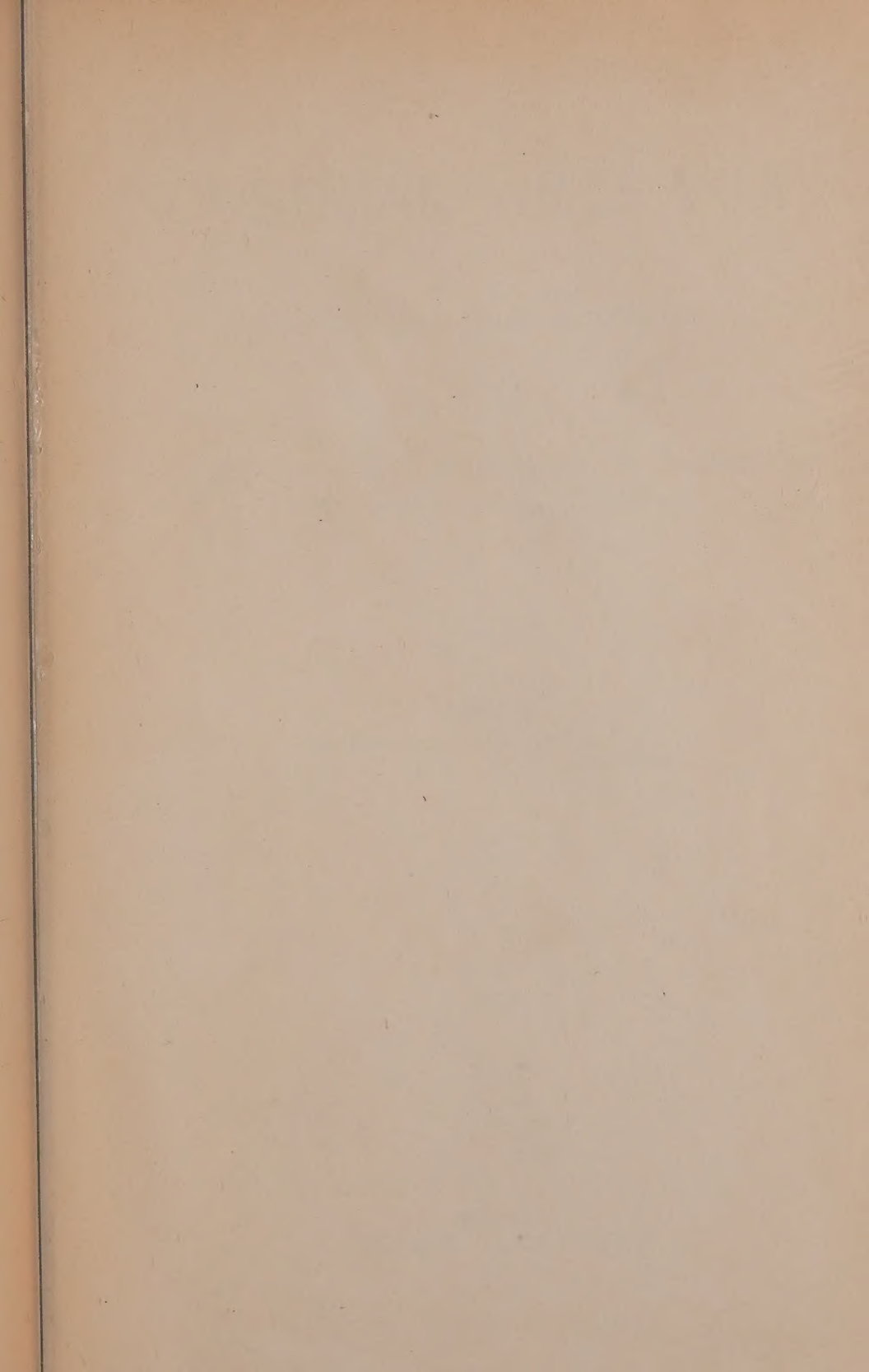


THE
INDUSTRIAL
ARTS INDEX
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1943

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THE INDUSTRIAL ARTS INDEX

THIRTY-FIRST ANNUAL VOLUME

1943

SUBJECT INDEX TO A SELECTED LIST OF ENGINEERING,
TRADE AND BUSINESS PERIODICALS

EDITED BY

MARION E. POTTER, LOUISE D. TEICH,
LEONE BAKER, RUTH BERKOWITZ

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1944

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PREFACE

This volume, the thirty-first annual of the *Industrial Arts Index*, is a cumulation of monthly issues published from December 1942, thru November, 1943. During the year there have been added to the list of magazines indexed: *Transactions of the American Society of Mechanical Engineers*; *Air Transport*; *Aviation News*; *Petroleum Refiner*; and *Banking Law Journal*. The last named journal has been indexed beginning with the July number, volume 60, number 7, when it combined with *Bankers Magazine*, indexed for many years. *Aviation News* is indexed beginning from its first number, August 2; and *Air Transport*, likewise from its first number, September.

The following magazines, owing to war conditions, have not been received, but it is hoped that their indexing may be completed later: *Angewandte Chemie*; *Chimie et Industrie*; *Génie Civil*; *Stahl und Eisen*; *Zeitschrift des Vereines Deutscher Ingenieure*; *R.C.A. Review* (suspended publication).

Two periodicals have been dropped from the list. *Transit Journal* discontinued publication with the December 1942 number; *American Photography*, indexed in the *Readers' Guide*, will no longer be indexed in the *Industrial Arts Index*.

The subject listing of books and pamphlets was discontinued last January.

M. E. P.

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List of Periodicals Indexed

- A S M E Trans**—Transactions of the American Society of Mechanical Engineers. \$12. single numbers \$1.50. m (except Mr, Je, S, D) American Society of Mechanical Engineers, 29 W 39th St, New York 18 (1v:Ja v65;i-s) \$7.50 to members and affiliates
- Acoustical Soc Am J**—Journal of the Acoustical Society of America. \$6; single numbers \$1.80. q American Institute of Physics, 175 Fifth Av, New York 10 (1v:Jl v15;i-s)
Indexing began July 1940 v 12, no 1
- Adv & Sell**—Advertising and Selling. \$3; single numbers 25c. m Robbins Pub. Co, Inc, 9 E 38th St, New York 16 (1v:Ja v36;i-none)
- Advanced Management**—Advanced Management, \$6; single numbers \$1.50. q Society for the Advancement of Management, Inc, 29 W 39th St, New York 18 (1v:Ja v8;i-l)
Formerly Society for the Advancement of Management Journal, a bi-monthly
- Aero Digest**—Aero Digest. \$3; single numbers 50c. m Aeronautical Digest Pub. Corp, 515 Madison Av, New York 22 (2v:Ja,Jl v42-43; i-s)
- Aeronautical Eng R**—Aeronautical Engineering Review. \$3; single numbers 30c. m Institute of the Aeronautical Sciences, Inc, 30 Rockefeller Plaza, New York 20 (1v:Ja v2;i-s)
Formerly Journal of the Aeronautical Sciences, Aeronautical Review Section
- Air Transport**—Air Transport. \$5; single numbers 50c. m McGraw-Hill Pub. Co, Inc, 330 W 42d St, New York 18 (1v:S v1;i-none)
Began publication September, 1943
- Am Assn of Textile Chemists and Colorists.** Proceedings. Published in American Dyestuff Reporter
- Am Assn Pet Geologists Bul**—Bulletin of the American Association of Petroleum Geologists. \$15; single numbers \$1.50. m American Association of Petroleum Geologists, Inc, Box 979, Tulsa 1, Oklahoma (1v:Ja v27;i-s)
- Am Bankers Assn J.** See Banking
- Am Bld**—American Builder and Building Age. \$2; single numbers 25c. m Simmons-Boardman Pub. Corp, 30 Church St, New York 7 (1v:Ja v65;i-none)
- Am Business**—American Business combined with System. \$3; single numbers 35c. m Dartnell Publications, Inc, 4660 Ravenswood Av, Chicago 40 (1v:Ja v13;i-none)
Indexing began August 1935 when it was combined with System
- Am Cer Soc Bul**—Bulletin of the American Ceramic Society. \$1.50; single numbers 25c. m American Ceramic Society, 2525 N High St, Columbus 2, Ohio (1v:Ja v26;i-s)
- Am Cer Soc J**—Journal of the American Ceramic Society. \$15; single numbers \$1.50. m American Ceramic Society, 2525 N High St, Columbus, Ohio (1v:Ja v26;i-s)
- Am Chem Soc J**—Journal of the American Chemical Society. \$8.50; single numbers 75c. m American Chemical Society, 1155 16th St, N.W., Washington 6, D.C. (1v:Ja v65;i-s)
- Am Concrete Inst J**—Journal of the American Concrete Institute. \$7.50; single numbers \$1.50. 6 times a year (S, N, Ja, F, Ap, Je) American Concrete Institute, 7400 Second Blvd, Detroit 2, Mich. (1v:S v15;i-s)
Began publication as v 1 (Proceedings, v 26) November, 1929
- Am Dyestuff Rep**—American Dyestuff Reporter. \$5; single numbers 50c. bi-w Howes Pub. Co, 440 4th Av, New York 16 (1v:Ja v32;i-s)
Includes Proceedings of American associations of textile chemists and colorists
- Am Gas Assn Mo**—American Gas Association Monthly. \$3. m (bi-m Jl-Ag) American Gas Assn, Inc, 420 Lexington Av, New York 17 (1v:Ja v25;i-l)
- Am Gas Assn Proc**—American Gas Association Proceedings. Annual convention proceedings. annual American Gas Association, Inc, 420 Lexington Av, New York (24th annual convention, 1942)
- Am Gas J**—American Gas Journal. \$2; single numbers 25c. m American Gas Journal, Inc, Dodge Bldg, 53 Park Pl, New York (2v:Ja, Jl v158-159;i-l)
- Am Inst Banking Bul**—Bulletin of the American Institute of Banking. \$1; single numbers 25c. q American Bankers Assn, American Institute of Banking Section, 22 E 40th St, New York 16 (1v:Ja v25;i-r)
- Am Inst Chem Eng Trans**—American Institute of Chemical Engineers. Transactions. \$10; single numbers \$2. bi-m American Institute of Chemical Engineers, 50 E 41st St, New York 17 (1v:F v33;i-s)
- Am Inst E E J.** See Elec Eng
- Am Inst of Mining and Metallurgical Engineers.** See Min & Met
- Am J Sci**—American Journal of Science. \$6; single numbers 60c. m American Journal of Science, New Haven, Conn. (1v:Ja v241;i-s)
- Am Mach**—American Machinist. \$5; single numbers 35c. bi-w McGraw-Hill Pub. Co, Inc, 330 W 42d St, New York 18 (1v:Ja v87;i-r)
- Am Pet Inst Proc**—American Petroleum Institute Proceedings. 50 W 50th St, New York
- Am Phot**—American Photography. \$2.50; single numbers 25c. m American Photographic Pub. Co, 353 Newbury St, Boston 15, Mass. (1v:Ja v37;i-r)
Absorbed Photo Technique, January, 1942
Indexing to be discontinued beginning January 1944
- Am Soc C E Proc**—Proceedings of American Society of Civil Engineers. \$8; single numbers \$1. m (except Jl and Ag) American Society of Civil Engineers, 33 W 39th St, New York (1v:Ja v69;i-s)
- Am Soc for Metals Trans**—Transactions of the American Society for Metals. \$5; single numbers \$2. q American Society for Metals, 7301 Euclid Av, Cleveland 3, Ohio (1v:Mr v31;i-r)
Formerly Transactions of American Society for Steel Treating
- Am Soc Heat & V E J.** See Heating-Piping
- Am Soc M E J.** See Mech Eng
- Am Soc M E Trans.** See A S M E Trans
- Am Soc Steel Tr Trans.** See Am Soc for Metals Trans
- Am Soc T M Proc**—American Society for Testing Materials. Proceedings. annual American Society for Testing Materials, 260 S Broad St, Philadelphia (1v:v42)
- Am Stat Assn J**—Journal of the American Statistical Association. \$6; single numbers \$1.50. q American Statistical Association, 1603 K St, N.W., Washington 6, D.C. (1v:Mr v38;i-s)

Publications of societies, institutions, etc. are listed under the names of the organizations.
i-l=index sent loose; i-r=index sent upon request; i-s=index stitched in volume.
Month abbreviation followed by volume number=Month in which new volume begins and the number of the new volume beginning in 1943.

- Am Water Works Assn J**—Journal of the American Water Works Association. \$7; single numbers 75c. to members 50c. m American Water Works Assn, 500 Fifth Av, New York 18 (1v:Ja v35;i-1)
- Ann Am Acad**—Annals of the American Academy of Political and Social Science. \$5; single numbers \$2. bi-m American Academy of Political and Social Science, 3457 Walnut St, Philadelphia 4 (6v:Ja,Mr,My,Jl,S,N v225-230;i-s)
- Arch Forum**—Architectural Forum. \$4; single numbers \$1. m Time, Inc, 330 E 22d St, Chicago 16 (2v:Ja,Jl v78-79;i-r)
- Arch Rec**—Architectural Record. \$3; single numbers \$1. m F. W. Dodge Corp, 119 W 40th St, New York (2v:Ja,Jl v93-94;i-s)
- Assn of Sp Lib & Inf Bur Proc**—Association of Special Libraries and Information Bureaux Proceedings. 6s. annual Association of Special Libraries and Information Bureaux, 31 Museum St, London, W.C. 1
Not published in 1941
- Automobile Eng**—The Automobile Engineer. £1 17s 4d; single numbers 2s 6d. m Iliffe & Sons, Ltd, Dorset House, Stamford St, London, S.E. 1 (1v:Ja v33;i-r;cost 6d)
Extra motor show review number published in November
- Automotive & Aviation Ind**—Automotive and Aviation Industries. \$1; single numbers 25c. s-m Chilton Co, Chestnut & 56th Sts, Philadelphia 39 (2v:Ja,Jl v88-89;i-none)
Formerly Automotive Industries
- Aviation**—Aviation. \$3; single numbers 50c. m McGraw-Hill Pub. Co, Inc, 330 W 42d St, New York 18 (1v:Ja v42;i-none)
- Aviation N**—Aviation News. \$5; single numbers 50c. m McGraw-Hill Pub. Co, Inc, 330 W 42d St, New York 18 (1v:Ag v1;i-none)
Began publication August 2, 1943
- Bankers M**—Bankers Magazine. \$5; single numbers 50c. m Bankers Publishing Co, 465 Main St, Cambridge, Mass. (2v:Ja,Jl v146-147;i-r)
Combined with Banking Law Journal, July 1943
- Bankers Mo**—Bankers Monthly. \$5; single numbers 50c. m Rand McNally & Co, 536 South Clark St, Chicago (1v:Ja v60;i-none)
Formerly Rand McNally Bankers Monthly
- Banking**—Banking; Journal of the American Bankers Association. \$3; single numbers 25c. m American Bankers Association, 22 E 40th St, New York 16 (1v:Jl v36;i-r)
Formerly American Bankers Association Journal
- Banking Law J**—Banking Law Journal (combined with the Bankers Magazine) \$6; single numbers 60c. m Bankers Publishing Co, 465 Main St, Cambridge 42, Mass. (1v:Ja v60;i-s)
Combined [v60 no7] with Bankers Magazine, July 1943
- Barron's**—Barron's. \$10; single numbers 25c. w Barron's Pub. Co, Inc, 40 New St, New York 4 (1v:Ja v23;i-r)
- Bell System Tech J**—Bell System Technical Journal. \$1.50; single numbers 50c. q American Telephone and Telegraph Co, 195 Broadway, New York
Published irregularly in 1942
- Blast F & Steel Pl**—Blast Furnace and Steel Plant. \$2; single numbers 50c. January and August numbers \$1 ea. m Steel Publications, Inc, Thaw Bldg, 108 Smithfield St, Pittsburgh 30, Pa. (1v:Ja v31;i-r)
- Boston Soc C E J**—Journal of the Boston Society of Civil Engineers. \$4; single numbers \$1. q Boston Society of Civil Engineers, 716 Tremont Temple, Boston (1v:Ja v30;i-s)
- Brick & Clay Rec**—Brick and Clay Record. \$5; single numbers 50c. m Industrial Publications, Inc, 59 E Van Buren St, Chicago 5 (2v:Ja,Jl v102-103;i-s)
- Burroughs Clearing House**—Burroughs Clearing House, m Burroughs Adding Machine Co, Second Blvd. and Burroughs Av, Detroit 32, Mich. (1v:O v28;i-none)
- Bus Transportation**—Bus Transportation. \$3; single numbers 35c. m McGraw-Hill Pub. Co, Inc, 330 W 42d St, New York 18 (1v:Ja v22;i-s)
- Business Week**—Business Week. \$5; single numbers 20c. w McGraw-Hill Pub. Co, Inc, 330 W 42d St, New York 18 (without vol no; i-r)
- Can Chem & Process Ind**—Canadian Chemistry and Process Industries. \$4; single numbers 40c. m Westman Publications, Ltd, 137 Wellington St, West, Toronto, Ont. 1 (1v:Ja v27;i-r)
Formerly Canadian Chemistry and Metallurgy
- Can Min J**—Canadian Mining Journal. \$3. m National Business Publications, Ltd, Garden-ville, Que. (1v:Ja v64;i-s)
- Cer Ind**—Ceramic Industry. \$4; single numbers 50c. m Industrial Publications, Inc, 59 E Van Buren St, Chicago 5 (2v:Ja,Jl v40-41;i-s)
- Chem Age (Lond)**—The Chemical Age. 26s; single numbers 8d. w Benn Brothers, Ltd, Bouverie House, 154 Fleet St, London, E.C. 4 (2v:Ja,Jl v48-49;i-r)
- Chem & Eng N**—Chemical and Engineering News. \$2; single numbers 15c. s-m American Chemical Society, 1155 16th St, N.W. Washington 6, D.C. (1v:Ja v21;i-s)
- Chem & Ind**—Chemistry and Industry. £2 15s. single numbers 2s. w Society of Chemical Industry, 56 Victoria St, London, S.W.1 (1v:Ja v62;i-r)
Published as section of Journal of the Society of Chemical Industry until 1937
Subscription price including Journal of the Society of Chemical Industry and Abstracts £5 15s
- Chem & Met Eng**—Chemical and Metallurgical Engineering. \$3; single numbers 35c. m McGraw-Hill Pub. Co, Inc, 330 W 42d St, New York 18 (1v:Ja v50;i-s)
Price of February and May issues ea \$1
- Chem Ind**—Chemical Industries. \$4; single numbers 50c. m Tradepress Pub. Corp, 522 Fifth Av, New York 18 (2v:Ja,Jl v52-53;i-1)
Published twice in October; second issue, Buyer's Guidebook number 2
- Chem R**—Chemical Reviews. \$9. (\$7 to members of American Chemical Society) bi-m Williams & Wilkins Co, Mount Royal and Guilford Aves, Baltimore 2, Md. (2v:F,Ag v32-33;i-s)
- Chem Soc J**—Journal of the Chemical Society. £2 15s. m S. E. Carr, The Chemical Society, Burlington House, Piccadilly, London, W. 1 (without vol no;i-1)
- Civil Aero J**—Civil Aeronautics Journal; Issued monthly by the Civil Aeronautics Administration; single numbers 5c. m Superintendent of Documents, Washington, D.C. (1v:Ja v4;i-s)
Formerly Air Commerce Bulletin
- Civil Eng**—Civil Engineering. \$5; single numbers 50c. m American Society of Civil Engineers, 33 W 39th St, New York (1v:Ja v13;i-s)
- Coal Age**—Coal Age. \$3; single numbers 35c. m McGraw-Hill Pub. Co, Inc, 330 W 42d St, New York 18 (1v:Ja v48;i-s)
- Comm & Fin Chr**—Commercial & Financial Chronicle. \$26; single numbers 60c. s-w William B. Dana Co, 25 Spruce St, New York 8 (2v:Ja,Jl v157-158;i-1)
- Comp Air M**—Compressed Air Magazine. \$3; single numbers 35c. m Compressed Air Magazine Co, Phillipsburg, New Jersey (1v:Ja v48;i-r)
- Concrete**—Concrete. \$2; Cement mill ed. \$3; single numbers 40c. m Concrete Pub. Corp, Daily News Plaza, 400 W Madison St, Chicago 6 (1v:Ja v51;i-s)
- Consumers' Research Bul**—Consumers' Research Bulletin (Not Confidential). \$3; single numbers 30c. m Consumers' Research, Inc, Washington, New Jersey (1v:O v11;i-s)
Beginning October 1941, the Bulletin was combined with Consumers' Digest [discontinued with June, 1941, issue], dropped the numbering of General Bulletin Series and continued the volume number of the Digest [volume 9]
- Credit & Fin Management**—Credit and Financial Management. \$3; single numbers 25c. m National Association of Credit Men, Chestnut at 56th St, Philadelphia 39, Pa.; 1 Park Av, New York 16 (1v:Ja v45;i-s)

- Diesel Power**—Diesel Power and Diesel Transportation. \$3; single numbers 35c. m Diesel Publications, Inc, 192 Lexington Av, New York 16 (1v:Ja v21;i:none)
- Dom Eng**—Domestic Engineering. \$3; single numbers 30c. m Domestic Engineering Co, 1900 Prairie Av, Chicago 16 (2v:Ja,Jl v161-162;i:none)
- Dun's R**—Dun's Review. \$4; single numbers 35c. m Dun & Bradstreet, Inc, 290 Broadway, New York 7 (1v:Ja v51;i-s)
Formerly Dun & Bradstreet Monthly Review
- Dun's Stat R**—Dun's Statistical Review. \$1; single numbers 10c. m Dun & Bradstreet, Inc, 290 Broadway, New York 7 (1v:Ja v7;i:none)
- East Underw**—Eastern Underwriter. \$3; single numbers 25c. w Eastern Underwriter Co, 41 Maiden Lane, New York 7 (1v:Ja v44;i:none)
- Econ Geol**—Economic Geology. \$5; single numbers 75c. s-q Economic Geology Pub. Co, Prince and Lemon Sts, Lancaster, Pa. (1v:Ja v38;i-s)
- Economist**—Economist. £3; single numbers 1s. w Economist Newspaper, Ltd, Brettenham House, Lancaster Place, London. W.C. 2 (2v:Ja,Jl v144-145;i-1)
- Edison Elec Inst Bul**—Edison Electric Institute Bulletin. \$2; single numbers 25c. m Edison Electric Institute, 420 Lexington Av, New York (1v:Ja v11;i-1)
November and December 1942 numbers combined
- Elec Eng**—Electrical Engineering. \$12; single numbers \$1.50. m American Institute of Electrical Engineers, 33 W 39th St, New York 18 (1v:Ja v62;i-1)
- Elec R (Lond)**—Electrical Review. £1 14s 8d; Canadian subs £1 12s 6d; single numbers 6d. w Electrical Review, Dorset House, Stamford St, London. S.E. 1 (2v:Ja,Jl v132-133;i-r)
v128 began Nov. 8, 1940 (smaller size)
- Elec W**—Electrical World. \$5; single numbers 25c. m McGraw-Hill Pub. Co, Inc, 330 W 42d St, New York 18 (2v:Ja,Jl v119-120;i-s)
Regular issue alternates with a News Edition
- Elec West**—Electrical West. \$2; single numbers 25c. m McGraw-Hill Co. of California, 68 Post St, San Francisco 4, Calif. (2v:Ja,Jl v90-91;i-r)
- Electrician**—Electrician. 30s; single numbers 6d. w Benn Bros, Ltd, Bouverie House, 154 Fleet St, London, E.C. 4 (2v:Ja,Jl v130-131;i-1)
- Electrochem Soc Trans**—The Electrochemical Society. Transactions. The Electrochemical Society, Columbia University, New York 27
Formerly American Electrochemical Society Preprints are indexed
- Electronics**—Electronics. \$5; single numbers 50c. m McGraw-Hill Pub. Co, Inc, 330 W 42d St, New York 18 (1v:Ja v16;i-s)
Price of the March and June issues ea \$1
- Eng & Min J**—Engineering and Mining Journal. \$3; single numbers 50c. m McGraw-Hill Pub. Co, Inc, 330 W 42d St, New York 18 (1v:Ja v144;i-s)
- Eng Educ**. See J Eng Educ
- Eng N**—Engineering News-Record. \$5; single numbers 25c. w McGraw-Hill Pub. Co, Inc, 330 W 42d St, New York 18 (2v:Ja,Jl v130-131;i-s)
- Engineer**—Engineer. £3 3s; Canadian subs £2 18s 6d; single numbers 1s 3d w Engineer, 28, Essex St, Strand, London, W.C. 2 [with bi-monthly supplement "Metallurgist"] (2v:Ja, Jl v175-176;i-1)
Bi-monthly supplement "Metallurgist" suspended for the duration of the war
- Engineering**—Engineering. Thick paper ed £3 7s 6d; thin paper ed £3 3s; Canadian subs thick paper ed £3 3s; thin paper ed £2 18s 6d; single numbers 1s 2½d w Engineering, Ltd, 35 and 36 Bedford St, Strand, London, W.C. 2 (2v:Ja,Jl v155-156;i-r)
- Explosives Eng**—The Explosives Engineer. \$1; single numbers 15c. bi-m Explosives Engineer, 922 Delaware Trust Bldg, Wilmington, Delaware (1v:Ja v21;i-s)
Changed to a bi-monthly beginning January 1943
- Factory Management**—Factory Management and Maintenance. \$3; single numbers 35c. m McGraw-Hill Pub. Co, Inc, 330 W 42d St, New York 18 (1v:Ja v101;i-r)
- Fed Res Bul**—Federal Reserve Bulletin. \$2; single numbers 20c (to non-members). m Board of Governors of the Federal Reserve System, Constitution Av at 20th St, Washington, D.C. (1v:Ja v29;i-s)
- Food Ind**—Food Industries. \$3; single numbers 35c. m McGraw-Hill Pub. Co, Inc, 330 W 42d St, New York 18 (1v:Ja v15;i-s)
- For Comm W**—Foreign Commerce Weekly. \$4.50; single numbers 10c. w Superintendent of Documents, Washington 25, D.C. (4v:Ja, Ap,Jl,O v10-13;i-1)
Replaces Commerce Reports and Comparative Law Series
- Fortune**—Fortune. \$10; single numbers \$1. m Time, Inc, 330 E 22d St, Chicago 16 (2v:Ja,Jl v27-28;i-r)
- Foundry**—Foundry. \$2; single numbers 25c. m Penton Pub. Co, Penton Bldg, Cleveland 13, O. (1v:Ja v71;i-r)
- Franklin Inst J**—Journal of the Franklin Institute. \$6; single numbers 60c. m Franklin Institute, Benjamin Franklin Parkway at 20th St, Philadelphia (2v:Ja,Jl v235-236;i-s)
- Gas Age**—Gas Age combining Natural Gas, Gas Age, Gas Record. \$3; single numbers 25c. bi-w Robbins Pub. Co, Inc, 9 E 38th St, New York 16 (2v:Ja,Jl v91-92;i-1)
- Gas J (Lond)**—Gas Journal. single numbers 1s. w Walter King, Ltd, 11 Bolt Court, Fleet St, London, E.C. 4 (4v:Ja,Ap,Jl,O v241-244;i-1)
- Gen Elec R**—General Electric Review. \$3; single numbers 30c. m General Electric Co, Schenectady 5, N.Y. (1v:Ja v46;i-1)
- Geol Soc Bul**—Bulletin of the Geological Society of America. \$10. m Geological Society of America, H. R. Aldrich, sec, 419 W 117th St, New York (1v:Ja v54;i-1)
- Geol Soc Proc**—Proceedings volume of Geological Society of America for 1942. Geological Society of America. H. R. Aldrich, sec, 419 W 117th St, New York
- Glass Ind**—Glass Industry. \$3; single numbers 25c. m Ogden Pub. Co, 55 W 42d St, New York 18 (1v:Ja v24;i-none)
- Harvard Business R**—Harvard Business Review. \$5; single numbers \$1.25. q McGraw-Hill Book Co, Inc, 330 W 42d St, New York 18 (1v:[O] v22;i-s)
- Heat & Ven**—Heating and Ventilating. \$2; single numbers 30c. m Industrial Press, 148 Lafayette St, New York 13 (1v:Ja v40;i-r)
- Heating-Piping**—Heating, Piping and Air Conditioning. \$2; single numbers 25c. m Keeney Pub. Co, 6 N Michigan Av, Chicago 2 (1v:Ja v15;i-s)
Includes American Society of Heating and Ventilating Engineers Journal section
- Ill U Eng Exp Sta Bul**—Illinois University Engineering Experiment Station. Bulletin. irr Univ. of Ill, Urbana
- Ill U Eng Exp Sta Circ**—Illinois University Engineering Experiment Station. Circular. irr Univ. of Ill, Urbana
- Illum Eng**—Illuminating Engineering including Transactions of the Illuminating Engineering Society. \$7.50; single numbers \$1. m (except Ag and O) Illuminating Engineering Society, 51 Madison Av, New York 10 (1v:Ja v38;i-s)
- Illum Engr**. See Light & Lighting
- Ind & Eng Chem**—Industrial and Engineering Chemistry Industrial Edition. single numbers 75c. m American Chemical Society, 1155 16th St, N.W, Washington 6, D.C. (1v:Ja v35;i-s)
With Analytical edition \$4
- Ind & Eng Chem Anal ed**—Industrial and Engineering Chemistry Analytical Edition. single numbers 50c. m American Chemical Society, 1155 16th St, N.W, Washington 6, D.C. (1v:Ja v15;i-s)

- Ind Marketing**—Industrial Marketing. \$2; single numbers 20c. m (s-m during O) Advertising Publications, Inc, 100 East Ohio St, Chicago (1v:Ja v28;i-none)
October 25th issue not sold separately
- Ind Med**—Industrial Medicine. \$5; single numbers 50c. m Industrial Medicine Pub. Co, 605 North Michigan Av, Chicago (1v:Ja v12; 1-s)
- Ind Stand**—Industrial Standardization. \$4; single numbers 35c. m American Standards Association, 29 W 39th St, New York 18 (1v:Ja v14;i-l)
- Index**—Index. q New York Trust Company, 100 Broadway, New York (1v:[Mr] v23;i-l)
- India Rubber W**—India Rubber World. \$3; single numbers 35c. m Bill Brothers Publishing Corporation, 386 4th Av, New York 16 (2v:Ap,O v108-109;i-s)
- Inland Ptr**—Inland Printer. \$4; single numbers 40c. m TradePress Pub. Corp, 309 W Jackson Blvd, Chicago 6; 522 5th Av, New York 18 (2v:Ap,O v111-112;i-none)
- Ins Field (Fire ed)**—Insurance Field (Fire and Casualty Edition). \$3; single numbers 15c. w Insurance Field Co, Inc, 322 West Liberty St, Louisville 1, Ky. (1v:Ja v72;i-none)
- Ins Field (Life ed)**—Insurance Field (Life Edition). \$3; single numbers 15c. w Insurance Field Co, Inc, 322 West Liberty St, Louisville 1, Ky. (1v:Ja v72;i-none)
- Inst Chem Eng Trans**—Transactions of the Institution of Chemical Engineers. annual Institution of Chemical Engineers, 56 Victoria St, Westminster, London, S.W. 1 (1v:v19 1941)
Indexing began with volume 9, 1931
- Inst E E J**—Journal of the Institution of Electrical Engineers. single numbers pt1 5s; pt2 7s 6d; pt3 6s m E. & F. N. Spon, Ltd, 67 Haymarket, London, S.W.1 (1v:Ja v90;i-none)
Beginning with volume 88 published in three parts: pt 1, General, m (Ja); pt 2, Power Engineering, bi-m (F); pt 3, Communication Engineering, q (Mr)
- Inst Mech Eng J & Proc**—Institution of Mechanical Engineers. Journal and Proceedings. Published 10 times a year Institution of Mechanical Engineers, Storey's Gate, St. James's Park, London, S.W. 1 (2v:Ap,N v149-150;i-s)
- Inst Pet J**—Journal of the Institute of Petroleum. single numbers 7s 6d m Institute of Petroleum, % Imperial College of Science and Technology, South Kensington, London, S.W.7 (1v:Ja v29;i-s)
Formerly Journal of the Institution of Petroleum Technologists
- Inst Radio Eng Proc**—Proceedings of the Institute of Radio Engineers. \$10; single numbers \$1. m Institute of Radio Engineers, Inc, 330 W 42d St, New York 18 (1v:Ja v31;i-s)
June issue, pt 2, Index 1913-42 \$1
- Instruments**—Instruments, the Magazine of Measurement and Control. \$2. m Instruments Pub. Co, 1117 Wolfendale St, Pittsburgh, Pa. (1v:Ja v16;i-s)
- Int Labour R**—International Labour Review. \$6; single numbers 60c. m International Labour Office, 734 Jackson Pl, Washington 6, D.C. (2v:Ja,Jl v47-48;i-s)
- Inv Banking**—Investment Banking, irr Investment Bankers Association of America, 33 S Clark St, Chicago 3 (1v:v13;i-none)
- Iron Age**—Iron Age. \$8; single numbers 35c. w Chilton Co, Inc, Chestnut & 56th Sts, Philadelphia 39; 100 E 42d St, New York 17 (2v:Ja,Jl v151-152;i-r)
- Iron & Steel Inst J**—Journal of the Iron and Steel Institute. s-annual Iron and Steel Institute, 4, Grosvenor Gardens, London, S. W. 1 (2v:v145-146,1942,nos1-2)
- J Account**—Journal of Accountancy. \$4; single numbers 35c. m American Institute Pub. Co, Inc, 13 E 41st St, New York 17 (2v:Ja,Jl v75-76;i-s)
- J Aeronautical Sci**—Journal of the Aeronautical Sciences. \$7; single numbers \$2. q Institute of the Aeronautical Sciences, Inc, 30 Rockefeller Plaza, New York 20 (1v:Ja v10;i-s)
V9 N '41-D '42; 10 Ja '43
Changed to a quarterly beginning October 1943, July number the last monthly issue
Review section now published as Aeronautical Engineering Review
- J Ap Phys**—Journal of Applied Physics. \$7; single numbers 70c. m American Institute of Physics, 175 Fifth Av, New York 10 (1v:Ja v14;i-s)
\$5 to members of Scientific Societies
- J Business**—Journal of Business of the University of Chicago. \$4; single numbers \$1.25. q University of Chicago Press, 5760 Ellis Av, Chicago (1v:Ja v16;i-s)
- J Chem Educ**—Journal of Chemical Education. \$3; single numbers 50c. m Journal of Chemical Education, 20th and Northampton Sts, Easton, Pa. (1v:Ja v20;i-s)
- J Chem Phys**—Journal of Chemical Physics. \$10. m American Institute of Physics, 175 Fifth Av, New York 10 (1v:Ja v11;i-s)
- J Eng Educ**—Journal of Engineering Education. \$3; single numbers 50c. m except (Jl and Ag) Society for the Promotion of Engineering Education, E. L. Bishop, Ed, University of Pittsburgh, Pittsburgh, Pa. (1v:S v34;i-s)
- J Fr Inst**—See Franklin Inst J
- J Ind & Eng Chem**—See Ind & Eng Chem
- J Ind Hygiene**—The Journal of Industrial Hygiene and Toxicology. \$6; single numbers 75c. m except (Jl and Ag) Williams & Wilkins Co, Mt Royal & Guilford Aves, Baltimore 2, Md. (1v:Ja v25;i-s)
- J Land & Pub Util Econ**—Journal of Land and Public Utility Economics. \$5; single numbers \$1.50. q University of Wisconsin, Madison 6, Wis. (1v:F v19;i-s)
- J Phys Chem**—The Journal of Physical Chemistry. \$10; single numbers \$1.50. m except (Jl and Ag, S) Williams & Wilkins Co, Mt Royal & Guilford Aves, Baltimore 2, Md. (1v:Ja v47;i-s)
- J Research Nat Bur Stand**—Journal of Research of the National Bureau of Standards. \$3.50; single numbers 30c. m Superintendent of Documents, Washington 25, D.C. (2v:Ja,Jl v30-31;i-l)
- J Retailing**—Journal of Retailing. \$1; single numbers 25c. q New York University School of Retailing, 100 Washington Square, New York (1v:F v19;i-r)
Index published every two years
- Light & Lighting**—Light and Lighting. 10s 6d; single numbers 9d. m Light and Lighting, 32 Victoria St, London, S.W.1 (1v:Ja v36;i-l)
- Locomotive**—Locomotive. 50c; single numbers gratis; bound volumes [8 nos in a volume] issued every 2 years \$1. q Hartford Steam Boiler Inspection & Insurance Co, 56 Prospect St, Hartford 2, Conn. (1v:Ja v44;i-r)
- Mach**—Machinery. \$4; single numbers 40c. m Industrial Press, 148 Lafayette St, New York 13 (1v:S v50;i-r)
- Machine Design**—Machine Design. \$6; single numbers 50c. m Penton Pub. Co, Penton Bldg, Cleveland 13, O. (1v:Ja v15;i-r)
- Mag of Wall St**—Magazine of Wall Street and Business Analyst. \$10; single numbers 50c. bi-w Ticker Pub. Co, Inc, 90 Broad St, New York 4 (2v:Ap,O v72-73;i-s)
Extra number, Manual of Magazine of Wall Street discontinued for duration of the war
- Management R**—Management Review. \$5; single numbers 50c. m American Management Association, 330 W 42d St, New York 18 (1v:Ja v32;i-l)
Formerly American Management Review
- Manuf Rec**—Manufacturers Record. \$3; single numbers 25c. m Manufacturers Record Publishing Co, Candler Building, Baltimore 3, Md. (1v:Ja v112;i-none)
- Marine Eng**—Marine Engineering and Shipping Review. \$3; single numbers 35c. m Simmons-Boardman Pub. Corp, 30 Church St, New York 7 (1v:Ja v48;i-r)

- Mass Transportation—Mass Transportation.** \$2; single numbers 25c. m Kenfield-Davis Pub. Co, 608 S. Dearborn St, Chicago 5 (1v:Ja v39;i-s)
- Mech Eng—Mechanical Engineering.** \$6; single numbers 75c. m American Society of Mechanical Engineers, 29 W 39th St, New York 18 (1v:Ja v65;i-r)
- Mech Handling—Mechanical Handling and Conveying.** 12s; single numbers 1s. m Louis Cassier Co, Ltd, 22 Henrietta St, London, W.C. 2 (1v:Ja v30;i-l)
- Metal Finishing—Metal Finishing.** \$2; single numbers 25c. m Metal Industry Pub. Co, Inc, 11 W 42d St, New York 18 (1v:Ja v41;i-s)
Formerly Metal Industry
- Metal Prog—Metal Progress.** \$5; single numbers \$1. m American Society for Metals, 7301 Euclid Av, Cleveland 3, O. (2v:Ja,Jl v43-44;i-s)
- Metallurgist.** See Engineer
- Metals & Alloys—Metals and Alloys.** \$2; single numbers 25c. m Reinhold Pub. Corp, 330 W 42d St, New York 18 (2v:Ja,Jl v17-18;i-l)
- Min & Met—Mining and Metallurgy.** \$3; single numbers 50c. m American Institute of Mining and Metallurgical Engineers, Inc, 29 W 39th St, New York 18 (1v:Ja v24;i-l)
- Min Cong J—Mining Congress Journal.** \$2; single numbers 20c. m American Mining Congress, 309 Munsey Bldg, Washington, D.C. (1v:Ja v29;i-r)
- Mo U Sch Mines & Met Bul tech ser—Bulletin of the University of Missouri, School of Mines and Metallurgy.** Technical Series. irr Univ. of Mo, Rolla
- Mod Packaging—Modern Packaging.** \$5; single numbers 50c. m Breskin Pub. Corp, 122 E 42d St, New York 17 (1v:S v17;i-l)
Indexing began September 1940, v 14 no 1
- Mod Plastics—Modern Plastics.** \$5; single numbers 50c. m Modern Plastics Inc, 122 E 42d St, New York 17 (1v:S v21;i-l)
Formerly Plastic Products
- Monthly Labor R—Monthly Labor Review.** \$3.50; single numbers 30c. m Superintendent of Documents, Washington 25, D.C. (2v:Ja,Jl v56-57;i-l)
Free to labor departments and bureaus and other offices connected with the administration of labor laws
- N A C A Bul—N.A.C.A. Bulletin.** s-m National Association of Cost Accountants, 335 Madison Av, New York 17 (1v:S v25;i-r)
Distributed regularly only to members of the Association
- N E Water Works Assn J—Journal of the New England Water Works Association.** \$4; single numbers \$1.25. q New England Water Works Association, 613 Statler Bldg, Boston (1v:Mr v57;i-s)
- Nat City Bank—National City Bank of New York.** m 55 Wall St, New York (without v no; i-none)
- Nat Pet N—National Petroleum News.** \$5; single numbers 20c. w National Petroleum Pub. Co, 1213 W 3d St, Cleveland 13, O. (1v:Ja v35;i-none)
Monthly technical section beginning July 29, 1942, published separately as pt 2 of the regular issue with subtitle Refinery Management and Petroleum Chemical Technology. Included in subscription to Nat Pet N
- Nat Research Council Bul—National Research Council Bulletin.** irr National Research Council, 2101 Constitution Av, Washington, D.C.
Individual numbers variously priced. Price-list sent on request
- Nat Safety N—National Safety News.** \$4; single numbers 40c. m National Safety Council, Inc, 20 N Wacker Drive, Chicago 6 (2v:Ja,Jl v47-48;i-r)
- Nat Underw—National Underwriter.** \$4.50; single numbers 20c. w National Underwriter Co, 175 W Jackson Blvd, Chicago (1v:Ja v47;i-none)
Extra number (Automobile no) Published in April
- Nat Under (Life ed)—National Underwriter Life Insurance Edition.** \$3.50; single numbers 20c. w National Underwriter Co, 175 W Jackson Blvd, Chicago (1v:Ja v47;i-none)
- New England Water Works Assn.** See N E Water Works Assn J
- N Y Pub Lib Bul—New York Public Library.** Bulletin. \$1; single numbers 10c. m New York Public Library, 5th Av & 42d St, New York 18 (1v:Ja v47;i-s)
Bibliographies of interest to special libraries are indexed
- Oil & Gas J—Oil and Gas Journal.** \$6; single numbers 20c. w Petroleum Pub. Co, 211 South Cheyenne St, Tulsa 1, Oklahoma (1v:My v42;i-s)
- Oil Paint & Drug Rep—Oil, Paint and Drug Reporter.** \$5; single numbers 25c. w Schnell Pub. Co, Inc, 59 John St, New York 7 (2v:Ja,Jl v143-144;i-r)
- Opt Soc Am J—Journal of the Optical Society of America.** \$7; single numbers 70c. m American Institute of Physics, Inc, 175 Fifth Av, New York 10 (1v:Ja v33;i-s)
- Paint Oil & Chem R—Paint, Oil and Chemical Review.** \$2; single numbers 15c. bi-w Trade Review Co, 537 S Dearborn St, Chicago 5 (1v:Ja v105;i-none)
- Paper Ind—Paper Industry and Paper World.** \$2. m Fritz Publications, Inc, 59 E. Van Buren St, Chicago 5 (1v:Ap v25;i-l)
- Paper Tr J—Paper Trade Journal.** \$4; single numbers 10c. w Lockwood Trade Journal Co, Inc, 15 W 47th St, New York 19 (2v:Ja,Jl v116-117;i-s)
- Personnel J—Personnel Journal.** \$5; single numbers 75c. m (except JI and Ag) Personnel Research Federation, 60 E 42d St, New York (1v:My v22;i-s)
- Pet Eng—Petroleum Engineer.** \$2; single numbers 25c. m (Ag-Je) s-m (Jl) Petroleum Engineer Pub. Co, Allen Bldg, Dallas 1, Texas (1v:O v15;i-l)
Indexing began October 1940, v 12 no 1
Extra number [Ref annual] Published July 1
- Pet Refiner—Petroleum Refiner.** \$2; single numbers 20c. m Gulf Pub. Co, 3301 Buffalo Drive, Houston, Texas (1v:Ja v22;i-s)
Began indexing with January, 1943 number
- Phys R—The Physical Review, Second Series.** \$15; single numbers \$1.50. m American Institute of Physics, Inc, 175 Fifth Av, New York 10 (2v:Ja,Jl v63-64;i-s)
Published monthly instead of semi-monthly, temporarily, beginning January, 1942
- Power—Power.** \$3; single numbers 35c. m McGraw-Hill Pub. Co, Inc, 330 W 42d St, New York 18 (1v:Ja v87;i-r)
Extra number published in Mid-December
- Power Pl Eng—Power Plant Engineering.** \$2; single numbers 25c. m Technical Pub. Co, 53 West Jackson Blvd 4, Chicago (1v:Ja v47;i-s)
- Product Eng—Product Engineering.** \$5; single numbers 50c. m McGraw-Hill Pub. Co, Inc, 330 W 42d St, New York 18 (1v:Ja v14;i-s)
- Ptr Ink—Printers' Ink.** \$4; single numbers 20c. w Printers' Ink Pub. Co, Inc, 205 E 42d St, New York 17 (4v:Ja,Ap,Jl,O v202-205;i-none)
- Pub Health Rep—Public Health Reports.** \$2.50; single numbers 5c. w Superintendent of Documents, Washington 25, D.C. (1v:Ja v58;i-l)
Distributed gratuitously to state and municipal health officers, etc., by the Surgeon general of the United States public health service, Washington, D.C.
- Pub Roads—Public Roads.** 35c; single numbers 10c. q Superintendent of Documents, Washington 25, D.C.
Changed to a quarterly, beginning July, 1942
- Pub Util—Public Utilities Fortnightly.** \$15; single numbers 75c. bi-w Public Utilities Reports, Inc, Munsey Bldg, Washington, D.C. (2v:Ja,Jl v31-32;i-s)
- Pub Works—Public Works.** \$3; single numbers 35c. m Public Works Journal Corp, 310 E 45th St, New York 17 (1v:Ja v74;i-r)
- Pulp & Pa of Can—Pulp and Paper Magazine of Canada.** \$5; single numbers 50c. m National Business Publications, Ltd, Gardenvale, Que. (1v:Ja v44;i-s)
Extra convention number published in February

- R Econ Stat**—Review of Economic Statistics. \$5. q Harvard University Press, Cambridge 38, Mass. (1v:F v25;i-s)
- R Sci Instr**—Review of Scientific Instruments. \$5; single numbers 50c. m American Institute of Physics, 175 Fifth Av, New York 10 (1v:Ja v14;i-s)
\$3 to members of Scientific Societies
- Radio N**—Radio News. \$3; single numbers 25c. m Ziff-Davis Pub. Co, 540 N. Michigan Av, Chicago 11 (2v:Ja,JI v29-30;i-none)
Price of June, Special U.S. Aviation Communications issue 50c
- Rayon**—Rayon Textile Monthly. \$5; single numbers 60c. m Rayon Pub. Corp, 303 Fifth Av, New York 16 (1v:Ja v24;i-s)
Formerly Rayon and Melland Textile Monthly
- Ref Shelf**—The Reference Shelf. irr The H. W. Wilson Co, 958 University Av, New York 52
- Refrig Eng**—Refrigerating Engineering. \$3; single numbers 35c. m American Society of Refrigerating Engineers, 50 W 40th St, New York 18 (2v:Ja,JI v45-46;i-s)
- Review of Economic Statistics**. See **R Econ Stat**
- Roads & Bridges**—Roads and Bridges. \$2; \$2.50 in U.S.; single numbers 25c; 30c in U.S. m Monetary Times Printing Co. of Canada, Ltd, 341 Church St, Toronto, Ont. 2 (1v:Ja v81;i-none)
Formerly Canadian Engineer: Roads and Bridges
- Roads & Sts**—Roads and Streets. \$3. m Gillette Pub. Co, 330 S Wells St, Chicago 6 (1v:Ja v86;i-r)
- Rock Prod**—Rock Products. \$2; single numbers 25c. m Trade Press Pub. Corp, 309 W Jackson Blvd, Chicago 6 (1v:Ja v46;i-none)
- Roy Aeronautical Soc J**—Journal of the Royal Aeronautical Society. £3 3s; single numbers 5s 3d. m Royal Aeronautical Society, 4 Hamilton Place, Piccadilly, London, W. 1 (1v:Ja v47;i-s)
- Rs Mod Phys**—Reviews of Modern Physics. \$4; single numbers \$1.20. q American Institute of Physics, Inc, 175 Fifth Av, New York 10 (1v:Ja v15;i-none)
- Rubber Age**—Rubber Age. \$3; single numbers 35c. m Palmerton Pub. Co, Inc, 250 W 57th St, New York 19 (2v:Ap,O v53-54;i-s)
- Ry Age**—Railway Age. \$6; single numbers 25c. w Simmons-Boardman Pub. Corp, 30 Church St, New York 7 (2v:Ja,JI v114-115;i-r)
- Ry Mech Eng**—Railway Mechanical Engineer with which is incorporated the Railway Electrical Engineer. \$3; single numbers 35c. m Simmons-Boardman Pub. Corp, 30 Church St, New York 7 (1v:Ja v117;i-r)
- S A E J**—S.A.E. Journal. \$10; single numbers \$1. m Society of Automotive Engineers, Inc, 29 W 39th St, New York 18 (1v:Ja v51;i-l)
- Safety Eng**—Safety Engineering. \$3; single numbers 25c. m Safety Engineering, 75 Fulton St, New York 7 (2v:Ja,JI v85-86;i-s)
- Sales Management**—Sales Management. \$4; single numbers 20c. s-m Sales Management, Inc, 386 4th Av, New York 16 (2v:Ja,JI v52-53;i-none)
Published semi-monthly except in May and November when it is published three times a month
- Sci Am**—Scientific American. \$4; single numbers 35c. m Munn & Co, Inc, 24 W 40th St, New York 18 (2v:Ja,JI v168-169;i-s)
- Science**—Science. \$6; single numbers 15c. w Science Press, Lancaster, Pa. (2v:Ja,JI v97-98;i-s)
- Sheet Metal Worker**—Sheet Metal Worker. \$2; single numbers 25c. m Edwin A. Scott Pub. Co, 45 W 45th St, New York 19 (1v:Ja v34;i-s)
- Soap & San Chem**—Soap and Sanitary Chemicals. \$3. m MacNair-Dorland Co, Inc, 254 W 31st St, New York (1v:Ja v19)
Annual index appears in Soap Blue Book which is sent to all subscribers
- Soc Chem Ind J**—Journal of the Society of Chemical Industry. £1 15s; single numbers 3s 3d. m Society of Chemical Industry, 56 Victoria St, London, S.W. 1 (1v:Ja v42-47)
Formerly two separately pagged sections: Transactions and British Chemical Abstracts; British Chemical and Physiological Abstracts published separate beginning January 1941. Subscription to Journal, Chemistry & Industry, and Abstracts £5 15s
- Soc Dyers & Col J**—Journal of the Society of Dyers and Colourists. 60s; single numbers 3s. m Society of Dyers and Colourists, Ocean Chambers, 32-34 Piccadilly, Bradford, Yorkshire, England (1v:Ja v59;i-l)
- Soc for Advan of Management J**. See **Advanced Management**
- Soc Motion Picture Eng J**—Journal of Society of Motion Picture Engineers. \$8; single numbers \$1. m Society of Motion Picture Engineers, Hotel Pennsylvania, New York (2v:Ja,JI v40-41;i-s)
- Society of Automotive Engineers Journal**. See **S A E J**
- Special Lib**—Special Libraries. \$5; single numbers 50c. m (S-Ap) bi-m (My-Ag) Special Libraries Association, 31 E 10th St, New York 3 (1v:Ja v34;i-l)
- Spectator (Life ed)**—Spectator; Life Insurance in Action. \$5; single numbers 50c m (s-m during D) Chilton Co, Inc, Chestnut & 56th Sts, Philadelphia 39 (2v:Ja,JI v150-151;i-s)
Changed from bi-weekly to monthly, beginning July, 1942
- Spectator (Property ed)**—Spectator; Property Insurance Review. \$2; single numbers 25c. bi-w Chilton Co, Inc, Chestnut & 56th Sts, Philadelphia 39 (1v:JI v9;i-s)
- Steel**—Steel. \$6; single numbers 25c. w Penton Pub. Co, Penton Bldg, Cleveland 13, O. (2v:Ja,JI v112-113;i-r)
- Survey of Cur Business**—Survey of Current Business. U.S. Bureau of Foreign and Domestic Commerce, Division of Business Review. \$1.50; single numbers 15c. m Superintendent of Documents, Washington 25, D.C. (1v:Ja v23;i-none)
Advance leaflets are distributed every week to subscribers in the United States. The leaflets are usually mailed on Thursdays and give such information as has been received during the preceding week
Published a biennial, presenting the historical record of all of the statistical series carried in the regular monthly issues of the Survey
- Survey of Cur Business 1942 Sup.** biennial U. S. Bureau of Foreign and Domestic Commerce. 50c Superintendent of Documents, Washington, D.C.
- Tech R**—Technology Review. \$2.50; single numbers 50c. m except (Ag. S. O) Massachusetts Institute of Technology, room 3-219, Cambridge 39, Mass. (1v:N v46;i-r)
Indexing began November 1940, v 43 no 1
- Textile Col**—Textile Colorist. \$5. m Textile Colorist, Inc, 233 Broadway, New York (1v:Ja v65;i-s)
- Textile Inst J**—Journal of the Textile Institute. 48s; single numbers 4s. m Textile Institute, 16 St Mary's Parsonage, Manchester 3, England (1v:Ja v34;i-l)
- Textile World**—Textile World. \$1.50; single numbers 25c. m McGraw-Hill Pub. Co, Inc, Eragdon, Lord & Nagle Division, 330 W 42d St, New York 18 (1v:Ja v93)
Annual index appears in Textile World yearbook and catalog
- Transactions of the American Society of Mechanical Engineers**. See **A S M E Trans**
- Transit J**—Transit Journal. \$3; single numbers 35c. m McGraw-Hill Pub. Co, Inc, 330 W 42d St, New York (1v:Ja v86;i-s)
Formerly Electric Railway Journal
Discontinued publication, December, 1942
- Trust Companies**. See **Trusts & Estates**
- Trusts & Estates**—Trusts and Estates, The Journal of Capital Management. \$5; single numbers 60c. m Fiduciary Publishers, Inc, 50 E 42d St, New York 17 (2v:Ja,JI v76-77;i-s)
Formerly Trust Companies

U S Agric—Publications. U.S. Dept. of Agriculture, Division of Publications, Washington, D.C.

Selected contributions on technical subjects are indexed

U S Bur For & Dom Com Domestic Commerce
* Ser—U.S. Bureau of Foreign and Domestic Commerce, Washington, D.C.

U S Bur For & Dom Com Economic Ser—U.S. Bureau of Foreign and Domestic Commerce, Washington, D.C.

U S Bur Labor Statistics Bul—United States Bureau of Labor Statistics. Bulletin. Distributed free of charge. U.S. Bureau of Labor Statistics, Washington, D.C.

U S Bur Mines Bul—United States. Bureau of Mines. Bulletin. U.S. Bureau of Mines, Washington, D.C.

U S Bur Mines Information Circ—United States. Bureau of Mines. Information Circular. U.S. Bureau of Mines, Washington, D.C.

U S Bur Mines Rep of Invest—United States. Bureau of Mines. Reports of Investigations. U.S. Bureau of Mines, Washington, D.C.

U S Bur Mines Tech Pa—United States. Bureau of Mines. Technical Paper. U.S. Bureau of Mines, Washington, D.C.

U S Geol S Bul—United States Geological Survey. Bulletin. U.S. Geological Survey, Washington, D.C.

U S Geol S Professional Pa—United States Geological Survey. Professional Paper. U.S. Geological Survey, Washington, D.C.

U S Nat Advisory Com for Aeronautics—United States National Advisory Committee for Aeronautics, Washington, D.C. Annual reports.

Technical Reports issued after June 1, 1940, not available for general distribution. Will be indexed later when restriction is lifted.

U S Nat Bur Stand—United States National Bureau of Standards. Circular. U.S. National Bureau of Standards, Washington, D.C.

U S Women's Bur Bul—United States. Women's Bureau. Bulletin. U.S. Women's Bureau, Washington, D.C.

W Soc E J—Journal of the Western Society of Engineers. \$3; single numbers 75c. q Western Society of Engineers, 205 W Wacker Drive, Chicago 6 (1v:Mr v48;i-2)
Changed to a quarterly beginning March 1943

Water & Sewage—Water and Sewage. \$2; \$2.50 in U.S.; single numbers 25c; 30c in U.S. m Monetary Times Printing Co. of Canada, Ltd, 341 Church St, Toronto, Ont. 2 (1v:Ja v81;i-1)
Formerly Canadian Engineer: Water and Sewage

Water Works & Sewerage—Water Works & Sewerage. \$2; single numbers 25c. m Gillette Pub. Co, 330 S Wells St, Chicago 6 (1v:Ja v90;i-s)

Weekly Underw—Weekly Underwriter. \$5; single numbers 25c. w Underwriter Printing and Publishing Co, 116 John St, New York 7 (2v:Ja,Jl v148-149;i-1)

Welding J—Welding Journal. \$5; single numbers 75c. October and December numbers \$1 ea. m American Welding Society, 33 W 39th St, New York 18 (1v:Ja v22;i-s)

Western Soc of Eng J. See **W Soc E J**

Wireless Eng—Wireless Engineer. 32s; single numbers 2s 6d. m Iliffe & Sons, Ltd, Dorset House, Stamford St, London, S.E. 1 (1v:Ja v20;i-1;cost 2s 6d)
Formerly Experimental Wireless and The Wireless Engineer

* The free distribution of publications of the Bureau of Foreign and Domestic Commerce is confined almost entirely to government officers, educational institutions, libraries, the press, and commercial organizations. Others may purchase them from the Superintendent of Documents, Government Printing Office, Washington, D.C.

† United States Bureau of Mines Publications for sale by Superintendent of Documents, Government Printing Office, Washington, D.C. Reports of Investigations and Information Circulars distributed by Bureau.

‡ The official (free) distribution of publications of the Bureau is limited to government offices, public libraries, educational institutions, scientific societies, and cooperating experts. Others may purchase them from the Superintendent of Documents, Government Printing Office, Washington, D.C.

Key to General Abbreviations

+	continued on later pages of the issue	Je	June
abr	abridged	Jl	July
Ag	August	Mr	March
Ap	April	My	May
arch	architect	n s	new series
bibliog	bibliography	N	November
comp	compiled or compiler	no	number
cond	condensed	O	October
cont	continued	p	page
D	December	pl	plate
diag	diagram	por	portrait
ed	edited or edition or editor	pseud	pseudonym
F	February	pt	part
i	index	rev	revised
il	illustrations	S	September
inc	incorporated	sup	supplement
Ja	January	tr	translated or trans- lation or translator
		v	volume

Sample entry: Budgeting to cut unit costs; Talon, incorporated. P. K. Poulton and P. H. Goldsmith. Factory Management 97:48-52+ O '39

Explanation: An article with the title given above will be found in Factory Management, volume 97, pages 48 to 52 (continued on later pages of the same issue) the October 1939 number.

Industrial Arts Index

A Cumulative Subject Index to Engineering, Trade and Business Periodicals

1943

A.E.F. See United States—Army—Expeditionary forces

ABBOTT laboratories

Nutrition committee of the Abbott laboratories. E. Joannes. Special Lib 34:275-6 J1-Ag '43

ABBREVIATIONS

Abbrevs. (a dictionary of abbreviations). H. J. Stephenson, comp. 126p \$1.75 Macmillan, New York '43

See also

Electric symbols

Symbols

ABERDEEN proving ground. See Ordnance school, Aberdeen proving ground

ABERHART, William, 1878-1943

Sketch. Economist 144:758-9 Je 12 '43

ABIETIC acid

Irradiation of abietic acid with ultraviolet rays. R. F. Brown, G. B. Bachman and S. J. Miller. bibliog Am Chem Soc J 65: 623-6 Ap '43

ABILITY

Ability, wages, and income. H. Staehle. R Econ Stat 25:77-87 F '43

See also

Creative ability

Skill

ABILITY tests

Accident-prone employee can be weeded out by simple tests. A. W. Williams. il Textile World 93:68-9 My '43

Bank personnel work under wartime conditions; how tests are used in selecting employees. E. N. Hay. il Bankers Mo 60:13-15+ Ja '43

Common sense about tests. F. H. Kirkpatrick. Personnel J 21:277-81 F '43

Dexterity tests for women workers. il Am Mach 86:1280-1 N 12 '42

Employee testing for upgrading present labor supply; tests by skilled administrators. il Am Business 13:22+ O '43

Guidance and placement of engineering students; Yale battery of tests of differential academic aptitude. R. S. Bartlett. J Eng Educ 33:535-51 Mr '43

Industrial misfit; aesthetokinetic tests; abstract. A. W. Williams. Management R 32: 374-5 O '43

Mechanical comprehension and dexterity. G. K. Bennett and R. A. Fear. Personnel J 22:12-17 My '43

Operator tests aid Lycoming training program. il diag Steel 112:111-12 F 15 '43

Personnel research in the army. Personnel J 21:349-55 Ap '43

Psychology pays; Detroit company pretests women; psychological, mechanical aptitude and emotional tests. Business Week p52+ F 20 '43

Results of testing machine-tool trainees. L. W. Ross. Personnel J 21:363-7 Ap '43

Skill, intelligence and temperament. D. G. Humm. Personnel J 22:80-90 S '43

Testing as a part of military classification. flow chart Science 97:473-8 My 28 '43

Tests for the selection of inspector-packers; abstract. E. E. Ghiselli. Management R 32:139 Ap '43

Tests in the selection of package wrappers; abstract. E. E. Ghiselli. Management R 32: 224 Je '43

Tests that aid wartime hiring. G. B. Arthur, Jr. il Factory Management 101:97-104 Mr '43

Use the right selection and testing methods. il Factory Management 101:96-105 Ag '43
Your place in the world of tomorrow; testing for talent. J. R. Roberts. Franklin Inst J 235:585-7 Je '43

See also

Personality tests

ABITIBI power and paper company

Committee prevents auction of Abitibi co. Paper Tr J 117:11+ J1 15 '43

Kalamazoo vegetable parchment company buys Espanola mill of Abitibi company. Paper Tr J 116:9 Ja 14 '43

Long awaited Abitibi appeal case opens. Paper Tr J 116:9 Je 3 '43

Privy council allows company's appeal against judgment ordering assets sold. Comm & Fin Chr 158:251 J1 19 '43

Way for reorganization cleared. Comm & Fin Chr 158:634 Ag 16 '43

ABRASION

Abrasion resistance of flexible vinyl plastics. F. W. Duggan. il diag Product Eng 14:44-9 Ja '43

ABRASIVES

Abrasive industry makes efficient use of its equipment; Abrasive co. manufacture of grinding wheels. il Brick & Clay Rec 102: 48-50, 52 Ja '43

Abrasives and methods for husbanding them. L. A. Parsons. Sci Am 168:96 F '43

Behr-Manning corporation; high pressure hot water heating system; drying system to facilitate production of abrasives and war materials. J. O. Amstutz and J. F. Geschwind. il diag Heat & Ven 40:41-5 Ja '43

Coated abrasive gadgets speed finishing operations. il Iron Age 151:48-51 F 25 '43

Conducting accurate test on abrasive performance. Foundry 71:166-7 Mr '43

Manufactured abrasives, old and new. R. R. Ridgway. bibliog il Chem & Eng N 21:858-62 Je 10 '43

Metal cutting with abrasive wheels. W. B. Heinz. A S M E Trans 65:21-6; Discussion. 26-9 Ja '43

New abrasive wheel for cutting rails. il Mass Transportation 39:255-6 J1 '43

Polishing, buffing and burring compounds are playing a vitally important part in the war program. H. J. McAleer. il Metal Finishing 41:144-5 Mr '43

Polishing with glue-abrasive mixtures. J. F. Siefen. il Iron Age 151:56-7 Mr 18 '43

Using abrasive cut-off wheels. F. A. Upper. il Foundry 71:115+ O '43

See also

Polishing

Pumice

Pulpsstones

Silicon carbide

ABSENTEEISM (labor)

ABC's of absenteeism. A. G. Mezerik. Ptr Ink 203:16-17+ Ap 9 '43

Absence due to sickness. D. L. Lynch. Ind Med 12:575-82 S '43

Absences drop when American Screw shows loss to war effort. Sales Management 52:39 Ja 1 '43

ABSENTEEISM (labor)—Continued

- Absent workers help Hitler; keeping workers consistently on the job. *Il Am Mach* 87: 90-2 My 27 '43
- Absentee control; union to shepherd laggards under scheme evolved for Alcoa's Cleveland plant. *Business Week* p82 J1 31 '43
- Absenteeism. *Ind Med* 12:417-19 Je '43
- Absenteeism. A. W. Williams and others. *Il Textile World* 93:74-9 Ap '43
- Absenteeism, a coal industry problem; British and American conditions. R. R. Sayers. bibliog *Il Min Cong J* 29:23-7 My '43
- Absenteeism among British engineering workers. *Int Labour R* 47:509-11 Ap '43
- Absenteeism among women war workers at two Royal ordnance factories. *Economist* 145:347 S 4 '43
- Absenteeism, an old problem under a new name. N. D'Olive. *Il Pet Refiner* 22:114, 116 Ap '43
- Absenteeism. CIO's view. *Personnel J* 21: 369-70 Ap '43
- Absenteeism control. J. J. Wittmer. *Ind Med* 12:281-4 My '43
- Absenteeism costs war industries more time than strikes. *Il Steel* 112:48-51 F 15 '43
- Absenteeism guide; causes, cures, agencies available for assistance. *Iron Age* 151:132 My 13 '43
- Absenteeism hit. *Business Week* p113 Mr 20 '43
- Absenteeism in Canadian war industries. *Monthly Labor R* 56:683-6 Ap '43
- Absenteeism in commercial shipyards, 1942. E. V. Kennedy. *Monthly Labor R* 56:211-22 F '43
- Absenteeism in Great Britain. *Int Labour R* 47:238-40 F '43; Same. *Ind Med* 12:183-4 Mr '43
- Absenteeism lower than in first World war but more significant now because of specialized jobs. *Iron Age* 151:76, 78 F 11 '43
- Absenteeism; morale education seen as best national solution. *Iron Age* 151:95-6, 98, 100-1 F 11 '43
- Absenteeism problem attacked by War manpower commission. *Steel* 112:31 Ja 25 '43
- Absenteeism; the new national malady. *Fortune* 27:104-5 Mr '43
- Absenteeism under control at Vultee. A. R. Baish. *Il Automotive & Aviation Ind* 88:22-4 Je 15 '43
- Absenteeism: what to do about it; reports to executives. *Il Business Week* p34-5 F 6 '43
- Absenteeism, what's the problem? *Il Aviation* 42:116-17-4 Ap '43
- Absentees rated. *Business Week* p98-9 Ap 24 '43
- Advertising at war, against absenteeism. J. W. Mason. *Il Ptr Ink* 202:19-21 Mr 12 '43
- Agreement between the mine, metal and smelter workers union and the Aluminum co. of America. *Personnel J* 22:192 N '43
- Aircraft council representative boils down absentee problem; abstract. R. B. Smith. *Iron Age* 151:76-7 Ap 1 '43
- Attendance contest for weekly prizes combats absenteeism. *Il Ptr Ink* 203:29 Ap 23 '43
- Bad working conditions are main cause of absence from work; abstract. F. Perkins. *Concrete (mill sec)* 51:178 My '43
- Bank night contest stimulates regular attendance on the job; Webster-Brinkley co. marine machinery defense plant in Seattle. *Il Sales Management* 51:26 N 15 '42
- Canadian plant halves willful absenteeism. J. Montagnes. *Il Factory Management* 101: 106-7 F '43
- Carrier's approach to production, absenteeism and postwar planning. J. M. Bickel. *Ind Marketing* 28:36-7+ My '43
- Competition lies absenteeism; American brake shoe company. E. K. Price. *Il Foundry* 71:89-9 J1 '43
- Co-workers' jibes shame offenders; Keokuk steel casting co. J. Sonnenfeld. *Steel* 112:93 Je 14 '43
- Dealing with absenteeism through the employ newspaper. W. R. Mason. *Il Ind Marketing* 28:60+ My '43
- Dental ill-health, in relation to absenteeism. H. A. Hooper. *Il Ind Med* 12:3-5 Ja '43
- Effect of unannounced quits on absenteeism in shipbuilding. *Monthly Labor R* 56:1047-8 Je '43
- Errors in fighting absenteeism. E. Whitmore. *Am Business* 13:13, 38-9 Ap '43
- Find chronic offenders to cut absenteeism. *Il Am Business* 13:13-4 Mr '43
- Formula which will cover absenteeism. *Iron Age* 151:96-7 My 27 '43
- Frequency and duration of disabilities causing absence from work among the employees of a public utility, 1938-42; Boston Edison company. W. M. Gafafer. bibliog *Pub Health Rep* 58:1554-60 O 15 '43
- Housing vs. absenteeism. *Arch Forum* 78: 104 Ap '43
- How to cut absenteeism. *Personnel J* 22:74-9 S '43
- Industrial absenteeism; its medical phase. R. F. Jukes. *Ind Med* 12:553-4 Ag '43
- Industrial health and the war; statistical analysis of the medical causes of absenteeism. D. L. Lynch. *Ind Med* 12:236-4 Ap '43
- Industry taking steps to control absenteeism. L. V. Spencer. *Aero Digest* 42:135-6+ Ap '43
- Launching provides contest promoting employee money. Bausch & Lomb optical company. *Il Ptr Ink* 205:86 N 12 '43
- Merchandise awards help lick absenteeism. C. G. Vienot. *Il Ind Marketing* 28:44, 46, 50 J1 '43
- Methods of controlling absenteeism. J. Tourin. *Monthly Labor R* 57:9-16 J1 '43
- NAM survey shows 56 per cent rise in 25 major war plants. *Steel* 112:68 My 24 '43
- Nationwide drive to keep 'em-working to be launched. E. Blair. *Barron's* 23:4 F 22 '43
- No single drive or campaign will solve absentee problem. *Automotive & Aviation Ind* 88:54-4 Ap 15 '43
- Observations on absenteeism. H. Earnheart. *Ind Med* 12:367 Je '43
- Off work; sanctions. *Economist* 143:536 O 31 '42
- Personnel helps for foremen. L. Marion. *Factory Management* 101:115 My '43
- Presenteeism; Western gear works uses the positive approach. *Ptr Ink* 203:63 Je 11 '43
- Problem of absenteeism in relation to war production. D. Evans. *Monthly Labor R* 56: 1-9 Ja '43
- Psychiatrist looks at industrial truancy. L. S. Selling. bibliog *Ind Med* 12:189-201 Ap '43
- Reasons for absenteeism. *Am Business* 13:34 Je '43
- Reducing absenteeism. *Ind Med* 12:247-9 Ap '43
- Reducing absenteeism. H. Saul. *Oil Paint & Drug Rep* 14:452 J1 '43
- Reducing absenteeism in coal mines; abstract of papers at meeting of Mine inspectors' institute of America. *Coal Age* 48:138-41 Je '43
- Regulation of wages, absenteeism, and hours in Australia. N. T. Johnson. *Monthly Labor R* 56:28-31 Ja '43
- Rewards and penalties cut absenteeism 67 percent. D. E. Wright. *Factory Management* 101:127-8 O '43
- Rewards for dependable employees; bonus for steady attendance coupled with penalty for absenteeism. C. G. Baumes. *Am Business* 13:13-4 F '43
- Role of psychiatry in absences. M. Brown. *Concrete (mill sec)* 51:193 Je '43
- Role of psychology in absences. W. H. Kushnick. *Ind Med* 12:25-6 Ja '43; Same cond. *Concrete (mill sec)* 51:161 Ap '43
- Roundtable on absenteeism. *Il Ry Mech Eng* 117:170-1 Ap '43
- Sickness absenteeism among industrial workers, first quarter of 1943, with an inquiry into the occurrence of the respiratory diseases, 1934-43. W. M. Gafafer. *Pub Health Rep* 58:1273-7 Ag 20 '43
- Sickness absenteeism among male and female industrial workers, 1933-42, inclusive. W. M. Gafafer. *Pub Health Rep* 58:1250-4 Ag 13 '43
- Some common causes of sick absences and their prevention. J. J. Wittmer. *Il Concrete (mill sec)* 51:111-12 Ja '43; Same. *Ind Med* 12:23-4 Ja '43
- Survey of twenty-five plants uncovers facts about absenteeism. *Concrete (mill sec)* 51: 192-4 Je '43
- Tampa yard adopts plan to cut down absenteeism. *Marine Eng* 48:234-4 Ap '43

ABSENTEEISM (labor)—Continued

- Tell workers why, and they won't go
A.W.O.L.; Goodyear aircraft corp. H. E.
Blythe. *Factory Management* 101:106-7 Je
'43
- Tested way to reduce absenteeism. *il* *Fac-
tory Management* 101:82-90 Mr '43; *Ab-
stract. Management* E 32:179-81 My '43
- They're sick; Health league of Canada plans
nutritional program. *Business Week* p52 Jl
3 '43
- Three-way solution offered by WMC to re-
duce absenteeism. *Iron Age* 151:82 F 4 '43
- Unconventional, but maybe it will reduce
absenteeism! offering travel and other
rewards. J. O. Young. *Ptr Ink* 203:52, 54
Ap 2 '43
- Westinghouse sells workers on need for stay-
ing on the job. A. R. Fiske. *il* *Ind Market-
ing* 28:30-2 O '43
- Who stays home? *Business Week* p37 Ap 3
'43
- Why absenteeism? Cleveland WMC studies
problem. *Business Week* p42+ N 21 '42
- Why do employees stay away from work and
what can we do about it? C. D. Selby. *Steel*
112:25+ Ja 18 '43
- Women as absentees. *Ind Med* 12:46 Ja '43
- Work drive due, while Congress considers
an antiabsentee bill. *Business Week* p96
Mr 27 '43

ABSORPTIOMETER

- Determination of phenol and *m*-cresol in coal
distillation products by means of the Spek-
ker photo-electric absorptiometer. T. S.
Harrison. *Soc Chem Ind J* 62:119-23 Ag '43
- Photoelectric absorptiometer, the polarograph,
and the spectrograph; a critical review;
H. K. Whalley. *Chem & Ind* 61:495-7 D 5 '42

ABSORPTION

- Absorption of carbon dioxide by sodium hy-
droxide solutions in a packed column. J. E.
Tepe and B. F. Dodge. *bibliog diag. Am*
Inst Chem Eng Trans 39:255-76 Ap '43
- Absorption of oxygen by glutathione in alka-
line solutions; kinetics of the reaction at
pH 13. M. B. Young and H. A. Young. *Am*
Chem Soc J 65:1681-7 S '43
- Absorption oil in the cycling plant. J. A.
Grimshaw. *il* *Pet Eng* 14:80, 82 D '42
- Charcoal treatment of brandy. N. E. Tolbert
and M. A. Amerine. *bibliog il* *Ind & Eng*
Chem 35:1078-82 O '43

*See also***Absorption****ABSORPTION apparatus**

- Absorber fabricated from obsolete materials.
L. L. Dresser. *il* *Pet Eng* 14:55 Mr '43
- Absorption tube tares in carbon and hydro-
gen microdetermination. W. M. MacNevin
and J. E. Varner. *bibliog Ind & Eng Chem*
Anal ed 15:224-5 Mr 15 '43
- Continuous nitric oxide test board. *Chem Ind*
53:96-7 Jl '43
- Drip-point grid tower packings: gas-film
transfer coefficients; abstract. M. C. Mol-
stad, J. F. McKinney and R. G. Abbey.
Chem & Met Eng 50:181-2 Jl '43
- Gas-absorption apparatus. L. Bolstad and
R. E. Dunbar. *diag Ind & Eng Chem Anal*
ed 15:498 Ag 15 '43
- Gas absorption in a Stedman packed column.
R. E. White and D. F. Othmer. *bibliog diags*
Am Inst Chem Eng Trans 38:1067-87; *Dis-
cussion*. 1087-9 D '42
- Jal plant processes two grades of field gases.
il *Pet Refiner* 22:99-102 Ap '43
- Studies of liquid holdup in packed towers.
B. W. Jesser and J. C. Elgin. *bibliog diags*
Am Inst Chem Eng Trans 39:277-98 Je '43
- Theoretical flooding velocities in packed col-
umns. J. W. Bertetti. *Am Inst Chem Eng*
Trans 38:1023-35 D '42
- Two obsolete towers made into absorber. L.
L. Dresser. *il* *Nat Pet N* 35 pt 2:R354 Ag
4 '43

Design

- Absorption of carbon dioxide by sodium hy-
droxide solutions in a packed column. J.
E. Tepe and B. F. Dodge. *bibliog diag Am*
Inst Chem Eng Trans 39:255-76 Ap '43
- Design for hydrocarbon absorption and strip-
ping. W. C. Edmister. *flow diag Ind & Eng*
Chem 35:837-9 Ag '43
- Nomographs for the absorption factor equa-
tion. S. Chase. *Ind & Eng Chem* 34:1499-
1501 D '42

ABSORPTION coefficients

- Probable X-ray mass absorption coefficients
for wave-lengths shorter than the *K* critical
absorption wave-length. J. A. Victoreen.
bibliog J Ap Phys 14:95-102 F '43

ABSORPTION of rays

- Absorption of light by 1,5-dien-3-yne in the
region 2300-2900 Å. H. Bastron, R. E.
Davis and L. W. Butz. *Am Chem Soc J*
65:973-5 My '43

- Spectra of dye molecules; absorption and re-
sonance in dyes. L. G. S. Brooker. *Rs Mod*
Phys 14:275-93 Ap-Jl '42

See also

- Spectrum—Absorp-
tion spectra

- ABSORPTION spectra.** *See* Spectrum—Absorp-
tion spectra

ABSTRACTS

- Abstracting and indexing. E. J. Crane. *J*
Chem Educ 20:537-9 N '43
- Abstracts and annotations. E. H. McClelland.
Special Lib 34:363-72 S '43

ACADEMY of sciences of the USSR

- Academy of sciences of the U.S.S.R. V.
Komarov. *Science* 98:357 O 22 '43
- Branches of the Academy of sciences of the
USSR. P. Kolesnikov. *Science* 98:205-8, 231-
3 S 3-10 '43

ACCELERATION

- Coriolis theorem. A. Bloch. *Engineering* 155:
243-4 Mr 26 '43
- Crystals used to measure high accelerations;
abstract. *Franklin Inst J* 236:8 Jl '43
- Horizontal path along the earth's surface
of a projectile or plane under constant
tangential acceleration. W. S. Kimball.
Franklin Inst J 236:67-79 Jl '43
- Path equation for motion on the surface of
the rotating earth in a uniform parallel
field of force with initial velocity along
the field. W. S. Kimball. *Franklin Inst J*
235:273-83 Mr '43
- Regions of infinite acceleration and flow
realms in a compressible fluid. M. G. Scher-
berg. *J Aeronautical Sci* 10:223-6+ Jl '43
- Special form of Coriolis' compound centripetal
acceleration due to the rotating earth. W.
S. Kimball. *diags Franklin Inst J* 234:453-72
N '42

- Velocity and acceleration analysis of uni-
versal joints. *Machine Design* 14:93-4 N '42

- ACCELERATION of machinery.** *See* Machinery,
Kinematics of

- ACCELERATORS.** *See* Vulcanization—Accel-
erators

ACCELEROMETERS

- Bellows accelerometer. J. E. Shrader. *il* *diags*
Franklin Inst J 236:353-62 O '43
- Three-component accelerometer. J. E.
Shrader. *il* *diags Franklin Inst J* 234:549-66
D '42

ACCEPTANCES

- Bankers acceptances outstanding, 1938-1941.
Survey of *Cur Business* 1942 Sup p60
[supplemented in monthly numbers]
- Commercial paper and bankers' acceptances
outstanding, Aug. 1941-Nov. 1942. *Fed Res*
Bul 29:66 Ja '43 [cont monthly]

ACCEPTANCES, Trade

- Holder in due course of trade acceptance.
C. R. Rosenberg, jr. *Burroughs Clearing*
House 28:30+ N '43

- ACCIDENT insurance.** *See* Insurance, Accident

ACCIDENT law*See also*

- | | |
|----------------------|-------------------|
| Damages | Negligence, Con- |
| Employers' liability | tributory |
| Negligence | Workmen's compen- |
| | sation |

- ACCIDENT prevention.** *See* Safety devices and
measures and references under that head-
ing

ACCIDENTS

- Accident costs; industrial losses due to non-
industrial accidents; abstract. A. E. Metz-
ger. *Safety Eng* 84:17 N '42
- Accidents must be prevented. C. R. Welborn.
Ins Field (Fire ed) 72:6-7 Mr 11 '43

ACCIDENTS—Continued

Historic accidents and disasters—(cont). *il* diags plans Engineer 174:352-4, 372-4, 432-3, 435, 452-5; 175:84-8; 176:238-9+, 258-9 O 30-N 6, 27-D 4 '42, Ja 29, S 24-O 1 '43

Industry's next big problem; off-the-job accidents. C. C. Carlton. *il* Nat Safety N 48:10-11+ S '43

Missing from the job; why 109 Syracuse workers lost 2253 days in after-work accidents. W. L. Fox. *il* Nat Safety N 46:21+ D '42

Off-the-job accidents. N. H. Dearborn. Paper Ind 25:512 Ag '43

Reinforcing the homefront. S. H. Kershaw. Nat Safety N 47:27+ My '43

Role of lighting in accident prevention. H. L. Logan. bibliog Elec Eng 62:143-7 Ap '43

Stairway accidents. Nat Safety N 47:21-2+ My '43

270 million lost man-days; off-the-job accidents. *il* Nat Safety N 47:40+ Ap '43

See also

Automobile accidents	First aid in illness
Aviation—Accidents	and injury
Building accidents	Insurance, Accident
Burns and scalds	Offices—Accidents
Electricity, Injuries from	Railroads—Accidents
Elevators—Accidents	Safety campaigns
Explosions	Safety devices and
Fires	measures

Statistics

Wasted manpower; statistics for 1942. map Nat Safety N 48:10-11, 38+ JI '43

ACCIDENTS, Automobile. See Automobile accidents

ACCIDENTS, Industrial

Accident-prone employee can be weeded out by simple tests. A. W. Williams. *il* Textile World 93:68-9 My '43

Accident proneness in factories, Great Britain. Monthly Labor R 55:1199-1202 D '42

Accident, saboteur of manpower; War production fund to conserve manpower. Marine Eng 47:126-7 D '42; Same cond. Am Gas J 157:35 D '42

Accidents in factories; annual report of the Chief inspector of factories for the year 1942. Electrician 131:379-80, 411-12 O 15-22 '43

Belt and pulley accidents. Nat Safety N 46:26-7 D '42

Case histories. Safety Eng 85:32-3 My '43

Industrial accidents; annual report of the Chief inspector of factories for 1942. Elec R (Lond) 133:503-4 O 15 '43

Industrial hazards and their prevention; survey based on 3600 accidents. J. J. Toland, Jr. and I. Kornbluh. bibliog(57 titles) *il* Ind Med 12:534+ Ag '43

Industrial health and safety, 1942. Economist 145:501 O 9 '43

Industrial misfit; aesthetokinetic tests; abstract. A. W. Williams. Management R 32:374-5 O '43

Industry accepts the challenge; industrial accident problem. W. A. Irvin. Nat Safety N 46:10+ N '42

Infection on the production line. *il* Safety Eng 84:39-40 N '42

It can be done! work of National committee for the conservation of manpower in war industries. Safety Eng 85:43-4 Ap '43

Just before dawn; accident prevention on the third shift. C. E. Muir. *il* Nat Safety N 46:12-13+ D '42

Management of industrial injuries. H. W. Meyerding. Ind Med 12:634, 636, 638 S '43

New workers for safety; experience of American brake shoe company. R. B. Parker. *il* Safety Eng 86:39, 42-3 Ag '43

None can be wasted. R. G. Swing. Nat Safety N 47:21+ F '43

Offspring of the emergency; unsafe temporary installations. C. R. Zeskey, Jr. Nat Safety N 47:53 F '43

Personal factor in accidents; abstract. Am Water Works Assn J 35:627-8 My '43

Production and safety; planning and organizing precautionary measures. Automobile Eng 32:519-22 D '42

Role of lighting in accident prevention. H. L. Logan. bibliog Elec Eng 62:143-7 Ap '43

Safety in industry. M. A. Snell. bibliog J Eng Educ 33:794-817 Je '43

Safety is a weapon. F. V. Geier. *il* Am Mach 87:71-3 Ja 7 '43

Trends in treatment of industrial injuries. H. H. Rubin. bibliog Nat Safety N 48:34+ N '43

Wrench accidents. *il* Nat Safety N 48:21-2+ Ag '43

See also

Boiler explosions	Eye—Injuries
Coal mines and mining—Safety measures	Falls
Disabled—Rehabilitation	Machinery—Safety devices
Dust explosions	Mine accidents
Employers' liability	Safety devices and measures
Explosions	Workmen's compensation
also subdivision	Accidents under special subjects, e.g.
Chemical plants	Lumbering
Coal bins	Paper mills
Coal mines and mining	Quarries and quarrying
Electric welding, Arc	Sand and gravel plants
Gas companies	
Grinding wheels	

Cost

Safety does pay dividends; specific examples of indirect costs of accidents. G. Gedge. Can Min J 64:369-71 Je '43

Records

Figures that don't lie; how accident records are used; American welding and manufacturing company. *il* Nat Safety N 48:24-5+ JI '43

Finding the facts; American standards code for compiling industrial accident causes. G. G. Grieve. Nat Safety N 48:20-1+ JI '43

How the cause code helps prevent accidents. D. A. Moore. *il* Ind Stand 14:177-81 Je '43

Make a note of it; notebook recording details of accidents and near-accidents is helpful reminder. W. J. Brokaw. *il* Nat Safety N 43:18+ Ag '43

New safety report facilitates study of mining accidents. W. M. Dake. Coal Age 48:58-9 Ja '43

Propose change in injury reporting methods. Nat Safety N 48:66+ Ag '43

Statistics

Accident hazard, by size of plant. M. D. Kossoris. Monthly Labor R 56:647-51 Ap '43

Causes and prevention of injuries from falls in shipyards. F. S. McElroy and A. L. Svenson. Monthly Labor R 57:766-72 O '43

Causes and prevention of injuries in the manufacture of lumber products, 1941. F. S. McElroy and G. R. McCormack. Monthly Labor R 55:960-77 N '42

Changes in injury frequency rates and employment in manufacturing, 1936-41. M. D. Kossoris. Monthly Labor R 56:949-54 My '43

Coke-oven accidents in the United States, calendar year 1941. W. W. Adams and V. E. Wrenn. U S Bur Mines Tech Pa 651:1-13; pa 10c Supt. of doc. '43

How many man-days lost? W. G. Johnson. Nat Safety N 47:20-1+ Ap '43

Industrial injuries in January 1943. Monthly Labor R 56:846-8 My '43 [cont monthly]

Industrial-injury experience in the iron and steel industry, 1941. F. S. McElroy and H. J. Butler. Monthly Labor R 55:1191-9 D '42

Industrial-injury statistics by industries and states, 1940; tables. U S Bur Labor Statistics Bul 700:1-67; pa 15c Supt. of doc. '42

Mining a dangerous industry; mine and other industrial accident rates compared. Min & Met 24:8 Ja '43

1941 accident rates in the rubber industry. India Rubber W 107:277 D '42

1942 industrial accident toll. Nat Safety N 47:12-13 Mr '43

War-time safety operation of public utilities. J. Stilwell. Pub Util 31:152-5 F 4 '43

ACCOMMODATION coefficients

Accommodation coefficients of He, Ne, Ar, H₂, D₂, O₂, CO₂, and Hg on platinum as a function of temperature. L. B. Thomas and F. Olmer. bibliog diags Am Chem Soc J 65:1036-43 Je '43

ACCOUNTANTS

- Accounting manpower. J Account 75:524-9 Je '43
 Licensing the accountant. Economist 144:628 My 15 '43
 Occupational deferment for accountants. O. H. Ritenour. Am Gas Assn Mo 25:94-5 Mr '43
 Official decisions and releases; accounting manpower; official texts. J Account 76:359-64 O '43
 SEC amends rule for qualifying accountants. Comm & Fin Chr 157:2072 Je 3 '43
 Some aspects of wage and salary administration of interest to accountants. G. A. Gesell. J Account 75:131-6 F '43
 Status of accountants under Selective service. J Account 75:468-9 My '43

See also

Accounting
 Accounting ethics

ACCOUNTANTS, Public

- Auditing under war conditions. G. P. Ellis. J Account 76:133-46 Ag '43
 Cooperation between SEC and public accountants. G. Purcell. J Account 76:155-8 Ag '43
 Fifth freedom. G. S. Olive. J Account 75:490-5 Je '43
 Independence of accountants; Securities and exchange commission amended rules. J Account 76:84 Jl '43
 Internal auditing and the public accountant. J. B. Thurston. J Account 76:220-9 S '43
 Suggestions for writing better comments. J. W. Rountree, Jr. J Account 75:140-3 F '43
 Tax returns and the practice of law. J Account 76:2-4 Jl '43; Discussion. T. G. Thurston. 76:165 Ag '43
 Use of accountants in war; statement presented before Senate subcommittee on technological mobilization. J Account 76:27-34 Jl '43

See also
 Accounting
 Auditing

Law

- Law of public accounting practice. J. L. Dohr. J Account 75:91-6 Ja '43

ACCOUNTANTS' reports

- Physical inventories in wartime; statement on auditing procedure no. 17. J Account 75:156-61 F '43
 Suggestions for writing better comments. J. W. Rountree, Jr. J Account 75:140-3 F '43

ACCOUNTING

- Accounting control for peace; the future of international prosperity. A. Grey. J Account 75:397-407 My '43
 Accounting developments of 1942. G. O. May. J Account 75:301-5 Ap '43
 Accounting problems of the small business. M. H. Stans. J Account 76:230-9 S '43
 Sources of accounting principles. R. B. Kesler. J Account 74:531-5 D '42

See also

- | | |
|------------------------------|---|
| Accountants, Public | Foundry accounting |
| Accountants' reports | Government accounting |
| Accounts receivable | Income statements |
| Auditing | Income tax |
| Balance sheets | Interest |
| Bank accounting | Inventories |
| Billing | Invoices |
| Budget, Business | Microfilm records |
| Card system in business | Overhead expense |
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| Depreciation | Profit and loss statements |
| Dividends | Punched card system |
| Financial ratios | Reserves |
| Financial statements | |
| also subdivision | Accounting under special subjects, e.g. |
| Airplane factories | Income tax |
| Contracts, Government | Industrial research |
| ment | Instalment plan |
| Corporations | Investment companies |
| Electric contractors | Labor cost |
| Electric utilities | Payrolls |
| Factories | Printing trade |
| Gas, Natural | Public utilities |
| Gas companies | Public welfare departments |
| Government loans to industry | |

Railroads
 Sewerage departments
 Taxation

Transportation tax
 United States—Navy department
 Waterworks

Bibliography

- Accounting in wartime. (Business literature v. 15, no. 6) 2p Business branch, Newark public lib, Newark, N.J. F '43
 Comprehensive bibliography. (In J. K. Lasser, ed. Handbook of accounting methods. p 1217-1331) \$10 D. Van Nostrand co, inc. 250 Fourth av, New York '43
 Current books and articles. Published in monthly numbers of Journal of accountancy
 Current cost literature. N A C A Bul 24:409+ sec 2 D 1 '42 [cont monthly]

Examinations

- Planned examinations. N. E. Webster. J Account 75:348-52 Ap '43

Laws and regulations

- Accountants have their troubles, spite of rules. H. H. Frank. Pub Util 31:754-6 Je 10 '43
 Accounting and regulation. G. O. May. J Account 76:295-301 O '43

See also

Accountants, Public
 —Law

Manuals

- Suggested procedure for the issuance and control of procedures. W. E. Bergstrom. N A C A Bul 24:384-9 D 1 '42; Abstract. Management R 32:53-5 F '43

Mechanical aids

- Customers and bank benefit by machine accounting at windows. F. L. O'Hair. il Bankers Mo 60:200-1+ My '43
 Expense accounting simplified by electrical accounting machines. H. C. Wiebenson. Bankers Mo 59:552-3 D '42
 Ford Motor's modernized payroll methods. R. G. French. il Am Business 13:18-20+ Mr '43
 Office appliances in the electric industry. S. H. Withey. Electrician 131:299-301 S 24 '43
 Proof machine aids audit and saves much operating time. R. A. Potter. Bankers Mo 60:447-8 O '43
 Proving methods reviewed. Bankers Mo 60:152-5+ Ap '43

Standards

- Standardised accountancy. Economist 145:51-2 Jl 10 '43

Terminology

- Names wanted; a problem in terminology. G. Rea. J Account 74:541-3 D '42

See also

Depreciation—Definition

Russia

- Accounting in Soviet Russia. J Account 74:543 D '42

ACCOUNTING and war

- Accounting problems of war contracts. G. D. Bailey. J Account 76:211-19 S '43
 Auditing under war conditions. G. P. Ellis. J Account 76:133-46 Ag '43
 Disclosure of the effect of wartime uncertainties on financial statements; statement on auditing procedure no. 15. J Account 75:153-5 F '43
 Financial statements in wartime. C. O. Wellington. J Account 76:54-65 Jl '43
 Physical inventories in wartime; statement on auditing procedure no. 17. J Account 75:156-61 F '43
 Reporting of war accounting practices; survey of 1942 annual reports of nine corporations. S. Gilman. J Account 76:200-10 S '43
 Some problems of wartime industrial accounting control. C. W. Bennett. N A C A Bul 24:1261-80 Jl 1 '43
 Use of accountants in war; statement presented before Senate subcommittee on technological mobilization. J Account 76:27-34 Jl '43
 War effect on statements. J Account 74:544-6 D '42

ACCOUNTING research

Practice in accounting for continuing expenditures arising from wartime production, compiled by the Research and technical service department, National association of cost accountants. N A C A Bul 24:925-49 sec 3 Ap 1 '43

ACCOUNTS receivable

Accounts receivable; features of the Corn exchange bank v. Klauder decision by the United States Supreme court. Banking 35: 57-8 Ap '43

Accounts receivable loans employ surplus funds. R. L. Redheffer. Bankers Mo 60:160-14 Ap '43

Accounts receivable system saves valuable war time; handles increased volume without additional employees. L. A. E. Gleason. Credit & Fin Management 45:18-20+ N '43

Auditing procedures for government receivables. J. W. Smart. J Account 76:9-10 Ji '43

Bank servicing of receivables. R. B. Cox. Burroughs Clearing House 27:22-4, 34-6 Ja '43

Confirmation of public accounts receivable. J Account 76:443-4 N '43

Confirmation of public utility accounts receivable; statement on auditing procedure no. 14. J Account 75:65-7 Ja '43

Confirmation of receivables from the government. G. Rea. J Account 76:166-7 Ag '43

Confirmation of receivables from the government; statement on auditing procedure no. 18. J Account 75:162-3 F '43

How American Chicle handles accounts receivable. J. Garth. Il Am Business 13:22-34 My '43

Loans on accounts receivable. R. S. Douglas. Banking 35:45, 47 Ja '43

Loans to watch. Business Week p91+ F 6 '43

Review of Supreme court ruling on assignment of accounts receivable. W. R. Montgomery. Credit & Fin Management 45:24-6 My '43

See also

Assignment of book accounts

ACCUMULATORS. See Storage batteries

ACCUMULATORS, Hydraulic. See Hydraulic accumulators

ACENAPHTHOYL BENZOIC acid

Derivatives of 3':2-acenaphthoylbenzoic acid. A. T. Peters and F. M. Rowe. bibliog Soc Dyers & Col J 59:52-4 Mr '43

ACERITOL

Ring structure of polygalitol. N. K. Richtmyer and C. S. Hudson. bibliog Am Chem Soc J 65:64-7 Ja '43

ACETAL

Study of the dilatometric method of measuring rates of reactions; the application to the determination of the rate of hydrolysis of acetal. L. K. J. Tong and A. R. Olson. diag Am Chem Soc J 65:1704-7 S '43

ACETALDEHYDE

Acrolein determination in the presence of formaldehyde and acetaldehyde by the polarographic method. R. W. Moshier. bibliog Ind & Eng Chem Anal ed 15:107-9 F '43

Infrared and Raman spectra of polyatomic molecules; acetaldehyde and acetaldehyde-d₄. J. C. Morris. bibliog J Chem Phys 11: 230-5 My '43

Manufacture of butadiene from ethyl alcohol. J. A. Gamma and T. Inouye. bibliog flow diags Chem & Met Eng 50:94-7 Ja '43

Some notes on the condensation products of acetaldehyde. E. E. Connolly. Chem Soc J p42 Ja '43

ACETALS

Geometrical isomerism of cyclic acetals derivable from nitro polyhydric alcohols. M. Senkus. Am Chem Soc J 65:1656 Ag '43

Isomeric 1,3- and 2,3-benzylidene-D-arabitol. W. T. Haskins, R. M. Hann and C. S. Hudson. bibliog Am Chem Soc J 65:1663-7 S '43

Ketene acetals; the pyrolysis of ketene acetals and orthoesters. S. M. McElvain, H. I. Anthes and S. H. Shapiro. bibliog Am Chem Soc J 64:2525-31 N '42

ACETAMIDOSACCHARIN

5-Acetamididosaccharin, a derivative of sulph-anilamide. O. G. Backeberg and J. L. C. Marais. Chem Soc J p78-9 F '43

ACETANILIDE

Electrolytic reduction of amides; N,N-dimethyl-valeramide and acetanilide. S. Swann, jr. bibliog Electrochem Soc Trans 84 (preprint 8):67-73 O '43

Kinetics of aromatic halogenation; bromination. P. W. Robertson, P. B. D. de la Mare and W. T. G. Johnston. Chem Soc J p276-9 Je '43

ACETATES

See also

Cellulose acetate

Analysis

Quantitative estimation of acetyl in carbohydrate acetates. E. L. Whistler and A. Jeanes. bibliog diag Ind & Eng Chem Anal ed 15:317-18 My 15 '43

ACETIC acid

Analytical data for the systems carbon tetrachloride-acetic acid-benzene and carbon tetrachloride-tetrachloroethylene. W. R. McMillan and H. J. McDonald. Ind & Eng Chem Anal ed 15:114-16 F 15 '43

Antispasmodics; basic esters of some aryl-acetic acids. R. R. Burtner and J. W. Cusic. bibliog Am Chem Soc J 65:262-7 F '43

Composition of vapors from boiling binary solutions. D. F. Othmer. bibliog il diags Ind & Eng Chem 35:614-20 My '43

Course of autooxidation reactions in polyisoprene and allied compounds; the oxidation of rubber in the presence of acetic acid or acetic anhydride. G. F. Bloomfield. Chem Soc J p356-60 Ag '43

Destructive distillation of bagasse. D. F. Othmer and G. A. Fernstrom. bibliog il diag Ind & Eng Chem 35:312-17 Mr '43

Destructive distillation of lignocellulose. R. Katzen, R. E. Muller and D. F. Othmer. bibliog diags Ind & Eng Chem 35:302-5 Mr '43

Dissociation constants and pH-titration curves at constant ionic strength from electrometric titrations in cells without liquid junction; titrations of formic acid and acetic acid. R. G. Bates, G. L. Seigel and S. F. Acree. bibliog diag J Research Nat Bur Stand 30:347-59 My '43

Dyeing of acid and chrome colors on wool without acetic acid. E. I. Noble. Textile Col 64:522-5 N '42

Experimental pulping with inorganic chlorides in acetic acid; abstract. F. Schütz and W. Knackstedt. Paper Ind 25:558-9 Ag '43

Hydrolysis of hydrogen cyanide in acetic acid solutions with mineral acids as catalysts. V. K. Kriebel, F. C. Duennel and E. Colton. bibliog Am Chem Soc J 65:1479-82 Ag '43

Lead tetraacetate oxidations in the sugar group; the rates of oxidation of trehalose, levoglucosan, α-methyl-L-sorbofuranoside, polygalitol and styrcitol in glacial acetic acid. R. C. Hockett, M. T. Dienes and H. E. Ramsden. bibliog Am Chem Soc J 65: 1474-7 Ag '43

Magneto-optic rotation; acetic and chloroacetic acids in polar and non-polar solvents. C. E. Waring, S. Steingiser and H. H. Hyman. Am Chem Soc J 65:1066-8 Je '43

Mechanism of the oxidation of oleic and elaidic acids and their methyl esters by hydrogen peroxide in acetic acid; further observations on the configurations of the 9:10-dihydroxystearic acids. G. King. Chem Soc J p37-8 Ja '43

Molecular state of acetic acid vapor; an experiment in gaseous equilibrium. R. H. Wright. il diag J Chem Educ 20:179-82 Ap '43

Reactions of atoms and free radicals in solution; decomposition of acetyl peroxide in aliphatic acids, a new synthesis of succinic acid and its substitution derivatives. M. S. Kharasch and M. T. Gladstone. bibliog Am Chem Soc J 65:15-17 Ja '43

Reactions of phenanthraquinone and retenequinone with aldehydes and ammonium acetate in acetic acid solution. E. A. Steck and A. R. Day. bibliog Am Chem Soc J 65:452-6 Mr '43

ACETIC acid—Continued

- Role of neighboring groups in replacement reactions; retention of configuration in the reaction of some dihalides and acetoxyhalides with silver acetate. S. Winstein and R. E. Buckles. *bibliog Am Chem Soc J* 64:2780-6 D '42
- Role of neighboring groups in replacement reactions; the effect of the neighboring acetoxy group on the course of the replacement of the tosylate group of *trans*-2-acetoxycyclohexyl *p*-toluenesulfonate. S. Winstein, H. V. Hess and R. E. Buckles. *bibliog Am Chem Soc J* 64:2796-801 D '42
- Role of neighboring groups in replacement reactions; the effects of small amounts of water on the reaction of silver acetate in acetic acid with some butene and cyclohexene derivatives. S. Winstein and R. E. Buckles. *bibliog Am Chem Soc J* 64:2787-90 D '42
- Vapor phase esterification over zirconium oxide. W. J. Knox, jr. and T. N. Burbridge. *bibliog diag Am Chem Soc J* 65:1999-1001 Je '43
- Vapor-phase esterification rates. H. F. Hoerig, D. Hanson and O. L. Kowalke. *bibliog diag Ind & Eng Chem* 35:575-80 My '43

ACETIC anhydride

- Analysis of cellulose derivatives; determination of free hydroxyl content. C. J. Malm, L. E. Genung and R. F. Williams, jr. *bibliog Ind & Eng Chem Anal ed* 14:1935-40 D 15 '42
- Course of autooxidation reactions in polyisoprene and allied compounds; the oxidation of rubber in the presence of acetic acid or acetic anhydride. G. F. Bloomfield. *Chem Soc J* p356-60 Ag '43
- Influence of *p*-substituents on the decomposition of zinc chloride double salts of diazonium chlorides by acetic anhydride. H. H. Hodgson and C. K. Foster. *Chem Soc J* p747-8 D '42
- Ketone synthesis; the condensation of acid anhydrides with olefins. A. C. Byrns and T. F. Doumani. *bibliog il diag Ind & Eng Chem* 35:349-53 Mr '43
- Microdetermination of hydroxyl content of organic compounds; acetic anhydride-pyridine mixture as reagent. J. W. Petersen, K. W. Hedberg and B. E. Christensen. *bibliog Ind & Eng Chem Anal ed* 15:225-6 Mr 15 '43
- Phenanthrene derivatives; acetylation and succinylation of 3-methylphenanthrene. W. E. Bachmann and G. D. Cortes. *bibliog Am Chem Soc J* 65:1329-34 Jl '43
- Studies on agar-agar; isolation of hepta-acetyl *dl*-galactose from 3:6-anhydro- β -methyl-*d*-galactoside. T. L. Cottrell and E. G. V. Percival. *Chem Soc J* p749-50 D '42
- Tracer studies with radioactive carbon; the exchange between acetic anhydride and sodium acetate. S. Ruben, M. B. Allen and P. Nahinsky. *Am Chem Soc J* 64:3050 D '42

ACETOACETIC acid

- Rearrangement of allyl-type esters of β -keto acids. W. Kimel and A. C. Cope. *Am Chem Soc J* 65:1992-8 O '43

ACETOACTER

- New beer disease organisms. A. J. C. Cosbie. *Chem & Ind* 62:30-1 Ja 23 '43

ACETOACTER suboxydians

- Production of acetylmethylcarbinol by the action of acetobacter suboxydians upon 2,3-butyleneglycol. E. I. Fulmer, L. A. Underkoffler and A. C. Bantz. *bibliog Am Chem Soc J* 65:1425-7 Jl '43

ACETOIN

- Production of acetylmethylcarbinol by the action of acetobacter suboxydians upon 2,3-butyleneglycol. E. I. Fulmer, L. A. Underkoffler and A. C. Bantz. *bibliog Am Chem Soc J* 65:1425-7 Jl '43

ACETOMESITYLENE

- Vinyl alcohols; oxidative cleavage. R. C. Fuson and others. *bibliog Am Chem Soc J* 64:2886-8 D '42

ACETONE

- Action of phosphorus pentachloride on non-symmetrically substituted acetones. A. Zaki and Y. Iskander. *Chem Soc J* p68-70 F '43

- Alcohol and acetone by solvent extraction; heat requirements of distillation and of combined distillation and extraction processes. D. F. Othmer and R. L. Katcliffe, jr. *il diag Ind & Eng Chem* 35:798-805 Jl '43

- Effect of temperature on liquid-liquid equilibrium; benzene-acetone-water system and dodecane-1,6-diphenylhexane-furfural system. S. W. Briggs and E. W. Comings. *il diag Ind & Eng Chem* 35:411-17 Ap '43
- Film formation by pure liquids. C. W. Foulk and J. E. Barkley. *bibliog diag Ind & Eng Chem* 35:1013-16 S '43

- Gas absorption in a Stedman packed column. R. E. White and D. F. Othmer. *bibliog diag Am Inst Chem Eng Trans* 38:1067-87; Discussion, 1087-9 D '42

- Methyl ethyl ketone extraction of rubber. L. E. Cheyney. *bibliog Ind & Eng Chem* 34:1426-8 D '42

- Mixed unsaturated glycerides of liquid fats; low-temperature crystallisation of whale oil. T. P. Hilditch and L. Maddison. *Soc Chem Ind J* 61:169-73 N '42

- Photo-reactions; formation of benzpinacol by the action of acetone on benzhydrol in sunlight. A. Schönberg and A. Mostafa. *Chem Soc J* p276 Je '43

- Rates and temperature coefficients of the hydroxyl ion catalyzed aldol condensation of benzaldehyde with methyl ethyl ketone and acetone. J. D. Gettler and L. P. Hammett. *bibliog Am Chem Soc J* 65:1824-9 O '43

- Reaction of some 2-(α -chloroalkyl)-benzimidazoles with potassium iodide in acetone solution. H. Skolnik, A. R. Day and J. G. Miller. *Am Chem Soc J* 65:1858-62 O '43

- Recovery of free acid from pickling liquors. H. W. Gehm. *Ind & Eng Chem* 35:1003-4 S '43

- Trimolecular acetone peroxide in isopropyl ether. F. Acree, jr. and H. L. Haller. *Am Chem Soc J* 65:1652 Ag '43

- Vapor-liquid equilibria for commercially important systems of organic solvents; binary systems ethanol-*n*-butanol, acetone-water and isopropanol-water. A. S. Brunjes and M. J. P. Bogart. *bibliog Ind & Eng Chem* 35:255-60 F '43

- Versatile apparatus for photolysis studies in the gas phase; acetone and iodine mixtures. S. W. Benson and G. S. Forbes. *bibliog diag Am Chem Soc J* 65:1399-1405 Jl '43

ACETONITRILE

- Acylation of acetonitrile with ethyl *n*-butyrate and the alcoholysis of the resulting ketonitrile to ethyl *n*-butyrylacetate. E. Abramovitch and C. R. Hauser. *Am Chem Soc J* 64:2720-1 N '42
- Suggested method for replaceable hydrogen. H. A. Liebhafsky. *Am Chem Soc J* 65:1778 S '43

ACETOPHENONE

- Arsenicals derived from acetophenone. R. L. Clark and C. S. Hamilton. *bibliog Am Chem Soc J* 65:635-7 Ap '43

- Hydrogen fluoride as a condensing agent; aralkyl ketones. J. H. Simons and E. O. Ramler. *bibliog Am Chem Soc J* 65:1390-2 Jl '43

- Photochemical pinacolization. F. Bergmann and Y. Hirschberg. *Am Chem Soc J* 65:1429-30 Jl '43

- Reaction of *n*-butylmagnesium bromide with some aromatic ketones. H. M. Crawford, M. E. Saeger and F. E. Warneke. *Am Chem Soc J* 64:2862-4 D '42

ACETOXYCHOLESTANOL

- Dehydration of the 7-epimeric 3(β)-acetoxycholestanols-7; some transformation products of γ -cholestenol. O. Wintersteiner and M. Moore. *bibliog Am Chem Soc J* 65:1507-13 Ag '43

- Preparation and properties of the 7-epimeric cholestanediols-3(β), 7. O. Wintersteiner and M. Moore. *bibliog Am Chem Soc J* 65:1503-7 Ag '43

ACETOXYCYCLOHEXYL toluenesulfonate

- Role of neighboring groups in replacement reactions; the effect of the neighboring acetoxy group on the course of the replacement of the tosylate group of *trans*-2-acetoxycyclohexyl *p*-toluenesulfonate. S. Winstein, H. V. Hess and R. E. Buckles. *bibliog Am Chem Soc J* 64:2796-801 D '42

ACETOXYISOBUTYRATES

Preparation of allyl and methallyl methacrylates by the thermal decomposition of allyl and methallyl α -acetoxyisobutyrate. C. E. Rehberg, C. H. Fisher and L. T. Smith. *bibliog Am Chem Soc J* 65:1003-6 Je '43

ACETYL chloride

Carboxylation: direct introduction of the chloroformyl ($-\text{COCl}$) group into alicyclic and aliphatic acid chlorides. M. S. Kharasch, K. Eberly and M. Kleiman. *Am Chem Soc J* 64:2975-7 D '42

Grignard reactions; the reactions of esters and acid chloride with Grignard reagents. F. C. Whitmore and W. S. Forster. *bibliog Am Chem Soc J* 64:2966-8 D '42

Phenanthrene derivatives; acetylation and succinylation of 3-methylphenanthrene. W. E. Bachmann and G. D. Cortes. *bibliog Am Chem Soc J* 65:1329-34 J1 '43

ACETYL choline

Acetylcholine and the physiology of the nervous system. J. F. Fulton and D. Nachmansohn. *bibliog Science* 97:569-71 Je 25 '43

Nature of myasthenia gravis. C. Torda and H. G. Wolff. *bibliog Science* 98:224-5 S 3 '43

ACETYL mandelic acid

New methods for the resolution of enantiomorphs; liquid-liquid extraction. E. Shapiro and R. F. Newton. *diags Am Chem Soc J* 65:777-9 My '43

ACETYL METHYLCARBINOL. See Acetoin**ACETYL peroxide**

Reactions of atoms and free radicals in solution; decomposition of acetyl peroxide in aliphatic acids, a new synthesis of succinic acid and its substitution derivatives. M. S. Kharasch and M. T. Gladstone. *bibliog Am Chem Soc J* 65:15-17 Ja '43

ACETYLATION

Effect of acetylation on water-binding properties of cellulose; rag stock. J. C. Bletzinger. *bibliog Il Ind & Eng Chem* 35:474-30 Ap '43

Effect of acetylation on water-binding properties of cellulose; relation between physical properties and hygroscopicity. W. H. Aiken. *bibliog Ind & Eng Chem* 35:1206-10 N '43

Formation of ergostetraene-B during the acetylation of ergosterol. H. A. Stansbury, jr. *Am Chem Soc J* 65:1243 Je '43

Microdetermination of hydroxyl content of organic compounds; acetic anhydride-pyridine mixture as reagent. J. W. Petersen, K. W. Hedberg and B. E. Christensen. *bibliog Ind & Eng Chem Anal* ed 15:225-6 Mr '43

Phenanthrene derivatives; acetylation and succinylation of 3-methylphenanthrene. W. E. Bachmann and G. D. Cortes. *bibliog Am Chem Soc J* 65:1329-34 J1 '43

ACETYLENE

Alternative fuels; survey of methods adopted in Switzerland. *Il diags Automobile Eng* 33:299-307 Ag '43

Manufacture of butadiene from ethyl alcohol. J. A. Gamma and T. Inouye. *bibliog flow diags Chem & Met Eng* 50:94-7 Ja '43

Plastics from acetylene. J. I. Jones. *bibliog Chem & Ind* 62:66-71 F 20 '43

Potential new sources for butadiene; acetylene may prove suitable raw material. H. F. Crow. *Nat Pet N* 35 pt 2:R284-5 Je 2 '43

1-Type doubling in linear polyatomic molecules. G. Herzberg. *bibliog Rs Mod Phys* 14:219-23 Ap-J1 '42

See also

Oxyacetylene cutting

Oxyacetylene welding

ACETYLENE compounds

Acetylene polymer produced in electric discharge. G. Glocker and C. A. Hollingsworth. *diag Electrochem Soc Trans* 84(preprint 16):149-58 O '43

Acetylenic ethers; halogen derivatives of phenoxyacetylene. T. L. Jacobs and W. J. Whitcher. *bibliog Am Chem Soc J* 64:2635-8 N '42

Addition of hydrogen fluoride to acetylenic compounds. A. L. Henne and E. P. Plueddeman. *Am Chem Soc J* 65:587-9 Ap '43

Addition of hydrogen to multiple carbon-carbon bonds; the electrolytic reduction of alkyl and aryl acetylenes. K. N. Campbell and E. E. Young. *bibliog Am Chem Soc J* 65:965-7 My '43

Hydrogenation of a triple bond. A. L. Henne and K. W. Greenlee. *Am Chem Soc J* 65:2020-3 O '43

Raman spectra of acetylenes; symmetrical acetylenes. F. F. Cleveland and M. J. Murray. *bibliog J Chem Phys* 11:450-4 O '43

ACETYLENE glycols. See Glycols**ACETYLENE hydrocarbons**. See Hydrocarbons**ACID fumes**. See Fumes, Acid**ACID handling**

Acid pump problems involving long suction lines. W. E. Pratt. *diag Chem & Met Eng* 50:104-7 Mr '43

Handling acids in carboys. T. P. Callahan. *Il Safety Eng* 86:35-6 S '43

How to handle anhydrous hydrofluoric acid safely. C. M. Fehr. *Il Pet Refiner* 22:89-94 Ag '43; Same abr. *Oil & Gas J* 42:39-42 J1 22 '43; Same abr. *Nat Pet N* 35 pt 2:R364-7 Ag 4 '43

Industrial safety gleanings; unusual accidents; precautions in storing acids. *Chem Age (Lond)* 47:449-50 N 21 '42

New acid siphon. *diag Chem Ind* 52:63-4 Ja '43

Safe handling and storage of anhydrous hydrofluoric acid. C. M. Fehr. *Il diag Chem Ind* 53:505-10 O '43

Safe handling and storage of phenol. *Il diags Chem Ind* 52:730-3 Je '43

Selecting construction materials for centrifugal acid pumps. W. E. Pratt. *Il Chem & Met Eng* 50:135-6 F '43

Selection of pumps for oleum and strong sulphuric acid. W. E. Pratt. *diag Chem & Met Eng* 50:86-9+ Ja '43

Unusual stuffing box problems encountered in acid pumping. W. E. Pratt. *bibliog diags Chem & Met Eng* 50:109-13 Ap '43

See also

Acid resisting materials

Acid-resisting metal; a notable high-silicon iron. Meldrum. *Il Chem Age (Lond)* 49:240 S 4 '43

Chemical resistance of laminates. C. J. Straka. *diags Mod Plastics* 20:80-4, 136+ J1 '43

Corrosion test data; guide to the selection of substitute materials. R. T. Barnes, jr., J. W. Wing and T. E. Lagerstrom. *Il diag Fulp & Pa of Can (Convention no)* 44:136-8+ [F] '43

How refractories are used in gigantic installation at Basic magnesium, inc. F. A. McCann. *Il Brick & Clay Rec* 103:51-4 S '43

Plastic carrying buckets; substitute for rubber and ebonite; Lorival acid bucket. *Chem Age (Lond)* 48:70 Ja 9 '43

Selecting construction materials for centrifugal acid pumps. W. E. Pratt. *Il Chem & Met Eng* 50:135-6 F '43

See also

Bakelite

Chemical plants—

Equipment

Corrosion and anti-

corrosives

Corrosion resisting

materials

Steel, Stainless

Stoneware

ACID tanks

Glass tanks now made of heat- and chemical-resistant sheets. *Sci Am* 169:30 J1 '43

Handling fumes from an acid tank. R. L. Grayford. *diags Sheet Metal Worker* 34:22-3 Mr '43

See also

Acid resisting materials**ACID waste**

Acid waste treatment with lime. W. Rudolfs. *Ind & Eng Chem* 35:227-30 F '43

ACIDITY

Methylene blue and other indicators in general acids; the acidity function. G. N. Lewis and J. Bigeleisen. *bibliog Am Chem Soc J* 65:1144-50 Je '43

See also

Hydrogen ion concentration

ACIDS

Acids and bases; a critical reevaluation. R. Ginell. *J Chem Educ* 20:250-2 My '43

Calculating mixed acids to achieve acid equilibrium; Gibbs trilinear system. E. Berl and G. A. Sterbutzel. *Chem & Met Eng* 50:106-8 O '43

Determining the density of mixed acids. C. McKinley. *Chem & Met Eng* 50:115-16 J '43

Inorganic acids advisory group formed. *Oil Paint & Drug Rep* 142:5 D 28 '42

Modern theories of acids and bases. H. I. Stonehill. *bibliog Soc Dyers & Col J* 59: 171-6 Ag '43

Preparation of aldehydes, ketones, and acids by ozone oxidation. A. L. Henne and P. Hill. *Am Chem Soc J* 65:752-4 My '43

Rate of solution of magnesium in acids. T. H. James. *bibliog Am Chem Soc J* 65:39-41 Ja '43

Simple approximate relation between successive dissociation constants of symmetrical inorganic oxygen acids. T. L. Hill. *bibliog Am Chem Soc J* 65:1564-6 Ag '43

Specific heats of mixed acids at higher temperatures. J. J. Morgan, D. A. Bender and R. G. Capell. *bibliog diags Chem & Met Eng* 50:122-4 Je '43

Teaching the electronic theory of acids and bases in the general chemistry course. W. F. Luder, W. S. McGuire and S. Zuffanti. *bibliog J Chem Educ* 20:344-7 J '43

See also

Wool, Effect of acids on

also names of acids, e.g.

Acetic acid Phosphoric acid

Hydrochloric acid Sulfuric acid

Nitric acid

ACIDS, Fatty

Chemicals from fats. A. W. Ralston. *il Chem & Eng N* 21:3-6 Ja 10 '43

Fatty acid distillation; Canadian patent. *Soap & San Chem* 19:77 O '43

Fatty acid separation; abstract. L. D. Myers and V. J. Muckerheide. *Soap & San Chem* 19:67 My '43

Fatty acid soap process. A. Treffler. *Soap & San Chem* 19:32-3+ S '43

Fatty acids; preparation, physical and chemical properties used in soaps and protective coatings. A. G. H. Reimold. *il Can Chem & Process Ind* 26:632-8 N '42; Same *abr. Chem Age (Lond)* 48:123-7 Ja 23 '43

New fatty acids; azelaic and pelargonic acid developed commercially through accelerated war research. L. D. Myers. *Soap & San Chem* 19:37 N '43

Non-carbohydrate substances in the cereal starches. T. J. Schoch. *Am Chem Soc J* 64:2954-6 D '42

Petroleum acids; aliphatic acids from California petroleum. W. A. Quebedeaux and others. *bibliog Am Chem Soc J* 65:767-70 My '43

Puerto Rican fatty oils; expressed tropical almond (talissay) oil. C. F. Asenjo and J. A. Goyco. *Am Chem Soc J* 65:1417-18 J '43

Puerto Rican fatty oils; the characteristics and composition of guanábana seed oil. C. F. Asenjo and J. A. Goyco. *bibliog Am Chem Soc J* 65:208-9 F '43

Rates of evaporation of water through compressed monolayers on water. I. Langmuir and V. J. Schaefer. *bibliog il Franklin Inst J* 235:119-62 F '43

Refractive indices and densities of normal saturated fatty acids in the liquid state. A. Dorinson, M. R. McCorkle and A. W. Ralston. *bibliog Am Chem Soc J* 64:2739-41 D '42

Solidification point nomograph for fatty acids. D. S. Davis. *Ind & Eng Chem* 35:105 Ja '43

Some esters of normal aliphatic alcohols and acids. J. H. Hoback, D. O. Parsons and J. F. Bartlett. *Am Chem Soc J* 65:1606-7 Ag '43

Studies on the chemistry of the fatty acids; the isolation of linoleic acid from vegetable oils by low temperature crystallization. J. S. Frankel, W. Stoneburner and J. B. Brown. *bibliog Am Chem Soc J* 65:259-62 F '43

Studies on the chemistry of the fatty acids; the preparation of alpha- and beta-linoleic acids by debromination in various solvents and observations on the chemistry of these acids. J. S. Frankel and J. B. Brown. *bibliog Am Chem Soc J* 65:415-18 Mr '43

Synthetic developments with fats and oils; abstract. J. E. Good. *Oil Paint & Drug Rep* 144:56+ N 1 '43

See also

Acetic acid

Formic acid

Linoleic acid

Propionic acid

Stearic acid

Analysis

Colored chromatograms with higher fatty acids. M. M. Graff and E. L. Skau. *bibliog diags Ind & Eng Chem Anal ed* 15: 340-1 My 15 '43

Microextraction and microtitration of fatty acids. D. Stetten, Jr. and G. F. Grail. *diag Ind & Eng Chem Anal ed* 15:300 Ap 15 '43

Woburn iodine absorption method; use in combination with partial iodine values for the determination of diene numbers. J. D. von Mikusch and C. Frazier. *bibliog Ind & Eng Chem Anal ed* 15:109-13 F 15 '43

ACIDS, Organic

Identification of organic acids by partition between ethyl ether and water. O. C. Dermer and V. H. Dermer. *bibliog Am Chem Soc J* 65:1653-4 Ag '43

See also

Acids, Fatty

Amino acids

Azelaic acid

Carboxylic acids

Citric acid

Glutamic acid

ACME steel company

Thumbnail stock appraisal. *Mag of Wall St* 72:198 My 29 '43

War stocks with good peace prospects. *il Mag of Wall St* 72:418 J 24 '43

ACOUSTIC filters. See Sound filters**ACOUSTIC impedance**

Mechanical impedance bridge. A. M. Wiggins. *il diags Acoustical Soc Am J* 15:50-3 J '43

ACOUSTIC interferometers. See Interferometers, Sonic

ACOUSTIC laboratories. See Sound laboratories

ACOUSTIC meters. See Sound—Measurement

ACOUSTIC patents

Review of acoustical patents. R. W. Young. *diags Acoustical Soc Am J* 14:198-205 Ja '43 [cont quarterly]

ACOUSTICAL society of America

Constitution and by-laws and membership list. *Acoustical Soc Am J* 14:263-80 pt 2 Ap '43

Program of the 28th meeting, New York, May 14-15; abstracts of papers. *Acoustical Soc Am J* 15:76-81 J '43

ACOUSTICS. See Sound**ACOUSTICS, Architectural**

Contemporary problems in television sound. C. L. Townsend. *il Inst Radio Eng Proc* 31:5-6 Ja '43

Contribution to the acoustics of radio studios. W. Furrer. *Acoustical Soc Am J* 14:239-41 Ap '43

Selected problems in architectural acoustics; problems pertaining to recording studios and conditions of microphone pickup. M. Rettinger. *Inst Radio Eng Proc* 31:18-22 Ja '43

See also

Soundproofing

ACRIDINE

Acridine ring. F. A. Robinson. *Chem & Ind* 62:26 Ja 16 '43

Preparation and therapeutic properties of certain acridine derivatives; 5-methylacridines, further 5-styrylacridines and their quaternary salts; with note on antiseptic and trypanocidal action by C. H. Browning and K. M. Calver. W. Sharp, M. M. J. Sutherland and F. J. Wilson. *Chem Soc J* p344-7 Ag '43

Preparation and therapeutic properties of certain acridine derivatives; 5-styrylacridines and their quaternary salts. W. Sharp, M. M. J. Sutherland and F. J. Wilson. *Chem Soc J* p5-7 Ja '43

ACRIDINE—Continued

Systematic investigation of the colour and dyeing properties of the aminoacridines; the five monoaminoacridines. A. Albert and C. L. Bird. *bibliog Soc Dyers & Col J* 59: 74-6 Ap '43

ACROLEIN

Investigations on the stereoisomerism of unsaturated compounds; the composition of divinyl glycol from acrolein; the system *meso-di-diethyl glycol*. W. G. Young, S. J. Cristol and F. T. Weiss. *bibliog Am Chem Soc J* 65:1245-6 Je '43

Analysis

Acrolein determination in the presence of formaldehyde and acetaldehyde by the polarographic method. R. W. Mosher. *bibliog Ind & Eng Chem Anal ed* 15:107-9 F 15 '43

ACRYLIC plastics. See Resinous products

ACRYLONITRILE

Chemicals from petroleum. W. T. Ziegenhain. *Oil & Gas J* 41:233 N 12 '42

Chemistry of acrylonitrile; cyanoethylation of active hydrogen groups. H. A. Bruson and T. W. Riener. *Am Chem Soc J* 65:23-7 Ja '43

Chemistry of acrylonitrile; cyanoethylation of alpha, beta-unsaturated compounds. H. A. Bruson and T. W. Riener. *bibliog Am Chem Soc J* 65:18-23 Ja '43

Chemistry of acrylonitrile; reactions with ketones. H. A. Bruson and T. W. Riener. *Am Chem Soc J* 64:2850-8 D '42

Synthesis of cinnamic acids from methyl acrylate or acrylonitrile and diazonium salts. C. F. Koelsch. *Am Chem Soc J* 65: 57-8 Ja '43

Toxicology of acrylonitrile (vinyl cyanide); determination of thiocyanates in blood and urine. A. H. Lawton, T. R. Sweeney and H. C. Dudley. *bibliog J Ind Hygiene* 25: 13-19 Ja '43

Toxicology of acrylonitrile (vinyl cyanide); studies of effects of daily inhalation. H. C. Dudley, T. R. Sweeney and J. W. Miller. *J Ind Hygiene* 24:255-8 N '42

ACTINOMETERS

Analysis of the uranyl oxalate actinometer as applied to accelerated light and weathering tests. F. T. Bowditch, C. E. Greider and C. G. Ollinger. *bibliog Am Soc T M Proc* 42:845-50 '42

ACTINOMYCIN

New microbe extract. *Science* 98:sup8+ O 22 '43

ACTIONS and defenses

Advance under loan agreement does not constitute payment depriving assured of right of action against co-insurer. *Weekly Underw* 149:971 O 30 '43

ACTIVATED carbon. See Carbon, Activated

ACTIVATED sludge method. See Sewage disposal—Activated sludge method

ACTIVATION

Activation energy of the reaction $\text{CH}_3 + \text{HBr} \rightarrow \text{CH}_3\text{Br}$ and the carbon-hydrogen bond strength in methane. H. C. Andersen and G. B. Kistiakowsky. *bibliog J Chem Phys* 11:6-10 Ja '43

Experimental methods of determining the activation energies of elementary reactions. E. W. R. Steacie and D. J. Le Roy. *diags Chem R* 31:227-93 *bibliog*(382 references, p285-93) O '42

Ihalogenation of phenolic ethers and anilides; Arrhenius activation energies for di- and poly-substituted aromatic ethers. B. Jones. *Chem Soc J* p676-8 N '42

Nomograph for the estimation of the activation energies of unimolecular reactions. E. Warrick. *J Chem Educ* 20:134-5 Mr '43

Organic reactions. H. Eyring, H. M. Hurlburt and R. A. Harman. *bibliog Ind & Eng Chem* 35:511-21 My '43

Volatile borates of polyhydric alcohols and the activation of boric acid. R. E. Rippere and V. K. La Mer. *bibliog diags J Phys Chem* 47:204-34 Mr '43

See also

Atoms

Carbon, Activated

Catalysis

Radioactivity

ACTIVITY coefficients

Activity and osmotic coefficients of sodium chlorate by an isopiestic method. J. H. Jones. *bibliog Am Chem Soc J* 65:1353-4 J 1 '43

Activity coefficient of potassium iodide in sulfur dioxide from vapor-pressure measurements. W. G. Eversole and A. L. Hanson. *bibliog diags J Phys Chem* 47:1-9 Ja '43

Activity coefficients of lead chloride determined from e. m. f. and solubility data at 25° in ethylene glycol-water solutions. A. B. Garrett, R. Bryant and G. F. Kiefer. *Am Chem Soc J* 65:1905-7 O '43

Activity coefficients of thallous chloride in ethylene glycol-water solutions determined by e.m.f. and solubility data at 25°. O. D. Black and A. B. Garrett. *bibliog Am Chem Soc J* 65:862-5 My '43

Activity coefficients of zinc chloride, bromide and iodide from electromotive forces. D. M. Egan and J. R. Partington. *diags Chem Soc J* p157-68 Ap '43

Thermodynamics of aqueous solutions of sodium chloride at temperatures from 15-45° from e.m.f. measurements on cells with transference. G. J. Janz and A. R. Gordon. *bibliog Am Chem Soc J* 65:218-21 F '43

Values of the constants in the Debye-Hückel equation for activity coefficients. G. G. Manov and others. *bibliog Am Chem Soc J* 65:1765-7 S '43

ACTUARIES. See Insurance actuaries

ACUSHNET process company

Acushnet process company's role in the production of gas masks. *Il Rubber Age* 53: 435-6 Ag '43

ACYL group

Acyl migration in steroids. V. A. Petrov, O. Rosenheim and W. W. Starling. *Chem Soc J* p135-9 Mr '43

Estimation of volatile acyl groups in cellulose esters. F. E. Cramer, T. S. Gardner and C. B. Purves. *bibliog Ind & Eng Chem Anal ed* 15:319-20 My 15 '43

ACYLATION

Acylation of acetonitrile with ethyl *n*-butyrate and the alcoholysis of the resulting ketonitrile to ethyl *n*-butyrylacetate. B. Abramovitch and C. R. Hauser. *Am Chem Soc J* 64:2720-1 N '42

Acylation of 8-hydroxyfurans. R. E. Lutz, C. E. McGinn and P. S. Bailey. *Am Chem Soc J* 65:1843-9 My '43

Condensations; the acylation of the anions of certain esters with ethyl carbonate. C. R. Hauser, B. Abramovitch and J. T. Adams. *Am Chem Soc J* 64:2714-15 N '42

Interaction of amides with amines: a general method of acylation. A. Galat and G. Eliot. *bibliog Am Chem Soc J* 65:1566-7 Ag '43

Investigation of pyrazole compounds; the acylation of 3-phenyl-5-pyrazolone and 3-anilino-5-pyrazolone. A. Weissberger and H. D. Porter. *bibliog Am Chem Soc J* 65: 1495-1502 Ag '43

Para acylation of polyalkylbenzophenones by aryl 2,4,6-trialkylbenzoates. R. C. Fuson and others. *bibliog Am Chem Soc J* 64:2573-6 N '42

Stability of racemates; mandelic acid and some of its derivatives. W. R. Angus and R. P. Owen. *Chem Soc J* p227-30 My '43

ACYLHYDRAZIDES. See Hydrazides

ACYLOINS

Condensation of acyloins with ethyl acetate. R. B. Woodward and E. R. Blout. *bibliog Am Chem Soc J* 65:562-5 Ap '43

ACYLTETRONIC acid

Synthesis of some α -acyltetronic acids. W. Baker, K. D. Grice and A. B. A. Jansen. *Chem Soc J* p241-2 My '43

ADAMS, Comfort Avery, 1868-

Adams lecture, to honor the founder and first president of the American welding society. *por Welding J* 22:842+ O '43

ADAMS, Frank Dawson, 1859-1942

Sketch. H. M. Tory. *Science* 97:235-6 Mr 12 '43

ADAMS express company

Low-priced stocks for large percentage gains.
Mag of Wall St 71:633 Mr 20 '43

ADAPTATION, Visual. See Eye—Accommodation and refraction**ADDITION compounds**

Addition compounds of sulfur dioxide. N. F. Albertson and W. C. Fernelius, biblog Am Chem Soc J 65:1687-90 S '43

Addition compounds of trimethylamine with boron fluoride and its methyl derivatives. A. B. Burg and A. A. Green, Am Chem Soc J 65:1838-41 O '43

Addition of hydrogen fluoride to halo-olefins. A. L. Henne and E. P. Plueddemann, biblog Am Chem Soc J 65:1271-2 JI '43

Association of boron trifluoride addition compounds with amines in non-polar solvents. J. R. Bright and W. C. Fernelius, Am Chem Soc J 65:735-6 Ap '43

Donor-acceptor bonding; etherates of boron trifluoride. A. W. Laubengayer and G. R. Finlay, biblog Am Chem Soc J 65:884-9 My '43

Molecular surface energy of sulfur dioxide addition compounds. J. R. Bright and J. J. Jasper, biblog Am Chem Soc J 63:3486-8; 65:1262-3 D '41, JI '43

See also
Tolunitrile

ADDRESSING machines

Tag-writing plan cuts costs; releases type-writers; White motor co. uses Addressograph to meet War department requirements for tagging spare parts. W. G. Graf, Il Am Business 13:22-3 Mr '43

ADELMANN, Henry R.

He's doing double war duty. por East Underw 44:35 pt 2 My 21 '43

ADENINE

Detection of minute amounts of adenine and guanine in casein. A. Bloch, Franklin Inst J 236:219-24 Ag '43

Experiments on the synthesis of purine nucleosides; a new and convenient synthesis of adenine. J. Baddiley, B. Lythgoe and A. R. Todd, Chem Soc J p386-7 Ag '43

ADHESION

Adsorption at solid-liquid interfaces; determination of adsorption by adhesion-tension and interfacial-tension measurements on binary organic liquid systems. F. E. Bartell and F. C. Benner, biblog diags J Phys Chem 46:847-59 N '42

Measurement and influence of bonding between paper fibers. J. d'A. Clark, biblog diags Paper Tr J 116:29-35 F 4 '43

Ploughing and adhesion of sliding metals. P. P. Bowden, A. J. W. Moore and D. Tabor, Il diags J Ap Phys 14:80-91 F '43

Progress report on a study of the adhesion of lacquer films on metals. R. L. Savace, W. von Escher and C. F. Prutton, biblog Il diags Paint Oil & Chem R 104:8-14, 16, 36 s N 19 '42

ADHESIVE tape

Conservation of pressure sensitive adhesive tapes. Metal Finishing 41:688 O '43

Physiological effect

Hypersensitivity to adhesive tape; report of four cases showing its variable etiology. H. Kell, biblog Il J Ind Hygiene 25:238-42 Je '43

ADHESIVES

Adhesive applicators for high-speed machines, diags Product Eng 14:106-7, 174-5 F-Mr '43

Adhesive requirements of the textile industry. G. B. Cloran, Rayon 24:422-3 Ag '43; Same cond. Textile World 93:98 O '43

Adhesive to save rubber. Chem & Eng N 21:307 Mr 10 '43

Collufix; Sweden's newly developed adhesive. For Comm W 13:33 O 23 '43

Plywood adhesives; characteristics and handling methods. Aviation 42:173, 175 Ja '43

Synthetic adhesives in use; speedy construction of laminated work, diag Chem Age (Lond) 48:247 F 27 '43

Treatment of roof glazing by fabric attached with bituminous adhesive. C. M. Watkins and T. A. Baker, Soc Chem Ind J 62:132-5 S '43

See also

Cementa	Resinous products—
Gelatin	Adhesives
Glu	Rubber cement
Mortar	Sealing compositions
Packaging materials	

Testing

Adhesiveness of gummed paper tape; TAPPI tentative standard T 463 m-43. Paper Tr J 116:23 Je 17 '43

Method for inspection and control of liquid starch-base adhesives for bottle labeling and case sealing. A. Herman and F. M. Knowlton, biblog Il Am Soc T M Proc 42: 956-61; Discussion. 962-7 '42

ADIPIC acid

Adipic acid; a review. H. Peters, Textile Col 65:96-1 Mr '43

Dissociation constants of some acids in mixed solvents. J. C. Speakman, Chem Soc J p270-3 Je '43

ADJECTIVES

Arbitrary editorial changes in scientific papers; nouns used as adjectives. W. C. Boyd, Science 98:197-8 Ag 27 '43

ADMINISTRATION, Public

Democracy can be efficient. Fortune 28:116-17+ Ag '43

Government by commission; FCC and its radio rules, case study of bureaucracy in action. Il Fortune 27:86-9+ My '43

How to prepare an organization chart; New York city issues manual outlining standard forms. J. Furia, Ind Stand 14:251-3 S '43

Problem of organizing for the chief executive. R. A. Feiss, Advanced Management 8:31-3 Ja '43

Rich Uncle Sam; stultifying bureaucracy. F. I. Kent, Banking 36:24-5+ N '43

Technology and political organization. H. C. Havighurst, Advanced Management 8:49-55 Ap '43

Ten years' progress in management; federal administrative management 1932-1942. D. C. Stone, A S M E Trans 65:242-8 Ap '43

Work planning in government. A. Solem, ed. Advanced Management 7:133-40, 180-4 JI-S, O-D '42

See also

Agricultural administration	Public health administration
Civil service	Public officials
Food administration	Public utilities commissions
Government employees	Social work
Highway administration	State employees
Local government	State governments
Municipal employees	United States—Executive departments

ADMINISTRATIVE law

Growth of administrative law and its effect on life insurance. R. B. Lucas, Nat Underw (Life ed) 47:4+ O 8 '43

ADMINISTRATORS and executors. See Executors and administrators

ADMIRALTY

Argentine ship salvage case is held under jurisdiction of U.S. East Underw 44:42 O 15 '43

Holds improper stowage constitutes unseaworthiness in plant life case. East Underw 44:30 S 24 '43

Possession of foreign vessel given to owners before invasion. East Underw 44:35 My 7 '43

State of Maine not permitted to sue government for damage done to bridge by Coast guard tender. East Underw 44:25 Je 25 '43

Time limitation on suits against vessels previously owned by government. East Underw 43:23 N 27 '42

See also

Collisions at sea

ADOBE

Southwest builders show they can save materials with mud. *Il plan Am Bld* 64:38-9 N '42

Waterproofed adobe bricks for revetment. G. E. Dewsnap. *Il Civil Eng* 13:495 O '43

ADRENALINE

Oxidation of adrenaline. F. Bergel and A. L. Morrison. *Chem Soc J* p48 F '43

ADSORPTION

Absolute method for the determination of the area of a fine crystalline powder; New adsorption isotherm; Adsorption method for the determination of the area of a solid without the assumption of a molecular area. W. D. Harkins and G. Jura. *J Chem Phys* 11:430-2 S '43

Adsorption at solid-liquid interfaces; determination of adsorption by adhesion-tension and interfacial-tension measurements on binary organic liquid systems. F. E. Bartell and F. C. Benner. *bibliog diag J Phys Chem* 46:847-59 N '42

Adsorption at the crystal-solution interface; an electron-diffraction investigation of crystal surfaces of pure sodium bromate and sodium bromate with adsorbed dyes. J. H. Blomquist and W. G. France. *bibliog J Phys Chem* 46:1044-50 D '42

Adsorption of gases at low temperature and pressure on smooth silver. M. H. Armbruster. *bibliog Am Chem Soc J* 64:2545-53 N '42

Adsorption of ions by leached surface films on glass. H. C. Hafner and F. L. Jones. *Am Cer Soc J* 26:55-6 F '43

Adsorption of propane and propylene by silica gel and metallized silica gel. L. H. Reyerson and M. R. Cines. *bibliog diag J Phys Chem* 46:1060-8 D '42

Adsorption of riboflavin by lactose; influence of concentration. A. Leviton. *Il Ind & Eng Chem* 35:539-93 My '43

Adsorption of simple and complex cobalt ions on titanium dioxide. D. G. Nicholson. *Am Chem Soc J* 64:2820-2 D '42

Adsorptive forces active through glass. P. G. Nutting. *Science* 97:74-5 Ja '43

Air recovery by gas adsorption cuts equipment weight and costs; activated carbon units; air conditioning at Pratt & Whitney plant. *Il diag Heating-Piping* 15:238-9 My '43

Development in analysis of hydrocarbon gases by adsorption fractionation. N. C. Turner. *diag Oil & Gas J* 41:48, 51-2+ Ap 29 '43; Same. *Nat Pet N* 35 pt 2:R234-7 My 5 '43; Same. *Pet Refiner* 22:98-102 My '43

Direct dehumidification by solid adsorption as applied in industrial refrigeration processes. G. L. Simpson. *Il Refrig Eng* 45:246-50 Ap '43

Equilibrium moisture content of dehydrated vegetables. E. Makower and G. L. Dehority. *bibliog Il Ind & Eng Chem* 35:193-7 F '43

Experimental study of chromatography. H. Weil-Malherbe. *Chem Soc J* p303-12 Ji '43

Heat, mass and momentum transfer in the flow of gases through granular solids. B. W. Gamson, G. Thodos and O. A. Hougen. *bibliog diag Am Inst Chem Eng Trans* 39:1-32; Discussion. 32-5 F '43

Low temperature adsorption of nitrogen, oxygen, argon, hydrogen, *n*-butane and carbon dioxide on porous glass and on partially dehydrated chabazite. P. H. Emmett and T. W. DeWitt. *bibliog Am Chem Soc J* 65:2153-62 Ji '43

New methods for the purification of invertase and some properties of the resulting products. M. Adams and C. S. Hudson. *bibliog Am Chem Soc J* 65:1359-68 Ji '43

Phosphorescence of adsorbed tryptophan and its quenching by oxygen. J. Franck and P. Pringsheim. *bibliog J Chem Phys* 11:21-7 Ja '43

Quantitative analysis of cotton-viscose rayon mixtures; adsorption of barium hydroxide. F. P. Greenspan and S. M. Finkelstein. *bibliog Am Dyestuff Rep* 22:73-6, 98 F '43; Same. *Rayon* 24:125-7, 188-90 Mr-Apr '43

Radioactive exchange and adsorption of methyl bromide with several inorganic bromides. G. B. Kistiakowsky and J. R. Van Wazer. *diag Am Chem Soc J* 65:1829-34 O '43

Resemblance between films on solids and on water. S. J. Gregg. *Chem Soc J* p696-708 N '42

Selective adsorption of hydrocarbon and water vapor on alumina at atmospheric pressure; abstract. Chen Chun Ku, R. L. Huntington and L. S. Reid. *Oil & Gas J* 42:73+ My 20 '43

Separation of diastereoisomerides by selective adsorption on optically inactive material. M. M. Jamison and E. E. Turner. *Chem Soc J* p611-12 O '42

Solid catalysts and reaction rates. O. A. Hougen, K. M. Watson and O. A. Vyevara. *bibliog Il Ind & Eng Chem* 35:529-45 My '43

Sorption and surface area in silica aerogel. S. S. Kistler, E. A. Fischer and I. R. Freeman. *bibliog Am Chem Soc J* 65:1909-19 O '43

Sorption of carbon monoxide by metals; temperature variation experiments. C. W. Griffin. *bibliog Am Chem Soc J* 64:2610-13 N '42

Sorption of NH₃ on montmorillonitic clay. I. Cornet. *bibliog diag J Chem Phys* 11:217-26 My '43

Sorption of water vapor by soap curd. J. W. McBain and W. W. Lee. *bibliog Ind & Eng Chem* 35:784-7 Ji '43

Surface area of oxide coated cathodes by adsorption of gas at low pressures. L. A. Wooten and C. Brown. *diag Am Chem Soc J* 65:113-18 Ja '43

Theory of chromatography. J. Weiss. *Chem Soc J* p297-303 Ji '43

Water adsorption by animal glue. C. M. Mason and H. E. Silcox. *bibliog Ind & Eng Chem* 35:726-9 Je '43

See also

Absorption

Carbon, Activated

ADSORPTION, Heat of

Heat of adsorption of ethyl chloride and of sulphur dioxide on sugar charcoal. S. J. Gregg. *Chem Soc J* p351-5 Ag '43

ADVERTISEMENTS

Ads draw 50,000 requests for reprints; Nash-Kelvinator. *Il Ptr Ink* 204:70 Ji 2 '43

Advertisers boost farm morale; eight advertisements. G. Murray. *Il Ptr Ink* 202:18-19 F 26 '43

Copy that clicked. R. Manville. *Il Ptr Ink* 202:64 F 12; 64 Mr 19; 203:38 Ap 23; 68, 70 Je 4; 204:30+ S 17 '43

Does cover advertising require special treatment? R. B. Luchars. *Ind Marketing* 27:35-6 D '42

See also

Advertising

Advertising—Dealer

helps

Advertising, Mail

Advertising, Point-

of-sale

Advertising awards

Calendars

Catalogs

Posters

Sales letters

Books and booklets

Booklets being utilized for many jobs in wartime promotion. *Il Ind Marketing* 28:50, 52, 54 Ag '43

Booklets for and by employees. G. E. Stedman. *Il Ind Marketing* 28:30-1 Ji '43

Keeping horse power on its feet; manual to help keep horses' and mules' feet in working order. H. W. Blankenship. *Il Ind Marketing* 28:53+ Mr '43

Keeping the wheels turning is also part of advertising's job; Allis-Chalmers' maintenance advertising programs. G. J. Callos. *Il Ind Marketing* 28:28-30+ Ja '43

Llama, the vicuna, the camel help Stroock sell its quality story. E. M. Murphy. *Il Sales Management* 52:76+ O 15 '43

Offers post-war home planners scrap book for assembling ideas; Andersen corp. manufacturers of window units. *Il Sales Management* 52:62 N 1 '43

Pepperell book graphically portrays textiles' dramatic role in the war effort; distributed to personnel and to textile trade. *Il Ptr Ink* 205:36+ O 22 '43

Public service copy approach scores heavily for Frigidaire. *Il Ptr Ink* 203:28+ Je 11 '43

Some ways to avoid delay in getting an OK for instruction manuals. R. G. E. Ullman. *Il Ind Marketing* 28:37-9 Ja '43

ADVERTISEMENTS—Books and booklets—*Continued*

Special center-spread insert personalizes booklet used by 125 different distributors! F. R. Jolly. *Il* *Ptr Ink* 204:24-5 Ag 20 '43

Westinghouse subordinates company in advertising to help win the war; hitherto confidential material included in wartime conservation. J. M. McKibbin. *Il* *Ind Marketing* 28:37+ F '43

Christmas cards

Christmas greetings! to help stimulate your imagination and sales! *Il* *Inland Ptr* 110:52-3 N '42

Cookbooks and recipes

Cookies for rookies catches on; Burnett sponsors nationally. *Il* *Sales Management* 52:31-2 Ja 1 '43

Ladies like kisses, and recipes. P. Murray. *Ptr Ink* 203:20-1+ Ap 23 '43

Coupons

Advertises free course in arc welding in industrial papers; prospects register by means of coupon; Hobart brothers company. *Il* *Ptr Ink* 205:21+ O 22 '43

Design

Squaring the circle; Franklin Simon, New York store, redesigns its advertising format and Dr M. F. Agha explains why the pattern was chosen. *Il* *Adv & Sell* 36:40+ J1 '43

Headlines

Hyperbole or hoax? consumers sense the difference! W. T. Laing. *Il* *Ptr Ink* 202:22-4 Mr 19 '43

25 good headlines, and why. V. O. Schwab. *Adv & Sell* 36:25-6+ N '43

Layout

Awards for technical excellence of visual presentation (layout, art, typography). *Il* *Adv & Sell* 36:26-8 F '43

Free your copy from its cloister! check-list of 28 ideas. F. Wright. *Ptr Ink* 203:20-1 Je 4 '43

Position

4500 newspaper pictures and their significance for advertisers; attention value of position in newspapers. M. Harper, Jr. and V. M. E. Harper. *Il* *Adv & Sell* 36:23-4 J1 '43

How page traffic influences readership of your ad. M. Harper, Jr. *Il* *Adv & Sell* 36:24+ Ap '43

Rating

Sad plight of rating readers. T. K. Quinn. *Adv & Sell* 35:40 D '42

Two tests prove business-paper readers want info, not pep talks; Morgan construction company and U.S. envelope company tests. H. F. King. *Il* *Ptr Ink* 203:24-6 Ap 9 '43

Readership

Ads in wartime. *Business Week* p76+ O 2 '43

Famly versus individual in measurement of audiences. A. Politz. *Am Stat Assn J* 38:233-7 Je '43

Free your copy from its cloister! check-list of 28 ideas. F. Wright. *Ptr Ink* 203:20-1 Je 4 '43

How page traffic influences readership of your ad. M. Harper, Jr. *Il* *Adv & Sell* 36:24+ Ap '43

Inspirational ads are most effective. *ANA study shows*. *Ptr Ink* 204:36+ J1 23 '43

Institutional ads are well read says Bureau of advertising brochure. *Il* *Ptr Ink* 204:24-5 S 24 '43

Reading of war copy in magazine ads. *Adv & Sell* 36:70 Ag '43

Sad plight of rating readers. T. K. Quinn. *Adv & Sell* 35:40 D '42

Three effective devices which increase readership of copy. W. A. Sturgis. *Ptr Ink* 203:20+ My 21 '43

Use both mail-type questionnaire and personal interviews on readership research; study made by Los Angeles times; readers don't want to admit reading certain ads. R. E. Baxter. *Ptr Ink* 203:24+ My 7 '43

What about the new half-page four-color magazine units? study made of those appearing in McCall's Ladies' home journal and Woman's home companion. G. W. Tasker. *Il* *Ptr Ink* 201:11-12 N 27 '42

Repetition

Argument for consistency-discounts in publication advertising. A. Ross. *Ptr Ink* 203:44+ Je 18 '43

Signatures

Advertisements should be signed by the agency! E. Meyer. *Il* *Ptr Ink* 204:19-20+ S 24 '43

Advertisements should not be signed by the agency! H. N. Phillips; O. C. Horn. *Ptr Ink* 205:84 O 22 '43

This agency has been signing ads. W. B. Golovin. *Ptr Ink* 205:30 O 15 '43

Size

British agency describes how Empire papers ration space. *Ptr Ink* 201:54 N 13 '42

Flexible space schedule can help the small advertiser's chance of being remembered post-war. E. B. Weiss. *Il* *Ptr Ink* 203:18-19, 82 Je 25 '43

4500 newspaper pictures and their significance for advertisers. M. Harper, Jr. and V. M. E. Harper. *Il* *Adv & Sell* 36:17-18 Je '43

See also

Advertisements, Small space

Specimens

Advertising's part in civilian mobilization; second portfolio of 50 outstanding war advertisements. *Adv & Sell* 36:61-76 Je '43

Exhibit of wartime advertising; advertising to help win the peace. C. Norton. *Il* *Ptr Ink* 201:21-4 D 4 '42

Exhibit of wartime advertising; advertising to help win the war. C. Norton. *Il* *Ptr Ink* 201:17-20+ N 27 '42

Exhibit of wartime advertising; examples of advertising that still talks merchandise. C. Norton. *Il* *Ptr Ink* 201:18-22 N 20 '42

See also

Advertising awards

Testing

Finding out what people want in copy. W. A. Sturgis. *Ptr Ink* 203:20-3 My 14 '43

How to test cartoon advertisements. H. M. Warren. *Il* *Ptr Ink* 202:58+ Mr 12 '43

How to test copy; an example in its simplest form; case history on Polident. R. Manville. *Il* *Ptr Ink* 202:17-18+ Mr 5 '43; Discussion. 203:50-1 My 7 '43

Hyperbole or hoax? consumers sense the difference! W. T. Laing. *Il* *Ptr Ink* 202:22-4 Mr 19 '43

Inspirational ads are most effective. *ANA study shows*. *Ptr Ink* 204:36+ J1 23 '43

Pre-tested copy. W. T. Laing. *Il* *Ptr Ink* 201:14-15+ O 23 '42; Discussion. 201:33-4+ D 4 '42

Pretty girls—phooey! three tests. W. T. Laing. *Il* *Ptr Ink* 201:21-4 D 18 '42

Three effective devices which increase readership of copy. W. A. Sturgis. *Ptr Ink* 203:20+ My 21 '43

What does your ad make people do? General Electric lamp campaign. T. M. Shepard. *Il* *Adv & Sell* 36:14-15 Ap '43

Why and how of measuring advertising effectiveness. T. M. Shepard. *Adv & Sell* 36:30+ S '43

Why some copy tests cluck instead of click; three reasons for varying volumes of responses to hidden offers. W. A. Sturgis. *Ptr Ink* 203:54+ My 23 '43

Yes, I said, copy testing is mechanized and sterile for the copy writer. M. Harper, Jr. *Ptr Ink* 201:28, 30 D 18 '42

Typography

Free your copy from its cloister! check-list of 28 ideas. F. Wright. *Ptr Ink* 203:20-1 Je 4 '43

Typographic clinic. H. N. King. Published in monthly numbers of *Inland printer*

Ward catalog given new dress. *Il* *Inland Ptr* 111:25-7 Ag '43

ADVERTISEMENTS, Classified

Classified can anticipate big increase in post-war era. *Ptr Ink* 203:46 Je 25 '43

Want ads

Bumptyous war baby: the classified ad. J. Stenbuck. *Il Adv & Sell* 36:20+ Ag '43
 Captivation in the classified or war warms up the want ads. P. H. Erbes, jr. *Il Ptr Ink* 203:18-20+ Je 18 '43
 Controlled hiring; contrary to fears, Buffalo employers are using help wanted columns. *Business Week* p76 Ag 14 '43
 Help wanted, female. *Il Bus Transportation* 22:58-9 S '43

ADVERTISEMENTS, Humorous

Advertising gets some Billy Rose oomph. J. Stenbuck. *Il Adv & Sell* 36:19+ S '43
 Hanky ads get verse. J. Tyler. *Il Adv & Sell* 36:19 Ag '43
 Saroyan did it, so why can't Zareh? J. Stenbuck. *Il Adv & Sell* 36:44, 128 O '43

ADVERTISEMENTS, Pictorial

Disembodied ones. T. Pittenger. *Il Ptr Ink* 203:15 My 21 '43
 Early American art makes effective advertising. C. W. Drepper. *Il Adv & Sell* 36:70+ O '43
 Pretty girls—phooey! three tests. W. T. Laing. *Il Ptr Ink* 201:21-4 D 18 '42
 Promote safety by showing women in ads safely dressed. G. Currier. *Il Ind Marketing* 28:23-5+ Ap '43

See also

Advertising art
 Color in advertising
 Posters

Animal pictures

Advertisers' animal kingdom. *Il Sales Management* 52:22-3 Mr 1 '43

Cartoons

Car conservation sold by cartoons. *Il Ptr Ink* 202:59 Ja 29 '43
 How to test cartoon advertisements. H. M. Warren. *Il Ptr Ink* 202:58+ Mr 12 '43
 Humor drives home the point; Etiquet for wartime telephone usage. *Il Ptr Ink* 204:23 J1 2 '43

Comic strips

4500 newspaper pictures and their significance for advertisers. M. Harper, jr. and V. M. E. Harper. *Il Adv & Sell* 36:27, 66 N '43
 Whelan's comic advertisement fills 8-page Sunday supplement. *Ptr Ink* 204:36 J1 16 '43

Drawings

Can animation illustrate your hidden product? Artzybasheff's drawings for Wickwire Spencer steel co. R. H. Ganly. *Ptr Ink* 204:24-6 Ag 27 '43
 Drawing vs. photograph. G. W. Tasker. *Il Ptr Ink* 202:18-19 Ja 22 '43
 Perspective drawings solve advertising illustration problem. D. W. McCrosky. *Il Ind Marketing* 28:86 O '43

Exhibitions

Art for ad's sake; medal winners, with prefaco outlining the artist's place in and attitude toward advertising. P. F. Berdanier. *Il Ptr Ink* 203:15-18+ My 28 '43

Photographs

Candid camera angles for sales promotion. *Il Sales Management* 52:22-3 S 15 '43
 Drawing vs. photograph. G. W. Tasker. *Il Ptr Ink* 202:18-19 Ja 22 '43
 Hitch your camera to your job. R. MacLeod. *Il Am Phot* 37:30-1 Je '43

Santa Claus

St Nick goes military. P. H. Erbes, jr. *Il Ptr Ink* 201:37+ D 25 '42

ADVERTISEMENTS, Small space

Continuity important in small space campaigns. *Il Ptr Ink* 201:22-3 D 11 '42
 Flexible space schedule can help the small advertiser's chance of being remembered post-war. E. B. Weiss. *Il Ptr Ink* 203:18-19, 82 Je 25 '43

ADVERTISERS

Radio and camp shows build service men's morale; Coca-Cola, Camel, General Electric and other national advertisers. P. Murray. *Il Ptr Ink* 202:20, 22, 24+ Ja 22 '43

ADVERTISING

Advertisers' plans for 1943; nearly half of industrial advertisers will operate on appropriations increased by an average of 26.8%. R. O. McGraw. *Il Ind Marketing* 28:19-21+ Ja '43

Advertising and the postwar world; advertising as means of communication between all peoples will make for peace. H. A. Batten. *Adv & Sell* 36:13-14, 62+ J1 '43

Advertising can continue, after the war, to foster spirit of teamwork in industry. J. L. Spencer. *Ptr Ink* 205:93-4+ O 8 '43

Advertising comes of age. L. S. Mattingly. *Adv & Sell* 35:36 D '42

Advertising from here on. W. Weir. *Il Adv & Sell* 36:13-14 My '43

Advertising vital in war and post-war era. C. E. Murphy. *Comm & Fin Chr* 156:1893 N 26 '42

Advertising's postwar job; to help move fifty per cent more goods than were sold before the war. J. H. Van Deventer. *Il Ind Marketing* 28:100, 104, 106+ O '43

Benjamin Franklin and advertising. *Adv & Sell* 36:42 Ja '43

Consumer movement is not dead! R. Amberson. *Ptr Ink* 203:15-16+ My 14 '43

Future of advertising. H. McKee. *Ind Marketing* 28:102, 104 Ja '43

Glossary of advertising terms; written especially for the young advertising tyro; humorous. R. J. Cooke. *Ptr Ink* 204:90 S 17 '43

Hendrickson disclaims government intention to destroy advertising. *Ptr Ink* 202:46 Mr 19 '43

How smaller advertiser can keep name alive for post-war market. E. B. Weiss. *Il Ptr Ink* 203:20-2+ Je 11; 18-19, 82 Je 25 '43

Intelligent advertising is low-cost selling. J. D. Cathcart. *Ptr Ink* 204:92 J1 16 '43

Look up, and win! S. Campbell. *Ptr Ink* 202:17, 66-7 Ja 1 '43

More annual reports tell stockholders the facts of advertising. P. H. Erbes, jr. *Il Ptr Ink* 202:21-3+ Ja 15 '43

Re-examination of advertising's fundamentals. J. C. Cornelius. *Adv & Sell* 36:117+ P '43; Discussion (Fundamentally, Mr Cornelius, the people appraise the ads). C. W. Drepper. 36:38+ Mr '43

Salesman's corner; postwar buyers of printing, returned soldiers. F. Rundell. *Inland* Ptr 112:68 O '43

Summer slump in advertising? not likely this year. L. D. H. Weld. *Ptr Ink* 203:15-16 Ap 30 '43

Tomorrow is here! C. B. Brown. *Ptr Ink* 203:58+ My 14 '43

Townsend's' method of mass persuasion and 27 points on lease basis. *Ptr Ink* 205:49-50 O 15 '43

See also

Advertisements
 Advertising agencies
 and other headings
 beginning Advertising
 Bank advertising
 Business
 Catalogs
 Color in advertising
 Containers
 Employment systems
 —Advertising aids
 Government advertising
 Housing
 Medical advertising
 Merchandizing
 also subdivision

Money raising campaigns
 Moving pictures in advertising
 Posters
 Premiums (merchandizing)
 Publicity
 Purchasing—Advertising aids
 Radio advertising
 Safety advertising
 Sales letters
 Show windows
 Slogans
 State advertising

Advertising under special subjects, e.g.
 Cigarette industry and trade
 Clothing trade
 Cooperative associations
 Corsets
 Dancing schools
 Department stores
 Diamonds
 Electric utilities
 Food industry and trade
 Gas industry
 Gasoline industry
 Insurance
 Insurance, Life
 Insurance agents
 Insurance companies

ADVERTISING—See also—Continued

Mail order business	Railroads
Opera	Retail trade
Printing trade	Trade marks
Radio broadcasting	Trade names
stations	Trust companies

Architects, Appeal to

Mesker brothers sell the future with facts, not fancies; business paper campaign sells architects on future of metal windows. *Il* Ind Marketing 28:26-7+ Ap '43

Bankers, Appeal to

J. I. Case campaign welds banker with implement dealer and farmer; banking publications used to show bankers how they can find proper places for food production loans. *F* A. Wirt. *Il* Ind Marketing 28:33, 42 Ap '43

Chain stores, Appeal to

Emphasizes post-war role by talking about the past; Autoyre reproduces old advertisements. *R. H. Ganly. Il* Ptr Ink 205:22-4 O 8 '43

Check lists

Advertisers' check list, 1943. *A. Kimball. Adv & Sell* 36:68, 70 Mr '43

See also

Radio advertising—
Check lists

Children, Appeal to

Children's contest spreads appliance conservation story; Wisconsin electric power company. *Elec W* 119:1618-19 My 15 '43

Continuity

Advertise, or be forgotten! *T. H. Thompson. Sales Management* 52:43+ Mr 1 '43

Advertising must be maintained, companies tell stockholders. *Sales Management* 52:66 Je 1 '43

Advertising when buying is restricted. *J. D. Scott. Harvard Business R* 21 no4:443-54 [J] '43

Continuity important in small space campaigns. *Il* Ptr Ink 201:22-3 D 11 '42

Formfit tells dealers, if you can't sell corsets, reread 'em. *Il* Sales Management 52:32+ Je 1 '43

Frigidaire must. *Il* Sales Management 52:25 Mr 15 '43

If you haven't any to sell, talk about it anyway, says Ted Collins. *Ptr Ink* 205:76+ O 1 '43

Remember us when you bake your own; B & M advertises to maintain name and quality identity of baked beans. *C. S. Morrill. Il* Mod Packaging 16:61+ F '43

What is the importance of continuity in advertising? *J. C. Sterling. Adv & Sell* 36:22-3+ Mr '43

Why merchandise—short retailers must continue advertising. *H. P. Abrahams. Il* Ptr Ink 204:21-2 Ag 13 '43

See also

Advertising and war
Advertising appropriations

Copy

See Advertising copy

Cost

See also

Radio advertising—
Cost

Coverage

Total advertising! *W. P. Tuttle. Ptr Ink* 201:15+ N 13 '42

Wanted, an acceptable measurement of magazine coverage. *E. R. Smith. Ptr Ink* 203:69-71 My 28; 29-31+ Je 4 '43

See also

Radio advertising—
Coverage

Dealer cooperation

Five ways to induce big stores to advertise your product. *J. C. Cumming. Sales Management* 52:48, 50 Ja 15 '43

See also

Radio advertising—
Dealer cooperation

Dealer helps

Armour scores a bull's-eye with its meat ration meals campaign. *J. E. Weber. Il* Sales Management 52:25-6+ JI 15 '43

Guide helps printers design ad pieces for war effort; Michle printing press company. *Il* Ptr Ink 202:86+ Mr 26 '43

How smaller advertisers can hold dealer good-will. *E. B. Weiss. Il* Ptr Ink 204:29+ JI 30 '43

Llama, the vicuna, the camel help Stroock sell its quality story. *E. M. Murphy. Il* Sales Management 52:76+ O 15 '43

Offers post-war home planners scrap book for assembling ideas; Andersen corp. manufacturers of window units. *Il* Sales Management 52:62 N 1 '43

Pack display signs in envelopes. *H. Manischewitz. Il* Ptr Ink 203:28+ Ap 9 '43

Spot radio, movies, are basis of Carter Carburetor local dealer help program. *Il* Sales Management 52:50+ Ap 15 '43

Universal's V-day plan: a program for building post-war demand; Landers, Frary & Clark introduce a plan in national and business magazines to help dealers. *Sales Management* 52:44+ O 15 '43

See also

Advertising, Point-of-sale

Dealers, Appeal to

Don't overlook the dealer's salesmen in your promotion. *J. A. Kliss. Ind Marketing* 28:35-6 JI '43

Prize contest produces furniture industry ad; manufacturer runs contest among dealers for copy and layout for national magazine advertisement. *Il* Ptr Ink 205:22-3+ O 15 '43

Retailer looks at his wartime mail. *A. H. Van Voris. Il* Ptr Ink 204:20-2+ JI 9 '43

Tel-another dealer idea campaign offers war bonds as prizes. *Il* Ptr Ink 204:23 S 24 '43

Wholesaler's approach to advertising; outline of successful advertising campaign, promoted by wholesaler through dealers. *W. Cayton. Il* Ptr Ink 204:23-4 JI 9 '43

Wire maker suggests a hennery in every home. *Ptr Ink* 203:35 Ap 23 '43

See also

Advertising, Point-of-sale

Economic aspects

Ask \$200,000 for new study of advertising; committee headed by chairman of General Mills seeks contributions. *Ptr Ink* 202:39 Ja 1 '43

Dean answers the professors. *C. E. Griffin. Adv & Sell* 36:34+ Ap '43

Gentlemen! gentlemen! Professor Warne has the floor; expands on that letter calling for curtailment of advertising during wartime. *C. E. Warne. Ptr Ink* 202:20, 22+ Ja 29 '43; Reply. *G. B. Hotchkiss. Ptr Ink* 202:52+ F 19 '43

How government standardization obstructs progress; setting top prices on women's rayon hosiery; ignores cumulative contribution of product differences brought about by advertising. *L. D. H. Weld. Ptr Ink* 204:21-2 JI 23 '43

Industry advertising, rather than competitive, will provide those 57,000,000 jobs; post-war basic idea selling. *H. F. Barnes. Ptr Ink* 203:58+ Je 11 '43

Now for the names; educators who want advertising drastically curtailed for the duration. *Ptr Ink* 202:62 Ja 8 '43

Warne debate features first district. *A. F. A., conference. Ptr Ink* 203:49-50 Ap 30 '43

Employees, Appeal to

Advertising at war, against absenteeism. *J. W. Mason. Il* Ptr Ink 202:19-21 Mr 12 '43

Lack of morale program met by effective campaign; Chicopee teaches personnel importance of their jobs with newspaper and other advertising. *E. Housman. Il* Ptr Ink 204:23-4 JI 23 '43

Family of products

Share-the-ride-plan for Ralston cereals. *Il* Mod Packaging 16:62-3 F '43

ADVERTISING—Continued

Farmers, Appeal to

Advertisers boost farm morale; eight advertisements. G. Murray. *Il Ptr Ink* 202:18-19 F 26 '43

Assigns 5 new wartime objectives to localized paper for farmers; Republic Steel's Farm spokesman. *Il Ptr Ink* 201:14-15+ N 27 '42
Copy that clicked; Reid national corn company. R. Manville. *Il Ptr Ink* 203:38 Ap 23 '43

Farmers don't like emotional advertising. E. B. Weiss. *Il Adv & Sell* 36:22 J1 '43
Shows tradesmen how to advertise to farmers; Republic steel co. *Ptr Ink* 205:24 O 29 '43

This promotion to farmers has showmanship; Allied mills, inc. J. L. Richardson. *Il Ptr Ink* 203:18-19 Je 11 '43

See also

Advertising mediums
—Farm papers

Government attitude

Government reviews airline advertising expenditures. J. H. Frederick. *Ptr Ink* 203:62+ Ap 2 '43

Government cooperation

Nutrition campaign is launched; many advertisers to tie in. *Sales Management* 52:62 Ap 15 '43

History

Stage for truth in advertising was set at Boston convention in 1911. H. W. Dickinson. *Ptr Ink* 203:78 Je 25 '43

Industries, Appeal to

See Advertising, Industrial

Institutional copy

See Advertising, Institutional

Jobbers, Appeal to

Dumore's Dutch Uncle advertising to distributors. R. E. MacDonald. *Il Ind Marketing* 23:26-9 S '43

His presentation to wholesale salesmen. C. W. Dexter. *Il Ind Marketing* 23:25+ J1 '43

Laws and regulations

Advertiser, fighting stipulation, sues F.T.C.; Miles laboratories, inc. asks U.S. court for declaratory judgment. *Ptr Ink* 201:20-1 D 25 '42

Australia's advertising glamour is out for the duration! E. F. Sylvester. *For Comm W* 10:7+ Ja 23 '43

Check list of FTC taboos. *Adv & Sell* 36:38 My '43

FTC sustained; U.S. court refuses to halt complaint against ads and labels of Miles laboratory. *Business Week* p93 J1 3 '43

Gentlemen! gentlemen! Professor Warne has the floor; expands on that letter calling for curtailment of advertising during wartime. C. E. Warne. *Ptr Ink* 202:20, 22+ Ja 29 '43

Is the F.T.C. covering too much territory? H. Mock. *Ptr Ink* 205:28, 32+ O 29 '43

Marketing legislation enacted by Congress in 1942; a review of laws affecting management, selling and advertising. *Ptr Ink* 202:30, 35-7 F 5 '43

Miles laboratories answers ad charges. *Oil Paint & Drug Rep* 144:3+ S 6 '43

Our flag in advertising; how it may, and may not be used. E. Austin. *Il Ptr Ink* 202:17-19 F 5 '43

Text of open letter urging limitation of wartime advertising; editorial comment. *Ptr Ink* 202:15-16 Ja 1 '43; Names of committee. 202:52 Ja 8 '43

U.S. Supreme court decisions of 1942; review of its opinions in cases affecting selling and advertising. *Ptr Ink* 202:24, 28 F 5 '43

Use of government insignia and uniforms in advertising. G. Adams. *Adv & Sell* 36:48 My '43

Use of Red cross in advertising. *Adv & Sell* 36:78 N '43

Wage hour law not for copy writers. A. Gray. *Ptr Ink* 204:30+ J1 2 '43

Watchdog of honest copy. J. M. Campbell. *Adv & Sell* 36:120 My '43

What foreign flags can be displayed in ads? *Adv & Sell* 36:62+ N '43

What the Reader's digest forgot to report on the dentifrice cases. L. C. Stone. *Sales Management* 52:48+ O 1 '43

Market selection

Tracing of retail sales shows Lydia Pinkham how to advertise; selecting media; copy testing. *Il Sales Management* 52:57-8+ Mr 1 '43

Negroes, Appeal to

Don't do this, if you want to sell your products to Negroes! D. J. Sullivan. *Il Sales Management* 52:46, 48+ Mr 1 '43

What does war prosperity mean to the Negro? P. James. *Il Adv & Sell* 36:111-12+ F '43

Objectives

Advertising for postwar objectives. J. W. Irwin. *Ind Marketing* 23:19-21+ Je '43

Advertising when consumers cannot buy. J. D. Scott. *Harvard Business R* 21 no2:207-29 [Ja] '43

Chemistry's front line of facts; Hercules powder company's advertising. T. Marvin. *Il Chem Ind* 53:50-2 J1 '43

Food packers reveal how advertising helps solve their wartime problems; Printers' ink survey. *Ptr Ink* 204:26, 28+ Ag 13 '43

It's the reader who's a sales prospect who counts! M. P. Hanford. *Ptr Ink* 201:16 N 27 '42

1943 advertising objectives pointed out by agency executives. *Il Ind Marketing* 23:31-3+ Ja '43

20 major purposes of wartime advertising; the country's 301 largest advertisers tell why they advertise today. P. Salisbury. *Sales Management* 52:18-21 S 15 '43

Physicians, Appeal to

Toward a measure of pharmaceutical advertising effectiveness. E. Belley. *J Business* 16:107-14 Ap '43

Planning

Chart your future; what would your company and advertising plans be if you knew if and when the following will occur: collapse of Germany, complete Allied victory, defeat of new deal? B. B. Geyer. *Ptr Ink* 203:21-4+ Ap 16 '43

Prize contests

Children's contest spreads appliance conservation story; Wisconsin electric power company. *Elec W* 119:1618-19 My 16 '43

Prize contest produces furniture industry ad; manufacturer runs contest among dealers for copy and layout for national magazine advertisement. *Il Ptr Ink* 205:22-3+ O 15 '43

Tel-another dealer idea campaign offers war bonds as prizes. *Il Ptr Ink* 204:23 S 24 '43

Using a contest to spread product information in wartime; Acheson colloids corporation. J. M. Lupton. *Il Ind Marketing* 23:28-9+ J1 '43

Psychology

Fundamentally, Mr Cornelius, the people appraise the ads. C. W. Drepperd. *Adv & Sell* 36:38+ Mr '43

Hyperbole or hoax? consumers sense the difference! W. T. Laing. *Il Ptr Ink* 202:22-4 Mr 19 '43

Raw material for the copy writer's imagination through: modern psychology. E. Dichter. *Ptr Ink* 202:63-8 Mr 5 '43

See also

Advertising copy

Advertising research

Rates

Argument for consistency-discounts in publication advertising. A. Ross. *Ptr Ink* 203:44+ Je 18 '43

Returns

Copy that clicked; Firth carpet company. R. Manville. *Il Ptr Ink* 202:64+ Mr 19 '43

Service

See Advertising, Educational

ADVERTISING—Continued

Soldiers, Appeal to

Don't overlook the coast guard. R. Manville. *Il Adv & Sell* 36:50 N '43.
 Uses industrial ads as insurance against war-created substitutes; manufacturer Koubey & Mattison sees service men as important prospects in the future. *Ptr Ink* 203:68 Ap 30 '43

Special weeks

Advertising campaigns—Special weeks

Statistics

Advertising holds. *Business Week* p40+ Ja 30 '43
 Advertising increased 12.3% during first half of 1943. L. D. H. Weld. charts *Ptr Ink* 204:28, 32+ Ag 27 '43
 Advertising, 1938-1941. Survey of *Cur Business* 1942. Sup p29-31 [supplemented in monthly numbers]
 Advertising, sales of retail stores, and manufacturers' shipments, 1939-July 1943; chart. Survey of *Cur Business* 23:2 S '43
 Advertising volume for Dec. Issues of industrial, trade, and class papers and totals for 1942 and 1941; tabulation. *Ind Marketing* 28:120 Ja '43
 Farm publications; advertising linage, three semi-annual totals, 1941-1943. *Ptr Ink* 204:101 J1 23 '43
 Farm publications; advertising linage, 3-year comparative totals. *Ptr Ink* 202:93 F 5 '43
 489 agencies placed 212,232 pages in business papers in 1942; tabulation, 1941-1942. *Ind Marketing* 28:32-4, 37-8 S '43
 How national newspaper linage compares with magazines for first half of year. L. D. H. Weld. *Ptr Ink* 205:25-6 O 8 '43
 Leading advertisers of 1942 and their expenditures; 399 companies invested \$256,221,479 in magazines, farm papers and network radio. *Ptr Ink* 202:57+ F 5 '43
 Magazine linage; five semi-annual totals, 1939-1943. *Ptr Ink* 204:94+ J1 23 '43
 Magazine linage; total linage for five years, 1938-1942. *Ptr Ink* 202:94+ F 5 '43
 Market changes in 98 cities as shown by their total newspaper linage, 1941, 1942. *Ptr Ink* 202:45-6+ F 5 '43
 \$1,820,000,000 invested in advertising in 1942. L. D. H. Weld. *Ptr Ink* 202:18-19+ Mr 26 '43
 Proctor & Gamble largest user of newspapers in '42. *Ptr Ink* 203:26 Je 11 '43
 Rising volume of business-paper advertising reflects the impact of war on the utility of advertising; over 700 business papers report how they fare in wartime. V. H. Van Diver, Jr. *Ptr Ink* 202:103-4+ F 5 '43
 World roads the advertising figures for 1942; preliminary report. L. D. H. Weld. *Ptr Ink* 202:20-2 F 5 '43
 Who advertises what in business papers? product analysis by *Iron Age*. O. Johnson. *Ptr Ink* 204:24+ J1 2 '43

See also

Radio advertising—Statistics

Women, Appeal to

War brings new grouping of markets; war workers and service men; Hinds lotion and Camels posters. P. W. Combs. *Il Ptr Ink* 203:52+ Ap 30 '43

Argentina

Argentina clamps down on drug advertising. *Ptr Ink* 205:52 O 1 '43

Australia

Australia's advertising glamour is out for the duration. E. F. Sylvester. *For Comm W* 10:7+ Ja 23 '43

Chile

Chile under a microscope; what you need to know to sell there. J. D. Cathcart. *Il map Sales Management* 52:28, 30 My 1 '43

Great Britain

Advertising slash; available space cut to 23% of total linage in British newspapers. *Business Week* p91 Ap 3 '43

Britain bids farewell to fear copy. J. L. Young. *Il Adv & Sell* 36:36+ Mr '43
 British agency describes how Empire papers ration space. *Ptr Ink* 201:54 N 13 '42
 How Britain keeps up its mailing lists in wartime. H. Dennett. *Adv & Sell* 36:54 Ap '43
 How the war has improved British industrial advertising. N. C. Pratt. *Il Ind Marketing* 28:26-7+ J1 '43
 Impact of war on advertising; British pattern. *Adv & Sell* 36:19-22 Ja '43
 In England, agencies and advertisers buy the space salesman's lunch! H. W. Yoxall. *Il Ptr Ink* 202:60, 62-3 F 12 '43
 Letter from London; Britain's biggest advertiser; Ministry of Information's work in home-front publicity. J. P. McNulty. *Adv & Sell* 35:56+ D '42
 Trends of wartime advertising in Britain. J. P. McNulty. *Il Adv & Sell* 36:60+ O '43

Hawaiian Islands

Honolulu in year of war adds \$100,000,000 buying power. *Sales Management* 52:37-8 Ja 1 '43

Latin America

Advertiser looks ahead to Latin America. P. Hedrick. *Il Ptr Ink* 203:18-19+ Je 4 '43
 New basic guide for foreign traders; advertising experts cooperate to provide important budgetary know-how on reaching vast post-war markets in Latin America. C. Cloyes. *For Comm W* 13:14-15+ O 23 '43
 Radio advertising as a selling tool for reaching Latin-America. J. D. Cathcart. *Il Sales Management* 52:32, 34 Mr 1 '43
 20 more questions about selling and advertising in Latin-America. *Sales Management* 52:36+ O 15 '43
 21 questions about selling and advertising in Latin-America. *Sales Management* 52:80+ Ag 15 '43
 U.S. export advertising zooms beyond estimates. C. Cloyes. *Il For Comm W* 12:8-9+ J1 10 '43; Same abr. *Ptr Ink* 204:66 Ag 6 '43
 U.S. manufacturers "up" export advertising. C. Cloyes. *Il For Comm W* 10:10-11, 27-8 Ja 9 '43
 With sound truck and 16mm film in Uruguay [Colombia]: an experience report; Sterling products international sales promotion. J. D. Cathcart. *Il Sales Management* 52:68+ Ap 1 '43

Mexico

Palmolive building Mexican market on policy of permanent friendship; combination seal and slogan. F. D. Gonda. *Il Ptr Ink* 202:40+ Mr 26 '43

New England

Tacturn Yankees like emotional copy. M. R. Grossman. *Adv & Sell* 36:40 N '43

ADVERTISING, Association

Awards for advertisements appearing in any medium, sponsored by one or more trade associations. *Il Adv & Sell* 36:23-5 F '43

See also

Advertising campaigns—Special weeks

Cooperative associations—Advertising

ADVERTISING, Cooperative

Campaign against inflation launched by life insurance companies in cooperative effort. *Comm & Fin Chr* 158:833 Ag 26 '43; *Nat Underw* (Life ed) 47:1+ Ag 20 '43; *Weekly Underw* 149:345+ Ag 21 '43; *Ptr Ink* 204:45-6 Ag 20 '43

Competitors unite in drive to put slacker bottles back to work. *Il Sales Management* 52:62+ S 1 '43

43 Rochester manufacturers tackle labor shortage in cooperative drive. *Il Ptr Ink* 204:74 J1 2 '43

How Newark super-sells to win 50,000 women to war work. *Il Sales Management* 52:96+ O 15 '43

Industry advertising, rather than competitive, will provide those 57,000,000 jobs; post-war basic idea selling. H. F. Barnes. *Ptr Ink* 203:58+ Je 11 '43

ADVERTISING, Cooperative—Continued

It paid these firms to sell what they haven't got! three natural gas companies of Pittsburgh promote insulation. H. Stanley. *Il* Ptr Ink 201:78-9 D 11 '42

Labor recruited in Rhode Island through cooperative advertising. *Ptr Ink* 204:80 JI 9 '43

New York savings banks spend \$300,000 to sell thrift. *Il* Sales Management 52:80+ S 1 '43

Special report on cooperative trust promotion. Trusts & Estates 77:41-6 JI '43

Sunkist to carry advertising; seek to convert non-users. *Il* Sales Management 52:25 My 20 '43

See also
Advertising, Association Radio advertising, Cooperative

ADVERTISING, Direct mail. See Advertising, Mail**ADVERTISING, Educational**

Ads of New York and Massachusetts bank groups fight against inflation. *Il* Ptr Ink 204:64+ Ag 13 '43

Advertisers boost farm morale; eight advertisements. G. Murray. *Il* Ptr Ink 202:18-19 F 26 '43

Advertising in post-war era must combat state socialism. J. E. Wiley. *Comm & Fin* Chr 158:97+ JI 8 '43

Advertising's front. *Sales Management* 52:24 JI 1 '43

Advertising's part in civilian mobilization; second portfolio of 50 outstanding war advertisements. *Adv & Sell* 36:61-76 Je '43

Awards for advertisements which contribute most to advancement of advertising as a social force. *Il* Adv & Sell 36:8-10 F '43

Borden's Elsie enlists for victory on Nation's home front. *Sales Management* 52:23 Mr 15 '43

Bread, butter, and beefsteak! H. McKee. *Inland* Ptr 111:19-23 JI '43

Cherry-Burrell corporation, Chicago, conservation program in dairy industry; abstract. O. K. Burrows. *Ind Marketing* 28:122+ F '43

Chicago's paper milk container battle aired in advertisements. *Ptr Ink* 202:19 Ja 8 '43

Competitors unite in drive to put slacker bottles back to work. *Il* Sales Management 52:62+ S 1 '43

Concrete examples, told by many advertisers, needed to tell the story of business, not abstract essays. *Il* Ptr Ink 202:18-19 F 19 '43

Dream models will come later; let's pre-sell what we'll have on V-day! W. A. Grove. *Sales Management* 52:18-19 Ap 15 '43

Editor and advertiser: same thought; let pleasure-boat owners sell their engines for lifeboat use. *Il* Ptr Ink 204:19 Ag 6 '43

Educational role of advertising charted by industrial conference. *Ptr Ink* 202:58 Ja 29 '43

Exhibit of wartime advertising; advertising to help win the war. C. Norton. *Il* Ptr Ink 201:17-20+ N 27 '42

Fabric house wins brand identity with dealers and consumers; Arlington Mills labels are carried after re-manufacture for their sales potency with consumers. *Il* Sales Management 52:23-5 S 15 '43

Food firms rally to Uncle Sam's call; rationing ads blanket Nation. *Il* Sales Management 52:20-3 Mr 15 '43

Food industry plans great ad campaign to push OWI program. *Ptr Ink* 202:58 F 12 '43

Government and food industry team up in huge 5-way national food drive. *Il* Sales Management 52:30-1 Mr 1 '43

If industry advertised free enterprise as well as it advertises war messages. B. G. Was-ser. *Ptr Ink* 204:70-1 JI 30 '43

Immediate production of additional pulp-wood aim of Victory campaign plan. *Ptr Ink* 204:38 JI 30 '43

Industrial advertisers urged to promote tool conservation campaign. *Il* Ind Marketing 28:58 JI '43

Industry's destiny and advertising's part in it. H. V. Mercready. *Ind Marketing* 28:54, 58+ My '43

Instructional material logical field for more wartime printing sales. J. M. Trytten. *Il* Inland Ptr 110:34-5 F '43

Is advertising fulfilling its war job? R. Murray. *Ptr Ink* 204:17-18+ Ag 20 '43

It paid these firms to sell what they haven't got! three natural gas companies of Pittsburgh promote insulation. H. Stanley. *Il* Ptr Ink 201:78-9 D 11 '42

Keeping the name alive though 100% busy; Servel Nutrition in industry and fashions in rationing campaigns. *Adv & Sell* 36:110+ Ag '43

Keeping the wheels turning is also part of advertising's job; Allis-Chalmers' maintenance advertising programs. G. J. Callos. *Il* Ind Marketing 28:28-30+ Ja '43

Kiwanis clubs sponsor campaign to "Keep his America American." S. Campbell. *Il* Ptr Ink 204:16-17 JI 16 '43

Life insurance firms cooperate in ad campaign on cost of living. *Il* Ptr Ink 204:45-6 Ag 20 '43

Maxon to enlist advertising aid to explain rationing, other programs. *Ptr Ink* 202:32 F 26 '43

New advertising. R. Clapper. *Il* Ptr Ink 202:16 Ja 15 '43

New Mennen series advises how to help relieve shortage of doctors. *Il* Ptr Ink 202:33 Ja 8 '43

New York media combat story that metropolis is a ghost town. *Ptr Ink* 204:46 JI 30 '43

No information please; New York telephone company's campaign. *Il* Ptr Ink 204:84 JI 9 '43

Nutrition campaign is launched; many advertisers to tie in. *Sales Management* 52:62 Ap 15 '43

100 million will read; ads used by publishers of periodicals as part of all-out attack on inflation. *Il* Sales Management 52:23-4 JI 1 '43

120 newspapers now carrying Institute of democracy copy selling Americanism. R. H. Ganly. *Il* Ptr Ink 204:48+ S 17 '43

Paid advertising best aid to public relations; A. P., Bendix, Goodrich as examples. C. Byoir. *Ptr Ink* 203:17+ Je 18 '43

Preaching the sermon. H. T. Ewald. *Adv & Sell* 36:26 N '43

Scott campaigns promote war program and aid customers during scarcity. L. M. Hughes. *Il* Sales Management 52:18-20 F 15 '43

Servel sells nutrition. G. S. Jones, jr. *Il* Ptr Ink 202:18-19, 42 Ja 1 '43

Service type of advertising nothing new to Blue Coal's radio program. B. Hall. *Il* Ptr Ink 202:50-1 Ja 8 '43

Share your rifle plan helps make U.S. nation of marksmen; Mossberg campaign. *Il* Sales Management 52:38+ N 1 '43

Should advertisers educate voters? A. Walker. *Ptr Ink* 204:98 S 24 '43

Stewart-Warner sees tax small price for freedom. *Ptr Ink* 202:71 Mr 5 '43

Story of the newspapers' scrap drive. G. T. Eager. *Il* Adv & Sell 36:15-16, 66, 68 Ja '43

Tell the public why America's future depends upon free enterprise! J. W. Irwin. *Ptr Ink* 204:17-18+ S 17 '43

U.S. war advertising sells workers, industry by industry. G. A. Nichols. *Il* Ptr Ink 202:16-18+ F 12 '43

Voluntary fuel-saving campaign; typical British advertisement. D. M. DeBard. *Il* Gas Age 90:14-15 D 17 '42

Wage earners, wealthy but wary! E. Smith. *Ptr Ink* 203:17-19 Ap 23 '43

Westinghouse subordinates company in advertising to help win the war; hitherto confidential material included in wartime conservation. J. M. McKibbin. *Il* Ind Marketing 28:37+ F '43

What does your ad make people do? General Electric lamp campaign. T. M. Shepard. *Il* Adv & Sell 36:14-15 Ap '43

What government wants advertising to do. G. Cowles, jr. *Adv & Sell* 36:17-18+ Mr '43

When you can't sell, help them service. B. F. Sturtevant policy. E. W. Andros. *Il* Ind Marketing 28:62+ Mr '43

Why U.S. Rubber finds paid space more effective than publicity releases. F. D. Richards. *Sales Management* 51:50-1 D 1 '42

ADVERTISING, Educational—Continued

With no goods to sell, Industrial Rayon sells its process. *il Ind Marketing* 28:110+ O '43

See also

Advertisements—	Government advertising
Books and booklets	Money raising campaigns
Advertising, Association	Publicity
Advertising, Institutional	

ADVERTISING, Foreign

Diplomacy problems Coca Cola met in opening the Mexican market. *F. D. Gonda. il Sales Management* 52:56+ Mr 15 '43

Export business shot, U.S. Rubber takes on other lines abroad. *L. C. Boos. il Ptr Ink* 202:20-1 Mr 5 '43

New basic guide for foreign traders; advertising experts cooperate to provide important budgetary know-how on reaching vast post-war markets in Latin America. *C. Cloyes. For Comm W* 13:14-15+ O 23 '43

Palmolive building Mexican market on policy of permanent friendship; combination seal and slogan. *F. D. Gonda. il Ptr Ink* 202:40+ Mr 26 '43

U.S. export advertising zooms beyond estimates. *C. Cloyes. il For Comm W* 12:8-9+ JI 10 '43; Same abr. *Ptr Ink* 204:66 Ag 6 '43

U.S. manufacturers "up" export advertising. *C. Cloyes. il For Comm W* 10:10-11, 27-8 Ja 9 '43

Why reciprocal trade agreements are important to advertisers! *C. H. Minor. Ptr Ink* 203:73-5 My 14 '43

See also

Advertising—Latin America	Radio advertising, Foreign
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ADVERTISING, Fraudulent*See also*

Advertising—Laws and regulations
Advertising ethics

ADVERTISING, Industrial

Advertises free course in arc welding in industrial papers; prospects register by means of coupon; *Hobart brothers company. il Ptr Ink* 205:21+ O 22 '43

Analysis of industrial and commercial equipment manufacturers advertising in national business magazines. *Am Gas Assn Proc* 1942:211-15

Awards for advertisements appearing in business publications. *il Adv & Sell* 36:20-2 F '43

Be yourself in industrial copy; two memos to writers in war-changed jobs; industrial copywriters now going national in general business papers, general copywriters now going industrial in specialized business papers. *E. S. Green. Ind Marketing* 28:46, 50+ My '43

Business paper advertising volume heavy; "how to" themes predominate; survey made among members of National industrial advertisers association. *Sales Management* 52:64+ N 1 '43

Can industrial advertisers help the war campaigns? *il Ind Marketing* 28:118+ S '43

Catalog copy tells all for Bailey; complete catalogs in business publications serving the iron and steel industry. *il Ind Marketing* 28:52 My '43

Conservation theme in industrial copy isn't always easy; *Combustion Engineering* persevered. *il Ptr Ink* 201:46+ N 27 '42

Eight ways to keep your ads from going lazy. *M. S. MacNaught. Ind Marketing* 28:19-20+ JI '43

Gearing industrial advertising to the needs of the war. *K. L. Morgan. Ind Marketing* 28:27-8+ Ag '43

Graphic arts rally to the needs of government and advertisers. *H. Kaufman. il Ind Marketing* 28:72, 74+ My '43

Hercules Powder wins Chicago publishers' award for best 1942 advertising. *il Ind Marketing* 28:76+ Ap '43

How the war has improved British industrial advertising. *N. C. Pratt. il Ind Marketing* 28:26-7+ JI '43

How we sell to industrial buyers; American brake shoe co. *J. I. Capps. il Ptr Ink* 204:21-2 JI 2 '43

Industrial advertisers urged to promote tool conservation campaign. *il Ind Marketing* 28:53 JI '43

Industrial advertising's accomplishment and its promise. *H. V. Merceready. Ind Marketing* 28:25-6+ Ag '43

Industrial copy has eliminated the guff; 9 major war themes remain. *J. A. Murphy. il Ptr Ink* 201:18-19+ D 25 '42

Industrial copy now for new kinds of post-war business; *Spriess Tool* stresses ingenuity. *il Ptr Ink* 203:87-9 My 21 '43

Industrial salesmen, now consultants, still need advertising backing. *il Ptr Ink* 202:46-7 Ja 22 '43

Market trends and postwar probabilities. *il Ind Marketing* 28:25-7+ Ja '43

Mr Lupton answers the copy chasers on paper conservation. *il Ind Marketing* 28:92, 94 S '43

NIAA central regional conference, Cleveland, June 25. *Ind Marketing* 28:23-4+ JI '43

Nelson calls it advertising; *Macwhyte* company helps wire rope users make their supply last. *F. J. Nelson. Ind Marketing* 28:38-9+ F '43

New opportunities for industrial advertising. *H. V. Merceready. Ind Marketing* 28:21-2+ F '43

New wartime concept of industrial advertising. *A. M. Staehle. Ind Marketing* 28:23-5+ F '43

Next job for industrial advertising. *W. Chevalier. Ptr Ink* 203:80+ Je 4 '43

1943 advertising objectives pointed out by agency executives. *il Ind Marketing* 28:31-3+ Ja '43

Portfolio copy varied by ingenious pocket device; *Cuno engineering corps., Meriden, Conn. Ptr Ink* 204:19 Ag 13 '43

Restrictions on printing and how they are being met; ingenuity of industrial advertising. *H. Kaufman. Ind Marketing* 28:51, 54+ Ap; 72, 74+ My '43

Set of commandments to end the adman-engineer feud. *J. C. Schneider. Ind Marketing* 27:50+ D '42

Seven ways to plan wartime ads that click. *W. Painter. il Ind Marketing* 28:37 Ag '43
Should low cost be revived as an industrial copy slant? *W. H. Green. Ind Marketing* 28:24 O '43

Stay on your course is the thought that guides Hercules advertising. *T. Marvin. il Ind Marketing* 28:19-22+ Mr '43

These industrial ads tell 'em what they want to know; *MacWhyte co., Kenosha, Wis., manufacturers of wire ropes, slings, aircraft cables, etc. il Ptr Ink* 205:20-1 O 29 '43

Two tests prove business-paper readers want info, not pep talks; *Morgan construction company and U.S. envelope company tests. H. F. King. il Ptr Ink* 203:24-6 Ap 9 '43

Uses industrial ads as insurance against war-created substitutes; manufacturer *Keasbey & Mattison* sees service men as important prospects in the future. *Ptr Ink* 203:63 Ap 30 '43

Vast market for industrial X-ray apparatus developed by war. *G. D. Crain, Jr. il Ind Marketing* 28:34-6+ Ja '43

War advertising programs can now begin to talk results! *il Ptr Ink* 202:25-6, 30+ Ja 15 '43

WAAC, also stands for wartime advertising allocation chart; *Air Reduction's* advertising department. *R. H. Ganly. il Ptr Ink* 203:20-1+ Je 25 '43

Weatherhead launches newspaper campaign to extend public recognition; human interest copy signed by president. *G. P. Roberts. il Ind Marketing* 28:74, 78 S '43

Westinghouse subordinates company in advertising to help win the war; hitherto confidential material included in wartime conservation. *J. M. McKibbin. il Ind Marketing* 28:37+ F '43

What is the editorial formula for advertising? *W. E. Irish. Ind Marketing* 28:54+ O '43

When lovely woman stoops to dolly; industrial advertisers play up the adaptability of their machines to women workers. *il Ptr Ink* 202:20-1 Ja 8 '43

ADVERTISING, Industrial—Continued

Who advertises what in business papers? product analysis by *Iron Age*, O. Johnson. *Ptr Ink* 204:24+ J1 2 '43

Would John E. Kennedy O.K. it? E. H. Pearson. *Ind Marketing* 27:37 D '42

Wrigley gum promotes factory tools as preliminary to postwar selling. P. K. Wrigley. *Il Ptr Ink* 205:22+ N 12 '43

See also

Advertising mediums Machinery industry—
—Trade Journals Advertising
Equipment Industries
—Advertising

ADVERTISING, Institutional

California firm advertises to explain its annual statement. *Il Ptr Ink* 203:22 Ap 9 '43

Crane co. launches new program of selling for tomorrow. *Il Ind Marketing* 28:22-4-1-
Ja '43

Dividend notices as institutional advertisements. W. Smith. *Il Ptr Ink* 205:22-4 O
22 '43

Eclipse Aviation's five-year institutional campaign. S. H. Webster. *Il Ind Marketing* 28:
26-8+ My '43

Emphasizes post-war role by talking about the past; Autovye reproduces old advertisements. R. H. Ganly. *Il Ptr Ink* 205:22-4 O 8
'43

Exhibit of wartime advertising; advertising to help win the peace. C. Norton. *Il Ptr Ink* 201:21-4 D 4 '42

How big business helps little business; International harvester company uses newspapers and business papers. *Ind Marketing* 28:72-4 Ap '43

Institutional ads are well read says Bureau of advertising brochure. *Il Ptr Ink* 204:
24-5 S 24 '43

Institutional advertising can produce results. Trusts & Estates 76:442 My '43

New post-war era for South is promoted by humanized Southern Railway advertising; interview by G. A. Nichols with E. E. Norris. *Il Ptr Ink* 204:19-21+ Ag 20 '43

Offer of aircraft picture makes friends for Studebaker. *Il Ptr Ink* 204:33+ Ag 20 '43

Opinion-forming advertising. K. W. Akers. *Ind Marketing* 28:34-5+ F '43

Union Oil advertising interprets big business to the public. *Il Sales Management* 52:41 Ag 15 '43

Wave of institutional copy tells story of railroads at war. L. B. Colby. *Il Sales Management* 51:52+ D 1 '42

Weatherhead launches newspaper campaign to extend public recognition; human interest copy signed by president. G. F. Roberts. *Il Ind Marketing* 28:74, 78 S '43

See also

Publicity

ADVERTISING, Mail

Californian organizes post-card drive to counter dry propaganda. *Sales Management* 52:46 J1 15 '43

Direct-mail campaign, limited to 300 names, brings 19 per cent return; Bankers trust company of Detroit. *Ptr Ink* 202:58, 70-1
Ja 8 '43

Direct mail does three wartime jobs. *Ptr Ink* 201:51 D 4 '42

Dr Pepper marshals field men in home-front morale campaign. W. V. Ballou. *Il Sales Management* 52:62+ F 15 '43

How Britain keeps up its mailing lists in wartime. H. Dennett. *Adv & Sell* 36:54 Ap '43

How to sell bank service by direct mail. R. E. Doan. *Bankers M* 145:292-318, 384-415, 478-527; 146:16-49 O '42-Ja '43

Its products on ice, Timken sustains name through service and advertising. D. G. Baird. *Il Sales Management* 52:22-4 Ap 1 '43

Mailing piece produces 80% returns in signed orders; Kleinzway wholesale fur cleaning, storage and repair service to quality department stores. G. M. Stern. *Il Ptr Ink* 203:22+ Je 4 '43

Obsolete lists, paper shortage, plague users of direct mail. *Sales Management* 52:72+ N 1 '43

Retailer looks at his wartime mail. A. H. Van Voris. *Il Ptr Ink* 204:20-2+ J1 9 '43

Salesmen's corner; printing salesmen and envelope houses should pull together. F. Rindell. *Inland Ptr* 111:27-8 Ag '43

Toward a measure of pharmaceutical advertising effectiveness. B. Bolley. *J Business* 16:107-14 Ap '48

27 wartime marketing problems you can solve with direct mail. W. J. Walker. *Sales Management* 52:62+ Je 15 '43

Wartime commandments of mail advertising; abstract. P. Muchnick. *Management R* 31:
426-7 D '42

See also

Advertisements—	Catalogs
Books and booklets	House organs
Advertisements—	Mail order business
Christmas cards	Sales letters
Calendars	

Brochures

Promotion shoe on other foot! Chicago liquor retailer wants preferred stock allocation from distillers. C. Gavin. *Il Ptr Ink* 204:17-4
J1 23 '43

Folders

Creator of V folder displays top-flight talent for creating other unusual ideas; reproductions. *Inland Ptr* 110:44-5 Ja '43

Typographic clinic; folder on conservation of gas. H. N. King. *Il Inland Ptr* 111:49
Je '43

ADVERTISING, National

Devotes campaign to defending principle of brand names; Berkshire knitting mills, Reading, Pa. *Il Ptr Ink* 205:96 O 29 '43

Food rationing speeds trend toward advertised brands; a study of super markets. *Il Sales Management* 52:21-3 J1 1 '43

Obligation of advertiser to protect his customers. A. Wineburgh. *Ptr Ink* 204:80 Ag 13 '43

Pooling threatens brands. C. J. Swan. *Il Ptr Ink* 201:16-18+ N 13 '42

Possible effects on national advertising of international tendency to insure freedom from want; Beveridge plan. *Adv & Sell* 36:
19-20 Mr '43

Rationing, an opportunity for brand manufacturers; after the war, battle of brands will begin again. L. A. Johnson. *Ptr Ink* 204:26 J1 9 '43

See also

Advertising appro-	Advertising cam-
priations	paigns

ADVERTISING, Outdoor

Urban traffic up 6% despite war, outdoor circulation audit shows. *Ptr Ink* 204:62 Ag 6
'43

See also

Posters

ADVERTISING, Point-of-sale

Certified facts tags give new personnel quick sales training; Western auto supply company. B. Bigelow. *Il Ptr Ink* 202:58+ Mr 6
'43

Check your point-of-sale policies against these retail trends! C. J. Swan. *Il Ptr Ink* 201:24-6, 30-1 D 11 '42

Counter cards for inexperienced help. *Il Mod Packaging* 16:82+ My '43

Dearth of displays on conservation. *Il Ptr Ink* 203:22-3 My 7 '43

Display for off-the-market merchandise. M. T. Sajous. *Il Mod Packaging* 16:99-103 D '42

Merchants like ration aids. *Il Mod Packaging* 16:79 Mr '43

News story at point of sale. *Il Mod Packaging* 16:82-3+ Ja '43

No retreat for brand names at point of sale; replies to questionnaire. *Il Mod Packaging* 16:81-5, 118-1+ Je '43

Permanent holder with changeable signs. *Il Mod Packaging* 16:75, 112 Ag '43

Simplify your point of sale pieces, and keep them working. K. Mendic. *Il Sales Management* 52:63+ Ag 16 '43

See also

Labels

ADVERTISING, Radio. See Radio advertising**ADVERTISING, Soliciting of**

Do space salesmen need new technique in selling business papers? C. B. Heaven. *Ind Marketing* 28:46, 48+ Ap '43

It will pay you to know what others are selling. J. C. Gries. *Inland Ptr* 111:24 Je '43

ADVERTISING, Soliciting of—Continued

Let publishers practice what they preach! why the secrets about their own story? F. de Guzman, *Ptr Ink* 201:28, 30 D 4 '42.

Publication men can help advertisers to give them more business, D. R. Collins, *Ind Marketing* 27:46+ D '42.

What a new advertising manager learned about space salesmen, printers, etc., A. Tyro, *Ptr Ink* 202:40+ Mr 12 '43; Reply, X. Perience, 203:70+ Ap 16 '43.

ADVERTISING agencies

Advertisements should be signed by the agency! H. Meyer, *Ptr Ink* 204:19-20+ S 24 '43.

Advertisements should not be signed by the agency! H. H. Phillips; O. C. Horn, *Ptr Ink* 205:84 O 22 '43.

Ah, those gorgeous account executives! P. H. Erbes, Jr., *Ptr Ink* 205:94+ O 22 '43.

Gallery: W. Buchen, poet and planner, *Adv & Sell* 36:30+ My '43.

How to select an advertising agency, N. Gassaway, *Ind Marketing* 28:30-1+ S '43.

Lasker leaves Lord & Thomas; agency to change name to Foote, Cone and Belding, *Ptr Ink* 202:30 Ja 1 '43.

New Chicago agency: Wallace-Ferry-Hanly, *Ptr Ink* 202:75 Mr 5 '43.

1943 advertising objectives pointed out by agency executives, *Ind Marketing* 28:31-3+ Ja '43.

Seven signposts point the way to agency progress, P. H. Erbes, Jr., *Ptr Ink* 201:50+ D 11 '42.

Shortcomings of the advertising agency today, P. H. Erbes, Jr., *Ptr Ink* 201:64, 67-8 D 4 '42.

Sponsorable local radio shows not encouraged by agencies, H. S. Chason, *Ptr Ink* 203:34+ Je 25 '43.

This agency has been signing ads, W. B. Golovin, *Ptr Ink* 205:30 O 15 '43.

Where advertising agencies fit into postwar planning, L. D. H. Weld, *Adv & Sell* 36:38+ Je '43.

See also

Advertising, Soliciting of

Advertising

Copy that clicked; advertisement of James Flett organization, R. Manville, *Ptr Ink* 202:64 F 12 '43.

Employees

Advertising agencies plagued by office help shortage; fourteen points for helping overcome current stringencies, P. H. Erbes, Jr., *Ptr Ink* 204:22, 91-3 Ag 27 '43.

Advertising will need youth's counsel, B. Smith, 2d, *Ptr Ink* 205:112 N 5 '43.

See also

Advertising copy writers

Management

How the small agency keeps going in wartime, G. W. Wright, *Adv & Sell* 36:32+ Ja '43.

Service

Advertising agencies are contributing many thousands of hours to war effort, P. H. Erbes, Jr., *Ptr Ink* 201:60, 62+ N 27 '42.

Advertising agency enlisted to brighten classroom textbook on banking, *Ptr Ink* 201:39 N 27 '42.

Agency is getting its finger into more of the client's pie, P. H. Erbes, Jr., *Ptr Ink* 201:56, 58, 61-2 N 20 '42.

How the agency can aid the advertising manpower problem; analysis of functions an agency can perform, B. W. Schellenbach, *Ind Marketing* 28:25-6+ Je '43.

Postwar experts: advertising agency forms technical board to study and ease future burdens of plants converting to war, *Business Week* p80 N 28 '42.

Wartime is shoving the agencies around, P. H. Erbes, Jr., *Ptr Ink* 201:29-30, 32+ N 13 '42.

Space buyers

Buying business paper space in wartime, R. Choute, *Adv & Sell* 35:24+ D '42.

Publication men can help advertisers to give them more business, D. R. Collins, *Ind Marketing* 27:46+ D '42.

ADVERTISING and employees

Booklets for and by employer, G. E. Stedman, *Ind Marketing* 28:30-1 J '43.

1943 twist: merchandise your advertising to your dealers and your workers; this agency is explaining to 1500 war workers of American pad & textile company how current advertising is building jobs for them post war, H. A. Rogers, *Ptr Ink* 205:17-18+ O 22 '43.

See also

Advertising—Employees, Appeal to

ADVERTISING and salesmen

Brag advertising builds hurdles for salesmen, N. L. Cooperider, *Ptr Ink* 204:23, 40 Ag 20 '43.

Crane co. launches new program of selling for tomorrow, *Ind Marketing* 28:22-4+ Ja '43.

How we sell to industrial buyers; American brake shoe co., J. I. Cupps, *Ptr Ink* 204:21-2 J '43.

Industrial salesmen, now consultants, still need advertising backing, *Ptr Ink* 202:40-7 Ja 22 '43.

ADVERTISING and war

Ads advise Britons on care of clothes, *Ptr Ink* 202:42 Ja 22 '43.

Advertise, or be forgotten! T. H. Thompson, *Sales Management* 52:43+ Mr 1 '43.

Advertisers boost farm morale; eight advertisements, G. Murray, *Ptr Ink* 202:18-19 F 26 '43.

Advertisers making valuable contribution to war effort with informative literature, *Ind Marketing* 28:55 Ap '43.

Advertising during 2 world wars, L. D. H. Weld, *Ptr Ink* 203:16-17 Je 25 '43.

Advertising spreads practical ideas for relieving chokes in production; Warner & Swasey's ideas for victory campaign, D. M. Pattison, *Sales Management* 52:74+ Ag 1 '43.

Advertising when buying is restricted, J. D. Scott, *Harvard Business R* 21 not:443-54 J '43.

Advertising when consumers cannot buy, J. D. Scott, *Harvard Business R* 21 not:207-29 J '43.

Advertising's part in civilian mobilization; second portfolio of 50 outstanding war advertisements, *Adv & Sell* 36:61-75 Je '43.

Ad-vice from Guadalupe, *Ptr Ink* 203:16-17 Je 4 '43.

American Locomotive launches new campaign to remove national apathy, *Ptr Ink* 201:36+ N 13 '42.

ANPA presents war ad collection in Blue book, *Ptr Ink* 204:71 S 3 '43.

ANA finds public appreciates war advertising, *Ptr Ink* 203:24 Je 11 '43.

Australia's advertising glamour is out for the duration! E. F. Sylvester, *For Comm W* 10:7+ Ja 23 '43.

Broad, butter, and beefsteak! H. McKee, *Indland* *Ptr* 111:19-23 J '43.

Broadenst to highlight drive to make third of all advertising war copy, *Ptr Ink* 204:31+ J '43.

Buying business paper space in wartime, R. Choute, *Adv & Sell* 35:24+ D '42.

California sells travel dreams now, to be realized post war, *Ptr Ink* 202:32+ Mr 19 '43.

Can industrial advertisers help the war campaigns? *Ind Marketing* 28:118+ S '43.

Car cards carry organized story; bus advertising companies contribute spaces to government services, *Ind Transportation* 22:57 S '43.

Caterpillar to maintain broad service advertising program in '43; traveling instruction schools, army training school, movies, slideshows, etc., J. Reichart, *Ind Marketing* 28:30-1+ Mr '43.

Celotex advertises now to stake its claim to share of post-war building, M. Greenwood, *Ind Sales Management* 52:18-20 My 20 '43.

Check your point-of-sale policies against these retail trends, C. J. Swan, *Ptr Ink* 201:24-6, 30+ D 11 '42.

Chemistry's front line of facts; Hercules powder company's advertising, T. Marvin, *Ind Chem* 101:53:50-2 J '43.

ADVERTISING and war—*Continued*

- Del Monte's service program eases grocers' wartime business woes; Calpak. E. Gidlow. *il Sales Management* 52:24-6 Je 1 '43
- Design for socialization; letter urging limitation of wartime advertising. *Business Week* p79 Ja 23 '43
- Dr Pepper marshals field men in home-front morale campaign. W. V. Ballaw. *il Sales Management* 52:62+ F 15 '43
- Editor rises in his wrath; distinctions between patriotism and flag-waving. *Adv & Sell* 36:52b Mr '43
- Emphasizes post-war role by talking about the past; Autoyre reproduces old advertisements. R. H. Ganly. *il Ptr Ink* 205:22-4 O 8 '43
- Essential war printing guide issued by Victory campaigns committee. *Inland Ptr* 110:36-7 Mr '43
- Exhibit of wartime advertising. C. Norton. *il Ptr Ink* 201:18-22 N 20; 17-20+ N 27; 21-4 D 4 '42
- Facing realities; six situations confronting the advertising field. P. B. West. *Ind Marketing* 27:27-8+ D '42
- Financial advertisers find war copy works two ways. *Ptr Ink* 205:39+ O 29 '43
- Food packers reveal how advertising helps solve their wartime problems; Printers' Ink survey. *Ptr Ink* 204:26, 28+ Ag 13 '43
- Formfit tells dealers, if you can't sell corsets, retread 'em. *il Sales Management* 52:32+ Je 1 '43
- 4500 newspaper pictures and their significance for advertisers; influence of World War II. M. Harper, Jr. and V. M. E. Harper. *il Adv & Sell* 36:30, 32+ Ag '43
- Gearing industrial advertising to the needs of the war. K. L. Morgan. *Ind Marketing* 28:27-8+ Ag '43
- Gentlemen! gentlemen! Professor Warne has the floor; expands on that letter calling for curtailment of advertising during wartime. C. E. Warne. *Ptr Ink* 202:20, 22+ Ja 29 '43; Reply. G. B. Hotchkiss. *Ptr Ink* 202:52+ F 19 '43
- Government leaders broadcast war message in every ad plea. *Ptr Ink* 204:86+ JI 23 '43
- Graphic arts rally to the needs of government and advertisers. H. Kaufman. *il Ind Marketing* 28:72, 74+ My '43
- Grocery bags carry wartime slogans. *Sales Management* 52:49 F 15 '43
- Guide helps printers design ad pieces for war effort; Michie printing press company. *il Ptr Ink* 202:86+ Mr 26 '43
- Have you a pre-postwar program? J. A. Wales. *il Ptr Ink* 204:23-5 Ag 13 '43
- How advertising can sell rationing. *Adv & Sell* 36:140 F '43
- How is the typewriter using its new freedom? J. Thompson. *Adv & Sell* 36:13-14+ Je '43
- How Life should advertise in war: six objectives. East Underiv. *il Adv & Sell* 36:13-14+ Je '43
- How should we advertise in 1943? K. L. Ede. *Edison Elec Inst Bul* 11:69-72+ Mr '43
- How to advertise in wartime. B. F. Gimbel. *J Retailing* 18:97-9 D '42
- How war has changed advertising appropriation methods. *Ptr Ink* 204:15-17 JI 2 '43
- If you haven't any to sell, talk about it anyway, says Ted Collins. *Ptr Ink* 205:76+ O 1 '43
- Impact of war on advertising (cont). *Adv & Sell* 35:19-21 D '42; 36:19-22 Ja; 113-16 F; 19-21 Mr; 19-21 Ap; 21-3 My; 19-21 Je; 19-21 JI; 21-2 Ag; 26, 28 S; 32, 34 O; 35-6 N '43
- Industrial advertising's accomplishment and its promise. H. V. Merceready. *Ind Marketing* 28:25-6+ Ag '43
- Is advertising fulfilling its war job? R. Murray. *Ptr Ink* 204:17-18+ Ag 20 '43
- Letter from London: Britain's biggest advertiser; Ministry of Information's work in home-front publicity. J. P. McNulty. *Adv & Sell* 35:56+ D '42
- Marketing jury hands up indictment in case of wartime copy; 86 advertisers, sitting on Printers' Ink panel, list seven major complaints. *Ptr Ink* 202:13-15 F 12 '43
- New opportunities for industrial advertising. H. V. Merceready. *Ind Marketing* 28:21-2+ F '43
- New wartime concept of industrial advertising. A. M. Staehle. *Ind Marketing* 28:23-5+ F '43
- Newspapers and newspaper advertising in wartime. J. R. McLauchlen. *Special Lib* 34:232-7 JI-Ag '43
- 1943 twist; merchandise your advertising to your dealers and your workers; this agency is explaining to 1500 war workers of American pad & textile company how current advertising is building jobs for them post war. H. A. Rogers. *il Ptr Ink* 205:17-18+ O 22 '43
- No merchandise? sell maintenance! Anaconda wire & cable co. E. F. Luna. *il Ptr Ink* 204:20, 24 Ag 6 '43
- 120 newspapers now carrying Institute of democracy copy selling Americanism. R. H. Ganly. *il Ptr Ink* 204:48+ S 17 '43
- Paint firm advertising seeks to ease West coast housing crisis; W. P. Fuller sponsors posters carrying a direct appeal and a local tie-in. *il Sales Management* 52:57-8 F 15 '43
- Power companies push conservation program. *il Elec W* 120:1339-41 O 16 '43
- Restrictions on printing and how they are being met; ingenuity of industrial advertising. H. Kaufman. *Ind Marketing* 28:51, 54+ Ag '43
- Rising volume of business-paper advertising reflects the impact of war on the utility of advertising; over 700 business papers report how they fare in wartime. V. H. Van Diver, Jr. *Ptr Ink* 202:103-4+ F 5 '43
- Scott campaigns promote war program and aid customers during scarcity. L. M. Hughes. *il Sales Management* 52:18-20 F 15 '43
- Seven ways to plan wartime ads that click. W. Painter. *il Ind Marketing* 28:37 Ag '43
- Share your rifle plan helps make U.S. nation of marksmen; Mossberg campaign. *il Sales Management* 52:38+ O 1 '43
- Shows printers how graphic arts can support wartime drives. Michie printing press and mfg. co. *il Sales Management* 52:48-50 Ap 1 '43
- Small war plants may use ads to reach one another; Colonel Johnson plan. *Ptr Ink* 203:24 Ap 2 '43
- Southern Pacific spends \$73,728 to discourage travel. *il Ry Age* 114:816-19 Ap 24 '43
- Suggestions on pre-post war advertising. H. Stanley. *il Gas Age* 92:70-1 O 21 '43
- Ten tests for good wartime advertising. K. Elliott. *Ptr Ink* 204:18 JI 9 '43
- Text of open letter urging limitation of wartime advertising; editorial comment. *Ptr Ink* 202:15-16 Ja 1 '43; Names of committee. 202:52 Ja 8 '43
- This is good war advertising. C. J. LaRoche. *il Ptr Ink* 204:16-18 JI 9 '43
- This little slogan went to war; this little slogan stayed home! C. Norton. *il Ptr Ink* 203:18-20+ Ap 16 '43
- 20 major purposes of wartime advertising; the country's 301 largest advertisers tell why they advertise today. P. Salisbury. *Sales Management* 52:18-21 S 15 '43
- Universal's V-day plan: a program for building post-war demand; Landers, Frary & Clark introduce a plan in national and business magazines to help dealers. *Sales Management* 52:44+ O 15 '43
- Wanted: an advertising victory fund to help win the war, to be administered by the Advertising council. G. E. Cole. *Adv & Sell* 36:17-18+ Ag '43
- War ads that pay. *il Business Week* p92+ Je 5 '43
- War advertising programs can now begin to talk results! *Ptr Ink* 202:25-6, 30+ Ja 15 '43
- War messages on packages, bottles and grocery bags. *il Mod Packaging* 16:58+ Mr '43
- Warne debate features first district, A.F.A., conference. *Ptr Ink* 203:49-50 Ap 30 '43
- Wartime is shoving the agencies around. P. H. Erbes, Jr. *Ptr Ink* 201:29-30, 32+ N 13 '42
- What government wants advertising to do. G. Cowles, Jr. *Adv & Sell* 36:17-18+ Mr '43
- What is your brand's equity in postwar America? M. Harper, Jr. *Adv & Sell* 36:24+ Ja '43

ADVERTISING and war—Continued

Whet their appetites! National adequate wiring bureau public-service message on how to get along with present inadequacies. F. LaClave. *il* Ptr Ink 203:40+ Ap 16 '43

Who has the loose money in wartime? E. R. Smith. *il* Adv & Sell 36:120+ F '43

Why merchandise-short retailers must continue advertising. H. P. Abrahams. *il* Ptr Ink 204:21-2 Ag 13 '43

Why U.S. Rubber finds paid space more effective than publicity releases. F. D. Richards. *Sales Management* 51:50-1 D 1 '42

Will preserve brand identity by every means possible, says Swift president. *Ptr Ink* 201: 91 D 4 '42

Wrigley converts program to promote WAAC enlistments. *il* Ptr Ink 203:69 Ap 23 '43

Wrigley gum promotes factory tools as preliminary to postwar selling. P. K. Wrigley. *il* Ptr Ink 205:22+ N 12 '43

Your help is needed on these campaigns. *Adv & Sell* 36:40 Je '43

See also

Advertising, Educational	Advertising copy—War theme
Advertising copy—Conservation appeal	War advertising council

ADVERTISING appropriations

Advertisers' plans for 1943; nearly half of industrial advertisers will operate on appropriations increased by an average of 26.8%. R. O. McGraw. *il* Ind Marketing 28: 19-21+ Ja '43

Advertising is deductible from income tax. Bankers M 145:449-50 N '42

Columbia, Mutual and Blue report on billings. *Ptr Ink* 202:150-2 F 5 '43

Flexible space schedule can help the small advertiser's chance of being remembered post-war. E. B. Weiss. *il* Ptr Ink 203:18-19, 82 Je 25 '43

Government reviews airline advertising expenditures. J. H. Frederick. *Ptr Ink* 203: 62+ Ap 2 '43

How war has changed advertising appropriation methods. *Ptr Ink* 204:15-17 J1 2 '43

Internal revenue bureau explains deductible advertising expenses. *Comm & Fin Chr* 156:1895 N 26 '42

Leading advertisers of 1942 and their expenditures; 399 companies invested \$256,221,479 in magazines, farm papers and network radio. *Ptr Ink* 202:57+ F 5 '43

Setting up and clearing the advertising budget under wartime conditions. R. O. McGraw. *Ind Marketing* 28:27-8+ Je '43

ADVERTISING art

Art for ad's sake; medal winners; with preface outlining the artist's place in and attitude toward advertising. P. F. Berdanier. *il* Ptr Ink 203:15-18+ My 28 '43

Awards for technical excellence of visual presentation (layout, art, typography). *il* Adv & Sell 36:26-8 F '43

Can animation illustrate your hidden product? Artzybasheff's drawings for Wickwire Spencer steel co. R. H. Ganly. *Ptr Ink* 204:24-6 Ag 27 '43

See also

Advertisements, Pictorial
Posters

ADVERTISING as a profession

Hang on to young Harrison. C. B. Larrabee. *Ptr Ink* 201:15-17, 50 D 18 '42

Hang on to Young Harrison? by Young Harrison himself. *Ptr Ink* 202:38+ Ja 29 '43

Message to women: never be afraid of any advertising job. D. Dignam. *Ptr Ink* 203: 24, 28+ My 14 '43

See also

Advertising agencies
Advertising copy writers
Advertising ethics

ADVERTISING associations

Announce new officers for advertising groups. *Ptr Ink* 203:74-5 Je 11 '43

Associations and trade groups; a list of those in the fields of advertising, distribution, sales, marketing, media and graphic arts. *Ptr Ink* 202:139-41 F 5 '43

See also

Association of national advertisers	War advertising council
Copy research council	

ADVERTISING awards

A.F.A. presents achievement award to Houston advertising association. *Ptr Ink* 204: 54 J1 2 '43

Annual advertising awards, 1942. *Adv & Sell* 36:1-93 F '43

Art for ad's sake; medal winners; with preface outlining the artist's place in and attitude toward advertising. P. F. Berdanier. *il* Ptr Ink 203:15-18+ My 28 '43
Heinz poster named year's best; P & G second and S.O. of Ohio third. *il* Ptr Ink 201:72 N 20 '42

Hercules Powder wins Chicago publishers' award for best 1942 advertising. *il* Ind Marketing 28:76+ Ap '43

Kudos for ads; annual awards. *il* Business Week p68+ F 6 '43

LaRoche awarded advertising medal; medals, honorable mentions given in six other classifications. *Ptr Ink* 202:58-9 F 12 '43

See also

Radio advertising—Awards

ADVERTISING booklets. *See* Advertisements—Books and booklets

ADVERTISING campaigns

Advertising puts over charity drive in face of heavy odds; Montgomery Ward's retail sales department acts as advertising agency for Chicago's community fund drive. *il* Ptr Ink 201:56, 58 D 18 '42

Armour scores a bull's-eye with its meat ration meals campaign. J. E. Weber. *il* Sales Management 52:25-6+ J1 15 '43

Borden wins national distribution for Hemo in less than six months; chocolate flavored malt drink. R. C. Fyne. *il* Sales Management 52:74+ O 1 '43

Fall ad campaigns stress war, patriotic and informative themes. *Ptr Ink* 204:74 Ag 20 '43

Food industry plans great ad campaign to push OWI program. *Ptr Ink* 202:58 F 12 '43

Geophysics company stresses necessity of finding oil to reduce personnel losses; advertising and publicity campaign of Geophysical service, Inc. H. F. Simons. *Oil & Gas J* 42:38-9 Je 17 '43

Government, mills and media spur 1,600 local drives for pulpwood. *Sales Management* 52:26, 28+ O 15 '43

Seeks associate sponsors for unusual war advertising program; Mossberg bid to obtain support in sponsoring National rifle association's program of rifle training. *Ptr Ink* 204:80 Ag 20 '43

Swift makes bid in national media for growing margarine business. *il* Ptr Ink 205:47 O 1 '43

Whelan's comic advertisement fills 8-page Sunday supplement. *Ptr Ink* 204:26 J1 16 '43

See also

Advertising, Association	Money raising campaigns
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Special weeks

1943 merchandising days and weeks. *Ptr Ink* 201:70+ D 4 '42

1944 merchandising days and weeks. *Ptr Ink* 205:33+ N 5 '43

Testing

Testing advertising and checking sales records by paired cities. *Sales Management* 52:78, 80, 82 J1 15 '43

ADVERTISING cards

Car card wrangle; C.I.O.'s effort to sign up Kaiser workers. *Business Week* p17 Je 19 '43

Car cards carry organized story; bus advertising companies contribute spaces to government services. *il* Bus Transportation 22:57 S '43

Car cards score; sharp increase in transit riding pulls space sales up. *Business Week* p82+ S 4 '43

ADVERTISING characters

Elsie helps the grocer. *il Mod Packaging* 16: 66 J1 '43

ADVERTISING copy

And so we leave sunny utopia; from mere truth to realism. J. Alger. *Adv & Sell* 36: 32 Ap '43

Award for technical excellence of copy. *il Adv & Sell* 36:29-31 F '43

Brag advertising builds hurdles for salesmen. N. L. Cooperider. *Ptr Ink* 204:23, 40 Ag 20 '43

Copy clinic. Published in monthly numbers of advertising and selling

Copy that clicked. R. Manville. *il Ptr Ink* 202:64 F 12; 64+ Mr 19; 203:38 Ap 23; 68, 70 Je 4; 204:30+ S 17 '43

Cure for the screaming meemies; artwork for selling copy converted to message on rationing. J. H. Sheldon. *il Ptr Ink* 205:22 N 5 '43

Does it pay? exaggerated copy. A. B. Weingard. *Ptr Ink* 203:15 Je 25 '43

Does radio's technique apply to other media? M. K. Powers. *il Adv & Sell* 36:22+ Ap '43

Fear of being dated. *Adv & Sell* 36:32 My '43

First with Freedom of choice message. S. Peabody. *Ptr Ink* 205:26+ O 15 '43

For copy writers only. B. J. Hauser. *Ptr Ink* 202:68 F 26 '43

How Micro Switch attains its objective; sales grew in relation to amount of product information given in advertising copy. J. J. Lawler. *il Ind Marketing* 23:22-5+ My '43

How Sears, Roebuck produces mail-order copy that sells; issues Advertising guide for its copy writers. *Ptr Ink* 202:72-4 Mr 5 '43

How smaller advertiser can keep name alive for postwar market. E. B. Weiss. *il Ptr Ink* 203:20-2+ Je 11 '43

How the Book-of-the-month club has thrived on direct-selling copy; success story of a former advertising agent (Harry Scherman). C. J. Swan. *il Ptr Ink* 202:58, 60-2 F 19 '43

Inspirational ads are most effective. ANA study shows. *Ptr Ink* 204:36+ J1 23 '43

Marketing jury hands up indictment in case of wartime copy; 86 advertisers, sitting on Printers' Ink panel, list seven major complaints. *Ptr Ink* 202:13-15 F 12 '43

Meet Joe America. E. A. Grossfeld. *Adv & Sell* 36:70 My '43

Missing in action! lack of human advertisements. H. F. Thomson. *Ptr Ink* 202:104 Mr 26 '43

Question those first sentences! E. H. Pearson. *Ptr Ink* 204:22 J1 30 '43

Raw material for the copy writer's imagination through; modern psychology. E. Dichter. *Ptr Ink* 202:63-8 Mr 5 '43

Saroyan did it, so why can't Zareh? J. Stenbuck. *il Adv & Sell* 36:44, 128 O '43

Thoughts in passing on copy. W. Weir. *Adv & Sell* 36:30 Je '43

Watchdog of honest copy. J. M. Campbell. *Adv & Sell* 36:120 My '43

What is the editorial formula for advertising? W. E. Irish. *Ind Marketing* 23:54+ O '43

When goods are scarce, copy can experiment. *Ptr Ink* 205:93 O 22 '43

See also

Advertisements—	Copy research council
Testing	—
Advertising ethics	Sales letters

Competitive copy

Meat, fat and cheese firms compete for red point stamps; Armour, Crisco, Kraft and other firms publish menus, etc. *il Ptr Ink* 203:23-4 Ap 2 '43

Conservation appeal

A.G.A. campaign supports conservation program. *il Am Gas Assn Mo* 24:435-7 D '42

Conservation of food and the institution market. A. G. Mezerik. *il Ptr Ink* 203:18-20 Ap 2 '43

Conservation theme in industrial copy isn't always easy; Combustion Engineering persevered. *il Ptr Ink* 201:46+ N 27 '42

Conservation theme successful for retail furniture chain store. *il Ptr Ink* 204:73 J1 30 '43

Dearth of displays on conservation. *il Ptr Ink* 203:22-3 My 7 '43

Fram plugs tractor care; will introduce new Victory cartridge. *Sales Management* 52:63 Ja 15 '43

If winter comes; fuel conservation is the campaign keynote of insulation, weather-stripping, and sash and door industries. *Business Week* 264+ Ag 14 '43

It paid these firms to sell what they haven't got! three natural gas companies of Pittsburgh promote insulation. H. Stanley. *il Ptr Ink* 201:78-9 D 11 '42

Its product on ice, Timken sustains name through service and advertising. D. G. Baird. *il Sales Management* 52:22-4 Ap 1 '43

Proud of its substitutes; Crane co. develops line of galvanized iron plumbing fittings and earthenware sinks and bath tubs. H. E. Fleming. *il Ptr Ink* 204:13-20 J1 23 '43

Public service copy approach scores heavily for Frigidaire. *il Ptr Ink* 203:28+ Je 11 '43

This promotion to farmers has showmanship; Allied mills, inc. J. L. Richardson. *il Ptr Ink* 203:18-19 Je 11 '43

War advertising programs can now begin to talk results! *il Ptr Ink* 202:25-6, 30+ Ja 15 '43

Westinghouse coins a word; conserve. E. J. Hegarty. *il Ptr Ink* 203:65+ My 7 '43

Credibility

Copy clinic; the man who couldn't write food copy. M. K. Powers. *Adv & Sell* 36:128 F '43

Do they believe us? M. Harper, jr. *il Adv & Sell* 36:119+ F '43

Dealers' services

Wayne pump co. boasts war-time services rendered by its customers. *Ptr Ink* 202:68 Mr 19 '43

Demonstrations and tests

Frozen shoes; Wolverine's demonstration stunt. *il Ptr Ink* 201:84 D 4 '42

Emotional appeal

Farmers don't like emotional advertising. E. B. Weiss. *il Adv & Sell* 36:22 J1 '43

Taciturn Yankees like emotional copy. M. R. Grossman. *Adv & Sell* 36:40 N '43

Fear appeal

Britain bids farewell to fear copy. J. L. Young. *il Adv & Sell* 36:36+ Mr '43

Health appeal

Meat industry plans offensive on the protein front. *Ptr Ink* 205:56 O 15 '43

Language, style, etc.

Copy clinic; of thee I scream. M. G. Rollins. *Adv & Sell* 36:34 J1 '43

How current ads would read in Basic English. P. H. Erbes, jr., tr. *Ptr Ink* 204:22-3 S 24 '43

Should copy be Basic English? E. S. Green. *Ptr Ink* 204:21-2 S 24 '43

When words fail, invent one. P. H. Erbes, jr. *Ptr Ink* 204:15+ Ag 6 '43

Will Basic English make the grade in advertising? W. Weir. *Adv & Sell* 36:28+ N '43

Local pride appeal

New post-war era for South is promoted by humanized Southern Railway advertising; interview by G. A. Nichols with E. E. Norris. *il Ptr Ink* 204:19-21+ Ag 20 '43

Premium offers

Copy that clicked; Firth carpet company. R. Manville. *il Ptr Ink* 202:64+ Mr 19 '43

How offer proved industrial house magazine is being read; SKF industries gets 13% response. R. A. Sholl, jr. *il Ptr Ink* 205: 21+ O 8 '43

Offer of aircraft picture makes friends for Studebaker. *il Ptr Ink* 204:33+ Ag 20 '43

Price appeal

Let food take a tip from the durables; change price-appeal. J. Mack. *il Ptr Ink* 204:23-4 J1 30 '43

ADVERTISING copy—Price appeal—*Continued*. Should low cost be revived as an industrial copy slant? W. H. Green. *Ind Marketing* 28:24 O '43

Quality appeal

Fabric house wins brand identity with dealers and consumers; Arlington Mills labels are carried after re-manufacture for their sales potency with consumers. *Il Sales Management* 52:23-5 S 15 '43

Llama, the vicuna, the camel help Stroock sell its quality story. E. M. Murphy. *Il Sales Management* 52:76+ O 15 '43

Merchandising problem of the moment: what to do with trade-name when war alters quality? 20 advertisers and advertising agencies answer to P.I. inquiry. F. LaClave. *Il Ptr Ink* 203:13-15+ Je 4 '43

Problem: how can a war-promoted product keep its new customers? Nucooa advertising. *Il Ptr Ink* 202:56-7+ Ja 22 '43

Reason appeal

Good product advertising is the same in war as in peace. J. J. Lawler. *Il Ind Marketing* 28:30-1+ F '43

Would John E. Kennedy O.K. it? E. H. Pearson. *Ind Marketing* 27:37 D '42

Revision

All the world's a copy writer. N. Wilder. *Ptr Ink* 204:112 S 24 '43

Service appeal

Help 'em proves profitable industrial theme. C. S. Wilkinson. *Il Ptr Ink* 202:17-19 Mr 19 '43

Testing

See Advertisements—Testing

Themes

Have you tried back yard research? how tune copy to answer customers' problems. E. Dolan. *Il Ind Marketing* 28:35+ My '43

Thrift appeal

New York savings banks spend \$300,000 to sell thrift. *Il Sales Management* 52:80+ S 1 '43

Use appeal

Army likes "how-to" advertising, too; instructing service men in proper use of equipment and tools; R. G. LeTourneau, Inc. G. C. McNutt. *Ptr Ink* 204:23+ Ag 27 '43

These industrial ads tell 'em what they want to know; MacWhyte co. Kenosha, Wis. manufacturers of wire ropes, slings, aircraft cables, etc. *Il Ptr Ink* 205:20-1 O 29 '43

War theme

Advertising's part in civilian mobilization; second portfolio of 50 outstanding war advertisements. *Adv & Sell* 36:61-76 Je '43

Ad-vice from Guadalcanal. *Il Ptr Ink* 203:16-17 Je 4 '43

Agency executive sees eight war copy patterns. R. N. Heath. *Ptr Ink* 202:74 F 26 '43

Airline ad features employees' service pledge. *Ptr Ink* 203:51 Ap 30 '43

Assigns 5 new wartime objectives to localized paper for farmers; Republic Steel's Farm spokesman. *Il Ptr Ink* 201:14-15+ N 27 '42

Bell ringers in wartime advertising. *Il Sales Management* 52:22-3 Ja 15 '43

Britain bids farewell to fear copy. J. L. Young. *Il Adv & Sell* 36:36+ Mr '43

Buy bonds now for product later. *Il Ptr Ink* 201:13+ N 27 '42

Civilian defense theme wins wide acclaim for brewery ads. *Il Ptr Ink* 204:20 JI 30 '43

Exhibit of wartime advertising; examples of advertising that still talks merchandise. C. Norton. *Il Ptr Ink* 201:18-22 N 20 '42

Fighters tell ANA they resent exaggerated claims in ad copy. *Ptr Ink* 203:24+ Je 11 '43

Government and food industry team up in huge 5-way national food drive. *Il Sales Management* 52:30-1 Mr 1 '43

How is the typewriter using its new freedom? J. Thompson. *Adv & Sell* 36:13-14+ Je '43

Industrial copy has eliminated the guff; 9 major war themes remain. J. A. Murphy. *Il Ptr Ink* 201:18-19+ D 25 '42

Penn Salt campaign designed to create better feeling for war chiefs. E. M. Massey. *Ind Marketing* 28:54+ Ja '43

This is good war advertising. C. J. LaRoche. *Il Ptr Ink* 204:16-18 JI 9 '43

Trade-marks don't detract from messages donated to government. *Il Ptr Ink* 201:58 N 27 '42

War effort copy outpuls straight product ads. W. W. Wachtel. *Il Ptr Ink* 202:16-17+ Mr 12 '43

What shall we do about the guilty ones? C. B. Larrabee. *Ptr Ink* 204:18+ JI 9 '43

See also

Advertising and war

ADVERTISING copy writers

After hours; unbeatable briefcase. V. O. Schwab. *Ptr Ink* 204:112 S 17 '43; Comment (White man's burden). I. S. Mattingly. 205:23-4 O 29 '43

Be yourself in industrial copy; two memos to writers in war-changed jobs; industrial copywriters now going national in general business papers, general copywriters now going industrial in specialized business papers. E. S. Green. *Ind Marketing* 28:46, 50+ My '43

Coming boom in copywriters. J. P. Cunningham. *Adv & Sell* 36:13 Ap '43

Copy lessons from the movies. J. Truscott. *Adv & Sell* 36:38+ Ag '43

Good copy comes from a spring. H. Stanley. *Ptr Ink* 204:88 JI 30 '43

Immortal ten: advertising's greats. J. M. Campbell. *Adv & Sell* 36:66+ S '43

Set of commandments to end the adman-engineer feud. J. C. Schneider. *Ind Marketing* 27:50+ D '42

Ten greatest advertising writers. *Ptr Ink* 204:94 JI 9 '43

Things you'll soon forget. H. W. Newton. *Adv & Sell* 36:54 Je '43

Wage hour law not for copy writers. A. Gray. *Ptr Ink* 203:30+ JI 2 '43

What price perfectionism? T. H. Thompson. *Ptr Ink* 204:100 Ag 27 '43

Yes, I said, copy testing is mechanized and sterile for the copy writer. M. Harper, jr. *Ptr Ink* 201:28, 30 D 18 '42

See also

Geyer, Patrick

ADVERTISING council. See War advertising council

ADVERTISING departments

Advertising department functions as independent unit; Hercules powder company. T. Marvin. *Il Ptr Ink* 203:46+ Ap 9 '43

Booklets for and by employees. G. E. Stedman. *Il Ind Marketing* 28:30-1 JI '43

Help the green worker; advertising man should assist personnel department. H. G. Sawyer. *Ind Marketing* 28:80+ Ag '43

How an advertising department helps with wartime activities; Walter Kilde company. *Il Ind Marketing* 27:30-14 D '42

How to woo the war worker; seventeen basic ways in which advertising departments are stimulating production. *Il Ptr Ink* 203:21-2 Ap 2 '43; Same cond. Management R 32:172-3 My '43

New wartime concept of industrial advertising. A. M. Staehle. *Ind Marketing* 28:23-5+ F '43

Should advertising department be under the sales department? *Ind Marketing* 28:60+ JI '43

See also Advertising manager

Records

WAAC, also stands for wartime advertising allocation chart; Air Reduction's advertising department. R. H. Ganly. *Il Ptr Ink* 203:20-1+ Je 25 '43

ADVERTISING displays

Award winners, 12th annual all-America package competition. *Il Mod Packaging* 16:105-9+ Ap '43

Display for off-the-market merchandise. E. T. Sajous. *Il Mod Packaging* 16:99-103 D '42

Display screens. *Il diags Arch Forum* 78:54-5 F '43

ADVERTISING displays—Continued—

Of art, imagination and madness: these displays stop the crowds; Staples-Smith design for retailers, manufacturers and publishers. *Il Sales Management* 52:22-3 F 15 '43

Pack display signs in envelopes. H. Manischewitz. *Il Ptr Ink* 203:28+ Ap 9 '43

See also

Advertising, Point-of-sale

ADVERTISING ethics

Advertisements should be signed by the agency! E. Meyer. *Il Ptr Ink* 204:19-20+ S 24 '43

Editor rises in his wrath; distinctions between patriotism and flag-waving. *Adv & Sell* 36:52b Mr '43

For those who believe in decent advertising: the challenge stands. C. B. Larrabee. *Ptr Ink* 203:16 My 14 '43

Hold up your heads, you advertisers. J. M. Kraus. *Ptr Ink* 201:72 i N 27 '42

How true is truth in ads? *Ptr Ink* 204:31 JI 23 '43

Is Reader's digest so wrong? E. E. Calkins. *Adv & Sell* 36:21-2+ O '43

Let's not tolerate advertisers who provoke attacks on advertising. *Ptr Ink* 204:15-16 JI 9 '43

Liar, implied the lady. J. P. Cunningham. *Adv & Sell* 36:22 O '43

Local committees can combat offensive copy. A.F.A. told. C. A. Halleck. *Ptr Ink* 204:35+ JI 2 '43

Scare advertising is blot on record of the information industry. *Ptr Ink* 201:57 D 11 '42

Shoddy advertising breaks faith with the enterprise system. C. B. Larrabee. *Ptr Ink* 204:21 S 10 '43

This is good war advertising. C. J. LaRoche. *Il Ptr Ink* 204:16-18 JI 9 '43

Truman committee slaps copy of two industrial advertisers; Curtiss-Wright's promotion of dive bomber, and International Nickel's advertising of helicopters. J. Crichton. *Ind Marketing* 28:98+ Ag '43

What shall we do about the guilty ones? C. B. Larrabee. *Ptr Ink* 204:18+ JI 9 '43

What the Reader's digest forgot to report on the dentifrice cases. L. C. Stone. *Sales Management* 52:48+ O 1 '43

See also

Advertising—Laws and regulations

ADVERTISING federation of America

Advertising federation names Barton and Dawson; other officers. *Comm & Fin Chr* 158:120 JI 8 '43

Meeting, New York. *Business Week* p82+ JI 3 '43

Officers. *pors* *Ptr Ink* 204:36 JI 9 '43

ADVERTISING libraries

Advertising librarians plan national meeting. *Ptr Ink* 203:58 My 21 '43

ADVERTISING literature

Advertisers making valuable contribution to war effort with informative literature. *Il Ind Marketing* 28:58 Ap '43

Advertising promotion. *Ptr Ink* 202:83-5 Mr 26 '43

See also

Advertisements—
Books and booklets

Bibliography

Free for the asking. Published in monthly numbers of Textile world

Manufacturers' literature. Published in monthly numbers of Metals and alloys

Manufacturers' new literature pertaining to instrumentation. Published in monthly numbers of Instruments, the magazine of measurement and control

New catalogs, booklets, bulletins; 350 items covering equipment and supplies used by power engineers. *Power* 86:976-85, 986a-986c+ Mid-D '42

Production speeding literature; books, booklets, brochures, data sheets, etc. *Automotive & Aviation Ind* 88:173-4+ Mr 15 '43

What's new in manufacturers' literature; metals, metal work, equipment, etc. *Metal Prog* 43:130+ Ja '43 [cont monthly]

ADVERTISING managers

Getting the company started on a war production program; advertising manager can become focal point of war production promotion. D. C. Miner. *Il Ind Marketing* 27:24-5+ D '42

How the advertising manager can help with employee relations. C. E. Gischel. *Ind Marketing* 28:23-4+ Je '43

How the agency can aid the advertising manpower problem; analysis of functions an agency can perform. B. W. Schellenbach. *Ind Marketing* 28:25-6+ Je '43

What a new advertising manager learned about space salesmen, printers, etc. A. Tyro. *Ptr Ink* 202:40+ Mr 12 '43; *Reply*. X. Perience. 203:70+ Ap 16 '43

See also

Odell, Elliott
Robinson, William

ADVERTISING mediums

Advertising guns moved up in battle for new employees. P. H. Erbes, jr. *Il Ptr Ink* 204:20-2+ S 17 '43

American Weekly promotion of men's wear. *Il Sales Management* 52:80 Mr 1 '43

Ration books as media. *Sales Management* 52:26 Ap 1 '43

Space that wasn't there; how paper shortage is affecting the balance among media. L. Deckinger. *Adv & Sell* 36:34 Mr '43

Survey by General printing ink corp. shows the changing trends in mediums of advertising. *Inland Ptr* 110:41 D '42

See also

Advertising, Soliciting of	Radio advertising
Advertising cards	Show windows
Moving pictures in advertising	Slide films
	Television advertising

Envelopes

Salesmen's corner; printing salesmen and envelope houses should pull together. F. Rundell. *Inland Ptr* 111:27-8 Ag '43

Farm papers

Farm publications; advertising linage, three semi-annual totals, 1941-1943. *Ptr Ink* 204:101 JI 23 '43

Farm publications; advertising linage, 3-year comparative totals. *Ptr Ink* 202:93 F 5 '43

Leading advertisers of 1942 and their expenditures; 399 companies invested \$256,221,479 in magazines, farm papers and network radio. *Ptr Ink* 202:57+ F 5 '43

Medical journals

Toward a measure of pharmaceutical advertising effectiveness. B. Belley. *J Business* 16:107-14 Ap '43

Motor trucks

Transportation sells victory; truck and bus lines ad recruiting, selling bonds, etc. *Il Am Business* 13:14-15 Ap '43

Newspapers

Ads in wartime. *Business Week* p76+ O 2 '43

Advertisers spent 4½ million supporting second war loan. *Ptr Ink* 203:75-6 My 28 '43

Allied newspaper council reports fantastic figures for second war loan. *Adv & Sell* 36:21-2 Ag '43

Bumptious war baby: the classified ad. J. Stenbuck. *Il Adv & Sell* 36:20+ Ag '43

81 markets + 85 daily newspapers = 61% of America's buying power. *Sales Management* 52:110 N 1 '43

How national newspaper linage compares with magazines for first half of year. L. D. H. Weld. *Ptr Ink* 205:25-6 O 8 '43

How page traffic influences readership of your ad. M. Harper, jr. *Il Adv & Sell* 36:24+ Ap '43

How retail advertisers regard newspapers' helpfulness. A. Coons. *Ptr Ink* 205:26+ N 12 '43

I. A. Klein sees newspaper advertising increase postwar. *Il Ptr Ink* 204:28-9 JI 16 '43

Market changes in 98 cities as shown by their total newspaper linage, 1941, 1942. *Ptr Ink* 202:45-6+ F 5 '43

ADVERTISING mediums—Newspapers—Cont.

- Newspaper advertising, lineage, 1938-1941. Survey of Cur Business 1942 Sup p31 [supplemented in monthly numbers]
- Newspaper business; summary of its economic importance. Index 28 no 3:59-68 [S] '43
- Newspapers and newspaper advertising in wartime. J. R. McLaughlin. Special Lib 34:232-7 JI-Ag '43
- 120 newspapers now carrying Institute of democracy copy selling. Americanism. R. H. Ganly. II Ptr Ink 204:48+ S 17 '43
- Weatherhead launches newspaper campaign to extend public recognition; human interest copy signed by president. G. P. Roberts. II Ind Marketing 28:74, 78 S '43

Periodicals

- Firm orders in magazine advertising. Ptr Ink 203:36-7 Ap 9 '43
- In England, agencies and advertisers buy the space salesman's lunch! H. W. Yoxall. II Ptr Ink 202:60, 62-3 F 12 '43
- Loading advertisers of 1942 and their expenditures; 399 companies invested \$256,221,479 in magazines, farm papers and network radio. Ptr Ink 202:57+ F 5 '43
- Magazine advertising, cost and lineage, 1938-1941. Survey of Cur Business 1942 Sup p30 [supplemented in monthly numbers]
- Magazine lineage; five semi-annual totals, 1939-1943. Ptr Ink 204:94+ JI 23 '43
- Magazine lineage; total lineage for five years, 1938-1942. Ptr Ink 202:94+ F 5 '43
- Marketing jury finds: space can't be rationed like merchandise. Ptr Ink 202:68+ Mr 12 '43
- Wanted, an acceptable measurement of magazine coverage. H. R. Smith. Ptr Ink 203: 69-71 My 28; 29-31+ Je 4 '43
- Wartime gains of magazine circulations. G. K. Greiner. Adv & Sell 36:32+ N '43

Periodicals, Sponsored

- Presentation of sponsored magazine. J. C. Gries. II Inland Ptr 110:33-6 Ja '43
- Professional treatment helps the sponsored magazine. J. C. Gries. II Inland Ptr 110: 27-30 F '43
- Small plants, too, can profit by selling house-organ contracts; New Mexico, a state-sponsored publication. F. Kutnewsky. II Inland Ptr 111:27-8 Ap '43
- Sponsored magazines; good business for wide-awake printers. J. C. Gries. II Inland Ptr 110:37-40 D '42

Rapid transit lines

- Car card wrangle; C.I.O.'s effort to sign up Kaiser workers. Business Week p17 Je 19 '43

Rates**See Advertising—Rates****Space rationing**

- Advertisers, agencies, publishers exchange ideas on rationing advertising space. Ind Marketing 28:23-4 Mr '43
- American Weekly policy on space. Adv & Sell 36:94 O '43
- British agency describes how Empire papers ration space. Ptr Ink 201:54 N 18 '42
- Four A's committee studies space rationing, offers six suggestions. Ptr Ink 202:15 Mr 12 '43
- Marketing jury finds: space can't be rationed like merchandise. Ptr Ink 202:68+ Mr 12 '43
- Mr Lupton answers the copy chasers on paper conservation. II Ind Marketing 28:92, 94 S '43
- Space for all! C. J. Cutajar. Ptr Ink 205: 17-18 O 8 '43

Telephone directories

- Survey shows women weak in where-to-buy-it knowledge. II Sales Management 52:44+ Ja 15 '43

Trade journal covers

- Does cover advertising require special treatment? R. B. Luchars. Ind Marketing 27:35-6 D '42

Trade journals

- Analysis of industrial and commercial equipment manufacturers advertising in national business magazines. Am Gas Assn Proc 1942:211-15
- Awards for advertisements appearing in business publications. II Adv & Sell 36:20-2 F '43
- Be yourself in industrial copy; memo to general copywriters now going industrial in specialized business papers. E. S. Green. Ind Marketing 28:46+ My '43
- Business paper advertising volume heavy: "how to" themes predominate; survey made among members of National industrial advertisers association. Sales Management 52: 64+ N 1 '43
- Do space salesmen need new technique in selling business papers? C. E. Beaven. Ind Marketing 28:46, 48+ Ap '43
- Evaluating qualitative characteristics of business papers. J. Cornell. Ind Marketing 28:50, 52 Ja '43
- 489 agencies placed 212,232 pages in business papers in 1942; tabulation, 1941-1942. Ind Marketing 28:32-4, 37-8 S '43
- Market data book number, 1943. Ind Marketing 27:1-43 O 25 '42
- Publication men can help advertisers to give them more business. D. R. Collins. Ind Marketing 27:46+ D '42
- Rising volume of business-paper advertising reflects the impact of war on the utility of advertising; over 700 business papers report how they fare in wartime. V. H. Van Diver, Jr. Ptr Ink 202:103-4+ F 5 '43
- These industrial ads tell 'em what they want to know; MacWhyrte co. Kenosha, Wis. manufacturers of wire ropes, slings, aircraft cables, etc. II Ptr Ink 205:20-1 O 29 '43
- Using a contest to spread product information in wartime; Acheson colloids corporation. J. M. Lupton. II Ind Marketing 28:28-9+ JI '43
- Who advertises what in business papers? product analysis by Iron Age. O. Johnson. Ptr Ink 204:24+ JI 2 '43
- See also*
Advertising, Industrial

Women's periodicals

- Women's magazines; total lineage, 1938-1942. Ptr Ink 202:96 F 5 '43

See also

- Woman's home companion (periodical)

ADVERTISING men*See also*

- | | |
|-----------------------------|--------------------------|
| Advertising agencies | Advertising copy writers |
| Advertising as a profession | Advertising managers |

ADVERTISING policies

- Advertising when buying is restricted. J. D. Scott. Harvard Business R 21 no4: 443-54 [JI] '43
- Arthur Murray's advertising lessons; ad rules for branch managers. F. James. II Adv & Sell 36:21-2, 68+ N '43
- Dow Chemical's advertising philosophy in war and peace. R. A. Brewer. Ind Marketing 28:32-4+ Ag '43
- Facing realities; six situations confronting the advertising field. P. B. West. Ind Marketing 27:27-8+ D '42
- How the Book-of-the-month club has thrived on direct-selling copy; success story of a former advertising agent (Harry Scherman). C. J. Swan. II Ptr Ink 202:58, 60-2 F 19 '43
- Stay on your course is the thought that guides Hercules advertising. T. Marvin. II Ind Marketing 28:19-22+ Mr '43

See also

- | | |
|---------------------------|------------------------------|
| Advertisements—Repetition | Advertising—Market selection |
| Advertising—Continuity | Advertising appropriations |
| | Advertising mediums |

ADVERTISING portfolios

- Ilg's presentation to wholesale salesmen. C. W. Dexter. II Ind Marketing 28:25+ JI '43

ADVERTISING research

- Advertising audit; N.I.C.B. study to cost \$200,000. *Business Week* p50-1 Ja 30 '43
- Awards. *Il Adv & Sell* 36:35-41 F '43
- Family versus individual in measurement of audiences. A. Politz. *Am Stat Assn J* 38:233-7 Je '43
- 4500 newspaper pictures and their significance for advertisers. M. Harper, Jr. and V. M. E. Harper. *Il Adv & Sell* 36:17-18 Je; 23-4 Jl; 30, 32+ Ag; 20-1 S; 26-7 O; 27, 66 N '43
- Have you tried back yard research? how tune copy to answer customers' problems. B. Dolan. *Il Ind Marketing* 28:38+ My '43
- Light on an interesting advertising group: the Copy research council. E. Peterson. *Il Ptr Ink* 204:32+ Jl 23 '43
- Toward a measure of pharmaceutical advertising effectiveness. B. Bailey. *J Business* 16:107-14 Ap '43
- Use both mail-type questionnaire and personal interviews in readership research; study made by Los Angeles times; readers don't want to admit reading certain ads. R. E. Baxter. *Ptr Ink* 203:24+ My 7 '43
- Want-association technique of advertising evaluation. D. Houghton. *Ptr Ink* 204:21-2+ Jl 16 '43
- What does your ad make people do? General Electric lamp campaign. T. M. Shepard. *Il Adv & Sell* 36:14-15 Ap '43
- Why and how of measuring advertising effectiveness. T. M. Shepard. *Adv & Sell* 36: 30+ S '43
- Yes, I said copy testing is mechanized and sterile for the copy writer. M. Harper, Jr. *Ptr Ink* 201:28, 30 D 18 '42

See also

Market research

ADVERTISING research foundation

Officers. *Ptr Ink* 204:31+ Jl 9 '43

AERATION

See also

Sewage disposal— Aeration Water purification— Aeration

AERIAL bombs. See Bombs, Aerial

AERIAL photography. See Photography, Aerial

AERIAL ropeways. See Cableways

AERIAL surveying. See Surveying, Aerial

AEROBACTER cloacae

Studies on strains of aerobacter cloacae responsible for acute illness among workers using low-grade stained cotton. B. H. Caminita and others. *bibliog Pub Health Rep* 58:1165-83, pl 1-2 Ji 30 '43

AERODYNAMIC laboratories. See Aeronautic laboratories; Wind tunnels

AERODYNAMICS

Aerodynamic center, control and stability of airplanes. H. Reissner. *A S M E Trans* 65: 625-8 Ag '43

Aerodynamic considerations of rotors in hovering and vertical climb conditions. C. H. Kaman. *bibliog J Aeronautical Sci* 10: 201-8 Jl '43

Aerodynamic performance of the towed glider. A. Klemin and W. C. Walling. *J Aeronautical Sci* 10:185-96 Je '43

Aerodynamics of the fuselage; abstract. H. Multhopp. *Aeronautical Eng R* 2:97-9 Mr '43

Application of the Hodograph method to the flow of a compressible fluid past a circular cylinder; abstract. K. Tamada. *Roy Aeronautical Soc J* 47:sup2-3 Ja '43

Aspect ratio corrections; airplane performance and stability computations. K. D. Wood. *bibliog J Aeronautical Sci* 10:270-2 O '43

Characteristics of airfoils in a cylindric axial-flow grid. J. R. Weske and F. E. Marble. *bibliog il diags J Aeronautical Sci* 10:289-94 O '43

Contraction cone for a wind tunnel. B. Szeniewski. *J Aeronautical Sci* 10:311-12 O '43

Designing aerodynamic surfaces by the use of algebraic and trigonometric functions to permit easy manufacture. J. J. Apalategui and W. B. White. *diags Aeronautical Eng R* 2:69, 71-2, 75 Ag '43

Determination of the lowest natural bending frequency of axial flow compressor blades; abstract. M. Schilhansl. *Roy Aeronautical Soc J* 47:sup351-2 Jl '43

Differential equations of an adiabatic gas flow and the shock curve; abstract. F. Ringleb. *Roy Aeronautical Soc J* 46:sup402-3 N '42

Dynamics of constant-speed propellers. H. K. Weiss. *bibliog J Aeronautical Sci* 10: 58-67+ F '43

Effect of a rotating cylinder placed in the nose of an aerofoil on its aerodynamic characteristics; abstract. E. B. Wolff and C. Koning. *Roy Aeronautical Soc J* 47: sup275-6 Je '43

Eleventh annual meeting of the Institute of the aeronautical sciences; review of technical papers. A. Klemin. *Aeronautical Eng R* 2:7+ Ap '43

Elliptic tunnel-wall corrections on drag and stall. J. G. Gavin, Jr. and R. W. Hensel. *bibliog diags J Aeronautical Sci* 9:533-7 D '42

Horizontal path along the earth's surface of a projectile or plane under constant tangential acceleration. W. S. Kimball. *Franklin Inst J* 236:67-79 Ji '43

Induced drag of a twisted wing. H. W. Sibert. *J Aeronautical Sci* 10:71-2 F '43

Isaac Newton and aerodynamics. T. von Kármán. *J Aeronautical Sci* 9:521-2+ D '42; Same. *Engineer* 175:149-50 F 19 '43

Measurement of the aerodynamic forces on small wing models undergoing vibration (combined flapping and twist); abstract. E. V. Holst. *Roy Aeronautical Soc J* 47: sup407-10 Ag '43

New theory of free turbulence. H. Reichardt. *Roy Aeronautical Soc J* 47:167-76 Je '43

Pressure distribution in nonuniform two-dimensional flow; abstract. M. Schwabe. *Aeronautical Eng R* 2:99 Mr '43

Regions of infinite acceleration and flow realms in a compressible fluid. M. G. Scherberg. *J Aeronautical Sci* 10:223-6+ Jl '43

Some experiments on the increase in the maximum lift of an aerofoil undergoing a change of incidence at a constant angular velocity; abstract. N. Scheubel. *Roy Aeronautical Soc J* 47:sup349-50 Jl '43

Steering experiments. R. W. L. Gawn. *Engineer* 176:116-18 Ag '43

Streamlining dynamic stability computations. M. M. Munk. *diag Aero Digest* 42:205-6+ My; 183, 185+ Je; 43:249-50+ Jl; 207-8+ Ag '43

Tail buffeting; abstract. G. Abdrashitov. *Roy Aeronautical Soc J* 47:sup546-9 O '43

Three-dimensional wing flutter analysis. A. H. Flax. *bibliog J Aeronautical Sci* 10:41-7 F '43

Transient analysis of linear systems. M. F. M. Osborne. *bibliog J Ap Phys* 14:180-4 Ap '43

Utility of statistical method in aerodynamics. H. G. Smith. *Am Stat Assn J* 38:341-5 S '43

Vector solution of the three-degree case of wing bending, wing torsion, aileron flutter. L. Arnold. *J Aeronautical Sci* 9:497-500 N '42

Wind tunnel tests and actual performance data; how lift varies with speed. H. G. Smith. *Aero Digest* 42:144+ F '43

Wood, smoke as a means of visualising boundary layer flow at high Reynolds numbers. J. H. Preston and N. E. Sweeting. *bibliog il diags Roy Aeronautical Soc J* 47: 93-102 Mr '43

See also

Aeronautical research	Airplanes—Design
Aeronautics	Aviation
Air flow	Ballistics
Airplane propellers	Rocket propulsion
Airplane stability and stabilizers	Turbulence
Airplane wings	Wind power
	Wind tunnels

AEROGELS. See Colloids**AERONAUTIC engineering**

Aeronautical engineer and military aeronautics. *Aeronautical Eng R* 2:7 Jl '43

Aerona aircraft corporation and other leading aircraft companies; ten years' progress. W. D. Hall and others. *Il Aeronautical Eng R* 1:39-86 N '42

AERONAUTIC engineering—Continued

- Airplane's increasing complexity calls for wide variety of engineering talent. H. Woodhead. *Aero Digest* 42:376+ Mr '43
- Ceiling and visibility unlimited; new American aircraft. E. R. Breech. *Aero Digest* 42:294+ Ap '43
- Development and engineering features of Lockheed P-38 fighter. *il* *diags* *Automotive & Aviation Ind* 89:32-6 N 1 '43
- Educational requirements for airline transportation engineering. G. H. Tweney. *J Eng Educ* 33:676-80 My '43
- Eleventh annual meeting of the Institute of the aeronautical sciences; review of technical papers. A. Klemm. *Aeronautical Eng R* 2:7-39+ Ap '43
- Engineering aspects of plastics. H. Sang. *il* *Aero Digest* 43:163-5+ Ag '43
- Engineering Boeing-Douglas-Vega production of Flying Fortresses. M. Short. *il* *diag* *Automobile & Aviation Ind* 89:17-21+ O 15 '43
- Engineering in airline maintenance; Trans-Canada air lines. *il* *Aviation* 42:213-15+ O '43
- Engineering job and training opportunities in the aircraft industry. C. T. Reid. *J Eng Educ* 33:691-5 My '43
- Future of aviation; abstract. R. S. Damon. *S A E J* 51:sup42+ JI '43
- Growth of wartime aircraft organization. E. W. Walker. *Aero Digest* 42:247, 249, 251+ Je '43
- Institute of the aeronautical sciences 11th annual meeting. New York, Detroit and Los Angeles. *Automotive & Aviation Ind* 88:24-6, 42+ F 15 '43
- Modification centers, an American military innovation; making engineering changes in aircraft; Consolidated aircraft modification center. G. Hotchkiss. *il* *Aviation* 42:134-6+ Ap '43
- Report of 38th SAE meeting; summaries of aeronautics papers. *Aviation* 42:177+ Ap '43
- Society of automotive engineers, National aeronautic meeting. New York, April 8-9. *S A E J* 51:sup17-21, 26-37 My '43; *Automotive & Aviation Ind* 88:30-4+ My 1 '43
- Technical functions and responsibilities of the Civil aeronautics administration; aircraft engineering. A. A. Vollmecke. *il* *Aeronautical Eng R* 2:27, 29, 31 S '43
- Technical functions and responsibilities of the Civil aeronautics administration; flight engineering and factory inspection. C. F. Dyer. *Aeronautical Eng R* 2:33 S '43
- Weight control engineering. W. F. Nicol. *il* *Aero Digest* 41:216, 218+ N '42
- What it takes to get giant planes into production. H. Woodhead. *il* *Automotive & Aviation Ind* 88:9+ Mr 1 '43
- When engineers meet; report of annual meeting of the Institute of the aeronautical sciences. A. Klemm. *Sci Am* 168:232-3 My '43

See also

- | | |
|---------------------|-----------------------|
| Aerodynamics | Airplanes, Military-- |
| Aeronautic research | Design |
| Aeronautics | Airports |
| Air lines | Aviation |
| Airplane engines | Flying boats |
| Airplanes | Seaplane bases |

Bibliography

- Abstracts from the scientific and technical press; Titles and references of articles and papers selected from publications reviewed by R.T.P.; List of selected translations. Published in monthly numbers of Royal aeronautical society journal thru September, 1943. Published separately beginning with October
- British air ministry translations in the Paul Kollsman library. *Aeronautical Eng R* 2:117-31 Je; 115, 117 S; 143, 145 O; 153+ N '43
- Periodical articles, government publications, books, library accessions, house organs and catalogues. *Aeronautical Eng R* 1:161-211 N '42 [cont monthly]

Study and teaching

- Aeronautical engineering courses for undergraduate and graduate curricula. H. Reissner. *J Eng Educ* 33:526-30 Mr '43
- Aircraft engineering education in the United States. R. Fedden. *Science* 98:193 Ag 27 '43

- Aviation medicine in the education of aeronautical engineers. J. D. Akerman. *J Eng Educ* 33:392-5+ Ja '43
- Education and training of aeronautical engineers. *Roy Aeronautical Soc J* 47:318-75 O '43
- Educational requirements for the analysis of modern aircraft structures. R. O. Wicksham and J. E. Younger. *J Eng Educ* 33:853-62 Je '43
- Engineering courses train women; Eastern aircraft division of General Motors sending women college graduates back for additional training. *il* *Am Mach* 87:99 JI 8 '43
- ESMWT, an experiment in engineering education. F. W. Ocvirk. *J Eng Educ* 33:463-9 Ja '43
- Engineers made to order; Vega's training. E. V. Gustavson. *il* *Aviation* 42:167, 169+ N '43
- Flight testing is a sound business; training flight test crews. E. T. Allen. *il* *Aviation* 42:118-19+ My '43
- Training for women in aeronautical engineering at the University of Cincinnati. *Science* 97:548-9 Je 18 '43
- Training women for engineering tasks; University of California. E. D. Howe. *Mech Eng* 65:742-4 O '43

Tables, calculations, etc.

- Aerodynamic center, control and stability of airplanes. H. Reissner. *A S M E Trans* 65:626-8 Ag '43
- Aerodynamic considerations of rotors in hovering and vertical climb conditions. C. H. Kaman. *bibliog* *J Aeronautical Sci* 10:201-8 JI '43
- Aerodynamic performance of the towed glider. A. Klemm and W. C. Walling. *J Aeronautical Sci* 10:186-96 Je '43
- Application of Maclaurin series to beams under simultaneous transverse and axial loading. A. G. Strandhagen. *J Aeronautical Sci* 9:529-32 D '42
- Designing aerodynamic surfaces by the use of algebraic and trigonometric functions to permit easy manufacture. J. J. Apalategui and W. B. White. *diags* *Aeronautical Eng R* 2:69, 71-2, 76 Ag '43
- Dynamic stiffness and effective inertia methods in modern torsional vibration theory. R. G. Manley. *bibliog* *diags* *Roy Aeronautical Soc J* 47:5-21 Ja '43
- Effects of yielding and perforations on a wing tension surface. R. K. Koegler and A. Schnitt. *diags* *J Aeronautical Sci* 10:273-88+ O '43
- Elliptic tunnel-wall corrections on drag and stall. J. G. Gavin, Jr. and R. W. Hensel. *bibliog* *diags* *J Aeronautical Sci* 9:533-7 D '42
- General equations for the analysis of elliptical rings. D. O. Dommash. *diags* *J Aeronautical Sci* 10:119-26 Ap '43
- Graphic determination of distance in accelerated airplane motion. G. A. Mokrzycki. *J Aeronautical Sci* 10:36-7 Ja '43
- Rate of climb calculations. G. Otten. *J Aeronautical Sci* 10:43-50+ F '43
- Streamlining dynamic stability computations. M. M. Munk. *diag* *Aero Digest* 42:205-6+ My; 183, 185+ Je; 43:249-50+ JI; 207-8+ Ag '43
- Weighing data as applied to structural analysis. J. C. Reams. *diags* *Aero Digest* 43:243, 245+ S '43

See also

- | | |
|------------------------------------|---------------------|
| Airplane engines-- | Airplanes--Design |
| Design | Airplanes--Stresses |
| Airplane stability and stabilizers | |

AERONAUTIC engineers

- Don't draft our student engineers! *il* *Aero Digest* 41:171-2, 177+ D '42
- Education and training of aeronautical engineers. *Roy Aeronautical Soc J* 47:318-75 O '43

Directories

- Institute of the aeronautical sciences membership roster. *Aeronautical Eng R* 1:228-55 N '42

AERONAUTIC instruments

- APB standardization of instrument production. L. A. Worden. *Instruments* 16:527-8 S '43

AERONAUTIC instruments—Continued

- Air navigation for global war; McMillen spherographical system. *il* Fortune 27:74-7+ Ja '43; Discussion. 27:34+ Mr '43
- Army astro domes; precision optical instruments of Plexiglas. *il* Mod Plastics 20:56+ F '43
- Bendix aviation corporation; ten years' progress. C. Marcus. *Aeronautical Eng R* 1:105 N '42
- Bendix gyro flux gate compass. *il* Automotive & Aviation Ind 89:37 N 1 '43; Aviation N 1:10 O 18 '43
- Calibrating pressure-actuated instruments by means of graphs. E. Keith, jr. *diags Instruments* 15:424, 426 O '42
- Cambridge instrument company. R. Rick. *il* Aeronautical Eng R 2:21 F '43
- Contributions of the Sperry gyroscope company to aviation 1932-1942. P. R. Bassett. *il* Aeronautical Eng R 1:151 N '42
- Electrical aircraft instruments. R. W. Gilbert. *Instruments* 15:466+ N '42
- Electrical instrument production soars; Westinghouse meter division. T. Turner. *il* Marine Eng 48:214 J1 '43
- Electronic control of de-icing equipment. W. Kliever. *il* Aero Digest 41:197-8 N '42
- Eleventh annual meeting of the Institute of the aeronautical sciences; review of technical papers. A. Klemm. *il* diags Aeronautical Eng R 2:31, 33+ Ap '43
- Engine control achieves simpler piloting; Simmonds-Hobson automatic controls. W. J. Morrison and A. P. Fraas. *il* diags Aviation 42:132-4+ N '43
- Flight recorder. A. Klemm. *il* Sci Am 168:41 Ja '43
- Flight recorder to ease test pilot's job; electronic instrument records temperature and pressure changes. *il* Aviation 41:149 N '42
- Flight-testing equipment for large aircraft. W. T. Dickinson. *il* diags S A E J 51:139-47 Ap '43
- Graphical analysis of delay of response in air-speed indicators. K. J. DeJuhasz. *bibliog diags J Aeronautical Sci* 10:91-7 Mr '43
- Horsepower meter for aircraft. J. C. Luttrell and W. A. Petrasek. *il* diags Aeronautical Eng R 2:35-6, 39 Je '43; Excerpts. *Elec Eng* 62:501-2 N '43
- How to calibrate aircraft fuel tanks. R. C. Moeller. *il* diags Aero Digest 41:139-40+ N '42
- Importance of electrical aircraft instruments in war and peace. J. C. Banks. *Instruments* 15:463+ N '42
- Improve! standardize! certify! outline of course for aircraft instrument repair, overhaul, installation, etc. H. Gollob. *Instruments* 16:607-8, 610 O '43
- Indicates power output; patent assigned to Square D co. *diags Machine Design* 15:120+ Ja '43
- Installing and operating the gas analyzer. E. Krederavage. *Instruments* 15:465+ N '42
- Instrument technician; his growing importance in all divisions of aviation. W. J. Watkins. *Instruments* 15:521+ D '42
- McMillen's spherographical system of celestial navigation. D. Brouwer and F. W. Keator. *diags Aero Digest* 42:116-18, 139-40+ Ap '43
- Magnesium remote reading compass. D. W. Smith. *il* diags Aeronautical Eng R 2:31, 33, 35-6 My '43
- Magnetism and electricity as utilized in aircraft instruments. R. J. Stephan. *Instruments* 16:495-6+ Ag '43
- Mass training of instrument mechanics to meet war needs. C. H. Smith. *il* Instruments 15:428+ O '42
- Note of appreciation to instrument men. O. M. Klose. *Instruments* 16:488, 490 Ag '43
- Old and odd aircraft instruments. *il* Instruments 16:353 Je '43
- Operation of vacuum-operated automatic-pilot air pick-offs. L. M. Falke. *diags Instruments* 16:68-9 F '43
- Oscillograph speeds up training of electrical instrument mechanics. M. D. Jackman. *il* Instruments 16:64-5 F '43
- Plotting a true course; Vinylite plastics for navigational instruments. *il* Am Gas J 159:28 O '43
- Precalibration filling of remote-reading thermometer systems. P. S. White. *Instruments* 16:197 Ap '43
- Precision engine control by the use of torque indicating instruments developed by Wright aeronautic corp. *il* diag Machine Design 14:39 D '42
- Progress in electrical experimentation of aircraft; Weston electrical instrument corporation. W. N. Goodwin, jr. *il* Aeronautical Eng R 1:158 N '42
- Skill training for aircraft instrument technicians. C. H. Smith. *il* Instruments 16:419-20, 422 O '42
- Soldering electrical aircraft instruments. J. J. Schiller. *diags Instruments* 16:491-4 Ag '43
- Technical aspects of rotameters; remote reading fuel rate metering device. W. J. Dament. *il* Aero Digest 42:138, 142 F '43
- Ten years of Kollsman development. J. C. Carr. *il* Aeronautical Eng R 1:125 N '42
- True air speed indicator; patent. Roy Aeronautical Soc J 47:sup412 Ag '43
- W. & L. E. Gurley; ten years' progress in aeronautic instruments. H. M. Dibert. *Aeronautical Eng R* 1:119 N '42

See also

- | | |
|-----------------------------|-----------------------------|
| Altimeters | Radio apparatus on aircraft |
| Direction finding apparatus | Radio compass |
| Gyro compass | Sextant |

Maintenance and repair

- Aircraft instrument mechanics and the war. E. D. Whitman. *il* Instruments 15:464+ N '42
- Graduate of the N.Y.S. of A.I. writes about his training. L. Josephson. *il* Instruments 15:488+ N '42
- Instrumentation aids United air lines to set new records in air transportation. W. C. Mentzer. *il* Instruments 16:6-7 Ja '43
- New system of spare parts selection aids production and field servicing; Kollsman instrument division of Square D co. H. N. Droge. *il* Aero Digest 42:151-3 Je '43
- On-the-job training. E. G. Chapman. *Instruments* 16:67-8+ F '43
- Overhaul procedure, pendulum assembly of horizon and bank and climb unit. R. B. Kees. *il* Instruments 15:523+ D '42
- Production vs. employment problems in aeronautic instrument shops. F. H. Brown. *Instruments* 16:72 F '43

Manufacture

- AC engineers use automotive methods to speed automatic pilot production. J. Geschelin. *il* Automotive & Aviation Ind 89:34-7+ Ag 1 '43
- Engraving for the aircraft industry; John Meerloo & sons. *il* Iron Age 152:58-60 O 7 '43
- Fisher Body mass-produces Sperry instruments. *il* Aero Digest 42:247-8, 261-2 Ap '43
- Ternstedt now making aircraft instruments. *il* Automotive & Aviation Ind 87:32-3+ N 1 '42
- Vertical speed indicator. *il* diag Mod Plastics 21:100+ O '43
- Volume production of auto pilots; AC spark plug division of General Motors. *il* Aero Digest 42:195, 197 My '43

Mounting

- Protective engineering for delicate military equipment; mounting instruments and other vital equipment in planes, tanks, and ships. F. C. Roche. *il* diags Mech Eng 65:581-7 Ag '43; Same. Rubber Age 53:515-22 S '43; Same cond. Machine Design 15:124-9+ J1 '43

Standards

- Standardization through cooperation. R. G. Ojers. *Instruments* 16:428+ J1 '43

Testing

- Automatized inspection of aircraft electrical instruments triples testing speed. B. Conway. A. C. Emery and C. S. Gooch. *il* Instruments 16:10-11+ Ja '43
- Electrical instrument test panel. H. L. Hamm. *il* diag Instruments 15:526 D '42
- Low temperature refrigeration requirements in war production. C. L. Olin. *il* Refrig Eng 45:35-7 F '43

AERONAUTIC instruments—Testing—Cont.

- Quiet buzzer (vibrator), R. J. Stephan, diags Instruments 16:494-5 Ag '43
 Rapid method and apparatus for type testing in aircraft instrument production, P. S. White, diags Instruments 16:8 Ja '43
 Testing and installing Liberator instruments, C. W. Greaves, II Aero Digest 43:156-8, 160 Ag '43
 Trouble shooting on the flight line; procedure for electrical instruments, L. J. Pospisil, Instruments 16:70+ F '43

AERONAUTIC laboratories

- Curtiss-Wright builds 750 mph wind tunnel and high altitude test chamber, II Aero Digest 42:202 Ja '43
 Curtiss-Wright's new research laboratory, W. E. Voisinet, II plans Automotive & Aviation Ind 88:38-9+ Je 15 '43
 One hundred degrees below zero; Ferro-Therm steel insulation applied in altitude testing chambers, J. G. Macormack, II Refrig Eng 45:239-42+ Ap '43
 Use of dry ice for testing; Douglas aircraft corp, Aero Digest 43:222 S '43

See also

- Aeronautic research
 Air lines—Laboratories
 Wind tunnels

AERONAUTIC libraries

- Aviation needs the special library, A. A. Paradis, Special Lib 34:119-21 Ap '43
 Institute of the aeronautical sciences; libraries and aeronautical archives, II Aeronautical Eng R 1:15-17 N '42

AERONAUTIC meteorology. See Meteorology, Aeronautic**AERONAUTIC research**

- Air line contributions to national defense, W. Littlewood, Aeronautical Eng R 1:91 N '42
 Airflow visualization opens new avenues of research; use of photography and projection apparatus, E. J. Saxl, biblog II diags Aviation 42:148-51+ Ap '43
 Experimental investigations in aircraft dynamics, W. E. Bergen, biblog II diags J Aeronautical Sci 10:233-49 O '43
 New results and problems in medical stratosphere research, H. Strughold, Roy Aeronautical Soc J 47:113-17 Ap '43
 Pattern for aviation research, C. C. Furnas, Aero Digest 42:154-5+ My '43
 Problems in aircraft structural research, F. R. Shanley, biblog II diags Mech Eng 65:169-78 Mr '43
 Research results will make new post-war world; abstract, A. W. Herrington, S A E J 51:sup32-3 Je '43
 Technical functions and responsibilities of the Civil aeronautics administration; technical development, J. C. Hromada, II Aeronautical Eng R 2:33, 35-6 S '43
 Transcontinental & western air, Inc.; ten years' progress, J. C. Franklin, Aeronautical Eng R 1:101 N '42
 Transparent plastic models facilitate design and research, II Automotive & Aviation Ind 87:44+ D 1 '42
 Wind tunnel tests and actual performance data, H. G. Smith, Aero Digest 41:170+ N '42; 42:144+ F '43
 Wood smoke as a means of visualising boundary layer flow at high Reynolds numbers, J. H. Preston and N. E. Sweeting, biblog II diags Roy Aeronautical Soc J 47:93-102 Mr '43
See also
 Aeronautic laboratories
 Wind tunnels
- AERONAUTIC schools**
 Sewage treatment at air-training schools in western Canada, R. A. McLellan, flow sheets II diags plans Water & Sewage 81:13-19+ My '43
 20 schools give air training in Spanish, Civil Aero J 4:26 Mr 15 '43
 Visual aids speed mechanic's training; Casey Jones school of aeronautics correlates slide-films with tests, L. S. Metcalfe, II Aviation 42:269+ Ja '43

Directories

- Directory of aviation schools, Aviation 42:272-3 F '43

AERONAUTIC workers

- CAA reopens trainee programs in seven regions, Civil Aero J 3:197+ D 15 '42
 Medical program for aviation, R. A. McFarland, Harvard Business R 22 no 1:93-127 [O] '43
 Selecting field service personnel, S. C. Timson, Aero Digest 43:168, 293+ J1 '43
 Women offered opportunity as airway aides; CAA communications training schools, Civil Aero J 4:93 J1 15 '43

See also

- Aeronautic schools Airplane mechanics
 Air lines—Employees Aviators
 Airplane factories—Employees

AERONAUTICAL chamber of commerce of America

- Annual meeting, 1st, Colorado Springs, Automotive & Aviation Ind 89:48+ O 15 '43
 Industry executives backing plan for vigorous air Chamber, Aviation N 1:9-10 Ag 2 '43
 Light plane manufacturers plan to have department in Chamber, Aviation N 1:21 O 25 '43
 Personal aircraft manufacturers organize as Aero chamber section, Aviation N 1:8 Ag 9 '43

AERONAUTICS

- Science in 1942, Science 97:sup 10 Ja 8 '43

See also

- | | |
|------------------------------------|-------------------------|
| Aerodynamics | Aviation |
| Air lines | Flying boats |
| Air power | Gliders |
| Air travel | Helicopters |
| Aircraft | Langley flying machine |
| Airplane carriers | Meteorology, Aeronautic |
| Airplane engines | Photography, Aerial |
| Airplane propellers | Radio aids to aviation |
| Airplane stability and stabilizers | Seaplanes |
| Airplanes | |
| Airports | |
| Airships | |

Bibliography

- Abstracts from the scientific and technical press; Titles and references of articles and papers selected from publications reviewed by R.T.P.3; List of selected translations. Published in monthly numbers of Royal aeronautical society journal thru September, 1943. Published separately beginning with October
 Additions to the library. Published in monthly numbers of the Royal aeronautical society journal
 Aeronautical reference library; a selected list of technical books essential to aeronautical library, W. K. Dennis, comp. 81p pa \$1 Special libraries assn, 31 E. 10th st, New York '43
 Bibliography of aviation education materials; an annotated list of books and visual aids for the use of schools and libraries, C. Cartwright and others, 139p 88c Macmillan '42
 British air ministry translations in the Paul Kollsman library, Aeronautical Eng R 2:117-31 Je; 115, 117 S; 143, 145 O; 153+ N '43
 Digest of foreign technical magazines. Published in monthly numbers of Aero digest
 New books on aeronautics; checklist of aeronautical technical books added to the Paul Kollsman library during 1942. Publishers' Weekly 143:1270-4 Mr 20 '43
 Parks air college library, East St Louis, recent periodical articles, May 1943, 8 leaves [cont monthly]
 Periodical articles, government publications, books, library accessions, house organs and catalogues, Aeronautical Eng R 1:161-211 N '42 [cont monthly]
 Recent books. Published in monthly numbers of Aviation
 Reviews. Published in monthly numbers of the Royal aeronautical society journal

Dictionaries

- Baughman's aviation dictionary and reference guide; aero-thesaurus, H. E. Baughman, 2d ed 906p \$6.50 Aero publishers, 120 N. Central av, Glendale, Calif. '42

AERONAUTICS—Continued

History

Flight of a heavier-than-air machine; North Carolina Kitty Hawk day proclamation. J. M. Broughton. Science 98:400-1 N 5 '43
Grandfather of flight; W. S. Henson, S. P. Johnston. il diag Tech R 45:419-22, 432, 436, 438 Je '43

Laws and regulations

Aeronautical legislation; measures which are pending before, or have been passed by, Congress. Civil Aero J 4:16 F 15 '43
Air age ahead; civil aviation regulation. O. Ryan. Pub Util 32:605-10 N 11 '43
Legislation for postwar. A. L. Bulwinkle. Air Transport 1:36-8 S '43
Proposed CAA regulations for installation of aircraft electrical assemblies. diags Aero Digest 41:154+ N; 238+ D '42
Sale of private planes banned by government. Civil Aero J 4:13+ F 15 '43
When is a pilot legally liable? study of pertinent court decisions. L. T. Parker. Aviation 42:231+ Ag '43

See also

Air lines—Regulation

Patents

Review of patents. A. H. Crowell. diags Aviation 41:153+ N; 175+ '42; 42:176 Ja '43
Trend of invention. Published in monthly numbers of Aero digest

See also

Aeronautic instruments

Study and teaching

Air education program succeeds in high schools. Civil Aero J 4:1+ Ja 15 '43
CAA confers with teachers, students as first preflight school year ends. B. Uthus. Civil Aero J 4:74 Je 15 '43
CAA to produce color film series for use in trainee instruction. Civil Aero J 4:102 Ag 15 '43
Junior CAP aids young leaders; aviation and military training to outstanding high school students. G. Slack. il Aviation 42:237, 239+ J1 '43
Mathematics in aeronautical teaching and research. A. Kleim. J Eng Educ 33:388-91 Ja '43
Preflight films as an aid in aeronautics instruction; list. Civil Aero J 4:129 O 15 '43
3,500 high school teachers trained in CAA preflight program. Civil Aero J 4:59 My 15 '43

See also

Aviators—Training

Bibliography

Bibliography of aviation education materials; an annotated list of books and visual aids for the use of schools and libraries. C. Cartwright and others. 139p 88c Macmillan '42

Textbooks

Air-age teaching or misinforming? W. J. Luyten. Science 97:201-2 F 26 '43; Discussion. W. F. Russell. 97:309-11 Ap 2 '43

Canada

Engineers and the British empire; air lines in Canada. M. Smith. Engineer 176:124 Ag 13 '43

South America

15,000 miles of air routes charted in Amazon jungles. J. Knight. Civil Aero J 4:114 S 15 '43

United States

Airplane, today and tomorrow. R. S. Damon. Aero Digest 42:169+ My '43
Aviation, nation's largest industry. C. I. Stanton. Civil Aero J 4:91 J1 15 '43
Zeal for aviation rises high in Congress; proposal for establishment of a permanent aviation committee. Ry Age 114:405-6 F 20 '43

See also

Aeronautics, Commercial—United States
Civil air patrol

AERONAUTICS, Commercial

Air transports, past and future. W. W. Davies. bibliog il Mech Eng 66:471-85 J1 '43

Average man air service; market for short-distance travel. C. I. Stanton. Civil Aero J 4:130+ O 15 '43

Commerce in a changing world. W. C. Taylor. il For Comm W 13:3-4, 32-3 O 2 '43
Future of aviation. R. S. Damon. il Aero Digest 43:214-15, 247+ J1 '43

Postwar-aviation demand. B. H. Weil. bibliog il Oil & Gas J 42:40-2, 44-5 Ag 19 '43

Post-war transport aircraft. E. P. Warner. il Roy Aeronautical Soc J 47:185-255 J1 '43; Same abr. Aeronautical Eng R 2:7+ O '43; Same cond. Engineering 158:95-6, 136, 216-17, 285-6, 337-8, 396-7, 437 J1 30, Ag 13, S 10, O 8, 22, N 12, 26 '43 (to be cont)

Warplane production reaches new highs; considerations of postwar plane conversions, manufacture, and international transport. il Aviation 42:108-9+ J1 '43

See also

Air express service Airplane industry
Air lines and trade
Air mail service Photography, Aerial

International aspects

Air cargo flight simmers. Business Week p48+ My 1 '43

Air policy pleases; Roosevelt's postwar plan wins operators' approval; with list of applications for foreign air services. map Business Week p18-20+ O 9 '43

Air transport. Economist 144:286-8 Mr 6 '43
British view; post-war airline policies under study. D. Tyerman. Barron's 23:11 O 11 '43

Cargo planes can expand world trade. G. F. Bauer. il Aviation 41:213-14, 217+ N '42
Civil aviation. Economist 144:713-14 Je 5 '43

Eastern seeks to extend routes to Montreal, Mexico, South America. Aviation N 1:9 O 4 '43

Free use of airports in post-war era envisioned by President Roosevelt. Comm & Fin Chr 158:1431 O 7 '43

Guide for postwar. F. Barker. il Air Transport 1:74-7 S '43

International air transport; problems that require solution by governments. J. Lee. il For Comm W 13:16-17 O 23 '43

Logic of the air; to get out into postwar international air, we must let others into our own. maps Fortune 27:70-4+ Ap '43

Pan American asks U.S. Chamber to reconsider foreign route policy. Aviation N 1:28 O 18 '43

Postwar airlines. Business Week p19-20 F 27 '43

Role of world air transport after the fighting is over. J. T. Trippe. Aero Digest 42:170-1+ Je '43

State department and CAB to collaborate on post-war air rights. Comm & Fin Chr 158:168 O 21 '43

United and American Export back conflicting foreign route policies. M. Mickel. Aviation N 1:24-5 O 11 '43

U.S. Chamber urges free flight of world's commercial airliners. Aviation N 1:27 S 27 '43

Upper regions. Economist 145:483-4 O 9 '43

See also

Air lines—Transoceanic lines

Alaska

CAB completes Alaskan survey. Aviation N 1:20-1 Ag 16 '43

Flying in Alaska is different. H. W. Robinson. il Air Transport 1:44-5, 47, 50 S '43

Canada

Alcan highway, pioneered from the air. E. H. Forbes. il map Aviation 42:114-16+ My '43

Canada in the air. Economist 144:553-4 My 1 '43
Canada's postwar air policy. map Fortune 27:90-2 My '43

Europe

Postwar preview of European airways. M. A. Garbell. map Aviation 42:202-3+ Ap '43

Great Britain

Future of British air transport. Engineer 176:17 J1 2 '43

AERONAUTICS, Commercial—Continued**Latin America**

Future air view of the Americas. J. Lee.
 Il For Comm W 12:3-4, 29 S 25 '43

See also

Air lines—Latin
 America

United States

Air age ahead; civil aviation regulation. O.
 Ryan. Pub Util 32:605-10 N 11 '43

Air cargo, plane surplus. L. W. Pogue. Civil
 Aero J 4:117 S 15 '43

America's aviation tomorrow; abstract. E. S.
 Gorrell. Aero Digest 42:345-7 Je '43

An air union for action. Aero Digest 43:
 148 S '43

Endless possibilities for commercial aviation
 after the war. B. C. Boulton. Il Aero
 Digest 42:111-13+ Mr '43

Expansion of post-war air transportation. H.
 R. Stringer. Il Aero Digest 42:95-6+ F '43

Our planes and our peace. H. Woodhead. Il
 Aviation 42:122-3+ Ag '43

Post-war need for hangars and service
 facilities. C. I. Stanton. Aviation N 1:8-9
 Ag 16 '43

Postwar small airplane and how to increase
 its utility; Fly-a-plane-car service. P. Alt-
 man. Il map Automotive & Aviation Ind
 88:17-21+ My 15 '43

Role of world air transport after the fighting
 is over. J. T. Trippe. Aero Digest 42:170-
 1+ Je '43

Transportation in the postwar period. A. N.
 Kemp. map Aviation 42:118-19+ F '43

Wanted, a national aviation policy. R. S.
 Damon. Il Aviation 42:112-13+ My '43

Wanted, an air policy. J. R. Custer. Auto-
 motive & Aviation Ind 88:17-19+ Je 15 '43

What's ahead for aviation? H. E. Somerville.
 Ins Field (Fire ed) 72:24-5 S 30 '43

See also

Air lines—United
 States

Airplane industry and
 trade—United
 States
 Airports

AERONAUTICS, Meteorological. See Meteorol-
 ogy, Aeronautic

AERONAUTICS, Military

Aeronautical engineer and military aeronautics.
 Aeronautical Eng R 2:7 JI '43

Air navigation for global war; McMillen
 spherographical system. Il Fortune 27:74-
 7+ Ja '43

Air power with land and sea forces. C.
 Caldwell. Il Aero Digest 43:117-20+ Ag
 '43

American doctrine of air power. N. F. Silsbee.
 Il Aviation 42:112-15+ F; 96, 98-9+ Mr '43

Application of air power. E. P. Sorensen.
 Il Mech Eng 65:549-52 Ag '43

Fighting line-abreast; fighter plane tactics
 used in the spectacular defense of Malta.
 J. L. Lowrey. diags Aviation 42:192-3+
 O '43

Joint air-sea-land operations in Italy set pat-
 tern for future. Aviation N 1:13-14 N 8
 '43

New items of value to combat flying. S. R.
 Winters. Il Aero Digest 43:216+ Ag '43

Ship flying and aircraft carriers. P. Bethell.
 Il diags Engineering 156:1-4, 10, 41-4, 50,
 61-3, 101-5, 110, 141-4, 161-3 JI 2, 16-23, Ag
 6, 20-27 '43

See also

Air raids
 Airplanes, Military
 Aviators, Military
 Balloons, Military
 Bomb sights
 Bombs, Aerial

Guns, Anti-aircraft
 Smoke screens
 United States—Air
 service, Army
 World war, 1939—
 Aerial operations

History

History; balloon corps in Civil war. H. L.
 Brownback. Automotive & Aviation Ind
 89:27 S 15 '43

Canada

Canada trains them by tens of thousands.
 J. R. Keith. Il Aviation 42:219, 221+ N '43

Germany

How the Luftwaffe grew; abstract. C. G.
 Grey. Comp Air M 48:6964 F '43

Rise in Nazi air strength in West due to
 removal from Russian front. Aviation N
 1:17-18 O 18 '43

See also

Airplanes, Military—
 Germany

Great Britain

See also

Airplanes, Military—
 Great Britain

Japan

See also

Airplanes, Military—
 Japan

United States

Air power now assumes dominant war role.
 L. V. Spencer. Il Aero Digest 42:111-15 Je
 '43

Bombing, the American way. E. E. Miller. Il
 diags Aviation 42:114-21+ Ag; 118-19+ S
 '43

Our gigantic global air transport services. Il
 Aero Digest 42:118-21+ Je '43

Sub hunting by the coastal air patrol. Il
 Aero Digest 42:113-14 My '43

Value of plane output this year to total
 fourth of war budget; report on American
 air transport, from the Office of war in-
 formation. Il Steel 112:74, 76 Je 21 '43

See also

Airplanes, Military— United States—Air
 United States service

AERONCA aircraft corporation
 Ten years' progress. W. D. Hall. Il Aeronau-
 tical Eng R 1:39 N '42

AEROPLANES. See Airplanes

AEROSOL-OT

Chronic toxicity of Aerosol-OT. A. E.
 Benaglia and others. J Ind Hygiene 25:175-
 80 My '43

Foam and emulsion stabilities. S. Ross. bib-
 liog J Phys Chem 47:266-77 Mr '43

AEROSOL wetting agents. See Wetting agents

AEROSOLS. See Colloids

AETNA (fire) insurance company

Aetna fire completes 100 years in Chicago
 field. Nat Underw 47:2 Je 3 '43

AETNA life insurance company

Rt port of Aetna Life and affiliated companies.
 Comm & Fin Chr 157:597 F 15 '43

AFGHANISTAN

Afghanistan; Nation enters the first stage
 of modern economy. M. C. Moir. Il For
 Comm W 12:10-15 S 4 '43

New measures enacted to promote industrial-
 ization. For Comm W 12:12 JI 3 '43

See also

Textile industry—
 Afghanistan

AFRICA

Our Africa policy; future American-French
 collaboration. J. Dana. Mag of Wall St
 72:117+ My 15 '43

See also

Airports—Africa
 World war, 1939—
 Africa

AFRICA, British East**Economic policy**

New interterritorial production and supply
 council established. For Comm W 10:17
 Mr 13 '43

AFRICA, British West

Economic conditions. For Comm W 11:16-19
 My 22 '43

Help for colonies. Business Week p64 Je 12
 '43

Industry in West Africa. Economist 144:617-
 18 My 15 '43

See also

Gold mines and min-
 ing—Africa, British
 West

AFRICA, North

French North Africa. Economist 143:635-6,
 668-9 N 21-28 '42

French North Africa, economy of new war-
 vortex. P. M. Copp. Il For Comm W 9:3-
 7+ N 28; 10-13+ D 5 '42

AFRICA, North—Continued

Impressions of pre-war North Africa. J. C. Cosgrove. *Il Explosives Eng* 21:16-20, 49-54 Ja-Mr '43

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Food supply—Africa, Railroads—Africa, North
Labor and laboring World war, 1939—
classes—Africa, Africa, North
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Economic conditions

Economic effects of our African victory; North and West French Africa. V. L. Horoth. *Il Mag of Wall St* 71:281-3+ D 26 '42
North Africa economic board gets up steam; putting area back on its feet, both agriculturally and industrially. *Business Week* p 15-16 Ag 28 '43

Industries and resources

From caravan to corner drug store; French Africa. E. M. Schwarzauber. *Il For Comm W* 10:14-17+ F 27 '43
Phosphate rock in French North Africa. C. K. Homer. *Il map For Comm W* 11:3-8+ Je 19 '43

AFRICA, South. See South Africa**AGAR**

Agar-agar as a coagulant for barium sulfate. E. J. Bogan and H. V. Moyer. *bibliog Ind & Eng Chem Anal ed* 14:849-50 N 15 '42

Agar-agar production in South Africa. *For Comm W* 12:25 Ji 17 '43

Agar-bearing seaweeds at La Jolla, California. R. H. Tschudy and M. C. Sargent. *Science* 97:89-90 Ja 22 '43

Methods for reclaiming agar from culture media. *Water & Sewage* 81:19-20 Ja '43

Money in moss; widening uses for gums of seaweed. *Il Business Week* p64+ S 18 '43

New agent for bacteriological examination of water; Carragar: reclamation of agar. R. E. Thompson. *Water & Sewage* 81:18, 38-40 Ji '43

Orphan agar; one of the Nation's most critical war materials. H. Keen. *Il Sci Am* 169: 73-5 Ag '43

Research finds substitute for bacteriological agar. W. E. Baier and T. C. Manchester. *bibliog Il Food Ind* 15:94-6 Ji '43

Simple procedure for the recovery of agar. G. P. Blundell. *Science* 97:76 Ja 15 '43

Source found in Puerto Rico. *Sci Am* 168: 21 Ja '43

Sperli's Institutum; irradiation expert heads research of Dominican school. *Il Business Week* p20+ S 18 '43

Studies on agar-agar; isolation of hepta-acetyl *d*-l-galactose from 3:6-anhydro- β -methyl-*d*-galactoside. T. L. Cottrell and E. G. V. Percival. *Chem Soc J* p749-50 D '42

Studies on agar-agar; mode of attachment and configuration of the 1-galactose residues isolated as 2:4-dimethyl 3:6-anhydro- β -methyl-7-galactoside by methylation of the hydrolysis products of methylated agar. E. G. V. Percival and T. G. H. Thomson. *Chem Soc J* p750-5 D '42

Use of fibrous sodium pectate as a substitute for agar in bacteriological gels. R. M. McCready, H. S. Owens and W. D. MacLay. *Science* 97:428 My 7 '43

AGASSIZ, Alexander, 1835-1910

Presentation of the Agassiz medal for the year 1942, with accompanying honorarium of \$300, to Columbus O'Donnell Iselin, II; reminiscences of Agassiz. T. Barbour. *Science* 97:431-3 My 14 '43

AGAVE fiber

Survey of the American textile fiber shortage; replacement fibers for jute and manila hemp. A. C. Whitford. *Il Rayon* 24:17 Ja '43

AGE

Man's most creative years; then and now. H. C. Lehman. *bibliog Science* 98:393-9 N 5 '43

See also

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AGE, Geological. See Geological time**AGE and employment**

Be ten years younger. *Bankers M* 146:555-7 Je '43

Best organized; mobilisation of Britain's manpower. *Economist* 144:420 Ap 3 '43

Build training program now; give older salesmen a break; Johns-Manville's experiences. N. B. Sherrill, Jr. *Ptr Ink* 201: 15-17+ D 4 '42

Does age add to executive's stature? M. L. Heacox. *Ptr Ink* 205:112 O 8 '43

Old man's department; abstract. D. Wharton. *Management R* 31:414-15 D '42

Older worker in industry. R. A. McFarland. *Harvard Business R* 21 no4:505-20 [J1] '43

Personnel helps for foremen; the old timer. L. Marion. *Factory Management* 101:116 Ji '43

Studies on the duration of disabling sickness; duration of disability from the nonrespiratory-nondigestive diseases among male employees with particular reference to the older worker. W. M. Gafafer and R. Sitgreaves. *Pub Health Rep* 58:969-79 Je 25 '43

Utilization of older workers. A. J. Carlson. *Monthly Labor R* 57:109-11 Ji '43

When older people go on the payroll. F. C. Minaker. *Il Am Business* 13:16-17 F '43

See also

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Old age pensions
Pensions, Industrial

AGENCIES, Advertising. See Advertising agencies

AGENCY (law)

See also

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AGENTS, Insurance. See Insurance agents

AGFIL system of metal protection. See Metal protection—Electrolytic process

AGG, Thomas Radford, 1878—
Sketch. *por Civil Eng* 12:694 D '42

AGGREGATES

Aggregates for an earth-fill dam; excavating, transporting and screening gravel for Santa Fe dam, California. *Il Rock Prod* 45:46-9 N '42

Alcan highway aggregates. H. J. McKeever. *Il Rock Prod* 46:55-8+ Ja '43

Emergency pavement patching with pre-stabilized soil-aggregate mixes. R. L. Fosburg. *Il Roads & Bridges* 81:25+ Je '43

How California rock and gravel co. cleans aggregates, sells red clay and promotes efficiency. W. L. Netherby. *Il Rock Prod* 46:52-4+ Mr '43

Producing aggregates for war projects. *Il Rock Prod* 46:47 Ji '43

Surface-dressed road markings. *diags Roads & Bridges* 81:41+ S '43

See also

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Prices

Application of price ceilings in the aggregates industry; discussion. *Rock Prod* 46:96-8 Ji '43

Specifications

Developments in methods of testing and specifying coarse aggregates. L. H. Tut-hill. *Am Concrete Inst J* 14:21-32 S '42; Discussion. 14:sup32:32+ Je '43

Testing

Developments in methods of testing and specifying coarse aggregates. L. H. Tut-hill. *Am Concrete Inst J* 14:21-32 S '42; Discussion. 14:sup32:32+ Je '43

AGGREGATES for concrete. See Concrete—Aggregate

AGING. See Old age

AGITATORS

Agitation of finishing materials. J. E. Hyler. *Il Metal Finishing* 41:323-5 My '43

Autoclaves for pressure-temperature reactions. D. B. Gooch. *Il diags Ind & Eng Chem* 35:936-9 S '43

Filter bed maintenance; experience with the Palmer filter-bed agitator. W. C. Goehring. *Il Water Works & Sewerage* 90:sup155-7 Je '43

AGRICULTURAL engineering—Continued

Versatility of the modern tractor. S. J. Wright. *Il Mech Handling* 30:293-9 J1 '43

See also

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ery farm
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AGRICULTURAL experiment stations

Tingo Maria experiment station, Peru. Science 97:155 F 12 '43

See also

Rothamsted experi-
mental station

**AGRICULTURAL insecticide and fungicide as-
sociation**

Annual meeting, 10th, Spring Lake, N.J. July 22-23. Chem & Eng N 21:1262-3 Ag 10 '43; Oil Paint & Drug Rep 144:7+ Ag 2 '43

AGRICULTURAL insurance. See Insurance, Agricultural**AGRICULTURAL insurance company**

Changes in personnel; results for 1942. Comm & Fin Chr 157:597 F 15 '43
Company analysis. Spectator (Property ed) 8:34-5+ N 12 '42

AGRICULTURAL laboratories

Labs go to town; Agriculture department research boomed by war. Business Week p47-8 N 21 '42

Where Midwest agriculture and industry meet; Northern regional research laboratory, Peoria, Illinois. H. T. Herrick. *Il Chem & Met Eng* 49:103-6 N '42

AGRICULTURAL laws and legislation

See also

Agricultural ad-
ministration

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New Soviet farm laws meet war's exigencies. H. H. Ware. *For Comm W* 9:9+ D 12 '42

United States

Supreme court upholds penalty levied against wheat marketed in excess of quota. Comm & Fin Chr 156:1894 N 26 '42

Vital 239 bushels; this trivial quantity of wheat brings sweeping decision of Supreme court, affecting marketing of all farm crops. Business Week p106 N 14 '42

AGRICULTURAL machinery

Davies asks PIWC's aid in farm program. Nat Pet N 35:30+ My 19 '43

Engineering in agriculture. J. E. Thornycroft. *Engineering* 154:375-6, 384-5, 405 N 6-20 '42; Same cond. *Engineer* 174:374-5, 396-8 N 6-13 '42

Farm machinery is sufficient for normal 1943 food production. E. G. McKibben. Comm & Fin Chr 157:1783 My 13 '43

Farmers get aid; manufacture of new implements. Business Week p28-30 Ap 24 '43
Machinery in modern farming. D. R. Bomford. *Il Mech Handling* 30:142-51; Discussion. 151-5 Ap '43

Mechanized farming; exhibition. *Il Engineering* 156:246-8 S 24 '43

More implements; increased steel allotment for farm equipment. Business Week p67-8+ O 16 '43

Older machinery must work harder in '43. *Il Nat Pet* N 35:33, 35-6 My 12 '43

U.S. launches farm maintenance program; industry's contact with farmer is key in broad campaign. Nat Pet N 35:40+ S 16 '43

See also

Cultivators Lime spreaders
Insurance, Agricul- Tractors
tural machinery

History

Steam cultivation in England. G. E. Fussell. *Engineering* 156:83-5, 134 J1 30, Ag 13 '43

Repair

Farm shortage aggravated by inability to get welding rods. Iron Age 151:90D Mr 18 '43

AGRICULTURAL machinery industry

Break for farmers; allotted tonnage of steel for farm machinery. Business Week p28-9 Je 26 '43

Farm equipment reconversion prospects. Barron's 23:15 J1 12 '43

Farm machinery exporting explained. Iron Age 152:106A-106B S 16 '43

Farm tool quotas given boost. Iron Age 151:91-3 Mr 11 '43

Higher production quotas asked for farm tools. *Il Steel* 112:14-15 Ja 25 '43

Implement builders turn to war goods to utilize plants. *Steel* 112:417-20 Ja 4 '43

Implement prospects best since advent of war. E. F. Ross. *Il Steel* 113:67-9 J1 12 '43

Machine on the farm; billion-dollar market beckons to more ingenuity, initiative, and basic research. *Il Fortune* 28:144-7+ S '43

Manufacturers face difficulties despite increased steel allotment. *Il Steel* 112:55-6 F 8 '43

Migrant machines; sale of southern combines to northern farmers. Business Week p20+ S 4 '43

Trend toward smaller machines to continue. E. F. Ross. *Il Steel* 113:61-3 O 4 '43

WEB eases up. Business Week p34 Ap 3 '43
WPB increases farm machinery quota for 1943. *Il Nat Pet* N 35:36-7 F 3 '43

See also

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Advertising

Dealer-inspected equipment to be given Farm Commando emblem; Allis-Chalmers program to help outlets stay on by servicing. *Il Ptr Ink* 202:59-60 Ja 1 '43

J. I. Case campaign welds banker with implement dealer and farmer; banking publications used to show bankers how they can find proper places for food production loans. F. A. Wirt. *Il Ind Marketing* 28:38, 42 Ap '43

Securities

Farm equipments in first year of full war restrictions; position of leading stocks. Mag of Wall St 71:536-7 F 20 '43

Farm equipments in war and peace. S. Devlin. *Il Mag of Wall St* 72:349-51+ J1 10 '43

Argentina

Argentina's farm-machinery imports, 1938-1942. *For Comm W* 13:35 O 23 '43

Canada

Canadian manufacture of farm implements, 1939-1941. *For Comm W* 12:31 S 11 '43

Great Britain

Engineering outlook; agricultural machinery. *Engineering* 155:144 F 19 '43

AGRICULTURAL machinery insurance. See Insurance, Agricultural machinery

AGRICULTURAL marketing administration. See United States—Agricultural marketing administration; Food administration

AGRICULTURAL pests

See also

Fungi Insects, Injurious and
Insecticides beneficial

AGRICULTURAL products

Natives' return; Western-Hemisphere products. C. R. Bryan. *Il For Comm W* 11:8-9+ Je 12 '43

New crops tried; United Fruit introducing many products such as manila fiber in Latin America. Business Week p65-6 Je 12 '43

See also

Farm produce

AGRICULTURAL research

Agricultural research. Economist 144:249 F 20 '43

Agricultural research in Scotland. Economist 145:472 O 2 '43

Institute of agricultural sciences established. *For Comm W* 9:17 N 21 '42

Institute of tropical agriculture at Turrialba. R. W. Keith. Science 98:16-17 J1 2 '43

Inter-American institute of agricultural sciences at Turrialba. Science 97:sup10 Mr 26; 371 Ap 23 '43

Lime may be spread with manure; Vermont agricultural experiment station finds advantages. A. R. Midgley. *Il Rock Prod* 46: 62-3 Ap '43

Publication of scientific and technical material by the United States Department of agriculture. M. C. Merrill. Science 97:343-4 Ap 16 '43

AGRICULTURAL research—Continued

Scientific farming; advent of radionic devices has made possible increases in quantity and quality of food production. S. R. Winters. *il* Radio N 30:30-1+ Ag '43

Scientific research by the Department of agriculture. T. S. Harding. *Science* 98:240-1 S 10 '43

Unique system under clock control used in research on pasture grass. T. Mitchell Heating-Piping 15:32 Ja '43

See also

Agricultural experimental stations Rothamsted experimental station

Agricultural laboratories

AGRICULTURAL sciences, Inter-American institute of. See Inter-American institute of agricultural sciences**AGRICULTURAL workers health and medical association**

Medical care for farm workers in California and Arizona. W. Goldner. *Monthly Labor R* 55:957-9 N '42

AGRICULTURE

International aspects of postwar food and agriculture. F. L. McDougall. *Ann Am Acad* 225:122-7 Ja '43

Organization of biology and agriculture. R. F. Griggs. *chart Science* 96:545-51 D 18 '42

Trends in agriculture in relation to nutrition. E. J. Russell. *Chem & Ind* 62:210-14 Je 5 '43

See also

Agricultural machinery	Feeding and feeding stuffs
Cotton	Fertilizers
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Crops	Food supply
Cultivators	Forests and forestry
Dairy products	Irrigation
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Farm labor	Plant quarantine
Farm market	Rubber plants and planting
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Consult Agricultural Index for additional references

Economic aspects

About agriculture; monthly report. L. Haystead. *Fortune* 28:70, 80 N '43

Agricultural finance guides in wartime. D. C. Horton and H. C. Larsen. *J Land & Pub Util Econ* 19:59-68 F '43

Approach to the measurement of farm population pressure in Wisconsin. T. C. McCormick. *Am Stat Assn J* 38:165-77 Je '43

So food will win the war, eh? *il* *Fortune* 27:116-19+ Je '43

World granary; British delegates would set up an international Joseph plan for marketing all agricultural products. *Business Week* p22+ Je 5 '43

See also

Agricultural credit	Farm produce
Farm income	Farmers
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Statistics

Older machinery must work harder in '43. *il* *Nat Pet N* 35:33, 35-6 My 12 '43

Some sampling uses of data from the census of agriculture. I. Holmes. *Am Stat Assn J* 38:78-86 Mr '43

Argentina

Argentina's new policy is all-out agricultural production. *For Comm W* 12:27 S 18 '43

Brazil

Farm aid in Brazil; wartime demand for crops prompts new policy. *Business Week* p68+ J1 31 '43

Canada

Canadian agriculture. *Bankers M* 146:523-5 Je '43

Canadian agriculture. *Economist* 145:16 J1 3 '43

Caribbean region

New crops tried; United Fruit introducing many products such as manilla fiber in Latin America. *il* *Business Week* p65-6 Je 12 '43

Central America

Food crops from U.S. found suitable for tropics. *For Comm W* 13:16 N 6 '43

Ceylon

Cultivation of food crops on estates made compulsory. *For Comm W* 11:16 My 8 '43

China

Economic and health conditions in agriculture in China. *Monthly Labor R* 57:493-5 S '43

Costa Rica

Costa Rica's new Ministry of agriculture. *For Comm W* 10:31 F 13 '43

Czechoslovakia

Agriculture in the protectorate. *Economist* 143:734-5 D 12 '42

Ecuador

Barter loans tried in Ecuador to encourage food crops. *For Comm W* 10:18 Mr 27 '43

Europe

Agricultural reconstruction in Europe after the war; abstract. H. J. Fleure. *Chem & Ind* 62:397 O 16 '43

France

French agriculture. *Economist* 144:268 F 27 '43

Germany

Germany at war; the agricultural outlook. *Economist* 144:530 Ap 24 '43

Great Britain

Agricultural improvement. *Economist* 144:508 Ap 17 '43

Agricultural problem. *Economist* 145:484-6, 512-14 O 9-16 '43

Agricultural statistics, 1942 and pre-war. *Economist* 144:831 Je 26 '43

Agriculture and the war stimulus. C. S. Orwin. *Assn of Sp Lib & Inf Bur Proc* 1942:37-40

Autarky for Britain? *Economist* 143:599-600 N 14 '42

Council of agriculture on food production. *Economist* 144:698 My 29 '43

Food for Britain; it's home-grown now. *Business Week* p47-9 Ag 14 '43

Future of food production in Great Britain. *Science* 97:459 My 21 '43

Increasing the food output of Great Britain. G. H. Bates. *Chem & Ind* 61:505-8; Discussion. 508 D 12 '42

Landowners' views on agriculture. *Economist* 144:665-6 My 22 '43

Policy for farming. *Economist* 144:459 Ap 10 '43

Ways and means; Mr Churchill's agricultural policy. *Economist* 144:416-17 Ap 3 '43

Great Plains region

Effect of land purchase by FSA standard loan borrowers on agricultural production in Northern Great Plains. M. Solem. *J Land & Pub Util Econ* 19:231-3 My '43

Haiti

Activities and purposes of S-H-A-D-A; Haiti turns to new farming tasks. T. A. Fennell. *il* *For Comm W* 10:4-5+ Mr 20 '43

Honduras

Honduras expands acreage for food projects. *For Comm W* 12:21 J1 17 '43

Iowa

Improved oats; Iowa turns to hybrids. *Business Week* p24+ Ja 23 '43

Ireland

Eire's food crops, 1941 and 1942. *For Comm W* 11:30 My 29 '43

Food-crop acreage increased in Eire; figures for 1942 and 1943. *For Comm W* 13:30 O 23 '43

Irish agriculture. *Economist* 145:239-40 Ag 21 '43

AGRICULTURE—Continued

Latin America

Help Latin America produce more things to sell, and it will be able to buy! G. A. Nichols. *il* *Ptr Ink* 203:18-20+ *Ap* 9 '43

See also

Agricultural colleges
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Louisiana

Tenure status of new-ground settlers in Louisiana. J. E. Mason and A. L. Bertrand. *J Land & Pub Util Econ* 19:233-8 *My* '43

Mexico

See also

Irrigation—Mexico

Middle western states

Field notes from the farm country. *il* *Fortune* 27:120-3+ *Je* '43

Missouri

Agricultural limestone in Missouri. O. T. Coleman. *Rock Prod* 46:67-8+ *Ap* '43

North Carolina

North Carolina, a story of great achievement; agriculture. *il* *Manuf Rec* 112:64-9 *O* '43

Norway

Norway's agricultural plan for 1943. *For Comm W* 11:29 *Je* 12 '43

Panama

War's effect on Panama's economy. W. H. H. Scott. *il* *For Comm W* 11:15-19, 44-5 *Je* 26 '43

Poland

Polish agriculture. *Economist* 144:394-5 *Mr* 27 '43

Puerto Rico

Earnings of small farmers in Puerto Rico. Monthly Labor R 55:1280-3 *D* '42
Puerto Rican upswing in foodstuff output. *il* *For Comm W* 11:6 *My* 15 '43

Russia

Drive in agriculture. *Economist* 144:329 *Mr* 13 '43

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Agricultural research in Scotland. *Economist* 145:472 *O* 2 '43

Southern states

South's agriculture achieves great war record. C. R. Wickard. *il* *Manuf Rec* 112:59-60 *S* '43

Spain

Spain's 1943 food program. *For Comm W* 12:23-4 *JI* 3 '43

Switzerland

Agricultural production in Switzerland. *For Comm W* 13:22 *O* 2 '43

Texas

Garden of Texas; Lower Rio Grande valley. *il* *Manuf Rec* 112:83-9+ *O* '43
Lone Star eden; Magic valley. *il* map *Business Week* p20+ *Ap* 3 '43

United States

About agriculture; monthly report. L. Haystead. *Fortune* 28:70, 80 *N* '43
Agriculture should be held munitions industry in view of war food problem. H. Hoover. *Comm & Fin Chr* 157:381 *Ja* 28 '43
Farm outlook. *Nat City Bank* p87-8 *Ag* '43
Farm output goals reflect war requirements. *Survey of Cur Business* 23:6-8 *F* '43
Farm production goals. H. D. Ralph. *Burroughs Clearing House* 27:20-1 *Ja* '43
Fortune survey; farmers tell what they think of farming as a way of life, attitudes toward the war and problems. *Fortune* 27:8-10+ *Mr*; 8-10, 14+ *Ap* '43
Hunger ahead? farm manpower and machinery shortages. *il* *Nat Pet N* 35:36, 38-40 *Mr* 3 '43
Land as we use it; picture map. *Fortune* 27:114-15 *Je* '43
1943 spring planting intentions. *Barron's* 23:6 *Mr* 22 '43

Our hopes for 1943 farm output. *Barron's* 22:6 *N* 16 '42

Physical volume of farm marketings, 1929-42. L. J. Paradiso, M. Kaufman and C. M. Purves. *Survey of Cur Business* 23:23-22 *Ap* '43

Planting intentions as of March 1, 1943. *Comm & Fin Chr* 157:1122-3 *Mr* 25 '43
Production for farm home use. D. W. Watkins. *Ann Am Acad* 225:162-8 *Ja* '43
Uncle Sam sells farmers on value of maintenance; Food for freedom campaign. *il* *Nat Pet N* 35:31-2 *F* 17 '43

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Farm relief

Farm era ends; congressional changes in schedule of payments made to agriculture. *Business Week* p26+ *Ag* 21 '43
Fortune survey; farmers and their government. *Fortune* 27:10, 14 *Ap* '43
Incentive payments to farmers proposed. *Comm & Fin Chr* 157:589 *F* 11 '43

See also

Agriculture—Economic aspects

Postwar problems

Our job ahead; agronomists in the post-war world. R. Bradfield. *Science* 97:271-7 *Mr* 26 '43

Uruguay

Uruguay's wise promotion of agriculture. *For Comm W* 10:21 *Ja* 23 '43

Wisconsin

Approach to the measurement of farm population pressure in Wisconsin. T. C. McCormick. *Am Stat Assn J* 38:165-77 *Je* '43
Fifteen million tons of limestone needed to sweeten Wisconsin soils. C. J. Chapman. *il* *Rock Prod* 46:61+ *Ap* '43

Zanzibar

Government promotes food production in Zanzibar. *For Comm W* 12:33-4 *Ag* 21 '43

AGRICULTURE and war

Agricultural finance guides in wartime. D. C. Horton and H. C. Larsen. *J Land & Pub Util Econ* 19:59-68 *F* '43

See also

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AGRIPOL

Agripol, a chemurgic rubber. C. A. Braidwood. *il* *Chem Ind* 52:322-4 *Mr* '43; Abstract. *India Rubber W* 107:589 *Mr* '43
Agripol from soy beans. *Rubber Age* 52:243-4 *D* '42
Agripol, the latest chemurgic infant; abstract. A. J. Snyder. *Nat Pet N* 35 pt 2: R325 *JI* 7 '43
Commercial production of chemurgic rubber. Agripol, made from soybeans and alcohol. *India Rubber W* 107:283 *D* '42
New rubber-like material; abstract. A. J. Snyder. *Chem & Met Eng* 50:196 *My* '43
Soya rubber; Reichhold chemicals, Inc. of Detroit, is in mass production of Agripol. *Business Week* p68+ *N* 28 '42

AGSTONE. See Lime as fertilizer

AILERONS

Aileron effectiveness at high flying speeds; abstract. W. Wirz. *Roy Aeronautical Soc J* 47:supl40-2 *Ap* '43
Torsional and aileron flutter. Z. Krzywoblocki. *bibliog J Aeronautical Sci* 10: 161-8 *My* '43

See also

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AINOS

Along the Aleutian route; white Ainus of island of Hokkaido cling to ancient customs. N. James. *il* *Tech R* 46:310-12+ *Ap* '43

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AIR

Acoustical tables for air and sea water. W. L. Woolf. *Acoustical Soc Am J* 15:83-6 *O* '43

AIR—Continued

- Diffusion of air through monel metal. H. S. Coleman and H. L. Yeagley. *il diags J Chem Phys* 11:135-9 Mr '43
- Final values of the interaction constant for moist air. J. A. Goff, J. R. Andersen and S. Gratch. *Heating-Piping* 15:319-24 Je '43
- Removal of air from pipe lines by flowing water. A. A. Kalinske and P. H. Bliss. *il Civil Eng* 13:480-2 O '43
- Removal of air from powders in density determination. E. L. Gooden. *diag Ind & Eng Chem Anal ed* 15:578-9 S 15 '43
- Thermodynamic properties of air at low temperatures. V. C. Williams. *bibliog Am Inst Chem Eng Trans* 39:93-111 F '43; Discussion. 39:433-8 *bibliog*(p435, 437) Ag '43

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- | | |
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Analysis

- Automatic apparatus for determination of small concentrations of sulfur dioxide in air; application to hydrogen sulfide, mercaptan, and other sulfur and chlorine compounds. M. D. Thomas and others. *bibliog diags Ind & Eng Chem Anal ed* 15:287-90 Ap 15 '43
- Collection and estimation of traces of formaldehyde in air. F. H. Goldman and H. Yagoda. *bibliog Ind & Eng Chem Anal ed* 15:377-8 Je 15 '43
- Determination of fumigants; determination of chlorohydrocarbons in air by reaction in monoethanolamine. F. P. W. Winteringham. *diags Soc Chem Ind J* 61:186-7 D '42
- Determination of halogenated hydrocarbons in the atmosphere. F. H. Goldman and C. G. Seegmiller. *bibliog diag J Ind Hygiene* 25:181-4 My '43
- Determination of monalkyl ethers of ethylene glycol. H. W. Werner and J. L. Mitchell. *bibliog Ind & Eng Chem Anal ed* 15:375-6 Je 15 '43
- Determination of monomeric styrene in air. V. K. Rowe and others. *diags J Ind Hygiene* 25:348-53 O '43
- Determination of the oxides of nitrogen by the phenoldisulfonic acid method. R. L. Beatty, L. B. Berger and H. H. Schrenk. *diags U S Bur Mines Rep of Invest* 3687: 1-17 '43
- Determination of the oxides of nitrogen in air. J. Cholak and R. R. McNary. *bibliog diag J Ind Hygiene* 25:354-60 O '43
- Determination of TNT content of air; abstract. *Roy Aeronautical Soc J* 47:sup491 S '43
- Diethylaminoethanol as a reagent for the detection and colorimetric determination of small amounts of trinitrotoluene in air. F. H. Goldman and D. E. Rushing. *J Ind Hygiene* 25:164-71 Ap '43
- Estimation of minute amounts of tetryl in the atmosphere. F. H. Goldman and D. E. Rushing. *J Ind Hygiene* 25:195-6 My '43
- Filter paper method for lead fume collection. L. Silverman and J. F. Ege, jr. *bibliog il diags J Ind Hygiene* 25:185-8 My '43
- Improved apparatus for the rapid determination of carbon monoxide. L. Shnidman. *bibliog il Am Gas Assn Mo* 25:405-8+ O '43 (to be cont)
- Measurement of industrial lead exposures by air analysis. J. Buxell. *bibliog J Ind Hygiene* 25:35-7 F '43
- Measurements of concentrations of air-borne dusts. T. Bedford and C. G. Warner. *bibliog J Ind Hygiene* 24:315-21 D '42
- Mercury vapor measurement; a radioactive method. C. Goodman, J. W. Irvine, jr. and C. F. Horan. *bibliog diags J Ind Hygiene* 25:275-81 S '43

- Modification of the silica gel method for the determination of atmospheric organic solvent vapors. L. V. Cralley, T. E. Shea and L. J. Cralley. *bibliog J Ind Hygiene* 25:172-4 Ap '43
- Mustard gas in air; sensitivity of qualitative tests and a rough quantitative determination. W. Rieman. 3d. *bibliog Ind & Eng Chem Anal ed* 15:411-12 Je 15 '43
- Nitrite field method for the determination of oxides of nitrogen except N_2O and N_2O_4 . F. A. Patty and G. M. Petty. *bibliog J Ind Hygiene* 25:361-5 O '43
- Photoelectric photometer for determining carbon disulfide in the atmosphere. S. Silverman. *bibliog il diags Ind & Eng Chem Anal ed* 15:592-5 S 15 '43
- Radioactive mercury in mercury-vapor measurements. J. W. Irvine, jr. and C. Goodman. *bibliog diag J Ap Phys* 14:496-8 S '43
- Simple device for detecting small concentrations of organic halide gases in the atmosphere. G. W. Jones and R. E. Kennedy. *pl U S Bur Mines Rep of Invest* 3697:1-10 '43
- Testing toxic atmospheres. N. R. Bernz. *bibliog il Heating-Piping* 15:236-7, 482-4, 518-20 My, S-O '43

See also

Dust

Bacteriology

- Air-borne infection. O. H. Robertson. *bibliog Science* 97:495-502 Je 4 '43
- Apparatus for determination of the bacterial content of air. S. Moulton, T. T. Puck and H. M. Lemon. *bibliog diag Science* 97:51-2 Ja 8 '43
- AIR, Liquid. See Liquid air
- AIR bases. See Airports, Military; Naval air stations
- AIR blast
- Damage from air blast; progress report 2. S. L. Windes. *bibliog pls U S Bur Mines Rep of Invest* 3708:1-50 '43
- AIR-blast circuit breakers. See Electric circuit breakers—Oilless
- AIR brakes
- Air brake questions and answers (cont). *Ry Mech Eng* 116:533-9; 117:46-7, 85-9, 135-6, 178, 220, 276, 331-2, 369-70, 420-1, 482-3 D '42-O '43
- Braking of high-speed trains. C. D. Stewart. *Ry Age* 114:909-10 My 8 '43; Same. *Ry Mech Eng* 117:258-9+ Je '43
- Cleaning AB cylinder pistons. *il diag Ry Mech Eng* 117:280 Je '43

Repair

- Device for dismantling AB brake piston. *il Ry Mech Eng* 117:48-9 Ja '43
- Handy shop devices for the air brake gang. *il Ry Mech Eng* 117:87-8 F '43
- Reconditioning worn air brake parts. *il Ry Mech Eng* 117:342 JI '43

Testing

- Finding leaks in brake system. P. J. Hogan. *Ry Mech Eng* 117:178 Ap '43
- AIR cargo. See Air express service; Air lines—Freight service
- AIR circuit breakers. See Electric circuit breakers—Oilless
- AIR cleaners
- Air cleaners; their construction and operation; for gas or gasoline engines, Diesel engines or air compressors. *diags Diesel Power* 21:725-7 Ag '43
- Taking dust out of industry. *il Sci Am* 169: 157-9 O '43
- See also
- Air filters
- Dust collectors

AIR cleaners, Automobile

- Dust problems in military vehicle operation. L. F. Overholt. *il S A E J* 51:381-4 O '43

AIR cleaning

- Conserving heat in exhaust system; cutting quartz rock, and returning cleaned air without wasting heat. *diag Sheet Metal Worker* 34:23+ Ap '43
- Electrostatic precipitators remove oil mist in machine shops. *Electronics* 16:141-2+ JI '43

AIR cleaning—Continued

Extracting oil mist from air. E. H. R. Pegg. *il* diags Sheet Metal Worker 34:21-3 My '43;
Excerpts. Heating-Piping 15:242 My '43;
Heat & Ven 40:60-1 JI '43

See also

Air filters

AIR compressors

Abnormal care will force the air compressor to give abnormal service. diags Pet Refiner 22:82-6 Mr '43

About air compressors. Power 87:119 F '43
Air cleaners; their construction and operation; for gas or gasoline engines. Diesel engines or air compressors. diags Diesel Power 21:725-7 Ag '43

Air raid signals operated by garage compressors. *il* Eng N 130:316 F 25 '43

Automobile ignition parts revamped for gas powered compressor. W. W. McCloy. *il* diags Power 86:886-7 D '42

Before you select air-compressor drive. C. G. Kohl. *il* Power 87:376-7+ Je '43

Broom and Wade combined air compressor and vacuum pump. *il* diags Engineering 155:127 F 12 '43

Compressed air for war production; special section. diags Power 87:237-52 Ap '43

Compressor auxiliaries increase efficiency; air receivers; aftercoolers, filters, etc. diags Chem Ind 53:370+ S '43; Same. Nat Pet N 35 pt 2:R416-17 S 1 '43; Same. Eng & Min J 144:38-9 O '43; Same. Paper Ind 25:396+ N '43

Compressor piston-ring leakage. diags Power 87:549-51+ Ag '43

Getting along with obsolete machinery. J. E. Hess. Eng & Min J 143:67-8 N '42

How to get the most from compressed air. C. W. Gibbs. *il* diags Factory Management 100:119-23 D '42

Keeping compressed air plants in shape. diags Power Pl Eng 47:96-7 O '43

Leakoff valve improves air-compressor operation. H. M. Naylor. diags Power 87:192-3 Mr '43

Model power house of C. F. Braun & co. C. B. Bason. *il* Comp Air M 48:7055-9 Je '43

More storage capacity reduces compressor load; with cost data. G. C. Tucker. *il* Power 87:91-2 F '43

Needs more air; increasing capacity. Power 87:58-9 Ja '43

New rotary compressor. A. J. R. Lysholm. *il* diags Engineering 155:97-100 Ja 29 '43

Proper care of compressed air plants. E. C. Powers. diags Blast F & Steel Pl 31:342, 344-5, 366-7 Mr '43; Same. Pet Eng 14:117-18, 121-2+ Ap '43; Same cond. Cer Ind 40:39-41 Mr '43; Same cond. Aviation 42:179-80+ Ap '43

Putting the air in air-spun; compressed air finds a new use in preparing cosmetic powders and rouge. S. M. Dunham. *il* Power 86:890-1 D '42

Recognize air-compressor troubles by their early symptoms. H. H. Miller. diags Power 87:449-51+ JI '43

Short questions, quick answers about air compressors. Power 87:60 Ja '43

Utilizing exhaust steam at Cast armor plant; plant supplies steam for compressed air requirements, low-pressure process and heating. P. Preuthon and P. N. Choporis. *il* diags Power Pl Eng 47:62-5 N '43

Varnish in air control mechanism; what to do about it. J. W. Lane. *il* Bus Transportation 22:28-30 Je '43

Victory in the grounded air; operation and maintenance of compressors. W. H. Wheeler. *il* Power Pl Eng 47:85-6+ Ap '43

Wartime compressor maintenance. C. W. Gibbs. *il* Comp Air M 48:7010-11 Ap '43

When starting the compressor. diags Eng & Min J 144:82 Ap '43

See also

Compressed air

Cost of operation

Let's compare compressed-air fuel costs. *il* Power 87:740-2 N '43

Lubrication

Lubrication and compressors. diags Eng & Min J 144:78 My '43

Protection

Are protective devices making your air compressor foolproof? H. H. Miller. *il* diags Power 87:612-13+ S '43

Repair

Worn compressor shaft metallized in place. *il* diags Comp Air M 48:7118-19 Ag '43;
Same cond. Roads & Bridges 81:62+ S '43

Safety measures

Air compressor protection. diags Power 87:194-6 Mr '43

Principle of the safety cylinder as an explosion preventer in air-gas compression. F. Squires. *il* diags Oil & Gas J 41:83-4+ Ap 8 '43

Testing

Compressors under test lick air shortage threatening production; Schramm, inc. H. J. Schramm. *il* Power 87:596-7 S '43

AIR compressors, Portable

How to get the most out of your portable air compressor. *il* Roads & Ss 86:87-8 O '43

Truck adapted to use of air-operated tools; Rockland light & power company. E. M. Bush. *il* Elec W 120:808-10 S 4 '43

AIR conditioning

Air conditioned trailer for engineers building advance bases. *il* Refrig Eng 46:119 Ag '43

Air conditioning a bowling hall. Sheet Metal Worker 33:48 N '42

Air conditioning goes to war. M. Ingels. *il* Heating-Piping 15:20-4 Ja '43

Court house system combines panel heating and cooling, conditioning; Yakima County, Wash. court house. E. L. Weber. diags Heating-Piping 15:13-15 Ja '43

Heat pump. T. F. Wall. diags Engineering 155:221 Mr 19 '43

Heating; the future indoor climate industry. W. E. McFee. Sheet Metal Worker 34:36, 39+ Je '43; Excerpts. Dom Eng 161:84 Je '43

How air conditioning has advanced refrigeration. W. H. Carrier. Mech Eng 65:332-4 My '43

How to meet war time restrictions in heating and air conditioning design. T. W. Reynolds. Heat & Ven 40:60B-60L F; 50-3 Mr; 62-3 Ap '43

Humidity control in underground bombproof spaces. E. Ledoux. *il* diags Heating-Piping 14:6-8, 364-6; 15:34-6 Ja, Je '42, Ja '43

If Uncle Sam drafts your refrigerating compressors you can still maintain air conditioning service. W. L. Fleisher. Power Pl Eng 47:112, 114 Ag '43

Information and filter centers keep tab on all aircraft in sky; heating, ventilating, and cooling problems. S. R. Lewis. *il* Heating-Piping 15:89-90 F '43

Lighting and air conditioning. H. M. Sharp. *il* Heat & Ven 39:36-46 N '42

Practical application of recent developments in theory to air conditioning design problems. W. Goodman. Heating-Piping 15:82-5 F '43

Reverse refrigeration cycle for winter and summer air conditioning. H. R. Sewell. Refrig Eng 45:328-30 My '43

Save, simplify, substitute! L. T. Avery. *il* plans Heat & Ven 40:67-70 Ja '43

Study of actual vs. predicted cooling load on an air conditioning system. J. N. Livermore. *il* diags Heating-Piping 15:197-204 Ap '43; Discussion. 15:377-8 JI '43

What's the matter with air conditioning as tomorrow's method; with cost data. L. T. Avery. Heat & Ven 40:57-9 Ap '43

See also

Air conditioning equipment

Air conditioning industries

Car cooling

Cold storage

Cooling

Deodorizers

Electricity in air conditioning

Gas in air conditioning

Heating

Humidity

Smoke prevention

Ventilation

also subdivision Air conditioning under special subjects, e.g.

Airplane factories

Libraries buildings

Moving picture

theaters

Munition factories

AIR conditioning—See also—*Continued*

Museums Radio broadcasting
Office buildings studios
Petroleum refineries Textile mills

Bibliography

Reprints of ASHVE papers; list. Heating-Piping 15:58-63 Ja '43

Hygienic aspects

Relationship of disease and weather studied at Northwestern university medical school in air conditioned room. H. Kreisman. *il* diags Heat & Ven 40:61-6 F '43

Specifications

Preparing the specifications for small arms munitions plants. J. J. Woolfenden. *il* Heating-Piping 15:282-6 Je '43

Study and teaching

Air conditioning and heating laboratory supplements classroom instruction at Syracuse university. J. H. Carpenter. *il* diag Heating-Piping 15:592-5 N '43

Heating and air conditioning curriculum. J. James. *J Eng Educ* 33:251-9 N '42

Tables, calculations, etc.

See also

Cooling—Tables, calculations, etc.

AIR conditioning, Industrial

Air-conditioned blast furnaces. F. T. Sisco. *Min & Met* 24:18 Ja '43

Air-conditioned room insures quality gages for war work; Axelson manufacturing co. C. O. Herb. *il* Mach 49:192-6 D '42; Excerpt. Heat & Ven 40:32-4 Mr '43

Air conditioned room used for refrigeration life tests; Philco corp. Engineering division, Philadelphia. H. K. Sellick. *il* plans Heat & Ven 40:58-60 F '43

Air conditioning a tool of the testing engineer. W. N. Findley. *il* Heating-Piping 15:421-2 Ag '43

Air conditioning aids in artillery optical equipment manufacture; Bausch & Lomb. Heat & Ven 40:46 Ag '43

Air conditioning helps production in many ways. L. W. Clifford. *il* Aero Digest 43:217, 219 S '43

Air conditioning insures nut quality; electrically air conditioned storeroom for California walnut growers assn. *il* Elec West 89:63 D '42

Air conditioning makes possible precision production for war. L. W. Clifford. *il* Heating-Piping 15:132-3 Mr '43

Air conditioning used in lens manufacture; Bausch and Lomb. Refrig Eng 46:181 S '43; Same abstr. Heat & Ven 40:56-7 Ag '43

Air conditioning used in processing human serum albumin. Heating-Piping 15:156 O '43

Allied plastics company manufactures plastic lenses for gas masks in room kept free from dust. *il* Heat & Ven 40:51-3 Ja '43

Atmospheric control. H. E. Ziel. *diags Arch Rec* 93:58 F '43

Behr-Manning corporation; high pressure hot water heating system; drying system to facilitate production of abrasives and war materials. J. O. Amstutz and J. F. Gschwind. *il* diag Heat & Ven 40:41-5 Ja '43

Better orchids by air conditioning of greenhouse. *il* diags Sheet Metal Worker 34:42, 44, 46 S '43

Bone dry or three grains? three papers on conditioning air for blast furnaces. R. H. Sweetser and others. *il* Heating-Piping 15:249-53 My '43

Controlled humidity steps up production of army gun sights. *Glass Ind* 24:116 Mr '43

Cotton cord conditioned in manufacture of tires; Goodrich company. Refrig Eng 45:243 My '43

Curing room in Denver's laboratory is automatically operated. A. Cavarra. *il* Concrete 51:33 Jl '43

Direct dehumidification by solid adsorption as applied in industrial refrigeration processes. G. L. Simpson. *il* Refrig Eng 45:246-50 Ap '43

Direct-fired air heaters designed for dehydration and chemical processes. R. M. Rush and B. B. Reilly. *il* diags Mech Eng 65:511-14 Jl '43

Dry blast production; abstract. D. Wolochow. *Metals & Alloys* 16:924+ N '42

Effect of moisture in blast air. R. J. Cowan. *il* diags Iron Age 150:43-50 N 12; 46-50 N 19 '42

Fighting plane radio parts tested in controlled atmosphere room. Heat & Ven 40:66 F '43

Food dehydration and air conditioning; reference section. *il* diags Heat & Ven 39:36-60 D '42

Frozen precision; war plants seek humidity and temperature control. *il* Business Week p82+ F 6 '43

In full-fashioned hosiery mills temperature and humidity requirements have changed due to use of new fibers. Textile World 93:95 O '43

Industrial air control. M. Ingels. *il* Sci Am 168:104-6 Mr '43

Low temperature cabinets. R. H. Swart. *il* diag Refrig Eng 46:17-20, 39, 52-3+ Jl '43

Make heating and ventilating survey at insulite plant of M. & O. paper co.; Engineering experiment station, University of Minnesota. F. E. Rowley, R. C. Jordan and C. E. Lund. *il* Paper Tr J 115:9-11 D 31 '42

Makeshift air conditioning. Inland Ptr 112:71-2 O '43

Marine propulsion gears are hobbled in rooms using air conditioning units. L. W. Clifford. Heat & Ven 40:60 F '43

Midwest ordnance plant uses refrigeration and gas heat to shock test 37-mm. shot. *il* Heat & Ven 39:52 N '42

Natural gas solves the problems of a gelatin producer; air dryer. C. Culbertson. *il* diag Gas Age 92:15-16+ Ag 12 '43

Parachutes in tropics protected by air conditioning. Heat & Ven 40:58 Jl '43

Picatinny arsenal uses air conditioning to improve powder and shell performance. H. W. Macdonald, Jr. *il* diags Heat & Ven 40:74-83 Je '43

Removal of refrigeration equipment from existing comfort conditioning systems for use in war production. C. S. Leopold. Heating-Piping 15:78-9 F '43

Romanoff caviar company finds packaging of bouillon cubes easy in air conditioned room. A. A. Giannini. *il* plan Heat & Ven 40:62-3 Ja '43

Spot air conditioning speeds war. L. W. Clifford. *il* Heat & Ven 40:78-80 My '43

United States navy materials testing laboratory; applications of air conditioning, ventilating and heating. F. J. Rice. *il* diags Heat & Ven 40:64-61 Ja '43

War industries make wide use of gas-fired dehumidifiers; subcommittee report to annual convention of American gas association. *il* Heat & Ven 39:50-1 N '42

Westinghouse lamp division finds air conditioning indispensable in manufacture of electronic tubes. *il* Heat & Ven 40:56 Ap '43

See also

Dehumidifiers

Humidifiers

AIR conditioning equipment

Air conditioning equipment of Pentagon building. *il* plan Sheet Metal Worker 34:32, 34+ F '43

Central air conditioning vs. unit system under war conditions. T. W. Reynolds. Heat & Ven 40:33+ O '43

Complete air conditioning features Washington's new Hotel Statler. M. J. Wilson. *il* diag Heat & Ven 40:41-4 Ag '43

Conditioned air can't go on the air at Hollywood Radio City; maintenance of sound-proof system. H. C. Alber. *il* Heating-Piping 15:476 S '43

Railroad air conditioning. G. T. Wilson. *il* Refrig Eng 45:323-6+ My '43

Relationship of disease and weather studied at Northwestern university medical school in air conditioned room. H. Kreisman. *il* diags Heat & Ven 40:61-6 F '43

Review of power and mechanical equipment; heating, ventilating, refrigerating, air conditioning. *il* Power 86:933-5 Mid-D '42

AIR conditioning equipment—Continued

Water sprayed, direct, expansion coils. W. Goodman. diag chart Heating-Piping 15: 165-8, 243-8, 295-9, 350-2 Ap-Jl '43

See also

Air filters Gas in air conditioning
Cooling equipment ing
Dehumidifiers Heat pump
Fans, Mechanical Humidifiers

Control

Consolidated aircraft corporation; air conditioning systems. Heat & Ven 40:35 Ja '43

Design

Practical application of recent developments in theory to air conditioning design problems. W. Goodman. diag Heating-Piping 14:730-4; 15:28-30 D '42-Ja '43

Maintenance and repair

Preventive maintenance keeps motors on job. B. M. Brown and W. W. McCullough. il Heating-Piping 15:505-9 O '43

Manufacture

Women in the air conditioning industry; Carrier corp. M. Ingels. il Heating-Piping 15:447-9 S '43

Safety measures

Picatinny arsenal uses air conditioning to improve powder and shell performance. H. W. Macdonald, jr. il diags Heat & Ven 40:74-83 Je '43

Protection of pressure vessels with rupture discs. C. E. Huff. il Refrig Eng 46:312-15+ N '43

Safety requirements for sterilamps in air conditioning systems. A. R. Dennington. il diags Heat & Ven 40:46-9 Mr '43

Testing

Cooling, dehumidifying; measuring capacities of air-conditioning equipment by the electric-calorimeter method. H. A. Whitesel. diags Gen Elec R 45:653-6 N '42

Water requirements

Lime clogging, slime are air conditioning problems. R. D. Touton. Heating-Piping 15: 399 Ag '43

Water spray versus sun heat; roof spray systems for supplementing air conditioning. Dom Eng 160:56+ D '42

AIR conditioning industries

Functional operating organization of industry advisory committees to Refrigeration and air conditioning section, General industrial equipment division, War production board; chart. Refrig Eng 45:336 My '43

Indoor climate institute being formed. Gas Age 92:27-8 Jl 1 '43; Same. Dom Eng 161: 82+ Je '43

Indoor climate institute is formally organized. Heating-Piping 15:154+ O '43; Elec W News ed 120:1276 O 9 '43

Indoor climate; plans for formation of industry-wide cooperative educational program. Arch Rec 94:12+ Jl '43

Post-war planning for the plumbing, heating and air conditioning industry. Dom Eng 161:58+ My '43

Regulations and amendments; WPB, OPA, PAW, etc. Heating-Piping 15:532-9 O '43

Serve sponsors post-war series on air conditioning. Gas Age 92:34, 36, 38 Ag 12 '43

Directories

Directory section; names and addresses of manufacturers of equipment and products used in warm-air heating, air conditioning, ventilation and sheet metal work. Sheet Metal Worker 34:117-34 Ja '43

1943 directory of heating, piping and air conditioning equipment for industry and large buildings; classified by products, trade names and manufacturers' addresses. Heating-Piping 15:211-305 Ja '43

Statistics

Demand for refrigeration. D. L. Fiske. Refrig Eng 46:339-41 N '43

Value of orders booked, 1942 and 1941; tabulation. Sheet Metal Worker 34:54 Mr '43

AIR conditioning of cars. See Car cooling

AIR conditions*See also*

Air—Analysis Atmospheric tem-
Air conditioning perature
Air flow Dust
Air pollution Humidity
Air purification Ventilation
Atmospheric pressure

AIR defenses. See Air raids—Protective measures; Guns, Anti-aircraft

AIR diffusers

Air diffusion with ceiling outlets. il diags Sheet Metal Worker 34:90-5 Ja '43

AIR entrainment. See Water flow

AIR express service

Air express in war-time; textile industry avoids production delays by speed in getting samples, parts, dyes, etc. il Textile World 93:142 O '43

Air transport charts routes to new horizons; portion of part II, section I, of the study, Transportation and national policy, issued by the National resources planning board. J. P. Van Zandt. Aviation 42:200+ O '43

Airlines free to make new express contracts. Civil Aero J 41:44 Ap 15 '43

Packaging and handling of air cargo. C. G. Peterson. S A E J 51:210-19 Je '43

See also

Air lines—Freight service
Airplanes, Freight

AIR filters

Air filters; getting best service from air conditioning equipment for cars. J. V. Dobbs; W. J. Dawson. il Ry Mech Eng 117:339 Jl '43

Glass filters. Engineering 156:266-7 O 1 '43

He wants air filters to last longer; home made filter. G. Deichmann. diags Power Pl Eng 47:102+ Ap '43

How to layout Diesel intake systems. G. Boyer. diags Power 87:111-13+ F '43

Know your dust; filtration of air on conditioned railroad equipment. il Ry Mech Eng 117:490 O '43

Modern production system installed at new plant of Skinner purifiers, inc. il Automotive & Aviation Ind 59:43+ S 1 '43

Windowless plant features special air filters; Cleveland graphite bronze company. il Comp Air M 48:6988 Mr '43

See also

Airplane engines—Air filters

Testing

Discoloration methods of rating air filters. F. B. Rowley and R. C. Jordan. il Heating-Piping 15:487-94 S '43

AIR flow

Air flow through side outlets on horizontal ducts. D. W. Nelson and G. E. Smedberg. il diags Sheet Metal Worker 34:34, 36+ Mr '43

Airflow visualization opens new avenues of research; use of photography and projection apparatus. E. J. Saxl. bibliog il diags Aviation 42:148-51+ Ap '43

Apparatus for measuring air flow during inspiration. R. C. Lee and L. Silverman. bibliog il diags R Soc Instr 14:174-81 Je '43

Balancing air flow to get the benefits of split currents; using a booster fan; making new openings or sinking new shafts. J. H. Dickerson. diags Coal Age 48:92-4 My '43

Centerline velocity characteristics of round openings under suction. L. Silverman. bibliog il J Ind Hygiene 24:259-66 N '42

Design of the contraction cone for a wind tunnel. H. Tsien. diag J Aeronautical Sci 10:68-70 F '43

How to design exhaust hoods; theory of flow into an opening. J. M. Dalla Valle. Heat & Ven 40:40-2 Mr '43

How to design exhaust hoods; velocity characteristics of common types experimentally determined. J. M. Dalla Valle. diags Heat & Ven 40:44-52 Ap; 83-6 My; 91-5 Je '43

Pressure losses in registers and stackheads in forced warm-air heating. A. E. Kratz and S. Konzo. il diags il U Eng Exp Sta Bul 342:1-58 '43 (pa 65c); Abstract. Sheet Metal Worker 34:48-50 Jl; 53-5 Ag '43

AIR flow—Continued

Specific surface measurements on compact bundles of parallel fibers. R. R. Sullivan. *bibliog J Ap Phys* 13:726-30 N '42

Speeding up measurements of air flow to aircraft engines and carburetors; adjustable orifices. J. P. Green. *il diags Instruments* 16:54-8+ F '43

Velocity characteristics of narrow exhaust slots. L. Silverman. *bibliog diags J Ind Hygiene* 24:267-76 N '42

Velocity equivalents of gage readings; reference data. Heat & Ven 40:98a-98b Je '43

See also

Aerodynamics
Compressed air
Gas flow

AIR hose, Plastic

Air hose for life rafts. *il Mod Plastics* 20: 74 Mr '43

AIR lifts

Air lift pump used to clean sewage-disposal grit chambers. N. M. Fuller. *diag Eng N* 130:567 Ap 22 '43; Same. *Water & Sewage* 81:130-1 Je '43

Air lift removes grit from settling tank. *diag Comp Air M* 43:7123 Ag '43

Faster shaft sinking possible with air lift. S. F. Shaw. *bibliog diag Eng & Min J* 144:70-2 Ag '43

Raising oil and water from oil wells by combination air-lift methods. S. F. Shaw. *Oil & Gas J* 41:51+ D 10 '42

Thirty years' experience with deep well pumping equipment; with cost data. L. A. Smith. *il Pub Works* 74:14-16 Ja '43

AIR lines

Air service starts from Louisiana to Panama. W. Van Dusen. *il map Manuf Rec* 112:31, 56 Jl '43

Air transport command and the air lines. H. L. George. *il Air Transport* 1:22-5 S '43

Educational requirements for airline transportation engineering. G. H. Tweney. *J Eng Educ* 33:676-80 My '43

Eleventh annual meeting of the Institute of the aeronautical sciences; review of technical papers. A. Klemm. *Aeronautical Eng R* 2:15-16 Ap '43

Future of air commerce; abstract. M. H. Anderson. *S A E J* 51:sup43-4 Jl '43

Postwar skyways. W. W. Davies. *Business Week* p20+ My 15 '43

Post-war transport aircraft. E. P. Warner. *il Roy Aeronautical Soc J* 47:185-256 Jl '43; Same *abr. Aeronautical Eng R* 2:7+ O '43; Same *cond. Engineering* 156:95-6, 136, 216-17, 285-6, 337-8, 396-7, 437 JI 30 Ag 13, S 10, O 8, 22, N 12, 26 '43 (to be cont)

See also

Aeronautics, Commercial	Pan American airways
Air mail service	Railroads—Air line subsidiaries
Airports	
Motor bus lines—Airplane auxiliaries	

Accidents

Airline accident statistics 1938-June 1943; tabulations. *Civil Aero J* 4:139-42 O 15 '43

Advertising

Airline ad features employees' service pledge. *Ptr Ink* 203:51 Ap 30 '43

ANPA intervenes in airline ad hearing; files petition as friend of court. *Ptr Ink* 203:100 My 7 '43

Branniff talks to Main streeters about post-war air travel. *il Sales Management* 52: 96-7 JI 15 '43

Government reviews airline advertising expenditures. J. H. Frederick. *Ptr Ink* 203: 62+ Ap 2 '43; Reply (Civil aeronautics board defends right to set airline expenditures). L. W. Pogue. *Ptr Ink* 203:42 Ap 23 '43

Costs

Economics of post-war carriage of air cargo. J. V. Sheehan. *S A E J* 51:362-8 O '43

Engineering of power control and altitude selection in air-line operation. R. D. Spears. *diag Aeronautical Eng R* 2:23+ JI '43

Post-war transport aircraft. E. P. Warner. *Roy Aeronautical Soc J* 47:195-216 Jl '43; Same. *Aeronautical Eng R* 2:15+ O '43; Same *cond. Engineering* 156:217, 285-6, 337-8 S 10, O 8, 22 '43

Value of a pound saved by weight control. J. E. Ayers. *Aero Digest* 41:238, 241-2, 245-6+ N '42

Directories

Directory of United States airlines. *Aviation* 42:271-2 F '43

Employees

Medical program for aviation. R. A. McFarland. *Harvard Business R* 22 no 1:93-127 [O] '43

Womanpower in airline maintenance shops. C. N. James. *il Aviation* 41:126-7+ D '42

Fares

Ask air fare cut; Civil aeronautics board. *Business Week* p35+ Mr 13 '43

Plane rates cut. *Business Week* p26+ JI 24 '43

Finance

Air transport charts routes to new horizons; portion of part II, section I, of the study, Transportation and national policy, issued by the National resources planning board. J. P. Van Zandt. *Aviation* 42:198-200+ O '43

Air line earnings and outlook. S. Altschul. *Barron's* 22:9 N 23 '42

Air line earnings at peak levels. R. S. Allen. *Barron's* 23:16 JI 5 '43

Airline earnings up sharply. A. W. Kleinbaum. *Barron's* 23:26-7 Ja 11 '43

Airlines' revenue up 132% in year. *Aviation* N 1:21-2 Ag 23 '43

Analysis of transcontinental lines shows best record made by United. R. Wilco. *Aviation* N 1:32-3 S 6 '43

Aviation's future trends. S. Altschul. *Aviation* 41:249+ D '42

Banking on air; smaller companies already have started to raise money for postwar airline expansion. *Business Week* p 114+ Ag 28 '43

Big airplanes will mean big airlines; costs can be reduced as commercial transports increase in size. C. R. Harrower. *Barron's* 22:3 D 14 '42

Domestic airlines' balance sheet, May 31, 1943; comparative statement of income and expenses for five months ending May 31, 1943; percentages expressed in cost per revenue plane-mile; statistics, first five months, 1943; tabulations. *Air Transport* 1: 96-7 S '43 [cont monthly]

Financial news. Published in weekly numbers of *Aviation* news

Financing the airlines. S. Altschul. *Aviation* 41:219, 221+ N '42

Future of air transport. W. Gates. *il Mag of Wall St* 71:407-10+ Ja 23 '43

Future of air transport; post-war outlook favorable. R. W. Babson. *Comm & Fin Chr* 158:1509+ O 14 '43

Future of airline industry; rate of return on capital may be high. A. W. Kleinbaum. *Barron's* 23:3-4 Ja 4 '43

IBA group to study post-war prospects for transportation expansion and financing. *Comm & Fin Chr* 158:3+ JI 1 '43

Market values industry at almost \$200,000,000. R. Wilco. *Air Transport* 1:69, 72 S '43

Shifting prospects for airline revenue and profits. R. L. Hoadley. *Aviation* 42:205, 207+ Ap '43

TWA turns South; buys 22 1/2% of air express carrier in Central America. *Business Week* p110 O 23 '43

Freight service

Air cargo economically limited; S.A.E. discussion. J. V. Sheehan; C. G. Peterson; E. S. Evans. *Ry Age* 113:1032-4 D 26 '42

Air cargo engineering meeting under the auspices of Chicago section of SAE. E. M. Ikert. *il Automotive & Aviation Ind* 88:36-7+ Ja 1 '43

Air cargo fight simmers. *Business Week* p48+ My 1 '43

Air cargo; how army experience will serve the Nation's air transportation in the post-war period. O. P. Echols. *il S A E J* 51: sup 17-19, 34-6 N '43

AIR lines—Freight service—Continued

- Air cargo soars. *Business Week* p30+ D 19 '42
- Air cargo today and its influence in the post-war world. L. W. Pogue. *il Aeronautical Eng R* 2:31+ Mr '43
- Air vs. rail and water transport in the post-war world. W. A. Patterson. *il Automotive & Aviation Ind* 87:17-19, 66+ D 15 '42
- Cargo glider pickup. R. C. du Pont. *il Mech Eng* 65:35-9 Ja '43
- Cargo planes' priority passenger; analysis of vital role of gasoline in air transport. *il Pet Refiner* 22:122, 124, 126 Ap '43
- Developing wider cargo markets. R. K. Kinzel. *il Aviation* 41:244-6+ D '42
- Don't underestimate the airplane; ton-mile costs invading railroad freight service predicted. E. S. Evans. *Ry Age* 114:952-4 My 15 '43
- Economics of post-war carriage of air cargo. J. V. Sheehan. *S A E J* 51:362-8 O '43
- Engineering design for air cargo system; SAE air cargo engineering meeting. Chicago, Dec. 8-9; with abstracts of papers. *S A E J* 51:sup15-19+ Ja '43
- Expansion of post-war air transportation. H. R. Stringer. *il Aero Digest* 42:95-6+ F '43
- Freight transport by air in Latin America. J. P. Van Zandt. *il Automotive & Aviation Ind* 88:24-5+ Ja 15 '43
- Ground time spells profit or loss in the air freight field. W. A. Lipman, Jr. *il diags Aviation* 42:232-3+ Mr '43
- Lights for bailed-out bales; colored plastic lamps lashed to aerial delivery containers. *il Mod Plastics* 20:45-6 F '43
- Packaging and handling of air cargo. C. G. Peterson. *S A E J* 51:210-19 Je '43
- Perfect shipping by air. P. H. Cummings. *il Manuf Rec* 112:33+ Ap '43
- Regulations for air-express shipments revised by Brazil. *For Comm W* 13:21 O 23 '43
- Terminal handling of air cargo. K. O. Larson. *S A E J* 51:285-8+ Ag '43
- What containers for the sky trains? *il Mod Packaging* 17:46-9+ S '43
- Who should carry air cargo? J. H. Frederick. *il Aviation* 42:255, 257+ Ja '43
- Will air take over freight business after V-day? pictograph. *Sales Management* 52: 48 Mr 15 '43
- See also*
- Air express service
- Airplanes, Freight

Bibliography

- Air cargo. A. G. Renstrom. *Aeronautical Eng R* 2:61+ O '43

Government ownership

- State monopoly; Dominion plans to run its international airlines and may operate ships. *Business Week* p106-7 My 22 '43

Information service

- Make your reservations early; UAL's system of handling passenger traffic. *il Aviation* 42:199, 201 N '43

Insignia

- Insignia on exhibition in archives of Institute of the aeronautical sciences. *Aeronautical Eng R* 2:153, 155-6 Jl '43

Laboratories

- American Airlines' materials laboratory gets paying results. *il diags Aviation* 42:235, 237+ Mr '43

Maintenance and repair

- American and Continental win Aviation's maintenance award. *Aviation* 41:113 D '42
- Continuous overhaul on PAA clippers. D. Baker. *Aviation* 42:211-12+ S '43
- Controlled maintenance; United air lines. *il Aviation* 42:216+ Je '43
- Engineering in airline maintenance; Trans-Canada air lines. *il Aviation* 42:213-15+ O '43
- Instrumentation aids United air lines to set new records in air transportation. W. C. Mentzer. *il Instruments* 16:5-7 Ja '43
- It's like the old shoe—it fits; why airline maintenance is as good and better now than ever before. P. E. Richter. *il Aviation* 41:102-3+ D '42

- Maintenance by production methods. H. W. Anderson. *il Air Transport* 1:51, 55, 57-8 S '43

- Wheel maintenance at American Airlines. R. Miller. *il diags Aviation* 42:245-7+ Mr '43

See also

- Air lines—Shops

Management

- Cruise 'control for flying efficiency. R. D. Spears, J. T. Farrah and S. Hinton. *il diags Aviation* 42:202-3, 205+ Jl; 207, 209, 211+ Ag; 204-5, 207+ S; 203, 205-6+ O '43
- Engineering of power control and altitude selection in air-line operation. R. D. Spears. *diags Aeronautical Eng R* 2:23+ Jl '43
- Materials and processes. Published in monthly numbers of *Air transport*

Pick-up service

- Feeder airlines pose problems; Nation's post-war transport system. J. H. Frederick. *il Aviation* 42:227, 229+ My '43
- Pick-up applicants offer to serve small towns. *Civil Aero J* 4:41+ Ap 15 '43

Radio communication

- CAA; charged with the safety of aircraft and planning of radio networks and devices. *il Radio N* 29:100-130+ Je '43
- Training radio ops for the airlines. L. Wimmer. *il Radio N* 28:34-6+ D '42

See also

- Airways—Traffic control

Records

- This plan simplifies travel records; Pan American airways system controls and analyzes passenger reservations with punched card system. *il Am Business* 13: 20-1+ O '43

Regulation

- Approval of United's purchase of Mexican line sets precedent. M. Mickel. *Aviation N* 1:27 O 4 '43
- Regulatory stability for air transport industry. H. L. Federman. *Aviation* 42:239+ Mr '43

Safety measures

- CAB studies signs on airliner exits. *Aviation N* 1:29 O 4 '43
- Housekeeping works to win in air line shops. G. F. Tyler. *il Nat Safety N* 48:18-19, 84+ N '43
- Safety for women in airline maintenance and overhaul; abstract. R. P. Russell. *Safety Eng* 85:26+ Ap '43
- United for safety. J. Curtis. *il Nat Safety N* 48:70-1+ O '43

Sanitation

- Sanitation manual for land and air conveyances operating in interstate traffic. *Pub Health Rep* 58:159-93 Ja 29 '43

Securities

- Future of air line securities. *Comm & Fin Chr* 157:1371+ Ap 15 '43
- Market values industry at almost \$200,000,000. R. Wilco. *Air Transport* 1:69 S '43
- Wanted; a haven for aviation securities; analysis of investment trust holdings shows both transport and manufacturing stocks dropped from trust portfolios. H. L. Federman. *Aviation* 42:183+ S '43

Shops

- Adapting assembly line techniques to engine overhaul; Chicago and Southern air lines' shops. *il Aviation* 41:120-1 D '42
- How AA's propeller shop keeps 'em turning. E. E. Thorp. *il plan Aviation* 42:205, 207-8+ N '43
- Servicing civil aircraft; British overseas airways corporation. *il Engineer* 174:387-8 N 6 '42
- Womanpower in airline maintenance shops. C. N. James. *il Aviation* 41:126-7+ D '42
- See also*
- Airplane repair stations

AIR lines—Continued

Statistics

Air carrier operations statistics; domestic operations by routes for January-June 1943; tabulations. Civil Aero J 4:134-6 O 15 '43
 Air traffic soaring to new highs; some gains 100% over last year. M. Mickel. Aviation N 1:26 Ag 30 '43
 Airline gains impressive despite 50% equipment cut. Aviation 42:211-4 Je '43
 Airlines report big traffic increase. Aviation N 1:23 Ag 9 '43
 Domestic air carrier operation statistics for the first 10 months of 1942 compared with the same period of 1941; tabulation. Civil Aero J 4:7 Ja 15 '43 [cont monthly]
 Domestic air carrier operation statistics for the month of October 1942; tabulation. Civil Aero J 4:6-7 Ja 15 '43 [cont monthly]
 Domestic air carrier operations statistics for the year 1942. Civil Aero J 4:118-19 S 15 '43
 Domestic airlines' balance sheet, May 31, 1943; comparative statement of income and expenses for five months ending May 31, 1943; percentages expressed in cost per revenue plane-mile; statistics, first five months, 1943; tabulations. Air Transport 1:36-7 S '43 [cont monthly]
 Eight years of domestic air carrier progress; charts. Civil Aero J 4:148-9 Ap 15 '43
 Miles flown, passengers and express carried on scheduled air lines, by years, 1930-1942; chart and table. Automotive & Aviation Ind 88:96 Mr 15 '43
 Operations on scheduled airlines, 1938-1941. Survey of Our Business 1942 Sup p99-100 [supplemented in monthly numbers]
 Some air transport statistics of particular interest; charts. Aviation 42:120-1 F '43

Terminals

Terminal handling of air cargo. K. O. Larson. S A E J 51:285-8+ Ag '43

See also

Airport buildings
 Airports

Traffic

Airlines' record. Business Week p14-15 Ja 30 '43
 Decade of air passenger transportation; pictograph. Sales Management 52:46 F 15 '43
 What of post-war passenger traffic, by air, between the Americas? W. A. M. Burden. For Comm W 11:15 Je 19 '43

Transoceanic lines

Air policy pleases; Roosevelt's postwar plan wins operators' approval; with list of applications for foreign air services. map Business Week p18-20+ O 9 '43
 Airlines look west to Orient; east to Moscow. Civil Aero J 4:57+ My 15 '43
 Airways opening; competitive trends in foreign air service. Business Week p32+ Mr 27 '43
 Board eyes seaborne mail as base cargo for air service. Civil Aero J 4:127-8 O 15 '43
 British air transport committee protests American plans for post war airlines. Comm & Fin Chr 158:1236 S 23 '43
 Canada plans world air role; government-owned company prepares to fly ocean routes. J. Montagnes. maps Barron's 23:3 Ag 30 '43
 Canada's postwar air policy. map Fortune 27:90-2 My '43
 CAB says 142 to 235 transports could fly all overseas mail. M. Mickel. Aviation N 1:7-8 S 27 '43
 Five airlines ask routes to Europe, Caribbean, Latin America, Hawaii. Civil Aero J 4:134 O 15 '43
 Maritime commission studying combined ship-air operations. Aviation N 1:22 Ag 9 '43
 Oceanic air traffic won't permit stiff competition. W. A. Patterson. Aviation N 1:25-6 O 11 '43
 Pan American Airways system; ten years' progress. W. L. Van Dusen. il Aeronautical Eng R 1:99 N '42
 PCA requests 100 cities in 23 states; files its seadrome application. Aviation N 1:18 S 13 '43

Postwar airlines. Business Week p19-20 F 27 '43
 Scramble for air; Northeast airlines bid for a Boston-Moscow line. Business Week p64+ Ap 10 '43
 Sea-air lines? case for making transportation by ships and planes a joint enterprise. Business Week p30+ J1 31 '43
 Skyblazed Africa and the East "way back when"; how England launched prewar air routes. il Aviation 42:196-7+ N '43

Alaska

21 Alaskan carriers granted certificates. Civil Aero J 4:5 Ja 15 '43

Argentina

Argentina's air lines. M. B. MacKrell. il For Comm W 12:10-11 J1 3 '43

Bolivia

Aviation in Bolivia. M. B. MacKrell. il For Comm W 12:8-9 J1 31 '43

Canada

Canada plans world air role; government-owned company prepares to fly ocean routes. J. Montagnes. maps Barron's 23:3 Ag 30 '43
 State monopoly; Dominion plans to run its international airlines and may operate ships. Business Week p106-7 My 22 '43

China

Aviation in Free China today. For Comm W 13:19 O 30 '43
 China's last lifeline. il map Fortune 27:106-10+ My '43

Great Britain

Air transport. Economist 144:286-8, 309 Mr 6 '43
 New brooms; affairs of British overseas airways. Economist 144:421-2 Ap 3 '43
 Skyblazed Africa and the East "way back when"; how England launched prewar air routes. il Aviation 42:196-7+ N '43

Latin America

Air-transport market in Latin America. J. P. Van Zandt. il Mech Eng 65:649-52 S '43
 Airlines south; systems in Latin America expand. il Business Week p101-2+ J1 10 '43
 Freight transport by air in Latin America. J. P. Van Zandt. il Automotive & Aviation Ind 88:24-5+ Ja 15 '43

United States

Air dissension; eighteen domestic lines gang up on Pan America's post-war aspirations overseas. Business Week p26 J1 24 '43
 Air routes west; Denver is hub of postwar plans. map Business Week p20+ Je 12 '43
 Air transport charts routes to new horizons; portion of part II, section I, of the study, Transportation and national policy, issued by the National resources planning board. J. P. Van Zandt. Aviation 42:198-200+ O '43
 Air line contributions to national defense. W. Littlewood. Aeronautical Eng R 1:91 N '42
 Airlines form committee to boost post-war aims. Aero Digest 43:43-14 Ag '43
 Airlines urge caution in granting permits for feeder, pickup routes. Aviation N 1:20 O 11 '43
 Board opens feeder hearings. Aviation N 1: 2-9 O 4 '43
 Braniff airways, inc. and other leading air lines; ten years' progress. P. D. Niles and others. il Aeronautical Eng R 1:93-101 N '42
 Danger of "big 4" monopoly. C. B. Monro. Aviation N 1:11-12 O 11 '43
 Don't underestimate post-war airline possibilities; abstract. L. W. Pogue. Aviation N 1:7-8 O 25 '43
 Engineering the airways; problem is to handle traffic of 300,000 planes within three years after the war. il plan Fortune 28:128-33+ N '43
 Feeder airline's place in postwar America. J. G. Ray. il map Aviation 42:116-17+ N '43
 Feeder airlines pose problems; Nation's post-war transport system. J. H. Frederick. il Aviation 42:227, 229+ My '43

AIR lines—United States—Continued

Future equipment of the airlines. Aero Digest 42:146, 315-16 Je '43
 Future of airline industry. W. C. Hansen, Jr.; A. W. Kleinbaum. Barron's 23:3-4 Ja 4 '43

Good job done by airlines during 1942. Civil Aero J 4:41 Ap 15 '43

No ceiling on airline aims; Aeronautics board to permit only needed expansion. C. C. Cring. map Barron's 23:3+ N 8 '43

Officials of CAB praise data presented at feeder investigation. B. Frederick. Aviation N 1:27-8 N 1 '43

Post-war aviation. A. N. Kemp. Comm & Fin Chr 157:2357+ Je 24 '43

Post-war decade will see big air traffic gains. T. Wolfe. Aviation N 1:12 Ag 23 '43

Small cities seeking service. Steel 113:94 S 20 '43

Soldiers on world fronts act as sampling crew for U.S. goods; post-war air transport. H. Cray. Ptr Ink 203:56 My 14 '43

Status of certificated routes, United States air transportation system, May 15, 1943; map. Civil Aero J 4:88 Je 15 '43

TWA, United routes extended to Washington. Civil Aero J 4:79 Je 15 '43

Wanted, an air policy. J. R. Custer. Automotive & Aviation Ind 88:17-19+ Je 15 '43

War calls on the airlines; airlines have responded by flying more with less. L. W. Fogue. II Air Transport 1:29-31 S '43

Wings for future. Business Week p65 My 22 '43

See also

Civil aeronautics board
 United States—Air service, Army—Transport command

AIR mail service

Air transport charts routes to new horizons; portion of part II, section I, of the study, Transportation and national policy, issued by the National resources planning board. J. P. Van Zandt. Aviation 42:200+ O '43

Board eyes seaborne mail as base cargo for air service. Civil Aero J 4:127-8 O 15 '43

CAB reveals policy in C&S mail suit. Aviation N 1:30-1 N 1 '43

CAB says 142 to 235 transports could fly all overseas mail. M. Mickel. Aviation N 1:7-8 S 27 '43

Excess American mail pay not to be recaptured; sizeable cut in eastern mail pay ordered by Board. Civil Aero J 3:201+ D 15 '42

Feeders to grow; postwar expansion of air-mail service. II Business Week p64 Ap 10 '43

Government reviews airline advertising expenditures. J. H. Frederick. Ptr Ink 203: 62+ Ap 2 '43

Helicopter mail service would blanket New England. Ry Age 114:802 Ap 17 '43

Mail pay set at .3 mill for United and TWA. Civil Aero J 4:30 Mr 15 '43

New mail rates for Pennsylvania-Central airlines, inc. routes set by board. Civil Aero J 4:1+ Ja 15 '43

Pick-up applicants offer to serve small towns. Civil Aero J 4:41+ Ap 15 '43

Regulatory stability for air transport industry. H. L. Federman. Aviation 42:239+ Mr '43

Return of equipment to avert airmail service breakdown. L. W. Fogue. Aviation N 1:24-5 S 20 '43

See also

United States—Air service, Army—Transport command

History

High points in air mail growth. Civil Aero J 4:61 My 15 '43

25th year for U.S. air mail service. Civil Aero J 4:60 My 15 '43

AIR navigation. See Aviation

AIR patrol

Blimps on patrol. R. G. Picinich, jr. II Aero Digest 43:116-17+ J1 '43

Sub hunting by the coastal air patrol. II Aero Digest 42:113-14 My '43

AIR pilots. See Aviators

AIR pipes

Air flow through side outlets on horizontal ducts. D. W. Nelson and G. E. Smedberg. II diags Sheet Metal Worker 34:34, 36+ Mr '43

Alternate material for duct construction. L. L. Narowetz, jr. diags Heating-Piping 15: 26-7 Ja '43; Same, without diags. Sheet Metal Worker 34:42+ F '43; Discussion. Heating-Piping 15:85 F '43

Correcting proportions of main pipe. R. L. Grayford. diags Sheet Metal Worker 34:25-6 J1 '43

Critical metals saved by sheet board ducts; abstract. T. M. Cunningham. Refrig Eng 45:104 F '43; Same cond. II Eng N 130:492 Ap 8 '43

Ductwork; wartime work demands use of wartime materials; non-metallic ducts. diags Dom Eng 160:70-2+ D '42

Fabrication of non-metallic ducts. II diags Sheet Metal Worker 34:23-4+ O '43

How to meet war time restrictions in heating and air conditioning design; non-metallic ducts. T. W. Reynolds. Heat & Ven 40:60H F '43

Laying out rectangular ducts and fittings (cont). O. W. Kothe. diags Sheet Metal Worker 33:28-30 D '42; 34:40-1+ Ja; 23-4 F; 24-5 Mr; 24-5 Ap; 24-6 My; 25-6+ Je; 22-3 J1; 30-1 Ag; 25-30 O '43

Non-metallic ducts; are they here to stay? II diags Heat & Ven 40:64-7 Ap '43

Plane modification center of Bechtel, McCone & Parsons; asbestos-cement ductwork. R. M. Rush. II Heat & Ven 40:68-9 S '43

Sound attenuation in air ducts. B. G. Churcher and A. J. King. II diags Engineering 156:221-2 S 17 '43

Inspection

Just around the corner; device for examining inside of air pipes. J. J. Woolfenden. diags Heat & Ven 40:46 O '43

Tables, calculations, etc.

Simplified procedure for selecting capacities of duct systems for gravity warm-air heating plants. A. P. Kratz and S. Konzo. diags III U Eng Exp Sta Circ 45:1-48 '42 (pa 55c)

AIR pollution

Atmospheric contamination from the casting of magnesium. C. R. Williams. bibliog J Ind Hygiene 24:277-80 N '42

Atmospheric pollution; report of Department of scientific and industrial research. Engineering 154:495 D 18 '42

Atmospheric pollution; summary report on observations during 1941-42. Electrician 129: 644 D 11 '42

Carbon monoxide; data regarding occurrence and effect. Heating-Piping 15:558-9 O '43

Chemical work of the factory department; aspect of industrial health report. S. H. Wilkes. Chem Age (Lond) 49:27-30 J10 '43

Chlorinated solvent exposures at degreasing operations. K. M. Morse and L. Goldberg. bibliog II Ind Med 12:706-13 O '43

Chlorine detector protects workers against poisoned air. T. A. H. Jeffery. II diags Power 87:514-15 Ag '43

Determining margins of safety; criteria for defining a harmful exposure. J. H. Sterner. Ind Med 12:514-13 Ag '43

Health of lead-exposed storage battery workers. W. C. Dreessen. bibliog flow-sheet J Ind Hygiene 25:60-70 F '43

Metal fume hazards. J. W. Fehnel. II Safety Eng 86:45-6, 48-9 Ag; 48-9 S '43

New standard recommends limit on arsenic fumes in workplaces. Ind Stand 14:247 S '43

Recommended safe concentrations of common toxic substances used in industry; abstract. M. A. Snell. Chem & Met Eng 50:181 O '43

Safe limits on mercury and chromates in air work places. P. A. Neal and F. H. Goldman. II Ind Stand 14:79-80 Mr '43

AIR pollution—Continued

Sensory response to certain industrial solvent vapors. K. W. Nelson and others. *bibliog J Ind Hygiene* 25:232-5 S '43
 Testing toxic atmospheres. N. R. Bernz. *il Heating-Piping* 15:432-4, 518-20 S-O '43
 Toxicology of acrylonitrile (vinyl cyanide); studies of effects of daily inhalation. H. C. Dudley, T. R. Sweeney and J. W. Miller. *J Ind Hygiene* 24:255-8 N '42

See also

Air—Analysis	Gases, Asphyxiating
Air—Bacteriology	and poisonous
Dust	Smoke
Flue dust	Tanks—Ventilation
Flue gas	Ventilation

AIR power

Joint air-sea-land operations in Italy set pattern for future. *Aviation N* 1:13-14 N 8 '43

Modern foreign policy; implications of air power. *Fortune* 28:133-4+ O '43

See also

United States—Air service, Navy

AIR preheaters

Electrical tube gauge. E. Fawcett. *il diags Engineering* 156:301-2 O 15 '43

Heat transfer and fluid resistances in Ljungstrom regenerative-type air preheaters. H. Karlsson and S. Holm. *bibliog il diags A S M E Trans* 65:61-71; Discussion. 71-2 Ja '43

AIR pumps

Details of the Pesco rotary air pump. *il Aero Digest* 42:331 My '43

Device for calibrating small air pumps. J. C. Owen. *diag Science* 97:99-100 Ja 22 '43
 Otto von Guericke; a neglected genius. T. Coulson. *il Franklin Inst J* 236:241-64, 333-51 S-O '43

AIR purification

Air borne infection. O. H. Robertson. *bibliog Science* 97:495-502 Je 4 '43

Air recovery by gas adsorption cuts equipment weight and costs; activated carbon units; air conditioning at Pratt & Whitney plant. *il diags Heating-Piping* 15:238-9 My '43

Economic factors in converting recirculated air for ventilation; activated carbon gas adsorption supplemented by filtration and bacteria control. H. E. Ziel and H. Sleik. *bibliog diags plan Heating-Piping* 15:367-71; Discussion. 371-2 JI '43

Jack & Heintz solves fume problem by installing air recovery equipment. *il diag Heat & Ven* 40:54-5 Ag '43

Lethal effect of triethylene glycol vapor on air-borne bacteria and influenza virus. O. H. Robertson and others. *bibliog Science* 97:142-4 F 5 '43

Luminous bacteria new research guinea pigs; used to determine amount of ultraviolet radiation needed to kill air-borne bacteria. *ilum Eng* 38:273 Je '43

Safety requirements for sterilamps in air conditioning systems. A. R. Dennington. *il diags Heat & Ven* 40:46-9 Mr '43

Simplified propylene glycol dispenser for field use. *bibliog Science* 97:208 F 26 '43

Sterilization of air by certain glycols employed as aerosols. O. H. Robertson and others. *bibliog Science* 93:213-14 F 23 '41; Abstract. *Heat & Ven* 39:53 D '42

See also

Air conditioning	Dust removal
Air filters	Ventilation

AIR raid shelters

Bomb-resistant air raid shelters. H. E. Weissman. *il diags Am Concrete Inst J* 14: 241-50 F '43

Bomb shelters in Hudson Palisades proposed. *Comp Air M* 48:6956-7 F '43

Deep tunnel air raid shelters. *il diags Engineer* 174:445-6, 456-8, 472-4 N 27-D 11 '42

Humidity control in underground bombproof spaces. E. Ledoux. *il diags Heating-Piping* 14:6-8, 364-6; 15:34-6 Ja, Je '42, Ja '43

Miners build London's deep underground shelters. *Eng N* 130:499 Ap 8 '43

Heating and ventilation

Heat and ventilation in air raid shelters. W. J. McGuinness. *diags Heating-Piping* 15:193-6 Ap '43

AIR raid signals

Air-raid alarm circuits. W. D. Stewart. *il diags Radio N* 30:23-6+ Ag '43

Air raid signals operated by garage compressors. *il Eng N* 130:316 F 25 '43

Air siren built by Idaho power company. *il Elec W* 120:1040+ S 18 '43

Automatic air-raid alarm for broadcast stations use. V. Voss. *diag Electronics* 16: 100+ F '43

Centralized sound in an ordnance plant. S. Harman and H. A. Blair. *il plan Radio N* 28:30-1+ O '42

Everybody in Boise can hear air-operated siren. H. W. Young. *il diag Comp Air M* 48:172 O '43

Need an air raid whistle? make one. *il diag Power Pl Eng* 47:91 My '43

New carrier current air raid warning device. Franklin Inst J 235:323 Mr '43

Rhythmic control. S. A. Daines. *il Elec R (Lond)* 133:167-9 Ag 6 '43

Self-checking carrier tone alarm. P. A. Berg. *diag Electronics* 16:174+ N '43

Sweden's telephone service conveys air-raid warnings. *il For Comm W* 9:6+ N 14 '42

To beat sneak bombers; supplementary air-raid warning system at Hove. *il Electrician* 131:86-7 JI 23 '43; *Elec R (Lond)* 133:123 JI 23 '43

AIR raid wardens

Suggestions for air raid wardens relating to emergency conditions in streets affecting electric service facilities. Edison Elec Inst Bul 11:32 Mr '43

AIR raids

Bombed British buildings; photographs. Arch Forum 77:65-9 N '42

Bomber losses in the big league; are they becoming too costly? *Aviation N* 1:13-14 O 25 '43

Bombing, the American way. E. E. Miller. *il diags Aviation* 42:114-21+ Ag; 118-19+ S '43

German dams attacked successfully. J. D. Lewin. *il diag map Eng N* 130:890-4 Je 17 '43

Heavy bomber changes aerial warfare. J. A. Ward. *il Aero Digest* 41:81-4+ N '42

High cost of bombing. *Business Week* p46 My 15 '43

High level precision bombing wins new laurels in air action. *Aviation N* 1:17 Ag 2 '43

If Chicago were bombed—this could happen! model intended to convey picture of destruction. *il Gas Age* 90:12-13 D 17 '42

L.N.E.R. air raid incident. *il Engineer* 175: 476 Je 11 '43

Months of planning and practice preceded attack on German dams. *Eng N* 131:280 Ag 12 '43

Phoenix of the blitz; Britain's national fire defense system. S. Hornblow. *il Nat Safety N* 45:62-3+ O '43

Radio in warfare; raids by radio controlled aircraft. L. W. Orton. *diags Radio N* 30:29+ N '43

Real reasons for astounding success of RAF's low-level attacks on German dams. *il Power* 87:686 O '43

Ruhr power dams breached. *il Elec West* 91:41-3 JI '43

Two large dams in Germany breached by British bombers. *il Eng N* 130:719+ My 20 '43

War emergency repairs in Great Britain. C. F. Graves-Carpenter. *il Eng N* 130: 439-42 Mr 25 '43

War's effect on English local government. A. Collins. *Am Water Works Assn J* 35: 1146-54; Comments. U.S. Grant, 3d. 1155 S '43

Protective measures

Air-raid answers; rights and liabilities of property owners. *Business Week* p24+ Ag 28 '43

Air raid precautions in New York city libraries. E. Brodman. *Special Lib* 33:370-1 D '42

Air-raid protection for valuable records. *Gas Age* 91:29-31+ Mr 11 '43

A.R.P. in office buildings; Metropolitan life insurance building in New York and du Pont and Nemours buildings in Wilmington. *il plans Arch Forum* 77:84-92 N '42

AIR raids—Protective measures—Continued

- Call men, their education and preparation; maintaining water service in case of air raid. E. O. Boothby. *Il Water Works & Sewerage* 90:94 Mr '43
- Chicago plans for emergency sewer repair. T. D. Garry and A. J. Schafmayer. *il maps Civil Eng* 13:23-5 Ja '43
- Civil defense for gas undertakings in England. R. N. LeFevre. *il Gas Age* 90:11-13 D 3 '42
- Effect of atmospheric haze on the camouflaging of aerial targets; abstract. F. Lohle. *Roy Aeronautical Soc J* 47:sup345-6 J1 '43
- England, its civilian protection and industrial and utility operations in wartime. D. M. DeBard. *Elec Eng* 62:55-60 F '43
- Generating plants in the blitz; Britain's utilities maintain service. J. Dalton. *il Power* 86:892-3 D '42
- Hints on effective camouflage. J. D. Campbell. *il Aero Digest* 42:116-17, 224+ Je '43
- How and why of camouflage. H. Goff. *il Aviation* 41:104-5+ O '42; Same cond. *Aero Digest* 42:119-21+ My '43
- How British plants fight air raids. Management E 32:26-7 Ja '43
- If bombers come, this plant is prepared. *il Nat Safety* N 47:20-1 Je '43
- Information and filter centers keep tab on all aircraft in sky; heating, ventilating, and cooling problems. S. R. Lewis. *il Heating-Piping* 15:89-90 F '43
- Operation of a control center; play by the staff of the Division of sanitation, New York state department of health, in collaboration with Colonel Thomas M. Sherman. *Am Water Works Assn J* 35:207-22 F '43
- Our deep-rooted future; subterranean protection against air raids. *Comp Air M* 48:7122 Ag '43
- Outline of Southern counties gas co. war games procedure. B. A. Devine. *il Gas Age* 92:13-15 J1 '43
- Proceedings of the Air raid precautions school for water works instruction of the New England water works association and the Office of civilian defense. N E Water Works Assn J 57:81-168 Je '43
- Protective concealment for reservoirs and exposed aqueducts; experiments with smoke screens. *il Eng N* 131:595-7 O 21 '43
- Ready for a raid; Westinghouse electric & manufacturing company. P. E. Rousseau. *il Am Mach* 86:1419-22 D 10 '42
- Sky sentries on guard; important U.S. centers are protected by barrage balloons. R. G. Picinich, Jr. *il Sci Am* 169:6-8 J1 '43
- Southern counties gas company stages unique war games to test efficiency of its preparations against air attack. L. S. Flint. *il Am Gas J* 157:7-10 D '42
- Water storage as an air raid precaution. W. Sleight. *Pub Works* 74:56-7 Je '43

See also

- | | |
|------------------------|-----------------------|
| Air raid shelters | Blackouts in war |
| Air raid signals | Camouflage |
| Air raid wardens | Civilian defense |
| Air raids and building | Lighting—War measures |

AIR raids and building

- Bomb-proof construction of utilities. B. Maddock. *diags Power Pl Eng* 47:69-70 J1 '43
- Building as a defense against fires from bombs. Franklin Inst J 234:583-5 D '42
- Defense against bombing. S. H. Ingeberg. *il Safety Eng* 84:24-6 N '42
- Proneness to damage of plant through enemy action. H. Gutteridge. *Int Mech Eng J & Proc* 147:Proc 99:104 Je '42; Discussion. 147:Proc 104-9; 148:Proc 120-8 Je '42, Ja '43
- Railway air-raid damage at Belfast. *il Engineering* 154:507, 510 D 25 '42
- Roof coverings under the blitz. J. McCawley. *il Sheet Metal Worker* 34:26-8 Mr '43

See also

- Earth movements

AIR receivers

- Compressor's auxiliaries. *Eng & Min J* 144: 88-9 O '43
- More storage capacity reduces compressor load; with cost data. G. C. Tucker. *il Power* 87:91-2 F '43

Underground air receiver in coal seam; no. 3 mine of the Northwestern improvement company. T. Murphy. *il diags Comp Air M* 47:6915-17 D '42

AIR reduction company

- Air reduction in peace and war. H. Lawrence. *Barron's* 23:9 My 3 '43
- Investment audit. H. F. Travis. *Mag of Wall St* 71:416-17+ Ja 23 '43
- News from the chemists' front. *Barron's* 23: 20 S 20 '43
- WAAC, also stands for wartime advertising allocation chart; Air Reduction's advertising department. R. H. Ganly. *il Ptr Ink* 203:20-1+ Je 25 '43

AIR sampling

- Collection and estimation of traces of formaldehyde in air. F. H. Goldman and H. Yasoda. *bibliog Ind & Eng Chem Anal ed* 15:377-8 Je 15 '43
- Portable electrostatic precipitator. W. L. Lea. *il diag J Ind Hygiene* 25:152-6 Ap '43

AIR separators

- Air-cleaning fines made practicable by dust separators; Elk Horn coal corp. J. H. Edwards. *flow diag il Coal Age* 48:49-53 Ja '43

AIR traffic. See Airways—Traffic control**AIR transport command. See United States—Air service, Army—Transport command****AIR transport information. Office of. See United States—Air transport information, Office of****AIR travel**

- Air travel dreams brought down to earth; traffic control requirements will put ceiling on use. S. M. Barber, Jr. *Barron's* 23:9 J1 12 '43
- Postwar small airplane and how to increase its utility; Fly-a-plane-car service. P. Altman. *il map Automotive & Aviation* Ind 88: 17-21+ My 15 '43
- What will war do to tomorrow's home? D. Bareuther. *il plans Am Bld* 65:52+ N '43

AIR washers

- Centri-spray co. water spray dust collection. *il Heating-Piping* 15:sup135+ N '43
- Finishing warplanes; Glenn L. Martin company. F. V. Faulhaber. *il Metal Finishing* 40:681-4, 686 D '42

AIRACOBRA. See Airplanes, Military—Design**AIRBRUSH**

- Beginning with the airbrush. J. P. Marshall. *il diag Am Phot* 37:12-13 Ap '43

AIRCRAFT

- Technical functions and responsibilities of the Civil aeronautics administration; aircraft engineering. A. A. Vollmecke. *il Aeronautical Eng R* 2:27, 29, 31 S '43

See also

- | | |
|--------------|-----------------------------|
| Airplanes | Helicopters |
| Airships | Langley flying machine |
| Autogiros | |
| Flying boats | Radio apparatus on aircraft |
| Giders | |

Patents

- Trends of invention. Published in monthly numbers of *Aero digest*

AIRCRAFT guns. See Guns, Aircraft**AIRCRAFT instrument guild**

- Arrangement between Instruments and the Aircraft instrument guild. R. G. Ojers. *il Instruments* 16:140-1+ Mr '43

AIRCRAFT production board. See United States—Aircraft production board**AIRCRAFT steel. See Steel, Aircraft****AIRCRAFT war production council, National. See National aircraft war production council****AIRCRAFT war production councils**

- Aircraft war production council, East coast, inc.; officers, directors, committee members. *Aero Digest* 42:240+ F '43
- Midwest council. *Business Week* p90 Mr 27 '43

AIRFOILS

- Effect of a rotating cylinder placed in the nose of an aerofoil on its aerodynamic characteristics; abstract. E. B. Wolf and C. Koning. *Roy Aeronautical Soc J* 47:sup275-6 Je '43

AIRFOILS—Continued

Experiments on rows of aerofoils under conditions of retarded flow; abstract. Y. Shimoyama. Roy Aeronautical Soc J 47: sup69 Mr '43

Some experiments on the increase in the maximum lift of an aerofoil undergoing a change of incidence at a constant angular velocity; abstract. N. Scheubel. Roy Aeronautical Soc J 47: sup349-50 Jl '43

See also

Airplane propellers
Airplane wings

Testing

Characteristics of airfoils in a cylindric axial-flow grid. J. R. Weske and F. E. Marble. bibliog il diags J Aeronautical Sci 10:289-94 O '43

AIRPLANE accessories industry**Advertising**

Eclipse Aviation's five-year institutional campaign. S. H. Webster. il Ind Marketing 28:26-8+ My '43

Directories

Aviation products and services; with list of suppliers. Aviation 42:275-383 F '43
Manufacturers of aircraft and engine accessories. Aero Digest 42:297-362, 424 Mr '43

Securities

Safest way to speculate in future of aircrafts. J. C. Harrington. Mag of Wall St 71:421+ Ja 23 '43

AIRPLANE assembly plants

Assembling and testing P-40's in Burma. B. A. Glover. il map Aviation 41:96-101+ D '42

Bombers via R.F.D.; rural towns supplying men, women, and buildings in newest subcontracting test. Business Week p52 D 12 '42

Lighting

Engineering twenty-four hour daylight to master manpower problems. C. F. Prideaux. il diags Illum Eng 33:227-50 My '43

Lighting a wartime airplane assembly plant. M. D. Darrah. il Gen Elec R 46:593-5 N '43

AIRPLANE brakes. See Brakes, Airplane**AIRPLANE carriers**

Ship flying and aircraft carriers. P. Bethell. il diags Engineering 156:1-4, 10, 41-4, 50, 61-3, 101-5, 110, 141-4, 161-3 Jl 2, 16-23, Ag 6, 20-27 '43

U. S. carrier fleet multiples; already outstrips Britain's. il Aviation N 1:11 Ag 2 '43

Warships of World war II; aircraft carrier. F. J. McDiarmid. il Barron's 23:16 F 1; 16 F '43

AIRPLANE dope

Engineering fundamentals of aircraft finishing. A. L. Johnson and J. J. Oudhoff. il Aero Digest 43:159-60+ S '43

AIRPLANE engines

Allison division, General motors corporation. R. M. Hazen. il Aeronautical Eng R 1:81 N '42

Aviation power plants; integral powerplant plan; abstracts. S. A. Moss. S A E J 51: 133 Ap '43; Automotive & Aviation Ind 88: 19 F 1 '43

Bristol Hercules 1600 hp, 14-cyl. power plant; drawing. Automotive & Aviation Ind 87:29 D 15 '42

Case for the integral power plant. S. A. Moss. il diags Aviation 42:150-1+ S; 148-50+ O '43

Decade for Jacobs aircraft engine company. C. E. Mines. il Aeronautical Eng R 1:83 N '42

Eleventh annual meeting of the Institute of the aeronautical sciences; review of technical papers. A. Klemm. Aeronautical Eng R 2:29+ Ap '43

Engineering advances which benefit the aviation industry; Packard airplane and PT boat engines. J. G. Vincent. Aeronautical Eng R 1:86 N '42

General aspects of aircraft powerplant installations; abstracts. T. Hammen, jr. S A E J 51: sup31-2 My '43; Diags Automotive & Aviation Ind 88:33-4 My 1 '43

German BMW 801 engine; drawing. Automotive & Aviation Ind 89:44 Ag 1 '43

Improving the fatigue strength of engine parts; abstract and discussion. J. O. Almen. S A E J 51: sup23-9 My '43

Interchangeable power plants for British bombers. M. W. Bourdon. il diags Automotive & Aviation Ind 88:42-3 Ja 15 '43

Lycorning develops light, compact unit. il (p16) Aviation N 1:17 O 25 '43

Lycorning's new geared six-cylinder engine. il Aero Digest 42:374 Mr '43

Major assemblies of Wright Cyclone 14. diags Aviation 42:184-5 Jl '43

Measures for ensuring reliability of aircraft engines; abstract. H. Kouba. Roy Aeronautical Soc J 47: sup286-8 Je '43

Menasco manufacturing company; manufacture of airplane engines and shock absorbers. W. G. Wood. il Aeronautical Eng R 1:85 N '42

Representative aircraft engines for 1943; illustrations. Aviation Ind 88:243, 245-6 F '43

Rocket propulsion principles studied by Allies and Germany. Aviation N 1:18-14 S 20 '43

Rolls-Royce engine and the stratosphere plane it powers; illustrations. Automotive & Aviation Ind 88:26 F 1 '43

Rolls-Royce Merlin 61 aero engine. il Engineering 154:490 D 18 '42

SAE war engineering production meeting; aircraft-engine sessions. S A E J 51: sup68-71 F '43

300 h.p. Gipsy Six engine. il Aero Digest 42: 242 Ja '43

Troop transport glider gets detachable engines. il Aero Digest 42:173+ Je '43

U.S. leads world in radial engines; new V-type liquid designs near. Aviation N 1: 14, 16 S 6 '43

Up with rockets; jet propulsion may be power for airplanes. Business Week p19-20 O 2 '43

Air filters

Requirements for carburetor air filters for aircraft engines. W. D. Cannon. il diags S A E J 51:33-7+ F '43; Abstract. Automotive & Aviation Ind 87:46-7 N 15 '42

Bearings

Antifriction-bearing developments for aviation engines. T. Barish. il diags A S M E Trans 65:261-6 My '43; Same cond. Machine Design 15:72-3+ Ja '43; Abstract. Automotive & Aviation Ind 88:39-40 Ja 1 '43

Bearing inspection without contact; silver-plated and lead-indium plated bearings checked by Air-O-Limit and Electrolimit gages. il diags Am Mach 87:86-9 Ag 19 '43

Bearings and bearing corrosion; abstract. L. Raymond. Automotive & Aviation Ind 87: 76 N 15 '42

SKF industries, inc.; aircraft ball bearings; ten years' progress. S. F. Wollmar. diags Aeronautical Eng R 1:147 N '42

Synthetic bearings from pressed resins. E. Gilbert and K. Lurenbaum. Automobile Eng 32:477 N '42

Control

See Airplanes—Control

Cooling

Brief survey of the principles of pressure water cooling. J. E. Ellor. il diags S A E J 51:65-8, 77 Mr '43

Cooling characteristics of steel and aluminum finned cylinders for in-line aircooled engines; abstract and discussion. M. Piry. S A E J 51: sup37 My '43

Design of cross-flow heat exchangers from tested core sections. P. A. Scherer. charts S A E J 50:542-8 D '42; Same. Aero Digest 42:138+ Ja '43

Effect of spinner and cowl entrance combinations on engine cooling. J. Jonas. Aviation 42:169+ S '43

Intercoolers and their performance in aircraft. S. K. Anderson and P. A. Scherer. il Aviation 42:125, 127, 129+ Mr '43

Oil coolers; new theories and tests on the subject of heat exchange. E. W. Steinitz and F. J. Grosé. il diags Automobile Eng 33:121-2 Mr '43

Thunderbolt performance increased by cooler doors. M. C. Benedict. diags Machine Design 15:117-18 Ap '43

AIRPLANE engines—Continued

Covers

Outbreak of dermatitis from airplane engine covers. L. Schwartz and S. M. Peck. Pub Health Rep 58:625-31, pl 1-2 Ap 16 '43

Cowlings

Effect of spinner and cowl entrance combinations on engine cooling. J. Jonas. Aviation 42:159+ S '43

Lifting problems of streamline bodies; development of a cowl system with cones. C. M. Hartley and E. A. Liming. Il Aero Digest 43:197-8+ Ag '43

Design

Allison engine design; abstract. D. Gerdan. Iron Age 152:47 O 21 '43

BMW 801A aircraft engine. Il diags Automotive & Aviation Ind 87:20-4 O 15; 38-41 N 1 '42

Calculation of proportional cams for internal combustion engines. E. Rossner. diags Automotive & Aviation Ind 88:35-40 My 1 '43; Discussion (Calculation of proportional cams). C. H. Bouvy. 83:45+ S 1 '43

Carburetion for the aircraft engine. F. J. Wiegand. Il diags S A E J 51:294-303 Ag '43

Co-designing aircraft powerplants; abstract. H. Karcher. S A E J 51:sup30 My '43

Design details of the BMW-801A engine. M. V. Cave. Il diags Aviation 41:228-9+ N; 256-7, 259 D '42

Design features of the Junkers 211B aircraft engine. S. Oldberg and T. M. Ball. Il diags S A E J 50:465-83 N '42; Same cond. Metals & Alloys 17:404+ F '43; Abstract. Automotive & Aviation Ind 86:13-21 Ap 1; 40-6+ Ap 15 '42

Design features of the Mitsubishi Kinsei engine. W. G. Ovens. Il S A E J 50:253-66 Jl '42

Detecting working temperatures by hardness drop. E. J. Willis and R. G. Anderson. Il diags Machine Design 15:105-8 Je '43

Effect of environment on aircraft engine design and performance; abstract and discussion. L. T. Miller. S A E J 51:sup30-1 My '43

Evaluation of engine types. E. M. Lester. Aero Digest 42:364+ Mr '43

Fundamentals of fighter design. F. H. M. Lloyd. Roy Aeronautical Soc J 46:272-4 N '42

How Germany does it; powerful, compact airplane engine has a pre-designed cooling system and other built-in accessories. A. Klemm. diags Sci Am 167:289-90 D '42

Intake systems for aircraft engines. C. T. Doman. Il diags S A E J 51:334-43 S '43

Methods of stress determination in engine parts. C. Lipson. Il diags S A E J 51:105-24 Ap '43; Abstract. Automotive & Aviation Ind 88:37-8 F 1 '43

Problem of two-stroke engine design with special reference to continued reciprocating and rotation of the piston; abstract. R. Mertz. Roy Aeronautical Soc J 47:sup5 Ja '43

Ring design makes or breaks the engine. D. M. Smith and N. Wainwright. diags Aviation 42:171, 173-4+ Ag '43

Some features of the DB-601 liquid-cooled aircraft engine. M. W. Bourdon. Il diags Automobile & Aviation Ind 89:23-31+ O 15 '43

Detonation

Cyclone combustion; moving picture aid to pilots in obtaining maximum performance from Wright aircraft engines. Il diags Aeronautical Eng R 2:11-13, 15 Ja '43

Directories

Directory of engine manufacturers. Aviation 42:269, 271 F '43

Manufacturers of aircraft engines; directory. Aero Digest 42:294, 297 Mr '43

Efficiency

Indicates power output; patent assigned to Square D co. diags Machine Design 15:120+ Ja '43

Possibilities of carburetor-type aircraft engines; abstract. G. P. Toews. Automotive & Aviation Ind 88:56+ Ja 1 '43

Temperature effects on turbine supercharger installations. P. Colman. diags J Aeronautical Sci 10:261-5 O '43

Exhaust

Installing and operating the gas analyzer. B. Kredersavage. Instruments 15:463+ N '42
Measurement of high temperatures in high-velocity gas streams. W. J. King. bibliog diags A S M E Trans 65:421-8; Discussion. 428-31 Jl '43

New techniques applied to anti-icing problem; thermal system makes indirect use of engine exhaust gases. Il diags Aero Digest 43:225, 227+ S '43

Porcelain enameling of aircraft exhausts. Il Iron Age 151:66-7 F 13 '43

Stainless steel aircraft exhausts; performance and fabricating technique for titanium or columbium-stabilized stainless steel. H. A. Campbell. bibliog Iron Age 151:56-3 Je 24 '43; Excerpts. S A E J 51:sup32-3+ Ag '43

See also

Airplane engines—
Manifolds

Failures

Engine failures as causes of aircraft accidents. Aero Digest 43:191 Ag '43

Fuel

ABC of chemical derivatives from petroleum; aviation gasoline and basic hydrocarbon fractions. R. L. Wakeman and E. H. Wcill. Il Nat Pet N 35 pt 2:R213-15, R220-1 My 5 '43

Air-cargo carriers here to stay; discussion of fuel and lubricants. diags maps Oil & Gas J 41:30-2 Mr 11 '43

Alkylation and isomerization combined in aviation-gasoline plant; Cities service oil co. F. M. Simpson. Il Oil & Gas J 42:89+ Je 24 '43

Army underestimated needs of aviation gasoline. Oil & Gas J 41:47-3 My 6 '43

Associated's aviation-fuel plant nearing completion. Il Oil & Gas J 42:33 S 9 '43

Aviation-fuel program may be unveiled by investigation of alleged conflict with synthetic rubber program. H. D. Ralph. Il Oil & Gas J 41:34-5 Ap 29 '43

Aviation gasoline by polymerization and alkylation of cracking gases. V. N. Ipatieff. Il Chem & Eng N 20:1367-8 N 10 '42

Behavior of gasoline at high temperatures. F. E. Mock. Il Aero Digest 43:204+ Ag '43

Calibration of C.F.R. reference fuels; report of sub-committee no.5, engine tests; aviation fuel knock-rating panel. Inst Pet J 29:235-6 Ag '43

Cargo aircraft fuel problem. Aero Digest 42: 410-11 Mr '43

Codimer for aviation gasoline produced in revamped catalytic poly plant. Il Nat Pet N 35 pt 2:R156+ Ap 7 '43

Evaluating aviation-gasoline content of crude oil. W. L. Nelson. Oil & Gas J 42:52-3 My 13 '43

First commercial TCC unit goes on stream, adding new aviation-gasoline capacity. J. P. O'Donnell. flow chart Il Oil & Gas J 42:30-1+ O 14 '43

High-octane aviation gasoline program continues to expand. flow sheets Il Chem & Met Eng 50:129-32 Je '43

High octane: tomorrow's power. Il Fortune 27:154-7+ Je '43

Houdry announces new catalytic process. Oil & Gas J 41:10 Ja 21 '43; Nat Pet N 35:15 Ja 20 '43

Importance of natural gasoline and derivatives to synthetic rubber and aviation gas programs. P. M. Raigorodsky and F. H. Dotterweich. bibliog Nat Pet N 34 pt 2: R420+ N 25 '42

100-octane aviation gasoline processes show rapid advance. C. C. Pryor. Il Pet Eng 14:61, 64 Mr; 79, 82, 84 Ap '43

100-octane cuts Diesel supply. C. M. Larson. Nat Pet N 35:16 Je 2 '43

100 octane output quadrupled since 1942; with map and list of plants. Nat Pet N 35:22, 24 N 3 '43

PAW reports to the industry; refining closely coordinated. E. D. Cumming. Oil & Gas J 42:104+ Jl 29 '43

AIRPLANE engines—Fuel—Continued

- PAW speeds new 100-octane plants. *Nat Pet N 35:25 Ag 25 '43*
- Phillips' Cycloversion process. *il Oil & Gas J 41:41-2 Mr 4 '43*; Same. *Pet Eng 14:98 Ap '43*
- Plant modifications to make aviation gasoline. *W. L. Neilson. Oil & Gas J 42:50 Jl 1 '43*
- Postwar-aviation demand. *B. H. Weil. bibliog il Oil & Gas J 42:40-2, 44-5 Ag 19 '43*
- Process perfected for synthesis of triptane, aviation superfuel. *A. L. Foster. Oil & Gas J 42:14-15 S 2 '43*
- Producing aviation gasoline by fluid catalytic cracking. flow diag il *diag Nat Pet N 35 pt 2:R251-2, R254-5 Je 2 '43*
- Producing wartime aviation gasoline by improved Houdry catalytic process. bibliog il *Nat Pet N 35 pt 2:R204-6, R208 My 5 '43*
- Production of hydrocarbons for aviation motor fuels. *M. Van Winkle. bibliog il Pet Refiner 22:83-8 S '43*
- Rapid expansion of refinery conversion probable answer to aviation-fuel shortage. *H. D. Ralph. Oil & Gas J 41:46 My 6 '43*
- Role of natural gasoline industry in the 100-octane gasoline program. *B. K. Brown. Pet Refiner 22:110-12 My '43*; Abstract. *Nat Pet N 35:16+ Ap 21 '43*
- Socony-Vacuum oil company, inc.; aviation gasoline and lubricants; ten years' progress. *W. F. Burt. il Aeronautical Eng R 1:149 N '42*
- Technical advisory committee praised for war services. *W. R. Boyd, jr. Oil & Gas J 42:28, 32, 34-5 S 16 '43*; Same cond. *Nat Pet N 35:28-9+ S 15 '43*
- Triptane, most powerful fuel, made in U.O.P. pilot plant. *Chem Ind 53:343 S '43*; *Pet Eng 14:81 F '43*
- Triptane on commercial scale; Universal claims development of process. *Nat Pet N 35:18 S 1 '43*
- Twenty-eight companies hold contracts for aviation-fuel manufacturing plants. *Oil & Gas J 41:49 D 24 '42*
- 20-story cracking plant makes aviation gasoline by fluid catalytic method. *il Nat Pet N 35 pt 2:R56-9 F 3 '43*
- U.S. stake in 100-octane; RFC has financed 50 plants. *Nat Pet N 35:15 Jl 28 '43*
- Use of petroleum products in aircraft. *F. D. Klein. diag S A E J 51:305-9 S '43*; Same. *Nat Pet N 35 pt 2:R473-6 O 6 '43*
- Warning to Axis; triptane, new superfuel for aircraft. *Business Week p75-6 S 11 '43*
- Where we stand on aviation gasoline; PAW issues statement. *Nat Pet N 35:18, 20 Ag 4 '43*
- Whole United nations strategy at stake in fight over high-octane gasoline supply. *E. Blair. Barron's 23:6+ Ap 26 '43*

Fuel consumption

- Cargo plane's priority passenger; analysis of vital role of gasoline in air transport. *il Pet Refiner 22:122, 124, 126 Ap '43*
- Technical aspects of rotameters; remote reading fuel rate metering device. *W. J. Diamant. il Aero Digest 42:133, 142 F '43*

Fuel feeding

- Adjustable orifices for aircraft engine testing; air flow-fuel flow tests. *J. P. Green. il diag Aviation 42:175-6 Je '43*
- Carburetion for the aircraft engine. *F. J. Wiegand. il diags S A E J 51:294-303 Ag '43*; Abstract. *Automotive & Aviation Ind 88:19+ F 1 '43*
- Holley carburetor operating and servicing. *E. B. Thorp. il diags Aviation 42:209-11+ O '43*
- Jumo aero-engines, fuel injection. *il diags Engineer 176:113-16 Ag 6 '43*
- Motor fuel supply system for engine test rooms. *A. F. Holler. diag plan Aero Digest 43:209-10+ Jl '43*
- New Bendix carburetor plant. *il Aero Digest 43:228 Jl '43*
- Petrol injection system of a German aero-engine. *il diags Engineer 175:108, 109-11 F 5 '43*
- Pneumatic pressure operates aircraft pump; patent assigned to the Wright aeronautical corp. *diags Machine Design 15:174+ Je '43*

- Preventing idling failures in flight on 4-cylinder engines. *Aero Digest 42:323-4 Ja '43*
- Servomotor locking mechanism; patent assigned to Bendix aviation corp. *diag Machine Design 15:180+ Jl '43*
- Stromberg injection carburetor production on large scale. *J. Geschelin. il Automotive & Aviation Ind 88:18-22+ F 15 '43*
- Thompson products, inc.; ten years' progress in airplane valves and fuel devices. *A. T. Colwell. il Aeronautical Eng R 1:153 N '42*

Gearing

- Aircraft gearing; design and production problems; abstract. *C. G. Pfeffer. Iron Age 152: 46 O 21 '43*
- Manufacture of aircraft gears; abstracts. *P. W. Brown and E. V. Farrar. il Iron Age 150:29-34 D 24 '42*; *Steel 112:90-1+ Mr 1 '43*
- Quenching dies minimize gear grinding. *F. A. Paquin. diags Am Mach 87:98-100 O 14 '43*
- Shaved gears for aircraft engines. *A. W. Harris. il diags S A E J 51:329-33+ S '43*; Same cond. *Iron Age 152:58-63 Ag 5 '43*; Abstract. *Automotive & Aviation Ind 88: 34+ My 1 '43*
- Sixty-three parts and assemblies from Studebaker to Cyclones. *J. Geschelin. il Automotive & Aviation Ind 88:32-5+ Je 15 '43*

Ignition

- Cyclone combustion; moving picture aid to pilots in obtaining maximum performance from Wright aircraft engines. *il diags Aeronautical Eng R 2:11-13, 15 Ja '43*

Ignition devices

- Aircraft distributor head is maze of metal parts inserted in plastic. *il Steel 113:84 O 25 '43*
- Aircraft-engine radio shielding. *D. W. Randolph. diags S A E J 50:538-41+ D '42*
- B. corporation; ten years' progress. *C. B. Bunch. il Aeronautical Eng R 1:107 N '42*
- Booster coil housing. *il diags Mod Plastics 21:96-7+ S '43*
- High-voltage-ignition-cable design for aircraft. *H. H. Wermin. il Elec Eng 62: 716-19 N '43*
- Ignition shielding design. *J. J. Mascuch. il Aero Digest 41:227-8, 230+ N '42*

Lubrication

- Aircraft oil systems; high-altitude problems. *H. E. Moerman. diags S A E J 51:394-6+ N '43*
- Oil coolers; new theories and tests on the subject of heat exchange. *E. W. Steinitz and F. J. Grosé. il diags Automobile Eng 33:121-2 Mr '43*
- Piston-ring scuffing as a criterion of oil performance. *G. H. Keller. il diag S A E J 51:125-9 Ap '43*
- Re-refining of aircraft-engine oils. *G. K. Brower. flow chart S A E J 51:130-8 Ap '43*; Same cond. *Nat Pet N 35 pt 2:R172, R174-9 Ap 7 '43*; Abstract. *Automotive & Aviation Ind 88:24+ Mr 1 '43*
- Socony-Vacuum oil company, inc.; aviation gasoline and lubricants; ten years' progress. *W. F. Burt. il Aeronautical Eng R 1:149 N '42*

Manifolds

- Flow production as applied to the manufacturing of aircraft exhaust collector systems. *Ed. A. Moore. il Automotive & Aviation Ind 87:26-9+ N 1 '42*

Manufacture

- Acres of air conditioning; Chrysler Dodge-Chicago engine plant. *H. E. Ziel. il Heating-Piping 15:480-1 S '43*
- Aircraft engines on the production line; Wright aeronautical corporation. *H. E. Linsley. il Mech Eng 65:493-6 Jl '43*
- Airplane engines and turbo-superchargers by Ford production methods. *C. O. Herb. il Mach 43:144-51 Ag '43*
- Allison engines for powering fast fighter planes. *C. O. Herb. il Mach 49:134-43 Ag '43*
- Aluminum castings poured in cores; Acme pattern & tool co. *W. G. Gude. il Foundry 71:96-9+ S '43*

AIRPLANE engines—Manufacture—Continued
 Aluminum cylinder heads for aircraft engines; Servel foundry. G. E. Stedman. *il Steel* 112:102-5 Ap 12; 114-16 Ap 19 '43
 Assembly line methods used at Douglas plant to prepare engines for installation. F. H. Hillman. *il Automotive & Aviation Ind* 89:34-6+ Ag 15 '43
 Buick aluminum foundry embodies best practices for mass production of aircraft engine cylinder heads. *il Automotive & Aviation Ind* 88:26-9+ Mr 1 '43
 Buick forges aircraft engine parts. R. R. Darnon. *il diags Am Mach* 87:98-100 Jl 22 '43
 Buick improves plating practices. H. Chase. *il Am Mach* 87:97-8 My 27 '43
 Buick now manufactures bomber engines. C. O. Herb. *il Mach* 48:160-6 Jl '42; 49:149-53 Ja '43
 Buick practice in machining Pratt & Whitney cylinder heads. H. Chase. *il Aviation* 42:174-6+ Jl '43
 Buick speeds production of aluminum alloy aircraft cylinder heads. A. H. Allen. *il Foundry* 70:66-71, 150-3 D '42
 Buick's cylinder head foundry. *il Aero Digest* 42:192-3, 195-6, 199 F '43
 Buick's know how speeds production of airplane engine parts. J. Geschelin. *il Automotive & Aviation Ind* 87:20-5+ N 15 '42
 Castings poured on mechanized conveyor at Chevrolet magnesium foundry. J. Geschelin. *il Automotive & Aviation Ind* 89:36-8+ O 1 '43
 Centrifugally cast cylinder barrels for airplane engines; Ford motor co. E. F. Cone. *il Metals & Alloys* 16:1062-6 D '42
 Chevrolet casts magnesium. *il Foundry* 71:90-4+ Ag '43
 Chevrolet grey iron men pour magnesium. F. M. Reck. *il Aero Digest* 43:190, 198, 204+ Jl '43
 Chevrolet methods speed operations on P. & W. engines. *il Am Mach* 87:91 Je 10 '43
 Chevrolet's unique setup for airplane engine production. J. Geschelin. *il Automotive & Aviation Ind* 88:24-8, 42 Je 1 '43
 Cylinder head cores made without wires; Aviation division. Studebaker corp. P. Dwyer. *il Foundry* 71:84-5, 150-1 F '43
 Delco-Remy aluminum foundry. J. Geschelin. *il Automotive & Aviation Ind* 87:18-23+ N 1 '42
 Engines have brains; 18 cylinders of aircraft engine controlled by distributor housing molded of mineral-filled melamine. *il Mod Plastics* 20:51-4+ Jl '43
 Ford casts cylinder barrels centrifugally. *il Foundry* 71:98-9+ Ag '43
 Ford masks engine parts on a conveyor; make-ready of aluminum and magnesium castings for spray painting. *il Am Mach* 87:75-7 S 30 '43
 Ford war plant facilitates straight-line production. J. Geschelin. *il Automotive & Aviation Ind* 87:18-24+ D 1 '42
 Ford's centrifugal cast cylinders. C. S. Ricker. *il diags plan Aviation* 42:134-7+ Je '43
 Foundry practice and quality in light-alloy castings. H. G. Warrington. *il Engineering* 156:90, 97-100 Jl 30 '43
 Gasket material cut from high tensile fibrous sheet material impregnated with phenolic plastic. *il Mod Plastics* 20:78-9+ My '43
 Grinding steel crankcases for aircraft engines; Bryant internal chucking grinders. P. C. Durland. *il diags Mach* 49:129-39 My '43
 Heat-treating aircraft engine parts. *il Aviation* 41:171, 173+ D '42
 How Cadillac mass-produces Allison engine parts to close tolerances. *il Aero Digest* 42:191-2, 197-8 Ja '43
 How Packard builds the Rolls-Royce Merlin. H. L. Horton. *il Mach* 49:188-96 Ag '43
 In-line machining of aircraft cylinder heads; Greenlee transfer type machine built for Studebaker. W. A. Phair. *il diags Iron Age* 152:66-73 Ag 12 '43
 Licking the gaging job; production of Rolls Royce aircraft engines at Packard motor car co. G. E. Stedman. *il Steel* 112:68-70, 72+ Mr 22 '43
 Lycoming radial engines for trainer planes. P. E. Garland. *il Mach* 49:164-71 Ag '43

Machine lapping that couldn't be done; Allison division of General Motors. *il Am Mach* 87:92-3 Ap 15 '43
 Machine work saved by Buick change in heat-treating and specifications; crankshafts and other engine parts. H. Chase. *il Am Mach* 87:75-7 Ap 1 '43
 Machining Cyclone cylinders; Wright aeronautical corp. *il Aero Digest* 42:219-20+ Ja '43
 Many production innovations in Ford P & W engine plant. F. M. Reck. *il Aero Digest* 43:256-7, 259-60 S '43
 Modern design in electroplating. N. A. Woodworth company. G. E. Stedman. *il Metal Finishing* 41:199-201+ Ap '43
 New materials for aircraft engines. M. Young and H. H. Hanink. *il S A E J* 51:157-64 My '43; Same abr. *Steel* 112:84-5+ Ap 26 '43; Abstract. *Automotive & Aviation Ind* 88:76+ F 1 '43
 New trails in surface finishing aircraft engine parts. *Steel* 113:102, 104+ J 5 '43
 Nobody's war baby; N. A. Woodworth co., Detroit turns out two million high-precision Wright aircraft motor parts a month. *il Fortune* 27:138-9 Je '43
 Overhead carriages provide efficient engine preparation. C. C. Whitlatch. *il diags Am Mach* 87:121-8 My 27 '43
 Packard builds aircraft engines on a conveyor line basis. F. M. Reck. *il Aero Digest* 42:164, 166-8+ F '43
 Packard converts to aluminum castings production. A. H. Allen. *il Foundry* 71:136-9+ Ap '43
 Plant power, minus the bottlenecks; Wright's Ohio engine plant, electrical distribution system. W. D. Drummond. *il diags Aviation* 42:157-9+ N '43
 Production speeded on welded seam inlet elbows; how Buick makes new-type inlet elbows for P & W engines. *il Aviation* 42:199+ My '43
 Shotblasting aircraft engine parts. *diags Am Mach* 87:88-9 Je 24 '43
 Studebaker corp. turns out \$215,000,000 worth of war products in 1942. *il Steel* 111:63-4, 148 D 14 '42
 Studebaker know-how speeds Flying Fortress engine output. J. Geschelin. *il Automotive & Aviation Ind* 88:18-22+ Ap 1 '43
 Surface finish and the function of parts; comparison of British and German aero-engine parts. G. Schlesinger. *Engineer* 175:454-5 Je 4 '43; Same cond. *Engineering* 155:460 Je 4 '43
 Surface finishing methods for aircraft engines. F. M. Reck. *il Aero Digest* 42:213, 215+ Je '43
 Synthetic coatings protect engine parts; Resistoflex coated containers. *il Aviation* 41:169 D '42
 Transition to war production entailed great mass movement of machine tools in and out of Chevrolet's Buffalo plant. A. H. Allen. *il Steel* 113:59-60 Jl 26 '43
 Two coolant streams improve grinding; Ford aircraft engine plant. *il diags Am Mach* 87:107-8 Ja 7 '43
 Welded tubing adapted to intake pipes for aircraft engines. *il Steel* 112:68+ My 10 '43
 Wright Cyclone production speeded up by special methods. P. W. Brown. *il Mach* 49:172-81 Ag '43

Mounting

New type engine mount developed by Douglas aircraft co. *il Steel* 113:50, 52 Ag 30 '43
 Prevention of engine mount failures. *diags Aero Digest* 41:152+ D '42
 Rubber mountings for vibration control; Lord manufacturing co. J. Geschelin. *il Automotive & Aviation Ind* 89:20-4+ O 1 '43
 Sketch book of design detail; engine-mount installation on Fleetwings BT-12 basic trainer. *il Aviation* 42:205 My '43
 Why not forged engine mounts? C. Frey. *diags Aviation* 42:176+ My '43

Protection

Antitrust insurance for airplane engines. A. M. Hoffmann. *il Comp Air M* 48:6941-2 Ja '43
 Battle of corrosion won; approved methods for the preservation of engines. A. Ayers. *S A E J* 51:sup49-50 Ag '43

AIRPLANE engines—Protection—Continued

Keep your engine dry. *il* Mod Plastics 20:89-91+ My '43
 Pliofilm bags used to protect airplane engines in shipment. *Refrig Eng* 45:118 F '43
 Silica gel prevents engine corrosion. *il* Iron Age 152:45 JI 29 '43

See also

Airplane engines—Air filters

Radiators

Lofting problems of streamline bodies; development of a radiator air scoop. C. M. Hartley and R. A. Liming. *il* *diags Aero Digest* 43:309-11+ JI '43

Repair

Adapting assembly line techniques to engine overhaul; Chicago and Southern air lines' shops. *il* *Aviation* 41:120-1 D '42
 Engine overhaul factory of the British overseas airways corporation. *il* (p470) *Engineering* 154:464 D 11 '42; *Engineer* 174:475-7 D 11 '42
 Importance of piston rings in aircraft engine maintenance. P. S. Lane. *il* *diag Aviation* 41:205, 207+ N '42
 Repair of damaged aero-engines. *il* *Engineer* 175:470-2 Je 11 '43
 Setting up the engine overhaul station; Embry-Riddle company, Miami, Fla. J. E. Horton. *il* *Aviation* 42:231-2, 235+ My '43

Specifications

American aircraft engines; tabulation. Automotive & Aviation Ind 88:110-11 Mr 15 '43
 American and foreign engine specifications; tabulations. *Aviation* 42:260-2 F '43

Superchargers

Advantages of duct seal bands; engine-supercharger system. *il* *Aero Digest* 43:229-30 Ag '43
 Aero primer. *Business Week* p79-80 D 19 '42
 Airplane engines and turbo-superchargers by Ford production methods. C. O. Herb. *il* *Mach* 49:144-51 Ag '43
 Design of cross-flow heat exchangers from tested core sections. F. A. Scherer. charts S A E J 50:542-8 D '42; Same. *Aero Digest* 42:138+ Ja '43
 Determination of airplane critical altitude by flight tests. L. C. Miller. *J Aeronautical Sci* 9:491-6 N '42
 German automatic supercharging system. *il* *diags Engineer* 176:48-9 JI 16 '43
 How superchargers aid high-altitude flight. R. G. Standerwick and W. J. King. bibliography *il* *diags Machine Design* 15:135-9+ Ag '43
 Intercoolers and their performance in aircraft. S. K. Anderson and F. A. Scherer. *il* *Aviation* 42:125, 127, 129+ Mr '43
 Progress in engineering knowledge during 1942. P. L. Alger and J. Stokley. *il* *Gen Elec R* 46:104-5 F '43
 Rolls-Royce Merlin 61. M. W. Bourdon. *il* *diags Automotive & Aviation Ind* 88:34-5+ Ja 15 '43
 Rolls-Royce Merlin 61 supercharged fighter engine. *il* *diag Engineer* 174:495-7 D 18 '42
 Supercharging aircraft engines. P. Hoffman. *il* *diags Comp Air M* 48:7019-25, 7138-42 My, S '43
 Temperature effects on turbine supercharger installations. P. Colman. *diags J Aeronautical Sci* 10:261-9 O '43

Temperature

Behavior of gasoline at high temperatures. F. E. Mock. *il* *Aero Digest* 43:204+ Ag '43
 Detecting working temperatures by hardness drop. E. J. Willis and R. G. Anderson. *il* *diags Machine Design* 15:105-3 Je '43
 Hydraulic control of aircraft engine temperature. W. A. Ray. *il* *Automotive & Aviation Ind* 89:25+ N 1 '43
 Measurement of piston temperatures under load; abstract. W. Glaser. *Roy Aeronautical Soc J* 47:sup288 Je '43
 Method to overcome piston ring seizure. F. Gossaud. *diags Automotive & Aviation Ind* 89:36 S 1 '43

See also

Airplane engines—Cooling

Testing

Adjustable orifices for aircraft engine testing; air flow-fuel flow tests. J. P. Green. *il* *diag Aviation* 42:175-6 JI '43
 Airplane engine production; pictures. *Manuf Rec* 112:42-3 F '43
 Chevrolet and Buick engine test plants; abstract. P. A. Collins and L. R. Grandy. *diag Automotive & Aviation Ind* 88:33 My 1 '43
 Controlled air supply for supercharger, carburetor and engine testing. C. S. Leopold. *flow diags Refrig Eng* 46:85-7+ Ag '43
 Determination of airplane critical altitude by flight tests. L. C. Miller. *J Aeronautical Sci* 9:491-6 N '42
 Discussion of acoustic cells for airplane engine test buildings. D. Fitzroy. *diags Acoustical Soc Am J* 15:106-13 O '43
 18 hour test cut to 10 minutes. F. M. Barnard. *diag Am Mach* 86:1502 D 24 '42
 Electrical power equipment loads aircraft engines under test. R. H. Wright. *il* *diags Power* 87:604-6 S '43
 Engine horsepower meter; abstract. J. C. Luttrell and W. A. Petrask. *diag Automotive & Aviation Ind* 88:26 F 15 '43
 Measurement of aero engine torque on high altitude test benches and in flight; abstract. C. R. Himmler. *Roy Aeronautical Soc J* 47:sup74 Mr '43
 Measurement of stresses in parts and structures. R. G. Anderson. *il* *Product Eng* 14:712-16 N '43
 Mock-up speeded Chevrolet engine test cell project; abstract and discussion. P. A. Collins. S A E J 51:sup25-6 My '43
 Motor fuel supply system for engine test rooms. A. F. Holler. *diag plan Aero Digest* 43:209-10+ JI '43
 New pressure and detonation pickups. *il* *Aeronautical Eng R* 2:107 F '43
 Sound-proof airplane motor test chambers. I. E. Katel. *diags Acoustical Soc Am J* 15:114-15 O '43
 Speeding up measurements of air flow to aircraft engines and carburetors; adjustable orifices. J. P. Green. *il* *diags Instruments* 16:54-8+ F '43
 Sub-zero tests solve problems of cold weather flying; Wright aeronautical corp. *il* *Aero Digest* 41:90 N '42
 Tests of plane engines; abstract. G. E. Cassidy, W. A. Mosteller and W. L. Wright. *Science* 97:sup8 Ja 29 '43
 Training operators for aviation engine testing; abstract and discussion. L. R. Grandy. S A E J 51:sup26-7 My '43
 Wright tests plane engines at stratosphere temperatures. *il* *Heat & Ven* 40:41 My '43

Power recovery

Aircraft-engine tests provide new source of manufacturing power. *il* *diags Power* 87:397-8 Je '43
 Airplane engine power recovered on test; synchronous alternator connected to engine under test by means of magnetic coupling. *Iron Age* 150:49 D 10 '42
 Electric torque meters for aircraft engines. R. L. Findley. *il* *diags Aero Digest* 42:285, 291+ Je '43
 Power generation from aircraft engines. R. L. Findley. *il* *diags Aviation* 42:162-5+ My '43
 Power recovery in testing aircraft engines. C. A. Chayne. *il* *diags Automotive & Aviation Ind* 87:26-8, 84+ D 15 '42
 Power-recovery system of testing aircraft engines. G. E. Cassidy, W. A. Mosteller and W. L. Wright. *il* *diags Gen Elec R* 46:239-46 Ap '43; Same. *Elec Eng* 62:Trans 240-6 My '43; Same cond. *Aero Digest* 42:223-4, 227, 268+ F '43; Abstract. *Electrician* 130:623-6 Je 18 '43
 Power saving on test beds. *diag Elec R (Lond)* 132:39-40 Ja 8 '43
 Variable-speed control; use of magnetic coupling for recovering power used on engine test beds. *diag Elec R (Lond)* 133:337-8 S 10 '43

Transportation

Dehydration to prevent corrosion; moistureproof wrappings and silica gel for metal parts. *il* *Mod Packaging* 16:69-72+ Mr '43

AIRPLANE engines—Transportation—*Continued*
 New package dehydrator. H. H. Wilkinson.
 il Chem & Eng N 21:1054-5 JI 10 '43; Same.
 Marine Eng 48:220+ Ag '43
Packaging aircraft engines and parts for shipment. il Steel 113:70+ O 13 '43

Valves

Austenitic manganese steels for exhaust valves. abstract. D. W. Rudorff. Iron Age 152:73 O 28 '43
Calculation of proportional cams for internal combustion engines. E. Rossner. diags Automotive & Aviation Ind 88:38-40 My 1 '43; Discussion (Calculation of proportional cams). C. H. Bouvy. 89:45+ S 1 '43
Exhaust valve design. abstract. S. Hu. Automotive & Aviation Ind 88:25-6 F 15 '43
Intake systems of horizontally-opposed air-cooled aircraft engines. abstract. C. T. Dorman. Automotive & Aviation Ind 88:31-2 My 1 '43
Thompson aircraft products plant; production of engine valves and parts. J. Geschelin. il Automotive & Aviation Ind 89:20-5+ Ag 1 '43
Thompson products, inc.; ten years' progress in airplane valves and fuel devices. A. T. Colwell. il Aeronautical Eng R 1:153 N '42

Vibration

Dynamic stiffness and effective inertia methods in modern torsional vibration theory. R. G. Manley. bibliog diags Roy Aeronautical Soc J 47:5-21 Ja '43
Electro-mechanical analogy in oscillation theory. R. G. Manley. diags Roy Aeronautical Soc J 47:22-6 Ja '43
Optimum performance of pendulum-type torsional vibration absorber. A. H. Shieh. diags J Aeronautical Sci 9:337-40 JI '42; Discussion. R. G. Manley. 10:38-9 Ja '43

AIRPLANE fabrics

Fabric bubbles removed with hypodermic needle. R. A. Herb. il Am Mach 87:115 O 14 '43

See also

Airplane dope

AIRPLANE factories

Aircraft plant has 150-ft. timber trusses. il Eng N 131:624-9 O 21 '43
Auto plant makes planes in 11 months; Eastern aircraft division of General Motors. il Steel 111:28-9 D 28 '42
Boeing aircraft company's parts manufacturing and assembly plant at Wichita, Kan. il Factory Management 101:B54-B57 Ap '43
Bomber noses now made in Knoxville; transformation from abandoned warehouse to model Plexiglas plant. il Manuf Rec 112:62-3+ S '43
Breathing walls of brick and tile, a new masonry conception; Douglas Aircraft plant at Oklahoma City. il diag Brick & Clay Rec 102:14-16 Ap '43
Concrete arch roof for Kansas City factory; movable forms speed construction of Pratt and Whitney plant. T. Wood. il Civil Eng 13:363-5 Ag '43
Curtiss-Wright well organized for warplane production. J. Geschelin. il Automotive & Aviation Ind 89:20-3+ Ag 15 '43
Curtiss-Wright's scrap metal reclamation program. il Aero Digest 43:167, 173, 179+ JI '43
Dispersal of manufacturing operations aids aircraft industry; facts of Willow Run plant. il Steel 113:94, 99 N 8 '43
Douglas Aircraft windowless plant in Oklahoma. il diag Steel 112:86-8 Ap 5 '43
Factory for fighter planes; plant for Bell Aircraft corporation. il Arch Rec 94:54-8 JI '43
Feeder plants tap new sources of manpower; Consolidated Vultee aircraft corporation. il Am Mach 87:88-9 My 27 '43
Ford bomber plant at Willow Run, Mich. il Factory Management 101:B58-B60 Ap '43
\$14,000,000 parts building added to Texas plane plant. il Manuf Rec 112:48-9 Ap '43
Frame for world's largest timber factory completed; Douglas aircraft co. il Eng N 130:334 Mr 11 '43
General Motors' Eastern aircraft division. il Automotive & Aviation Ind 88:28-9 Ja 15 '43

Heavy timber trusses carry timber arches. A. Zweig. il diags Eng N 131:190-3 JI 29 '43
How handling helped us beat space limitations; Propeller division, Nash-Kelvinator corporation. C. Wood. il Factory Management 101:93-6 O '43
Huge bomber plant nears completion in Georgia. il Manuf Rec 112:42-3 Ap '43
Huge reinforced concrete aircraft plant built on principle of assembly line. N. V. Clements. il Concrete 51:4-5 Ja '43
Long-span flat slabs in bomber plant call for unusual floor design. il diag Concrete 51:2-3 Je '43
New bomber plant starts operations in Alabama. il Manuf Rec 112:40+ Ap '43
**New plants of 1942; Bell Aircraft, il Factory Management 101:B79-B82 Ap '43
Out of Detroit; Ford would limit Willow Run to plane assembly. Business Week p19 My 1 '43
Progress on the plains; Dallas, Texas, plant of North American aviation, inc.; illustrations with text. Am Mach 87:92-3 Ap 29 '43
Refrigerators to Thunderbolt wings; Servel's wing fabricating methods. G. E. Stedman. il Aviation 42:142-7+ O '43
Series of mobile roof forms speed aircraft engine factory; Pratt & Whitney plant. il Steel 111:41 D 23 '42
Styled for war; saving in critical metals; new Douglas plant. Business Week p81-2 F 27 '43
Texas airplane plant largest in U.S.; Lockheed-Vega modification center in Dallas. il Manuf Rec 112:32+ My '43
Ventilated design for windowless walls; Douglas Aircraft plant. il diag Eng N 130:500-1 Ap 8 '43
Ventilated wall saves steel in walls of Douglas Aircraft plant. il Heat & Ven 40:42 My '43
Warspeed erection shortcut; aircraft engine plant; Wright aeronautical corp. il Steel 112:108+ F 1 '43
Wartime construction of factory buildings; building-types study; with time-saver standards. il Arch Rec 92:52-3, 56-7 D '42
Willow Run; Ford's bomber plant. C. O. Herb. il Mach 49:121-43 F '43
Willow Run production up to schedule but not up to capacity. Automotive & Aviation Ind 88:39+ Mr 1 '43
Willow Run runs; problem plant grinds out B-24's on schedule. il Business Week p17-18 F 20 '43
Willow Run, today. F. M. Reck. il Aero Digest 42:112-15+ Ap '43**

See also

Airplane propellers— Manufacture	Airplane modification centers
Airplane assembly plants	Airplanes—Manufac- ture
Airplane engines— Manufacture	

Accounting

Application of standard costs to the aircraft industry. H. C. Nichols. N A C A Bul 24: 953-62 Ap 15 '43

Air conditioning

Acres of air conditioning; Chrysler Dodge-Chicago engine plant. H. E. Ziel. il Heating-Piping 15:480-1 S '43
Air conditioned aircraft plant has walls that breathe so as to avoid condensation troubles. il Heating-Piping 15:290-1 Je '43
Air conditioning helps production in many wars. L. W. Clifford. il Aero Digest 43:217, 219 S '43
Air recovery by gas adsorption cuts equipment weight and costs; activated carbon units; air conditioning at Pratt & Whitney plant. il diags Heating-Piping 15:238-9 My '43
Consolidated aircraft corporation; air conditioning systems. il Heat & Ven 40:30-5 Ja '43
Decentralized air conditioning serves big aircraft factory; Douglas aircraft plant at Long Beach. H. M. Hendrickson. il diag Heating-Piping 15:340-4 JI '43; Discussion. 15:405-6, 456-8 Ag-S '43
Douglas aircraft company's Tulsa plant is year-round air conditioned. R. F. Hurt. il diags Heat & Ven 40:54-61 S '43

AIRPLANE factories—Air conditioning—Cont.

Kansas bomber plant has 13 air conditioning systems. *Il Heat & Ven* 40:46-50 Ja '43
 Mammoth air conditioning plant safeguards aircraft production. *J. C. Tweedell. Il Refrig Eng* 45:442 Je '43
 More air conditioning at Glenn L. Martin plant. *Refring Eng* 46:180 S '43
 Novel comfort features in world's largest air-conditioning system; bomber plant of Consolidated aircraft corp. R. Latimer. *Il Gas Age* 92:29-30+ JI 15 '43
 Plant temperature adjusted to meet outdoor conditions; gas-fired comfort air conditioning; Consolidated aircraft corporation. *J. Kearns. Am Gas J* 159:31 Ag '43
 7000 tons of refrigeration help to make it hot for Herr Hitler; air conditioning windowless bomber plant. *J. C. Tweedell. Il Heating-Piping* 15:289 Je '43
 Ventilating paint spraying departments of bomber assembly plants. *Il Dom Eng* 160:51 N '42

Electric equipment

Lockheed's experience with magnetic particle inspection. R. Mitchell and C. Geist. *Il Automotive & Aviation Ind* 89:26-9+ S 1 '43
 Plant power, minus the bottlenecks; Wright's Ohio engine plant, electrical distribution system. *W. D. Drummond. Il diags Aviation* 42:157-9+ N '43
 Power trucks in an aircraft plant. *Il Mach* 49:184-6 D '42
 Salt bath treatment of aircraft parts. S. M. DePoy. *Il Automotive & Aviation Ind* 89:38-40+ N 1 '43

Employees

Absenteeism under control at Vultee. A. R. Baish. *Il Automotive & Aviation Ind* 88:22-4+ Je 15 '43
 Absenteeism, what's the problem? *Il Aviation* 42:116-17+ Ap '43
 Adel's training system for manufacture of aircraft hydraulic equipment. G. Tharratt. *Il diags Automotive & Aviation Ind* 88:30-1+ Ja 15 '43
 Aircraft industry officials doubt WMC order will solve problem. S. Hershey. *Aviation N* 1:7 Ag 23 '43
 Aircraft welders need special training; welding aluminum and chromium molybdenum steel. *Il diags Am Mach* 87:112-13 My 13 '43
 All set for any emergency; Goodyear aircraft corporation. Akron. E. T. Hier and W. C. Wright. *Il Factory Management* 100:107-12 D '42
 Boeing surprised; lands 1,538 workers in big drive. *Business Week* p88+ O 2 '43
 Brewster hearings bring out shocking effects of Wagner act. *Steel* 113:75 N 8 '43
 Brewster's tangle; Coast guard seizure of defiant plant guards precipitated Hatboro strike. *Il Business Week* p88+ S 4 '43
 Building winning spirit into Grumman Aircraft. E. H. Forbes. *Il Aviation* 42:100-1+ Mr '43
 China's own; subassemblies for planes to be made in California DPC plant organized and staffed by Chinese. *Business Week* p14-15 S 4 '43
 Curtiss-Wright airplane division's year-round war production drive. *Il Aero Digest* 42:237, 239-40+ Je '43
 Curtiss-Wright offers its employee relations techniques to other firms. R. C. Fyne. *Il Sales Management* 52:60, 62 Je 1 '43
 Developing graphic illustrators; commercial artists trained in creating isometric drawings for production and service line workers; Fleetwings, inc. R. R. Wiese. *diags Aviation* 41:113+ N '42
 Douglas' safety plan pays dividends; abstract. A. R. Boone. *Management R* 32:216 Je '43
 Earnings in aircraft-engine plants, May 1942. L. M. Solomon and N. A. Tolles. *Monthly Labor R* 55:1230-5 D '42
 Earnings in aircraft-parts plants, November 1942. E. M. Olsen. *Monthly Labor R* 56:1054-68 Je '43
 Earnings in California aircraft-parts plants, November 1942. E. M. Olsen. *Monthly Labor R* 56:758-67 Ap '43
 Employees play; Lockheed workers' club. *Business Week* p83+ Je 5 '43

Employment of women, handicapped men and inauguration of split shift system help aircraft builders solve manpower problem. *Il Steel* 112:72-3 Je 28 '43
 Engineering courses train women; Eastern aircraft division of General Motors sending women college graduates back for additional training. *Il Am Mach* 87:99 JI 8 '43
 Engineering job and training opportunities in the aircraft industry. C. T. Reid. *J Eng Educ* 33:691-5 My '43
 Engineers made to order; Vega's training. E. V. Gustavson. *Il Aviation* 42:167, 169+ N '43
 First aid corps; Consolidated Vultee aircraft corporation. C. Harrison. *Il Ind Med* 12:390-3 Je '43
 Fix plane labor; program drafted by Porter after studying turnover. *Business Week* p62+ Ja 2 '43
 Foremen's test; Association seeks vote for strike in NLRB ballot at Murray. *Business Week* p68-9 Ag 7 '43
 Ganging Douglas? A.F.L.-C.I.O. truce in aircraft plants. *Business Week* p75-6 Ap 3 '43
 Girls and middle-aged women comprise 47 per cent of Boeing aircraft's personnel. *Il Steel* 112:84, 86, 88 Ap 12 '43
 Housing muddle; Willow Run scratch for manpower. *Business Week* p75-6+ Mr 13 '43
 How Curtiss cares for workers' children. *Il Aero Digest* 42:264+ F '43
 Industry taking steps to control absenteeism. L. V. Spencer. *Aero Digest* 42:135-6+ Ap '43
 Influence of women on aircraft production methods. W. G. Tuttle. *Il Aero Digest* 42:142-3, 195, 199 Mr '43
 Inspectors in ten weeks; Johns Hopkins course in precision inspection in aircraft work. D. H. Fax. *Il Factory Management* 101:118-19+ Ja '43
 Keeping plant people fit; North American aviation, inc. K. L. Kellough. *Il Factory Management* 101:95-7 Ja '43
 Legal requisites for labor standards in the aviation industry. *Aviation* 42:127+ Ja '43
 Lift for Boeing? WMC orders shipyards to lay off 14,000 in hope they'll move to aircraft. *Business Week* p 17-13 Ag 28 '43
 Machinists win; I.A.M. takes about 50% of votes in NLRB election at big Douglas plant. *Business Week* p74+ Ag 14 '43
 Makeshift remedy; aircraft manufacturers pessimistic about manpower plan. *Business Week* p96-7 S 11 '43
 Manpower ruling seen to hold vital men in plants; aircraft workers forbidden to enlist in armed forces. *Aero Digest* 41:365+ D '42
 Manufacturers study 3-point plan to ease plane manpower shortage. *Aviation N* 1:15 O 11 '43
 Meets or planes? West coast manufacturers offer the services their choice. *Business Week* p73-4 Ag 14 '43
 Much tighter labor controls for West Coast plane builders. *Automotive & Aviation Ind* 89:48+ S 15 '43
 Negro employment in airframe plants. *Monthly Labor R* 56:888-9 My '43
 New Grumman wage plan studied for key to manpower problem. *Aviation N* 1:14 O 18 '43
 New hands; Lycoming division, Aviation corp. *Il Safety Eng* 34:11-12 N '42
 Operator tests aid Lycoming training program. *Il diags Steel* 112:111-12 F 15 '43
 Physically handicapped workers handle control system for ice-box rivets at Curtiss-Wright Columbus plant. *Il Steel* 113:84+ JI 5 '43
 Plant war production drive; Glenn L. Martin co. *Il Steel* 111:54-5+ D 28 '42
 Position charts guide inexperienced workers at Vultee. *Il Automotive & Aviation Ind* 88:23 F 15 '43
 Posters introduce workers within aircraft plant; show work being done by each group. B. K. Platt. *Il Ptr Inc* 205:23 N 12 '43
 Production changes necessary for women workers. W. G. Tuttle. *Il Automotive & Aviation Ind* 88:24-6+ Ap 15 '43
 Proper feeding boosts worker production; Douglas aircraft co. L. S. Flint. *Il Aviation* 41:104-5+ N '42
 Ready for the emergency. *Il Nat Safety N* 47:38+ Ja '43

AIRPLANE factories—Employees—Continued

- Results count; bomber performance is credited with draft moratorium for plane plants. Business Week p16-17 Ag 14 '43
- Satellites gleam; branch plants set up near big aircraft companies. Business Week p78+ Mr 13 '43
- Sources of labor supply in West Coast shipyards and aircraft-parts plants. T. P. Kanninen. Monthly Labor R 55:926-31 N '42
- Split-shift as a solution of the manpower problem. B. R. Otto. Aero Digest 42:313+ Je '43
- Tailored training program; Wright aeronautical corporation. B. H. Saltzer. il Am Mach 87:98-9 Je 24 '43
- Training operators for aviation engine testing; abstract and discussion. L. R. Grandy. S A E J 51:sup26-7 My '43
- Training workers for machine tool operation; Briggs manufacturing co. J. W. Busman. il diags Aero Digest 42:116, 119-20, 125+ Ja '43
- Turnover studied; Pacific Coast aircraft men had to hire 150,435 to gain about 20,000 this year. Business Week p58+ S 25 '43
- Wage stabilization in California airframe industry, 1943. T. W. Reedy and N. A. Tolles. Monthly Labor R 56:1188-98 Je '43
- Wages in aircraft-propeller industry, October 1942. T. W. Reedy. Monthly Labor R 56:748-57 Ap '43
- War industries turn to women as men become scarce; North American aviation, inc. il Mach 49:176-81 D '42
- Wartime problems of personnel administration. W. L. Wilson. il Aero Digest 41:56, 58A, 89+ N '42
- West Coast aircraft industry starts tests of new manpower policy. S. Hershey. Aviation N 1:15+ S 20 '43
- What kind of a guy is an aircraft worker, and how do you sell him? il Sales Management 52:44-7 Ja 1 '43
- Which will we get, men and/or planes? J. Foster, jr. Aviation 42:110-11+ O '43
- Willow Run set-to; union officials attack bomber plant's output record. Business Week p17-18 O 9 '43
- Women and warplanes will help win this war; training program. Curtiss-Wright corp. H. C. Herrick. il Steel 112:101-2+ Ap 26 '43
- Women drop out; riveters leaving aircraft plants. Business Week p88+ Ag 21 '43
- Women in industry; a study of 135 women working as riveters in the aircraft industries. W. C. Bradbury and C. B. S. Evans. bibliog ind Med 12:690, 692 O '43
- Women who work for victory. W. G. Tuttle. Mech Eng 65:657-60 S '43

Equipment

- Aero equipment digest. A. Klein. Published in monthly numbers of Aero digest
- Aircraft engines on the production line; Wright aeronautical corporation. H. E. Linsley. il Mech Eng 65:493-6 J1 '43
- Aircraft industry competing with oil for reclaimed casing and tubing; jigs from reclaimed pipes. R. N. Swanson. il Oil & Gas J 41:42-3 Ja 14 '43
- Aircraft production number. il Mach 49:134-97 J1; 134-96 Ag '43
- Aircraft tooling with plastics. il Engineer 175:127-30 F 12 '43
- Are welded tubular jigs. R. H. Holmes. il Aero Digest 42:301+ Je; 43:327-9, 331 J1 '43
- Automatic sorters for aircraft rivets. H. O. Mills and L. Donner. il diags Am Mach 87:105-8 J1 8 '43
- Aviation products and services; with list of suppliers. Aviation 42:275-383 F '43
- Building a dive bomber; Douglas aircraft company. il Am Mach 87:98-101 S 2 '43
- Cast zinc-base dies produce aircraft stampings. il Foundry 71:144+ J1 '43
- Chevrolet's unique setup for airplane engine production. J. Geschelin. il Automotive & Aviation Ind 88:24-8, 42 Je 1 '43
- Consolidated retools the Coronado. E. P. Myers. diags Am Mach 87:83-90 Je 10 '43
- Controlled air supply for supercharger, carburetor and engine testing. C. S. Leopold. flow diags Refrig Eng 46:85-7+ Ag '43
- Conveyors save space in aircraft plant; finishing operations. F. M. Bates. il diags Metal Finishing 41:53-9 Ja '43
- Conveyors save this plant's manpower for production; Wright aeronautical corp. il Factory Management 101:84-8 F '43
- Curtiss-Wright's Indiana propeller plant. il Aero Digest 42:181, 188, 190+ Ap '43
- Cutting costs on perforating dies; use of masonite and Cerromatrix. E. H. Ruder. il diags Aviation 42:165-7+ Ag '43
- Designing aircraft jigs and fixtures for arc welding to eliminate machining. H. V. Wenger, jr. il diags Aeronautical Eng R 2:40, 45, 47+ Mr '43
- Device provides quick quench for aluminum parts; Ryan aeronautical company. il Am Mach 87:105 O 14 '43
- Directory of equipment for handling parts and materials. Aero Digest 43:281, 283-4 Ag '43
- Directory of machines and machine tools. Aero Digest 42:279-82+ Ja '43
- Douglas drop hammer technique; use of Cosostamps, rubber pads and Kirksite dies. P. Staybold. il Iron Age 152:58-61 J1 8 '43
- Douglas tube bender speeds output. il Iron Age 151:54-7 Je 17 '43
- 5000-ton hydraulic press speeds production of army's Bell Airacobras. il Aero Digest 41:192 N '42
- Ford war plant facilitates straight-line production. J. Geschelin. il Automotive & Aviation Ind 87:18-24+ D 1 '42
- Fortresses by Vega. H. E. Ryker. il plan Aviation 42:136-8, 143-5+ J1 '43
- Four tables feed aircraft. Press. S. H. Brama. il Iron Age 152:61 S 9 '43
- Fully-automatic spar riveter at Curtiss Wright. il Aero Digest 42:195+ Je '43
- Handling trolleys for assembly of aircraft il Mech Handling 30:59-60 F '43
- Hanging and racking airplane parts for processing. W. P. Sykes. il Metal Finishing 41:131-3+ Mr '43
- Hydraulic propeller hoist saves vital man-hours at Willow Run. il Steel 112:62 My 24 '43
- Ideas from Inglewood; some novel machine set-ups. il Am Mach 87:90-1 J1 22 '43
- Impression-cast jaws for aircraft fittings made from Kirksite A. H. F. Lenz. il diags Automotive & Aviation Ind 89:34-6 J1 1 '43
- In-line machining of aircraft cylinder heads; Greenlee transfer type machine built for Studebaker. W. A. Phair. il diags Iron Age 152:66-73 Ag 12 '43
- Lockheed sheds tears for the Axis; manufacturing auxiliary gasoline tanks for fighter planes. M. W. Coker. il Mach 49:161-7 My '43
- Mass assembly methods adapted by Ford engineers to army 3-ton transport gliders. il Automotive & Aviation Ind 89:30-3, 46+ Ag 1 '43
- Mass production methods used at Bell plant to build Airacobras. J. Geschelin. il Automotive & Aviation Ind 89:22-6+ S 15 '43
- More wings for Airacobras; constant motion production lines aid unskilled women workers; Bell aircraft corp. C. F. Lozon. il diags Aviation 42:126-40 F '43
- Overhead railways speed bomber parts handling at Willow Run. E. H. Doerger. il Steel 113:108-10 S 13 '43
- Plant tribunal; Douglas Aircraft pays counselors to prosecute complaints of employees. Business Week p85+ F 20 '43
- Plastic punches are tough; Vega aircraft corporation. il Am Mach 87:83-6 F 4 '43; Same. Aero Digest 42:121+ F '43; Same. Iron Age 151:68-72 F 18 '43; Same. Automotive & Aviation Ind 88:40-2 F 1 '43
- Plastic reduces cost of piercing dies; Vega aircraft corporation. R. Kennedy. il diags Am Mach 87:83-6 My 27 '43
- Pneumatic clamping device for plywood skins. il Automotive & Aviation Ind 88:29 Je 1 '43
- Press output upped by special built-in materials handling system; Douglas aircraft company. il Steel 113:99-100 J1 26 '43
- Producing the B-25 bomber. R. E. Dawe. il diags Aviation 42:106-11+ Mr '43
- Production operations at Willow Run. J. Geschelin. il Automotive & Aviation Ind 88:34-7+ Je 1 '43
- Quicker and cheaper setup method for drop-hammer dies. il Aero Digest 42:157 My '43
- Reclaiming Kirksite dies in aircraft manufacture; metal spraying. il Steel 111:66+ D 28 '42

AIRPLANE factories—Equipment—Continued..

- Roll out the warplanes by means of conveyorized production lines; Curtiss Wright corp. A. D. Palmer, Jr. *il Steel* 112:92-4 Mr 22; 94-6 Mr 29 '43
- Shop shots. *il Am Mach* 87:92-3 Je 10 '43
- Shortcuts speed propeller production; Hamilton standard propeller division of United Aircraft. *il Aviation* 42:151+ N '42
- Special devices used in aircraft building. H. F. Schwedes. *il Mach* 49:166-8 Je '43
- Stitch in time, modern version; metal stitching machines. R. J. Niederhauser. *il diags* Machine Design 15:87-90+ My '43
- Studebaker know-how speeds Flying Fortress engine output. J. Geschell. *il Automotive & Aviation Ind* 38:13-22+ Ap 1 '43
- Teaming handling devices with women; Wright aeronautical corporation. H. E. Linsley. *il Am Mach* 87:109-11 O 28 '43
- Technical developments in high-production sheet metal forming. W. Schroeder and T. H. Hazlett. *il diags S A E J* 51:170-92 My '43
- Thermoplastics for aircraft tools; Thermo-Cast. J. M. Church. *il Mod Plastics* 20:74-5+ My '43
- This plant-within-plant assures peak production; miscellaneous parts department of Consolidated Vultee's San Diego plants. *il Aviation* 42:161-3+ N '43
- Tooling plays stellar role in building the constellation. G. A. Betts. *il diags Am Mach* 87:109-24 Ag 19 '43
- Tunnel-type drilling equipment; Eastern aircraft division, General Motors corp. D. C. Stewart and W. F. Ocenasek. *il diags Am Mach* 87:100-1 JI 8 '43
- Two men and mechanical handling aids turn out 12,000 parts per shift; Consolidated Vultee aircraft corp. revolving table hydraulic press. *il Steel* 112:96 My 31 '43
- Widespread use of conveyorized assembly systems. *il Aero Digest* 43:182-3 Ag '43
- Willow Run; sanitary system. *il Dom Eng* 162:66-7 Ag '43

Bibliography

- Aero equipment digest index; items described in Aero equipment digest section from November 1942 to April 1943; addresses for manufacturers. *Aero Digest* 42:390+ Ap '43

Fires and fire protection

- Fire protection in aircraft manufacturing. F. Hargrett. *Weekly Underw* 147:1310-13 D 5 '42

Heating and ventilation

- Chrysler corp. builds Dodge-Chicago plant; heating, ventilating and air conditioning equipment. G. S. Whittaker. *il Heat & Ven* 40:40-5 S '43
- Douglas aircraft company Chicago plant, heating equipment, illustrations. *Heat & Ven* 40:70-1 S '43
- Glenn L. Martin company's new building heated by oil-fired direct heaters. R. V. Mehaffey. *il plans Heat & Ven* 39:30-2 D '42
- Heating the world's largest incubator for bombers; Ford bomber plant at Willow Run. *il Dom Eng* 161:78-80 Je; 162:55-7 JI '43
- Wright aeronautical corporation; Cyclone engine plant in New Jersey equipped with blackout ventilation. R. N. Hosey. *il Heat & Ven* 40:36-40 Ja '43

See also

- Airplane factories—
Air conditioning

Layout

- Avengers by Eastern. H. Chase. *il plan Aviation* 42:168-73+ JI '43
- Behind the assembly line; feeder departments; Consolidated Vultee aircraft corporation. R. B. Parkhurst. *il Am Mach* 87:91-4 JI 8 '43
- Mustangs by North American. R. H. Ruud. *il plan Aviation* 42:162-7+ JI '43
- Plant layout for aircraft mass production; Vultee aircraft inc. C. H. Brubaker. *il flow chart diags Iron Age* 151:52-4 Je 3 '43
- Plant layout in three dimensions; use of models; Long Beach plant, Douglas aircraft company. W. A. Burton. *il Am Mach* 87:87-8 S 16 '43

Lighting

- Aircraft factory lighting. *il Electrician* 131:39-40 JI 9 '43
- Lighting in the aircraft industry. *il Light & Lighting* 36:100-1 JI '43
- Production jigs fluorescent lighted; Douglas aircraft co. J. A. Murray. *il Elec West* 31:43 S '43
- Regular servicing keeps lighting fixtures fit. F. Clayton. *il diags Factory Management* 101:132-4 Je '43

See also

- Airplane assembly
plants—Lighting

Management

- Adapting automotive mass production to manufacture of fighting aircraft; Republic aviation corp. G. E. Stedman. *il Steel* 113:88-90+ Ag 16 '43
- Aircraft production analysis, key to assembly line efficiency. L. F. Dorman. *il Aviation* 42:148-52+ N '43 (to be cont)
- Aircraft tool planning. R. H. Luders. *il Aviation* 42:144-5, 147+ Ap, 175, 181+ My '43
- Assignment boards tell what to do, how to do it; Vultee aircraft. J. M. Druliner. *il diags Factory Management* 101:112-13 My '43
- Bell's production methods and their advantages. O. L. Woodson. *il Aero Digest* 43:147+ JI '43
- Bright future foreseen for Douglas aircraft co. in postwar production of transport planes. *Steel* 113:72, 74-5 Ag 9 '43
- Centralized planning for small plants; subcontractors' system; Aircraft products & equipment corp. J. H. Stephens. *il Aviation* 42:217+ Mr '43
- Conservation starves the scrap barrel. C. C. Shafer. *il diags Aviation* 42:138-42+ Je '43
- Consolidated subcontract system coordinates schedules. H. G. Golem. *il Aviation* 42:195+ Ap '43
- Constant-motion line speeds assembly, saves space; wing panels at Bell aircraft corporation. *il Factory Management* 101:122-3 S '43
- Costs, building time for Consolidated planes reduced by suggestions from supervisors and employees; foreman's cost conversion bonus system. *Steel* 112:82 My 3 '43
- Curtiss shows subcontractors how to spur production. *il Ptr Ink* 203:22-3 Je 25 '43
- Curtiss-Wright's shop priority control system. W. J. Shepherd. *Aero Digest* 42:216, 219-20+ Mr '43
- Decentralized maintenance for continuous output; Douglas aircraft company. A. T. Kuehner. *il Factory Management* 101:123-8 Mr '43
- Douglas streamlined inspection system. C. C. Harrison. *il Automotive & Aviation Ind* 39:24-5+ JI 15 '43
- Douglas subcontracting system. F. W. Constant. *Automotive & Aviation Ind* 38:32-3+ Je 1 '43
- Efficient production management achieved by careful controls. C. H. Speck. *il Aero Digest* 42:184-6, 207-8 Ap; 173+ My '43
- Flight testing is a sound business. E. T. Allen. *il Aviation* 42:109-12 Ap; 118-19+ My; 147, 149+ Je '43
- Flow production as applied to the manufacturing of aircraft exhaust collector systems. E. A. Moore. *il Automotive & Aviation Ind* 37:26-9+ N '42
- Foreman and the manpower problem; Pratt & Whitney division of United aircraft; motion picture used to supplement program of education in foremanship. *il Aero Digest* 43:154, 157+ S '43
- Fortresses by Douglas. G. Tulloch. *il Aviation* 42:130-5+ JI '43
- Good tooling simplifies production of Flying Fortresses. B. K. Bucey. flow chart *il diags Aviation* 42:106-11+ Ja '43
- Growth of wartime aircraft organization. E. W. Walker. *Aero Digest* 42:247, 249, 251+ Je '43
- How Cadillac's Aircraft division prevents bottlenecks in men and machines. F. M. Reck. *il Aero Digest* 41:110, 113-14+ N '42
- How Vega engineering simplifies production methods. R. A. Trumple and N. Irwin. *il Automotive & Aviation Ind* 38:20-1+ Je 15 '43

AIRPLANE factories—Management—Continued
 Liberators by Consolidated Vultee, G. S. Newman, *il* plan Aviation 42:146-51+ J1 '43
 Liberators by Ford, C. S. Ricker, *il* diags Aviation 42:152-8, 161+ J1 '43
 Many production innovations in Ford P & W engine plant, F. M. Reck, *il* Aero Digest 43:256-7, 259-60 S '43
 Meeting delivery dates by production planning, A. Lanzafame, *il* Aero Digest 41:176, 178, 181-2 N '42
 Organizing a graphic illustration department, J. Gonzales and R. E. Wiese, *il* diags Product Eng 44:366-9 Je '43
 Planned engineering records aid production scheduling, P. Sheets, *il* diags Product Eng 14:400-5 J1 '43
 Plans for intensive labor utilization called more visionary than practical, S. Hershey, Aviation N 1:16-17 N 8 '43
 Present-day manufacturing problems of the aircraft industry, C. W. Perelle, Aero Digest 42:158+ My '43
 Production control; Consolidated Vultee aircraft corporation, W. V. McClung, *il* Mech Eng 65:727-31 O '43
 Production density, to save floor space; Boeing aircraft company, *il* Factory Management 101:91-3 Mr '43
 Production planning through time study analysis, B. F. Smith, Aero Digest 43:255+ Ag '43
 Quality control keeps product standards high; Ryan Aeronautical co. B. Holland, *il* Aviation 42:160-2+ Je '43
 Quality control plays a major role at Bendix, J. Geschwin, *il* Automotive & Aviation Ind 88:18-23, 44 Ja 1 '43
 Reduction of man-hours in aircraft production; Consolidated Vultee's rule-of-thumb for fabricating efficiency, I. M. Laddon, *il* Aviation 42:170-1, 173+ My '43
 Rivets, cool and collected, *il* Mod Packaging 17:92-4 O '43
 Scrap goes back to work; Bell aircraft corp., Buffalo, E. B. Cole, *il* Factory Management 101:120-3 J1 '43
 Special handling facilities and efficient production control system; wings for the Republic P-47 Thunderbolt fighter plane; Servel inc. G. E. Stedman, *il* Steel 113:124-6+ N 8 '43
 Statistical quality control in the aircraft industry, E. A. Pinto, Aero Digest 43:313-15, 317+ J1 '43
 Subcontracting as a permanent policy; United aircraft corporation, *il* Aviation 41:189+ N '42
 Timed operations pace conveyors in Vengeance bomber assembly, R. McCulloch, *il* diags Am Mach 87:97-108 Ap 1 '43
 To simplify is to save; Glenn L. Martin company, Baltimore, O. H. P. Champlin, *il* Factory Management 101:98-104 Je '43
 Tool and operation planning in an aircraft plant, W. E. Brainard, *il* Iron Age 152:60-4 N 11 '43; Abstract, S A E J 51:sup27-8 O '43
 Tool control, C. H. Brown, *il* Aero Digest 42:229-30+ Ja '43
 Tool design gains importance; Fleetwings, inc. J. J. Scheppe, diags Aviation 41:129+ N '42
 Vega's material conservation program is a selling job, J. A. Brash, *il* Automotive & Aviation Ind 88:36-7+ F 15 '43
 Work simplification at Martin, A. W. Perkins, *il* Aero Digest 42:178-80 F '43

See also

Airplane factories—
 Employees

Power

Aircraft-engine tests provide new source of manufacturing power, *il* diags Power 87:397-8 Je '43
 Power generation from aircraft engines, R. L. Findley, *il* diags Aviation 42:162-5+ My '43
 Power recovery in testing aircraft engines, C. A. Chayne, *il* diags Automotive & Aviation Ind 87:26-8, 34+ D 15 '42
 Power-recovery system of testing aircraft engines, G. E. Cassidy, W. A. Mosteller and W. L. Wright, *il* diags Gen Elec R 46:239-46 Ap '43; Same, Elec Eng 62:Trans 240-6 My '43; Same cond. Aero Digest 42:223-4, 227, 268+ F '43

Power saving on test beds, diag Elec R (Lond) 132:39-40 Ja 8 '43

Records

Curtiss-Wright's shop priority control system, W. J. Shepherd, Aero Digest 42:216, 219-20+ Mr '43
 Douglas streamlined inspection system, C. C. Harrison, *il* Automotive & Aviation Ind 89:24-6+ J1 15 '43
 Efficient production management achieved by careful controls, C. H. Speck, *il* Aero Digest 42:184-6, 207-8 Ap; 173+ My '43
 How Bell Aircraft makes operations sheets, *il* Am Business 13:24-5+ O '43
 Tool control, C. H. Brown, *il* Aero Digest 42:229-30+ Ja '43

Safety measures

Accident prevention in aircraft manufacturing, W. S. Rhodes, Automotive & Aviation Ind 88:151-2+ Mr 15 '43
 Built with safety! L. Johnson, *il* Safety Eng 35:9-10+ Mr '43
 More men mean more safety; Glenn L. Martin company, *il* Safety Eng 84:20-1 N '42
 Reducing dust and din; new booths provide improved ventilation for grinding; Curtiss-Wright corporation, *il* Nat Safety N 48:23+ J1 '43
 Safety devices for aviation plants, D. S. Frederick, *il* Mod Plastics 20:48-9 F '43
 Setting the pace for the aircraft industry; Nashville division of Consolidated Vultee aircraft corporation, *il* Nat Safety N 48:68-9+ O '43
 Transparent armor; tough plastic used for gun turrets and bombardier compartments also protects aircraft workers, D. S. Frederick, *il* Nat Safety N 47:24-5 F '43

AIRPLANE industry and trade

Central aircraft council formed by southern and midwestern manufacturers, Automotive & Aviation Ind 88:47+ Ap 1 '43
 Engineering outlook; aircraft, Engineering 155:75 Ja 22 '43
 Plane artists; catalogs prepared by staff of War-art associates, Business Week p70 Ja 30 '43
 Sears, Ward and Penney stores quiz airplane industry on post-war goods, S. Bangs, Aviation N 1:8 Ag 30 '43
 Subcontractors section (cont), *il* Aviation 41:221+ D '42

See also

Airplane models

Advertising

Offer of aircraft picture makes friends for Studebaker, *il* Ptr Ink 204:33+ Ag 20 '43
 Priority lists readied for post-war plane buyers, *il* Ptr Ink 203:28+ My 21 '43
 Truman committee slaps copy of two industrial advertisers; Curtiss-Wright's promotion of dive bomber, and International Nickel's advertising of helicopters, J. Crichton, Ind Marketing 28:98+ Ag '43

Directories

Annual directory of manufacturers of airplanes, gliders, engines and accessories, Aero Digest 42:283-362, 424 Mr '43
 Directory of aircraft and engines manufacturers, Aviation 42:265-71 F '43

Finance

Aircraft industry's problem of reserves for postwar transition, F. A. Callery, Automotive & Aviation Ind 89:17+ S 15 '43
 Aircraft makers look to Congress, R. P. Cooke, Barron's 23:15 S 6 '43
 Aircraft manufacturers are not overcapitalized in relation to peace-time sales, Comm & Fin Chr 158:99+ J1 8 '43
 And just where are those profits? H. L. Federman, Aviation 42:118+ Je '43
 Are you prepared for contract termination? R. L. Hoadley, Aviation 42:126+ Ag '43
 Aviation's postwar portents, H. L. Federman, Aviation 42:120+ My '43
 Financial outlook for the aviation industry, H. L. Federman, Aviation 42:116+ F '43
 Financial position of the aircraft industry, L. B. Bollinger and T. Lilley, (Business research studies, 25) 46p pa \$1.50 Harvard Univ. Graduate school of business, Boston '43

AIRPLANE industry and trade—Finance—Cont.

Mid-year checkup on aviation finance. R. Hoadley. Aviation 42:114+ J '43
Investment status of the aircraft industry. Aviation 42:96+ Ja '43
Needed, a plant re-conversion cost policy. H. L. Federman. Aviation 42:127+ Ag '43
Planes for all; finance company bought by Lockheed to provide postwar credit. Business Week p 105-6 Je 12 '43
Reconversion reserves, they're postwar worry no. 1. R. L. Hoadley. Aviation 42:179+ S '43
Slump, or surge; which will it be in aviation's postwar markets? H. L. Federman. Aviation 42:113+ JI '43
You can't write profits in red ink. R. L. Hoadley. charts Aviation 42:114-16+ O '43

Securities

Aircraft industry's pros and cons for the future; position of leading aviation stocks. Mag of Wall St 71:648-50 Mr 20 '43
Aircraft manufacturing companies. H. Gully. Comm & Fin Chr 157:1571 Ap 29 '43
Aircrafts may still be growth industry shares; earnings and prices, 1936-39; tabulation. Mag of Wall St 71:237 D 12 '42
Favoring factors for aircraft investments. H. L. Federman. Aviation 42:173+ O '43
Should aircrafts be held as peace stocks? G. W. Mathis. II Mag of Wall St 72:345-8+ JI 10 '43
Stockholders audit of the aircrafts. J. C. Clifford. Mag of Wall St 73:77-9, 99-100 O 30 '43
Wanted: a haven for aviation securities; analysis of investment trust holdings shows both transport and manufacturing stocks dropped from trust portfolios. H. L. Federman. Aviation 42:183+ S '43
Where are those dividends? H. L. Federman. Aviation 42:190+ N '43

Service

Selecting field service personnel. S. C. Timson. Aero Digest 43:158, 293+ JI '43

Service manuals

Service manuals for the army and navy air forces. A. Lundgren. II diags Aero Digest 43:233-4+ S '43

Statistics

Aircraft, production, domestic civil, and exports, 1938-1941. Survey of Cur Business 1942 Sup p170
Airplane and engine production, 1927-1932; chart and table. Automotive & Aviation Ind 88:97 Mr 15 '43
Planes to win. Business Week p17 Mr 13 '43

California

Associate producers plan speeds CG-4A gliders; eleven California manufacturers pooled their equipment. O. W. Timm. II Aviation 42:121-31 N '43

Canada

Aircraft production in Canada. B. Keith. II Aero Digest 42:172-4, 176+ F '43
Canada gains vital new production role. R. L. Hoadley. II Aviation 42:92-5+ Mr '43
Canada's aircraft industry undergoes rapid expansion. II Automotive & Aviation Ind 89:25+ S 1 '43
Conservation in Canada's aircraft industry. J. Montagnes. II Aviation 42:181+ S '43
Mosquito design facilitates production; De Havilland aircraft of Canada. J. Montagnes. II Aviation 42:259, 261 My '43

Eastern states

Aircraft war production council, East coast, inc.; officers, directors, committee members. Aero Digest 42:240+ F '43

Great Britain

Aircraft industry. Economist 144:585 My 8 '43
Aircraft industry. Economist 145:228-9 Ag 21 '43
Aircraft production; from the tenth report of the Select committee on national expenditure. Engineer 176:143-4 Ag 20 '43
Aircraft production in Great Britain. Science 98:318 O 8 '43

Industrial achievement. Economist 145:231 Ag 21 '43
Smaller aircraft concerns; earnings. Economist 143:807 D 26 '42
U.S. aircraft mission surveys Britain's air industry. Aero Digest 41:118, 120, 248+ D '42
We may be expected to assume leadership in design and production of large aircraft; British production methods. G. D. Welty. Aero Digest 42:182-3+ Ap '43

Latin America

Latin America; the industry's land of promise. W. R. Douglass. II Aero Digest 42:118, 120+ Mr '43

Pacific coast

Pacific rim market offers large possibilities for West Coast aircraft plants in postwar era. A. E. Allen. II Steel 112:87-8 My 17 '43
Shipbuilding, aircraft and women; dominant war problems on the Pacific coast, Iron Age 151:159+ Ja 7 '43

United States

Aerona aircraft corporation and other leading aircraft companies; ten years' progress. W. D. Hall and others. II Aeronautical Eng R 1:39-86 N '42
Air warfare comes of age. T. E. Lloyd. II Iron Age 151:110-17+ Ja 7 '43
Aircraft industry in all-out cooperation. Aviation 41:94-5+ N '42
Aircraft industry in war and peace. Barron's 23:29 Ja 11 '43
Aircraft production. Published in weekly numbers of Aviation news
Aircraft scheduling unit attacks materials distribution problems for aviation contractors. Steel 112:54, 56, 58 Mr 29 '43
Airplane production in 1943 expected to reach 100,000. Automotive & Aviation Ind 89:46+ JI 1 '43
Aviation's place in the Controlled materials plan. J. Foster, Jr. Aviation 42:114-15+ Ap '43
Cancellation demands action, and quick. R. L. Hoadley. Aviation 42:119+ N '43
Design for survival; aircraft producers' problems. J. Foster, Jr. Aviation 42:118+ N '43
Douglas aircraft co. expands from two to seven plants within two years. Steel 112:68+ Ap 26 '43
Effect on the war of 1943 aircraft production. J. A. Ward. II Aero Digest 42:83-6+ F '43
Future of American aircraft industry. W. Thayer. Barron's 22:8-9 N 16 '42
House group studies cost of putting air industry back on peace basis. B. Stubblefield. Aviation 1:25 S 27 '43
Knotty problems ahead in the postwar car market. J. W. Scoville; E. L. Warner, Jr. Automotive & Aviation Ind 89:30-1+ Ag 15 '43
Letter to Berlin; facts Der Fuehrer should know about aircraft production, ours vs. his. L. E. Neville. Aviation 42:110-12+ JI '43
Master surplus stock registers of ASU employ idle or excessive surplus aircraft materials through controlled redistribution. Iron Age 151:86D, 87 My 27 '43
Miracle of 1942. Aviation 42:92-3+ Ja '43
Our planes and our peace. H. Woodhead. II Aviation 42:122-3+ Ag '43
Peacetime problems of the aviation industry. H. Woodhead. Comm & Fin Chr 157:2261+ Je 17 '43
Plane cooperatives; with photographs of company officials. Business Week p60 O 9 '43
Plane goal seen; output to be leveled off at 10,000 a month. Business Week p19-20 My 29 '43
Postwar small airplane and how to increase its utility; Fly-a-plane-car service. P. Altman. II map Automotive & Aviation Ind 88:17-21+ My 15 '43
Renegotiation after taxes, provision for necessary reserves for postwar transition, and changes in contract termination policies to protect employees suggested. Steel 113:92+ S 6 '43
Slump, or surge; which will it be in aviation's postwar markets? H. L. Federman. Aviation 42:113+ JI '43

AIRPLANE industry and trade—United States

—Continued

- Some observations on the industry's post-war planning; some companies will change to new products. S. Siggia. *Aero Digest* 42: 368+ Mr '43
- Some post-war problems of our aircraft-manufacturing industry. E. S. Gorrell. *For Comm W* 11:15 Mr '29 '43
- V loan financing plan gains favor in industry. R. Wilco. *Aviation* N 1:32 Ag 30 '43
- Wanted, a national aviation policy. R. S. Damon. *Aviation* 42:112-13+ My '43
- Wartime liaison; aircraft manufacturers and their suppliers. *Business Week* p22 Mr 20 '43
- We must maintain quality while achieving quantity. R. P. Whitman. *Aero Digest* 43: 180-1+ S '43
- What the postwar buyer wants. J. H. Geisse. *Aviation* 42:116-17+ S '43
- Wing tips; aviation catapulted into no. 1 rank in year. *Steel* 112:244+ Ja 4 '43
- Wings for Kaiser; purchase of plane plant. *Business Week* p107+ Mr 13 '43
- See also Consolidated Vultee United aircraft corporation
Douglas aircraft company
- AIRPLANE landing stations.** See *Aviation* landing stations
- AIRPLANE mechanics**
Aircraft instrument mechanics and the war. E. D. Whitman. *Instruments* 15:464+ N '42
- Automotive industry's training of aircraft engine mechanics. E. L. Warner, Jr. *Aviation* & *Aviation Ind* 89:17-18+ JI 15 '43
- Canada trains them by tens of thousands. J. R. Keith. *Aviation* 42:219 221+ N '43
- CAA asks mechanic certificate plan. *Aviation* N 1:30 O 4 '43
- Improve! standardize! certify! outline of course for aircraft instrument repair, overhaul, installation, etc. H. Gollob. *Instruments* 16:607-8, 610 O '43
- Instrument technician; his growing importance in all divisions of aviation. W. J. Watkins. *Instruments* 15:521+ D '42
- Mass training of instrument mechanics to meet war needs. C. H. Smith. *Instruments* 15:428+ O '42
- Mechanics' wages hit stalemate. *Aviation* N 1:26 O 11 '43
- On-the-job training. E. G. Chapman. *Instruments* 16:67-8+ F '43
- Production vs. employment problems in aeronautic instrument shops. F. H. Brown. *Instruments* 16:72 F '43
- Service manuals for the army and navy air forces. A. Lundgren. *Aviation* 42:233-4+ S '43
- Significance of the mass training of aircraft maintenance experts. L. D. Bell. *Aero Digest* 42:170-1+ F '43
- Skill training for aircraft instrument technicians. C. H. Smith. *Instruments* 15: 419-20, 422 O '42
- Training ground crews at Chanute Field, Illinois. *Aeronautical Eng R* 2:23+ Ag '43
- Visual aids speed mechanic's training; Casey Jones school of aeronautics correlates slide-films with tests. L. S. Metcalfe. *Aviation* 42:269+ Ja '43
- AIRPLANE models**
Flying solo; \$10,000,000 industry. *Business Week* p4-6 F 27 '43
- AIRPLANE modification centers**
Long-span arches for modification center. *Aviation* Eng N 131:632-5 O 21 '43
- Modification centers, an American military innovation; making engineering changes in aircraft; Consolidated aircraft modification center. G. Hotchkiss. *Aviation* 42:134-6+ Ap '43
- Modification centers fit military planes for combat. *Aviation* 43:125-8 S '43
- Tailoring American planes to the job. *Aviation* & *Aviation Ind* 89:17-20+ JI 1 '43
- Texas airplane plant largest in U.S. Lockheed-Vega modification center in Dallas. *Manuf Rec* 112:32+ My '43

- Tire changer for big bombers; Tucson division modification center of Consolidated Vultee aircraft corp. *Aviation* & *Aviation Ind* 89:35 S 15 '43
- Tomorrow's planes today; modification centers; Consolidated-Vultee at Tucson. *Aviation* Mach 87:75-7 Ap 29 '43
- Two modification centers requested—Immediately; Tulsa and Oklahoma City are scenes of construction miracles. T. M. Robins. *Aviation* Eng 13:629-32 N '43
- Yank modification center rises in England. M. V. Cave. *Aviation* 42:255+ My '43

Heating and ventilation

- Plane modification center of Bechtel, McCone & Parsons. R. M. Rush. *Aviation* Heat & Ven 40:66-9 S '43

AIRPLANE parts

- Boosting bomber production by subcontracting; Glenn L. Martin company. T. J. Dunne. *Aviation* 41:221+ D '42
- Die castings for the war efforts; Mount Vernon die casting corp. G. Nyselius. *Aviation* & *Alloys* 18:42-7 JI '43
- Earnings in California aircraft-parts plants, November 1942. E. M. Olsen. *Monthly Labor R* 56:758-67 Ap '43
- Finishing aluminum parts for military aircraft. *Product Eng* 14:99-100 F '43; Same. *Metal Finishing* 41:257-9 Ap '43
- Foolproof procedures for precision production welding. F. Shaw and V. Forgett. *Aviation* Eng 42:237-8, 241-2+ My '43
- Forming aircraft extrusions. *Aviation* Eng 151: 66 Mr 11 '43
- Furniture city joins the air war; Grand Rapids factories make airplane parts and materials. *Aviation* 42:145-8, 153-4+ Ap '43
- Gas stoves take wing; Hardwick stove company producing aircraft wing sections and fuel tanks. H. H. Granger. *Aviation* & *Gas Assn Mo* 25:205 My '43
- Hanging and racking airplane parts for processing. W. P. Sykes. *Metal Finishing* 41:131-3+ Mr '43
- Hinge bolt design. M. Di Giovanni. *Aviation* Eng 42:211+ Ap '43
- Impact extrusion and cold pressing of airplane parts; with punch and die diagrams. P. Koenig. *Aviation* & *Aviation Ind* 89: 58-40 O 15 '43
- It's war work or else! employee training; General fireproofing co. *Steel* 112:84-5 My 10 '43
- Low-cost dies for aircraft parts; use of semi-plastic materials, such as masonite and bakelite. B. Schlenzig. *Aviation* Mach 86:1307-14 N 12 '42
- Modified standard thread for primary aircraft structures. M. Di Giovanni. *Aviation* Eng 14:641-2 O '43
- Plane parts replace silk hosiery; Se-Ling hosiery company; war conversion. *Textile World* 92:71 N '42
- Powder metallurgy; Chrysler corp.'s Amplex division. F. M. Reck. *Aviation* 42: 170, 173-4 Ja '43
- Practical application of stress strain theory in fabrication of aircraft parts; abstract. F. C. Hoffman. *Aviation* Eng 51:sup27, 39 O '43
- Precision castings for ordnance and aircraft; jewelry manufacturers make small parts by lost wax centrifugal casting process. J. D. Wolf. *Aviation* & *Alloys* 18:784-8 O '43
- Precision manufacture; Hobourn aero components, Ltd. *Aviation* Eng 33:61-8 F '43
- Producing aircraft parts at aluminum mill; scrap remelted; Reynolds metals co. ship finished aircraft parts instead of aluminum sheets. M. H. Froelich. *Aviation* Eng 42:104, 109-10, 113-14 Ja '43
- Radiography of aircraft castings. R. Taylor. *Aviation* Eng 42:238, 240+ Ap '43
- Recent aircraft developments of United States rubber company. H. L. Hayward. *Aeronautical Eng R* 1:155 N '42
- Republic Aircraft parts tool up the spider line; production of knuckle-pin locking plates for aircraft engines. *Aviation* Mach 87:90-4 S 30 '43

AIRPLANE parts—Continued

- Sheet metal shapes classified as to formability. L. D. Dame. *il Product Eng* 14:558-60, 633-5 S-O '43
- Subcontracting increases output of tube mill; Summerill tubing co. D. E. Lukens. *il Steel* 112:128-30, 132 Ap 12 '43
- Testing transparent plane sections under operating conditions; Rohm & Haas plastics testing laboratory. *il Aero Digest* 42:295, 299 Je '43
- Thermoelectric forming of airplane parts. W. I. Beach. *il Mech Eng* 65:719-23 O '43
- Thompson aircraft products plant; production of engine valves and parts. J. Geschelein. *il Automotive & Aviation Ind* 89:20-5+ Ag 1 '43
- Transparent enclosures in aircraft. O. E. Brown and W. H. Arata. *jr. il diags Mod Plastics* 21:89-93, 140 O '43
- Tube identification made simple by use of a standard business machine; printing part numbers on colored calendar tape used in identification of warplane tubing. *il Sci Am* 169:226-8 N '43
- See also*
- | | |
|---------------------|-----------------|
| Airplane engines | Airplane struts |
| Airplane propellers | Airplane wings |

Transportation

- Hands off; Republic aircraft products packaging micro-finished aircraft engine parts. *il Mod Packaging* 17:74-5+ N '43
- Overseas shipment of spares and maintenance parts. *il Aero Digest* 43:202 S '43

AIRPLANE propellers

- Aeroproducts constant-speed propeller. J. F. Haines. *il Aero Digest* 42:219-20+ Ap '43
- Bevel gears in aircraft. A. H. Candee. *il diags A S M E Trans* 65:267-73 My '43; Same. *Aero Digest* 42:167+ Ap '43
- British propeller development. G. E. Rochester. *il Aero Digest* 42:212+ Ap '43
- Contra-rotating propellers. *il Aero Digest* 42:228+ F '43
- Counter-rotating propeller makes initial test flight. *Iron Age* 161:75 Ja 21 '43
- Current trends in propeller design. R. P. Lambeck. *il S A E J* 51:sup 18-20+ S '43
- Curtiss-Wright six-bladed dual-rotating airplane propeller. *il Aeronautical Eng R* 1:97+ D '42
- Design and manufacture of Curtiss propellers. *il Aero Digest* 42:179-80+ Ap '43
- Dynamic balancing in propeller maintenance. E. J. Cumnock. *diags Aviation* 42:214+ Ap '43
- Dynamics of constant-speed propellers. H. K. Weiss. *bibliog J Aeronautical Sci* 10:58-67+ F '43
- Eleventh annual meeting of the Institute of the aeronautical sciences; review of technical papers. A. Klemin. *Aeronautical Eng R* 2:29 Ap '43
- Escher-Wyss variable pitch airscrew adapted for braking landing run; abstract. *Roy Aeronautical Soc J* 47:sup 144 Ap '43
- Freedman-Burnham engineering corporation; ten years' progress in wooden propellers. W. E. Burnham. *Aeronautical Eng R* 1:111 N '42
- Hollow propellers. *Fortune* 28:14 Jl '43
- Hydulignum laminated-wood airscrews. *il Engineering* 155:27, 30 Ja 8 '43
- Methods for balancing airscrews; abstract. H. Oschatz. *Roy Aeronautical Soc J* 47:sup 283-4 Je '43
- New Ford prop changer simplifies and speeds field handling. *il Aero Digest* 42:176 Je '43
- New Rotol propeller. *diag Automotive & Aviation Ind* 87:46 D 1 '42
- Opposite propeller rotation; shall it be in-board or outboard? J. H. Hamelet. *diags Aviation* 42:156, 161+ My '43
- Propeller blade stresses caused by periodic displacement of the propeller axis; abstract. J. Meyer. *Roy Aeronautical Soc J* 46:sup 405-6 N '42
- Propulsion by physics; Wickwire Spencer steel co. automatic, variable-pitch propeller. *Fortune* 27:80+ F '43
- Rotol four-bladed variable-pitch airscrew. *il diags Engineering* 156:125-8 Ag 13 '43
- Selection and installation of aircraft propellers. T. B. Rhines. *il diags S A E J* 51:397-407 N '43

- Stress increases in hollow thin-walled sections under torsion; abstract. A. Weigand. *Roy Aeronautical Soc J* 47:sup 291-2 Je '43
- Tabular method of propeller blade stress analysis. J. Stuart. 3d. *diags J Aeronautical Sci* 10:115-18 Ap '43; Discussion. 10:317-20 O '43
- VDM propeller pitch changing mechanism. *diags Automotive & Aviation Ind* 88:40-1 F 15 '43

Manufacture

- American propeller corporation; heating, air conditioning. *il Heat & Ven* 40:64-6 Ja '43
- Arc welding in the manufacture of aircraft propeller blades. E. K. Benedek. *diags Welding J* 22:335-8 My '43
- Curtiss-Wright electric propellers are made and assembled in windowless controlled atmosphere plant. R. A. Rotz. *il Heat & Ven* 40:75-8 S '43
- Curtiss-Wright's Indiana propeller plant. *il Aero Digest* 42:181, 188, 190+ Ap '43
- Curtiss-Wright's newest propeller plant. P. B. Terhorst. *il Mach* 49:152-63 Ag '43
- Exemplary inspection system is foolproof and time-conserving; Nash-Kelvinator corp. *il Aero Digest* 42:193+ My '43
- Hamilton Standard hydromatic propellers in the making. H. L. Horton. *il Mach* 49:182-7 Ag '43
- Hollow steel propeller blades made from tubing. A. H. Allen. *il Steel* 112:92-6+ Ap 19 '43
- How handling helped us beat space limitations; Propeller division, Nash-Kelvinator corporation. C. Wood. *il Factory Management* 101:93-6 O '43
- Latest type of equipment at Chevrolet's new forge plant. J. Geschelein. *il Automotive & Aviation Ind* 89:20-3+ Jl 15 '43
- Miles of conveyors in propeller plant. *il Steel* 112:81 Ap 19 '43
- New Curtiss-Wright propeller conveyor-assembly line. *il Aviation* 42:185 My '43
- One-piece, hollow steel propeller blades produced at American Propeller plant. J. Geschelein. *il Automotive & Aviation Ind* 88:18-22+ Ja 15 '43
- Painting speed increased 400 per cent; Propeller division plants of Nash-Kelvinator corp. *il Steel* 112:111 Je 21 '43
- Propellers in the making at the Nash-Kelvinator plant. J. Geschelein. *il Automotive & Aviation Ind* 87:20-5, 72+ D 15 '42
- Reducing dust and din; new booths provided improved ventilation for grinding; Curtiss-Wright corporation. *il Nat Safety N* 43:23+ Jl '43
- Rotary machine speeds curing of propeller blade fairings. *il Aero Digest* 43:215+ S '43; Same. *Aviation* 42:167-8 O '43; Same. *Rubber Age* 54:45 O '43; Same. *Am Mach* 87:89 S 16 '43
- Shortcuts speed propeller production; Hamilton standard propeller division of United Aircraft. *il Aviation* 41:151+ N '42
- Shuttles cut prop-grinding time; American propeller corporation. *il Am Mach* 87:95-6 S 30 '43
- Solving new production problems on standard automatic machines. H. L. Pope. *il diags Aero Digest* 42:176, 179-80 Ja '43
- Wages in aircraft-propeller industry, October 1942. T. W. Reedy. *Monthly Labor R* 56:748-57 Ap '43
- Welding of aircraft propeller blades. C. A. Liedholm. *il Welding J* 22:165-72 Mr '43; Abstract. *Metals & Alloys* 16:1140 D '42

Repair

- Bent and battered blades fly again. *il Aero Digest* 42:191-2, 198+ Ap '43
- How AA's propeller shop keeps 'em turning. E. E. Thorp. *il plan Aviation* 42:205, 207-8+ N '43

Testing

- Electronic method for endurance testing of propeller components; abstract and discussion. R. M. Guerke and G. P. Knapp. *S A E J* 51:sup 35 My '43
- Problems of routine propeller balancing. J. T. Farrah. *il diags J Aeronautical Sci* 10:209-12 Jl '43
- Propeller blades shielded during test. *il Aero Digest* 43:247 S '43

AIRPLANE repair stations

Engine overhaul factory of the British overseas airways corporation. *Il* (p470) *Engineering* 154:464 D 11 '42; *Engineer* 174:475-7 D 11 '42

International overhaul; inside view into one of Canada's most completely equipped repair shops. *Il* *Aviation* 42:209, 211-12+ J1 '43

Lockheed's service empire; providing engineering service for warplanes of the United Nations. *Il* *Aero Digest* 43:121-5 Ag '43

New planes for old; Noorduyt plant. *Il* *Aviation* 42:215+ Ag '43

Setting up the engine overhaul station; Embury-Riddle company, Miami, Fla. J. R. Horton. *Il* *Aviation* 42:231-2, 235+ My '43

See also

Air lines—Shops

Safety measures

Fire protection at airplane bases. H. Schlosser. *Il* *Nat Safety* N 48:14-15+ Ag '43

Housekeeping works to win in air line shops. G. F. Tyler. *Il* *Nat Safety* N 48:18-19, 84+ N '43

AIRPLANE stability and stabilizers

Aerodynamic center, control and stability of airplanes. H. Reissner. *A S M E Trans* 65:625-8 Ag '43

Aspect ratio corrections; airplane performance and stability computations. K. D. Wood. *bibliog J Aeronautical Sci* 10:270-2 O '43

Duramold speeds stabilizer production. H. Chase. *Il* *Aviation* 42:150-1, 153+ Je '43

Flight testing for performance and stability. E. T. Allen. *Il* *J Aeronautical Sci* 10:15-24; *Discussion*. 25-30 Ja '43

General instability of monocoque cylinders. N. J. Hoff. *bibliog diags J Aeronautical Sci* 10:105-14+ Ap '43

Proportioning a canard airplane for longitudinal stability and safety against stall. J. V. Foa. *bibliog diag J Aeronautical Sci* 9:523-8 D '42

Streamlining dynamic stability computations. M. M. Munk. *diag Aero Digest* 42:205-6+ My; 183, 185+ Je; 43:249-50+ J1; 207-8+ Ag '43

See also

Aerodynamics
Airplane propellers

Airplane wings—
Flutter
Airplanes—Spinning

AIRPLANE struts

Analysis of long-tapered struts. E. A. Richardson. *Product Eng* 14:673-4 O '43

Determination of the buckling load of struts with successive approximations. J. Ratzersdorfer. *Roy Aeronautical Soc J* 47:103-5 Mr '43

Menasco makes landing gear struts; illustrations with text. *Iron Age* 161:48-51 My 27 '43

Pioneer Pacific Coast shop makes landing-gear struts; Axelson mfg. co. C. O. Herb. *Il* *Mach* 49:170-7 J1 '43

Pressure welding of heavy tubing; aircraft landing gear struts. W. G. Wood. *Il* *Iron Age* 152:56-8 S 23 '43

AIRPLANE wings

Design considerations for plywood structures. L. J. Marhofer. *Il* *diags Aviation* 42: 164-5, 167+ Ap '43

Effects of yielding and perforations on a wing tension surface. R. K. Koegler and A. Schnitt. *diags J Aeronautical Sci* 10:273-88+ O '43

Elliptic wing examined on the basis of the potential theory; abstract. K. Krlenec. *Roy Aeronautical Soc J* 47:sup 1-2 Ja '43

Induced drag of a twisted wing. H. W. Sibert. *J Aeronautical Sci* 10:71-2 F '43

Influence of sweep on the spanwise lift distribution of wings. F. Thellheimer. *diags J Aeronautical Sci* 10:101-4 Mr '43; *Discussion*. 10:320-1 O '43

Rational analysis of tension-field beams. H. W. Sibert. *diags J Aeronautical Sci* 9:510-14 N '42

Vector solution of the three-degree case of wing bending, wing torsion, aileron flutter. L. Arnold. *diags J Aeronautical Sci* 9: 497-500 N '42

Wing loading at high speeds; abstract. W. Wirz. *Roy Aeronautical Soc J* 47:sup210-11 My '43

See also

Airplane dope

Flutter

Experimental investigations in aircraft dynamics. W. B. Bergen. *bibliog Il diags J Aeronautical Sci* 10:233-49 O '43

Flutter; detection of vibration has broad implications. *Il* *Sci Am* 168:220 My '43

Ground vibration tests. C. D. Pengeley. *bibliog Il diags J Aeronautical Sci* 9:481-90 N '42

Marlin engineers develop new apparatus for vibration studies. *Il* *diag Automotive & Aviation Ind* 88:44-5+ F 15 '43

Three-dimensional wing flutter analysis. A. H. Flax. *bibliog J Aeronautical Sci* 10:41-7 F '43

Torsional and aileron flutter. Z. Krzywoblocki. *bibliog J Aeronautical Sci* 10: 161-8 My '43

Vector solution of the three-degree case of wing bending, wing torsion, aileron flutter. L. Arnold. *diags J Aeronautical Sci* 9: 497-500 N '42

Manufacture

Conveyorized assembly line and vertical jigs speed output of airplane wings at Murray corp.'s plant. *Il* *Steel* 112:70, 72 F 15 '43

More wings for Alraebras; constant motion production lines aid unskilled women workers; Bell aircraft corp. C. F. Lozon. *Il* *diags Aviation* 42:126-40 F '43

Murray fabricates aircraft surfaces on moving assembly lines. F. M. Reck. *Il* *Aero Digest* 42:207, 215 Mr '43

Refrigerators to Thunderbolt wings; Servel's wing fabricating methods. G. E. Stedman. *Il* *Aviation* 42:142-7+ O '43

Special handling facilities and efficient production control system; wings for the Republic P-47 Thunderbolt fighter plane; Servel Inc. G. E. Stedman. *Il* *Steel* 113:124-6+ N 8 '43

Wings for the Flying Fortress. *Il* *diags Am Mach* 86:1509-19 D 24 '42

Testing

Measurement of the aerodynamic forces on small wing models undergoing vibration (combined flapping and twist); abstract. E. V. Holst. *Roy Aeronautical Soc J* 47: sup407-10 Ag '43

AIRPLANES

Aerona aircraft corporation and other leading aircraft companies; ten years' progress. W. D. Hall and others. *Il* *Aeronautical Eng R* 1:39-86 N '42

Airline officials set standards for speedy 50 passenger transport. *Aviation* N 1:23 N 8 '43

Development of postwar aircraft. J. T. Bain. *Mech Eng* 65:781-4 N '43

Fundamental requirements of post-war transport airplanes. C. Froesch. *S A E J* 51: sup42+ J1 '43

Future equipment of the airlines. *Aero Digest* 42:145, 315-16 Je '43

Horizontal path along the earth's surface of a projectile or plane under constant tangential acceleration. W. S. Kimball. *Franklin Inst J* 236:67-79 J1 '43

Short haul transports; general specifications for postwar cargo-passenger planes. C. Froesch. *Il* *diags Air Transport* 1:32-5 S '43

SAE National aircraft engineering and production meeting, Los Angeles, Sept. 30-Oct. 2. *S A E J* 51:sup20, 25-7 N '43

SAE war engineering production meeting; aircraft sessions. *S A E J* 51:sup71-3 F '43

Tomorrow's air transport planes. *Il* *Sci Am* 169:154-6 O '43

See also

Aeronautics
Aeronautics, Commercial
Airplane engines
Airplane propellers
Airplane wings
Autogiros
Aviation

Flying boats
Gliders
Hangars
Helicopters
Langley flying machine
Photography, Aerial
Seaplanes

AIRPLANES—Continued

Airworthiness

Speculations on airworthiness and operating regulations; abstract. E. Warner. S A E J 51:sup26+ O '43

Auxiliary power

Aircraft accessory system. T. B. Holliday. il S A E J 51:234-40+ J1 '43
Aircraft electric power-supply system. J. E. Farnack. bibliog il diags Elec Eng 62: Trans 655-8 O '43
Aircraft hydraulic control and power systems. diags Product Eng 13:656-8, 731-3 N-D '42
Aviation uses of the amplydine. R. A. Averitt. il diags Aero Digest 43:177, 179+ S '43
Compressed gas actuator for aircraft; steel bottle filled with liquid carbon dioxide or compressed air that can be connected to hydraulic systems. il diags Product Eng 14:144-6 Mr '43
Design considerations of aircraft electrical systems. T. B. Holliday. il diags Aero Digest 42:205-6, 208, 210 Ja '43
Diesel auxiliary power units for large aircraft. E. M. Wilson. Aero Digest 42:259+ Mr '43
High output generating systems. W. F. Fell. il diags Aviation 42:167, 169-70+ Je '43
Power packages for aircraft. J. J. Horan. il Aero Digest 42:194, 197+ Ap '43

Bearings

New departure division, General motors corporation; ball bearings for aircraft. T. C. Delaval-Crow. il Aeronautical Eng R 1:129 N '42
Norma-Hoffmann bearings corporation. D. E. Batesole. il Aeronautical Eng R 1:131 N '42
Unground bearings used in aircraft design. W. H. Korff. il diags Product Eng 14:483-92 Ag '43

Bombers

See Airplanes, Military

Cabins

Cabin supercharging in scheduled airline operation. R. L. Ellinger. S A E J 51: 241-7 J1 '43
Pressurizing low-altitude airplanes. C. W. Morris. Aeronautical Eng R 2:29, 31+ Je '43

Cargo

See Airplanes, Freight

Climbing efficiency

Rate of climb calculations. G. Otten. J Aeronautical Sci 10:48-50+ F '43

Control

AC engineers use automotive methods to speed automatic pilot production. J. Geschelin. il Automotive & Aviation Ind 89:34-7+ Ag 1 '43
Aerodynamic center, control and stability of airplanes. H. Reissner. A S M E Trans 65:625-8 Ag '43
Aircraft engines remote-controlled by hydraulics. il diags Product Eng 14:18-19 Ja '43
Automatic synchronizer controls engine speed. il Aero Digest 43:207 J1 '43
Cruise control for flying efficiency. R. D. Spears, J. T. Farrah and S. Hinton. il diags Aviation 42:202-3, 205+ J1; 207, 209, 211+ Ag; 204-5, 207+ S; 203, 205-6+ O '43
Curtiss autosynchronizes engines; eases pilot's job. G. W. Brady and M. Meyer. il diags Aviation 42:144-9 S '43
Duck; how Alexandre Goupil's airplane control theories of 1884 were proved in 1917. S. P. Johnston. il diags Tech R 45:130-2+ Ja '43
Dynamics of constant-speed propellers. H. K. Weiss. bibliog J Aeronautical Sci 10:58-67+ F '43
Electronic pilot; Minneapolis-Honeywell's automatic stabilizer for high-altitude bombers can be used on firm's own postwar products. Business Week p68+ S 25 '43
Electronic plane pilot on American bombers in Europe. il Electronics 16:154 N '43

Engine control achieves simpler piloting; Simmonds-Hobson automatic controls. W. J. Morrison and A. P. Fraas. il diags Aviation 42:132-4+ N '43
Engineers debate control systems; hydraulic versus electric mechanisms. Aviation N 1: 13 N 1 '43

Engines have brains; 18 cylinders of aircraft engine controlled by distributor housing molded of mineral-filled melamine. il Mod Plastics 20:51-4+ J1 '43

Gyros; unknown heroes; automatic pilot or Gyroplot. P. Romanelli. il Instruments 15: 470+ N '42

Horsepower meter for aircraft. J. C. Luttrell and W. A. Petrasek. il diags Aeronautical Eng R 2:35-6, 39 Je '43; Excerpts. Elec Eng 62:501-2 N '43

New developments in simplified control. R. H. Upson. bibliog diags J Aeronautical Sci 9:315-20+ D '42

New method of longitudinal control for aircraft by use of an adjustable angle of attack balance. R. J. White. il diags J Aeronautical Sci 10:152-60 My '43

Operation of vacuum-operated automatic-pilot air pick-offs. L. M. Faik. diags Instruments 16:68-9 F '43

Radio in warfare; raids by radio controlled aircraft. L. W. Orton. diags Radio N 30: 29+ N '43

Symposium on remote controls for aircraft. W. C. Trautman; J. W. Kelly; W. P. Lear. S A E J 51:sup32-3+ Je '43

Testing machine for aeroplane auto-pilot gear. il Engineering 154:385-6, 390 N 13 '42

See also
Airplane stability and stabilizers
Airplanes—Landing

Cost of operation

Value of a pound saved by weight control. J. E. Ayers. Aero Digest 41:238, 241-2, 245-6+ N '42

Design

Air transports, past and future. W. W. Davies. bibliog il Mech Eng 65:471-85 J1 '43

Aircraft design considerations. H. R. Gordon. diags Mod Plastics 21:101-10+ S '43
Airplane design for cargo transport. C. W. Wood. diags Aero Digest 42:185-6, 189-90, 249-50 F '43

Airplane of the future; abstract. W. W. Davies. Science 98:sup 10-11 J1 9 '43

Analysis of members with variable moments of inertia. Y. Nubar. bibliog diags Aviation 42:153-4+ N '43

Application of Maclaurin series to beams under simultaneous transverse and axial loading. A. G. Strandhagen. J Aeronautical Sci 9:529-32 D '42

Aviation power plants; integral powerplant plan; abstract. S. A. Moss. S A E J 51:138 Ap '43

Biomechanics in airplane design. Mech Eng 65:469 J1 '43

Case for the integral power plant. S. A. Moss. il diags Aviation 42:150-1+ S; 148-50+ O '43

Continental design competition winners. il diags Aero Digest 41:220, 222+ N '42

Control of life expectancy in airplane structures. R. B. Bland and P. E. Sandorff. bibliog Aeronautical Eng R 2:7+ Ag '43

Design analysis of the Fleetwings BT-12; America's only stainless steel airplane. D. Baker. il diags Aviation 42:119-32+ O '43

Design and production with substitute materials; Vultee uses plywood and plastic material for basic trainers. S. R. Carpenter. il diags Aviation 42:112-15+ Mr '43

Design approach for long range aircraft. R. V. Boname. il Aviation 42:139-43+ S; 153-5+ O '43

Design considerations for plywood structures. L. J. Marhoefer. il diags Aviation 41:114-17+ N; 146-9+ D '42; 42:150-1, 153+ Ja; 164-5, 167+ Ap '43

Design for production. J. S. Haldeman. diags Automotive & Aviation Ind 89:40-1 O 1 '43

Design for service and maintenance. J. E. Frazer, M. M. Cone and C. G. Schulze. il diags Aero Digest 43:297-9, 301-3, 305-6 J1 '43

AIRPLANES—Design—Continued

- Design methods and details for transparent aircraft inclosures. A. C. Foster. *il diags Product Eng* 14:260-3, 354-7 My-Je '43
- Design of trusses and its influence on weight and stiffness. J. Drymael. *diags Roy Aeronautical Soc J* 46:297-308 D '42
- Designing aerodynamic surfaces by the use of algebraic and trigonometric functions to permit easy manufacture. J. J. Aputategui and W. B. White. *diags Aeronautical Eng R* 2:69, 71-2, 75 Ag '43
- Determination of the buckling load of struts with successive approximations. J. Ratzersdorfer. *Roy Aeronautical Soc J* 47:103-5 Mr '43
- Effect of openings in molded plywood structures; abstract. L. J. Marhoefer. *S A E J* 51:sup25 My '43
- Eleventh annual meeting of the Institute of the aeronautical sciences; review of technical papers. A. Klemin. *il diags Aeronautical Eng R* 2:13+ 35-6, 39+ Ap '43
- Eliminating unnecessary weight in aircraft structures. M. Boe. *Aero Digest* 41:154, 157-8 D '42
- Energy method, which one? A. S. Niles. *bibliog J Eng Educ* 33:698-706 My '43
- Experimental investigations in aircraft dynamics. W. B. Bergen. *bibliog il diags J Aeronautical Sci* 10:233-49 O '43
- General aspects of aircraft powerplant installations; abstract. T. Hammen, jr. *S A E J* 51:sup31-2 My '43
- General equations for the analysis of elliptical rings. D. O. Dommasch. *diags J Aeronautical Sci* 10:119-26 Ap '43
- General instability of monocoque cylinders. N. J. Hoff. *bibliog diags J Aeronautical Sci* 10:105-14+ Ap '43
- Hearing and vision of American fliers; abstract. W. R. Miles, L. D. Carson, and S. S. Stevens. *Science* 97:sup10 F 5 '43
- Influence of sweep on the spanwise lift distribution of wings. F. Theilheimer. *diags J Aeronautical Sci* 10:101-4 Mr '43; Discussion. 10:320-1 O '43
- Medical research in some aspects of aircraft design. W. E. Russell, J. R. Erwin and H. R. DeHaven. *J Aeronautical Sci* 10:227-31 Ji '43
- Method of applying production design to aircraft; abstract and discussion. H. M. Harrison. *S A E J* 51:sup33 My '43
- Minimum buckling load for spherical shells; abstract. K. I. Friedrichs. *Roy Aeronautical Soc J* 47:sup150-1 Ap '43
- Moment distribution factors for tapered beams. H. B. Alvord and V. C. Trimarchi. *Aeronautical Eng R* 2:7, 9 Ja '43
- New developments in simplified control. R. H. Upson. *bibliog diags J Aeronautical Sci* 9:515-20+ D '42
- New industrial frontier, the applied mathematician. F. P. Huddle. *il Sci Am* 169:211-13+ N '43
- New method of longitudinal control for aircraft by use of an adjustable angle of attack balance. R. J. White. *il diag J Aeronautical Sci* 10:152-60 My '43
- Opposite propeller rotation; shall it be in-board or outboard? J. H. Hamelet. *diags Aviation* 42:156, 161+ My '43
- Permanent buckling strains in flat compression panels. F. N. Platt. *diags Product Eng* 14:211-13 Ap '43
- Plywood design practice for maximum strength. *il diags Product Eng* 14:149-52 Mr '43
- Post-war transport aircraft. E. P. Warner. *il Roy Aeronautical Soc J* 47:185-256 Ji '43; Same abr. *Aeronautical Eng R* 2:7+ O '43; Same cond. *Engineering* 156:95-6, 136, 216-17, 285-6, 337-8, 396-7, 437 Ji 30, Ag 13, S 10, O 8, 22, N 12, 26 '43 (to be cont)
- Predicting stiffener and stiffened panel crippling stresses. H. B. Crockett. *bibliog diags J Aeronautical Sci* 9:501-9 N '42
- Problems in aircraft structural research. F. R. Shanley. *bibliog il diags Mech Eng* 65:169-78 Mr '43
- Problems in the use of plywood in airplane construction. A. Klemin. *Mech Eng* 65:105-9 F '43
- Production control of design changes. J. D. Robbins. *il Aero Digest* 42:215-16+ F '43

- Progress in structural design through strain-gage technique. C. R. Strang. *il diags S A E J* 50:346-57 Ag '42; Excerpts. *Metals & Alloys* 16:530+ S '42; Abstracts. *Machine Design* 14:66-7, 90, 92+ My '42; *Automotive & Aviation Ind* 86:40-3 Je 1; 87:40-2+ D 15 '42
- Proportioning a canard airplane for longitudinal stability and safety against stall. J. V. Foa. *bibliog diag J Aeronautical Sci* 9:523-8 D '42
- Rational analysis of tension-field beams. H. W. Sibert. *diags J Aeronautical Sci* 9:510-14 N '42
- Relative merits of materials used for light-weight structures. F. Platt. *il Product Eng* 14:67-72 F '43
- Selection and installation of aircraft propellers. T. E. Rhines. *il diags S A E J* 51:397-407 N '43
- Significance of the secant and tangent moduli of elasticity in structural design. D. S. Wolford. *bibliog il diags J Aeronautical Sci* 10:169-79 Je '43
- Significance of weight control. J. E. Ayers. *Aero Digest* 43:237, 290-1 Ji '43
- Sketch book of design detail (cont). *il Aviation* 41:176, 179-80 D '42; 42:167, 169, 171 Ja; 147+ F; 167, 169, 171 Mr; 183, 185, 187 Ap; 203, 206, 207 My; 187, 189, 191 Je; 183-5 Ji; 187, 189, 191 Ag; 187, 189, 191 S; 177-9 O; 177, 179, 181 N '43
- Sky cars as designed by W. B. Stout. *il Aero Digest* 43:128-30 Ag '43
- Some secondary stresses in thin-walled box beams. E. Reissner. *diags J Aeronautical Sci* 9:538-42 D '42
- Stresses and deformation under torsion of thin-walled cylinders with circular cut outs; abstract. D. Thoma and M. Schillhansl. *Roy Aeronautical Soc J* 46:sup413-14 N '42
- Stresses in space-curved rings reinforcing the edges of cut-outs in monocoque fuselages. N. J. Hoff. *bibliog diags Roy Aeronautical Soc J* 47:35-83 F '43
- Tension joints in aircraft structures; riveted joint design practice with respect to applicability to aluminum alloys. C. H. Holleman. *il J Aeronautical Sci* 10:295-302+ O '43
- Theoretical and experimental investigations of thin-webbed plate-girder beams. H. L. Langhaar. *bibliog A S M E Trans* 65:799-802 O '43
- Three-dimensional wing flutter analysis. A. H. Flax. *bibliog J Aeronautical Sci* 10:41-7 F '43
- Torsion analysis of open shell structures. E. H. Spaulding. *il diags Product Eng* 13:718-21; 14:25-7 D '42-Ja '43
- What it takes to get giant planes into production. H. Woodhead. *il Automotive & Aviation Ind* 88:9+ Mr 1 '43

See also

- | | |
|---------------------|----------------------|
| Airplane propellers | Airplanes, Military— |
| Airplane wings | Design |
| Airplanes—Weight | Helicopters |
| Airplanes, Light | |

Diving speed

- Calculation of diving speeds; abstract. E. Kenner. *Roy Aeronautical Soc J* 47:sup281-2 Je '43

Drawing

- How to do it drawings speed war production; here to stay? *Sales Management* 52:40 Mr 15 '43
- Perspective illustration as applied to aircraft design and production. A. M. Fitzpatrick. *il diags Aeronautical Eng R* 2:23, 25, 27+ Je '43
- Planes visualized; graphic illustration of aircraft. *Business Week* p82+ Mr 13 '43
- Visualizing in three dimensions; Fleetwings, Inc., uses perspective drawings for manufacturing instructions, etc. *il diags Product Eng* 14:131-7 Mr '43

Efficiency

- Large landplanes for large payloads. B. Smith. *Aero Digest* 43:192, 195 Ag '43

See also

- | | |
|--------------------|--------------------|
| Airplanes—Climbing | Airplanes—Perform- |
| efficiency | ance |

AIRPLANES—Continued

Electric equipment

- Aircraft accessory system. T. B. Holliday. *il S A E J* 51:234-40+ *Jl '43*
 Aircraft circuit breakers. C. W. Kuhn. *il diags Elec Eng* 62:Trans 642-5 O '43
 Aircraft contactors. F. J. Russell and A. P. Charbonneau. *il Elec Eng* 62:Trans 563-6 S '43
 Aircraft electric power-supply system. J. E. Yarmack. bibliog *il diags Elec Eng* 62:Trans 655-8 O '43
 Aircraft electrical system suggestions. C. S. Green. *Instruments* 16:616+ O '43
 Aircraft inverter construction. C. T. Button. *il diags Elec Eng* 62:Trans 598-602 S '43
 Aircraft lends itself to hydraulic-electric units; abstract. W. C. Trautman. *S A E J* 51:sup32-3+ *Je '43*
 Aviation uses of the amplidyne. R. A. Averitt. *il diags Aero Digest* 43:177, 179+ S '43
 Behavior of electrical equipment at high altitude. N. J. Clark. *diags Aero Digest* 41:189-90 N '42
 Checking cables in aircraft with Rotobridge tester. D. A. Griffin. *il diag Electronics* 16:200+ *Je '43*
 Comparison of direct and alternating current supply in aircraft on the basis of danger of electrocution; abstract. H. H. Viehmann. Roy Aeronautical Soc *J* 47:sup346-7 *Jl '43*
 Design considerations of aircraft electrical systems. T. B. Holliday. *il diags Aero Digest* 42:205-6, 208, 210 *Ja '43*
 Design relationships for d-c generators for use in aircraft. S. R. Bergman. *il diags Elec Eng* 62:Trans 613-16 O '43
 Development of electrical equipment in aircraft; abstract. E. Ruhlmann. Roy Aeronautical Soc *J* 47:sup285 *Je '43*
 Development of quick disconnect plugs for aircraft. D. H. Loukota. *il Aero Digest* 41:210, 212, 215 N '42
 Electrical developments of 1942; aviation. G. Bartlett. *il diag Gen Elec R* 46:36-40 *Ja '43*
 Electrical equipment for aircraft, d-c generators. P. M. Heldt. *il diag Automotive & Aviation Ind* 87:36-9 D 15 '42
 Electrical protective devices for aircraft. J. C. Lebens, Jr. *il diags Aero Digest* 42:235, 237, 239+ *Mr '43*
 Electrical system testing device speeds final assembly of lightning. *il Aero Digest* 41:163+ N '42
 General Electric activities for the aviation industry. D. R. Shoults. *il Aeronautical Eng R* 1:113 N '42
 Generator brush life increased 50 times; offsetting effect of high altitude. *Marine Eng* 48:212 *Je '43*
 High output generating systems. W. F. Fell. *il diags Aviation* 42:167, 169-70+ *Je '43*
 High-voltage-ignition-cable design for aircraft. H. H. Wermer. *il Elec Eng* 62:Trans 716-19 N '43
 Importance of electrical aircraft instruments in war and peace. J. C. Banks. *Instruments* 15:463+ N '42
 Lear avia, inc.; ten years' progress in airplane electric and radio equipment. L. Gelin. *il Aeronautical Eng R* 1:127 N '42
 Manifold-solenoid de-icer systems with electronic control. M. L. Taylor and W. B. Pond. *il diags Aviation* 42:144-7 N '43
 Manual switches for aircraft. R. A. Miller-master. *il diag Elec Eng* 62:Trans 596-8 S '43
 Power packages for aircraft. J. J. Horan. *il Aero Digest* 42:194, 197+ *Ap '43*
 Proposed CAA regulations for installation of aircraft electrical assemblies. *diags Aero Digest* 41:154+ N; 238+ D '42
 Resonant electrical control systems. D. W. Moore, Jr. *il diags Elec Eng* 62:436-9 O '43; Same. *diags J Aeronautical Sci* 10:285-8+ O '43
 Sees gradual switch to electric remote controls; abstract. W. P. Lear. *S A E J* 51:sup33+ *Je '43*
 Solenoid contactor aircraft units. *il Electronics* 16:163+ *Ja '43*
 Westinghouse contributes to aeronautical progress. V. J. Kropf. *il Aeronautical Eng R* 1:157 N '42

See also

Airplanes—Control
MagnetsRadio apparatus on
aircraft

Equipment

- Aviation products and services; with list of suppliers. *Aviation* 42:275-383 F '43
 B. F. Goodrich company; ten years' progress in rubber goods for aircraft. R. S. Colley. *il Aeronautical Eng R* 1:117 N '42
 Bendix aviation corporation; ten years' progress. C. Marcus. *Aeronautical Eng R* 1:105 N '42
 Details of the PESCO rotary air pump. *il Aero Digest* 42:331 *My '43*
 John A. Roebling's sons company; ten years' progress in wire rope, cables, wires, etc. for aircraft. A. J. Morgan. *Aeronautical Eng R* 1:143 N '42
 Manufacturers of aircraft and engine accessories. *Aero Digest* 42:297-362, 424 *Mr '43*
 New products for aircraft. *il Automotive & Aviation Ind* 88:41, 74+ *Ja '43*
 Simmonds aerocessories, inc.; aeronautical accessories and equipment. W. J. Morrison. *il Aeronautical Eng R* 1:145 N '42
 Tubing and tube fittings for aircraft and in other applications. W. M. White. *il diags Mod Plastics* 20:65-7+ *Ag '43*
 Walter Kidde & company, inc.; carbon dioxide equipment for fire extinction and other aircraft uses. A. M. Doxsey. *Aeronautical Eng R* 1:122 N '42

See also

Aeronautical Instru-
ments
Airplanes—Fuel
tanksAirplanes—Pick-up
equipment

Bibliography

- Aero equipment digest index; items described in Aero equipment digest section from November 1942 to April 1943; addresses for manufacturers. *Aero Digest* 42:390+ *Ap '43*

Fires and fire protection

- Airport fire truck. *il Machine Design* 15:100-1 *Jl '43*
 Fighting fires aloft. *il Sci Am* 168:259 *Je '43*
 Fire protection equipment on PAA Clippers. *il Aviation* 42:241+ *Mr '43*

Fuel tanks

- Control of solvent exposures in the rubber industry. T. R. Thomas and B. D. Tebbens. *diags Ind Med* 12:257-8 *Ap '43*
 Deformation under pressure of brazed aluminum tank. L. W. Combs. *il diags Product Eng* 14:581-2 S '43
 Detachable gasoline tank of molded plywood. *il Aviation* 42:163 *Ja '43*
 Fabrication of tear drop tanks; Lockheed Lightning P-38. *il Iron Age* 151:64-5 *Je 17 '43*
 How Lockheed builds drop tanks. R. A. Von Hake. *il Aviation* 42:128-33 *Je '43*
 How to calibrate aircraft fuel tanks. R. C. Moeller. *il diags Aero Digest* 41:139-40 N '42
 Jetison tanks for ferry service; urea-impregnated glass fiber cloth or canvas. *il Mod Plastics* 21:75-7+ S '43
 Lockheed mass-produces droppable steel tanks. *il Aero Digest* 42:151-3 *My '43*; Same abr. *Automotive & Aviation Ind* 88:26-9+ *My 15 '43*
 Lockheed sheds tears for the Axis; manufacturing auxiliary gasoline tanks for fighter planes. M. W. Coker. *il Mach* 49:161-7 *My '43*
 Manufacture of fuel tanks at Firestone; illustrations. *Rubber Age* 53:530-1 S '43
 Specially designed welding equipment assemblies auxiliary fuel tanks. *il diags Product Eng* 14:479-80 *Ag '43*

Fuselage

- Aerodynamics of the fuselage; abstract. H. Multhopp. *Aeronautical Eng R* 2:97-9 *Mr '43*
 Carbon steel replaces dural in airplane fuselage stringers. *il Iron Age* 151:58-61 *My 20 '43*
 General equations for the analysis of elliptical rings. D. O. Dommash. *diags J Aeronautical Sci* 10:119-26 *Ap '43*
 Lofting problems of streamline bodies. C. M. Hartley and R. A. Liming. *diags Aero Digest* 42:160, 163-4 *My*; 205, 207, 209+ *Je '43*

AIRPLANES—Fuselage—Continued
Stresses in space-curved rings reinforcing the edges of cut-outs in monocoque fuselages. N. J. Hoff, bibliog diags Roy Aeronautical Soc J 47:35-83 F '43

Gearing

Angle drive employs multiple pinion; patent assigned to Wright aeronautical corp. permits installation of radial engine in a slender fuselage. diags Machine Design 15:192+ N '43

Bevel gears in aircraft. A. H. Candee, II diags A S M E Trans 65:267-77 My '43; Same, Aero Digest 42:167+ Ap; 314, 317-18, 323 My '43

Carburized aircraft gears; abstract. R. S. Kegg, Iron Age 152:46 O 21 '43

Lubrication of gear wheels with special reference to conditions of boundary lubrication; abstract. E. Pietsch, Roy Aeronautical Soc J 47:sup220 My '43

Heating and ventilation

Aircraft heating systems; critical comparison of three types. W. W. Reaser, diags Mech Eng 55:775-80 N '43

Comfortization of airplanes; heating and air conditioning. II Heating-Piping 15:514-17+ O '43

Heating airplane cabins. R. C. Hitchcock, II Heat & Ven 40:62-5 S '43

How heaters are made for American flagships. II Aviation 42:236-7+ My '43

Many problems to be solved in heating and ventilating military aircraft. A. A. Arnhyrn, II Heating-Piping 15:69-72 F '43

History

Duck; how Alexandre Goupil's airplane control theories of 1884 were proved in 1917. S. P. Johnston, II diags Tech R 45:130-2+ Ja '43

Henson, inventor of the airplane. A. F. Zahm, II Franklin Inst J 236:235-9 S '43

Henson's aerial steam carriage, 1843. J. E. Hodgson, Roy Aeronautical Soc J 47:118-28 Ap '43

1914 tests of the Langley aerodrome. C. G. Abbott, diags Roy Aeronautical Soc J 46:291-6 D '42; Same, J Aeronautical Sci 10:31-5 Ja '43

Hydraulic equipment

Adel's training system for manufacture of aircraft hydraulic equipment. G. Tharratt, II diags Automotive & Aviation Ind 88:30-1+ Ja 15 '43

Aircraft accessory system. T. B. Holliday, II S A E J 51:234-40+ Ji '43

Aircraft engines remote-controlled by hydraulics. II diags Product Eng 14:13-19 Ja '43

Aircraft experience aids industrial hydraulics. H. J. Marx, II diags Machine Design 15:91-5 S; 100-4 O '43

Aircraft hydraulic control and power systems. diags Product Eng 13:656-8, 731-3 N-D '42

Air craft lends itself to hydraulic-electric units; abstract. W. C. Trautman, S A E J 51:sup32-34+ Je '43

Boulton Paul gun turret mechanism. M. W. Bourdon, diags Automotive & Aviation Ind 88:28-30 Ap 1 '43

Bristol hydraulic system. II plan Engineer 175:236, 237-9 Mr 19 '43

Bristol hydraulic system for aeroplanes. II Engineering 155:225-7, 230 Mr 19 '43

Compact unit for testing military aircraft hydraulic systems. II diags Product Eng 14:483 Ag '43

Design and installation factors for aircraft hydraulic accumulator systems. E. M. Greer, II diags Aviation 41:150-5+ D '42

Design simplicity prerequisite of hydraulic control standardization. J. W. Kelly, diags Aero Digest 41:211-12, 215-16, 218+ D '42

Designing gun turrets as integral part of aircraft. L. G. Frise, II diags Aviation 42:227, 229, 231 Ap; 247-8, 250, 253 My; 227-9, 231, 343-4+ Je '43; Excerpt. Engineer 175:312-14 Ap 16 '43

Development of hydraulic pressure accumulators; Bendix aviation, Ltd. N. DeKiss, II Aero Digest 41:130, 136+ D '42

High pressure hydraulic systems; abstract. P. De Beixodon, S A E J 51:sup43+ Ji '43

Hydraulic control of aircraft engine temperature. W. A. Ray, II Automotive & Aviation Ind 89:25+ N 1 '43

Isodraulic system passes low temperature tests; abstract. J. W. Kelly, S A E J 51:sup33+ Je '43

Performance capabilities of pressure loaded gear pumps. J. M. Roth, II Aero Digest 41:160, 162 D '42

Performance quality control in the manufacture of hydraulic parts. H. A. Zimmerman, II diags Aero Digest 41:261-2+ D '42

PESCO pressure-loaded gear pump for aircraft hydraulic systems. J. M. Roth, II Aeronautical Eng R 1:133 N '42

Remote control of hydraulic installations. C. G. Hebel, II diags Aero Digest 41:228, 230, 233 D '42

Sketch book of design detail; elevator control mechanism of the Junkers JU-88. diags Aviation 42:187 Je '43

Ice protection

Aircraft double windshield; its development and use. R. L. McBrien, II diags S A E J 51:350-5 O '43; Abstract. Automotive & Aviation Ind 88:76+ My 1 '43

De-icer uses heat of exhaust gas from engine. Sci Am 169:201 N '43

De-icers controlled by electronic device. II diags Product Eng 14:80 F '43

Electronic control for de-icer system. II Automotive & Aviation Ind 89:37+ N 1 '43

Electronic control of de-icing equipment. W. Klever, II Aero Digest 41:197-8 N '42

Electronic wing de-icer. Electronics 16:110+ Ja '43

Experimental researches on aircraft icing; abstract. B. Brun, Roy Aeronautical Soc J 46:sup406-7 N '42

Formation of ice on aircraft; abstract. W. Bleeker, Roy Aeronautical Soc J 47:sup23 Ja '43

Ice indicator. II Sci Am 167:280 D '42

Icing of aircraft; abstract. M. Robitzsch, Roy Aeronautical Soc J 47:sup22-3 Ja '43

Manifold-solenoid de-icer systems with electronic control. M. L. Taylor and W. B. Pond, II diags Aviation 42:144-7 N '43

Methacrylate disk warns of ice formation. II Mod Plastics 20:47 D '42

New Consolidated Vultee developments. diags Automotive & Aviation Ind 89:34-5 S 15 '43

New techniques applied to anti-icing problem; thermal system makes indirect use of engine exhaust gases. II diags Aero Digest 43:225, 227+ S '43; Excerpt. Aviation N 1:20 Ag 23 '43

New windshield protects against birds and ice. Civil Aero J 4:29 Mr 15 '43

Inspection

Inspectors in ten weeks; Johns Hopkins course in precision inspection in aircraft work. D. H. Fax, II Factory Management 101:118-19+ Ja '43

Landing

Escher-Wyss variable pitch airscrew adapted for braking landing run; abstract. Roy Aeronautical Soc J 47:sup144 Ap '43

Experimental investigation of impact in landing on water; abstract. R. L. Kreps, Aeronautical Eng R 2:38 S '43

Instrument approach by radio direction finder. C. H. McIntosh, diags Aviation 42:224-5+ My; 206-7, 209+ Je '43

Instrument approach system. P. Caporale, II diags Radio N 29:121-5+ Je '43

Technique to shorten takeoffs and landings. R. D. Williams, II diags Aviation 42:94-5+ Ja '43

See also
Aviation landing stations

Landing gear

Landing wheel prerotation poses problems; abstract. C. R. Mason and W. H. Elliott, Machine Design 15:160+ My '43

Leaf spring landing gear accepted. II Iron Age 152:64 S 16 '43

Levered suspension landing gear development. J. A. Zaccaria, II diags Aero Digest 42:161-2+ Je '43

Menasco makes landing gear struts; illustrations with text. Iron Age 151:48-51 My 27 '43

AIRPLANES—Landing gear—Continued

Mosquito legs equipped with rubber pack to absorb shock. diags Automotive & Aviation Ind 89:29 Ag 15 '43

New airplane landing gear. il Automotive & Aviation Ind 89:56 Ag 1 '43

New technique saves material in producing tapered landing gear tubing. J. P. Dods. il diags Aero Digest 42:149-50+ F '43

Pioneer Pacific Coast shop makes landing-gear struts; Axelson mfg. co. C. O. Herb. il Mach 49:170-7 J1 '43

Quality control plays a major role at Bendix. J. Geschelin. il Automotive & Aviation Ind 88:18-23, 41 Ja 1 '43

Tractor-type gear permits plane landings on soft or rough ground. diag Product Eng 14:698 N '43

Tricycle landing gears; abstract. Roy Aeronautical Soc J 47:sup213-14 My '43

See also

Airplanes—Wheels

Length of service

Control of life expectancy in airplane structures. R. B. Bland and P. E. Sandorff. biblog Aeronautical Eng R 2:7+ Ag '43

Light airplanes

See Airplanes, Light

Lofting

See Airplanes—Manufacture—Drafting room practice

Lubrication

Characteristics of greases at low temperatures. T. A. Maxwell. il diags Nat Pet N 35 pt 2:R42-4 Ja 6 '43

Pure oil company; lubricating and other oils for aircraft; cutting oils. W. B. Ross. il Aeronautical Eng R 1:135 N '42

Use of petroleum products in aircraft. F. D. Klein. diag S A E J 51:305-9 S '43; Same. Nat Pet N 35 pt 2:R473-6 O 6 '43

Maintenance and repair

Aircraft service organization, the gateway to sound operation; Bell aircraft corporation. A. L. Fornoff. il Aviation 42:211-13+ Ap '43

Aviation's maintenance notebook; sketches, detail drawings and photographs. Aviation 41:129-43 D '42; 42:237, 239, 241 Ja; 251+ Mr; 219+ Ap; 239, 241, 243 My; 219, 221, 223 Je; 215, 217, 219 Ji; 219, 221, 223 Ag; 217, 219, 221 S; 217, 219, 221 O; 211, 213, 215 N '43

Bringing field experience back to the plant; North American aviation. F. H. Lyons. il Aviation 41:124-5+ D '42

Design for service and maintenance. J. E. Frazer. M. M. Cone and C. G. Schulze. il diags Aero Digest 43:297-9, 301-3, 305+ J1 '43

Fighting the aircraft maintenance war. R. C. Stunkel. il Aviation 41:118-19+ D '42

Metallizing for better maintenance. L. E. Kunkler. il diags Aviation 42:231, 233, 235+ Ja '43

World cargo takes to the air; effect of transport aircraft on maintenance and design. D. S. Sprague. il Aviation 41:114-17+ D '42

See also

Repair

Airplane engines— Airplanes, Military—
Repair Maintenance and
Airplane repair sta- repair
tions

Manufacture

Adapting automotive mass production to manufacture of fighting aircraft; Republic aviation corp. G. E. Stedman. il Steel 113:88-90+ Ag 16 '43

Aircraft manufacturing problems; abstract. G. A. Arnold. S A E J 51:sup34-6 Je '43

Aircraft production analysis, key to assembly line efficiency. L. F. Dorman. il Aviation 42:148-52+ N '43 (to be cont)

Aircraft production number. il Mach 49:134-37 J1; 134-36 Ag '43

Boeing builds Flying Fortresses to bomb the enemy. C. O. Herb. il Mach 48:198-204 J1 '42; 49:161-3 Mr '43

Bucking bar simplifies aircraft riveting. il diags Product Eng 14:78-9 F '43

Building a dive bomber; Douglas aircraft company. il Am Mach 87:98-101 S 2 '43

Carbon steel replaces dural in airplane fuselage stringers. il Iron Age 151:58-61 My 20 '43

Castings in aircraft construction; Vultee field division, Consolidated Vultee aircraft corp. D. M. Davis. il Iron Age 152:52-6+ N 4 '43

Chemicals that aid in aircraft production. R. Sanders. il diags S A E J 51:23-30 Ja '43

Cold heat to expedite plywood fabrication; passing high frequency electric current through wood sections polymerizes glue. C. S. Ricker. flow diag il diags Aviation 42:116-20+ Mr '43

Control of flange wrinkles in hydro-press forming. W. H. Snow. il diags Iron Age 152:40-2 S 30 '43

Conversion for war; influence of automotive mass-production methods. J. Geschelin. il S A E J 50:279-82 J1 '42; Same. Automotive & Aviation Ind 87:32-5 J1 1 '42

Curtiss-Wright produces famous fighting planes. P. N. Jansen. il Mach 48:178-86 J1; 49:168-72 J1 '42

Curtiss-Wright well organized for warplane production. J. Geschelin. il Automotive & Aviation Ind 89:20-3+ Ag 15 '43

Cycleweld, a new bonding process. il Mod Plastics 21:65-9+ S '43

Cyclewelding applied successfully to airplane subassemblies. il Automotive & Aviation Ind 89:33+ O 1 '43

Design for production. J. S. Haldeman. diags Automotive & Aviation Ind 89:40-1 O 1 '43

DeSoto builds bomber fuselages. F. M. Reck. il Aero Digest 41:188, 191-2 D '42

Double-deck assembly of the Vega. Ventura. H. W. Allen. il Am Mach 87:121-9 F 18 '43

Douglas likes U-boats without bombs. J. Simpson. il diags Aviation 42:135-41+ O '43

Droppable fuel tanks; design and manufacture; Lockheed plant. F. C. Hoffman. il diags Automotive & Aviation Ind 88:26-9+ My 15 '43

Eleventh annual meeting of the Institute of the aeronautical sciences; review of technical papers. A. Klemin. il Aeronautical Eng R 2:9, 11+ Ap '43

Expanded steel mesh backing up thin sheets developed for aircraft fuselage. il Steel 111:96, 98+ D 7 '42

Final assembly of the Coronado; illustrations with text. Am Mach 87:94-6 Je 24 '43

Finishing warplanes; Glenn L. Martin company. F. V. Faulhaber. il Metal Finishing 40:681-4, 686; 41:113-14, 116-19, 173-6 D '42, F-Mr '43

Flight level; assembly line conveyor speeds bomber production. il diags Steel 112:125-6 My 17 '43

Ford applies mass production to big bombers. il diags Am Mach 87:93-108 F 4 '43

Ford Willow Run plant beginning to get encouraging results. Steel 112:74 Je 21 '43

Fortresses by Boeing, Douglas, Vega; Liberators by Consolidated Vultee and Ford; Mustangs by North American; Avengers by Eastern. il diags plans Aviation 42:124-73+ J1 '43

Good tooling simplifies production of Flying Fortresses. B. K. Bucey. flow chart il diags Aviation 42:106-11+ Ja '43

Grinding methods that aid in aircraft production; illustrations with text. Mach 49:174-7 F '43

Heat therapy facilitates aluminum work on aircraft. il Mech Eng 64:903 D '42

Hi-cycle and Hyper milling on aircraft parts; Vega aircraft corporation. C. H. Bodner. il Am Mach 87:103-6 Je 10 '43

High speed milling in aircraft production; data on milling of alloy steel and of aluminum. il diags table Iron Age 152:74-83 O 14 '43

Hi-shear rivet replaces bolts in Mustang wing. il Automotive & Aviation Ind 88:19-20 Je 1 '43

How Consolidated builds the Coronado. il Aero Digest 43:182-4, 186, 189+ S '43

How fewer build more bomber nose sections; Consolidated Vultee San Diego plants. il Aviation 42:161-3, 165 S '43

How to do it drawings speed war production; here to stay? Sales Management 52:40 Mr 15 '43

AIRPLANES—Manufacture—Continued

- Impact extrusion and cold pressing of airplane parts; with punch and die diagrams. P. Koenig. *il S A E J* 51:415-19 N '43; Same cond. *Automotive & Aviation Ind* 89:38-40 O 15 '43
- Information on the cycleweld method of joining structures. S. G. Saunders. *Steel* 113: 62+ S 27 '43
- Inspection time reduced on aircraft parts; Consolidated Vultee aircraft corp. V. E. Childers. *il Iron Age* 152:66-9 S 16 '43
- Jam riveting process adopted by Curtiss-Wright. *il Aero Digest* 43:234 JI '43
- Jig assembly of tube lines for aircraft. *il Automotive & Aviation Ind* 87:32-3+ N 15 '42
- Lightning line brews triple trouble for Axis; mechanized assembly of P-38 fighter. J. H. Sreenan. *il diags Aviation* 42:121-34+ S '43
- Lockheed mass-produces droppable steel tanks. *il Aero Digest* 42:151-3 My '43; Same abr. *Automotive & Aviation Ind* 88: 26-9+ My 15 '43
- Lockheed P-38 fighters now produced on mechanized assembly line. *il Steel* 113:102, 104+ S 20 '43
- Lockheed practice in stretching aircraft structural parts. F. C. Hoffman. *il diags Mach* 50:149-58 S '43
- Low-cost dies for aircraft parts; use of semi-plastic materials, such as masonite and bakelite. B. Schlenzig. *il diags Am Mach* 86: 1307-14 N 12 '42
- Mass production methods used at Bell plant to build Airacobras. J. Geschelin. *il Automotive & Aviation Ind* 89:22-6+ S 15 '43
- Mechanized assembly line to double output of P-38 fighters. R. R. Kay. *il Automotive & Aviation Ind* 89:32-3+ JI 15 '43
- Metal stitching of aircraft parts. M. Barbe. *il Aero Digest* 41:118+ N '42
- Methods for cutting aircraft sheet metal; reference book sheet. *il diags Am Mach* 87:109, 111 S 30; 141, 143 O 14 '43
- Methods for forming aircraft sheet metal; reference booksheet. *diags Am Mach* 87:117, 119 O 28 '43 (to be cont.)
- Mosquito design facilitates production; De Havilland aircraft of Canada. J. Montagnes. *il Aviation* 42:259, 261 My '43
- Moulded plywood aircraft. G. L. White. *il Can Chem & Process Ind* 27:441-3 Ag '43
- Moulded shell construction in plywood; Skydyne method. A. Klemin. *il diags Aero Digest* 42:148, 153, 160+ Ja '43
- Night into day; portable fluorescent extension lamp illuminates interior installations in planes. E. F. Lougee. *il Mod Plastics* 21:83+ O '43
- Noorduyn production time-savers; illustrations with text. J. Montagnes. *Aviation* 42:171-2 N '43
- Possibilities of furnace brazing in aircraft production. H. D. Samuel, jr. *il diags Automotive & Aviation Ind* 89:28-9+ S 15 '43
- Present-day manufacturing problems of the aircraft industry. C. W. Perelle. *Aero Digest* 42:153+ My '43
- Producing aircraft parts at aluminum mill; scrap remelted; Reynolds metals co. ship finished aircraft parts instead of aluminum sheets. M. H. Froelich. *il diags Aero Digest* 42:104, 109-10, 113-14 Ja '43
- Producing the B-25 bomber. R. E. Dawe. *il diags Aviation* 42:106-11+ Mr '43
- Production control of design changes. J. D. Robbins. *il Aero Digest* 42:215-16+ F '43
- Production operations at Willow Run. J. Geschelin. *il Automotive & Aviation Ind* 88:34-7+ Je 1 '43
- Production problems of the Coronado flying boat. E. P. Meyers. *il diags Automotive & Aviation Ind* 89:38-41+ S 1 '43
- Production short cuts; new time and money saving devices in use at Lockheed aircraft corp. and Vega aircraft corp.; illustrations with text. *Iron Age* 152:62-3 O 7 '43
- Production short cuts suggested by employees; Douglas aircraft co.; illustrations with text. *Iron Age* 151:56-7 Mr 11 '43
- Range of drop hammer operations. C. J. Frey and S. S. Kogut. *il diags Aviation* 41:118-21+ N '42
- Reduction of man-hours in aircraft production; Consolidated Vultee's rule-of-thumb for fabricating efficiency. I. M. Laddon. *il Aviation* 42:170-1, 173+ My '43
- Republic develops method for continuous milling of rod ends. *il diags Aero Digest* 42:196 Je '43
- Roll out the warplanes by means of conveyorized production lines; Curtiss Wright corp. A. D. Palmer, jr. *il Steel* 112:92-4 Mr 22; 94-6 Mr 29 '43
- Salt bath treatment of aircraft parts. S. M. DeBoy. *il Automotive & Aviation Ind* 89: 38-40+ N 1 '43
- Salvaging aircraft structures in process of manufacture. R. L. Schleicher. *il Mech Eng* 65:711-18 O '43
- Separation method increases Liberator nose section output. *il Automotive & Aviation Ind* 89:34-5+ JI 15 '43
- Sheet-spring fasteners speed aircraft assembly. H. White. *il Aviation* 42:183, 185+ Ag '43
- Single assembly line produces both bombers and transports; Consolidated aircraft corp. R. C. Sebold and S. J. Powell. *il Aviation* 42:126-33+ Ap '43
- Skin heater solves sheet metal wrinkle problem. *Sci Am* 167:253 D '42
- Society of automotive engineers, National aircraft production meeting. *Aviation* 41:124-6 N '42
- Some aircraft production problems solved by process engineering. T. E. Piper. *il Automotive & Aviation Ind* 87:19+ N 15 '42
- Some recent developments in sheet metal fabrication. P. L. Smith and V. L. Brooks. *il diags Automotive & Aviation Ind* 88:22-3+ Mr 1 '43
- Steel casing retools the Mustang; aircraft assembly fixtures from steel casing from oil fields. L. Pollock. *il Am Mach* 87:91-5 My 13 '43
- Super-hard rivet for aircraft. *il Iron Age* 151:64 Je 3 '43
- Technical developments in high-production sheet metal forming. W. Schroeder and T. H. Hazlett. *il diags S A E J* 51:170-92 My '43
- Timed operations pace conveyors in Vengeance bomber assembly. R. McCulloch. *il diags Am Mach* 87:97-108 Ap 1 '43
- Tolerance and dimensional control; its effect upon airplane production. H. Adams. *Mech Eng* 65:739-40 O '43
- Tooling for bombers at Willow Run; dies and punches; center wing assembly fixture. *il diags Am Mach* 86:1441-56 D 10 '42
- Use of glue in aircraft construction. J. T. Stephan. *bibliog il Aviation* 42:132-3+ Mr '43
- War-time production short cuts (cont.). *il diags Aero Digest* 41:127-8, 130 N 25+ D '42; 42:330+ Ja; 286+ F; 272+ Mr; 367-71 My; 349, 351, 353+ Je; 43:457+ JI; 391+ Ag; 345+ S '43
- Widespread conversions to help the United States meet 1943 quotas. L. V. Spencer. *il Aero Digest* 42:82-3+ Ja '43
- Willow Run; Ford's bomber plant. C. O. Herb. *il Mach* 49:121-43 F '43
- Willow Run, today. F. M. Reck. *il Aero Digest* 42:112-15+ Ap '43
- Wood models speed plane production. *il Am Mach* 87:110-15 Je 24 '43
- Wood techniques developed in glider construction. *il Aviation* 41:108-12 N '42

See also

Airplane engines—	Airplane propellers—
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Drafting room practice

- Application of the lithographic processes to war work; manufacture of templates, dials, gage sticks, aeroplane left panels, and similar items. W. H. Wood. *Paper Tr J* 116:27-9 Je 10 '43; Same cond. *Paper Ind* 25:314, 316-17 Je '43
- Bell Airacobra; product of precise prefabrication. H. L. Horton. *il Mach* 49:160-2 JI '43
- Bell's production methods and their advantages; lofting practice. O. L. Woodson. *il Aero Digest* 43:147+ JI '43

AIRPLANES—Manufacture—Drafting room practice—*Continued*

- Developing graphic illustrators; commercial artists trained in creating isometric drawings for production and service line workers; Fleetwings, Inc. R. R. Wiese. diags Aviation 41:113+ N '42
- Fleetwings mouse saves hours in lofting. *Il Aero Digest* 42:272+ Mr '43
- How to fair lines by graphical calculus. D. Madsen. diags Aviation 42:136-7, 139-40+ Ja; 137, 139+ Mr '43
- Lofting problems of streamline bodies. C. M. Hartley and R. A. Liming. *Il diags Aero Digest* 39:184, 188, 190+ D '41; 40:180, 183-4 Ja; 151, 155+ F; 210, 213+ Mr; 126, 129+ Ap; 249-50+ My; 164+ Je; 41:209-10+ JI '42; 42:234+ Ja; 130+ F; 185+ Mr; 200-2, 205+ Ap; 160, 163-4 My; 205, 207, 209+ Je; 43:309-11+ JI; 197-8+ Ag; 193, 195, 197 S '43
- Lofting, the keynote to aircraft production. L. H. Willardson. *Il Aeronautical Eng R* 2:49+ Ag '43
- Master layouts for production use; abstract. S. R. Carpenter. *diag Automotive & Aviation Ind* 87:47-8 N 15 '42
- New process simplifies template reproduction; Transphoto film template reproduction process. *Il Aviation* 42:179, 181+ JI '43
- Organizing a graphic illustration department. J. Gonzales and R. R. Wiese. *Il diags Product Eng* 14:366-9 Je '43
- Perspective illustration as applied to aircraft design and production. A. M. Fitzpatrick. *Il diags Aeronautical Eng R* 2:23, 25, 27+ Je '43
- Photoprint process of loft layout reproduction. F. B. Marshall. *Il diags plan Aviation* 42: 154-6, 159-61 Ap '43
- Planned engineering records aid production scheduling. P. Sheets. *Il diags Product Eng* 14:400-5 JI '43
- Production illustration as applied to precision parts. R. Kay. *diags Automotive & Aviation Ind* 89:28-31+ JI '43
- Republic's rapid reproduction system. D. C. Cooke. *Il Aero Digest* 42:221-2+ My '43; Abstract. *Steel* 113:83+ S 27 '43
- Template-making shortcuts in airplane manufacture; General Motors X-ray activated material prints from negative to positive plates by phosphorescence. G. E. Stedman. *Il Steel* 111:70-1+ N 23 '42
- Templet duplication by dry offset printing; abstract. W. A. Collins and J. T. Barnes. *Automotive & Aviation Ind* 87:48 N 15 '42
- Theory and technique of perspective projection; use in airplane factories. G. F. Bush. *Il diags Aviation* 42:118-20, 125+ Ja; 150-1, 153 Mr; 171-2, 174 Ap; 194, 197+ My '43
- Vacuum-cup locks solve vertical lofting problem. *Il Product Eng* 14:222 Ap '43
- Visualizing in three dimensions; Fleetwings, Inc., uses perspective drawings for manufacturing instructions, etc. *Il diags Product Eng* 14:131-7 Mr '43
- Visuals save production time by simplifying drawings. L. S. Sanders. *Il diags Aero Digest* 43:205, 207+ S '43
- Wing chord divider beam. *Il Aviation* 42:181 Ag '43

Welding

See Airplanes—Welding operations

Materials

- Aircraft electroplating. R. R. Janssen. *diag Metal Finishing* 40:247-9+ My '42; Same. *Steel* 111:120+ D 7 '42; Abstract. *Metals & Alloys* 16:942+ N '42
- Alloys for planes; supply problem. *Business Week* p16-17 Mr 13 '43
- Aluminum bronzes commonly used in aircraft; tabulation. W. W. Edens, comp. *Metal Prog* 44:701 O '43
- Aluminum for the coming air age. R. S. Reynolds. *Aero Digest* 43:188-9+ Ag '43
- Aluminum in post-war reconstruction. R. Hammond. *Il diags Engineer* 176:67-8 JI 23 '43
- Aviation's engineering data book; cold bonding tests; varying conditions and materials. *Aviation* 42:209, 211 My '43
- Bead designs studied for standardization; sheet aluminum aircraft parts. F. M. Mallett. *diags Product Eng* 14:708-11 N '43
- Buckling of aluminum-alloy columns and plates. H. L. Langhaar. *diags J Aeronautical Sci* 10:218-22 JI '43
- Design analysis of the Fleetwings BT-12; America's only stainless steel airplane. D. Baker. *Il diags Aviation* 42:119-32+ O '43
- Design-strengthened materials. R. S. Smith and H. Gray. *Il diag J Aeronautical Sci* 10:213-17 JI '43
- Directory of aircraft and engine materials; manufacturers' addresses. *Aero Digest* 43: 333-47 JI '43
- Effect of cold-work and heat-treatment on 24ST aluminum alloy. B. Mitchell. *bibliog Il J Aeronautical Sci* 10:86-90 Mr '43
- Effect of scratches on fatigue strength of Alcad sheet. H. J. Andrews and G. W. Stickley. *Il diag Aviation* 42:154-5, 157 Je '43
- Elevated temperature aging of 24S aluminum alloy. P. P. Mozley. *J Aeronautical Sci* 10: 180-4 Je '43
- Eleventh annual meeting of the Institute of the aeronautical sciences; review of technical papers. A. Klemm. *Il Aeronautical Eng R* 2:16, 21+ Ap '43
- Formability of aluminum alloys used in aircraft fabrication. G. A. Brewer. *Il diags Automotive & Aviation Ind* 87:32-5 D 15 '42
- Goodyear tire and rubber company; ten years' engineering progress in development of airplane, aircraft materials and rubber goods. P. W. Litchfield. *Aeronautical Eng R* 1:61 N '42
- Heat treating problems in aviation. M. E. Tatman. *Il Automotive & Aviation Ind* 89: 34-5+ O 1 '43
- High-strength, natural-aging aluminum alloy; Frontier 40E. H. Brown. *Aero Digest* 42: 209-10+ My '43
- Latest list of AMS (aeronautical material specifications) steels and nonferrous alloys. *Steel* 113:92, 94, 96+ Ag 9 '43
- Magnesium in German aircraft. H. W. Schmidt. *Il Aeronautical Eng R* 2:7+ Je '43
- Metal finishing of aircraft; abstract. E. R. Irwin and J. Teres. *Metals & Alloys* 17: 1034+ My '43
- New guides to high-altitude rubbers. H. J. Marx and S. S. Kogut. *Il Aviation* 42:152-4+ S '43
- New materials for aircraft engines. M. Young and H. H. Hanink. *Il S A E J* 51:157-64 My '43; Abstract. *Automotive & Aviation Ind* 88:76+ F 1 '43
- New war planes for the United Nations. *Il Mod Plastics* 20:61-9+ Mr '43
- Nickel contributes to the progress of the aviation industry. T. H. Wickenden. *Aeronautical Eng R* 1:121 N '42
- Non-ferrous alloys for airframes and engines; tables. J. B. Johnson. *Aero Digest* 42:169-71 My '43
- Operating stresses and temperatures of aluminum aircraft engine parts; abstract. E. J. Willis and R. G. Anderson. *Automotive & Aviation Ind* 88:32 My 1 '43
- Plastic working of magnesium alloy sheet; Dowmetal Ma and Dowmetal J-1a. C. E. Lehnhardt. *Il diags Aeronautical Eng R* 2: 21+ My '43; Same abbr. *Iron Age* 151:45-51 Mr 18 '43
- Prescriptions for head cracks in 24ST rivets; laboratory tests of strengths, corrosion resistance, heat treatments, and aging. E. C. Hartmann, C. F. Westcoat and M. W. Brennecke. *Il Aviation* 42:139-43+ N '43
- Refrigerating aluminum alloy rivets and parts. B. J. Fletcher. *flow chart Il Metals & Alloys* 17:1178-82 Je '43
- Relative merits of materials used for lightweight structures. F. Platt. *Il Product Eng* 14:67-72 F '43
- Safe beam loading for aluminum tubes. M. Holt. *Il Product Eng* 14:36-7 Ja '43
- Some aircraft production problems solved by process engineering. T. E. Piper. *Il Automotive & Aviation Ind* 87:19+ N 15 '42
- Some calibration data and scatter measurements for the radiography of magnesium aircraft castings. L. W. Ball. *Am Soc T M Proc* 42:1064-70; Discussion. 1071-5 '42
- Some recent contributions of the chemical industry to aviation. J. K. Hunt. *Il Aeronautical Eng R* 1:109 N '42

AIRPLANES—Materials—Continued

- Study of cassette design for the radiography of aircraft castings. L. W. Ball. *diags Am Soc T M Proc* 42:1156-64; Discussion. 1165 '42
- Super-aluminum alloys for aircraft structures. K. R. Jackman. *bibliog il Aviation* 42:154-8, 163+ Ag; 168-9+ S; 156-7, 159, 161+ O '43
- Surface protection; light metals; German data on the electrolytic oxidation of aluminum alloys. *il Iron Age* 150:64-8 D 3 '42
- Survey of non-critical materials; abstract. L. D. Bonham. *Automotive & Aviation Ind* 87:76+ N 15 '42
- Tension joints in aircraft structures; riveted joint design practice with respect to applicability to aluminum alloys. C. H. Holleman. *il J Aeronautical Sci* 10:295-302+ O '43
- Torsional damping capacity of solid magnesium-alloy rods as affected by cold-working. A. U. Kutsay and A. J. Yorgiadis. *bibliog il diag J Aeronautical Sci* 10:303-10 O '43
- Transport plane mast for antenna; cloth resin X-crepe. *il Mod Plastics* 20:57-8 J '43
- Tubing and tube fittings for aircraft and in other applications. W. M. White. *il diags Mod Plastics* 20:65-7+ Ag '43
- Wool felt a vital ingredient in airplane construction. *il Aero Digest* 43:271, 273+ JI '43
- X-ray inspection of castings; Army air forces' requirements. R. Katz. *il Metal Prog* 44:89-94 JI '43

See also

Airplane fabrics
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Plastics

- Acrylics in aviation; Plexiglas. D. S. Frederick. *Aeronautical Eng R* 2:25 F '43
- Aircraft applications of plastics. C. L. Fell. *il Mod Plastics* 20:89-90+ JI '43
- Cellulose acetate sheet plastic assumes importance for aircraft. W. E. Moeller. *il Aero Digest* 42:183, 187, 191 My '43
- Design methods and details for transparent aircraft inclosures. A. C. Foster. *il diags Product Eng* 14:260-3, 354-7 My-Je '43
- Details of Duramold fabrication. S. M. Fairchild. *il Aero Digest* 42:232, 235-6, 239 F '43
- Duramold speeds stabilizer production. H. Chase. *il Aviation* 42:150-1, 153+ Je '43
- Engineering aspects of plastics. H. Sang. *il Aero Digest* 43:163-5+ Ag '43
- Engineering properties of plastics. F. B. Fuller. *Mod Plastics* 20:95-7+ Je '43
- Engines have brains; 18 cylinders of aircraft engine controlled by distributor housing molded of mineral-filled melamine. *il Mod Plastics* 20:51-4+ JI '43
- Evaluation of high-strength plastics. H. Sang and P. M. Field. *Mod Plastics* 21:107-9+ O '43
- Fabricating plane parts from laminated paper plastic; McDonnell aircraft corporation. *il Aviation* 41:138 N '42
- Fabricating plastic dies for acrylate sheets. K. J. Leeg. *il diags Aviation* 41:143, 145+ N '42
- Forming and repairing acrylic plastics. D. S. Frederick. *il diags Mod Plastics* 20:86-9+ D '42
- Improved techniques promote expanded use of plastic parts; Consolidated aircraft corp. K. Woodson. *il Aero Digest* 41:126+ D '42
- Laminated aircraft sub-assemblies. *il Mod Plastics* 21:81-2+ S '43
- Laminated paper plastics for aircraft. *il Machine Design* 15:87 Mr '43
- Low pressure laminates for aircraft. P. Crosley. *3d. il Mod Plastics* 20:54-5+ Ja '43
- Low temperature synthetics. P. A. Anderson. *il Aero Digest* 41:184+ D '42
- Mechanical properties of plastics at normal and subnormal temperatures. T. P. Oberg. R. T. Schwartz and D. A. Shinn. *bibliog il Mod Plastics* 20:87-100+ Ap '43
- Mechanical properties of Plexiglas. *Aviation* 42:183, 185 N '43
- New applications of Panelyte in the aircraft industry; abstract. C. R. Mahaney. *Automotive & Aviation Ind* 87:48+ N 15 '42

- Physical properties of Fiberglas laminated plastics. C. W. Armstrong. *il diags Iron Age* 152:51-4 JI 22 '43; Abstract. *Machine Design* 15:133-4 N '43
- Planes of paper. *il Mod Plastics* 20:82+ D '42
- Plastics and their application to aircraft construction. J. T. Zhibitsky. *Roy Aeronautical Soc J* 47:138-43 My '43
- Plastics help conserve strategies; Curtiss-Wright corp. C. G. Trimbach. *il Machine Design* 15:116-18 S '43
- Plastics in aircraft construction. J. K. Northrop. *Iron Age* 151:56-7 Ap 8 '43
- Plastics in future aircraft development; with particular reference to Plexiglas. *il Am Gas J* 159:29 O '43
- Plastics used by the aviation industry; tabulation of their properties, principal applications and manufacturers. *Aero Digest* 43:186-9, 232-3 JI '43
- Points on plastics in aircraft engineering. J. Sasso. *il diags Aviation* 42:141-3+ Ap; 187, 189-90+ My; 178-80+ Je '43
- Strength properties of Plexiglas. W. F. Bartoe. *il diags Aviation* 42:128-9, 131, 135 Ja; 140+ Mr '43
- Thermoelectric C-stage laminates; North American aviation, inc. E. F. Lougee. *il Mod Plastics* 20:69-71+ Je '43
- Thermoelectric forming of airplane parts. W. I. Beach. *il Mech Eng* 65:719-23 O '43
- Transparent enclosures in aircraft. O. E. Brown and W. H. Arata, jr. *il diags Mod Plastics* 21:89-93, 140 O '43

Wood

- Aircraft from West coast timberlands. C. E. Rozema. *il Mod Plastics* 20:68-9, 134+ Ja '43
- Australian timbers for airplane parts. *For Comm W* 10:23 F 13 '43
- Cargo planes of plywood save vital materials. *il diags Product Eng* 14:73-5 F '43
- Creep in aircraft plywoods. J. Delmonte and E. Watkins. *Aero Digest* 43:306-7+ JI '43
- Design and production with substitute materials; Vultee uses plywood and plastic material for basic trainers. S. R. Carpenter. *il diags Aviation* 42:112-15+ Mr '43
- Design considerations for plywood structures. J. J. Marhofer. *il diags Aviation* 41:114-17+ N; 146-9+ D '42; 42:150-1, 153+ Ja; 164-5, 167+ Ap '43
- Douglas fir plywood for aircraft. N. S. Perkins. *diags Aero Digest* 42:260+ Mr '43
- Fatigue characteristics of natural and resin-impregnated, compressed, laminated woods. F. B. Fuller and T. T. Oberg. *bibliog il diags J Aeronautical Sci* 10:81-5 Mr '43
- Flexible pressure in veneer and plywood work. T. D. Perry. *bibliog diags Mech Eng* 65:417-24 Je '43; Same. *Mod Plastics* 20:73-7+ Ag '43; Same. *Engineer* 176:132-3, 155-6 Ag 13-20 '43; Same cond. *Aero Digest* 43:237, 239, 241-2+ JI '43; Discussion. *Mech Eng* 65:677-8 S '43
- Giders from the Wolverine state; use of plastic-bonded plywood. *il Mod Plastics* 20:62-6+ Ap '43
- Improved methods of making curved plywood. T. D. Perry. *diags Aero Digest* 43:237, 239, 241-2+ JI '43
- Molded plastic-bonded veneers and wood in aircraft construction. R. J. Nebesar. *il Mech Eng* 65:197-201 Mr '43; Same. *Mod Plastics* 20:83-6+ F '43; Same abr. *Engineer* 175:412-13 My 21 '43
- Mosquito bomber; study of design in wood. R. B. McIntyre. *il diags fold pl Product Eng* 14:683-8 N '43
- Official plywood and veneer specifications. R. C. Perkins. *il Aero Digest* 42:273-4+ My '43
- Planes of wood. *il Business Week* p19-20 JI 10 '43
- Plastic plywood airplanes. S. M. Fairchild. *il Manuf Rec* 112:28-9+ My '43
- Plasticized wood for aircraft parts. F. W. Fink. *il Iron Age* 151:52-4 F 25 '43; Same. *Automotive & Aviation Ind* 88:21-2+ Je 1 '43
- Plastics and plywood. H. T. Moore and H. J. Vogler. *il diags Comp Air M* 48:716-8 O '43
- Plywood in aircraft construction. G. A. Allward. *Mech Eng* 65:14-16 Ja '43
- Problems affecting the use of wood in aircraft. R. W. Hess. *Mech Eng* 65:653-6+ S '43

AIRPLANES—Materials—Wood—Continued

Problems in the use of plywood in airplane construction. A. Klemin. *Mech Eng* 65: 105-9 F '43

Problems in wood aircraft. I. C. Peterson. bibliog diags S A E J 51:369-80 O '43; Excerpts. *Machine Design* 15:115-19-1 J1 '43

Progress in aircraft plywood. 1941-1942. T. D. Perry. bibliog diags *Aeronautical Eng R* 2:7+ F '43; Abstract. *Mech Eng* 65:362-4 My '43

Ryan develops plywood primary trainer for army. *il Automotive & Aviation Ind* 88: 24-5, 54 Ja 1 '43

Strength characteristics of plastic-bonded plywood. G. B. Parsons. bibliog diags A S M E Trans 65:1-7 Ja '43; Same. *Mod Plastics* 19:74-9, 110, 112+ Ag '42; Same. *Aero Digest* 41:160, 162, 165+ J1; 140+ Ag '42

United Kingdom produces new wood material; hydulignum. *For Comm W* 10:27 Ja 30 '43

Utilizing molding and forming for aircraft plywood. J. Delmonte. *il diags Machine Design* 15:93-5 Je '43

Wood-plastics in mass production of aircraft. C. L. Bates and H. J. Block. S A E J 51: 30 Ja '43

Wood techniques developed in glider construction. *il Aviation* 41:108-12 N '42

Wooden planes failing to catch up with metal combat craft. *il Aviation N* 1:12+ Ag 30 '43

Models

See Airplane models

Noise

Vision, hearing, and aeronautical design. L. D. Carson, W. R. Miles and S. S. Stevens. *J Aeronautical Sci* 10:127-30 Ap '43

White noise in planes. *Science* 98:sup8 J1 30 '43

Painting

Automatic spray painting; the Glenn L. Martin co. *il Steel* 111:82, 85 N 23 '42; Same cond. *Heat & Ven* 39:48-9 N '42

Engineering fundamentals of aircraft finishing. A. L. Johnson and J. J. Oudhoff. *il Aero Digest* 43:169-60+ S '43

Finishes for plywood in the aircraft industry. R. B. Anderson. bibliog *Mech Eng* 65: 506-10 J1 '43

Finishing warplanes; Glenn L. Martin company. F. V. Faulhaber. *il Metal Finishing* 40:681-4, 686; 41:113-14, 116-19, 173-6 D '42, F-Mr '43

Overhead rotary conveyors in Douglas paint booths. *il Automotive & Aviation Ind* 88: 27 F 1 '43

Patents

Cargo plane design patented by William D. van Zelm. *Aeronautical Eng R* 2:179+ O '43

Review of patents. A. H. Crowell. diags *Aviation* 42:176 Ja '43 [cont monthly]

Trend of invention. Published in monthly numbers of *Aero digest*

Performance

Aspect ratio corrections; airplane performance and stability computations. K. D. Wood. bibliog *J Aeronautical Sci* 10:270-2 O '43

Cruise control for flying efficiency. R. D. Spears, J. T. Farrah and S. Hinton. *il diags Aviation* 42:202-3, 205+ J1; 207, 209, 211+ Ag; 204-5, 207+ S '43

Flight testing for performance and stability. E. T. Allen. *il J Aeronautical Sci* 10:1-15; Discussion. 25-30 Ja '43

Maneuverability criteria through turning performance. J. E. Goode, jr. *J Aeronautical Sci* 10:73-80 Mr '43

Wind tunnel tests and actual performance data. H. G. Smith. *Aero Digest* 41:170+ N '42; 42:144+ F '43

Pick-up equipment

Cargo glider pickup. R. C. du Pont. *il Mech Eng* 65:35-9 Ja '43; Abstract. *Automotive & Aviation Ind* 88:16-17 Mr 1 '43

Private ownership

Hundreds join Cessna post war plane plan. *Aviation N* 1:21 Ag 2 '43

Post-war private planes. A. Klemin. *il Sci Am* 169:199-201 N '43

Sale of private planes banned by government.

Civil Aero J 4:13+ F 15 '43

What the postwar buyer wants. J. H. Geisse. *il Aviation* 42:116-17+ S '43

Radio equipment

See Radio apparatus on aircraft

Refueling

Safety bureau gives tips on refueling. *Civil Aero J* 4:3 Ja 15 '43

Renting

WPB-CAA revise rental rules for light planes. *Civil Aero J* 4:58 My 15 '43

Safety measures

Impact-resistant aircraft windshields. G. L. Pigman. *il Mod Plastics* 20:107+ Mr '43

Medical research in some aspects of aircraft design. W. E. Russell, J. R. Erwin and H. R. DeHaven. *J Aeronautical Sci* 10:229-31 J1 '43

Safety door ruling. *Aviation N* 1:27 N 8 '43

See also
Airplanes—Fires and Airplanes—Ice protection

Sanitation

Insect control on aircraft. G. L. Dunnahoo. *il Soap & San Chem* 19:111+ F '43

Size

Big airplanes will mean big airlines; costs can be reduced as commercial transports increase in size. C. R. Harrower. *Barron's* 22:3 D 14 '42

Large landplanes for large payloads. B. Smith. *Aero Digest* 43:192, 195 Ag '43

Limit on plane size has not been neared; abstract. H. Woodhead. *Iron Age* 151:114+ Ap 1 '43

Specifications

See also
Airplanes, Military—Specifications

Speed

Aileron effectiveness at high flying speeds; abstract. W. Wirz. *Roy Aeronautical Soc J* 47:sup140-2 Ap '43

Determination of airplane critical altitude by flight tests. L. C. Miller. *J Aeronautical Sci* 9:491-6 N '42

Post-war transport aircraft. E. P. Warner. *Roy Aeronautical Soc J* 47:217-32 J1 '43; Same. *Aeronautical Eng R* 2:34+ O '43; Same cond. *Engineering* 156:338, 396-7 O 22, N 12 '43

Wind tunnel tests and actual performance data; how lift varies with speed. H. G. Smith. *Aero Digest* 42:144+ F '43

See also
Airplanes—Diving speed

Spinning

Spins aren't dangerous. G. H. Tweney. *il diags Aero Digest* 41:164, 166+ D '42

Springs and suspension

Space limitations and optimum conditions in aircraft spring design. R. H. Carter. *J Aeronautical Sci* 10:51-7 F '43

Standards

Air corps standards; tube fittings AN811. diags *Aviation* 42:185 O '43

Aircraft standards for victory; résumé of the SAE aeronautical standards program; committee members. J. D. Redding. S A E J 51:sup20-1, 25-36 Ap '43

Army air force standards; numbering code. *Aviation* 42:197, 199 S; 183 O '43

Bead designs studied for standardization; sheet aluminum aircraft parts. F. M. Mallett. diags *Product Eng* 14:708-11 N '43

Canadian association organizes Aircraft standards technical committee. *Ind Stand* 14:241 Ag '43; Same. *Science* 98:236 S 10 '43

Economic aspects of standardization. B. C. Boulton. S A E J 51:sup20-2, 44-7 Je '43

NASC develops standards for armed forces. *Ind Stand* 14:154 My '43

Program keyed to war needs; 4th annual meeting of the National aircraft standards committee, New York, Nov. 9-13. *Aviation* 41:165, 351-2+ D '42

AIRPLANES—Standards—Continued

Bibliography

Aircraft standards index. Automotive & Aviation Ind 88:100+ Mr 15 '43

Stresses

Airframe stress analysis by the electrical strain gage. W. T. Thomson. diags Aero Digest 42:269, 261, 263 My '43

Bending strength in the plastic range. F. P. Cozzone. diags J Aeronautical Sci 10:137-51 My '43

Effects of yielding and perforations on a wing tension surface. R. K. Koegler and A. Schnitt. diags J Aeronautical Sci 10:273-88+ O '43

Stress increases in hollow thin-walled sections under torsion; abstract. A. Weigand. Roy. Aeronautical Soc J 47:sup291-2 Je '43

Stresses in space-curved rings reinforcing the edges of cut-outs in monocoque fuselages. N. J. Hoff. bibliog diags Roy Aeronautical Soc J 47:35-33 F '43

Stressing of aircraft wheels and brakes. H. Burkhardt. diags Roy Aeronautical Soc J 47:133-7 My '43

Tabular method of propeller blade stress analysis. J. Stuart. 3d. diags J Aeronautical Sci 10:115-18 Ap '43; Discussion. 10:317-20 O '43

Struts

See Airplane struts

Tail surfaces

Tail buffeting; abstract. G. Abdrashitov. Roy Aeronautical Soc J 47:sup546-9 O '43

Take-off

Activated throw; abstract. A. Prohl. Roy Aeronautical Soc J 47:sup350-1 Jl '43

Giders proposed to assist take-off. A. Klemin. Sci Am 169:42 Jl '43

Rocket power for assisted takeoff. R. Healy. il diags Aviation 42:100+ Ja '43

Role of composite aircraft in comparison with other methods of assisted take-off; abstract. W. Hoff. Roy Aeronautical Soc J 47:sup347-9 Jl '43

Technique to shorten takeoffs and landings. R. D. Williams. il diags Aviation 42:94-5+ Ja '43

Testing

Aircraft structural testing. B. L. Springer. il Civil Aero J 41:45-7 Ap 15 '43

Details of the Vultee flight test recorder. il diags Aero Digest 42:255-6, 258, 261-2 F '43

Flight performance recorded automatically in ground station; Vultee radio flight test recorder. il Automotive & Aviation Ind 88:38 Ja 1 '43

Flight recorder for aircraft. H. D. Giffen. il diags Radio N 29:14-17+ Ap '43

Flight recorder to ease test pilot's job; electronic instrument records temperature and pressure changes. il Aviation 41:149 N '42

Flight-testing equipment for large aircraft. W. T. Dickinson. il diags S A E J 51:139-47 Ap '43

Flight testing for performance and stability. E. T. Allen. bibliog il J Aeronautical Sci 10:1-24; Discussion. 25-30 Ja '43

Flight testing is a sound business. E. T. Allen. il Aviation 42:109-12 Ap; 118-19+ My; 147, 149+ Je '43

Ground vibration tests. C. D. Pengelley. bibliog il diags J Aeronautical Sci 9:481-90 N '42

New flight testing apparatus radios precise plane data; instrument developed by the Consolidated-Vultee aircraft corporation. il diags Product Eng 14:395-9, 512-16 Jl-Ag '43

Philosophy of flight testing; abstract. J. B. Kendrick. S A E J 51:sup29+ N '43

Temperature effects on turbine supercharger installations. P. Colman. diags J Aeronautical Sci 10:261-9 O '43

Vultee radio recorder. H. D. Giffen. il diags Aeronautical Eng R 2:9+ Jl '43; Same abr. Automotive & Aviation Ind 89:24-8 Ag 15 '43

See also

Wind tunnels

Transportation

Aircraft delivery vessel. J. C. Lord. plan Marine Eng 48:209-10+ Je '43

Crating airplanes. il Mod Packaging 16:166+ Ap '43

Crating the P-40 for export shipment. il Aero Digest 42:222, 224, 227+ Ja '43

Experience shipping planes will aid postwar freight. bibliog il Mod Packaging 17:65-9+ O '43

Shipping aircraft presents new packaging problems. L. C. Ray. il Aero Digest 43:137-8, 141, 143 Jl '43

Shipping raincoat for P-40 bodies; use of plioilm bags. il Aviation 42:168 O '43

Vibration

Experimental investigations in aircraft dynamics. W. B. Bergen. bibliog il diags J Aeronautical Sci 10:233-49 O '43

Ground vibration tests. C. D. Pengelley. bibliog il diags J Aeronautical Sci 9:481-90 N '42

Martin engineers develop new apparatus for vibration studies. il Diags Automotive & Aviation Ind 88:44-5+ F 15 '43

Protective engineering for delicate military equipment; mounting instruments and other vital equipment in planes, tanks, and ships. P. C. Roche. il diags Mech Eng 65:581-7 Ag '43; Same. Rubber Age 53:515-22 S '43; Same cond. Machine Design 15:124-9+ Jl '43

See also

Airplane engines—Flutter

Vibration—Flutter

Airplane stability and stabilizers

Weight

Design approach for long range aircraft. R. V. Boname. il Aviation 42:139-43+ S; 153-5+ O '43

Design of trusses and its influence on weight and stiffness. J. Drymael. diags Roy Aeronautical Soc J 46:297-308 D '42

Eliminating unnecessary weight in aircraft structures. M. Boe. Aero Digest 41:154, 157-8 D '42

Large landplanes for large payloads. B. Smith. Aero Digest 43:192, 195 Ag '43

Scale installations for weighing aircraft. L. R. Hackney. diags Aero Digest 43:219-20+ Ag '43

Significance of weight control. J. E. Ayers. Aero Digest 43:287, 290-1 Jl '43

Weighing data as applied to structural analysis. J. C. Reams. diags Aero Digest 43:243, 245+ S '43

Weight control engineering. W. F. Nicol. il Aero Digest 41:216, 218+ N '42

Weight of German aircraft. Engineer 176:232 S 17 '43

Welding operations

Aircraft welding; oxy-acetylene, normal metallic, arc, atomic hydrogen and spot welding. il Elec R (Lond) 131:577-80 N 6 '42

Application of flash welding in airplane construction. C. B. Smith. il Welding J 22:769-75 O '43; Abstract. Iron Age 152:63-4 O 28 '43

Arc welding aircraft structures. W. S. Evans. il diags Aero Digest 42:200, 205-6, 209-10+ F; 177-8, 180-1, 183 Mr '43

Arc welding of magnesium aircraft structures; with cost data. V. H. Pavlecka and J. K. Northrop. il diags Metals & Alloys 18:302-7 Ag '43

Correlation of metallographic and radiographic examinations of spot welds in aluminum alloys. D. W. Smith and F. Keller. bibliog il Welding J 21:sup573-83 D '42

Designing aircraft jigs and fixtures for arc welding to eliminate machining. H. V. Wenger, Jr. il diags Aeronautical Eng R 2:40, 45, 47+ Mr '43

Fatigue strength of welded aircraft joints. T. V. Buckwalter and O. J. Horgor. bibliog il diags Welding J 21:sup525-39 N '42

Flash-welding in aircraft production; abstract. R. Millmoe. Automotive & Aviation Ind 88:78+ F 1 '43

Flash welding of aircraft. R. P. Della-Vedova. il diags Steel 111:80-2, 93 D 21 '42

AIRPLANES—Welding operations—Continued

- Modern methods in aircraft welding. N. F. Ward. *il* *diags* Mech Eng 65:732-6 O '43
- Proposed code of minimum requirements for instruction of welding operators; Part B-1, oxyacetylene welding of steel-aircraft. *il* *diags* Welding J 22:522-44 JI '43
- Radiography of aircraft spot-welds. R. Taylor. *il* *diags* Aero Digest 43:263, 265-6+ JI '43
- Specially designed welding equipment assemblies auxiliary fuel tanks. *il* *diags* Product Eng 14:479-80 Ag '43
- Spot welding aluminum. H. Lawrence. *bibliog* *diags* Steel 113:108, 110+ JI 12; 118, 121+ JI 19 '43
- Spot welding in aircraft structures. E. S. Jenkins. *il* Welding J 21:839-43 D '42
- Survey of arc-welding practice in the aircraft industry. M. Nelles. Welding J 22:sup79-81 F '43
- Swiss fatigue tests of oxyacetylene welded aircraft tubing. M. Heiz. Welding J 22:sup62 F '43
- Tests on NE 8630 steels for welded air frames. M. Hill. Metal Prog 43:555-9 Ap '43; Same. Welding J 22:sup300-4 JI '43
- Utility characteristics of aircraft arc-welding electrodes. C. B. Voldrich and R. D. Williams. *il* *diags* Welding J 21:sup540-53 N '42
- Weldability of NE 8630 steel for aircraft structures and a suggested specification for weld metals. A. R. Lytle and K. H. Koopman. *il* Welding J 22:sup62-93 F '43
- Weldability tests of aircraft structural steels. C. B. Voldrich and R. D. Williams. *diags* Welding J 22:sup545-54 N '43
- Welding in aircraft construction. H. O. Klink. *il* Welding J 22:412-16 Je '43

Wheels

- Design and operation of nose wheel shimmy dampers. G. M. Magrum. *il* *diags* Aero Digest 41:142+ D '42
- Stressing of aircraft wheels and brakes. H. Burkhardt. *diags* Roy Aeronautical Soc J 47:133-7 My '43
- Wheel maintenance at American Airlines. R. Miller. *il* *diags* Aviation 42:245-7+ Mr '43

Windshields

- Aircraft double windshield; its development and use; prevention of ice formation. R. L. McBrien. *il* *diags* S A E J 51:350-5 O '43; Abstract. Automotive & Aviation Ind 88:76+ My 1 '43
- Bird-proof windshields for airplanes. R. N. Iryan. *il* Comp Air M 48:7091-2 JI '43
- Development of impact-resistant windshields. A. L. Morse. S A E J 50:319-20 JI '42
- Impact-resistant aircraft windshields. G. L. Pigman. *il* Mod Plastics 20:107+ Mr '43
- New windshield developments. A. L. Morse. S A E J 51:289-93+ Ag '43
- New windshield protects against birds and ice. Civil Aero J 4:29 Mr 15 '43
- Tests plane windshields against bird impact. Nat Safety N 47:96 F '43
- Windshield design for high-speed airplanes. M. Di Giovanni. *il* *diags* Aero Digest 43:321-3, 325+ JI '43

AIRPLANES, Amphibian

- Decade of Grumman amphibians. F. J. Kurt. *il* Aeronautical Eng R 1:63 N '42

AIRPLANES, Freight

- Air-cargo carriers here to stay; discussion of fuel and lubricants. *il* maps Oil & Gas J 41:30-2 Mr 11 '43; Abstract. Nat Pet N 35:24+ Mr 17 '43
- Air cargo engineering meeting under the auspices of Chicago section of SAE. B. M. Ikert. *il* Automotive & Aviation Ind 88:1-7+ Ja 1 '43
- Air cargo function misunderstood; abstract. R. S. Lovett. Ry Age 113:774 N 14 '42
- Air cargo; how army experience will serve the Nation's air transportation in the post-war period. O. P. Echols. *il* S A E J 51:sup 17-19, 34-6 N '43
- Air freight, unlimited; carrying equipment for construction of Shipshaw waterpower project. D. Baker. *il* map Aviation 42:114-17, 335+ Je '43
- Airplane design for cargo transport. C. Wood. *diags* Aero Digest 42:185-6, 189-90, 249-50 F '43
- Cargo aircraft fuel problem. Aero Digest 42:410-11 Mr '43

- Cargo plane design patented by William D. van Zelm. Aeronautical Eng R 2:179+ O '43
- Cargo planes can expand world trade. G. F. Bauer. *il* Aviation 41:213-14, 217+ N '42
- Cargo planes of plywood save vital materials. *il* *diags* Product Eng 14:73-5 F '43
- Cessna develops new cargo plane. *il* Aviation 42:239 Je '43
- Curtiss Commando; giant military cargo plane. *il* Automotive & Aviation Ind 87:24-5 N 1 '42
- Design considerations for long-range heavy cargo carrying transport. W. L. Lewis. *il* Aero Digest 42:92, 94+ Ja '43
- Designing better cargo planes. C. Froesch. Aviation 41:363-4+ D '42; Abstract. Automotive & Aviation Ind 88:14-15 Mr 1 '43
- Don't underestimate the airplane; ton-mile costs invading railroad freight service predicted. E. S. Evans. Ry Age 114:952-4 My 15 '43
- Economics of post-war carriage of air cargo. J. V. Sheehan. S A E J 51:362-8 O '43
- Engineering design for air cargo system; SAE air cargo engineering meeting. Chicago, Dec. 8-9; with abstracts of papers. S A E J 51:sup15-19+ Ja '43
- Facts and figures of air cargo. R. E. Oursler. *il* Automotive & Aviation Ind 88:35+ My 1 '43
- Freight planes may supplement, but are unlikely to supplant surface transportation. A. Klein. Sci Am 168:88 F '43
- Increasing payloads by scientific cargo loading. E. S. Evans. *il* Aero Digest 41:257-8+ D '42
- Manufacturer's viewpoint on heavy cargo airplanes. H. Woodhead. S A E J 51:sup17-19 Ap '43
- Martin engineer designs new cargo plane. *il* Aero Digest 43:199 S '43
- Martin wins patent on cargo design. *il* Aviation N 1:7-8 Ag 16 '43
- New hold-down equipment for air shipments. *il* Aeronautical Eng R 1:99+ D '42
- Our present cargo plane situation. L. V. Spencer. *il* Aero Digest 42:113-16+ F '43
- Overenthusiasm harmful to aviation's development; cargo plane; with cost data. W. A. Patterson. Aero Digest 41:128-9, 357 D '42
- Securing means for air cargo. E. S. Evans. Aviation 41:356+ D '42; Abstract. *il* Automotive & Aviation Ind 88:15-16 Mr 1 '43
- Slotted hinge speeds removal of cargo doors. *il* Aviation 42:242 Mr '43
- Tankers take wing; York (Pa.) company asks permit to operate oil-carrying airplanes. Nat Pet N 35:30+ Ag 4 '43
- World cargo takes to the air; effects of transport aircraft on maintenance and design. D. S. Sprague. *il* Aviation 41:114-17+ D '42

See also

- Air lines—Freight service
Airplanes, Military transport
Loading and unloading—Airplanes

Bibliography

- Air cargo. A. G. Renstrom. Aeronautical Eng R 2:61+ O '43

AIRPLANES, Light

- Continental design competition winners. *il* *diags* Aero Digest 41:220, 222+ N '42
- Engineering progress at the Piper aircraft corporation. W. C. Jamouneau. *il* Aeronautical Eng R 1:75 N '42
- Grasshoppers. *il* Radio N 29:80-2 Je '43
- Light planes being overlooked. W. T. Piper. Aero Digest 41:142-3+ N '42
- Stout designs peacetime air cars. *il* Aviation N 1:22 Ag 2 '43

AIRPLANES, Military

- Aboard a Mitchell bomber. R. C. Picinich, Jr. *il* Aero Digest 42:114-15 My '43
- Aeronautics in 1942. *il* Engineer 175:7-9, supp3 Ja 1 '43
- Aeronca aircraft corporation and other leading aircraft companies; ten years' progress. W. D. Hall and others. *il* Aeronautical Eng R 1:39-86 N '42
- Aircraft developments, 1942-1943. C. G. Grey. *il* Iron Age 151:101-9+ Ja 7 '43
- Aircraft production number. *il* Mach 49:134-97 JI; 134-96 Ag '43

AIRPLANES, Military—Continued.

Ball turret and firepower help make Flying Fortress supreme weapon; abstract. P. G. Massfield. *Iron Age* 151:92 F 25 '43

Ceiling and visibility unlimited; new American aircraft. E. R. Breech. *Aero Digest* 42: 294+ Ap '43

Comfortization of military aircraft. A. A. Arrhym. biblog il diags *Aero Digest* 40: 188+ Je; 41:220, 223-4, 226+ D '42; 149-50, 153-4+ O; 202+ N; 196+ D '42

Comparative aircraft armament fire power; World war I and II; tables. P. G. Massfield. *Automotive & Aviation Ind* 89:31 J 15 '43

DeSoto builds bomber fuselages. F. M. Reck. il *Aero Digest* 41:188, 191-2 D '42

Effect of increased resistance due to compressibility on the tactical employment of fighter aircraft; abstract. E. Muhlemann. *Roy Aeronautical Soc J* 46:sup401-2 N '42

Finishing aluminum parts for military aircraft. *Product Eng* 41:99-100 F '43; Same. *Metal Finishing* 41:257-9 Ap '43

Good tooling simplifies production of Flying Fortresses. B. K. Bucey. flow chart il diags *Aviation* 42:106-11+ Ja '43

Heavy bomber changes aerial warfare. J. A. Ward. il *Aero Digest* 41:81-4+ N '42

Heavy bombers; data for American, British and German bombers. il *Automotive & Aviation Ind* 88:23 Ja '43

High performance fighters; abstract. K. Tank. *Roy Aeronautical Soc J* 47:sup343-4 J '43

Inspecting Liberator (B-24) heavy bombers; illustrations. *Automotive & Aviation Ind* 88:40-1 Ja '43

Light planes being overlooked. W. T. Piper. *Aero Digest* 41:142-3+ N '42

Lightning line brews triple trouble for Axis; mechanized assembly of P-38 fighter. J. H. Sreenan. il diags *Aviation* 42:121-34+ S '43

Lockheed P-38 has wide range of tactical uses. il *Aviation* 42:101+ Ja '43

Many problems to be solved in heating and ventilating military aircraft. A. A. Arrhym. il *Heating-Piping* 15:69-72 F '43

Modification centers, an American military innovation; making engineering changes in aircraft; Consolidated aircraft modification center. G. Hotchkiss. il *Aviation* 42:134-6+ Ap '43

Modification centers fit military planes for combat. il *Aero Digest* 43:125-8 S '43

Navy sky-fighters. W. L. Robinson. il *Sci Am* 167:246-9 D '42

New bomber plant starts operations in Alabama. il *Manuf Rec* 112:4+ Ap '43

New war planes for the United nations. il *Mod Plastics* 20:61-9+ Mr '43

Noorduyn Norsemen serves AAF. il *Aviation* 42:241+ Je '43

Passive defense; the protective armoring of military aircraft. H. J. Alter. diags *Aeronautical Eng R* 2:45+ Ap '43

Problems of global air war. N. F. Silsbee. il map *Mech Eng* 65:313-20 My '43

Ship flying and aircraft carriers. P. Bethell. il *Engineering* 156:101-5, 110 Ag 6 '43

Stinson planes for war service. il *Automotive & Aviation Ind* 87:25 D 1 '42

Thunderbolt in action. A. Klemin. il *Sci Am* 158:40 Ja '43

Timed operations pace conveyors in Vengeance bomber assembly. R. McCulloch. il diags *Am Mach* 87:97-108 Ap 1 '43

Tomorrow's planes today; modification centers; Consolidated-Vultee at Tucson. il *Am Mach* 87:75-7 Ap 29 '43

Two new Stinson warplanes. il *Aviation* 41: 261 D '42

U.S. leads world in radial engines; new V-type liquid designs near. *Aviation N* 1: 14, 16 S 6 '43

We may be expected to assume leadership in design and production of large aircraft; British production methods. G. D. Welty. *Aero Digest* 42:182-3+ Ap '43

Wooden planes failing to catch up with our metal combat craft. il *Aviation N* 1:12+ Ag 30 '43

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-------------------------------	-------------------------------

Conversion

British bomber-transport conversions. J. Bradbrooke. il *Aviation* 42:227+ Ag '43

Design

Airplanes fit to fight. N. F. Silsbee. il *Mech Eng* 64:847-52 D '42

Altering planes. *Business Week* p24+ F 13 '43

B-24 output boosted hundredfold by simple engineering changes. il *Product Eng* 14: 476-8 Ag '43

Boeing B-17F flying Fortress. il *Aero Digest* 42:155 F '43

Design analysis of the Bell Airacobra from cannon to tail. E. E. Miller. il diags *Aviation* 42:126-55 My '43

Design analysis of the Curtiss Commando. J. Foster, jr. il diags *Aviation* 42:130-53 Ag '43

Designers aided by proximity to war areas. J. C. Ward, jr. *Aero Digest* 42:200-1+ Mr '43

Designing for easy maintenance; Fleetwings BT-12 training plane. J. A. Knox and J. J. Boericke. il diags *Aviation* 41: 108-12 D '42

Development and engineering features of Lockheed P-38 fighter. il diags *Automotive & Aviation Ind* 89:32-6 N 1 '43

Engineering by subtraction. N. V. Davidson. diags *Aviation* 42:165+ Je '43

Factors controlling aircraft design and combat performance; analysis of American, British and German warplanes. N. F. Silsbee. il diags *Aviation* 41:96-9+ N '42

Fundamentals of fighter design. F. H. M. Lloyd. diags *Roy Aeronautical Soc J* 46:266-85 N '42

Maneuverability criteria through turning performance. J. E. Goode, jr. *J Aeronautical Sci* 10:73-80 Mr '43

Martin Marauder; design features. *Aero Digest* 42:244-5 Ja '43

Mosquito bomber; study of design in wood. R. B. McIntyre. il diags fold pl *Product Eng* 14:683-8 N '43

Mosquito design facilitates production; De Havilland aircraft of Canada. J. Montagnes. il *Aviation* 42:259, 261 My '43

New German warplanes. il diags *Automotive & Aviation Ind* 88:33+ My 15 '43

North American P-51 has novel design features. il *Aviation* 42:234, 237+ Je '43

Official data on the Mosquito. diag(p90) *Aeronautical Eng R* 2:177+ Ag '43

Test flights show army's new Sentinel to be rugged flying jeep. il *Steel* 11:52, 54+ N 23 '42

Trends of British bomber design. J. I. Waddington. il *Aero Digest* 42:223-4, 227+ Ap '43

Vision, hearing, and aeronautical design. L. D. Carson, W. R. Miles and S. S. Stevens. *J Aeronautical Sci* 10:127-30 Ap '43

Drawings

Bell Airacobra. *Aero Digest* 42:256-7 Mr '43

Britain's Avro Lancaster I; drawing. *Automotive & Aviation Ind* 87:30-1 D 15 '42

Douglas Havoc (A-20) attack bomber; drawings. *Aero Digest* 42:180-1 My '43

Fleetwings BT-12. C. H. Guishard. *Aero Digest* 41:186-7 D '42

Focke-Wulf FW 190A; drawings. *Automotive & Aviation Ind* 87:26-7 N 15 '42

North American Mustang (P-51). *Automotive & Aviation Ind* 88:34 F 15 '43

Three versions of the Liberator; drawings. *Automotive & Aviation Ind* 88:24-5 My 15 '43

Equipment

Air corps flashlight; housed in tough cellulose acetate butyrate. il *Mod Plastics* 20: 63+ My '43

Army astro domes; precision optical instruments of Plexiglas. il *Mod Plastics* 20:56+ F '43

Electronic plane pilot on American bombers in Europe. il *Electronics* 16:154 N '43

Fabrication of tear drop tanks; Lockheed Lightning P-38. il *Iron Age* 151:64-5 Je 17 '43

Fittings for the Thunderbolt. il *Mod Plastics* 20:72-3 Je '43

Flying Fortress raid equipment; illustrations. *Automotive & Aviation Ind* 88:38-9 Ap 15 '43

AIRPLANES, Military—Equipment—Continued

Lockheed sheds tears for the Axis; manufacturing auxiliary gasoline tanks for fighter planes. M. W. Coker. *il Mach* 49:161-7 My '43

Molding a bomb recorder frame. *il plan Mod Plastics* 20:74-6 Ja '43

Mustang's bomb rack. K. West. *il Mod Plastics* 21:75-7+ N '43

New type life saving raft for use of heavy bomber crews. *il Aero Digest* 42:156+ F '43

Thermoclastic C-stage laminates; North American aviation, inc. E. F. Lougee. *il Mod Plastics* 20:69-71+ Je '43

United nations vs Axis warplane radio equipment. J. L. Waddington. *il Aero Digest* 42:154-5+ Je '43

Gun turrets

Air conditioned firing range for testing bomber gun turrets. L. W. Greenblatt. *il Heat & Ven* 40:27-32 O '43

Boulton Paul gun turret mechanism. M. W. Bourdon. *il diags Automotive & Aviation Ind* 88:28-33 Ap 1 '43

Bristol hydraulic system. *il plan Engineer* 175:236, 237-9 Mr 19 '43

Bristol hydraulic system for aeroplanes. *il Engineering* 155:225-7, 230 Mr 19 '43

Designing gun turrets as integral part of aircraft. L. G. Frise. *il diags Aviation* 42:227, 229, 231, Ap; 247-8, 250, 253 My; 227-9, 231, 343-4+ Je '43; Excerpt. *Engineer* 175:312-14 Ap 16 '43

Gun turret development in England. M. W. Bourdon. *il Automotive & Aviation Ind* 87:34-7+ N 15 '42

New turrets on American heavy bombers. *il Automotive & Aviation Ind* 89:26-7 N 1 '43

Parnall power-operated gun turret. *il Engineering* 154:366-7, 370 N 6 '42; *Engineer* 174:386-7 N 6 '42

Power turret gives our bombers the edge. *il Aero Digest* 43:120-4 S '43

Some details of automatic gun-sight revealed. *il Aero Digest* 43:217+ JI '43

Unlimited revolutions for gun turrets. *il Mod Plastics* 20:85-7 Je '43

Identification

Identification chart of American aircraft in the R.A.F. and fleet air arm. *Aero Digest* 41:288, 292 N '42

Split-second recognition, a new allied weapon. *il Aviation* 42:119+ JI '43

Maintenance and repair

Air service command keeps replacement parts flowing to combat zones. E. L. Warner, jr. *il Automotive & Aviation Ind* 88:17-19+ My 1 '43

Automotive industry's training of aircraft engine mechanics. E. L. Warner, jr. *il Automotive & Aviation Ind* 89:17-18+ JI 15 '43

Britain's ground crews batter Germany's war plants. *il Aviation* 42:217+ Ap '43

Correct repair of transparent sections; Plexiglas, Lucite or Lumarith turrets, noses, observation domes, and tail cones. B. MacIntosh. *diags Aviation* 42:243 Mr '43

Designing for easy maintenance; Fleetwings BT-12 training plane. J. A. Knox and J. J. Boerick. *il diags Aviation* 41:108-12 D '42

Factory-designed repairs. M. Duke and L. C. Cowgill. *il diags Aero Digest* 43:238-9+ Ag '43

Field maintenance and repair of fighting airplanes; abstracts. N. L. Kearney. S A E J 51:sup32 My '43; *Aero Digest* 42:356-60 My '43

Fighters and bombers fly home for repair. J. Foster, jr. *il Aviation* 42:120-3+ Je '43

Lockheed overseas keeps 'em flying. R. C. Stunkel. *il Aviation* 42:112-13+ O '43

Maintaining RAF combat craft at peak efficiency. J. I. Waddington. *il Aero Digest* 42:101-2, 104+ F '43

Mass production overhaul; Southwest aircraft corp. J. H. Connelly. flow sheet *il Aviation* 42:213-15+ Je '43

Motion pictures in aircraft production. N. Mathews. Soc Motion Picture Eng J 40:291-5 My '43

New planes for old; Noorduyn plant. *il Aviation* 42:215+ Ag '43

OWI discloses world-wide scope of AAF's Air service command. *il Aviation* N 1:10-11 S 20 '43

Repair of damaged aero-engines. *il Engineer* 175:470-2 Je 11 '43

Selecting field service personnel. S. C. Timson. *Aero Digest* 43:158, 293+ JI '43

Service manuals for the army and navy air forces. A. Lundgren. *il diags Aero Digest* 43:233-4+ S '43

Training ground crews at Chanute Field, Illinois. *il Aeronautical Eng R* 2:23+ Ag '43

We learned war maintenance with the AVG. T. M. Lett, jr. *il Aviation* 41:104-6+ D '42

Manufacture

See Airplanes—Manufacture

Names

Popular names of U.S. military aircraft. *Automotive & Aviation Ind* 88:98-9 Mr 15 '43

We name our military aircraft. *Aero Digest* 42:321 Ja '43

Specifications

Aviation's aircraft specifications; tabulations. *Aviation* 42:255-9 F '43

World military airplanes, grouped by types; tabulation. *Automotive & Aviation Ind* 88:105-9 Mr 15 '43

Transportation

African front line aircraft assembly. *il Aero Digest* 42:122-4 My '43

Canada

Aircraft production in Canada. B. Keith. *il Aero Digest* 42:172-4, 176+ F '43

Conservation in Canada's aircraft industry. J. Montagnes. *il Aviation* 42:181+ S '43

Germany

BMW 801A aircraft engine. *il diags Automotive & Aviation Ind* 87:20-4 O 15; 38-41 N 1 '42

Construction and equipment of the Focke-Wulf FW190A-3 fighter. M. W. Bourdon. *il Automotive & Aviation Ind* 88:36-8+ My 15; 38+ Je 1 '43

Design details of the BMW-801A engine. M. V. Cave. *il diags Aviation* 41:228-9+ N; 256-7, 259 D '42

Design features of the Junkers 211B aircraft engine. S. Oldberg and T. M. Ball. *il diags S A E J* 50:465-83 N '42; Same cond. Metals & Alloys 17:404+ F '43; Abstract. *Automotive & Aviation Ind* 86:18-21 Ap 1; 40-6+ Ap 15 '42

Fire power details of Nazi planes. *diags Aviation* 41:200-1 N '42

Flight research and routine testing at various German aircraft works; abstract. C. Cornelius and others. Roy Aeronautical Soc J 47:sup143-4 Ap '43

Focke-Wulf F.W. 190 fighter. *il Engineer* 175:68-71 Ja 22 '43

Focke-Wulf FW 190A; drawings. *Automotive & Aviation Ind* 87:26-7 N 15 '42

German aircraft radio equipment. L. Winner. *il Radio N* 29:10-12+ Mr '43

German automatic supercharging system. *il diags Engineer* 176:48-9 JI 16 '43

German BMW 801 engine; drawing. *Automotive & Aviation Ind* 89:44 Ag 1 '43

German planes; brief descriptions, illustrations and specifications. *Aviation* 42:231-7, 275-8 F '43

German warplanes; Messerschmitt Me 109G-2, Henschel He 129 and Junkers Ju 87D-1. *Automotive & Aviation Ind* 88:37 Ap 1 '43

How Germany does it; powerful, compact airplane engine has a pre-designed cooling system and other built-in accessories. A. Klemin. *diags Sci Am* 167:289-90 D '42

Jumo aero-engines, fuel injection. *il diags Engineer* 176:113-16 Ag 6 '43

Magnesium in German aircraft. H. W. Schmidt. *il Aeronautical Eng R* 2:7+ Je '43

Messerschmitt Me 210; Germany's newest fighter bomber. M. W. Bourdon. *diags Automotive & Aviation Ind* 88:34-7 Ap 1 '43

AIRPLANES, Military—Germany—Continued
 Messerschmitt Me-210A-1. *il Aviation* 42:235+ Ap '43
 Messerschmitt 210 A-1 long-range fighter-bomber. *il diags Aero Digest* 42:267-8+ Ar '43
 New German warplanes. *il diags Automotive & Aviation Ind* 88:33+ My 15 '43
 Petrol injection system of a German aero-engine. *il diags Engineer* 175:108, 109-11 F 5 '43
 Sketch book of design detail; elevator control mechanism of the Junkers JU-88. *diags Aviation* 42:187 Je '43
 Weight of German aircraft. *Engineer* 176:232 S 17 '43

Great Britain

Airspeed Horsa; details of one of Great Britain's transport gliders. *diags Automotive & Aviation Ind* 89:32-3 S 15 '43
 Avro Lancaster heavy bomber. *il diags Aero Digest* 41:234, 236 N '42
 Britain's Avro Lancaster I; drawing. *Automotive & Aviation Ind* 87:30-1 S 15 '42
 Britain's ground crews batter Germany's war plants. *il Aviation* 42:217+ Ap '43
 British planes; brief descriptions, illustrations and specifications. *Aviation* 42:209-19, 257-8 F '43
 Cutaway sketch of Britain's Spitfire IX. *Aviation* 42:133 Jl '43
 DeHavilland Mosquito. *diags Aero Digest* 42:231 F '43
 De Havilland Mosquito. *il diags Aero Digest* 42:227, 229, 232+ Je '43
 De Havilland Mosquito. M. W. Bourdon. *il diags Automotive & Aviation Ind* 88:26-31+ Je 15 '43
 De Havilland Mosquito bomber and fighter. *il Engineer* 175:373-5 My 7 '43
 Development of British aircraft armament. *il Aero Digest* 41:179-80, 183+ D '42
 Fighting aircraft of the Royal air force; de Havilland Mosquito. *il(p390) Engineering* 155:385 My 14 '43
 Fleet air arm. A. V. Alexander. *Engineer* 175:229 Mr 19 '43
 Gun turret development in England. M. W. Bourdon. *il Automotive & Aviation Ind* 87:34-7 N 15 '42
 Halifax II features higher speed. *il Aviation* 42:232 S '43
 Hawker Typhoon. *il Aero Digest* 42:199 My '43
 Hawker Typhoon. *il Automotive & Aviation Ind* 88:41+ Je 15 '43
 Hawker Typhoon unwrapped. *il Aviation* 42:239+ Je '43
 Inside the Stirling; interior fittings and crew accommodations; illustrations. *Automotive & Aviation Ind* 89:37 S 1 '43
 Interchangeable power plants for British bombers. M. W. Bourdon. *il diags Automotive & Aviation Ind* 88:42-3 Ja 15 '43
 Mosquito legs equipped with rubber pack to absorb shock. *diags Automotive & Aviation Ind* 89:29 Ag 15 '43
 New Halifax heavy bomber series. *il Automotive & Aviation Ind* 89:80 Jl 15 '43
 Rolls-Royce Merlin 61 supercharged fighter engine. *il diags Engineer* 174:495-7 D 18 '42
 Those claims are right; performances of both English and American planes reviewed. M. V. Cave. *il Aviation* 42:116-18+ Jl '43
 Trends of British bomber design. J. I. Waddington. *il Aero Digest* 42:223-4, 227+ Ap '43

Italy

Italian planes; brief descriptions, illustrations and specifications. *Aviation* 42:227, 229, 257-8 F '43

Japan

Design features of the Mitsubishi Kinsei engine. W. G. Owens. *il S A E J* 50:253-66 Jl '42
 Japanese planes; brief descriptions, illustrations and specifications. *Aviation* 42:239, 241, 257-8 F '43
 Late model Zeros lend new life to much battered Jap air force. *Aviation* N 1:13-14 O 11 '43
 Zero truth. A. Klemm. *Sci Am* 168:89 F '43

Russia

Russian Lagg-3 fighter. *il diags Automotive & Aviation Ind* 89:30-2+ O 1 '43

Russian planes; brief descriptions, illustrations and specifications. *Aviation* 42:221-7, 259 F '43
 Soviet air force using wide range of aircraft types; illustrations. *Aviation* 42:229-30 Jl '43
 YAK-1 (I-26) fighters. *il Automotive & Aviation Ind* 88:37 Mr 1 '43

United States

Aeronca L-3B liaison; drawings. *Aero Digest* 43:226-7 Jl '43
 America at war. *il Aviation* 41:92-3+ N '42
 American planes; brief descriptions and illustrations. *Aviation* 42:181-207 F '43
 Army air corps' vision, plus technical genius, producing weapons far surpassing enemy's. E. Blair. *Barron's* 23:4 Ja 4 '43
 Assembling and testing P-40's in Burma. E. A. Glover. *il map Aviation* 41:96-101+ D '42
 Boosting bomber production by subcontracting; Glenn L. Martin company. T. J. Dunne. *il Aviation* 41:221+ D '42
 British comment on U.S. planes. *il Automotive & Aviation Ind* 88:33+ F 1 '43
 Convair patrol; flying boat for anti-submarine duty. *il diags Automotive & Aviation Ind* 89:26-7+ Ag 1 '43
 Curtiss Commando; giant military cargo plane. *il Automotive & Aviation Ind* 87:24-5 N '42
 Design analysis of the Bell Airacobra from cannon to tail. E. E. Miller. *il diags Aviation* 42:126-55 My '43
 Douglas licks U-boats without bombs. J. Simpson. *il diags Aviation* 42:135-41+ O '43
 Engineering Boeing-Douglas-Vega production of Flying Fortresses. M. Short. *il diags Automotive & Aviation Ind* 89:17-21+ O 15 '43
 Fortresses by Boeing, Douglas, Vega; Liberators by Consolidated Vultee and Ford; Mustangs by North American; Avengers by Eastern. *il diags plans Aviation* 42:124-73+ Jl '43
 Four types of U.S. warplanes helping Russians smash Nazis. *il Aviation* N 1:13-14 Ag 16 '43
 Grumman F6F Hellcat scores in combat. *il Aviation* 42:223 O '43
 Lockheed Lightning, high-altitude fighter; drawings. *Aero Digest* 42:202-3 Je '43
 Number of plane types cut; one super-bomber is rushed. *Aviation* N 1:13, 15 O 4 '43
 OWI report reviews warplane progress. *Aviation* N 1:9 O 18 '43
 100,000 airplanes have been built in U.S. since June, 1940. *Automotive & Aviation Ind* 88:48+ Je 15 '43
 Plane production will be emphasized and streamlined by Little WPB for aircraft. *Am Mach* 86:1460f D 10 '42
 Plans completed for giant plane to carry 400 passengers. *Automotive & Aviation Ind* 87:43+ D 15 '42
 Some details of automatic gun-sight revealed. *il Aero Digest* 43:217+ Jl '43
 Summary of nation's warplanes simplifies identification. *Steel* 112:78 Mr 1 '43
 Tailoring American planes to the job. *il Automotive & Aviation Ind* 89:17-20+ Jl 1 '43
 Taking the measure of Axis air power; Grumman Hellcat. *il Aero Digest* 43:119 S '43
 Those claims are right; performances of both English and American planes reviewed. M. V. Cave. *il Aviation* 42:116-18+ Jl '43
 Tokyo may see our super-bombers; new U.S. fighters ready soon. *il Aviation* N 1:13-14 Ag 23 '43
 Wing tips; aviation catapulted into no. 1 rank in year. *il Steel* 112:244+ Ja 4 '43

AIRPLANES, Military transport

Air transport command; radio helps deliver men and supplies. *il Radio* N 29:72-3+ Je '43
 Converting today's military airplane transports for post-war passenger and cargo use; abstract. W. J. Forster. *S A E J* 51:sup29+ N '43
 Curtiss Caravan. *il Aero Digest* 42:186, 188 Ja '43
 Curtiss Caravan C-76 transport. *il Automotive & Aviation Ind* 88:26-7 Ja 15 '43
 Curtiss Commando. P. N. Jansen. *il Mach* 49:134-43 Jl '43

AIRPLANES, Military transport—Continued

- Curtiss-Wright wood transport for Army air forces. *Aeronautical Eng R* 2:96 Ja '43
- Design analysis of the Curtiss Commando. J. Foster, jr. *il diags Aviation* 42:130-53 Ag '43
- Facts and figures of air cargo. R. E. Oursler. *il Automotive & Aviation Ind* 88:35+ My 1 '43
- Lockheed Constellation. *il Aero Digest* 42:212, 214-4 Ja '43; *Aeronautical Eng R* 2:109-10 F '43
- Mass assembly methods adapted by Ford engineers to army 3-ton transport gliders. *il Automotive & Aviation Ind* 89:30-3, 46+ Ag 1 '43
- Messerschmitt 323 six-engined troop transport. *il Aero Digest* 42:252 Ap '43
- No oxygen needed; circular pressurized cabin is feature of Constellation for high-altitude operation. A. Klemin. *il Sci Am* 163:182-3 Ap '43
- Our gigantic global air transport services. *il Aero Digest* 42:118-21+ Je '43
- Troop carrier command; the common carrier of death and destruction; destination: the enemy's rear. *il Fortune* 28:130-5+ O '43
- Troop transport glider gets detachable engines. *il Aero Digest* 42:173+ Je '43
- U. S. must plan post war disposal of military transports. L. W. Pogue. *Aviation N* 1:37 Ag 2 '43
- Volume production is begun on C-46. *il Aviation N* 1:24 N 1 '43

AIRPLANES, Training

- Boeing AT-15 bomber crew trainer. *il Aviation* 41:263 D '42
- Design analysis of the Fleetwings BT-12; America's only stainless steel airplane. D. Baker. *il diags Aviation* 42:119-32+ O '43
- Design and production with substitute materials; Vultee uses plywood and plastic material for basic trainers. S. R. Carpenter. *il diags Aviation* 42:112-15+ Mr '43
- Designing for easy maintenance; Fleetwings BT-12 training plane. J. A. Knox and J. J. Boericke. *il diags Aviation* 41:108-12 D '42
- Fairchild Cornell primary trainer; drawings. *Aero Digest* 43:214-15 Ag '43
- Fleetwings BT-12; drawings. C. H. Gulshard. *Aero Digest* 41:186-7 D '42
- Lockheed trainer developed from a bomber. *Aeronautical Eng R* 2:110 F '43
- Lycoming radial engines for trainer planes. P. E. Garland. *il Mach* 49:164-71 Ag '43
- New Piper PT. *il Aero Digest* 42:179, 181+ Je '43
- Old lady in a new dress; Avro Anson V. *il Aviation* 42:226 N '43
- Piper enters low-wing trainer field. *il Aviation* 42:233+ Jl '43
- Ryan develops plywood primary trainer for army. *il Automotive & Aviation Ind* 88:24-5, 54 Ja 1 '43
- Seat added to P-39 used as trainer. *il Aviation N* 1:7-8 N 1 '43
- Stepping stones to action; growing use of twin engine planes to train bomber crews. *il Aviation* 41:100 N '42
- Trim trainer; Ryan-built plane made of ersatz materials. *il Sci Am* 167:291 D '42

AIRPLANES in engineering

- Air freight, unlimited; carrying equipment for construction of Shipshaw waterpower project. D. Baker. *il map Aviation* 42:114-17, 335+ Je '43

See also

Airplanes in road construction

AIRPLANES in freight service. See Air lines—Freight service; Airplanes, Freight

AIRPLANES in road construction

- Alcan highway, pioneered from the air. E. H. Forbes. *il map Aviation* 42:114-16+ My '43

AIRPORT buildings

- New buildings for 194X: airport. *il plans maps Arch Forum* 72:123-8 My '43
- Safety underfoot; floor maintenance as an aid to safety. *il Safety Eng* 86:31-2+ O '43

Seaplane station, Santos Dumont airport, Rio de Janeiro. *il plans Arch Rec* 93:45-7 Ja '43

See also

Hangars

AIRPORTS

- Airport contractor gets "E" for fast job; Austin road company. *il Roads & Sts* 86:63 O '43
- Airport of future. W. A. M. Burden. *Aviation N* 1:28-9 O 18 '43
- Airports of the future. J. G. Carr. *il plan Arch Rec* 94:66-70 Jl '43
- Free use of airports in post-war era envisioned by President Roosevelt. *Comm & Fin Chr* 158:1431 O 7 '43
- Minnesota legislature takes steps to aid post-war airport planning. *Eng N* 131:17 Jl 1 '43
- New buildings for 194X: airport. *il plans maps Arch Forum* 72:123-8 My '43
- Number of airports and landing fields in the United States, 1931-1942; tabulation. *Automotive & Aviation Ind* 88:96 Mr 15 '43
- On the threshold of great developments in highway and airport construction; report of National resources planning board. *il Roads & Bridges* 81:24+ F '43
- Post-war need for hangars and service facilities. C. I. Stanton. *Aviation N* 1:8-9 Ag 16 '43
- Post-war transport aircraft. E. P. Warner. *Roy Aeronautical Soc J* 47:243-5 Jl '43; Same. *Aeronautical Eng J* 2:52+ O '43
- Sky harbors; New York's and Chicago's answer to what kind of airport facilities will be needed after the war. *il map Arch Forum* 79:50 Ag '43
- Soil classification for airfields reported to Am. Soc. C.E. meeting; airfield drainage and soil sampling also discussed. *Eng N* 130:110-11 Ja 28 '43
- Technical functions and responsibilities of the Civil aeronautics administration; airport program. C. E. Donaldson. *Aeronautical Eng R* 2:7, 9+ S '43

See also

Airport buildings Hangars
Aviation landing sta- Seaplane bases
tions

Cost

- Airport construction, Texas; unit prices. *Eng N* 131:492 S 23 '43
- Airport, Florida; unit prices. *Eng N* 131:702 N 4 '43
- Airport improvements, Alexandria, Minn.; unit prices. *Eng N* 131:224 Jl 29 '43
- Airport improvements, Rockport, Texas; unit prices. *Eng N* 131:46 Jl 1 '43
- Airport paving and drainage. Woodbine, N.J.; unit prices. *Eng N* 131:639 O 21 '43
- Airport paving and grading, Kansas City, Mo.; unit prices. *Eng N* 130:152 Ja 28 '43
- Airport paving, New Jersey; unit prices. *Eng N* 129:824 D 10 '42
- Airport, Texas; unit prices. *Eng N* 129:824 D 10 '42
- Contract unit bid prices; list of projects showing how contractors bid in 1942-1943. *Eng N* 130:sup168+ Ap 22 '43

Drainage

- Airfield storm sewer built of unreinforced concrete. *diag Eng N* 131:282 Ag 12 '43
- Airport drainage on a rocky site. *il plan diag Eng N* 130:28-30 Ja 14 '43
- Constructing an airport on Florida sands; marl added to sand for runway foundation. C. H. Moneypenny. *il Pub Works* 73:12-13 D '42
- Drainage of airport pavement; abstract. L. M. Arms. *Eng N* 129:731 N 19 '42
- Drainage, runways and roadways at aerodromes in No. 1 Training command, Royal Canadian air force. G. G. Reid. *il diags plans Roads & Bridges* 81:29-33+ My '43
- Heavy-duty asphaltic runways. B. E. Gray. *il Civil Eng* 13:265-8 Je '43
- Lynchburg, Virginia, completes a municipal airport. J. D. Wright. *il diags Pub Works* 74:11-13+ Jl '43
- Marginal drains provided for runways at a naval air station. W. W. Olmstead. *diags Civil Eng* 13:434-5 S '43
- Multiple-box drain for airbase runoff. *il Eng N* 130:678-81 My 6 '43

AIRPORTS—Drainage—Continued

Precast box conduits for runway drainage. C. R. Otto. *il diags Eng N 130:899-900 Je 17 '43*
 Underground channels utilized for airport drainage. *il diag plan Eng N 130:498-9 Ap 8 '43*

Equipment

Brave new world, F.O.B.; from Kansas City, Butler manufacturing co. ships ready-made airports of sheet metal, thinks of shipping practically everything. *il Fortune 28:124-7, 146+ Ag '43*
 Mobile stiff leg crane for airfields. *il diag Product Eng 14:142-3 Mr '43*

Finance

\$100,000,000-a-year industry; statistical analysis of the construction of road and air transport facilities in Canada. *il Roads & Bridges 81:27-9 Jl '43*
 Postwar airports; CAA chief proposes joint federal and state financing. *Business Week p30-1 S 25 '43*

Lighting

Aircraft defense lighting. W. T. Harding. *illum Eng 37:844-5 D '42*
 Airport lighting equipment under army-navy control. *Civil Aero J 4:17 F 15 '43*
 Airport lighting under blackout conditions. H. J. C. Pearson. *illum Eng 37:846-8 D '42*
 Airport lighting under wartime conditions. G. J. Dyktor. *diags Elec Eng 62:64-7 F '43*
 Airport runway lighting control switch. J. P. Houck. *il diags Product Eng 14:268-9 My '43*

Municipal airports

See Airports, Municipal

Runways

Airfield paved with local materials. *il Eng N 130:390-1 Mr 18 '43*
 America's greatest northeastern air base carried out by Canadian contractors in record time. *il Roads & Bridges 80:28-32, 58 D '42*
 Concrete pavements in wartime. D. O. Robinson. *il Roads & Bridges 81:25-7 Ap '43*
 Concrete paving in near-zero weather; runways for airport. *il Eng N 130:547-50 Ap 22 '43*
 Constructing an airport on Florida sands; marl added to sand for runway foundation. C. H. Money Penny. *il Pub Works 73:11-13 D '42*
 Design of flexible pavement foundations. T. A. Middlebrooks. *diags Roads & Sts 86:44-8 Mr '43*
 Drainage, runways and roadways at aerodromes in No. 1 Training command, Royal Canadian air force. G. G. Reid. *il diags plans Roads & Bridges 81:29-33+ My '43*
 Establishing grades on airfields; staking runway intersections. B. J. Lambert. *Eng N 129:788-9 D 3 '42*
 15,000 sq. yd. concrete daily at southern airport. *il Roads & Sts 85:29 D '42*
 Heavy-duty asphaltic runways. B. E. Gray. *il Civil Eng 13:265-8 Je '43*
 Lynchburg, Virginia, completes a municipal airport. J. D. Wright. *il diags Pub Works 74:11-13+ Jl '43*
 Resistance of soft fill to static wheel loads. W. W. Pagon. *il map Am Soc C E Proc 68:237-54 F '42*; Discussion. 69:151-2 Ja '43
 Soil-cement pavement for desert airbase. *il Eng N 129:921-5 D 31 '42*
 Soil-cement runways of Duluth municipal airport. I. W. Ward. *il Pub Works 74:12-14 O '43*
 Speed in spite of 86 rainy days; airport paving job. *il diags Roads & Sts 86:37-43 Mr '43*
 Test runway gives data on base thickness requirements. *il Eng N 130:430-3 Mr 25 '43*
 Vibration considered major factor in design of airplane runways. *Eng N 130:134 Ja 28 '43*
 Winter construction methods followed at bomber base. *il Concrete 51:2-5 O '43*

Snow protection and removal

Airport snow removal. W. M. Fletcher. *il Aero Digest 41:85-8+ D '42*

Fighting snow to keep 'em flying. H. W. Hunt. *il map Eng N 129:641-52 N 5 '42*
 Same cond. Aviation 42:98-9, 263+ Ja '43
 How our airports are handling the snow problem. *il Pub Works 73:34, 37+ D '42*
 Snow on airport runways. *Pub Works 74:35 Ag '43*
 Snow-removal equipment in the R.C.A.F. *il Roads & Bridges 81:40-1, 116-18 O '43*

Surfaces

Bases for bombing from Britain. W. G. Bowman. *il diags plan Eng N 131:253-9 Ag 12 '43*
 Build landing mat a half-mile square of soil-cement construction. *il Concrete 51:4-6+ Mr '43*; Same cond. *Roads & Sts 86:35-9 F '43*
 Canada's largest Pacific airport. W. P. Braggins. *il Roads & Bridges 81:33-40, 68+ S '43*
 Establishing grades on airfields; method for preparing an isometric grade chart. B. J. Lambert. *diag Eng N 129:786-9 D 3 '42*
 Million-yard winter paving job on large eastern airbase. *il diag Roads & Sts 86:35-40 My '43*
 Place million yards of air-base pavement in six cold-weather months. *il Concrete 51:10-11 My '43*
 700 acres of pavement; design and construction features of hugh western air base. H. J. McKeever. *il diags Roads & Sts 86:41-8 S '43*
 Speed in spite of 86 rainy days; airport paving job. *il diags Roads & Sts 86:37-43 Mr '43*
 We grease 'em and no foolin'; shop of Megarry brothers, grading and paving airport at Alexandria, Minn. H. J. McKeever. *il Roads & Sts 86:75-6, 78-9 Ag '43*
 See also
 Airports—Runways

Traffic control

Airport traffic control. H. S. Stokes and H. F. Cole. *il Radio N 29:108-11+ Je '43*
 Engineering the airways; problem is to handle traffic of 300,000 planes within three years after the war. *il plan Fortune 28:128-33+ N '43*
 Technical functions and responsibilities of the Civil aeronautics administration; air traffic control. G. A. Gilbert. *il Aeronautical Eng R 2:21, 25 S '43*

Water supply

See Water supply for airports

Africa

American airbases across Africa. E. R. Littler and W. A. Creamer. *il Eng N 130:216-18 F 11 '43*

Canada

Canada's largest Pacific airport. W. P. Braggins. *il Roads & Bridges 81:33-40, 68+ S '43*
 International port; air terminal proposed for joint use of U.S. and Canada in Windsor with a high-speed highway to Detroit. *Business Week p66+ My 22 '43*
 \$100,000,000-a-year industry; statistical analysis of the construction of road and air transport facilities in Canada. *il Roads & Bridges 81:27-9 Jl '43*

Portugal

Opening of important airport at Lisbon. *For Comm W 10:18 F 13 '43*

AIRPORTS, Floating

Floating airports in mid-ocean. A. Klemm. *il diag map Sci Am 169:118-20 S '43*; Same cond. *Engineer 176:293-4 O 8 '43*
 Landing isles proposed for transatlantic plane routes. *il Manuf Rec 112:37+ Je '43*
 Seadromes planned. *il map Arch Rec 94:14 Jl '43*

Steel seadromes planned for Atlantic air route. *il Steel 112:77 My 17 '43*; *Eng N 130:724 My 20 '43*

AIRPORTS, International

International port; air terminal proposed for joint use of U.S. and Canada in Windsor with a high-speed highway to Detroit. *Business Week p66+ My 22 '43*

AIRPORTS, Military

- African construction front. W. G. Bowman. *il Eng N* 131:454-9 S 23 '43
- America's greatest northeastern air base carried out by Canadian contractors in record time. *il Roads & Bridges* 80:23-32, 58 D '42
- Bases for bombing from Britain. W. G. Bowman. *il diag* plan *Eng N* 131:253-9 A 12 '43
- Build landing mat a half-mile square of soil-cement construction. *il Concrete* 51: 4-6+ Mr '43; Same cond. *Roads & Sts* 86: 35-9 F '43
- Drainage, runways and roadways at aerodromes in No. 1 Training command. Royal Canadian air force. G. G. Reid. *il diag* plans *Roads & Bridges* 81:29-33+ My '43
- Goose Bay air base in Labrador, one of the world's largest. *il Roads & Bridges* 81:24 Je '43
- Million-yard winter paving job on large eastern airbase. *il diag Roads & Sts* 86:35-40 My '43
- Patuxent River naval air station. E. M. Hockensmith. *il Aero Digest* 43:118-19+ JI '43
- Place million yards of air-base pavement in six cold-weather months. *il Concrete* 51: 10-11 My '43
- Soil-cement pavement for desert airbase. *il Eng N* 129:921-5 D 31 '42

See also

Airports, Municipal
—Military use

AIRPORTS, Municipal

- Airport promotion and planning in Wisconsin. M. W. Torkelson. map *Pub Works* 74: 19+ F '43
- Evolution of a small city airport; Burlington, Vermont. G. C. Stanley. *il Roads & Sts* 86:80, 89 O '43
- Lynchburg, Virginia, completes a municipal airport. J. D. Wright. *il diag Pub Works* 74:11-13+ JI '43
- Minnesota planning municipal airports. *Comm & Fin Chr* 157:2280 Je 17 '43

Military use

City control of airports protected by CAA efforts. *Civil Aero J* 4:73+ Je 15 '43

AIRSHIP hangars. See Hangars**AIRSHIPS**

- Accurate paving required for blimp bases. *Eng N* 131:405 S 9 '43
- Blimps on patrol. R. G. Pleinich, jr. *il Aero Digest* 43:116-17+ JI '43
- Goodyear tire and rubber company; ten years' engineering progress in development of airships, airplane materials and rubber goods. P. W. Litchfield. *Aeronautical Eng R* 1:61 N '42
- Guardians of the convoys; blimps in lighter-than-air branch of naval coastal patrol service. E. H. Forbes. *il Aviation* 41:197-9 N '42

See also

Aeronautics
Aviation

Manufacture

Time-saving assembly method; steel scaffolding used in attaching gondola to blimps. *il Rubber Age* 52:346 Ja '43

Mooring masts

Craft of demolition; safe practice with acetylene and explosives. J. Langley. *il Chem Age (Lond)* 48:525-6 My 15 '43

AIRWAYS

- Federal airways. C. I. Stanton. *il Radio N* 29:100-1+ Je '43
- Postwar airways. A. Scott. *Air Transport* 1:63-4+ S '43
- Postwar preview of European airways. M. A. Garbell. map *Aviation* 42:202-3+ Ap '43
- Technical functions and responsibilities of the Civil aeronautics administration; airways engineering. L. M. Hammond. *il Aeronautical Eng R* 2:11, 13 S '43

See also

Air lines
Airports
Aviation

Maps

Great circle airways. R. E. Harrison and M. K. Ullrich. *Fortune* 27:supp My '43

Traffic control

- Air travel dreams brought down to earth; traffic control requirements will put ceiling on use. S. M. Barber, jr. *Barron's* 23:9 JI 12 '43
- Airways flying. J. G. Cozzens and B. Moore. *il Air Transport* 1:39-42 S '43
- Airways look ahead. T. B. Bourne. *il Radio N* 29:102-4+ Je '43
- Engineering the airways; problem is to handle traffic of 300,000 planes within three years after the war. *il plan Fortune* 28:128-33+ N '43
- Post-war traffic control is a problem, experts say. *Civil Aero J* 4:57+ My 15 '43
- Technical functions and responsibilities of the Civil aeronautics administration; air traffic control. G. A. Gilbert. *il Aeronautical Eng R* 2:21, 25 S '43
- Teletype editor new short-cut in ATC work. *Civil Aero J* 4:113+ S 15 '43

AKRON, Ohio**Industries**

Akron off again. *Business Week* p100+ My 29 '43

ALANINE

- Absence of β -alanine in proteins. M. A. Pollack. *bibliog Am Chem Soc J* 65:484-5 Mr '43
- Growth effects of α -methyl homologs of pantothenic acid and β -alanine. M. A. Pollack. *bibliog Am Chem Soc J* 65:1335-9 JI '43
- Physicochemical aspects of bacterial growth; the lag phase of bact. lactis aerogenes. R. M. Lodge and C. N. Hinshelwood. *Chem Soc J* p213-19 My '43

ALANYLGLYCINE

Thermal data; heats of combustion and free energies of some compounds containing the peptide bond. H. M. Huffman. *bibliog J Phys Chem* 46:385-91 N '42

ALARMS

See also

Burglar alarms
Electric alarms

ALARMS, Electric. See Electric alarms

ALASKA

- North Pacific planning project. *Science* 98: 275 S 24 '43
- Northwest deliveries; difficulties surmounted in running Alaska route. D. Baker. *il Aviation* 42:226, 227+ JI '43

See also

Geology—Alaska	Mines and mineral resources—Alaska
Gold mines and mining—Alaska	Silver mines and mining—Alaska

Commerce

New agreement affects exporters supplying needs of Alaska. *For Comm W* 11:20 Je 12 '43

ALASKA highway. See Roads—Canada

ALBANIA

Restoration of Albania is one of war aims. *Comm & Fin Chr* 156:2256 D 24 '42

ALBERTA

See also

Geology—Alberta	Petroleum industry and trade—Alberta
Petroleum—Alberta	

ALBUMIN

- Catalyzed hydrolysis of amide and peptide bonds in proteins. J. Steinhardt and C. H. Fugitt. *bibliog J Research Nat Bur Stand* 29:15-27 N '42
- Dehydrating effect of disinfectants on egg-albumin solutions. A. Steigmann. *Soc Chem Ind J* 61:178-80 N '42
- Effects of inorganic electrolytes on the liberation of —SH in proteins. N. F. Burk. *bibliog J Phys Chem* 47:104-18 F '43
- Influence of heat treatment on solutions of crystalline horse serum albumin. G. R. Cooper and H. Neurath. *bibliog J Phys Chem* 47:333-98 My '43
- Normal variation in the concentration of fibrinogen, albumin, and globulin in blood plasma. R. M. Hill and V. Trevorrow. *bibliog J Phys Chem* 46:1117-29 D '42

ALBUMIN—Continued

- Study of the diffusion velocity of ovalbumin in relation to its molecular weight. L. Friedman and B. R. Ray. bibliog diags J Phys Chem 46:1140-50 D '42
- Ultraviolet absorption spectra of protein solutions. R. N. Jones and H. J. Creeth. bibliog Opt Soc Am J 33:209-18 Ap '43

ALCAN highway. See Roads—Canada**ALCHEMY**

- Development of alchemy in Bohemia. G. Druce. bibliog Chem & Ind 62:51-3 F '6 '43

ALCLAD

- Effect of cold-work and heat-treatment on 24ST aluminum alloy. B. Mitchell. bibliog J Aeronautical Sci 10:86-90 Mr '43
- Effect of scratches on fatigue strength of Alclad sheet. H. J. Andrews and G. W. Stickley. II diag Aviation 42:154-5, 157 Je '43

- Predicting stiffener and stiffened panel crippling stresses. H. B. Crockett. bibliog diags J Aeronautical Sci 9:501-9 N '42

ALCOHOL

- Action of cuprous oxide on diazotised amines in ethyl-alcoholic acid solution. H. H. Hodgson and H. S. Turner. Chem Soc J p748-9 D '42

- Alcohol and acetone by solvent extraction; heat requirements of distillation and of combined distillation and extraction processes. D. F. Othmer and R. L. Ratcliffe, Jr. II diags Ind & Eng Chem 35:798-805 JI '43

- Alcohol tilt due; fight for more rubber from grain alcohol. Business Week p23-30 D 19 '42

- Effect of ethanol concentration on purity of potassium chloroplatinate in determination of potash in fertilizers. H. L. Mitchell and O. W. Ford. Ind & Eng Chem Anal ed 15:56 Ja 15 '43

- Equilibria in ethanol-water system at pressures less than atmospheric. A. H. Beebe, Jr. and others. Ind & Eng Chem 34:1501-4 D '42

- Equilibrium still for miscible liquids; data on ethylene dichloride-toluene and ethanol-water. C. A. Jones, E. M. Schoenborn and A. P. Colburn. bibliog II diag Ind & Eng Chem 35:666-72 Je '43

- Ethanol-water system; vapor-liquid properties at high pressures. J. Griswold, J. D. Haney and V. A. Klein. bibliog II diag Ind & Eng Chem 35:701-4 Je '43

- Factors influencing the plateau characteristics of self-quenching Geiger-Mueller counters; argon-alcohol type. W. D. B. Spatz. bibliog Phys R 64:236-40 O 1 '43

- Laboratory cooking, mashing, and fermentation procedures. W. H. Stark and others. II diag Ind & Eng Chem Anal ed 15:443-6 JI 15 '43

- Manufacture of butadiene from ethyl alcohol. J. A. Gamma and T. Inouye. bibliog (56 references) flow diags Chem & Met Eng 49: 97-100 D '42; 50:94-7 Ja '43

- Methods of preparing butadiene; dehydration, dehydrogenation plus condensation of ethanol. G. Egloff and G. Hulla. bibliog Oil & Gas J 41:45-8 D 10 '42

- Studies on high molecular weight aliphatic amines and their salts; the behavior of various salts of dodecylamine in water, ethanol and benzene. C. W. Hoerr and A. W. Ralston. bibliog Am Chem Soc J 64: 2824-9 D '42

- Styrene for rubber made from benzene, alcohol or ethylene. II Oil & Gas J 41:43 N 26 '42

- System ethyl alcohol-glycerol-carbon tetrachloride at 25°C. H. J. McDonald, A. F. Kluender and R. W. Lane. J Phys Chem 46:946-8 N '42

- Ternary system; dioxane-ethanol-water. C. H. Schneider and C. C. Lynch. bibliog Am Chem Soc J 65:1063-6 Je '43

- Too much liquor; output of spirits from Caribbean molasses curtails our sugar supply. Business Week p65 N 6 '43

- Vapor-liquid equilibria for commercially important systems of organic solvents; binary systems ethanol- γ -butanol, acetone-water and isopropanol-water. A. S. Brunles and M. J. P. Bogart. bibliog Ind & Eng Chem 35:256-60 F '43

- Vapor phase esterification over zirconium oxide. W. J. Knox, Jr. and T. N. Burbridge. bibliog diag Am Chem Soc J 65:999-1001 Je '43

- Vapor-phase esterification rates. H. F. Hoerig, D. Hanson and O. L. Kowalke. bibliog diags Ind & Eng Chem 35:575-80 My '43

See also**Alcohols'****Distilleries'****Fermentation****Liquor traffic****Analysis**

- Analysis of ethanol for minor amounts of esters and aldehydes. F. M. Biffen and F. D. Snell. Ind & Eng Chem Anal ed 16: 577 S 15 '43

- Estimation of water in alcohol with aid of dicyclohexyl. G. R. Robertson. bibliog Ind & Eng Chem Anal ed 15:451-2 JI 15 '43

Manufacture

- Absolute alcohol, an economical method for its manufacture; plant data. T. O. Wentworth, D. F. Othmer and G. M. Pohler. flow sheet II Am Inst Chem Eng Trans 39:565-76; Discussion. 577-8 Ag '43

- Alcohol for war purposes; abstract. A. J. Liebmam. Chem Ind 53:494 O '43

- Alcohol from granular wheat flour. P. A. Singleton. flow sheet II Chem Ind 52:594-6 My '43

- Alcohol from waste sulfite liquor. Chem Ind 52:234 Mr '43; Same abr. Pulp & Pa of Can 44:550-1 Je '43

- Alcohol from waste sulphite liquor. Manuf Rec 112:30 JI '43

- Alcohol from wheat. Oil Paint & Drug Rep 143:4+ Ja 25 '43

- Alcohol raw materials problem looming. Chem Ind 53:244 Ag '43

- Byproduct alcohol; new process effects big economy by eliminating malt. Business Week p72+ Je 12 '43

- Co-ops alcohol; leases on two new grain plants. Business Week p32+ Ap 17 '43

- Discussions at the 9th annual chemurgic conference in Chicago. March 24-25. Chem & Eng N 21:490-1 Ap 10 '43

- Ethyl alcohol from sulphite waste liquor. F. S. Hanson. bibliog Paper Tr J 115:37-40 D 10 '42

- Ethyl alcohol operation by Trenton valley distillers corporation. II Chem & Eng N 20:1690-1 D 25 '42

- Flour alcohol; experiments indicate better yield from granulated wheat flour; but South sticks to molasses. Business Week p81 Ap 3 '43

- Fungal amylases as saccharifying agents in the alcoholic fermentation of corn. Lu Cheng Hao, S. I. Fulmer and L. A. Underkoffler. bibliog diag Ind & Eng Chem 35: 814-18 JI '43; Same abr. Chem Age (Lond) 49:261-4 S 11 '43

- Granular wheat flour increases alcohol yields; Park & Tilford distillery. R. T. Handren. II Chem Ind 53:350-2 S '43

- Industrial alcohol for war and postwar; Chem & Met report. flow sheets II Chem & Met Eng 50:119-26 Ag '43

- Industrial alcohol from molasses. Chem & Eng N 21:1456 S 10 '43

- Making absolute alcohol by ethyl-ether dehydration; abstract. T. O. Wentworth and D. F. Othmer. Chem & Eng N 21:754 My 25 '43

- Mill converts sulphite waste to alcohol. II Pulp & Pa of Can 44:585 JI '43

- Molasses elaboration; removal of calcium sulfate; recovery of non-sugars. G. T. Reich. bibliog flow diags II diags Am Inst Chem Eng Trans 38:1049-66 D '42; Same. Can Chem & Process Ind 27:2-6 Ja '43

- Molasses re-entering alcohol picture. Chem Ind 53:385 S '43

- Wartime developments in the alcohol industry. P. A. Singleton. II Chem Ind 52:450-4 Ap '43

- Water for grain alcohol distilleries. C. S. Boruff, B. Smith and M. G. Walker. flow diag Ind & Eng Chem 35:1211-13 N '43

- Wheat as a raw material for alcohol production. W. H. Stark, P. Kolachov and H. F. Willkie. II Ind & Eng Chem 35:133-7 F '43

ALCOHOL—Manufacture—Continued

Wood alcohol; McCormick's newsprint firm employs wood pulp waste. *Business Week* p94-5 Je 26 '43
 Wood hydrolysis pilot plants authorized. *Chem Ind* 52:462 Ap '43
 Wood waste may have chemical future. *Chem Ind* 52:461-2 Ap '43
 Woodpulp-alcohol sale may affect newsprint prices. *For Comm W* 12:25 Ag 7 '43

By-products

Alcohol from grits; fermentation of ground wheat yields protein feed. *Business Week* p79 Je 19 '43
 Cheaper alcohol. *Sci Am* 169:129-30 S '43
 New alcohol process cuts costs; Balls-Tucker process, Park & Tilford's Brownsville distillery. R. L. Taylor. *Ind diag Chem Ind* 53:63-5 Jl '43
 New method of making alcohol; Park & Tilford's new process to produce pure protein. F. G. Handren. *Pulp & Pa of Can* 44:659 Ag '43
 Protein as a by-product of alcohol distillation from wheat. *Science* 97:sup8 Je 25 '43
 Sulphite alcohol process provides high-grade protein. *Oil Paint & Drug Rep* 144:3+ Jl 19 '43

Physiological effect**See also****Alcoholism****Prices**

Ethyl alcohol control tightened. *Oil Paint & Drug Rep* 143:4+ Mr 1 '43
 Ethyl alcohol prices for west coast set. *Oil Paint & Drug Rep* 143:5+ Ja 4 '43
 Ethyl alcohol subsidy set to protect price ceilings. *Oil Paint & Drug Rep* 144:3+ Jl 5 '43

ALCOHOL, Denatured

Determination of alkalies in glass; denatured alcohols as substitutes for U.S.P. grain alcohol. P. A. Webster and R. M. Crane. *Ind & Eng Chem Anal ed* 15:36 Ja 15 '43

ALCOHOL, Industrial

Alcohol plant erections halted. *Oil Paint & Drug Rep* 143:48 Ap 26 '43
 Industrial alcohol for war and postwar; Chem & Met report. flow sheets *Ind Chem & Met Eng* 50:119-26 Ag '43
 Industrial alcohol output to reach 500,000,000 gallons. *Oil Paint & Drug Rep* 144:3 Ag 30 '43

ALCOHOL as fuel

Examination of ethyl alcohol and alcohol blends for use as motor fuel. S. J. W. Pleeth. *bibliog diags Inst Pet J* 28:240-56 O '42

ALCOHOL industry

Alcohol and solvents, 1942. *Chem & Met Eng* 50:114-15 F '43
 Alcohol appraisal. T. N. Sandifer. *Chem Ind* 52:552 My '43
 Alcohol dwindles. *Business Week* p19 N 6 '43
 Alcohol in 1944. *Chem & Eng N* 21:1724 O 25 '43
 Alcohol producers converting from grain to molasses. *Oil Paint & Drug Rep* 144:7+ Ag 23 '43
 Alcohol producers' corn needs studied. *Oil Paint & Drug Rep* 143:7+ Mr 29 '43
 Alcohol to burn; government's stockpile has reached 135,000,000 gal. *Business Week* p22+ Ag 14 '43
 Rubber's influence on post-war alcohol industry. *Chem Ind* 52:548 My '43
 Wartime developments in the alcohol industry. P. A. Singleton. *Ind Chem Ind* 52:460-4 Ap '43

See also**Distilling industries****Statistics**

Alcohol, 1938-1941. Survey of Cur Business 1942 Sup p102

Taxation

Alcohol drawback tax clarified. *Oil Paint & Drug Rep* 143:3+ Ja 25 '43
 Alcohol tax drawback procedure. *Oil Paint & Drug Rep* 143:3+ Ap 12 '43

Brazil

Alcohol industry in Brazil; abstract. *Chem Ind* 52:241 F '43

ALCOHOLISM

Award of the Research council on problems of alcohol. *Science* 97:111-12 Ja 29 '43
 Cirrhosis. *Sci Am* 168:269-70 Je '43

ALCOHOLS

Action of cuprous oxide on diazotised amines; reactions in solutions of various alcohols and organic solvents; preparation of 1:6-dinitronaphthalene. H. H. Hodgson and H. S. Turner. *Chem Soc J* p86-9 Mr '43
 Alcohols other than butyl. J. G. Park and T. R. Donlan. *Ind & Eng Chem* 35:1030-2 O '43

Catalytic dehydrogenation; catalytic conversion of alcohols into aldehydes, paraffins and olefins. E. J. Eadin. *bibliog Am Chem Soc J* 65:1809-13 O '43

Catalytic dehydrogenation of alcohols to aldehydes in the presence of air. R. R. Davies and H. H. Hodgson. *Chem Soc J* p282-4 Je '43

Condensation of amino alcohols with benzene. C. M. Suter and A. W. Ruddy. *Am Chem Soc J* 65:762-3 My '43

Condensation of methyl dipropyl carbinols with phenol in the presence of aluminum chloride. R. C. Huston and C. R. Meloy. *bibliog Am Chem Soc J* 64:2655-7 N '42

Condensation of vapors; film coefficients for alcohols, esters, and ketones. D. F. Othmer and S. Berman. *bibliog ind diags Ind & Eng Chem* 35:1068-77 O '43

Condensations; the alkylation of β -keto esters with alcohols and ethers in the presence of boron trifluoride. J. T. Adams, B. Abramovitch and C. R. Hauser. *bibliog Am Chem Soc J* 65:552-4 Ap '43

Conversion of an alcohol into the corresponding aldehyde by a less volatile aldehyde with the aluminum alkoxide as catalyst; the influence of an ethylene linkage in the reactant aldehyde. R. R. Davies and H. H. Hodgson. *Soc Chem Ind J* 62:109-10 Jl '43

Dehydration of alcohols; t-amyl alcohol and the related dimethylnepentylcarbinol. F. C. Whitmore and others. *bibliog Am Chem Soc J* 64:2970-2 D '42

Influence of hindered molecular rotation on the dielectric constants of water, alcohols, and other polar liquids. G. Oster and J. G. Kirkwood. *bibliog J Chem Phys* 11:175-8 Ap '43

Local anesthetics; alkoxybenzoates of 2-monoalkylamino-2-methyl-1-propanols and 2-monoalkylamino-1-butanols. J. S. Pierce and others. *Am Chem Soc J* 64:2884-5 D '42

Preparation of aminobenzoic acid esters of substituted monoalkyl amino alcohols. W. F. Ringk and E. Epstein. *bibliog Am Chem Soc J* 65:1222-6 Je '43

Some esters of normal aliphatic alcohols and acids. J. H. Hoback, D. O. Parsons and J. F. Bartlett. *Am Chem Soc J* 65:1606-7 Ag '43

Tetrahydropyranil amino alcohols. G. H. Harnest and A. Burger. *bibliog Am Chem Soc J* 65:370-2 Mr '43

Vinyl alcohols; hindrance at the β -carbon atom. R. C. Fuson and Q. F. Soper. *bibliog Am Chem Soc J* 65:915-17 My '43

Volatile borates of polyhydric alcohols and the activation of boric acid. R. E. Rippere and V. K. La Mer. *bibliog diags J Phys Chem* 47:204-34 Mr '43

See also

Alcohol	Esters
Amyl alcohol	Isoamyl alcohol
Batyl alcohol	Isopropyl alcohol
Butyl alcohol	Methanol
Dimethylalyl alcohol	Vinyl alcohol

Analysis

Iodoform microtest for the higher alcohols and ketones. F. H. Stodola. *bibliog Ind & Eng Chem Anal ed* 15:72-3 Ja 15 '43

Pseudo-saccharin chloride, a reagent for the identification of alcohols. J. R. Meade and E. E. Reid. *Am Chem Soc J* 65:467-8 Mr '43

ALCOHOLYSIS

- Studies on lignin and related compounds; isolation and identification of 1-(4-hydroxy-3,5-dimethoxyphenyl)-2-propanone and 1-(4-hydroxy-3-methoxyphenyl)-2-propanone from maple wood ethanolysis products; metabolic changes in lower and higher plants. M. Kulka and H. Hibbert. bibliog Am Chem Soc J 65:1180-5 Je '43
- Studies on lignin and related compounds; isolation of 1-(4-hydroxy-3-methoxyphenyl)-2-propanone and 1-ethoxy-1-(4-hydroxy-3-methoxyphenyl)-2-propanone from the ethanolysis products of spruce wood. E. West, A. S. MacInnes and H. Hibbert. bibliog Am Chem Soc J 65:1187-92 Je '43
- Studies on lignin and related compounds; re-ethanolysis of isolated lignins. W. B. Hewson and H. Hibbert. bibliog Am Chem Soc J 65:1173-6 Je '43
- Studies on lignin and related compounds; the ethanolysis of maple wood. E. West and others. bibliog Am Chem Soc J 65:1176-80 Je '43

ALDEHYDES

- Catalytic dehydrogenation; catalytic conversion of alcohols into aldehydes, paraffins and olefins. E. J. Badin. bibliog Am Chem Soc J 65:1809-13 O '43
- Catalytic dehydrogenation of alcohols to aldehydes in the presence of air. R. R. Davies and H. H. Hodgson. Chem Soc J p282-4 Je '43
- Catalytic reduction by formic acid under pressure; the preparation of aldehydes from carboxylic acids with titanium dioxide as catalyst. R. R. Davies and H. H. Hodgson. Chem Soc J p84-6 Mr '43
- Conversion of an alcohol into the corresponding aldehyde by a less volatile aldehyde with the aluminum alkoxide as catalyst; the influence of an ethylene linkage in the reactant aldehyde. R. R. Davies and H. H. Hodgson. Soc Chem Ind J 62:109-10 Jl '43
- Gattermann reaction in the mono-methoxydiphenyl ethers. H. E. Ungnade and E. F. Orwoll. bibliog Am Chem Soc J 65:1736-9 S '43
- Indirect phenol-aldehyde condensations. J. B. Niederl and J. S. McCoy. bibliog Am Chem Soc J 65:629-31 Ap '43
- Preparation of aldehydes by the disruptive oxidation of the ethylene linkage. R. R. Davies and H. H. Hodgson. Soc Chem Ind J 62:90-2 Je '43
- Preparation of aldehydes, ketones, and acids by ozone oxidation. A. L. Henne and P. Hill. Am Chem Soc J 65:752-4 My '43
- Reactions of phenanthraquinone and retenequinone with aldehydes and ammonium acetate in acetic acid solution. E. A. Steck and A. E. Day. bibliog Am Chem Soc J 65:462-6 Mr '43
- Reactions of retenequinonimine and phenanthraquinonimine with aldehydes; a new example of an aldol-type of condensation. C. W. C. Stein and A. R. Day. bibliog Am Chem Soc J 64:2567-9 N '42
- Structural effects of unsaturation and hyperconjugation in aldehydes, nitriles and chlorides as shown by their dipole moments in the vapor state. E. C. Hurdis and C. P. Smyth. bibliog Am Chem Soc J 65:89-96 Ja '43
- Studies in the polyene series; a new anionotropic rearrangement; isomerisation of ethynylcarbinols from $\alpha\beta$ -unsaturated aldehydes. E. R. H. Jones and J. T. McCombie. Chem Soc J p261-4 Je '43
- Studies in the polyene series; condensation of 3-methylpent-2-en-4-yne (1:2-dimethylvinylacetylene) with butaldehyde, crotonaldehyde, and citral; anionotropic rearrangements with vinylacetylenecarbinols derived from $\alpha\beta$ -unsaturated aldehydes. I. M. Heilbron and others. Chem Soc J p265-8 Je '43
- Studies in the polyene series; the employment of 3-(2': 6': 8'-trimethylcyclohexenyl)-1-methylcrotonaldehyde for the synthesis of vitamin A and analogues. I. M. Heilbron and others. Chem Soc J p727-33 D '42
- Studies in the polyene series; the preparation of ethynylcarbinols from $\alpha\beta$ -unsaturated aldehydes. E. R. H. Jones and J. T. McCombie. Chem Soc J p733-5 D '42

Synthesis of aldehydes from acylhydrazides. C. Niemann and J. T. Hays. bibliog Am Chem Soc J 65:482-4 Mr '43

Synthesis of olefin hydrocarbons by catalytic condensation and dehydration of aliphatic aldehydes. V. I. Konarevsky and T. H. Kritchevsky. Am Chem Soc J 65:547-8 Ap '43

Utilization of aliphatic nitro compounds; nitrotriols (nitroglycerols) prepared from simple aldehydes. C. A. Sprang and E. F. Degering. Am Chem Soc J 65:628 Ap '43

See also
Acetaldehyde
Cinchoninaldehyde
Formaldehyde
Gallaldehyde
Perkin reaction
Undecaldehyde

Analysis

Analysis of ethanol for minor amounts of esters and aldehydes. F. M. Biffen and F. D. Snell. Ind & Eng Chem Anal ed 15:577 S 15 '43

ALDEHYDO sugars. See Sugars

ALDOL condensation. See Condensation, Chemical

ALEUTIAN islands

Journey to Attu and back. H. W. Richardson. il map Eng N 131:566-7, 573 O 14 '43

ALFALFA

Isolation of β -amyryn from the leaves and seeds of alfalfa. L. C. King and others. Am Chem Soc J 65:1168-70 Je '43

ALGAE

- Agar-bearing seaweeds at La Jolla, California. R. H. Tschudy and M. C. Sargent. Science 97:89-90 Ja 22 '43
- Biological water conditioning; Judson Reservoir, southern California; growth of Chara inhibits algae. H. C. Mers. Water Works & Sewerage 90:185-6 My '43
- Chemical products from seaweeds; algin as a textile raw material. E. M. Delf. Chem Age (Lond) 48:555 My 22 '43
- Contribution to the toxicity of algae. R. E. Wheeler, J. B. Lackey and S. Schott. bibliog Pub Health Rep 57:1695-1701 N 6 '42
- Control of algae. F. E. Hale. il Water Works & Sewerage 90:sup139-40 Je '43
- Control of micro-organisms and aquatic vegetation in lakes and streams. L. F. Warwick. bibliog il Water Works & Sewerage 90:267-72 Jl '43
- Dry and flush algae from condenser tubes. Elec W 120:1554 O 30 '43
- Effect of certain microorganisms on the injection of water into sand; abstract. F. B. Plummer and others. Oil & Gas J 42:78 My 20 '43
- Marine victory gardens. il Chem Ind 53:499 O '43
- Seaweed. Chem Age (Lond) 49:301-2 S 25 '43
- Seaweeds for industrial purposes. Can Chem & Process Ind 27:355 Je '43
- Utilisation of seaweed; its present and future industrial development. T. Dillon. bibliog il Chem Age (Lond) 49:279-83, 305-8 S 18-25 '43

See also
Carrageen
Diatoms

ALGAE, Fossil

Bibliography

Geologic importance of calcareous algae with annotated bibliography. J. H. Johnson. Colorado School of Mines (Golden) Quarterly 38:1-102 bibliog(p21-92) Ja '43 (pa \$1.50)

ALGEBRA

Non-commutative algebra. C. Turnbull. Elec trician 131:352 O 8 '43

See also
Equations

ALGERIA

Economic conditions

French North Africa, economy of new war-vortex. P. M. Copp. il For Comm W 9:3-7+ N 28 '42

ALGINIC acid

Algin, its uses in the textile industry and its possibilities of spinning into filaments. Rayon 23:679-80 N '42

ALGINIC acid—*Continued*

Chemical products from seaweeds; algin as a textile raw material. E. M. Delf. *Chem Age (Lond)* 48:555 My 22 '43

Money in moss; widening uses for gums of seaweed. *il Business Week* p64+ S 18 '43

ALICYCLIC compounds. See **Cyclic compounds****ALIENS**

Employment of aliens in war industries. *Chem & Eng N* 20:1618 D 25 '42

See also

Enemy aliens

ALIGNMENT charts. See **Charts (calculating)****ALIGNMENT of machinery**

Long work aligned with an indicator. R. R. Waech. *diag Am Mach* 87:106-7 Je 24 '43

Misalignment; foundations of mechanically connected machinery. E. L. Parry. *diags Elec R (Lond)* 133:133-4 Ag 6 '43

Once upon a time there was an erection problem that required aligning six units; ordinary doorbell laid them straight. N. L. Rea. *diag Power* 87:683 O '43

ALIZARIN

Colorimetric determination of fluoride in natural waters with thorium and alizarin. N. A. Talvitie. *bibliog Ind & Eng Chem Anal* ed 15:620-1 O 15 '43

ALKALI metal carbonates

See also

Sodium carbonates

ALKALI metal hydroxides. See **Alkalies****ALKALI metals**

See also

Lithium	Rubidium
Potassium	Sodium

ALKALIES

Action of alkalis upon substituted benzodioxins. H. Irving and E. G. Curtis. *Chem Soc J* p319-21 Jl '43

See also

Ammonia	Potassium hydroxide
Concrete, Effect of	Sodium hydroxide
alkalies on	Wool, Effect of alkalies on
Potash	

ALKALIMETERS

Determination of the clinker content; use of alkalimeter. J. R. Romig and V. E. Wessels. *il diag Rock Prod* 46:62, 64+ Je '43

ALKALINE earth metals

See also

Barium	Magnesium
Calcium	Strontium

ALKALINITY

Alkalinity equivalents; table. *Water Works & Sewerage* 90:30 Ja '43

ALKALOIDS

Alkaloids of the seeds of delphinium elatum. L. J. A. Goodson. *Chem Soc J* p139-41 Mr '43

Alkoxy interchange by γ -alkoxyquinoline derivatives in alcoholic alkali. B. Berinzaghi and others. *Am Chem Soc J* 65:1357-9 Jl '43

Curare alkaloids from chondodendron tomentosum. O. Wintersteiner and J. D. Dutcher. *bibliog Science* 97:467-70 My 21 '43

Structure of riddelline, the alkaloid in senecio riddellii. R. Adams and others. *Am Chem Soc J* 64:2760-3 D '42

Veratrine alkaloids; surface film studies. A. Rothen and L. C. Craig. *bibliog il Am Chem Soc J* 65:1102-6 Je '43

Veratrine alkaloids; the correlation of the veratrine alkaloids with the solanum alkaloids. L. C. Craig and W. A. Jacobs. *bibliog Science* 97:122 Ja 29 '43

See also

Cinchona alkaloids	Quinine
Papaverine	Tubocurarine
Pyridine	

ALKALINE esters. See **Esters****ALKOXY group**

Alkoxy interchange by γ -alkoxyquinoline derivatives in alcoholic alkali. B. Berinzaghi and others. *Am Chem Soc J* 65:1357-9 Jl '43

Qualitative test for methoxy and other alkoxy groups; compounds encountered in pharmacology and toxicology. W. C. Tobie. *bibliog Ind & Eng Chem Anal* ed 15:433-4 Jl 15 '43

ALKYD resins. See **Resinous products****ALKYL halides**

Criterion for the mechanism of the reaction between alkyl halides and hydroxylic solvents; reactions of *n*-butyl bromide. M. L. Bird, E. D. Hughes and C. K. Ingold. *Chem Soc J* p255-61 Je '43

Reactions of organometallic compounds with alkyl halides; the action of sodium ethyl on (—)2-bromooctane. N. G. Brink, J. F. Lane and E. S. Wallis. *bibliog Am Chem Soc J* 65:943-9 My '43

ALKYLATION

Alkylated cresols from refinery gases. W. Weinrich. *il plan Ind & Eng Chem* 35:264-72 Mr '43

Alkylation and isomerization combined in aviation-gasoline plant; Cities service oil co. F. M. Simpson. *il Oil & Gas J* 42:89+ Je 24 '43

Alkylation and other reactions of 9-formylfluorene. W. G. Brown and E. A. Bluestein. *bibliog Am Chem Soc J* 65:1082-4 Je '43

Alkylation of amines. J. H. Billman, A. Radike and B. W. Mundy. *bibliog Am Chem Soc J* 64:2977-8 D '42

Alkylation of linseed oil. J. G. Smull and J. S. Saylor. *Am Chem Soc J* 64:3054 D '42

Alkylation of 3-methyl-4-carbethoxy-2-cyclohexen-1-one (Hagemann's ester) and related substances. L. I. Smith and G. F. Rouault. *bibliog Am Chem Soc J* 65:631-5 Ap '43

Catalytic alkylation of benzene with ethylene. W. A. Pardee and B. F. Dodge. *bibliog flow diag Ind & Eng Chem* 35:273-8 Mr '43; Same. *il Nat Pet N* 35 pt 2:R180-4 Ap 7 '43

Condensations; the alkylation of β -keto esters with alcohols and ethers in the presence of boron trifluoride. J. T. Adams, B. Abramovitch and C. R. Hauser. *bibliog Am Chem Soc J* 65:552-4 Ap '43

Configuration of tervalent nitrogen; bicyclic hydrazine derivative. E. L. Buhle, A. M. Moore and F. Y. Wisselogle. *bibliog Am Chem Soc J* 65:29-32 Ja '43

Digest of United States patents on alkylation of hydrocarbons. H. Heinemann, comp. *Pet Refiner* 22:148+ Ag '43

Facts about and possibilities of alkylation and isomerization processes. A. L. Foster. *il Oil & Gas J* 41:77, 81+ Ap 15 '43

Isomeric *p*-dibutylbenzenes. G. F. Hennion and L. A. Auspos. *bibliog Am Chem Soc J* 65:1603-6 Ag '43

Local anesthetics; alkoxybenzoates of 2-monoalkylamino-2-methyl-1-propanols and 2-monoalkylamino-1-butanols. J. S. Pierce and others. *Am Chem Soc J* 64:2384-5 D '42

Nuclear alkylation of aromatic bases; the action of methyl alcohol on *m*-toluidine hydrochloride. R. W. Cripps and D. H. Hey. *Chem Soc J* p14-15 Ja '43

para-Alkylation of benzoyldurene by the Grignard reagent. R. C. Fuson and B. C. McKusick. *bibliog Am Chem Soc J* 65:60-4 Ja '43

Rearrangement of allyl groups in three-carbon systems; nitriles and an acid. D. E. Whyte and A. C. Cope. *bibliog Am Chem Soc J* 65:1999-2004 O '43

Separation of individual cresols and xylenols from their mixtures. D. R. Stevens. *bibliog il Ind & Eng Chem* 35:655-60 Je '43

Some boron trifluoride catalyzed alkylations of halobenzenes. G. F. Hennion and V. R. Pieronek. *bibliog Am Chem Soc J* 64:2751-2 D '42

Some Friedel-Crafts type alkylations with boron trifluoride. G. F. Hennion and R. A. Kurtz. *bibliog Am Chem Soc J* 65:1001-3 Je '43

Special catalyst-handling equipment provided in HF alkylation plant. *bibliog flow diag il Nat Pet N* 35 pt 2:R243-4 Je 2 '43

ALL American aviation, Inc.

Preferred stock offered. *Comm & Fin Chr* 158:942 S 6 '43

ALLANITE

Possible age of allanite from Whiteface mountain, Essex county, New York. J. P. Marble. *Am J Sci* 241:32-42, pl 1-3 Ja '43

ALLDREDGE, J. Haden, 1887-

New I.C.C. chairman for one-year term. *Ry Age* 113:1039-40 D 26 '42

ALLEGHANY corporation

Alleghany does it; long ominous maturity is met thru bank loan. *Business Week* p100-2 My 8 '43

Collateral value rises. *Comm & Fin Chr* 157: 517 F 8 '43

How C. & O. plan affects Alleghany. *Baron's* 23:10 O 11 '43

Negotiates \$19,600,000 bank loan. *Comm & Fin Chr* 157:1737 My 10 '43

Planning for 1944 maturity. *Comm & Fin Chr* 156:2093 D 14 '42

Railroad securities. *Comm & Fin Chr* 157: 1005+, 1757 Mr 18, My 13 '43

Solution of Alleghany 1944 maturity in prospect. A. Jansen. *Barron's* 23:15-16 Ap 12 '43

ALLEGHENY Ludlum steel corporation

Investment audit. P. Dobbs. *Mag of Wall St* 71:184-5 N 28 '42

Ten years' progress in aircraft steel. C. A. Scharschu. *Aeronautical Eng R* 1:103 N '42

Thumbnail stock appraisal. *Mag of Wall St* 72:365 J 10 '43

ALLEGHENY synclorium

Development of the northern Allegheny synclorium and adjoining regions. G. M. Kay, maps *Geol Soc Bul* 53:1601-57, pl 1-3 bibliog(pl651-7) N '42

ALLEN, Edgar, 1892-1943

Sketch. W. U. Gardner. *Science* 97:368-9 Ap 23 '43

ALLEN, Edmund Turney, 1896-

Tribute. *por Aviation* 42:108 Ap '43

ALLENTOWN, Pennsylvania**Water supply**

Waste water survey saves plant capacity; with cost data. W. R. Schnabel. *il Eng N* 130:551-3 Ap 22 '43

Water saving survey in Allentown. W. R. Schnabel. *il Am Water Works Assn J* 35: 993-8 Ag '43

ALLERGENS

Chemistry of allergens; isolation and properties of an active protein-polysaccharide fraction, CB-1A, from castor beans. J. R. Spies and E. J. Coulson. *bibliog Am Chem Soc* 65:1720-5 S '43

ALLERGIA. See Allergy**ALLERGY**

Allergy and appendicitis. *Science* 98:sup10 Ag 13 '43

Culprit is histamine; its role in allergies. L. W. Giellerup. *Sci Am* 169:68-9 Ag '43

See also

Hay fever

ALLIED chemical and dye corporation

Annual report. *Comm & Fin Chr* 157:986 Mr 15 '43

ALLIED military currency. See Money, Military**ALLIED mills, inc.**

Allied Mills has protein substitutes. *Baron's* 23:9 Ag 9 '43

ALLIED newspaper council

Allied newspaper council reports fantastic figures for second war loan. *Adv & Sell* 36:21-2 Ag '43

ALLIED stores corporation

Thumbnail stock appraisal. *Mag of Wall St* 72:310 Je 26 '43

ALLIGATOR pear. See Avocados**ALLIGATORS**

Don't shoot the alligator. *For Comm W* 11: 26 Je 19 '43

Industrial uses of alligators studied by floating marine laboratory. *For Comm W* 13:18 N 6 '43

ALLIS-CHALMERS manufacturing company

Annual report. *Comm & Fin Chr* 157:1235 Ap 5 '43

In the middle; Allis-Chalmers caught by antistrike law. *Business Week* p96+ S 4 '43

Keeping the wheels turning is also part of advertising's job; Allis-Chalmers' maintenance advertising programs. G. J. Callos. *il Ind Marketing* 28:28-30+ Ja '43

ALLISON engine

Allison division, General motors corporation. R. M. Hazen. *il Aeronautical Eng R* 1:81 N '42

Allison engine design; abstract. D. Gerdan. *Iron Age* 152:47 O 21 '43

Allison engines for powering fast fighter planes. C. O. Herb. *il Mach* 49:134-43 Ag '43

How Cadillac mass-produces Allison engine parts to close tolerances. *il Aero Digest* 42:191-2, 197-8 Ja '43

ALLOCATIONS. See Priorities and allocations, Industrial**ALLOCATIONS to dealers. See Sales policies****ALLOYS**

Diffraction of X-rays by binary alloys. R. Smoluchowski. *Phys R* 64:257-8 O 1 '43

Engineering file facts. R. S. Burpo, Jr., comp. *Metals & Alloys* 17:340-3 F '43

Iron, steel and nonferrous metals listed by tradenames, by products and by principal constituents. *Machine Design* 15:158-85 O '43

Modern electrical resistance alloys. A. G. Arend. *diags Electrician* 131:250-2 S 10 '43

Non-ferrous section, National metal congress report. F. N. Rhines. *Metal Prog* 42:890-2 N '42

Propagation of order in crystal lattices. J. Ashkin and W. E. Lamb, Jr. *bibliog Phys R* 64:159-78 S '43

Reference table of new materials and finishes of 1942. F. P. Peters, comp. *Metals & Alloys* 17:101-14 Ja '43

Relative corrodibility of some common metals and alloys; tabulation. J. Strauss. *Metal Prog* 44:300 O '43

Special metals in the electrical industry. P. R. Hensel and J. W. Wiggs. *il Elec Eng* 62:296-302 J '43

Study of inverse segregation suggests new method of making certain alloys. M. L. Samuels, A. R. Elsea and K. Grube. *bibliog il diags Am Soc for Metals Trans* 31: 459-82; Discussion. 482-6 Je '43

Valves and valve seat material; tabulation. S. D. Heron, O. E. Harder and M. R. Nestor. *Metal Prog* 44:680 O '43

Wear of metals and alloys; abstract. J. W. Donaldson. *Metals & Alloys* 16:1144+ D '42

See also

Aluminum alloys

Antimony alloys

Babbitt metal

Bearing metals

Beryllium alloys

Brass

Bronze

Cobalt alloys

Copper alloys

Gun metal

Invar

Iron alloys

Lead alloys

Magnesium alloys

Metallurgical analysis

Monel metal

Nickel alloys

Silver alloys

Steel alloys

Tin alloys

Zinc alloys

Analysis

Spectrographic analysis; photographic aspects of the internal standard method. E. H. Amstein. *bibliog Soc Chem Ind J* 62:51-8 Ap '43; Correction. 62:92 Je '43

ALLOYS, Hard facing

Hardness vs. wear resistance. J. R. Spence. *il Welding J* 22:179-81 Mr '43

ALLOYS, Heat resisting

Heat resistant alloy castings; abstract. T. G. Beament. *Metals & Alloys* 17:414+ F '43

Testing

Precision in creep testing. J. A. Fellows. *Metal Prog* 42:1088. 1090 D '42

ALLOYS, Low melting

Jigs of fusible alloy for small quantity production. T. Baldwin and B. Swindells. *il Engineer* 175:98 Ja 29 '43

Low melting-temperature alloy for proof-casting of cavities; Cerosafe. *Mach* 49:198 F '43

Tool salvaging by low-temperature joining; with cost data; Castolin eutectic process. B. Laune. *Welding J* 22:423-5 Je '43

ALLOYS of iron research

Unfinished symphony. Metals & Alloys 16: 873, 875 N '42

ALLUVIUM

Flotation of peaty alluvial soils. S. C. Happ. pl Am J Sci 241:629-39 O '43

ALLYL acrylate

Pyrolysis of lactic acid derivatives; preparation of allyl and methallyl acrylates. C. H. Fisher, C. E. Rehberg and L. T. Smith. bibliog Am Chem Soc J 65:763-7 My '43

ALLYL compounds

Allylic character of 2-(α -chloroalkyl)-benzimidazoles. H. Skolnik, J. G. Miller and A. R. Day. bibliog Am Chem Soc J 65:1854-8 O '43

ALLYL group

Rearrangement of allyl groups in three-carbon systems; nitriles and an acid. D. E. Whyte and A. C. Cope. bibliog Am Chem Soc J 65:1999-2004 O '43

Rearrangement of allyl-type esters of β -keto acids. W. Kimmel and A. C. Cope. Am Chem Soc J 65:1992-8 O '43

ALLYL methacrylates

Preparation of allyl and methallyl methacrylates by the thermal decomposition of allyl and methallyl α -acetoxyisobutyrate. C. E. Rehberg, C. H. Fisher and L. T. Smith. bibliog Am Chem Soc J 65:1003-6 Je '43

ALLYL nitrophenyl thiosemicarbazide

Some allyl nitrophenyl thiosemicarbazides and their analytical properties. A. W. Scott and J. T. Andrews. Am Chem Soc J 64: 2873-4 D '42

ALLYL resins. See Resinous products**ALLYN, W. Ellery**

New Connecticut insurance commissioner. por East Underw 44:15 Je 4 '43

ALMOND oil

Puerto Rican fatty oils; expressed tropical almond (talissay) oil. C. F. Asenjo and J. A. Goyco. Am Chem Soc J 65:1417-18 Jl '43

ALMONDS

Almond production in Iran. For Comm W 10: 25 Mr 20 '43

Spain's almond and filbert crops. For Comm W 12:21 Ag 28 '43

Spain's 1942 almond crop. For Comm W 10: 22 F 20 '43

ALPACA

Camel family fibers. A. C. Whitford. Textile Col 65:100-1 Mr '43

ALPHA portland cement company

Another look. Mag of Wall St 72:493 Ag 7 '43

ALPHA rays

Counting method for the determination of small amounts of radium and of radon. L. F. Curtiss and F. J. Davis. pl diags J Research Nat Bur Stand 31:181-95 S '43

Saturation characteristics for alpha-particles in purified gases. E. D. Klema and H. H. Barschall. bibliog Phys R 63:18-23 Ja 1 '43

See also

Counters (electrons, ions, etc.)
Helium

ALPHABET

Global alphabet is devised by Senator Owen. Comm & Fin Chr 158:527 Ag 5 '43

ALPINE mudflows. See Mud flow**ALTERNATING current—calculating board.** See Electric engineering—Tables, calculations, etc.**ALTGELD, John Peter, 1847-1902**

Eagle forgotten. por Fortune 28:142-3 S '43

ALTIMETERS

Altimeter demonstration chart speeds training. S. B. Smith. il Instruments 16:16 Ja '43

Altimeter setting indicator; special form of aneroid barometer. C. H. Colvin. il J Aeronautical Sci 10:250-2 O '43

ALTITUDE, Influence of

Negative water balances during exposures to low barometric pressures. H. G. Swann and others. Science 96:588-9 D 25 '42

Recent engineering developments in strato-chambers. J. G. Bergdoll, Jr. il diags Refrig Eng 45:26-32; Discussion. 32-3 Ja '43

ALTITUDE flying. See Aviation—Altitude flying**ALTON railroad**

Reorganization filed with court. Comm & Fin Chr 158:31 Jl 5 '43

ALTROSE

Mutarotation of β -D-altrose. N. K. Richtmyer and C. S. Hudson. bibliog Am Chem Soc J 65:740-1 Ap '43

ALUM

Alum mfrs. want clay prepared by brick plants. il Brick & Clay Rec 103:16-17 Jl '43

See also

Aluminum sulfate
Alums

ALUMINA

Activated alumina for purifying oil. H. E. Eby. Elec W 120:1206+ O 2 '43

Equilibrium relationships on the liquidus surface in part of the $\text{MnO-Al}_2\text{O}_3\text{-SiO}_2$ system. R. B. Snow. bibliog il diags Am Cer Soc J 26:11-20 Ja 1 '43

Hydrothermal study of equilibria in the system alumina-water. A. W. Laubengayer and R. S. Weisz. bibliog il Am Chem Soc J 65:247-50 F '43

Manufactured abrasives, old and new. R. R. Ridgway. il Chem & Eng N 21:858-61 Je 10 '43

Mechanism of formation of orange II alumina color lakes. A. Voet. bibliog J Phys Chem 47:131-6 Mr '43

Selective adsorption of hydrocarbon and water vapor on alumina at atmospheric pressure; abstract. Chen Chun Ku, R. L. Huntington and L. S. Reid. Oil & Gas J 42:73+ My 20 '43

Separation of diastereoisomerides by selective adsorption on optically inactive material. M. M. Jamison and E. E. Turner. Chem Soc J p611-12 O '42

See also

Corundum

ALUMINIUM

Aluminum and magnesium: new potentialities. Index 23 no 2:26-35 [Je] '43

Aluminum chief nonferrous metal problem among critical and noncritical mineral products. Min & Met 24:276 Je '43

Aluminum for post-war cars. F. Jardine. S A E J 61:sup41 Mr '43

Aluminum for the coming air age. R. S. Reynolds. Aero Digest 43:188-9+ Ag '43

Aluminum in post-war reconstruction. R. Hammond. il diags Engineer 176:15-16, 33-5, 66-8, 94-6 Jl 2-9, 23-30 '43

Aluminum in the brewing industry; abstract. Metals & Alloys 18:140 Jl '43

Aluminum may cut car weight. F. Jardine. S A E J 61:sup32+ Ag '43

Crown jewels of aluminum. il Chem & Eng N 21:1172-3 Jl 25 '43

Cycle of non-ferrous metals; recovery of prevailing types of scrap. O. Eimerl and F. Neurath. Chem Age (Lond) 48:270-2 Mr 6 '43

Fatigue strength of aluminum and its alloys; abstract. R. Irmann. Chem & Met Eng 49:182 N '42

Light metals. il Business Week p45-58 Ag 28 '43

Light metals; aluminum and magnesium. J. St Peter. il J Chem Educ 19:556-62 D '42

Light metals and plastics vs. steel; potential competition over-emphasized. L. S. Hamaker. il Steel 113:57-9 N 1 '43

Mechanical ingotting of aluminum and magnesium turnings. M. Stern. il diag Iron Age 152:90-2 Ag 12 '43

Progress in aluminum. R. A. Hunt. Sheet Metal Worker 34:26 Jl '43

Small angle scattering of electrons by aluminum. B. C. Dees and B. Hamermesh. bibliog Phys R 63:297-303 Ap 1 '43

Soldering of aluminum. O. Eimerl and F. Neurath. il diag Chem Age (Lond) 47: 401-5 N 7 '42

Steel versus light metals. B. Ravits. Barron's 23:11+ Ag 16 '43

ALUMINUM—Continued

Studies on the structure of thin metallic films by means of the electron microscope. R. G. Picard and O. S. Duffendack. *il J Ap Phys* 14:291-305 Je '43
Time lag of impulse breakdown at high pressures. J. D. Cobine and E. C. Easton. *bibliog J Ap Phys* 14:321-31 Jl '43
Use of inhibitors for aluminum chemical equipment. R. B. Mears and G. G. Eldredge. *il Electrochem Soc Trans* 83 (preprint 16): 201-15 Ap '43

See also

Alumina

Analysis

Determination of aluminum in biological material. J. Cholak, D. M. Hubbard and R. V. Story. *bibliog Ind & Eng Chem Anal ed* 15:57-60 Ja '43
Direct method for determination of aluminum in alloys; abstract. I. V. Tananaev and S. T. Abilov. *Chem & Met Eng* 50:192 Ag '43
Modified basic succinate estimation of aluminum in magnesium alloys. A. J. Boyle and D. F. Musser. *Ind & Eng Chem Anal ed* 15:621-2 O 15 '43
New spectroscopic source unit. M. F. Hasler and H. W. Dietert. *il diag Opt Soc Am J* 33:218-25 Ap '43
Spectrochemical determination of silicon, iron, and aluminum in mineral powders with a high voltage direct current arc. H. I. Oshry, J. W. Ballard and H. H. Schrenk. *bibliog il diags Opt Soc Am J* 32:672-80 N '42

See also

Aluminum alloys—

Analysis

Cleaning

Steps for cleaning aluminum alloys. C. W. Smith. *diags Am Mach* 87:97-8 Ag 5 '43
Surface treatment of aluminum-alloy assemblies prior to spot welding. H. O. Klinke. *Welding J* 22:602-4 Ag '43

Bibliography

Annotated bibliography of aluminum cleaning. J. C. Harris and R. B. Mears. *Metal Finishing* 41:348-51, 423-5, 498-9 Je-Ag '43

Coloring

Dyeing chromic acid anodized aluminum; black finishes. M. Darris and L. G. Tubbs. *bibliog il Metal Finishing* 41:550-2+ S '43

Conservation

Revises method of obtaining aluminum patterns. *Foundry* 71:166-7 My '43

Electrotechnical uses

Aluminum electrolytic condensers. P. Robinson and J. Burnham. *il diags Electrochem Soc Trans* 83 (preprint 24):261-77 Ap '43
Possibility of reducing electrical contact resistance of aluminum and aluminum alloys; abstract. C. Wagner and V. Stein. *Roy Aeronautical Soc J* 47:sup293 Je '43
Used armor rod salvaged for reuse. S. Tjepkema. *diag Elec W* 120:860 S 4 '43

Finishing

See also

Aluminum—Coloring

Metallography

Correlation of metallographic and radiographic examinations of spot welds in aluminum alloys. D. W. Smith and F. Keller. *bibliog il Welding J* 21:sup573-83 D '42
Metallurgical aspects of spot-welds in aluminum alloys. J. R. Heising and E. H. Burkart. *bibliog il diags Metal Prog* 42: 1027-34 D '42
Structure of rolled and annealed aluminum as revealed by X-rays; abstract and discussion. E. E. Spillett. *Engineering* 156:294 O 8 '43

Paint

Warmth without weight achieved by applying heat-reflecting metallic coatings to various fabrics. C. Kirkpatrick. *Textile World* 93:78 My '43

Physiological effect

Treat silicosis effectively with aluminum powder. J. L. Blaisdell. *Concrete (mill sec)* 51:114 Ja '43; *Same. Nat Safety N* 47:38+ Je '43

Prices

Metal mixup. *Business Week* p106 Jl 3 '43
Price, wholesale, scrap, castings (New York) 1938-1941. *Survey of Cur Business* 1942 Sup p142 [supplemented in monthly numbers]
Virgin aluminum, 99% plus, delivered, monthly, 1929-1942; tabulation. *Iron Age* 151:212 Ja 7 '43

Protection

Aircraft electroplating. R. R. Janssen. *Metal Finishing* 40:247-8 My '42; *Same. Steel* 111: 120+ D 7 '42
Anodizing in chromic acid; abstract. E. Finnie. *Metals & Alloys* 16:1116+ D '42
Anodizing in Germany; abstract. *Metals & Alloys* 17:390+ F '43
Chromic acid anodizing; abstract. L. G. Tubbs. *Metals & Alloys* 18:114+ Jl '43
Development of an accelerated method for the anodic oxidation of aluminum alloys in sulphuric acid; abstract. G. E. Akimov, N. D. Tomashov and M. N. Tiukina. *Chem & Met Eng* 50:188-9 O '43
Finishing aluminum parts for military aircraft. *Product Eng* 14:99-100 F '43; *Same. Metal Finishing* 41:257-9 Ap '43
Finishing warplanes; cleaning and pretreatment of aluminum. F. V. Faulhaber. *Metal Finishing* 41:113-14, 116-19 F '43
Hanging and racking airplane parts for processing. W. P. Sykes. *il Metal Finishing* 41:131-3+ Mr '43
Mechanism of anodic oxidation of aluminum in sulphuric acid; abstract. G. V. Akimov, N. L. Tomashov and M. N. Tiukina. *Chem & Met Eng* 50:196 Je '43
New partnership is formed; aluminum and plastics. C. Braggio. *il Mod Plastics* 20:58-4+ Ap '43
Plating on aluminum; Krome-alume process. R. F. Yates. *il Metals & Alloys* 16:1084-8 D '42; *Abstract. Iron Age* 152:69 Jl 15 '43
Surface protection; light metals; German data on the electrolytic oxidation of aluminum alloys. *il Iron Age* 150:64-8 D 3 '42
Use of inhibitors for aluminum chemical equipment. R. B. Mears and G. G. Eldredge. *il Electrochem Soc Trans* 83 (preprint 16): 201-15 Ap '43; *Abstract. Can Chem & Process Ind* 27:450 Ag '43
War-time anodising; comparison of processes; abstract. A. W. Wallbank. *Chem Age (Lond)* 48:560 My 22 '43

Testing

Hardness of aluminum sheet; tests and conversion charts. R. L. Templin. *il Metal Prog* 44:86-8 Jl '43

Uses

Will our aluminum plants be postwar white elephants? *il Min & Met* 24:191-4 Ap '43

Welding

Aircraft welders need special training; welding aluminum and chromium molybdenum steel. *il diags Am Mach* 87:112-13 My 13 '43
Aluminum in post-war reconstruction. R. Hammond. *il Engineer* 176:33-5 Jl 9 '43
Atomic-hydrogen repairs aluminum castings. H. A. Beaudoin. *il Metals & Alloys* 18:321 Ag '43
Correlation of metallographic and radiographic examinations of spot welds in aluminum alloys. D. W. Smith and F. Keller. *bibliog il Welding J* 21:sup573-83 D '42
Flange welding of light metal sheets; Weibel process of joining aluminum and magnesium. W. Flatow. *diags Iron Age* 151:59 Ap 1 '43
How to spot weld aluminum. *il Am Mach* 86:1487-9; 87:82-4 D 24 '42-Ja 7 '43
Metallurgical aspects of spot-welds in aluminum alloys. J. R. Heising and E. H. Burkart. *bibliog il diags Metal Prog* 42: 1027-34 D '42
Micro-radiography of light alloy spot welds. S. T. Gross and G. L. Clark. *bibliog il diag Iron Age* 152:44-8 Jl 22 '43
Nitric-hydrofluoric bath for removing welding flux from aluminum alloy parts. P. M. Craig. *il Automotive & Aviation Ind* 88: 19+ Mr 1 '43

ALUMINUM—Welding—Continued

- Post-treatment of welds; abstract. A. J. T. Eyles. *Metals & Alloys* 18:362+ Ag '43
- Proper piping is important when cooling welding electrodes. A. L. Munson. *il diags Heating-Piping* 15:346-9 J '43
- Radiographic inspection technique applied to special welding problems. D. M. McCutcheon. *il Welding J* 22:18-20 Ja '43
- Refrigeration of electrodes in welding. A. L. Munson. *il Refrig Eng* 45:413-15, 434+ Je '43; Same cond. *Welding J* 22:339-42 My '43
- Spot-weld joint efficiency for aluminum alloys. C. W. Steward. *il diags Welding J* 22:sup528-32 O '43
- Spot welding aluminum. H. Lawrence. *bibliog diags Steel* 113:108, 110+ J '12; 118, 121+ J '19 '43
- Spot welding aluminum-clad steel. J. D. Rosenblatt. *il Iron Age* 151:72-4 Je 10 '43
- Spot welding of light alloys; comparison with riveted joints. G. H. Field, H. Sutton and H. E. Dixon. *bibliog il diags Welding J* 22:sup573-92 N '43
- Study of the application of refrigeration to the cooling of spot-welding electrodes. W. F. Hess and others. *il diags Welding J* 22:sup555-67 N '43
- Surface treatment of aluminum-alloy assemblies prior to spot welding. H. O. Klinke. *Welding J* 22:602-4 Ag '43
- Variable waveform unit for testing aluminum welding. J. W. Dawson and H. Klemperer. *il diags Electronics* 16:62-6+ F '43
- Welding aluminum alloys; abstract. E. C. West. *Metals & Alloys* 18:858+ O '43
- Welding of aluminum alloys; tables. *Aviation* 42:193, 195 Ag '43
- Welding of light metals; gas, arc and atomic-hydrogen welding. Herrmann and Zurbrugg. *diags Iron Age* 152:53-6 Ag 26 '43

ALUMINUM, Powdered

- Powder metallurgy of aluminum. G. D. Cremer and J. J. Cordanio. *Metals & Alloys* 17:818+ Ap '43; Abstract. *Iron Age* 151:58-9 F 25 '43
- Powdered aluminum as an admixture to concrete. R. W. Carlson. *il Am Soc T M Proc* 42:808-18; Discussion. 819-20 '42
- Safety in handling aluminum powders. G. M. Babcock and F. B. Rethwisch. *il Chem & Met Eng* 50:82-4 Ja '43
- Some factors influencing the strength of concrete containing admixtures of powdered aluminum. C. A. Menzel. *diags Am Concrete Inst J* 14:165-84 Ja '43
- Treat silicosis effectively with aluminum powder. J. L. Blaisdell. *Concrete (mill sec)* 51:114 Ja '43; Same. *Nat Safety N* 47:38+ Je '43
- Use of aluminum metal in the ceramic industry; effect of coating insulating firebrick with aluminum-fire-clay mixtures. H. G. Schurecht and J. F. McMahon. *il diags Am Cer Soc J* 26:212-17 J '43

ALUMINUM, Structural

- Aluminum in post-war reconstruction. R. Hammond. *il diags Engineer* 176:15-16, 33-5, 66-8, 94-6 J '1 2-9, 23-30 '43
- Working stresses in aluminum-alloy structures. E. W. Thomas. *Engineering* 155:101 F 5 '43

Testing

- Riveted and pin-connected joints of steel and aluminum alloys. L. S. Moisseiff, E. C. Hartmann and R. L. Moore. *il diags Am Soc C E Proc* 69:3-40 Ja '43; Discussion. 69:575-6, 1463-4 Ap, N '43
- Theoretical and experimental investigations of thin-webbed plate-girder beams. H. L. Langhaar. *bibliog A S M E Trans* 65:799-802 O '43

ALUMINUM acetate

- Separation and determination of protein sulfur, sulfide sulfur, and other sulfur in sodium sulfide dispersions of keratins. E. F. Potter and C. B. Jones. *bibliog diags Ind & Eng Chem Anal ed* 15:15-17 Ja 15 '43

ALUMINUM alcohols

- Conversion of an alcohol into the corresponding aldehyde by a less volatile aldehyde with the aluminum alkoxide as catalyst; the influence of an ethylene linkage in the reactant aldehyde. R. R. Davies and H. H. Hodgeson. *Soc Chem Ind J* 62:109-10 J '43

ALUMINUM alloys

- Aluminum alloy forging dies; considerations in their design and use. R. F. Duff. *il S A E J* 51:sup23-4 N '43

- Aluminum alloy 24S-T; physical properties, applications and other data; tabulation. *Machine Design* 15:109-12 O '43
- Aluminum alloys; types and specifications; tabulation. K. Rose, comp. *Metals & Alloys* 18:813, 815 O '43
- Aluminum casting alloy substitution. *Iron Age* 152:56-7 O 7 '43
- Aluminum casting alloys; abstract. W. Bon-sack. *Metals & Alloys* 18:918+ N '42
- Aluminum forging technique advanced. S A E J 51:sup24+ N '43
- Aluminum in post-war reconstruction. R. Hammond. *il diags Engineer* 176:15-16, 33-5, 66-8, 94-6 J '1 2-9, 23-30 '43
- Aluminum; the properties of the various wrought alloys. *Automobile Eng* 33:145-6 Ap '43
- Conserving aluminum by alloy selection; chart and tables. *Machine Design* 15:98-9 O '43
- Constituents of 24S alloy etching characteristics; photomicrographs. F. Keller and R. A. Bossert. *Metal Prog* 44:706 O '43
- Cooperation pays; pooled research results in substituting one aluminum alloy for another. *Business Week* p62+ O 9 '43
- Correlation of metallographic and radiographic examinations of spot welds in aluminum alloys. D. W. Smith and F. Keller. *bibliog il Welding J* 21:sup573-83 D '42
- Damping characteristics of light alloys; abstract and discussion. L. K. Stanton and F. C. Thompson. *Engineering* 155:214-15 Mr 12 '43
- Design of aluminum hammer forgings. *il diags Iron Age* 151:58-63 Je 17 '43
- Design-strengthened materials. R. S. Smith and H. Gray. *il diags J Aeronautical Sci* 10:213-17 J '43
- Drawn box shapes of various aluminum alloys. T. H. Hazlett. *il Product Eng* 14:517-20 Ag '43
- Effects of yielding and perforations on a wing tension surface. R. K. Koegler and A. Schnitt. *diags J Aeronautical Sci* 10:273-88+ O '43
- Elevated temperature aging of 24S aluminum alloy. P. P. Mozley. *J Aeronautical Sci* 10:180-4 Je '43
- Etching characteristics of constituents in aluminum alloys; tabulation. *Metal Prog* 44:712 O '43
- Factors to be considered when designing die-castings. H. Chase. *il Product Eng* 14:237-41, 303-6, 376-9 Ap-Je '43
- Forging aluminum alloys; abstract. *Metals & Alloys* 17:380+ F '43
- Formability of aluminum alloys used in aircraft fabrication. G. A. Brewer. *il diags Automotive & Aviation Ind* 87:32-5 D 15 '42
- Foundry metallurgy in the castings industry. J. W. Bolton. *bibliog Foundry* 71:101+ S '43
- Heat-treatment of alloys; wrought aluminum problems. *Chem Age (Lond)* 48:610 Je 5 '43
- Heat treatment of aluminum and its alloys. *tables Am Gas Assn Proc* 1942:187-204 bibliog(p 193)
- Heat treatment of wrought aluminum alloys. *Engineering* 155:505; 156:27-8 Je 25, J '1 9 '43
- High-strength, natural-aging aluminum alloy; Frontier 40E. H. Brown. *Aero Digest* 42:209-10+ My '43
- Induction furnace for melting aluminum alloys. M. Tama. *il diags Metals & Alloys* 17:326-9 F '43
- Joining light alloys by plastic adhesives. *il Iron Age* 152:52-3 Ag 19 '43
- Lead-bearing magnesium aluminum alloys; effect on mechanical and working properties. *Iron Age* 150:63 D 3 '42
- Low temperature refrigeration requirements in war production; processing aluminum alloy rivets. C. L. Olin. *il Refrig Eng* 45:83-4 F '43
- Melt aluminum alloys in low-frequency furnace. H. L. Edsall. *il Foundry* 71:164-5 My '43
- Melting, alloying, heating aluminum and alloy ingot. R. R. LaPelle. *il diags Metal Prog* 44:276-82 Ag '43
- Metallurgical aspects of spot-welds in aluminum alloys. J. R. Heising and E. H. Burkart. *bibliog il diags Metal Prog* 42:1027-34 D '42

ALUMINUM alloys—Continued

- Operating stresses and temperatures of aluminum aircraft engine parts; abstract. E. J. Willis and R. G. Anderson. *Automotive & Aviation Ind* 35:32 My 1 '43
- Possibility of reducing electrical contact resistance of aluminum and aluminum alloys; abstract. C. Wagner and V. Stein. *Roy Aeronautical Soc J* 47:sup293 Je '43
- Powder metallurgy of aluminum. G. D. Cremer and J. J. Cordiano. *Metals & Alloys* 17:818+ Ap '43; Abstract. *Iron Age* 151:58-9 F 25 '43
- Reductions with nickel-aluminum alloy and aqueous alkali; quantitative determination of halogens in organic compounds. E. Schwenk, D. Papa and H. Ginsberg. *Ind & Eng Chem Anal* 15:576-7 S 15 '43
- Refrigerating aluminum alloy rivets and parts. E. J. Fletcher. flow chart *Metals & Alloys* 17:1173-82 Je '43; Correction. 18: 65 J '43
- Refrigeration used in making airframe parts; cold treatment of aluminum; Hudson motor car company. *Refriger Eng* 45:342 My '43
- Relative merits of materials used for lightweight structures. F. Platt. *Product Eng* 14:67-72 F '43
- Removing gases and inclusions in aluminum casting alloys. E. Bremer. *Foundry* 71: 126-8+ Je '43
- Soldering aluminum alloys. diag *Iron Age* 151:52-7 My 27 '43
- Super-aluminum alloys for aircraft structures. K. R. Jackman. bibliog *Aviation* 42:154-8, 163+ Ag; 163-9+ S; 156-7, 159, 161+ O '43
- Tension joints in aircraft structures; riveted joint design practice with respect to applicability to aluminum alloys. C. H. Holleman. *J Aeronautical Sci* 10:295-302+ O '43
- Types of commercial aluminum alloys with respect to machinability; tabulation. *Aviation* 41:183 D '42
- Using aluminum casting alloys efficiently. chart *Foundry* 71:109+ S '43
- Working stresses in aluminum-alloy structures. E. W. Thomas. *Engineering* 155:101 F 5 '43

See also

Alclad

Aluminum bronze

Analysis

- Electrolytic determination of zinc in aluminum alloys. G. H. Osborn. *Soc Chem Ind J* 62:58-60 Ap '43
- New oxide technique; determination of magnesium in aluminum alloys. *Chem Age (Lond)* 48:627 Je 12 '43

Testing

- Buckling of aluminum-alloy columns and plates. H. L. Langhaar. diags *J Aeronautical Sci* 10:218-22 J '43
- Drawn cylindrical shapes of various aluminum alloys. T. H. Hazlett. *Product Eng* 14:425-8 J '43
- Machining and forming 14ST aluminum alloy. *Iron Age* 152:65-7 N 11 '43
- Measurement of stresses in parts and structures. R. G. Anderson. *Product Eng* 14:712-16 N '43
- Prescriptions for head cracks in 24ST rivets; laboratory tests of strengths, corrosion resistance, heat treatments, and aging. E. C. Hartmann, C. F. Westcott and M. W. Brennecke. *Aviation* 42:139-42+ N '43
- Radiography of aircraft castings. R. Taylor. *Aero Digest* 42:238, 240+ Ap '43
- Radiography of light alloys. R. C. Woods and V. C. Cetrone. *Iron Age* 151:52-8 Mr 25 '43
- Riveted and pin-connected joints of steel and aluminum alloys. L. S. Moisseff, E. C. Hartmann and R. L. Moore. *Diags Am Soc E E Proc* 69:3-40 Ja '43; Discussion. 69: 575-6 Ap '43
- Simple hydropress formability test for sheet metals. G. C. Barber. *Mech Eng* 65:643-6 S '43
- Tension-compression device for quantitative X-ray diffraction evaluation of strain in metals and a calibrated series of aluminum alloys. G. L. Clark, G. Pish and R. Seabury. bibliog *Diags J Ap Phys* 14:284-90 Je '43

Tests of thin hemispherical shells subjected to internal hydrostatic pressure; reprint of University of Illinois engineering experiment station bulletin 295. W. M. Wilson and J. Marin. *Diags Welding J* 22:sup214-20 My '43

X-ray inspection of castings; Army air forces' requirements. R. Katz. *Metal Prog* 44:89-94 J '43

ALUMINUM bromide

Radioactive exchange and adsorption of methyl bromide with several inorganic bromides. G. B. Kistiakowsky and J. R. Van Wazer. *Am Chem Soc J* 65:1829-34 O '43

ALUMINUM bronze

- Aluminum bronze castings; abstract. F. Hudson. *Metals & Alloys* 17:1016+ My '43
- Aluminum bronzes commonly used in aircraft; tabulation. W. W. Edens, comp. *Metal Prog* 44:701 O '43
- Heat treating aluminum bronzes. G. P. Halliwell. *Metals & Alloys* 17:1222 Je '43
- Save tin by use of aluminum bronze. *Oil & Gas J* 41:53 F 18 '43
- Thermal expansion of some bronzes. P. Hidnert. bibliog *J Research Nat Bur Stand* 30:75-88 Ja '43
- Welding with aluminum bronze. C. E. Swift. *Welding J* 21:843-5 D '42

ALUMINUM chloride

- Action of magnesium and aluminum salts as binders for refractories. *Brick & Clay Rec* 103:43 Ag '43
- Condensation of methyl dipropyl carbinols with phenol in the presence of aluminum chloride. R. G. Huston and C. R. Meloy. bibliog *Am Chem Soc J* 64:2655-7 N '42
- Sulphur products from the aluminum-chloride complex obtained in refining high-sulphur gasolines. I. I. Tsyganok and L. A. Vanyukova. *Pet Eng* 14:75-6 J '43
- Tetra-aryl-phosphonium, -arsonium and -stibonium salts; the mechanism of their formation by the aluminium chloride reaction. D. R. Lyon and F. G. Mann. *Chem Soc J* p666-71 N '42

See also

Friedel-Crafts reaction

Analysis

- Determination of chloride in bauxite-supported anhydrous aluminum chloride catalysts; extraction and distillation methods. W. A. La Lande, Jr., H. Heinemann and W. S. W. McCarter. *Ind & Eng Chem Anal* 15:385-7 Je 15 '43

ALUMINUM coating

- Armco develops aluminized sheet steel. *Mach* 49:212 Ap '43
- Conserving critical alloys in heat-treating equipment; steel annealing covers sprayed with molten aluminum. H. S. Ingham. *Steel* 112:94, 96 F 15 '43

ALUMINUM company of America

- Absentee control; union to shepherd laggards under scheme evolved for Alcoa's Cleveland plant. *Business Week* p82 J '43
- Aluminum production by Alcoa. *Elast F & Steel* P 31:sup56 Ap '43
- Annual report. *Comm & Fin Chr* 157:1520 Ap 26 '43
- Answers monopoly charges. *Comm & Fin Chr* 157:5 Ja 4 '43
- High court delays anti-trust suits. *Comm & Fin Chr* 158:1629 O 25 '43
- Light metals. *Business Week* p45-58 Ag 28 '43
- Requests that government drop anti-trust suit appeal. *Comm & Fin Chr* 156:2093 D 14 '42
- Stock increased. *Comm & Fin Chr* 155:1821 N 8 '43
- Strikes probed; Alcoa's Cleveland works investigated by NWLB. *Business Week* p89-90+ Ap 10 '43
- Supreme court cannot decide case. *Comm & Fin Chr* 156:1947 N 30 '42
- Women's wages; important technicalities at stake in NWLB's case that involves Alcoa, C.I.O., and a new group of workers. *Business Week* p64-6 Ja 2 '43

ALUMINUM company of Canada

New Shipshaw power project. *Comm & Fin*
Chr 157:206 My 31 '43
 Write-offs scored. *Business Week* p101-3 Ap
 3 '43

ALUMINUM compounds

See also

Alum
 Alumina

ALUMINUM founding

Aluminum alloy casting properties improved
 by aging. J. Hubel. *Il Foundry* 71:134+
 Mr '43
 Aluminum and magnesium castings, 1942. N.
 E. Woldman. *Il Metals & Alloys* 17:64-5 Ja
 '43
 Aluminum casting alloy substitution. *Iron*
Age 152:56-7 O 7 '43
 Aluminum casting alloys; abstract. W. Bon-
 sack. *Metals & Alloys* 16:918+ N '42
 Aluminum castings poured in cores; Acme
 pattern & tool co. W. G. Gude. *Il Foundry*
 71:96-9+ S '43
 Aluminum cylinder heads for aircraft en-
 gines; Servel foundry. G. E. Stedman. *Il*
Steel 112:102-5 Ap 13; 114-16 Ap 19 '43
 Aluminum-magnesium attract considerable
 attention; abstracts of A.F.A. annual meet-
 ing papers. *Foundry* 71:173+ Je '43
 Black aluminum foundry embodies best prac-
 tices for mass production of aircraft en-
 gine cylinder heads. *Il Automotive & Avia-*
tion Ind 88:26-9+ Mr 1 '43
 Buick speeds production of aluminum alloy
 aircraft cylinder heads. A. H. Allen. *Il*
Foundry 70:66-71, 150-3 D '42
 Buick's cylinder head foundry. *Il Aero Digest*
 42:192-3, 195-6, 199 F '43
 Canadian foundry specializes in nonferrous
 castings; Robert Mitchell co. P. Dwyer. *Il*
Foundry 71:98-100+ M '43
 Castings in aircraft construction; Vultee field
 division, Consolidated Vultee aircraft corp.
 D. M. Davis. *Il Iron Age* 152:52-6+ N 4 '43
 Conserving aluminum by alloy selection;
 chart and tables. *Machine Design* 15:98-9 O
 '43
 Cylinder head cores made without wires;
 Aviation division, Studebaker corp. P.
 Dwyer. *Il Foundry* 71:84-5, 150-1 F '43
 Delco-Remy aluminum foundry. J. Geschelin.
Il Automotive & Aviation Ind 87:18-23+ N 1
 '42
 Die-casting mold parts two ways. H. Thorn-
 ton. *Il Am Mach* 87:92-3 Ap 1 '43
 Die castings for the war effort; Mount Ver-
 non die casting corp. G. Nyselius. *Il Metals*
& Alloys 18:42-7 Jl '43
 Foundry practice and quality in light-alloy
 castings. H. G. Warrington. *Il Engineering*
 156:90, 97-100 Jl 30 '43
 Heading and gating of aluminum and mag-
 nesium castings; abstract. R. E. Ward.
Foundry 71:120+ Jl '43
 Induction furnace for melting aluminum al-
 loys. M. Tama. *Il diags Metals & Alloys*
 17:326-9 F '43
 Light metal sand practice, inspection; ab-
 stracts of papers. A.F.A. aluminum and
 magnesium division. *Iron Age* 151:70-1, 172-
 3 My 6 '43
 Melt aluminum alloys in low-frequency fur-
 nace. H. L. Edsall. *Il Foundry* 71:164-5
 My '43
 Melting, alloying, heating aluminum and al-
 loy ingot. R. E. LaPelle. *Il diags Metal*
Prog 44:276-82 Ag '43
 New aluminum castings plant in the South-
 west. *Manuf Rec* 112:46 Ap '43
 Packard converts to aluminum castings pro-
 duction. A. H. Allen. *Il Foundry* 71:136-9+
 Ap '43
 Quality of aluminum castings; abstract. A.
 Von Zeerleder. *Metals & Alloys* 17:580+
 Mr '43
 Recent production improvements in mag-
 nesium melting and aluminum ladle pre-
 heating through direct radiant gas firing.
 J. Kniveton. *Il diag Am Gas J* 150:10-13
 Jl '43
 Removing gases and inclusions in aluminum
 casting alloys. E. Bremer. *Il Foundry* 71:
 126-8+ Je '43
 Using aluminum casting alloys efficiently.
 chart *Foundry* 71:109+ S '43

ALUMINUM industry and trade

Production of aluminum tops essential needs.
Steel 113:73 N 8 '43

See also

Aluminum company
 of America
 Bohn aluminum and
 brass corporation

Finance

Post-war future of the light metals. E. A.
 Krauss. *Il Mag of Wall St* 72:675-7+ O 2
 '43

Statistics

Aluminum, 1938-1941. Survey of Cur Business
 1942 Sup p142
 Aluminum; production, imports, exports,
 consumption, 1930-1942; table and chart.
Automotive & Aviation Ind 88:77 Mr 16 '43
 Light metals, 1942. J. H. Weitz. *Eng &*
Min J 144:69-70 F '43

Brazil

Brazil, with big bauxite reserves, seeks
 aluminum industry. *For Comm W* 12:29
 S 11 '43

Brazil's aluminum. *Business Week* p98+ Ap
 3 '43

Canada

Aluminum monopoly in Canada. *Economist*
 145:80 Jl 17 '43

Switzerland

Swiss aluminum in 1942. *Chem Age (Lond)*
 48:536 My 15 '43

United States

Aluminum capacity soon to be seven times
 peacetime peak. T. D. Jolly. *Steel* 111:45-6
 N 30 '42

Aluminum industry. F. C. Frary. *Il Chen &*
Eng N 20:1646-8 D 25 '42

Huge increase in capacity places industry
 in promising position. *Iron Age* 152:82-3
 Jl 29 '43

Huge new Chicago rolling mill typifies in-
 dustry's expansion; Defense plant corp.
 units operated by Aluminum co. of America.
Il Steel 113:70-1 Ag 16 '43

U.S. aluminum output exceeds Nazis. in 1942.
 R. A. Hunt. *Marine Eng* 48:123 Ja '43

Will our aluminum plants be postwar white
 elephants? *Il Min & Met* 24:191-4 Ap '43

ALUMINUM metallurgy

Alumina from clay. *Business Week* p59-60
 Jl 24 '43

Aluminum and magnesium, 1942. H. A.
 Knight. *Metals & Alloys* 17:57-8 Ja '43

Aluminum developments. A. G. Arend. *diags*
Electrician 130:441-3 Ap 30 '43

Aluminum, from bauxite to rolled metal;
 Reynolds' Alabama plant. H. C. Parmelee.
flow diag Il Eng & Min J 144:52-8 S '43

Aluminum production. *Il Elec R (Lond)* 132:
 3-6 Ja 1 '43

Aluminum production, 1942. P. D. Wilson. *Il*
Min & Met 24:71-3 F '43

Carbon, a refractory material; lining of alu-
 minum pots. F. J. Vosburgh. *Il diags Steel*
 112:108+ Ap 5 '43

From bauxite to aluminum sheet; pictured
 flow sheet. *Il Chem & Met Eng* 50:154-7 My
 '43

Induction furnace for melting aluminum al-
 loys. M. Tama. *Il diags Metals & Alloys*
 17:326-9 F '43

Light metals; aluminum and magnesium. J.
 St Peter. *Il J Chem Educ* 19:556-62 D '42

Production of alumina from low-grade domestic
 materials; work in Bureau of mines pilot
 plants. E. S. Dean. *Il Min & Met* 24:356-
 9; Discussion (Work done by agencies other
 than the Bureau of mines in treatment
 of low-grade aluminum ore). P. D. Wil-
 son. 359-61 Ag '43

Report of the Nonmetals division, fiscal
 year 1942; alumina from clay and low-grade
 bauxites. O. C. Ralston and A. G. Stern.
pl U S Bur Mines Rep of Invest 3675:3-11
 '42

Three plants in one; Reynolds metals co.
 aluminum plant. J. A. Leo. *flow sheet Il*
Chem & Met Eng 50:145-50 My '43

ALUMINUM naphthenate

Metallic naphthenates. *Can Chem & Process*
Ind 27:400-1 Jl '43

ALUMINUM ores

Streak identification for alumina ores. Can Min J 63:725 N '42

See also

Bauxite

ALUMINUM oxide. See Alumina

ALUMINUM plating

Résumé on the electrodeposition of aluminum. B. D. Ostrow. bibliog Metal Finishing 41: 70-2 F '43

ALUMINUM powders. See Aluminum, Powdered

ALUMINUM research

Crown jewels of aluminum. il Chem & Eng N 21:1172-3 JI 25 '43

ALUMINUM silicates

See also

Cordierite

Feldspar

Kaolin

Montmorillonite

Sillimanite

Spodumene

Topaz

ALUMINUM sulfate

Filter-run difficulties at Belleville, Ont. O. H. Scott. il Water & Sewage 81:37-4 Ap '43
How the war affects alum quality; reasons behind changes in specifications for sulphate of alumina. F. E. Stuart. il Water & Sewage 81:11-13-4 Ja '43; Same abr. Am Water Works Assn J 35:34-6 Ja '43
Victory alum; symposium. Water Works & Sewerage 90:273-4 JI '43

ALUMINUM tubes. See Tubes, Aluminum

ALUMINUM ware

Any pots to mend today? Consumers' Research Bul 11:22-4 Ap '43

ALUMINUM work

Aluminum parts gaged at constant temperature. diag Iron Age 152:53 S 9 '43
Automatics speed binocular production; Westinghouse electric & manufacturing company. J. Witchey. il Am Mach 87:92-3 Ag 5 '43
Bead designs studied for standardization; sheet aluminum aircraft parts. F. M. Mallett. diags Product Eng 14:708-11 N '43
Buick forges aircraft engine parts. R. R. Darnton. il diags Am Mach 87:98-100 JI 22 '43
Deformation under pressure of brazed aluminum tank. L. W. Combs. il diags Product Eng 14:581-2 S '43
Design of aluminum hammer forgings. il diags Iron Age 151:58-63 Je 17 '43
Design of highly stressed studs to improve their fatigue strength. il diags Product Eng 14:288-90 My '43
Device provides quick quench for aluminum parts; Ryan aeronautical company. il Am Mach 87:105 O 14 '43
Drawn box shapes of various aluminum alloys. T. H. Hazlett. il Product Eng 14: 517-20 Ag '43
Electroplating on aluminum. Chem Age (Lond) 48:483-4 My 1 '43
Electroplating on aluminum; abstract. Metals & Alloys 16:938-4 N '42
Extrusion of light alloys; preheating and hydraulic operations. il Elec R (Lond) 133: 297-301 S 3 '43
From bauxite to aluminum sheet; pictured flow sheet. il Chem & Met Eng 50:154-7 My '43
Heat therapy facilitates aluminum work on aircraft. il Mech Eng 64:903 D '42
Heat treatment of aluminum and its alloys. tables Am Gas Assn Proc 1942:187-204 bibliog(p 193)
High-speed loading and quenching system for heat-treating furnace for aluminum casting. il Comp Air M 48:6992-3 Mr '43
High speed milling in aircraft production; data on milling of alloy steel and of aluminum. il diags table Iron Age 152:74-83 O 14 '43
Know-how of aluminum riveting; illustrations showing tools and methods. Am Mach 87: 94-7 O 14 '43
Latest type of equipment at Chevrolet's new forge plant. J. Geschelin. il Automotive & Aviation Ind 89:20-3+ JI 15 '43
Lockheed practice in stretching aircraft structural parts. F. C. Hoffman. il diags Mach 50:149-58 S '43

Low-cost dies for aircraft parts; use of semi-plastic materials, such as masonite and bakelite. B. Schlenzig. il diags Am Mach 86:1307-14 N 12 '42

Machining aluminum. Aviation 41:183, 185 D '42

Machining aluminum. R. L. Templin. il diags Automotive & Aviation Ind 87:38-42 N 15 '42

Machining and forming 14ST aluminum alloy. diag Iron Age 152:65-7 N 11 '43

Melting, alloying, heating aluminum and alloy ingot. R. R. LaPelle. il diags Metal Prog 44:276-82 Ag '43

New partnership is formed; aluminum and plastics. C. Braglio. il Mod Plastics 20: 53-4+ Ap '43

Pressed pistons; technique employed by Specialoid limited in forging light wrought alloys. il Automobile Eng 33:349-59, 397-404 S-O '43

Recommended dimensions for aluminum castings; diagrams. Product Eng 14:234-5 Ap '43

Soldering aluminum alloys. diags Iron Age 151:52-7 My 27 '43

Special surface plate reduces gaging rejects of aluminum parts caused by temperature changes. diag Product Eng 14:342 Je '43
Technique of stretching aluminum. C. L. Fenn. il diags Am Mach 87:92-5 S 16 '43

See also

Aluminum—Welding

Aluminum founding

ALUMINUM works

Aluminum capacity of 2.1 billion pounds goal for next year; abstracts. T. B. Jolly. Iron Age 150:104-6 N 26 '42; Steel 111:45-6 N 30 '42

Aluminum co. of America finds clay products simplify industrial construction. Brick & Clay Rec 103:32 Ag '43

Aluminum, from bauxite to rolled metal; Reynolds' Alabama plant. H. C. Parmelee. flow diag il Eng & Min J 144:52-8 S '43

Huge new Chicago rolling mill typifies industry's expansion; Defense plant corp. units operated by Aluminum co. of America. il Steel 113:70-1 Ag 16 '43

Producing aircraft parts at aluminum mill; scrap remelted; Reynolds metals co. ship finished aircraft parts instead of aluminum sheets. M. H. Froelich. il diags Aero Digest 42:104, 109-10, 113-14 Ja '43

Three plants in one; Reynolds metals co. aluminum plant. J. A. Lee. flow sheet il Chem & Met Eng 50:145-50 My '43

Power

Aluminum developments. A. G. Arend. diags Electrician 130:441-3 Ap 30 '43

Canada building world's biggest power plant to serve aluminum plant. D. C. Howe. Elec W 118:2111 D 26 '42

Ignition rectifiers save critical materials in aluminum plants. A. F. Kenyon. Blast F & Steel Pl 31:336 Mr '43

Load pickup by a group of ignitron rectifiers; application to large electrochemical loads, such as aluminum cell lines. L. W. Morton and D. I. Bohn. bibliog diags Elec Eng 62:Trans 679-84 N '43

Power for aluminum; Shipshaw power development. Min & Met 24:280-1 Je '43

Power pool proves stand-by ability; picks up 66,000 kw. for aluminum plant when Ark-La line fails. Elec W 119:76-7 Ja 9 '43

Project X; world's largest plant powered by internal-combustion engines; completed jointly by Aluminum company of America and Defense plant corporation. il Diesel Power 21:695-701 Ag '43

Use of REA funds for Lake Catherine line condemned. C. M. Reed. Elec W News ed 119:2055-6 Je 19 '43

ALUMS

Adiabatic demagnetization of iron alum. J. A. Sauer. bibliog diag Phys R 64:94-112 Ag 1 '43

ALUNITE

Production of alumina from low-grade domestic materials; work in Bureau of mines pilot plants. R. S. Dean. Min & Met 24: 358 Ag '43

ALVORD, John Watson, 1861-1943

Sketch. por Civil Eng 13:443 S '43

AMAGAT'S law

Dalton's law of partial pressures and Amagat's law of additive volumes. E. C. Craven. Chem & Ind 62:27-8 Ja 16 '43

AMALGAMATED clothing workers of America
New company for Clothing workers of America. East Underw 44:5 Ag 6 '43**AMALGAMS**

Cerium amalgam electrode and the thermodynamics of aqueous cerium(III) sulfate solutions. G. C. Walters and T. De Vries. bibliog Am Chem Soc J 65:119-22 Ja '43

Rare-earth metal amalgams; the separation of ytterbium from its neighbours. J. K. Marsh. Chem Soc J p8-10 Ja '43

Simplified technique in the use of liquid amalgam reducers. G. F. Smith and L. T. Kurtz. bibliog diag Ind & Eng Chem Anal ed 14:854-5 N 15 '42

AMAPALA, Honduras

Malaria control and water supply in Honduras. Eng N 130:883 Je 17 '43

AMAZON valley

Battle of the Amazon. J. C. McClintock. il For Comm W 12:3-5, 30-2 Jl 3 '43

AMBER, Harrison L. 1899-

New president of Berkshire. por Nat Underw (Life ed) 46:1 N 13 '42

New president of Berkshire Life. C. Axman. por East Underw 44:3+ Ja 15 '43

AMBER glass. See Glass, Colored**AMBERLITES**

Distilled water supply for small schools. S. Gaddis and C. Kubina. diag J Chem Educ 20:381+ Ag '43

Water purification by the ion-exchange method. O. K. Smith. diag Pet Eng 14:57-60 S '43

AMBLYOMMA gertschi. See Ticks**AMBROSIA.** See Ragweed**AMBULANCE trains.** See Hospital trains**AMBULANCES, Marine**

Marine ambulance service at Miami, Fla. Pub Health Rep 57:1944, pl 1-2 D 18 '42

AMERADA petroleum corporation

Oil shares for inflation hedging. H. Lawrence. Barron's 22:20 D 21 '42

AMERICA

America dreams a new frontier. E. A. Johnston. il Dun's R 52:7-9+ Jl '43

Americanism stands for freedom and brotherhood of plain people; hope and glory of America in the future. H. A. Wallace. Comm & Fin Chr 157:1881+ My 20 '43

Contribution of the Americas to the war and to the peace. E. Silva. Ann Am Acad 228:21-4 Jl '43

Cooperation, the way to inter-American development. J. C. McClintock. Pet Eng 15: 92, 94 O '43

See also

Latin America
Pan Americanism
United States

AMERICA fore companies

America fore group leaders show gains in 1942 statements. East Underw 44:1+ Ja 23 '43

AMERICAN academy of arts and sciences

Election of fellows and officers. Science 97: 461 My 21 '43

AMERICAN airlines, Inc.

Annual report. Comm & Fin Chr 157:1235 Ap 5 '43

CAB drops plan to recapture air mail excess pay, orders cut in rates. Comm & Fin Chr 156:1856 N 23 '42

Expansion. Barron's 23:1 Ag 30 '43

Re-appraisal of companies in the news. Mag of Wall St 72:33 Ap 17 '43

AMERICAN and foreign power company, Inc.

Annual report. Comm & Fin Chr 157:1937, 2442-3 My 24, Je 28 '43

Argentine decree cuts power ration in two provinces. Comm & Fin Chr 158:1125 S 20 '43

Brief article on holding company. O. Ely. Pub Util 31:761-3 Je 10 '43

AMERICAN arbitration association

Arbitration helps public relations; comments at luncheon for Pink, Bissell. Nat Underw 47:15+ Ja 14 '43; East Underw 44:26 Ja 15 '43

Movie tribunals; future of arbitration system rests with Thurman Arnold's successor. Business Week p38+ F 20 '43

Six cities to get arbitration tribunals. Nat Underw 47:21 Ja 7 '43

AMERICAN association for the advancement of science

Digest of the minutes of the executive committee. Science 97:204-5 F 26 '43

Financial reports. Science 97:72 Ja 15 '43

Lancaster branch; lectures for the season 1942-43. Science 96:442 N 13 '42

Officers for 1943. Science 97:239 Mr 12 '43

Postponement of the New York meeting. F. R. Moulton. Science 96:501 D 4 '42

Preliminary announcement of New York meeting. F. R. Moulton. Science 96:479-88 N 27 '42

Resolution of the council on the Science mobilization bill (S.702). Science 98:135-7 Ag 6 '43

Pacific division

Annual meeting, 27th, Oregon state college, June 14-19. Science 97:217-18 Mr 5 '43

AMERICAN association of advertising agencies

Annual meeting, 26th, New York. Ptr Ink 203:26+ My 28 '43

AMERICAN association of industrial physicians and surgeons

History in the making; industrial medicine in the terms of now. Ind Med 12:569-75 S '43

AMERICAN association of insurance general agents

Intuitive cognition of general agents invaluable; AAIGA charts its course for the coming year. S. L. Johnson. Ins Field (Fire ed) 72:18 Jl 22 '43

AMERICAN association of oilwell drilling contractors

Annual meeting, 2d, Tulsa. Oil & Gas J 41: 16-17 N 26 '42

Annual meeting, Houston. Oil & Gas J 42:34-5+ O 14 '43

AMERICAN association of petroleum geologists

Annual meeting, 28th, Fort Worth, April 7-9. Am Assn Pet Geologists Bul 27:662-704 My '43; Nat Pet N 35:34-6 Ap 14 '43; Oil & Gas J 41:46-7 Ap 15 '43

Membership list. Am Assn Pet Geologists Bul 27:323-402 Mr '43

Wartime conference; papers. Oil & Gas J 41: 37-42+ Ap 8 '43

AMERICAN association of state highway officials

Annual meeting, 28th, St Louis, Dec. 7-9. Eng N 129:830-2 D 17 '42

AMERICAN association of textile chemists and colorists

Proceedings. Published in bi-weekly numbers of American dyestuff reporter

Report of the research committee. L. A. Olney. Am Dyestuff Rep 31:642-3 D 7 '42

Reporter passes quarter century mark. A. P. Howes. Am Dyestuff Rep 31:583-92 D 7 '42

AMERICAN association of textile technologists

President Hagen reviews technologists' progress. Rayon 24:448-9 S '43

AMERICAN association of university teachers of insurance

Teachers of insurance publish war symposium in lieu of annual meeting. East Underw 44: 52 Ap 30 '43; Nat Underw 47:6 My 20 '43

AMERICAN bank note company

American bank note company in two World wars. H. Lawrence. Barron's 23:1-2 Jl 5 '43

AMERICAN bankers association

ABA appoints 12 to executive council. Comm & Fin Chr 156:2333 D 31 '42

ABA commission on country bank problems. Comm & Fin Chr 158:1428 O 7 '43

A.B.A. executive council round-up. Bankers M 146:451-6 My '43

AMERICAN bankers association—Continued

Annual convention, 69th, New York, Sept. 13-15. Banking 36:33-42 O '43; Comm & Fin Chr 158:1189+, 1340 S 23, 30 '43; Trusts & Estates 77:341-2, 353-4 O '43

Both country and city banks well represented; officers elected at annual meeting. Burroughs Clearing House 28:3 O '43

Hemingway and his teamworkers in A.B.A. offices; portraits. Banking 36:45-9 S '43

Highlights of A.B.A. convention talks. Burroughs Clearing House 28:16-18+ O '43

People you know; photographs of members of ABA executive council. Banking 35:39-41 My '43

Proposed amendments to A.B.A. constitution. Banking 36:52, 54 Ag '43

Staff changes. Comm & Fin Chr 157:198 Ja 14 '43

Use of the A.B.A. code in wartime. M. C. Miller. Banking 35:49 Je '43

Year of action; chronology. M. B. Leach. Banking 36:50-2 S '43

Credit policy commission

A.B.A. creates new credit commission; re-organizes credit service set-up. Comm & Fin Chr 158:1517 O 14 '43

Trust division

Trust division appointments. Trusts & Estates 76:41 Ja '43

War-time trust conference, New York, Feb. 9-11. Trusts & Estates 76:127-30 F '43

AMERICAN bar association**Insurance section**

Annual meeting, Chicago, Aug. 23-25. East Underw 44:3, 26+ Ag 27 '43; Ins Field (Fire ed) 72:3-5+ Ag 26 '43; Ins Field (Life ed) 72:3+ Ag 27 '43; Nat Underw 47:2+ Ag 26 '43; Nat Underw (Life ed) 47:1+ Ag 27 '43; Weekly Underw 149:389, 406-8 Ag 28 '43

Real property, probate and trust law section

Annual meeting, Chicago. Trusts & Estates 77:207-70 S '43

AMERICAN bison. See Bison, American**AMERICAN Bosch corporation**

Charged with Sherman act violations. Comm & Fin Chr 157:5 Ja 4 '43

AMERICAN brake shoe company

American brake shoe & foundry co. shortens name. Comm & Fin Chr 157:1645 My 3 '43

AMERICAN broadcasting system, inc.

Blue network taken over by E. J. Noble. Comm & Fin Chr 158:1630 O 25 '43

AMERICAN car company

Annual report. Comm & Fin Chr 157:1045 Mr 22 '43

Machine shops 80% on war work; report to stockholders. Comm & Fin Chr 157:776 Mr 1 '43

AMERICAN capital corporation

Pacific southern investors, inc.; merger of American capital corp. proposed. Comm & Fin Chr 157:2453-4 Je 28 '43

AMERICAN car and foundry company

American Car and Foundry decision. G. O. May. J Account 74:517-22 D '42

Annual report. Comm & Fin Chr 158:251 JI 19 '43

Court authorizes payment of preferred dividend. Comm & Fin Chr 157:436 F 1 '43

Is the profession going legalistic? R. H. Montgomery. J Account 74:523-4 D '42

Stockholders advised of court decree. Comm & Fin Chr 157:776 Mr 1 '43

AMERICAN ceramic society

Annual meeting, 45th, Pittsburgh, April 18-21; program. Am Cer Soc Bul 22:83-107 Ap 15 '43

Annual meeting, 45th, Pittsburgh, April 18-21; with abstracts of papers. Brick & Clay Rec 102:16-19 My '43

Annual meeting, 45th, Pittsburgh, April 18-21; with abstracts of papers. Cer Ind 40:28-40 My '43

Membership roster. Am Cer Soc Bul 22:325-52 O 15 '43

President's address at thirty-fifth annual meeting. L. J. Trostel. Am Cer Soc Bul 22:172-4 Je 15 '43

What the American ceramic society can and should do in the field of standardization. A. S. Watts. Am Cer Soc Bul 22:5-6; Discussion. 6-8 Ja 15 '43

Art division

Remolding of Art division into design institute. Am Cer Soc Bul 22:244-6 JI 15 '43

Glass division

Annual meeting, 24th, Pittsburgh; with summaries of papers. Glass Ind 24:203-8+ My '43

Autumn meeting, Uniontown, Pa. Sept. 15-16. Cer Ind 41:44, 46, 49 O '43; Glass Ind 24:422-3+ O '43

Program of papers and events. Glass Ind 24:164+ Ap '43

AMERICAN ceramic society journal

Indexes to the Journal, v 25, 1942; comp. by the American ceramic society. Am Cer Soc J 25:467-86 D 1 '42

AMERICAN chemical society

A.C.S. reviews progress in solving war needs at Detroit meeting. Oil Paint & Drug Rep 143:3+ Ap 19 '43

Candidates for 1943. pors Chem & Eng N 20:1353-6 N 10 '42

Candidates for 1944. pors Chem & Eng N 21:1716-20 O 25 '43

Chemistry at war; Detroit meeting points up significance of new developments. Business Week p80-2 Ap 24 '43

Economic status of the members; committee report. Chem & Eng N 20:1289-93, 1497-1505, 1563-74, 1635-43 O 25, N 25-D 25 '42

Economic status of the members of the American chemical society; statement of the committee. Chem & Eng N 21:296-7 Mr 10 '43

Election of the president and other officers. Science 97:10-11 Ja 1 '43

Meeting, 105th, Detroit, April 11-14. Chem & Eng N 21:654-78 My 10 '43; Chem Ind 52:604-8 My '43; Can Chem & Process Ind 27:250-5 My '43

Meeting, 106th, Pittsburgh, September 6-10; program, etc. Chem & Eng N 21:1337-64 Ag 25 '43

Meeting, Pittsburgh, Sept. 6-11. Chem & Eng N 21:1510-25 S 25 '43

Meeting, Pittsburgh, Sept. 6-11. Chem Ind 53:338-42 S '43

Meeting, Pittsburgh, Sept. 6-11; abstracts of papers. Can Chem & Process Ind 27:561-3 O '43

Monthly earnings of members, 1941. Monthly Labor R 56:776-80 Ap '43

1943 spring meeting, Detroit; program. Chem & Eng N 21:381-2+ Mr 25 '43

Officers, committees, and student affiliate chapters. Chem & Eng N 21:767-71 My 26 '43

Officers for 1943. pors Chem & Eng N 20:1619 D 25 '42

Official reports for the year 1942. Chem & Eng N 21:231-8 F 25 '43

Pittsburgh meeting, Sept. 6-10, 1943. Science 98:10 JI 2 '43

Preliminary program, Pittsburgh meeting, September 6-10, 1943. Chem & Eng N 21:879-86 Je 10 '43

Some abstracts of papers read before the Pittsburgh meeting. Science 98:sup12, 14 S 17; sup12 S 24 '43

Petroleum division

Annual meeting, Detroit, April 12-16. Oil & Gas J 41:55, 127-9 Ap 15 '43

Annual meeting, Pittsburgh, Sept. 6-10. Oil & Gas J 42:26-7, 63-4 S 16 '43

Rubber division

Division of rubber chemistry meeting, Detroit, April 15-16; abstracts of papers. Rubber Age 52:499-502+ Mr '43; India Rubber W 108:56-8 Ap '43

Fall meeting, New York, Oct. 5-7; abstracts of papers. Rubber Age 53:523-9 S '43; India Rubber W 109:55-60 O '43

Progress and problems of the rubber industry revealed at Detroit. India Rubber W 108:152-4 My '43

AMERICAN cities power and light corporation

Court rejects Harris group bid. Comm & Fin Chr 156:1947 N 30 '42

- AMERICAN college of life underwriters**
Ranks of C.L.U. are swelled to total of 2,424.
Nat Underw (Life ed) 47:4+ J1 30 '43
Wartime commencement at annual session of American society of chartered life underwriters. Weekly Underw 149:673+ S 25 '43
See also American society of chartered life underwriters
- AMERICAN concrete institute**
Annual meeting, 39th, Chicago, Feb. 17. Am Concrete Inst J 14:sup [news letter] 1-8 Ap '43
Annual meeting, 39th, Chicago, Feb. 17. Concrete 51:8+ Mr '43
Looking backward and forward. M. O. Withey. Am Concrete Inst J 14:385-8 Ap '43
Meeting of directors, Chicago, Feb. 17. Rock Prod 46:96 Mr '43
- AMERICAN concrete pipe association**
Annual meeting, 36th, Chicago, Feb. 17-18. Concrete 51:35 Mr '43; Rock Prod 46:92-3 Mr '43
- AMERICAN coordinating committee on corrosion**
Annual meeting, 5th, Pittsburgh, April 10. Science 97:437 My 14 '43
- AMERICAN credit indemnity company**
Reaches 50th milestone. W. L. Clapp. East Underw 44:31-2 F 5 '43
- AMERICAN cyanamid company**
American Cyanamid prospering. Barron's 23:1 Ag 30 '43
Annual report. Comm & Fin Chr 157:1417 Ap 19 '43
News from the chemists' front. Barron's 23: 22 S 20 '43
- AMERICAN drug manufacturers association**
Annual meeting, 32d, Chicago, May 2-4. Oil Paint & Drug Rep 143:49-52, 52A-52C My 10 '43
- AMERICAN dyestuff reporter (periodical)**
Reporter passes quarter century mark. A. P. Howes. Am Dyestuff Rep 31:583-92 D 7 '42
- AMERICAN electrolaters' society**
Annual meeting, 31st, Buffalo, June 7-9. Iron Age 152:58-62+ J1 1; 68-73 J1 8; 66-9 J1 15; 55-9+ J1 22 '43; Metal Finishing 41: 414-17 J1 '43
- AMERICAN ethnological society**
Address delivered at celebration of the centenary of the society. F. Boas. Science 97: 7-8 Ja 1 '43
Centenary. M. W. Smith. Science 96:584-5 D 25 '42
Schoolcraft and the American ethnological society. C. S. Osborn and S. Osborn. Science 97:161-2 F 12 '43
- AMERICAN export lines, inc.**
Ordered to divorce airline. Comm & Fin Chr 157:517 F 8 '43
- AMERICAN federation of labor**
AFL names group for post-war planning. Comm & Fin Chr 157:68 Ja 7 '43
Another million? Business Week p99-100 O 16 '43
1942 convention, 62d, Toronto, Oct. 5-15. Monthly Labor R 55:1000-6 N '42
- AMERICAN federation of musicians**
Peanuts to Petrillo. Business Week p93-4 O 23 '43
Records again? Senate grilling may force Petrillo to end six-month ban on recordings. Business Week p28-30 Ja 23 '43
Steelman tunes in, but Petrillo holds out. Business Week p101 Je 26 '43
Words and music; transcription boycott. Business Week p81-2+ J1 24 '43
- AMERICAN felt company**
Should each company grow and train its own president? policies of John T. Lawless, J. A. Murphy. Sales Management 51:18-21 N 15 '42
- AMERICAN fire and casualty company**
Company analysis. Spectator (Property ed) 8:34-6 Ap 8 '43
- AMERICAN foreign insurance association**
AFLA celebrating 25th anniversary. L. H. Doman. East Underw 44:1+ Ag 20 '43; Same abr. Weekly Underw 149:351 Ag 21 '43; Abstract. Nat Underw 47:8 Ag 26 '43
Marks first 25 years. W. A. Hamlin. Ins Field (Fire ed) 72:5+ Ag 26 '43
- AMERICAN foundation for pharmaceutical education**
Doerr elected president. Oil Paint & Drug Rep 143:7 Ap 19 '43
Pharmacy foundation board to allocate funds in support of colleges of pharmacy. Oil Paint & Drug Rep 143:3 My 3 '43
- AMERICAN foundation for tropical medicine**
Grants. Science 97:547-8; 98:193-4 Je 18, Ag 27 '43
- AMERICAN foundrymen's association**
Annual meeting, 47th, St Louis; program. Iron Age 151:55-9 Ap 22 '43
Annual meeting; plans, program, committee members, awards, etc. Foundry 71:118-27+ Ap '43
Annual meeting, St Louis, April 28-30. Iron Age 151:67-71, 172-4 My 6 '43; Steel 112:65 J1 3 '43; Foundry 71:122-5+ Je; 96-7+ J1 '43
Establishes research foundation. Foundry 71: 94 Ja '43; Steel 112:398 Ja 4 '43
Officers, directors. Foundry 71:198-200 Je '43
- AMERICAN gas and electric company**
Annual report. Comm & Fin Chr 157:1521 Ap 26 '43
Descriptions of holding companies. O. Ely. Pub Util 31:698 My 27 '43
U.S. Supreme court refuses to review SEC decision. Comm & Fin Chr 157:2141 Je 7 '43
- AMERICAN gas association**
Accident prevention; national committee streamlines for wartime service. C. L. Hightower. Am Gas Assn Mo 25:25-7 Ja '43
Joint production and chemical conference, New York, May 24-25. Am Gas J 158:42-4 Je '43; Gas Age 91:13-15+ Je 17 '43; Am Gas Assn Mo 25:326-9 J1-Ag '43
1942-1943 officers and section chairmen; portraits. Gas Age 92:54 O 21 '43
Post-war planning; gas industry launches far-reaching preparedness program. Am Gas Assn Mo 25:7 Ja '43
Report on the activities of the Association's Washington office. G. W. Bean. Am Gas Assn Proc 1942:43-4
Technical section, 1942-1943. H. L. Gaidry. Gas Age 91:43+ Ja 14 '43
Technical section's place in the war effort; report of committee. Am Gas Assn Proc 1942:252-6
- Appliance testing laboratory**
Laboratories add women scientists to research staff. Am Gas Assn Mo 25:229 My '43
War activities supplement laboratories operations. R. M. Conner. Il Gas Age 91:23-4+ Ja 14 '43
- Natural gas section**
Meeting, St Louis, Oct. 26-28. Oil & Gas J 42:36 O 28 '43
- AMERICAN gear manufacturers association**
Annual meeting, 27th, Rye, N.Y. May 17-19. Steel 112:44 My 24; 50-1 My 31 '43; Iron Age 151:61-4 My 27 '43; Mach 49:165 Je '43
Semi-annual meeting, 26th, Chicago, Oct. 25-27. Iron Age 152:66-9 N 4 '43; Steel 113:63 N 1 '43
- AMERICAN geological association**
Geological union now. C. Croneis. Am Assn Pet Geologists Bul 27:1001-7 J1 '43
- AMERICAN geophysical union**
American geophysical union. J. A. Fleming. Science 97:565-8 Je 25 '43
- AMERICAN home products corporation**
Acquisitions during 1942; expansion and diversification of activities. Comm & Fin Chr 157:2141 Je 7 '43
Merges subsidiaries. Comm & Fin Chr 158: 1237-8 S 27 '43; Oil Paint & Drug Rep 144:3+ S 27 '43
- AMERICAN ice company**
Stockholder invokes new SEC proxy rules. Comm & Fin Chr 157:1045-6 Mr 22 '43
- AMERICAN institute for property and liability underwriters**
Award six candidates CPCU designation at 1st annual meeting of board of trustees, Philadelphia, July 21. East Underw 44:27 J1 30 '43

AMERICAN institute for property and liability underwriters—Continued
CPCU designation in insurance education. H. J. Loman. Weekly Underw 148:26, 50-1 Ja 2 '43
Report. S. S. Huebner. East Underw 44:27 My 28 '43

AMERICAN institute of accountants
American institute of accountants war program. J Account 74:536-40 D '42

AMERICAN institute of actuaries
Annual meeting, Chicago, June 3-4. East Underw 44:3-4 Je 11 '43; Nat Underw (Life ed) 47:1+ Je 11 '43

AMERICAN institute of architects
Annual meeting, 75th, Cincinnati, May 26-28. Arch Rec 93:47-8+ Je '43

AMERICAN institute of banking
A.I.B. gears program to bank needs. M. B. Leach. Banking 36:44 O '43
Annual convention, 41st, Chicago, June 9-10. Am Inst Banking Bul 25:2-15, 18-32 Ji '43
How to use your head; practical value of A.I.B. E. Lassetter. Banking 36:38+ Je '43
Institute 1917-1918. J. C. Thomson. Am Inst Banking Bul 25:14-15+ Ja '43
Report of Institute membership; tabulation. Am Inst Banking Bul 25:21-2 Ji '43
Reports progress of Institute at war time conference. D. E. Simms. Comm & Fin Chr 158:51 Ji 5 '43
Some A.I.B. chapters are growing. Banking 36:40-1 Ji '43
Wartime debating. W. T. Dunn. Am Inst Banking Bul 24:12+ O '42

AMERICAN institute of chemical engineers
Annual meeting, 35th, Cincinnati, Nov. 15-17. Chem & Eng N 20:1555-8 D 10 '42
Chemical engineers elect Bennett; other officers. Oil Paint & Drug Rep 142:7+ N 23 '42
Proceedings of the thirty-fifth annual meeting, Cincinnati, Nov. 16-17. Am Inst Chem Eng Trans 98:B177-B245 D '42
Semi-annual meeting, 35th, New York, May 9-11. Chem & Eng N 21:752-5 My 25 '43

AMERICAN institute of electrical engineers
Domination of A.I.E.E. by manufacturers and holding companies charged. C. Nau. Elec W News ed 120:9 Ji 3 '43
Officers and committees for 1943-44; student branches and local sections. Elec Eng 62:418-22 S '43
Summer meeting, Cleveland, June 21-25. Elec Eng 62:361-74 Ag '43; Elec W 120:80-5 Ji 10 '43
Technical meeting, Salt Lake City, Sept. 2-4. Elec W News ed 120:906-7 S 11 '43; Elec West 91:72-3 O '43
Transmission and distribution and electrical equipment committees meeting, Cleveland, Oct. 11-12. Elec W News ed 120:1446 O 23 '43
Winter meeting, New York, Jan. 25-29. Elec Eng 62:115-27 Mr '43
Winter meeting, New York, Jan. 25-29. Elec W 119:445-52 F 6 '43; Power Pl Eng 47:84+ Mr '43
Winter meeting, New York, Jan. 25-29; committee reports on power equipment. Power 87:162-5+ Mr '43

AMERICAN institute of marine underwriters
American institute of marine underwriters. H. C. Thorn. Weekly Underw 148:68, 71+ Ja 2 '43
Marine institute meets; several directors elected. East Underw 44:23 O 29 '43
Thorn elected president; other officers. Weekly Underw 147:1186 N 21 '42

AMERICAN institute of mining and metallurgical engineers
Annual meeting, 158th, New York, Feb. 15-18. Iron Age 151:55-61 F 25 '43; Steel 112:40-2 F 22 '43; Chem & Eng N 21:311+ Mr 10 '43; Eng & Min J 144:85 Mr '43; Min & Met 24:146-62 Mr '43; Rock Prod 46:71-3 Mr '43
Complete program, annual meeting, New York, Feb. 14-18. Min & Met 24:110-20 F '43
How to improve your Institute; preliminary report. Min & Met 24:310-13 Ji '43
New Institute officers assume duties; list of committee chairmen. Min & Met 24:207-8 Ap '43

Coal division

Annual meeting, New York, Feb. 16-17. Coal Age 48:98+ Mr '43; Min & Met 24:160-1 Mr '43

Industrial minerals division

Fall meeting, Bethlehem, Oct. 22-24. Rock Prod 45:62-4 D '42

Institute of metals division

Annual meeting, New York, Feb. 16-18. Min & Met 24:155-7 Mr '43
Fall meeting, Chicago, Oct. 16-20. Steel 113:44+ O 25 '43
Our two great metal societies; competitive situation between A.I.M.E., Metals division, and A.S.M.; editorial. Metals & Alloys 17:957+ My '43; Discussion. 18:279, 281, 308 Ag '43

Iron and steel division

Electric furnace steel committee, 1st annual conference, Pittsburgh, Oct. 1-2. Steel 113:145 O 11 '43; Iron Age 152:50-1, 136A-136D O 21 '43; Foundry 71:118+ N '43; Metal Prog 44:941-4 N '43
Fall meeting, Chicago, Oct. 16-20. Steel 113:44+ O 25 '43

Petroleum division

Annual meeting, New York. Oil & Gas J 41:32-44 F 13; 52-3 F 25 '43
Annual meeting, New York, Feb. 15-18; abstracts of papers. Pet Refiner 22:98, 100+ Mr '43
Fall meeting, Los Angeles, Oct. 21-22. Oil & Gas J 42:34, 57, 65-7 O 28 '43
Spring meeting, Dallas, May 6-8. Oil & Gas J 42:30-1 My 13 '43; Min & Met 24:285-7 Je '43
War problems and accomplishments of petroleum industry discussed. Min & Met 24:163 Mr '43

AMERICAN institute of physics
American institute of physics building; early history of the building. R. V. Hutchison. il plans J Ap Phys 14:501-9 O '43
Headquarters building. Science 98:296-7 O 1 '43
Message to physicists and their friends; proposed physics building. il R Sci Instr 14:242-7 Ag '43
National headquarters for physicists. H. A. Barton. il J Ap Phys 14:499-500 O '43
Physics building fund. R Sci Instr 14:285-6 O '43
Report for 1942. R Sci Instr 14:148-51 My '43
Report to physicists. H. A. Barton and G. H. Burnham. R Sci Instr 13:471-80 N '42; Same cond. Science 97:172-6 F 19 '43

War policy committee

Appeal of the War policy committee. Science 98:147-8 Ag 13 '43
Work of the War policy committee of the American institute of physics. P. E. Klopsteig. R Sci Instr 14:236-41 Ag '43

AMERICAN institute of steel construction
Annual meeting, 21st, Rye, N.Y. Oct. 19-21. Steel 113:45-6 O 25 '43; Roads & Bridges 81:42, 62-4 N '43

AMERICAN iron and steel institute
Annual meeting, 52d, New York, May 27. Steel 112:31-4 My 31 '43; Blast F & Steel Pl 31:635-7 Je '43; Iron Age 151:90-3+ Je 3 '43
New technical groups appointed. Steel 113:68-9 S 13 '43

AMERICAN labor party
Make American labor party national third party. F. H. La Guardia. Comm & Fin Chr 157:1886 My 20 '43

AMERICAN life convention

Annual meeting, 38th, Chicago, Oct. 4-7. East Underw 44:1+ O 8 '43; Ins Field (Life ed) 72:5-6+ O 8 '43; Nat Underw (Life ed) Conv no 47:1-20 O 7 '43; Nat Underw (Life ed) 47:1+ O 8 '43; Spectator (Life ed) 151:24-5+ O '43; Weekly Underw 149:752+, 786 O 9 '43
Believe that more eastern companies will go into ALC. East Underw 44:1+ O 15 '43
Second big eastern company joins ALC. Ins Field (Life ed) 72:3 N 5 '43

AMERICAN locomotive company

Capital readjustment. Barron's 23:9 Ag 2 '43

AMERICAN locomotive company—*Continued*
Merger of two units approved; capital re-adjustment plan ratified. Comm & Fin Chr 158:1030 S 13 '43

AMERICAN machine and foundry company
News and views of investments. Barron's 23:9 N 1 '43

AMERICAN machine tool distributors' association (formerly Associated machine tool dealers of America)
Annual meeting, 19th, Montebello, Que. Oct. 14-15. Iron Age 152:48-9 O 21 '43; Am Mach 87:120g-120h O 28 '43; Steel 113:67+ O 25 '43

AMERICAN management association
Insurance division meeting, Chicago. Nat Underw 46:1+ D 10 '42

Insurance division meeting, New York, May 25-26. East Underw 44:16+, 29 My 28 '43; Nat Underw 47:1+ My 27 '43; 1+ Je 3 '43; Spectator (Property ed) 8:40 Je 3 '43; Weekly Underw 148:1124 My 29 '43

Manpower utilization theme of AMA conference. Factory Management 101:260+ Mr '43

War-time packaging conference and exposition, New York, April 13-16. Mod Packaging 16:63-78 My '43

AMERICAN marketing association
Light on another advertising group. Ptr Ink 205:38+ N 5 '43

AMERICAN meat institute
Annual meeting, 38th, Chicago, Oct. 5-7. Food Ind 15:108 N '43

AMERICAN medical association
A.M.A. conviction upheld by high court. Oil Paint & Drug Rep 143:3+ Ja 25 '43; Comm & Fin Chr 157:498 F 4 '43; East Underw 44:29 Ja 22 '43
Medical care council created by A.M.A. Oil Paint & Drug Rep 143:3+ Je 14 '43

AMERICAN men of science
Class distinction among American men of science. S. O. Mast. Science 97:465 My 21 '43; Discussion. 97:487, 511, 534-5; 98:281-2 My 28-Je 11, S 24 '43

AMERICAN meter company
Elects new officers. pors Gas Age 91:34-6+ F 11 '43

AMERICAN mining congress
American mining congress reviews its activities in 1942; secretary's report. J. D. Conover. Min Cong J 29:20-3 Mr '43

Coal division committee on safety; plans and procedure for carrying on work. L. C. Campbell. II Min Cong J 29:35-7 Ja '43

Coal division 8th annual conference of committees, Pittsburgh, Dec. 1. Coal Age 48: 94+ Ja '43; Min Cong J 28:43-7 D '43

Coal division, 20th annual meeting, Cincinnati, July 19-20; officers, program, speakers, papers. Min Cong J 29:23-47 J1; 23-32+ Ag '43; Coal Age 48:77-87 Ag '43

Coal mine war conference; program. Min Cong J 29:29-40 My '43

Elects new directors. Min Cong J 29:61 Mr '43

Western division

War conference, Salt Lake City, Nov. 16-17. Min Cong J 28:14-26+ D '42; Eng & Min J 143:81-2 D '42

AMERICAN museum of natural history
Department of experimental biology. Science 97:460 My 21 '43

New habitat groups in the Whitney memorial hall of birds. Science 97:257 Mr 19 '43

AMERICAN museum of safety
American museum steps up '43 safety program. D. B. Armstrong. East Underw 44: 12 Ja 8 '43

AMERICAN newspaper publishers association
Annual convention, New York. Ptr Ink 203: 20-1 Ap 30 '43; Comm & Fin Chr 157:1688 My 6 '43

AMERICAN oil chemists' society
Annual meeting, 34th, New Orleans, May 13-14. Oil Paint & Drug Rep 143:7+ My 24 '43
Fall meeting, 17th, Chicago. Chem & Eng N 21:1740-1 O 25 '43

AMERICAN ornithologists' union
Annual meeting, 60th, Philadelphia, Oct. 12-16. Science 96:443 N 13 '42

AMERICAN paper and pulp association
Action program for industry. Paper Tr J 117:9-10 Ag 26 '43

Annual meeting, 66th, New York, Feb. 14-19. Paper Tr J 116:101-2+ F 18 '43

AMERICAN petroleum industries committee
A.P.I.C. marks 10th anniversary; portraits of state committee members. Nat Pet N 34:32-3 S 9; 34 S 30; 40-1 N 18; 42-3 D 2; 36-7 D 9; 32-3 D 23; 35 D 30 '42; 35:35-6 Ja 6; 1 Je 16; 1 J1 14 '43

AMERICAN petroleum institute
Annual meeting, 23d, Chicago. Oil & Gas J 41:54-7, 76-8, 263-4, 266 N 12; 22-3, 52, 54 N 19 '42; Nat Pet N 34:15-16+ N 18 '42

Eastern district of Production division, annual meeting, Pittsburgh. Oil & Gas J 41: 50-1 Ap 15 '43

Mid-continent district of Production division meeting, Tulsa, May 20-21. Oil & Gas J 42:40-1 My 27 '43; Nat Pet N 35:20 My 26 '43

Pacific Coast district of Production division meeting, Los Angeles, March 23. Oil & Gas J 41:22-3 Ap 1 '43

Resolutions adopted by the board of directors; extracts from minutes of board and executive-committee meetings; and division and department reports to the board; list of officers, directors and committee members. Am Pet Inst Proc 23(1):83-113 '42
Southwestern district of Production division meeting, Houston, April 29-30. Oil & Gas J 41:57, 178-9 My 6 '43

AMERICAN pharmaceutical manufacturers association

Annual meeting, 36th, Hot Springs, Va. Oil Paint & Drug Rep 143:7+ Je 21 '43

Midyear meeting, New York, Dec. 7-8. Oil Paint & Drug Rep 142:7+ D 14 '42

AMERICAN philosophical society
Officers and members elected. Science 97:418 My 7 '43

AMERICAN physical society
Current trends in the American physical society; discussion on greater participation in affairs of the Society by physicists in industry. J Ap Phys 14:437-42 S '43

Proceedings, annual meeting, New York, Jan. 22-23; with abstracts of papers. Phys R 63:215-26 Mr 1 '43

Proceedings, meeting at Chicago, Nov. 27-28, 1942; abstracts of papers. Phys R 63:58-66 Ja 1 '43

Proceedings, meeting at Los Angeles, Dec. 29; abstracts of papers. Phys R 63:138-41 F 1 '43

Proceedings, meeting at Stanford university, July 10, 1943; abstracts of papers. Phys R 64:186-9 S 1 '43

Proceedings of the American physical society and of its Ohio section, Columbus meeting, April 30-May 1, 1943; abstracts of papers. Phys R 63:459-63 Je 1 '43

AMERICAN physiological society
Cancellation of the annual meeting. Science 97:86 Ja 22 '43

AMERICAN phytopathological society
Election of officers; War committee resolutions. Science 97:323-4 Ap 9 '43

AMERICAN potash and chemical corporation
Control taken over by Alien property custodian. Comm & Fin Chr 156:1736 N 16 '42

AMERICAN power and light company
Annual report. Comm & Fin Chr 157:2341-2 Je 21 '43

Bond purchase program explained, files dissolution petition. Comm & Fin Chr 158:1726 N 1 '43

Capital structures of American and Electric Power and Light called mess from any viewpoint. Comm & Fin Chr 157:2142 Je 7 '43

Debutante 6s/2016. O. Ely. Mag of Wall St 71:362 Ja 9 '43

Description of holding companies. Pub Util 32:39-40 J1 8 '43

Problems for American Power & Light; SEC unlikely to permit retirement of part of bonds. W. T. Hyde, jr. Barron's 22:18 N 16 '42

AMERICAN president lines (formerly Dollar steamship lines)

May be sold to private interests. Comm & Fin Chr 158:155 J1 12 '43

AMERICAN public works association

Annual meeting, Cleveland, Oct. 18-21; abstracts of papers. Eng N 129:729-31 N 19 '42
 Annual meeting, 49th, Chicago, Oct. 23-26, Concrete (mill sec) 51:242+ N '43; Eng N 131:660, 751-3 N 4, 18 '43; Roads & Sts 86: 54-5+ N '43

AMERICAN pulp and paper mill superintendents association

Abridgments of papers presented at the annual convention, New York, June 15-17. Paper Ind 25:420-2, 526+, 552+ JI-S '43
 Annual meeting, 24th, New York, June 15-17. Paper Tr J 116:37-8+ Je 24 '43; Paper Ind 25:390+ JI '43

AMERICAN radiator and standard sanitary corporation

Low-priced stocks for large percentage gains. Mag of Wall St 71:633-4 Mr 20 '43

AMERICAN railway bridge and building association

Annual meeting, Chicago, Oct. 20-21. Ry Age 115:682-3, 729-32, 763-5+ O 30-N 13 '43

AMERICAN railway engineering association

Convention in print; president's report; secretary's report; committee reports. Ry Age 114:550-74 Mr 20 '43

AMERICAN road builders association

Annual meeting, Chicago, May 4-7. Roads & Sts 86:44-7+ My '43; Concrete 51:4-5 Je '43; Roads & Bridges 81:38+ Je '43; Rock Prod 46:90-2 Je '43

AMERICAN rolling mill company

Annual report. Comm & Fin Chr 157:2142 Je 7 '43

Another look. Mag of Wall St 71:298 D 26 '42

AMERICAN savings and loan institute

C. Plumb national president of American savings and loan institute; other officers. Comm & Fin Chr 157:751 F 25 '43
 Savings and loan institute marks fifteenth graduation. D. C. Vaile. Comm & Fin Chr 157:1965 My 27 '43

AMERICAN smelting and refining company

Annual report. Comm & Fin Chr 158:856 Ag 30 '43

AMERICAN snuff company

Thumbnail stock appraisal. Mag of Wall St 72:252 Je 12 '43

AMERICAN society for metals

Annual meeting, Chicago. Steel 113:39-41 O 25 '43

Our two great metal societies; competitive situation between A.I.M.E., Metals division, and A.S.M.; editorial. Metals & Alloys 17: 957+ My '43; Discussion. 18:279, 281, 308 Ag '43

Technical program and reports of officers, 24th annual convention, Cleveland, Oct. 12-16, 1942. Am Soc for Metals Trans 30:1463-98 D '42

AMERICAN society for testing materials

ASTM issues 32 new standards; some to save vital materials. Steel 112:50+ Ja 25 '43

Annual meeting, 46th, Pittsburgh, June 28-July 1. Chem & Eng N 21:1163-6+ JI 25 '43; Eng N 131:159-61 JI 15 '43; Ry Age 115: 53-5 JI 10 '43; Rubber Age 53:353 JI '43; Foundry 71:107+ Ag '43; Iron Age 152:70-4 Ag 5 '43

Relation of the A.S.T.M. to the textile industry. H. J. Ball. Am Dyestuff Rep 32: 419-22+ S 27 '43

Textile committees meeting, New York, Oct. 20-22. Rayon 24:570-1 N '43

AMERICAN society of chartered life underwriters

Annual meeting, Pittsburgh, Sept. 16. Nat Underw (Life ed) Daily ed 47:13, 21 S 17 '43; Weekly Underw 149:673+ S 25 '43

AMERICAN society of civil engineers

A.S.C.E. expands its activities relating to employment conditions; local sections authorized to set up machinery under which engineers can be independently represented in collective bargaining. Eng N 131:645 O 28 '43

Annual convention, 73d, Los Angeles, July 28-29. Eng N 131:225-6+ Ag 5 '43

Annual meeting, New York, Jan. 20-21. Eng N 130:105, 109-12 Ja 28 '43

Awards of the American society of civil engineers. Science 97:85 Ja 22 '43

Collective bargaining and salaries for professional engineering employees; bargaining units organized in local sections. E. B. Whitman. Civil Eng 13:513-14 N '43

Collective bargaining for professional engineers; report of the Society's committee on employment conditions. Civil Eng 13: 552-3 N '43

Five engineers awarded honorary membership. pors Civil Eng 13:48-54 Ja '43

Life memberships are awarded to 162. Civil Eng 13:56 Ja '43

Sanitary engineering division meeting, New York, Jan. 21-22. Water Works & Sewerage 90:56-60, 101-4 F-Mr '43

Society prizes and medals to be awarded. pors Civil Eng 13:45-7 Ja '43

Society's ninetieth year; annual report of the board of direction for the year ending December 31, 1942. Civil Eng 13:110-11 F '43

AMERICAN society of heating and ventilating engineers

Annual meeting, 49th, Cincinnati, Jan. 25-27. Heating-Piping 15:141-56 Mr '43; Dom Eng 161:66-8 F '43

1943 officers. Am Bld 65:58 F '43

Semi-annual meeting, Pittsburgh, June 7-8. Heating-Piping 15:373-86 JI '43; Power Pl Eng 47:108+ JI '43; Heat & Ven 40:80, 82 JI '43

AMERICAN society of mechanical engineers

Annual meeting, 63d, New York, Nov. 30-Dec. 4. Mech Eng 65:55-73, 76-81, 147-8 Ja-F '43; Steel 111:77-8+ D 7 '42

Annual meeting, 63d, New York, Nov. 30-Dec. 4; abstracts of power plant papers. Power Pl Eng 47:78-81 Ja '43; Power 86: 963-72 Mid-D '42

Council and finance committee reports for 1942. Mech Eng 65:42-54 Ja '43

Engineers against time; A.S.M.E. and national defense. J. L. Walsh. Mech Eng 65:406-7 Je '43

Joint meeting with Engineering institute of Canada, Toronto, Sept. 30-Oct. 2. Mech Eng 65:828-31 N '43

Manual for discussion-type meetings. Mech Eng 65:523-4 JI '43

Program, 64th annual meeting, New York, Nov. 29-Dec. 3. Mech Eng 65:843-6+ N '43

Railroad division, annual meeting, New York, Dec. 3. Ry Age 113:994-5 D 19 '42

Semi-annual meeting, Los Angeles, June 14-17. Mech Eng 65:603-4 Ag '43

Semi-annual meeting, Los Angeles, June 14-17; abstracts of petroleum papers. Oil & Gas J 42:85-6, 132+ S 24 '43

Society records. A S M E Trans 65:1-46 sec 2 F '43

Spring meeting, Davenport, Iowa, April 26-28. Mech Eng 65:455-7 Je '43

AMERICAN society of newspaper editors

World guarantee of press freedom asked; annual meeting. Comm & Fin Chr 157:760 F 25 '43

AMERICAN society of refrigerating engineers

Spring meeting, Cleveland, June 1-3. Refrig Eng 46:42-6 JI '43

Year in review. W. R. Hainsworth. Refrig Eng 45:20+ Ja '43

AMERICAN society of tool engineers

Annual meeting, 11th, Milwaukee, March 25-27. Iron Age 151:61-6 Ap 1 '43; Am Mach 87:1121 Ap 1 '43; Steel 112:66-70 Ap 5 '43; Mach 49:199 Ap '43; Automotive & Aviation Ind 88:23+ Ap 15 '43

Semi-annual meeting, Indianapolis, Oct. 11-12. Iron Age 152:44-7+ O 21 '43; Am Mach 87:120f-120g O 28 '43; Steel 113:52-4 O 18 '43

AMERICAN society of tropical medicine

Annual meeting, 38th, Richmond, Nov. 1942. Science 97:223-4 Mr 5 '43

AMERICAN standards association

ASA names Chandross as new commodities engineer. Ind Stand 14:193 Je '43

ASA sets up Inter-American department. Ind Stand 13:301 D '42

Annual meeting, December 11; officers; reports. Ind Stand 14:1-7 Ja '43

48 companies become new ASA members. Ind Stand 14:12 Ja '43

Four new members on ASA board of directors. pors Ind Stand 14:75-6 Mr '43

- AMERICAN statistical association**
Reports of the Association. Am Stat Assn J 38:113-24 Mr '43
- AMERICAN steel warehouse association**
Annual meeting, 34th, New York. Iron Age 151:104-5 My 27 '43; Steel 112:35-6 My 31 '43
- AMERICAN stove company**
Stocks with three-way profit prospects. Mag of Wall St 71:710+ Ap 3 '43
- AMERICAN superpower corporation (Delaware)**
Exchange offer made to holders of first preferred stock. Comm & Fin Chr 157:1417-18 Ap 19 '43
- AMERICAN telephone and telegraph company**
Annual report. Comm & Fin Chr 157:686-7 F 22 '43
Asked to reduce toll rates. Comm & Fin Chr 156:1947 N 30 '42
Dividend outlook. O. J. Gingold. Barron's 23:1 Ag 2 '43
Places transcontinental telephone cable in service. Comm & Fin Chr 157:5 Ja 4 '43
To reduce long distance over-time rates; FCC to end investigation. Comm & Fin Chr 157:341 Ja 25 '43
- AMERICAN tobacco company**
Annual report. Comm & Fin Chr 157:986 Mr 15 '43
Another look. Mag of Wall St 72:638 S 18 '43
- AMERICAN trade association executives**
Annual convention, New York. Ptr Ink 201:84 N 13 '42
- AMERICAN transit association**
Eastern conference on wartime transit problems, New York, May 5-7. Bus Transportation 22:42-5 My '43
New setup for Association activities. Mass Transportation 39:181 My '43
- AMERICAN type founders, inc.**
Another look. Mag of Wall St 71:428 Ja 23 '43
Subcontracting made to work. J. Haydock. flow chart il Am Mach 87:83-6 S 2 '43
Thumbnail stock appraisal. Mag of Wall St 72:683 O 2 '43
- AMERICAN viscose corporation**
News from the chemists' front. il Barron's 23:22 S 20 '43
Peace-time leaders. Mag of Wall St 72:552 Ag 21 '43
- AMERICAN water works and electric company**
Descriptions of holding companies. O. Ely. Pub Util 32:232-5 Ag 19 '43
State commission asks SEC to investigate service arrangements. Comm & Fin Chr 157:517 F 8 '43
- AMERICAN water works association**
Annual meeting, Cleveland, June 15-18. Eng N 130:911-12+ Je 24 '43; Water & Sewage 81:11-16, 40-6 J '43; Water Works & Sewerage 90:249-54, 291-304 J '43
Board of directors annual meeting, New York, Jan. 18-19. Water Works & Sewerage 90:53-5 F '43
Constitution and by-laws. Am Water Works Assn J 35:1101-12 Ag '43
1942 conference, Chicago; with list of papers. Am Water Works Assn J 34:1927-36 D '42
Report of the committee on water works practice. Am Water Works Assn J 35:320-8 Mr '43
Report of the publication committee. Am Water Works Assn J 35:329-32 Mr '43
Tentative standardization procedure. Am Water Works Assn J 35:1097-1100 Ag '43
- Canadian section**
- Annual meeting, Hamilton, Ont. April 7-9. Water & Sewage 81:27-34+ Ap; 28-9+ My '43
- AMERICAN welding society**
Annual meeting; presentation of medals and awards. Welding J 21:784+ N '42
Annual meeting, 24th, Chicago. Iron Age 152:59-65 O 28 '43; Steel 113:42-4+ O 25 '43
Board of directors meeting, Sept. 16. Welding J 22:934+ N '43
By-law amendments. Welding J 22:546+ J '43
1942 year book, map Welding J 21:1-116, suppl-20 sec 2 D '42
- AMERICAN wood preservers' association**
Annual meeting, 39th, Chicago, April 27. Ry Age 114:864-6 My 1 '43
- AMERICAN woolen company**
Securities disturbing investors. J. S. Williams. Mag of Wall St 72:690+ O 2 '43
- AMERICANS**
American man-in-the-street; by his leader looked upon as a thirteen-year-old. il Fortune 26:142-4 D '42
Government by horse sense. Fortune 27:128+ Je '43
- AMES, Joseph Sweetman, 1864-1943**
Sketch. Franklin Inst J 236:313 S '43
Sketch. L. J. Briggs. Science 98:100-1 J '43
- AMHERST college**
War department civilian protection school at Amherst college, Amherst, Mass. H. C. Hall. N E Water Works Assn J 56:294-301 S '42
- AMIDES**
Amide-substituted phenylarsine oxides and their derivatives; a group of compounds of possible utility in the treatment of syphilis. H. Eagle and others. Am Chem Soc J 65:1236-7 Je '43
Electrolytic reduction of amides; N,N-dimethylvaleramide and acetanilide. S. Swann, jr. bibliog Electrochem Soc Trans 84 (preprint 8):67-73 O '43
Interaction of amides with amines; a general method of acylation. A. Galat and G. Elion. bibliog Am Chem Soc J 65:1566-7 Ag '43
Intermolecular forces and chain configuration in linear polymers; the effect of N-methylation on the X-ray structures and properties of linear polyamides. W. O. Baker and C. S. Fuller. bibliog pl diags Am Chem Soc J 65:1120-30 Je '43
Use of xanthidrol as a reagent for the characterization of primary amides. R. F. Phillips and B. M. Pitt. bibliog Am Chem Soc J 65:1355-7 J '43
- Analysis**
- Amide detergent analysis; abstract. Vizern and Guillot. Soap & San Chem 19:63 S '43
- AMIDINES**
Some reactions of amidines with derivatives of malonic acid. G. W. Kenner and others. Chem Soc J p388-90 Ag '43
Some sulphonyl derivatives of amidines and imino-ethers. H. J. Barber. Chem Soc J p101-4 Mr '43
- See also*
Propamidine
- AMIDINOPHENYLARSONIC acid**
Amidino arsenicals; p-aminodiphenylarsonic acid and 4,4'-diamidinoarsenobenzene. F. Linsker and M. T. Bogert. Am Chem Soc J 65:932-4 My '43
- AMINES**
Action of cuprous oxide on diazotised amines in ethyl-alcoholic acid solution. H. H. Hodgson and H. S. Turner. Chem Soc J p748-9 D '42
Action of cuprous oxide on diazotised amines; reactions in solutions of various alcohols and organic solvents; preparation of 1,6-dinitronaphthalene. H. H. Hodgson and H. S. Turner. Chem Soc J p86-9 Mr '43
Aldehyde amines; a new acid in the dyehouse. P. H. Anderson. Textile Col 65:367-8 Ag '43; Abstract. Chem Ind 53:357 S '43
Alkylation of amines. J. H. Billman, A. Radike and B. W. Mundy. bibliog Am Chem Soc J 64:2977-8 D '42
Association of boron trifluoride addition compounds with amines in non-polar solvents. J. R. Bright and W. C. Fernelius. Am Chem Soc J 65:735-6 Ap '43
Basicity studies of tertiary vinyl amines. R. Adams and J. E. Mahan. bibliog Am Chem Soc J 64:2588-93 N '42
Catalytic interchange of groups in aliphatic amines. K. Nozaki. Am Chem Soc J 64:2920-3 D '42
Color test for some highly reactive organo-metallic compounds. H. Gilman and L. A. Woods. bibliog Am Chem Soc J 65:33-4 Ja '43

AMINES—Continued

Condensation of unsaturated amines with aromatic compounds; the preparation of β -substituted phenethylamines. A. W. Weston, A. W. Ruddy and C. M. Suter. *bibliog Am Chem Soc J* 65:674-7 Ap '43

Cyclobutane derivatives; the degradation of *cis*- and *trans*-1,2-cyclobutanedicarboxylic acids to the corresponding diamines. E. R. Buchman and others. *bibliog Am Chem Soc J* 64:2696-700 N '42

Electrolytic reduction of trinitro aromatic compounds to triamines by use of a carrier catalyst. R. W. Lewis and O. W. Brown. *bibliog Electrochem Soc Trans* 84 (preprint 1):1-9 O '43

Identification of organic bases by means of the optical properties of dilutates (nitro-barbiturates); aliphatic amines. E. M. Plein and B. T. Dewey. *bibliog diags Ind & Eng Chem Anal ed* 15:534-6 Ag 15 '43

Interaction of amides with amines: a general method of acylation. A. Galat and G. Elion. *bibliog Am Chem Soc J* 65:1566-7 Ag '43

Mechanism of indole formation from phenacylarylamines. A. F. Crowther, F. G. Mann and D. Purdie. *bibliog Chem Soc J* p58-68 F '43

Method for the rapid identification of the arylamine residue in compounds of the naphtol AS series. E. J. Cross and P. W. Carlene. *bibliog Soc Dyers & Col J* 59:191-2 S '43

Optical crystallographic studies with the polarizing microscope; ellipsoidal dispersion in the picrates of various amines. J. Mitchell, Jr. and W. M. D. Bryant. *bibliog J Am Chem Soc J* 65:128-37 F '43

Preparation of mixed, secondary aliphatic amines, RR'NH. H. R. Henze and D. D. Humphreys. *bibliog Am Chem Soc J* 64:2878-80 D '42

Reaction between thioamides and primary amines. M. J. Schlatter. *bibliog Am Chem Soc J* 64:2722 N '42

Reaction of carbon disulfide with amine sulfides. E. S. Blake. *bibliog Am Chem Soc J* 65:1267-9 JI '43

Reaction of *ortho*-quinones and *ortho*-quinonimines with primary amines. G. McCoy and A. R. Day. *bibliog Am Chem Soc J* 65:1956-9 O '43

Steric factors in quaternary salt formation. W. G. Brown and S. Fried. *Am Chem Soc J* 65:1841-5 O '43

Studies on high molecular weight aliphatic amines and their salts; ionization constants of primary and symmetrical secondary amines in aqueous solution. C. W. Hoerr, M. R. McCorkle and A. W. Ralston. *bibliog Am Chem Soc J* 65:328-9 Mr '43

Studies on high molecular weight aliphatic amines and their salts; the behavior of various salts of dodecylamine in water, ethanol and benzene. C. W. Hoerr and A. W. Ralston. *bibliog Am Chem Soc J* 64:2824-9 D '42

Studies on high molecular weight aliphatic amines and their salts; transference numbers of some primary amine hydrochlorides in aqueous solution and their significance in the interpretation of the micelle theory. C. W. Hoerr and A. W. Ralston. *bibliog Am Chem Soc J* 65:976-83 My '43

Symmetrical biaryls from diazotized amines; reducing agents. E. R. Atkinson and others. *bibliog Am Chem Soc J* 65:476 Mr '43

Tertiary alkyl primary amines, RR'CNH₂. H. R. Henze, B. B. Allen and W. B. Leslie. *Am Chem Soc J* 65:87-9 Ja '43

Tertiary alkyl primary amines, RR'CNH₂. H. R. Henze and T. R. Thompson. *bibliog Am Chem Soc J* 65:1422-5 JI '43

α,β -Unsaturated aminoketones; reaction of piperidine and N-methylbenzylamine with bromine derivatives of benzalacetone and benzalacetophenone. N. H. Cromwell and I. H. Witt. *Am Chem Soc J* 65:308-12 Mr '43

α,β -Unsaturated aminoketones; reaction of primary amines with 1,3-diketones and bromine derivatives of benzalacetophenone; ethylene imines. N. H. Cromwell, R. D. Babson and C. E. Harris. *bibliog Am Chem Soc J* 65:312-16 Mr '43

α,β -Unsaturated aminoketones; the mechanisms of the reactions of secondary amines with α -bromo- α,β -unsaturated ketones. N. H. Cromwell and D. J. Cram. *Am Chem Soc J* 65:301-8 Mr '43

X-ray studies of reactions of cellulose in non-aqueous systems; interaction of cellulose and primary amines. W. E. Davis and others. *bibliog Am Chem Soc J* 65:1294-9 JI '43

AMINOACETOPHENONE

Mechanism of indole formation from phenacylarylamines. A. F. Crowther, F. G. Mann and D. Purdie. *bibliog Chem Soc J* p58-68 F '43

AMINO acid oxidase

Effect of castration and testosterone propionate on d-amino acid oxidase activity in the mouse. L. C. Clark, Jr., C. D. Kochakian and R. P. Fox. *bibliog Science* 98:89 JI 23 '43

AMINO acids

Amino acids and human requirements. W. E. Gaunt. *bibliog Chem & Ind* 62:127-30; Discussion, 130-1 Ap 3 '43

Amino acids; glycine. J. H. Billman and E. E. Parker. *Am Chem Soc J* 65:761-2 My '43

Amino acids; some essential, some not, to human beings. *Sci Am* 169:81 Ag '43

Anhydrides of basic amino-acids. D. W. Adamson. *Chem Soc J* p39-40 Ja '43

Basic amino acids in strains of tobacco mosaic virus. C. A. Knight. *bibliog Am Chem Soc J* 64:2734-6 D '42

Chemistry of allergens; isolation and properties of an active protein-polysaccharide fraction, CB-1A, from castor beans. J. R. Spies and E. J. Coulson. *bibliog Am Chem Soc J* 65:1720-5 S '43

Derivatives of N-carboxy- α -amino acid esters. M. Frankel and E. Katchalski. *bibliog Am Chem Soc J* 65:1670-4 S '43

Hydroxyalkylamino-acids. W. Cocker. *Chem Soc J* p373-8 Ag '43

Map of the natural amino acids. G. Toennies. *Science* 97:492-3 My 28 '43

Observations on the biological value of a mixture of essential amino acids. A. A. Albanese and V. Irby. *Science* 98:286-8 S 24 '43

Oxidation of amino acids by hydrogen peroxide in formic acid. G. Toennies and R. P. Homiller. *bibliog Am Chem Soc J* 64:3054-6 D '42

Physicochemical aspects of bacterial growth; growth of *bact. lactis aerogenes* in media containing ammonium sulphate or various amino-acids. R. M. Lodge and C. N. Hinchelwood. *Chem Soc J* p205-13 My '43

Quantitative investigations of amino acids and peptides; equilibria between amino acids and formaldehyde; arginine and lysine. E. H. Frieden, M. S. Dunn and C. D. Coryell. *J Phys Chem* 47:118-33 F '43

Quantitative investigations of amino acids and peptides; equilibria between amino acids and formaldehyde; glutamic acid. E. H. Frieden, M. S. Dunn and C. D. Coryell. *bibliog J Phys Chem* 47:20-4 Ja '43

Quantitative investigations of amino acids and peptides; equilibria between amino acids and formaldehyde; leucine and N-methyl-leucine. E. H. Frieden, M. S. Dunn and C. D. Coryell. *bibliog J Phys Chem* 47:10-20 Ja '43

Quantitative investigations of amino acids and peptides; equilibria between histidine and formaldehyde. E. H. Frieden, M. S. Dunn and C. D. Coryell. *J Phys Chem* 47:85-94 F '43

Quantitative investigations of amino acids and peptides; structural characteristics of some amino acids. G. Albrecht and others. *bibliog J Phys Chem* 47:24-30 Ja '43

Raman spectra of amino acids and related compounds; sarcosine, ethanolamine, choline, betaine and betaine derivatives. J. T. Edsall. *bibliog Am Chem Soc J* 65:1767-70 S '43

See also
Carbamic acid
Tryptophan

Analysis

Chromatography as a means of separating amino acids. J. L. Wachtel and H. G. Cassidy. *bibliog Am Chem Soc J* 65:665-8 Ap '43

AMINO acids—Analysis—Continued

Microbiological determination of amino acids. K. A. Kuiken and others. *Science* 98:266 S 17 '43

AMINOACRIDINE

Improved syntheses of aminoacridines; 2,5-diamino-7-ethoxyacridine, the base of rivanol. A. Albert and W. Gledhill. *bibliog Soc Chem Ind J* 61:159-60 O '42

N-substituted 2-methoxy-6-chloro-9-aminoacridines. J. H. Burckhalter and others. *Am Chem Soc J* 65:2012-15 O '43

Systematic investigation of the colour and dyeing properties of the aminoacridines; the five monoaminoacridines. A. Albert and C. L. Bird. *bibliog Soc Dyers & Col J* 59:74-6 Ap '43

AMINO alcohols. See Alcohols

AMINO arsenosphenol. See Mapharsen

AMINOAZOBENZENE

Toxicity and histopathology of some azo compounds as influenced by dietary protein. M. I. Smith, R. D. Lillie and E. F. Stohlmann. *bibliog Pub Health Rep* 58:304-17 F 19 '43

AMINO BENZOIC acid

p-Aminobenzoic acid detoxication of carbarson (p-carbamino phenyl arsonic acid) and certain other pentavalent phenyl arsonates administered in massive doses to rats. J. H. Sandground. *bibliog Science* 97:73-4 Ja 15 '43

Electrolytic reduction of p-nitrobenzoic acid to p-aminobenzoic acid. P. H. Ravenscroft, R. W. Lewis and O. W. Brown. *bibliog Electrochem Soc Trans* 84 (preprint 2) 11-17 O '43

Increased synthesis of p-aminobenzoic acid associated with the development of sulfonamide resistance in staphylococcus aureus. M. Landy and others. *bibliog Science* 97:265-7 Mr 19 '43

Pigment production by tubercle bacillus in the presence of P-aminobenzoic acid. R. L. Mayer. *Science* 98:203-4 Ag 27 '43

Preparation of aminobenzoic acid esters of substituted monoalkyl amino alcohols. W. F. Ringk and E. Epstein. *bibliog Am Chem Soc J* 65:1222-6 Je '43

AMINO BENZOQUINOLINE

Synthesis of 1-substituted aminobenzo (f) quinolines. A. C. Mueller and C. C. Hamilton. *bibliog Am Chem Soc J* 65:1017-18 Je '43

AMINO BENZOYLENEUREA

Synthesis of aminobenzoyleneureas and of dihydroxyquinoxalines isomeric with luminol. E. H. Huntress and J. V. K. Gladding. *bibliog Am Chem Soc J* 64:2644-9 N '42

AMINO compounds

Derivatives of 1:2:4:5-tetrachlorobenzene; nitro- and amino-compounds. A. T. Peters, F. M. Rowe and D. M. Stead. *Chem Soc J* p233-5 My '43

Synthesis of amino sugars. W. H. Myers and G. J. Robertson. *bibliog Am Chem Soc J* 65:8-11 Ja '43

α,β -Unsaturated aminoketones. N. H. Cromwell and others. *Am Chem Soc J* 65:301-19 Mr '43

AMINODIMETHYLANILINE

p-Aminodimethylaniline; the o-chloro- and -nitro-derivatives. E. E. Ayling, J. H. Gorvin and L. E. Hinkel. *Chem Soc J* p755-8 D '42

Use of p-aminodimethylaniline as an indicator for free chlorine. W. A. Moore. *Am Water Works Assn J* 35:427-8 Ap '43

AMINODIPHENYLACETAMIDE

N,N'-substituted α -aminodiphenylacetamides. J. H. Billman and P. H. Hidy. *bibliog Am Chem Soc J* 65:760-1 My '43

AMINOHYDROXY compounds

Aminoalcohol derivatives; some industrial applications. *Chem Age (Lond)* 49:333-4 O 2 '43

Industrial applications of the nitroparaffins. W. E. Scheer. *Chem Ind* 52:475-6 Ap '43

AMINOPHENOL

5-Amino-2-hydroxybenzenesulphonamide and some related compounds. R. T. Williams. *Chem Soc J* p708-9 N '42

AMINOPHTHALHYDRAZIDE. See Luminol

AMINOPROPIONITRILES

N-substituted 2-methoxy-6-chloro-9-aminoacridines. J. H. Burckhalter and others. *Am Chem Soc J* 65:2012-15 O '43

AMINOSTYRYLACRIDINE

Preparation and therapeutic properties of certain acridine derivatives; 5-styrylacridines and their quaternary salts. W. Sharp, M. M. J. Sutherland and F. J. Wilson. *Chem Soc J* p5-7 Ja '43

AMINOTHIAZOLE

Researches on thiazoles; some acyl derivatives of 2-aminothiazole. E. J. Masters and M. T. Bogert. *Am Chem Soc J* 64:2712-13 N '42

AMIOCA. See Cornstarch

AMMETERS

Determining exact horsepower needed for a particular job may reveal important possible savings. J. A. Setter. *Steel* 112:34-1 F 22 '43; Same. *Concrete (mill sec)* 51:104-1 Ja '43; Same. *Elec West* 90:81 Ap '43

Electric instruments; performance at higher than normal operating frequencies; simple, practical methods of checking accuracy. S. C. Richardson. *il diags Gen Elec R* 46:565-9 O '43

How to interchange voltmeters and ammeters. E. G. Key. *diags Power Pl Eng* 47:90-2 O '43

How to select and apply ammeter shunts. P. Mac Gahan. *Elec W* 118:1966-1 D 12 '42

Voltmeters, ammeters and wattmeters; instruments make use of three electrical effects according to the type of measurement. *Elec West* 90:47-8 Ja '43

See also

Milliammeters

AMMINES. See Ammino compounds

AMMINO compounds

Dissociation pressures of compounds of ammonia and trideuterammonia with some metallic salts. A. E. Hart and J. R. Partington. *diags Chem Soc J* p104-18 Mr '43

Interchange of hydrogen isotopes with complex salts; kinetics of the interchange with platinumous and palladous tetrammines. J. S. Anderson and others. *diag Chem Soc J* p367-72 Ag '43

Studies in the chromamines; preparation of luteo salts. C. L. Rollinson and J. C. Bailar, jr. *bibliog Am Chem Soc J* 65:250-4 F '43

AMMONIA

Addition of metals to some phenylated olefins in liquid ammonia solution. H. Gilman and J. C. Bailie. *Am Chem Soc J* 65:267-8 F '43

Ammonia acids many industries. *Sci Am* 167:255 D '42

Carbamic acid peptides; a new type of peptide and a new possible source of ammonia from proteins. A. H. Corwin and C. I. Damerel. *bibliog Am Chem Soc J* 65:1974-84 O '43

Chlorine azide, ClN₃; properties, behavior toward liquid ammonia, pentane, metals, phosphorus. W. J. Frierson, J. Kronrad and A. W. Browne. *bibliog Am Chem Soc J* 65:1696-8 S '43

Complex ions; monamine-silver ion. W. C. Vosburgh and R. S. McClure. *Am Chem Soc J* 65:1060-3 Je '43

Control of ammonia in the electrodeposition of brass. J. H. Monaweck. *Electrochem Soc Trans* 82 (preprint 28):331-8 O '42; Same. *Metal Finishing* 41:80-2 F '43

Corrosion of iron by ammonia. H. J. McDonald and M. Feller. *Chem & Met Eng* 50:111 Ag '43

Differences in the vapor pressures, heats of vaporization, and triple points of nitrogen (14) and nitrogen (15) and of ammonia and trideuterammonia. I. Kirshenbaum and H. C. Urey. *bibliog diag J Chem Phys* 10:706-17 D '42

Dissociation pressures of compounds of ammonia and trideuterammonia with some metallic salts. A. E. Hart and J. R. Partington. *diags Chem Soc J* p104-18 Mr '43

Effect of active nitrogen and of certain nitrogen compounds on catalytic properties of carbon. P. F. Bente and J. H. Walton. *bibliog J Phys Chem* 47:329-37 Ap '43

AMMONIA—Continued

Hydrogenation of the triple bond. A. L. Henne and K. W. Greenlee. *Am Chem Soc J* 65:2020-3 O '43

Infra-red prism spectrograph as a precision instrument. R. A. Oetjen, C. Kao and H. M. Randall. *bibliog il diag R Sci Instr* 13:515-23 D '42

Kinetics of the ammonolysis of 9-phenyl-9-chlorofluorene by liquid ammonia. P. M. Williamson, R. C. Anderson and G. W. Watt. *bibliog Am Chem Soc J* 65:49-51 Ja '43

Liquid ammonia research, 1941. G. W. Watt, W. B. Leslie and T. E. Moore. *Chem R* 31:525-36 *bibliog*(97 references, p534-6) D '42

Liquid ammonia research, 1942. G. W. Watt, W. B. Leslie and T. E. Moore. *bibliog*(72 references) *Chem R* 32:219-29 Ap '43

Magnetic susceptibilities of metals dissolved in liquid ammonia. S. Freed and N. Sugerman. *bibliog diags J Chem Phys* 11:354-60 Ag '43

Reaction of indene and styrene bromohydrins with sodium sulfite; cleavage of alkali sulfonates with sodium in liquid ammonia. C. M. Suter and H. B. Milne. *Am Chem Soc J* 65:582-4 Ap '43

Reactions of cobalt(III), cobalt(II), and iron(II) oxides in liquid ammonia. T. E. Moore and G. W. Watt. *bibliog Am Chem Soc J* 64:2772-5 D '42

Reactions of nickel(II), nickel(II,III), and iron(III) oxides in liquid ammonia. R. E. Holt and G. W. Watt. *Am Chem Soc J* 65:938-9 My '43

Reduction of potassium cyanopalladate (II) by potassium in liquid ammonia; a zerovalent compound of palladium. J. J. Burbage and W. C. Fernelius. *bibliog Am Chem Soc J* 65:1484-6 Ag '43

Reduction of quinoline and certain substituted quinolines in liquid ammonia. C. M. Knowles and G. W. Watt. *bibliog Am Chem Soc J* 65:410-12 Mr '43

Simple demonstration of the oxidation of ammonia to nitric acid. S. S. Hauben and R. S. Siegel. *diag J Chem Educ* 20:166 Ap '43

Sorption of NH_3 on montmorillonitic clay. I. Cornet. *bibliog diags J Chem Phys* 11:217-26 My '43

Study of the products obtained by the reducing action of metals upon salts in liquid ammonia solution; the reduction of complex cyanides. J. W. Eastes and W. M. Burgess. *Am Chem Soc J* 64:2715-16 N '42

Thermal diffusion with ammonia. W. W. Watson and D. Woernley. *bibliog Phys R* 63:181-4 Mr '43

See also

Ammonium sulfate

Manufacture

Ammonia converter of welded 5% chromium steel. J. Schuyten. *il diags Metal Prog* 43:218-23 F '43; Same cond. *Nat Pet N* 35 pt 2:R406, R408-9 S 1 '43

Design and operation of a gas liquor concentration plant. S. C. Bentley. *Gas J* (Lond) 242:259-60 S 1 '43

Kinetics of ammonia synthesis. P. H. Emmett and J. T. Kummer. *bibliog il Ind & Eng Chem* 35:677-83 Je '43

Modern concentrated liquor plant. L. Biddulph-Smith. *diags Chem Age* (Lond) 48:521-4 My 15 '43

Processing of gas liquor; a technical and economic survey. W. N. Baird and P. Parrish. *diags Gas J* (Lond) 242:296-8, 301+ S 8 '43

Safety measures

Applications and handling of liquid synthetic anhydrous ammonia. R. J. Quinn. *il Chem Ind* 52:58-60 Ja '43

Storage

Storage and handling of anhydrous ammonia in tank car quantities. L. H. Brandt. *bibliog il plan Chem Ind* 53:200-6 Ag '43

AMMONIA, Substitutes for

Ammonia substitutes; development of liquid cleaners. *Soap & San Chem* 19:30-1 Ja '43

AMMONIA compressors

Accumulator smooths refrigeration operation. H. A. Schreiber. *diag Power* 87:765 N '43

Keep that head pressure down; how refrigerating engineers can lower power costs or reduce fuel consumption. J. D. Constance. *diags Power* 87:684-5+ O '43
Should he raise his condenser pressure? *Power Pl Eng* 47:102+ F '43

Control

Needs suction pressure control; Diesel-driven ammonia compressors. *diags Power* 87:766-8 N '43

AMMONIA handling

Ammonia in industry; equipment for handling anhydrous and aqua ammonia. *Chem Age* (Lond) 47:549-50 D 19 '42

Applications and handling of liquid synthetic anhydrous ammonia. R. J. Quinn. *il Chem Ind* 52:58-60 Ja '43

Handling of liquid ammonia for nitriding and other atmospheres. C. V. Snell. *il diags Metal Prog* 43:245-8 F '43

Storage and handling of anhydrous ammonia in tank car quantities. L. H. Brandt. *bibliog il plan Chem Ind* 53:200-6 Ag '43

AMMONIACAL liquor. See Ammonia—Manufacture

AMMONIUM

Absence of coprecipitation of barium ion with the chlorides of the silver group and the sulfides of the copper and tin groups in the presence of ammonium ion. L. Lehрман and I. Mandel. *bibliog J Phys Chem* 47:264-6 Mr '43

AMMONIUM acetate

Reactions of phenanthraquinone and retenequinone with aldehydes and ammonium acetate in acetic acid solution. E. A. Steck and A. R. Day. *bibliog Am Chem Soc J* 65:452-6 Mr '43

AMMONIUM bromide

Electrolytic properties of solutions of paraffin-chain quaternary ammonium salts. A. B. Scott and H. V. Tartar. *bibliog diag Am Chem Soc J* 65:692-8 Ap '43

AMMONIUM carbamate

Phase diagrams and the mass law. T. R. Briggs. *J Chem Educ* 20:484-7+ O '43

AMMONIUM compounds

Electrolytic properties of solutions of paraffin-chain quaternary ammonium salts. A. B. Scott and H. V. Tartar. *bibliog diag Am Chem Soc J* 65:692-8 Ap '43

Solubility effect in solvents of low dielectric constant; a study of the solubility effect in benzene. A. A. Vernon and J. P. Masterson. *bibliog Am Chem Soc J* 64:2822-3 D '42

Thermal decomposition of quaternary ammonium phenolates, with reference to the Claisen rearrangement. D. S. Tarbell and J. R. Vaughan, Jr. *bibliog Am Chem Soc J* 65:231-3 F '43

Analysis

Germicidal quaternary ammonium salts in dilute solution; a colorimetric assay method. M. E. Auerbach. *bibliog Ind & Eng Chem Anal* 15:492-3 Ag 15 '43

AMMONIUM cyanate

Rate of conversion of ammonium cyanate to urea in non-aqueous solvents. W. J. Svirbely and S. Peterson. *Am Chem Soc J* 65:166-70 F '43

AMMONIUM hyposulfite. See Ammonium thiosulfate

AMMONIUM nitrate

Ammonium nitrate troubles not fully solved. *Chem & Met Eng* 50:139 S '43

Army ammonia nitrate to be handled by TVA. *Oil Paint & Drug Rep* 144:1+ N 8 '43

Formulating fertilizers for 1943-44. F. W. Parker and W. H. Ross. *Chem & Met Eng* 50:109-10 S '43; Excerpt. *Oil Paint & Drug Rep* 143:58 Je 28 '43

Humidity measurements in presence of water-soluble salts. G. C. Williams and R. J. Williams. *bibliog Ind & Eng Chem* 35:730-2 Je '43

Sodium nitrate released for fall agricultural needs; ammonium nitrate as fertilizer. *Oil Paint & Drug Rep* 144:3+ O 4 '43

Systems: $\text{LiNO}_3\text{-NH}_4\text{NO}_3$ and $\text{LiNO}_3\text{-NH}_4\text{NO}_3\text{-H}_2\text{O}$. A. N. Campbell. *Am Chem Soc J* 64:2680-4 N '42

AMMONIUM phosphate

Susceptibility of wood to decay; effect of urea and other nitrogen compounds. F. H. Kaufert and E. A. Behr. bibliog il Ind & Eng Chem 34:1510-15 D '42

AMMONIUM sulfamate

Growth stimulation by ammonium sulfamate in low concentration. F. Fromm. Science 98:391-2 O 29 '43

Studies on the physiological effects of sulfamic acid and ammonium sulfamate. A. M. Ambrose. J Ind Hygiene 25:26-8 Ja '43

AMMONIUM sulfate

Dyeing of acid and chrome colors on wool without acetic acid. E. I. Noble. Textile Col 64:522-5 N '42

Physicochemical aspects of bacterial growth; growth of bact. lactis aerogenes in media containing ammonium sulphate or various amino-acids. R. M. Lodge and C. N. Hinshelwood. Chem Soc J p208-13 My '43

Physicochemical aspects of bacterial growth; the lag phase of bact. lactis aerogenes. R. M. Lodge and C. N. Hinshelwood. Chem Soc J p213-19 My '43

Susceptibility of wood to decay; effect of urea and other nitrogen compounds. F. H. Kaufert and E. A. Behr. bibliog il Ind & Eng Chem 34:1510-15 D '42

AMMONIUM sulfonates

Electrolytic properties of aqueous solutions of octyltrimethylammonium octanesulfonate and decyltrimethylammonium decanesulfonate. A. B. Scott, H. V. Tartar and E. C. Lingafelter. bibliog Am Chem Soc J 65:698-701 Ap '43

AMMONIUM thiosulfate

Some characteristics of ammonium thiosulfate fixing baths. D. B. Alnutt. bibliog Soc Motion Picture Eng J 41:300-28 O '43

AMMONIUM uranate

Preparations and properties of ammonium diuranate. H. W. Safford and A. Kuebel. il J Chem Educ 20:88-91 F '43

AMMONOLYSIS

Kinetics of the ammonolysis of 9-phenyl-9-chlorofluorene by liquid ammonia. P. M. Williamson, R. C. Anderson and G. W. Watt. bibliog Am Chem Soc J 65:49-51 Ja '43

AMMUNITION

Aircraft cannon; factors in design and operation of aircraft cannon; shell and ammunition. L. Bruchiss. il diags Steel 111:78-9+ N 16 '42

Chrysler ammunition arsenal; illustrations. Automotive & Aviation Ind 89:37 J1 1 '43

Guns and ammunition. K. Rose, comp. diags Metals & Alloys 18:313, 315 Ag '43

Happy hunting; WPB lets down bars on use of ammunition. Business Week p32+ O 2 '43

Hunters set back; farmers will get first call on ammunition. Business Week p38+ S 4 '43

SAE war engineering production meeting; ammunition and artillery sessions. S A E J 51:sup58-61 F '43

Steel replaces brass in .45-caliber ammunition. Steel 112:90 Ap 5 '43

See also

Cartridge cases	Shot
Cordite	Smokeless powder
Projectiles	

Testing

Firing range for testing small arms ammunition. il Concrete 51:3 S '43

AMMUNITION cases

Boxes for bullets; phenolic laminated cloth. C. G. Trimbach. il diags Mod Plastics 20:59-61 My '43

Gift boxes for the Axis; cartridge boxes, cases and chests. G. T. Kellogg. il Mod Packaging 16:72-5 Ja '43

AMORTIZATION

Accounting for amortization of war facilities. G. N. Farrand. J Account 76:419-20 N '43

Alvord on amortization. J Account 76:342 O '43

Current problems on amortization. C. L. Turner. J Account 75:30-5 Ja '43

AMPERE meters. See Ammeters

AMPLIDYNE generator

Amplidyne-electronic equipment increases versatility of paper machine. G. V. Kullgren. il Paper Tr J 115:57 N 26 '42

Amplidyne simplified; coal mine applications. D. Stoetzel. diags Coal Age 48:128-9 O '43

Amplidyne; what it does for power control and how it does it. F. Felix. il diags Power 87:504-6+ Ag '43

Amplidyne, what it is and how it works. F. Felix. il diags Power Pl Eng 47:78-80 J1 '43; Same. Concrete (mill sec) 51:198-9+ J1 '43; Same. Diesel Power 21:815-17 S '43; Same. Mech Handling 30:383-7 S '43; Same abr. Gen Elec R 46:442-5 Ag '43

Amplidyne for arc-furnace control. G. E. Shaad. il diags Blast F & Steel Pl 31:879-82 Ag '43

Aviation uses of the amplidyne. R. A. Averitt. il diags Aero Digest 43:177, 179+ S '43

Electrical developments in the steel industry during 1942. F. Mohler. il Blast F & Steel Pl 31:76-9 Ja '43; Same cond. Steel 112:98+ F1 '43

Fundamental principles of amplidyne applications. F. E. Crever. bibliog diags Elec Eng 62:Trans 603-6 S '43

How the amplidyne functions. F. Felix. diags Elec W 119:1474, 1654 My 1-15 '43

Precise control enhances machine performance. F. Felix. il diags Machine Design 15:132-4+ Ap '43

Versatile amplidyne control for electric shovels. D. Stoetzel. il diags Eng & Min J 143:53-5 N '42

What the amplidyne has contributed to reversing mill drives. C. B. Huston. il diags Blast F & Steel Pl 31:654-8 Je '43

AMPLIFIERS, Vacuum tube

Amplifier circuit; hydraulic analog; electronic circuit; applications. il diags Product Eng 14:649 O '43

Amplifying and recording technique in electro-biology, with special reference to the electrical activity of the human brain. G. Parr and W. G. Walter. il diags Inst E E J 90 pt 3:129-42; Discussion. 142-4 S '43

Automatic frequency-controlled oscillator and amplifier for driving mechanical vibrators. E. V. Potter. diags U S Bur Mines Rep of Invest 3702:1-10 '43; Same. R Sci Instr 14:207-15 J1 '43; Abstract. Electronics 16:194+ N '43

Behavior of a balanced d.c. amplifier. R. C. Spencer and L. Schulz. bibliog diags R Sci Instr 14:10-14 Ja '43

Comparison of voltage- and current-feedback amplifiers. E. H. Schulz. diags Inst Radio Eng Proc 31:25-8 Ja '43; Correction. 31:384 J1 '43

Direct-current amplifier and its application to industrial measurements and control. D. C. Gall. il diags Inst E E J 89 pt2:434-43 O '42; Abstracts. Elec R (Lond) 130:338 Mr '42; Electrician 128:249-51 Mr 20 '42; Elec W 118:487-8 Ag 8 '42; Discussion. Inst E E J 89 pt2:443-6 O '42; Electrician 128:249-51 Mr 20 '42

Diving amplifier. D. W. Gellerup. il diags Electronics 16:170+ S '43

Electron tubes; their principles and their instrumentation applications; triode as an amplifier. A. W. Kramer. diags Instruments 16:408, 410-15, 480-2 J1-Ag '43

Electronic megaphones; units using vacuum-tube amplifiers aid navy in maintaining communications among convoys ships. il diags Electronics 16:125-7 N '43

Graphical determination of power amplifier performance. R. I. Sarbacher. Electronics 15:52-6+ D '42

Iron-core components in pulse amplifiers. R. Lee. diags Electronics 16:115-17+ Ag '43

Optimum conditions in class A amplifiers. G. W. O. Howe. diags Wireless Eng 20:53-5 F '43; Discussion. 20:302-3 Je '43

Performance of self biased modulated amplifiers. R. I. Sarbacher. bibliog Electronics 16:99-103+ Ap '43

Power output of a-c operated amplifiers. W. A. Schwarzmann. diags Electronics 16:94-6+ Ag '43

Power-tube performance in class C amplifiers and frequency multipliers as influenced by harmonic voltage. R. I. Sarbacher. il diags Inst Radio Eng Proc 31:607-25 N '43

AMPLIFIERS, Vacuum tube—Continued

Practical radio course. A. A. Ghirardi. *il diags Radio N* 29:34-5+ Ap; 31-2+ My; 30:43-4+ JI; 38-9+ Ag; 43-4+ S; 48-50+ O; 55-6+ N '43

Precision time control; amplified tuning fork power supply in National broadcasting company studios and control rooms at New York. *il diags Electronics* 15:49+ D '42

Recording war news with the SX-28. O. Read. *il diags Radio N* 29:18-21+ F '43

Some characteristics of a stable negative resistance. C. Brunetti and L. Greenough. *bibliog diags Inst Radio Eng Proc* 30:542-6 D '42

Telephone and telegraph vast users of electronics. F. A. Cowan. *il map Electronics* 16:88-91, 162, 165 Mr '43

Three resonant circuit transformer. M. R. Winkler. *il diags Electronics* 16:96-100+ Ja '43

Universal equalizer provides a-f amplifier design data. *il diags Electronics* 16:120-1+ Ag '43

Valve-oscillator theorem. E. Williams. *diags Wireless Eng* 20:489-91 O '43

Wide band amplifier design. E. J. Bukstein. *diags Radio N* 30:21-2+ Ag '43

See also

Electron multipliers

Testing

Multi-servimeter. R. F. Scott. *il diags Radio N* 29:24-6+ Ja '43

AMPOULES

All-America package competition award; Johnson & Johnson; ampoules and applicators for iodine and mercurochrome. *il Mod Packaging* 16:95+ Ap '43

AMPUTATION

Reduced temperature anesthesia for surgery of trauma: case report. J. M. Dziob and R. K. Brown. *Ind Med* 12:79-80 F '43

ANTHOR tensile tester

Instrumentation studies; measurement of the tensile strength of paper. *il Paper Tr J* 116:10-12 F 11 '43

AMUSEMENT industry**Advertising**

See also

Night clubs—Advertising

AMYGDALEOID

Phosphatization at Malpelo island, Colombia. D. McConnell. *bibliog Geol Soc Bul* 54:707-15, pl 1-2 My '43

AMYL alcohol

Dehydration of alcohols; t-amyl alcohol and the related dimethylnonpentylcarbinol. F. C. Whitmore and others. *bibliog Am Chem Soc J* 64:2970-2 D '42

Optical rotation and atomic dimension: the four optically active 2-halogenopentanes. D. H. Brauns. *bibliog J Research Nat Bur Stand* 31:83-106 Ag '43

AMYL mercaptan

Nonchlorinated compounds derived from monochloropentanes. C. K. Hunt. *bibliog flow sheets il Ind & Eng Chem* 35:1048-52 O '43

AMYL naphthalene

Nonchlorinated compounds derived from monochloropentanes. C. K. Hunt. *bibliog flow sheets il Ind & Eng Chem* 35:1048-52 O '43

AMYLAMINE

Nonchlorinated compounds derived from monochloropentanes. C. K. Hunt. *bibliog flow sheets il Ind & Eng Chem* 35:1048-52 O '43

AMYLASES

Action of macerans amylase on the fractions from starch. E. J. Wilson, Jr, T. J. Schoch and C. S. Hudson. *bibliog Am Chem Soc J* 65:1380-3 JI '43

Amylase inhibitor from certain cereals. E. Kneen and R. M. Sandstedt. *Am Chem Soc J* 65:1247 Je '43

Cereal amylases, significance of the component concept; abstract. E. Kneen. *Food Ind* 15:147 N '43

Fungal amylases as saccharifying agents in the alcoholic fermentation of corn. Lu Cheng Hao, E. I. Fulmer and L. A. Underkofer. *bibliog diags Ind & Eng Chem* 35:814-18 JI '43; Same abr. *Chem Age (Lond)* 49:261-4 S 11 '43

Quantitative strength determination of amylase (diastase) preparations. E. Lenk. *Soc Dyers & Col J* 58:133-41 JI '42; Abstract. *Am Dyestuff Rep* 32:212 Ap 26 '43

Significance of the degradation of starch by macerans amylase. R. W. Kerr. *bibliog Am Chem Soc J* 65:188-93 F '43

AMYOPECTINS

Amylose and amylopectin content of starches determined by their iodine complex formation. F. L. Bates, D. French and R. E. Rundie. *bibliog Am Chem Soc J* 65:142-8 F '43

Molecular constitution of amylose and amylopectin of potato starch. W. Z. Hassid and R. M. McCready. *bibliog Am Chem Soc J* 65:1157-61 Je '43

Orientation in stretched films of amylose triacetate. R. L. Whistler and N. C. Schieltz. *il Am Chem Soc J* 65:1436-7 JI '43

Separation and quantitative estimation of amylose and amylopectin in potato starch. R. M. McCready and W. Z. Hassid. *bibliog Am Chem Soc J* 65:1154-7 Je '43

AMYLOSES

Amylose and amylopectin content of starches determined by their iodine complex formation. F. L. Bates, D. French and R. E. Rundie. *bibliog Am Chem Soc J* 65:142-8 F '43

Molecular constitution of amylose and amylopectin of potato starch. W. Z. Hassid and R. M. McCready. *bibliog Am Chem Soc J* 65:1157-61 Je '43

Multiple amylose concept on starch; the isolation of an amylose in crystalline form. E. W. Kerr and G. M. Severson. *il Am Chem Soc J* 65:193-8 F '43

Orientation in stretched films of amylose triacetate. R. L. Whistler and N. C. Schieltz. *il Am Chem Soc J* 65:1436-7 JI '43

Separation and quantitative estimation of amylose and amylopectin in potato starch. R. M. McCready and W. Z. Hassid. *bibliog Am Chem Soc J* 65:1154-7 Je '43

Solution viscosities of the amylose components of starch. J. F. Foster and R. M. Hixon. *Am Chem Soc J* 65:618-22 Ap '43

Some aspects of starch chemistry in relation to tubsizing. R. W. Kerr. *bibliog il Paper Tr J* 115:30-4 D 3 '42

AMYRIN

Isolation of β -amyrin from the leaves and seeds of alfalfa. L. C. King and others. *Am Chem Soc J* 65:1168-70 Je '43

ANACONDA copper mining company

Organizes new subsidiary to construct extrusion plant in Nebraska. *Comm & Fin Chr* 158:1126 S 20 '43

Securities disturbing investors. J. S. Williams. *Mag of Wall St* 71:359 Ja 9 '43

ANACONDA wire and cable company

Indicted on charges of defective product. *Comm & Fin Chr* 156:2303 D 28 '42

Plea changed. *Comm & Fin Chr* 158:1238 S 27 '43

ANAESTHETICS. See Anesthetics**ANALGESICS**

5,5-Dimethylhydantoins containing a —NRR' substituent. H. R. Henze and D. D. Humphreys. *Am Chem Soc J* 64:2881 D '42

Tetrahydropyranyl amino alcohols. G. H. Harnest and A. Burger. *bibliog Am Chem Soc J* 65:370-2 Mr '43

ANALYSIS, Chemical. See Chemistry, Analytic

ANALYSIS, Chromatographic. See Chromatographic analysis

ANALYSIS, Colorimetric. See Colorimetric analysis

ANALYSIS, Electrographic. See Electrographic analysis

ANALYSIS, Metallurgical. See Metallurgical analysis

ANALYSIS, Volumetric. See Volumetric analysis

- ANALYSIS** of variance. See Variation (statistics)
- ANALYTIC** chemistry. See Chemistry, Analytic; Microanalysis
- ANAPHYLAXIS**
See also
Allergens
Allergy
- ANCHORAGES**, Bridge. See Bridges, Suspension—Anchorages
- ANCHORS**. See Concrete construction—Anchorages
- ANCHORS**, Guy
Concrete cone anchor replaces steel. I. Eckhart. diags Elec W 118:2136 D 26 '42
- ANDALUSITE**
Marketing kyanite and allied minerals. N. C. Jensen. U S Bur Mines Information Circ 7234:7-10 '43
- ANDERSON**, Gustavus Edwin, 1879-1940
Memorial. S. Weidman. por(pl) bibliog Geol Soc Proc 1942:149-52 Ap '43
- ANDREWS**, William H.
Fieldmen's war bond chief. por East Underw 44:48+ pt 2 O 1 '43
- ANEMIA**
Isolation of the antianemia factor (vitamin Bc) in crystalline form from liver. J. J. Piffner and others. Science 97:404-5 Ap 30 '43
Production and treatment of granulocytopenia and anemia in rats fed sulfonamides in purified diets. A. Kornberg, F. S. Daft and W. H. Sebrell. Science 98:20-2 Jl 2 '43
Red cell degeneration caused by thiazines and related compounds; abstract. C. Siebenmann. Can Chem & Process Ind 27:220 Ap '43
Successful treatment of granulocytopenia and leukopenia in rats with crystalline folic acid. F. S. Daft and W. H. Sebrell. bibliog Pub Health Rep 58:1542-5 O 15 '43
Toxic anemia. E. Browning. bibliog J Ind Hygiene 25:124-31 Mr '43
Vitamin cures predicted; abstract. C. A. Elvehjem. Science 97:sup12 Ap 2 '43
- ANEMOMETERS**
Hot wire anemometer; abstract. G. Datwyler. Chem & Met Eng 50:163 Ja '43
- ANEROID** barometers. See Barometers
- ANESTHESIA**
Cryotherapy. Sci Am 169:21-2 Jl '43
Method for narcotizing holothurians. W. G. Hewatt. Science 97:588 Je 25 '43
Reduced temperature anesthesia for surgery of trauma: case report. J. M. Dzibol and R. K. Brown. Ind Med 12:79-80 F '43
- ANESTHETICS**
Cross-circulation as a method in the study of drug fixation and poisoning. T. Koppányi and C. R. Linegar. Science 96:562-3 D 18 '42
Explosion hazards of combustible anesthetics. G. W. Jones, R. E. Kennedy and G. J. Thomas. pls diags U S Bur Mines Tech Pa 653:1-47; pa 15c Supt. of doc. '43
Researches on thiazoles; some new thiazolidinopyrimidines of barbituric acid type. E. J. Masters and M. T. Bogert. flow sheet bibliog Am Chem Soc J 64:2709-12 N '42
See also
Demerol
- ANESTHETICS**, Local
Alkamine esters of fluorenonecarboxylic acids. F. E. Ray and Rieveschl, jr. bibliog Am Chem Soc J 65:836-9 My '43
Local anesthetics; alkoxybenzoates of 2-monoalkylamino-2-methyl-1-propanols and 2-monoalkylamino-1-butanols. J. S. Pierce and others. Am Chem Soc J 64:2884-5 D '42
Some stovaine analogs. W. T. Olson and F. M. Whitacre. bibliog Am Chem Soc J 65:1019-20 Je '43
Synthetic mydriatics. F. F. Blicke and H. M. Kaplan. bibliog Am Chem Soc J 65:1967-70 O '43
- ANETHOLE** hydrobromide
Factors determining the course and mechanism of Grignard reactions; a new synthesis of hexestrol dimethyl ether (3,4-dianisylhexane). M. S. Kharasch and M. Kleiman. Am Chem Soc J 65:491-3 Ap '43
- ANEURIN**. See Vitamins—Vitamin B₁
- ANGLE** of contact. See Contact angle
- ANGLES**
Drawing an angle with scale and compass. diag Eng N 130:316 F 25 '43
- ANGLO CALIFORNIA** national bank of San Francisco
Bank management. W. H. Thomson. il Burroughs Clearing House 27:13-15+ My '43
- ANGOLA** yarn
Color faults in angola yarn. Textile Col 65:458-9 O '43
- ANGORA** goats
See also
Mohair
- ANHYDRIDES**
Anhydrides of basic amino-acids. D. W. Adamson. Chem Soc J p39-40 Ja '43
Ketone synthesis; the condensation of acid anhydrides with olefins. A. C. Byrns and T. F. Doumani. bibliog il diag Ind & Eng Chem 35:349-53 Mr '43
- ANHYDRITE**
Evidence of erosion of salt stock in Gulf Coast salt plug in late oligocene. M. A. Hanna. Am Assn Pet Geologists Bul 27:85-6 Ja '43
- ANHYDROMETHYL** galactoside
Studies on agar-agar; isolation of hepta-acetyl di-galactose from 3:6-anhydro-8-methyl-d-galactoside. T. L. Cottrell and E. G. V. Percival. Chem Soc J p749-50 D '42
- ANILINE**
Sulfonation of aniline; application of partial-pressure distillation. J. J. Jacobs, jr., D. F. Othner and A. Hokanson. Ind & Eng Chem 35:321-3 Mr '43
System n-hexane-methylcyclopentane-aniline. B. deB. Darwent and C. A. Winkler. bibliog diags J Phys Chem 47:442-54 Je '43
- Analysis**
- Determination of water in aniline by a cloud point method; comparison of rapeseed oil with cottonseed-mineral oil mixtures. W. Seaman, A. R. Norton and J. J. Hugonet. Ind & Eng Chem Anal ed 15:322-4 My 15 '43
- ANILINE** point
Aniline points of hydrocarbons. J. S. Ball. U S Bur Mines Rep of Invest 3721:1-49 bibliog(82 titles, p47-9) '43
Effect of petroleum products on neoprene vulcanizates; effect of gasolines. D. F. Fraser. il Ind & Eng Chem 35:947-8 S '43
N-methylaniline point of viscous petroleum oils. B. W. Geddes, L. Z. Wilcox and E. H. McArdle. bibliog Ind & Eng Chem Anal ed 15:487-9 Ag 15 '43
- ANILINE** poisoning
Acute experimental aniline intoxication. B. B. Clark, E. J. Van Loon and R. W. Morrissey. J Ind Hygiene 25:1-12 bibliog(48 titles, p11-12) Ja '43
- ANILINE** printing
Anilin inks and drying systems. F. E. Boughton. diag Inland Ptr 110:54-6 Mr '43
Anilin printing; a link in the chain of complete service. F. E. Boughton. il Inland Ptr 110:73-6 D '42; 41-4 Ja '43
Important facts about anilin rolls and fountain. F. E. Boughton. Inland Ptr 111:51-2 My '43
- ANILINOPYRAZOLONE**
Investigation of pyrazole compounds; the acylation of 3-phenyl-5-pyrazolone and 3-anilino-5-pyrazolone. A. Weissberger and H. D. Porter. bibliog Am Chem Soc J 65:1495-1502 Ag '43
- ANILS**
Properties of some anils. T. F. West. Soc Chem Ind J 61:158-9 O '42
- ANIMAL** dyes. See Dyes and dyeing—Natural dyes
- ANIMAL** pictures. See Advertisements, Pictorial—Animal pictures

ANIMAL products

Fallen animals, a little-known process industry. W. M. Robinson. *Il Chem & Met Eng* 50:112-15 Ag '43

See also

Packing houses—By-products

ANIMALS

Wiring on the farm; animals susceptible to leakage voltages. *Electrician* 131:159-60 Ag 13 '43

See also

Dogs	Insects
Gorillas	Live stock
Horses	War and animals

Language

Dumb? all animals have means of communication. E. P. Walker. *Sci Am* 168:82-3 F '43

ANIMALS, Color of. See Color of animals

ANIMALS, Electrocuting of. See Electrocuting of animals

ANIMALS, Habits and behavior of

Where angels fear to tread: a contribution from general sociology to human ethics. W. C. Allee. *bibliog Science* 97:517-25 Je 11 '43

ANIMALS, Photography of. See Photography of animals

ANISOLE

Electric moments of ortho-substituted phenols and anisoles; halogen derivatives. W. F. Anzilotti and B. C. Curran. *bibliog Am Chem Soc J* 65:607-11 Ap '43

Kinetics of aromatic halogenation; bromination. P. W. Robertson, P. B. D. de la Mare and W. T. G. Johnston. *Chem Soc J* p276-9 Je '43

ANISOTROPY

Magnetic and optical anisotropy of selected microscopic crystals and the linear magneto-optical anisotropy of their suspensions. W. Heller, G. Quimfe and Y. Ta. *bibliog Il Phys R* 62:479-86 N 1 '42

New effects due to anisotropy of colloidal particles. R. E. D. Clark. *diags Chem & Ind* 62:348-50 S 11 '43

ANKLE

Ankle sprains; incidence, treatment, diagnosis, and lost time incurred. R. W. Bohnsack and J. E. Andes. *Ind Med* 12: 588 S '43

Fractures about the ankle. E. P. Gillettee. *Ind Med* 12:160+ Mr '43

ANN ARBOR railroad

Reciprocity ends. *Comm & Fin Chr* 157:125-6 Ja 11 '43; *Ry Age* 114:175 Ja 9 '43

ANNEALING

Annealing four 75-mm shells simultaneously; Thermionic induction generator. *Il Iron Age* 150:54 N 19 '42

Annealing machine for steel cartridge cases. *Il Mach* 49:224+ JI '43

Annealing of steel. P. Payson. *bibliog Il Iron Age* 151:44-7+ Je 24; 152:48-54 JI 1; 74-7 JI 8; 70-7 JI 15; 60-7 JI 22 '43

Cartridge brass; cold working and annealing. L. E. Gibbs. *Il Metal Prog* 44:243-8+ Ar '43

Cartridge cases continuously annealed. *Il Iron Age* 151:57 My 6 '43

Determining the Acs critical point in iron by a grain elimination method. J. K. Desmond. *Il Am Soc for Metals Trans* 31:1-7 Mr '43

Mechanical handling of annealing and pickling operations. *Il Mech Handling* 30:343-4 Ag '43

Morrison annealing machines. *Il Steel* 113: 128+ Ag 16 '43

Morrison annealing machines for steel cartridge cases. *Il Mach* 49:181-2 Ja '43

Reclaiming alloy still tubes; with cost data. *Il diags Nat Pet N* 35 pt 2:R210-12 My 5 '43

Some factors affecting longitudinal bend tests on fine-grained, cold-rolled annealed carbon strip steel. A. F. Sprinkle and M. A. Hughes. *bibliog Il Am Soc for Metals Trans* 31:257-80; Discussion. 280-3 Je '43

Spheroidize annealing of S.A.E. 52100 steel. R. J. Hafsten. *Il Metal Prog* 42:869-73 N '42

Thermal rating of overhead line wire. M. Zucker. *bibliog Il Elec Eng* 62:Trans 501-7 JI '43

Tool hardener; watch that anneal! T. R. Lewis and C. Verdi. *Metal Prog* 42:867-8 N '42

ANNEALING furnaces. See Electric furnaces, Annealing; Furnaces, Annealing

ANNEALING of glass. See Glass manufacture

ANNOTATIONS

Abstracts and annotations. E. H. McClelland. *Special Lib* 34:363-72 S '43

ANNOUNCERS, Radio. See Radio broadcasting—Announcers

ANNUAL reports. See Corporations—Reports and yearbooks

ANNUITIES

Annuities favored for pension trusts. I. Bendiner. *Nat Underw (Life ed)* 47:11 Ap 2 '43

Disability turns to profit side; results in 1942. *Nat Underw (Life ed)* 47:1-2 Mr 5 '43

Great Southern offers deferred annuity form. *Nat Underw (Life ed)* 47:22 JI 16 '43

Large increase shown in annuity contracts during last ten years. *Weekly Underw* 148: 68-9 sec 2 My 8 '43

No self-insurance for county employees' annuities. *Nat Underw (Life ed)* 47:9 O 15 '43

Ohio National has new annuity scale. J. H. Rader. *Nat Underw (Life ed)* 47:15 Ag 6 '43

Over \$6 billion reserved for life insurance annuity income payments. *Comm & Fin Chr* 153:1809 N 4 '43

Study of fixed income trusts. L. H. Roseberry. *Il Burroughs Clearing House* 27:22-4+ D '42

See also

Insurance, Group

Old age pensions

Pensions, Industrial

Taxation

Annuitants must pay; Brodie against the Commissioner of internal revenue. *Ins Field (Life ed)* 72:12 Ja 15 '43

Annuity decision by U.S. tax court; those used as added pay for services rendered not gifts. *Nat Underw (Life ed)* 47:4 JI 23 '43

Canadian annuity tax is attacked in newspaper ad. *Nat Underw (Life ed)* 47:8 S 3 '43

Federal court decision affects annuities; case of Phillips H. Lord. *Ins Field (Life ed)* 72:5 Ja 1 '43

Would tax annuities under property levy; Kentucky issue. *East Underw* 43:7 N 27 '42

ANODES. See Electrodes

ANODIC coating of aluminum. See Aluminum—Coloring; Aluminum—Protection

ANODISING. See Aluminum—Protection

ANONA muricata. See Guanábana seed oil

ANOPHELES. See Mosquitoes

ANTARCTIC regions

See also

Polar regions

ANTELOPES, Fossil

Occurrence of the pliocene antelope, *ilingoceros*, in Nevada. E. L. Furlong. *Science* 97:262 Mr 19 '43

ANTENNAS, Radio. See Radio antennas

ANTHOCHLOR pigments. See Pigments

ANTHOCYANINS

Biochemistry of anthocyanins. W. D. Bancroft. *bibliog Science* 98:98-100 JI 30 '43

ANTHRACENE

1,2,9,10-Tetramethylantracene. R. B. Sandin, R. Kitchen and L. F. Fleiser. *bibliog Am Chem Soc J* 65:2018-20 O '43

ANTHRACITE. See Coal

ANTHRACILT. See Coal as filter medium

ANTHRANILIC acid

Carl Julius Fritzsche and the discovery of anthranilic acid, 1841. F. E. Sheibley. *bibliog J Chem Educ* 20:115-17 Mr '43

Symmetrical diaryls from diazotized amines; reducing agents. E. R. Atkinson and others. *bibliog Am Chem Soc J* 65:476 Mr '43

ANTHRAQUINONE

Action of bases on 1-diazoanthraquinone-2-sulphonate and its derivatives. J. I. Lynas-Gray and J. L. Simonsen. *Chem Soc J* p45-7 F '43

Ketetics in acid media; condensation of *o*-benzoylbenzoic acid. C. W. Deane and J. R. Huffman. *bibliog*(73 references) *il Ind & Eng Chem* 35:684-94 Je '43

Some lesser known dyers' assistants; anthraquinone. H. Peters. *Textile Col* 65:387-8 S '43

ANTHROPOLOGY

Franz Boas. R. Benedict. *Science* 97:60-2 Ja 15 '43

Franz Boas, his predecessors and his contemporaries; reply to Professor Benedict. R. H. Lowie. *Science* 97:202-3 F 26 '43

Recent anthropology. F. Boas. *Science* 98:311-14, 334-7 O 8-15 '43

See also

Hrdlička, Aleš
Man, Prehistoric

ANTHROPOMETRY

See also

Stature

ANTI-AIRCRAFT guns. *See* Guns, Anti-aircraft

ANTIBODIES. *See* Antigens and antibodies

ANTICONVULSANTS

N,N'-substituted α -aminodiphenylacetamides. J. H. Billman and P. H. Hidy. *bibliog Am Chem Soc J* 65:760-1 My '43

ANTI-FOULING paint. *See* Paint, Anti-fouling

ANTI-FREEZE lamps. *See* Automobile engines

—Heaters

ANTI-FREEZE solutions

A.A.A. fights substitute anti-freezes; alcohol supply adequate, WPB says. *Nat Pet N* 34:12 N 18 '42

Anti-freeze reconditioner restores anti-rust properties. G. W. Sherin. *Sci Am* 169:204 N '43

Anti-freeze solutions; danger to car from use of calcium chloride or other salt. *Science* 97:sup13 F 19 '43

Cold wave coming; information on use of anti-freeze. *il diags Bus Transportation* 22:46-9 O '43

Dangerous anti-freezing solutions. Franklin Inst J 235:405-6 Ap '43

Freezeproofing fire barrels. *Nat Safety N* 46:92-3 D '42

This winter's anti-freeze problem. *Consumers' Research Bul* 12:10-12 O; 18-19 N '43

Timely topic, anti-freeze. *Eng & Min J* 144:89-90 Ag '43

WPB lists anti-freezes said to damage engines, radiators. *Nat Pet N* 35:6 F 3 '43

Rating

More on the anti-freeze racket. *Consumers' Research Bul* 11:8 Ap '43

Wartime substitute anti-freezes. *Consumers' Research Bul* 11:5-7 F '43

ANTIGENS and antibodies

Biochemical and antigenic relationships of the paracolon bacteria; abstract. C. A. Stuart and others. *Am Water Works Assn J* 35:1360 O '43

Deantigenated beef blood plasma as a possible substitute for human blood plasma. J. H. Lewis. *Science* 98:371-2 O 22 '43

Experimental test of the framework theory of antigen-antibody precipitation. L. Pauling, D. Pressman and D. H. Campbell. *bibliog Science* 98:263-4 S 17 '43

Improved antigen for complement fixation in American trypanosomiasis. D. J. Davis. *Pub Health Rep* 58:775-7 My 14 '43

Non-virulent frozen and dried antigens for complement-fixation tests with central nervous system virus infections. J. Casals. *Science* 97:337-8 Ap 9 '43

Quantitative micro-estimation of antibodies in the sera of man and other animals. M. Heidelberger and C. F. C. MacPherson. *bibliog Science* 97:405-6 Ap 30 '43; *Correction*. 98:63 Jl 16 '43

Serological activity of denatured antibodies. J. O. Erickson and H. Neurath. *bibliog Science* 98:284-5 S 24 '43

Serological properties of simple substances; hapten inhibition of precipitation of antibodies and polyhaptenic simple substances. D. Pressman, D. H. Brown and L. Pauling. *Am Chem Soc J* 64:3015-20 D '42

Serological properties of simple substances; precipitation reactions between antibodies and substances containing two or more haptenic groups. L. Pauling and others. *bibliog Am Chem Soc J* 64:2994-3003 D '42

Serological properties of simple substances; the composition of precipitates of antibodies and polyhaptenic simple substances; the valence of antibodies. L. Pauling, D. Pressman and C. Ikeda. *diags Am Chem Soc J* 64:3010-14 D '42

Serological properties of simple substances; the effects of changed conditions and of added haptens on precipitation reactions of polyhaptenic simple substances. L. Pauling and others. *Am Chem Soc J* 64:3003-9 D '42

Serological properties of simple substances; the precipitation of polyhaptenic simple substances and antiserum homologous to the *p*-(*p*-azophenylazo)-phenylarsonic acid group and its inhibition by haptens. D. Pressman and others. *bibliog Am Chem Soc J* 65:728-32 Ap '43

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ANTIHEMORRHAGIC activity. *See* Hemorrhage

ANTIHEMORRHAGIC compounds. *See* Hemorrhage; Vitamins—Vitamin K

ANTIMALARIALS. *See* Malaria

ANTIMONY

Antimony; sources, metallurgy, uses; abstract. L. Sanderson. *Metals & Alloys* 17:356-7 F '43

Catalytic activity of intermetallic compounds in the vapor-phase reduction of nitrobenzene. B. Berk and O. W. Brown. *bibliog diags J Phys Chem* 46:964-8 N '42

Hemisphere output of antimony increased for war needs. *For Comm W* 11:35 My 8 '43

Minor metals, 1942. A. L. Ransome. *Eng & Min J* 144:74 F '43

Analysis

Determination of small amounts of arsenic, antimony, and tin in lead and lead alloys. C. L. Luke. *bibliog il Ind & Eng Chem Anal ed* 15:626-9 O 15 '43

Dichromate-ferrous sulfate method for antimony. R. B. Neill. *Ind & Eng Chem Anal ed* 14:955 D 15 '42

Isotopes

Beta-ray spectrum of antimony (124). E. B. Hales and E. B. Jordan. *bibliog Phys R* 64:202-6 O 1 '43

ANTIMONY alloys

New soft solder; lead-arsenic-antimony alloy. R. L. Dowdell and others. *il Metal Prog* 43:56-9-4 Ja '43

ANTIMONY halides

Crystalline complexes of arsenic, antimony and bismuth trihalides with dioxane. C. J. Kelley and P. A. McCusker. *bibliog Am Chem Soc J* 65:1307-9 Jl '43

ANTIMONY metallurgy

Progress in antimony recovery; types of furnace recommended. A. G. Arend. *il diags Chem Age (Lond)* 49:337-40 O 2 '43

ANTIMONY mines and mining**Alaska**

Antimony deposits of the Stamped Creek area, Kantishna district. D. E. White. *maps U S Geol S Bul* 936-N:331-48, pl 49-50; pa 25c Supt. of doc. '42

Idaho

Yellow Pine mine, producing combination of tungsten, antimony, and gold. J. D. Bradley, J. A. Mecla and R. E. Baker. *il diags Eng & Min J* 144:60-6 Ap '43

ANTIOXIDANTS

Antioxidants for fruit oils. *Food Ind* 15:144 Jl '43

ANTIOXIDANTS—Continued

- Effect of carbon treatment on fish liver oils; vitamin A destruction and peroxide formation. L. O. Buxton. *bibliog Ind & Eng Chem* 34:1486-9 D '42
- Fortification of oil, fat, and flour; stability of added carotene and effect of antioxidants. P. W. Morgal, L. W. Byers and E. J. Miller. *bibliog Ind & Eng Chem* 35: 794-7 JI '43
- Mineral insulating oils; effect of additives on electrical and chemical stability. A. G. Assaf and J. C. Balsebaugh. *bibliog Ind & Eng Chem* 35:909-16 Ag '43
- Stabilization of fats and fatty foods. H. S. Mitchell and H. C. Black. *bibliog Ind & Eng Chem* 35:50-2 Ja '43
- α -Tocopherol, a natural antioxidant in a fish liver oil. C. D. Robeson and J. G. Baxter. *bibliog Am Chem Soc J* 65:940-3 My '43
- Vegetable fat antioxidants; abstract. C. Golumbic. *Soap & San Chem* 19:58 Ag '43
- What you can use; antioxidants for soap. *Oil Paint & Drug Rep* 143:42 Mr 29; 47 Ap 5; 46 Ap 12; 46 Ap 19; 49 Ap 26; 66 My 3; 68 My 10; 25 My 24; 66 My 31; 144:32C JI 5; 60 JI 26 '43

See also

Soybean flour

ANTIOXIDANTS for rubber. See Rubber—Aging

ANTISEPTICS

Disinfectants and antiseptics; a summary of scientific advances during 1942. E. G. Klarman. *bibliog*(74 references) *Soap & San Chem* 19:97+ Ja '43

Preparation and therapeutic properties of certain acridine derivatives; 5-methylacridines, further 5-styrylacridines and their quaternary salts; with note on antiseptic and trypanocidal action by C. H. Browning and K. M. Calver. W. Sharp, M. M. J. Sutherland and F. J. Wilson. *Chem Soc J* p344-7 Ag '43

Preparation and therapeutic properties of certain acridine derivatives; 5-styrylacridines and their quaternary salts. W. Sharp, M. M. J. Sutherland and F. J. Wilson. *Chem Soc J* p5-7 Ja '43

What you can use; antiseptics and germicides used in soaps. *Oil Paint & Drug Rep* 143:49 Ap 26; 66 My 3 '43

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Bacteriostasis	Soap
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Rivanol	

ANTI-SLIP surfaces. See Floors—Anti-slip surfaces

ANTISPASMODICS

Antispasmodics. F. F. Blicke and N. Grier. *bibliog Am Chem Soc J* 65:1725-8 S '43

Antispasmodics; basic esters of some arylacetic acids. R. R. Burtner and J. W. Cusic. *bibliog Am Chem Soc J* 65:262-7 F '43

Antispasmodics; basic esters of some polynuclear carboxylic acids. R. R. Burtner and J. W. Cusic. *bibliog Am Chem Soc J* 65: 1582-5 Ag '43

N,N'-substituted α -aminodiphenylacetamides. J. H. Billman and P. H. Hidy. *bibliog Am Chem Soc J* 65:760-1 My '43

ANTI-STRIKE law. See Strikes—Law

ANTONOFF'S rule

Antonoff's rule. A. Yoffe and E. Heymann. *bibliog J Phys Chem* 47:409-10 My '43

ANUS**Diseases**

Pruritus ani and absenteeism; a review of the literature, and report on new form of adjuvant therapy. R. H. Aldrich. *bibliog Ind Med* 12:654-8 O '43

APARTMENT houses

Apartment-row house project, Chicago; in-city rental project. *il plans Arch Forum* 79: 111-19 O '43

Architecture of Brazil. *il Arch Rec* 93:50-1 Ja '43

Build them for keeps and you will keep on building; garden type rental war apartments. Weiser's *Royal Gardens*. *il plans Am Bld* 65:38-9+ JI '43

Court king builds for war workers, plans for future. *il plans Am Bld* 65:50-1 JI '43

Designs and plans

Dwelling units; Vanport City's standardized type of apartment house. *il plans Arch Forum* 79:56-7 Ag '43

New buildings for 194X: park apartments. *il diag plans Arch Forum* 72:138-45 My '43

Garden apartments

You can expect planned communities and garden apartments; River Oaks project, Houston, Texas. *il plans Am Bld* 65:46-8 My '43

Heating and ventilation

Field study of comfort reactions of apartment dwellers under fuel oil rationing. S. Hamilton. *il diag plan Heating-Piping* 15: 311-18 Je '43

APARTMENT houses, Remodeled

From residence to six apartments in Alexandria, Va. *il Sheet Metal Worker* 34:56+ S '43

APARTMENTS

Here's one good job; creating two small apartments out of one seven-room apartment. *il plans Dom Eng* 160:40 N '42

APATITE

Isomorphism and isotypism among silicates and phosphates. D. McConnell. *bibliog Science* 97:98-9 Ja 22 '43

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See also

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APES, Fossil

Some paleontological inferences as to the life-habits of the australopithecines. L. C. Eiseley. *Science* 95:61-2 JI 16 '43

APIEZON oil

Accurate high sensitivity Aplezon oil McLeod gauge. J. Bannon. *il diag R Sci Instr* 14: 6-10 Ja '43

APOCUPREINE

Cinchona alkaloids in pneumonia; some ethers of apocupreine. R. S. Tipson, M. A. Clapp and L. H. Cretcher. *bibliog Am Chem Soc J* 65:1092-4 Je '43

APPALACHIAN region

See also

Geology—Appalachian region

APPENDICITIS

Allergy and appendicitis. *Science* 98:sup10 Ag 13 '43

APPLE juice

Microbiological analysis of apple juice processing; abstract. J. Forgacs. *Food Ind* 15:119-20 Mr '43

APPLE sirup

Glycerin replaced; apple sirup as moistening agent in tobacco processing. *Business Week* p86-7 F 27 '43

Making apple syrup, glycerine, and sugar substitute. *flow sheet Chem & Met Eng* 50: 104+ Ag '43

New sweetener from apples; method for making it. *flow sheet Food Ind* 14:62-3 D '42

APPLES

Apples for eating, apples for cooking. Consumers' Research Bul 11:21-3 O '42

Canada's apple crop. *For Comm W* 12:25 JI 10 '43

Somatic mutations in the apple. J. K. Shaw and L. Southwick. *Science* 97:202 F 26 '43

Analysis

Determination of sugars in apple tissue; some modifications of the usual procedures. R. H. Leonard, R. C. Meade and R. B. Dustman. *bibliog Ind & Eng Chem Anal ed* 15:579-82 S 15 '43

Statistics

Apples, 1938-1941. Survey of Cur Business 1942 Sup p117 [supplemented in monthly numbers]

Storage

Controlled atmosphere storage helps to keep fruits fresh. D. V. Fisher. *bibliog il Food Ind* 15:70-1 My '43

Importance of the atmosphere in the cold storage of apples. R. M. Smock. *bibliog Refrig Eng* 45:331-3 My '43

APPLES—Continued

Transportation

Apples in molded pulp trays. *il Mod Packaging* 16:40-1 J1 '43

APPLES, Dried

Army specifications for dehydrated foods; dehydrated apple nuggets. *Food Ind* 15:122-4 Je '43

Brief summaries of grade standards. *Food Ind* 14:96-8 D '42

APPLICATIONS for positions

Getting the right job. F. A. Anderson. *Chem & Eng N* 21:1331-3 Ag 25 '43

I wanted a war job. *Adv & Sell* 36:13 My '43

You have to be tough; getting a job. E. M. Jennings. *Personnel J* 22:123-9 O '43

Your approach to your industrial job. V. Conquest. *Chem & Eng N* 21:1330-1 Ag 25 '43

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Employment—Job choosing

APPOINTMENT, Power of. See Power of appointment

APPRENTICES

Employers weigh apprenticeship difficulties; discussion at Printers national association meeting. *Inland Ptr* 112:35-8 O '43

Reorganization of apprenticeship in the building industry of Great Britain. G. D. H. Cole. *Int Labour R* 48:174-200 Ag '43

Sigmund apprentice training scheme. *il Engineer* 175:348-9 Ap 30 '43

Training apprentices for war and post-war work. A. Goodwin. *Factory Management* 100:100-1+ D '42

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APTITUDE tests. See Ability tests

AQUARIUMS

Aquarium of the Zoological park, London. *Science* 98:102 J1 30 '43

Proposed oceanarium at Coney Island. *Science* 98:127 Ag 6 '43

AQUATIC plants

Control of micro-organisms and aquatic vegetation in lakes and streams. L. F. Warrick. *bibliog il Water Works & Sewerage* 90:267-72 J1 '43

Utilization of aquatic food resources; fresh water plankton. C. Juday. *Science* 97:456-8 My 21 '43

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AQUEDUCTS

Delaware aqueduct. *il diags plans map Engineer* 174:184-6, 208-10, 226-3, 248-50, 270-2, 290-2; 175:344-6, 362-4, 382-3, 385, 402-4, 422-3, 440-1, 460-3 S 4-O 9 '42, Ap 30-Je 11 '43

Lining inclined section of Delaware aqueduct. C. G. Hoerner. *il diags plan Civil Eng* 13:139-43 Mr '43

Protective concealment for reservoirs and exposed aqueducts; experiments with smoke screens. *il Eng N* 131:595-7 O 21 '43

ARABIA

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ARABINOSE

Synthesis of 5-D-glucosido-D-arabinose. N. S. MacDonald and W. L. Evans. *bibliog Am Chem Soc J* 64:2731-3 D '42

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Benzylidene arabitol

ARABOGALACTAN

Constitution of arabo-galactan; the structure of the repeating unit. E. V. White. *Am Chem Soc J* 64:2838-42 D '42

ARABS

Changes in Arab economy. *Economist* 144:760-1 Je 12 '43

ARALAC

Aralac and spun rayon fabrics; desizing, dyeing, finishing, etc. *il Rayon* 23:715-16 D '42

Dyeing and finishing of Aralac fabrics. *il Rayon* 24:146 Mr '43

Methods for the detection of Aralac. *Rayon* 23:656 N '42

Microscopical identification of Lanital, Aralac and soybean fibers. G. L. Royer. *il Am Dyestuff Rep* 32:165-6 Mr 29 '43

Physical and chemical properties of Aralac. *Rayon* 23:691 N '42

Processing of Aralac. H. E. Millson. *il Textile Col* 65:151-9, 198-203, 206, 208-10, 245-52, 280-2, 294-8 Ap-J1 '43

Producing Aralac-wool blends. *il Textile World* 93:98 Je '43

Products from casein. F. C. Atwood. *Chem Ind* 51:864-6 D '42

Scouring and dyeing of Aralac blends. H. E. Hager. *il Rayon* 24:30-2, 87-8 Ja-F '43

Symposium of man-made fibers; Aralac and other protein-base fibers. H. E. Millson. *Textile Col* 65:12-13 Ja '43

Testing

Sweaters of the future; will they be all wool. Aralac, or nylon? *Consumers' Research Bul* 11:24-5 O '42

ARATA, Pedro Narcisco, 1849-1922

Portrait. *J Chem Educ* 20:476 O '43

ARBITRATION

Commercial arbitration in action; abstract. C. N. Callender. *Management R* 32:363-4 O '43

Needed, a shock absorber for peace! what will happen when war production stops? P. Fitzpatrick. *Credit & Fin Management* 45:7-8 Mr '43

Procedure under arbitration act outlined in federal court case. *East Underw* 44:35 My 7 '43

Wider significance of commercial arbitration. G. Everett. *For Comm W* 12:6-+ Ag 14 '43

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ARBITRATION, Industrial

Activities of the United States conciliation service, 1942-43. *Monthly Labor R* 57:540-2 S '43

Activities of United States conciliation service, November 1942. *Monthly Labor R* 56:69-71 Ja '43 [cont monthly]

Governmental adjustment of labor disputes, by H. S. Kaltenborn. *Review*, by W. R. MacLaurin. *Mech Eng* 65:812-13 N '43

National conciliation machinery for British coal-mining industry. E. M. Hodgkinson. *Monthly Labor R* 56:1170-4 Je '43

Schedule upheld; arbitrator sustains right of management to shift to four turns. *Business Week* p72-3 Ja 16 '43

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National mediation National war labor board Strikes

ARBITRATION association, American. See American arbitration association

ARBORS and mandrels

Close-quarter stator stacking. J. E. Waugh. *il Am Mach* 87:101 S 16 '43

Collapsible arbor speeds coil winding. *il Elec W* 120:1200 O 2 '43

Double-duty expanding mandrels. F. H. Colvin. *diags Am Mach* 86:1507 D 24 '42

Replaceable section arbor. *diag Iron Age* 151:70 Je 17 '43

ARC lamps. See Electric lamps, Arc; Electric lamps, Mercury vapor

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Arches of laminated wood. *il Arch Rec* 94:75 J1 '43

Heavy timber trusses carry timber arches. A. Zweig. *il diags Eng N* 131:190-3 J1 29 '43

Long-span arches for modification center. *il diags Eng N* 131:632-5 O 21 '43

Navy develops all-timber blimp hangar. A. Amirikian. *il diags Civil Eng* 13:471-4, 525-8 O-N '43

Plywood arches. *il Arch Forum* 78:8 Ap '43

Timber arches for blimp dock erected from scaffold on flatcars. *il diags Eng N* 131:320-3 Ag 26 '43

Two timber blimp docks erected with traveling timber scaffolds. *il diags Eng N* 131:460-5 S 23 '43

ARCHES, Concrete

Arched concrete shell for industrial roof; extension to Westinghouse plant. H. C. Schwerin. *il Civil Eng* 13:213-14 My '43

No steel in Kansas concrete culverts. T. W. Oliver. *il diags Eng N* 131:484-8 S 23 '43

Plain concrete arches; use of unreinforced spans. C. S. Whitney. *il diags Civil Eng* 13:29-32 Ja '43

Reservoir roof of unreinforced arches at Springfield, Vt. *il diags Eng N* 131:479-81 S 23 '43

Simplified analysis of skewed reinforced concrete frames and arches. R. M. Hodges. *diags Am Soc C E Proc* 69:635-63 My '43; Discussion. 69:1044-8, 1465-79 S, N '43

ARCHIBALD, Raymond Clare, 1875- Retirement of Professor Raymond C. Archibald, Science 98:261-2 S 17 '43**ARCHITECTS**

Beauty plus utility; both architects and engineers are necessary. J. R. Todd. *il Arch Rec* 94:52-3 O '43

Design for sale! why are there not more architects designing products in industry? K. K. Stowell. *Arch Rec* 94:41 Ag '43

Engineer, the architect, and the surveyor in town and country planning. H. J. Manzoni. *Engineer* 176:303-4 O 15 '43

Prefabricators view their future and the architect's. *Arch Rec* 94:52 J1 '43

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Advertising—Architects, Appeal to American institute of architects Architectural ethics Architecture

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Architect-engineers design an increasing proportion of total buildings; chart of 11 year period. *Arch Rec* 92:35 N '42

Organizational set-up of an architect-engineer. D. H. McCreery. *il Civil Eng* 13:477-9 O '43

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Designed by and for designers; offices of industrial designer and architect; views. *Arch Rec* 93:60 My '43

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Prefabrication vs. architects' ethics. G. L. Kaufman. *Arch Rec* 94:30+ O '43

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Decay of architectural morale. L. La Beaume. *Tech R* 45:133-4+ Ja '43

Does modern architecture pay? clients' statements based on their experience. *il Arch Forum* 79:69-76 S '43

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Architecture of Brazil; with photographs by G. E. Kidder-Smith. *Arch Rec* 93:34-56 Ja '43

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Polar regions
Radio communication—Arctic regions

AREA measurement

Area of annular space. W. F. Schaphorst. chart Chem Ind 53:374 S '43

Calculation of areas, volumes, surfaces reduced to simple terms. Water Works & Sewerage 90:sup271-3 Je '43

Transect method of estimating forests area from aerial photograph index sheets. P. R. Kramer and E. E. Sturgeon. Pulp & Pa of Can 44:34-6 Ja '43

AREA of particles. See Particles; Powders

AREA of United States. See United States—Area

AREQUIPA, Peru

Arequipa region; basic economic picture of southern Peru. J. G. Dwyre. il For Comm W 11:8-11+ My 1 '43

ARGAND, Émile, 1879-1940

Memorial. H. E. Thalmann. por(pl) Geol Soc Proc 1942:153-65 bibliog(pl62-5) Ap '43

ARGENTINA*See also*

Air lines—Argentina	Oil industries—Argentina
Banks and banking—Argentina	Paper industry and trade—Argentina
Bonds, Government—Argentina	Petroleum industry and trade—Argentina
Chemical industries—Argentina	Poultry industry—Argentina
Drug trade—Argentina	Public health—Argentina
Electric apparatus industry—Argentina	Public works—Argentina
Fruit trade—Argentina	Shoe industry and trade—Argentina
Housing—Argentina	Wheat—Argentina
Moving picture industry—Argentina	

ARGENTINA—Continued

Commerce

Argentina's foreign trade in 1942. H. Houston. *il For Comm W* 11:12-13+ My 1 '43
 Argentine; disparity between volume and value of exports, 1939-1942. Bankers M 146: 63-4 Ja '43
 For better cheese; Argentina to invoke new, higher standards. *Business Week* p54+ F 6 '43
 News by countries. *For Comm W* 13:19-20 O 23 '43

Economic conditions

Argentina in 1942. *Economist* 144:sup14 Mr 13 '43
 Argentina's trade and the war. *Economist* 145:143 J1 31 '43
 Brazil, Argentina, Chile, from an investment standpoint. V. L. Horoth. *il Mag of Wall St* 71:683-5+ Ap 3 '43
 Headaches on the Plata. *il Business Week* p17-19 D 5 '42
 News by countries. Published in *Foreign commerce weekly*
 Paving the way; Argentina's government attempts to prove big rise in business profits as prelude to boost in income taxes. *Business Week* p44 J1 17 '43

Economic policy

Argentina takes over U.S.-owned companies. *Comm & Fin Chr* 158:505 Ag 5 '43

Foreign relations

United States

U.S. rejects Argentine plea for lend-lease. *Comm & Fin Chr* 158:1111 S 16 '43

Industries and resources

Postwar markets take form. *Business Week* p28, 30 Ja 30 '43
 Value of Argentina's oil resources enhanced by reduced fuel imports. *il Steel* 112:32, 34-5+ Ja 13 '43

Politics and government

Argentina's new government. D. Saavedra. *Barron's* 23:10 J1 19 '43
 Argentina's revolution. *Economist* 145:78+ J1 17 '43
 Argentine military regime assumes rule. *Comm & Fin Chr* 157:2275 Je 17 '43
 Argentine revolt. *Business Week* p 14 Je 12 '43
 Second thoughts in Argentina. *Economist* 145:41-2 J1 10 '43

ARGERICH, Sir Cosme

Portrait. *J Chem Educ* 20:476 O '43

ARGININE

Quantitative investigations of amino acids and peptides; equilibria between amino acids and formaldehyde: arginine and lysine. E. H. Frieden, M. S. Dunn and C. D. Coryell. *J Phys Chem* 47:118-33 F '43

ARGON

Coefficients of thermal diffusion of neon and argon and their variation with temperature. L. G. Stier. *bibliog Phys R* 62:548-51 D 1 '42

Factors influencing the plateau characteristics of self-quenching Geiger-Mueller counters; argon-alcohol type. W. D. E. Spatz. *bibliog Phys R* 64:236-40 O 1 '43

Geiger-Mueller counter pulse size. C. W. Miller. *diag R Sci Instr* 14:68-76 Mr '43

Low temperature adsorption of nitrogen, oxygen, argon, hydrogen, *n*-butane and carbon dioxide on porous glass and on partially dehydrated chabazite. P. H. Emmett and T. W. Dewitt. *bibliog Am Chem Soc J* 65:1253-62 J1 '43

Positive and negative point-to-plane corona in pure and impure hydrogen, nitrogen, and argon. G. L. Weissler. *bibliog diag Phys R* 63:96-107 F 1 '43

Retardation and neutralization of argon ions in helium. W. J. Hamm. *bibliog diag Phys R* 63:433-3 Je 1 '43

Saturation characteristics for alpha-particles in purified gases. E. D. Klema and H. H. Barschall. *bibliog Phys R* 63:18-23 Ja 1 '43

Viscosities of carbon monoxide, helium, neon, and argon between 80° and 300°K coefficients of viscosity. H. L. Johnston and E. R. Grilly. *bibliog J Phys Chem* 46:948-63 N '42

ARITHMETIC

See also
 Cube root

ARIZONA

Regional patterns of dietary deficiency; Spanish-Americans of New Mexico and Arizona. C. A. Heller. *Ann Am Acad* 225: 49-51 Ja '43

See also

Geology—Arizona
 Rain and rainfall—
 Arizona

ARKANSAS

See also

Electricity supply—
 Arkansas
 Mines and mineral
 resources—Arkansas
 Petroleum—Arkansas
 Public utilities—Arkansas

Industries and resources

New electric plant brings Arkansas other industries. *il Manuf Rec* 111:33+ D '42

ARKANSAS River valley

Plans revamped; National resources planning board to delete all portions of report dealing with the upper Arkansas River valley. *Business Week* p37 Je 12 '43

ARMAMENTS

Army ordnance probes secrets of enemy weapons. A. F. Macconochie. *il Steel* 113: 80-2, 84+ S 27 '43
 Automotive techniques in war; molded resin parts for war machines. *il Mod Plastics* 21: 72-4+ O '43
 Canadian armament redesigns conserve critical materials and increase production. J. Montagnes. *il Product Eng* 14:327-32 Je '43

See also

Armor plate
 Munitions
 Ordnance
 Tank automotive
 center, Detroit
 Tanks, Military

ARMATURES

Armature progress reflected in long-term detailed records; Zeigler no. 1 mine, Bell & Zoller coal & mining co. *il Coal Age* 47:67-8 D '42
 Armature reaction. *diag Electrician* 131: 303-5 S 24 '43

Repair

New armature winding diagram. W. T. Taylor. *diag Power Pl Eng* 47:78-81 Ap; 72-5 Je; 56-9 J1; 70-4+ Ag; 74-7 N '43
 Rewinding armatures; repairing universal motors for small machine tools. R. Newing. *diag Elec R (Lond)* 132:548-50 Ap 23 '43

ARMIES

See also

Demobilization
 Water supply for
 armies
 also subdivision Army under names of countries, e.g. Great Britain—Army; Russia—Army; United States—Army

Commissariat

New foods for U.S. and Canadian fighters. *il Mod Packaging* 17:60-3+ S '43

ARMOR plate

American steel foundries casts armor for tanks. F. G. Steinebach. *il Foundry* 71:78-82+ J1 '43

Armor plate building. Ford motor company, Rouge plant. R. W. Tuer. *il Heat & Ven* 40:62-7 Je '43

Armor plate for ships and tanks. *il diag Metal Prog* 43:383-95+ Mr '43

Armor plate milling. K. B. Kaiser. *il diag Am Mach* 87:116-20 Je 24 '43

Armor plate milling. W. F. Pioch. *Am Mach* 87:157-8 J1 8 '43

Armour-plate welding; jig construction. *il Elec R (Lond)* 132:805-3 Je 18 '43

Armor speeded; Ford devises press which combines two operations. *Business Week* p48+ My 8 '43

Carnegie-Illinois armor plate plant. R. E. Hattis. *diag Heat & Ven* 40:68-73 Je '43

Cast armor, its post-war possibilities. *il Product Eng* 14:[724] insert 8 N '43

Flame cutting; use of oxy-acetylene on rolled armour plate. *Automobile Eng* 33:211-13 My '43

ARMOR plate—Continued

- Ford engineers develop new method for straightening armor plate. *il* Automotive & Aviation Ind 87:52 D 1 '42
- Passive defense; the protective armoring of military aircraft. H. J. Alter. *diags* Aeronautical Eng R 2:45+ Ap '43
- Pressure quench for armor plate. F. P. Peters. *il* *diags* Metals & Alloys 18:789-94 O '43
- Principal operations in production of 1000 tons of class A main belt armor for battle-ships; chart. Iron Age 151:102 S 16 '43
- Quench-straightening of armor plate. *il* Iron Age 151:54 Ap 29 '43
- Quench-time control for cast armor; Brown system. J. P. Vollrath. *plan* Iron Age 151:59 Ap 22 '43
- Tank destroyer fabricated from armor plate. *il* Blast F & Steel Pl 31:443-4 Ap '43
- Welded weapons in war. S. B. Ritchie. *il* Welding J 22:893-901 N '43
- Welding armor plate for combat tanks; superiority of welded over riveted construction; abstracts. E. Brooker and L. L. Elliot. *il* *diags* Iron Age 151:23-7 Ja 14 '43; Metal Prog 43:392-5+ Mr '43
- Working out techniques for welding armor plate. E. G. Biederman. *diags* Iron Age 151:46-50 Ja 21 '43; Same. Welding J 22:516-19 J1 '43

ARMORIES**Heating and ventilation**

- Heating for the navy; military building on the West coast. *il* Dom Eng 161:52-3 Mr '43

ARMOUR-VIT. See Metal protection

- ARMOUR** and company of Delaware
Armour revamping contemplated. Barron's 23:9 My 10 '43
- Debentures offered. Comm & Fin Chr 157:2209-10 Je 14 '43
- Files \$35,000,000 issue with SEC. Comm & Fin Chr 157:1737 My 10 '43
- Guaranteed 7% preferred. O. Ely. Mag of Wall St 71:363 Ja 9 '43
- Preferred stockholders given right to exchange holdings for 7% debentures. Comm & Fin Chr 157:2007 My 31 '43
- To retire preferred stock through private sale of \$15,000,000 notes. Comm & Fin Chr 158:452 Ag 2 '43
- Underwriters named. Comm & Fin Chr 157:1937-8 My 24 '43

ARMOUR and company of Illinois

- Court drops indictment against Armour and Wilson. Comm & Fin Chr 157:517 F 8 '43
- Financial report for 1942. Comm & Fin Chr 157:6 Ja 4 '43
- Merger effected. Comm & Fin Chr 158:1342 O 4 '43
- Packers' recovery. Business Week p102-3 O 9 '43
- Plans merger with Delaware subsidiary. Comm & Fin Chr 158:542 Ag 9 '43
- Securities disturbing investors. J. S. Williams. Mag of Wall St 71:359+ Ja 9 '43

ARMOUR institute of technology. See Illinois institute of technology**ARMOUR research foundation**

- Armour institute is clearing house for heavy-duty oil test data. Nat Pet N 35 pt 2:R472 O 6 '43

- Industrial research progress at the Armour research foundation 1941-1942. *il* Chem & Eng N 21:17-26 Ja 10 '43

ARMS and armor*See also*

- Armor plate
Bayonets
Ordnance

ARMSTRONG, Edwin Howard, 1890-

- Award of the Edison medal to Dr E. H. Armstrong. Science 97:11-12 Ja 1 '43; Excerpt. Power Pl Eng 47:53 Ja '43
- E. H. Armstrong, Edison medalist; address by A. Hazeltine, with response by E. H. Armstrong. *por* Elec Eng 62:147-61 Ap '43
- Personalities in science. *por* Sci Am 168:245 Je '43
- Sketch. *por* Inst Radio Eng Proc 31:315 J1 '43

ARMSTRONG cork company

- Market leaders for 1943. Mag of Wall St 71:342-3 Ja 9 '43
- War casualty companies that will revive with peace. J. C. Clifford. Mag of Wall St 72:532 S 4 '43
- War orders hide Armstrong Cork's growth. M. Pescatello. Barron's 23:5 O 25 '43

ARMY, International. See Police, International**ARMY amateur radio system**

- AARS fights. R. D. Jordan. *il* Radio N 28:118-19+ N '42

ARMY camps. See Camps, Military; Military posts; Military training camps**ARMY fabrics**

- Blends for 32-oz. army overcoating. W. G. Holman. *il* Textile World 93:91 Ap '43
- Cotton replacing fur in many cold climate garments for soldiers. Textile Col 64:558 D '42
- Defects in military knit goods. *il* Textile World 93:106 Ap '43
- Development and research in the Q. M. C. F. M. Steadman. Am Dyestuff Rep 32:244-7 My 24 '43
- Fabrics for military purposes; coated HH balloon cloth; cotton drill and sheeting specification amended. *il* Textile World 92:80 D '42
- Fabrics for military purposes; cotton marquisette for sandfly bars; fabrics for use in outfits for WAACS. *il* Textile World 92:70 N '42
- Fastness to weathering of the army O.D. shade dyed by the monochrome method. N. G. Koehler. Am Dyestuff Rep 32:481-2+ N 8 '43
- Finishing of army ducks with special reference to mildewproofing. E. C. Bertolet. Am Dyestuff Rep 32:214-19, 226-7 My 10 '43
- Flameproof military fabrics; processes which afford protection against fire, water, mildew. W. W. Chase. Textile World 93:90 Ap '43
- Impact of war-time requirements on post-war finishes; presented for the A.A.T.C.C. Rhode Island section by H. S. Travis. Am Dyestuff Rep 31:634-7+ D 7 '42
- Infrared reflecting and fluorescent pigments on textiles for the armed forces. R. K. Jackson. *diag* Am Dyestuff Rep 32:259-60 Je 7 '43
- Manual of military fabrics. *il* *diags* Textile World 93:83-90 F; 72-4 Mr; 88-9 Ap; 82-3 My; 94-5 Je; 72-3 J1; 88-9 Ag; 94-5 S; 90-1+ O '43
- Mildewproofing army fabrics. J. E. Goodavage. *diags* Textile World 93:92-3 Je '43
- Mildewproofing of military fabrics. C. W. Hock and M. Harris. *bibliog* Rayon 23:670, 711-12 N-D '42
- New fabric developed for mountain troops. Textile Col 65:138 Mr '43
- Olive drab for army nurses corps; new fabrics and uniforms for nurses and WAACS. *il* Textile World 93:93 Ap '43
- Part-wool blankets for use in barracks. H. F. Schiefer, L. R. Mizell and F. T. Mose-dale. J Research Nat Bur Stand 30:203-8 Mr '43
- Preservatives used in Australia; rotproofing and waterproofing of textiles. For Comm W 12:40 Ag 21 '43
- Report of the committee cooperating with the government on uniform fabrics. L. A. Olney. Am Dyestuff Rep 31:644-6 D 7 '42
- Study of the sulfuric acid carbonizing bath used in carbonizing the government 32 oz. olive-drab overcoating. K. S. LaFleur. *il* Am Dyestuff Rep 32:473-6, 485-9 N 8 '43
- Tendering of cotton fabrics. F. M. Steadman. Textile Col 65:302+ J1 '43
- Tiger stripes in army socks; frequently traced to mercerization. *diags* Textile World 93:97 S '43
- Vat dyeing OD army underwear. O. W. Clark. Textile World 93:104-5 Ap '43
- Weaving OD army overcoatings. W. G. Holman. Textile World 93:66 Ja '43

See also

- Tents United States—Army
Uniforms, Military Textile require-
ments

Testing

- Quartermaster board and field testing. M. R. Wainer. Textile Col 65:105-6+ Mr '43

- ARMY food.** See Armies—Commissariat; China—Army—Commissariat; United States—Army—Commissariat
- ARMY-Navy E pennant.** See Incentives in industry
- ARMY post exchanges.** See Post exchanges
- ARMY posts.** See Military posts
- ARMY rations.** See China—Army—Commissariat; United States—Army—Commissariat
- ARMY soap specifications.** See Soap—Specifications
- ARMY specialized training program.** See United States—Army—Education
- ARMY stores.** See Post exchanges
- ARMY transportation corps.** See United States—Army—Transportation corps
- ARMY trucks.** See Motor trucks, Military
- ARNDT-EISTERT reaction**
Mechanism of the Arndt-Eistert reaction. C. Huggett, R. T. Arnold and T. I. Taylor. *Am Chem Soc J* 64:3043 D '42
- ARNOLD, print works**
Dissolved, pays final liquidating dividend. *Comm & Fin Chr* 158:1127 S 20 '43
- AROMATIC compounds**
Alicyclic-aromatic isomerization. E. C. Horning. *Chem R* 33:89-135 bibliog(144 references, p132-5) O '43
See also Hydrocarbons, Aromatic
- ARROYO del Río, Carlos Alberto**
Roosevelt welcomes President of Ecuador. *Comm & Fin Chr* 156:2164 D 17 '42
- ARSENAL laboratories**
Research at a government arsenal in co-operation with universities. L. S. Fletcher. *J Eng Educ* 33:781-6; Discussion. L. M. K. Boelter; A. W. Hixson. 786-93 Je '43
- ARSENALS**
Architectural concrete building aids arsenal in its fourth war. *il Concrete* 51:36 S '43
- ARSENATES**
Studies on aging and coprecipitation; the distribution coefficient of arsenate between magnesium ammonium phosphate and solution. I. M. Kolthoff and C. W. Carr. *J Phys Chem* 47:148-52 F '43
- ARSENIC**
Decolorization and fining in the absence of arsenic. *Glass Ind* 24:107+ Mr '43
Exaggerated phosphorescence of zinc silicate phosphors. H. C. Froelich and G. R. Fonda. *J Phys Chem* 46:878-85 N '42
Minor metals, 1942. A. L. Ransome. *Eng & Min J* 144:74 F '43
- Analysis
- Determination of small amounts of arsenic, antimony, and tin in lead and lead alloys. C. L. Luke. bibliog *il Ind & Eng Chem Anal ed* 15:626-9 O 15 '43
- Iodometric semimicroprocedure for determination of arsenic in sodium cacodylate and cacodylic acid. V. Levine and W. M. McNabb. *Ind & Eng Chem Anal ed* 15:76-7 Ja 15 '43
- Microdetermination of arsenic in biological material. J. A. Sultzberger. bibliog *diag Ind & Eng Chem Anal ed* 15:408-10 Je 15 '43
- Systematic polarographic metal analysis; characteristics of arsenic, antimony, bismuth, tin, lead, cadmium, zinc, and copper, in various supporting electrolytes. J. J. Lingane. bibliog *Ind & Eng Chem Anal ed* 15:583-90 S 15 '43
- Isotopes
- Cyclotron targets; preparation and radiochemical separations; arsenic and germanium. J. W. Irvine, jr. bibliog *il J Phys Chem* 46:910-14 N '42
- Gamma-rays from As⁷⁶. C. E. Mandeville. bibliog *Phys R* 63:91-3 F 1 '43
- ARSENIC compounds**
Amidino arsenicals; *p*-amidinophenylarsonic acid and 4,4'-diamidinoarsenobenzene. F. Linsker and M. T. Bogert. *Am Chem Soc J* 65:932-4 My '43
- p*-Aminobenzoic acid detoxication of carbarsone (*p*-carbamino phenyl arsonic acid) and certain other pentavalent phenyl arsonates administered in massive doses to rats. J. H. Sandground. bibliog *Science* 97:73-4 Ja 15 '43
- Arsenicals derived from acetophenone. R. L. Clark and C. S. Hamilton. bibliog *Am Chem Soc J* 65:635-7 Ap '43
See also Lewisite Mapharsen
- ARSENIC halides**
Crystalline complexes of arsenic, antimony and bismuth trihalides with dioxane. C. J. Kelley and P. A. McCusker. bibliog *Am Chem Soc J* 65:1307-9 JI '43
- ARSENIC oxides**
Polymorphism of arsenious oxide. J. H. Schulman and W. C. Schumb. bibliog *diag Am Chem Soc J* 65:878-3 My '43
- ARSENIC poisoning**
New standard recommends limit on arsenic fumes in workplaces. *Ind Stand* 14:247 S '43
- ARSENOBENZENE**
Amidino arsenicals; *p*-amidinophenylarsonic acid and 4,4'-diamidinoarsenobenzene. F. Linsker and M. T. Bogert. *Am Chem Soc J* 65:932-4 My '43
- ARSENOPYRITE**
Leached derivatives of arsenopyrite and chromite. R. Blanchard. *il Econ Geol* 37:596-626 N '42
- ARSON**
Fight against arson; report to National Board. *Weekly Underw* 148:1130+ My 29 '43; Same abr. *East Underw* 44:18 My 28 '43
Fires set to collect insurance. P. B. Reed. *Weekly Underw* 148:1328-9 Je 19 '43
- ARSONIUM compounds**
Tetra-aryl-phosphonium, -arsonium and -stibonium salts; the mechanism of their formation by the aluminum chloride reaction. D. R. Lyon and F. G. Mann. *Chem Soc J* p666-71 N '42
- ARSONOACETOPHENONE**
Arsenicals derived from acetophenone. R. L. Clark and C. S. Hamilton. bibliog *Am Chem Soc J* 65:635-7 Ap '43
- ART**
See also Enamel and enameling
Architects Architecture
Ceramic art Photography
Design Pottery
Consult Art Index for additional references
Philosophy
Civilization and the arts. W. M. Dixon. *il Fortune* 27:112-15, 120+ Ap '43
- ART, Commercial**
See also Advertising art
Design
War-art associates
- ART, Decorative**
See also Glassware—Decoration
Pottery—Decoration
- ART, Mexican**
See also Painting, Mexican
- ART education**
Inter-society color council symposium; color in art education. *Opt Soc Am J* 32:698-726 D '42
- ART galleries and museums**
New buildings for 194X; museum. *il plan Arch Forum* 72:84-5 My '43
New display techniques for Art of this century; designed by Frederick J. Kiesler. *il diags Arch Forum* 78:49-53 F '43
- ART industries**
Ad men merchandise masterpieces to the masses; Tomorrow's masterpieces, inc. organized to sell work of established artists thru department stores. E. M. Housman. *il Ptr Ink* 205:24-5+ N 12 '43
See also Ceramics Jewelry

- ART metal works, inc.**
Thumbnaill stock appraisal. *Mag of Wall St* 71:240 D 12 '43
- ART of this century (museum).** See Art galleries and museums
- ARTESIAN wells**
Early history of water-well drilling in the United States. C. W. Carleton. *bibliog* *il* *diags Econ Geol* 38:119-36 Mr '43
- ARTHRITIS**
Preliminary spectrographic study of normal and arthritic human blood. J. S. Hepburn, C. A. Hall and J. A. Doane. *Franklin Inst J* 285:167 F '43
Six-year study of arthritis therapy. R. G. Snyder, W. H. Squires and J. W. Forster. *bibliog* *Ind Med* 12:291-7 My '43
Therapeutic value of electrically activated ergosterol when administered intramuscularly. R. G. Snyder and others. *bibliog* *Ind Med* 12:668-8 O '43
- ARTIFICIAL limbs**
On its own legs; prosthetics industry. *il* *Business Week* p34+ Ag 7 '43
- ARTIFICIAL respiration.** See Respiration, Artificial
- ARTIFICIAL rubber.** See Rubber, Artificial
- ARTIFICIAL silk.** See Rayon
- ARTIFICIAL teeth.** See Teeth, Artificial
- ARTIFICIAL wool.** See Wool, Artificial
- ARYL amines.** See Amines
- ARYL sulfates**
p-Toluidine salts of monocaryl sulfates. A. D. Barton and L. Young. *Am Chem Soc J* 65:294-5 F '43
- ASBESTOS**
Asbestos and its products; progress in South Africa. *Chem Age (Lond)* 49:213-16 Ag 28 '43
Mining of asbestos. T. A. Rickard. *bibliog* *il* *map Can Min J* 64:359-65 Je '43
Navy camp built from non-critical materials; Camp Bainbridge. *il* *diag Eng N* 130:124-7 Js 28 '43
Performance data on enamel type pipe-line coatings. W. F. Rogers. *Pet Eng (Ref annual)* 14:162, 164, 166 Jl 1 '43
See also
Pipes, Asbestos Turner and Newall, board limited
- Advertising**
- Uses industrial ads as insurance against war-created substitutes; manufacturer Keasbey & Mattison sees service men as important prospects in the future. *Ptr Ink* 203:68 Ap 30 '43
- Testing**
- Tests of steam-pipe insulation; rock wool, glass wool and corrugated asbestos. E. A. Allcut. *bibliog* *il* *diags A S M E Trans* 65:407-17; Discussion. 417-19 Jl '43
- ASBESTOS cement**
Asbestos cement products. *Mech Handling* 30:261-2 Je '43
- ASBESTOS cement pipes.** See Pipes, Asbestos cement
- ASBESTOS shingles.** See Shingles, Asbestos
- ASCITES**
Ultracentrifugal and electrophoretic investigation of an ascitic fluid from a cancer patient. E. B. Saenger, L. E. Krejci and E. O. Kraemer. *bibliog* *Franklin Inst J* 295:298-313 Mr '43
- ASCORBIC acid.** See Vitamins—Vitamin C
- ASH content.** See Oil fuel—Ash content
- ASH handling**
Ash sluice pipe life quadrupled by turnings. *Elec W* 119:297 Ja 25 '43
Chain conveyor removes ashes. *il* *Elec W* 120:112 Jl 10 '43
Coal and ash handling plant. J. F. R. Mitchell. *il* *diags Mech Handling* 30:200-4 My '43; Same cond. *Elec R (Lond)* 132:533-4 Ap 16 '43
New N. & W. cinder handling plant. *diag Ry Age* 114:579-80 Mr 20 '43
Simplicity and versatility stressed in Akron addition; fly ash disposal. G. C. Daniels. *diags plan Elec W* 120:986-7 S 18 '43
- You can meet WPE regulations when buying material-handling equipment. W. G. Hudson. *il* *Power* 87:658-60 O '43
- ASH receptacles**
Concrete manhole covers and ash receptacles; Best block co. *il* *Rock Prod* 45:63-4 N '43
- ASHLAND, Kentucky**
Resurfacing Winchester ave. C. M. Ferguson. *il* *Pub Works* 74:19+ O '43
- ASIA**
See also
Food supply—Asia
- ASIA, Southeastern**
Southeastern Asia and the Philippines. L. A. Mills, ed. *bibliog* *maps Ann Am Acad* 226:1-150 Mr '43
- ASPARAGINE**
Physicochemical aspects of bacterial growth; the lag phase of *bact. lactis aerogenes*. R. M. Lodge and C. N. Hinshelwood. *Chem Soc J* p213-19 My '43
Reaction of formaldehyde with 1(-)-asparagine. D. C. Carpenter and F. E. Lovelace. *bibliog* *Am Chem Soc J* 64:2399-902 D '42
- ASPARTIC acid**
Reaction of formaldehyde with l(+)-aspartic and l(+)-glutamic acids. D. C. Carpenter and F. E. Lovelace. *bibliog* *Am Chem Soc J* 65:1161-5 Je '43
- ASPEN**
Cooking process; action of aqueous solutions of pure sodium hydrosulfide on aspen wood. R. L. Hossfeld, R. A. Gortner and F. H. Kaufert. *bibliog* *diag Ind & Eng Chem* 35:717-20 Je '43
- ASPERGILLUS**
Clavacin and the press. H. W. Anderson. *Science* 95:282 S 24 '43
- ASPHALT**
Asphalt, 1938-1941. Survey of Cur Business 1942 Sup p159 [supplemented in monthly numbers]
Asphalt-polybutene paints. H. C. Evans, D. W. Young and R. L. Holmes. *il* *Ind & Eng Chem* 35:481-8 Ap '43
California plant adapted to refine sulfur crude; road oil and asphalt main products; Bell oil & refining co. *il* *Oil & Gas J* 42:74 Je 17 '43
Liquid asphalt ends pumping action at joints in concrete road slabs. *il* *Eng N* 131:333 Ag 26 '43
Modifiers aid manufacture of asphalt products. *Oil & Gas J* 42:44 Jl 15 '43
OPC recommendation 61 cuts number of asphalt grades. *Nat Pet N* 34:20 N 25 '42
Pulled piles reveal effectiveness of asphalt-treated wrapping; protecting untreated piling from marine borers. *il* *Eng N* 130:480-1. Ap 8 '43
See also
Bituminous sand Pavements, Asphalt
Gilsonite Roads, Bituminous
- Analysis**
- Determination of wax in asphalt. R. L. Betts and H. D. Wirsig. *bibliog* *diags Ind & Eng Chem Anal ed* 15:478-83 Ag 15 '43
- Bibliography**
- Quarterly digest of current asphalt literature. Published by Asphalt Institute, 801 2d av, New York
- Prices**
- Asphalt ceiling; OPA sets new formula for clarifying maximum price structure. *Nat Pet N* 35:16 F 17 '43
- Specifications**
- PAW issues new asphalt specifications. *Oil & Gas J* 41:59 Ap 1 '43
- Testing**
- Performance of slow-curing asphalts; abstract. J. Zapata. *Eng N* 131:160 Jl 15 '43
Rapid method of estimating the A.S.T.M. plus-and-ball softening point of asphalts. A. B. Hersberger and C. Overbeck. *il* *diag Am Soc T M Proc* 42:889-94; Discussion. 895 '42

ASPHALT—Testing—*Continued*

Surface consistency characteristics of asphalts; penetration test of asphalt surfaces ranging in thickness from 0.04 to 0.30 cm. E. C. Knowles and F. C. McCoy. *bibliog* *il* Ind & Eng Chem 35:1118-22 O '43

ASPHALT institute

New officers. *pers* Nat Pet N 35:2 Ap 28 '43

ASPIRIN

All-America package competition award; Bayer company. *il* Mod Packaging 16:94+ Ap '43

ASSAULT and battery

When is an assault covered? digest of recent cases. J. L. Roesch. *Spectator* (Property ed) 8:28-30 Je 24 '43

ASSAYING. See Metallurgical analysis; Ore sampling; Ore testing

ASSEMBLING machines

Makes disks, seats and inspects automatically; foil disk assembly machine for detonator cups. W. S. McArdle. *il* Metal Prog 44:274 Ag '43; Same. *Mach* 49:204 Ag '43

ASSEMBLING methods

AC engineers use automotive methods to speed automatic pilot production. J. Geschelin. *il* Automotive & Aviation Ind 89:34-7+ Ag 1 '43

Aircraft production analysis, key to assembly line efficiency. L. F. Dorman. *il* Aviation 42:148-52+ N '43 (to be cont)

All half-trac assembly operations at White plant on mass production basis. J. Geschelin. *il* Automotive & Aviation Ind 89:36-8+ S 15 '43

Assembling 16-ton Liberty ship engine crankshaft; Joshua Hendy iron works. *il* Marine Eng 48:215-16 S '43

Assembly by silver brazing; William R. Bootz manufacturing company; assembling army field range fire units. H. Chase. *il* Am Mach 86:1426-8 D 10 '42

Assembly fixture for increasing production. *il* Mach 50:162 S '43

Assembly line methods used at Douglas plant to prepare engines for installation. F. H. Hillman. *il* Automotive & Aviation Ind 89:34-6+ Ag 15 '43

Automatic fastener for ship assembly. H. F. Lowe. *il* Marine Eng 48:212-13 Ap '43

Behind the assembly line; feeder departments; Consolidated Vultee aircraft corporation. R. B. Parkhurst. *il* Am Mach 87:91-4 Jl 8 '43

Bell Airacobra; product of precise prefabrication. H. L. Horton. *il* Mach 49:160-9 Jl '43

British prefabricated tugs. *il* plan Engineer 175:336-8 Ap 23 '43

Building a dive bomber; Douglas aircraft company. *il* Am Mach 87:98-101 S 2 '43

Close-quarter stator stacking. J. E. Waugh. *il* Am Mach 87:101 S 16 '43

Complicated assemblies welded easily with alternating-current machines; United welding co. L. T. Kennedy and E. Wenzel. *il* Steel 113:92+ O 18 '43

Consolidated retools the Coronado. E. P. Myers. *diags* Am Mach 87:83-90 Je 10 '43

Constant-motion line speeds assembly, saves space; wing panels at Bell aircraft corporation. *il* Factory Management 101:122-3 S '43

Conveyorized assembly line and vertical jigs speed output of airplane wings at Murray corp.'s plant. *il* Steel 112:70, 72 F 15 '43

Double-deck assembly of the Vega Ventura. H. W. Allen. *il* Am Mach 87:121-9 F 18 '43

Down assembly lines. *il* Factory Management 101:105-6 Jl '43

Final assembly of the Coronado; illustrations with text. *Am Mach* 87:94-6 Je 24 '43

Flight level; assembly line conveyor speeds bomber production. *il* diags Steel 112:125-6 My 17 '43

Ford applies mass production to big bombers. *il* diags Am Mach 87:93-108 F 4 '43

Fortresses by Boeing, Douglas, Vega; Liberator by Consolidated Vultee and Ford; Mustangs by North American; Avengers by Eastern. *il* diags plans Aviation 42:124-73+ Jl '43

Handling trolleys for assembly of aircraft. *il* Mech Handling 30:59-60 F '43

How Consolidated builds the Coronado. *il* Aero Digest 43:182-4, 186, 189+ S '43

How fewer build more bomber nose sections; Consolidated Vultee San Diego plants. *il* Aviation 42:161-3, 165 S '43

How Kaiser builds Liberty ships; line assembly of deck houses at the Richmond shipyards. *il* diags plans Am Mach 86:1299-1306 N 12 '42

Inspection time reduced on aircraft parts; Consolidated Vultee aircraft corp. V. E. Childers. *il* Iron Age 152:66-9 S 16 '43

Jig assembly of tube lines for aircraft. *il* Automotive & Aviation Ind 87:32-3+ N 15 '42

Jigs and fixtures for arc welded mass production; R. G. Le Tourneau inc. W. J. Brooking. *il* diag Steel 113:80, 82+ O 25; 102, 104+ N 1; 119-20, 122 N 8 '43

Lightning line brews triple trouble for Axis; mechanized assembly of P-38 fighter. J. H. Sreenan. *il* diags Aviation 42:121-34+ S '43

Lockheed P-38 fighters now produced on mechanized assembly line. *il* Steel 113:102, 104+ S 20 '43

Mass assembly adapted to build troop-carrying gliders. *il* Steel 112:80+ Mr 15 '43

Mass assembly methods adapted by Ford engineers to army 3-ton transport gliders. *il* Automotive & Aviation Ind 89:30-3, 46+ Ag 1 '43

Mass production methods in shipyards. A. J. Ackerman. *il* diags plan Civil Eng 13:201-4, 261-4 My-Je '43

Mass production methods used at Bell plant to build Airacobras. J. Geschelin. *il* Automotive & Aviation Ind 89:22-6+ S 15 '43

Mechanized assembly line to double output of P-38 fighters. R. R. Kay. *il* Automotive & Aviation Ind 89:32-3+ Jl 15 '43

More wings for Airacobras; constant motion production lines aid unskilled women workers; Bell aircraft corp. C. F. Lozon. *il* diags Aviation 42:126-40 F '43

Murray fabricates aircraft surfaces on moving assembly lines. F. M. Reck. *il* Aero Digest 42:207, 215 Mr '43

New Curtiss-Wright propeller conveyor-assembly line. *il* Aviation 42:185 My '43

Packard builds aircraft engines on a conveyor line basis. F. M. Reck. *il* Aero Digest 42:164, 166-8+ F '43

Prefabricated tugs. *il* plan Engineering 155:306-7, 310 Ap 16 '43

Production density, to save floor space; Boeing aircraft company. *il* Factory Management 101:91-3 Mr '43

Production line shipbuilding with pre-assembled sections; Dravo corporation. *il* diags Eng N 131:200-3 Jl 29 '43

Production problems of the Coronado flying boat. E. P. Meyers. *il* diags Automotive & Aviation Ind 89:38-41+ S 1 '43

Refrigerators to Thunderbolt wings; Servel's wing fabricating methods. G. E. Stedman. *il* Aviation 42:142-7+ O '43

Revolution in mass production; full utilization of machines that move materials will determine the shape of our postwar industry. *il* diags Fortune 27:130-6+ F '43

Sheet-spring fasteners speed aircraft assembly. H. White. *il* Aviation 42:183, 185+ Ag '43

Ships welded on a production line; Dravo corp. G. F. Wolfe. *il* diag Metal Prog 43:550-4 Ap '43

Single assembly line produces both bombers and transports; Consolidated aircraft corp. R. C. Sebald and S. J. Powell. *il* Aviation 42:126-33+ Ap '43

Some observations on ship welding. D. Arnott. *il* diags Welding J 22:73-92 F '43; Same *abr.* Marine Eng 48:132-41 Ja; 179-83 Mr; 203-5 Ap '43; Discussion. 48:160, 162+ Ja '43

Specially designed welding equipment assembles auxiliary fuel tanks. *il* diags Product Eng 14:479-80 Ag '43

ASSEMBLING methods—Continued

- Steel casing retools the Mustang; aircraft assembly fixtures from steel casing from oil fields. L. Pollock. *il Am Mach* 87:91-5 My 13 '43
- Timed operations pace conveyors in Vengeance bomber assembly. R. McCulloch. *il diags Am Mach* 87:97-103 Ap 1 '43
- Too hot to handle, but workers work fast; installing parts in heated airplane cylinder head. *il Iron Age* 151:61 My 20 '43
- Tooling for bombers at Willow Run; center wing assembly fixture. *il diags Am Mach* 86:1452-6 D 10 '42
- Welding plays top role in anti-aircraft gun recoil; R. Hoe & company. *il Am Mach* 86:1372-6 N 26 '42
- Widespread use of conveyorized assembly systems. *il Aero Digest* 43:182-3 Ag '43
- Wings for the Flying Fortress. *il diags Am Mach* 86:1509-19 D 24 '42

See also

Airplane assembly plants

ASSES. See Mules

ASSESSMENT

Pattern of successful property tax administration: the Wisconsin experience; state supervision. H. M. Groves and A. B. Goodman. *J Land & Pub Util Econ* 19:141-52 My '43

ASSESSMENT insurance. See Insurance, Assessment

ASSESSMENT maps

Construction of tax maps from aerial survey plats; Warwick, R.I. A. E. McGuinness. *il diags map Pub Works* 74:16-19 My '43

ASSESSMENTS, Special. See Special assessments

ASSETS, Liquid. See Liquidity (economics)

ASSIGNMENT of book accounts

High court limits a method of lending; holds state laws govern use of trade accounts as security. W. H. Hillyer. *Barron's* 23:9 Mr 29 '43

Non-notification financing of receivables. C. R. Rosenberg, jr. *Burroughs Clearing House* 27:30+ Je '43

Review of Supreme court ruling on assignment of accounts receivable. W. R. Montgomery. *Credit & Fin Management* 45:24-6 My '43

U.S. District court in Illinois rules in favor of trustee in an assignment of accounts case. W. R. Montgomery. *Credit & Fin Management* 45:16 N '43

U.S. Supreme court rules against assigned accounts as preference claims. *Credit & Fin Management* 45:40 Ap '43

ASSOCIATED business papers

Annual spring conference, Skytop, Pa. *Ptr Ink* 203:48 Je 4 '43

ASSOCIATED dry goods corporation

Low-priced stocks for large percentage gains. *Mag of Wall St* 71:634 Mr 20 '43

Thumbnail stock appraisal. *Mag of Wall St* 72:632 S 18 '43

ASSOCIATED electric company

Bond purchase held up. *Comm & Fin Chr* 156:1857 N 23 '42

SEC reopens bond purchase case. *Comm & Fin Chr* 157:687 F 22 '43

Simplification. *Comm & Fin Chr* 157:126 Ja 11 '43

ASSOCIATED equipment distributors

Canadian equipment distributors affiliate with A.E.D. Roads & Bridges 81:31-2+ JI '43

ASSOCIATED gas and electric system

Amendment to plan of reorganization. *Comm & Fin Chr* 158:1526 O 18 '43

Associated corp. to merge and dissolve; bank vindicated in Associated gas and electric corp. breach of trust charges. *Comm & Fin Chr* 157:1418 Ap 19 '43

Associated Gas compromise plan; relative rights of bondholders in AGECO and AGECORP. *Pub Util* 30:794-6 D 3 '42

Associated Gas making progress with reorganization plans. *Comm & Fin Chr* 158:1195+ S 23 '43

Associated Gas plan. *Pub Util* 32:38-9 JI 8 '43

Associated gas system makes big tax saving. *Pub Util* 31:367-9 Mr 18 '43

Associated Gas trustees plan new top company. *O. Ely. Pub Util* 31:167-70 F 4 '43

Compromise plan on claims approved. *Comm & Fin Chr* 158:542 Ag 9 '43

Employees' claims on utilities cut. *Comm & Fin Chr* 157:2210 Je 14 '43

Files reorganization plan. *Elec W News* ed 119:2072 Je 19 '43

Improving position of Associated Gas. *O. Ely. Pub Util* 31:763-5 Je 10 '43

Loses in plea on Philippines; property divestment by Aug. 13 will stand. *Comm & Fin Chr* 157:126 Ja 11 '43

Moves to complete top company reorganization. *Comm & Fin Chr* 157:214-15 Ja 18 '43

Plans single top unit. *Comm & Fin Chr* 156:1858 N 23 '42

Progress. *Business Week* p103+ N 14 '42

Protective group asks SEC for permission to solicit deposits. *Comm & Fin Chr* 157:517 F 3 '43

Reorganization plan. W. Andrews. *Barron's* 23:9+ Je 21 '43

Three subsidiaries to merge. *Comm & Fin Chr* 156:2303 D 28 '42

To compromise claims. *Comm & Fin Chr* 157:437 F 1 '43

To sell subsidiaries. *Comm & Fin Chr* 156:2094 D 14 '42

Trustees announce reorganization plan, proposal filed with SEC. *Comm & Fin Chr* 157:2342-4 Je 21 '43

Trustees file recap compromise with federal court; list rights of various security holders concerned. *Comm & Fin Chr* 156:1737 N 16 '42

Trustees' report. *Comm & Fin Chr* 156:1948; 157:777, 2007-8; 158:943-4 N 30 '42, Mr 1, My 31, S 6 '43

Utility milestone; plan of reorganization. *Business Week* p121-2 Je 19 '43

ASSOCIATED general contractors of America

Annual meeting, Chicago. *Eng N* 130:273-4 F 25 '43

Board meeting, Chicago, June 28-29. *Concrete* 51:36-7 Ag '43

Board meeting replaced 24th annual convention. *Roads & Srs* 86:48+ Mr '43

ASSOCIATED hospital service of New York

Pink to head Associated hospital service of New York. *Nat Underw (Life ed)* 46:3+ D 11 '42; *Nat Underw* 46:3B D 10 '42

ASSOCIATED indemnity corporation

20 years old. G. Macdonald. *Ins Field (Fire ed)* 72:9 F 11 '43

ASSOCIATED insurance fund

Move to buy two Coast insurers. *Nat Underw* 47:15 JI 8 '43

ASSOCIATED machine tool dealers of America.

See American machine tool distributors' association

ASSOCIATED portland cement manufacturers

Ordinary general meeting, 44th, London. *Economist* 145:90 JI 17 '43

ASSOCIATED press

AP files reply to anti-trust charges. *Comm & Fin Chr* 158:52 JI 5 '43

Board delays action; court rules Associated press may pass upon admissions. *Comm & Fin Chr* 158:1630 O 25 '43

Court rules Associated press may limit membership but must modify by-laws. *Comm & Fin Chr* 158:1719 O 28 '43

Decision reserved in AP anti-trust case. *Comm & Fin Chr* 158:432 JI 29 '43

Nothing in anti-trust legislation warrants postponing Associated Press suit says Bidde. *Comm & Fin Chr* 156:1984 D 3 '42

Summary judgment asked by U.S. in anti-trust case. *Comm & Fin Chr* 157:2008, 2084 My 31-Je 3 '43

ASSOCIATION advertising.

See Advertising, Association

ASSOCIATION and associations

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Advertising, Association

Employers' associations

Benefit societies

Technical societies

Cooperation

Trade associations

Corporations

Trade unions

ASSOCIATION of American railroads

Railroads prepare for post-war era; A.A.R. sponsoring comprehensive research program. W. J. Taft. *Ry Age* 114:23-5 Ja 2 '43

ASSOCIATION of American railroads—Cont.
What the A.A.R. has under way in engineering and mechanical research. *Il Ry Age* 114: 430-3 F 27 '43

Engineering division
Electrical section

A.A.R. Electrical section reports. *Ry Age* 113:968-70 D 12 '42

Purchases and stores division

Procurement patterns and people; ODT organization, relations with WPB clarified. *Ry Age* 115:148-50 J1 24 '43

ASSOCIATION of casualty and surety executives

Annual meeting, New York, May 11. *East Underw* 44:31+ My 14 '43; *Ins Field* (Fire ed) 72:10-12 My 13 '43; *Nat Underw* 47:19+ My 13 '43; *Weekly Underw* 148:1048+ My 15 '43

Public and agency relations work. W. L. Clapp. *East Underw* 43:78-9 D 11 '42

ASSOCIATION of federal architects
Elects officers. *Arch Rec* 93:98 Je '43

ASSOCIATION of gas appliance and equipment manufacturers

Annual meeting, New York, June 29. *Gas Age* 92:32-4 J1 15 '43
Meeting, Cincinnati, April 28. *Gas Age* 91:29-30 My 20 '43; *Am Gas Assn Mo* 25:258 Je '43; *Am Gas J* 158:30 Je '43

ASSOCIATION of highway officials of the North Atlantic states

Annual meeting, 18th, New York, Feb. 17-19. *Eng N* 130:326 Mr 4 '43; *Roads & Sts* 86: 52, 54 Mr '43

ASSOCIATION of iron and steel engineers

Annual meeting, Pittsburgh, Sept. 28-30. *Iron Age* 152:69-73 O 7 '43; *Steel* 113:64-5 O 4; 102-4 O 18 '43
Annual meeting, Pittsburgh, Sept. 28-30; abstracts of power plant papers. *Power* 87: 756-7+ N '43

ASSOCIATION of life agency officers

Joint meeting with Life insurance sales research bureau, 21st, Chicago, Nov. 17-19. *East Underw* 43:1+ N 20 '42; *Ins Field* (Life ed) 71:3-12 N 20 '42; *Nat Underw* (Life ed) 46:1+ N 20; 1+ N 27; *Weekly Underw* 147:1202 N 21 '42

ASSOCIATION of life insurance counsel

Annual meeting, New York, May 12-13. *Nat Underw* (Life ed) 47:3+ My 14; 3+ My 21 '43; *Weekly Underw* 148:1060 My 15 '43

ASSOCIATION of life insurance presidents

Re-elect officers at annual meeting. *Weekly Underw* 147:1344 D 5 '42

ASSOCIATION of manufacturers of chilled car wheels

Chilled car wheels contribute to the war effort; inspection and research. *Il Ry Age* 115:596-9 O 16 '43

ASSOCIATION of national advertisers

Advertisers' war effort; new officers. *Business Week* p92 N 21 '42
Annual meeting, New York. *Ptr Ink* 201:16-17 N 20 '42

ASSOCIATION of official agricultural chemists

Annual meeting, 58th, Washington, Oct. 27-28. *Oil Paint & Drug Rep* 144:7+ N 1 '43

ASSOCIATION of railway claim agents

Annual meeting, 54th, Chicago, June 16. *Ry Age* 114:1254-5 Je 26 '43

ASSOCIATION of scientific workers

Association of scientific workers; president's address: annual council meeting. *Chem Age* (Lond) 48:531-2 My 15 '43

Conference, London, Jan. 30-31. *Electrician* 130:132 F 5 '43

ASSOCIATION of special libraries and information bureaux

A.S.L.I.B. in wartime. E. J. Carter. *Special Lib* 34:164-7+ My '43

Year's work of ASLIB, 1941-42. E. Carter, E. Lancaster-Jones and E. M. R. Dumas. *Assn of Sp Lib & Inf Bur Proc* 1942:11-13

ASSOCIATION of university professors and lecturers of allied countries in Great Britain

Conference. *Science* 98:169-70 Ag 20 '43

Organization, sections, officers. *Science* 97: 62-3 Ja 15 '43

ASTRONOMERS

Work of Soviet astronomers at Leningrad during the siege. *Science* 97:237 Mr 12 '43

See also

Schlesinger, Frank

ASTRONOMICAL instruments

Art of original circular dividing (1650-1850). E. W. Taylor. *Engineering* 156:204, 235 S 10-17 '43

See also

Sextant

ASTRONOMICAL measurements

Art of original circular dividing (1650-1850). E. W. Taylor. *Engineering* 156:204, 235 S 10-17 '43

ASTRONOMICAL observatories

Centennial of the observatory of the University of Cincinnati. *Science* 98:359 O 22 '43
John Bunyan observatories. *Il Sci Am* 168: 94-6 F '43

Royal observatory at the Cape of Good Hope. *Science* 97:257 Mr 19 '43

ASTRONOMICAL photography

How to take star-trail photographs. B. Humphrey. *Il Am Phot* 37:11 Mr '43
Photographing sunspots. E. C. Day. *Il Am Phot* 37:12-13 O '43

ASTRONOMY

Astronomical problems of to-day. J. Jeans. *Science* 98:373-6 O 29 '43

See also

Astrophysics Satellites
Earth Stars
Eclipses, Solar Sun

History

Nicholas Copernicus, father of modern astronomy. 1543-1943. S. P. Mizwa. *Science* 97:192-4 F 26 '43
Nicolaus Copernicus, 1473-1543. *Engineering* 155:413-14 My 21 '43

ASTROPHYSICS

Dream almost attained; astrophysics nearer to solution of a major problem. H. N. Russell. *Sci Am* 168:116-17 Mr '43
Stochastic problems in physics and astronomy; probability methods in stellar dynamics. S. Chandrasekhar. *diags Rs Mod Phys* 15:1-89 bibliog(p87-9) Ja '43

See also

Comets—Spectra Spectrum
Nebulae Stars

ASYLUM, Right of

No neutral asylum for Axis leaders, Roosevelt urges. *Comm & Fin Chr* 158:523 Ag 5 '43

Swiss right of asylum upheld. *Comm & Fin Chr* 158:612 Ag 12 '43

ATABRIN

Antimalarial ammunition; synthetic drugs. R. E. Gruber. *Il Tech R* 45:179-81, 190+ F '43
Atabrine speedup. *Business Week* p27-8 My 15 '43

Chemistry and development of atabrine and plasmochin. A. E. Sherndal. *Il Chem & Eng N* 21:1154-3 J1 25 '43; *Abstract, Chem Age* (Lond) 49:309-11 S 25 '43

Experimental Rocky Mountain spotted fever; results of treatment with certain drugs. E. A. Steinhauas and R. R. Parker. *Pub Health Rep* 58:351-2 F 26 '43

Quinine hunt. *Business Week* p48-9 Mr 6 '43
Toxic effects of atabrine and sulfadiazine in growing rats. C. I. Wright and R. D. Lillie. *Pub Health Rep* 58:1242-50 Ag 13 '43

ATCHISON, Topeka and Santa Fé railway

Annual report. *Comm & Fin Chr* 157:1046 Mr 22 '43

Merger of roads. *Comm & Fin Chr* 156:2303 D 28 '42

Railroad securities. *Comm & Fin Chr* 158:205 J1 15 '43

Santa Fe Coast lines serve area important to war effort. *Il map Ry Age* 114:502-6 Mr 13 '43

ATHLETE's foot (disease)

Practical plan for the treatment of superficial fungus infections. S. M. Peck and L. Schwartz. *Pub Health Rep* 58:337-45 F 26 '43

ATHLETICS*See also*

Running

ATLANTA, Georgia

Atlanta dries up; Georgia's capital outlaws public drinking of hard liquor. *Business Week* p24+ My 1 '43

Rapid transit

Fare box hopper for Atlanta buses and cars. *il Mass Transportation* 39:149 Ap '43

Water supply

How critical war materials were saved; renovation and rustproofing applied to two filter plants. *P. Weir. il Water Works & Sewerage* 90:189-95 Je '43

ATLANTA gas light company

Securities offered. *Comm & Fin Chr* 158: 1630-1 O 25 '43

ATLANTIC and St Lawrence railroad

Control, etc. *Comm & Fin Chr* 157:341 Ja 25 '43

ATLANTIC charter

Access to raw materials in the postwar world. *K. E. Knorr. Harvard Business R* 21 no 3:385-96 [Ap] '43

After the war, what—in the mining industry? cartelization seems unavoidable if Atlantic charter is to be fulfilled. *O. W. Roskill. il Eng & Min J* 144:62-6 My '43

Atlantic charter not treaty, says Churchill. *Comm & Fin Chr* 158:426 Ji 29 '43

Individual in a corporate world; freedom and security do not go hand in hand. *A. Valentine. Comm & Fin Chr* 157:1473+ Ap 22 '43

President sees right of self-determination again becoming living reality. *Comm & Fin Chr* 158:932 S 2 '43

ATLANTIC mutual insurance company

Atlantic Mutual reports record premiums of over \$25,000,000. *East Underw* 44:34 F 26 '43

ATLANTIC ocean

Geology and biology of North Atlantic deep-sea cores between Newfoundland and Ireland; mollusca; echinodermata; miscellaneous fossils and significance of faunal distribution. *H. A. Rehder; A. H. Clark; L. G. Henbest. U S Geol S Professional Pa* 196-D: 107-33, pl 20-3; pa 30c Supt. of doc. '42

Geology and biology of North Atlantic deep-sea cores between Newfoundland and Ireland; organic matter content. *P. D. Trask and others. U S Geol S Professional Pa* 196-E:135-49, pl 1-2; pa 20c Supt. of doc. '42

Geology and biology of North Atlantic deep-sea cores between Newfoundland and Ireland; selenium content and chemical analyses. *G. Edgington and H. G. Byers. U S Geol S Professional Pa* 196-F:151-5, pl 1-2; pa 15c Supt. of doc. '42

ATLANTIC refining company

Annual report; statistics, 1940-1942. *Comm & Fin Chr* 157:1236+ Ap 5 '43

Oil company assets at a discount. *M. Pescatello. Barron's* 23:9 My 24 '43

ATLANTIC states shippers advisory board

Annual meeting, 19th, New York, Jan. 13-14. *Ry Age* 114:259-60 Ja 23 '43

ATLAS corporation

Annual report. *Comm & Fin Chr* 157:598 F 15 '43

ATLAS powder company

Annual report. *Comm & Fin Chr* 157:598-9 F 15 '43

ATMOSPHERE*See also*

Air

Meteorology

ATMOSPHERE, Planetary

Geochemistry of the atmosphere and the constitution of the terrestrial planets. *R. Wildt. bibliog Rs Mod Phys* 14:151-9 Ap-Jl '42

ATMOSPHERE, Upper

Earth's atmosphere and the constitution of the planets; meteors and the earth's upper atmosphere. *F. L. Whipple. Rs Mod Phys* 14:139 Ap-Jl '42

Effects of solar activity on the ionosphere and radio communications. *H. W. Wells. bibliog il maps Inst Radio Eng Proc* 31: 147-57 Ap '43

Light of the night sky. *C. T. Elvey. bibliog il Rs Mod Phys* 14:140-50 Ap-Jl '42

What do spectrum-analytical investigations say as to the constitution of the upper atmosphere; abstract. *R. Penndorf. Wireless Eng* 16:30 Ja '43

See also

Kennelly-Heaviside layer

ATMOSPHERIC electricity

Lightning and kindred phenomena. *L. P. Dudley. bibliog Electrician* 129:507-10 N 6 '42

See also

Auroras

Lightning

Thunderstorms

ATMOSPHERIC pressure

Simple and accurate formula for barometric corrections. *L. Cintra do Prado. bibliog R Sci Instr* 14:221-2 Ji '43

Temperature effects on turbine supercharger installations. *P. Colman. diags J Aeronautical Sci* 10:261-9 O '43

See also

Barometers

ATMOSPHERIC temperature

Equivalent ambient temperatures for load-ing transformers; calculations based on Weather bureau records. *W. C. Sealey. Elec Eng* 62:Trans 87-93 F '43

Temperature effects on turbine supercharger installations. *P. Colman. diags J Aeronautical Sci* 10:261-9 O '43

Use of equivalent annual ambient temperature in overloading transformers and voltage regulators. *M. S. Oldacre. bibliog Elec Eng* 62:Trans 477-80 Ji '43

See also

Air conditioning

Cooling

Thermometers and thermometry

ATOMIC beam. See Atoms—Beams**ATOMIC distances. See Molecules****ATOMIC hydrogen. See Hydrogen—Atomic hydrogen****ATOMIC weights**

Analytical chemistry of the rare earths; average atomic weight of the rare earths in a mixture. *G. L. Barthauer, R. G. Russell and D. W. Pearce. bibliog Ind & Eng Chem Anal* ed 15:548-9 S 15 '43

Atomic weight of lead from a second sample of pitchblende, Great Bear Lake, N.W.T., Canada. *J. P. Marble. Am Chem Soc J* 64: 3047 D '42

Electron mass in relation to the energy of formation of the atoms; calculations of isotopic and atomic weights. *H. D. K. Drew. Chem & Ind* 62:390-3 O 16 '43

Report of the committee on atomic weights of the American chemical society. *G. P. Baxter. Am Chem Soc J* 65:1443-7 Ag '43

ATOMS

Atom smashing; present and future. *G. A. Pettitt. Civil Eng* 13:160 Mr '43

Electron mass in relation to the energy of formation of the atoms; calculation of isotopic and atomic weights. *H. D. K. Drew. Chem & Ind* 62:390-3 O 16 '43

Elementary particles of physics. *J. D. Stranathan. il diags Electronics* 16:122-6+ Ag '43

Further tests of the atom-annihilation hypothesis as to the origin of the cosmic rays. *R. A. Millikan, H. V. Neher and W. H. Pickering. Phys R* 63:234-45 Ap 1 '43

Nuclear structure of the elements. *L. H. Niesicle. Chem & Ind* 62:55, 234-5 F 6, Je 19 '43

Optical rotation and atomic dimension: the four optically active 2-halogenopentanes. *D. H. Brauns. bibliog J Research Nat Bur Stand* 31:83-106 Ag '43

Physics in 1942; the nucleus; the neutrino. *T. H. Osgood. il J Ap Phys* 14:55-60 F '43

Putting tagged atoms to work. *J. A. Timm. bibliog J Chem Educ* 20:54-9 F '43

Strong coupling mesotron theory of nuclear forces. *R. Serber and S. M. Dancoff. Phys R* 63:143-61 Mr 1 '43

Theory of a mixed pseudoscalar and a vector meson field. *W. Pauli and S. Kusaka. Phys R* 63:400-16 Je 1 '43

ATOMS—Continued

Thermal equilibrium between elementary particles. G. Wataghin. bibliog Phys R 63: 137 F 1 '43

See also

Atomic weights
Cyclotron
Electrons
Molecules
Neutrinos

Neutrons
Protons
Radiation
Spectrum
Stereochemistry

Beams

Atomic beam apparatus for studying the atomic spectra of gases, especially hydrogen. J. E. Mack and E. C. Barkofsky. bibliog il diags Rs Mod Phys 14:82-93 Ap-Jl '42

Atomic beam light sources applied to the structure of the magnesium I resonance line. R. A. Fisher. bibliog il diags Rs Mod Phys 14:79-81 Ap-Jl '42

Atomic beam spectra; application of atomic beams in spectroscopy. K. W. Meissner. bibliog il diags Rs Mod Phys 14:68-78 Ap-Jl '42

Attempts at obtaining excitation of an atomic beam of monatomic hydrogen. W. E. Williams. Rs Mod Phys 14:94-5 Ap-Jl '42

Average H—H₂ repulsive potential from collision cross section measurements. I. Amdur. J Chem Phys 11:157-9 Ap '43

Collisions

Average H—H₂ repulsive potential from collision cross section measurements. I. Amdur. J Chem Phys 11:157-9 Ap '43

Disintegration

Electrostatic focusing of high speed ion and electron beams. J. D. Craggs. il diags J Ap Phys 13:772-80 D '42

Recombination

Surface recombination of H atoms and OH radicals. W. V. Smith. diags J Chem Phys 11:110-25 Mr '43

ATROPINE

Antispasmodics; basic esters of some arylacetic acids. R. R. Burtner and J. W. Cusic. bibliog Am Chem Soc J 65:262-7 F '43

ATTACHMENT and garnishment

Bank deposit and the garnishee. M. L. Hayward. Barron's 22:4 N 30 '42
Delivery of check by mailing. C. R. Rosenberg, jr. Burroughs Clearing House 27:29+ N '42

ATTICS

100 attics will house over 200 war workers; wartime repairs, maintenance and conversion jobs. il diags plan Am Bld 65:36-7 F '43

ATTITUDE (psychology)

Ten years' progress in management; management attitudes. E. H. Scheil. A S M E Trans 65:258-60 Ap '43

AUCHENIA

Camel family fibers. A. C. Whitford. Textile Col 65:97-101 Mr '43

AUCKLAND, New Zealand

See also Electricity supply—Auckland, New Zealand

AUCTIONS

Clerking auction sales at a profit. A. H. Abts il Burroughs Clearing House 27:26-7 My '43
Tobacco auctions evaluated. P. D. Converse. J Business 16:147-59 Jl '43

AUDIMETER. See Radio advertising—Coverage**AUDIT bureau of circulations**

AEC has new rules including one on service subscriptions. Ptr Ink 201:70 D 18 '42
Audit bureau of circulations may curtail services for duration. Ptr Ink 205:44 O 22 '43

Directors oppose suggestion A.B.C. make secondary readership surveys. Ptr Ink 202:37 F 26 '43

AUDITING

Administrative audit of time and material vendors' charges. J Account 75:560-8 Je '43

Auditing procedures for government receivables. J. W. Smart. J Account 76:9-10 Jl '43

Auditing under war conditions. G. P. Ellis. J Account 76:133-46 Ag '43

Confirmation of receivables from the government; statement on auditing procedure no. 18. J Account 76:162-3 F '43

Disclosure of the effect of wartime uncertainties on financial statements; statement on auditing procedure no. 15. J Account 75:153-5 F '43

How much test checking is enough? R. H. Prytherch. J Account 74:525-30 D '42

Physical inventories in wartime; statement on auditing procedure no. 17. J Account 75:156-61 F '43

See also

Accounting
Bank auditing

Internal control

Experiences in auditing. J Account 75:144-7 F '43

Facilitating the independent accountant's review of internal accounting control. V. H. Stempf. J Account 75:49-57 Ja '43

Internal auditing and the public accountant. J. B. Thurston. J Account 76:220-9 S '43

See also

Auditors

Standards

Why we need auditing standards. S. S. Webster, jr. J Account 75:426-32 My '43

AUDITORIUMS

Naval training station auditorium; single stage serves both indoor and outdoor theaters. il diag plan Arch Forum 79:54 S '43

Lighting

Engineering auditorium lighting improved; Engineering societies building, New York. S. W. Bruun. Elec Eng 62:18-19 Ja '43

AUDITORIUMS, Municipal

Multi-use municipal building; auditorium and City hall, Topeka, Kansas. il plans Arch Rec 94:51-3 Ag '43

AUDITORS

Institute of internal auditors, inc. East Underw 43:20 D 11 '42

AUGERS

Soil penetration tests with a loaded auger. A. R. Lamm. diags Civil Eng 12:685 D '42

AUGITE andesite

Phosphatization at Malpelo island, Colombia. D. McConnell. bibliog Geol Soc Bul 54:707-15, pl 1-2 My '43

AURORA, Illinois**Water supply**

Water works improvements at Aurora. C. Duy. Am Water Works Assn J 35:789-94 Je '43

AURORAS

Goats, brands, and theories; aurora borealis impels the search for knowledge. E. H. Bramhall. il Tech R 46:32-3+ N '43

AUSTENITE

Electrical resistance method for the determination of isothermal austenite transformations. F. B. Rote, W. C. Truckenmiller and W. P. Wood. bibliog il diags Am Soc for Metals Trans 30:1359-73; Discussion. 1373-6 D '42

Formation of austenite in heat treatment; composite of abstracts. Metals & Alloys 17:598+ Mr '43

Kinetics of austenite decomposition in high speed steel. P. Gordon, M. Cohen and R. S. Rose. bibliog il diags Am Soc for Metals Trans 31:161-98; Discussion. 198-217 Mr '43

Mechanism and the rate of formation of austenite from ferrite-cementite aggregates. G. A. Roberts and R. F. Mehl. bibliog(42 titles) il Am Soc for Metals Trans 31:613-50 S '43

Metallographic study of the formation of austenite from aggregates of ferrite and cementite in an iron-carbon alloy of 0.5 per cent carbon. T. G. Digges and S. J. Rosenberg. bibliog il Am Soc for Metals Trans 31:753-74; Discussion. 775-6 S '43

Positions of the carbon atoms in austenite. N. J. Petch. bibliog Iron & Steel Inst J 145:111-23; Discussion. 124-8 no 1 '42

AUSTENITE—Continued

Quantitative study of austenite transformation. R. A. Flinn, E. Cook and J. A. Fellows. bibliog il diags Am Soc for Metals Trans 31:41-66; Discussion. 66-70 Mr '43

AUSTIN, James Bliss, 1904-
Sketch, bibliography. por Am Cer Soc Bul 22:116-17 Ap 15 '43

AUSTRALIA

Some personal observations on Australia. R. E. Cherne. Refrig Eng 46:171-4 S '43

See also

Food supply—Australia	Machine tool industry—Australia
Insurance, Health—Australia	Mines and mineral resources—Australia
Labor and laboring classes—Australia	Railroads—Australia
Labor laws and legislation—Australia	Trust companies—Australia
	Wages—Australia

Council for scientific and industrial research

Australian council for scientific and industrial research. Science 97:45-7 Ja 8 '43

Economic conditions

Australia in 1942. Economist 144:sup9 Mr 13 '43

Industries and resources

Antipodes come of age industrially; upsurge in South Africa, Brazil, Australia and the Argentine. G. Riviere. Mag of Wall St 72:360-1+ Jl 10 '43

Australia's industry; industrial mobilization job since 1939. A. H. Allen. il Steel 113:75-6 Ag 2 '43

Australia's role. Business Week p104+ Jl 10 '43

Can Australia's plague be turned to profit? rabbits. C. R. Budd. il For Comm W 11:12-15 Je 12 '43

War's requirements speeding continent's industrialization. il Steel 112:62-3 My 10 '43

Postmaster-General's department

Special library for telecommunications. B. Robertson. Special Lib 34:89-93 Mr '43

AUSTRALIAN association of scientific workers.
See Scientists—Australia

AUSTRALITES. *See* Tektites

AUSTRALOPITHECUS. *See* Apes, Fossil

AUSTRIA*See also*

Chemical industries—Austria

AUTHORSHIP*See also*

Copyright
Technical writing

AUTOClaves

Autoclaves for pressure-temperature reactions; safety factor, heating, agitation, parts, materials. D. B. Gooch. bibliog il diags Ind & Eng Chem 35:927-46 S '43

AUTOGIROS

Kellett autogiro corporation; ten years' progress. R. H. Prewitt. Aeronautical Eng R 1:65 N '42

AUTOGRAPHIC registers. *See* Registers, Autographic

AUTOMATIC control. *See* Control equipment

AUTOMOBILE accessories industry

Annual report of the Automotive parts and equipment manufacturers, inc. Automotive & Aviation Ind 88:43 Je 1 '43

Conversion of automotive parts plants to war production. J. Gescheln. il S A E J 51:99-104 Mr '43; Abstract. Automotive & Aviation Ind 88:20-3+ F 1 '43

Standard buying and selling agreement drafted by industry. Ind Marketing 28:108, 110 S '43

See also

Bohn aluminum and brass corporation	Tire industry and trade
	Tires, Automobile

Advertising

Spot radio, movies, are basis of Carter Car-buretor local dealer help program. il Sales Management 52:50+ Ap 15 '43

Securities

Market potentials in auto accessories. J. C. Harrington. Mag of Wall St 71:230-2+ D 12 '42

War and peace prospects for autos, accessories and tires. Mag of Wall St 71:642-5+ Mr 20 '43

War and post-war potentials for the motors, accessories, tires; position of leading stocks. F. R. Walters. il Mag of Wall St 72:464-8+ Ag 7 '43

Statistics

Accessories and parts, shipments, 1938-1941. Survey of Cur Business 1942 Sup p171 [supplemented in monthly numbers]

AUTOMOBILE accidents

Bodily injury and property damage claim situation now favorable. Nat Underw 47:22 Jl 8 '43

Effect of after-dark traffic accidents on the war effort. D. M. Diggs. Roads & Bridges 81:36 Ja '43

Humanitarian doctrine; digest of recent cases. J. L. Roesch. Spectator (Property ed) 9:30-1 O 7 '43

Increase in cost per automobile accident noted. Nat Underw 47:25 Mr 18 '43

Industry's next big problem; off-the-job accidents. C. C. Carlton. il Nat Safety N 48:10-11+ S '43

Night accidents on the increase. A. F. Dickerson. Sci Am 168:80-1 F '43

Uniform definitions of motor vehicle accidents; Bureau of census pamphlet. East Underw 44:32 Ap 16 '43

See also

Automobile drivers	Insurance, Automobile
Automobile driving	hire

Statistics

Automobile death toll in 1942. T. J. V. Cullen. map Spectator (Property ed) 9:10-14, 34-5 O 21 '43; Same. Spectator (Life ed) 151:6-11+ N '43

Motor fatalities show decrease in six months. Nat Underw 47:16 Ag 5 '43

Traffic deaths in 1942 30% below '41 figure. Nat Underw 47:21 Ja 7 '43

Wartime lighting and safety. E. Vennard. bibliog Edison Elec Inst Bul 11:93-101 Ap '43

AUTOMOBILE associations*See also*

Royal automobile club of Canada

AUTOMOBILE camps. *See* Tourist camps, hostels, etc.

AUTOMOBILE drivers

Highway rules. Sci Am 168:35-6 Ja '43
Minor held operator although assured took control of wheel from his position on right hand side of car. Weekly Underw 148:875 Ap 17 '43

AUTOMOBILE driving

Driving has great influence in war; safety effort results. L. H. Lippincott. Weekly Underw 148:95-8 Ja 2 '43

War declared on general winter; driving hazards. il Safety Eng 85:9 Ja '43

See also

Automobile drivers

AUTOMOBILE engineering

Social and economic responsibility of the automobile engineer; abstract. D. H. Smith. Metal Prog 44:71+ Jl '43

Steam power for motor vehicles. Automobile Eng 32:493-5 N '42

See also

Automobile engines
Automobiles

Tables, calculations, etc.

Car performance; method of graphic analysis. H. Cousins. Automobile Eng 33:249-50 Je '43

AUTOMOBILE engines

- Daimler Scout, *il* diag Automobile Eng 33: 219-23 Je '43
 G.P. war truck, *il* Automobile Eng 33:131-3 Ap '43
 Half-engined car, Consumers' Research Bul 11:9-12 Mr '43
 Modified automobile engines to save gas; half-engined car, Consumers' Research Bul 11:19 N; 14 D '42
 Postwar automobile, *il* Steel 112:75-6 Ap 19 '43
 Whither are we bound? R. G. Lovell, *il* Pet Eng 14:67-8 Jl; 80+ Ag '43

See also

- Automobiles Motor bus engines
 Carbureters Motor truck engines

Bearings

- Bearings and bearing corrosion, L. Raymond, bibliog *il* diag S A E J 50:533-7 D '42; Same, without bibliog, Automobile Eng 33: 369-72 S '43
 Engine bearings: replacement; technique for installation or fitting; report of SAE subcommittee to Vehicle maintenance section, Division of motor transport, *il* diag S A E J 51:sup25-40 Ja '43
 Synthetic bearings from pressed resins, E. Gilbert and K. Lurenbaum, Automobile Eng 32:477 N '42

Carbon deposits

- New methods for the evaluation and recording of piston-skirt deposits, H. R. Luck, T. A. Rogers and A. G. Cataneo, *il* diag S A E J 51:38-44+ F '43; Same, Automobile Eng 33:321-5 Ag '43; Abstract, Automotive & Aviation Ind 87:32+ D 1 '42

Cooling

- Postwar possibilities of air-cooled engines in automobiles, C. T. Doman, *diag* Automotive & Aviation Ind 89:29-30 N 1 '43

Design

- Coventry Climax engine, *il* diag Automobile Eng 33:175-9 My '43
 Design thirty years ago; 1912 Th. Schneider cuff-valve engine, *diag* Automobile Eng 32: 517 D '42
 Fuel economy, L. Mantell, *diag* Automobile Eng 33:19-26 Ja '43
 Methods of stress determination in engine parts, C. Lipson, *il* diag S A E J 51:105-24 Ap '43; Abstract, Automotive & Aviation Ind 88:37-8 F 1 '43
 Morris ten-four chassis, *il* diag Automobile Eng 32:467-77 N '42
 Sunbeam-Talbot two-litre car, *il* diag Automobile Eng 33:91-4 Mr '43
 Two-stroke engines; problems of reciprocation and rotation of the piston, Automobile Eng 33:164 Ap '43

Efficiency

- Excess air; its relation to brake mean effective pressure, P. H. Schweitzer, *diag* Automobile Eng 33:34-5 F '43
 Increased economy with fuel and tire rationing; testing possibilities of split engine, E. O. Wirth and A. H. Winkler, *il* diag S A E J 51:220-8 Je '43
 Producer gas; the effect of compression-ratio on performance, J. Spiers and E. Giffen, *diag* Automobile Eng 32:523-7 D '42

Fuel

- British gazogenes producer; development from Gohin-Poulenc type, *diag* Automobile Eng Extra no32:444-6 N 5 '42
 B.V.P. gas producer, *il* diag Automobile Eng Extra no32:446-9 N 5 '42
 Cheswick and Wright producer on tractor trailer, *il* Automobile Eng Extra no32:463-4 N 5 '42
 Cooperative fuel-research motor-gasoline survey, winter 1942-43, A. J. Kraemer and O. C. Blade, U S Bur Mines Rep of Invest 3716:1-28 '43
 Enness-Sentinel gas producer plant, *il* diag Automobile Eng Extra no32:453-6 N 5 '42
 High octane; tomorrow's power, *il* Fortune 27:154-7+ Je '43
 High speed gas, *ld.* plant, *il* Automobile Eng Extra no32:458-62 N 5 '42

- Portable producers; underlying theory and its practical application, E. R. Slattery, Automobile Eng 33:69-72 F '43
 Refiner's viewpoint on motor fuel quality, W. M. Holaday and J. Happel, flow chart *diag* S A E J 51:1-11 Ja '43; Same, bibliog Pet Eng (Ref annual) 14:251-5, 258-60 Jl 1 '43; Excerpts, Nat Pet N 34:R46-7 F 4 '42; Automobile Eng 33:365 S '43
 Road tests of automobiles using alcohol-gasoline fuels, R. G. Paustian, *il* diag Iowa Eng Exp Sta (Ames) Bul 158:1-56 bibliog(p56) '42
 Sawdust now runs some British autos, For Comm W 10:17 Mr 13 '43
 Spark adjustment best for tuning engines to operate on fuels of differing octane ratings; abstract, D. P. Brenz, H. H. Maxfield and C. B. Culbertson, Oil & Gas J 41:21 Ja 21 '43

See also

- Automotive fuel Motor bus engines—
 Benzol (commercial) Fuel
 benzene) Motor truck engines—
 Gasoline Fuel

Fuel feeding

- Air-gas mixing valves; Enness-Cura and Swain designs for producer gas plants, *il* diag Automobile Eng 33:377-9 S '43
 Excess air; its relation to brake mean effective pressure, P. H. Schweitzer, *diag* Automobile Eng 33:34-5 F '43
 Fuel economy, L. Mantell, *diag* Automobile Eng 33:19-26 Ja '43
 Reducing cost of motor-car operation; spark photography in study of fuel injection, S. Gilman, Roads & Bridges 80:50 N '42

Heaters

- Anti-freeze lamp for extreme weather, Consumers' Research Bul 11:15+ F '43

Ignition devices

- Conservation of tungsten in automotive electrical parts, Automotive & Aviation Ind 89: 74 Jl 15 '43

Industrial uses

- Automotive engines adapted to water pump drives, *il* Pet Refiner 22:75-7 Mr '43
 Experiment in the operation of improvised compressor units, F. Squires, *il* diag Oil & Gas J 42:62, 64+ Ji 15 '43

Lubrication

- Change oil every 1000 miles or even more frequently, Nat Pet N 34:14 N 11 '42
 Chemical problems of engine lubrication; the problem of lubricating oil stability, R. G. Larsen, F. A. Armfield and G. M. Whitney, *il* S A E J 51:310-16+ S '43
 Correlation of laboratory oil bench tests with full-scale engine tests, C. W. Georgi, *il* S A E J 51:52-62 F '43
 Crankcase dilution, E. V. Paterson, Automobile Eng 33:373-4 S '43
 Engine wear almost inversely proportional to the kinematic viscosity of the crankcase oil; abstract, H. A. Everett, Oil & Gas J 41:21-2 Ja 21 '43
 Influence of lubricating oil viscosity on cylinder wear, H. A. Everett, *il* S A E J 51: 165-9; Discussion, H. C. Mougey, 169 My '43
 Oil additives, E. W. Steinitz and F. J. Grose, bibliog *diag* Automobile Eng 33:273-5 Jl '43
 Oil engine lubrication; problem of adequate control in the cylinder, Automobile Eng 32: 505 N '42
 Simplified lubricating oil oxidation stability test, R. E. Hersh and others, bibliog *diag* Pet Refiner 22:91-9 Jl '43
 Test shows need for 60-day oil change, M. L. Moir, *il* Nat Pet N 35:32-3 Je 9 '43

Maintenance and repair

- Reconditioning cylinder blocks and fitting sleeves, *diag* S A E J 51:sup49-51 F '43

Mounting

- Engine smoothness and protection through shear rubber mountings, P. C. Roche, *il* diag S A E J 50:314-19 Ji '42; Same, Automobile Eng 32:499-502 N '42

AUTOMOBILE engines—Continued**Radiators**

See also
Anti-freeze solutions

Temperature

Cylinder temperatures; accurate readings by means of thermo-couple sparking plugs. diag Automobile Eng 33:228 Je '43

Testing

Increased economy with fuel and tire rationing; testing possibilities of split engine. E. O. Wirth and A. H. Winkler. il diags S A E J 51:220-8 Je '43
Optical oscillograph. K. J. DeJuhasz. il diags Automobile Eng 32:483-7 N '42

AUTOMOBILE factories**Employees**

Auto workers seek post-war security fund, also increased bonuses instead of vacations. Comm & Fin Chr 157:1690 My 6 '43
Reuther plan II. Business Week p68+ Ap 23 '43
Workers' health; employee welfare developments at Morris motors, ltd. il Automobile Eng 33:160 Ap '43

Equipment

Precision grinding; developments in machines and production methods; products of the Churchill machine tool company. il diags Automobile Eng 33:229-34, 267-72 Je-Jl '43

AUTOMOBILE industry and trade

Chemistry and the motor car industry. C. F. Kettering. il Chem & Eng N 21:841-5 Fe 10 '43
Dealers survive. Business Week p88+ Ap 24 '43
Ford gives cars away; makes profits on spare parts; pictograph. Sales Management 52:52 Ag 15 '43
How two West Coast auto dealers found the means to survival. Sales Management 52:84+ Mr 15 '43
Kaiser in autos; invasion of Detroit with new model jeep. Business Week p24 Ap 10 '43
Motor cars after the war. Economist 145:274 Ag 28 '43

See also

Automobile accessories industry	Motor bus industry
Automobile factories	Motor truck industry
Automobile parts	Tractor industry

Advertising

When Ford introduced the Model A. G. W. Cecil. Adv & Sell 36:45-6 S '43

Finance

Finance volume on retail cars 15% of 1939 period. Nat Underw 47:8 S 9 '43
Financing assumes an interesting phase. Nat Underw 47:4 Jl 8 '43
Indexes of retail financing, 1938-1941. Survey of Cur Business 1942 Sup p170 [supplemented in monthly numbers]

Munitions manufacture

Auto plant makes planes in 11 months; Eastern aircraft division of General Motors. il Steel 111:28-9 D 28 '42
Automobile city produces weapons for victory. R. B. Bennett. il Chem & Eng N 21:152-6 F 10 '43
Automotive design techniques in mass production of ordinance. il diags Product Eng 14:467-71, 546-9 Ag-S '43
Automotive industry passes along \$3 billion saving to government. Automotive & Aviation Ind 88:17+ Ja 1 '43
Automotive industry producing war materials at rate of 75 per cent above dollar level of peacetime peak. il Steel 112:235-6, 238, 243, 397-8 Ja 4 '43
Automotive production methods cut manpower requirements. E. L. Warner, jr. Automotive & Aviation Ind 87:17+ D 1 '42
Buick now manufactures bomber engines. C. O. Herb. il Mach 48:160-6 Jl '42; 49:149-53 Ja '43
Buick's know how speeds production of airplane engine parts. J. Geschelin. il Automotive & Aviation Ind 87:20-5+ N 15 '42

Conservation of critical materials, man-hours, machine time. il Automotive & Aviation Ind 88:26-9+ Ja 1 '43

Contract termination in the automotive industry. J. H. Marks. Automotive & Aviation Ind 89:17+ N 1 '43

Conversion for war; influence of automotive mass-production methods. J. Geschelin. il S A E J 50:276-83 Jl '42; Same cond. Automotive & Aviation Ind 87:30-5+ Jl 1 '42

Conversion of automotive parts plants to war production. J. Geschelin. il S A E J 51:99-104 Mr '43; Abstract. Automotive & Aviation Ind 88:20-3+ F 1 '43

Cooperation of vehicle manufacturers in army maintenance program. J. Kirk. S A E J 51:sup23-7; Discussion. sup65-6 F '43

Corcoran-Brown, automobile headlamp maker, now producing steel carriage cases in large quantities. J. Geschelin. il Automotive & Aviation Ind 89:22-5+ O 15 '43

Detroit, like a phoenix; production record of the automobile industry since Pearl Harbor. S. H. Brams. il Iron Age 151:154-8+ Ja 7 '43

Fisher Body mass-produces Sperry instruments. il Aero Digest 42:247-8, 251-2 Ap '43

How Packard plans to tackle reconversion. G. T. Christopher. il Am Business 13:10-12 Ag '43

How the experience of the automotive industry has aided war production. Mach 49:181 D '42

Management problems vastly increased by production changes. Sci Am 168:223 My '43

Network of shops for heat treating small armor. L. Stouffer. il Metal Prog 43:390-1 Mr '43

On the SAE battlefronts. M. Short. S A E J 51:sup17-19+ Ag '43

Ordinance automotive experience in this war. L. H. Campbell, jr. S A E J 51:sup21-2+ F '43

Production speeded by improved methods and simplified designs. Automotive & Aviation Ind 88:46+ My 15 '43

Second-quarter data of General Motors reflect sharp stepup in war materiel production by automotive industry. A. H. Allen. Steel 113:69-70 Ag 9 '43

Sees ways to speed transition for post-war economy; re-conversion in advance to hasten production. G. T. Christopher. Comm & Fin Chr 157:2161+ Je 10 '43

73,132 planes delivered to army between Pearl Harbor and July 1; production of the automotive industry continues to show gains. Automotive & Aviation Ind 89:48 Ag 15 '43

Studebaker corp. turns out \$215,000,000 worth of war products in 1942. il Steel 111:63-4, 148 D 14 '42

Systematic stock-keeping of non-productive items; Cadillac motor car division of General Motors. F. M. Reck. il Aero Digest 43:179-81 Ag '43

Transition to war production entailed great mass movement of machine tools in and out of Chevrolet's Buffalo plant. A. H. Allen. il Steel 113:59-60 Jl 26 '43

U.S. automobile manufacturers outdo German tank builders. Automotive & Aviation Ind 87:54+ D 1 '42

U.S. war production showed great increase during 1942. Automotive & Aviation Ind 88:48+ Ja 15 '43

Vital statistics; tables and charts. il Automotive & Aviation Ind 88:53-5 Mr 15 '43

Why automotive manufacturers prefer balanced flow for materials control. E. L. Warner, jr. Automotive & Aviation Ind 87:17+ N 1 '42

World's biggest inventory of machine tools is bigger now. E. L. Warner, jr. Automotive & Aviation Ind 88:17+ Ja 15 '43

New models

When Ford introduced the Model A. G. W. Cecil. Adv & Sell 36:45-6 S '43

Securities

War and peace prospects for autos, accessories and tires. Mag of Wall St 71:642-5+ Mr 20 '43

AUTOMOBILE industry and trade—Securities
—Continued

War and post-war potentials for the motors, accessories, tires; position of leading stocks. F. R. Walters. *il Mag of Wall St* 72:464-8+ Ag 7 '43

Service

Million and a half Americans join Chevrolet's Victory service league; organized to save the wheels that serve America, and to support all victory movements. W. E. Holler. *il Sales Management* 52:18-21 S 1 '43

Statistics

Automobiles, 1938-1941. Survey of Cur Business 1942 Sup p170-1

Comparative record of retail sales of passenger cars (new registrations by months, by years) 1931-1941; tabulation. *Automotive & Aviation Ind* 88:95 Mr 15 '43

Nation's stock pile of new passenger cars, Dec. 31, 1942; tabulation. *Automotive & Aviation Ind* 88:94 Mr 15 '43

Used cars

Cars go west, and it's worrying eastern dealers, who are thus deprived of profit and maintenance work on used autos. *Business Week* p105 Ag 21 '43

Used-car bait; auto finance company plan for immediate trade-in on postwar model. *Business Week* p96+ Je 5 '43

Used cars perk up. *il Business Week* p19 F 13 '43

What do you bid? auction of used cars in Kansas City. *Business Week* p67-8 My 8 '43

Great Britain

Engineering outlook. *Engineering* 155:74 Ja 22 '43

United States

Auto sales lag. *Business Week* p29+ S 18 '43

Autos to come; the motor industry sees a postwar period of radical changes. *Business Week* p17 Ja 16 '43

Car dealers fold; four thousand retired in past year. *Business Week* p70+ D 5 '42

Detroit at war; annual reports of General Motors and Packard. *Business Week* p105-6 Ap 3 '43

New OPA auto ration helps RFC. *Business Week* p22 Mr 6 '43

No dream car; problems of reconversion. *Business Week* p16-17 O 11 '43

Post-war industrial problems and prospects; Packard's outlook. W. Von Tresckow. *Barron's* 23:9 Je 14 '43

AUTOMOBILE insurance. See Insurance, Automobile

AUTOMOBILE insurance company of Hartford Thirtieth anniversary. *East Underw* 44:22 Ap 16 '43; *Weekly Underw* 148:362-3 Ap 17 '43; *Nat Underw* 47:12 Ap 15 '43

AUTOMOBILE laws and regulations

Acceptance of risk; intoxicated driver's liability for guest; digest of recent cases. J. L. Roesch. *Spectator (Property ed)* 8:26-7 Ja 7 '43

Evaluation of responsibility laws points to sound, popular legislation. L. A. Mills. *East Underw* 44:48 O 8; 47+ O 15; 38 O 22 '43

Liability under the share-the-ride program; digest of recent cases. J. L. Roesch. *Spectator (Property ed)* 8:38-40 D 10 '42; 34-6 My 20 '43

Non-essential driving banned by OPA. *Comm & Fin Chr* 157:1979 My 27 '43

Occupational driving permitted under new OPA driving rules. *East Underw* 44:1+ My 28 '43

See also

Automobile parking
Insurance, Automobile—Compulsory liability
Insurance, Automobile—Financial responsibility laws

Motor bus lines—
Laws and regulations
Motor trucks—Laws and regulations
Motor vehicles—Inspection
Traffic regulations

Mexico

Use of automobiles limited to 6 days a week. *For Comm W* 11:25 My 22 '43

Nebraska

Violation of age provision in Nebraska collision insurance case. *East Underw* 44:24 Ag 6 '43

Ohio

New highway safety laws will take effect in Ohio. *Eng N* 131:408 S 9 '43

Ohio high court holds share-the-ride drivers liable for passenger injury. *East Underw* 44:34 Ap 16 '43; *Nat Underw* 47:17 Ap 15 '43

AUTOMOBILE mechanics

Dealers worried; auto men have lost 75% of their mechanics. *Business Week* p24+ D 26 '42

Training

Blindfolded; how Uncle Sam's soldier-mechanics are taught to repair motor vehicles. F. A. Quackenbush. *il Bus Transportation* 22:30-4 My '43

AUTOMOBILE parking

Municipal parking lots keep streets clear. *Eng N* 129:sup 146-7 N 19 '42

Parking problem as a factor in roadway design. *il diags Roads & Bridges* 81:28-30, 54, 56, 58 F '43

AUTOMOBILE parts

Replacement parts outlook. E. L. Warner, Jr. *il Automotive & Aviation Ind* 88:17+ Ap 1 '43

Transportation

Overseas shipments of millions of war service items test packaging. *Steel* 112:85 Mr 1 '43

AUTOMOBILE research

Automobile research; report of the automobile research committee of the Institution of automobile engineers. *Engineering* 156:296-7, 307-8 O 8-15 '43

Cooperative research comes of age. C. B. Veal. *S A E J* 51:45-51+ F '43; Same cond. *Nat Pet N* 35 pt 2:R136-9 Mr 3 '43

AUTOMOBILE service stations**See also**

Gasoline service stations

AUTOMOBILE steel. See Steel, Automobile

AUTOMOBILE tires. See Tires, Automobile

AUTOMOBILE trailers

Like peas in a pod. *il Business Week* p30 My 15 '43

No more trailers. *Arch Forum* 79:48 Ag '43

No more trailers. *Business Week* p19 Ji 17 '43

Trailers trailing; barred now from civilian production. *Business Week* p69-70 Ja 16 '43

Camps

Ordinances prevent shantytowns developments in California. *Eng N* 130:sup204+ Ja 14 '43

AUTOMOBILE trailers, Commercial. See Trailers

AUTOMOBILE workers of America, United. See United automobile workers of America

AUTOMOBILES

Kaiser unveils model of \$400 post-war car. *Comm & Fin Chr* 158:10 Ji 1 '43

Postwar automobile. *il Steel* 112:81-2+ Ap 12; 75-6 Ap 13; 55-6 Ap 26; 79-80+ My 3 '43

When cars come back. *Sci Am* 168:201 My '43

See also

Automobile engines	Motor buses
Automobile industry and trade	Motor cars (railroad)
Automobile trailers	Motor trucks
Electric trucks	Motor vehicles
Electric vehicles	Tires, Automobile
Garages	Tractors

Bodies

Modeling postwar motor car bodies. *il Mod Plastics* 20:50+ F '43

Plastic bodywork. W. Nichols. *il Automobile Eng* 33:361-5, 405-10 S-O '43

Postwar automobile. *Steel* 112:79-80+ My 3 '43

Car

Government foots bill for inspections to keep war worker cars rolling. W. W. Weston. *il Nat Pet N* 35:18, 20 N 3 '43

AUTOMOBILES—Care—Continued

Guard against freezing of automobile storage batteries. Consumers' Research Bul 12:15 N '43

Little-used cars: preventive maintenance practices. S A E J 51:sup20-1 O '43
Preventive maintenance, what to do and when; S.A.E. group submits program. Nat Pet N 35:24, 26, 28, 30 Ap 14 '43

Chassis

Design thirty years ago; 1913 De Dion 50 h.p. chassis. diags Automobile Eng 33:180 My '43

Design thirty years ago; 1913 Lancia 30 h.p. chassis. diags Automobile Eng 33:308 Ag '43

Design thirty years ago; the 1912 Clement-Talbot 15 h.p. chassis. diags Automobile Eng 32:496 N '42

Design thirty years ago; the 1913 Daimler 39 h.p. chassis. diags Automobile Eng 33:58 F '43

Design thirty years ago; the 1913 Germinal chassis. diags Automobile Eng 33:10 Ja '43

Design thirty years ago; the 1913 Motobloc 15 h.p. chassis. diags Automobile Eng 33: 98 Mr '43

Design thirty years ago; the 1913 Sheffield-Simplex 30 h.p. chassis. diags Automobile Eng 33:159 Ap '43

Cost of operation

Despite savings, per mile auto expense is up 1½¢ for '43. Sales Management 52:32-3 Je 15 '43

See also

Automobiles, Sales-
men's—Costs

Design

And there shall be motorcars; predictions on postwar design. W. B. Stout. il Tech R 45:125-6+ Ja '43

Economic considerations will out-weigh fancy designing in postwar automobiles. R. E. Cole. Steel 113:77 N 1 '43

Effect of war development on post-war car design. F. Jardine. S A E J 50:299-303 Jl '42

Forecast of postwar period outlook in motor car designs. Nat Underw 47:11 Jl 8 '43

Future car designs as forecast by automotive engineers; symposium. diag Automobile & Aviation Ind 89:28-30+ N 1 '43

How one designer is blueprinting the automobile of the future; George Walker, pioneer user of plastics. L. Stouffer. il Sales Management 52:24-6 F 15 '43

Morris ten-four chassis. il diags Automobile Eng 32:467-77 N '42

Radical change in postwar cars doubtful, S.A.E. told; Metropolitan section meeting, New York, Oct. 7. il diags Nat Pet N 35: 20+ O 20 '43

Sloan finds Kaiser plan for post-war car is impractical. Ptr Ink 201:78 D 18 '42

Sunbeam-Talbot two-litre car. il diags Automobile Eng 33:91-7 Mr '43

Symposium on tomorrow's automobiles. S A E J 51:sup28-9+ N '43

Electric equipment

Batteries of A card holders require extra recharging. il Nat Pet N 35:37-8 Ja 27 '43
Storage battery performance at low temperatures. J. H. Little and R. A. Dally. il diags S A E J 51:149-56+ My '43

See also

Automobiles—Light-
ing
Storage batteries

Equipment

Wartime rackets—gas-savers. Consumers' Research Bul 11:25-6 F '43

See also

Automobile accessories industry
Automobile engines
Carburetors
Tires, Automobile

Frames

Wheel mounting bracket for four-wheel drive racing automobile; arc welding solved difficult design problem; with cost data. E. W. Jacobson and F. F. Versaw. il Welding J 22:499-503 Jl '43

Gearing**See also**

Automobiles—Trans-
mission

History

Design thirty years ago (cont). diags Automobile Eng 32:496, 517; 33:10, 58, 98, 159, 180, 234, 308, 421 N '42-Je, Ag, O '43
Is a great new line looming? reminiscences of early days of the motor car. H. A. Giddings. East Underw 44:34+ Ap 23 '43

Insurance

See Insurance, Automobile

Lighting

Highway signs and markings for blackout conditions; test using cars equipped with lights approved by the War department. G. J. Fisher and O. K. Normann. il diags map Pub Roads 23:105-24, 135-6 O '42

Motor vehicle blackout lighting. H. C. Mead. Illum Eng 37:339-43 D '42

Motor vehicle blackout lighting. V. J. Roper. Illum Eng 37:835-8 D '42

Photocell photometry of reflex reflectors. W. F. Little and A. E. Parker. il diags Illum Eng 37:789-94; Discussion. 795-7 D '42

Lubrication

Dimensional value of lubricants in gear design. J. O. Almen. il diags S A E J 50: 373-80 S '42; Same. Automobile Eng 33: 147-53 Ap '43

See also

Automobile engines—
Lubrication

Manufacture

Auto dies saved; industry compromises. Business Week p80 Ap 10 '43

Materials

Aluminum for post-war cars. F. Jardine. S A E J 51:sup41 Mr '43

Aluminum may cut car weight. F. Jardine. S A E J 51:sup32+ Ag '43

How one designer is blueprinting the automobile of the future; George Walker, pioneer user of plastics. L. Stouffer. il Sales Management 52:24-6 F 15 '43

Modeling postwar motor car bodies. il Mod Plastics 20:50+ F '43

Plastic bodywork. W. Nichols. il Automobile Eng 33:361-5, 405-10 S-O '43

Standard SAE-ASTM classification and tests recommended for natural automotive rubbers. S A E J 50:sup25 Jl '42

See also

Steel, Automobile

Painting and finishing

Automobile finishes; lacquers giving increased gloss and abrasion-resistance. Automobile Eng 33:360 S '43

Parking

See Automobile parking

Patents

Current patents. Published in monthly numbers of Automobile engineer

Performance

Car performance; method of graphic analysis. H. Cousins. Automobile Eng 33:249-50 Je '43

Rationing

Automobile rationing; quotas and number of certificates issued authorizing purchase of new passenger cars, by states and by months, 1942. Automobile & Aviation Ind 88:94-5 Mr 15 '43

Safety measures**See also**

Automobile accidents
Motor vehicles—In-
Automobile drivers section

Springs and suspension

Design method for volute springs. H. O. Fuchs. il diags S A E J 51:317-28 S '43

Statistics

Transit's postwar role; studies of pre-war riding on public and private vehicles. J. A. Beeler. Transit J 86:440-2 D '42

AUTOMOBILES—Continued**Storage**

Protection of motor vehicles and engines in storage. P. V. Lamarque. Engineering 156:156-7 Ag 20 '43

Theft

Stealing a car under National motor vehicle theft act defined. East Underw 44:27 Jl 16 '43

Transmission

Daimler Scout. II diags Automobile Eng 33: 223-5 Je '43
Gear-matic drive. II Automotive & Aviation Ind 87:51 D 1 '42
Insures torque transmission to driven wheel; patent assigned to C. F. Gobright, inc. diags Machine Design 15:198+ Ag '43

Wheels

Wheel mounting bracket for four-wheel drive racing automobile; arc welding solved difficult design problem; with cost data. E. W. Jacobson and F. F. Versaw. II Welding J 22:499-503 Jl '43
Wide rims gain. Business Week p68 My 15 '43

See also

Tires, Automobile

AUTOMOBILES, Electric. See Electric vehicles
AUTOMOBILES, Employees'

Application of the wartime industrial transit plan; Goodyear tire and rubber co. of Canada, Ltd. Roads & Bridges 51:46, 43 Ja '43
Car-sharing plan conserves cars, tires, and gas; American car & foundry company. M. L. Keyser. map Factory Management 101: 105-7+ Mr '43

Government foots bill for inspections to keep war worker cars rolling. W. W. Weston. II Nat Pet N 35:18, 20 N 3 '43
M-day still has a place on the drawing board; California war worker transportation. J. H. Collins. Pub Util 31:267-74 Mr 4 '43

Off to war work they go; gaps in war transportation bridged by share-the-ride and bus service. P. M. Whelan. II Bus Transportation 22:34-7 Mr '43

Only 11% use buses; war-worker transportation; conference sponsored by National association of manufacturers. Bus Transportation 22:33 Mr '43

This plant gets more people to work in fewer cars. O. J. Greenway and S. Paluch. II Factory Management 100:98-9+ D '42
You can't work unless you can get there; solving employee transportation problem; Westinghouse electric and manufacturing co. II Mach 49:168-72 Ja '43

See also

Automobiles, Salesmen's

AUTOMOBILES, Industrial

Car pooling saves one mile in five. Elec W 119:1652 My 15 '43
Motor vehicle operations at the present time; Cincinnati gas and electric co. F. Heinlein. II Gas Age 91:41-3+ My 20 '43
Utility transportation, yesterday, today and tomorrow. C. S. Worley. Gas Age 90:14-16, 30 D 3 '42

AUTOMOBILES, Military

Daimler Scout. II diags Automobile Eng 33: 219-27 Je '43
G.P. war truck, an interesting design built for the U.S. government. II diags Automobile Eng 33:131-6 Ap '43
Henry J. Kaiser retains Detroit contractor to develop modification of jeep. A. H. Allen. Steel 112:83 Ap 5 '43
Innards of jeep, the omnipotent. J. R. Custer. II diags Automotive & Aviation Ind 88:28-31+ Ap 15 '43
The jeep. Mech Handling 29:227 D '42

Outstanding engineering makes the jeep an indispensable piece of war equipment. II diags Product Eng 14:543-5 S '43

AUTOMOBILES, Salesmen's

Auto mileage payments to salesmen under gasoline rationing; Rumford adjusted allowances. G. W. Penny, jr. Ind Marketing 27:29 D '42

How salesmen operate under gas rationing. Management R 32:106-7 Mr '43

Prepare for gas rationing in insurance. Nat Underw 46:19+ N 12 '42
Salesmen out of preferred class in new gas and tire rationing rules. P. L. Hardesty. East Underw 43:28+ N 13 '42

Costs

Despite savings, per mile auto expense is up 1½¢ for '43. Sales Management 52:32-3 Je 15 '43

New problems in car-costing you face under gasoline rations. E. E. Runzheimer, Sales Management 51:50-2 N 15 '42

AUTOMOBILES, Steam

Alternative fuels. Automobile Eng Extra no32:432 N 5 '42
Steam power for motor vehicles. Automobile Eng 32:493-5 N '42

AUTOMOTIVE council for war production

Automotive council seeks manpower shortage solution. S. Freeman. Am Mach 87: 124e-124f Mr 18 '43
Manpower becoming greatest problem in war production; Manpower utilization division is set up by Automotive council for war production. Automotive & Aviation Ind 88: 133+ Mr 15 '43

AUTOMOTIVE Diesel engines. See Diesel engines, Automotive**AUTOMOTIVE fuel**

Alternative fuels. diags Automobile Eng Extra no32:423-32 N 5 '42
Alternative fuels. J. Devon. Automobile Eng 33:36 Ja '43

Alternative fuels; survey of methods adopted in Switzerland. II diags Automobile Eng 33:289-307, 343-8 Ag-S '43

Application of producer gas to Canadian automotive transport. G. Godwin. bibliog diags Pulp & Pa of Can 44:273-8+ F '43

Cooperative research comes of age. C. B. Veal. S A E J 51:45-51+ F '43; Same cond. Nat Pet N 35 pt 2:R136-9 Mr 3 '43

Ersatz gasoline; charcoal-burning unit replacing gas in Brazil's motor vehicles. II Business Week p54, 56+ Ja 9 '43

Examination of ethyl alcohol and alcohol blends for use as motor fuel. S. J. W. Fleeth. bibliog diags Inst Pet J 28:240-56 O '42

Fuels and lubricants activities of the army; abstract. J. A. Richardson. Automotive & Aviation Ind 88:25 Ap 1 '43

Fuels and lubricants for U.S. army motorized ground forces. G. A. Round. II Nat Pet N 35 pt 2:R291-4, R296-7, R300 Jl 7 '43; Excerpts. S A E J 51:sup33-6 Ag '43

Gasogenos' coup; charcoal-burning producer-gas engines. Business Week p84+ Ap 17 '43

German portable gas-producer practice. Engineering 155:423-5 My 28 '43; Excerpts. Mech Eng 65:596 Ag '43

Grain wheat fuel combined with charcoal in gas producer. Automobile Eng 33:83 F '43

Mobile gas producers. J. R. Denoon. Gas J (Lond) 241:749 Je 16 '43

Motor vehicles propelled by producer gas. G. Egloff and P. Van Arsdell. II diags Nat Pet N 35 pt 2:R455-8 O 6 '43

Producer gas substitute for motor fuel. G. Egloff and P. Truesdell. Pet Refiner 22: 146+ O '43

Producer gas for motor transport. E. A. Allcut. diags Automotive & Aviation Ind 89:38-41 Ag 1: 38-40, 42, 44+ Ag 15 '43

Producer gas sets and gas containers for traction. G. W. L. Day. II Am Gas Assn M 25:81-3 F '43

SAE war engineering production meeting; fuels and lubricants sessions. S A E J 51: sup62-5 F '43

Trouble with oil supply turns Britain to alternate fuels. G. W. L. Day. II Oil & Gas J 41:113-14, 116 D 31 '42

Unifying road transport; post-war problems; fuel, etc. C. Ridley. Automobile Eng 33: 109-14 Mr '43

Universal fuel; suggested statutory supply for transport, industry and homes; potentialities of methane. C. Ridley. Automobile Eng 33:187-90 My '43

AUTOMOTIVE fuel—Continued

Whither are we bound? refining processes of the future and how change in utilization of petroleum products will influence future manufacturing procedures. R. G. Lovell. *Il Pet Eng* 14:37-40 Je; 67-8 Ji; 80+ Ag '43

Woman who fled Nazis makes gas producers in Michigan plant for export to China. *Il Nat Pet* N 35:17-18 O 20 '43

Wood and charcoal as fuel for vehicles. R. Rudy. *Pulp & Pa* of Can 43:906 N '42

See also

Airplane engines—	Gasoline
Fuel	Liquid fuel
Alcohol as fuel	Motor bus engines—
Automobile engines—	Fuel
Fuel	Motor truck engines
Benzol (commercial benzene)	—Fuel
	Triptane

Patents

Motor fuels. *Inst Pet* J 28:433A-5A N '42

Testing

Performance of a converted petrol engine with different producer fuels. E. Giffen and J. Spiers. *Engineering* 155:465 Je 11 '43

Producer gas; the effect of compression-ratio on performance. J. Spiers and E. Giffen. *diags Automobile Eng* 32:523-7 D '42

AUTOMOTIVE industries*See also*

Airplane industry and trade	Motor bus industry
Automobile accessories industry	Motor truck industry
Automobile industry and trade	Tractor industry and trade
	Trailers

Statistics

Automotive and aviation industries 1943 statistical issue. *Il maps Automotive & Aviation Ind* 88:53-97 Mr 15 '43

AUTO-ordnance corporation

Auto-ordnance corp. has become one of Kansas' most active oil producers. N. Williams. *Il Oil & Gas* J 41:34-5 Ja 7 '43

AUTORADIOGRAPHY. See Radiography

AUTO-Railer. See Motor trucks on rails

AUTOTRANSFORMERS. See Electric transformers—Autotransformers

AUTOXIDATION. See Oxidation—Autoxidation

AUXINS

Auxin action. H. C. Eyster. *Science* 97:358-9 Ap 16 '43

AVALANCHES

Avalanche research in Switzerland. *Science* 97:526-7 Je 11 '43

AVERAGE (maritime law)

Jurisdiction in general average case is left to Argentine courts. *East Underw* 44:23 Ja 22 '43

Questions of general average are passed on by federal appeal court. *East Underw* 44:25 Je 25 '43

AVIATION

Age of flight; great future for aircraft industry and aviation insurance predicted. H. A. Giddings. *East Underw* 44:37-8 My 28 '43

Air navigation for global war; McMillen spherographical system. *Il Fortune* 27:74-7+ Ja '43; Discussion. 27:34+ Mr '43

Astronomical navigation without mathematics. A. L. Mieville. *diags Roy Aeronautical Soc* J 47:273-83 Ag '43

Great circle tracking. T. Collins. *diags map Aero Digest* 42:122-4, 139, 319+ Je '43

In flight, troubles begin. H. N. Russell. *diag Sci Am* 168:164-5 Ap '43

Limits in the accuracy of the determination of the true vertical in an aircraft by taking the average of readings of the apparent vertical; abstract. E. Timmel. *Roy Aeronautical Soc* J 47:sup489-91 S '43

McMillen's spherographical system of celestial navigation. D. Brouwer and F. W. Keator. *diags Aero Digest* 42:116-18, 139-40+ Ap '43

Simplified computers aid navigation. P. V. H. Weems. *Il Aviation* 41:233-4 N '42

See also

Aeronautics	Flying boats
Air lines	Gliders
Airplanes	Insurance, Aviation
Airports	Radio aids to aviation
Airships	Radio apparatus on aircraft
Airways—control	Traffic
Altitude, Influence of	United States—Air service
Autogiros	Wind tunnels
Aviators	

Accidents

Airplane hits cables on San Francisco bridge. *Eng N* 131:444 S 23 '43

Analysis of non air carrier accidents, 1942. *Civil Aero J* 4:93 Ji 15 '43

Army plane survives striking 66-kv. line. *Il Elec W* 120:474 Ag 7 '43

Bomber crash destroys Chicago gas holder. *Il Gas* Ag 91:40 Je 3 '43

Engine failures as causes of aircraft accidents. *Aero Digest* 43:191 Ag '43

Low flying is a form of suicide, cautions CAB Safety bureau. *Civil Aero J* 4:62 My 15 '43

Post-war transport aircraft. E. P. Warner. *Roy Aeronautical Soc* J 47:245-9 Ji '43

Same. *Aeronautical Eng* R 2:55+ O '43

Safety without softness; army flyer's training. N. M. Shepard. *Il Nat Safety* N 48:60-1+ O '43

Altitude flying

Aircraft oil systems; high-altitude problems. H. E. Moerman. *diags S A E J* 51:394-6+ N '43

Behavior of electrical equipment at high altitude. N. J. Clark. *diags Aero Digest* 41:189-90 N '42

Boeing Stratotrainer; low pressure chamber will be used for physiological research and training of high altitude crews. *Il Aero Digest* 42:258+ Ap '43

Bomber nose cone doubles as altitude test chamber for radio equipment. *Il Aero Digest* 42:286 My '43

Cabin supercharging in scheduled airline operation. R. L. Ellinger. *S A E J* 51:241-7 Ji '43

Contributions of the Puritan compressed gas corporation to aeronautical progress. G. W. Larson. *Il Aeronautical Eng* R 1:137 N '42

Determination of airplane critical altitude by flight tests. L. C. Miller. *J Aeronautical Sci* 9:491-6 N '42

Flight testing is a sound business. E. T. Allen. *Il Aviation* 42:147, 149+ Je '43

How superchargers aid high-altitude flight. R. G. Standerwick and W. J. King. *bibliog il diags Machine Design* 15:135-9+ Ag '43

New guides to high-altitude rubbers. H. J. Marx and S. S. Kogut. *Il Aviation* 42:152-4+ S '43

New results and problems in medical stratosphere research. H. Strughold. *Roy Aeronautical Soc* J 47:113-17 Ap '43

One hundred degrees below zero; Ferro-Therm steel insulation applied in altitude testing chambers. J. G. Macormack. *Il Refrig Eng* 45:239-42+ Ap '43

Oxygen requirements at high altitudes. W. A. Wildhack. *bibliog J Aeronautical Sci* 9:543-7 D '42

Powerplant problems at high altitudes; abstract. T. Hammen. *jr diag Automotive & Aviation Ind* 88:33-4 My 1 '43

Recent engineering developments in stratosphere chambers. J. G. Bergdoll. *jr il diags Refrig Eng* 45:25-32 Ja '43; Excerpts. *Heating-Piping* 15:183-4 Ja '43; Discussion. *Refrigeration* 45:32-3 Ja '43

Sub-zero hurricanes to test new U.S. stratosphere planes; new tunnel to be built at Wright field; abstracts. J. G. Bergdoll, jr. *Refrigeration Eng* 45:360 My '43; Heat & Ven 40:88 My '43

Therm steel insulation applied in altitude testing chambers. J. G. Macormack. *Il Refrig Eng* 45:239-42+ Ap '43

Oxygen requirements at high altitudes. W. A. Wildhack. *bibliog J Aeronautical Sci* 9:543-7 D '42

Powerplant problems at high altitudes; abstract. T. Hammen. *jr diag Automotive & Aviation Ind* 88:33-4 My 1 '43

Recent engineering developments in stratosphere chambers. J. G. Bergdoll. *jr il diags Refrig Eng* 45:25-32 Ja '43; Excerpts. *Heating-Piping* 15:183-4 Ja '43; Discussion. *Refrigeration* 45:32-3 Ja '43

Sub-zero hurricanes to test new U.S. stratosphere planes; new tunnel to be built at Wright field; abstracts. J. G. Bergdoll, jr. *Refrigeration Eng* 45:360 My '43; Heat & Ven 40:88 My '43

Therm steel insulation applied in altitude testing chambers. J. G. Macormack. *Il Refrig Eng* 45:239-42+ Ap '43

Oxygen requirements at high altitudes. W. A. Wildhack. *bibliog J Aeronautical Sci* 9:543-7 D '42

Powerplant problems at high altitudes; abstract. T. Hammen. *jr diag Automotive & Aviation Ind* 88:33-4 My 1 '43

Recent engineering developments in stratosphere chambers. J. G. Bergdoll. *jr il diags Refrig Eng* 45:25-32 Ja '43; Excerpts. *Heating-Piping* 15:183-4 Ja '43; Discussion. *Refrigeration* 45:32-3 Ja '43

Sub-zero hurricanes to test new U.S. stratosphere planes; new tunnel to be built at Wright field; abstracts. J. G. Bergdoll, jr. *Refrigeration Eng* 45:360 My '43; Heat & Ven 40:88 My '43

Therm steel insulation applied in altitude testing chambers. J. G. Macormack. *Il Refrig Eng* 45:239-42+ Ap '43

Oxygen requirements at high altitudes. W. A. Wildhack. *bibliog J Aeronautical Sci* 9:543-7 D '42

Powerplant problems at high altitudes; abstract. T. Hammen. *jr diag Automotive & Aviation Ind* 88:33-4 My 1 '43

Recent engineering developments in stratosphere chambers. J. G. Bergdoll. *jr il diags Refrig Eng* 45:25-32 Ja '43; Excerpts. *Heating-Piping* 15:183-4 Ja '43; Discussion. *Refrigeration* 45:32-3 Ja '43

Sub-zero hurricanes to test new U.S. stratosphere planes; new tunnel to be built at Wright field; abstracts. J. G. Bergdoll, jr. *Refrigeration Eng* 45:360 My '43; Heat & Ven 40:88 My '43

Therm steel insulation applied in altitude testing chambers. J. G. Macormack. *Il Refrig Eng* 45:239-42+ Ap '43

Oxygen requirements at high altitudes. W. A. Wildhack. *bibliog J Aeronautical Sci* 9:543-7 D '42

AVIATION—Continued

Instrument flying

- Blind flying hazards to be eliminated by secret development. E. R. Breech. *Comm & Fin Chr* 157:1297 Ap 8 '43
 Delta devises improved shield for blind flying training. *il diag Aero Digest* 43:295 Jl '43
 Instrument approach by radio direction finder. C. H. McIntosh. *diags Aviation* 42:224-5+ My; 206-7, 209+ Je '43 (to be cont)

Medical aspects

- Appraisal of tests of altitude tolerance. A. L. Barach, R. Brookes and others. *Aeronautical Eng R* 2:60+ Jl '43
 Aviation medicine in the education of aeronautical engineers. J. D. Akerman. *J Eng Educ* 33:392-5+ Ja '43
 Eleventh annual meeting of the Institute of the aeronautical sciences; review of technical papers; physiologic problems. A. Klemin. *Aeronautical Eng R* 2:27+ Ap '43
 Hyperventilation syndrome and its importance in aviation; abstract. H. C. Hinshaw, R. F. Rushmer, and W. N. Boothby. *Aeronautical Eng R* 2:65 S '43
 Ju. 87 equipped for medical flight research; abstract. H. V. Diningshofen. *Roy Aeronautical Soc J* 47:sup416-17 Ag '43
 Limits of human heat regulation. L. H. Newburgh, L. P. Herrington and A. P. Gagge. *J Aeronautical Sci* 10:197-9 Je '43
 Medical program for aviation. R. A. McFarland. *Harvard Business R* 22 no 1:93-127 [O] '43
 Medical research in some aspects of aircraft design. W. E. Russell, J. R. Erwin and H. R. DeHaven. *J Aeronautical Sci* 10:227-31 Jl '43
 New results and problems in medical stratosphere research. H. Strughold. *Roy Aeronautical Soc J* 47:113-17 Ap '43
 Oxygen makes the flyer; testing naval flying cadets for high altitude flight. F. Tupper, Jr. *il Aero Digest* 42:88-90+ Ja '43
 Oxygen requirements at high altitudes. W. A. Wildhack. *bibliog J Aeronautical Sci* 9:543-7 D '42
 Physiological strains of modern flying; abstract. D. W. Bronk. *Science* 97:sup12 F 5 '43
 Significance of CO₂ for high altitude breathing; abstract. H. Rein. *Roy Aeronautical Soc J* 47:sup158 Ap '43
 Stratospheric aviation of the future; abstract. M. Richon. *Roy Aeronautical Soc J* 47:sup 214-15 My '43

Safety measures

- Biomechanics in airplane design. *Mech Eng* 65:469 Jl '43
 Determining cloud depths; electronic photocell equipment; essential for safe aircraft flights. S. R. Winters. *diags Radio N* 30:44-5+ O '43
 One-man parachute boat has unique features. *il Aero Digest* 41:298 N '42
 Thunderstorm characteristics and flight procedures. J. A. Browne. *diags Aeronautical Eng R* 1:5+ D '42

Transoceanic flights

- Avigation by radio. L. LeKashman. *il maps Radio N* 30:19-21+ O '43

See also
 Airports, Floating

Winter flying

- Northwest deliveries; difficulties surmounted in running Alaska route. D. Baker. *il Aviation* 42:225, 227+ Jl '43
 Snow is different warns Safety bureau; advice on take-off and landing. *Civil Aero J* 4:15 F 15 '43

AVIATION corporation

- Annual report. *Comm & Fin Chr* 157:987 Mr 15 '43
 Aviation corp. plants, dotting the map from east to west and north to south. *Steel* 113:78, 80, 82 Ag 2 '43

AVIATION fuel. See Airplane engines—Fuel

AVIATION insurance. See Insurance, Aviation

AVIATION landing stations

- Considerations in the construction of flight strips. F. E. Schnepfe. *il diags Aero Digest* 41:222, 225-6+ D '42; Same cond. *Civil Eng* 13:93-6 F '43; Excerpts. *Roads & Sts* 85:64-6 N '42; Abstract. *Roads & Bridges* 81:25+ F '43
 Flight strip hows and whys. *il diags Aviation* 42:247, 249+ Ja '43
 How flight strips are being built. *il diags Eng N* 130:128-32 Ja 28 '43
 Number of airports and landing fields in the United States, 1931-1942; tabulation. *Automotive & Aviation Ind* 88:96 Mr 15 '43
 Utah's first flight strip. W. L. Anderson. *diag Roads & Sts* 86:55 Ag '43

See also

Airports

Portable landing mats

- Continuous finishing setup facilitates production of steel landing mats. W. R. Baxter and D. M. Wilkinson. *il plan Steel* 113:122-5 S 20 '43
 Interlocked steel planks make landing field. *il diags Product Eng* 13:695 D '42
 Steel landing mats; conveyors help turn them out by the square mile. G. R. Reiss. *il Steel* 113:112-14 Ag 9 '43
 Steel landing mats for airplane runways. G. G. Greulich. *il Civil Eng* 13:431-3 S '43

AVIATION libraries. See Aeronautic libraries

AVIATORS

- Short vacations advised for test pilots; abstract. J. H. Tillisch and M. N. Walsh. *Science* 96:sup 12-13 D 25 '42
 When is a pilot legally liable? study of pertinent court decisions. L. T. Parker. *Aviation* 42:231+ Ag '43

See also

Altitude, Influence of

Women as aviators

also names of aviators, e.g. Allen, Edmund T.

Clothing

- Cooling, heating used to protect flying suits; storage of wool-and-fur suits. L. W. Clifford. *Refrig Eng* 44:321 N '42; Same. *Heat & Ven* 40:34 Mr '43
 Making airmen's clothes; electrically heated garments. *il Elec R (Lond)* 133:45-6 Jl 9 '43

Physical examinations

- Centrifuge to test pilots' reactions to acceleration. *diag Instruments* 15:533 D '42
 Medical program for aviation. R. A. McFarland. *Harvard Business R* 22 no 1:93-127 [O] '43
 Personalities in science; Edward C. Schneider who originated the Schneider physical fitness index. *Sci Am* 169:5 Jl '43

Training

- Boeing Stratotrainer; low pressure chamber will be used for physiological research and training of high altitude crews. *il Aero Digest* 42:258+ Ap '43
 Delta devises improved shield for blind flying training. *il diag Aero Digest* 43:295 Jl '43
 Flight testing is a sound business; training flight test crews. E. T. Allen. *il Aviation* 42:118-19+ My '43
 Mock-ups improve ground instruction. W. C. Youngclaus. *il Aviation* 42:267, 269+ Mr '43
 Pre-flight training; complete illusion of flight; Soule-Rabkin pre-flight trainer. A. Klemin. *il Sci Am* 169:88 Ag '43
 Technical functions and responsibilities of the Civil aeronautics administration; human engineering in aviation. D. R. Brimhall. *Aeronautical Eng R* 2:36, 39+ S '43
 Women instructors graduated. *Aviation* 42:239+ Ap '43

See also

Aviators, Military—Training

AVIATORS, Military

- Oxygen makes the flyer; testing naval flying cadets for high altitude flight. F. Tupper, Jr. *il Aero Digest* 42:88-90+ Ja '43
 Vision, hearing, and aeronautical design. L. D. Carson, W. R. Miles and S. S. Stevens. *J Aeronautical Sci* 10:127-30 Ap '43

See also

Chennault, Claire Lee
 United States—Air service

AVIATORS, Military—Continued

Training

- Building the AAF. B. K. Yount. *il Aviation* 42:124-5+ Ag; 225, 227 S; 229, 231+ O; 223, 225 N '43
- Canada trains them by tens of thousands. J. R. Keith. *il Aviation* 42:219, 221+ N '43
- Eliminations in flier training course occur mostly in first 20 hr of flying; abstract. T. J. DuBose. S A E J 51:sup51-2 My '43
- How our navy gears pilots for war. F. Tupper, jr. *il Aviation* 41:239-41+ D '42
- New training technique. *il Aero Digest* 42:199 My '43
- Radio-robot battle; electric cars controlled by radioed instructions go through maneuvers of raiding and defending air squadrons; Army air force school; illustrations. *Electronics* 16:97 Ag '43
- Safety without softness. N. M. Shepard. *il Nat Safety* N 48:60-1+ O '43
- Special expedients speed construction of naval air training station. *il Eng* N 130:792-7 Je 3 '43
- Stepping stones to action; growing use of twin engine planes to train bomber crews. *il Aviation* 41:100 N '42

AVIDIN

- Heat-labile, avidin-uncombinable, species-specific and other vitamins of biotin. D. Burk and R. J. Wenzler. *biblog Science* 97:57-60 Ja 15 '43

AVOCADOS

- Refrigeration important in avocado production. E. Hickman. *il Refrig Eng* 46:102+ Ag '43

AWNINGS

- Store front awnings; time-saver standards. W. J. Ward, jr. *diags Arch Rec* 93:85-6 Je '43

AXLES

See also

- Bearings
Car axles

AXTON-FISHER tobacco company

- Stock call held mandatory. *Comm & Fin Chr* 158:356 Jl 26 '43

- Tobacco payoff; Gianninis' alleged plan to liquidate Axton-Fisher. *Business Week* p30+ Ag 7 '43

AZELAIC acid

- New fatty acids; azelaic and pelargonic acid developed commercially through accelerated war research. L. D. Myers. *Soap & San Chem* 19:37 N '43

AZIMUTH dial

- Road map for navigators. *il Mod Plastics* 20:52+ Ja '43

AZO compounds

- Application of azoic dyes to cellulose materials. A. J. Hall. *Textile Col* 65:293+ Jl '43

- Chemical constitution of the chrome azo dyes. K. L. Dorman. *tables Am Dyestuff Rep* 32:47-66 F 1 '43

- Identification of some sulphonate azo reduction products of azo dyes. P. Chen and E. J. Cross. *biblog Soc Dyers & Col J* 59:144-8 Jl '43

- 3,2'-Nicotyrine; insecticidal properties of certain azo derivatives. R. L. Frank, R. W. Holley and D. M. Wilkholm. *biblog Am Chem Soc J* 64:2835-8 D '42

- Preparation of symmetrical azo-compounds, the positional influence of the nitro-group on the decomposition of nitronaphthalenediazonium sulphates by cuprous hydride, and an improved method for the production of 2-nitronaphthalene. H. H. Hodgson, E. Leigh and G. Turner. *Chem Soc J* p744-6 D '42

- Simplified discussion of color and constitution of azo dyes. W. B. Reynolds. *Am Dyestuff Rep* 32:455-6, 465-7 O 25 '43

AZOBENZENE

- Toxicity and histopathology of some azo compounds as influenced by dietary protein. M. I. Smith, R. D. Lillie and E. F. Stohman. *biblog Pub Health Rep* 58:304-17 F 19 '43

AZOTOBACTER

- Large-scale production of azotobacter. S. B. Lee and R. H. Burris. *biblog il Ind & Eng Chem* 35:354-7 Mr '43

- AZOYL derivatives of sugars. See Sugars

B

BG corporation

- Ten years' progress. C. B. Bunch. *il Aeronautical Eng R* 1:107 N '42

BABASSU oil

- Coconut, babassu oils freed for inedible use. *Oil Paint & Drug Rep* 143:5 Je 7 '43
- Diversity of uses for babassu oil. *For Comm W* 13:20 N 6 '43
- FDA releases coconut, babassu oils for soap. *Soap & San Chem* 19:39 Jl '43

BABBITT metal

- Good babbitts in spite of tin shortage; Rex babbitt metal. *Marine Eng* 47:142 N '42
- Oil engine bearings; various materials for main and connecting-rod big-ends. A. B. Willis. *biblog il diags Automobile Eng* 32:535-42 D '42
- Taking tin out of babbitt. A. H. Phelps. *Metal Prog* 44:432 S '43

BABBITTING

- Babbitting of cast iron improved by new process. *il diag Product Eng* 14:228-30 Ap 43

- Cooper-Bessemer tests solve tin shortage; Kolene process provides bond between lead-base babbitt and meehanite. *Gas Age* 91:42+ F 25 '43

- How to babbitt without a mandrel. W. F. Schaphorst. *Paper Ind* 25:275 Je '43
- Restoring babbitt-type journal bearings. *il diags Diesel Power* 21:138-9 F '43

See also

- Bearings

BABCOCK and Wilcox company

- News and views on investments. H. Lawrence. *Barron's* 23:1 Je 14 '43

BACH, Alexei, 1857-

- Sketch. *Science* 98:381 O 29 '43

BACHE, Franklin, 1792-1864

- Franklin Bache, chemist. E. F. Smith. *por(front) J Chem Educ* 20:367-8 Ag '43

BACHINSKII'S law

- Fluidity of mixtures which obey Bachinskii's law. F. Kottler. *biblog J Phys Chem* 47:277-93 Mr '43

BACILLUS coli

- Bacteriology of fresh water; distribution and types of coliform bacteria in lakes and streams; abstract. C. E. Taylor. *Am Water Works Assn J* 35:641-2 My '43

- Biochemical and antigenic relationships of the paracolon bacteria; abstract. C. A. Stuart and others. *Am Water Works Assn J* 35:1360 O '43

- Coliform confirmation from raw and chlorinated waters with brilliant green bile lactose broth. E. Wattie. *Pub Health Rep* 58:377-83 Mr 5 '43

- Comparative study of the presumptive and confirmative media for bacteria of the coliform group and for fecal streptococci; abstract. A. A. Hajna and C. A. Perry. *Am Water Works Assn J* 35:1358 O '43

- Ecology and significance of the different types of coliform bacteria found in water; abstract. C. B. Taylor. *Am Water Works Assn J* 35:641 My '43

- Relation between coliforms and enteric pathogens. R. W. Kehr and C. T. Butterfield. *Pub Health Rep* 58:589-597 *biblog*(p606-7) Ap 9 '43; *Abstract. Water & Sewage* 81:25-6+ Je '43

- Relative resistance of coliform organisms and certain enteric pathogens to excess-lime treatment. E. Wattie and C. W. Chambers. *biblog Am Water Works Assn J* 35:709-20 Je '43

BACILLUS pestis. See Plague

BACK

- Low back pain of industrial workers. W. H. Means. *Ind Med* 12:180, 182-3 Mr '43

BACK—Continued

Low back pain; some anatomical considerations. M. T. Schnitker. *bibliog Ind Med* 12: 5-7 Ja '43

BACK yards

Playing in your own back yard. *il Consumers' Research Bul* 12:11-13 Jl '43

BACON

Overhead cars used for bacon to Britain. *Refrig Eng* 46:111 Ag '43

Wartime refrigeration of foods for transport at sea; emergency method of transporting Canadian bacon over the North Atlantic route. W. H. Cook and T. A. Steeves. *diags Refrig Eng* 44:373-9 D '42

BACTERIA

Acclimatization of bacteria to disinfectants used in the paper and paperboard industry. J. W. Appling and E. F. Shema. *il Paper Tr J* 117:101-4 S 30 '43; Same cond. *Paper Ind* 25:906, 908-9 N '43

Bacteriological changes in cucumber fermentation. J. L. Etchells and I. D. Jones. *bibliog il Food Ind* 15:54-6 F '43

Destruction of bacteria in the commercial laundry. L. W. Wright. *il Soap & San Chem* 19:31-3+ Ag '43

Distribution in the rat of injected radioactivated bacteria. J. O. Ely. *Franklin Inst J* 234:500-14 N '42

Estimation of rope spores in wheat flour and other products. E. Barton-Wright. *Soc Chem Ind J* 62:33-7 Mr '43

Luminous bacteria new research guinea pigs; used to determine amount of ultraviolet radiation needed to kill air-borne bacteria. *Illum Eng* 38:273 Je '43

Microbiology of textile fibers. W. S. Marsh. *Am Dyestuff Rep* 31:563; Discussion. 563-9 N 23 '42

Physicochemical aspects of bacterial growth; growth of *bact. lactis aerogenes* in media containing ammonium sulphate or various amino-acids. R. M. Lodge and C. N. Hinshelwood. *Chem Soc J* p208-13 My '43

Physicochemical aspects of bacterial growth; observations on the variability of growth rate of *bact. lactis aerogenes*. R. M. Lodge and C. N. Hinshelwood. *Chem Soc J* p219-21 My '43

Physicochemical aspects of bacterial growth; the lag phase of *bact. lactis aerogenes*. R. M. Lodge and C. N. Hinshelwood. *Chem Soc J* p213-19 My '43

Plant tumor bacteria. *Science* 98:sup10 Ag 13 '43; Correction. P. R. White. 98:199 Ag 27 '43

Role of microorganisms in the transformation of organic material into petroleum. *bibliog Am Pet Inst Proc* 23(4):123-6 '42

Simple multiple-loop method speeds bacterial counts. A. Moldavan. *il diags Food Ind* 15:56-7 Je '43

Tank fires caused by bacteria; spirillum desulfuricans. *Oil & Gas J* 42:40 Je 10 '43

See also

Air—Bacteriology
Bacteriology
Bacteriophage
Bacteriostasis
Fermentation

Food—Bacteriology
Iron bacteria
Paper making—Bacteria control
Water—Bacteriology

BACTERIA, Marine

Marine microorganisms which oxidize petroleum hydrocarbons. C. E. Zobell, C. W. Grant and H. F. Haas. *Am Assn Pet Geologists Bul* 27:1175-93 *bibliog(p)* 1191-3 S '43

BACTERIA, Nitrifying

See also

Azotobacter

BACTERIA, Pathogenic

Bacteria which cause disease in plants. W. J. Dowson. *bibliog Chem & Ind* 62:163-4 My 1 '43

Relative resistance of coliform organisms and certain enteric pathogens to excess-lime treatment. E. Wattie and C. W. Chambers. *bibliog Am Water Works Assn J* 35:709-20 Je '43

See also

Aerobacter cloacae
Bacillus coli
Clostridium

Food poisoning
Infectious diseases
Pneumococci

BACTERIOLOGICAL apparatus

Apparatus for determination of the bacterial content of air. S. Moulton, T. T. Puck and H. M. Lemon. *bibliog diag Science* 97:61-2 Ja 8 '43

BACTERIOLOGICAL research

Louis Livingston Seaman fund. *Science* 98: 277 S 24 '43

Research award of Eli Lilly and company. *Science* 97:156-7 F 12 '43

BACTERIOLOGY

See also

Acetobacter
Antigens and antibodies
Bacillus coli
Bacteria
Disinfection and disinfectants
Fermentation

Food—Bacteriology
Iron bacteria
Milk—Bacteriology
Rubber—Bacteriology
Sewage—Bacteriology
Viruses
Water—Bacteriology

Culture mediums

Bacterial reduction of tetrathionate; abstract. M. R. Pollock, R. Knox and P. G. H. Gell. *Am Water Works Assn J* 35:640-1 My '43

Chemical and bacteriological studies on peptones; abstract. A. E. Hook and F. W. Fabian. *Food Ind* 15:148 N '43

Coliform confirmation from raw and chlorinated waters with brilliant green bile lactose broth. E. Wattie. *Pub Health Rep* 58: 377-83 Mr 5 '43

Comparative study of the presumptive and confirmative media for bacteria of the coliform group and for fecal streptococci; abstract. A. A. Hajna and C. A. Perry. *Am Water Works Assn J* 35:1358 O '43

Growth of *pasteurella pestis* on a casein digest medium. L. D. Smith and R. L. Phillips. *Franklin Inst J* 235:536-45 My '43

Methods for reclaiming agar from culture media. *Water & Sewage* 81:19-20 Ja '43

New agent for bacteriological examination of water; Carragar; reclamation of agar. R. E. Thompson. *Water & Sewage* 81:18, 38-40 Jl '43

Physicochemical aspects of bacterial growth; growth of *bact. lactis aerogenes* in media containing ammonium sulphate or various amino-acids. R. M. Lodge and C. N. Hinshelwood. *Chem Soc J* p208-13 My '43

Physicochemical aspects of bacterial growth; observations on the variability of growth rate of *bact. lactis aerogenes*. R. M. Lodge and C. N. Hinshelwood. *Chem Soc J* p219-21 My '43

Physicochemical aspects of bacterial growth; the lag phase of *bact. lactis aerogenes*. R. M. Lodge and C. N. Hinshelwood. *Chem Soc J* p213-19 My '43

Research finds substitute for bacteriological agar. W. E. Baier and T. C. Manchester. *bibliog il Food Ind* 15:54-6 Jl '43

Selective media for organisms of the salmonella group; abstract. R. Knox, P. F. H. Gell and M. R. Pollock. *Am Water Works Assn J* 35:1356-7 O '43

Use of fibrous sodium pectate as a substitute for agar in bacteriological gels. R. M. McCready, H. S. Owens and W. D. Maclay. *Science* 97:428 My 7 '43

Laboratory methods

Detergents and staining of bacteria. S. F. Snieszko. *bibliog Science* 96:589 D 25 '42

Method for the removal of bacterial contaminants from suspensions of influenza virus. *Science* 96:543-4 D 11 '42

Nomenclature

Appointment of a judicial commission on bacteriological nomenclature. R. St John-Brooks and R. S. Breed. *Science* 97:370-1 Ap 23 '43

BACTERIOPHAGE

Bacteriophage and cheesemaking; abstract. L. J. Meanwell. *Chem & Ind* 62:73; Discussion. 73-4 F 20 '43

BACTERIOSTASIS

Bacteriostatic action of sulfonamide compounds upon clostridia. S. M. Rosenthal. *bibliog Pub Health Rep* 58:5-9 Ja 1 '43

BAD debts. See Collecting of accounts**BAG closing machines**

Bemis bag closing machines. *il Chem & Eng N* 21:1736+ O 25 '43

BAG closing machines—Continued

- Heat sealing; practice and equipment for bags. J. E. Corcoran. *il* *diags* *Mod Packaging* 16:74-7+ *Jl* '43
- New way to close coffee bags; by corrugating the tops. *il* *Mod Packaging* 16:77 *Mr* '43
- Simple method of closing bags saves metal; developed by A & P. G. Hightower. *il* *Food Ind* 15:56-7 *Mr* '43

BAG filling

- Process charts point way to man-hour saving; dating and filling 100-lb. paper bags; Diamond crystal salt. G. A. Hornberger. *Factory Management* 101:126-7 *S* '43

BAGASSE

- Destructive distillation of bagasse. D. F. Othmer and G. A. Fernstrom. *bibliog il diag Ind & Eng Chem* 35:312-17 *Mr* '43
- Synthetic-charcoal production in Barbados from megass (bagasse) and vacuum-pan molasses. *For Comm W* 12:19 *Jl* 17 '43

BAGGAGE

- Valises in vogue; WPB cuts luggage output. *Business Week* p70 *My* 8 '43

See also

- Motor bus lines—
Baggage

BAGGAGE and express cars

- Box-baggage cars for the C.N.R. *il* *Ry Age* 115:486-7 *S* 25 '43

BAGGING. See Bags**BAGS**

- All-America package competition award; Standard brands, inc. bag-in-carton for Fleischmann's Diamalt. *il* *Mod Packaging* 16:111+ *Ap* '43
- Bagging from domestic flax. J. B. Hosmer. *il* *Textile World* 93:104-5 *Je* '43
- Bemis rip-cord closure. *il* *Chem Ind* 51:734+ *N* '42
- Huge water proof bag developed for North African campaign. *Manuf Rec* 112:35 *F* '43
- Pillow in a carton. *il* *Mod Packaging* 16:56-7+ *D* '42
- Tech-flax system of processing flax. G. A. Rosselot. *il* *Rayon* 24:301-2, 357-8 *Je-Jl* '43

See also

- Burlap
Cotton bags
Paper bags

Tables, calculations, etc.

- Calculation of flat dimensions of sacks and bags when the volume to be contained is known. H. L. Parsons. *diags Textile Inst J* 34:T1-18 *Mr* '43

BAGS, Canvas. See Canvas bags**BAGS, Cotton. See Cotton bags****BAGS, Paper. See Paper bags****BAHAMA islands****Economic conditions**

- Bahamas look to the future. H. N. Stark. *il* *For Comm W* 11:8-10+ *My* 8 '43

BAILEES' customers insurance. See Insurance, Bailees' customers**BAILMENT**

- Garage keeper liable for damage to car when employee borrowed it. *East Underw* 44:23 *Jl* 9 '43

- Lost stock and the burden of proof. M. L. Hayward. *Barron's* 22:19 *N* 23 '42

BAKELITE

- Control sheaves for continuous take-ups; woodflour phenolic. *il* *diags Mod Plastics* 20:94-5+ *Mr* '43

- Fountain fixtures in the front lines; now furnishes water for U.S. troops in the field. C. J. Groos. *il* *Mod Plastics* 20:53+ *D* '42

- Housings for tapping attachments. *il* *diags Mod Plastics* 21:110-12 *N* '43

- Low-cost dies for aircraft parts; use of semi-plastic materials, such as masonite and bakelite. B. Schlenzig. *il* *diags Am Mach* 86:1307-14 *N* 12 '42

- New application of heatronic molding. *il* *Mod Plastics* 21:106-7 *N* '43

- New uses for phenolic resin board. *il* *Mod Plastics* 20:56-7+ *Ja* '43

- Plastic treatment for porous castings. *Engl-neer* 175:293 *Ap* 9 '43

- Reclaiming porous castings with bakelite V.1845 and N.2106. W. Bowman. *Iron Age* 151:52-3 *Ap* 8 '43

- Salvage of porous castings. *diag Chem Age* (Lond) 49:15 *Jl* 3 '43

- Simplified welding tool. *il* *Mod Plastics* 20:66+ *Mr* '43

- Unlimited revolutions for gun turrets. *il* *Mod Plastics* 20:85-7 *Je* '43

BAKENHUS, Reuben Edwin, 1873-

- Sketch. *por Civil Eng* 12:694 *D* '42

BAKER, Frank Collins, 1867-1942

- Memorial. M. M. Leighton. *por(pl)* *Geol Soc Proc* 1942:167-72 *bibliog*(p169-72) *Ap* '43

BAKER, Philip Schaffner, 1916-

- Fathers and sons in chemistry. R. S. Voris. *por Chem & Eng N* 20:1515 *N* 25 '42

BAKER, Ross Allen, 1886-

- Fathers and sons in chemistry. R. S. Voris. *por Chem & Eng N* 20:1515 *N* 25 '42

BAKERS and bakeries

- Bakers win fats. *Business Week* p82 *My* 8 '43

- Bakers' woes. *Business Week* p22 *Ja* 23 '43

- First food distribution order restricts bakers. *Food Ind* 15:87 *F* '43

- Giant gas masks to remove plant odors. H. Sleik. *il* *Mod Packaging* 16:88+ *Ja* '43

- Let 'em eat cake; argument for equal sugar ration for all its products without discrimination. *Business Week* p22+ *S* 4 '43

- New buildings for 194X: bakery and candy store. *il* *diags plans Arch Forum* 72:104-5 *My* '43

- Outlook for baking industry. *Barron's* 22:12 *N* 16 '42

- Quality and profit in a nickel's worth of cup cake. W. R. Van Meter. *plan Food Ind* 15:68-9 *Mr* '43

- Rationing pains; baking and drug trades feel pinch. *Business Week* p30-2 *Ap* 17 '43

- Using sugar to best advantage under rationing. J. Micka. *il* *Food Ind* 15:69-71+ *Je*; 74-5 *Jl* '43

- What's wrong with baking. C. A. Harper. *Food Ind* 15:117-18 *My* '43

See also

- Biscuits
Bread
Cake

Electric equipment

- Food plant with new ideas; all-electric bakery. H. W. Young. *flow sheet il diag, Food Ind* 15:60-2 *O* '43

Employees

- Union wages and hours in the baking industry, June 1, 1942. *Monthly Labor R* 56:347-55 *F* '43

Equipment

- Bakery engineers tell how to make equipment last. *Food Ind* 15:96 *Ap* '43

- National Biscuit makes trucks last longer. *il* *Food Ind* 15:79-80 *Ap* '43

Finance

- How price boost affects leading bakers. *Barron's* 23:6 *F* 15 '43

BAKING

- Gluten in doughs; recent patent. *Food Ind* 15:120+ *F* '43

- Influence of temperature on the beating and baking properties of spray-dried egg. J. R. Hawthorne and E. B. Bennon. *Soc Chem Ind J* 61:151-3 *O* '42

See also

- Bakers and bakeries *Flour*
Bread *Food mixes*
Cake *Yeasts*
Cookies

- also* Louis Livingstone library of baking, Chicago

BALANCE of payments

- Elire's balance of payments. *Economist* 143:575-6 *N* 7 '42

- Foreign balances in U.S. and London. *Nat City Bank* p81-3 *Jl* '43; *Same abr. Comm & Fin Chr* 158:227 *Jl* 15 '43

- Unfavourable balance? changing concept. *Economist* 143:601 *N* 14 '42

BALANCE of payments—Continued

United States in the world economy; the international transactions of the United States during the interwar period, H. B. Lary and others. 38 charts 25 tables U S Bur For & Dom Com, Economic Ser 23:1-216; pa 35c Supt. of doc. '43

See also

Commerce

BALANCE sheets

Balance sheet classification of V loans; a statement by the Research department of the American Institute of accountants. J Account 75:164 F '43

Balance-sheet treatment of partnership taxes. J Account 75:364 Ap '43

Bond discount controversy. W. B. Castenholz. J Account 75:70-3 Ja '43

Do we need a balance-sheet? C. Martin. J Account 75:343-7 Ap '43

Names wanted; a problem in terminology. G. Rea. J Account 74:541-3 D '42

Operator's monthly balance sheet. C. E. Moore. Am Water Works Assn J 34:1880-8 D '42

Watch out for inflation of the balance sheet; eight factors. A. C. Klechlin. Inland Pkr 111:29-32 Jl '43

See also

Consolidated statements

Financial statements

BALANCES

Balance method of determining specific gravity of natural gas. G. M. Stearns. diag Oil & Gas J 41:47 D 24 '42

Improved damping device for high capacity balances. H. L. Andrews, F. W. Oberst and E. G. Williams. Il diag R Sci Instr 14:22-3 Ja '43

Modification of the C.F.R. bouncing pin spring-tension balance and instructions for use. P. Draper. diag Inst Pat J 29:253-7 O '43

New Towers balance. Il Chem Age (Lond) 49:195 Ag 21 '43

Reproducibility of weighings made on microchemical balances. C. J. Rodden and others. Ind & Eng Chem Anal ed 15:416-16 Jo 15 '43

Simple automatic and recording balance. N. W. Muller and R. E. Peck. bibliog diag Ind & Eng Chem Anal ed 15:46-8 Ja 15 '43

Spring tension balance for C.F.R. bouncing pin. P. Draper. Il diag plan Inst Pat J 28:209-13 S '42

BALANCING machines

Electronic machine balances rotating parts. Il diag Electronics 16:101 Ja '43

Gisholt balancing machine checks rotating parts in production. Il diag Electronics 16:310+ Mr '43

Micro-poise tire balancing machine. Il Rubber Age 53:557 S '43

BALANCING of machinery

Balancing 50-ton marine gears. G-E Thy-mo-trol type electronic control for driving motor. Il diag Electronics 16:132 Jl '43

Determining counter-balancing effects by rail-stress measurements. diag Engineering 154:301-4, 341-4, 381-3, 421-2 O 16, 30, N 13, 27 '42

Dynamic balancing in propeller maintenance. B. J. Cunnock. diag Aviation 42:214+ Ap '43

Oil-well pumping practices; counterbalancing, purpose and principles. J. Zaba. Oil & Gas J 42:51-3 S 30 '43

Problems of routine propeller balancing. J. T. Farrar. Il diag J Aeronautical Sci 10:209-12 Jl '43

Testing for victory; motor control system, and operating sequence applied to dynamic-balancing machine, testing marine turbine-propulsion gear. Il Gen Elec R 46:408 Jl '43

BALANTIDIUM coli

Carbazono treatment for balantidium coli infections. M. D. Young and R. Burrows. Pub Health Rep 58:1273-3 Ag 20 '43

BALATA

Statistical lengths of rubber-like hydrocarbon molecules. F. T. Wall. bibliog J Chem Phys 11:67-71 F '43

BALDNESS

Ivory dome; baldness may be caused by calcification of the skull. Sci Am 167:260 D '42

BALDWIN, Calvin Benham, 1902-Portrait. Iron Age 152:84 S 16 '43

BALDWIN locomotive works
Baldwin chooses new executives. Ry Age 114:715 Ap 10 '43

BALES, Cecil Eugene, 1897-
President of the American ceramic society, 1943-1944. por Am Cer Soc Bul 22:113-14 bibliog(p114) Ap 15 '43

BALING (textiles)

How to bale for the army; illustrated instructions. Mod Packaging 17:63-9 S '43

See also

Cotton baling

BALING presses

Meldruma tin baling press. Il Mech Handling 30:33-4 F '43

Presses for briquetting and baling steel scrap. W. L. DeLaney. Il Steel 112:102, 104+ My 3 '43

BALKAN states

See also

World war, 1939—

Balkan states

BALL, Frank Clayton, 1859-1943

Sketch. por Cor Ind 40:106 Ap '43

BALL bearings

Ball bearings loaded easily; contact wheel assemblies for radio transmitters. diag Elec W 120:653 Ag 21 '43

Bearing load capacity doubled through use of new helical spring ball cage. S. R. Thomas. Il diag Steel 113:254 O 11 '43

Getting extra service from bearings under wartime conditions; reground and reconditioned ball bearings. Coal Age 48:93+ O '43

Grinding a ball-bearing race on an aircraft engine part. Il Mach 49:124 Ja '43

High-capacity ball recirculating bearings. S. R. Thomas. diag Pet Eng 14:116, 119 Ag '43; Same. Automotive & Aviation Ind 89:35+ S '43; Same. Aero Digest 43:191+ S '43; Same. Mach 50:175-6 O '43

How to get extra bearing service. C. Nelson, Jr. Mech Handling 30:340-2 Ag '43

Unground bearings used in aircraft design. W. H. Korff. Il diag Product Eng 14:488-92 Ag '43

Why ball bearings fail. C. A. Comstock. Il Power Pl Eng 47:81-3 Jl '43

See also

SKF industries, inc.

Cleaning

Eliminates hand cleaning of ball bearings. D. H. Baum. Il Am Mach 87:115 My 13 '43

Manufacture

To one-millionth of an inch; at SKF as much as 40 per cent of the man-hours go into quality control. Il Fortune 28:128-9+ O '43

Testing

Precision tests for ball bearings. C. E. Stoodly. Il diag Am Mach 87:92-3 S 2 '43

BALL clay. See Clay**BALL mills**

Ball milling for metal reclamation. G. F. Metz. flow sheet Il Metals & Alloys 18:63-5 Jl '43

Induction hardening for ball mills. S. A. Covert. Metals & Alloys 17:349 F '43

Laboratory processing of pulp; ball-mill method; TAPPI suggested method T 224 sm-43, bibliog Paper Tr J 117:23-4 S 9 '43

New ball mill support reduces bearing friction; slide shoe bearings developed and patented by Michael Treshow. S. Kock-Petersen. Il Eng & Min J 144:81-2 O '43

Quartz pebbles for ball mill grinding in Saskatchewan; abstract. W. F. Kerr. Eng & Min J 144:71 Ap '43

Repair sustains ball mill 5 months. diag Elec W 120:1540 O 30 '43

Wear of steel balls in a cylindrical ball mill. T. K. Prentice. Iron Age 152:50 S 23 '43

BALLANTINE, P., and sons

Acquires control of Belgianspan brewery. Comm & Fin Chr 153:356 Jl 26 '43

BALLAST

Roadway and ballast; A.R.E.A. committee report. Ry Age 114:572-4 Mr 20 '43

BALLISTICS

Ballistic and technical problems of aerial combat; abstract. T. W. Schmidt. Roy Aeronautical Soc J 47:sup543-6 O '43
Effects of the earth's rotation on the range and drift of a projectile. W. H. Roever. Science 97:115-16 Ja 29 '43
Measuring muzzle velocity. A. F. Macconochie. il diags Steel 113:206-8, 210+ O 11 '43

See also

Bombs
Projectiles

BALLOON fabrics

Fabrics for military purposes; coated HH balloon cloth. il Textile World 92:80 D '42

BALLOONS**Manufacture**

Control of solvent exposures in the rubber industry. T. R. Thomas and B. D. Tebbens. diags Ind Med 12:266-7 Ap '43

BALLOONS, Military

Handling break-away barrage balloons. Edison Elec Inst Bul 11:315-16 O '43
No blowouts for barrage balloons; plastic gas release valves. il diags Mod Plastics 21:69-71 O '43
Sky sentries on guard; important U.S. centers are protected by barrage balloons. R. G. Picinich, jr. il Sci Am 169:6-8 Ji '43

History

History; balloon corps in Civil war. H. L. Brownback. Automotive & Aviation Ind 89:27 S 15 '43

Manufacture

Barrage balloon manufacturing; pictures. Manuf Rec 112:36-7 Ja '43
Firestone barrage balloon plant; heating and ventilating system. H. Maag and L. G. Griebeling. il Heat & Ven 40:72-4 S '43
Revamping an old plant for a war job; Woonsocket plant of United States rubber company turning out barrage balloons and inflatable boats. G. A. Van Brunt. il Factory Management 101:121-4 My '43

BALLS

Ball turning on a lathe. F. J. Atzrott. diags Am Mach 87:106 Je 24 '43

See also

Billiard balls

Golf balls

BALLS, Rubber

Sewer cleaning with rubber beach balls. A. M. Rawn. diag Water Works & Sewerage 90:sup182 Je '43

BALLS, Steel

Wear of steel balls in a cylindrical ball mill. T. K. Prentice. Iron Age 152:50 S 23 '43

BALSA

Balsa. Ecuador's contribution to war effort. V. Kinnard. il For Comm W 9:5+ N 14 '42
Balsa-wood production to be increased in Costa Rica. For Comm W 11:30 Je 12 '43
Import control of balsa wood tightened. For Comm W 9:28 D 26 '42

BALSAM fir

Effect of mature yellow birch upon spruce and fir understorey. W. M. Robertson. Pulp & Pa of Can 44:36 Ja '43

Wood influence on pulp quality. H. J. Ostrowski. Pulp & Pa of Can 44:807-9 O '43

BALSAMS

See also

Storax

BALTIMORE**Rapid transit**

Baltimore Transit advertises in wartime. il Mass Transportation 39:56-60 F '43

There are no bewildered customers in Baltimore; pamphlets, radio, newspapers, and information bureau provide information. R. S. Tompkins. il Bus Transportation 22:36-7 Ag '43

Sewerage

Wood septic tank in Baltimore. Pub Works 73:30 N '42

BALTIMORE and Ohio railroad

Again issues invitation for tenders of 18 issues. Comm & Fin Chr 157:777-8 Mr 1 '43
Compensation for tenders. Comm & Fin Chr 157:6 Ja 4 '43

Earnings at boom levels. A. Jansen. Barron's 22:19-20 N 16 '42

Equipment trust certificate authorized. Comm & Fin Chr 157:2143 Je 7 '43

Equipment trusts offered. Comm & Fin Chr 158:944 S 6 '43

Equipment trusts offered; annual report. Comm & Fin Chr 157:1938 My 24 '43

Railroad securities. Comm & Fin Chr 157:1197 Ap 1 '43

Railroad securities. Comm & Fin Chr 158:1401 O 7 '43

Seeks to purchase its securities, tenders sought. Comm & Fin Chr 156:2303 D 28 '42

Tenders averaged. Comm & Fin Chr 157:1265 Ap 5 '43

Tenders covering \$29,275,650 of bonds and notes accepted under offer. Comm & Fin Chr 157:518 F 8 '43

Tenders for bonds and notes accepted. Comm & Fin Chr 158:82 Ji 5 '43

Terminates Alton bond agreement. Comm & Fin Chr 156:1948 N 30 '42

BALTIMORE stock exchange

Weekly record. Published in weekly Monday numbers of Commercial & financial chronicle

BALTIMORE transit company

Baltimore transit company. O. Ely. Pub Util 31:300-1 Mr 4 '43

BAMBOO

Native cane reinforcement in concrete; Clemson College tests. H. E. Glenn. il Civil Eng 13:386-8 Ag '43

BANANAS

Cuba's banana industry. For Comm W 10:26-7 Mr 6 '43

Cuba's banana industry undergoing hardships. For Comm W 12:25-6 Ji 10 '43

Honduras faces its unsold bananas problem. D. H. Bradley. il For Comm W 11:5-8+ Ap 3 '43

Mexico's banana business experiencing revival. D. M. Crawford and A. J. Mullen. il For Comm W 12:6-9 Ji 17 '43

See also

United fruit company

BANANAS, Dried

Banana flakes in cones. il Mod Packaging 16:54-5 Mr '43

Dehydrated-banana factories, Brazil. For Comm W 10:25 Mr 27 '43

Dried-banana loaves would help feed world. E. J. Rausch. Food Ind 15:116 Je '43

BANCOR. See Money—International aspects

BANGOR, Maine**Streets**

Spring maintenance of streets in Bangor. J. L. MacLeod. il Pub Works 74:11-12+ Mr '43

BANGOR and Arrostook railroad

Refinancing Jan. 1 maturities. Comm & Fin Chr 157:215 Ja 18 '43

BANK accounting

Bank accounting plan for farmers; Farmers state bank of Lostant, Illinois. C. A. Whitney. Burroughs Clearing House 27:26-7+ N '42

Complicated schedules increase analysis costs. il Bankers Mo 60:394-6+ S '43

Customers and bank benefit by machine accounting at windows. F. L. O'Hair. il Bankers Mo 60:200-1+ My '43

Expense accounting simplified by electrical accounting machines. H. C. Wiebenson. Bankers Mo 59:552-3 D '42

How we reduced the cost of handling payroll savings; issuing and safekeeping bonds. J. W. Larsen. il Bankers Mo 60:254-5 Je '43

Internal operation and accounting in banks. C. R. Kennett. Bankers M 146:6-14 Ja '43

Making the most of delayed posting; Whitney national bank of New Orleans. J. Gilly, jr. il Burroughs Clearing House 27:16-18 Mr '43

BANK accounting—Continued

NABAC manual on bank accounting, auditing and operation. 350p \$2.50 National association of bank auditors and comptrollers, 512 Caxton bldg, Cleveland; Review. Burroughs Clearing House 27:8-10 F '43

Proof machine aids audit and saves much operating time. R. A. Potter. Bankers Mo 60:447-8 O '43

Proving methods reviewed. Bankers Mo 60:152-5+ Ap '43

Ration accounting; simplified plan of Wabek state bank of Detroit. F. C. Schlorff. il Burroughs Clearing House 27:13-15+ JI '43

Simple pay deduction process; checkbook permits depositor to segregate deductions withheld. F. W. Hetzel. il Banking 35:26+ Ap '43

Simplified system of handling mortgage payments. Burroughs Clearing House 27:6 F '43

Single posting and filmed records simplify operating technique. J. F. White. Bankers Mo 59:548-9 D '42

Sixteen clearing houses have changed rules on return. Bankers Mo 60:108-9+ Mr '43

This journal sheet proof plan provides analysis figures. C. W. Hewitt. il Bankers Mo 60:110-11+ Mr '43

Voucher department helps speed up bookkeeping; Chase national bank. J. J. Lendrum. il Bankers Mo 59:490-2 N '42

See also

Bank auditing Banks and banking—
Banks and banking— Records
Forms, blanks, etc.

BANK advertising

Ads of New York and Massachusetts bank groups fight against inflation. il Printers' Ink 204:64+ Ag 13 '43

Business development for community banks. E. O. Meeh. bibliog Bankers M 146:302-11 Ap '43

Copy that clicked; Bowery savings bank insurance advertisement in newspapers. R. Manville. il Ptr Ink 204:30+ S 17 '43

Creating a pattern; ways banks promoted the U.S. Treasury's victory fund drive. il Banking 35:26-8 Ja '43

Financial advertisers find war copy works two ways. Ptr Ink 205:39+ O 29 '43

Great American privileges; Troy savings bank advertising to commemorate 120th anniversary. il Ptr Ink 204:13 JI 2 '43

How to sell bank service by direct mail. R. E. Doan. Bankers M 145:292-318, 384-415, 478-527; 146:16-49 O '42 Ja '43

Institutional advertising can produce results. Trusts & Estates 76:442 My '43

New purpose in saving. Bankers Mo 59:492+ N '42

New York savings banks spend \$300,000 to sell thrift. il Sales Management 52:80+ S 1 '43

Public leadership in bank advertising; Citizens & southern national bank of Georgia. il Burroughs Clearing House 27:8-9 Mr '43

Reaching banking's new mass market. L. E. Townsend. il Burroughs Clearing House 27:16-18+ Ap '43

Some noteworthy trends in bank advertising. Burroughs Clearing House 28:8 O '43

Tools for selling bank services. G. M. Underhill. il Burroughs Clearing House 27:22-4+ N '42

Trends in bank advertising. J. J. McCann. il Banking 35:62+ Je '43

Trio of unusual bank advertisements. Burroughs Clearing House 27:6 N '42

See also

Banks and banking Trust companies—
—Show windows Advertising

BANK auditing

Brighter side; employee turnover aids internal audit. H. A. Dunham. Bankers Mo 60:478 O '43

How to maintain audit control of collections. Bankers Mo 60:392-3 S '43

BANK books, Depositors'

More acceptance of custody of bank book insufficient to establish gift. Banking Law J 60:684-8 Ag '43

BANK buildings

Built to speed work, cut costs; new building of Bank of America. E. Whitmore. il Am Business 13:20-2+ S '43

New buildings for 194X; bank. il plans Arch Forum 72:86-7 My '43

Unusual small bank opens attractive new quarters; New Richmond national bank, New Richmond, Ohio. il Burroughs Clearing House 27:9-10 N '42

BANK buildings, Portable

Next step may be a helicopter bank! Manufacturers trust company portable bank office at Brooklyn navy yard. il Burroughs Clearing House 28:11 O '43

BANK charters

Refusal of bank charter. C. R. Rosenberg, jr. Burroughs Clearing House 27:29 Mr '43

BANK checks. See Checks**BANK clearings**

Bank clearings. Published in monthly numbers of Dun's statistical review; summary in Dun's review

Bank clearings for individual cities, 1941-1942. Dun's Stat R 7:2 F '43

Bank clearings in 1942. Comm & Fin Chr 157:399-400+ Ja 28 '43

Bank clearings in 1942. Economist 144:78-9 Ja 16 '43

Course of bank clearings. Published in weekly Monday numbers of Commercial & financial chronicle

BANK credit. See Credit, Bank**BANK debits**

Bank debits. Published in monthly numbers of Federal reserve bulletin

Bank debits, 1938-1941. Survey of Cur Business 1942 Sup p61 [supplemented in monthly numbers]

Revision of statistics of bank debits; with table giving revised figures, monthly, May 1942-June 1943. Fed Res Bul 29:717, 756 Ag '43

BANK defalcations. See Embezzlement**BANK deposits**

All banks in the United States; deposits, exclusive of interbank deposits. Published in monthly numbers of Federal reserve bulletin

Bank deposit and the garnishee. M. L. Hayward. Barron's 22:4 N 30 '42

Bank deposits after the war. J. A. White. Comm & Fin Chr 158:589+ Ag 12 '43

Banks should survey depositors' intentions now to assure post-war liquidity. J. A. Ritchie. Comm & Fin Chr 158:1785 N 4 '43

Bond account, future of bank's deposits and its bearing on current investment policy; Citizens national bank of Chicago Heights. B. J. Schwoeffermann. il Burroughs Clearing House 27:13-15+ Je '43

Changing distribution of bank funds. Fed Res Bul 29:207-14 Mr '43

Condition of all member banks, reserves and liabilities. Fed Res Bul 29:61 Ja '43 [cont monthly]

Depositor entitled to set-offs of deposits on indebtedness to insolvent bank. Banking Law J 60:543-54 JI '43

Deposits of major banks reflect war spending; year-end deposits of 100 largest commercial banks. Burroughs Clearing House 27:6-7 Mr '43

Deposits of member banks in larger and smaller centers, Oct.-Nov. 1942. Fed Res Bul 29:56 Ja '43 [cont monthly]

Distribution of bank deposits; personal and business accounts. Economist 144:532-3 Ap 24 '43

Effect of war on currency and deposits. C. R. Whittlesey. Comm & Fin Chr 158:1488+ O 14 '43

Expansion of currency and bank credit in individual countries since 1938. Nat City Bank p71 Je '43

Federal Reserve reports on commercial bank deposits. H. D. Ralph. maps Burroughs Clearing House 27:20 S '43

General or special deposit? C. R. Rosenberg, jr. Burroughs Clearing House 27:46-7 Ag '43

Geographical distribution of bank deposits. maps Fed Res Bul 29:599-603 JI '43

Liability of bank for corporate officer's use of corporate funds deposited in personal account. J. A. Nobile. Banking Law J 60:623-27 Ag '43

Managing managed-money. J. H. Wood. Comm & Fin Chr 157:2261, 2272-3 Je 17 '43

BANK deposits—Continued

- Ownership of bank deposits. Fed Res Bul 29:713-16 Ag '43; Same abr. Comm & Fin Chr 158:229 Jl 15 '43
- Ownership of bank deposits. Fed Res Bul 29:917-22 O '43
- Relation between currency and bank deposits. Fed Res Bul 29:415-16 Mr '43
- Special purpose deposit. C. R. Rosenberg, jr. Burroughs Clearing House 27:42 D '42
- Statistics of deposit ownership. Fed Res Bul 29:330-6 O '43
- Survey of distribution of bank deposits in New York Federal reserve district. Comm & Fin Chr 158:419 Jl 29 '43

See also

- Banks and banking—
Guaranty of deposits
- Savings deposits

Interest

- Absorption of exchange charges as a payment of interest on deposits. Fed Res Bul 29:817-18 S '43
- Interest rates decline. D. E. Hoffman. Banking 35:54 Ap '43

Joint accounts

- Donor's intent controlling in establishing joint tenancy of bank deposit. Banking Law J 60:674-84 Ag '43
- Evidence sufficient to establish completed gift of joint interest in bank account. Banking Law J 60:302-8 O '43
- Evidence to overcome presumption of gift of joint account must be convincing. Banking Law J 60:554-6 Jl '43
- Gift of bank account held invalid where mistake of fact shown by donor. Banking Law J 60:884-902 O '43
- Mere form of joint bank account not conclusive to show completed gift. Banking Law J 60:875-84 O '43
- Signatures of both donor and donee on joint account card effective and controlling to entitle survivor to account. Banking Law J 60:779-84 S '43

BANK deposits, Government

- Bank subscriptions and bank deposits; proposed legislation affecting war loan deposits. Nat City Bank p28-9 Mr '43
- Banks and tax withholding. Banking 36:10+ Ag '43
- Banks slow to seek depository status. Burroughs Clearing House 27:21 Ag '43
- Banks urged to use war loan deposit accounts to facilitate war financing. Comm & Fin Chr 156:1992 D 3 '42
- Change in method of making calls on war loan depositories. Comm & Fin Chr 157:1991 My 27 '43
- Changed status of war loan deposit accounts; effect on excess reserves. Fed Res Bul 29:372-5 My '43
- Ecclies and Crowley favor bill suspending FDIC assessments on war bond sales. Comm & Fin Chr 157:843 Mr 4 '43
- FDIC banks to act as depositories of taxes withheld from wages. Comm & Fin Chr 158:235 Jl 15 '43
- Increased number of special depositories. Fed Res Bul 29:42 Ja '43
- List of special depositories increases; government funds limited to \$8,429,017,164. Comm & Fin Chr 156:2260 D 24 '42
- President signs bill suspending FDIC levy and reserve requirements on war bond bank cash. Comm & Fin Chr 157:1600 Ap 29 '43
- Public funds in an unauthorized depository. C. R. Rosenberg, jr. Burroughs Clearing House 27:47-8 Ag '43
- War loan accounts exempt from FDIC assessments. H. D. Ralph. Burroughs Clearing House 27:21 My '43

BANK deposits, Unclaimed

- Methods and ideas; soldiers' dormant accounts. J. J. McCann. Banking 36:62 O '43

BANK directors

- Bank directors; liability. Banking 35:57 My; 57 Je '43
- Duties and liabilities of a bank director. Banking 35:60 F '43
- Interlocking personnel. Banking 36:49 Jl '43

- Legislation passed by the 1941-1942 Congress of concern to bank directors. Banking 35:57 Mr '43
- Qualifications of directors recommended by the American bankers association. Banking 36:49 Jl; 57 Ag '43

- Reimbursement of directors and officers for expenses of actions against them based on their official conduct. Banking 35:44+ Ja '43

- Statutory requirements for residence or citizenship of state bank directors. Banking 35:57 Ag '43

- What should a state or national bank director know about state legislation? Banking 35:57 Ap '43

See also

- Federal reserve banks—Directors

- BANK economists.** *See* Banks and banking—Economics departments

BANK employees

- All-woman farm bank reports. C. E. McLean. il Banking 35:43 Ap '43
- Almost-perfect secretaries. Bankers Mo 60:12+ Ja '43
- Bank employees carrying heavy burden. J. S. Brown. Banking Law J 60:823-5 O '43
- Bank manpower in Britain; Kennet report. Burroughs Clearing House 27:1-2 Ap '43
- Bank personnel work under wartime conditions; how tests are used in selecting employees. E. N. Hay. il Bankers Mo 60:13-15+ Ja '43
- Bank personnel work under wartime conditions; how to find new employees. E. N. Hay. il Bankers Mo 59:542-3+ D '42
- Bank personnel work under wartime conditions; personnel policies: selection, promotion, dismissal. E. N. Hay. Bankers Mo 60:61-2 F '43
- Bank women discuss their job. M. E. Leach. Banking 35:41-2 F '43
- Bank women's opportunity. M. E. Leach. Banking 35:58, 60 Mr '43
- Banks' ten thousand; branch telescoping. Economist 143:547-8 O 31 '42
- Brighter side; employee turnover aids internal audit. H. A. Dunham. Bankers Mo 60:478 O '43
- Business development for community banks; staff relations. E. O. Meeh. bibliog Bankers M 146:293-9 Ap '43
- Conserving bank and trust manpower. Trusts & Estates 76:125 F '43
- Deferment for bank men. W. Powers. Banking 36:27+ Jl '43
- Each employee signs a declaration of secrecy on the first of each month. Bankers Mo 60:366 Ag '43
- Employee handbook of the Pennsylvania company. Philadelphia. Personnel J 22:97-108, 147-52 S O '43
- Employee's part in bank management. J. G. Renshaw. Trusts & Estates 75:494-7 N '42
- 59 types of bank work now performed by women. C. S. Pepper. Bankers Mo 60:308-9 Jl '43
- Finding people for bank work. W. Powers. Banking 35:96 Ja '43
- 48 hour week. W. Powers. Banking 35:27 Ap '43
- 48-hour week; step-by-step program of National bank of Detroit. E. J. Fallor. il Burroughs Clearing House 27:13-15+ Ap '43
- Holding group meetings. B. E. Espersen. Banking 36:48 Jl '43
- How to classify bank jobs. L. K. Curry. Banking 36:31-2 O '43
- How to simplify computing overtime wages. W. C. Hubbell. il Bankers Mo 60:260-1+ Je '43
- How to use your head; practical value of American institute of banking. E. Lasseter. Banking 36:38+ Je '43
- Human factor in bank operations; bank employment dignified by employees' manual. Trusts & Estates 77:65-6 Jl '43
- Importance of bank staff conferences; abstract. K. G. Cone. Bankers M 145:454-5 N '42
- Interviews on the manpower problem; what Philadelphia banks are doing. C. R. Rosenberg, jr. il Burroughs Clearing House 28:22-4+ N '43

BANK employees—Continued

It's surprising what a bank can do; panel discussion on more service in spite of manpower handicap. W. C. Adamson and others. Banking 36:30-3 S '43

Listen ladies! M. G. Rehfuess. Am Inst Banking Bul 24:13-14 O '42

Manning table for banks. W. Powers. Il Banking 35:23-9+ Mr '43

Manning the banks; Kennet and A.B.A. reports. W. Powers. Banking 35:67 D '42

Manpower problems of banks discussed at AIB meeting. W. Powers. Comm & Fin Chr 157:2391 Je 24 '43

Miss Banker. D. Ragan. Il Banking 35:26-7 F '43

Nation's manpower problem. W. H. Spencer. Am Inst Banking Bul 25:10-12 Ji '43

New York Trust has plan with Equitable; retirement annuity plan. East Underw 43:10 D 25 '42

Overtime work saves money. C. R. Kennett. Bankers Mo 60:78-9 F '43

Planned employee relations program; Peoples-Pittsburgh trust company. G. A. Price. Il Burroughs Clearing House 27:16-18+ My '43

Public relations ideas from Ohio bankers' experiences; promotion of sound employee relations. D. Brown. Bankers Mo 60:63-4 F '43

Recruits for banks. I. I. Sperling. Banking 36:82 Ag '43

Reducing employee turnover in banks. J. S. Brown. Il Burroughs Clearing House 27:16-18+ Je '43

Reserves for that day; Armistice day to World War II. R. A. Foulke. Banking 35:23-4+ My '43

Retirement system as manpower insurance. J. E. Hughes. Banking Law J 60:619-22 Ag '43

Revival of house organs. Trusts & Estates 76:446-7 My '43

Salary stabilization pointers. Banking 36:16-18+ Ag '43

Some manpower possibilities; report of the Kennet committee. Banking 35:66 Ja '43

Stabilization of bank salaries. J. A. Rellly. Burroughs Clearing House 27:22-4+ F '43

Urges banks to plan for employees' security through pension and retirement funds; abstracts. H. J. Marshall. Comm & Fin Chr 158:120 Ji 8 '43; Burroughs Clearing House 27:5-6 Ag '43

Wage and salary freeze. H. D. Ralph. Burroughs Clearing House 27:20-1 D '42

War activities of bankers; how English bank men give part-time services. A. H. Ensor. Trusts & Estates 77:141-2 Ag '43

What women can do for banking. G. S. Stoermer. Il Am Inst Banking Bul 25:18-19+ Ja '43

Women about banks. M. B. Leach. Il Banking 35:31-2 Ja '43

Women belong. E. N. Hay. Banking 35:32+ Ap '43

See also

Banks and banking—
Tellers

Training

Basic training for banks. Trusts & Estates 76:469 N '42

Clinic for job instructors. Banking 36:37 S '43

How new employees are trained; routines used by two banks. Il Bankers Mo 59:493-5+ N '42

How to safeguard personnel. W. Powers. Banking 35:28 Je '43

How to train new employees. C. R. Kennett. Bankers Mo 60:85 F '43

Information please—about banking! employees have developed monthly quiz sessions. J. N. Garber. Burroughs Clearing House 27:26-7, 38-9 Ja '43

Proving sorts learned easily from large wall charts. Il Bankers Mo 60:270 Je '43

Women in the plant; brief observations on training for bank work. H. Jackson and others. Il Banking 36:34-6 S '43

BANK equipment and supplies

Built to speed work, cut costs; new building of Bank of America. E. Whitmore. Il Am Business 13:20-2+ S '43

Make it last. R. D. Young. Il Am Inst Banking Bul 24:16-17 O '42

Proof machine aids audit and saves much operating time. R. A. Potter. Bankers Mo 60:447-8 O '43

Purchasing supplies and equipment. H. F. Hofer. Bankers M 146:184 F '43

Releasing typewriters; Guaranty trust company of New York. Bankers M 146:183 F '43

War on waste of bank supplies. Il Burroughs Clearing House 27:16-18+ Ja '43

See also

Banks and banking—
Forms, blanks, etc.

Directories

Semi-annual buyers guide and supply source. Bankers Mo 60:222-40, 509-28 My, N '43

BANK examination

Directors' examinations. Trusts & Estates 76:532 Je '43

Manual issued to aid in bank examinations. Comm & Fin Chr 157:2072 Je 3 '43

BANK failures

Bank suspensions; number of banks suspended and deposits of suspended banks (in thousands of dollars) 1934 to 1941, Jan.-Nov. 1942. Fed Res Bul 29:58 Ja '43 [cont monthly]

Depositor entitled to set-offs of deposits on indebtedness to insolvent bank. Banking Law J 60:543-54 Ji '43

BANK for international settlements

Annual report, 12th, year ending March 31, 1942. Fed Res Bul 29:15-41 Ja '43

BANK holidays

Banking holidays by states, January-June, 1943; tabulation. Bankers Mo 59:550-1 D '42

Banking holidays by states, July-December, 1943; tabulation. Bankers Mo 60:268 Je '43

Fewer holidays, fewer rush hours. Bankers Mo 59:551 D '42

BANK liability

Bank not liable for defalcations of agent acting under power of attorney of depositor. J. A. Nobile. Banking Law J 60:731-40 S '43

Liability of bank for corporate officer's use of corporate funds deposited in personal account. J. A. Nobile. Banking Law J 60:623-7 Ag '43

Liability of bank for misappropriation of trust funds by depositor. Banking Law J 60:848-57 O '43

Liability of bank for payment after depositor's death. Banking Law J 60:753-4 S '43

Liability of bank to depositor for misappropriations of cashier. Banking Law J 60:515-22 Ji '43

Lost or stolen instruments; are the rights of a discounting, purchasing, or pledgee bank superior to those of the owner? Banking 36:57 N '43

BANK loans. See Loans, Bank**BANK money orders**

ABA group offers plan for bank money orders. Comm & Fin Chr 156:2264 D 24 '42

We sell 6,000 money orders each month at 16 cents each. R. R. Eldred. Bankers Mo 60:462 O '43

BANK notes

See also

Federal reserve bank
notes

BANK of America national trust and savings association

Built to speed work, cut costs. E. Whitmore. Il Am Business 13:20-2+ S '43

Public campaign to sell war bonds. E. Burke. Il Burroughs Clearing House 27:26-8+ S '43

BANK of Canada. See Banks and banking—Canada**BANK of London and South America**

Annual ordinary meeting. Economist 143:745 D 12 '42

BANK of Manhattan company

Operating net income for 1942; report to stockholders. Comm & Fin Chr 156:2080 D 10 '42

BANK of Montreal
Annual general meeting, 125th, Montreal.
Economist 144:122 Ja 23 '43

BANK officials
Chip off the old block; surnames of bank officers. T. D. McGregor. Banking 35:22 D '42

Loans to executive officers; inactive officer serving as director and member of discount committee. Fed Res Bul 29:215 Mr '43

BANK reserves

Bank reserves during the early months of 1943. Fed Res Bul 29:312-13 S '43

Changed status of war loan deposit accounts; effect on excess reserves. Fed Res Bul 29:372-5 My '43

Changes in bank reserves, latter half of 1942. Fed Res Bul 29:591-3 Jl '43

Changing distribution of bank funds. Fed Res Bul 29:207-14 Mr '43

Condition of all member banks, reserves and liabilities. Fed Res Bul 29:61 Ja '43 [cont monthly]

Decrease in reserve requirements. Fed Res Bul 28:1074-5 N '42

Deposits and reserves of member banks, May 1943, by classes of banks and districts. Fed Res Bul 29:636 Jl '43 [cont monthly]

Gold reserves of central banks and governments, monthly, Dec. 1941-Nov. 1942. Fed Res Bul 29:96 Ja '43 [cont monthly]

Member bank reserve balances by classes of banks, Nov. 1941-Nov. 1942. Fed Res Bul 29:56 Ja '43 [cont monthly]

100% reserve plan of commercial banking would inject new disturbances into system. J. T. Madden. Comm & Fin Chr 157:1973 My 27 '43

Poser in reserves. Business Week p103+ F 27 '43

President signs bill suspending FDIC levy and reserve requirements on war bond bank cash. Comm & Fin Chr 157:1600 Ap 29 '43

Reserves vanish; New York banks feel pinch resulting from heavy Treasury financing. Business Week p117-19+ My 22 '43

BANK robberies

FBI as an aid to the banker; how bank employees may give intelligent assistance in case of robbery. J. E. Hoover. Il Bankers Mo 60:439-41+ O '43

Let's prevent a new crime wave before it starts; importance of an efficient police department. V. W. Peterson. Il Bankers Mo 60:343-5+ Ag '43

BANKERS

Bankers must lend wise counsel; to create post-war economy. R. Strickland. Comm & Fin Chr 158:1190+ S 23 '43

What manner of a man should the banker be? from a paper written in 1894. B. E. Comegys. Banking Law J 60:830-5, 837-8 O '43

See also

Bank officials
Banking ethics

BANKERS' blanket bond

ABA gets \$2 million annual insurance premium reduction for banks. Comm & Fin Chr 158:1923 N 11 '43

Excess bankers blanket bond rider. Spectator (Property ed) 8:21 Jl 8 '43

Experience credits rise on various bankers and brokers bonds. East Underw 44:36-7 N 5 '43

Fidelity and surety claims; new banker's blanket bonds. S. F. Maher. Weekly Underw 149:908-11 O 23 '43

Several changes made in bankers bond forms. Nat Underw 47:21 F 11 '43

Surety association broadens coverage; B.E.B. no. 5 revised. Spectator (Property ed) 8:23 F 18 '43

War bond forgery; banks may be protected by clause E under blanket coverage. Weekly Underw 148:493 F 27 '43

BANKERS trust company of New York
Annual report. Comm & Fin Chr 157:374 Ja 28 '43

What is this bank stock worth? K. L. Trefftz. Barron's 23:5 My 17 '43

BANKHEAD, John Hollis, 1872-
Portrait. Business Week p15 Mr 6 '43

BANKHEAD government advertising bill. See Government advertising

BANKING ethics

Each employee signs a declaration of secrecy on the first of each month. Bankers Mo 60:366 Ag '43

BANKING law

Bank directors; liability. Banking 35:58 My; 57 Je '43

Bank doing business in another state. C. R. Rosenberg, Jr. Burroughs Clearing House 28:29+ O '43

Court holds bank party to unlawful procedure; bank accepted public funds in personal account. East Underw 44:29 O 29 '43

Duties and liabilities of a bank director. Banking 35:60 F '43

Interlocking personnel. Banking 36:49 Jl '43

Judgment against bank in credit inquiry case is reversed. Credit & Fin Management 45:22-4 Mr '43

Law department. Published in Federal reserve bulletin

New state law allows delayed return of items. Bankers Mo 60:256-7 Je '43

Retention of records still a problem. Il Bankers Mo 59:487-9 N '42

Statutory provision relative to bank entries made with intent to deceive bank examiners. Banking Law J 60:656-9 Ag '43

Urges long-range legislative planning. C. K. Withers. Banking 35:49 F '43

Wartime state legislation. C. K. Withers. Banking 35:88 D '42

What should a state or national bank director know about state legislation? Banking 35:57 Ap '43

See also

Bank liability	Checks—Law
Banks and banking—	Escheat
Guaranty of deposits	Federal reserve banks
Banks and banking—	Trusts and trustees
Taxation	

United States

ABA issues booklet on banking legislation passed during the 77th Congress. Comm & Fin Chr 157:764 F 25 '43

Legislation passed by the 1941-1942 Congress of concern to bank directors. Banking 35:57 Mr '43

See also

Federal reserve banks

BANKRUPTCY

Accounts receivable; features of the Corn Exchange bank v. Klauder decision by the United States Supreme court. Banking 35:57-8 Ap '43

Bankrupt broker again. M. L. Hayward. Barron's 23:9 Ap 19 '43

High court limits a method of lending; holds state laws govern use of trade accounts as security. W. H. Hillyer. Barron's 23:9 Mr 29 '43

Non-notification financing of receivables. C. R. Rosenberg, Jr. Burroughs Clearing House 27:30+ Je '43

Noticeable decline in number of bankruptcy cases filed. E. L. Covey. Credit & Fin Management 45:12-14 My '43

Review of Supreme court ruling on assignment of accounts receivable. W. R. Montgomery. Credit & Fin Management 45:24-6 My '43

Section 270 of the Federal bankruptcy act. C. S. J. Banks. J Account 76:331-41 O '43

U.S. Supreme court rules against assigned accounts as preference claims. Credit & Fin Management 45:40 Ap '43

See also

Business failures	Insurance companies
Corporations—Reorganization	—Receiverships
	Railroads—Receiver-ships

BANKS, Federal reserve. See Federal reserve banks

BANKS, National. See Banks and banking, National

BANKS, Savings. See Savings banks

BANKS and banking

Alert bankers are postwar planning. R. A. Ilg. Il Burroughs Clearing House 27:16-18+ Ag '43

BANKS and banking—Continued

Are banks necessary? let banks take advantage of opportunities that exist today. M. C. Corns. Banking Law J 60:501-5 JI '43

Bank credit in war-times; economic trends. E. B. Agger. Credit & Fin Management 45: 14-17, 21 Ja '43

Bank management; Anglo California national bank of San Francisco. W. H. Thomson. II Burroughs Clearing House 27:13-15+ My '43

Bank operations in wartime. J. J. McCann. II Banking 35:55+ S '43

Bankers monthly quiz no 1. Bankers Mo 60: 249, 272-3 Je '43 [cont monthly]

Banks can make more postwar jobs. J. F. Ebersole. Harvard Business R 22 no 1:1-9 [O] '43

Chicago bankers consider 48 ways to save time and money. C. S. Battles. Bankers Mo 60:346-8+ Ag '43

Eleven suggestions for improving operating technique. E. F. Lyle. Bankers Mo 60:60, 71-2 F '43

Examining today's banking problems. O. W. Adams. II Burroughs Clearing House 27: 16-18+ S '43

47 hints for wartime bank economy. E. W. Fair. Bankers Mo 59:546-7 D '42

Highlights of A.B.A. convention talks. Burroughs Clearing House 28:16-18+ O '43

How banks handle payroll checks; charges for service and ways of handling rush peaks. H. V. Odie. II Burroughs Clearing House 27: 16-18+ F '43

How to discover work which may be eliminated. Bankers Mo 60:84-5 F '43

How war spurs bank activity. J. L. Cooley. II Banking 35:46-7 My '43

Internal operation and accounting in banks. C. R. Kennett. Bankers M 146:6-14 Ja '43

Interviews on the manpower problem; what Philadelphia banks are doing. C. R. Rosenberg, Jr. II Burroughs Clearing House 28: 22-4+ N '43

It's surprising what a bank can do; panel discussion on more service in spite of manpower handicap. W. C. Adamson and others. Banking 36:30-3 S '43

Let's refute misconceptions about banks. Bankers Mo 60:56-7+ F '43

Let's simplify protest procedure. G. R. Durang. Bankers Mo 60:245-6 Je '43

Management committee aids efficiency. J. Y. Beatty. II Bankers Mo 60:53-5+ F '43

New state law allows delayed return of items; clearing houses report change in rules. Bankers Mo 60:256-7 Je '43

Practical innovations aid bank operations; Bank of San Rafael, San Rafael, California. II Burroughs Clearing House 27:5-9 Je '43

631 tested ideas published in Bankers monthly in 1942. Bankers Mo 60:21-2, 24-9 Ja '43

This changing bank world; transformation in function and structure of business credit. W. H. Hillyer. Banking 35:57-8 F '43

265 tested ideas published since January 1, 1943. Bankers Mo 60:311+ JI '43

See also

Agricultural credit	Interest
Bank accounting	Intermediate credit
Bank advertising	banks
Bank buildings	Investment banking
Bank deposits	Investment trusts
Banking ethics	Loans, Bank
Banking law	Safe deposits
Checks	Savings banks
Credit	Savings deposits
Federal reserve banks	Securities
Foreign exchange	Trust companies
Home loan banks	

Advertising*See* Bank advertising**Bibliography**

How to maintain income and reduce operating costs. Bankers Mo 60:5-6 Ja '43

Branch banking

Banks and branches; number in operation on Dec. 31, 1941 and 1942. Fed Res Bul 29: 687-8 JI '43

Changes in number of banking offices in the United States, Jan. 1-June 30, 1943. Fed Res Bul 29:899 S '43

Changes in number of banks and branches in the United States, 1942. Fed Res Bul 29: 190 F '43

Expansion of Federal Reserve branch activities. Fed Res Bul 29:397-8 My '43

Services for service men; army camp banks. II Banking 35:50-1 Ap '43

Trust business from bank branches; program for developing such accounts. D. W. Mackay. Trusts & Estates 76:247-50 Mr '43

See also

Banks and banking—
Traveling banks

Central banks

Annual report of the Central bank of the Argentine Republic. Fed Res Bul 29:613-22 JI '43

Central bank established in Ireland. For Comm W 9:17 N 21 '42

Central bank of Ireland. Fed Res Bul 29:122-7 F '43

Central banks; assets and liabilities. Published in monthly numbers of Federal reserve bulletin

See also

Federal reserve
banks

Checking accounts

Customers can compute their own service charges. II Bankers Mo 60:162+ Ap '43

Increasing special checking account profits. Burroughs Clearing House 27:5-6 JI '43

No minimum-balance accounts increase in popularity. P. K. Barker. Bankers Mo 60: 101-3 Mr '43

700 new checking accounts opened in 106 days. L. Drake. Bankers Mo 60:302-3 JI '43

Simple pay deduction process; checkbook permits depositor to segregate deductions withheld. F. W. Hetzel. II Banking 35:26+ Ap '43

This employer pays service fees for employee checking accounts. G. W. McSweeney. Bankers Mo 60:398-9+ S '43

See also

Banks and banking—
Service charge

Overdrafts

Collections

Bank not liable for collection of bearer bonds presented by joint owner of safe deposit box containing the bonds. J. A. Noble. Banking Law J 60:635-7 Ag '43

How to maintain audit control of collections. Bankers Mo 60:392-3 S '43

90 clearing houses now return checks the next day. map Bankers Mo 60:197-9+ My '43

Paper for collection and remittance. C. R. Rosenberg, Jr. Burroughs Clearing House 27:29+ D '42

Protesting checks is a nuisance with no compensating income. Bankers Mo 60:247-8+ Je '43

Too many dishonored items; what can be done about it. Bankers Mo 60:156-7+ Ap '43

See also

Banks and banking
—Transit operations

Checks—Collection

Correspondent banks

Articles for your newspaper; how the local bank can get services for customers through city correspondents. Bankers Mo 60:68-70 F '43

Help customers to understand correspondent services. Bankers Mo 59:500-1 N '42

More articles on correspondent banking services. Bankers Mo 60:20+ Ja '43

Country banks

All-woman farm bank reports. C. E. McLean. II Banking 35:43 Ap '43

Bank accounting plan for farmers; Farmers state bank of Lostant, Illinois. C. A. Whitney. Burroughs Clearing House 27:26-7+ N '42

Boosting the bank and the community; First national bank of Pleasanton, Calif. H. J. Harding. II Burroughs Clearing House 28: 16-18+ N '43

Clerking auction sales at a profit. A. H. Abts. II Burroughs Clearing House 27:26-7 My '43

BANKS and banking—Country banks—Cont.

- Cogitations of a country banker. W. W. Evans. Bankers M 146:453-4 N '42
Country banker. Banking 36:49-56 O '43 [cont. monthly]
Farm program for country banks. Banking 36:96-7 S '43
Farm service; Bank of San Rafael, and First national bank, San Rafael, California. W. P. Murray. II Burroughs Clearing House 27:13-15+ Mr '43
Food, war weapon; country banker has two-fold job. E. B. Wright. Am Inst Banking Bul 24:5-6+ O '42
1943 farm program; First national bank, Clarksville, Tennessee. C. W. Bailey. II Burroughs Clearing House 27:13-15+ F '43
Plain talk on the farm problem; bankers should discourage farm auction sales. H. W. Rawson. Banking 35:40 Ap '43
Small bank's service stripes; Bank of Powhatan, Virginia. W. R. Parker. II Banking 35:26+ My '43
There are no quiet sectors; Rockport national bank, Rockport, Mass. J. L. Cooley. I Banking 35:42-3 Je '43
27 states attain agricultural honor roll. Bankers Mo 60:257 Je '43
With mud on his boots; Bob McCormick and DeKalb trust and savings bank. J. Farmer. Banking 35:44 My '43

Credit departments

- Simplified bank credit records. II Burroughs Clearing House 27:16-18 JI '43
Where to look for credit flaws. S. G. Jones. Banking 35:58+ Je; 36:52-4 JI '43

See also

- Banks and banking—**
Credit information service

Credit information service

- Bank's relation to the mercantile credit department. W. E. Atkinson. Credit & Fin Management 45:8-10+ Ap '43
Fraud alleged in credit report. Burroughs Clearing House 27:43-4 Je '43
Judgment against bank in credit inquiry case is reversed. Credit & Fin Management 45:22-4 Mr '43

Custodianship

- Safekeeping plan for war bonds. B. E. Rhodes. II Burroughs Clearing House 27:26-7+ JI '43
Safekeeping Victory bonds in Canada. J. Montagnes. Burroughs Clearing House 27:28 JI '43
Safekeeping war bonds. II Banking 35:75-6 N; 76-7 D '42; 86-7 F '43
Simple war bond safe-keeping record system. Burroughs Clearing House 27:4 Ja '43
Six ways to protect customers' valuables; what to do when safe deposit boxes are all rented. II Bankers Mo 60:66-7 F '43
Two forms supply safekeeping records. A. H. Abts. II Bankers Mo 60:318 JI '43
We safekeep wills and thus develop trust business. E. M. Galliard. Bankers Mo 60:172-3 Ap '43

Customer relations

- Dozen rules. Banking 35:7-8 My '43
How to sell bank service by direct mail; personalized form letters. R. E. Doan. Bankers M 145:478-527 D '42
No ceiling on goodwill; humanizing correspondence. Banking 35:52-3 My '43
Ways to maintain customer service. P. L. Speidel. II Burroughs Clearing House 27:16-18+ D '42

Dual system

- Dual banking system upheld as responsive to needs of country. E. V. Bell. Comm & Fin Chr 158:1329 S 30 '43

Economics departments

- Federal reserve banks expand economic staffs. Burroughs Clearing House 28:41-2 O '43

Exhibits

- Aviation exhibit; State Street trust company of Boston. Bankers M 146:267-8 Mr '43
Louisiana bank raises chickens in the lobby. Bankers Mo 60:34-5 Ja '43

Farm development service

See Banks and banking—Country banks

Finance

- Bank earnings higher in first quarter. Barron's 23:4 Ap 12 '43
Bank earnings likely to rise; unprecedented expansion in credit expected to continue. W. W. Phillips. Barron's 23:1 Mr 1 '43
Bank earnings up sharply; New York City banks, first nine months 1942 and 1943. M. J. Saada. Barron's 23:1 O 11 '43
Bank position is iron-clad; future of United States Treasury tied up with their welfare. W. W. Phillips. Barron's 23:1+ JI 5 '43
Bank profits up 17% for 12 months; second quarter earnings and price gains of New York City banks. Barron's 23:1 JI 12 '43
Bank stocks; effect of financing, 1914-1919 and 1939-1942 on some of the leading New York City banks. Comm & Fin Chr 157:566+ F 11 '43
Bank stocks; experience of some principal commercial banks of cities other than New York. Comm & Fin Chr 157:910 Mr 11 '43
Bank stocks; first quarter statements of New York City banks. E. A. Van Deusen. Comm & Fin Chr 157:1288 Ap 8 '43
Bank stocks; growth in capital funds of New York City banks since the start of the war. E. A. Van Deusen. Comm & Fin Chr 158:1414 O 7 '43
Bank stocks; second quarter indicated earnings. E. A. Van Deusen. Comm & Fin Chr 158:220 JI 15 '43
Bank stocks; situation today and ten years ago. H. A. Leggett. Comm & Fin Chr 157:182 Ja 14 '43
Bank stocks; six months' indicated earnings in 1942 of leading banks in Reserve cities other than New York. E. A. Van Deusen. Comm & Fin Chr 158:417-18 JI 29 '43
Bank stocks; sources and disposition of earnings of leading New York City banks, 1938-1942. E. A. Van Deusen. Comm & Fin Chr 158:1799-1800 N 4 '43
Bank stocks; third quarter statements of New York City banks. E. A. Van Deusen. Comm & Fin Chr 158:1607 O 21 '43
Bank subscriptions and bank deposits; proposed legislation affecting war loan deposits. Nat City Bank p28-9 Mr '43
Banks and consumer credit. T. E. Savage. Bankers M 146:102-4, 106-21, 193-222 F-Mr '43
Banks are making good profits; samples of earnings. Bankers Mo 60:114+ Mr '43
Banks' fourth quarter and year's profits better than expected; comparisons for 1940 and 1941. Barron's 23:15 Ja 11 '43
Banks report at annual meetings. Barron's 23:5 Ja 18 '43
Capital problem; swollen deposits depress capital ratio. Business Week p113-14 Ap 24 '43
Changing distribution of bank funds. Fed Res Bul 29:207-14 Mr '43
Does your bank need more capital? J. W. Wooster, Jr. charts Banking 36:30-1, 63 JI; 28-9+ Ag '43
Earnings and expenses of Federal reserve banks during 1942. Fed Res Bul 29:188-9 F '43
Earnings and expenses of Federal reserve banks for the six-month period ended June 30, 1943. Fed Res Bul 29:790 Ag '43
Eccles and Crowley favor bill suspending FDIC assessments on war bond sales. Comm & Fin Chr 157:843 Mr 4 '43
FDIC reports earnings of insured banks up. Comm & Fin Chr 158:117 JI 8 '43
History's greatest credit flood; parallels and contrasts between British and American banks in meeting war's financial demands. F. B. Makin. II Banking 35:28-9 D '42
Insured banks had record assets and deposits on Dec. 31, 1942. FDIC reports. Comm & Fin Chr 157:1603 Ap 29 '43
Managed money, debt and rates; controls implied by deficit financing by banks and public. J. H. Wood. Trusts & Estates 77:166-7 Ag '43
Member bank earnings first half of 1942; with comparisons for other half years. Fed Res Bul 28:1098, 1150 N '42
Member bank earnings in 1942. Fed Res Bul 29:500 Je '43

BANKS and banking—Finance—Continued

Member bank earnings, 1942, and comparisons, 1939-1941. Fed Res Bul 29:672-80 J1 '43
 National bank earnings higher in 1942. Comm & Fin Chr 157:1888 My 20 '43
 National banks' gross earnings up in first half of 1943. P. Delano. Comm & Fin Chr 158:1511 O 14 '43
 N.Y. bank earnings increasing? W. W. Phillips. Comm & Fin Chr 147:2060+ Je 3 '43
 N.Y. bank ratio of profits to capital funds down in 1942 although holdings of governments up. Comm & Fin Chr 157:1292 Ap 8 '43
 Outlook for the banks. R. W. Babson. Comm & Fin Chr 157:2381+ Je 24 '43
 Raising bank dividend rates now would be mistake. L. Fraser. Comm & Fin Chr 157:373 Ja 28 '43
 Rise in bank earnings shown in June 30 statements. Burroughs Clearing House 27:3 Ag '43
 Treasury financing and the banks. Nat City Bank p42-3 Ap '43
 Urges banks to build up capital reserves to meet problems arising in post-war area. E. V. Bell. Comm & Fin Chr 157:1780 My 13 '43
 Victory loan; role of commercial banks. Nat City Bank p134-7 D '42
 War finance and the banks. M. Nadler. Bankers M 145:531-2 D '42

See also

Bank accounting	Banks and banking
Bank reserves	Stock
Banks and banking—	Banks and banking,
Investments	National

Forms, blanks, etc.

Bond redemption form is complete and saves time. A. W. Bickler. il Bankers Mo 60:174-5+ Ap '43
 Compiling a manual of banking forms. O. K. Johnson. il Burroughs Clearing House 27:22-4+ Je '43
 Improved depositor's contract and signature card. il Burroughs Clearing House 27:4 N '42
 Legal forms; dangers to banks. Banking 36:89-90 S; 58+ O; 57 N '43
 Simplified bank credit records. il Burroughs Clearing House 27:16-18 J1 '43

See also

Checks

Group banking

Group banks; number and deposits of banks in 35 groups and number of branches and additional offices of group banks, Dec. 31, 1942. Fed Res Bul 29:689 J1 '43

Guaranty of deposits

All NY mutual banks to be FDIC members. Comm & Fin Chr 157:1879 My 20 '43
 All New York savings banks get FDIC coverage. Comm & Fin Chr 158:119 J1 8 '43
 Eccles and Crowley favor bill suspending FDIC assessments on war bond sales. Comm & Fin Chr 157:843 Mr 4 '43
 FDIC income for half year. Comm & Fin Chr 158:1714 O 28 '43
 Federal deposit insurance corporation not bound by bank's liabilities on loan agreement. Banking Law J 60:638-46 Ag '43
 FDIC reports earnings of insured banks up. Comm & Fin Chr 158:117 J1 8 '43
 Insured banks had record assets and deposits on Dec. 31, 1942, FDIC reports. Comm & Fin Chr 157:1603 Ap 29 '43
 Mutual savings unit established by FDIC. H. D. Ralph. Burroughs Clearing House 27:21+ S '43
 President signs bill suspending FDIC levy and reserve requirements on war bond bank cash. Comm & Fin Chr 157:1600 Ap 29 '43
 War loan accounts exempt from FDIC assessments. H. D. Ralph. Burroughs Clearing House 27:21 My '43

Hours of business

Longer banking hours trend continues. il Burroughs Clearing House 27:3-4 Ap '43
 Pro and con opinions on banking hours. Burroughs Clearing House 27:3-4 Je '43

Insurance requirements

Bank coverage much improved, survey shows. W. B. Gladney. Nat Underw 47:17+ My 13 '43
 Cover ration bank plan under general liability. East Underw 44:37 Ap 23 '43; Nat Underw 47:18 Ap 22 '43
 Four types of war damage insurance offered to banks. Bankers M 145:553 D '42
 Grant ration banking liability insurance coverage to bank. Comm & Fin Chr 157:1792 My 13 '43
 Liability policy for banks under ration banking. Nat Underw 47:21 Mr 4 '43
 New war damage protection. J. E. Baum. Banking 35:79 Ja '43
 W.D.C. coverage on money and securities reviewed by A.B.A. Nat Underw 47:23 Mr 4 '43
 War damage coverage on intangibles. J. E. Baum. Banking 35:54 Mr '43

See also

Bankers' blanket bond	Insurance, Valuable papers
-----------------------	----------------------------

Insurance selling

Revokes license of agency in Detroit controlled by bank. Nat Underw 47:4+ N 4 '43

See also

Savings banks—Insurance selling

Investments

All banks in the United States, loans and investments. Published in monthly numbers of Federal reserve bulletin
 All member banks, classification of loans and United States government direct obligations. Fed Res Bul 29:351 Ap '43
 Amendment to Regulation K; investments in the stock of other corporations. Fed Res Bul 29:923 O '43
 Bank promotion of sales of governments; war finance and the banks. A. Sproul. Comm & Fin Chr 157:385+ Ja 28 '43
 Bank stocks; commercial banking system and the government debt. H. A. Leggett. Comm & Fin Chr 156:1790+ N 19 '42
 Bankers urged to adopt investment policy now; address before National bank division of the A.B.A. M. Nadler. Comm & Fin Chr 158:1198-9, 1210-13+ S 23 '43
 Banks and TDR payments. Economist 145:500 O 9 '43
 Banks end hull; U.S. bonds acquired. Business Week p113-15 Ap 17 '43
 Banks should survey depositors' intentions now to assure post-war liquidity. J. A. Ritchie. Comm & Fin Chr 158:1785 N 4 '43
 Bond account, future of bank's deposits and its bearing on current investment policy; Citizens national bank of Chicago Heights. B. J. Schwoeffermann. il Burroughs Clearing House 27:13-15+ Je '43
 Changing function of a bank's municipal portfolio. J. A. White. Comm & Fin Chr 158:297+ J1 22 '43
 Commercial banks and the bond market. Nat City Bank p78-81 J1 '43
 Condition of all member banks, loans and investments. Published in monthly numbers of Federal reserve bulletin
 Government agencies; supervisors committee agree on loans upon government securities. Comm & Fin Chr 156:2068 D 10 '42
 Governments; how Treasury war financing developed program including war bonds, special bank issues, and victory fund drives. H. J. Boone. il Burroughs Clearing House 27:13-15, 32-3 Ja '43
 Managing managed-money. J. H. Wood. Comm & Fin Chr 157:2261, 2272-3 Je 17 '43
 Participation by commercial banks in the war financing program. A. Sproul. Fed Res Bul 28:1190-1 D '42
 Railroad bond prices. Bankers M 146:50-2 Ja '43
 Real estate lending. H. Bruere. Bankers M 146:335-7 Ap '43
 Sound policies of bank investment; Walker bank & trust company, Salt Lake City. E. A. Bering. il Burroughs Clearing House 28:22-4+ O '43
 Statement to banks; third war loan drive. Fed Res Bul 29:316 S '43
 Treasury bills for smaller banks. Fed Res Bul 29:492 Je '43

BANKS and banking—Investments—*Continued*
 Urges banks to invest temporarily idle funds during war loan drive. A. Sproul. Comm & Fin Chr 158:1026 S 9 '43
 Victory loan; role of commercial banks. Nat City Bank p134-7 D '42
 War financing and banking developments. Fed Res Bul 28:1173-81 D '42

See also

Loans, Bank
 Trusts and trustees
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Joint accounts

See Bank deposits—Joint accounts

Law

See Banking law

Mail service

Banking by mail extended to tax payments. il Burroughs Clearing House 27:8-10 Ag '43

New business

Business development for community banks. E. O. Meeh. bibliog (97 references) Bankers M 146:285-6, 288-321 Ap '43
 Explore for loans; survey. Bankers Mo 60:166+ Ap '43
 New business from war workers. M. Cushing. il Banking 36:31-2 N '43
 Where Bankers Monthly readers have found new loans. Bankers Mo 60:17-18 Ja '43

Protection

See also

Bank robberies

Public relations

Bankers should speak up! W. T. Dunn. Am Inst Banking Bul 25:22 Ja '43
 Boosting the bank and the community; First national bank of Pleasanton, Calif. H. J. Harding. il Burroughs Clearing House 28:16-18+ N '43
 Business development for community banks. E. O. Meeh. bibliog Bankers M 146:288-93 Ap '43
 Common man is on the march; how banks may increase good-will. A. Effron. Bankers M 145:471-7 D '42
 Directors' rooms used for community meetings. Bankers Mo 60:59+ F '43
 Helpful booklet attracted people to New York banks. E. B. Sturges. 2d. Bankers Mo 60:414-15 S '43
 Public relations ideas from Ohio bankers' experiences. D. Brown. Bankers Mo 60:63-4 F '43
 We don't let people forget the Union state bank. W. S. Ross. il Bankers Mo 59:544-5 D '42

Purchasing

Centralized purchasing helps increase operating efficiency. A. C. Schlegel. Bankers Mo 60:190+ Ap '43
 Good purchasing records determine when to buy, where to buy, how much to buy, how much to pay. A. C. Schlegel. Bankers Mo 60:210-12 My '43
 Purchasing supplies and equipment. H. F. Hofer. Bankers M 146:184 F '43

Ration coupon handling

Billions of ration coupons; bankers comment and suggest. il Banking 36:23-6+ JI '43
 Canadian banking; ration coupon banking. J. Montagnes. il Burroughs Clearing House 27:28+ Ap '43
 Clothing coupon banking. Economist 143:553 O 31 '42
 Controls for ration banking; procedure of Security trust and savings bank, Shenandoah, Iowa. C. W. Fishbaugh. Bankers Mo 60:252-3 Je '43
 Coupon checks; ration-banking gets off to good start in Albany test. Business Week p122-3+ N 21 '42
 Coupon rationing plan undergoing test. H. D. Ralph. Burroughs Clearing House 27:19 N '42
 Cover ration bank plan under general liability. East Underw 44:37 Ap 23 '43; Nat Underw 47:18 Ap 22 '43
 Grant ration banking liability insurance coverage to bank. Comm & Fin Chr 157:1792 My 13 '43

How to lose on ration reports. M. B. Leach. Banking 36:46 N '43
 How we handle ration accounts; Granite trust company, Quincy, Mass. P. K. Barker. il Banking 35:28+ My '43
 Liability policy for banks under ration banking. Nat Underw 47:21 Mr 4 '43
 Nationwide ration banking. il Banking 35:20-2 Ja '43
 Nationwide ration banking near. Barron's 23:5 Ja 25 '43
 Nationwide ration banking plan. Comm & Fin Chr 156:2166 D 17 '42
 New developments in ration coupon banking. H. D. Ralph. Burroughs Clearing House 27:21 Ap '43
 OPA ration coupon verification plan unsound, says ABA. Comm & Fin Chr 157:2295 Je 17 '43
 OPA seeks to simplify ration banking. Burroughs Clearing House 27:43-4 My '43
 OPA studies ration methods, remuneration. Burroughs Clearing House 27:21+ Ag '43
 Plans completed for ration tokens. H. D. Ralph. Burroughs Clearing House 28:21+ N '43
 Ration account records filmed as part of this bank's control. H. W. Osterhout. Bankers Mo 60:397 S '43
 Ration accounting; simplified plan of Wabcock state bank of Detroit. F. C. Schlorff. il Burroughs Clearing House 27:13-15+ JI '43
 Ration banking. R. J. Hannon. J Account 75:58-9 Ja '43
 Ration banking. H. D. Ralph. il Burroughs Clearing House 27:19-20 Ja; 20 F '43
 Ration banking; actual operation of plan in New York introductory area. H. J. Boone. il Burroughs Clearing House 27:13-15+ D '42
 Ration banking changes. H. Bratter. Banking 36:111-12 S '43
 Ration banking coast-to-coast. Banking 35:22-3 F '43
 Ration banking; general ration order. Fed Res Bul 29:116-19 F '43
 Ration banking operations; how one bank keeps a record. Banking 36:75 Ag '43
 Ration banking plan. Fed Res Bul 29:121 F '43
 Ration banking problems. W. F. Lawson. Banking 36:38 JI '43
 Ration banking reimbursement increased. American bankers association announces. Comm & Fin Chr 158:1113 S 16 '43
 Ration banking report. J. J. McCann. Banking 35:82+ My; 63 Je '43
 Ration banking revisions assist banks. H. D. Ralph. Burroughs Clearing House 28:19-20 O '43
 Ration banking shifts to second. Banking 35:38-9 Mr '43
 Ration banking to be nation-wide during January. Credit & Fin Management 45:19-20 Ja '43
 Ration-coupon banking. Bankers M 146:92-3 Ja '43
 Ration coupon banking begins. Bankers M 146:134-7 F '43
 Ration coupon banking begins. W. L. Hemingway. Comm & Fin Chr 157:427 Ja 28 '43
 Ration-coupon banking inaugurated in Canada. For Comm W 10:16-17 Mr 6 '43
 Ration lineup. il Banking 35:23-7 D '42
 Simplified ration banking; new reimbursement schedule. Banking 36:45 O '43
 Some ration banking kinks. Banking 35:42+ My '43
 Stamps! stamps! stamps! Am Inst Banking Bul 25:10 Ap '43
 What ration banking may mean to banks. J. Early. Barron's 23:6 Ap 19 '43

Real estate departments

Mortgage loan delinquencies. W. R. Bryant. Banking 35:91-2 F '43

Real estate operations

Cooperative management for real estate; how Philadelphia financial institutions are protecting values and cutting costs. F. J. Smith. Trusts & Estates 75:499-500, 502-3 N '42

Records

Automatic audit for drafts, cashier's checks, bank money orders. T. W. Long. il Bankers Mo 60:10-11 Ja '43

BANKS and banking—Records—Continued

Bank's stockholder's right to inspect bank's records. C. R. Rosenberg, Jr. Burroughs Clearing House 27:29 F '43

Bond sales facilitated by a simple card system. C. W. Fishbaugh. Bankers Mo 60:464-5 O '43

Canadian banking; preserving bank records. J. Montagnes. il Burroughs Clearing House 28:29+ N '43

Draft system simplified. J. D. Barnette. Bankers Mo 60:404 S '43

Dual control for collateral. W. C. Hubbell. Bankers Mo 59:558+ D '42

Good purchasing records determine when to buy, where to buy, how much to buy, how much to pay. A. C. Schlegel. Bankers Mo 60:210-12 My '43

How to get more room in your correspondence files. L. W. Bishop and others. il Bankers Mo 59:496+ N '42

How to maintain audit control of collections. Bankers Mo 60:392-3 S '43

New uses for carbon paper. S. L. Jerpak. il Bankers Mo 59:497+ N '42

Retention of records still a problem. il Bankers Mo 59:487-9 N '42

Safekeeping plan for war bonds. B. E. Rhodes. il Burroughs Clearing House 27:26-7+ JI '43

Simple war bond safe-keeping record system. Burroughs Clearing House 27:4 Ja '43

Single posting and filmed records simplify operating technique. J. F. White. Bankers Mo 59:548-9 D '42

Two forms supply safekeeping records. A. H. Abts. il Bankers Mo 60:318 JI '43

Regulation

Wartime banking controls in Australia. H. Daniel and M. Belle. Banking Law J 60:724-30+ S '43

See also

Banking law

Banks and banking—

Dual system

Reports

A.B.A. announces new earnings report forms. Burroughs Clearing House 27:8-9 Ja '43

ABA committee and government agencies agree on simplified form for earnings, dividend reports. Comm & Fin Chr 156:2249+ D 24 '42

Bank stocks; standard form for reporting annual earnings to stockholders. H. A. Leggett. Comm & Fin Chr 156:2150 D 17 '42

Dime savings bank of Brooklyn issues bank statement in new form. Comm & Fin Chr 157:186 Ja 14 '43

Recent improvements in published bank statements. Bankers Mo 59:537-9+ D '42

Two new bank forms. Banking 35:58-9 Ja '43

What does the public want to know about a bank? A. J. Quinn. Bankers Mo 60:304-5 JI '43

Savings departments

Caretakers of peoples' savings. L. P. Smith. Banking 36:32 JI; 33+ Ag '43

No withdrawals from savings. H. E. Gail. Bankers Mo 60:401 S '43

Saving time and forms is important; eliminating deposit and withdrawal slips in the savings department. Bankers Mo 60:16+ Ja '43

See also

Savings banks

Savings deposits

Securities**See also**

Banks and banking—

Stock

Service

ABA to aid in solving small plants problem. Comm & Fin Chr 158:40 JI 1 '43

Another tax accounting plan for farmers. il Burroughs Clearing House 28:8-9 N '43

Army camp banking at Fort Custer. il Banking 35:48 F '43

Bank accounting plan for farmers; Farmers state bank of Lostant, Illinois. C. A. Whitney. il Burroughs Clearing House 27:26-7+ N '42

Bank aid to small business. R. W. Johnson. Banking 36:69 JI '43

Bank service to airmen and sailors. il Banking 36:45 JI '43

Banking's H.Q.; War department's bank facility program; pictures. Banking 35:39-40 Ja '43

Common man is on the march; how banks may increase good-will. A. Efron. Bankers M 145:471-7 D '42

Farm service; Bank of San Rafael, and First national bank, San Rafael, California. W. P. Murray. il Burroughs Clearing House 27:13-15+ Mr '43

Financing the biggest war plant; aids to farmers by some country banks. E. A. Howton and others. Banking 36:52-3 O; 50-1 N '43

Future market for bank services. I. I. Sperling. Banking 35:50 Ja '43

How the navy is paid. il Banking 36:37-8 N '43

How we reduced the cost of handling payroll savings; issuing and safekeeping bonds. J. W. Larsen. il Bankers Mo 60:254-5 Je '43

Like the air we breathe; part banking is taking in the Nation's war effort. Banking 35:78-9 My '43

Merchandising country bank services. Banking 36:54-6 O '43

New business from war workers. M. Cushing. il Banking 36:31-2 N '43

New fields for the banker; services he can perform tending to increase. J. Early. Barron's 23:5+ Ap 12 '43

Over-the-counter and off-the-knee; service for war workers and men in uniform. J. J. McCann. il Banking 35:32-4+ D '42; 41-2 Ja '43

Post-war home builders' club will please come to order; contribution of Peoples bank of Cumberland, Maryland. J. L. Cooley. il Banking 36:21-3 N '43

Reporter finds story that's never been told. H. S. McNutt. il Banking 35:46-7 Mr '43

Services for service men; army camp banks. il Banking 35:50-1 Ap '43

Serving war workers; survey of banking practice in payroll checks. il Banking 35:83-4 Ja '43

Soil conservation in a farm program. H. V. Odle. il Burroughs Clearing House 27:22-5, 36-40 JI '43

Tools for selling bank services. G. M. Underhill. il Burroughs Clearing House 27:22-4+ N '42

Tom that 10%! what banks can do to help. il Banking 35:69-70 D '42

Ways to maintain customer service. P. L. Speidel. il Burroughs Clearing House 27:16-18+ D '42

Work in evacuees' interests by Federal reserve bank of San Francisco. Fed Res Bul 29:295 Ap '43

See also

Banks and banking

—Credit information service

Banks and banking—

Traveling banks

Checks

Service charge

Absorption of exchange charges as a payment of interest on deposits. Fed Res Bul 29:817-18 S '43

All Iowa banks pay at par. D. E. Neiman. Bankers Mo 60:354-5 Ag '43

Charge on savings; Merchants national bank of Mobile, Alabama. J. J. McCann. Banking 36:75-6 S '43

Charges for redemption of war bonds. J. J. McCann. Banking 36:60+ Ag '43

Common man is on the march; advantages of pay-as-you-go checking service. A. Efron. Bankers M 145:471-7 D '42

Complicated schedules increase analysis costs. il Bankers Mo 60:394-6+ S '43

Customers can compute their own service charges. il Bankers Mo 60:162+ Ap '43

Handling those war payroll checks. P. P. Butler. Bankers M 145:549 D '42

How banks handle payroll checks; charges for service and ways of handling rush peaks. H. V. Odle. il Burroughs Clearing House 27:16-18+ F '43

How to sell the service charge to new customers. Bankers Mo 59:551 D '42

Maze of bank service charges. H. H. Heimann. Credit & Fin Management 45:2 Ja '43

BANKS and banking—Service charge—Cont.

- More money from service charges; simplifying the charge schedule. *il Bankers Mo* 60:445-7 O '43
- Names for no-minimum-balance checking accounts. *Bankers Mo* 59:545 D '42
- New charges to defray costs of savings accounts. *Burroughs Clearing House* 27:5 My '43
- No-minimum-balance accounts increase in popularity. P. K. Barker. *Bankers Mo* 60:101-3 Mr '43
- Results of savings activity charges; Irvington national bank, Irvington, New Jersey. H. A. Berghof. *il Burroughs Clearing House* 27:22-4+ S '43
- Service charges benefit Wisconsin banks. W. G. Coapman. *Bankers Mo* 60:293-4+ JI '43
- This employer pays service fees for employee checking accounts. G. W. McSweeney. *Bankers Mo* 60:398-9+ S '43
- This newspaper sold the service charge for banks. *Bankers Mo* 60:180 Ap '43
- Timely suggestions on service charges. *Burroughs Clearing House* 27:3 Mr '43
- Why of service charges. J. Kinneman, jr. *Banking* 36:29-30 N '43

Service to government

- ABA program for banks in new war bond drive. *Comm & Fin Chr* 157:1224 Ap 1 '43
- Bank promotion of sales of governments; war finance and the banks. A. Sproul. *Comm & Fin Chr* 157:385+ Ja 28 '43
- Banks as subsidy paying agents. *Trusts & Estates* 76:102 F '43
- Dramatic victory fund arithmetic. A. W. Atwood. *il Banking* 35:23-5+ Ap '43
- Tells banks' part in victory fund drive; Economic policy commission. *Banking* 35:47 Ap '43

See also

- Banks and banking—
Ration coupon handling

Show windows

- Hobby theater a big hit in bank window. *il Burroughs Clearing House* 27:7-8 Ja '43

Statements of account

- Staggered statements. E. S. Woolley. *Banking* 35:62+ F '43

Statements of condition**See Banks and banking—Reports****Statistics**

- All banks in the United States; principal assets and liabilities, by districts and by states, June 30 and Dec. 31, 1941, and June 30, 1942. *Fed Res Bul* 28:1151-5 N '42
- All banks; principal assets and liabilities, by districts and by states. *Fed Res Bul* 29:681-6 JI '43
- All member banks, assets and liabilities on December 31, 1942 by classes of banks. *Fed Res Bul* 29:350 Ap '43
- All member banks; assets and liabilities on June 30, 1943 by classes of banks. *Fed Res Bul* 29:1030 O '43
- All member banks, classification of loans and United States government direct obligations. *Fed Res Bul* 29:351 Ap '43
- Assets and liabilities of insured commercial banks in United States and possessions, June 30, 1943, December 31, and June 30, 1942. *Fed Res Bul* 29:1031 O '43
- Banks and branches; number in operation on Dec. 31, 1941 and 1942. *Fed Res Bul* 29:687-8 JI '43
- Changes in number of banking offices in the United States, Jan. 1-June 30, 1943. *Fed Res Bul* 29:899 S '43
- Changes in number of banks and branches in the United States, 1942. *Fed Res Bul* 29:190 F '43
- Commercial banks; United Kingdom, Canada, France; assets and liabilities, yearly Dec. 1936-1940 and monthly Nov. 1941-Oct. 1942. *Fed Res Bul* 29:104 Ja '43 [cont monthly]
- Condition of insured commercial banks in United States and possessions, June 30, 1942 and Dec. 31, 1941. *Fed Res Bul* 28:1249 D '42

- Condition of insured commercial banks in United States and possessions, December 31, 1942 and June 30, 1942. *Fed Res Bul* 29:570 Je '43

- Condition of national banks, Dec. 31, 1941, April 4, June 30, and Dec. 31, 1942. *Comm & Fin Chr* 157:1999 My 31 '43

- 56 more banks pass twenty-five million mark; comparison of consolidated statements of American banks, Dec. 30, 1922-Dec. 30, 1942. *Bankers Mo* 60:158-9 Ap '43

- Glance at the road map; charts giving capital ratios of national banks, deposits of all commercial banks, etc.; with estimates to 1945. *Banking* 36:38-9 S '43

- Inflow and outflow of bank cash, 1942-1943; graph. *Business Week* p13 N 6 '43

- Member bank operating ratios, 1942. *Fed Res Bul* 29:896-8 S '43

- Net capital movement to United States since Jan. 2, 1935. *Fed Res Bul* 29:472 My '43 [cont monthly]

- Percentages of member bank income and expenses in 1942, grouped according to percentages of time deposits. *Bankers M* 146:362-3 Ap '43

- Statistics of deposit ownership. *Fed Res Bul* 29:930-6 O '43

- Substandard assets; assets of commercial banks examined in 1941. *Bankers M* 145:423 N '42

- Wartime bank trends revealed by annual reports. *Burroughs Clearing House* 27:3-4 F '43

- Weekly reporting member banks, by Federal reserve districts; loans and investments, reserves and liabilities. Published in monthly numbers of Federal reserve bulletin

- Weekly reporting member banks, New York city and outside; loans and investments, reserves and liabilities. Published in monthly numbers of Federal reserve bulletin

See also

- Bank clearings
Bank debits
Bank deposits

Stock

- Bank stock acquired by RFC not taxable Supreme court rules. *Comm & Fin Chr* 157:1021 Mr 18 '43

- Bank stocks; aristocrats of the security market. E. A. Van Deusen. *Comm & Fin Chr* 158:1009+ S 9 '43

- Bank stocks as war equities; with statistics of leading New York City banks with significant ratios, September 30, 1942. K. L. Trefftz. *Barron's* 22:9 D 21 '42

- Bank stocks; comparisons of New York City bank stocks, 1941 and 1942. E. A. Van Deusen. *Comm & Fin Chr* 157:358 Ja 28 '43

- Bank stocks; current dividend yields of leading stocks. *Comm & Fin Chr* 157:2279+ Je 17 '43

- Bank stocks; leverage ratios of leading New York City bank stocks. E. A. Van Deusen. *Comm & Fin Chr* 157:2073+ Je 3 '43

- Financial stocks affected by war. J. S. Williams. *Mag of Wall St* 72:352-3+ JI 10 '43

- New York City bank stocks. *Comm & Fin Chr* 158:824 Ag 26 '43

- What is this bank stock worth? Central Hanover. K. L. Trefftz. *Barron's* 23:5 Je 7 '43

- What is this bank stock worth? Chase national bank. K. L. Trefftz. *Barron's* 23:5 My 10 '43

- What is this bank stock worth? Chemical bank & trust co. K. L. Trefftz. *Barron's* 23:11 S 27 '43

- What is this bank stock worth? Continental Illinois. K. L. Trefftz. *Barron's* 23:16 Ap 19 '43

- What is this bank stock worth? Corn Exchange. K. L. Trefftz. *Barron's* 23:5 My 24 '43

- What is this bank stock worth? Manufacturers trust co., Security first national bank of Los Angeles, First national bank of Chicago. K. L. Trefftz. *Barron's* 23:1 Ap 5 '43

- What is this bank stock worth? National city bank of New York. K. L. Trefftz. *Barron's* 23:13 Ap 26 '43

- What is this bank stock worth? outstanding investment factors in Bankers Trust. K. L. Trefftz. *Barron's* 23:5 My 17 '43

BANKS and banking—Continued**Study and teaching**

Advertising agency enlisted to brighten classroom textbook on banking. *Ptr Ink* 201:39 N 27 '42
 Inter-American banking scholarships. *Banking* 36:84 Ag '43

See also

American institute of banking Institute of bankers, London
 Bank employees—Training

Taxation

Bank stock acquired by RFC not taxable Supreme court rules. *Comm & Fin Chr* 157:1021 Mr 18 '43
 Due-borrowers accounts taxable as deposits. *Banking Law J* 60:860-2 O '43
 How the new taxes affect banks. C. H. Mylander. *Banking* 35:41-5 D '42

Tellers

Miss Banker. D. Ragan. *il Banking* 35:26-7 F '43
 Teller's sixth sense. C. B. Edwards. *Banking* 36:30 O '43
 To 20,000 new tellers; forged government checks and counterfeit bills. F. J. Wilson. *il Banking* 35:38-9 Ap '43

Tellers' departments

Customers and bank benefit by machine accounting at windows. F. L. O'Hair. *il Bankers Mo* 60:200-1+ My '43

Transit operations

Improved transit system. W. C. Hubbell. *il Bankers Mo* 60:306-7 JI '43
 Transit letters simplified. *Bankers Mo* 60:104-5 Mr '43

Traveling banks

Mobile banking unit serves war workers. *il Burroughs Clearing House* 27:9-10 S '43

Trust departments

Case for the trust department. J. P. Cummings. *Trusts & Estates* 77:369-74 O '43
 Central Hanover bank & trust co.; handling of pensions and retirement plans. *East Underw* 43:8 D 4 '42
 Fifth freedom; current thinking of the trust prospect. A. Journey. *Banking* 36:31-2+ Ag '43
 Simplified cost accounting for small trust departments. *Trusts & Estates* 77:156 Ag '43
 Trust assets and earnings up; national bank trust departments, 1942. *Trusts & Estates* 77:355 O '43
 Trust business from bank branches; program for developing such accounts. D. W. Mackay. *Trusts & Estates* 76:247-50 Mr '43
 Trust profitability, and otherwise. *Trusts & Estates* 76:33-4 Ja '43
 Trust year in review, and in prospect. *Trusts & Estates* 76:39-40, 161-4 Ja-F '43
 Wartime trust service of Security-first national bank of Los Angeles. *Bankers M* 146:268-9 Mr '43
 We safekeep wills and thus develop trust business. E. M. Gaillard. *Bankers Mo* 60:172-3 Ap '43
 Will banks be trustees? appraisal of misgivings of bank presidents as to the trust business. L. S. Headley. *Trusts & Estates* 77:381-5 O '43

See also

American bankers as- Trust companies
 sociation—Trust Trusts and trustees
 division

Argentina

Annual report of the Central bank of the Argentine Republic. *Fed Res Bul* 29:613-22 JI '43
 Industrial credit system established. *For Comm W* 13:16 O 30 '43

Australasia

Bank of Australasia annual general meeting, London. *Economist* 144:372 Mr 20 '43

Australia

Australian bank regulations. *Economist* 144:333 Mr 13 '43

Wartime banking controls in Australia. H. Daniel and M. Belle. *Banking Law J* 60:724-30+ S '43

Burma

Bankers in Burma. J. W. Hyslop. *Banking* 35:86 My '43

California

See also Bank of America national trust and savings association

Canada

Annual report of the Bank of Canada. *Fed Res Bul* 29:218-20 Mr '43
 Banks as subsidy paying agents. *Trusts & Estates* 76:102 F '43
 Commercial banks; assets and liabilities, yearly Dec. 1936-1940 and monthly Nov. 1941-Oct. 1942. *Fed Res Bul* 29:104 Ja '43 [cont monthly]
 Postwar planning. J. Montagnes. *Burroughs Clearing House* 28:23+ O '43

See also

Bank of Montreal

Chicago

Paper that pays; banks and Chicago currency exchanges. *Business Week* p103+ Mr 27 '43

China

British banks in China. *Economist* 144:273 F 27 '43
 Shaping China's banking system. P. Hsia and H. C. Chen. *il Burroughs Clearing House* 27:22-4+ My '43
 See also Hongkong and Shanghai banking corporation

Cuba

Banking operations in 1942. *For Comm W* 11:19 Ap 10 '43

Egypt

National bank of Egypt 43d ordinary general meeting, Cairo. *Economist* 144:510 Ap 17 '43

France

Bank stocks; experience of French banks under inflation. E. A. Van Deusen. *Comm & Fin Chr* 157:742+ F 25 '43
 Commercial banks; assets and liabilities, yearly Dec. 1936-1939 and monthly Dec. 1940-Dec. 1941. *Fed Res Bul* 29:104 Ja '43 [cont monthly]

Germany

Germany at war; pressure on banks. *Economist* 144:660 My 22 '43

Great Britain

Bank and discount profits. *Economist* 144:79-80 Ja 16 '43
 Bank credit in 1942. *Economist* 144:150 Ja 30 '43
 Bank manpower in Britain; Kennet report. *Burroughs Clearing House* 27:1-2 Ap '43
 Banks and excess profits tax. *Economist* 143:804-5 D 26 '42
 Banks and the deficit. *Economist* 145:113-14 JI 24 '43
 Banks not understood. *Bankers M* 145:428 N 42
 Banks' ten thousand; branch telescoping. *Economist* 143:547-8 O 31 '42
 British banking and finance; significant recent developments and trends. D. F. Heatherington. *For Comm W* 12:5-7+ JI 24 '43
 British view; banks regarded as having a new function. D. Tyerman. *Barron's* 23:8 S 13 '43
 British war finance and the banks. C. Muller. *J Business* 16:77-99 Ap '43
 Chartered bank of India, Australia and China, 89th general meeting, London. *Economist* 144:311 Mr 6 '43
 Commercial banks; assets and liabilities, yearly Dec. 1936-1940 and monthly Nov. 1941-Oct. 1942. *Fed Res Bul* 29:104 Ja '43 [cont monthly]
 Future of banking. *Economist* 145:308, 311-12 S 4 '43
 Great Britain; banking in 1942. *Bankers M* 146:431-4 My '43

BANKS and banking—Great Britain—*Continued*

History's greatest credit flood; parallels and contrasts between British and American banks in meeting war's financial demands. F. B. Makin. *il Banking* 35:28-9 D '42

Mr McKenna on banking. *Economist* 143:738 D 12 '42

News from England. *il Am Inst Banking Bul* 25:20-1 Ja; 14-15 Ap '43

Sees London money market disintegrating as war curtails foreign exchange business. J. T. Madden. *Comm & Fin Chr* 157:1390 Ap 15 '43

Some manpower possibilities; report of the Kennet committee. *Banking* 35:66 Ja '43

United Kingdom; banks at the end of the third year of war. *Bankers M* 146:258-60 Mr '43

See also

Bank of London and South America District bank, limited Institute of bankers, London Lloyds bank Martins bank	Midland bank National provincial bank Westminster bank Williams Deacon's bank
---	--

India

National bank of India, limited, statement by the chairman. R. L. James. *Economist* 144:634 My 15 '43

Ireland

Banking in Eire. *Economist* 144:396 Mr 27 '43

Central bank established. *For Comm W* 9:17 N 21 '42

Central bank of Ireland. *Fed Res Bul* 29:122-7 F '43

Eire's Central bank; first report. *Economist* 145:118-† J1 24 '43

Kodiak, Alaska

Banking up Kiska way. H. G. Brown. *il Banking* 35:25-† Je '43

Netherlands

Netherlands banks serve German war economy. *For Comm W* 11:22 Ap 17 '43

Wartime study of Dutch banking. B. Landheer. *il Burroughs Clearing House* 27:22-4-† Mr '43

Netherlands Indies

Fate of the banks in the Netherlands Indies. *For Comm W* 12:23 S 4 '43

New York (city)

Bank earnings higher in first quarter. *Barron's* 23:4 Ap 12 '43

Bank earnings up sharply, first nine months 1942 and 1943. M. J. Saada. *Barron's* 23:1 O 11 '43

Bank profits up 17% for 12 months; second quarter earnings and price gains of New York City banks. *Barron's* 23:1 J1 12 '43

Bank stocks; first quarter statements of New York City banks. E. A. Van Deusen. *Comm & Fin Chr* 157:1238 Ap 8 '43

Bank stocks; second quarter indicated earnings. E. A. Van Deusen. *Comm & Fin Chr* 158:220 J1 15 '43

Bank stocks; sources and disposition of earnings of leading New York City banks, 1938-1942. E. A. Van Deusen. *Comm & Fin Chr* 158:1799-1800 N 4 '43

Bank stocks; third quarter statements of New York City banks. E. A. Van Deusen. *Comm & Fin Chr* 158:1607 O 21 '43

Banks' fourth quarter and year's profits better than expected; comparisons for 1940 and 1941. *Barron's* 23:15 Ja 11 '43

Reserves vanish; New York banks feel pinch resulting from heavy Treasury financing. *Business Week* p117-19-† My 22 '43

See also

Bank of Manhattan company Chase national bank of New York Guaranty trust com- pany of New York Irving trust company	Manufacturers trust company National city bank of New York New York trust com- pany
---	--

New York (state)

Banks and the war. *Bankers M* 146:88-9 Ja '43

Banks carrying on war activity program. *Comm & Fin Chr* 156:2176 D 17 '42

Oklahoma

Soil conservation in a farm program. H. V. Odle. *il Burroughs Clearing House* 27:22-5, 36-40 J1 '43

Persia

Imperial bank of Iran; statement. H. McMahon. *Economist* 145:219 Ag 14 '43

Portugal

Portuguese banking. *Economist* 144:329 Mr 13 '43

Samoa

Bankers aweigh; Bank of American Samoa. L. G. Titus. *il Banking* 36:36 N '43

Scotland

Bank of Scotland annual general meeting, Edinburgh. *Economist* 144:476 Ap 10 '43

Commercial bank of Scotland, limited, annual meeting, Edinburgh. *Economist* 143:781 D 19 '42

Royal bank of Scotland annual general court of proprietors, Edinburgh. *Economist* 143:679 N 28 '42

South Africa

Standard bank of South Africa 130th ordinary meeting, London. *Economist* 145:281 Ag 28 '43

Spain

Report of the Bank of Spain, 1936-1941. *Fed Res Bul* 29:399-414 My '43

Spanish bank authorized to effect foreign-trade transactions. *For Comm W* 11:26 My 22 '43

Switzerland

Annual report of the Swiss national bank, 1942. *Fed Res Bul* 29:841-7 S '43

Turkey*See also*

Ottoman bank

United States

Bank stocks; banking institutions in 1942. H. A. Leggett. *Comm & Fin Chr* 156:2318 D 31 '42

Bankers urged to continue efforts to curb government lending. A. L. M. Wiggins. *Comm & Fin Chr* 158:1197 S 23 '43

Banking activity in 1942. W. L. Hemingway. *Comm & Fin Chr* 157:391 Ja 28 '43

Banking trends. T. F. Regan. *il Am Inst Banking Bul* 25:11-12, 33 Ap '43

Dual banking system upheld as responsive to needs of country. E. V. Bell. *Comm & Fin Chr* 158:1329 S 30 '43

How about post-war plans for the banks. M. Corns. *Banking Law J* 60:715-23 S '43

Impact of war. R. S. Hecht. *Am Inst Banking Bul* 25:5-6 J1 '43 (to be cont)

Review of the month. Published in monthly numbers of Federal reserve bulletin

This Nation at war; wartime banking in the United States; broadcast. *Banking* 36:36-7 Ag '43

Warns commercial banks' existence imperiled by encroachment of non-banking agencies. H. J. Marshall. *Comm & Fin Chr* 158:228 J1 15 '43

See also

Banking law—United States Banks and banking, National Federal reserve banks	Home loan banks Intermediate credit banks Reconstruction fi- nance corporation
---	--

BANKS and banking, International

Bank of international cooperation; a world RFC. C. S. Dewey. *Comm & Fin Chr* 157:2357-† Je 24 '43; Discussion. 158:97-†, 201-†, 314 J1 8, 15, 22 '43

British view; what will be world bank's policy? D. Tyerman. *Barron's* 23:8 O 18 '43

Denounces proposed international bank. R. A. Taft. *Comm & Fin Chr* 158:1488 O 14 '43

For world's economic health; Treasury plans for international bank and stabilization funds. *Business Week* p74-† N 6 '43

International bank for postwar reconstruction. H. D. Ralph. *Burroughs Clearing House* 28:19 N '43

President cannot commit U.S. to post-war international bank. W. E. Spahr. *Comm & Fin Chr* 158:401-† J1 29 '43

- BANKS and banking, International—Continued**
 Tentative international monetary stabilization plan. M. Falyi. *Comm & Fin Chr* 158: 589, 602-3 Ag 12 '43
- Treasury outlines plan for United nations RFC bank.** *Comm & Fin Chr* 158:1486+ O 14 '43
- World bank, what it is and how it works.** *Business Week* p7 O 16 '43
- World capital bank.** *Economist* 145:527-8 O 16 '43
- See also*
 Bank for international settlements
 Foreign exchange
- BANKS and banking, National**
 Comptroller's annual report; tribute to the National banking system. *Bankers M* 146: 374-5 My '43
- Condition of national banks, Dec. 31, 1941, April 4, June 30, and Dec. 31, 1942.** *Comm & Fin Chr* 157:1999 My 31 '43
- Member bank earnings, 1942; national banks, by size of bank.** *Fed Res Bul* 29:677 JI '43
- National bank assets up; loans show decline.** *Comm & Fin Chr* 157:1032 Mr 18 '43
- National bank assets up, loans show decline; June 30, 1942.** *Comm & Fin Chr* 158:1427 O 7 '43
- National bank earnings higher in 1942.** *Comm & Fin Chr* 157:1888 My 20 '43
- National banks' gross earnings up in first half of 1943.** P. Delano. *Comm & Fin Chr* 158: 1511 O 14 '43
- National member banks, principal assets and liabilities, by states; June 30 and Dec. 31, 1941, and June 30, 1942.** *Fed Res Bul* 28: 1153 N '42
- National member banks; principal assets and liabilities, by states, Dec. 31, 1941 and 1942, and June 30, 1942.** *Fed Res Bul* 29:683 JI '43
- Trust assets and earnings up; national bank trust departments, 1942.** *Trusts & Estates* 77:355 O '43
- BANKS and banking, Private**
 Private banks, principal assets and liabilities, by states, June 30 and Dec. 31, 1941, and June 30, 1942. *Fed Res Bul* 28:1155 N '42
- Private banks; principal assets and liabilities, by states, Dec. 31, 1941 and 1942, and June 30, 1942.** *Fed Res Bul* 29:685 JI '43
- BANKS and banking, State**
 Member bank earnings, 1942; state member banks, by size of bank. *Fed Res Bul* 29: 678 JI '43
- State banks, principal assets and liabilities, by states; June 30 and Dec. 31, 1941 and June 30, 1942.** *Fed Res Bul* 28:1154 N '42
- State banks; principal assets and liabilities, by states, Dec. 31, 1941 and 1942, and June 30, 1942.** *Fed Res Bul* 29:684 JI '43
- BANKS and banking, Trade union**
 Status of labor banks, 1942. *Monthly Labor R* 55:999 N '42
- BARBADOS**
 Economic conditions
 Developments during 1942 in Barbados. *For Comm W* 10:17-18 Mr 13 '43
- BARBER, Max Hayden, 1879-**
 Sketch. *por Explosives Eng* 21:116-17 JI '43
- BARBER asphalt corporation**
 Another look. *Mag of Wall St* 72:194 My 29 '43
- Another look.** *Mag of Wall St* 72:706 O 2 '43
- Market leaders for 1943.** *Mag of Wall St* 71:343 Ja 9 '43
- Thumbnail stock appraisal.** *Mag of Wall St* 71:240 D 12 '42
- BARBER-WIELAND reaction**
 Barbier-Wieland degradation of 3-hydroxy-12-ketocholanic acid. B. Riegel and R. B. Moffett. *bibliog Am Chem Soc J* 65:1971-3 O '43
- BARBITURATES**
 Direct replacement of oxygen in hydantoins and barbiturates by sulfur. H. R. Henze and P. E. Smith. *bibliog Am Chem Soc J* 65:1090-2 Je '43
- BARBITURIC acid**
 Vinylalkylmalonic esters and barbituric acids. D. Heyl and A. C. Cope. *bibliog Am Chem Soc J* 65:669-73 Ap '43
- BARCLAY, Edwin**
 Liberian president sees President Roosevelt. *Comm & Fin Chr* 157:2087 Je 3 '43
- BARCLAYS bank (Dominion, colonial and overseas)**
 Annual general meeting, London. *Economist* 143:779 D 19 '42
- BARCLAYS bank, limited**
 Ordinary general meeting, 48th, London. *Economist* 144:86-7 Ja 16 '43
- BARCOL impressor.** *See Hardness—Testing*
- BARCROFT-WARBURG apparatus**
 Barcroft-Warburg manometric apparatus; usage, recent developments, and applications. J. J. Perkins. *bibliog (102 references) il diags Ind & Eng Chem Anal* ed 15:61-8 Ja 15 '43
- BARGES**
 Barge places 90-ton breakwater blocks at Leixoes, Portugal. C. H. Cruttwell. *il diags Eng N* 131:149-51 JI 15 '43
- Hungary's aerial propellers on river barges.** *For Comm W* 12:21 S 18 '43
- Marine tractor unit fills tug shortage.** *il Product Eng* 14:208-9 Ap '43
- Timber barges built for easy assembly.** *il Eng N* 131:281 Ag 12 '43
- See also*
 Tank barges
- BARGES, Concrete**
 Building concrete ships in prefabricated forms. *il Eng N* 129:902-6 D 31 '42
- Concrete oil barge goes to sea.** *il Nat Pet N* 35:32-+ F 10 '43
- Concrete oil barge work to be reduced one-half.** *Eng N* 131:297 Ag 19 '43
- First non-propelled concrete ship placed in service by government.** *Marine Eng* 48:213 O '43
- Sea-going barges of concrete construction.** *il Eng N* 130:878-83 Je 17 '43
- U.S. cools on concrete barges.** *il Nat Pet N* 35:19 Ag 18 '43
- BARITE**
 Barytes, a non-metallic product of eastern Tennessee. A. H. Hubbell. *il Eng & Min J* 144:63-5 Ja '43
- British non-ferrous minerals; the exploitation of domestic resources.** W. D. Reynolds. *Chem Age (Lond)* 48:198-9 F 13 '43
- BARIUM**
 Addition of metals to some phenylated olefins in liquid ammonia solution. H. Gilman and J. C. Bailie. *Am Chem Soc J* 65:267-8 F '43
- Equilibria in a carbonaceous cation exchanger.** H. F. Walton. *bibliog J Phys Chem* 47: 371-82 My '43
- Supposed graphite in carburized NE and S.A.E. steels; effect of calcium and barium.** J. Welchner and R. W. Roush. *il Metal Prog* 43:889-96 Je '43
- Analysis**
 Absence of coprecipitation of barium ion with the chlorides of the silver group and the sulfides of the copper and tin groups in the presence of ammonium ion. L. Lehrman and I. Mandel. *bibliog J Phys Chem* 47:264-6 Mr '43
- BARIUM bromide**
 Radioactive exchange and adsorption of methyl bromide with several inorganic bromides. G. B. Kistiakowsky and J. R. Van Wazer. *diag Am Chem Soc J* 65:1829-34 O '43
- BARIUM chromate**
 Coprecipitation of chromate with barium sulfate. W. E. Meldrum, W. E. Cadbury, Jr. and C. E. Bricker. *bibliog Ind & Eng Chem Anal* ed 15:560-2 S 15 '43
- Solubility product of barium chromate at various ionic strengths.** G. L. Beyer and W. Rieman. *3d, bibliog Am Chem Soc J* 65:971-3 My '43
- BARIUM compounds**
 Chemical studies on crystalline barium acid heparinate. M. L. Wolfson and others. *Science* 97:450 My 14 '43
- Statistics**
 Statistical reviews of minerals and chemicals in 1942. *Chem Ind* 53:268+ Ag '43

BARIUM hydroxide

Quantitative analysis of cotton-viscose rayon mixtures; adsorption of barium hydroxide. F. P. Greenspan and S. M. Edelstein. bibliog Am Dyestuff Rep 32:73-6, 98 F 15 '43; Same. Rayon 24:125-7, 188-90 Mr-Apr '43

BARIUM ores

See also

Barite**BARIUM oxide**

Thermionic emission from an oxide-coated cathode. H. Y. Fan. bibliog diags J Ap Phys 14:552-60 O '43

Analysis

Determination of active oxygen in the presence of barium and lead. M. Fleischer. Ind & Eng Chem Anal ed 15:31-2 Ja 15 '43

BARIUM sulfate

Agar-agar as a coagulant for barium sulfate. E. J. Bogan and H. V. Moyer. bibliog Ind & Eng Chem Anal ed 14:849-50 N 15 '42

Barium and strontium sulfate decomposition in aqueous solution. R. N. Shreve and H. F. Wiegandt. bibliog Ind & Eng Chem 35: 608-13 My '43

Coprecipitation of chromate with barium sulfate. W. B. Meldrum, W. E. Cadbury, Jr. and C. E. Bricker. bibliog Ind & Eng Chem Anal ed 15:560-2 S 15 '43

Measurement of the activity of radiosulfur in barium sulfate. R. H. Hendricks and others. bibliog diags J Phys Chem 47:469-73 O '43

See also

Barite**BARK**

Pulps from pine and spruce barks; abstract. A. V. Wacek and A. Schön. Paper Ind 25: 322 Je '43

BARK beetles

Estimation of forest insect damage; with particular reference to dendroctonus piceaperda Hopk. R. E. Balch. bibliog Pulp & Pa of Can 43:900-6; Comments. S. A. Graham. 906 N '42

BARK peeling

Hydraulic-jet machine for removing bark from timber. D. K. MacBain. Engineering 156:175 Ag 27 '43

BARKER, Lewellys Franklin, 1867-1943

Sketch. W. T. Longcope. Science 98:316-18 O 8 '43

BARLEY

Utilisation of phosphatic open-hearth slag; the availability of phosphoric acid as measured by yield and phosphorus recovery in barley and clover. L. E. Wright, A. Leahey and R. C. Turner. Soc Chem Ind J 62:28-31 F '43

Statistics

Barley, 1938-1941. Survey of Cur Business 1942 Sup p118 [supplemented in monthly numbers]

Barley production, Chile. For Comm W 10:26 Mr 13 '43

BARNs and stables

Action expected on the farm front; wartime dairy barn. il diags plans Am Bld 65:42-3-Ag '43

Farm market, structures in demand. diags plans Am Bld 65:52-3+ Je '43

Glass block barn. il Sheet Metal Worker 34:44 Jl '43

How to brace rafters for barns of three different heights. diags Am Bld 65:54 Ag '43

Immediate farm job: rebuilding old barns. il diags Am Bld 65:50-1 Ja '43

Pole and rafter barn. il Am Bld 65:53 S '43

Short cut estimating methods; how to figure barn roofing. H. F. Lotz. il Am Bld 65:62+ Mr '43

Walk-through type barn and milk house. il diag plan Am Bld 65:51 F '43

Heating and ventilation

Farm building ventilation. diag plan Am Bld 65:56 May '43

BARNSDALL oil company

Assets underground. H. Lawrence. Barron's 22:13 N 30 '42

BAROGRAPH

Calibration of the electromagnetic micro-barograph. E. L. Sulkowski. bibliog il diags Franklin Inst J 235:239-58 Mr '43

BAROMETERS

Altimeter setting indicator; special form of aneroid barometer. C. H. Colvin. il J Aeronautical Sci 10:250-2 O '43

Simple and accurate formula for barometric corrections. L. Cintra do Prado. bibliog R Sci Instr 14:221-2 Jl '43

Tercentenary commemoration of the invention of the barometer, 1643-1943. Science 98:402-3 N 5 '43

See also

Barograph**BARRACKS**

Clay products cut building time by two weeks on WAAC barracks at Des Moines. il Brick & Clay Rec 101:19-20 N '42

Military huts and structures at American installations in Britain. W. G. Bowman. il diags Eng N 131:608-15 O 21 '43

Naval training station barracks; flat roofs, long ribbon windows and straight-line plans. il diag plan Arch Forum 79:50-1 S '43

One-a-day barracks for service men; San Francisco's civic center. il Dom Eng 162: 554-O '43

Prefabricated barracks assembled in 90 minutes. il Manuf Rec 112:31+ Ja '43

63-man barracks built in a day. il Am Bld 64:36-7+ N '42

Steel and plywood huts house fighters. il diag Am Bld 65:49+ Jl '43

Structural tile barracks for the WAACS. il Eng N 129:838-40 D 17 '42

See also

Military training camps

Heating and ventilation

Fuel and heating program at army cantonments. L. C. McCabe. il Heating-Piping 15: 228-30 My '43

Unusual heating and ventilating problem; grandstand in Toronto exhibition grounds converted to barracks and recreation building for Canadian air force. il diag Engineer 175:354-5 Ap 30 '43

BARRAGE balloons. See Balloons, Military**BARRAGES. See Dams****BARRE. See Rayon fabrics—Defects****BARRELS**

Bridge floats on barrels at Brookfield, Vermont. A. D. Bishop. il Roads & Sts 86: 53-4 Ag '43

Demand for wooden barrels. Chem Ind 53: 367 S '43

How much is a barrel? W. F. Schaphorst. Heat & Ven 39:27 D '42

Too few barrels. Business Week p39-40 O 23: '43

Wooden barrel buoys prove superior. Franklin Inst J 236:328-9 S '43

BARRELS, Steel**Statistics**

Steel barrel and drum statistics for first quarter, 1941, 1942, 1943. Chem Ind 52:754 Je '43

Steel barrels and drums, heavy types, 1938-1941. Survey of Cur Business 1942 Sup p140 [supplemented in monthly numbers]

BARROWS, Albert Lloyd, 1883-1942

Appreciation. I. Bowman. Science 97:346-7 Ap 16 '43

BARS and bar rooms

Service restaurant and bar. il plan Arch Rec 94:80-1 Ag '43

BARTER

Barter superseding money in China. For Comm W 12:17 S 25 '43

Farmers swap electrical equipment. Elec W 119:2010 Je 12 '43

Germans resort increasingly to barter. For Comm W 12:18 S 25 '43

Supply swappers; electrical contractors in Chicago exchange needed items. Business Week p66 D 12 '42

BARTON, F. Sherbrooke, 1895-

Sketch. por Inst Radio Eng Proc 31:591 N '43

- BARUCH, Bernard Mannes, 1870-**
Baruch would like to see much more drastic taxes and civilian standardization. E. Blair. *Barron's* 23:4 Je 7 '43
- BARYLAMBD**
Barylambda; restoration of heavily built, extinct mammal. B. Patterson. *il Sci Am* 168:76 F '43
- BARYTES.** See Barite
- BASALT**
Use of wetting agents in reducing dust produced by wet drilling in basalt. J. A. Johnson. U S Bur Mines Rep of Invest 3678:1-27 '43
- BASCULE bridges.** See Bridges, Bascule
- BASE exchanging compounds**
Amberlites; new synthetic ion exchange resins. Water Works & Sewerage 90:266 JI '43
Cation and anion interchange with zinc montmorillonite clays. M. M. Elgabaly and H. Jenny. *bibliog J Phys Chem* 47:399-408 My '43
Cation-exchange water softening rates. J. du Domaine, R. L. Swain and O. A. Hougen. flow chart *il Ind & Eng Chem* 35:546-53 My '43
Deminerlizing industrial water and process liquors. E. Nordell. *il Chem & Met Eng* 50:112-15 O '43
Deminerlizing solutions by a two-step ion exchange process. H. L. Tiger and S. Sussman. *bibliog diags Ind & Eng Chem* 35:186-92 F '43
Equilibria in a carbonaceous cation exchanger. H. F. Walton. *bibliog J Phys Chem* 47:371-82 My '43
Fractionation of the rare earths by zeolite action. R. G. Russell and D. W. Pearce. *Am Chem Soc J* 65:595-600 Ap '43
Ion-exchange resins; abstract. R. J. Myers. *Chem & Met Eng* 50:148-50 Ja '43
Ion exchange resins; new tools for process industries. F. J. Myers. *bibliog flow sheet il Ind & Eng Chem* 35:858-63 Ag '43
Pure water without heat; costs of purifying water by stills and by regenerative exchange filters using resins in a food and beverage plant. A. A. Fette. *Power Pl Eng* 47:118- My '43
Tentative manual of zeolite test procedures (ion-exchange materials; cation exchangers operating on the sodium cycle). *il diags Am Water Works Assn J* 35:721-50 Je '43
Tests of modern base-exchange materials in practice; abstract. K. Hofer. *Am Water Works Assn J* 35:520 Ap '43
Water purification by the ion-exchange method. O. K. Smith. *diags Pet Eng* 14:57-60 S '43
- BASEMENTS**
Basement waterproofing; time-saver standards. *diags Arch Rec* 93:79-82 My '43
- BASES (chemistry)**
Acids and bases; a critical reevaluation. R. Ginell. *J Chem Educ* 20:250-2 My '43
Basicity studies of tertiary vinyl amines. R. Adams and J. E. Mahan. *bibliog Am Chem Soc J* 64:2588-93 N '42
Modern theories of acids and bases. H. I. Stonehill. *bibliog Soc Dyers & Col J* 59:171-6 Ag '43
Structure of monocrotaline; structure of retronecine and related bases. R. Adams, M. Carmack and J. E. Mahan. *bibliog Am Chem Soc J* 64:2593-7 N '42
Teaching the electronic theory of acids and bases in the general chemistry course. W. F. Luder, W. S. McGuire and S. Zuffanti. *bibliog J Chem Educ* 20:344-7 JI '43
See also
Alkaloids Schiff bases
Amines Volumetric analysis
Nitrogen compounds
- BASIC English**
Basis of Basic English. H. H. Smith. *Ptr Ink* 205:26 O 15 '43
How current ads would read in Basic English. P. H. Erbes, Jr, tr. *Ptr Ink* 204:22-3 S 24 '43
Should copy be Basic English? E. S. Green. *Ptr Ink* 204:21-2 S 24 '43
Will Basic English make the grade in advertising? W. Weir. *Adv & Sell* 36:23- N '43
- BASIC magnesium, inc.**
New deal for Basic Magnesium. *Min & Met* 24:2-3 Ja '43
Why and how of Basic Magnesium. R. H. Ramsey. *il Eng & Min J* 144:61-7 O '43; Same abr. *Chem & Met Eng* 50:98-101- O '43
- BASSET process.** See Iron metallurgy—Basset process
- BAST fibers**
Bast fibers. H. D. Salins. *Rayon* 24:356-7, 427-8, 494-5, 547-8 JI-O '43 (to be cont)
See also
Flax Jute
Hemp Ramie
- BATHOLITHS**
Wallowa batholith. K. B. Krauskopf. *maps Am J Sci* 241:607-28 O '43
- BATHROOMS**
Prefabricated bathroom unit being considered for use by NHA; diagrams. *Arch Forum* 78:34 Mr '43
- BATHS, Public**
Public baths scheme; electric conversion. *il diag Elec R (Lond)* 132:541-4 Ap 23 '43
- BATH TUBS**
Bath tub battle. *Arch Forum* 79:46 S '43
- BATH TUBS, Concrete**
Casting white concrete bath tubs; Olympian cast stone co. *il Rock Prod* 46:82- O '43
Concrete replacing cast iron; bathtubs, man-hole covers, and traffic buttons; Otto Buehner & company. R. S. Torgerson. *il Rock Prod* 45:103-4 D '42
2,000 concrete bath tubs made for a Utah housing project. O. Buehner. *il Am Concrete Inst J* 14:452-4 Ap '43
- BATT, William Loren, 1885-**
Portrait. *Business Week* p42 JI 31 '43
- BATTELLE memorial institute, Columbus, Ohio**
Battelle receives Bituminous coal research commission to study war fuel problems. *Coal Age* 48:48 Ja '43
- BATTLES ***
See also
Naval battles
- BATTLESHIPS.** See Warships
- BATYL alcohol**
Batyl alcohol. N. Kornblum and H. N. Holmes. *bibliog Am Chem Soc J* 64:3045-6 D '42
- BAUME scale**
Baumé-dry substance tables for starch suspensions. J. E. Cleland, E. E. Fauser and W. R. Fetzner. *diags Ind & Eng Chem Anal* 15:334-6 My 15 '43
- BAUSCH and Lomb optical company**
High court to act on informer suit. *Comm & Fin Chr* 157:1938 My 24 '43
- BAUXITE**
Brazilian bauxite for sugar refining; abstract. F. J. Maffei. *Chem & Met Eng* 50:191 Mr '43
New data on activated bauxite desiccants. R. G. Capell, R. C. Amero and J. W. Moore. *bibliog diags Chem & Met Eng* 50:107-10 JI '43
Production of alumina from low-grade domestic materials; work in Bureau of mines pilot plants. R. S. Dean. *il Min & Met* 24:356-9; Discussion (Work done by agencies other than the Bureau of mines in treatment of low-grade aluminum ore). P. D. Wilson. 359-61 Ag '43
- BAYLEY, William Shirley, 1861-1943**
Sketch. M. M. Leighton. *Science* 98:145-6 Ag 13 '43
Sketch. C. S. Ross. *Econ Geol* 38:263-4 My '43
- BAYONET clips**
Welded bayonet clips replace forgings. *il diag Iron Age* 152:52 S 9 '43
- BAYONETS**
Manufacture of bayonets. J. B. Nealey. *il diag Iron Age* 151:62-6 Mr 4 '43
Navy training bayonet. *il Mod Plastics* 21:70-1+ S '43
- BAYUK cigars, incorporated**
Bayuk's profit margin declines. *Barron's* 23:3 Mr 1 '43

BAZOOKA

Famed bazooka described, in part; army's new rocket gun. *Il Iron Age* 152:104 S 23 '43

Rocket, oldest yet newest weapon of war; details of the army's famous bazooka. A. F. Macconochie. *Il diags Steel* 113:176-8+ O 11 '43

Rockets versus tanks; bazooka that fires a rocket projectile. *Fortune* 27:92 Je '43

BEACH houses

Beach house, Carmel, California; views, plans, and construction outline. *Arch Forum* 79:64-5 J1 '43

BEACHES

Waves as a sand-transporting agent. U. S. Grant. *Am J Sci* 241:117-23 F '43

BEAMS

Analysis of stresses in simple and continuous beams and girders. H. L. Wagner. *Il diags Roads & Bridges* 81:19-23+ Je '43

Application of Maclaurin series to beams under simultaneous transverse and axial loading. A. G. Strandhagen. *J Aeronautical Sci* 9:529-32 D '42

Applications of the operational calculus to the theory of structures. L. A. Pipes. *J Ap Phys* 14:486-95 S '43

Arc-welded T-beams for use in residences. E. J. Slygh. *Il diags W Soc E J* 48:59-67 Je '43

Beams of glued 1-in. boards carry railroad line to war project. *Il Eng N* 130:287 F 25 '43

Built-up beams substituted for heavy timbers. *diag Eng N* 130:504 Ap 8 '43

Chart for selecting safe wooden beams. W. F. Schaphorst. *Chem Ind* 52:212 F '43

Determination of moments in continuous beams with concentrated loads. O. Albert. *Civil Eng* 13:545-6 N '43

Fatigue tests of light weight aggregate concrete beams. H. A. Williams. *Il Am Concrete Inst J* 14:441-7 Ap '43

Glued laminated beams carry test load of 502,410 lb. *Il Eng N* 130:810 Je 3 '43

How to analyze continuous beams for combined dead and live loading; Hardy Cross method. J. Zalkin. *diags Eng N* 130:486-9 Ap 8 '43

How to figure beams. P. Swain. *diags Power* 86:513, 588, 668, 746, 826, 904 J1-D '42

Moment distribution factors for tapered beams. H. B. Alvord and V. C. Trimarchi. *Aeronautical Eng R* 2:7, 9 Ja '43

Numerical procedure for computing deflections, moments, and buckling loads. N. M. Newmark. *bibliog diags Am Soc C E Proc* 68:691-718 My '42; Discussion, 68:783-7; 69: 153-62, 427-30 My '42, Ja, Mr '43

Oregon tests on composite (timber-concrete) beams. C. B. McCullough. *Il diags Am Concrete Inst J* 14:429-40 Ap '43

Plasticity ratio of concrete and its effect on the ultimate strength of beams. V. P. Jensen. *bibliog diags Am Concrete Inst J* 14:565-82 Je '43; Discussion, *bibliog* 14:sup 584:584²⁸ N '43

Precast units cut cost and time on seaplane ramps. *diags Eng N* 130:306-9 F 25 '43

Rational analysis of tension-field beams. H. W. Sibert. *diags J Aeronautical Sci* 9:510-14 N '42

Safe beam loading for aluminum tubes. M. Holt. *Il Product Eng* 14:36-7 Ja '43

Simple trussed beams. J. J. O'Donovan. *Engineering* 156:303 O 15 '43

Simplified equations for concrete beams. J. F. P. Tate. *diag Eng N* 131:388-9 S 9 '43; Discussion, 131:584-5, 735 O 21, N 18 '43

Some secondary stresses in thin-walled box beams. E. Reissner. *diags J Aeronautical Sci* 9:538-42 D '42

Strength of slender beams. G. Winter. *diags Am Soc C E Proc* 69:317-45 *bibliog* (p843) Je '43; Discussion, *bibliog* 69:1094-6, 1634-6 S, D '43

Supporting continuous beams. A. R. Cox. *diags Machine Design* 15:101-3 S '43

Tests of composite timber and concrete beams. F. E. Richart and C. E. Williams, Jr. *Il diags Ill U Eng Exp Sta Bul* 343:1-60 *bibliog* (p58-60) '43 (pa 70c); Same cond. *diags Am Concrete Inst J* 14:253-76 F '43

Theoretical and experimental investigations of thin-webbed plate-girder beams. H. L. Langhaar. *bibliog A S M E Trans* 65:799-802 O '43

See also

Airplane wings
Girders

BEANS

Bean and pea production, Cuba. *For Comm W* 12:33-4 S 4 '43

Bean and pea situation in Spain. *For Comm W* 10:22 Ja 16 '43

Bean famine; New Mexico's protests ease ration grip on frijoles. *Business Week* p22 Ap 3 '43

Bean production in Mexico, 1937-1942. *For Comm W* 10:24 Ja 9 '43

Ether soluble fraction of navy beans and the digestion of starch; retarding influence of bean oil. D. E. Bowman. *Science* 98: 308-9 O 1 '43

Turkey's 1942 bean crop. *For Comm W* 9: 28-9 D 12 '42

See also

Lima beans
Soybeans
Yam beans

BEANS, Dried

Army specifications for dehydrated foods; baked beans. *Food Ind* 15:126-7 F '43

Beans or peas? WFA backs peas. *Business Week* p78+ O 16 '43

Financing bean dealers. *Banking* 36:12+ N '43

BEANS, Frozen

Brief summaries of grade standards. *Food Ind* 15:80 F '43

How to cook food for quick freezing; flavor and vitamin retention in pork and beans. *Food Ind* 15:69+ O '43

Spending your ration points on frozen vegetables; lima beans, peas, broccoli, and snap beans. *Il Consumers' Research Bul* 11:5-8 My '43

BEAR Lake valley

Thaynes formation, Bear Lake valley, Idaho. B. Kummel, Jr. *bibliog diags map Am J Sci* 241:316-32 My '43

BEARING metals

Bearing metal (whitebase antifriction), 1938-1941. Survey of Cur Business 1942 Sup p144 [supplemented in monthly numbers]

Bearings and bearing corrosion. L. Raymond. *bibliog Il diag S A E J* 50:533-7 D '42; Same, without bibliog. *Automobile Eng* 33: 369-72 S '43

Behavior of lead bearing alloys; abstract. E. Schmid and R. Weber. *Metals & Alloys* 18:908 O '43

Corrosion of lead-indium diffusion alloys. J. M. Freund, H. B. Linford and F. W. Schutz. *diags Electrochem Soc Trans* 84 (preprint 7):61-5 O '43

Indium surface-alloys resist corrosion and wear. *Il Product Eng* 14:630-2 O '43

Lubrication by thin metallic films and the action of bearing metals. F. P. Bowden and D. Tabor. *Il J Ap Phys* 14:141-51 Mr '43

Metal-powdering furnace; reclamation of bearing metals; abstract. J. N. Bradley and H. O'Neill. *Elec R (Lond)* 132:124 Ja 22 '43

Oil engine bearings; various materials for main and connecting-rod big-ends. A. B. Willi. *bibliog Il diags Automobile Eng* 32: 535-42 D '42

Substitute alloys for bearings may save tons of tin, Battelle reports. *Steel* 112:71 Mr 1 '43

Substitute for 90 Cu, 10 Sn bearings; for Bofors anti-aircraft gun; abstracts. M. F. Garwood and E. H. Stilwell. *Metal Prog* 43: 396 Mr '43; *Automotive & Aviation Ind* 83:13-19 F 1 '43

Substitutes for leaded bearing bronze. R. W. Dayton, H. W. Gillett and L. E. Balch. *bibliog Metals & Alloys* 16:1072-9 D '42

Tin substitutes prove satisfactory in bronzes. J. F. Felly and J. Worth. *Steel* 112:81 My 31 '43

See also

Babbitt metal
Ball bearings
Bearings

BEARING metals—Continued

Analysis

- Determination of small amounts of tellurium in high-lead and tin-base alloys. R. A. Schaefer, *bibliog Ind & Eng Chem Anal ed* 15:379 J 15 '43
- Determination of tin in babbitts, white metal alloys, and bronze. E. T. Saxer and R. E. Minto, *Ind & Eng Chem Anal ed* 15:261-2 Ap '43
- Dichromate-ferrous sulfate method for antimony. R. B. Neill, *Ind & Eng Chem Anal ed* 14:955 D 15 '42

Testing

- Bearing materials; systematic tests on the suitability of various alloys; abstract. *Automobile Eng* 33:404 O '43
- Corrosion of bearing alloys. L. M. Tichvinsky, *bibliog il diags S A E J* 51:69-76 Mr '43; *Abstract. Automotive & Aviation Ind* 88:24 Ap 1 '43
- BEARING surfaces**
- Bearing and tool damage by galling. E. L. Hemingway, *il Iron Age* 152:54-60 J 15 '43
- Chilling prevents bearing surface damage. *il Iron Age* 150:68 D 3 '42
- Diffusion in indium plating; abstract. A. A. Smith, Jr. *Iron Age* 152:68 O 28 '43
- Physical basis of seizure. E. A. Smith, *Engineering* 154:481-2 D 18 '42
- Role of surface chemistry and profile in boundary lubrication. J. T. Burwell, *S A E J* 50:450-7 O '42; *Abstract. Metal Prog* 43:582+ Ap '43
- Surface finish of journals. R. W. Dayton, H. R. Nelson and L. H. Milligan, *bibliog il diags Mech Eng* 64:718-26 O '42; *Discussion. 65:367-72 My '43*

BEARINGS

- Alternative bearings for mobile storage units. R. S. Weatherley, *il Mech Handling* 30:387-8 S '43
- Bearing design as affected by lubrication theory. A. H. Korn, *diags Machine Design* 15:77-9 Ja '43
- Bearings in kiln construction. *Mech Handling* 29:215 N '42
- Bearings pitted by ground alarm surges. T. M. Blakeslee, *diags Elec W* 119:81-2 Ja 9 '43
- Close-quarter filing of bearing spools; propeller drive shafts. N. C. Elza, *diags Am Mach* 87:91 Ap 29 '43
- Design of self-cooled journal bearings. M. F. Spotts, *diags charts Product Eng* 14:231-3, 253-4, 307-12 Ap-My '43; *Discussion. 14:456-7 J 1 '43*
- Design of sleeve bearings by hydro-dynamic theory. H. W. Hamm, *bibliog diags Product Eng* 14:422-4, 464-6 J 1 '43
- Fixing bearings in steel shells without using tin. W. Coopey, *Metal Prog* 43:75 Ja '43
- How to get the lubricant to the bearing. G. A. Van Brunt, *il diags plan Factory Management* 101:[insert]76b Ap '43
- New ball mill support reduces bearing friction; slide shoe bearings developed and patented by Michael Treshow. S. Kock-Petersen, *il Eng & Min J* 144:81-2 O '43
- Oil-retaining bearings; some uses for porous bronze. *diag Chem Age (Lond)* 48:161-2 Ja 30 '43
- Powder metals find wide use. *il Am Mach* 87:83-6 J 24 '43
- Selecting bearings; abstract. C. R. Underhill, *Metals & Alloys* 17:182+ Ja '43
- Wartime developments in powdered metal parts. *il diags Product Eng* 14:472-5 Ag '43

See also

- | | |
|---------------------------------|----------------------------|
| Babbitt metal | Lubrication and lubricants |
| Babbitting | Roller bearings |
| Ball bearings | Thrust bearings |
| Bearing metals | |
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| also subdivision subjects, e.g. | Bearings under special |
| Airplane engines— | Cars—Bearings |
| Bearings | Motor truck engines |
| Airplanes— | —Bearings |
| Automobile engines— | |
| Bearings | |

Manufacture

- Kolene metal cleaning and tinning process for bearings; bonding high-lead babbitt to cast iron and to steel. *il diag Automotive & Aviation Ind* 89:40+ S 15 '43
- Metal time-saver; briquetting and sintering of ferrous powders and alloys. *Business Week* p55-6 J 26 '43

Temperature

- Studies in lubrication; temperature behavior of journal bearing systems. M. Muskat and F. Morgan, *diag J Ap Phys* 14:234-44 My '43

Testing

- Air-O-Limit bearing gage checks inside diameters for errors in straightness, roundness and size. *il Am Mach* 87:145 O 14 '43
- Bearing inspection without contact; silver-plated and lead-indium plated bearings checked by Air-O-Limit and Electrolimit gages. *il diags Am Mach* 87:86-9 Ag 19 '43
- Bearings and bearing corrosion. L. Raymond, *bibliog il diags S A E J* 50:533-7 D '42; *Same, without bibliog. Automobile Eng* 33:369-72 S '43
- Surface finish of journals. R. W. Dayton, H. R. Nelson and L. H. Milligan, *bibliog il diags Mech Eng* 64:718-26 O '42; *Discussion. 65:367-72 My '43*
- BEARINGS, Anti-friction**
- Antifriction-bearing developments for aviation engines. T. Barish, *il diags A S M E Trans* 65:261-6 My '43; *Same cond. Machine Design* 15:72-3+ Ja '43; *Abstract. Automotive & Aviation Ind* 88:39-40 Ja 1 '43
- How to remove anti-friction bearings; illustrated instructions. *Power* 87:54-5 Ja '43

- See also
Ball bearings
Roller bearings

Advertising

- How offer proved industrial house magazine is being read; SKF industries gets 13% response. R. A. Sholl, Jr. *il Ptr Ink* 205:21+ O 8 '43

BEARINGS, Ball. See Ball bearings

BEARINGS, Jewel

- Cleans jewels safely with tetrachloride; use of exhaust system and air blast. *Elec W* 119:484 F 6 '43
- Glass jewels speed instrument manufacture; abstract. R. H. Oppermann, *Franklin Inst J* 235:436-7 Ap '43
- Instrument pivots and bearings. M. F. Behar, *il diags Instruments* 16:262, 264, 266+, 340+ My-Je '43
- Machine repolishes worn meter jewels. *Elec W* 119:1148 Ap 3 '43
- New glass jewels speed instrument manufacture. *Cer Ind* 41:36 J 1 '43
- Restoring meter jewels to service. H. C. Rankin, *Elec W* 119:990+ Mr 20 '43
- Synthetic sapphire for war precision instruments. *Science* 98:sup10+ O 29 '43
- Synthetic sapphire production reaches commercial scale in U.S. *il Product Eng* 14:668-70 O '43

BEARINGS, Non-metallic

- Bearings of laminated phenolic materials. *Automotive & Aviation Ind* 88:45+ Ap 1 '43
- Composition bearing applications in industry. J. A. Petho and F. W. Vogt, *diags Paper Tr J* 115:31-5 D 24 '42; *Excerpts. Paper Ind* 24:1158-60 F '43
- High duty bearings made of synthetic pressed resins; abstract. E. Gilbert and K. Lurenbaum, *Roy Aeronautical Soc J* 46:sup412-13 N '42
- Micarta bearings employed for propeller shafts. *Mach* 49:197 Ap '43
- Non-metallic bearings; abstract. G. E. Reiser, *Iron Age* 152:70-1 O 7 '43
- Phenolic materials for wartime demands; bearings. F. W. Vogt, *diags Paper Tr J* 117:28-30 J 1 '43; *Same cond. Paper Ind* 25:662+ S '43
- Plastic bearings; abstract. H. Frank, *Metals & Alloys* 18:376 Ag '43
- Plastic bearings; Micarta. *il Chem & Eng N* 21:560 Ap 25 '43

BEARINGS, Non-metallic—Continued

Ryertex design improves resin bonded marine bearings. *il* diags Marine Eng 48:222, 224 O '43; Mod Plastics 21:78-9 N '43
 Synthetic bearings from pressed resins. E. Gilbert and K. Lurenbaum. *Automobile Eng* 32:477 N '42

See also

Bearings, Jewel

BEARINGS, Roller. *See* Roller bearings

BEARINGS, Thrust. *See* Thrust bearings

BEATRICE creamery company

Preferred stock offered. *Comm & Fin Chr* 158:82 J1 5 '43

BEATTY, Sir Edward, 1877-1943

Sketch. *por Ry Age* 114:627 Mr 27 '43

BEAUTY shops

Beauty shop grief; steadily shrinking supply of operators, etc. *Business Week* p57+ N 21 '42

BECHTEL, Stephen D.

Earth movers. *pos Fortune* 28:98-107+ Ag '43

BECHTEL, W. A., company

Earth movers. *il Fortune* 28:138-44+ O '43

BECKET, Frederick Mark, 1875-1942

Appreciation. J. H. Critchett. *por Eng & Min J* 144:73+ Ja '43
 Sketch; appreciation by A. B. Kinzel. *por Min & Met* 24:43 Ja '43

BECKLEY, West Virginia

Water supply

First year of operation of Beckley's new water supply. E. E. Chandler. *il Water Works & Sewerage* 90:158-60 My '43
 New water supply of Beckley; with cost data. W. D. Kelley. *il Water Works & Sewerage* 90:153-8 My '43

BECKMAN, Arnold Orville, 1900-

Sketch. *por Chem & Eng N* 21:1716 O 25 '43

BEDBUGS

Bedbugs and their practical control. M. H. Doner and E. G. Thomssen. *Soap & San Chem* 19:109-11+ Je '43

BEDDING

See also

Blankets
 Mattresses
 Sheets

BEDFORD pulp and paper company

Bonds offered. *Comm & Fin Chr* 157:6-7 Ja 4 '43

BEDROOMS

For more useful bedroom space. *il plans Arch Rec* 92:63 N '42

BEDS

Welding metal bed springs. E. H. Atkinson. *diags Welding J* 22:239-41 Ap '43

BEECH

Hemicellulose content and strength properties; beechwood pulps; abstract. G. Jayme and E. Lochmuller-Kerler. *Paper Ind* 25: 812-13 O '43

Properties of beechwood pulp and wood anatomy; abstract. G. A. Kienitz and W. Klauditz. *Paper Ind* 24:886 N '42

BEEF

Cuban beef industry. *For Comm W* 12:7+ Ag 14 '43

Digestion of beef by papain; abstract. G. Y. Gottschall and M. W. Kles. *Food Ind* 15: 107-8 Ja '43

Our meat supply. S. Bull. *il Consumers' Research Bul* 12:16-17 N '43

Vitamin A potency of yellow beef fat and beef liver. B. W. Gardner, jr. *Consumers' Research Bul* 12:16 Ag '43

Prices

Peg beef prices. *Business Week* p70 D 19 '42

BEEF, Dried

Dried meat; the water relations of air-dried, pre-cooked beef and pork. R. Gane. *Soc Chem Ind J* 62:139-40 S '43

BEER

Beer industry finding new markets. W. Alwyn-Schmidt. *Barron's* 23:3 O 4 '43

Demand for beer rising as breweries anticipate 10% drop in sales. *Ptr Ink* 204:72+ Ag 13 '43

Filtration and beer clarification, some technical aspects; abstract. F. L. Horine. *Food Ind* 15:120-1 Ap '43

New beer disease organisms. A. J. C. Cosbie. *Chem & Ind* 62:30-1 Ja 23 '43

3.2 beer again? *Business Week* p27-9 Ag 7 '43

See also

Brewing industries

Analysis

Determination of sulfur dioxide in beer; a modification of Monier-Williams method. B. H. Nissen and R. B. Petersen. *Ind & Eng Chem Anal ed* 15:129-30 F 15 '43

BEES

Biological crisis; millions of bees died as result of hard winter. *Business Week* p72+ Je 19 '43

BEESSWAX

French West Africa's exports of beeswax, 1936-1939. *For Comm W* 9:23 N 14 '42

BEETS and beet sugar

Beet sugar outlook. *Barron's* 23:8 My 24 '43

Differential inhibition between normal and tumor (crown gall) tissue in beet roots. M. Michaelis, I. Levi and H. Hibbert. *Science* 98:89-90 J1 23 '43

1943 production of beet sugar. F. Thone. *Science* 97:sup10+ My 14 '43

Still unsweetened; growers of sugar beets cut acreage. *Business Week* p62+ N 6 '43

Sugar, a chemically-pure food; production of beet sugar. R. H. Cottrell. *il Sci Am* 169:9-11 J1 '43

Sugar-beet cultivation expanded in Alberta, Canada. *For Comm W* 9:30 D 5 '42

Sugar for 1944; beet growers and refiners cooperate to get larger plantings. *Business Week* p70 J1 24 '43

Sugar industry in wartime; a few lessons from events in Europe during 1914-24. C. A. Browne. *bibliog il Chem & Eng N C*: 1243-8 Ag 10 '43

To aid sugar beet growers. *Comm & Fin Chr* 157:755 F 25 '43

Trouble in sugar. *Business Week* p56+ Ap 24 '43

By-products

See also

Glutamic acid

BEILSTEIN, Friedrich Konrad, 1838-1906

Reprints of Beilstein's Handbook and of Chemical abstracts. B. Soule. *Science* 96: 532-3 D 11 '42

BELÉM (Para), Brazil

War comes to Belém. *il Business Week* p19-20+ N 21 '42

BELFAST, Ireland

Railroads

Railway air-raid damage. *il Engineering* 154: 507, 510 D 25 '42

BELGIAN CONGO. *See* Congo, Belgian

BELGIUM

German occupation

Belgium under the Wehrmacht. *Economist* 144:554-5 My 1 '43

BELL, Elliott V.

Named NY bank superintendent. *Comm & Fin Chr* 156:2327 D 31 '42

BELL Airacobra. *See* Airplanes, Military—Design

BELL aircraft corporation

Aeronautical progress. R. P. Whitman. *Aeronautical Eng R* 1:41 N '42

Three new divisions of Bell aircraft corp. *Automotive & Aviation Ind* 89:45 J1 1 '43

BELL system technical journal

Tables of contents and cumulative index, volumes XI-XX, 1932-1941. 48p Am. telephone and telegraph co, 195 Broadway, New York

BELL telephone company of Canada

Earnings, 1939-1942. *Comm & Fin Chr* 157: 987 Mr 15 '43

BELL telephone company of Pennsylvania

Earnings, 1941 and 1942. *Comm & Fin Chr* 157:778 Mr 1 '43

\$35,000,000 bonds placed privately. *Comm & Fin Chr* 156:2095 D 14 '42

BELL telephone laboratories

- Bell Telephone's rubber research laboratory. F. S. Malm. *il Rubber Age* 52:495-8 Mr '43;
Same. *India Rubber W* 108:255-6+ Je '43
New Murray Hill laboratory of Bell telephone laboratories. F. L. Hunt. *il diags J Ap Phys* 14:249-57 Je '43
Piping services at the new Bell telephone laboratory. F. L. Hunt. *il diag Heating-Piping* 15:217-19 My '43

BELL telephone system

- Bell System goes to war. *Pub Util* 31:178-80 F 4 '43
Bell System post-war construction and financing. *Comm & Fin Chr* 157:1236 Ap 5 '43

BELLADONNA

- Belladonna cultivation data. A. Laurie and E. N. Stillings. *Oil Paint & Drug Rep* 143: 3+ Mr 22 '43
Belladonna cultivation largely Penick project. *Oil Paint & Drug Rep* 142:3+ D 23 '42
Belladonna produced in U.S. provides adequate 1943 supply. *Oil Paint & Drug Rep* 142:7+ D 14 '42
Home-grown drug. *Business Week* p62+ Ap 24 '43
Supply of belladonna. *Science* 96:sup 10+ D 18 '42

BELLANCA aircraft corporation

- Bellanca's coup. *Business Week* p107 Mr 20 '43
Ten years' progress. A. F. Haiduck. *il Aeronautical Eng R* 1:43 N '42

BELLEKE ware

- Production methods are compared for five chinases of the world. *Cer Ind* 41:70 N '43

BELLEVILLE, Ontario**Water supply**

- Filter-run difficulties. O. H. Scott. *il Water & Sewage* 81:37+ Ap '43

BELLMAWR, New Jersey

- Housing project, Bellmawr, N.J.; comments by the architects on planning the community. *il diag plans Arch Forum* 78:74-80 Ja '43

BELLOWS accelerometer. See Accelerometers**BELT conveyors. See Conveying machinery—Belt conveyors****BELTING**

- Belt and pulley accidents. *Nat Safety N* 46: 26-7 D '42
Belt life shortened by high tension. *Iron Age* 150:34 D 24 '42
Belt selection chart. W. F. Schaphorst. *Chem Ind* 52:615 My '43
Belt transmission chart. W. F. Schaphorst. *Chem Ind* 53:374 S '43
Care of leather belting. *il diag Rayon* 24:373-5 J1 '43
Cleaning textile mill belting. W. F. Schaphorst. *Am Dyestuff Rep* 32:450 O 11 '43
Consult the manufacturer to save belt dollars. R. B. Heller. *il Power* 87:186 Mr '43
Correct application assures uniform flat-belt service. R. B. Heller. *il Power* 86:898-9 D '42
Cutting belts for lacing. J. E. Hyler. *Am Mach* 86:1438-9 D 10 '42
Cylindrical grinding with a flat belt; development of special fixture. E. A. Hepner and H. J. Moskow. *il diags Am Mach* 87:86-7 O 28 '43
Data on belt loadings. *Power Pl Eng* 47:83 J1 '43
Extending life of multiple V-belt drives. *Pet Eng* 14:91 D '42
Fixing hosiery machines; circular machines. J. W. Hughes. *Textile World* 93:117 My '43
Flat belt drives as integral parts. C. Carmichael. *il diags Machine Design* 15:125-74 Ap '43
Flat belts for axle drives; maintenance methods. J. V. Dobbs; R. G. Cazanjan. *Ry Mech Eng* 117:434-6 S '43
For longer V-belt life. *Factory Management* 100:124 D '42
Frictional phenomena; technical applications of external friction of solids. A. Gemant. *diags J Ap Phys* 14:510-12 O '43
How to get the most out of belts. *il Factory Management* 101:113-20 F '43
How to keep belting free of oil corrosion. *Brick & Clay Rec* 102:36-7 Je '43

- How to make leather belts endless. J. R. Hopkins. *il diag Power Pl Eng* 46:77-8 D '42

- How to save rubber belting. *il Mod Packaging* 16:109-11+ D '42

- Larger sheaves increase V-belt capacity for war. *il Power* 87:306+ My '43

- Laying out the V-belt drive; Allis-Chalmers Econograph. G. A. Van Brunt. *Factory Management* 101:138-41 S '43

- Leather V-belts introduced. *il Iron Age* 152:40 J1 29 '43

- Life insurance for V-belts. *diags Ry Mech Eng* 117:235, 286-7 My-Je '43

- Longer life for belts. F. Merish. *il Textile World* 93:92 Ap '43

- Proper installation and care lengthen V-belt life. E. Sterrett. *il Pet Refiner* 22: 108-14 J1 '43

- Savings by belt service records. *Oil & Gas J* 42:57 Ag 5 '43

- Selection plan for V-belt drives conserves rubber; Texrope econograph. chart Heating-Piping 15:139-40 O '43

- Seven ways to make V-belts last longer. R. J. Enters. *il Power Pl Eng* 47:99 Je '43

- Spliced cotton belts; abstract. R. W. Mallick. *Iron Age* 151:63 Ap 1 '43

- That V-for-victory belt. *Eng & Min J* 144: 67-8 Ja '43

- V-belts applied on short-center quarter turn. *il Power* 87:190 Mr '43

See also

- Power transmission
Pulleys

Testing

- Test unit simulates shock loading; belt testing machines. C. O. Mitchell. *il Machine Design* 15:116-17 Ap '43

BELTING, Conveyor

- British wedge wire type CL wire belts. *il Mech Handling* 30:81-2 F '43

- Conveyor belting. J. Smellie. *diags Mech Handling* 30:14-19 Ja '43

- Handling rubber belts. E. H. Anderson. *Coal Age* 47:90+ N '42

- How to repair conveyor belts; illustrated instructions. *Power* 87:201 Mr '43

- Repairing a worn rubber belt; illustrated instructions. *Power Pl Eng* 47:99 O '43

- Stretch the life of rubber conveyor belts. W. C. Winings. *il diags Mech Handling* 30:248-50+ Je '43

BENDING

- Vise bends eye on strip stock. F. Haartly. *diags Am Mach* 87:100-1 Ag 5 '43

BENDING machines

- Contouring sheet metal. *il diags Sheet Metal Worker* 34:33-4 S '43

- Douglas tube bender speeds output. *il Iron Age* 151:54-7 Je 17 '43

- Wallace portable automatic bending machine. *il Mach* 50:190 S '43

See also

- Pipe bending

BENDING moment

- Symmetrically loaded base slab on an elastic foundation. S. U. Benscoter. *diags Am Soc C E Proc* 69:691-704 My '43; Discussion. 69:1125-32, 1503-4 S, N '43

- Weighing data as applied to structural analysis. J. C. Reams. *Aero Digest* 43:243, 245+ S '43

BENDING strength. See Strength of materials**BENDIX aviation corporation**

- Annual report. *Comm & Fin Chr* 157:599 F 15 '43

- Companies favored by research. *Mag of Wall St* 73:34 O 16 '43

- \$150,000,000 V loan announced; 60 banks will participate in revolving fund to finance war output. *Comm & Fin Chr* 157:778 Mr 1 '43

- Ten years' progress. C. Marcus. *Aeronautical Eng R* 1:105 N '42

BENEFIT societies

- Court concludes insurance is commerce; decision in Polish Alliance case. *Nat Underw* (Life ed) 47:7 Je 11 '43; *Nat Underw* 47: 6+ Je 10 '43

- Down to cases; waiver of prompt payment; accepting overdue premiums. L. A. Burke. *Spectator* (Life ed) 151:22-3 Ag '43

- Fraternal orders; business of 1942 and condition Dec. 31, 1942. *Weekly Underw* 148:99 sec 2 My 8 '43

BENEFIT societies—Continued

- Modern Woodmen is planning 60th year. Nat Underw (Life ed) 47:17-18 Ja 8 '43
- New York ruling; law construed in connection with burial services. Weekly Underw 149:156 JI 24 '43
- Office complexities due to war. W. C. Braden. Nat Underw (Life ed) 47:28 O 1 '43
- Polish Alliance appeals case to U.S. Supreme court. Nat Underw 47:4 Ag 12 '43; Same. Nat Underw (Life ed) 47:9 Ag 13 '43
- Polish Alliance case to high court. Nat Underw 47:1 Je 17 '43; Same. Nat Underw (Life ed) 47:1 Je 18 '43
- Tells fraternal to meet modern demands. A. N. Guertin. Nat Underw (Life ed) 47:6 Je 4 '43
- See also National fraternal congress of America

Taxation

- Fraternal societies subject to U.S. tax; change to mutual legal reserve life company. Ins Field (Life ed) 71:7 D 18 '42
- Supreme court won't hear appeal of Arizona benefit concern on income tax. Nat Underw (Life ed) 47:5 JI 2 '43
- Tax decision on employee group. Nat Underw (Life ed) 46:11 D 4 '42

BENEŠ, Eduard, 1884-

- Czech president concludes speeches in U.S. Comm & Fin Chr 157:2087 Je 3 '43

BENTON, William

- Portrait. Business Week p27 Ja 2 '43

BENTONITE

- Action of bentonite clay in stopping leaks in water-supply reservoirs. Il Water & Sewage 81:14-15 F '43
- Bentonite; abstract. A. L. Roberts. Chem & Ind 62:132-3 Ap 3 '43
- Bentonite as a coagulant for sewages and industrial wastes. H. L. Olin, R. J. Box and R. E. Whitson. Water Works & Sewerage 89:535-8 D '42
- Bentonite as plasticiser for moulding sands and bonding. Chem Age (Lond) 48:242 F 27 '43
- Maybe it's bentonite in your clay that makes it hard to handle. C. M. Furgason. bibliog Brick & Clay Rec 103:22-4+ S '43
- New effects due to anisotropy of colloidal particles. R. E. D. Clark. diags Chem & Ind 62:348-50 S 11 '43
- New methods for the purification of invertase and some properties of the resulting products. M. Adams and C. S. Hudson. bibliog Am Chem Soc J 65:1359-68 JI '43
- New uses for bentonite. For Comm W 10: 27 Mr 20 '43
- Plugging gas mains with bentonite. Il Gas Age 90:13-15 D 31 '42
- See also Montmorillonite

BENZALACETONE

- Action of aliphatic diazo compounds upon α,β -unsaturated ketones; benzalacetone and diazomethane. L. I. Smith and K. L. Howard. Am Chem Soc J 65:165-6 F '43
- α,β -Unsaturated aminoketones; reaction of piperidine and N-methylbenzylamine with bromine derivatives of benzalacetone and benzalacetophenone. N. H. Cromwell and I. H. Witt. Am Chem Soc J 65:308-12 Mr '43

BENZALCETOPHENONE. See Chalcone**BENZALDEHYDE**

- Conversion of an alcohol into the corresponding aldehyde by a less volatile aldehyde with the aluminum alkoxide as catalyst; the influence of an ethylene linkage in the reactant aldehyde. R. E. Davies and H. H. Hodgson. Soc Chem Ind J 62:109-10 JI '43
- Rates and temperature coefficients of the hydroxyl ion catalyzed aldol condensation of benzaldehyde with methyl ethyl ketone and acetone. J. D. Gettler and L. P. Hammett. bibliog Am Chem Soc J 65:1824-9 O '43

BENZAMIDES

- Study new synergists. S. I. Gertler, J. H. Fales and H. L. Haller. Soap & San Chem 19:111 My '43

BENZANTHRACENE

- Polymethylbenzoylnaphthoic acids. R. H. Martin. Chem Soc J p239-41 My '43

BENZANTHRONE

- Indeno-2'' : 3' : 2' : 1'-benzanthrone; tumour-inhibitory properties. G. Swain and A. R. Todd. Chem Soc J p626-8 O '42

BENZANTHRYLCARBAMIDO acetic acid

- Ultraviolet absorption spectra of protein solutions. R. N. Jones and H. J. Creech. bibliog Opt Soc Am J 33:209-18 Ap '43

BENZENE

- Analytical data for the systems carbon tetrachloride-acetic acid-benzene and carbon tetrachloride-tetrachloroethylene. W. R. McMillan and H. J. McDonald. Ind & Eng Chem Anal ed 15:114-16 F 15 '43
- Benzene from petroleum oils and natural gas. W. L. Nelson. Oil & Gas J 41:234 N 12 '42
- Catalytic alkylation of benzene with ethylene. W. A. Pardee and E. F. Dodge. bibliog flow diag Ind & Eng Chem 35:273-8 Mr '43; Same. Il Nat Pet N 35 pt 2:R180-4 Ap 7 '43
- Catalytic hydrogenation of benzene over metal catalysts. P. H. Emmett and N. Skau. bibliog Am Chem Soc J 65:1029-35 Je '43
- Condensation of amino alcohols with benzene. C. M. Suter and A. W. Ruddy. Am Chem Soc J 65:762-3 My '43
- Condensations by sodium; metalation of benzene, toluene and xylene; the orienting influence of sodium and the influence of alkyl groups on metalation. A. A. Morton, E. L. Little, jr. and W. O. Strong, jr. bibliog Am Chem Soc J 65:1339-46 JI '43
- Determination of high pressure vapor-liquid equilibria; the vapor-liquid equilibrium of benzene-toluene. J. Griswold, D. Andres and V. A. Klein. bibliog diags Am Inst Chem Eng Trans 39:223-40 Ap '43; Same. Fet Refiner 22:99-106 Je '43
- Effect of temperature on liquid-liquid equilibrium; benzene-acetone-water system and docosane-1,6-diphenylhexane-furfural system. S. W. Briggs and E. W. Comings. Il diags Ind & Eng Chem 35:411-17 Ap '43
- Electronic absorption spectra of benzene and its derivatives. A. L. Sklar. bibliog Il Rs Mod Phys 14:232-45 Ap-JI '42
- Electronic spectra and structure of organic molecules; ultraviolet absorption spectra of substituted benzenes. H. Sponer. Il Rs Mod Phys 14:224-31 Ap-JI '42
- Film formation by pure liquids. C. W. Foulk and J. E. Barclay. bibliog diag Ind & Eng Chem 35:1013-16 S '43
- Fluidity of mixtures which obey Bachinskii's law. F. Kottler. bibliog J Phys Chem 47: 277-93 Mr '43
- Friedel-Crafts reaction with cinnamic, crotonic, and β -chlorocrotonic acids. C. F. Koelsch, H. Hochmann and C. D. Le Claire. Am Chem Soc J 65:59-60 Ja '43
- Influence of addenda on the inversion of l-menthone with acids in benzene; the effect of solvents in chemical reactions. A. Weissberger. Am Chem Soc J 65:242-5 F '43
- Inversion of menthone with hydrogen chloride in benzene. A. Weissberger and D. S. Thomas, jr. Am Chem Soc J 65:402-3 Mr '43
- Inversion of menthone with trichloroacetic acid in aprotic solvents. A. Weissberger. bibliog Am Chem Soc J 65:102-10 Ja '43
- Kinetics of aromatic halogenation; the chlorination of hydrocarbons. P. B. D. de la Mare and P. W. Robertson. Chem Soc J p275-81 Je '43
- Mills-Nixon effect and its bearing on the benzene valency problem; abstract. H. D. Springall. Chem & Ind 62:149 Ap 17 '43
- Polyalkylbenzenes; the reaction between dimethylacrylic acid and m-xylene. L. I. Smith and L. J. Spillane. bibliog Am Chem Soc J 65:202-8 F '43
- Polyalkylbenzenes; 4,6,7-trimethylcoumaran-3-one and its conversion into 2-isopropyl-4,6,7-trimethyl-5-hydroxycoumaran. L. I. Smith and others. bibliog Am Chem Soc J 65:1594-9 Ag '43
- Pure hydrocarbons from petroleum; vapor-liquid equilibrium of methylcyclopentane-benzene and other binary aromatic systems. J. Griswold and E. E. Ludwig. bibliog Ind & Eng Chem 35:117-19 Ja '43

BENZENE—Continued

- Rotational structure of the near ultraviolet bands of benzene. A. Turkevich and M. Fred. *Il Rs Mod Phys* 14:246-7 Ap-Jl '42
- Solubility effect in solvents of low dielectric constant; a study of the solubility effect in benzene. A. A. Vernon and J. P. Masterson. *bibliog Am Chem Soc J* 64:2822-3 D '42
- Solvent polarization error and its elimination in calculating dipole moments. I. F. Halverstadt and W. D. Kumler. *bibliog Am Chem Soc J* 64:2988-92 D '42
- Some boron trifluoride catalyzed alkylations of halobenzenes. G. F. Hennion and V. R. Pieronek. *bibliog Am Chem Soc J* 64:2751-2 D '42
- Studies on high molecular weight aliphatic amines and their salts; the behavior of various salts of dodecylamine in water, ethanol and benzene. C. W. Hoerr and A. W. Ralston. *bibliog Am Chem Soc J* 64:2824-9 D '42
- Styrene for rubber made from benzene, alcohol or ethylene. *Il Oil & Gas J* 41:43 N 26 '42
- Thermodynamics and molecular structure of benzene and its methyl derivatives. K. S. Pitzer and D. W. Scott. *bibliog diag Am Chem Soc J* 65:803-29 My '43
- Total and partial pressures of binary mixtures of dioxane in benzene at 25°. P. C. Teague and W. A. Felsing. *Am Chem Soc J* 65:485-6 Mr '43
- Volume of mixing and the thermodynamic functions of benzene-carbon tetrachloride mixture. S. E. Wood and J. E. Brusie. *bibliog diags Am Chem Soc J* 65:1891-5 O '43

Analysis

- Determination of benzene; detection and estimation of benzene in the presence of toluene, xylene, and other substances. B. H. Dolin. *bibliog Ind & Eng Chem Anal ed* 15:242-7 Ap 15 '43
- Photometric determination of benzene, toluene, and their nitro derivatives. H. D. Baernstein. *bibliog Ind & Eng Chem Anal ed* 15:251-3 Ap 15 '43
- Quantitative determination of benzene in the presence of cyclohexane. R. L. Bishop and E. L. Wallace. *Il diag Ind & Eng Chem Anal ed* 15:563-5 S 15 '43
- BENZENE poisoning**
- Acute toxicity of vapors of certain solvents containing appreciable amounts of benzene and toluene. J. L. Svirbely, R. C. Dunn and W. F. von Oettingen. *bibliog J Ind Hygiene* 25:366-73 O '43
- Hazards and control of industrial toxic solvents. W. M. Pierce. *bibliog Chem & Met Eng* 49:85-7 D '42
- Leucotoxic action of benzol. D. R. Climenko and J. MacLeod. *bibliog J Ind Hygiene* 24:289-91 N '42
- Toxic anemia. E. Browning. *J Ind Hygiene* 25:124-5 Mr '43

BENZENEARSONIC acid

- Ionization constants of several substituted phenylarsonic acids. D. Pressman and D. H. Brown. *bibliog Am Chem Soc J* 65:540-3 Ap '43

BENZENESULFONATES

- Studies of sulfonates; conductances and densities of sodium ethyl-, *n*-butyl-, *n*-octyl-, and *n*-dodecylbenzene-*p*-sulfonate solutions. R. G. Paquette, E. C. Lingafelter and H. V. Tartar. *bibliog diags Am Chem Soc J* 65:1686-92 Ap '43

Analysis

- Colorimetric determination of alkyl benzene sulfonates. J. C. Harris. *bibliog Ind & Eng Chem Anal ed* 15:254-6 Ap 15 '43

BENZETHIOL

- Hydrogenation of some sulphur compounds. C. M. Cawley and C. C. Hall. *bibliog Soc Chem Ind J* 62:116-19 Ag '43

BENZENEOANTHRACENE. See Triptycene**BENZIL**

- Optical crystallographic studies with the polarizing microscope; axial dispersion with change of sign; other dispersion measurements. W. M. D. Bryant. *bibliog Il Am Chem Soc J* 65:96-102 Ja '43

- Reaction of *n*-butylmagnesium bromide with some aromatic ketones. H. M. Crawford, M. E. Saeger and F. E. Warneke. *Am Chem Soc J* 64:2862-4 D '42

BENZILIC acid

- Synthetic mydratics. F. F. Blicke and H. M. Kaplan. *bibliog Am Chem Soc J* 65:1967-70 O '43

BENZIMIDAZOLE

- Allylic character of 2-(α -chloroalkyl)-benzimidazoles. H. Skolnik, J. G. Miller and A. R. Day. *bibliog Am Chem Soc J* 65:1854-8 O '43
- Reactions of some 2-(α -chloroalkyl)-benzimidazoles with potassium iodide in acetone solution. H. Skolnik, A. R. Day and J. G. Miller. *Am Chem Soc J* 65:1858-62 O '43

BENZIMIDAZOLEACETIC acid

- Preparation and reactions of 2-benzimidazolecarboxylic acid and 2-benzimidazoleacetic acid. R. A. B. Copeland and A. R. Day. *Am Chem Soc J* 65:1072-5 Je '43

BENZIMIDAZOLECARBOXYLIC acid

- Preparation and reactions of 2-benzimidazolecarboxylic acid and 2-benzimidazoleacetic acid. R. A. B. Copeland and A. R. Day. *Am Chem Soc J* 65:1072-5 Je '43

BENZOATES

- Local anesthetics; alkoxybenzoates of 2-monoalkylamino-2-methyl-1-propanols and 2-monoalkylamino-1-butanols. J. S. Pierce and others. *Am Chem Soc J* 64:2854-5 D '42
- Rearrangement of phenyl allyl ethers; ethyl *p*-(γ,γ -dimethylallyloxy)-benzoate. W. M. Lauer and O. Moe. *bibliog Am Chem Soc J* 65:289-93 F '43
- Rearrangement of phenyl allyl ethers; the isomeric ethyl *p*-(α - and γ -methylallyloxy)-benzoates. W. M. Lauer and P. A. Sanders. *Am Chem Soc J* 65:198-201 F '43

BENZOCYCLOOCTATETRAENE

- Benzocyclooctatetraenes; diphenylene and tetraphenylene. W. S. Rapson, R. G. Shuttleworth and J. N. van Niekerk. *Chem Soc J* p326-7 Jl '43

BENZODIOXIN

- Action of alkalis upon substituted benzodioxins. H. Irving and E. G. Curtis. *Chem Soc J* p319-21 Jl '43

BENZOFURAN

- Chemistry of vitamin E; synthesis and properties of 2-isopropyl-4,6,7-trimethyl-5-hydroxycoumaran. L. I. Smith and J. A. King. *bibliog Am Chem Soc J* 65:441-4 Mr '43

BENZOHYDROL

- Alkyl-oxygen fission in carboxylic esters; derivatives of *p*-methoxybenzhydrol. M. P. Balfe and others. *Chem Soc J* p605-11 O '42
- Photo-reactions; formation of benzpinacol by the action of acetone on benzhydrol in sunlight. A. Schöenberg and A. Mostafa. *Chem Soc J* p276 Je '43

BENZOLIC acid

- Dissociation constants of some acids in mixed solvents. J. C. Speakman. *Chem Soc J* p270-3 Je '43

- Effect of substituents on the acid strength of benzoic acid; the cyano group. M. Kilpatrick and R. D. Eanes. *Am Chem Soc J* 65:589-90 Ap '43

- Electric moments of some substituted benzoic acids; the moments of *o*-, *m*- and *p*-fluorobenzoic acids, and of *o*-chloro and *o*-bromobenzoic acids. M. E. Hobbs and J. J. Weith, jr. *bibliog Am Chem Soc J* 65:967-71 My '43

- Liquid extraction in perforated-plate and packed towers. J. Allerton, B. O. Strom and R. E. Treybal. *bibliog diags Am Inst Chem Eng Trans* 39:361-83; Discussion. 383-4 Je '43

- Present status of plant hormones. P. W. Zimmerman. *Il Ind & Eng Chem* 35:596-601 My '43

BENZOIN

- Benzoic acid as fluorescent qualitative reagent for zinc. C. E. White and M. H. Neustadt. *bibliog Ind & Eng Chem Anal ed* 15:599-600 S 15 '43

- Condensation of some aromatic ketones with ethyl succinate. C. L. Hewett. *Chem Soc J* p585-7 O '42

BENZOL (commercial benzene)

Benzole recovery by active carbon. A. K. Howell. Gas J (Lond) 242:337 S 15 '43.
Benzole recovery by gas oil. B. Richardson. Gas J (Lond) 240:248 N 25 '42; Same, Chem Age (Lond) 47:561-2 D 19 '42.

BENZOL poisoning. See Benzene poisoning

BENZOPHENONE

Factors determining the course and mechanism of Grignard reactions; the effect of metallic halides on the reaction of Grignard reagents with benzalacetophenone and with benzophenone. M. S. Kharasch and D. C. Sayles. *bibliog Am Chem Soc J* 64:2972-5 D '42.

Para acylation of polyalkylbenzophenones by aryl 2,4,6-trialkylbenzoates. R. C. Fuson and others. *bibliog Am Chem Soc J* 64:2573-6 N '42.

Photochemical pinacolization. F. Bergmann and Y. Hirshberg. *Am Chem Soc J* 65:1429-30 JI '43.

Reaction of *n*-butylmagnesium bromide with some aromatic ketones. H. M. Crawford, M. E. Saegeer and F. E. Warneke. *Am Chem Soc J* 64:2862-4 D '42.

BENZOPINACOL

Photo-reactions; formation of benzpinacol by the action of acetone on benzhydrol in sunlight. A. Schönberg and A. Mostafa. *Chem Soc J* p276 Je '43.

BENZOPYRENE

Effect of oxygen on the fluorescence of certain hydrocarbons. J. A. Miller and C. A. Baumann. *bibliog il Am Chem Soc J* 65:1540-6 Ag '43.

BENZOQUINONE. See Quinone

BENZOTHAZOLE

Thiazoles and their uses in industry and medicine. R. F. Hunter. *Chem & Ind* 62:118-21 Mr 27 '43.

BENZOYL BENZOIC acid

Kinetics in acid media; condensation of *o*-benzoylbenzoic acid. C. W. Deane and J. R. Huffman. *bibliog (73 references) il Ind & Eng Chem* 35:684-94 Je '43.

Rearrangement of allyl-type esters of β -keto acids. W. Kimel and A. C. Cope. *Am Chem Soc J* 65:1992-3 O '43.

BENZOYL diphenylpropane

Aromatic cyclodehydration; the mechanism of the cyclization of *o*-benzylphenones. C. K. Bradsher and E. S. Smith. *Am Chem Soc J* 65:1643-5 Ag '43.

BENZOYLURENE

para-Alkylation of benzoyldurene by the Grignard reagent. R. C. Fuson and B. C. McKusick. *bibliog Am Chem Soc J* 65:60-4 Ja '43.

BENZOYL NAPHTHALENE

Condensation of some aromatic ketones with ethyl succinate. C. L. Hewett. *Chem Soc J* p585-7 O '42.

BENZOYL peroxides

Optically active acyl peroxides; preparation, decomposition, and use as catalysts for vinyl polymerization. C. S. Marvel, R. L. Frank and E. Prill. *bibliog Am Chem Soc J* 65:1647-52 Ag '43.

BENZOYL TETRALIN

Condensation of some aromatic ketones with ethyl succinate. C. L. Hewett. *Chem Soc J* p585-7 O '42.

BENZYL alcohol

Conversion of an alcohol into the corresponding aldehyde by a less volatile aldehyde with the aluminium alkoxide as catalyst; the influence of an ethylene linkage in the reactant aldehyde. R. R. Davies and H. H. Hodgson. *Soc Chem Ind J* 62:109-10 JI '43.

BENZYLAMINE

α,β -Unsaturated aminoketones; reaction of primary amines with 1,3-diketones and bromine derivatives of benzalacetophenone; ethylene imines. N. H. Cromwell, R. D. Babson and C. E. Harris. *bibliog Am Chem Soc J* 65:312-15 Mr '43.

BENZYL benzoate

Fluidity of mixtures which obey Bachinski's law. F. Kottler. *bibliog J Phys Chem* 47:277-93 Mr '43.

BENZYL bromide. See Bromotoluene

BENZYL compounds

Catalytic debenzoylation; the effect of substitution on the strength of the *O*-benzyl and *N*-benzyl linkages. R. Baltzly and J. S. Buck. *Am Chem Soc J* 65:1984-92 O '43.

BENZYL cyanide. See Tolunitrile

BENZYLFRUCTOFURANOSIDE

Photolysis of the *d*-glycosides: α benzylfructofuranoside, β benzylfructopyranoside, and α and β phenyl, benzyl and β phenylethyl glucosides; and the bearing of the data upon the transfer of energy within molecules. L. J. Heidt. *Franklin Inst J* 234:473-85 N '42.

BENZYLFRUCTOPYRANOSIDE

Photolysis of the *d*-glycosides: α benzylfructopyranoside, β benzylfructopyranoside, and α and β phenyl, benzyl and β phenylethyl glucosides; and the bearing of the data upon the transfer of energy within molecules. L. J. Heidt. *Franklin Inst J* 234:473-85 N '42.

BENZYLIDENE arabitol

Isomeric 1,3- and 2,3-benzylidene-*D*-arabitol. W. T. Haskins, R. M. Hann and C. S. Hudson. *bibliog Am Chem Soc J* 65:1663-7 S '43.

BENZYLIDENE glycerol

Aliphatic beta monoglycerides. B. F. Dautbert, H. H. Fricke and H. E. Longenecker. *bibliog Am Chem Soc J* 65:1718-20 S '43.

BENZYL MAGNESIUM chloride

Grignard reactions; reactions of benzylmagnesium chloride. F. C. Whitmore and T. K. Sloat. *bibliog Am Chem Soc J* 64:2968-70 D '42.

BENZYLPHENONES

Aromatic cyclodehydration; the mechanism of the cyclization of *o*-benzylphenones. C. K. Bradsher and E. S. Smith. *bibliog Am Chem Soc J* 65:854-7, 1643-5 My, Ag '43.

BENZYL phenylglyoxal

2,4,6-Trimethylbenzylphenylglyoxal. R. P. Barnes and R. J. Brown. *Am Chem Soc J* 65:412-15 Mr '43.

BENZYLATION

Gallaldehyde tribenzyl ether. R. O. Clinton and T. A. Geissman. *bibliog Am Chem Soc J* 65:85-7 Ja '43.

BERBERA tree. See *Milletia ferruginea* Hochst

BERG, Louis Israel, 1900-

Dismisses Dr Berg's libel suit against P.I. *Ptr Ink* 204:56 JI 23 '43.

BERGIUS process

Urgent study of oil from coal. *Nat Pet N* 35:19 JI 21 '43.

BERIBERI

Decrease in pellagra and beriberi; enriched white bread and flour. J. Stafford. *Science* 98:sup8-9 JI 30 '43.

BERKEFELD filter. See Filters and filtration (biological products)

BERKSON, Joseph, 1899-

Note on Dr Berkson's criticism of tests of significance. R. A. Fisher. *Am Stat Assn J* 38:103-4 Mr '43.

BERMUDA

See also

Botany—Bermuda.

Economic conditions

News by countries. *For Comm W* 10:16-17 Mr 13; 12:14-15 S 25 '43.

BERYL

Beryl in Maine. *Eng & Min J* 144:85 Ag '43.

BERYLLIUM

Beryllium; facts about the metal. *il Metal Prog* 43:904-7+ Je '43.

Beryllium in glass. K. Sun. *bibliog Glass Ind* 24:155-6, 172, 217-20+ Ap-My '43.

Beryllium, its sources and uses. *Min & Met* 24:232-4 My '43; Abstracts. *Steel* 112:111-12+ My 10 '43; *Iron Age* 161:46, 118 Ap 29 '43.

Beryllium windows for permanently evacuated X-ray tubes. H. Brackney and Z. J. Atlee. *bibliog il diag R Sci Instr* 14:59-63 Mr '43.

Beryllium windows in X-ray tubes for diffraction. Z. J. Atlee. *il diag Gen Elec R* 46:233-6 Ap '43.

BERYLLIUM—Continued

- Minor metals, 1942. A. F. Matthews. Eng & Min J 144:74 F '43
 War metal from beryl. Fortune 28:68 Ag '43
 Windows of beryllium diffract X-ray beam. J. M. Crowe. Chem Ind 52:342 Mr '43

BERYLLIUM alloys

- Beryllium-copper. E. M. Foster. il Electrician 131:56-8 JI 16 '43
 Beryllium-copper alloys. L. David. Chem Age (Lond) 47:502-3 D 5 '42
 Beryllium; facts about the metal. il Metal Prog 43:904-7+ Je '43
 Beryllium, its sources and uses. Min & Met 24:232-4 My '43; Abstracts. Steel 112:111-12+ My 10 '43; Iron Age 151:46, 118 Ap 29 '43
 Predicting spring performance of beryllium copper wire and strip. H. G. Williams. il Iron Age 152:62-7 JI 8 '43
 Processing beryllium-copper; abstract. L. B. Hunt. Metals & Alloys 17:594+ Mr '43
 Quality inspection of beryllium copper. W. Martin. il Metals & Alloys 17:1203-7 Je '43

BESSEL'S functions

- Concerning the roots of $J_n(x)N_n'(x) - J_n'(x)N_n(x) = 0$. R. Truett. J Ap Phys 14:350-2 JI '43

BESSEMER process

- Bessemer steel gaining a stronger hold. Iron Age 151:95-6 Mr 4 '43
 Comparative quality of converter cast steel. C. E. Sims and F. B. Dahle. bibliog il diags Am Soc T M Proc 42:532-50 '42; Same cond. Foundry 70:38-9+ S '42; Same cond. Steel 111:125-6+ S 14 '42; Discussion. Am Soc T M Proc 42:551-5 '42
 Greater Bessemer use limited by metallics. Iron Age 150:112+ D 3 '42
 Hints on converter practice. F. G. Seifing. Foundry 71:87+ F '43
 New uses for Bessemer steel. Franklin Inst J 235:623 Je '43
 Recent trends in steel manufacture. G. A. Y. Russell. Blast F & Steel Pl 30:1369-71 D '42
 Rimming steel; comparative study of three ingots received from Soc. anon. des hauts fourneaux, forges et aciéries de Denain et d'Anzin, at Denain, France; report on four ingots of British manufacture. J. Mitchell. Iron & Steel Inst J 146:295-344, pl 25-9; Discussion. 363-88 no 2 '42

BEST foods, inc.

- Acquires complete control of the Best foods, inc. Comm & Fin Chr 156:1864, 2038 N 23, D 7 '42
 Hecker products corp. changes its name, etc. Comm & Fin Chr 157:42, 127 Ja 4, 11 '43
 Thumbnail stock appraisal. Mag of Wall St 72:631 S 18 '43

BETA rays

- Antisymmetrical interaction in beta-decay theory. C. L. Critchfield. bibliog Phys R 63:417-25 Je 1 '43
 Beta-ray spectrum of antimony (124). E. B. Hales and E. B. Jordan. bibliog Phys R 64:202-6 O 1 '43
 Direct determination of the charge of the β -particle. Y. Beers. bibliog Phys R 63:77-85 F 1 '43
 Simple method for the investigation of secondary electrons excited by γ -rays and the interference of these electrons with measurements of primary β -ray spectra. L. Meitner. Phys R 63:73-6 F 1 '43
 Theory of the electrostatic beta-particle energy spectrograph. F. T. Rogers, Jr. and C. W. Horton. bibliog R Sci Instr 14:216-20 JI '43

BETAINE

- Raman spectra of amino acids and related compounds; sarcosine, ethanolamine, choline, betaine and betaine derivatives. J. T. Edsall. bibliog Am Chem Soc J 65:1767-70 S '43

BETATRON. See Electron accelerator**BETHLEHEM steel corporation**

- Annual report. Comm & Fin Chr 157:987-8 Mr 15 '43
 Bethlehem's huge tax cushion. H. Lawrence. Barron's 23:8 Mr 8 '43
 Offers to redeem 6% bonds at 181. Comm & Fin Chr 156:1949 N 30 '42

- Preliminary report for 1942. Comm & Fin Chr 157:437-8 F 1 '43
 Thumbnail stock appraisal. Mag of Wall St 71:177 N 23 '42

BETHOGENIN

- Saponins and sapogenins; bethogenin and trilligenin, new sapogenins from trillium erectum. S. Lieberman and others. bibliog Am Chem Soc J 64:2581-3 N '42
 Saponins and sapogenins; the composition and constitution of bethogenin. C. R. Noller and M. R. Barusch. Am Chem Soc J 65:1435-6 JI '43
 Saponins and sapogenins; the constitution of bethogenin. C. R. Noller and M. R. Barusch. Am Chem Soc J 65:1786 S '43
 Sterols; sapogenins; bethogenin. R. E. Marker and others. Am Chem Soc J 65:1658-9 Ag '43

BEVEL gearing. See Gearing, Bevel**BEVERAGES**

- Roasting beverage materials. R. E. Kremers. bibliog il Food Ind 15:74-6 O '43
 Soft drink outlook good. Barron's 23:12 My 24 '43
 Soft drink sterilisation; Sterilamp installation for bottle cleaning and syrup protection. Pepsi-Cola company. il Electrician 131:294 S 24 '43
 Soft drinks versus liquor stocks. H. F. Travis. Mag of Wall St 72:93-5+ My 1 '43

See also

- | | |
|-----------------------|--------------|
| Beer | Liquors |
| Bottle caps and seals | Maté |
| Bottling | Orange juice |
| Coca-Cola | Tea |
| Cocoa | Whisky |
| Coffee | Wine |
| Fruit juices | |

Advertising

- Breakfast Cup spurs appeal as substitute, but sales quadruple; sold through standard grocery outlets on the West coast. Sales Management 52:30-2 Je 15 '43
 Dr Pepper marshals field men in home-front morale campaign. W. V. Ballew. il Sales Management 52:62+ F 15 '43

See also

- Milk, Chocolate—Advertising

BEVERIDGE, Sir William Henry, 1879-

- Sir William Beveridge working on new program to provide maximum post-war employment. Comm & Fin Chr 157:1883 My 20 '43

BEVERIDGE report. See Insurance, Social—Great Britain**BEVIN, Ernest, 1881-**

- Importance of being Ernest; Mr Bevin and labor. Economist 143:533-4 O 31 '42
 Portrait. Business Week p37 O 9 '43

BIBLE

- Chemical knowledge in the Old Testament. S. Isserow and H. Zahnd. J Chem Educ 20:327-35 bibliog (p332-5) JI '43
 Exhibit of chemical substances mentioned in the Bible. M. E. Weeks. J Chem Educ 20:63-76 bibliog (p75-6) F '43
 Popular book; sales are soaring. Business Week p48+ F 27 '43

BIBLIOGRAPHY**See also**

- | | |
|----------------------------|---|
| Periodicals—Indexes | |
| also subdivision | Bibliography under special subjects, e.g. |
| Accounting | Metallurgy |
| Aeronautics | Paper making |
| Annotations | Petroleum |
| Business | Physics |
| Ceramics | Radio communication |
| Chemistry, Technical | Reference books |
| Civil engineering | Reprints |
| Engineering | Rubber |
| Iron | Steel |
| Labor and laboring classes | Textile fabrics |
| Lighting | Waterworks |

Best books

- Best books of the year, 1942. A. J. Philip, ed. 72p Alexander J. Philip, Lodgewood, Gravesend, Eng. '43
 Selected list of books in English by U.S. authors. 166p pa 25c Am. library assn, 520 N. Michigan av, Chicago '42

BIBLIOGRAPHY—Continued

Bibliography

Bibliographies. Special Lib 33:380 D '42

BICARBONATES. See Carbonates

BICYCLE insurance. See Insurance, Bicycle

BICYCLES

Bicycle operation during the war. J. H. Motz.

il Am Gas Assn Mo 24:443 D '42

Bicycle parts, accessories, and safety. il

Consumers' Research Bul 11:19-21 My '43

Hub transmission provides multiple speeds;

patent assigned to Sturmev-Archer gears.

il diag Machine Design 15:180+ Ap '43

Story of the bicycle. N. W. Sample, Jr. and

T. Coulson. Franklin Inst J 235:393-404 Ap

'43

Survey use of bikes by utility companies.

Elec W 118:1825 N 28 '42

Take good care of your bicycle. il Con-

sumers' Research Bul 11:19-22 Ja '43

Safety measures

Bicycling with safety. A. J. Naquin. Gas Age

91:26-7 My 6 '43

BIDDING, Competitive

See also

Securities—Market-

ing

BIG inch pipeline. See Petroleum pipe lines

BIG Snowy group

Big Snowy group; lithology and correlation

in the Northern Great Plains. E. S. Perry

and L. L. Sloss. bibliog il diags maps Am

Assn Pet Geologists Bul 27:1287-1304 O '43

BIGELOW-SANFORD carpet company

War casualty companies that will revive with

peace. J. C. Clifford. Mag of Wall St 72:

582-3 S 4 '43

BILE

See also

Scymnol

BILLBOARDS

Billboards tallied; Traffic audit bureau to

intensify check on readership. Business

Week 173+ JI 10 '43

Law prohibiting highway billboards upheld

in Vermont. Eng N 130:905 Je 17 '43

See also

Posters

BILLIARD balls

Game that founded an industry. H. J. Luth.

il Mod Plastics 20:71-3+ JI '43

BILLING

Accounts receivable system saves valuable

war time; handles increased volume with-

out additional employees. L. A. E. Gleason.

Credit & Fin Management 45:18-20+ N '43

Bi-monthly or quarterly meter reading and

related billing plans to conserve rubber,

automotive equipment and manpower. H. B.

Hardwick. Edison Elec Inst Bul 10:393-5

N-D '42

Case for bi-monthly billing. R. B. Tulpin.

Gas Age 92:22-3+ JI 1 '43; Same. Edison

Elec Inst Bul 11:242-4 Ag '43

Customer accounting; wartime survey of

meter reading and billing changes. J. J.

Natale. Am Gas Assn Mo 25:311-13 JI-Ag

'43

Meter reading and billing; practices under

war conditions. H. J. Johnson and others.

il Am Gas Assn Proc 1942:93-117

New plan of bi-monthly meter reading with

monthly billing. R. C. Gordon. Am Gas

Assn Mo 25:111-12 Mr '43

Report shows both customer and company

approval of meter reading and billing

changes. Edison Elec Inst Bul 11:129-32 My

'43

Revenue plan for sewage works financing;

joint billing of water and sewerage charges.

J. A. Goetz. Water Works & Sewerage 90:

366-8 O '43

Will bi-monthly billing help the utility man-

power problem. D. Robertson. Elec W 119:

601-3 F 20 '43; Correction. 119:1771 My 29

'43

See also

Collecting of accounts

Waybills

BILLS of lading

New government bill of lading; revised form

is harmonized and combined with a freight

waybill form. il Ry Age 114:1221-3 Je 19 '43

BIMETALLISM

Ghost of international bimetalism reappears.

A. M. Sakolski. Comm & Fin Chr 158:1686+

O 28 '43

International bimetalism advocated; com-

ments on White and Keynes stabilization

plans. F. H. Brownell. Comm & Fin Chr

158:1304-5 S 30 '43

BINDING. See Bookbinding**BINDING** materials

Refractories life is increased by proper selec-

tion of binders. Brick & Clay Rec 102:

48-50 Mr '43

Seek to ease cereal binder pinch. Steel 113:

66 JI 5 '43

BINDSCHEDLER'S green

Methylene blue and other indicators in gen-

eral acids; the acidity function. G. N.

Lewis and J. Bigeleisen. bibliog Am Chem

Soc J 65:1144-50 Je '43

BINOCULARS. See Field glasses**BINS**

Redler bin level control. il diag Mech Han-

dling 30:361-2 Ag '43

See also

Coal bins

Grain bins

BINS, Concrete

Build long line of concrete bins for storage

of scrap. il Concrete 51:33 JI '43

BIOCHEMICAL oxygen demand

Bio-chemical oxygen demand and dissolved

oxygen; abstract and discussion. C. N.

Sawyer. Water Works & Sewerage 89:485-6

N '42

Effect of river mud deposits on determina-

tion of B.O.D. of supernatant liquor. W. A.

Moore and C. C. Ruchhoft. Ind & Eng

Chem Anal ed 14:933-4 D 15 '42

Mathematics of B.O.D. determinations. H. M.

Gift. chart Water Works & Sewerage 90:

313-15 Ag '43

BIOCHEMICAL research foundation. See

Franklin institute, Philadelphia—Biochemi-

cal research foundation

BIOCHEMISTRY. See Biological chemistry**BIODYNES**

Biodynes; miracle of wound healing and tis-

sue repair. L. M. Miller. il Sci Am 168:14-16

Ja '43

Spart's Institutum; irradiation expert heads

research of Dominican school. il Business

Week p20+ S 18 '43

BIOGRAPHY

Dictionaries

Webster's biographical dictionary. 1697p \$6.50

G. & C. Merriam co, Springfield, Mass. '43

BIOLOGICAL abstracts (periodical)

Merits of abstracting journals. H. Kirby. Sci-

ence 98:84 JI 23 '43

BIOLOGICAL apparatus

Volumetric respirometer for aquatic animals.

F. F. Scholander, N. Haugaard and L.

Irving. diag R Sci Instr 14:48-51 F '43

See also

Microscope and mi-

croscopy

Physiological appara-

tus

BIOLOGICAL assay

Determination of nicotinic acid; modifica-

tions in the microbiological method. W. A.

Kiehl, F. M. Strong and C. A. Elvehjem.

bibliog Ind & Eng Chem Anal ed 15:471-5

JI 15 '43

Determination of vitamin B₁ (thiamine) in

extracts and concentrates; comparison of

biological and chemical methods. R. A.

Brown and others. bibliog Ind & Eng Chem

Anal ed 15:494-5 Ag 15 '43

Evaluation of fungicides: a study in quantita-

tive toxicology; bio-assay and the physico-

chemical methods. H. Martin. bibliog Soc

Chem Ind J 62:67-70; Discussion. 70-1 My

'43

Microbiological and chemical assay of nico-

tinic acid in B complex products. R. D.

Greene, A. Black and F. O. Howland. bib-

liog Ind & Eng Chem Anal ed 15:77-8 Ja

15 '43

BIOLOGICAL assay—Continued

Microbiological determination of pantothenic acid. A. L. Neal and F. M. Strong. *bibliog Ind & Eng Chem Anal* 15:654-7 O 15 '43
 Spectrophotometric and biological assay of vitamin A in oils. N. H. Coy, H. L. Sassaman and A. Black. *bibliog Ind & Eng Chem Anal* 15:441-3 J1 15 '43

BIOLOGICAL chemistry

Archives of biochemistry. Published bi-monthly by the Academic press, 125 East 23d Street, New York
 Catalysis as a biological factor. J. Alexander. *Science* 96:446-7 N 13 '42
 Chemistry of the biologically important imidazoles. S. W. Fox. *Chem R* 32:47-71 *bibliog*(113 references, p69-71) F '43
 Eighth scientific meeting to discuss trace elements in relation to health. *Chem & Ind* 61:463-5 N 7 '42
 Great biochemist; retirement of Sir F. G. Hopkins. *Chem Age (Lond)* 49:335-6 O 2 '43
 Radioactive isotopes for the study of trace elements in living organisms. J. D. Kurbatov and M. L. Pool. *bibliog il Chem R* 32:231-48 Ap '43
 Studies on biological methylation; a summary of recent work and some hypotheses regarding its mechanism. F. Challenger. *Chem & Ind* 61:397-9, 413-15, 456-8 S 26, O 10, N 7 '42

See also

Antigens and antibodies	Metabolism
Azotobacter	Nutrition
Bacteria	Physiological chemistry
Bacteriology	Plant growth
Biological materials—Analysis	Plants—Chemical analysis
Blood	Proteins
Botanical chemistry	Protoplasm
Cells	Tissues
Chlorophyll	Vitamins
Enzymes	Water in the body
Hormones	

Dictionaries

Dictionary of bio-chemistry and related subjects. W. M. Malisoff, ed. 579p \$7.50
 Philosophical library, 15 E. 40th st, New York '43

Study and teaching

Autocatalytic experiment to illustrate virus growth. P. Hersch. *bibliog J Chem Educ* 20:376 Ag '43

Terminology

Isotel, isotelic. R. J. Williams. *Science* 98:386 O 29 '43

BIOLOGICAL laboratories*See also*

Marine biological laboratories
also Marine biological laboratory, Woods Hole, Massachusetts; Yerkes laboratories of primate biology, Orange Park, Florida

BIOLOGICAL libraries

War-time activities and problems of biological sciences libraries in the Middle-West. J. R. Greenbaum. *Special Lib* 34:249-51 J1-Ag '43

BIOLOGICAL literature

Streamlining production and distribution of current periodical articles. Z. Troy. *Special Lib* 34:287-92 J1-Ag '43

BIOLOGICAL materials**Analysis**

Analytical patterns in the study of mineral and biological materials; autoradiograph, contact print, electrographic print, etc. H. Yaroda. *bibliog*(70 references) il *diags Ind & Eng Chem Anal* 15:135-41 F 15 '43
 Determination of aluminum in biological material. J. Cholak, D. M. Hubbard and R. V. Story. *bibliog Ind & Eng Chem Anal* 15:57-60 Ja 15 '43
 Microdetermination of arsenic in biological material. J. A. Sultzberger. *bibliog diag Ind & Eng Chem Anal* 15:408-10 Je 15 '43
 Photometric determination of reduced and total ascorbic acid. M. Hochberg, D. Melnick and B. L. Oser. *bibliog diag Ind & Eng Chem Anal* 15:182-8 Mr 15 '43

Polarographic determination of formaldehyde in biological material; application to the determination of serine. M. J. Boyd and K. Bambach. *bibliog Ind & Eng Chem Anal* 15:314-15 My 15 '43

Ultramicromethod for sodium employing the polarograph. C. Caruthers. *bibliog Ind & Eng Chem Anal* 15:70-1 Ja 15 '43

See also

Blood—Analysis
 Feces—Analysis
 Urine—Analysis

BIOLOGICAL products

Biological products; establishments licensed for the propagation and sale of viruses, serums, toxins, and analogous products. *Pub Health Rep* 57:1775-81 N 20 '42

See also

Serum
 Toxins and antitoxins
 Viruses

Analysis

Microdetermination of mercury in organic compounds. H. W. Eckert. *bibliog Ind & Eng Chem Anal* 15:406-7 Je 15 '43

BIOLOGICAL research

Supersonics in biology; abstract. J. G. Lynn and others. *Electronics* 16:154+ My '43

See also

Microscope and ml— National research council
also Franklin institute, Philadelphia— Biochemical research foundation

BIOLOGICAL specimens

Polyvinyl alcohol; a medium for mounting and clearing biological specimens. W. G. Downs. *Science* 97:539-40 Je 11 '43

BIOLOGICAL stains. See Stains and staining (microscopy)

BIOLOGY

Organization of biology and agriculture. R. F. Griggs. *chart Science* 96:545-51 D 13 '42

Where angels fear to tread: a contribution from general sociology to human ethics. W. C. Allee. *bibliog Science* 97:517-25 Je 11 '43

See also

Bacteriology	Microscope and microscopy
Biological chemistry	Mutation (biology)
Blood	Plant cells and tissues
Botany	Plants
Cell division (biology)	Protoplasm
Cells	Sex
Heredity	Zoology
Mendel's law	
Metabolism	
Microorganisms	

BIOPSIES. See Tissues—Analysis

BIOTIN

Heat-labile, avidin-uncombinable, species-specific and other vitamins of biotin. D. Burk and R. J. Winzler. *bibliog Science* 97:57-60 Ja 15 '43

Influence of biotin upon susceptibility to malaria; experiments with avian malaria. W. Trager. *Science* 97:205-7 F 26 '43

Role of folic acid and biotin in the utilization of pantothenic acid by the rat. L. D. Wright and A. D. Welch. *bibliog Science* 97:426-7 My 7 '43

Structure of biotin. V. du Vigneaud. *bibliog Science* 96:455-61 N 20 '42

Synthesis of biotin. *Chem & Eng N* 21:782 My 25 '43

Synthetic biotin. S. A. Harris and others. *bibliog Science* 97:447-8 My 14 '43

BIPHENYL. See Diphenyl

BIPHENYLENE

Electron diffraction investigation of biphenylene. J. Waser and V. Schomaker. *bibliog Am Chem Soc J* 65:1451-5 Ag '43

BIPYRIDINE

Colorimetric determination of iron with 2,2'-bipyridyl and with 2,2',2''-terpyridyl. M. L. Moss and M. G. Mellon. *bibliog Ind & Eng Chem Anal* 14:362-5 N 15 '42

Revision of the oxidation potentials of the orthophenanthroline- and dipyrityl-ferrous complexes. D. N. Hume and I. M. Kolthoff. *bibliog Am Chem Soc J* 65:1895-7 O '43

BIPYRIDYL. See Bipyridine

BIRCH

Effect of mature yellow birch upon spruce and fir understory. W. M. Robertson. *Pulp & Pa of Can* 44:36 Ja '43

Fatigue characteristics of natural and resin-impregnated, compressed, laminated woods. F. E. Fuller and T. T. Oberg. *bibliog* *il diags J Aeronautical Sci* 10:81-5 Mr '43

General electrophoretic pattern in extracts of pollens causing hay fever. H. A. Abramson, D. H. Moore and H. H. Gettner. *il J Phys Chem* 46:1129-39 D '42

Substitution of birch for spruce-balsam ground in the newsprint furnish. W. W. Holland. *Pulp & Pa of Can* (Convention no) 44:148-51 [F] '43

BIRD seed

Coriander, canary seeds future shipments offered. *Oil Paint & Drug Rep* 144:4+ Ag 16 '43

BIRDS

Effect of bird life on water-supply reservoirs. R. E. Thompson. *il Water & Sewage* 81:19-20 F '43

Presentation of the Daniel Giraud Elliot medal for 1936, with accompanying honorarium of \$200, to Robert Cushman Murphy. F. M. Chapman. *Science* 97:434 My 14 '43

Protection

Heath hen. J. H. Pannell. *Science* 98:174 Ag 20 '43

BIRDS, Photography of. See *Photography of birds*

BIREFRINGENCE. See *Refraction, Double*

BIRELEV'S incorporated. See *General foods corporation*

BIRINGUCCIO, Vannoccio, 1480-1539?

Pirotechnia of Biringuccio. C. A. Browne. *Science* 97:163-4 F 12 '43

BIRMINGHAM, Alabama

Libraries

Tutwiler collection of southern history and literature. S. A. Maxwell. *Special Lib* 33:367-9 D '42

Rapid transit

Telling the story in Birmingham; women representatives give talks to riders. *il Transit J* 86:399 N '42

BIRMINGHAM slag company

Slag, gravel and concrete plants. B. Nordberg. *il Rock Prod* 45:46-69, 96-7+ D '42

BIRTH certificates

Registers to issue birth certificates. *il Am Business* 13:20 F '43

BIRTH control

Family limitation and the war. H. P. Fairchild. *Ann Am Acad* 229:79-86 S '43

Fortune survey; birth control; young women's opinion. *Fortune* 28:24, 30 Ag '43

BIRTH rate

Birth and death rates in Great Britain. *Science* 98:192 Ag 27 '43

Birthrate of Great Britain. *Science* 98:55 JI 16 '43

Births, infant mortality, maternal mortality; graphic presentation, 1940, maps tables U S Children's Bur Pub 288:1A-34A, 1B-34B '43

Comparison of demographic rates assumed by the National resources committee with actual experience. R. J. Myers. *Am Stat Assn J* 38:201-9 Je '43

Empty cradle. *Economist* 144:748-9 Je 12 '43

Group differences in urban fertility, by C. V. Kiser. Review, by W. S. Thompson. *Science* 97:185-6 F 19 '43

Marriages, births, and divorces. W. F. Ogburn. *Ann Am Acad* 229:20-9 S '43

More babies. *Economist* 144:461 Ap 10 '43

Preview of the postwar generation, it will be smaller; but it can be demographically sounder. map *Fortune* 27:116-17, 130+ Mr '43

Quarter's babies. *Economist* 144:40-1 Ja 9 '43

U.S. birth rate rises in World war II. *Baron's* 22:1 N 23 '42

BISCUITS

Selective selling helps Sunshine build now for post-war prosperity; Loose-Wiles sales policies will be altered permanently. L. M. Hughes. *il Sales Management* 52:18-20 JI 1 '43

BISMUTH

Arc spectrum of bismuth Bi I. S. Mrozowski. *il Phys R* 62:526-33 D 1 '42

Coppers containing selenium, tellurium, and bismuth. G. L. Bailey and A. P. C. Hallows. *Engineering* 155:276 Ap 2 '43

Effect of selenium, tellurium, and bismuth on copper. M. Cook and G. Parker. *Engineering* 155:338, 345 Ap 23-30 '43

Microdetermination of lead by dithizone with an improved lead-bismuth separation. K. Eambsch and R. E. Burkner. *bibliog Ind & Eng Chem Anal* ed 14:904-7 N 15 '42

Analysis

Alpha-picoline methiodide as a reagent for bismuth. K. Whelan and F. J. Welcher. *bibliog J Chem Educ* 20:246-8 My '43

Simplified cell unit for internal electrolysis. R. P. Yeck and O. C. Zischkau. *il diags Ind & Eng Chem Anal* ed 15:221-2 Mr 15 '43

Systematic polarographic metal analysis; characteristics of arsenic, antimony, bismuth, tin, lead, cadmium, zinc, and copper, in various supporting electrolytes. J. J. Lingane. *bibliog Ind & Eng Chem Anal* ed 15:583-90 S 15 '43

BISMUTH alloys

Cutting costs on perforating dies; use of masonite and Cerromatrix. E. H. Ruder. *il diags Aviation* 42:165-7+ Ag '43

Low melting-temperature alloy for proof-casting of cavities; Cerrosafe. *Mach* 49:198 F '43

New method of making metal drop hammer dies; use of Cerrobend. H. G. Groehn. *il Aero Digest* 43:229, 231 S '43

BISMUTH compounds

See also
Thiobismol

BISMUTH halides

Crystalline complexes of arsenic, antimony and bismuth trihalides with dioxane. C. J. Kelley and P. A. McCusker. *bibliog Am Chem Soc J* 65:1307-9 JI '43

BISMUTH oxides

Polymorphism of bismuth trioxide. W. C. Schumb and E. S. Rittner. *bibliog Am Chem Soc J* 65:1055-60 Je '43

BISMUTHINITE

Flotation of bismuthinite. J. G. Hart. *Can Min J* 64:355 Je '43

BISON, American

Folsom mystery; its solution is largely contingent on the solution of another mystery; relation of northern bison to fossil type. L. C. Eiseley. *il Sci Am* 167:260-1 D '42

BISSELL, Richard M, Jr. 1909-
Sketch. *por*(p178) *Marine Eng* 48:185 Ag '43

BISULFITES

Crystalline bisulfite addition compounds of menadione. F. Abbondi and others. *Am Chem Soc J* 65:1776 S '43

BITS

Tempering reconditioned detachable bits. W. A. Vickers. *diags Eng & Min J* 144:85-6 Ap '43

BITUMINOUS materials

Asphalt from the Alberta tar sands. J. H. Holloway. map *Roads & Bridges* 81:78+ Mr '43

Federal rulings on the use of bituminous materials. *Roads & Sts* 85:30-1 N '42

Mean molecular weight of bitumens. W. Kirby. *Soc Chem Ind J* 62:58 Ap '43

Pumping joints sealed by mudjacking asphaltic cement. H. D. Metcalf. *il Roads & Sts* 86:53-4 My '43

Treatment of roof glazing by fabric attached with bituminous adhesive. C. M. Watkins and T. A. Baker. *Soc Chem Ind J* 62:132-5 S '43

See also
Asphalt
Gilsonite
Oil shales

Pavements, Bituminous
Road tar
Roads, Bituminous

BITUMINOUS materials—Continued

Testing

- Viscosity of coal-tar residues; comparison of viscosity measurements and A.S.T.M. penetration tests. W. F. Fair, jr. and E. W. Volkmann. *bibliog Ind & Eng Chem Anal* 15:240-2 Ap 15 '43
- Viscosity of pitches. W. F. Fair, jr. and E. W. Volkmann. *bibliog Ind & Eng Chem Anal* ed 15:235-9 Ap 15 '43

BITUMINOUS roads. See Roads, Bituminous

BITUMINOUS sand

- Asphalt from the Alberta tar sands. J. H. Holloway. *map Roads & Bridges* 81:78+ Mr '43
- Canadian government takes over operation of Athabaska oil sand. *Oil & Gas J* 41:43 Ap 29 '43
- Exploitation of Athabaska tar sands. *Pet Eng* 15:114+ O '43

- BLACK, Joseph**, 1728-1799
Joseph Black, M.D. A. Kent. *bibliog Chem & Ind* 61:530-1 D 26 '42

BLACK

- Observations on black nickel. E. Schore. *Metal Finishing* 41:77-9 F '43

See also

Carbon black

BLACK body

- Blackbody. F. Benford. *Gen Elec R* 46:377-82, 433-40 Jl-Ag '43

BLACK liquor. See Paper mills—Waste

BLACK markets. See Profiteering

BLACK-oxide coatings. See Metal finishing

BLACK paper. See Paper—Color

BLACK River group. See Geology, Stratigraphic—Ordovician

BLACKENING of aluminum. See Aluminum—Coloring

BLACKENING of non-ferrous metals. See Metals, Non-ferrous—Blackening

BLACKENING of steel. See Steel—Blackening

BLACKOUT lamps. See Electric lamps, Black-out

BLACKOUT paint. See Paint

BLACKOUTS in war

- Airport lighting under blackout conditions. H. J. C. Pearson. *Illum Eng* 37:846-8 D '42

Area street lights have blackout control. W. A. Upham. *diags Elec W* 119:1472 My 1 '43

Blackening-out of converter furnaces; abstract. W. Trinks. *diag Mech Handling* 29:230 D '42

Blackout and dimout of street lighting and traffic signals. K. M. Reid. *diags Illum Eng* 37:849-56 D '42

Blackout and protective lighting. W. G. Darley. *il diags Ry Age* 113:1028-31+ D 26 '42

Blackout dining cars. *il Ry Age* 115:732 N 6 '43

Blackout lighting; how much light is permissible and how best to produce. L. C. Porter. *bibliog il diags Gen Elec R* 45:674-84 D '42

Blackout lighting using the principle of mutual exclusion by color; tests using variety of window coatings, filters, and light sources. R. A. Wank and E. H. Wakefield. *diag Illum Eng* 38:41-4 Ja '43

Blackout problems of a utility serving 16 counties; West Penn power company. W. R. Hamilton. *Elec W* 119:753-4 Mr 6 '43

Commercial and industrial blackouts on the Pacific coast. W. P. Bear. *Illum Eng* 37:818-21 D '42

Darkness for victory. T. P. Walker. *Pub Util* 31:242-5 F 18 '43

Do's and don'ts for blackouts and dim-outs. S. G. Hibben. *Special Lib* 33:372-3 D '42

Eastern commercial and industrial blackouts. R. B. Brown, jr. *Illum Eng* 37:822-5 D '42

Glass-beaded paint for blackout traffic control. R. A. Mitchell. *il Eng N* 129:720-1 N 19 '42

Highway signs and markings for blackout conditions; test using cars equipped with lights approved by the War department. G. J. Fisher and O. K. Normann. *il diags map Pub Roads* 23:105-24, 135-6 O '42

Motor vehicle blackout lighting. H. C. Mead. *Illum Eng* 37:839-43 D '42

Motor vehicle blackout lighting. V. J. Roper. *Illum Eng* 37:835-8 D '42

Progress in engineering knowledge during 1942; blackouts. P. L. Alger and J. Stokley. *il Gen Elec E* 46:129-30 *bibliog*(p137) F '43

Progress interpretations; report of the I.E.S. committee; blackout engineering. *il diags Illum Eng* 37:666-74 D '42

Road markings for blackout conditions; embedding glass beads in paint more than doubles visibility. *Pub Works* 74:47-8 S '43

Simple and inexpensive methods for black-out control of small store lighting; illustrated instructions. *Elec W* 118:2142 D 26 '42

Traffic signals during blackouts. C. T. Bakeman. *Illum Eng* 37:857-61 D '42

Tripping device on time switch for blackouts. *diags Edison Elec Inst Bul* 11:14 Ja '43

Ventilation (natural and artificial) in relation to the black-out. E. W. Murray. *Inst Chem Eng Trans* 19:25-9; Discussion. 29-32 '41

Water supply observations during blackouts. F. J. Reny. *Water Works & Sewerage* 90:322 S '43

See also

Air raids—Protective Lighting—War measures

BLACKSTONE Valley gas and electric company
Registers with SEC. *Comm & Fin Chr* 158:1727 N 1 '43

BLAISE reaction

Direct reduction of certain carboxylic acids to aldehydes, and the preparation of undecaldehyde by a modified Blaise reaction. R. R. Davies and H. H. Hodgson. *Soc Chem Ind J* 62:123 Ag '43

BLAKE, William, 1757-1827

Civilization and the arts. W. M. Dixon. *Fortune* 27:112-15, 120+ Ap '43

BLANCHING

Dehydration of fruits offers important wartime advantages. E. M. Mrak and others. *bibliog il Food Ind* 15:59-62 Ap '43

New development in technic of blanching. G. T. Hemmeter. *Food Ind* 15:137-8 N '43

Peroxidase test for blanching requires careful application. H. J. Phaff and M. A. Joslyn. *bibliog il Food Ind* 15:50-2 Mr '43

Testing

Quantitative field test for estimation of peroxidase. W. B. Davis. *Ind & Eng Chem Anal ed* 14:952-3 D 15 '42

BLANDFORD, John Bennett, 1897-

Portrait. *Arch Forum* 79:60 S '43

BLANKET bonds. See Bankers' blanket bond, Insurance companies blanket bond

BLANKETS

Fabrics for military purposes; manufacturing and finishing procedures for four types of navy wool blankets. *il Textile World* 93:105 F '43

Luxury slumber; ersatz blanket market. *Business Week* p67 F 6 '43

Advertising

Blanket company offers first aid to insomniacs. *Ptr Ink* 203:68 Ap 30 '43

Testing

Advantages of a blanket-and-sheet combination for outdoor use. H. F. Schiefer. *J Research Nat Bur Stand* 30:203-14 Mr '43

Factors influencing thermal transmission of blanket materials. E. Freedman. *il Rayon* 24:527-8, 583-9 O-N '43; Same. *Textile Col* 65:477-80 N '43; Abstract. *Textile World* 93:77+ O '43

Part-wool blankets for use in barracks. H. F. Schiefer, L. R. Mizell and F. T. Mose-dale. *J Research Nat Bur Stand* 30:203-8 Mr '43

BLAST cleaning. See Sand blast

BLAST furnace gas

Automatic combustion control for steel plant boilers; firing with blast furnace gas with coal as auxiliary fuel. M. J. Boho. *il* plan Blast F & Steel Pl 31:430, 432-4, 447-8 Ap '43

Blast furnace gas burning; Babcock & Wilcox multi-fuel burners. F. X. Gilg. *diags* Blast F & Steel Pl 31:224-8 F '43

Gas at the new Kaiser company steel plant at Fontana, California. F. A. Herr. *il* Am Gas J 159:11-13+ S '43

Modern boilers for steel-mill plants; designed to burn blast-furnace gas and supplementary fuels efficiently. M. H. Kuhner. *diags* Power 87:650-7 O '43

Cleaning

Combined primary and secondary blast furnace gas washer. S. P. Kinney. *il* diag Blast F & Steel Pl 31:113-16 Ja '43

BLAST furnace slag. See Slag**BLAST furnace stoves**

Develops cross-vent checker brick. *il* *diags* Steel 113:36 Ag 9 '43

BLAST furnaces

Bethlehem relines and enlarges blast furnace in twenty-one days. *il* Blast F & Steel Pl 30:1395-6 D '42

Blast furnace efficiency rises; abstract. C. D. King. Steel 113:109 O 18 '43

Blast furnace lubrication; abstract. A. J. Jennings. Iron Age 152:72-3 O 7 '43

Blast furnace metallurgy. C. D. Smith. *bibliog* *il* Steel 112:86-8, 91-2 Mr 29 '43; Same. Blast F & Steel Pl 31:529-34+ My '43

Blast furnace practice, 1942. R. H. Sweetser. Metals & Alloys 17:50-1 Ja '43

Blast furnaces dismantled and moved. *il* Eng N 129:766-70 D 3 '42

Builds welded blast furnace in eight months; riveting and welding costs compared. R. F. Fey. *il* *diags* Steel 113:144-50+ S 20 '43; Same cond. Iron Age 151:48-55, 130 Je 24 '43

Furnacemen look to your sinter. J. D. Knox. *il* Steel 112:254-6, 258 Ja 4 '43

Handling emergency shutdowns at blast furnace plants due to failure of cooling water supply. W. H. Burnett. Steel 112:108+ Mr 1 '43

Increased blast furnace capacity and how accomplished. G. T. Williams and B. M. Stubblefield. Blast F & Steel Pl 31:645-8, 780-2 Je-Jl '43

Investigations on falling blast-furnace slags. T. W. Parker and J. F. Ryder. *bibliog* Iron & Steel Inst J 146:21-51, pl 1-2 no 2 '42

Moves blast furnace to Mexico; Mississippi Valley iron company. R. R. Hetz. *il* Steel 112:98-100+ Je 28 '43

National open hearth steel committee and blast furnace and raw materials committee of the American institute of mining and metallurgical engineers; 26th conference, program. Blast F & Steel Pl 31:sup20+ Ap '43

New blast furnace blown in at Bethlehem's Lackawanna plant. *il* Steel 112:79 Je 28 '43

Problems of total operation in steelmaking; abstract. W. C. Marshall and F. G. Norris. Iron Age 151:57-8 F 25 '43

Republic's new blast furnace is on production. *il* Blast F & Steel Pl 30:1283-4 N '42

Résumé of blast furnace practice in 1942. W. A. Steele. *il* Blast F & Steel Pl 31:68-70 Ja '43

Sinter and blast furnace thermal principles. C. E. Agnew. *il* Steel 113:110-12, 114+ O 4; 262+ O 11 '43

Sintering plant practice and the use of sinter in the blast furnace. M. E. Nickel. Blast F & Steel Pl 31:sup65+ Ap '43

Smelting of vanadium-bearing titaniferous slag from an experimental blast furnace. C. E. Wood. T. L. Joseph and S. S. Cole. *bibliog* *il* diag U S Bur Mines Rep of Invest 3679:1-24 '43

Smelting sinter in the blast furnace. C. E. Agnew. *il* Steel 112:100-2+ F 15; 88-90, 94, 97 F 22 '43

Stopping blast furnace tap-holes; abstract. A. G. Arend. Metals & Alloys 18:550 S '43

Study of the reducibility of ores and blast furnace sinter. W. O. Philbrook. *bibliog* *il* *diags* table(insert) Blast F & Steel Pl 31:890-7+, 1019-24, 1141-7 Ag-O '43

Use of inwall temperatures in determining improper gas flow. L. Tofft. Blast F & Steel Pl 31:759-66 Jl '43

See also

Blast furnace gas Iron metallurgy
Blast furnace stoves Slag
Cupola furnaces

Air supply

Air-conditioned blast furnaces. F. T. Sisco. Min & Met 24:18 Ja '43

Bone dry or three grains? three papers on conditioning air for blast furnaces. R. H. Sweetser and others. *il* Heating-Piping 15: 249-53 My '43

Dry blast production; abstract. D. Wolochow. Metals & Alloys 16:924+ N '42

Effect of moisture in blast air. R. J. Cowan. *il* *diags* Iron Age 150:43-50 N 12; 46-50 N 19 '42

Charging

Developments in blast furnace charging. A. J. Whitcomb. Mech Handling 29:217-18, 243-5 N-D '42

Slag control through blast furnace tuyeres; abstract. C. G. Hogberg. Metals & Alloys 17:1010 My '43

2400 tons of sinter per day; Youngstown sheet & tube co. *il* Iron Age 150:32-5 D 31 '42

Cooling

Emergency plant shutdowns; interruption of cooling water supply to blast furnaces. W. H. Burnett. Blast F & Steel Pl 31:323-4 Mr '43

Design

Blast furnace for solving blast furnace problems. J. S. Stewart. *il* *diags* Eng & Min J 144:64-8 Jl '43

Lining

Blast furnace refractories; abstract. R. E. Birch. Metal Prog 43:932+ Je '43

BLASTING

Alternate methods of connecting blasting caps to Primacord obviates use of copper unions. *diags* Explosives Eng 20:366 D '42

Big Rock in Little Rock, Arkansas; quarry and crushing plant. J. M. Daugherty. *il* Explosives Eng 21:130, 151 Jl '43

Blast throws bridge landward for salvage. *il* Eng N 130:160-1 F 4 '43

Blasting a 22ft. limestone ledge over a wide area; Hillsville district, Ohio. *il* Rock Prod 46:54-5+ Ap '43

Blasting five tunnels at one time; Trap rock company of Dresser, Wisconsin. W. P. Beinhorn. *il* Explosives Eng 21:172-3 S '43

Blasting rings from rotary kilns by means of Cardox. R. Gibbs. *diags* Rock Prod 46:96, 98+ Ag '43

Blasting salt below sea level; Jefferson Island salt mining company. W. H. Roll. flow sheet *il* *diags* Explosives Eng 21:7-14 Ja '43

Damage from air blast; progress report 2. S. L. Windes. *bibliog* pls U S Bur Mines Rep of Invest 3708:1-50 '43

Explosives; chapter from Truck trail handbook of United States Forest service. *il* *diags* Roads & Sts 85:37+ D '42; 86:53-7+ F; 52-6+ Ap; 58-60+ Jl '43

Explosives erect a pole line. J. L. Mattox. *il* Explosives Eng 20:138-41 My '42; Abstract. Eng N 130:811 Je 3 '43

How a tunnel drill round is blasted. M. W. Terrill. *diags* maps Comp Air M 48:7193-5 N '43

Industrial blasting; technological progress. F. J. Byrne. *il* Sci Am 169:56-8 Ag '43

Peat salvage and reclamation of bog area; explosives displace swamp materials. O. F. Burbank. *il* diag Civil Eng 13:425-6 S '43

Quarrying stone for quicklime; Moores lime company. T. L. Wells. *il* *diags* Explosives Eng 20:321 N '42

Stemming in metal mines; progress report 5; comparison of dust and gases produced from blasting charges of dynamite in drill holes, in bombs, and in mud-cap shots. J. A. Johnson and W. G. Agnew. U S Bur Mines Rep of Invest 3673:1-10 '42

BLASTING—Continued

Stemming in metal mines; progress report 6; relative advantages and disadvantages of different types of stemming and no stemming when used with 40 percent ammonia gelatin dynamite at the Mount Weather testing adit. J. A. Johnson and W. G. Agnew. pl U S Bur Mines Rep of Invest 3693:1-38 '43

Stemming in metal mines, Progress report 7; blasting with no stemming only 72 percent efficient compared with results obtained when two cartridges of sand stemming per hole were used with 40-percent ammonia gelatin dynamite at the Mount Weather testing adit. W. G. Agnew. U S Bur Mines Rep of Invest 3725:1-19 '43

Tunnel blast at North Branford. J. Horthy. il Explosives Eng 21:84-5, 99 My '43

Unusual hanging wall shot; Arkansas quicksilver mines. R. L. Klotz, jr. il diag plan Explosives Eng 21:21-5 Ja '43

Youghogheny dam nears completion. il diag Explosives Eng 21:43-7 Mr '43

See also
Explosives

Safety measures

Active list of permissible explosives and blasting devices approved prior to June 30, 1942. J. E. Tiffany and Z. C. Gaugler. U S Bur Mines Rep of Invest 3665:1-25 '42

Cushioned blasting; preliminary studies of gallery testing. A. R. T. Denues, il diag U S Bur Mines Rep of Invest 3674:1-37 bibliog(p36-7) '43

Effects of sheaths on gaseous products from permissible explosives. E. J. Murphy and others. bibliog U S Bur Mines Rep of Invest 3705:1-41 '43

Handling explosives. E. L. Thayer. Rock Prod 45:86-4 D '42

Safer blasting near power lines; device prevents cap wires from fouling cables in seismograph shooting. M. D. McCarty. il Explosives Eng 21:192-4 S '43

Safety in underground blasting methods. B. S. Richards. il Min Cong J 29:26-9 S '43

Some information from an investigation on methods of confining carbox blasting devices in boreholes in certain coal mines. F. E. Griffith and C. H. Seelings. pls U S Bur Mines Rep of Invest 3714:1-13 '43

BLASTING, Subaqueous

Blasting river crossings for pipe lines. R. Siegrist. il Explosives Eng 21:86-4 My '43

Difficult submerged rock removal undertaken in Seymour Narrows. Eng N 131:27 JI 1 '43

Natural gas crosses the Maumee river. R. S. Siegrist. il Explosives Eng 21:174-5 S '43

Trenching rock ledges complicates WEP Mississippi River crossing. P. Reed. il Oil & Gas J 42:41-2 My 13 '43

BLEACHERIES**Equipment**

Continuous peroxide bleaching as developed in the Piedmont section; presented for the A.A.T.C.C. Piedmont section by R. E. Rupp. diag Am Dyestuff Rep 31:638-40 D 7 '42

BLEACHERS' association, limited

Ordinary general meeting, 44th, Manchester. Economist 145:121-2 JI 24 '43

BLEACHING

Damage to textile fibers and fabrics in finishing processes. Textile Col 65:379-82 S '43

See also

Decolorization
Dyes and dyeing

Paper making—
Bleaching
Stains—Removal

Cotton

Continuous peroxide bleaching as developed in the Piedmont section; presented for the A.A.T.C.C. Piedmont section by R. E. Rupp. diag Am Dyestuff Rep 31:638-40 D 7 '42

Improvements in continuous peroxide bleaching. H. R. Mauersberger. flow plan il Rayon 24:144-5 Mr '43

Fur

Principles of fur bleaching. W. E. Austin. Textile Col 65:407-11, 429-30-4 S-O '43

Paper

See Paper making—Bleaching

Rayon

Improvements in continuous peroxide bleaching. H. R. Mauersberger. flow plan il Rayon 24:144-5 Mr '43

Wool

Action of sulphates on wool. A. J. Hall. Textile Col 65:311-13 JI '43

BLEACHING materials

Bleaching solutions of chlorines and their self-production. G. Ullmann. Textile Col 65:227, 231, 253-4 My-Je '43

How to handle chemicals safely. il Textile World 93:96-7 O '43

Textile bleaching compounds. Textile Col 65:328-9 JI '43

See also

Chlorine
Fuller's earth
Hydrogen peroxide
Hypochlorites
Sodium chlorite

BLIMP hangars. See Hangars

BLIMPS. See Airships

BLIND

Audio scale may open war work to blind; diagram. Elec Eng 52:40 Ja '43

Blind girls as transcribers. il Am Business 12:13 D '42

Blind operators weigh material by ear; new Toledo scale. il Steel 112:98 F 15 '43

Blind war workers prove efficient, score new low records in absenteeism, spoilage; Walter Kidde & co. il Iron Age 152:90-1 Ag 19 '43

Fish packers like fibre containers; employment of blind operators. il Mod Packaging 16:44-6-4 JI '43

Directories

Directory of activities for the blind in the United States and Canada; including prevention of blindness organizations and sight-saving classes. H. Lende, comp. 5th ed 149p ps \$1.25 American foundation for the blind, 15 W. 16th st, New York '43

BLIND flying. See Aviation—Instrument flying

BLOCK sampling. See Sampling (statistical methods)

BLOOD

Chemistry and uses of blood substitutes. O. F. Denstedt. Can Chem & Process Ind 27:322-4 Je '43

Cold agglutinins (autohemagglutinins) in primary atypical pneumonias. O. L. Peterson, T. H. Ham and M. Finland. Science 97:167 F 12 '43

Destruction of red blood cells after fat ingestion. V. Johnson, J. Longini and L. W. Freeman. Science 97:400 Ap 30 '43

Determination of cell volume and hemoglobin on the same drop of blood. A. T. Shohl and L. K. Diamond. bibliog Science 98:22-3 JI 2 '43

Effect of lead absorption on blood calcium. W. V. Jenrette and L. T. Fairhall. bibliog Pub Health Rep 58:1001-6 JI 2 '43

Enzymatic cleaning of Berkefeld candles used in the filtration of human blood plasma. B. Witlin. Science 98:160 Ag 13 '43

Influence of adrenal cortical secretion on blood elements. T. F. Dougherty and A. White. Science 98:367-9 O 22 '43

Isolation and properties of chicken erythrocyte nuclei. A. L. Dounce and Tien Ho Lan. Science 97:584-5 Je 25 '43

Measurement of industrial lead exposure by determination of stippling of the erythrocytes. L. W. Sanders. bibliog J Ind Hygiene 25:38-46 F '43

Metabolism of mononitroparaffins; the concentration of nitroethane, nitrite and nitrate in the blood of rabbits during exposure by inhalation and oral administration. E. W. Scott. diag J Ind Hygiene 25:20-5 Ja '43

Method for the study of invertebrate blood in vitro. E. Liebmann. diag Science 97:146 F 5 '43

Normal variation in the concentration of fibrinogen, albumin, and globulin in blood plasma. R. M. Hill and V. Trevorrow. bibliog J Phys Chem 46:1117-29 D '42

BLOOD—*Continued*

Recording blood flow in stomach with thermocouples and phototubes. *Electronics* 16: 130+ J1 '43

Studies regarding a glutamine-like substance in blood and spinal fluid. M. M. Harris. *bibliog Science* 97:382-3 Ap 23 '43

See also
Hemoglobin
Lipemia
Serum

Analysis

Determination of volatile halogenated hydrocarbons in blood. H. E. Moran. *bibliog diag J Ind Hygiene* 25:243-8 Je '43

Estimation of the sulfonamides; a rapid and accurate micromethod. S. W. Lee, N. B. Hannay and W. C. Hand. *bibliog Ind & Eng Chem Anal* ed 15:403-6 Je 15 '43

Measurement of industrial lead exposure by analyses of blood and excreta of workmen. J. Cholak and K. Bambach. *bibliog J Ind Hygiene* 25:47-54 F '43

Microextraction and microtitration of fatty acids. D. Stetten, Jr. and G. F. Grail. *diag Ind & Eng Chem Anal* ed 15:300 Ap 15 '43

Preliminary spectrographic study of normal and arthritic human blood. J. S. Hepburn, C. A. Hall and J. A. Doane. *Franklin Inst J* 235:167 F '43

Rapid and accurate micro method for the estimation of the sulfonamides. S. W. Lee, N. B. Hannay and W. C. Hand. *Science* 97: 359-60 Ap 16 '43

Toxicology of acrylonitrile (vinyl cyanide); determination of thiocyanates in blood and urine. A. H. Lawton, T. R. Sweeney and H. C. Dudley. *bibliog J Ind Hygiene* 25:13-19 Ja '43

Circulation

New objective method for the determination of the circulation time. B. Jablons. *Science* 97:515-16 Je 4 '43

Coagulation

Influence of fever upon the action of 3,3'-methylene-bis-(4-hydroxycoumarin) (dicumarol). R. K. Richards. *Science* 97:313 Ap 2 '43

New blood-clotting theory. J. H. Ferguson. *bibliog Science* 97:319-22 Ap 9 '43

Protective action of glucose in bovine plasma against heat coagulation. C. R. Hardt, I. F. Huddleson and C. D. Ball. *bibliog Science* 98:309-10 O 1 '43

Use of thrombin to stop bleeding. B. Kudryashov. *Science* 96:sup 10 N 27 '42

See also
Prothrombin
Vitamins—Vitamin K

Cross-circulation

Cross-circulation as a method in the study of drug fixation and poisoning. T. Koppányi and C. R. Linegar. *Science* 96:562-3 D 18 '42

See also
Anemia

Oxygen content

Oximeter, an instrument for measuring continuously the oxygen saturation of arterial blood in man. G. A. Millikan. *il diags R Sci Instr* 13:434-44 O '42; *Abstract. Electronics* 16:130+ Ja '43

Transfusion

Air conditioning used in processing human serum albumin. *Heating-Piping* 15:156 O '43

Blood banks don't fail; blood giving does not affect absenteeism and production. *il Safety Eng* 8:41+ Je '43

Blood donations by war workers. *Ind Med* 12:318, 320+ My '43

Blood on the move; Church containers. *Business Week* p20+ J1 17 '43

Church containers used for blood shipments. *il Refrig Eng* 44:396 D '42

Deantigenated beef blood plasma as a possible substitute for human blood plasma. J. H. Lewis. *Science* 98:371-2 O 22 '43

Inexpensive disposable filter for blood and plasma transfusions. M. Novak. *il Science* 97:248 Mr 12 '43

Nylon blood and plasma filter. S. B. Rose. *diag Science* 98:92 J1 23 '43

Nylon blood filters. *Chem Ind* 53:360 S '43

Possible substitute for blood plasma; hydrolyzed proteins from beef blood or casein; abstract. R. Elman and C. E. Lischer. *Science* 97:sup10+ F 19 '43

Probability of obtaining potentially dangerous pools of human serum or plasma. H. A. Davis and G. R. Meneely. *bibliog Science* 96:468-70 N 20 '42

Refrigerated container designed for food now speeds blood for Red cross. *Franklin Inst J* 235:350 Ap '43

Transporting frozen goods. *il Manuf Rec* 111: 37+ D '42

Two blood banks; San Francisco, Honolulu. *il diag plans Arch Forum* 77:59-63 N '42

See also
Blood donor centers
Blood group

BLOOD, Dried

Effect of drying from the frozen state on the physico-chemical properties of citrated human blood plasma. L. E. Krejci. *il Franklin Inst J* 234:596-604 D '42

Elliott company speeds processing of plasma; steam jet ejector for high vacuum drying. *Refrig Eng* 46:247 O '43

Engineering discussion of the desiccation of human blood plasma. D. C. Pfeiffer. *bibliog il diags Mech Eng* 65:325-31 My '43; *Discussion. 65:676-7 S '43*

Analysis

Determination of blood in packing-house by-products. R. Reiser and G. S. Fraps. *bibliog Ind & Eng Chem Anal* ed 14:861-3 N 15 '42

BLOOD, Frozen

Effect of drying from the frozen state on the physico-chemical properties of citrated human blood plasma. L. E. Krejci. *il Franklin Inst J* 234:596-604 D '42

Low temperature refrigeration requirements in war production; blood plasma freezing and processing. C. L. Olin. *il diags Refrig Eng* 45:172-5 Mr '43

BLOOD donor centers

Blood donor center in building of Acacia. *il East Underw* 44:6 Ag 20 '43

Two blood banks; San Francisco, Honolulu. *il diag plans Arch Forum* 77:59-63 N '42

BLOOD group

Distribution and heredity of variants of the Rh type. A. S. Wiener. *bibliog Science* 98: 182-4 Ag 20 '43

Human anti-Rh sera and their importance in racial studies. P. Levine. *bibliog Science* 96:452-3 N 13 '42

Probability of obtaining potentially dangerous pools of human serum or plasma. H. A. Davis and G. R. Meneely. *bibliog Science* 96:468-70 N 20 '42

BLOOD pressure

Cod liver oil and other fish oils may prove to be a source of a high blood pressure remedy; abstract. A. Grollman and T. R. Harrison. *Science* 97:sup12 My 28 '43

Tertiary alkyl primary amines, RR'R''CNH₂. H. R. Henze and T. R. Thompson. *Am Chem Soc J* 65:1422-5 J1 '43

BLOOD serum. See Serum**BLOWERS**

Air-supported roofs for factories. H. H. Stevens, Jr. *il diags Arch Rec* 92:45-6 D '42

Blower design utilizes screw principles. J. E. Whitfield. *il Machine Design* 15:147+ Ap '43

Carbon and molded rubber seal blower rotors. *il diag Product Eng* 14:339 Je '43

Engineering economies of product design. R. E. Smith. *diag Blast F & Steel Pl* 31:790, 792-4 J1 '43; Same cond. Concrete (mill sec) 51:187+ Je '43

Hamilton-Whitfield blower. *il diag Automotive & Aviation Ind* 88:44+ Ja 15 '43

Hamilton-Whitfield blower. J. E. Whitfield. *il diag Diesel Power* 21:409-11 My '43

See also
Blast furnaces
Exhaust systems
Fans, Mechanical
Gas and oil engines—
Superchargers
Mine ventilation
Soot blowers
Ventilation

BLOWING of plastics. See Plastic materials—Blowing

BLUE

Dyeing to government specifications with sulfur colors. *Am Dyestuff Rep* 32:109-12 Mr 1 '43; Same. *Textile Col* 64:534-5, 539 N '42

Dyeing with sulphur colors; blue shades and the problems to be faced in producing them. *Textile Col* 64:534-5, 539-41 N '42

Navy blue with or without indigo. A. A. Claflin. *Am Dyestuff Rep* 32:323-4 J1 19 '43

See also

Indanthrene blue	Molybdenum blue
Indigo	Prussian blue
Methylene blue	Wood

BLUE toning. See Photography—Developing and developers

BLUEPRINTS

Weaco blue print dryer. *Il R Sci Instr* 13: 504-5 N '42

BOARDING schools. See Private schools

BOAS, Franz, 1858-1942

Franz Boas, his predecessors and his contemporaries; reply to Professor Benedict. R. H. Lowie. *Science* 97:202-3 F '26 '43

Franz Boas, psychologist. J. P. Foley, jr. *Science* 97:330 Ap 9 '43

Sketch. R. Benedict. *Science* 97:60-2 Ja 15 '43

BOAT building

Making plywood with multidirectional pressure. J. S. Barnes. *bibliog Il Mech Eng* 65:17-20 Ja '43

BOATS, Rubber

Some of the new roles of rubber in modern warfare; parachute troopers, inflated boats and pontoons, and balloons foreseen by Goodyear and Franklin. R. Wolf. *Il Rubber Age* 52:399-402 F '43

BOATS and boating

See also

Dredges	Ships
Flying boats	Steamboats
Freight ships	Torpedo boats
Shipbuilding	Towboats

BODINE, William Warden, 1887-

Financial vice-president of Penn Mutual Life, per Comm. & Fin Chr 157:2379 Je 24 '43; East Underw 44:5+ Je 25 '43

BODY form. See Stature

BOEING airplane company

Boeing output in 1942 eight times greater than previous year. *Steel* 112:60+ My 24 '43

Securities disturbing investors. J. S. Williams. *Mag of Wall St* 72:586 S 4 '43

Ten years of progress. W. E. Beall. *Il Aeronautical Eng R* 1:45 N '42

BOFORS guns. See Guns, Anti-aircraft

BOGS

See also

Peat bogs

BOHN aluminum and brass corporation

Indicted by grand jury. *Comm & Fin Chr* 158: 636 Ag 16 '43

Investment audit. J. C. Clifford. *Mag of Wall St* 71:296-7+ D 26 '42

Market losses for 1943. *Mag of Wall St* 71: 343 Ja 9 '43

Thumbail stock appraisal. *Mag of Wall St* 72:366 J1 10 '43

BOILER cleaning

Boiler cleaning; internal and external heating surfaces. V. Walker. *Elec R (Lond)* 133: 75-6 J1 16 '43

Chemical cleaning of steam boilers. F. D. Mosher. *Power Pl Eng* 47:66-7 My '43

Chemical removal of scale. F. N. Alquist, C. H. Groom and G. F. Williams. *Power Pl Eng* 47:71-2 J1 '43

Flue cleaning deluge. *Il Power Pl Eng* 47: 34-6 Je '43

Heterodox tube cleaning. *diags Power Pl Eng* 46:93-4 O '42; 47:87-9 Mr '43

See also

Soot blowers

BOILER explosions

Apartment house severely damaged by heating boiler explosion. *Il Locomotive* 44:204-7 J1 '43

Causes and prevention of furnace explosions. W. B. Parker. *Il Locomotive* 44:226-34+ O '43

Heating boiler accident reports reveal many and varied causes. *Il Locomotive* 44:242-7 O '43

Heating boilers can be dangerous. *Locomotive* 44:131-2 Ja '43

Lessons from boiler explosions; steel with superior physical properties at high temperatures and syphons both contribute to safety. R. McBrian. *Il diag Ry Age* 115: 47-9 J1 10 '43; Same. *Ry Mech Eng* 117:353-5 Ag '43

Why boiler and hot water tank explosions are violent. *Il Locomotive* 44:162-7 Ap '43

BOILER feed pumps. See Pumps, Feed water

BOILER feed water. See Feed water

BOILER furnaces. See Furnaces, Boiler

BOILER insurance. See Insurance, Boiler

BOILER makers, iron ship builders, welders and helpers of America, International brotherhood of. See International brotherhood of boiler makers, iron ship builders, welders and helpers of America

BOILER plants

Boiler plant; recent developments; abstract. B. L. Luly. *Elec R (Lond)* 132:387 Mr 19 '43

Mechanical equipment for factories. F. K. Boomhower. *Arch Rec* 93:59 F '43

See also

Boilers
Feed water
Steam plants

Design

Wartime boiler plant design; Allis-Chalmers mfg. co. *Il Power Pl Eng* 47:62-4 Ja '43

Efficiency

Distribution of boiler load. P. G. Kaufmann. *Inst Mech Eng J & Proc* 148:Proc 42-52 D '42

Economical raising of steam in small and medium-size boiler-plants. G. W. Himus. *Inst Chem Eng Trans* 19:33-41; Discussion. 41-4 '41

Heat balance in a brewery. C. M. Sieben. *Il diags Refrig Eng* 45:410-12+ Je '43

See also

Boilers—Efficiency

Equipment

Boiler-house measurement and control for efficient fuel utilization. G. H. Barker and A. L. Hancock. *Inst E E J* 90 pt 2:217-27 Ag '43; Abstract. *Electrician* 130:117-18 Ja 29 '43; Discussion. *Inst E E J* 90 pt 2: 227-32 Ag '43; *Electrician* 130:118-19 Ja 29 '43

Douglas aircraft company's Tulsa plant is year-round air conditioned. R. F. Hurt. *Il diags Heat & Ven* 40:55-6 S '43

How to meet war time restrictions in heating and air conditioning design; boiler plants. T. W. Reynolds. *plans Heat & Ven* 40:60J-60L F '43

Making a phosphate control system work. J. W. Odlum. *diags Power Pl Eng* 46:70-2+ D '42; Discussion. *R. C. Baker*. 47:98 My '43

New coal chute that eliminates stoker-hopper segregation is easy to make; patent. F. B. Richardson and M. R. Boye. *diags Power* 87:507-9 Ag '43

Pneumatic spreader stokers solve conversion problems, save \$25,000; Hunt-Rankin leather co. W. Macmichael. *Il diag Power* 87:598-9+ S '43

Soot blower, with special reference to the present position of power and automatic operation of mechanical blowers. R. J. Glinn. *bibliog Il diags Inst E E J* 89 pt 2: 533-48 D '42; Same abr. *Engineering* 154:76, 87-8, 105 J1 24-Ag 7 '42; Same cond. *Inst Mech Eng J & Proc* 149:Proc 89-98, pl 1-2 Je '43; Discussion. *Inst E E J* 89 pt 2:548-54; 90 pt 2:259-61 D '42, Ag '43

Use of automatic control to increase plant capacity. H. E. Gerrie. *Blast F & Steel Pl* 31:678, 680-1+ Je '43; Same cond. *Concrete (mill sec)* 51:202-3 J1 '43; Abstract. *Power* 87:316-17 My '43

See also

Boilers
Coal handling
Feed water regulators

Furnaces, Boiler
Pumps, Feed water
Stokers, Mechanical
Water gages

BOILER plants—Continued**Layout**

Detailed layouts and accurate planning required for efficient piping installations. diags plans Heat & Ven 40:47-52 Ag '43

Maintenance and repair

Boiler maintenance in wartime. A. C. Foster. Power Pl Eng 47:114, 116+ My '43

Good operation key to small-boiler maintenance. L. W. Hayward. il Power 87:157-9+ Mr '43

It starts in the boiler house. F. D. Mosher. il Textile World 93:112-13 F '43

Practical pointers on wartime boiler operation. A. Iddles. il diags Power 87:726-7+ N '43

Proper boiler maintenance for maximum service. Oil & Gas J 41:52+ D 3 '42

Management

Conserving steam to meet wartime load on boilers. il Nat Pet N 35 pt 2:R105-6 Mr 3 '43

Doing all you can with the feedwater system? L. D. Johnson. il diag Power 87:401-3 Je '43

How to operate large boilers. J. L. Massie. Power Pl Eng 47:86-8 S '43

Prevent fuel waste; maintenance services; data sheet. J. F. Barkley. Factory Management 101:164 Jl '43

Procedure for proper boiler operation. J. L. Massie. Pet Eng 14:198+ My '43

BOILER plants, Outdoor

Outdoor steam plants save materials, cut costs; details of 12 geographically diversified installations. L. Elliott. il plan Elec W 119:936-9 Mr 20 '43

BOILER plugs. See Fusible plugs**BOILER pumps. See Pumps, Feed water****BOILER scale**

Boiler scale prevention; electrical treatment of feed water; Kirkaldy and Agfil systems of metal protection. H. Seymour. Electrician 129:525-7 N 13 '42

Chemical removal of scale. F. N. Alquist, C. H. Groom and G. F. Williams. Power Pl Eng 47:71-2 Jl '43

Chemical removal of scale is factor in speeding production. H. F. Simons. bibliog plans Oil & Gas J 42:59-60, 63 My 20 '43

Continuous blowdown in gasoline plant boilers reduces scale formation. N. Williams. il diags Oil & Gas J 42:50+ Mr 27 '43

Crystalline compounds observed in water treatment. C. E. Imhoff and L. A. Burkardt. bibliog (40 references) il Ind & Eng Chem 35:873-82 Ag '43

Mono-sodium phosphate for silica scale. Elec W 118:1644 N 14 '42

Scales still plague boiler operators; discussion at meeting of American society of mechanical engineers. Power 86:969 Mid-D '42

BOILER tubes

Corrosion of boiler tubes. T. H. Turner. Inst Mech Eng J & Proc 149:Proc74-88, pl 1-2 bibliog(p85-8) My '43; Same abr. Engineering 154:455-6, 464-5, 503-5 4-11, 25 '42; Excerpts. Engineer 174:46-8, 466-8 N 27, D 4 '42; Abstract. Chem Age (Lond) 48: 115-18 Ja 23 '43; Discussion. Engineering 154:454, 463 D 4-11 '42; Engineer 174:442-4 N 27 '42

Don't fool with bagged tubes. J. M. Gorrie. diag Power 87:48-9 Ja '43

Heterodox tube cleaning. diags Power Pl Eng 46:93-4 O '42; 47:87-9 Mr '43

Periscope inspects inside of a boiler tube. W. J. de Mauriac. il diag Elec W 119:1148 Ap 3 '43

Setting and maintaining flues without copper ferrules. S. Christopherson. diags Ry Mech Eng 117:131-2, 179-81 Mr-Apr '43

Tube corrosion of furnace walls. G. S. Gethen. il diags Power Pl Eng 47:74-8 O '43

Tube pitting traced to unequal water flow. R. Briscoe. il Elec W 119:443-4 F 6 '43

Expanded joints

Experimental investigation of tube expanding. E. D. Grimison and G. H. Lee. il diags A S M E Trans 65:497-505; Discussion. 515-21 Jl '43

Holding power and hydraulic tightness of expanded tube joints; analysis of the stress and deformation. J. N. Goodier and G. J. Schoessow. bibliog il diags A S M E Trans 65:489-96 Jl '43

Practical aspects of making expanded joints. C. A. Maxwell. il diags A S M E Trans 65: 507-14; Discussion. 515-22 Jl '43

Testing

Studies of heat transmission through boiler tubing at pressures from 500 to 3300 pounds. W. F. Davidson and others. il diags A S M E Trans 65:553-79; Discussion. 579-91 Ag '43

BOILER water. See Feed water**BOILERS**

American society of mechanical engineers; power plant papers. Elec W 118:1936-7 D 12 '42

Boiler availability; aspects of selection, design and operation. V. Smith. Elec R (Lond) 133:377-9 S 17 '43

Boilers; past and present. S. J. Thompson. il 42 diags Inst Mech Eng J & Proc 148: Proc 132-61, pl 1-6 F '43; Same, with 3 diags. Engineering 154:356, 398-400, 418-20 O 30, N 13-20 '42; Same cond. with 11 diags. Engineer 174:356-8, 376-8, 394-6 O 30-N 13 '42; Excerpts. Electrician 129:468-70 O 30 '42

Increased steam capacity versus the materials problem. G. E. Anderson. il Oil & Gas J 41:79-81 Ap 8 '43

Jenkins stills become steam boilers. il Oil & Gas J 42:48 O 28 '43

Mechanics of materials and some details of boiler construction; questions and answers. A. Higgins. diags Power 87:552-4 Ag '43

Operation of high pressure boilers. F. D. Mosher. il Heat & Ven 40:37-41 Ap '43

Practical pointers on wartime boiler operation. A. Iddles. il diags Power 87:726-7+ N '43

Procedure for proper boiler operation. J. L. Massie. Pet Eng 14:198+ My '43

Questions and answers for power engineers; boiler regulations and methods of study. A. Higgins. il Power 87:198-200 Mr '43

Questions and answers for power engineers; boilers: safety, definitions, firetube types. A. Higgins. diags Power 87:270-3 Ap '43; Discussion. H. M. Spring. diags 87:412-13+ Je '43

Questions and answers for power engineers; stays, staybolts, joint calculations. A. Higgins. diags Power 87:628-9, 640a+ S '43

Review of recent progress in heat transfer. C. H. Lander. bibliog il diags Inst Mech Eng J & Proc 148:Proc 11-112 Ja '43; Discussion. 149:Proc 117-32 Je '43

Steam generation for marine and stationary service in the United States, 1933-1943. E. G. Bailey. Mech Eng 65:770-2 N '43

Water problems in high-pressure boilers. D. B. Jones. il diag Elec W 119:1118-20 Ap 3 '43

See also

Boiler explosions and other headings beginning Boiler	Flue gas
Feed water	Furnaces, Boiler
Feed water purification	Grates
	Pumps, Feed water
	Slag (in boilers)

Blowdown

Builds continuous-blowdown system. O. Rantanen. diags Power 87:191-2 Mr '43

Continuous blowdown in gasoline plant boilers reduces scale formation. N. Williams. il diags Oil & Gas J 42:50+ My 27 '43

See also

Locomotive boilers—
Blowdown

Coke firing

Use of coke and coke breeze for steam raising. Mech Handling 30:119-21 Mr '43

Control

Automatic combustion control for steel plant boilers; firing with blast furnace gas with coal as auxiliary fuel. M. J. Boho. il plan Blast F & Steel Pl 31:430, 432-4, 447-8 Ap '43

BOILERS—Control—Continued

- Boiler-house measurement and control for efficient fuel utilization. G. H. Barker and A. L. Hancock. *Inst E E J* 90 pt 2:217-27 '43; Abstracts. *Electrician* 130:117-18 Ja 29 '43; *Elec R (Lond)* 132:115-16 Ja 22 '43; Discussion. *Inst E E J* 90 pt 2:227-32 Ag '43; *Electrician* 130:118-19 Ja 29 '43
- Central control for boilers; form of Ward-Leonard control. J. W. Young. *diags Engineering* 154:461-2 D 11 '42
- Combustion control; system of the Metropolitan-Vickers electrical co. *il diag Elec R (Lond)* 132:423 Mr 26 '43
- Combustion of excess gas; automatic control of boiler firing. R. A. Fox. *diags Oil & Gas J* 41:109-10+ Mr 25 '43
- Electronic circuits actuate automatic combustion control. K. D. Knoblock. *diags Elec W* 120:1168-70 O 2 '43
- How to operate large boilers. J. L. Massie. *Power Pl Eng* 47:86-8 S '43
- Smoke as guide to boiler control. M. Fielden. *Engineer* 174:423 N 20 '42
- Steam boiler control; discussion of paper by S. H. Barker and Hancock. *Elec R (Lond)* 132:158-9 Ja 29 '43
- Unified system of boiler control. *il diag Engineer* 176:284-5 O 8 '43
- Use of automatic control to increase plant capacity. H. H. Gorrie. *Blast F & Steel Pl* 31:678, 680-1+ Je '43; Same cond. Concrete (mill sec) 51:202-3 Jl '43; Abstract. *Power* 87:316-17 My '43

Corrosion

- Corrosion of boiler tubes. T. H. Turner. *bibliog Inst Mech Eng J & Proc* 149:Proc74-38, pl 1-2 My '43; Same abstr. *Engineering* 154:455-6, 464-5, 503-5 D 4-11, 25 '42; Excerpts. *Engineer* 174:446-8, 466-8 N 27-D 4 '42; Abstract. *Chem Age (Lond)* 48:115-18 Ja 23 '43; Discussion. *Engineering* 154:454, 463 D 4-11 '42; *Engineer* 174:442-4 N 27 '42
- Tube pitting traced to unequal water flow. R. Briscoe. *il Elec W* 119:443-4 F 6 '43

Bibliography

- Bibliography of boiler corrosion, and methods of prevention. T. H. Turner. *Inst Mech Eng J & Proc* 149:Proc85-8 My '43

Design

- 1325-lb. pressure topping unit with special reference to forced-circulation boiler. F. S. Clark, F. H. Rosencrans and W. H. Armacost. *diags Blast F & Steel Pl* 30:1385-7, 1390-3+ D '42; Abstract. *Power* 86:965 Mid-D '42
- Modern boilers for steel-mill plants; designed to burn blast-furnace gas and supplementary fuels efficiently. M. H. Kuhner. *diags Power* 87:650-7 O '43
- More steam, how? minimize air leakage. A. Idles. *Elec W* 118:1816+ N 28 '42

See also

Boilers—Vexol boiler

Efficiency

- Boiler efficiency; preventing and removing deposits. C. T. S. Arnett. *Elec R (Lond)* 133:543 O 22 '43
- Boiler feedwater control and its effect on boiler capacity. R. C. Baker. *Power Pl Eng* 47:90-1 Ag '43
- Boiler heat balance. *Oil & Gas J* 41:130 Ja 7 '43
- Boiler output rise by draft changes. J. Cassie. *diags Elec W* 119:476+ F 6 '43
- Chimney loss measurements without CO₂ meters; nomogram for determining losses by temperature measurements. R. H. Parsons. *Engineer* 175:165-6 F 26 '43
- If you want increased capacity and efficiency in wood-burning furnaces. G. L. Graiff. *il diags Power* 87:228-9+ Ap '43
- Modern applications of overfire air. H. C. Carroll. *il diags A S M E Trans* 65:73-7; Discussion. 77-86 F '43
- 600 miles and 10,000 pounds; boiler gains efficiency by added waterwalls and new stoker; Russell-Miller milling co. F. S. Rieder. *il diags Power* 87:594-6 S '43
- Stop that leak! L. S. Lyon. *diags Power Pl Eng* 47:84-5+ O '43

Electric heating

- Electrolytic gases in steam. D. Roberts. *Pulp & Pa of Can* 44:737-8+ S '43
- Public baths scheme; electric conversion. *il diag Elec R (Lond)* 132:541-4 Ap 23 '43

Embrittlement

See Boilers—Failures

Equipment

- Questions and answers for power engineers; steam gages and water columns. *diags Power* 87:698-700 O '43

See also

Furnaces, Boiler
Stokers, Mechanical
Water gages

Failures

- Caustic embrittlement. E. W. Colbeck, S. H. Smith and L. Powell. *bibliog diags Inst Mech Eng J & Proc* 149:Proc63-73, pl 1-4 My '43; Same cond. *Engineering* 154:455, 478-80, 517-19 D 4-11, 25 '42; Discussion. 154:454, 463 D 4-11 '42
- Caustic embrittlement; abstracts of Inter-crystalline cracking of boiler steel and its prevention, by W. C. Schroeder and A. A. Berk, and Symposium on caustic embrittlement, by the Joint research committee on boiler feedwater studies. *Metal Prog* 42:1134+ D '42
- Caustic embrittlement research brings results; work conducted at the United States Bureau of mines. J. H. Walker. *bibliog Mech Eng* 64:391-3 D '42
- Practical way to prevent embrittlement cracking; use of sodium nitrate, quebracho extract, waste sulphite liquor and elimination of caustic alkalinity. A. A. Berk and W. C. Schroeder. *diag A S M E Trans* 65:701-4; Discussion. 704-11 Ag '43
- Protection against caustic embrittlement by coordinated phosphate-pH control. T. E. Purcell and S. F. Whirl. *bibliog il diag Electrochem Soc Trans* 83 (preprint 25):279-95 Ap '43

Firing

- Avoiding high stoker maintenance, retaining good combustion. A. R. Mumford. *bibliog Mech Eng* 65:119-24 F '43
- Causes and prevention of furnace explosions. W. B. Parker. *il Locomotive* 44:226-34+ O '43
- Coal or oil? which is more economical? W. F. Schaphorst. *chart Am Dyestuff Rep* 32:208 Ap 26 '43
- Colloidal fuel substituted for oil fuel. J. F. Barkley, L. R. Burdick and A. B. Hersberger. *il Nat Pet N* 35 pt 2:R304-6 Jl 7 '43; Same. *Coal Age* 48:51-3 Jl '43; Same. *Power* 87:512-13+ Ag '43; Same. *Steel* 113:98-9+ Jl 12 '43; Same. *Pet Refiner* 22:113-16 S '43
- Combined firing of coal and natural gas on stoker-fired units; Kansas City power & light company. H. L. Crain. *diags A S M E Trans* 65:137-40; Discussion. 140-1 Ap '43
- Conversion from oil to coal fired steam generation. S. I. Rottmayer. *chart Heating-Piping* 15:220-4 My '43
- Dew point of flue gases of fuels containing sulfur. J. S. Yeaw and L. Shnidman. *bibliog Power Pl Eng* 47:68-71 Ja; 69-71 F '43
- Elimination of carry-over under steel-mill operating conditions. H. M. Rivers and W. F. Hill. *diags A S M E Trans* 65:149-54 Ap '43; Same cond. *Blast F & Steel Pl* 30:1151-4 O '42; Discussion. *A S M E Trans* 65:154-8 Ap '43
- Firing truck improves boiler operation. R. B. Allen. *il Power* 86:901-2 D '42
- Fuel economy in gas works. G. M. Gill. *Gas J (Lond)* 241:247-8 F 24 '43
- Hand firing practice. *diags Power Pl Eng* 47:96-8 Ag '43
- How to determine forced draft air requirements. E. M. Sims. *chart(pl08) Power Pl Eng* 46:94 F '42; Discussion (Forced draft requirements get Joe steamed up). 46:86-8 Ag; 104, 106+ N '42; 47:97-8 F '43
- Mixing oil and coal for industrial burners. *Power* 86:922b+ D '42
- Modern applications of overfire air. H. C. Carroll. *il diags A S M E Trans* 65:73-7; Discussion. 77-86 F '43

BOILERS—Firing—Continued

Modern boilers for steel-mill plants; designed to burn blast-furnace gas and supplementary fuels efficiently. M. H. Kuhner. *diags Power 87:650-7 O '43*
 Modernized firing methods in powder plant. T. A. Marsh. *il diag Power Pl Eng 47:80-1 Je '43*

Oil-coal mixture proposed for industrial boiler use by Bureau of mines to offset oil shortage. Heat & Ven 39:61 N '42
 Overfire air jets. R. B. Engdahl and W. C. Holton. *bibliog diags A S M E Trans 65:741-61 O '43; Abstract. Heating-Piping 15:431 S '43; Discussion. A S M E Trans 65:751-4 O '43*

Overfire air performance applied to stationary plants. H. C. Carroll. *diags Power Pl Eng 47:81-3 N '43*

Photoelectric-controlled coal larry distributes fuel to hopper feeding boiler. *il Electronics 15:84+ D '42*

Recent developments in spreader-stoker firing. R. L. Beers. *il diags Mech Eng 64:867-71 D '42; Discussion. 65:440-1 Je '43*

Smoke-box char as boiler fuel. *diags Engineer 176:250 S 24 '43*

Use of mixtures of oil and coal in boiler furnaces. W. C. Schroeder. *bibliog Mech Eng 64:793-8+ N '42; Abstract. Nat Pet N 34 pt 2:R363-4+ O 28 '42; Discussion. Mech Eng 65:278-84 Ap '43*

See also

Boilers—Coke firing	Boilers—Wood firing
Boilers—Gas firing	Boilers, Heating—Oil firing
Boilers—Pulverized coal firing	Stokers, Mechanical

Foaming and priming

Case of foaming. *Locomotive 44:201-2 Jl '43*
 Elimination of carry-over under steel-mill operating conditions. H. M. Rivers and W. P. Hill. *diags A S M E Trans 65:149-54 Ap '43; Same cond. Blast F & Steel Pl 30:1151-4 O '42; Discussion. A S M E Trans 65:154-8 Ap '43*

Scales still plague boiler operators; discussion at meeting of American society of mechanical engineers. *Power 86:969 Mid-D '42*

Furnaces

See Furnaces, Boiler

Gas firing

Automatic combustion control for steel plant boilers; firing with blast furnace gas with coal as auxiliary fuel. M. J. Boho. *il plan Blast F & Steel Pl 31:430, 432-4, 447-8 Ap '43*

Blast furnace gas burning; Babcock & Wilcox multi-fuel burners. F. X. Gilg. *diags Blast F & Steel Pl 31:224-8 F '43*

Combustion of excess gas; automatic control of boiler firing. R. A. Fox. *diags Oil & Gas J 41:109-10+ Mr 25 '43*

Natural gas combustion. G. M. Stearns. *Oil & Gas J 41:229 D 31 '42*

Heating boilers

See Boilers, Heating

La Mont boiler

See Boilers, Water tube—La Mont boiler

Length of service

Must these boilers be replaced? insurance carriers permit only 15-psi steam because of their age. *diags Power 87:410-11+ Je '43*

Outdoor installation

See Boiler plants, Outdoor

Pulverized coal firing

Automatic combustion control for steel plant boilers; firing with blast furnace gas with coal as auxiliary fuel. M. J. Boho. *il plan Blast F & Steel Pl 31:430, 432-4, 447-8 Ap '43*

Conversion from oil firing to coal firing. O. Craig. *diags Power Pl Eng 47:76-9 Je; 66-8 Jl '43*

Converting furnaces from oil to coal firing; boiler and metallurgical furnaces. R. M. Hardgrove. *diags Mech Eng 65:573-7 Ag '43; Same cond. Power Pl Eng 47:78-81 Ag '43; Abstract. Power 87:320-1+ My '43*

Ingenious conversion saves oil; Scott paper co. pulverizer equipment blows powdered coal through pipeline to former oil-fired boilers. *diags Power 87:13+ Ja '43*

Problems of conversion to coal; experience of typical companies. H. S. Knowlton. *il plans Elec W 120:626-9 Ag 21 '43*

Pulverized fuel. V. Walker. *diag Elec R (Lond) 132:626-7 My 7 '43*

Saving 70 per cent of fuel oil in lighting pulverized-coal-fired boilers. C. V. Jones and J. J. Harper. *Power Pl Eng 47:114+ N '43*

20-1 speed units drive coal-pulverizer feeders. *il Power 87:227 Ap '43*

Safety measures

Causes and prevention of furnace explosions. W. B. Parker. *il Locomotive 44:226-34+ O '43*

Questions and answers for power engineers; safety valves, water-level alarms, fusible plugs. *diags Power 87:770-2 N '43*

Settings

Construction of refinery boiler settings. J. T. Browning. *diags Pet Eng 14:174, 177 My '43*

Stop that leak! L. S. Lyon. *diags Power Pl Eng 47:34-5+ O '43*

Up boiler settings to better combustion. *Elec W 118:1985-6 D 12 '42*

Standards

A.S.M.E. boiler code. *Mech Eng 64:911-15 D '42*

Revisions and addenda to boiler construction code. *Mech Eng 65:75, 375-7, 445-7 Ja, My-Je '43*

Statistics

Cast-iron boilers and radiators. Survey of Cur Business 1942 Sup p137-8 [supplemented in monthly numbers]

Testing

High-voltage X-rays in the boiler shop. O. R. Carpenter. *il Am Soc T M Proc 42:1101-8; Discussion. 1109-10 '42*

Velox boiler

Experience refines Velox boiler design. *il diags Power 87:23-5 Ja '43*

Present-day design of the Velox boiler. *il diags Engineer 174:364-6 O 30 '42*

Water tube boilers

See Boilers, Water tube

Wood firing

Burning of sawdust. *diags Engineering 155:247 Mr 26 '43*

Burning sawmill waste. F. H. Boothby. *Elec W 119:1476+ My 1 '43*

Effective use of wood waste cuts purchased power needs; Lane co., inc. *il diags plan Power Pl Eng 47:58-62 F '43*

Eugene, Oregon's new plant cashes in on old system's experience; using wood waste as fuel. R. B. Boals. *il diags Power 87:434-6+ Jl '43*

Hog fuel-handling equipment improved; Portland General electric company. *il Elec W 118:1660-1 N 14 '42*

How to figure hog-fuel combustion. G. L. Graiff. *Power 87:325+ My '43*

If you want increased capacity and efficiency in wood-burning furnaces. G. L. Graiff. *il diags Power 87:228-9+ Ap '43*

BOILERS, Heating

Advertising helped this manufacturer avoid wartime conversion; H. B. Smith co. boilers. J. E. Reed. *il Ind Marketing 28:21-2 Ap '43*

Heating boiler accident reports reveal many and varied causes. *il Locomotive 44:242-7 O '43*

Heating boilers can be dangerous. *Locomotive 44:131-2 Ja '43*

Control

Oil to coal conversion; controls. *il diags Heat & Ven 40:53-4 My '43*

BOILERS, Heating—Continued**Electric heating**

Controlled heating; electric space-heating machines of the hot-water-radiator type in association with thermal storage cylinders. diags Elec R (Lond) 132:613-15 My '43

Heating buildings; improved performance of a thermal-storage installation. F. Mather. Elec R (Lond) 132:250-1 F 19 '43

Some problems in the application of electric heating to residential and commercial premises; with cost data. W. Gilchrist. diags Inst E E J 89 pt 2:377-90; Discussion. 390-9 O '42

Space-heating machines; controlling hot-water radiator type. R. Grierson. Elec R (Lond) 131:681-2 N 27 '42

Firing

Basis for conversion. H. E. Winkler. Dom Eng 161:68-9+ Ap '43; Same cond. II Heating-Piping 15:190-1 Ap '43

Oil to coal conversion; reference section. II diags Heat & Ven 40:44-74 My '43

Stokers promote wartime economies in fuel utilization. T. F. J. Moffett. Heat & Ven 40:38-40 Ag '43

Gas firing

Heating and ventilating a Rochester museum. D. K. Smith. II plan Gas Age 92:55-8 O 21 '43

Oil firing

Estimating quantities of fuel oil wasted. O. M. Elliott and W. S. Hobbs. chart Heat & Ven 39:25 D '42

Milwaukee Journal modernizes its fleet garage with boiler-burner units and unit heaters. II Heat & Ven 39:33 D '42

Oil saving. 2,575 gals.; remodeling job by Illinois heating & ventilating co. II Dom Eng 162:64-5+ Ag '43

Rationing fuel oil for commercial buildings. L. W. Mauger. II Heating-Piping 15:73-5 F '43

Safety measures

How to assure safe operation of low-pressure heating boilers. A. F. Norcross. Heat & Ven 39:51-3 D '42

BOILERS, Locomotive. See Locomotive boilers

BOILERS, Marine

Machinery weights; boilers for motorships. E. A. Stevens. Jr. Marine Eng 48:170 Ja '43

Marine boilers. T. B. Stillman. diags Marine Eng 48:196-201 My '43

Shipbuilding and marine engineering in 1942. diags Engineer 175:56-7 Ja 15 '43

Steam generation for marine and stationary service in the United States, 1933-1943. E. G. Bailey. Mech Eng 65:770-2 N '43

Control

Boiler control. E. G. Bailey and P. S. Dickey. diags Marine Eng 47:154-8; Discussion. 149+ D '42

Firing

Whither coal? Engineering 156:65-6 Jl 23 '43; Same. Mech Handling 30:389-93 S '43; Same cond. Engineer 176:53 Jl 16 '43

BOILERS, Portable

Merryweather portable vertical oil-fired boiler. II Engineering 155:235 Mr 19 '43

BOILERS, Range

Range boilers, galvanized, 1938-1941. Survey of Cur Business 1942 Sup p138 [supplemented in monthly numbers]

BOILERS, Waste heat

Cooling sulfur dioxide gas; SO₂ waste heat boiler. diags Pulp & Pa of Can 44:320 Mr '43

BOILERS, Water tube

Boilers; past and present. S. J. Thompson. II 32 diags Inst Mech Eng J & Proc 148; Proc 137-61, pl 4-6 F '43; Same, with 3 diags. Engineering 154:398-400, 418-20 N 13-20 '42; Same cond. with 11 diags. Engineer 174:356-8, 376-8, 394-6 O 30-N 13 '42

Holding power and hydraulic tightness of expanded tube joints; analysis of the stress and deformation. J. N. Goodier and G. J. Schoessow. bibliog II diags A S M E Trans 65:489-96 Jl '43

Questions and answers for power engineers; watertube boilers. diags Power 87:340-2 My '43

Some observations on water-tube boiler practice. H. Pryce-Jones. Inst E E J 90 pt 1: 67-70 F '43; Same cond. Electrician 129:393-4 O 9 '42; Abstract. Elec R (Lond) 131:458-9 O 9 '42

La Mont boiler

1825-lb-pressure topping unit with special reference to forced-circulation boiler. F. S. Clark, F. H. Rosenkrantz and W. H. Arnacost. II diags A S M E Trans 65:461-74 Jl '43; Same cond. Blast F & Steel Pl 30:1385-7, 1390-3+ D '42; Same cond. Engineer 175:356-8, 377-8 Ap 30-May 7 '43; Abstract. Engineering 155:385-8 My 14 '43; Discussion. diags A S M E Trans 65:474-7 Jl '43

Power engineers find new means for boosting steam output. J. G. Coutant. Blast F & Steel Pl 31:148-9 Ja '43

BOILING points

Constants of some hydrocarbons in the gasoline boiling range. C. E. Boord. bibliog Oil & Gas J 41:188+ N 12 '42

Determination of boiling points of pure organic liquids; a micromethod for use with reduced pressures. C. R. Garcia. bibliog diags Ind & Eng Chem Anal ed 15:648-9 O 15 '43

Paraffin hydrocarbons; correlation of physical properties. A. W. Francis. bibliog Ind & Eng Chem 35:442-9 Ap '43

Studies of the physical properties of alicyclic hydrocarbons; boiling points of monocyclic hydrocarbons. G. Egloff and R. C. Kuder. bibliog J Phys Chem 46:334-45 N '42

BOLIVAR, Simón, 1783-1830

El libertador. por Fortune 28:130-1 Jl '43

BOLIVIA

See also

Air lines—Bolivia

Budget—Bolivia

Commercial law—Bolivia

Investments. Foreign (in Bolivia)

Mines and mineral resources—Bolivia

Economic conditions

News by countries. For Comm W 9:12 N 28 '42; 10:12-13 F 6; 12:12-14 Jl 3; 10 Jl 17; 18-20 Ag 21; 12-14 Ag 28 '43

Foreign relations**United States**

Bolivian President concludes U.S. visit. Comm & Fin Chr 157:2160 Je 7 '43

Industries and resources

Bolivian economy thrives in wartime. E. W. Skartvedt. II For Comm W 10:7-10+ Mr 13 '43

Rivalry over Bolivia. Economist 143:543-4 O 31 '42

Politics and government

Uneasiness in Bolivia. Economist 144:76 Ja 16 '43

BOLTS and nuts

Bolt-circle hole layout; reference book sheet. E. J. Farawell. diags Am Mach 87:114c Ja 21 '43

Bolt loads analyzed. Machine Design 15:134 Ag '43

Cooling increases bolt strength in steam turbines; patent assigned to Westinghouse electric & manufacturing co. diags Machine Design 15:174+ S '43

Design of highly stressed studs to improve their fatigue strength. II diags Product Eng 14:288-90 My '43

Effect of nut design on strength of threaded fastenings. M. Hetenyi. diags Machine Design 15:119-20 F '43

Electric heater sets turbine bolts tight. E. F. Miller. II Elec W 115:1644 N 14 '42

Fatigue failures in common machine parts. J. O. Almen. diags Metal Prog 48:737-8 My '43; Same abr. Machine Design 15: 133-4 Ag '43

Heat tightens turbine bolts safely. E. F. Miller. II Power 87:42-4 Ja '43

BOLTS and nuts—Continued

- Hinge bolt design. M. Di Giovanni. *diags Aero Digest* 42:211+ Ap '43
- How to use heat-treated carbon steel bolts. A. E. R. Peterka. *il diags Steel* 112:86-8, 90+ My 10 '43
- New fastening system combines blind rivet with nut-and-bolt action; Rivnut. *il diags Steel* 111:80-1+ D 28 '42
- New system for locking studs and inserts developed by Jose Rosán. *il Iron Age* 151:44D Ap 22 '43
- Salvage of reduction-gear bolts. M. Hamilton. *diags Am Mach* 87:124 Ap 15 '43
- Stud welding for ship deck work. *il diags Steel* 113:84-6+ Ag 9 '43
- Tightened bolts exceed elastic limit. W. H. Graves. *diags Am Mach* 87:105 Je 24 '43
- Torque-stress-load relationship in bolts and screws; reference book sheets. A. H. Korn. *diag Product Eng* 14:752-4 N '43
- Typical bolts, screws, nuts and other fastening devices; illustrations; data sheet. E. J. Tannerman. *Power* 87:349, 421 My-Je '43
- Warlike standards for screw threads for high-temperature bolting. *Nat Pet N* 35 pt 2:1238 My 6 '43
- Word on tightening engine nuts and bolts. *diag Roads & Sts* 85:60 N '42

Manufacture

- Compressed air can do many odd jobs; Tinnerman products, inc. A. M. Hoffmann. *il Comp Air M* 48:7066-7 Je '43
- Experience with NE (national emergency) alloy steels in the NE-8000 series. A. S. Jameson. *il Steel* 111:70-2+ D 21 '42
- Experience with NE (national emergency) alloy steels; NE-9437 as a bolting material. A. S. Jameson. *il diags Steel* 113:66-8, 70, 72 Ag 30 '43
- Heat treating output doubled by installation of continuous furnace; Triplex screw co. *il Steel* 113:86+ O 25 '43
- Metal spraying solves a finishing problem; manufacture of Speed nuts. R. C. Overstreet. *il Metal Finishing* 41:634-6 O '43
- Simplifies hand tapping of nuts. A. George. *diag Am Mach* 87:108 J1 22 '43

Testing

- Obtaining maximum bolt strength. G. Sachs, P. S. Cole and R. A. Roth. *il diags Machine Design* 15:144-6 N '43
- BOLZA**, Oskar, 1857-1942
- Sketch. G. A. Bliss. *Science* 97:108-9 Ja 29 '43
- BOMB racks, Plastic**
- Mustang's bomb rack. K. West. *il Mod Plastics* 21:75-7+ N '43
- BOMB sights**
- A.C. Spark plug division employs conveyor lines to produce British T-1 bomb-sight. S. H. Brams. *Iron Age* 152:76 N 4 '43
- New bombsight; A.C. Spark Plug reveals general description, production refinements of British T-1. *il Business Week* p66+ N 6 '43

BOMBING. See Aeronautics, Military; Air raids

BOMBS

- British use gray cast iron for trench mortar bombs; Institute of British foundrymen, cast iron subcommittee report. *bibliog diags Foundry* 71:107-8+ S '43
- Trench mortar bombs pass critical inspection. P. Dwyer. *il Foundry* 71:66-9, 151-2 Ja '43
- War department considers use of clay practice bombs. *diags Brick & Clay Rec* 102:42 Ja '43

BOMBS, Aerial

- Bomb scoring made more accurate by microphone method. *il Sci Am* 168:128-9 Mr 43
- Delayed-action bombs and bomb reconnaissance. R. L. Starr. *N E Water Works Assn J* 57:110-15 Je '43
- Effects of bombings on structures and other installations. W. C. Voss. *N E Water Works Assn J* 57:127-36 Je '43
- When the bombs fall; British ARP setup. A. B. Konz. *N E Water Works Assn J* 57:116-26 Je '43
- Wind tunnel test specifications for quality control of bomb fuzes. A. L. Atherton. *il Product Eng* 14:95-8 F '43

See also

Bomb sights

Manufacture

- Assembly line production of aerial ammunition; factory for Mechanical handling systems, inc. *il Arch Rec* 94:59-61 J1 '43
- Blast cleaning 500-lb. bombs. *il Iron Age* 151:61 Mr 18 '43
- Blast cleaning greatly facilitates inspection of bomb casings. *il diags Steel* 112:86+ My 24 '43
- Bombs for blasting Berlin; American car and foundry company. V. R. Whitenight. *il diags Mach* 49:168-80 Ap '43
- Eljer co. makes bomb casings. *il Cer Ind* 41:34-7 N '43
- Forging and welding 1000-lb aerial bombs. J. B. Nealey. *il diags Iron Age* 151:49-54 F 11 '43
- 1000-pound bombs fabricated from seamless pipe; Commercial shearing & stamping co. G. R. Reiss. *il Steel* 112:76-7+ My 24 '43
- Spinning high explosive bomb casings; combination of automatically controlled spinner and Tocco induction heating; Wheeling steel corp. *il Iron Age* 151:71 Je 17 '43
- They made stoves before, now they're making bombs; Wrought iron range co. *il Cer Ind* 39:28-30 D '42; Same. *Am Gas Assn Mo* 25:66-8 F '43
- Two-piece case design, heavy bombs; Ralston steel car co. *il Steel* 113:106-8+ N 8 '43

BOMBS, Incendiary

- Application of carbon tetrachloride-type fire-extinguisher liquid to burning magnesium chips and magnesium incendiary bombs. S. J. Pearce and others. *pls U S Bur Mines Rep of Invest* 3685:1-18 '43
- Building as a defense against fires from bombs. *Franklin Inst J* 234:553-5 D '42
- Civilian incendiary bomb extinguisher. *il diags Mod Plastics* 20:73-6 D '42
- Defense against bombing. S. H. Ingeberg. *il Safety Eng* 84:24-6 N '42
- Feldspar as fire extinguisher for magnesium incendiary bombs. *Can Min J* 64:577 S '43
- Fire guard program; abstract. L. W. Hutchins. *Safety Eng* 86:28-9 Ag '43
- Incendiary bomb protection with packaged sand. L. S. Flint. *il Rock Prod* 45:34-6+ N '42
- Incendiary bombs; hazards, control methods. *diags Nat Safety N* 47:23-4+ My '43
- Methods of extinguishing incendiary bombs. E. A. Shrader. *J Chem Educ* 20:278-81 Je '43
- Preventing and extinguishing magnesium fires. H. A. Knight. *il Metals & Alloys* 17:960-6 My '43
- Recent developments in incendiaries. *J Chem Educ* 20:59-60 F '43
- Revised OGD instructions for dealing with fire bombs. *Safety Eng* 84:31 N '42
- There are two parts to a fire-bomb blaze. W. H. Eason. *il Food Ind* 14:59+ D '42

BOMBS, Smoke

- Signal flares and smoke bombs; Canada's major fireworks company turns to war production. *il Can Chem & Process Ind* 27:50-60 F '43

BOND stores, inc.

- Another look. *Mag of Wall St* 72:479-80 Ag 7 '43

BONDERIZING

- Bonderized and lacquered steel sheet; German investigations; substitute for tinplate in fabrication of food cans. *Iron Age* 151:39+ Ja 14 '43; *Abstract. Chem Age (Lond)* 48:179-81 F 6 '43
- New mill treated rust resistant sheet and strip; bonderizing zinc-flash. *il Metal Finishing* 41:327 My '43

BONDS

- Can you get 10% with safety? 10-year experience. *Comm & Fin Chr* 156:2148-9 D 17 '42
- Halsey, Stuart & co. year-end bond review. *Comm & Fin Chr* 157:389-90 Ja 28 '43
- Improved status for Indiana Service bonds. *Barron's* 23:10+ S 13 '43
- Investing in second grades; 1939 widow list shows 35% appreciation and 9½% yield; guides to proper selection. H. C. Trundle. *Barron's* 23:8 Ap 26 '43
- Nonrefunding security flotations and capital structures, 1935-1937. J. B. Hubbard. *R Econ Stat* 25:192-201 Ag '43

BONDS—Continued

Preferred stocks and bonds attractive for income; tabulation. *Mag of Wall St* 72:208 My 29 '43

Seven bonds and preferred stocks for a 6% yield. O. Ely. *Mag of Wall St* 71:362-3+ Ja 9 '43

Values in Canadian corporate bonds. F. J. McDiarmid. *Barron's* 23:18-19 F 8 '43

Views and news on bonds. O. Ely. *Mag of Wall St* 71:582+ Mr 6 '43

What's ahead for the bond market? high grade vs. speculative issues. J. S. Williams. *Mag of Wall St* 72:296-7+ Je 26 '43

See also

Debts, Public	Railroads—Securities
Municipal bonds	Railroads—Terminal bonds
New York stock exchange	Securities
Public utilities—	Stock exchange
Securities	Stocks

Accounting

Bond discount controversy. W. B. Castenholz. *J Account* 75:70-2 Ja '43

Maturity

See Bonds—Redemption

Price indexes and averages

Bond prices, 1938-1941. Survey of Cur Business 1942 Sup p82 [supplemented in monthly numbers]

Moody's bond prices and bond yield averages. Published in weekly Thursday numbers of Commercial & financial chronicle

Prices

Bond prices, 1939-1941 average; monthly Nov. 1941-Nov. 1942; weekly Dec. 1942. *Fed Res Bul* 29:63 Ja '43 [cont monthly]

Bond record. New York stock exchange. Friday, weekly, yearly. Published in weekly Monday numbers of Commercial & financial chronicle

Monthly range of prices on the New York stock exchange. *Comm & Fin Chr* 157:410-20 Ja 28 '43

New York curb exchange. Published in weekly Monday numbers of Commercial & financial chronicle

Redemption

Important bond maturities in 1943. *Barron's* 22:15-16 D 28 '42

Statistics

Security markets, 1938-1941. Survey of Cur Business 1942 Sup p82-5 [supplemented in monthly numbers]

Yields

Another look at stock yields as compared with yields on bonds. J. S. Williams. *Mag of Wall St* 72:241+ Je 12 '43

Averages, Nov. 1941-Nov. 1942. *Fed Res Bul* 29:67 Ja '43 [cont monthly]

Bonds used in Moody's corporate bond yield averages; list. *Comm & Fin Chr* 157:202 Ja 14 '43

Bonds; yields, 1938-1941. Survey of Cur Business 1942 Sup p84 [supplemented in monthly numbers]

High yield bonds for income and appreciation. F. R. Bretey. *Mag of Wall St* 71:465-7+ F 6 '43

Moody's bond prices and bond yield averages. Published in weekly Thursday numbers of Commercial & financial chronicle

BONDS, Chemical. *See Chemical bonds*

BONDS, Convertible

Making money in stock trading; when to buy convertible securities. *Barron's* 23:20 Ja 4 '43

BONDS, Government

Gambling in European dollar bonds. F. M. Stern. *Barron's* 22:13+ D 7 '42

War bond hedge against post-war deflation. *Barron's* 23:1 S 13 '43

See also

Debts, Public	Taxation, Exemption from
Municipal bonds	

Advertising

Advertisers spent 4 1/2 million supporting second war loan. *Ptr Ink* 203:75-6 My 28 '43

Advertiser's war bond posters feature Bataan day. *Ptr Ink* 202:22-4 Mr 26 '43

Benrus, Heinz, P.&G. promotions sell \$500,000,000 of war bonds. L. M. Hughes. *Il Sales Management* 52:84+ J1 15 '43

Buy bonds now for product later. *Il Ptr Ink* 201:13+ N 27 '42

Creating a pattern; ways banks promoted the U.S. Treasury's victory fund drive. *Il Banking* 35:26-8 Ja '43

Hotpoint continues bond theme in new campaign. *Ptr Ink* 203:72 Ap 23 '43

Impact of war on advertising. *Adv & Sell* 35:21-3 My '43

Impact of war on advertising; third war loan. *Adv & Sell* 36:32, 34 O '43

Let's look at the war bond advertising record. F. LaClave. *Il Ptr Ink* 202:17-19+ Ja 29 '43

Radio sells war bonds. *Ptr Ink* 202:50 Mr 12 '43

Third war loan advertising greatly in excess of second loan. R. H. Ganly. *Ptr Ink* 204:86+ S 24 '43

Value of advertising proved by bond sales. L. F. Gordon. *Comm & Fin Chr* 157:668 F 18 '43

Co-owners and beneficiaries

See Bonds, Government—United States
—Co-owners and beneficiaries

Deferred maintenance bonds (proposed)

Practical idea for American industry. B. Hill. *Mass Transportation* 39:316-18, 323 S '43

Marketing

Active promotion helps banks expand their war bond sales. *Il Banking* 35:38-9 F '43

ABA program for banks in new war bond drive. *Comm & Fin Chr* 157:1224 Ap 1 '43

ABA supports Treasury program for distribution of government securities. *Comm & Fin Chr* 156:1985 D 3 '42

Banks are selling victory. *Il Banking* 35:48-50 Mr '43

Bond sales facilitated by a simple card system. C. W. Fishbaugh. *Bankers Mo* 60:464-5 O '43

Bonds, or else; Treasury changes its plan for financing war. *Business Week* p109-11 Je 26 '43

Buying shares in Canada; methods in use at pulp and paper mills. *Pulp & Pa of Can* 44:402-4+ Ap '43

How Westinghouse handles 5,000 war bonds daily. *Il Am Business* 13:20-1 Ap '43

Let's sell more war bonds to individuals. F. J. McDiarmid. *Barron's* 23:9 Ag 30 '43

Merchandising methods not bond pledges; Los Angeles Dept. of water & power system. *Il Elec West* 90:43-5 Mr '43

Milk salesmen sell war bonds, publicize an over-sold product; Pet milk sales corporation. *Il Ptr Ink* 202:36 Ja 22 '43

Public campaign to sell war bonds; Bank of America plan. E. Burke. *Il Burroughs Clearing House* 27:26-8+ S '43

Set industry war bond record; Wisconsin Power & Light employees. *Elec W* 119:149-50 Je 12 '43

Top that 1942! *Il Banking* 35:69-70 D '42

Treasury aims at thirty million buyers through payroll plans. *Steel* 111:50 N 30 '42

Treasury approves sub-agents war bond plan. *Comm & Fin Chr* 156:2344 D 31 '42

Treasury initiates payroll savings campaign, urges employers as war bond issuing agencies. *Comm & Fin Chr* 156:1893 N 26 '42

Treasury, SEP and 40 department stores collaborate in bond show; traveling show will tour country. *Ptr Ink* 203:35-6 Ap 16 '43

Victory loan drive over \$12 billion mark—original goal exceeded. *Comm & Fin Chr* 156:2332 D 31 '42

War bond work held major contribution; how underwriters are aiding war effort. W. H. Andrews, Jr. *Ins Field* (Pittsburgh Conv Daily ed) 72:5 S 15 '43

War bonds for everybody. *Il Banking* 35:80-2 Ja '43

War finance conference; annual meeting of the IBA. *Inv Banking* 13:5-24 D '42

War job investment banking is doing. J. N. Whipple. *Inv Banking* 13:1, 3 D '42

BONDS, Government—Marketing—Continued

War workers major participants in payroll savings plan, survey shows. *Comm & Fin Chr* 158:526 Ag 5 '43
Who sold the bonds in other wars? *Inv Banking* 13:4 D '42

Merchandise bonds (proposed)

War bonds for economic stability; American marketing association proposes sale of special victory merchandise bonds in conjunction with advance sale of post-war durable merchandise. R. J. McFall. *Edison Elec Inst Bul* 11:169-75 Je '43

Prices

Course of prices of government securities for the year 1942, monthly; tabulation. *Comm & Fin Chr* 157:420 Ja 28 '43
New York bond record; foreign government securities, monthly range of prices, 1942. *Comm & Fin Chr* 157:410-12 Ja 28 '43

Redemption

Analysis of war bond redemptions. T. C. Swanson. *Burroughs Clearing House* 27:10-11 Je '43
Bond redemption form is complete and saves time. A. W. Bickler. *il Bankers Mo* 60:174-5+ Ap '43
Charges for redemption. J. J. McCann. *Banking* 36:60+ Ag '43
Danger, savings bonds and idle cash, detour, forced savings. H. Spero. *Bankers M* 146:495-500 Je '43
New form facilitates war bond redemption. *il Burroughs Clearing House* 27:10-11 Mr '43
Redemption of war savings bonds. *Trusts & Estates* 76:103 F '43
Treasury can redeem war bonds. D. W. Bell. *Comm & Fin Chr* 157:371 Ja 28 '43
Treasury makes savings notes easier to cash. *Comm & Fin Chr* 158:505 Ag 5 '43
War bonds yield tax money. *Business Week* p102 Mr 27 '43

Valuation

Dollar devaluation does not devalue bond values. H. Spero. *Bankers M* 146:379-80, 382 My '43

Argentina

Argentine government calls foreign bonds held in Great Britain. *Comm & Fin Chr* 158:1517 O 14 '43
To repatriate sterling bonds. *For Comm W* 13:16 O 30 '43

Canada

Buying shares in Canada; methods in use at pulp and paper mills. *Pulp & Pa of Can* 44:402-4+ Ap '43
Canadian securities; Canada's sixth war loan drive. B. Williams. *Comm & Fin Chr* 157:1587 Ap 29 '43
Opportunities in Canadian public bonds. F. J. McDiarmid. *Barron's* 23:16 Ja 25 '43

Colombia

Colombia requires national defense bond purchase. *Comm & Fin Chr* 157:284 Ja 21 '43

Ecuador

Subscriptions to gold bond issue. *For Comm W* 13:11-12 N 6 '43

Great Britain

Bonds and preferred stocks for a 6% yield; British war loan 3 1/8%. O. Ely. *Mag of Wall St* 71:363+ Ja 9 '43
Longer war bonds. *Economist* 143:674 N 28 '42
More light; ways and means advances. *Economist* 145:115 Jl 24 '43
New war bond tap. *Economist* 145:279-80 Ag 28 '43
Rate on tap bills. *Economist* 145:22 Jl 3 '43

Tax savings notes

Tax certificates and bank loans. *Economist* 144:243 F 20 '43
Tax reserve certificates: a critique. *Economist* 143:579 N 7 '42

Mexico

Distribution of government bond holdings; purchase of government obligations. *For Comm W* 11:23-4 Ap 17 '43

Foreign bondholders council objects to Mexican government's offer. *Comm & Fin Chr* 157:1595 Ap 23 '43
Repeat Mexico bond offer. *Comm & Fin Chr* 157:206 Ja 14 '43

United States

All member banks, classification of loans and United States government direct obligations. *Fed Res Bul* 29:351 Ap '43
Announcement of Treasury financing by Secretary Morgenthau. *Fed Res Bul* 28:1182-3 D '42
April financing drive set at \$13 billion; 3 new issues scheduled in record borrowing. *Comm & Fin Chr* 157:1022 Mr 18 '43
Banks end lull; U.S. bonds acquired. *Business Week* p113-15 Ap 17 '43
Bond buying day of savings and loan institutions. F. S. Cannon. *Comm & Fin Chr* 156:2323 D 31 '42
Bond market now inflation-proof; government authorities have complete control over cost of borrowing. M. Nadler. *Barron's* 23:3 Mr 22 '43
Book on government securities reflects growing public confidence in interest rates. *Comm & Fin Chr* 158:317 Jl 22 '43
Campaign to raise \$13 billion. H. D. Ralph. *Burroughs Clearing House* 27:19-21 Ap '43
Changing distribution of bank funds. *Fed Res Bul* 29:207-14 Mr '43
Closes \$11 billion Victory loan drive; largest financing in history successful. *Comm & Fin Chr* 156:2245 D 24 '42
Commercial banks and the bond market. *Nat City Bank* p78-81 Jl '43
Democratizing the debt; new types of federal bonds for war and post-war finance. P. Haensel. *Trusts & Estates* 76:221-3 Mr '43
Effect of exchanging tax-exempt bonds for taxable U.S. issues. F. E. Huston. *Nat Underw (Life ed)* 47:8 Ja 22 '43
Federal reserve government security operations. *Fed Res Bul* 29:375-7 My '43
Gift of U.S. bonds valid notwithstanding possible refusal of transfer by Treasury department. *Banking Law J* 60:563-71 Jl '43
Government agencies; supervisors committee agree on loans upon government securities. *Comm & Fin Chr* 156:2068 D 10 '42
Governments; how Treasury war financing developed program including war bonds, special bank issues, and victory fund drives. H. J. Boone. *il Burroughs Clearing House* 27:13-15, 32-3 Ja '43
Guatemala purchases U.S. war bonds. *For Comm W* 13:21 O 30 '43
Nation's investment resources adequate, if inflation does not skyrocket costs. J. N. Whipple. *Comm & Fin Chr* 156:2149 D 17 '42
Ownership of United States government securities, direct and fully guaranteed. June and Dec. 1938-1941, monthly June-Oct. 1942. *Fed Res Bul* 29:72 Ja '43 [cont monthly]
Problems in the funding of tax and other reserves; tax liability and government bond holdings. W. A. Hosmer. *N A C A Bul* 24:1049-75 My 1 '43
Recent increase in public debt; government securities market. *Fed Res Bul* 28:1071-4 N '42
Sales, redemptions, and pay-roll deductions for U.S. savings bonds, 1941-1942; chart. *Survey of Cur Business* 23:2 F '43
Second war loan drive securities sales. *Comm & Fin Chr* 157:2404 Je 28 '43
Second war loan drive; terms of offerings. *Fed Res Bul* 29:293 Ap '43
Third war loan drive; with charts showing ownership of government securities. *Fed Res Bul* 29:707-12 Ag '43
Treasury bills for smaller banks. *Fed Res Bul* 29:492 Je '43
Treasury offer of \$2,000,000,000 certificates was oversubscribed more than three times. *Comm & Fin Chr* 157:493 F 4 '43
Treasury offers 7/8% certificates in exchange for two maturing issues. *Comm & Fin Chr* 157:1491 Ap 22 '43
Treasury will borrow \$9 billion in December. *Barron's* 22:18 N 23 '42

BONDS, Government—United States—Cont.

United States government securities on the New York stock exchange. Published in weekly Monday numbers of Commercial & financial chronicle

United States savings bonds, monthly May 1941-Nov. 1942. Fed Res Bul 29:71 Ja '43 [cont monthly]

Urges banks to invest temporarily idle funds during war loan drive. A. Sproul. Comm & Fin Chr 158:1026 S 9 '43

Urges government to stimulate current income bond buying to prevent inflationary effect. R. S. Hecht. Comm & Fin Chr 157:2285+ Je 17 '43

Victory fund buyers; marketing report on December sales. Banking 35:27 Mr '43

War changes the U.S. debt picture; big factor is sales to insurance companies and corporations. Business Week p19 O 23 '43

Wartime savings and postwar inflation. E. T. Weiler. Survey of Cur 'Business 23:13-18 Jl '43

Which government bond shall I buy? Barron's 23:1 Ap 12 '43

Wide distribution of the debt; ownership of U.S. government securities; chart. Fed Res Bul 29:113-14 F '43

Would solve national debt by issuing legal tender bonds yielding \$1 a year p \$1000 bond. M. M. Mattison. Comm & Fin Chr 158:406 Jl 29 '43

See also
Bonds, Government
—Marketing

Co-owners and beneficiaries

Clarifies status of persons named on beneficiary war bonds. Comm & Fin Chr 157:2171 Je 10 '43

Government bonds: title of surviving beneficiary or co-owner. Banking 36:57 Ag '43

Named beneficiary entitled to United States saving bonds under federal law. Banking Law J 60:339-46 O '43

U.S. savings bonds; disposition of bonds in name of owner payable on death to another. Trusts & Estates 77:93 Jl '43

War bond inheritance important. H. Bratter. Banking 35:52+ Mr '43

War bond ruling. Bankers M 146:249-50 Mr '43

Tax savings notes

Redemption limit on tax notes lifted. Comm & Fin Chr 158:1619 O 21 '43

Treasury tax note sales revised. Comm & Fin Chr 157:2379 Je 24 '43

BONDS, Housing authority

Local housing bonds increasingly attractive. Comm & Fin Chr 156:1792 N 19 '42

BONDS, Leasehold. See Bonds, Real estate

BONDS, Municipal. See Municipal bonds

BONDS, Real estate

Assessed valuations placed upon New York City real estate indicate that bonds are selling below true intrinsic values. Comm & Fin Chr 157:652 F 18 '43

Coming boom should be in real estate bonds! Comm & Fin Chr 158:510 Ag 5 '43

First mortgage liquidation certificates offer attractive investment possibilities; series C-2 issued by New York title and mortgage company. Comm & Fin Chr 157:1004 Mr 18 '43

First mortgage liquidation certificates offer attractive investment possibilities; series F-1 issued by New York title and mortgage co. Comm & Fin Chr 157:740 F 25 '43

Leasehold bonds. Comm & Fin Chr 157:1100 Mr 25 '43

New York title & mortgage co. F-1 certificates probably largest real estate investment trust. Comm & Fin Chr 158:1605 O 21 '43

Prospects appear bright for holders of New York title and mortgage co. certificates. Comm & Fin Chr 157:2164 Je 10 '43

Real estate securities. Comm & Fin Chr 158:904 S 2 '43

Real estate securities; 1942 retrospect; hotel bonds. Comm & Fin Chr 156:2316 D 31 '42

Record of Herald Square building since reorganization; original \$2,500,000 mortgage reduced to \$1,530,000. Comm & Fin Chr 157:52 Ja 7 '43

S. W. Straus bonds. Comm & Fin Chr 158:125-6 Jl 8 '43

Situation in real estate bonds; tabulation.

Mag of Wall St 71:183 N 28 '42

Two Park Avenue building. Comm & Fin Chr 157:180 Ja 14 '43

See also

Hotels—Securities

BONDS, Revenue

Moody report on security values stresses work on revenue bonds. East Underw 43:17-18 D 4 '42

Pennsylvania Turnpike commission revenue bonds. Comm & Fin Chr 157:1662 My 6 '43

Revenue bonds. J. W. Johnson. Nat Underw (Life ed) 47:2+ O 8 '43

St Louis County bridge revenue bonds default. Comm & Fin Chr 158:1608 O 21 '43

Value of a revenue bond. H. Corey. Pub Util 31:740-6 Je 10 '43

BONDS, Surety. See Insurance, Surety and fidelity—Contract bonds

BONE conducted sound. See Hearing

BONES*Analysis*

Identification and localization of lead in bone tissue. L. T. Fairhall. bibliog Pub Health Rep 58:209-16, pl 1-2 F 5 '43

BONSACK, Walter

Dudley medal winner. por Oil Paint & Drug Rep 143:3+ Je 28 '43

BONUS system

Bonus on quality. A. S. Wharton. Elec R (Lond) 133:536-8 O 22 '43

Bonus to boost output; rewards for keeping all machines on the job every minute of 24-hour day. F. Bernstein. Factory Management 101:118+ Je '43

Incentive o.k.'d; NWLE permits individual production bonus at Alcoa plant. Business Week p18-19 My 15 '43

Incentive pay plan augments production at Murray-Ecorse. S. H. Brams. Iron Age 151:60+ Ap 29 '43

Keeping woods workers at work; continuous service bonus. Pulp & Pa of Can 44:320 O '43

More pay does it; Murray's plant at Ecorse tests extra work-extra pay idea. Business Week p20 My 15 '43

More pay-more production; Murray corp. of America proves it at the Ecorse plant. il Fortune 28:138-40+ S '43

See also

Salesmen—Bonuses

Wage payment plans

BONUS system (for executives)

Bonuses barred; court enjoins E. G. Budd Co. plan for stock options. Business Week p107 O 16 '43

BONUSES, Cost of living. See Wage payment plans

BONUSES, Soldiers'. See Soldiers' bonuses

BOOK industry and trade

All-America package competition award; Garden City publishing co. counter display merchandiser. il Mod Packaging 16:108+ Ap '43

Books; they're enjoying greatest sales in years. B. Hall. il Ptr Ink 205:19-21+ O 1 '43

Boom in books. il Fortune 28:142-5+ N '43

Kid books boom as parents seek antidotes for war fever. Sales Management 52:30 F 1 '43

Mail-order books; Sears collaborates with Simon & Schuster to market best-sellers at \$1.66; selections to be made by Gallup poll. Business Week p36-7 Je 26 '43

Publishing faces a third year of war. M. K. Dutton. Paper Tr J 117:84-6 S 30 '43

Sears, Roebuck initiates monthly People's book club by mail order. Ptr Ink 204:44 Jl 9 '43

See also

Book-of-the-month club

Printing trade Publishing

Paper industry and trade

Periodicals Bibliography

Books and printing; a selected list of periodicals, 1800-1942. C. F. Ulrich and K. Kùp. 244p pa \$5 William Edwin Rudge, Woodstock, Vermont '43

BOOK industry and trade—Continued**Statistics**

Book publication, 1938-1941. Survey of Cur Business 1942 Sup p152 [supplemented in monthly numbers]

BOOK-of-the-month club

How the Book-of-the-month club has thrived on direct-selling copy; success story of a former advertising agent (Harry Scherman). C. J. Swan. *Il Ptr Ink* 202:58, 60-2 F '43

BOOK reviews

See also
Annotations

BOOK selection

Keeping up with technical books. E. Portman. *J Chem Educ* 20:542-4 N '43

BOOKBINDERIES**Employees**

Earnings and hours in book and job printing, January 1942; hourly earnings. E. B. Harris and W. C. Linn. *Monthly Labor R* 55:785-801, 1024-41 O-N '42

BOOKBINDING

Conservation in wartime; a resumé of the recent Library binding institute convention. *Special Lib* 34:51-2 F '43

War-time problems in books and binding. B. M. Headicar. *Assn of Sp Lib & Inf Bur Proc* 1942:40-2; Discussion. 67

BOOKKEEPING

How American Chicle handles accounts receivable. J. Garth. *Il Am Business* 13:22-34 My '43

BOOKLETS, Advertising. See Advertisements—Books and booklets**BOOKS**

Beauty and the book. O. F. Ege. *Special Lib* 34:373-8 S '43

See also	Publishing
Bibliography	Reprints—Bibliography
Cataloging	
Libraries	
Printing	

Conservation and restoration

Air conditioning to kill bookworms; Howard-Tilton memorial library of Tulane university. *Il Dom Eng* 161:58, 61+ Mr '43

See also
Bookbinding
Paper—Durability

Bibliography

Preserving books by air conditioning; list of references. *Heating-Piping* 15:437 Ag '43

BOOKS and reading

Economics of reading. A. H. Cole. *bibliog Harvard Business R* 21 no4:485-95 [Jl] '43
Inspiration from books. C. T. Hubbard. *Ins Field (Fire ed)* 72:8-9 Ap 1 '43

BOOKS for the sick

See also
Hospital libraries

BOONE, Rodney E. 1882-1943

Tribute. B. Corum. *por Adv & Sell* 36:40 S '43

BOONVILLE, Missouri**Water supply**

Maintenance of chlorine residual in the distribution system. C. Hagar. *Am Water Works Assn J* 34:1801-5 D '42

BOOTH, James Curtis, 1810-1888

James Curtis Booth, chemist. E. F. Smith. *por(front) J Chem Educ* 20:315-18+ Jl '43

BOOTS pure drug company

Annual ordinary general meeting. Beeston. *Economist* 145:122 Jl 24 '43

BORATES

Volatile borates of polyhydric alcohols and the activation of boric acid. R. E. Rippere and V. K. La Mer. *bibliog diags J Phys Chem* 47:204-34 Mr '43

BORAX

Roach powders; what composition for poisonous and non-poisonous types. *Il Soap & San Chem* 19:97-8+ Ap '43

Viscosity of borax and boron oxide during the softening process; abstract. B. V. Rabinovich. *Chem & Met Eng* 50:201 Ap '43

Manufacture

Production of borax from Searles Lake brine; abstract. R. M. Curtis. *Can Chem & Process Ind* 27:562-3 O '43

BORDEN company

Acquires Soy bean processing co. *Comm & Fin Chr* 158:543 Ag 9 '43

Annual report, 1942. *Comm & Fin Chr* 157:983-5, 988 Mr 15 '43

To add another product. *Comm & Fin Chr* 157:688 F 22 '43

23 companies fined in milk trust case. *Comm & Fin Chr* 158:1343 O 4 '43

BOREHOLE surveying

Diamond-drill hole surveyor. H. McIntyre. *Il diags Can Min J* 64:353-5 Je '43

Estimating ore by the polygon method. T. T. Read. *diags Eng & Min J* 144:84-5 Ag '43

BOREN, Wallace

Gallery; three ring circus. M. G. Rollins. *por Adv & Sell* 36:34, 36 S '43

BORERS, Marine. See Marine borers**BORG-WARNER corporation**

Re-appraisal of companies in the news. *Mag of Wall St* 72:35+ Ap 17 '43

Thumbnail stock appraisal. *Mag of Wall St* 72:686 O 2 '43

BORIC acid

Conversion of lutein in a boric acid-naphthalene melt. L. Zechmeister and J. W. Sease. *Il Am Chem Soc J* 65:1951-5 O '43

Effect of sodium chloride upon the ionization of boric acid at various temperatures. B. B. Owen and E. J. King. *bibliog Am Chem Soc J* 65:1612-20 Ag '43

Heat-treatment with boric acid. J. H. Sperman. *Am Mach* 87:107 S 16 '43

Reduction of ash content of residual oils with boric acid. E. T. Scafe, K. F. Hayden and V. A. Kalichevsky. *bibliog diags Ind & Eng Chem Anal ed* 14:923-6 D 15 '42; Same. *Nat Pet N* 35 pt 2:R86-8 F 3 '43

Volatile borates of polyhydric alcohols and the activation of boric acid. R. E. Rippere and V. K. La Mer. *bibliog diags J Phys Chem* 47:204-34 Mr '43

BORING bars

New tool revolutionizes long hole boring at North American plant. *Il Automotive & Aviation Ind* 88:42+ Ja 1 '43

Two-tool boring bars. S. Arthur. *diags Am Mach* 87:91-2 Ja 7 '43

BOROFLUORIDES. See Fluoborates**BOROHYDRIDES. See Boron compounds****BORON**

Boron assumes a position of importance as an alloying element in steel. A. F. Macconochie. *Steel* 113:106, 108+ O 18 '43

Boron; effects as alloying element in steel interest metallurgists. *Steel* 112:83 Mr 15 '43

Boron found to be a very beneficial alloying element. N. F. Tisdale. *Blast F & Steel* 31:93-4 F '43

Boron in steel; a composite of abstracts. *Metals & Alloys* 17:1228+ Je '43

Boron plus titanium in heat-treated steels. G. F. Comstock. *bibliog Metals & Alloys* 17:978-83 My '43

Boron; preparation and properties of pure crystalline boron. A. W. Laubenkayer and others. *bibliog il diags Am Chem Soc J* 65:1924-31 O '43

Boron, steel alloying agent. T. W. Lippert. *Il Iron Age* 150:41-4 N 19 '42

Boron steels increasingly favored. N. F. Tisdale. *Iron Age* 151:40-4 F 4 '43

Comparative effects of boron and manganese on some properties of heat treated steel. G. F. Comstock. *Iron Age* 152:48-52 S 9 '43

Effect of boron containing additions on NE steel. A. S. Jameson. *diags Iron Age* 151:45-50 Mr 25 '43

Great boron mystery lends zest to progress of NE steels. *Il Steel* 112:67-8 F 15 '43

Panel discussion on boron in steel, held by the Iron and steel division, A.I.M.E. *Iron Age* 151:56-7 F 25 '43

BORON—Continued

Presence of boron in braunite and manganese ores. B. Wasserstein. bibliog Econ Geol 38:389-98 Ag '43
 Special addition agent steels. R. B. Schenck. S A E J 51:385-93 N '43; Same abr. Steel 113:96-8, 100+ O 4 '43; Excerpts. Elec W 120:1706+ N 13 '43

See also
 Plants, Effect of boron on

Analysis

Colorimetric determination of boron in steel using quinalizarin reaction. G. A. Rudolph and L. C. Flickinger. il Steel 112:114+ Ap 5 '43; Same. Foundry 71:168-70 My '43
 Crude boron; analysis and composition. E. H. Winslow and H. A. Liebhafsky. Am Chem Soc J 64:2725-6 N '42
 Methods for analyzing boron content in steel discussed. Steel 111:49 D 23 '42; Same cond. Foundry 71:157-8 Mr '43

BORON carbide

Manufactured abrasives, old and new. R. R. Ridgway. il Chem & Eng N 21:861-2 Je 10 '43

BORON chloride

Behavior of phosphoryl chloride, thionyl chloride and sulfuryl chloride toward boron halides. A. B. Burg and M. K. Ross. Am Chem Soc J 65:1637-8 Ag '43
 Fluorination of boron trichloride. H. S. Booth and S. G. Frary. bibliog Am Chem Soc J 65:1836-7 O '43

BORON compounds

Borohydrides of gallium. H. I. Schlesinger, H. C. Brown and G. W. Schaeffer. Am Chem Soc J 65:1786-7 S '43

BORON fluoride

Addition compounds of trimethylamine with boron fluoride and its methyl derivatives. A. B. Burg and A. A. Green. Am Chem Soc J 65:1838-41 O '43

Addition of boron fluoride to hexamethylenetetramine. A. B. Burg and L. L. Martin. diag Am Chem Soc J 65:1635-7 Ag '43

Association of boron trifluoride addition compounds with amines in non-polar solvents. J. R. Bright and W. C. Fernelius. Am Chem Soc J 65:735-6 Ap '43

Behavior of phosphoryl chloride, thionyl chloride and sulfuryl chloride toward boron halides. A. B. Burg and M. K. Ross. Am Chem Soc J 65:1637-8 Ag '43

Condensations; the alkylation of β -keto esters with alcohols and ethers in the presence of boron trifluoride. J. T. Adams, B. Abramovitch and C. R. Hauser. bibliog Am Chem Soc J 65:552-4 Ap '43

Donor-acceptor bonding; an electron diffraction investigation of the structure of dimethyl ether-boron trifluoride. S. H. Bauer, G. R. Finlay and A. W. Laubengayer. bibliog Am Chem Soc J 65:889-95 My '43

Donor-acceptor bonding; ethers of boron trifluoride. A. W. Laubengayer and G. R. Finlay. bibliog Am Chem Soc J 65:884-9 My '43

Fluorination of boron trichloride. H. S. Booth and S. G. Frary. bibliog Am Chem Soc J 65:1836-7 O '43

Isomeric *p*-dibutylbenzenes. G. F. Hennion and L. A. Auspos. bibliog Am Chem Soc J 65:1603-6 Ag '43

Some boron trifluoride catalyzed alkylations of halobenzenes. G. F. Hennion and V. R. Pieronek. bibliog Am Chem Soc J 64:2751-2 D '42

Some Friedel-Crafts type alkylations with boron trifluoride. G. F. Hennion and R. A. Kurtz. bibliog Am Chem Soc J 65:1001-3 Je '43

Structures of dimethyl boron fluoride and methyl boron difluoride. S. H. Bauer and J. M. Hastings. bibliog Am Chem Soc J 64:2686-91 N '42

Studies in stereochemistry; steric strains as a factor in the relative stability of some ethers of boron fluoride. H. C. Brown and R. M. Adams. bibliog diag Am Chem Soc J 64:2557-63 N '42

BORON hydrides

Structure of the boron hydrides. H. C. Longuet-Higgins and R. F. Bell. Chem Soc J p250-5 Je '43

BORON oxide

Viscosity of borax and boron oxide during the softening process; abstract. B. V. Rabinovich. Chem & Met Eng 50:201 Ap '43

BOROUGH halls. See Municipal buildings**BOSE-EINSTEIN statistics**

Distance correlations and Bose-Einstein condensation. F. London. bibliog J Chem Phys 11:203-13 Ap '43

BOSTON

This is Boston. P. James. il map Adv & Sell 36:32, 36, 80+ Je '43

Rapid transit

How the Boston elevated railway is following up on the subject of staggered hours. il Bus Transportation 22:43-4 O '43

Streamlined planning for staggered hours. H. S. Knowlton. il Transit J 86:405-7 N '42

Suburbs

Rural development, 65 families, Boston; protected neighborhood which exploits advantages of a wooded, lake-side site. il plans maps Arch Forum 79:133-9 O '43

BOSTON and Maine railroad

Earnings boom for Boston & Maine. A. Janzen. Barron's 23:15-16 Ja 18 '43

BOSTON & Providence railroad

Authority to solicit stockholders in reorganization proceedings asked. Comm & Fin Chr 157:2444-5 Je 28 '43

BOSTON Edison company

Consolidated income account, 1939-1942. Comm & Fin Chr 157:778 Mr 1 '43

BOSTON globe**Library**

Newspaper library and the army, navy and F.B.I. W. Alcott. Special Lib 34:308-10+ Jl-Ag '43

BOSTON society of civil engineers

Annual reports. Boston Soc C E J 30:146-68 Ap '43

BOSTON stock exchange

Weekly record. Published in weekly Monday numbers of Commercial & financial chronicle

BOTANICAL chemistry

Biochemistry of anthocyanins. W. D. Bancroft. bibliog Science 98:98-100 Jl 30 '43

Enzymic degradation of cell wall substances. D. H. F. Clayton. bibliog Chem & Ind 61:516-18; 62:49-51, 298-300; Discussion. 300-1 D 19 '42, F 6, Ag 7 '43

Sterols; sapogenins; isolation and structures of thirteen new steroidal sapogenins; new sources for known sapogenins. R. E. Marker and others. Am Chem Soc J 65:1199-1209 Je '43

See also

Auxins	Photosynthesis
Bacteria	Plant cells and
Cellulose	tissues
Chlorophyll	Plants—Chemical
Gums and resins	analysis

BOTANICAL gardens

Botanic garden of the University of Cambridge. Science 98:55-6 Jl 16 '43

See also

Elgin botanic garden

BOTANICAL research**See also**

Tropical plant research foundation

BOTANY

Introduction of new viewpoints and scientific concepts in general botany. J. F. Stanfield. Science 98:164-6 Ag 20 '43

See also

Aquatic plants	Photosynthesis
Bacteriology	Plant cells and
Botanical chemistry	tissues
Dyes and dyeing—	Plant growth
Natural dyes	Plants, Effect of
Forests and forestry	temperature on
Fungi	Poisonous plants
Galls (botany)	Rubber plants and
Paleobotany	planting

BOTANY—Continued**Nomenclature**

Botanical name of the giant sequoia. G. N. Jones. Science 98:406-7 N 5 '43

Physiology

Forty years of plant physiology. E. C. Miller. Science 97:315-19 Ap 9 '43

Synapsis and syngamy as stimulating processes of plant development. A. E. Murneek and S. H. Wittwer. Science 98:384-5 O 29 '43

Bermuda

Mycoflora of Bermuda. F. J. Seaver. Science 96:462-3 N 20 '42

BOTANY, Economic

Tropical plants; abstract. E. D. Merrill. Science 98:sup9 Ag 20 '43

See also

Cotton	Grasses
Dyes and dyeing—	Hemp
Natural dyes	Rubber plants and
Flax	planting
Fungi	Textile fibers

Cuba

Great variety of textile plants and fibers in Cuba. M. L. Blanco. il Rayon 24:533-4, 605-7 O-N '43

Islands of the Pacific

Emergency and poisonous plants of the islands of the Pacific; abstract. E. D. Merrill. Science 98:sup10 Jl 2 '43

Latin America

Natives' return; Western-Hemisphere products. C. R. Bryan. il For Comm W 11:8-9+ Je 12 '43

Russia

Work of Soviet botanists; plants as sources of bandaging materials, vitamin C, medicines, food, etc. B. Shishkin. Science 97:354-5 Ap 16 '43

BOTANY, Medical

From caravan to corner drug store; French Africa. E. M. Schwarzauber. il For Comm W 10:14-17+ F 27 '43

United States aids Mexico in drug-plant cultivation. For Comm W 12:20 Jl 24 '43

BOTTLE caps and seals

All-America package competition award; Cummer products company; Energine lighter fluid. il Mod Packaging 16:98+ Ap '43

Cel-O-Seal cellulose closures. il India Rubber W 107:496 F '43

Closure makers assn. hit by F.T.C. order. Oil Paint & Drug Rep 143:3+ Je 7 '43

Continuous-thread paper closure. il Mod Packaging 16:63+ Ja '43

Converting old cans into crowns; brewer gets 1,100 gross a week of extra-quota caps from reclaimed tinplate. A. H. Haffenreffer, jr. flowsheet il Food Ind 15:80-1 S '43

Making crowns do double duty; brewer reconditioning used bottle caps. A. H. Haffenreffer, jr. flowsheet il Food Ind 15:76-7 Ag '43

New tester for bottle cap liners. J. D. Charlton and C. L. Lovell. il Diags Mod Packaging 16:86, 88+ F '43

Reclaiming crown caps. il Mod Packaging 16:74-6+ Je '43

Refinishing salvaged crown shells with lacquers or enamels. A. H. Warth. il Metal Finishing 41:399-401 Je '43

Spouted closure; lighter fluid container. il Mod Plastics 20:70 Ja '43; Mod Packaging 16:76 Ja '43

Substitute container closures will increase use of glass in 1943. il Cer Ind 40:28-9+ F '43

WPB establishes quotas for drug, chemical closures. Oil Paint & Drug Rep 143:3+ Ja 4 '43

WPB issues L-103 program standardizing glass pack; closures and packing quotas. Food Ind 15:83-4+ My '43

WPB issues specifications on closures for glass. Food Ind 15:77+ F '43

Rating

Bottle closures. Consumers' Research Bul 12:8 Jl '43

BOTTLE factories**Equipment**

Knox Glass opens ninth plant in Lincoln, Illinois; Lincoln glass bottle co. il Cer Ind 39:43-4, 46 D '42

Layout

Streamlined plant layout distinguishes new Knox unit. E. A. Schrag. il Glass Ind 24:15-16+ Ja '43

BOTTLE filling machines. See Bottling machines

BOTTLE making machinery

Roirant's bottle patents. diag Glass Ind 24:212 My '43

BOTTLED goods

All-America package competition award; Pennzoil company. il Mod Packaging 16:100+ Ap '43

All-America package competition award; Turpentine & rosin factors, inc. il Mod Packaging 16:101+ Ap '43

See also

Beverages
Bottle caps and seals

Inspection

Psychometric testing; Calvert packaging research laboratory. H. F. Willkie. il Mod Packaging 16:85-7, 116 Ja '43

BOTTLES

Competitors unite in drive to put slacker bottles back to work. il Sales Management 52:62+ S 1 '43

Greater New York starts drive for salvage of bottles. Cer Ind 41:58 Ag '43

One bottle with multiple duties; Dermetics, inc. il Mod Packaging 16:58 Jl '43

Pinch in bottles. Business Week p84+ Jl 24 '43

Turpentine bottles. il Mod Packaging 16:50 Jl '43

WPB may allow reuse of bottles. Ptr Ink 204:75 Jl 23 '43

Manufacture

Knox Glass opens ninth plant in Lincoln, Illinois; Lincoln glass bottle co. il Cer Ind 39:43-4, 46 D '42

Streamlined plant layout distinguishes new Knox unit. E. A. Schrag. il plan Glass Ind 24:15-16+ Ja '43

BOTTLES, Plastic

Plastic bottles? new blowing method. il Diags Mod Packaging 17:65-7 N '43

BOTTLING

Bottling pure gum turpentine. il Mod Packaging 16:71+ Je '43

Conversion time: 30 minutes; mechanical ingenuity maintains both military and civilian output on single bottling line. il diag Mod Packaging 17:58-61 N '43

Good-by hand bottling. il Mod Packaging 16:94+ Ja '43

BOTTLING machines

All-America package competition award; Abbott laboratories cottoning mechanism for drug bottle filling. il Mod Packaging 16:113+ Ap '43

Conversion time: 30 minutes; mechanical ingenuity maintains both military and civilian output on single bottling line. il diag Mod Packaging 17:58-61 N '43

BOTTLING plants

Meeting the safety problem. R. J. Crosby. il Food Ind 15:70-1 O '43

Soft drink sterilisation; Sterilamp installation for bottle cleaning and syrup protection. Pepsi-Cola company. il Electrician 131:294 S 24 '43

BOUILLON cubes

Romanoff caviar company finds packaging of bouillon cubes easy in air conditioned room. A. A. Giannini. il plan Heat & Ven 40:62-3 Ja '43

BOULDER Dam project. See Colorado river—Boulder Dam project

BOUNDARIES

See also Northeast boundary of the United States; also subdivision Boundaries under names of countries, e.g. Germany—Boundaries

BOUNDARY layer

Heat transfer and friction in the turbulent boundary layer of a compressible gas at high speeds; abstract. F. Frankl and V. Voishel. *Roy Aeronautical Soc J* 47:sup207-9 My '43

Wood smoke as a means of visualising boundary layer flow at high Reynolds numbers. J. H. Preston and N. E. Sweeting. bibliog il diags *Roy Aeronautical Soc J* 47:93-102 Mr '43

BOUNDARY value problems

Numerical solution of the boundary value problem for the potential equation by means of punched cards. M. Korimes. *R Sci Instr* 14:248-50 Ag '43

Two-dimensional boundary value problems in potential theory. I. S. Sokolnikoff and R. D. Specht. *J Ap Phys* 14:91-5 F '43

BOURDON gages. See Pressure gages

BOWDITCH, Nathaniel Ingersoll, 1773-1838
Hall of fame in life insurance. R. W. Sheehan. *por Spectator (Life ed)* 151:16-19+ S '43

BOWEN, Ira Sprague, 1898-
Presentation of the Henry Draper medal for 1942. J. H. Moore. *Science* 97:431 My 14 '43

BOWLES, Chester B. 1901-
Portrait. *Business Week* p17 J1 24 '43
Yachtsman Chester Bowles sails into berth vacated by Lou Maxon. *por Ptr Ink* 204:47 J1 23 '43

BOWLING alleys

Air conditioning a bowling hall. *Sheet Metal Worker* 33:48 N '42

Bowling alley line gets another black eye. *Nat Underw* 47:2+ S 2 '43

Insurers watch bowling alley risks closely. *Nat Underw* 47:4+ Ja 28 '43

BOWMAN, Isaiah, 1878-

President of the American association for the advancement of science. K. T. Compton. *Science* 97:305-6 Ap 2 '43

BOWMAN, John Gabbert, 1877-
Sketch. *por Am Cer Soc Bul* 22:111 Ap 15 '43

BOWMAN, Waldo G.
Portrait. *Eng N* 130:865 Je 17 '43

BOWSTRING hemp

Jute and manila fibers; sansevieria as substitute. A. C. Whitford. *Textile Col* 64:526 N '42

BOXES

Boxes in a fix; wooden containers scarce due to lumber shortage. *Business Week* p98 Ap 17 '43

Boxes plentiful. *Business Week* p28-9 My 29 '43

Folding boxes at war; abstract. W. D. Lynch. *Mod Packaging* 16:73 My '43

Toilet goods assn. promotes voluntary standardization. *Mod Packaging* 16:100+ Je '43

Wood for war. M. R. Merryfield. *il Mod Packaging* 16:41-5+ My '43

See also

Candy boxes

Paper boxes

BOXES, Wire bound

Performance of nailed and wirebound wooden cases for luncheon meat. V. Wright. *il Mod Packaging* 16:176, 178+ Ap '43

BOYAJIAN, Aram

I am an American. *por Elec Eng* 61:614-15 D '42

BRACHIOPODA, Fossil

Brachiopod from mica schist, South Stratford, Vermont. C. G. Doll. bibliog *Am J Sci* 241:676-9, pl 1 N '43

Brachiopoda of the High Point sandstone of New York. M. A. Stainbrook. *Am J Sci* 240:379-90, pl 1-2 D '42

BRADFIEL, John Job Crew, 1867-1943

Sketch. *por Engineering* 156:275 O 1 '43

BRADLEY, George Oliver, 1866-1943

Appreciation. D. C. Jackling. *por Min & Met* 24:255 My '43

BRADY, Cyrus Townsend, Jr.

Portrait. *Ind Stand* 13:300 D '42

BRADING machines

Hard wire brading; development of new machine carrier. *il Electrician* 129:501-2 N 6 '42

BRAIN

Amplifying and recording technique in electrobiology; with special reference to the electrical activity of the human brain. G. Parr and W. G. Walter. il diags *Inst E E J* 90 pt 3:129-41 S '43; Abstract. *Electrician* 130:245 Mr 5 '43; Discussion. *Inst E E J* 90 pt 3:142-4 S '43

Electroencephalograph design. F. Traugott. il diag *Electronics* 16:132+ Ag '43

Encephalophone converts brain potentials into sounds. diag *Electronics* 16:144+ My '43

Ether and metabolism in the cerebral cortex. F. N. Craig. bibliog *Science* 98:68-9 J1 16 '43

Macromolecular components of normal embryonic and adult brain tissue. A. R. Taylor, D. G. Sharp and B. Woodhall. bibliog *Science* 97:226-7 Mr 5 '43

Type of cholinesterase present in brain tissue. B. Mendel and H. Rudney. *Science* 98:201-2 Ag 27 '43

Analysis

Studies on the phosphorus compounds of brain; determinations of adenosine triphosphate and its decomposition products in fresh and autolyzed dog brain; abstract. S. E. Kerr. *Franklin Inst J* 235:98 Ja '43

Diseases

Encephalopathy from inhaling fumes from burning storage battery boxes. W. D. McNally. *J Ind Hygiene* 25:29-30 Ja '43

BRAKE beams

Brake beam repairs; use of hydraulic press. Reading, Pa. shops. il diag *Ry Mech Eng* 117:275-6 Je '43

BRAKE shoes

Machine for forming and rolling brake-shoe keys. *il Ry Mech Eng* 117:135 Mr '43

Advertising

How we sell to industrial buyers; American brake shoe co. J. I. Capps. *il Ptr Ink* 204:21-2 J1 2 '43

BRAKES

Arc welding worn brake heads; with cost data. J. D. Seivewright. *il Metals & Alloys* 17:350 F '43

Frictional phenomena; technical applications of external friction of solids. A. Gemant. diags *J Ap Phys* 14:514-17 O '43

Powdered metal facings for clutches and brakes. M. S. Adler, R. B. Aufmuth and F. J. Lowey. *il Product Eng* 14:218-21 Ap '43

See also

Air brakes

BRAKES, Airplane

Controls airplane landing wheel speed; patent assigned to Bendix aviation corp. diag *Machine Design* 15:154+ F '43

Stressing of aircraft wheels and brakes. H. Burkhardt. diags *Roy Aeronautical Soc J* 47:133-7 My '43

BRAKES, Electric

Braking an inclined cableway with solenoid. R. C. Newhouse. diag *Rock Prod* 46:34 Ap '43

Electric brake now used on guns, tractors, machines. *il Sci Am* 168:124 Mr '43

Manufacture

Experience with NE (national emergency) alloy steels; Warner electric brake mfg. co. F. Born. diags *Steel* 113:110 N 8 '43

BRAKES, Hydraulic

Coaster brake goes hydraulic! patent assigned to General motors corp. diag *Machine Design* 15:152 Mr '43

Controls airplane landing wheel speed; patent assigned to Bendix aviation corp. diag *Machine Design* 15:154+ F '43

Substitution for aluminum in brake cylinder pistons; abstract. J. F. Bachman. *S A E J* 51:sup67 J1 '43

Vacuum booster for hydraulic brakes. diag *Automotive & Aviation Ind* 89:46 S 1 '43

BRAKES, Magnetic

Common types of magnetic brakes and their characteristics. A. C. Prescott. *il Product Eng* 14:292-3 My '43

BRAKES, Motor bus

Maintenance of electric drive and dynamic braking equipment. G. M. Woods. *Il Mass Transportation* 38:360-2 D '42

Repair

Brake shoe machine wins \$25 war bond. *Il Bus Transportation* 22:56-7 My '43

BRAKES, Motor truck**Manufacture**

Progressive die is oil-operated; drawing rear brake drum web. H. Chase. *diags Am Mach* 87:89-91 Mr 4 '43

BRAKING, Dynamic

Industrial control: dynamic braking of a d-c shunt motor and load. G. F. Leland and L. T. Rader. *diag Elec Eng* 62:Trans 472-6 JI '43

Maintenance of electric drive and dynamic braking equipment. G. M. Woods. *Il Mass Transportation* 38:360-2 D '42

BRANCH banking. See Banks and banking—Branch banking

BRANCH libraries. See Libraries—Branches

BRANCH management

Arthur Murray's advertising lessons; ad rules for branch managers. P. James. *Il Adv & Sell* 36:21-2, 68+ N '43

BRANCH offices

Girls shun 35-mile daily trip to office, so office goes to the girls. *Ptr Ink* 204:38 JI 30 '43

See also

Insurance companies
—Branch offices

BRANCH stores

Pay day stand; Bamberger branch operates in factories. *Il Business Week* p84 My 22 '43

BRANDING**See also**

Grade marks
Labels

BRANDS, Advertised. See Advertising, National

BRANDY

Charcoal treatment of brandy. N. E. Tolbert and M. A. Amerine. *bibliog Il Ind & Eng Chem* 35:1078-82 O '43

BRANIFF airways, inc.

Common stock registered. *Comm & Fin Chr* 158:766 Ag 23 '43

Plans expansion. *Comm & Fin Chr* 158:543 Ag 9 '43

Stock offered. *Comm & Fin Chr* 158:945 S 6 '43

Ten years' progress. P. D. Niles. *Il Aeronautical Eng R* 1:93 N '42

BRASS

Arc welding brass and bronze castings. *diags Iron Age* 151:53 Ja 21 '43

Brass and bronze castings conservation chart revised. *Foundry* 71:121, 193 N '43

Cartridge brass; an elementary introduction. L. E. Gibbs. *Il Metal Prog* 43:897-900 Je '43

Cartridge brass; cold working and annealing. L. E. Gibbs. *Il Metal Prog* 44:243-8+ Ak '43

Cartridge brass defects. C. O. Windrath. *Metal Prog* 44:643 O '43

Copper and brass, 1942. R. A. Wilkins. *Metals & Alloys* 17:54-5 Ja '43

Correction of brasses for zinc loss; chart. *Iron Age* 151:56 My 6 '43

Down-grading chart for brasses and bronzes. C. S. Cole. *Metal Prog* 43:406-8 Mr '43; Same cond. *Foundry* 71:87+ Mr '43; Same cond. *Steel* 112:106+ Ap 12 '43

Electrolytic polishing of zinc and brass. J. L. Rodda. *Min & Met* 24:323 JI '43

Extrusion brasses from fired cartridge cases. J. Rae, jr. *Engineering* 155:145, 165-6, 185, 205 F 19-Mr 12 '43; Excerpts. *Metal Prog* 44:74+ JI '43

Hardness conversion for cartridge brass; tabulation. *Metal Prog* 44:714 O '43

Influence of crystal size and orientation upon the mechanical properties of metals in the cast condition. L. Northcott. *Metal Prog* 43:586+ Ap '43

Investigations of ferromagnetic impurities.

F. W. Constant, R. E. Faires and H. E. Lenander. *bibliog Phys R* 63:441-5 Je 1 '43
Leaded brasses; a digest of common specifications. R. S. Burpo, jr. *Metals & Alloys* 17:1215 Je '43

Picking of cartridge brass; abstract. H. A. H. Crowther and P. D. Liddiard. *Metals & Alloys* 17:1038-40 My '43

Properties of cast red brass as affected by the ambient atmosphere during melting. H. B. Gardner, A. I. Krynetsky and C. M. Saeger, jr. *bibliog pl diags J Research Nat Bur Stand* 31:125-40 S '43

Reclaiming tin from scrap brass; large scale operation an essential. A. G. Arend. *Il Chem Age (Lond)* 49:11-14 JI 3 '43

Remelting cartridge cases; abstract. J. Rae, jr. *Metals & Alloys* 17:568 Mr '43

Standard brass and bronze alloys of the non-ferrous metal institute; tabulation. *Metal Prog* 44:708 O '43

Tin-saving bronzes and brasses; abstract. *Metals & Alloys* 16:954+ N '42

Welding brasses and bronzes. *Chem Age (Lond)* 48:299-300 Mr 13 '43

Width of X-ray diffraction lines from cold-worked tungsten and α -brass. C. S. Smith and E. E. Stickley. *bibliog Phys R* 64:181-8 O 1 '43

Working of cast copper-base alloys. *diags Am Mach* 87:125-40 O 14 '43

X-ray line broadening by cold-working alpha-brass. M. Petersen and C. W. Tucker. *Phys R* 63:385 My 1 '43

See also

Brazing
Gilding metal
Zinc alloys

Analysis

Polarographic analysis of copper and zinc in brass plate; a rapid control method. W. P. Tyler and W. E. Brown. *Ind & Eng Chem Anal ed* 15:520-3 Ag 15 '43

Rapid volumetric method for the determination of lead in brass. P. M. Fisk and F. F. Pollak. *Chem Soc J* p41-2 Ja '43

Cracking

Stress cracking of brass. H. P. Croft and G. Sachs. *Il Iron Age* 151:47-50 Mr 11; 62-7 *bibliog* (103 titles, p65-7) Mr 18 '43

Specifications

Brasses; a digest of common specifications; tabulation. R. S. Burpo, jr. comp. *Metals & Alloys* 17:991, 993 My '43

Testing

Catching cartridge defects at the source. G. J. Foss, jr. *Metal Prog* 44:97 JI '43

Hardness conversion for cartridge brass; tabulation. *Metal Prog* 43:235 F '43

Studies of machined versus as-cast test specimens for copper-base alloy sand castings. J. J. Curran and others. *Il diags Am Soc T M Proc* 42:139-214 '42

BRASS-clad steel. See Steel, Brass-clad

BRASS founding

Brass and bronze castings, 1942. S. Tour. *Metals & Alloys* 17:65-6 Ja '43

Brass and bronze sessions feature reports; A.F.A. annual meeting. *Foundry* 71:172+ Je '43

Casting of brass; treatment of billets and strip ingots. *Chem Age (Lond)* 49:139-41 Ag 7 '43

Develops chart to compensate zinc loss in brass. *Foundry* 71:120 Mr '43

Experiences in pouring copper with high conductivity. A. Campbell. *Foundry* 71:112 JI '43

Gas holes in brass castings. A. K. Higgins. *Iron Age* 151:54 Ap 22 '43

Low-tin and tin-free bronzes and brasses. F. Hudson. *bibliog Il diags Iron Age* 150:46-50 D 3; 62-4 D 10 '42

Nonferrous foundries need temperature control. D. F. O'Connor. *Foundry* 71:95+ Ag '43

Properties of cast red brass as affected by the ambient atmosphere during melting. H. B. Gardner, A. I. Krynetsky and C. M. Saeger, jr. *bibliog pl diags J Research Nat Bur Stand* 31:125-40 S '43

BRASS founding—Continued

Speeds production of brass castings; Repeal brass mfg. co. il Foundry 71:76-9, 163 Ja '43; Same. Mech Handling 30:234-41 Je '43

BRASS industry and trade

Trading Post for jobbers does three-way job for Imperial Brass. E. F. Todd. il Ind Marketing 27:32-3+ D '42

BRASS plating

Control of ammonia in the electrodeposition of brass. J. H. Monaweck. Electrochem Soc Trans 82 (preprint 28):331-8 O '42; Same. Metal Finishing 41:80-2 F '43

BRASS work

Materials saved by car-brass trimmer. il diags Ry Mech Eng 117:144-5 Mr '43
20 mm. shell cases; use of carbide dies and several unusual machines; Stoner mfg. co. W. A. Phair. il diag Iron Age 151:41-5 Ap 1 '43

BRASS works

Flow of typical aircraft brass mill orders; chart. Iron Age 152:103 S 16 '43; Same. Automotive & Aviation Ind 89:25 O 1 '43
Questions and answers relating to brass mill operations under CMP. Iron Age 151:112+ Je 17 '43

Steel cartridge cases from a Chase brass plant. C. O. Herb. il diags Mach. 50:137-52 O '43

World's most modern brass mill; Bridgeport brass co. illustrations with text. Iron Age 151:58-60 Je 3 '43

BRAUNITE

Presence of boron in braunite and manganese ores. B. Wasserstein. biblog Econ Geol 38:389-98 Ag '43

BRAVOITE

Bravoite from a new locality. C. A. Rasor. biblog il Econ Geol 38:399-407 Ag '43

BRAZIL

Building Brazil. L. Ross. il For Comm W 11:3-9+ Je 26; 12:6-8+ J1 3 '43

See also

Aluminum industry and trade—Brazil	Mines and mineral resources—Brazil
Architecture—Brazil	Petroleum—Brazil
Building—Brazil	Railroads—Brazil
Chemical industries—Brazil	Railroads—Electrification—Brazil
Industrial mobilization—Brazil	Rubber industry and trade—Brazil
Iron mines and mining—Brazil	Technical education—Brazil
Labor and laboring classes—Brazil	Wages—Brazil
Labor laws and legislation—Brazil	World war, 1939—Brazil

Commerce

Brazil's 1942 foreign trade termed very encouraging. For Comm W 11:24 My 22 '43

Commercial policy

Facilitated procedure for clearance of import shipments arriving with documents missing or legalized after arrival of merchandise. For Comm W 9:11 N 21 '42

Farm aid in Brazil; wartime demand for crops prompts new policy. Business Week p68+ J1 31 '43

Preference request import-control procedure established. For Comm W 10:13-14 F 20 '43

Regulations for air-express shipments revised by Brazil. For Comm W 13:21 O 23 '43

Economic conditions

Brazil, a 20-year boost. il map Business Week p18-20+ N 28 '42

Brazil, Argentina, Chile, from an investment standpoint. V. L. Horoth. Mag of Wall St 71:683-5+ Ap 3 '43

Brazil in the war. Economist 145:270-1 Ag 28 '43

Inflation at work in Brazil. Business Week p46 O 16 '43

News by countries. For Comm W 11:20-1 Je 26; 12:10-11 J1 17; 20:1 Ag 21; 14 S 11 '43

Industries and resources

Antipodes come of age industrially; upsurge in South Africa. Brazil, Australia and the Argentine. G. Riviere. il Mag of Wall St 72:360-1+ J1 10 '43

Battle of the Amazon. J. C. McClintock. il For Comm W 12:3-5, 30-2 J1 3 '43

Brazil can help allied war effort in variety of ways. J. F. Chapman. il Am Mach 86:1460n D 10 '42

Brazil plans its own TVA. map Business Week p101-2 Je 19 '43

Brazil surveys progress. Business Week p30+ Ja 30 '43

Brazil's industry. Business Week p62+ Je 5 '43

Brazil's industry; war's emergencies spur unprecedented activity. S. Zink. il For Comm W 12:3-10+ S 11 '43

Brazil's transition; industrial self-sufficiency assuming shape. Business Week p46 J1 17 '43

Commercial possibilities in Brazil's forest wealth. C. W. Slifko. il map For Comm W 11:10-11+ Ap 3 '43

Drowning giant of South now undergoing notable expansion. il Iron Age 152:104 S 16 '43

Monsanto cocoa; plant at Bahia to extract butter for Europe; residues to U.S. for caffeine content. Business Week p74 Ap 24 '43

Pushes industrialization as wartime curbs limit imports. il Steel 112:79, 82-3 Je 7 '43

U.S. capital flows south; many U.S. industrial enterprises expanding operations in Brazil. Business Week p98+ J1 10 '43

BRAZING

Assembly by silver brazing; William R. Bootz manufacturing company; assembling army field range fire units. H. Chase. il Am Mach 86:1426-8 D 10 '42

Better brazed and soldered joints made possible by induction heating. J. P. Jordan. il diags Product Eng 14:102-5 F '43

Braze-hardening high-speed-steel tipped tools; controlled atmosphere electric furnace, using Drycolene. il Steel 112:108 My 10 '43; Same. Welding J 22:274+ Ap '43; Same. Iron Age 152:47 J1 1 '43

Brazed ends make wire rope safer to handle. F. L. Spangler. il Coal Age 48:85-6 Mr '43; Same. Paper Ind 25:43 Ap '43; Same. Steel 112:104 Ap 26 '43; Same. Safety Eng 85:29 My '43

Brazing and soldering, 1942. R. N. Chapin. Metals & Alloys 17:83-4 Ja '43

Brazing averts tool shortages. R. C. Holloway. il Am Mach 87:102-4 My 13 '43

Brazing discarded cutters. il Metals & Alloys 13:82 J1 '43

Bronze welding vs. brazing; abstract. E. Christie. Metals & Alloys 16:1126+ D '42

Carboly offers carbide tool brazing equipment and engineering service in cooperation with G.E. il Am Mach 87:126 Je 10 '43

Cast cutters boost milling capacity; combination of meehanite bodies and brazed tips. W. C. Whittem. il diag Am Mach 87:92-4 J1 22 '43

Deformation under pressure of brazed aluminum tank. L. W. Combs. il diags Product Eng 14:581-2 S '43

Electro-brazing with water-cooled tongs. G. E. Prussien. il diag Iron Age 151:67 Mr 4 '43

Electronic tool brazing. il Business Week p70 My 29 '43

Fatigue strength of welded aircraft joints. T. V. Buckwalter and O. J. Horger. biblog il diags Welding J 21:sup25-39 N '42

Form tools salvaged by low-temperature brazing. il Iron Age 152:62 Ag 19 '43

From pliers to brazing tongs. il Steel 112:98 Ap 26 '43

Handling of liquid ammonia for nitriding and other atmospheres. C. V. Snell. il diags Metal Prog 43:245-8 F '43

Low temperature welding of broken tools; using Castolin Eutectic alloy. il Iron Age 151:66 Mr 25 '43

Methods of brazing nonferrous joints. il Marine Eng 48:218+ Je '43

Multi-flame jig facilitates the brazing of tool bits to shanks. il Mach 49:139-41 Ja '43

Possibilities of furnace brazing in aircraft production. H. D. Samuel, jr. il diag Automotive & Aviation Ind 89:28-9+ S 15 '43

Reclaiming tools by low-temperature brazing at International Harvester plants. H. E. Fleming. il Steel 111:122, 124+ D 7; 88, 90 D 14 '42

BRAZING—Continued

- Redesigned fuse adaptor saves time and metal. J. B. Nealey. *il* diags Iron Age 151: 40-3 Ja 28 '43
- Silver brazing and its application in war work. C. M. Robbins. *il* Welding J 22:410-11 Je '43
- Small furnace for brazing carbide tips. *il* Iron Age 150:58 N 19 '42
- Spot welder converted for electro-brazing. *il* Iron Age 151:65 My 13 '43
- Three-torch setup for tool brazing. H. R. James. *plan* Am Mach 86:1365 N 26 '42
- Tool brazing speeded by electronic induction heating; new grinding system. *il* diags Steel 112:90, 92+ My 31 '43; Same *abr.* Iron Age 151:60 My 27 '43
- Tool reclamation pays its way; International harvester company. W. A. Johnson and L. Schultz. *il* Am Mach 87:83-5 O 28 '43
- Tool-tipping procedure; data sheets. Mach 49:205 Ag '43; Same. Metals & Alloys 18:317 Ag '43
- Tool tipping procedures for high speed steel. Iron Age 152:62-3 J1 15 '43; Same. Steel 113:106a J1 5 '43
- Two methods of brazing high speed steel tips; copper brazing and hardening with a hydrogen atmosphere furnace; silver soldering and tempering with an oxyacetylene torch. B. S. Lement and W. B. Kennedy. *il* Iron Age 150:55-8 N 19 '42; Same. Steel 112:90, 92+ F 15 '43; Same *cond.* Mach 49:201-3 D '42
- Water-cooled brazing tongs. *il* Am Mach 87: 94-5 Ap 15 '43
- Wheel forging replaced by brazed steel disks; transformer truck wheels. C. H. Hannon. *il* Iron Age 151:45 Ja 21 '43
- Worn high speed steel tools tipped with carbide. J. S. Gillespie. *diags* Iron Age 150:70-1 N 26 '42; Same. Ry Mech Eng 117: 129-30 Mr '43

See also

Silver solder

BRAZING, Silver. See Silver solder**BREAD**

- Bakers' woes. Business Week p22 Ja 28 '43
- Ban on bread slicing increases sales 15%. *Ptr* Ink 202:91 F 5 '43
- Enrichment of flour and bakery products. W. H. Cathcart. *bibliog* *il* Ind & Eng Chem 35:66-70 Ja '43
- Estimation of rope spores in wheat flour and other products. E. Barton-Wright. *Soc* Chem Ind J 62:33-7 Mr '43
- Gluten and its relation to flour constituents in bread making; abstract. J. C. Baker. *Can* Chem & Process Ind 27:44 Ja '43
- Less milk for bread. Business Week p87 Je 26 '43
- Wheat germ in bread; abstract. E. Grewe and J. A. LeClerc. *Food* Ind 15:130-1 S '43
- Wheat whirling; trimming bread's frills and boosting flour's ceiling. Business Week p22+ Ja 9 '43
- White, national, or wholemeal bread. J. D. Robertson. *bibliog* Chem & Ind 62:222-5 Je 12 '43; Discussion. D. W. Kent-Jones. 62: 273 J1 17 '43; Reply. J. D. Robertson. 62: 233 J1 31 '43

See alsoBakers and bakeries Flour
Baking Yeasts**Analysis**

Determination of thiamine in bread by the thiochrome method; a comparison of phosphatase-containing enzyme preparations. D. F. Clausen and R. E. Brown. *bibliog* *il* Ind & Eng Chem Anal ed 15:100-1 F 16 '43

Standards

Bread standards announced after two years' wait. *Food* Ind 15:39 S '43

BREAKFAST foods. See Cereals, Prepared**BREAKWATERS**

Breakwaters. R. R. Minikin. *il* diags Engineering 155:301-2, 342-3, 381-2, 441-3, 481-2 Ap 16, 30, My 14, Je 4, 18 '43

BREAKWATERS, Concrete

Large places 90-ton breakwater blocks at Leixoes, Portugal. C. H. Crutwell. *il* diags Eng N 131:149-51 J1 15 '43

BREECH, Ernest Robert, 1897-
Bendix Aviation's president. *por* Mag of Wall St 72:210 My 29 '43

BREECH bolts. See Rifles—Manufacture

BREED, Charles Blaney, 1875-
Sketch. *por* Civil Eng 12:695 D '42

BREWERIES**Equipment**

Aluminum in the brewing industry; abstract. Metals & Alloys 18:140 J1 '43

Vitamin-rich food made from byproduct yeast. L. V. Burton. *flow* diag *il* Food Ind 15:66-9+ N '43

Power

Heat balance in a brewery. C. M. Sieben. *il* diags Refrig Eng 45:410-12+ Je '43

Safety measures

New ideas in an old plant; Terre Haute brewing company. R. P. Harris. *il* Nat Safety N 47:18-19+ Je '43

BREWERS' malt. See Malt**BREWING****By-products**

Vitamin-rich food made from byproduct yeast. L. V. Burton. *flow* diag *il* Food Ind 15:66-9+ N '43

BREWING industries**Statistics**

25 leading brewers listed. *Ptr* Ink 205:93 O 29 '43

Great Britain

Brewery shares. Economist 145:403-4 S 18 '43

Mexico

Mexico's beer. D. M. Crawford and A. J. Mullen. *il* For Comm W 12:8+ S 26 '43

BREWSTER aeronautical corporation

Brewster gremlins hold no terror. Business Week p20 Ap 17 '43

Brewster puzzle. Business Week p94+ O 2 '43

House naval group may include other firms in Brewster inquiry. Aviation N 1:8-9 N 8 '43

Navy intervenes again at Brewster in attempt to boost production. Aviation N 1: 10 O 4 '43

Ten years' progress. R. Hill. *il* Aeronautical Eng R 1:47 N '42

Terms in suit. Comm & Fin Chr 157:1646 My 3 '43

BREWSTER law

Measurement of anomalous dispersion in opaque dielectrics. A. W. Lawson. *diags* R Sci Instr 14:38-43 F '43

BRICK construction

Aluminum co. of America finds clay products simplify industrial construction. Brick & Clay Rec 103:32 Ag '43

Army decides on masonry construction; hospital unit at Camp White, Oregon. *il* Brick & Clay Rec 103:29-30 S '43

Breathing walls of brick and tile, a new masonry conception; Douglas Aircraft plant at Oklahoma City. *il* diag Brick & Clay Rec 102:14-16 Ap '43

Brick selected for spirit of school; Crow Island school at Winnetka, Ill. *il* plan Brick & Clay Rec 103:23-5 O '43

Canadian council specifies brick for municipal housing projects. St. John. N.B. *il* Brick & Clay Rec 103:38-9 S '43

Clay products are doing a big job on military and housing projects. plans Brick & Clay Rec 102:27-8 Ja '43

Clay products for durability, quality, simplicity and truthfulness; Mercy hospital school of nursing. W. Koehl. *il* Brick & Clay Rec 103:28-9 Ag '43

Excellent design and construction win honors for Baltimore brick co. building. *il* Brick & Clay Rec 102:33 My '43

Hospital construction in winter weather. *il* Eng N 131:693-5 N 4 '43

Now is the time to start promoting spring and summer brick gardening. *il* Brick & Clay Rec 102:24-5 Mr '43

Structural tile barracks for the WAACS. *il* Eng N 129:838-40 D 17 '42

BRICK construction—Continued.

Vertical barbecue enhances beauty of brick; illustrations with text. Brick & Clay Rec 103:38 Ag '43

See also
Brick houses
Sidewalks, Brick
Walls, Brick

Design

Brick arches for tank walls; sewage digester and clarifier tanks at eastern army camps. O. Albert. *il* diags Eng N 131:260-2 Ag 12 '43

Reinforcement

Reinforced brick and concrete substituted for steel kiln shells. V. J. Azbe. *diag* Rock Prod 46:78-9 S '43

BRICK floors. *See* Floors, Brick

BRICK houses

Masonry for war housing; how to conserve lumber and nails. F. W. Cortright. *il* plan Am Bld 64:46-74 D '42
Modern homes of brick beautiful and economical; illustrations and plans. Brick & Clay Rec 103:33-6 S; 27-9 O '43

BRICK industry and trade

Clay products industry favorably affected by WPB directive. *il* diags Brick & Clay Rec 101:18-19 D '42
Industry supports the War council program. Brick & Clay Rec 102:16-26 Ja '43
Practical promotion helps sell clay products; Southern brick & tile manufacturers assn. G. H. Merry. *il* diags Brick & Clay Rec 102:24-8 Ap '43

Two prominent brick men exchange letters about brick man's future. Brick & Clay Rec 103:14-15 Ag '43; Discussion. 103:15 S '43

See also
Bricks—Prices

Statistics

Common brick, vitrified paving brick, 1938-1941. Survey of Cur Business 1942 Sup p162 [supplemented in monthly numbers]

Great Britain

Brick plays major role in Britain's 12-year rebuilding plan. Brick & Clay Rec 102:28 Ap '43

See also
London brick company

BRICK making. *See* Brickmaking

BRICK sewage tanks. *See* Sewage tanks, Brick

BRICK sidewalks. *See* Sidewalks, Brick

BRICK walls. *See* Walls, Brick

BRICK works

Alum mfrs. want clay prepared by brick plants. *il* Brick & Clay Rec 103:16-17 Jl '43
Excellent design and construction win honors for Baltimore brick co. building. *il* Brick & Clay Rec 102:33 My '43
Reduction of iron ores in clay plants. C. Austin. Brick & Clay Rec 102:17-18 Mr '43

See also
Brickmaking

Employees

Women workers are one answer to the labor problem; Alliance clay products co. *il* Brick & Clay Rec 101:22+ N '42

Equipment

Clay plant equipment goes to war in the form of salvage scrap. *il* Brick & Clay Rec 101:32+ D '42
Glass used in core tips helps save critical steel. *il* Brick & Clay Rec 102:44 Ja '43
New equipment does a better job in meeting production needs; Lanz brick & tile co. *il* Brick & Clay Rec 102:40+ Mr '43
Stoker firing requires little attention and is dependable in operation; plant of Belden brick co. *il* Brick & Clay Rec 102:19-20 Mr '43

Maintenance and repair

Foresight is better than hindsight in a maintenance program; Wadsworth brick and tile co. Brick & Clay Rec 102:38 My '43

BRICKER, John William, 1893-

Ohio looks to '44; hopes to provide its eighth U.S. president. E. Janeway. *por* Fortune 27:104-6+ F '43

Sketch. *por* Spectator (Life ed) 160:66, cover Je '43

Would follow Republican platform if nominated. *por* Comm & Fin Chr 158:517 Ag 5 '43

BRICKMAKING

Combustion principles should be applied when firing down-draft kilns. H. L. Longenecker. *diags* Brick & Clay Rec 102:26-7 Mr; 37-8+ Ap; 20, 22-3 Je '43

Construction of kiln influences correct firing draft. J. G. Seanon. *il* Brick & Clay Rec 102:24-5 Je '43

Distinctly colored brick produced by accurate firing control; Belden brick co. *il* Brick & Clay Rec 101:30-1 N '42

Firebox design is important to quality of coal used. D. L. Wilson. *diags* Brick & Clay Rec 103:37-43 O '43

Flat arch tunnel kiln permits square setting of brick. *il* Brick & Clay Rec 101:44-6 D '42

Use of soda ash for structural clayware production by Barker-Truog process. H. W. Harrington. *Am Cer Soc Bul* 22:57-60 Mr 15 '43

What's happening inside your kiln (cont). L. R. Whitaker. *diags* Brick & Clay Rec 101:22-3 D '42; 102:38, 40+ Ja; 23-5 F; 32-4 Mr; 29-31 My; 103:23-4 Jl; 16-18 Ag; 20-1 S; 20 O '43 (to be cont)

See also
Brick works

BRICKS

Expanded clay products. J. D. Sullivan, C. R. Austin and E. J. Rogers. *il* Brick & Clay Rec 101:46, 48 N '42

Varying basic factors involved in bloating of clays. C. R. Austin, J. L. Nunes and J. D. Sullivan. *il* Brick & Clay Rec 101:24-6 D '42

See also

Adobe	Brickmaking
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Brick industry and trade	Fire brick
	Silica brick

Color

Distinctly colored brick produced by accurate firing control; Belden brick co. *il* Brick & Clay Rec 101:30-1 N '42

Drying

Drying structural clay products. H. L. Longenecker. Brick & Clay Rec 102:26-8 F '43

Freezing

Relations between results of laboratory freezing and thawing and several physical properties of certain soft-mud bricks. J. W. McBurney. *Am Soc T M Proc* 42:837-44 '42

Moisture absorption

Effect of brick absorption characteristics upon mortar properties. F. O. Anderegg. *bibliog* *il* Am Soc T M Proc 42:821-30; Discussion. 831-6 '42

Prices

Gaps in the line; OPA's new formulas for brick and saddlery. *Business Week* p86-7 My 29 '43

Standards

First meeting on modular design held in Philadelphia. Brick & Clay Rec 103:24-5 Ag '43

Proposed modular sizes, how they will affect manufacturing process. *diags* Brick & Clay Rec 103:41-2+ S '43

Recommend modular design planning based on brick sizes; standard module of 4 in. submitted to American standards assn. Brick & Clay Rec 102:7-8 Je '43

BRIDGE approaches

Bridge bearings replaced under traffic; Bronx approach to the Macombs Dam bridge. *il* diags Eng N 131:687-9 N 4 '43

Old timber trestle approaches replaced by 65-ft. concrete piles; Dismal Swamp region near Suffolk, Va. *Concrete* 51:18+ Jl '43

BRIDGE bearings

Bridge bearings replaced under traffic; Bronx approach to the Macombs Dam bridge. *il* diags Eng N 131:687-9 N 4 '43

BRIDGE design

Analysis of stresses in simple and continuous beams and girders. H. L. Wagner. *il* diags Roads & Bridges 81:19-23+ Je '43
Bridge design and construction, 1942. W. G. Bowman. Eng N 130:203 F 11 '43

Charter Oak bridge. *il* diags plan Engineer 176:261-4 O 1 '43

Charts and a direct method for design of cantilever retaining walls. W. A. Jones. diags Am Concrete Inst J 15:5-32 S '43

Curved box girders for highway overpass. *il* diags Eng N 129:698-9 N 19 '42

Cuscatlan bridge in El Salvador. C. K. McCracken; H. D. Hussey. *il* diags Civil Eng 12:661-6 D '42

Design and construction of the concrete multiple arch bridge over the spillway of Grand Coulee dam. E. R. Dexter. *il* diags Am Concrete Inst J 14:149-63 Ja '43; Discussion. 14:sup164-164+ Je '43

Design of St. Georges tied arch span. J. M. Garrelts. *il* diags Am Soc C E Proc 67:1801-12 D '41; Discussion. 68:341-2, 593-5, 845-53, 1054-6, 1163-70, 1411-12, 1617-18; 69:507-10 F, Ap-Je, S-N '42, Ap '43

Design of slab and stringer highway bridges. N. M. Newmark and C. P. Siess. diags Pub Roads 23:157-64 Ja '43

Designing a three-span rigid-frame concrete highway bridge by methods of column analogy and moment distribution. L. Loch. diags Roads & Bridges 81:19-24+ Ap '43

Designing and constructing cresoated timber bridges and culverts. W. D. Keeney. *il* diags Pub Works 74:18-24+ Ja '43

Development of the Chicago type bascule bridge. D. N. Becker. *il* diags maps Am Soc C E Proc 69:263-93 F '43; Discussion. 69:892-4, 1037-43 Je, S '43

Hydrological factors in the design of culverts and small bridges. F. W. Grove. Roads & Bridges 81:32, 66+ Ap '43

Indiana highway bridges designed to carry two lanes of 40-ton trucks. *il* Eng N 131:193 JI 29 '43

Long plate girders in Hartford bridge. C. H. Gronquist. *il* diags map Eng N 130:344-7 Mr 11 '43

Long railway bridge built from reclaimed steel; Jackfish River bridge in northern Ontario. E. R. Tryhorn. *il* plans Roads & Bridges 81:21-8 Ag '43

Moments in flexible two-hinged arches; Rainbow arch bridge over Niagara gorge. E. K. Timby, L. M. Mead, jr. and R. McElDowney, jr. *il* Am Soc C E Proc 69:1193-1207 O '43

Plain concrete arches; use of unreinforced spans. C. S. Whitney. *il* diags Civil Eng 13:29-32 Ja '43

Rainbow arch bridge over Niagara gorge. S. Hardesty, J. M. Garrelts and I. G. Hedrick, jr. *il* diags Am Soc C E Proc 69:1164-92 O '43

Recent developments in structural engineering. R. H. Evans. Engineering 155:176 F 26 '43

Redesign of the Quebec bridge; new structure to illustrate how steel can be conserved. *il* diags Roads & Bridges 81:17-22+ F '43

Rigid-frame footbridge replaces suspension type over the Moira river at Belleville, Ont. C. A. Mott. *il* Roads & Bridges 81:23-4+ Ja '43

River bridge of all-timber construction. *il* diags Eng N 131:390-3 S 9 '43

Simplified analysis of skewed reinforced concrete frames and arches. R. M. Hodges. diags Am Soc C E Proc 69:633-63 My '43; Discussion. 69:1044-8, 1465-79 S, N '43

Theory of suspension bridges. S. P. Timoshenko. diags Franklin Inst J 235:213-38, 227-49 Mr-Apr '43

There is a time for less steel and a time for more. C. M. Goodrich. Roads & Bridges 81:42, 58+ My '43

Three-span continuous truss bridge with the middle span a tied arch; Mississippi River bridge at Dubuque. *il* diags Eng N 130:282-7 F 25 '43

Use of models as a practical aid in the design of suspension bridges. F. P. Witmer. *il* diags Franklin Inst J 236:147-66 Ag '43
Welded plate-girder bridge separates Connecticut highways; Jordan Lane bridge, Wethersfield, Conn. J. F. Willis. *il* diags Civil Eng 13:407-8 S '43
Wheel load distribution for shear in timber bridge stringers. C. Johnson. Pub Works 74:16-17+ Ap '43

See also

Bridges—Load
Bridges, Arched
Bridges, Suspension

BRIDGE engineering

Rainbow arch bridge over Niagara gorge; symposium. *il* diags Am Soc C E Proc 69:1160-1277 O '43; Discussion. 69:1626-9 D '43
Story bridge, Brisbane, Queensland. *il* diags map Engineering 155:1-4, 41-3, 50 Ja 1, 15 '43

BRIDGE failures

Scouring of foundations as a cause of bridge failure. R. Borhek. *il* Roads & Bridges 81:33, 50, 52+ Ag '43

BRIDGE models

Use of models as a practical aid in the design of suspension bridges. F. P. Witmer. *il* diags Franklin Inst J 236:147-66 Ag '43

BRIDGE moving

213-ft timber bridge floated 112 miles. *il* Roads & Sts 85:37 N '42

BRIDGE painting

Bridge paint maintenance. T. H. Dennis. *il* diags Eng N 130:368-72 Mr 11 '43

BRIDGE railings

Modernizing hand rails on old concrete bridges. H. L. Sligh. *il* Concrete 51:5 Ag '43

BRIDGE raising. See Bridges, Railroad—Raising

BRIDGES, Harry R. 1900-

Bridge's own paper. Business Week p31 Ja 16 '43

Selling Bridges. Business Week p108+ Je 19 '43

BRIDGES

Bridge and culvert flow areas; current practice in determining runoff. F. W. Greve. *il* Civil Eng 13:381-2 Ag '43

Bridge design and construction, 1942. W. G. Bowman. Eng N 130:203 F 11 '43

Bridge repairs and construction with salvage material; Ohio highway department. R. E. Teegarden. *il* diags Roads & Sts 86:60+ Ag '43

Civil engineering in 1942. *il* Engineer 175:24, 26 supp 1 Ja 8 '43

Design of slab and stringer highway bridges. N. M. Newmark and C. P. Siess. diags Pub Roads 23:157-64 Ja '43

Engineers and the British empire; Australian bridges. M. Smith. *il* (p298) Engineer 176:300 O 15 '43

Railroad bridge salvaged for highway use; temporary superstructure. C. A. Rothrock. diags Eng N 130:695 My 6 '43

Strengthening or replacing old highway bridges in Michigan. G. M. Foster. Concrete 51:6, 8 Ja '43

See also

Bridge design
Culverts
Girders
Highway administration
Highway engineering
Trusses

also subdivision Bridges under names of cities, e.g. Chicago—Bridges; Niagara Falls, New York—Bridges

Bearings

See Bridge bearings

Cost

Bridge piers, Texas; unit prices. Eng N 130:320 F 25 '43
Bridge substructure, New Jersey; unit prices. Eng N 130:152 Ja 28 '43

Completion of viaduct, Seattle; unit prices. Eng N 131:168 JI 15 '43

Contract unit bid prices; list of projects showing how contractors bid in 1942-1943. Eng N 130:sup198+ Ap 22 '43

Highway bridge, California; unit prices. Eng N 129:736 N 19 '42

BRIDGES—Cost—Continued

- Highway bridge, New Mexico; unit prices. Eng N 131:494 S 23 '43
 Highway bridge, Texas; unit prices. Eng N 130:246 F 11 '43
 Highway, Wyoming; unit prices. Eng N 130:842 Je 3 '43
 Overhead bridge approaches, West Virginia; unit prices. Eng N 130:842 Je 3 '43
 Overpass and approaches, Wyoming; unit prices. Eng N 131:46 JI 1 '43

Damage from floods, etc.

- Scouring of foundations as a cause of bridge failure. R. Borhek. *Il Roads & Bridges* 81: 33, 50, 52+ Ag '43

Design

See Bridge design

Erection

- Balanced erection for New London bridge. *Il Eng N* 130:522-3 Ap 15 '43
 Building the Peace River suspension bridge in sub-zero weather. R. Archibald. *Il Pub Works* 74:24+ Ag '43
 Erection of a Butterley standard-unit bridge. *Il Engineering* 156:67-8, 70 JI 23 '43; *Engineer* 176:74-5 JI 23 '43
 Modern methods in constructing timber bridges. *Il Pub Works* 74:25-6 Ja '43
 New bridge over old; project at St Johnsbury. A. D. Bishop. *Il plan Roads & Sts* 86:41-3 My '43
 New bridges on the Dixie highway. *Il diags Eng N* 131:469-71 S 23 '43
 Ordinance plant bridge built of old trusses; system of dismantling and re-erecting the trusses. E. L. Durkee. *Il Eng N* 130:901-3 Je 17 '43
 Peace River bridge builders win hard race. R. Archibald. *Il diags Eng N* 131:228-9 Ag 5 '43
 Plate-girder erection at Hartford. R. M. Boynton. *Il diags Eng N* 130:443-6 Mr 25 '43
 Rainbow arch bridge; erection of steel superstructure. E. L. Durkee. *Il diags Am Soc C E Proc* 69:1240-77 O '43
 Rainbow arch bridge; fabrication and erection controls. J. I. Copp and others. *Il diags Am Soc C E Proc* 69:1208-39 O '43
 River bridge of all-timber construction. *Il diags Eng N* 131:390-3 S 9 '43
 Stiffleg-traveler sets 78-ton girders; erecting Arroyo Seco river bridge at Los Angeles. P. R. Watson. *Il Roads & Sts* 86:52-3 S '43
 Story bridge, Brisbane, Queensland. *Il diags Engineering* 155:41-3, 50 Ja 15 '43
 Three-span continuous truss bridge with the middle span a tied arch; Mississippi River bridge at Dubuque. *Il diags Eng N* 130:282-7 F 25 '43

See also

Bridges—Welding operations

Floors

- Designing and constructing creosoted timber bridges and culverts. W. D. Keeney. *Il diags Pub Works* 74:13-24+ J '43
 Laminated timber bridge deck developed in Arizona. R. A. Hoffman. *diags Civil Eng* 13:390-1 Ag '43
 Pump delivers concrete for Dubuque bridge deck. *Il Eng N* 129:880-1 D 24 '42
 Tests of composite timber and concrete beams. F. E. Richart and C. B. Williams, Jr. *Il diags Ill U Eng Exp Sta Bul* 343:1-60 bibliog(p58-60) '43 (pa 70c); Same cond. *Am Concrete Inst J* 14:253-76 F '43
 Timber-concrete bridge decks used in Florida. W. E. Dean. *Il diags Civil Eng* 13:175-7 Ap '43

Foundations and piers

- Fighting water in a bridge foundation. *Il diags Eng N* 130:806-10 Je 3 '43
 Marine borers on the Gulf coast. W. E. Wheat. *Il Civil Eng* 12:679-81 D '42
 Mexican bridge has unique foundations. *diags Eng N* 130:688-90 My 6 '43
 New bridges on the Dixie highway. *Il diags Eng N* 131:469-71 S 23 '43
 Peace River bridge builders win hard race. R. Archibald. *Il diags Eng N* 131:228-9 Ag 5 '43

Redesign of the Quebec bridge; new structure to illustrate how steel can be conserved. *Il diags Roads & Bridges* 81:17-22+ F '43

- Scouring of foundations as a cause of bridge failure. R. Borhek. *Il Roads & Bridges* 81: 33, 50, 52+ Ag '43
 Story bridge, Brisbane, Queensland. *Il diags Engineering* 156:41-3, 50 Ja 15 '43
 Testing theoretical losses in open channel flow; flow through bridge piers. J. G. Jobs and J. H. Douma. *Il Civil Eng* 12:667-9 D '42

See also

Bridges, Suspension—Anchorages

Load

- Safe loads for existing concrete bridges. F. W. Panhorst. *Am Concrete Inst J* 14:185-92 Ja '43; Discussion. 14:sup192-192u N '43
 Wheel load distribution for shear in timber bridge stringers. C. Johnson. *Pub Works* 74:16-17+ Ap '43

Maintenance and repair

- Bridge bearings replaced under traffic; Bronx approach to the Macombs Dam bridge. *Il diags Eng N* 131:687-9 N 4 '43
 Georgia's steel and timber bridge maintenance. M. S. Steadman. *Roads & Sts* 86: 64-5 Ap '43

See also

Bridge painting

Model testing

- Moments in flexible two-hinged arches; Rainbow arch bridge over Niagara gorge. E. K. Timby, L. M. Mead, Jr. and R. McEldowney, Jr. *Il Am Soc C E Proc* 69:1193-1207 O '43

Models

See Bridge models

Protection

- Suspended span restrained by friction devices. J. E. Tonnelier. *diags Civil Eng* 13: 325-6 JI '43

Reconstruction

- Bootstrapping jacking rigs raise bridge; Kansas City, Kan. *Il diags Eng N* 130:558-9 Ap 22 '43
 Bringing a bridge up to date; Liberty bridge at Pittsburgh. *Il diags Eng N* 130:798-800 Je 3 '43
 Built-up timber beams save structural steel; reconstruction of overhead highway bridges. *Il diags Ry Age* 115:22-3 JI 3 '43

See also

Bridges, Railroad—Reconstruction

Stresses**See also**

Bridge design
 Bridges—Load

Tolls

- Operating deficit looms as New London-Groton, Conn. toll span opens. *Il Eng N* 130:326 Mr 4 '43

Welding operations

- Fatigue strength of butt welds in ordinary bridge steel. *diags Welding J* 22:sup189-211 My '43
 Swing bridge is semi-welded. B. M. Shinkin. *Il diags Welding J* 22:716-18 S '43
 Tests of riveted and welded joints in low-alloy structural steels. W. M. Wilson, W. H. Bruckner and T. H. McCrackin, Jr. *Il diags Ill U Eng Exp Sta Bul* 337:1-73 '42 (pa 80c)
 Welded heads for plate eyebars. J. Jones. *Il diags Civil Eng* 13:178-80 Ap '43
 Welded plate-girder bridge separates Connecticut highways; Jordan Lane bridge, Wethersfield, Conn. J. F. Willis. *Il diags Civil Eng* 13:407-8 S '43
 Welding repairs to steel railroad bridges. W. A. Roof. *diags Civil Eng* 13:495-6 O '43

Wrecking

- Blast throws bridge landward for salvage. *Il Eng N* 130:160-1 F 4 '43
 Blow old L. & N. bridge span into Nation's scrap pile. *Il Ry Age* 114:244-5 Ja 23 '43

BRIDGES—Wrecking—Continued

- Dismantling Tacoma Narrows bridge towers. C. E. Andrew. *il Eng N* 131:602-3 O 21 '43
 Engineers improvise machinery to dismantle wrecked Narrows bridge. *il Steel* 112:64-5 My 24 '43
 Observations of a bridge cable unsnapper; operations on Tacoma Narrows bridge. C. E. Andrew. *il diags Eng N* 131:347-9 Ag 26 '43
 Orndance plant bridge built of old trusses; system of dismantling and re-erecting the trusses. E. L. Durkee. *il Eng N* 130:901-2 Je 17 '43
 Salvaging a Kettle River bridge. F. A. Banks. *il Civil Eng* 13:222-3 My '43
 Unspinning Tacoma Narrows bridge cables. C. E. Andrew. *il Eng N* 130:35-7 Ja 14 '43

Canada

- \$100,000,000-a-year industry; statistical analysis of the construction of road and air transport facilities in Canada. *il Roads & Bridges* 81:27-9 Jl '43

Central America

- Mexico-Guatemala bridge speeds "good neighbor" aims. E. W. James. map For Comm W 9:4+ N 14 '42

China

- Remarkable Chinese military bridge; Poh Lam bridge. *il Civil Eng* 13:65 Ja '43

New Hampshire

- Pre-framed timber bridges in New Hampshire; with cost data. H. E. Langley. *il Roads & Sts* 86:44-6 Ap '43

Ontario

- Problem of the outworn bridge. W. H. Keith. *Roads & Bridges* 81:72+ Mr '43

Salvador

- Cuscatlan bridge in El Salvador. C. K. McCracken; H. D. Hussey. *il diags Civil Eng* 12:661-6 D '42

BRIDGES, Arched

- Design and construction of the concrete multiple arch bridge over the spillway of Grand Coulee dam. E. R. Dexter. *il diags Am Concrete Inst J* 14:149-63 Ja '43; Discussion. 14:sup164-164 Je '43
 Design of St Georges tied arch span. J. M. Garrett. *il diags Am Soc C E Proc* 67:1801-12 D '41; Discussion. 68:341-2, 593-5, 845-53, 1054-6, 1168-70, 1411-12, 1617-18; 69:507-10 F, Ap-Je, S-N '42, Ap '43
 Plain concrete arches; use of unreinforced spans. C. S. Whitney. *il diags Civil Eng* 13:29-32 Ja '43
 Rainbow arch bridge over Niagara gorge; symposium. *il diags Am Soc C E Proc* 69:1160-1277 O '43; Discussion. 69:1626-9 D '43
 Three-span continuous truss bridge with the middle span a tied arch; Mississippi River bridge at Dubuque. *il diags Eng N* 130:282-7 F 25 '43
 Unreinforced concrete arches; Indiana example demonstrates advantages. C. R. Rummier. *il diags Roads & Sts* 85:27-8 D '42; 86:84 Ja '43

BRIDGES, Bascule

- Development of the Chicago type bascule bridge. D. N. Becker. *il diags maps Am Soc C E Proc* 69:263-93 F '43; Discussion. 69:892-4, 1037-43 Je, S '43
 Timber bascule spans a feature of Alcan bridges. H. J. McKeever. *il diags Roads & Sts* 86:46-7 F '43

BRIDGES, Cantilever

- Redesign of the Quebec bridge; new structure to illustrate how steel can be conserved. *il diags Roads & Bridges* 81:17-22+ F '43

- Story bridge, Brisbane, Queensland. *il diags map Engineering* 155:1-4, 41-3, 50 Ja 1, 15 '43

BRIDGES, Concrete

- Concrete grade separation at South Charleston, W. Va. L. L. Jemison. *il diag plans Civil Eng* 13:356-8 Ag '43
 Curved box girders for highway overpass. *il diags Eng N* 129:698-9 N 19 '42

- Design and construction of the concrete multiple arch bridge over the spillway of Grand Coulee dam. E. R. Dexter. *il diags Am Concrete Inst J* 14:149-63 Ja '43; Discussion. 14:sup164-164 Je '43
 Design of slab and stringer highway bridges. N. M. Newmark and C. P. Siess. Pub Roads 23:157-64 Ja '43
 Designing a three-span rigid-frame concrete highway bridge by methods of column analogy and moment distribution. L. Loch. *diags Roads & Bridges* 81:19-24+ Ap '43
 Highway over dam rebuilt in winter. *il Eng N* 130:682-4 My 6 '43
 Huge concrete trestle assures continuous rail traffic in flood emergency; with cost data. *il Concrete* 51:10-11, 16+ Jl '43
 Los Angeles completes big viaduct project. *il Eng N* 130:324-5 Mr 4 '43
 Minimizing use of critical materials by concrete bridge and culvert construction. *il diag Pub Works* 74:32, 34, 36-7 Ja '43
 Modernizing hand rails on old concrete bridges. H. L. Sligh. *il Concrete* 51:5 Ag '43
 Plain concrete arches; use of unreinforced spans. C. S. Whitney. *il diags Civil Eng* 13:29-32 Ja '43
 Rigid-frame footbridge replaces suspension type over the Moira river at Belleville, Ont. C. A. Mott. *il Roads & Bridges* 81:23-4+ Ja '43
 Safe loads for existing concrete bridges. F. W. Panhorst. *Am Concrete Inst J* 14:185-92 Ja '43; Discussion. 14:sup192-192 N '43
 Simplified analysis of skewed reinforced concrete frames and arches. R. M. Hodges. *diags Am Soc C E Proc* 69:635-63 My '43; Discussion. 69:1044-8, 1465-79 S, N '43
 Unreinforced concrete arches; Indiana example demonstrates advantages. C. R. Rummier. *il diags Roads & Sts* 85:27-8 D '42; 86:84 Ja '43
 Well organized county bridge modernization program; Grand Forks county, N. D. J. W. Harty. *il Pub Works* 73:24-6+ D '42

Cost

- Bridge and approaches, Georgia; unit prices. *Eng N* 130:320 F 25 '43
 Bridge and approaches, Tennessee; unit prices. *Eng N* 129:736 N 19 '42
 Concrete arch bridge, Indiana; unit prices. *Eng N* 130:842 Je 3 '43
 Concrete overpass, Utah; unit prices. *Eng N* 130:508 Ap 8 '43
 Grade separation, Michigan; unit prices. *Eng N* 131:492+ S 23 '43
 Highway bridge, Virginia; unit prices. *Eng N* 131:286 Ag 12 '43

Maintenance and repair

- Forty-year-old concrete bridge is reconstructed by guniting. J. H. Brayton. *il Concrete* 51:14 O '43

BRIDGES, Foot

- Rigid-frame footbridge replaces suspension type over the Moira river at Belleville, Ont. C. A. Mott. *il Roads & Bridges* 81:23-4+ Ja '43

BRIDGES, Iron and steel

- Long railway bridge built from reclaimed steel; Jackfish River bridge in northern Ontario. E. R. Tryhorn. *il plans Roads & Bridges* 81:21-8 Ag '43

- Rainbow arch bridge over Niagara gorge; symposium. *il diags Am Soc C E Proc* 69:1160-1277 O '43; Discussion. 69:1626-9 D '43
 Three-span continuous truss bridge with the middle span a tied arch; Mississippi River bridge at Dubuque. *il diags Eng N* 130:282-7 F 25 '43

See also**Bridges, Railroad****BRIDGES, Lift**

- Lift span that goes down instead of up; new concept of movable bridges located in Iraq. *il Eng N* 131:578 O 21 '43

See also**Bridges, Bascule****BRIDGES, Movable**

- Early movable bridges of Chicago. D. N. Becker. *il map Civil Eng* 13:421-4 S '43

BRIDGES, Movable—Continued

Tow bridge solves launching problem; Odenbach shipbuilding co. yards. *il Steel* 113:100-1 JI 19 '43

See also

Bridges, Bascule
Bridges, Lift
Bridges, Swing

BRIDGES, Pontoon

Bridge floats on barrels at Brookfield, Vermont. A. D. Bishop. *il Roads & Sts* 86:53-4 Ag '43

192 pounds of soap in a rubber pontoon bridge. *Textile Col* 65:459 O '43

Pontoon bridge over the Mistassibi river. G. E. La Mothe. *il Pulp & Pa of Can (Convention no)* 44:185-6 [F] '43

Tow bridge solves launching problem; Odenbach shipbuilding co. yards. *il Steel* 113:100-1 JI 19 '43

BRIDGES, Portable

Erection of a Butterley standard-unit bridge. *il Engineering* 156:67-8, 70 JI 23 '43; *Engineer* 176:74-5 JI 23 '43

BRIDGES, Railroad

Beams of glued 1-in. boards carry railroad line to war project. *il Eng N* 130:287 F 25 '43

Blow old L. & N. bridge span into Nation's scrap pile. *il Ry Age* 114:244-5 Ja 23 '43

Concrete for railway bridge decks, with rails directly attached. *Am Concrete Inst J* 14:218-19 Ja '43

Conservation of bridge materials; abstract. A. M. Knowles. *Ry Age* 115:731 N 6 '43

How cement grout restores old masonry railway structures; with cost data. *il Concrete* 51:2-3+ JI '43

Huge concrete trestle assures continuous rail traffic in flood emergency; with cost data. *il Concrete* 51:10-11, 16+ JI '43

Line relocation on Rock Island speeds war traffic. *il (p635) Ry Age* 115:636, 639 O 23 '43

Long railway bridge built from reclaimed steel; Jackfish River bridge in northern Ontario. El. R. Tryhorn. *il plans Roads & Bridges* 81:21-8 Ag '43

Mexican bridge has unique foundations. *diags Eng N* 130:688-90 My 6 '43

Mexico-Guatemala bridge speeds "good neighbor" aims. E. W. James. *map For Comm W* 9:4+ N 14 '42

Old timber trestle approaches replaced by 65-ft. concrete piles. Dismal Swamp region near Suffolk, Va. *Concrete* 51:18+ JI '43

Pan-American railway gets a new link bridge over Suchiate river. *Eng N* 129:752 N 26 '42

Precast concrete culvert solved troublesome channel problem; Bessemer & Lake Erie bridge, south of Springboro, Pa. *il Ry Age* 114:282-4 Ja 30 '43

Retirement of old viaduct speeds traffic on two railroads; bridge near Lakeview, N.Y. replaced by embankment over concrete culvert. *il diag Ry Age* 114:316-18+ F 6 '43

Welding repairs to steel railroad bridges. W. A. Roof. *diags Civil Eng* 13:495-6 O '43

Raising

Raise long bridge under traffic to clear flood waters. *il diag Ry Age* 114:202-5 Ja 16 '43

Reconstruction

Bridge renewal in East Midlands. *Engineer* 176:93 JI 30 '43

Renewing light spans strengthens line for war-time traffic; Chicago & North Western bridge at Winona, Minn. A. R. Harris. *il diags Ry Age* 114:350-2+ F 13 '43

Testing

Special A.R.E.A. committee report on impact. *Ry Age* 114:574 Mr 20 '43

BRIDGES, Suspension

Building the Peace River suspension bridge in sub-zero weather. R. Archibald. *il Pub Works* 74:24+ Ag '43

Cuscatlan bridge in El Salvador. C. K. McCracken; H. D. Hussey. *il diags Civil Eng* 12:661-6 D '42

Observations of a bridge cable unspinner; operations on Tacoma Narrows bridge. C. E. Andrew. *il diags Eng N* 131:347-9 Ag 26 '43

Peace River bridge builders win hard race. R. Archibald. *il diag Eng N* 131:228-9 Ag 5 '43

Suspended span restrained by friction devices. J. E. Tonnelier. *diags Civil Eng* 13:325-6 JI '43

Theory of suspension bridges. S. P. Timoshenko. *diags Franklin Inst J* 235:213-38, 327-49 Mr-Apr '43

Unspinning Tacoma Narrows bridge cables. C. E. Andrew. *il Eng N* 130:35-7 Ja 14 '43

Use of models as a practical aid in the design of suspension bridges. F. P. Wiltmer. *il diags Franklin Inst J* 236:147-66 Ag '43

Anchorage

Welded heads for plate eyebars. J. Jones. *il diags Civil Eng* 13:178-80 Ap '43

BRIDGES, Swing

Mexican bridge has unique foundations. *diags Eng N* 130:688-90 My 6 '43

Raise long bridge under traffic to clear flood waters. *il diag Ry Age* 114:202-5 Ja 16 '43

Swing bridge is semi-welded. B. M. Shimkin. *il diags Welding J* 22:716-18 S '43

BRIDGES, Temporary

Alcan highway; culverts and bridges. H. J. McKeever. *il diags Roads & Sts* 86:41-5 F '43

Pontoon bridge over the Mistassibi river. G. E. La Mothe. *il Pulp & Pa of Can (Convention no)* 44:185-6 [F] '43

Temporary bridge to minimize use of critical materials; swinging cable bridge. R. A. Rawlings. *il diags Pub Works* 74:24+ My '43

BRIDGES, Wooden

Alcan highway; culverts and bridges. H. J. McKeever. *il diags Roads & Sts* 86:41-7 F '43

Army builds creosoted timber bridges. *il Pub Works* 74:19+ Je '43

Beams of glued 1-in. boards carry railroad line to war project. *il Eng N* 130:287 F 25 '43

Built-up timber beams save structural steel; reconstruction of overhead highway bridges. *il diags Ry Age* 115:22-3 JI 3 '43

Designing and constructing creosoted timber bridges and culverts. W. D. Keeney. *il diags Pub Works* 74:18-24+ Ja '43

Developments in the use of timber for bridges and culverts. B. M. Winegar. *il Roads & Bridges* 81:41+ Mr '43

Modern methods in constructing timber bridges. *il Pub Works* 74:25-6 Ja '43

Pre-framed timber bridges in New Hampshire; with cost data. H. E. Langley. *il Roads & Sts* 86:44-6 Ap '43

River bridge of all-timber construction. *il diags Eng N* 131:390-3 S 9 '43

Salvaging a Kettle River bridge. F. A. Banks. *il Civil Eng* 13:222-3 My '43

219-ft. timber bridge floated 112 miles. *il Roads & Sts* 85:37 N '42

Wheel load distribution for shear in timber bridge stringers. C. Johnson. *Pub Works* 74:16-17+ Ap '43

BRIGGS manufacturing company

Share-the-ride; Briggs plan puts program on voluntary basis. *il Business Week* p68 D 12 '42

BRIGHAM, Harold Lewis, 1893-1943

Appreciation. F. H. Kingsbury. *por(front) N E Water Works Assn J* 57:1-2 Mr '43

BRIGHTNESS

Illumination from a non-uniform sky. P. Moad and D. E. Spencer. *diags Illum Eng* 37:707-22; *Discussion* 722-6 D '42

Lighting for easy seeing. M. Luckiesh. *il Arch Rec* 93:54-9 'bibliog(p98) My '43

Magnification and brightness of images on the retina. F. Benford. *diag Opt Soc Am J* 33:245 Ap '43

Summary of researches in seeing at low brightness-levels. M. Luckiesh and A. H. Taylor. *Illum Eng* 38:189-207 Ap '43

Vision at low brightness-levels. A. H. Taylor. *bibliog il Illum Eng* 38:89-98 F '43

See also

Paper—Brightness

BRINE

Brine stabilization with sodium hexametaphosphate. F. W. Jessen and J. L. Battle. *bibliog il Ind & Eng Chem* 35:650-4 Je '43

BRINE—Continued

- Kansas oil field brines analyzed for the recovery of magnesium. W. H. Schoewe. Nat Pet N 35 pt 2:R466-7+ O 6 '43
- Oklahoma oil-field brines and their utilization. B. W. Logue. Oil & Gas J 41:49-50+ F 11 '43
- Recovery of chemicals from oil field brines awaits market for chloride compounds. il Nat Pet N 35 pt 2:R282-3 Je 2 '43
- Value of brine peeling tested; method tried at USDA laboratory. diags Food Ind 15:51-2 Je '43

See also

Salt

Analysis

- Volumetric determination of bromide in brines. H. H. Willard and A. H. A. Heyn. Ind & Eng Chem Anal ed 15:321-2 My 15 '43

BRINELL hardness test

- Impact loads determined by Brinell technique. L. D. Hagenbook. il diag Product Eng 14:300-2 My '43

BRICKETTING

- Bricketting is found important aid in salvaging operations. A. W. Wood. il Steel 112:84, 86 F 8 '43
- Bricketting press and electrode loader for spectrochemical analysis. H. C. Harrison and C. C. Ralph. bibliog il diag Ind & Eng Chem Anal ed 15:466-7 JI 15 '43
- Mechanical ingotting of aluminum and magnesium turnings. M. Stern. il diag Iron Age 152:90-2 Ag 12 '43
- Metal time-saver; bricketting and sintering of ferrous powders and alloys. Business Week p55-6 Je 26 '43
- Process for bricketting soft iron ores. Eng & Min J 144:71 Ap '43

BRICKETTING (fuel)

- Bricketting subbituminous coal. V. F. Parry and J. B. Goodman. bibliog pls U S Bur Mines Rep of Invest 3707:1-37 '43

BRICKETTING machines

- Bricketting machine supplies charge and feed ore in cubes. J. D. Knox. il diags Steel 112:82-4+ Ja 11 '43
- Bricketting press compresses turnings. il Factory Management 101:120 Je '43
- Presses for bricketting and baling steel scrap. W. L. DeLaney. il Steel 112:102, 104+ My 3 '43

BRISBANE, Queensland

Bridges

- Story bridge. il diags map Engineering 155: 1-4, 41-3, 50 Ja 1, 15 '43

BRISTLES

- Bristles use, imports under strict control. Oil Paint & Drug Rep 144:5+ JI 12 '43
- Devco salvages millions of used paint brushes to lick bristle famine. il Sales Management 52:20-3 Ja 1 '43
- World bristle trade faces difficulties. D. S. Parris and R. C. Leslie. il For Comm W 11:12-13+ Je 19 '43

BRISTLES, Artificial

- Tapered nylon now available to replace natural bristles. Sci Am 168:85 F '43

BRISTOL board. See Paper board**BRITISH-AMERICAN tobacco company**

- Annual general meeting, 40th. Economist 144: 250 F 20 '43

BRITISH celanese company

- Arrears of preference dividend; extraordinary general meeting. London. Economist 143: 586-8 N 7 '42

- Assets, year to June 27th. Economist 144:80-1 Ja 16 '43

- Statement at 23d annual general meeting. H. Dreyfus. Economist 144:127-8 Ja 23 '43

BRITISH chemical and dyestuffs traders

- Annual meeting, 20th. London, May 25. Chem Age (Lond) 48:580 My 29 '43

BRITISH COLUMBIA

See also

- Forests and forestry—British Columbia
Mines and mineral resources—British Columbia

- Mining industry and finance—British Columbia
Physical geography—British Columbia

BRITISH electrical and allied manufacturers' association

- Annual meeting, London, April 15. Elec R (Lond) 132:555-6 Ap 30 '43

- Report for 1942. Electrician 130:388 Ap 16 '43

BRITISH electrical development association

- Annual general meeting, London, March 19. Electrician 130:311-12+, 320 Mr 26 '43; Elec R (Lond) 132:409-13 Mr 26 '43

- E.D.A. activities. Elec R (Lond) 133:41-2 JI 9 '43

BRITISH federation of master printers

- Eight-point reorganization plan. Inland Ptr 110:59 F '43

BRITISH GUIANA

See also

- Textile industry—British Guiana

Bibliography

- Selective guide to the English literature on the Netherlands West Indies; with a supplement on British Guiana. P. H. Hiss. 129p pa Netherlands information bur, 10 Rockefeller plaza, New York '43

Economic conditions

- War economy of the Guianas. W. R. Scott. il For Comm W 11:5-10 Ap 17 '43

Industries and resources

- British Guiana's secondary industries. Economist 145:15-16 JI 3 '43

BRITISH HONDURAS

See also

- Labor and laboring Lumber trade—British Honduras
Honduras ish Honduras

Economic conditions

- British Honduras under war economy. D. H. Bradley. il For Comm W 10:5, 8-9 F 6 '43

BRITISH information services

- Britain in America. Economist 143:730-2 D 12 '42

BRITISH parliamentary and scientific committee. See Parliamentary and scientific committee**BRITISH standards institution**

- Annual meeting. Elec R (Lond) 133:139-40 JI 30 '43

- Annual report. P. Ashley. Engineering 156:76 JI 23 '43; Excerpt. Science 98:170 Ag 20 '43

- Standardization in Britain. D. V. Baker. il Steel 112:66, 68, 72 Ja 11 '43

BRITISH West Africa. See Africa, British West**BRITTLE point of rubber. See Rubber—Brittle point****BROACHES**

- Colonial universal broach-sharpening machine. il Mach 49:177-8 Ja '43
- Double-thread broach burnishes parts. H. Fancher. diags Am Mach 87:96 Ap 29 '43
- New broach finishes round holes. diags Steel 112:110 Ap 26 '43
- Overcomes broaching difficulties; special broaches, designed by Howard Fancher. diags Aero Digest 42:332+ Ja '43
- Split broach eliminates chip damage. C. Bogue. diag Am Mach 87:95 Ap 1 '43

BROACHING

- Broaching and hobbing engine-starter parts having dual lead angles. il Mach 49:196-7 F '43
- Broaching fixture designed to produce keyways in two different parts. diags Mach 49:188 D '42
- Development of broach rifling at Rock Island arsenal; with cost data. W. Baumbeck. il diags Mech Eng 65:401-5 Je '43
- Dual lead angles produced by broaching and hobbing; mechanisms for starting engines in racing cars, aircraft, yachts, etc. il Steel 112:114+ Je 7 '43
- Hints on correct broach use. H. Gotberg. Iron Age 150:61 D 10 '42; Same. Steel 112:91 Ja 11 '43
- Punch press used as a broach. R. Mawson. diags Am Mach 87:102-3 JI 8 '43
- Rifling gun barrels by broaching. I. A. Swidlo. il diags Am Mach 87:117-24 O 14 '43

BROACHING machines

Hopkinson double-ended broaching machine. *Il diags Engineering* 155:106-7 F 5 '43; *Engineer* 175:96-7 Ja 29 '43

BROCCOLI, Frozen

Spending your ration points on frozen vegetables. *Consumers' Research Bul* 11:5-8 My '43

BROCHURES

See also

Advertising, Mail—
Brochures

BROKERS

Denied registration by SEC as involved in municipal fraud. *Comm & Fin Chr* 156:2059 D 10 '42

J. S. Bache announces new brokerage service; offices open evenings. *Comm & Fin Chr* 157:662 F 18 '43

Security dealers now have increased duties to investors. *H. G. Riter, 3d. Comm & Fin Chr* 157:561-4 F 11 '43

This broker business. *J. B. Alcorn. Comm & Fin Chr* 156:2233-4 D 24 '42

See also

Insurance brokers

Stock exchange

also National security traders association

Law

Bankrupt broker again. *M. L. Hayward. Barron's* 23:9 Ap 19 '43

SEC asks court to uphold revocation of registration of broker-dealer. *Comm & Fin Chr* 158:1798 N 4 '43

BROKERS' blanket bond. *See* Bankers' blanket bond

BROKERS' loans

Customers' debit balances, money borrowed, and principal related items of stock exchange firms carrying margin accounts, June and Dec. 1936-1941, and monthly Nov. 1941-Nov. 1942. *Fed Res Bul* 29:66 Ja '43 [cont monthly]

Loans for purchasing or carrying government obligations. *Fed Res Bul* 29:496 Je '43

BROMANIL

Preparation of pentabromophenol and bromanil from phenol. *M. Kohn. J Chem Educ* 20:117 Mr '43

BROMATES

Determination of iodate in the presence of bromate and chlorate. *I. M. Kolthoff and D. N. Hume. Ind & Eng Chem Anal ed* 15:174-5 Mr 15 '43

Analysis

New thermoanalytical methods. *D. Kaplan. Chem & Ind* 61:431-2 O 24 '42; *Same. Can Chem & Process Ind* 27:39-40 Ja '43

BROMIDES

See also

Methyl bromide

Potassium bromide

Analysis

Volumetric determination of bromide in brines. *H. H. Willard and A. H. A. Heyn. Ind & Eng Chem Anal ed* 15:321-2 My 15 '43

BROMINATION

Apparently anomalous bromination in the polyphenylindene series. *C. F. H. Allen and J. W. Gates, jr. bibliog Am Chem Soc J* 65:419-22 Mr '43

Bromination of diphenylalkanes and the preparation of some stilbene derivatives; *o*,*o*-diphenylethane. *S. Bance, H. J. Barber and A. M. Woolman. Chem Soc J* pi-4 Ja '43

Bromination of diphenylalkanes and the preparation of some stilbene derivatives; *β*,*γ*-diphenyl-*n*-butane. *H. J. Barber, R. Slack and A. M. Woolman. Chem Soc J* p99-101 Mr '43

Bromination of 4-phenylphenyl bromoacetate. *L. C. Hensley and S. E. Hazlet. Am Chem Soc J* 65:987-8 My '43

Halogen compounds derived from 4-methyl-2,5-diphenylfuran. *R. E. Lutz and C. E. McGinn. Am Chem Soc J* 64:2583-5 N '42

Kinetics of aromatic halogenation; bromination. *P. W. Robertson, P. E. D. de la Mare and W. T. G. Johnston. Chem Soc J* p276-9 Je '43

BROMINE

Angular correlation of successive gamma-rays. *R. Beringer. bibliog diags Phys R* 63:23-8 Ja 1 '43

Statistical reviews of minerals and chemicals in 1942. *Chem Ind* 53:412-4 S '43

Analysis

Quantitative decomposition of organic bromine and iodine compounds by the lime-fusion method. *W. M. MacNevin and G. H. Brown. Ind & Eng Chem Anal ed* 14:908 N 15 '42

Semimicrodetermination of chlorine, bromine, and iodine in organic compounds. *E. W. Peel, R. H. Clark and E. C. Wagner. bibliog Ind & Eng Chem Anal ed* 15:149-51 F 15 '43

BROMINE compounds

Quinoidation of triaryl compounds; bromonaphthylidiphenylchloromethanes. *L. C. Anderson and D. Johnston. Am Chem Soc J* 65:239-42 F '43

α,*β*-Unsaturated aminoketones; reaction of piperidine and *N*-methylbenzylamine with bromine derivatives of benzalacetone and benzalacetophenone. *N. H. Cromwell and H. H. Witt. Am Chem Soc J* 65:308-12 Mr '43

α,*β*-Unsaturated aminoketones; reaction of primary amines with 1,3-diketones and bromine derivatives of benzalacetophenone; ethylene imines. *N. H. Cromwell, R. D. Babson and C. E. Harris. bibliog Am Chem Soc J* 65:312-15 Mr '43

α,*β*-Unsaturated aminoketones; the mechanisms of the reactions of secondary amines with *α*-bromo-*α*,*β*-unsaturated ketones. *N. H. Cromwell and D. J. Cram. Am Chem Soc J* 65:301-8 Mr '43

BROMOACETO naphthalide

Preparation of diazo-naphthols and nitration of 4-bromoaceto-1-naphthalide. *H. H. Hodgson and S. Birtwell. Chem Soc J* p321-2 Ji '43

BROMOAMINOBENZOIC acid

5-Bromo-2-aminobenzoic acid as an analytical reagent. *R. J. Shennan. Soc Chem Ind J* 61:164 O '42

BROMOBENZENE

Fluidity of mixtures which obey Bachinskii's law. *F. Kottler. bibliog J Phys Chem* 47:277-93 Mr '43

BROMOBENZOIC acid

Electric moments of some substituted benzoic acids; the moments of *o*-, *m*- and *p*-fluorobenzoic acids, and of *o*-chloro and *o*-bromobenzoic acids. *M. E. Hobbs and A. J. Welch, jr. bibliog Am Chem Soc J* 65:967-71 My '43

BROMOBENZOYL peroxide

Ester groups in polystyrene made with chloro- and bromobenzoyl peroxides. *P. D. Bartlett and S. G. Cohen. Am Chem Soc J* 65:543-6 Ap '43

BROMOBUTANOL

Role of neighboring groups in replacement reactions; retention of configuration in the reaction of the 3-bromo-2-butanols with phosphorus triiodide. *S. Winstein. bibliog Am Chem Soc J* 64:2791-2 D '42

BROMODESOXYMESITOLIN

Vinyl alcohols; isomeric bromo-1,2-dimesityl-1-propen-1-ols. *R. C. Fuson, R. V. Lindsey, jr. and P. B. Welldon. bibliog Am Chem Soc J* 64:2888-91 D '42

BROMODIMESITYLPROPENOLS

Vinyl alcohols; isomeric bromo-1,2-dimesityl-1-propen-1-ols. *R. C. Fuson, R. V. Lindsey, jr. and P. B. Welldon. bibliog Am Chem Soc J* 64:2888-91 D '42

BROMODIMETHYL propane

Substitution reactions of neopentyl halides; abstract and discussion. *E. D. Hughes and I. Dostrovsky. Chem & Ind* 62:63 F 6 '43

BROMOETHYLBENZYL bromide

Synthetic application of *o*-*β*-bromoethylbenzyl bromide; sulphanilamide derivatives of 1:2:3:4-tetrahydroquinoline. *F. G. Holliman and F. G. Mann. Chem Soc J* p37-41 D '42

BROMOFLUORENONE

Fluorenones and diphenic acids; establishment of authentic 1-bromo- and 4-bromo-fluorenones. E. H. Huntress, K. Pfister, 3d and K. H. T. Pfister. bibliog Am Chem Soc J 64:2845-9 D '42

BROMOHYDRINS

Reaction of indene and styrene bromohydrins with sodium sulfite; cleavage of alkali sulfonates with sodium in liquid ammonia. C. M. Suter and H. B. Milne. Am Chem Soc J 65:582-4 Ap '43

BROMOCTANE

Reactions of organometallic compounds with alkyl halides; the action of sodium ethyl on (—)-2-bromooctane. N. G. Brink, J. F. Lane and E. S. Wallis. bibliog Am Chem Soc J 65:943-9 My '43

BROMOPHENOL blue

Effect of dielectrics and solvent upon the regeneration in acid solution of alkali-faded bromophenol blue. E. S. Amis and J. E. Price. bibliog J Phys Chem 47:338-48 Ap '43

BROMOPHENYLHYDROXYMALEIC imide

p-Bromophenylhydroxy-maleic imide. G. S. Skinner, C. A. Coghlan and A. S. Berlin. Am Chem Soc J 64:2600-1 N '42

BROMOPROPIONIC acid

Resolution and rates of hydrolysis of d, l- α -bromopropionic acid and its glycine derivatives. A. F. Chadwick and E. Pacsu. bibliog Am Chem Soc J 65:392-402 Mr '43

BROMOPROPYNE

Raman spectra of acetylenes; symmetrical-top acetylenes. F. F. Cleveland and M. J. Murray. bibliog J Chem Phys 11:450-4 O '43

BROMOTHYMOL blue

Germicidal quaternary ammonium salts in dilute solution; a colorimetric assay method. M. E. Auerbach. bibliog Ind & Eng Chem Anal ed 15:492-3 Ag 15 '43

BROMOTOLUENE

Synthetic application of o- β -bromomethylbenzyl bromide; sulphanilamide derivatives of 1:2:3:4-tetrahydroquinoline. F. G. Holliman and F. G. Mann. Chem Soc J p737-41 D '42

BRONCHITIS

Sickness absenteeism among industrial workers, final quarter of 1942, with a note on the occurrence of bronchitis and pneumonia, 1933-42. W. M. Gafafer. Pub Health Rep 58:677-9 Ap 23 '43

BRONZE

Arc welding brass and bronze castings. diags Iron Age 151:53 Ja 21 '43

Brass and bronze castings conservation chart revised. Foundry 71:121, 133 N '43

Corrosion test data; guide to the selection of substitute materials. R. T. Barnes, Jr., J. W. Wing and T. E. Lagerstrom. il diag Pulp & Pa of Can (Convention no) 44:135-8+ [F] '43

Down-grading chart for brasses and bronzes. C. S. Cole. Metal Prog 43:406-8 Mr '43; Same cond. Foundry 71:87+ Mr '43; Same cond. Steel 112:106+ Ap 12 '43; Excerpt. Product Eng 14:236 Ap '43

German metallurgy in wartime; smelting bell bronze. W. J. Kroll. Eng & Min J 144:50-1 S; 82-3 O '43

Instance of corrosion in electric relays; phosphor-bronze springs. R. Wood and G. H. Wyatt. Soc Chem Ind J 62:110-11 Jl '43

Leaded bronzes; a digest of common specifications. R. S. Burpo, Jr., comp. Metals & Alloys 18:531, 533-4 S '43

New tin-free gear bronze; copper-antimony-nickel alloy, development by Hamilton gear & machine co. Mach 49:205 N '42; Can Min J 63:724 N '42; Mech Eng 64:905 D '42

Oil-retaining bearings; some uses for porous bronze. diag Chem Age (Lond) 48:161-2 Ja 30 '43

Phosphor bronze ingots; points to remember and defects to avoid in casting. Chem Age (Lond) 48:18-19 Ja 2 '43

Representative micrographs of copper-base alloys. il Metal Prog 44:636-9 O '43

Standard brass and bronze alloys of the non-ferrous metal institute; tabulation. Metal Prog 44:708 O '43

Substitutes for leaded bearing bronze. R. W. Dayton, H. W. Gillett and L. E. Balch. bibliog Metals & Alloys 16:1072-9 D '42

Thermal expansion of some bronzes. P. Hidnert. bibliog J Research Nat Bur Stand 30:75-88 Ja '43

Tin bronzes; a digest of common specifications. R. S. Burpo, Jr., comp. Metals & Alloys 18:73 Jl '43

Tin-free bronze; copper-nickel-antimony for worm gears. C. B. Hamilton, Jr. Steel 112:86 F 22 '43

Tin-free gear bronze; research on foundry technique and characteristics; abstract. R. F. Hudson. Metals & Alloys 17:1244+ Je '43

Tin substitutes prove satisfactory in bronzes. J. F. Pelly and J. Worth. Steel 112:81 My 31 '43

Welding brasses and bronzes. Chem Age (Lond) 48:299-300 Mr 13 '43

Working of cast copper-base alloys. diags Am Mach 87:125-40 O 14 '43

See also
Gun metal
Manganese bronze
Silicon bronze

Analysis

Determination of tin in babbitts, white metal alloys, and bronze. E. T. Saxer and R. E. Minto. Ind & Eng Chem Anal ed 15:261-2 Ap 15 '43

Testing

Cast bronze test bars to size. J. W. Bryant. Foundry 71:189-90 O '43

Studies of machined versus as-cast test specimens for copper-base alloy sand castings. J. J. Curran and others. il diags Am Soc T M Proc 42:199-214 '42

BRONZE founding

Brass and bronze castings, 1942. S. Tour. Metals & Alloys 17:65-6 Ja '43

Brass and bronze sessions feature reports; A.F.A. annual meeting. Foundry 71:172+ Je '43

Canadian foundry specializes in nonferrous castings; Robert Mitchell co. P. Dwyer. il Foundry 71:98-100+ My '43

Cast bronze test bars to size. J. W. Bryant. Foundry 71:189-90 O '43

Casting nonferrous parts for ordnance; Northern pump co. P. Dwyer. il Foundry 71:106-9+ N '43

Controls manganese bronze melting. N. K. B. Patch. Foundry 71:106+ S '43

Handling copper-silicon alloys efficiently. diags Foundry 71:146, 148+ O '43

Low-tin and tin-free bronzes and brasses. F. Hudson. bibliog il diags Iron Age 150:46-50 D 3; 62-4 D 10 '42

Molding large bronze propellers; Bartlett-Hayward co. P. Dwyer. il diags Foundry 71:90-3+ S; 112-14+ O '43

Navy makes gun metal castings. E. Portman. Foundry 71:117+ O '43

Nonferrous foundries need temperature control. D. F. O'Connor. Foundry 71:95+ Ag '43

Phosphor bronze ingots; points to remember and defects to avoid in casting. Chem Age (Lond) 48:18-19 Ja 2 '43

Porosity in navy bronzes; abstract. W. B. George. Metals & Alloys 17:1012+ My '43

Silicon bronze castings. E. Portman. il Metals & Alloys 17:528-32 Mr '43

War spurs foundry research. il Iron Age 151:153+ Ja 7 '43

BRONZE welding

Bronze welding vs. brazing; abstract. E. Christie. Metals & Alloys 16:1126+ D '42

Jig speeds sheet metal welding; radiator grille frames. il Sheet Metal Worker 34:26 My '43

Locomotive parts fabrication and welding of bronze bearing surfaces. J. W. Kenefic. il Welding J 22:799-805 O '43

Welding with aluminum bronze. C. E. Swift. il Welding J 21:843-5 D '42

BROODERS, Electric. See Poultry brooders. Electric

BROOKE, George Doswell, 1878-

Successors named for G. D. Brooke. por Ry Age 113:1001-2 D 19 '42

BROOKLYN, New York

Water supply

Determination by statistical methods of the average service life of 6-inch cast-iron water mains in Brooklyn. A. V. Ruggles. tables N E Water Works Assn J 56:361-84; Discussion. 384-9 S '42

BROOMCORN

Broom corn imports from Argentina. For Comm W 12:19 J1 17 '43

BROTHERHOOD of electrical workers, International. See International brotherhood of electrical workers

BROUGHTON, Averell

Sketch. por Spectator (Property ed) 9:22 S 9 '43

BROWN, George Herbert, 1884-1943

Sketch. E. L. Nawrot. bibliog por Am Cer Soc Bul 22:211-14 J1 15 '43

BROWN, J. Calvin

Sketch. por(p611) Mech Eng 65:612 Ag '43

BROWN, Prentiss Marsh, 1889-

Appraisal on prices. por Business Week p 15-16 D 26 '43

New price administrator. por Nat Pet N 35:2 Ja 27 '43; Burroughs Clearing House 27:19-20 F '43

Portrait. Business Week p15 Je 26 '43

BROWN, Richard B. Jr.

President. Illuminating engineering society, 1942-1943. por(cover) Illum Eng 37:544-5 N '42

BROWN company (Maine)

Reorganization terminated. Comm & Fin Chr 157:1523 Ap 26 '43

BROWNIAN movements

Stochastic problems in physics and astronomy; theory of the Brownian motion. S. Chandrasekhar. Rs Mod Phys 15:20-44 Ja '43

BROWNING, John Moses, 1855-1926

Greatest gun wizard. Fortune 27:36+ Ap '43

BROWNLEE, James F.

OPA deputy administrator. por Oil Paint & Drug Rep 144:7 Ag 23 '43

BROWNSVILLE, Texas

Texas slighted? Brownsville mill for crushing castor beans. il Business Week p53-4+ Ap 24 '43

BRUCE, Edward, 1879-1943

Sketch. por Arch Forum 78:118 Mr '43

BRUCINE mandelate

Methods for resolution of enantiomorphs; chromatographic adsorption. H. B. Hass, T. de Vries and H. H. Jaffé. bibliog Am Chem Soc J 65:1486-8 Ag '43

BRUCITE

Brucite in limestone near Wilkinson, Ontario. I. C. Brown. bibliog il Econ Geol 38:408-19 Ag '43

BRUSH plating. See Electroplating—Brush plating

BRUSHES (electric machinery)

Bomber ceiling boosted by new generator brushes. H. M. Elsey. il Sci Am 169:126 S '43

Generator brush life increased 50 times; off-setting effect of high altitude. Marine Eng 48:212 Je '43

BRUSHES, Industrial

Brush engineering speeds up ship construction work; Osborn manufacturing company. il Marine Eng 48:155-7 F '43

Brushes for engine maintenance. il Diesel Power 21:426 My '43

Brushing wheels break bottlenecks in weld joint preparation and weld cleaning. il Steel 113:107, 110+ Ag 2 '43

Smoothing out the rough spots; power-driven brushes. V. E. Brink. il Comp Air M 48:7170-1 O '43

Wire brush to help in construction of radios and electrical instruments. il Gen Elec R 46:195 Mr '43

See also

Paint brushes

BRYN MAWR college

Bryn Mawr raises its torch. il Fortune 27:106-11+ Ap '43

BUBBLE cap plates. See Distillation apparatus—Design

BUBBLES

Theory of stress due to collapse of vapour bubbles in a liquid. R. S. Silver. Engineering 154:501-2 D 25 '42

See also

Foam
Soap bubbles and films

BUBBLFIL

Floating on air. il Mod Plastics 20:70+ D '42
New buoyant material made of strands of bubbles. Comp Air M 48:6968 F '43

Technical data on DuPont's Bubblfil product. J. B. Quig. il Rayon 24:77-8, 119-21 F-Mr '43; Abstract. Chem & Met Eng 50:198-200 My '43

BUCHEN, Walther, 1886-

Gallery; poet and planner. por Adv & Sell 36:30+ My '43

BUCHI supercharging system. See Diesel engines—Superchargers

BUCKETS

Ancient clamshell overhauled for wartime service. Roads & Sts 86:80-2 Ap '43

Good dental work speeds clamshell digging; renewing teeth and cutting edges. A. Hooper. il diags Roads & Sts 86:72-3 Je '43

Gravity-bucket conveyors or pivoted-bucket carriers. W. H. Atherton. il diags Mech Handling 30:2-10, 61-71, 110-16, 162-5 Ja-Apr '43

Repairing shovel dippers with the electric arc; with cost data. M. M. McElderry. Eng & Min J 144:73-4 S '43

Salvaging shovel teeth and buckets. il Roads & Bridges 81:58 Mr '43

BUCKEYE pipe line company

Curb ruling. Comm & Fin Chr 157:216 Ja 18 '43

Plan for unification. Comm & Fin Chr 156:1738-9 N 16 '42

BUCKLEY, John R.

Gallery; from prairie to penthouse. M. G. Rollins. por Adv & Sell 36:46+ N '43

BUCKTHORN

Saponins from the species of the buckthorn family. C. D. Mell. Textile Col 65:108-9+ Mr '43

BUCKWHEAT

Isolation of photosensitizing agents from buckwheat. S. H. Wender, R. A. Gortner and O. L. Inman. bibliog Am Chem Soc J 65:1733-5 S '43

BUDD, Edward G., manufacturing company

Bonuses barred; court enjoins E. G. Budd plan for stock options. Business Week p107 O 16 '43

Court refuses to stop meeting. Comm & Fin Chr 158:288 J1 19 '43

Exchange of stock; declares initial dividend in new preferred shares. Comm & Fin Chr 158:543 Ag 9 '43

Extends association with important banking groups. Comm & Fin Chr 157:2037 My 31 '43

Financing plan approved. Comm & Fin Chr 158:356+ J1 26 '43

Refinancing program. Comm & Fin Chr 157:1805 My 17 '43

Stockholders would enjoin option grants to key executives to buy common stock. Comm & Fin Chr 158:185 J1 12 '43

BUDDLEIA

Saponin from the species of buddleia. C. D. Mell. Textile Col 65:114 Mr '43

BUDGET

Government receipts, expenses covered in bulletin of League of nations. Comm & Fin Chr 157:2187 Je 10 '43

See also

Finance
Government expenditures
Purchasing, Government

Bolivia

Budget for 1943. For Comm W 10:12 F 20 '43

Brazil

Extraordinary budget for 1943. For Comm W 11:15 My 29 '43

Canada

Canada's budget. Economist 144:528-9 Ap 24 '43

BUDGET—Continued**Cuba**

Budgetary results of 1942. For Comm W 10: 15-16 Ja 30 '43

Great Britain

Budget. Economist 144:485-6 Ap 17 '43
Budget figures. Economist 144:455-7 Ap 10 '43
Budget proposals. For Comm W 11:22-3 My 8 '43; Same. Bankers M 146:519-21 Je '43
Chancellor's problems. Economist 144:451 Ap 10 '43
National budget. Economist 144:36-7 Ja 9 '43
White paper statistics. Economist 144:497 Ap 17 '43

Honduras

Budgetary operations; 1941-42 and 1942-43. For Comm W 10:16 F 6 '43

India

Central government budget shows deficit for year 1941-42; deficit trend in 1942-43. For Comm W 10:19-20 Ja 9 '43
India's fourth war budget. For Comm W 11: 18-19 My 8 '43

Iraq

Budget for 1943-44. For Comm W 12:24-5 S 4 '43

Ireland

Eire's new budget. Economist 144:659 My 22 '43

Madagascar

Budget for 1943. For Comm W 12:14 J1 31 '43

Mexico

Budget for 1943. For Comm W 10:19 Ja 30 '43

New Zealand

New Zealand's budget. Economist 145:465-6 O 2 '43

Peru

Revenues in 1942. For Comm W 11:24 My 29 '43

Salvador

Budget for 1943. For Comm W 10:18 F 20 '43

Spain

Ordinary budget for 1943. For Comm W 10:19 Mr 27 '43; Same. Bankers M 146:434-5 My '43

Turkey

Record budget. For Comm W 12:18 J1 31 '43

United States

Annual budget. Burroughs Clearing House 27:21+ F '43
Budget message. Bankers M 146:95-6 F '43
Budget message. charts(p3) Survey of Cur Business 23:4-5 F '43
Budget slashes are hamstringing commerce services to business. Sales Management 52: 18, 20-2 Ag 15 '43
Bureau of the budget and governmental budgeting in wartime. G. A. Moe. N A C A Bul 25:43-62 S 15 '43
More sacrifice, that's what President's budget message asks. Business Week p82+ Ja 16 '43
1943-44 budget and inflation. Trusts & Estates 76:105 F '43
1944 budget trend better than estimated. Nat City Bank p126-7 N '43
One hundred billion budget. Nat City Bank p15-19 F '43
President submits \$100 billion war budget; calls for \$16 billion in new taxes, savings. Comm & Fin Chr 157:202 Ja 14 '43
Study of budgetary problems urged following convening of Congress. Comm & Fin Chr 157:431 Ja 28 '43
Text of President's summation of 1944 budget. Comm & Fin Chr 158:520-1 Ag 5 '43
Text of the President's budget message to Congress. Comm & Fin Chr 157:286-8 Ja 21 '43

Treasury finance and the new budget. Fed Res Bul 29:111-15 F '43

See also

United States—Budget, Bureau of

Venezuela

Budget for 1943-44. For Comm W 13:23+ O 30 '43

BUDGET, Business

Budgeting in wartime; abstract. A. Lazarus. Management R 32:349-50 S '43
Business budgeting with a view to conversion from wartime to peacetime conditions. V. R. Bechtel. N A C A Bul 24:1349-75 Ag 1 '43
Expense budgeting. C. Pendlebury. N A C A Bul 24:260-70 N 1 '42
Foremen's budgets save 20 percent; Toledo scale company. G. M. Richard. Factory Management 101:90-1 S '43
Ten years' progress in management; cost accounting and budgetary control. J. A. Willard. A S M E Trans 65:228-30 Ap '43

BUDGET, Household

Budget adviser gets data on life insurance outlays. E. Stapleton. Nat Underw (Life ed) 46:2 D 18 '42
Statistical laws of family expenditure. H. Working. Am Stat Assn J 33:43-56 Mr '43

See also**Cost of living****BUENOS AIRES**

General Paz avenue. il Engineer 174:367 O 30 '42

Subways

Buenos Aires underground railway. E. Kindel. diags map Engineer 175:166-9, 184-7 F 26-Mr 5 '43

BUFFALO, New York

Development of the Buffalo waterfront as a post-war planning project. C. R. Waters. map Roads & Sts 86:55 S '43
This is Buffalo. P. James. il Adv & Sell 36:25-6+ My '43

Sewerage

Sewage sludge; drying and incineration; developments indicated by experience at Buffalo; with cost data. C. R. Velzy. plan Am Soc C E Proc 69:43-9 Ja '43

BUFFALO gourd. See Cucurbita foetidissima

BUFFALOES, American. See Bison, American

BUFFER mixtures

Assay of potassium *p*-phenolsulfonate, its pH range, and its ultraviolet absorption spectrum. E. E. Sager, M. R. Schooley and S. F. Acree. J Research Nat Bur Stand 31:197-204 O '43

Second dissociation constant of *p*-phenolsulfonic acid and pH values of phenolsulfonate-chloride buffers from 0° to 60° C. R. G. Bates, G. L. Siegel and S. F. Acree. bibliog J Research Nat Bur Stand 31:205-23 O '43

BUFFING. See Polishing

BUFFING materials. See Polishing materials

BUGLES. See Trumpets

BUHL foundation

Research grants by the Buhl foundation for basic studies in chemistry. il Chem & Eng N 21:359-64 Mr 25 '43

BUILDERS' risk marine insurance. See Insurance, Builders' risk marine

BUILDING

Builders from Britain; mission sent to study U.S. methods and costs. Arch Forum 79:61 O '43

Building for war production. G. H. Miehl. Illum Eng 37:753-67; Discussion. L. C. Twitchell. 767-8 D '42

Buildings at home and abroad; special section. il diags Eng N 131:608-38 O 21 '43

Centralized organization speeds industrial plant building program; Westinghouse electric & mfg. co. G. Parkman. Eng N 129:794-5 D 3 '42

Outlines of postwar patterns. E. Goble. Arch Rec 92:41-6+ N '42

Post-war urban building must include redevelopment of blighted areas. H. Potter. Comm & Fin Chr 158:1807 N 4 '43

BUILDING—Continued

Structural tile barracks for the WAACS. *il*
Eng N 129:838-40 D 17 '42

Wartime construction of factory buildings;
building-types study; with time-saver
standards. *il* *diags* Arch Rec 92:51-66 D '42

See also

Air conditioning
Air raids and build-
ing
Architecture
Attics
Beams
Brick construction
Bridges
Building accidents
Building cycles
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als
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struction
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Warehouses
Waterproofing
Wind pressure
Windowless con-
struction
Windows
Wood construction

Accidents

See Building accidents

Cost

Construction cost indexes, 1938-1941. Survey
of Cur Business 1942 Sup p25-7 [supple-
mented in monthly numbers]
Construction costs, 1943. Eng N 130:571-4+
Ap 22 '43
Construction price control. W. J. Casey. Arch
Rec 92:8+ D '42
Cost climb continues in 1942. Eng N 130:227-8
F 11 '43
Manpower in construction. L. E. Brigham.
Civil Eng 13:485-7 O '43
Masonry for war housing; how to conserve
lumber and nails. F. W. Cortright. *il* plan
Am Bld 64:46-7+ D '42
Price ceiling rulings. Arch Forum 77:33-4 D
'42

Estimates

How to figure insulation jobs quickly. H. F.
Lotz. *ai* Bld 65:41 JI '43
Short cut estimating methods. H. F. Lotz.
il *diags* Am Bld 65:52+ F; 62+ Mr; 58+
Ap; 60+ My; 58-9+ Je '43

Extensions

Special features mark addition to May com-
pany building, Denver, Colo. W. H.
Wheeler. *il* plans Civil Eng 13:73-5 F '43
Truss revision adds mezzanine space to laun-
dry. J. Feld. *diags* Eng N 131:151 JI 15 '43

Finance

Construction contracts awarded, by owner-
ship, monthly, Jan. 1940-Nov. 1942. Fed Res
Bul 29:84 Ja '43 [cont monthly]
Cost of financing; bond yields, 1933-1942; in-
terest rates, 1901-1941. Eng N 130:584 Ap
22 '43
Depreciation schedule. U.S. Bureau of in-
ternal revenue; buildings, building equip-
ment, construction equipment, bridges,
utilities. Eng N 130:622, 624 Ap 22 '43

New construction financing, 1942. Eng N 130:
225 F 11 '43

See also

Building and loan as- sociations	Federal housing ad- ministration
Building trades—Fi- nance	Home ownership—Fi- nance Housing finance

Heating aspects

Cash value of insulation savings. J. McCaw-
ley. Sheet Metal Worker 34:36, 38, 40 My;
23-4+ Je; 36, 38 JI; 42-3+ Ag '43
Effect of studs and joists on heat flow
through frame construction. P. D. Close.
Heating-Piping 15:529-31 O '43
Heat transmission tables; values of U for
walls, roofs, floors and ceilings using ply-
wood; reference data. Heat & Ven 40:74a-
74b JI '43
Heat transmission through insulation as af-
fected by orientation of wall. F. B. Rowley
and C. E. Lund. *il* *diags* Heating-Piping
15:361-5; Discussion. 365-6 JI '43
Home insulation. *il* Consumers' Research
Bul 12:13-20 O '43
New business for many; making homes more
comfortable by caulking cracks around
doors and windows. Sheet Metal Worker 33:
42+ N '42
Prepare homes for cold winter days. *il* Am
Bld 65:30-1+ S '43
Thrifty warmth. J. Holt. Tech R 45:77-8+
D '42

See also

Cooling—Tables, cal- culations, etc.	Insulation (heat) Solar heating
---	------------------------------------

Rapid construction

Booster station built in record time in De-
troit. L. E. Ayres. *il* *diags* plans map Eng
N 131:473-5 S 23 '43
Concrete and timber aid fast war plant con-
struction. *il* Eng N 130:666-70 My 6 '43
Cost-cutting methods by precutting framing.
T. C. Combs. *il* *diags* Am Bld 65:101+ O;
40-1 N '43 (to be cont)
800 houses, 3½ months at Norfolk, Va. *il*
diags plan Am Bld 65:36-7+ JI '43
How of site prefabrication. *il* *diags* plan Am
Bld 65:38-40 Mr '43
Power equipment speeds big war housing job
in face of serious delays; 273-house Title VI
project in Mobile, Ala. *il* plans Am Bld 64:
42-4+ D '42
Prefab methods speed Seattle housing. *il*
diags plan Am Bld 64:50-1 D '42
63-man barracks built in a day. *il* Am Bld
64:36-7+ N '42
Two modification centers requested—imme-
diately; Tulsa and Oklahoma City are
scenes of construction miracles. T. M.
Robins. *il* Civil Eng 13:529-32 N '43
Wallace E. Johnson, the Henry Kaiser of
war housing. *il* plans Am Bld 65:32-4 F '43
Warspeed erection shortcut; aircraft engine
plant; Wright aeronautical corp. *il* Steel
112:108+ F 1 '43
Wartime construction of factory buildings;
building-types study; with time-saver
standards. *il* *diags* Arch Rec 92:51-66 D '42

See also

Houses, Prefabri-
cated

Repair and reconstruction

Answers to repair and remodel questions by
FHA. Am Bld 64:42 N '42
Busy today, busier tomorrow. H. E. Kennedy,
builder. *il* Am Bld 65:40-1 F; 32-5 Mr '43
Ed and Matt Simon thrive on wartime re-
pairs and commercial maintenance. *il* Am
Bld 65:38-9+ Ap '43
How to do it; repair, maintenance and small
construction. *il* *diags* plans Am Bld 65:60-2
Ja; 48-51 F; 52-4 Mr; 42-9, 52-4 Ap; 54-6
My; 54-6 Je; 56-60 JI; 52-5 Ag; 54-5 S; 34-
7+ N '43
How to refinish interiors with insulation
board. *il* Am Bld 65:66 Ja '43
Insured financing to continue. Arch Rec 93:16
My '43
NHA home conversion program gets under
way; with list of cities approved, and
names of persons in charge of each region.
il plans Am Bld 65:68-9, 87 Ja '43

BUILDING—Repair and reconstruction—Cont.

New foundations provided for a nineteenth century cathedral; St Joseph's cathedral, in Hartford, Conn. G. F. Flay, Jr. and D. B. McKinley. *II* *diags* Civil Eng 13:85-7 F '43

101 ways to keep busy. *II* *Am Bld* 65:40-1 Ap '43

Restore fire-damaged homes; contractor rebuilds 75 a year. *II* *Am Bld* 65:32-3 S '43

Three R's; remodeling, repairs, rehabilitation, set for an early start. *II* *Am Bld* 65:105-7+ O '43

Title I conversion is now top job for builders. E. H. Christy. *II* *Am Bld* 64:52-5 D '42

Truss revision adds mezzanine space to laundry. J. Feld. *diags* Eng N 131:151 JI 15 '43

See also

Factories—Reconstruction	Office buildings—Maintenance and repair
Houses, Remodeled	

Safety measures

Every man on the job; safety program on war construction job. W. H. Magness. *II* *Nat Safety* N 47:20+ My '43

Protective devices important on construction jobs; abstract. G. W. Elg. *Safety Eng* 85:35-7 Ap '43

Rope for high living; safety nets for building workers. *II* *Safety Eng* 86:11+ S '43

Winter hazards on construction jobs. *Nat Safety* N 46:94-5 D '42

See also

Concrete construction	Shipyards—Safety measures
—Safety measures	

Standards

Building code work shows progress despite war problems. J. H. Courtney. *II* *Ind Stand* 14:217-19 JI '43

Coordination of dimensions of building materials and equipment. Heating-Piping 15:585-6 N '43

Modular shelter; proposed new system of prefabrication permits wide variety of expandable plans. *II* *diags* plans Arch Forum 79:71-4 JI '43

Modular size of clay-products units. H. C. Plummer and E. F. Wanner. *bibliog* *II* *diags* plans Am Cer Soc J 26:307-20 S 1 '43

Modularia. F. Heath, Jr. *Am Cer Soc Bul* 22:305 S 15 '43

Prefabricated panels for packaged buildings; General panel corporation uses same module for all dimensions. W. von Moltke. *II* *diags* Arch Rec 93:50-3 Ap '43

Proposed modular standard for building units now available. *Concrete* 51:15+ N '43

Standardized war models to aid private builders. *II* *diags* plan Am Bld 65:50-1+ Ag; 38-40 S; 42-5 N; 38-9 D '43

See also

Building laws and regulations
Housing—Standards

Statistics

All classes of U.S. construction lower; statistics for the first six months of 1943. Eng N 131:51 JI 29 '43

American economy in 1942; construction; with comparisons for earlier years. C. A. R. Wardwell and R. B. Bangs. *Survey of Cur Business* 23:11 Ja '43

Architect-engineers design an increasing proportion of total building; chart of 11 year period. Arch Rec 92:35 N '42

Building construction activities in the first full year of war. Comm & Fin Chr 157:1396-9 Ap 15 '43

Building construction, 1941. U S Bur Labor Statistics Bul 713:1-130; pa 20c Supt. of doc. '42

Building permit survey, 1939. U S Bur Labor Statistics Bul 689 v 1:1-85 '41; v2:1-134 '42; v3:1-116 '42; v4:1-46 '42; v6:1-38 '41; v8:1-28 '42; v9:1-73 '41

Building permit values by cities. Published in monthly numbers of Dun's statistical review; summary in Dun's review

Building permit values for 215 cities, 1940-1942. Dun's Stat R 7:5-6 F '43

Building volume \$4 1/2 billion for first half of 1943. *Concrete* (mill sec) 51:223 S '43

Construction activity in the continental United States, 1929-42. *Survey of Cur Business* 23:32 Je '43

Construction contracts awarded, by types of construction, monthly Jan. 1941-Oct. 1942, and by districts, Nov. 1941 and 1942. Fed Res Bul 29:84 Ja '43 [cont monthly]

Construction contracts awarded in 37 states (F. W. Dodge corporation) etc, 1938-1941. *Survey of Cur Business* 1942 Sup p21-4 [supplemented in monthly numbers]

Construction count, 1941-1942 and estimates for 1943. Arch Forum 77:36-6 N '42

Construction, first half 1943, and figures for other periods. *Survey of Cur Business* 23:6-7 Ag '43

Construction volume statistics for computing 1942 corporation taxes; construction volume 1925-1942. Eng N 180:647 Ap 29 '43

Estimated construction activity in continental United States 1939-43. *Monthly Labor R* 57:357-9 Ag '43

Estimated construction activity in the United States, 1941 and 1942. *Monthly Labor R* 55:1297-8 D '42

New construction activity, continental United States, 1939-42. *Survey of Cur Business* 23:10 My '43

Pre-war construction and war construction; chart. T. S. Holden and C. Shute. Arch Rec 92:37 D '42

Record ENR volume tops \$9 billion, 1942. Eng N 130:221-5 F 11 '43

Summary of building construction in principal cities, November 1942. *Monthly Labor R* 55:162-5 Ja '43 [cont monthly]

Value of building construction, 1921-1942; new nonfarm dwelling units provided, 1921-1942; construction employment, 1939-1942, and estimate for 1943; graphs. Arch Forum 78:35 F '43

Value of public and private new construction, quarterly, 1941 and 1942; chart. *Survey of Cur Business* 22:2 D '42

War construction; war casualty; charts. *Business Week* p28 My 1 '43

See also

Building cycles

Brazil

Building Brazil. L. Ross. *II* *For Comm* W 11:3-4+ Je 26; 6-8+ JI 3 '43

Concrete in Brazil's building program. *II* *Concrete* 51:4-5+ S '43

Great Britain

Britain prepares for extensive postwar building program. Eng N 130:305 F 25 '43

Building practice; committee's first report. Elec R (Lond) 132:462-3 Ap 2 '43

Civil engineers and the building industry. A. Binns. *Engineer* 175:133-4 F 12 '43

Civil engineers and the building industry; conference arranged by institution of civil engineers. *Engineer* 174:186-8, 241-2, 323, 393-9, 486-7; 175:130-1 S 4, 18, O 16, N 13, D 11 '42, F 12 '43

Post-war building industry. *Engineer* 175:318 Ap 16 '43

Panama

Increased building activity in Panama. *For Comm* W 12:19 Ag 28 '43

Persia

Mud, straw, bally poles and brick; use of native materials and methods in building of barracks, mess halls, warehouses and hospitals along Persian transportation arteries to Russia. W. G. Bowman. *II* *Eng N* 131:668-73 N 4 '43

Peru

Highway and building construction, Peru, 1942. *For Comm* W 10:24 Mr 20 '43

Southern states

Southern construction contracts break all records in 1942. S. A. Lauer. *Manuf Rec* 112:32-3+ Ja '43

Southern states 1942 construction record. Eng N 130:sup 1 Ap 22 '43

United States

Blg expansion of construction work in post-war period. T. S. Holden. *Concrete* 51:20+ JI '43; Same. Heating-Piping 15:397 JI '43

BUILDING—United States—Continued

- Building construction in first half of 1943 totaled \$4,300,000,000. Comm & Fin Chr 158: 231 JI 15 '43
- Building's first year at war. *il Arch Forum* 78:71-3+ Ja '43
- Construction. Survey of Cur Business 23: 10-12 My '43
- Construction activity, 1942 and 1943. Comm & Fin Chr 156:2052 D 10 '42
- Construction after the war. G. A. Bryant; L. Kahn; M. C. Tuttle. *il Eng N* 131:616-19 O 21 '43
- Construction forecast for 1943 predicts volume exceeding 1940. *il Concrete* 51:2-3 Ja '43
- Construction outlook for 1943.. T. S. Holden and C. Shute. *Arch Rec* 92:36-8 D '42; Abstract. *Concrete* 51:20+ Ja '43
- Construction under \$10,000 now handled by War production board field offices. *Concrete* 51:5 N '43
- Forecast of construction in 1943. *Sheet Metal Worker* 34:55 Ja '43
- 1942 war construction doubled 1941 volume. Comm & Fin Chr 157:843 Mr 4 '43
- Post-war construction. T. S. Holden. *Concrete* 51:33-4 Mr '43
- Postwar construction and its influence on the market for portland cement. *Concrete (mill sec)* 51:230-1 O; 2-4 N '43
- Postwar construction; program adopted by the Board of direction, American society of civil engineers. *Civil Eng* 13:439-42 S '43; Abstract. *Eng N* 131:300-1 Ag 19 '43; Discussion. *Civil Eng* 13:548-9 N '43
- Problems and promises of post war building. S. M. Livingston. *Dom Eng* 161:59 Ja '43
- Review and forecast, 1942-1943. *Eng N* 130: 183-5 F 11 '43
- Steel man's view of postwar construction. D. R. G. Cowan. *Sheet Metal Worker* 34:32 S '43
- Summary of building construction in principal cities, November 1942. *Monthly Labor R* 56: 162-5 Ja '43 [cont monthly]
- WPB turns to war program for cuts in construction work. *Eng N* 129:755-6 D 3 '42
- War year's heavy engineering volume 56 percent above defense record, 1942. *Eng N* 130: 220-8 F 11 '43
- What 1942 can teach 1943; housing can be changed by proper administrative steps. H. Potter. *Am Bld* 64:32-3 D '42

See also

Building trades—
United States

BUILDING accidents

- Winds wreck wood arches of partly erected hangar. *il Eng N* 130:272 F 25 '43

BUILDING and air raids. See Air raids and building

BUILDING and loan associations

- Asset figures for 50 largest savings and loan associations; tabulation. *Burroughs Clearing House* 27:6 Je '43
- Assets of savings and loan associations have shown spectacular increase. H. F. Cellarius. Comm & Fin Chr 157:2371 Je 24 '43
- Assets of savings, building and loan associations reach highest point in seven years. H. F. Cellarius. Comm & Fin Chr 156:1881 N 26 '42
- Backbone of savings and loan lending of small loans for wartime homes. J. Clawson. Comm & Fin Chr 157:1581 Ap 29 '43
- Bond buying day. F. S. Cannon. Comm & Fin Chr 156:2323 D 31 '42
- California savings and building-loan associations; assets as of Dec. 31, 1942. Comm & Fin Chr 157:748+ F 25 '43
- California's savings-loan associations maintain high volume of refinancing loans. N. Davis. Comm & Fin Chr 157:746 F 25 '43
- Colorado commissioner sees increased popularity of investments in savings and loan associations. A. O. Johnson. Comm & Fin Chr 157:1107 Mr 25 '43
- Home financing through savings and loan associations. C. M. Torrance. *Monthly Labor R* 56:332-40 My '43
- Home mortgage lending in 1943. J. F. Scott. Comm & Fin Chr 157:274 Ja 21 '43
- Indiana savings & loan associations have followed progressive policy in 70 years of existence. I. E. Coopridge. Comm & Fin Chr 157:1580 Ap 29 '43

Large and small investors fare well by disbursements of savings and loan associations. C. Distelhorst. Comm & Fin Chr 156: 2322 D 31 '42

Management conference studies savings-loan problems. C. F. Distelhorst. Comm & Fin Chr 157:1965 My 27 '43

Minnesota savings-loan associations have maintained steady growth. V. S. Welch. Comm & Fin Chr 158:414+ JI 29 '43

Ohio savings and loan associations occupy leading place in field; authors of innovations. W. M. Brock. Comm & Fin Chr 157: 1964+ My 27 '43

Proposed bill to increase usefulness of savings-loan groups. Comm & Fin Chr 157: 1394 Ap 15 '43

Savings and loan associations and the postwar era. R. H. Cake. Comm & Fin Chr 158:1318+ S 30 '43

Savings and loan associations have high earnings rates, low operating cost. W. W. McAlister. Comm & Fin Chr 158:415-16 JI 29 '43

Savings and loan associations in Michigan have made rapid strides. G. H. Longenecker. Comm & Fin Chr 157:1106 Mr 25 '43

Savings and loan associations repaying government loans far beyond requirements. M. Bodfish. Comm & Fin Chr 157:914 Mr 11 '43

Savings and loan associations return \$100 million to government since January 1, 1943. Comm & Fin Chr 158:826 Ag 26 '43

Savings and loan institutions are penetrating to all nations. E. C. Baltz. Comm & Fin Chr 158:326 Ag 26 '43

Savings and loan institutions are preparing to adapt to post war needs. H. R. Hanger. Comm & Fin Chr 157:747 F 25 '43

Savings and loan's 1942 in retrospect. R. H. Cake. Comm & Fin Chr 157:275 Ja 21 '43

Savings-loan units should encourage repaying old debts and growth of new savings. E. V. Bell. Comm & Fin Chr 157:2361+ Je 24 '43

Standard savings & loan association of Detroit celebrates golden anniversary. Comm & Fin Chr 157:1552 Ap 29 '43

Too much money. *Business Week* p101-2 N 28 '42

War housing and war financing. J. Twohy. *Barron's* 23:13-14 Ja 11 '43

See also Federal savings and loan insurance corporation

Advertising

Coordinated (not cooperative) advertising adopted by loan group; five Salt Lake City savings and loan associations. *Ptr Ink* 203: 58 My 21 '43

Great Britain

Position of British building societies in 1942. *Monthly Labor R* 56:1155-7 Je '43

BUILDING contracts

Civil engineers and the building industry; conference arranged by Institution of civil engineers. *Engineer* 174:486-7 D 11 '42

How St Louis builders guild plan allows tomorrow's home to be bought today. M. Gill. *il plans Am Bld* 65:70-3 Ap '43

See also

Contractors
Heating contracts

BUILDING cycles

Neglected cycle; the transport-building cycle. Issard. *bibliog R Econ Stat* 24:149-58 N '42

BUILDING fittings

See also

Sheet metal work,
Architectural

BUILDING inspection

With us every day is building-inspection day; Gardner-Denver co., Quincy, Ill. H. Theis. *il Factory Management* 101:139-40 Je '43

BUILDING laws and regulations

Amend WPB regulations on repair, rebuilding. *Nat Underw* 47:1 F 25 '43

Application of welding in structural design; with list of cities whose building codes have welding and cutting provisions in general conformity with the provisions of the A.W.S. code. S. A. Greenberg. *Welding J* 22:409-10 Je '43

BUILDING laws and regulations—Continued.

Authoritative word on rebuilding after fire. R. B. Mitchell. Nat Underw 46:3+ N 26 '42

Building briefs; Federal public housing authority need not comply with local building codes. Arch Forum 79:140 Ag '43

Building construction and CMP; further tightening of L-41 provisions; WPB and NHA housing regulations. J. M. Dickey. Arch Rec 93:74- Mr '43

Building exits code protects against loss of life in fire. Coconut Grove fire. R. S. Moulton. Il Ind Stand 13:309-10 D '42

Can't stop U.S.; city ordinances not applicable to federal war housing projects, district court rules. Business Week p30+ J1 17 '43

Holds fire repairs not barred by government. F. Crystal. East Underw 44:32 F 26 '43; Same. Weekly Underw 148:370 F 13 '43

Knock out horse and buggy building codes. Il Am Bld 65:96-7 O '43

Materials conservation requirements; construction decentralization. Arch Rec 93:10+ Ap '43

National board issues revised building code. Weekly Underw 148:1085 My 22 '43; Same. East Underw 44:29 My 14 '43

Private builder and war housing. Arch Forum 78:87-8+ Ap '43

Private builders' rating on war housing projects; Branch of WPB advise on priorities; New housing standards allow larger floor space areas; Private remodeling temporarily halted. Am Bld 65:17-18 F '43

Quick and orderly lifting of building restrictions demanded. Il Am Bld 65:88-9+ O '43

Revised building code. Arch Rec 93:100 Je '43

Round up on construction control; Project requirements plan. Arch Rec 92:8 N '42

Rule on rebuilding is amended. Nat Underw 46:1 N 12 '42

WPB removes limitations to save fuel. Am Bld 64:14 N '42

BUILDING loans

Large market for loans now and the day after V-day; home and farm repairs and improvements. G. M. Underhill. Il Bankers Mo 60:442-4 O '43

Making Title I loans in wartime. A. E. Custer. Il Burroughs Clearing House 27:22-4+ Ap '43

See also

Building and loan associations Home ownership—Finance

Federal housing administration Housing finance

Home loan banks Mortgages

Reconstruction finance corporation

BUILDING lots. See Building sites**BUILDING management. See Buildings—Management****BUILDING materials**

American railway bridge and building association meeting; abstracts of papers and reports on materials. Ry Age 115:729-32 N 6 '43

Building materials; one-year summary from Factory. Il Factory Management 101:152-4 J1 '43

Buildings of 1942 were for war. A. N. Carter. Il plan Eng N 130:186-9 F 11 '43

Built with minimum use of critical materials; new synthetic rubber plant in Baton Rouge. Il Factory Management 101:130-1 Je '43

Conservation of critical materials. H. Hill and H. B. Zackrisson. Civil Eng 13:83-4 F '43

Controlled materials plan now covers all construction. Eng N 131:121-2 J1 15 '43

Corrugated rags and resin replace steel in new sheets. Il Sci Am 168:159 Ap '43

Cotton stalks for synthetic lumber; with cost data. F. W. zur Burg. bibliog diags Paper Ind 25:612-15 S '43

Employment and materials, 1942. Eng N 130:226 F 11 '43

Growing list of substitute materials. Il Sheet Metal Worker 34:44-5 F '43

Here's the man who can smash your post-war distribution bottlenecks; building material dealer. J. Parshall. Il Cer Ind 40:50, 75 Ap '43

Navy camp built from non-critical materials; Camp Bainbridge. Il diag Eng N 130:124-7 Ja 28 '43

9,000,000,000 brick or tile needed for 1943 war building program! Il map Brick & Clay Rec 101:10-13 N '42

Plastic predictions for building. Il diags Arch Forum 79:6-8 S '43

Policy of finding construction material overseas. For Comm W 10:38-9 Mr 6 '43

Practical use of plastics in building and constructional work. F. S. Snow; A. Caress; R. J. Schaffer. Chem & Ind 62:287-90 J1 31 '43

Production of a structural board by gelatinization of wood wastes. S. Coppick and E. C. Jahn. bibliog Paper Tr J 117:23-5 J1 15 '43

Substitutions to save critical building materials; list. Eng N 130:189 F 11 '43

What a million homes a year will mean in jobs and building material sales. Am Bld 65:80-1 O '43

What's cookin'? how developments of science and wartime engineering will produce better homes and other structures tomorrow. Il Am Bld 65:42-3 Ja '43

See also

Adobe	Iron
Aluminum, Structural	Limestone
Asbestos	Lumber
Bricks	Mortar
Cement	Paper, Building
Clay products	Pisé
Concrete	Plastic materials, Laminated
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Concrete slabs	Sheet steel
Cork	Shipbuilding—Materials
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Glass	Terra cotta
Glass, Structural	Tiles
Gunite	Wall board
Gypsum	Wood
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Exhibits

Permanent samples exhibit aids New York City's Department of public works. Il Eng N 131:362-3 S 2 '43

Heat transmission

See Heat transmission—Tables, calculations, etc.; Insulation (heat)

Permeability

Comparative resistance to vapor transmission of various building materials. L. V. Teedale. Heating-Piping 14:736-42 D '42; Discussion. 15:152 Mr '43

Estimating water vapor transmission through walls; reference data. Heat & Ven 40:42a-42b Mr; 74a-74b Ap '43

Prices

Digest of OPA price regulations affecting construction. Eng N 130:614+ Ap 22 '43

Material price trends, 1925-1942; basic building materials prices, 1874 to 1942 in New York city. Eng N 130:589 Ap 22 '43

Materials prices. Published in Engineering news-record, first technical issue of each month

Price control eased on construction. Sheet Metal Worker 34:15 Ap '43

Testing

Summer comfort factors as influenced by the thermal properties of building materials. C. O. Mackey and L. T. Wright, jr. Heating-Piping 14:750-7 D '42; Discussion. 15:150-2 Mr '43

BUILDING paper. See Paper, Building**BUILDING repair shops**

Ed and Matt Simon thrive on wartime repairs and commercial maintenance. Il Am Bld 65:38-9+ Ap '43

Maintenance work centers in basement service shops; Seattle's Metropolitan building co. properties. Il Am Bld 65:56-7+ Ja '43

BUILDING research

Prefabrication; technical advances: present and post-war. H. P. Vermilya. Il diags Arch Rec 93:70-4 Je '43

BUILDING sites

How Chicago builders are creating post-war sales; market for homes by selling home sites now. *Il Am Bld* 65:46-7+ N '43
 What will war do to tomorrow's home? D. Bareuther. *plans Am Bld* 65:52+ N '43

BUILDING trades

Does the building industry owe an obligation to the public? Brick & Clay *Rec* 103:13 Ag '43
 Helping dealers through the war and preparing them for the peace; Johns-Manville dealer educational program. A. A. Hood. *Il Ind Marketing* 28:54, 59-60, 64 F '43
 Here's the man who can smash your post-war distribution bottlenecks; building material dealer. J. Parshall. *Il Cer Ind* 40: 50, 75 Ap '43
 How Kennedy plans a busier tomorrow. *Il plans Am Bld* 65:32-5 Mr '43
 How to do something in your town about post-war building. *Am Bld* 65:110-12 O '43
 Local prefabs out in front. *Il Am Bld* 65:41-3+ Mr '43
 New regulation for construction price control. Roads & Sts 85:46+ N '42; Same. *Dom Eng* 160:41+ N '42
 No dream house; materials men look upon home of tomorrow as impractical. *Business Week* p17-18 S 11 '43
 101 ways to keep busy. *Il Am Bld* 65:40-1 Ap '43
 Tremco shows inside employees how their jobs help build sales; training course for factory and office workers. *Sales Management* 52:45-6 Ap 1 '43
 Wanted, thousands of farm builders; how to get farm jobs. J. L. Strahan. *Il Am Bld* 65:28-9+ Ag '43

See also

Brick industry and trade	Houses, Model
Cement industry and trade	Housing projects
Contractors	Lumber trade
	Painting, Industrial
	Plumbing trade

Advertising

Celotex advertises now to stake its claim to share of post-war building. M. Greenwood. *Il Sales Management* 52:18-20 My 20 '43
 How Chicago builders are creating post-war sales; market for homes by selling home sites now. *Il Am Bld* 65:46-7+ N '43
 If winter comes; fuel conservation is the campaign keynote of insulation, weather-stripping, and sash and door industries. *Business Week* p64+ Ag 14 '43
 Mesker brothers sell the future with facts, not fancies; business paper campaign sells architects on future of metal windows. *Il Ind Marketing* 28:26-7+ Ap '43
 Offers post-war home planners scrap book for assembling ideas; Andersen corp. manufacturers of window units. *Il Sales Management* 52:62 N 1 '43

Directories

Directory of wartime prefabricators. *Il diags plans Arch Forum* 78:79-86+ Ap '43
 Prefabrication: list of prefabricators. *Il Arch Rec* 93:75-9 Je '43

Finance

Building companies' outlook improved. *Baron's* 23:7 F 22 '43
 Will create new post-war markets. F. V. Wilson, Jr. *Am Bld* 65:43+ Mr '43

Labor conditions

Building industry; White paper on post-war training facilities. *Electrician* 130:251-2 Mr 5 '43
 Building trades strike ended by FPHA's drastic action. *Eng N* 131:509+ O 7 '43
 Construction employment declines in most large industrial centers. *Eng N* 131:296 Ag 19 '43
 Construction wage rates and trends; 1910-1942. *Eng N* 130:604, 606, 608, 610 Ap 22 '43
 Employment and materials, 1942. *Eng N* 130: 226 F 11 '43
 Employment of professional and technical personnel in contract construction. *Monthly Labor R* 55:932-5 N '42
 Essential occupations listed for construction industry. *Eng N* 129:667-8 N 12 '42

Guaranteed work; Chicago electrical group campaigns for maintenance men of other trades. *Business Week* p82 F 13 '43
 Hours and welfare conditions on building sites in Great Britain. *Int Labour R* 47: 240-3 F '43

Manpower in construction. L. E. Brigham. *Civil Eng* 13:485-7, 541-3 O-N '43
 Physical examinations pay dividends; construction workers on ordnance plant. W. H. D. Hinchman. *Eng N* 130:372-3 Mr 11 '43; Same. *Ind Med* 12:153-4 Mr '43; Same cond. *Nat Safety N* 47:34, 36 Ap '43
 Reorganisation of apprenticeship in the building industry of Great Britain. G. D. H. Cole. *Int Labour R* 48:174-200 Ag '43
 Skilled and common wage rates, per hour. Published in *Engineering news-record*, first technical issue of each month
 Union wages and hours in the building trades, July 1, 1942. K. B. Mohn and A. V. Simi. *Monthly Labor R* 55:1251-78 D '42
 Wage adjustment board reconstituted to handle private work. *Eng N* 131:577 O 21 '43
 Wage rates in building trades; asbestos workers, common laborers, plumbers, roofers, sheet metal workers, and steam fitters, as of July 1, 1942. *Sheet Metal Worker* 34: 42 Ja '43
 WLE clarifies wage order for government building industry. *Comm & Fin Chr* 157: 294 Ja 21 '43
 WLB order clarifies status of construction worker pay. *Eng N* 129:587 N 19 '42
 War manpower commission approves interim plan on construction workers draft. *Eng N* 129:827-8 D 17 '42
 WMC's new job change order will benefit construction. *Eng N* 130:531 Ap 22 '43

Securities

Coming building boom; which companies will profit most? position of bidding equipment shares. G. W. Mathis. *Il Mag of Wall St* 72:572-5+ S 4 '43
 War building volume past its peak; position of leading building equipment shares. *Il Mag of Wall St* 71:591-3+ Mr 6 '43

Statistics

Builders of 1-family houses in 11 areas, 1940 and 1941. A. C. Findlay. *Monthly Labor R* 56:801-7 Ap '43
 Record ENR volume tops \$9 billion, 1942. *Eng N* 130:221-5 F 11 '43
 What a million homes a year will mean in jobs and building material sales. *Am Bld* 65:80-1 O '43

Germany

Todd 1st tot; breakdown of German building. *Il Arch Forum* 79:62+ O '43

Great Britain

Building industry; White paper on post-war training facilities. *Electrician* 130:251-2 Mr 5 '43
 Control of building materials. *Economist* 145: 86 J1 17 '43
 Engineering outlook; structural engineering. *Engineering* 155:222-3 Mr 19 '43
 Post-war building. *Economist* 144:766 Je 12 '43
 Reorganisation of apprenticeship in the building industry of Great Britain. G. D. H. Cole. *Int Labour R* 48:174-200 Ag '43
 Ten-year building plan. *Economist* 144:290 Mr 6 '43
 White paper on building postwar. *Arch Forum* 78:54 Je '43

United States

America's builders speak on post-war home building. J. B. Mason. *Il Am Bld* 65:32-5+ My '43
 And now, construction industry is licensed; new pricing formula set up under MPR-251. *Am Bld* 64:45, 75-7 D '42
 Builders demand war housing action; suggestions to make housing program work. *Il plan Am Bld* 65:28-9+ F '43
 Building industry in war and post-war. W. Gates. *Il Mag of Wall St* 72:183-6+ My 29 '43
 Building industry, key to private enterprise; greatest potential producer of post-war employment. *Il Am Bld* 65:74-5+ O '43

BUILDING trades—United States—Continued

Coming building boom; which companies will profit most? position of building equipment shares. G. W. Mathis. *Il Mag of Wall St* 72:572-5+ S 4 '43

Construction industry's biggest job during 1943. O. B. Coblentz. *Concrete* 51:34+ Ap '43

Construction under war controls, 1942. R. B. Colborn. *Eng N* 130:194-6 F 11 '43

Easier building; Brown moving to nullify price control on construction. *Business Week* p26+ Ap 3 '43

Functions, factors and futures; reshaping the building industry for its war and post-war tasks. *Arch Rec* 92:32-6 N '42

Home builders assured on war housing aid. *Comm & Fin Chr* 157:581 F 11 '43

Home building wave of the future. W. C. Bober. *Il Am Bld* 65:32-4+ Ja; 54+ F '43

How many postwar houses? T. S. Holden. *Arch Rec* 94:50-1+ S '43

How to create jobs and prosperity after the war. S. O. Dunn. *Il Am Bld* 65:76-7+ O '43

Immediate war building job; 1942 review, 1943 prospect. *Il Am Bld* 65:35 Ja '43

It's not too soon to start lifting building restrictions; an open letter to Donald M. Nelson. *Brick & Clay Rec* 102:11-12 Ap '43

Million houses, more or less; potential market for postwar houses. R. Newcomb. *Arch Rec* 94:48-51 JI '43

Post-war planning for construction; university training in merchandizing and salesmanship needed; abstract. A. A. Hood. *Sheet Metal Worker* 33:40+ N '42

Postwar realism vs. romance. T. S. Holden. *Arch Rec* 93:60+ Ap '43

Pre-fab homes a postwar opportunity. B. Dahlberg. *Il Am Business* 13:8-10+ JI '43

Prefabrication; assembly lines reach out for markets. D. Haskell. *Il Arch Rec* 93:62-9 Je '43

Price control for construction industry. *Sheet Metal Worker* 33:19+ D '42

Private builder and war housing. *Arch Forum* 78:87-8+ Ap '43

Private enterprise program for post-war home building. *Am Bld* 65:30-1+ My '43

Situation in the building industry. H. Abraham; B. Dahlberg. *Comm & Fin Chr* 157:386, 388 Ja 28 '43

Ten point program to give home building back to private enterprise and assure post-war prosperity. *Il Am Bld* 65:73 O '43

Vigorous action on post-war home front. *Am Bld* 65:32-3+ JI '43

War and post war construction; abstract. T. S. Holden. *Rock Prod* 46:41 F '43

War to peace plan stirs industry thinking on post-war problems. *Am Bld* 65:30-1+ Je '43

What builders are doing in wartime. L. M. Forbes. *Am Bld* 65:38-9 F '43

BUILDINGS

Does modern architecture pay? clients' statements based on their experience. *Il Arch Forum* 79:69-76 S '43

New buildings for 194X; projected designs. *Il* diags plans *Arch Forum* 72:69-152+ My '43

See also

Air raids and building
 Airport buildings
 Apartment houses
 Architecture
 Bank buildings
 Building
 Building
 Capitols
 Churches
 College buildings
 Courthouses
 Dampness in buildings
 Electric service, Rural—Cooperative lines—Buildings
 Electric utilities—Buildings
 Employees' buildings
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 Farm buildings
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 Garages
 Gasoline service stations

Hospitals
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 Public buildings
 Railroads—Buildings and structures
 Recreation buildings
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 Shopping centers
 Society buildings
 Steel buildings
 Steel construction
 Store buildings
 Telephone company buildings
 Warehouses

Cleaning

See also
 Masonry—Cleaning

Damage from air blasts

See Air blast

Employees

Women in public-housekeeping occupations in California; housekeeping occupations in office buildings and department stores. *Monthly Labor R* 56:918-21 My '43

Management

How to charge tenants for extra hour heating in multiple occupancy buildings. R. E. Hieronymus. *Heating-Piping* 15:135-7 Mr '43

How to determine cost of overtime heat in industrial buildings. P. B. Jameson. *Heating-Piping* 15:67-8 F '43

Wrecking

See Wrecking

BUILDINGS, Portable

Air-borne front line hangar. W. B. Larkin. *Il Aero Digest* 42:245+ Je '43

Arctic shelters; new type of light-weight, portable shelter for use by Air Corps personnel. *Il Sci Am* 168:222 My '43

CCC buildings salvaged for army camps. *Il Eng N* 131:162-4 JI 15 '43

Portable camps on skids. J. Hundevad. *Il plans Pulp & Pa of Can* 44:816-18+ O '43

Sectional steel buildings of rigid-frame type. C. H. Louree. *Il diag Civil Eng* 13:436 S '43

Steel-frame portable airplane hangars. W. B. Larkin. *Il Eng N* 130:675-7 My 6 '43

Transformer housings superior to platforms; portable steel house set on a concrete mat. G. H. Landis. *Il diags Elec W* 118:2092-4 D 26 '42

See also

Houses, Portable

BUILDINGS, Prefabricated

Count on prefabricated farm, utility, store, industrial and public buildings. *Il diags Am Bld* 65:46-7 Mr '43

Modulok; compound sheet-insulation in interlocking frames forms single-thickness wall panels. *Il diags plans Arch Forum* 79:65-8 S '43

Prefabricated barracks assembled in 90 minutes. *Il Manuf Rec* 112:31+ Ja '43

Prefabricated panels for packaged buildings. W. von Moltke. *Il diags Arch Rec* 93:50-3 Ap '43

Steel and plywood huts house fighters. *Il diag Am Bld* 65:49+ JI '43

See also

Houses, Prefabricated

BUILDINGS, Remodeled

Wartime face-lifting shows how for later; control office of Southern California telephone co. *Il diags Am Bld* 65:41 Ag '43

BUILDINGS, Temporary

Recruiting station for the United States marines. Detroit. *Il plan Arch Forum* 77:36-7 D '42

BUILT-IN furniture. *See Furniture, Built-in*

BULBS*See also*

Gladiolus

BULGARIA**Economic conditions**

Bulgaria under the Axis. *Economist* 144:13-14 Ja 2 '43

Labor conditions in Bulgaria. A. L. Whitney. *Monthly Labor R* 57:672-88 O '43

BULKHEADS

Bulkhead, Seattle; unit prices. *Eng N* 131:168 JI 15 '43

BULKHEADS (naval architecture)

New design for tanker bulkheads. *diags Engineer* 175:231 Mr 19 '43

Strength of welded T-joints for ships' bulkhead plates. H. B. Fergusson. *Il diags Welding J* 22:sup57-62 F '43

BULLDOZER tractors. *See Tractors*

BULLDOZERS. *See Forging machinery*

BULLETIN boards

Visual education; bulletin boards and film strips teach safety to new and old employees. *il Nat Safety* N 47:185 Mr '43

BULLETS. See Projectiles**BUNA rubber.** See Rubber, Artificial**BUNDLE shippers' service,** Cambridge, Massachusetts

Bundle Shippers merchandise gift boxes for those in service. *Sales Management* 52:56 My 20 '43

BUNGALOWS

Oregon bungalow demonstrates that the basement garage can be a design asset. *il diags plans Arch Forum* 78:84-5 Je '43

BUNYAN, John

Amateur astronomer. *A. G. Ingalls. Sci Am* 168:94-6 F '43

BUOYS

Wooden barrel buoys prove superior. *Franklin Inst J* 236:328-9 S '43

BUREAU of personal accident and health underwriters

Annual meeting, New York, May 26-27. *East Underw* 44:29-30 My 28 '43; *Ins Field (Life ed)* 72:4 Je 4 '43

BURGLAR alarms

Crime detection; electronic devices. *R. P. Turner. Radio N* 30:22+ S '43

Intrusion alarms. *C. E. Jackson. il diags Radio N* 29:14-16+ My '43

Protection of property by electronic methods. *P. M. Farmer. il Electronics* 16:120-2+ Mr '43

Simple alarm systems for the home. *diags Consumers' Research Bul* 11:24-6 Mr; 12:21-4 Ag '43

BURGLARY insurance. See Insurance, Burglary; Insurance, Theft**BURIAL**

See also Undertakers

BURLAP

Burlap is plentiful; U.S. controls imports, but industry governs distribution. *Business Week* p27-30 N 6 '43

New WEB plans for burlap imports. *For Comm W* 12:22 Jl 24 '43

Role of textiles in camouflage. *il Textile World* 93:68-9 Jl '43

BURLINGTON, Vermont**Streets**

Step-by-step photos of street job. *G. C. Stanley. Roads & Sts* 86:51-3 Je '43

BURLINGTON mills corporation

Growth trend. *H. Lawrence. Barron's* 23:6 Ap 12 '43

Preferred stock offered. *Comm & Fin Chr* 157:861-2 Mr 8 '43

Registers with SEC. *Comm & Fin Chr* 157:779 Mr 1 '43

Ten year expansion in fine fabrics field. *il Rayon* 24:361-72 Jl '43

Thumbnail stock appraisal. *Mag of Wall St* 71:422 Ja 23 '43

BURMA

Burma. *J. L. Christian. Ann Am Acad* 226:120-8 Mr '43

See also World war, 1939—Burma

BURNERS

Blast furnace gas burning; Babcock & Wilcox multi-fuel burners. *F. X. Gilg. diags Blast F & Steel Pl* 31:224-8 F '43

Burning of creosote-pitch mixtures. *diags Engineer* 175:352-4 Ap 30 '43

Burning of pitch creosote mixtures; discussion. *Gas J (Lond)* 241:524, 529 Ap 28 '43

Explosion hazards in the chemical industry. *T. A. Cohen. diags Chem & Eng N* 21:302-3 Mr 10 '43

See also Gas burners Oil burners

Control

Photoelectric flame failure safeguard applicable to oil, gas, or pulverized coal burners. *il diags Heating-Piping* 15:sup152+ N '43

BURNS and scalds

Abnormal nitrogen metabolism in burns. *F. H. L. Taylor and others. Science* 91:423 My 7 '43

Biodynes; miracle of wound healing and tissue repair. *L. M. Miller. il Sci Am* 168:14-16 Ja '43

Burns and compound fractures; a review of their closed treatment. *H. H. Alexander, Jr. Ind Med* 12:434-6 Jl '43

Capillary emboli as a lethal factor in burns. *H. Kabat and M. Levine. Science* 96:476-7 N 20 '42

Experimental burns; changes in the phosphorus content and moisture content of muscle. *J. O. Ely. diags Franklin Inst J* 235:416-24 Ap '43

Experimental burns; the influence of a gelatin-glucose-salts solution on the hemoconcentration of burns. *J. O. Ely and A. W. Angulo. Franklin Inst J* 235:197-204 F '43

Experimental chemotherapy of burns and shock; effects of systemic therapy on early mortality. *S. M. Rosenthal. bibliog Pub Health Rep* 58:513-22 Mr 26 '43

Experimental chemotherapy of burns and shock; methods; effects of local therapy upon mortality from shock. *S. M. Rosenthal. bibliog Pub Health Rep* 57:1923-35 D 18 '42

First aid treatment of shock in severe burns; salt drink treatment. *J. Stafford. Science* 97:sup12 Ap 23 '43

How to handle anhydrous hydrofluoric acid with safety. *C. M. Fehr. Oil & Gas J* 42:42 Jl 22 '43; *Same. Pet Refiner* 22:93-4 Ag '43

Hydrofluoric acid burns. *Ind Med* 12:634 S '43

Industrial burns treated with tannic acid in new package. *Sci Am* 169:175 O '43

Local therapy for industrial burns; series of 96 cases. *G. H. Collings, Jr. Ind Med* 12:301-3 My '43

Magnesium in industry; magnesium burns. *F. J. Jarzynka. bibliog il Ind Med* 12:427-31 Jl '43

Modern treatment of burns. *R. H. Aldrich. J Chem Educ* 20:566-70 N '43

New plaster cast treatment of burns; abstract. *S. M. Levenson and C. C. Lund. Science* 98:sup12 O 8 '43

Quick healing burn treatment; Hexene-ol. *B. Levine. Iron Age* 151:69 F 11 '43

Safety organization in the mill. *J. F. Holmes. Textile Col* 64:589-94+ D '42

Sulfa drug film for surgical dressing on burns. *J. Stafford. Science* 96:sup 10+ D 4 '42

Sulfonamides in the treatment of war wounds and burns. *C. L. Fox, Jr. Special Lib* 34:244-7 Jl-Ag '43

Treatment of burns; abstract. *E. G. Håkansson. Oil Paint & Drug Rep* 143:52B My 10 '43

Treatment of burns and wounds. *Science* 98:sup9 J 30 '43

BURROUGHS adding machine company

Earnings and dividends. *H. Lawrence. Barron's* 23:5 Mr 15 '43

BURRS

Cemented-carbide burring tools. *il Iron Age* 152:69 S 16 '43

BURT, Sir Bryce Chudleigh, 1881-1943

Sketch. *R. S. Finlow, Chem Soc J* p200-1 Ap '43

BUSBARS

Abnormal load conditions on bus. *W. Deans. Elec W* 119:484+ F 6 '43

Bus construction of welded wrought-iron pipe. *J. A. Gerber. il Elec W* 120:988-9 S 18 '43

Busway plant distribution. *L. Siebert. il diags Elec West* 89:64-5 D '42; 90:44-5 Ja '43

Conductor material for buses. *W. Deans. Elec W* 118:2120 D 26 '42

D.c. on live a.c. bus to locate grounds. *W. C. Noddings. diags Elec W* 120:500 Ag 7 '43

Formulas for calculating short-circuit forces between conductors of structural shape. *T. J. Higgins. bibliog diags Elec Eng* 62:Trans 659-63 O '43

Formulas for the geometric mean distances of rectangular areas and of line segments. *T. J. Higgins. J Ap Phys* 14:188-95 Ap '43

BUSBARS—Continued

- How to arrange bus conductors for an a.c. system. W. Deans. *il Elec W* 119:986 Mr 20 '43
- How to dissipate heat energy in buses. W. Deans. *Elec W* 119:82 Ja 9 '43
- Interfering buses skillfully joined. *il Elec W* 120:671 Ag 21 '43
- Mechanical forces on buses due to fault currents. S. C. Killian. *diags Elec W* 118:1335-40 D 12 '42
- New formulas for calculating short-circuit stresses in bus supports for rectangular tubular conductors. T. J. Higgins. *diag J Ap Phys* 14:151-4 Mr '43
- Paired-phase bus bars for large polyphase currents. L. E. Fisher and R. L. Frank. *bibliog il diags Elec Eng* 62:Trans 71-7 F '43
- Practical shapes of d.c. bus conductors. W. Deans. *il Elec W* 119:794+ Mr 6 '43
- Reactors in busbars; their effect on circuit-breaker rating. *diag Elec R (Lond)* 132:408 Mr 26 '43
- Skin and proximity effects on buses. W. Deans. *Elec W* 119:640+ F 20 '43
- Switching station modified to save copper and steel; treated timbers for structures and galvanized conduit for buses. P. H. Adams. *il diag Elec W* 119:1946-9 Je 12 '43
- Temperature rise of conductors for buses. W. Deans. *Elec W* 119:300+ Ja 23 '43
- Three-winding transformer ring-bus characteristics. G. W. Bills and C. A. MacArthur. *diags Elec Eng* 61:Trans 848-9 D 42
- Transformer buses on columns cut substitution steelwork in two. *il diags Elec W* 119:1770-1 Mr 29 '43
- What shape conductors for electrical busbars? W. Deans. *il diags Power* 87:87-90 F '43

Protection

- Busbar protection; abstract. M. Kaufmann and W. Szwander. *Elec R (Lond)* 132:288 F 26 '43; Discussion. *Electrician* 130:221-3 F 26 '43
- Damage local and less with fault bus relaying. I. C. Eppley. *il diags Elec W* 120:633-4 Ag 21 '43
- Linear couplers used for bus protection. W. K. Sonnemann. *diag Elec W* 120:110+ J1 10 '43

BUSH, Vannevar, 1890-

- Portrait. *J Ap Phys* 14:389 Ag '43

BUSHINGS

- Bushing driver eliminates damaged threads; aluminum casting of Rolls-Royce engines. M. J. Brenner. *diags Am Mach* 87:103 Je 24 '43
- Bushing salvage method wins \$25 war bond; winner is M. F. Craney, Eau Claire transportation company. *il Bus Transportation* 22:50-2 F '43
- Bushings, inc. formed to make Rubberflex bushings. *il Iron Age* 150:53 D 31 '42
- Centrifugal casting of bushings; abstract. *diags Mech Eng* 65:817-18 N '43
- Cone bushing fits oversize pulleys. M. H. Ball. *diag Am Mach* 87:107 Je 10 '43
- Foreign bushing offered generally in U.S.; Rubberflex. *Steel* 111:92 D 28 '42
- Making pipe bushings from standard pipe. *Water Works & Sewerage* 90:sup77 Je '43
- Rubberflex bushings. *il India Rubber W* 108:272 Je '43
- Tool sets brass bushings. H. W. Stowell. *diags Am Mach* 86:1297-8 N 12 '42
- Wearproofing cast iron bushings. G. C. Masters. *Am Mach* 87:160 J1 8 '43
- Wrench for threaded bushing. M. Crawford. *diag Am Mach* 86:1364-5 N 26 '42

BUSHINGS, Insulating

- How to maintain bushings. L. Wetherill and C. W. Davis. *Elec W* 120:1542 O 30 '43
- Oil-impregnated-paper high-voltage condenser bushings for circuit breakers and transformers. H. J. Lingal, H. L. Cole and T. R. Watts. *bibliog diags Elec Eng* 62:Trans 269-75 Je '43
- Rebuilding old transformer bushings. *Elec W* 119:94+ Ja 9 '43
- Sealed glass bushings. W. W. Grigorieff and C. M. Lampman, jr. *bibliog il diags Am Cer Soc J* 26:83-7 Mr 1 '43

Simple method for the determination of bushing-current-transformer characteristics. S. D. Moreton. *bibliog Elec Eng* 62:Trans 581-5 S '43

BUSINESS

- Business at the crossroads. A. May. *Manuf Rec* 112:34+ Je '43
- Business has a story to tell; production for war. *Trusts & Estates* 76:35-6 Ja '43
- Grin and bear it; or, be ingenious? F. R. Coutant. *il Adv & Sell* 36:84 My '43
- Impact of war on advertising. *Adv & Sell* 35:19-21 D '42; 36:113-16 F '43
- War products from peace profits. E. Johnston. *Trusts & Estates* 75:551-2 D '42
- What business can do to control inflation and remain profitable. F. F. Hoyt. *Trusts & Estates* 76:504-6 Je '43
- What program does business have? C. Davidson. *Trusts & Estates* 75:457-9 N '42
- What war does to business births and deaths; abstract. W. Mitchell, jr. *Management R* 32:28-9 Ja '43

See also

- | | |
|------------------------------------|--------------------------|
| Accounting | Income |
| Advertising | Income tax |
| Auditing | Industrial management |
| Billing | Industry |
| Budget, Business | Instalment plan |
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| beginning Business | Inventories |
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| Executives | Salesmanship |
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| Finance | Speculation |
| Financial statements | Taxation |
| Government aid to business | Time saving |
| Government regulation of industry | Trade associations |
| House organs | Trade marks |
| | Trust companies |
| | Trusts, Industrial |
| | War—Economic aspects |

Bibliography

- Business reference publications; trade directories, consolidated catalogs, encyclopedias, and buyers' guides. *Ind Marketing* 27:109-10 O 25 '42
- Economics of reading. A. H. Cole. *Harvard Business R* 21 no4:485-95 [J1] '43

See also

- Business periodicals

Mortality

- Births and deaths in business. W. Mitchell, jr. and W. Hayes. *il map Dun's R* 50:16-19+ N '42
- Effects of the war on the number of business enterprises. W. Hayes. *il map Dun's R* 51:9-11 S '43

See also

- Business failures

New businesses

- Births and deaths in business. W. Mitchell, jr. and W. Hayes. *il map Dun's R* 50:16-19+ N '42
- Impact of the war upon smaller manufacturing plants; firms established since Jan. 1941. H. R. Bowen. *Survey of Cur Business* 23:19-24 S '43

BUSINESS—Continued

Political aspects

Independent oil men wield power. W. C. Platt. Nat Pet N 35:33-4 My 5 '43

Postwar business

Advertising man and postwar. E. L. Andrew. Ind Marketing 28:30-1+ Ag '43
 Aims and aspirations of NAM. N. Sargent. Edison Elec Inst Bul 11:207-10 JI '43
 Alert bankers are postwar planning. R. A. Ilg. Il Burroughs Clearing House 27:16-18+ Ag '43
 America's new industrial empire; problems of peacetime conversion. Index 23 no 3:51-8 [S] '43
 Basis for postwar planning; one-fifth of a nation, government-owned. Business Week p52-8 Je 19 '43
 Bread, butter, and beefsteak! H. McKee. Inland Ptr 111:19-23 JI '43
 Business after the war; billions in deferred demand. A. R. Upgren. Credit & Fin Management 45:4-6 My '43
 Business and credit problems after V-day. P. J. Vigil. Credit & Fin Management 45: 20-3 S '43
 Business budgeting with a view to conversion from wartime to peacetime conditions. V. R. Bechtel. N A C A Bul 24: 1349-75 Ag 1 '43
 Can product-of-the-future advertising hold back V-day lust to buy? Il Ptr Ink 204: 15-16+ JI 23 '43
 Canadian advertisers discourage current demand by showing what peace dollars will buy; traveling exhibits. L. L. Knott. Il Ptr Ink 205:20-1 N 12 '43
 Chain pledges post-war jobs; expansion program all set! Cussins & Fearn, Columbus, plans mass distribution. F. LaClave. Il Ptr Ink 205:17-19 O 29 '43
 Chart your future; what would your company and advertising plans be if you knew if and when the following will occur: collapse of Germany, complete Allied victory, defeat of new deal? B. B. Geyer. Ptr Ink 203:21-4+ Ap 16 '43
 Check list for post-war planning. Am Business 13:12-15 Ja '43
 Collapse or boom at the end of the war? abstracts. H. G. Moulton and K. Schlotterbeck. Management R 32:86-8 Mr '43; East Underw 44:3+ Ap 23 '43
 Coming great shifts in our civilian economy. H. M. Tremaine. Il Mag of Wall St 72:513-15, 547 Ag 21 '43
 Commerce department analysis of post-war marketing presents challenge to advertising. F. LaClave. Ptr Ink 203:17-19 Ap 30 '43
 Complacency, your competitor and the post-war market. M. K. Powers. Il Dun's R 51:11-13+ Ap '43
 Contact with consumers today insures post-war market. J. H. Van Deventer. Sales Management 52:59-60 Ja 15 '43
 Controller views the postwar world; abstract. J. C. Naylor. Management R 31: 402-4 D '42
 Dewey says private enterprise must provide post-war jobs; offers seven-point program for New York. Comm & Fin Chr 158:1221+ S 23 '43
 Dream models will come later; let's press what we'll have on V-day! W. A. Grove. Sales Management 52:18-19 Ap 15 '43
 Editorial on post-war planning; return of opportunity. Il Banking 35:75-8 Ja '43
 Employment quota plan evolved by post-war business committee; abstract. L. H. Rich. Iron Age 151:107-8 Mr 18 '43
 Enamel industry answers the question about its post-war future. Il Cer Ind 40:22-4 F '43
 Enterprise in postwar America; abstract. S. H. Slichter. Management R 32:201-3 Je '43
 Era of unprecedented prosperity predicted for U.S. in new report; markets after the war prepared by Bureau of foreign and domestic commerce. Iron Age 151:100-1 Ap 29 '43
 Fenn college sponsors post-war course for Cleveland executives. Sales Management 52:60-1 Ap 1 '43
 Finding the pattern of postwar markets. D. R. G. Cowan. Ind Marketing 28:80, 84+ Ja '43

Foreign trade after the war. A. Maffry and H. B. Lary. U S Bur For & Dom Com, Economic Ser 28:1-22 '43
 Fortune management poll; executives consider postwar prospects. Fortune 28:12, 18+ O '43; Abstract. Management R 32:442-4 D '43
 Has business been dodging its proper political responsibilities? L. Ruthenburg. Sales Management 52:24-6 Ja 15 '43
 Holding customers when you cannot serve them. E. Whitmore. Il Am Business 13:10-12 My '43
 How designers can benefit through C.E.D. activities. Product Eng 14:539-42 S '43
 How should industrial firms plan their postwar growth? J. A. Murphy. Il Adv & Sell 36:19-20+ My '43
 How six companies approach post-war planning. Am Business 13:28, 30-1 Ap '43
 How to assure postwar prosperity; extracts from National association of manufacturers booklet, Jobs, freedom, opportunity. Ry Age 114:859-61 My 1 '43
 If Germany falls this year, what about industry? business? your investments? L. Stern. Il Mag of Wall St 72:280-4+ Je 26 '43
 Industrial reconversion after war can be met by American business leaders. J. A. Stevenson. Comm & Fin Chr 158:1223 S 23 '43
 Industry has every chance to meet successfully, challenge of post-war production, employment. P. G. Hoffman. Comm & Fin Chr 157:1968 My 27 '43
 Industry looks to new postwar fields. Adv & Sell 36:130 O '43
 Industry must prepare to shoulder tremendous task. J. C. Sullivan. Il Steel 113:86-7+ Ag 2 '43
 Industry plans for the future. P. G. Hoffman. Mach 50:167-70 S '43
 Industry's capacity to meet postwar needs. Management R 32:51-2 F '43
 Industry's post-war conversion assets. V. Catozella. Barron's 23:3, 8 Ag 16 '43
 International factors in post-war business. A. W. Zelonek. Ptr Ink 205:79-80+ O 29 '43
 Invasion to nip civilians; allied armies will have to replace rail, power, farm, and many other types of equipment. Business Week p62+ Je 12 '43
 Is Joe Doakes a member of your post-war planning committee? D. Belding. Sales Management 52:40-2 My 1 '43
 Is too much of our post-war planning based on hope rather than reality? W. H. Lough. Sales Management 52:46, 48-9 Je 1 '43
 Large backlogs of demand expected for reconstruction period, says Conference board. Comm & Fin Chr 157:2188 Je 10 '43
 Leaders chart post-war plans. Am Business 13:18-19 F '43
 Length of post-war boom in various industries. E. A. Krauss. Il Mag of Wall St 72: 504-6+ Ag 21 '43
 Looking into the post-war world. J. F. Fennelly. Comm & Fin Chr 158:1870+ N 11 '43; Same abr. Inv Banking 14:18-22 N '43
 Manufacturers plan future: Canadian manufacturers association meeting. Can Chem & Process Ind 27:333-5+ Je '43
 Marketing's role in solving the postwar problems of industry. E. L. Lindseth. Ind Marketing 28:35-8 Ag '43
 Markets after the war; review of Mr Livingston's report. P. T. Cherington. Adv & Sell 36:34+ My '43
 Massachusetts prepares for tomorrow. J. W. Culliton. Harvard Business R 21 no 3:298-308 [Ap] '43
 National advertising and post-war planning. F. E. Drake. Il Gas Age 91:17-18 Mr 25 '43
 New frontiers of business development; government must accord freedom needed by business. E. Schram. Comm & Fin Chr 158:997+ S 9 '43
 Oil's postwar outlook. J. P. O'Donnell. Il Oil & Gas J 41:22-4, 38 Mr 4 '43
 Pacific coast electrical association launches postwar program. S. E. Gates. Elec West 90:57-9 Ap '43
 Past is perilous pattern for post-war planning. D. R. G. Cowan. Ptr Ink 202:15-13 Ja 8 '43
 People, homes and post-war appliance market. A. Hirose. Gas Age 91:25-30 Je 3 '43

BUSINESS—Postwar business—Continued

- People's wants and desires in the postwar market. A. Hirose. Adv & Sell 36:84 Je '43
- Plan A for postwar planning; who's in C.E.D., how it will operate, what it's doing, what to expect of it; report to executives. Business Week p27-9+ Ja 2 '43
- Planning now for the business of peace. S. W. Seeley. Adv & Sell 36:44, 46 Ja '43
- Post-war balance sheet. J. Miller. Credit & Fin Management 45:24-6 S '43
- Post-war boom seen by Commerce dept. Comm & Fin Chr 157:1780 My 13 '43
- Post-war demand for power. M. L. Sindelband. Edison Elec Inst Bul 11:295-6+ O '43
- Post-war developments of greatest importance in industry seen by Guaranty Trust. Comm & Fin Chr 158:903 S 2 '43
- Postwar industrial development. G. A. Sloan. Mech Eng 65:163-5 Mr '43
- Post-war investment opportunities. S. H. Slichter. Comm & Fin Chr 157:1473+ Ap 22 '43; Same. East Underw 44:3+ Ap 23 '43; Same. Trusts & Estates 76:146-18 My '43
- Post-war job number 2; more friends for business. Il Am Business 13:16-18, 40 Ap '43
- Post-war markets for food products. J. H. Stehman. Credit & Fin Management 45:15-17+ Je '43
- Post-war outlook for jobs. J. Hirsch. Barron's 23:3+ Jl 19 '43; Same cond. Management R 32:278-80 Ag '43
- Post-war outlook with special reference to savings and investments. R. W. Robey. Comm & Fin Chr 158:1781, 1790-1+ N 4 '43
- Post-war period one of greatest expansion for independent merchants. W. P. O'Neill. Comm & Fin Chr 157:2384-6 Je 24 '43
- Postwar planning and the electric industry. E. Vennard. Edison Elec Inst Bul 11:159-64 Je '43
- Post-war planning for the plumbing, heating and air conditioning industry; analysis and information bulletin. Dom Eng 161:41 F '43
- Post-war planning problems; electronics industries. W. MacDonald. Electronics 16:72-3+ My '43
- Postwar planning receives impetus as United Nations take offensive. Steel 112:24, 26-7 Ja 25; 60, 62-3 F 1; 60, 62-3 F 8; 58-9 F 15; 50, 52-3 F 22; 66+ Mr 1; 64, 66; 7 Mr 8; 66, 68-71 Mr 15; 40, 42-3 Mr 22; 42, 44-5 Mr 29 '43
- Postwar planning within business concerns. W. S. Landis. Chem & Met Eng 50:105-7 Ap '43
- Postwar plans. Business Week p91 Ja 30 '43
- Postwar products planning and raw materials sources. C. E. Williams. Min & Met 24:268-70 Je '43; Same, with Il. Chem & Eng N 21:1035-40 Jl 10 '43
- Postwar quiz for executives. Am Business 13:18 Ag '43
- Postwar readjustments. M. T. Copeland. Oil Paint & Drug Rep 144:46+ O 11 '43
- Post-war selling offers dazzling opportunity. G. A. Nichols. Ptr Ink 201:13-15, 54-5 D 25 '42
- Potentials present for era of unparalleled peacetime prosperity described in Markets after the war, a volume released by Bureau of foreign and domestic commerce. Steel 112:70-1+ My 3 '43
- Preparation for post-war progress. L. M. Cherne. N A C A Bul 24:1315-30 Jl 15 '43
- Preparing for after war conditions; rules for businessmen. R. W. Babson. Comm & Fin Chr 157:2287 Je 17 '43
- Present savings and postwar markets. S. H. Slichter. Harvard Business R 22 no 1:1-73 pt 2 [O] '43
- Price fixing curbs production and leads to rationing; postwar planning problems of the retailer. C. F. Ross. Comm & Fin Chr 158:1+ Jl 1 '43
- Printing industry in immediate post-war period; abstract. S. H. Slichter. Inland Ptr 112:35-7 O '43
- Problems business should consider. J. H. Greene. Am Cer Soc Bul 22:177-80 Je 15 '43
- Projecting business trends in the early peace period. W. Gates. Mag of Wall St 72:664-6+ O 2 '43
- Question of national fiscal and monetary policy in relation to business and employment vital. B. Ruml. Comm & Fin Chr 157:1975 My 27 '43
- Recommends individual post-war planning; planning from the industrial point of view. L. du Pont. Comm & Fin Chr 157:2181, 2184-5 Je 10 '43
- Retail credit in the postwar world. C. N. Schmalz. Harvard Business R 22 no 1:63-74 [O] '43
- Return of the future; excerpts from Return of opportunity. S. C. Allyn and others. Il Banking 36:53-54 S '43
- Sales managers, it's up to you! to keep the number of workers you are obligated to, employed. G. S. Jones, Jr. Ptr Ink 202:38+ Mr 19 '43
- San Francisco's post-war workpile; what it is and how it's being built. E. Gidlow. Sales Management 52:21-3 My 20 '43
- Seven major trends to watch in post-war distribution. B. Bigelow. Il Sales Management 52:18-21 Ag 1 '43
- Shape of post-war private enterprise. L. Stern. Mag of Wall St 71:333-5+ Ja 9 '43
- Some aspects of post-war business; how will world peace affect the United States? C. H. Minor. Credit & Fin Management 45:4-6+ Mr '43
- Survey shows investment dealer looking to substantial increase in post-war business. Comm & Fin Chr 158:407 Jl 29 '43
- Ten major musts for post-war sales managers. H. Simmons. Ptr Ink 204:17-18, 78, 80 Ag 27 '43
- Three-way postwar planners; report to executives. Business Week p42, 44+ Jl 31 '43
- Transition from war to peace. Comm & Fin Chr 158:1297+ S 30 '43
- U. of M. Detroit commerce board, sponsor industrial clinics. Sales Management 52:56+ Jl 1 '43
- War and post war construction; abstract. T. S. Holden. Rock Prod 46:41 F '43
- War bonds for economic stability; American marketing association proposes sale of special victory merchandise bonds in conjunction with advance sale of post-war durable merchandise. R. J. McFall. Edison Elec Inst Bul 11:169-75 Je '43
- War financing and post-war business outlook. A. R. Uppgren. Bankers M 146:239-46 Mr '43; Excerpts. Comm & Fin Chr 157:764 F 25 '43
- Warborn products and materials presage post-war wonders. T. G. Joslin. Sales Management 52:55-6 Ja 15 '43
- Wartime guides for your business; preparing for a post-war world. W. H. Hillyer. Barron's 23:5 Mr 8 '43
- Wartime savings and post-war markets. S. M. Livingston. Survey of Cur Business 23:12-18 S '43
- Wealthy wage earner. E. R. Smith. Ptr Ink 203:15-17+ Ap 16; 17-29 Ap 23 '43
- What and when? B. B. Geyer. Gas Age 91:37-9 My 20 '43
- What are the post-war prospects for business in this country? F. C. Crawford. Dun's R 51:7-8 S '43
- What pattern for post-war business? R. R. McCoy. Credit & Fin Management 45:15-16 O '43
- What war-born consumer habits will do to retailing. B. E. Puckett. Ptr Ink 205:98-9 O 8 '43
- What will the postwar consumer want? D. Dailey. Adv & Sell 36:54+ Je '43
- Where advertising agencies fit into postwar planning. L. D. H. Weld. Adv & Sell 36:38+ Je '43
- Will markets for goods and services be different in the postwar period? A. F. Hirose. Special Lib 34:225-31 Jl-Ag '43
- Winning the war, then what? A. J. Tuscany. Foundry 71:94+ My '43
- Your business after the war. E. Whitmore. Il Am Business 13:7-10, 24 Ja '43

See also
Nugent plan
Planning

BUSINESS—Postwar business—Continued*Bibliography*

Selected bibliography on postwar planning; sampling of books, pamphlets, magazine and newspaper articles by National planning association, Washington. Steel 112:66, 68-71 Mr 15 '43

Reports to government

Committee for the review of data requests from industry eliminates, simplifies 40 per cent of voluminous WPB forms. Steel 111: 56+ D 14 '42

Drug manufacturers complain about OPA questionnaire mess. Oil Paint & Drug Rep 142:3+ D 7 '42

Federal report services will be coordinated. Comm & Fin Chr 157:68 Ja 7 '43

Financial reports to the OPA. W. W. Werntz. J Account 74:511-16 D '42

Industry advocate to aid on business questionnaires. Comm & Fin Chr 157:70 Ja 7 '43

Living with the bureaucrats; private business is learning how to adapt to increasing regulation. S. A. Weart. Barron's 23:7 F 15 '43

Rationalization of government questionnaires. S. A. Rice and H. Venneman. N A C A Bul 24:1225-35 Je 15 '43

Shall we kill the questionnaire that lays the golden fact? V. D. Reed. Ptr Ink 202:14 Ja 15 '43

Thousands of man days spent answering government questionnaires, executives report. Comm & Fin Chr 157:931 Mr 11 '43

Washington bank protests WLB red tape; paper work required by government held needless. Comm & Fin Chr 156:2329+ D 31 '42

Small business

Accounting problems of the small business. M. H. Stans. J Account 76:230-9 S '43

ABA to aid in solving small plants problem. Comm & Fin Chr 158:40 Jl 1 '43

Bank aid to small business. R. W. Johnson. Banking 36:69 Jl '43

Can small business work with big business? E. Whitmore. Il Am Business 15:10-12+ Ap '43

Constructive credit for small business; essential ingredient of the post-war reconstruction program. W. Sheperdson. Credit & Fin Management 45:15-18 Mr '43

Credit phases of small business; what will be small retailers status after war? J. S. Thomas. Credit & Fin Management 45:22+ N '43

Finds war conditions peril small business. Comm & Fin Chr 155:2328 D 31 '42

Five that were small; independent enterprises that have risen capably to the demands of war. Il Fortune 27:129-39 Je '43

Future of small businessmen. R. W. Babson. Comm & Fin Chr 158:605+ Ag 12 '43

Hope extended to small plants not making war goods. Steel 112:432+ Ja 4 '43

How & why behind Pacific Light's Good neighbor program; practical assistance to little business, and agriculture. Sales Management 52:38-40 My 20 '43

Impact of the war upon smaller manufacturing plants. H. R. Bowen. Survey of Cur Business 23:19-24 Jl; 19-24 S '43

Industry has every chance to meet successfully, challenge of post-war production, employment. P. G. Hoffman. Comm & Fin Chr 157:1968 My 27 '43

Johnson resigns as small plants head; cites five problems still facing SWPC. Comm & Fin Chr 158:1714 O 28 '43

Jones endorses bill for Assistant secretary of commerce for small business. Comm & Fin Chr 157:2084 Je 3 '43

NACM locals respond to appeal for assistance by SWPC. Credit & Fin Management 45: 20+ O '43

New hope for small business in war program aroused by Johnson appointment. E. Blair. Barron's 23:4 Ja 25 '43

Post-war credit for small business. W. Mitchell. Banking 35:29-30 My '43

Saving small industry as future customers. H. M. Sawyer. Edison Elec Inst Bul 11: 200-2+ Jl '43

Small business, a national asset. U S Bur For & Dom Com, Economic Ser 24:1-36 '43

Small business and renegotiation. W. T. Hedlund. Business Week p107 F 13 '43

Small business group to work with OPA. Comm & Fin Chr 158:334 Jl 22 '43

Small business in the postwar era. Sheet Metal Worker 34:46+ Jl '43

Small business' new problem. Business Week p15-17 O 16 '43

Small plants' share in service contracts up. Comm & Fin Chr 158:612 Ag 12 '43

Small war plants may use ads to reach one another; Colonel Johnson plan. Ptr Ink 203:24 Ap 2 '43

Sounding board; small business men hurl their brickbats at Murray committee. Business Week p17 Ja 30 '43

Thousands of small businesses won't come back. T. K. Quinn. Adv & Sell 36:24+ My '43

Three steps to aid small business in war. Comm & Fin Chr 157:1318 Ap 8 '43

Trials for small business in war economy. E. J. Stewart. Credit & Fin Management 45:30+ F '43

WPB controlled material plan designed to aid small business in overcoming supply problems. H. H. Helmann. Comm & Fin Chr 156:1895 N 26 '42

Wartime guides for your business. W. H. Hillier. Barron's 22:3-4 O 26; 7 N 2; 7-8 N 9; 5-6 N 16; 8 N 23; 7 N 30; 4 D 7; 20 D 14; 3 D 21 '42; 23:8 Ja 4; 7 Ja 18; 7 F 1; 11 F 8; 9 F 15; 6 F 22; 5 Mr 8 '43

Yeast of the economy. Fortune 23:116-17 S '43

See also

Smaller war plants corporation

BUSINESS budget. See Budget, Business

BUSINESS conditions

Business and finance speaks after the turn of the year; symposium on 1943 prospects. Comm & Fin Chr 157:386-99 Ja 28 '43

Business and the war; some effects on manufacturing. W. Hayes and R. Wyant. Dun's R 50:17-19 D '42

Business trend. Published in weekly numbers of Steel

Business Week index revised. Business Week p14 N 6 '43

Course of trade and speculation and bank clearings in 1942. Comm & Fin Chr 157: 399-400+ Ja 28 '43

Fourth quarter business outlook. W. Gates. Mag of Wall St 72:612-14+ S 18 '43

Growth companies and their future. H. F. Travis. Il Mag of Wall St 72:126-8+ My 15 '43

How 22 industries line up at start of 1943; volume of business, prices and profit margins, 1942 results, war prospects, peace prospects. Barron's 23:36-7 Ja 11 '43

National summary of business conditions. Published in monthly numbers of Federal reserve bulletin

1943 preview of business and industry. G. W. Mathis. Mag of Wall St 71:263-70+ D 26 '42

Pattern for 1943. Nat City Bank p 1-4 Ja '43

Review of the month. Published in monthly numbers of Federal reserve bulletin

State of trade. Published in weekly Thursday numbers of Commercial & financial chronicle

Survey of current business; 1942 supplement. Survey of Cur Business 1942 Sup p 1-271 (pa 50c)

This thing might last 5 to 10 years; trend of stock market upward. Comm & Fin Chr 157:1859+ My 20 '43

Which industries offer best prospects for 1943? G. W. Mathis. Il Mag of Wall St 71: 328-32, 377-80 Ja 9 '43

See also

Business cycles	Index numbers (eco-
Business failures	nomics)
Business forecasting	Inflation (finance)
Business statistics	Market statistics
Export trade	Prices

BUSINESS conferences

Ritual of conferences; how to organize and hold a conference. W. B. Finney. Ptr Ink 204:25-6 S 17 '43

BUSINESS consolidations

Giant communications triumvirate planned; Postal-Western merger foreshadows reshuffling of phone, telegraph and world services. O. J. Gingold. *Barron's* 23:3 *Je* 7 '43

Growing concentration of industrial production. H. L. Blackburn. *Mag of Wall St* 72: 623-5+ *S* 18 '43

It isn't love; object is selfadvantage. *Business Week* p107 *O* 30 '43

Postwar merger? consolidation of cable and radio facilities discussed. *Business Week* p34+ *My* 29 '43

See also

Railroads—Consolidation

BUSINESS consultants

Business consultant. T. H. Brown. *Harvard Business R* 21 no2:183-9 [*Ja*] '43

BUSINESS cycles

Century of prices; business cycle, national income and real wages. H. M. Tremaine. *Mag of Wall St* 72:36-7+ *Ap* 17 '43

Cycles as an aid to postwar planning. E. R. Dewey. *Gen Elec R* 46:264-8 *My* '43

Effect of business fluctuations upon public housing finance; low-rent housing in peacetime. N. Nurnberg. *J Land & Pub Util Econ* 19:180-92 *My* '43

Monetary, equilibrium, and business-cycle theory. W. F. Stolper. *R Econ Stat* 25:88-92 *F* '43

Neglected cycle: the transport-building cycle. W. Isard. *bibliog R Econ Stat* 24:149-58 *N* '42

Statistical testing of business-cycle theories. T. Haavelmo. *R Econ Stat* 25:13-18 *F* '43

See also

Business forecasting
Innovations

BUSINESS depression

See also

Business cycles
Business failures
Business management
Unemployment

BUSINESS development office

Central research group in BDO. A. I. Wolff. *East Underw* 44:24 *O* 15 '43

Informing the public on war damage. M. W. Mays. *Weekly Underw* 148:32, 40 *Ja* 2 '43

War Damage educational campaign carried to public all over country. M. W. Mays. *East Underw* 43:66 *D* 11 '42

BUSINESS districts

Would protect central business districts in plan for rebuilding of blighted areas. *Comm & Fin Chr* 158:34 *J* 1 '43

See also

Shopping centers

BUSINESS education

See also

Retail trade—Study
Salesmen—Training
and teaching
Secretaries, Private
also Harvard university—Graduate school
of business administration

Bibliography

Business education index, 1942. E. H. Hughes, ed. 48p *Business education world*, 270 Madison av, New York '43

BUSINESS ethics

Adperson as a consumer teacher. *Ptr Ink* 204: 24 *J* 30 '43

Beware of new sales tricks in the heating business. *Consumers' Research Bul* 12:8 *S* '43

One retailer's creed. J. C. Penney. *J Retailing* 19:1+ *F* '43

See also

Advertising ethics
Cancellation of orders
Misbranding

BUSINESS failures

Canadian failures by provinces, monthly record. Published in Dun's statistical review; summary in Dun's review

Canadian failures by provinces, 1941 and 1942, annual and quarterly; and quarterly record by divisions of industry and by cities. *Dun's Stat R* 7:8, 15 *F* '43

Commercial failures, 1939-1941. Survey of *Cur Business* 1942 *Sup* p66-7 [supplemented in monthly numbers]

Decline in business failures; statistics, 1933-1942. *Economist* 144:119 *Ja* 23 '43

Failures by divisions of industry, city, state, size of liability, and Federal reserve district, 1941 and 1942, and quarterly record by detailed divisions of industry. *Dun's Stat R* 7:8-13 *F* '43

Industrial and commercial failures: current liabilities by industry groups, 1940-May 1943; chart. *Survey of Cur Business* 23:2 *J* 1 '43

Monthly failures by division of industry, city, state, size of liability and Federal reserve district. Published in Dun's statistical review; summary in Dun's review

1942 failures lowest since 1919. *Dun's R* 51:23 *F* '43

Retailers survive; checkup on mortalities. *Business Week* p70+ *J* 10 '43

Small retail store mortality. W. T. Hicks and W. F. Crowder. *U S Bur For & Dom Com, Economic Ser* 22:1-43 '43

Summary of industrial and commercial failures, monthly, 1939-1942. *Dun's Stat R* 7:2 *F* '43

You, your retailers and the future. A. M. Sullivan. *Ptr Ink* 202:15-16, 70 *Mr* 19 '43

See also

Bankruptcy
Railroads—Receiver-ships

BUSINESS forecasting

Chart your future; what would your company and advertising plans be if you knew if and when the following will occur: collapse of Germany, complete Allied victory, defeat of new deal? B. B. Geyer. *Ptr Ink* 203:21-4+ *Ap* 16 '43

Coming peace, a security reappraisal; report by Kerr & company. *Comm & Fin Chr* 158:901, 912-13 *S* 2 '43

How 22 industries line up at start of 1943; volume of business, prices and profit margins, 1942 results, war prospects, peace prospects. *Barron's* 23:36-7 *Ja* 11 '43

Kiplinger, Washington's gloomy prophet. E. Whitmore. *Am Business* 13:10-12+ *Mr* '43

Making money in stock trading; forecasting with statistics. *Barron's* 23:44 *Ja* 11 '43

Use of formula plans for investment timing. H. G. Carpenter. *Trusts & Estates* 76: 363-4, 366-8 *Ap* '43

See also

Budget, Business
Business—Postwar
business
Market research
Market statistics
Sales estimates

BUSINESS history

Are you writing your company's wartime history? it can provide data for production as well as advertising. G. E. Stedman. *Ind Marketing* 28:42, 46 *Ja* '43

BUSINESS hours. *See* Department stores—Hours of business; Retail trade—Hours of business

BUSINESS information

Bureau of foreign and domestic commerce, how it can help you; Division of commercial and economic information. A. R. Hahn. *Sales Management* 52:32, 34+ *S* 15 '43

Making money in stock trading; where and how to get information. *Barron's* 23:7 *F* 8 '43

BUSINESS insurance. *See* Insurance, Business

BUSINESS insurance trusts. *See* Insurance trusts

BUSINESS interruption insurance. *See* Insurance, Use and occupancy

BUSINESS law

Legal adventures of a chemist. *Chem Ind* 52:517-18 *Ap* '43 [cont monthly]

BUSINESS libraries

Conservation in the special library; periodicals, photostats, reprints, company documents, patents. R. C. Cibella. *Special Lib* 34:52-3+ *F* '43

Evaluating library procedures and services; coordination of branch office and home office libraries; Curtis publishing company. M. Hasselberg. *Special Lib* 34:54-6 *F* '43; Discussion. D. C. Binkley. 34:180-1 *My* '43

BUSINESS libraries—Continued

Public library service to business; a comparative study of its development in cities of 70,000 and more. M. C. Manley. 217p \$3.50 Newark public library, Newark, N.J. '42

BUSINESS literature

See also

Business periodicals

BUSINESS management

Check list for post-war planning. *Am Business* 13:12-15 Ja '43

Common blunders of modern business; investigation by the George S. May business foundation. *Am Business* 13:18, 28-9 O '43 (to be cont.)

Controller views the postwar world; abstract. J. C. Naylor. *Management R* 31: 402-4 D '42

Executive responsibility war and post-war. G. L. Wood. *Personnel J* 21:302-13 Mr '43

Financial executive's wartime job. H. C. Perry. *Credit & Fin Management* 45:28-9 My '43

High cost of not managing. *Am Business* 13: 13+ S '43

How Purex escaped starvation from basic materials shortage; making own chlorine and caustic. *Sales Management* 52:58+ JI 15 '43

How to evaluate management in common stock selection. L. O. Hooper. *Mag of Wall St* 71:518-19+ F 20 '43

Managing a business for stockholders through the vicissitudes of inflation. I. Wright. *Comm & Fin Chr* 158:97+ JI 8 '43; Discussion. 158:201+, 299, 402+ JI 15, 22, 29 '43

Multiple management re-examined. T. R. Reid. *Advanced Management* 8:60-3 Ap '43

Nine important problems you and I will face on V-day. L. McCanne. *Sales Management* 51:21-3 N 15 '42

Planning by memory, a mistake; statistical records are not enough. A. Gabor. *J Retailing* 19:89-91 O '43

Post-war planning vital now to avoid chaos when war is won. D. C. Prince. *Sales Management* 51:28+ D 15 '42

Relation of officers' remuneration to company dividends. *Mag of Wall St* 71:701+ Ap 3 '43

Staying in business without war contracts. J. A. Murphy. *Am Business* 12:7-9 D '42

Sterling streamlines corporate setup and makes radical policy changes. L. M. Hughes. *Sales Management* 52:32, 34, 36 Ap 15 '43

Ten years' progress in management; management attitudes. E. H. Schell. *A S M R Trans* 65:258-60 Ap '43

Thirteen mistakes to avoid in your post-war planning. B. Bigelow. *Sales Management* 52:36+ Ap 1 '43

Training men to watch expense. E. Whitmore. *Il Am Business* 13:10-12 O '43

Trustees as business managers; Canadian practice of trustee receivers and reorganization managers. F. R. MacKelcan. *Trusts & Estates* 77:152-6 Ag '43

Wartime guides for your business; three major alternatives under present conditions. W. H. Hillyer. *Barron's* 23:9 F 15 '43

Watch out for granulation of the corporate joints! plea for integration of management, sales, advertising and promotion. F. E. Mullen, I. E. Showerman and C. B. Brown. *Ptr Ink* 204:21-2 JI 30 '43

What business learns from war. B. F. Martin. *Harvard Business R* 21 no 3:358-68 [Ap] '43; Abstract. *Management R* 32:358-60 O '43

What did we do last year? executive. E. Whitmore. *Am Business* 13:16-17 JI '43

What's in your business attic; ideas from past advertising, sales policies, etc. *Adv & Sell* 36:82 Ag '43

See also

Accounting

Auditing

Budget, Business

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Business forecasting

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Collecting of accounts

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Efficiency, Industrial

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Files and filing (documents, etc.)

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Retail trade—Store management

Sales management

Sales policies

Sales promotion

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Expansion problems

Chain pledges post-war jobs; expansion program all set! Cussins & Fearn, Columbus, plans mass distribution. *F. LaClave. Il Ptr Ink* 205:17-19 O 29 '43

Facts behind the Curtiss Candy program of line expansion. O. Schnering. *Il Sales Management* 52:24-6 N 1 '43

See also

Factories—Expansion

BUSINESS men

See also

Executives

BUSINESS names

Post-war expansion plans focus attention on modernizing the company name. F. H. Erbes, Jr. *Ptr Ink* 203:16-17+ Je 11 '43

See also

Corporate names

BUSINESS periodicals

Business magazines in their general uses. (*Business literature* v. 15, no. 10) 2p Business branch, Newark public lib, Newark, N.J. Je '43

See also

Advertising mediums

—Trade journals

Trade journals

BUSINESS reports

Ritual of conferences; how to prepare a business report. W. B. Finney. *Ptr Ink* 204:25-6 S 17 '43

See also

Business—Reports to government

BUSINESS research

That happier tomorrow: if we want it, we must plan today. S. Holme. *Sales Management* 51:18-22 D 15 '42

See also

Advertising research

Committee for economic development

Market research

BUSINESS schools and colleges

See also Harvard university—Graduate school of business administration

BUSINESS statistics

Births and deaths in business. W. Mitchell, Jr. and W. Hayes. *Il map Dun's R* 50:16-19+ N '42

Business indexes; industrial production; construction contracts, employment, etc; index totals, 1919-1941, monthly. Aug. 1939-Dec. 1942. *Fed Res Bul* 29:75 Ja '43 [cont monthly]

Current statistics for Federal reserve chart book on bank credit, money rates, and business. *Fed Res Bul* 29:91-3 Ja '43 [cont monthly]

Effects of the war on the number of business enterprises. W. Hayes. *Il map Dun's R* 51: 9-11 S '43

Materials statistical data control relaxation indicated. *Oil Paint & Drug Rep* 144:7+ S 6 '43

Measurement of business activity in the Puget Sound area. G. I. Butterbaugh. *biblog map J Business* 16:1-72 pt 2 Ap '43

Monthly review of business statistics. Published by Dominion bureau of statistics, Business statistics branch, Ottawa \$1 per year

BUSINESS statistics—Continued

- New uses for business statistics. F. R. Wilson. Special Lib 34:198-203+ JI-Ag '43
Put statistics to work! Census bureau offers valuable aid to business and industry. Steel 112:80-1 My 17 '43
Survey of current business; 1942 supplement. Survey of Cur Business 1942 Sup p 1-271 (pa 50c)

See also

- | | |
|---------------------------|-------------------------|
| Advertising—Statistics | Industrial statistics |
| Business conditions | Manufactures—Statistics |
| Business forecasting | Market research |
| Index numbers (economics) | Market statistics |
| | Prices—Statistics |

BUTADIENE

- Butadiene patent pool pact signed. Oil Paint & Drug Rep 142:3+ D 14 '42
Configuration of 1,3-butadiene. R. S. Rasmussen, D. D. Tunnicliff and R. R. Brattain. *ibid* J Chem Phys 11:432-3 S '43
Economy of petroleum processes compared to alcohol base guided Canadian rubber program. C. D. Howe. Oil & Gas J 42:38-9 JI 15 '43
Hyperconjugation in methyl butadienes as shown by dipole moments. N. B. Hannay and C. P. Smyth. *Am Chem Soc J* 65:1931-4 O '43
Laboratories to investigate ways of controlling butadiene fire hazards. East Underw 44:36 S 17 '43
Petroleum rubber program progressing satisfactorily. H. D. Ralph. Oil & Gas J 41:14-15+ N 26 '42
Polymerization of mixtures of olefins and diolefins in presence of metallic sodium. V. N. Lvov. Oil & Gas J 42:38-9+ JI 8 '43
Prevention of butadiene-air explosions by addition of nitrogen and carbon dioxide. G. W. Jones and R. E. Kennedy. *diag U S Bur Mines Rep of Invest* 3691:1-11 '43
Same abstr. Nat Pet N 35 pt 2:R328-30 JI 7 '43
Raw materials for synthetic rubber intermediates. W. L. Nelson. Oil & Gas J 41:34-5+ N 26 '42
Solubility of sulphur in butadiene-styrene copolymer. I. Williams. India Rubber W 108:35-6 Ap '43
Some physical properties of butadiene and styrene. L. A. Wood and C. F. Higgins. *ibid* India Rubber W 107:475-6 F '43
Structure and ultraviolet spectra of ethylene, butadiene, and their alkyl derivatives. R. S. Mulliken. *ibid* Rs Mod Phys 14:265-74 Ap-JI '42

Analysis

- Automatic leveling bulb lifter for butadiene analysis. W. R. Atwater. *diag Ind & Eng Chem Anal ed* 14:954 D 15 '42
Determination of butadiene in the presence of other unsaturated and saturated gaseous hydrocarbons. J. F. Cuneo and R. L. Switzer. *ibid* Ind & Eng Chem Anal ed 15:508-9 Ag 15 '43
Mass spectrometer for butadiene analysis. *il Electronics* 16:142 S '43; *Science* 98:sup 8-9 Ag 20 '43
Sargent butadiene gas analyzer. *il Rubber Age* 53:78-9 Ap '43
Unsaturation of butadiene and related polymers as determined by iodine chloride addition. A. R. Kemp and H. Peters. *ibid* Ind & Eng Chem Anal ed 15:453-9 JI 15 '43

Manufacture

- Baton Rouge symbol and forecast. *il Pet Refiner* 22:115-20 JI '43
Butadiene. P. K. Frolich and C. E. Morrell. *ibid* *il Chem & Eng N* 21:1138-45 JI 25 '43
Butadiene by the glycol process; abstract. P. J. Kalachov. *Chem & Met Eng* 50:176 JI '43
Butadiene conversion projects involve outlay of \$51,000,000. B. K. Brown. Oil & Gas J 41:57+ Ja 21 '43
Butadiene from grain in pilot plant stage; Schenley distillers corp. at Lawrenceburg, Ind. *il Chem Ind* 53:198-9 Ag '43
Butadiene from petroleum; Baton Rouge refinery of Standard oil co. of Louisiana. *il Chem & Met Eng* 50:104-6 JI '43

- Butadiene production under way at Southern California gas co. plant. H. L. Masser. *flow chart Oil & Gas J* 42:45-6+ O 28 '43
Butyl rubber. *il Nat Pet N* 35 pt 2:R399-401 S 1 '43
Catalytic dehydrogenation of butylene into butadiene; abstract. A. A. Balandin and others. *Chem & Met Eng* 50:198 Ap '43
Cheap butadiene; Schenley advocates bacterial process. *il Business Week* p36 JI 24 '43
Enough synthetic rubber will be made in time. Oil & Gas J 41:140 N 26 '42
Government synthetic rubber plant at Institute, W. Va. R. G. Seaman. *flow charts il India Rubber W* 108:359-62, 457-60, 466 JI-Ag '43
GR-S rubber; West Virginia's synthetic rubber plantation. J. A. Lee. *flow sheet (p 140-3) il Chem & Met Eng* 50:98-102 Je '43
Inspection confirms magnitude of plants on Gulf coast producing war materials. A. L. Foster. *il Oil & Gas J* 42:16+ Je 3 '43
Koppers trains girls for Butadiene division. *il Blast F & Steel Pl* 31:324 Mr '43
Mammoth utilities of unusual design installed at Port Neches plant. J. P. O'Donnell. *il Oil & Gas J* 42:49-50, 53-4 Ag 12 '43
Manufacture of butadiene from ethyl alcohol. J. A. Gamma and T. Inouye. *ibid* (56 references) *flow diag Chem & Met Eng* 49:97-100 D '42; 50:94-7 Ja '43
Methods of manufacturing synthetic-rubber intermediates. C. R. Wagner. *diag Oil & Gas J* 41:44+ N 26 '42
Methods of preparing butadiene. G. Egloff and G. Hulla. *ibid* Oil & Gas J 41:40-1, 43 N 5; 228-33 N 12; 41-4, 46-7 N 19; 124+ N 26; 36, 39-42+ D 3; 45-51 D 10; 36-40, 42-3 D 17; 35-7, 39 D 24 '42
New uses for solvent processes. G. F. Fitzgerald. *ibid* *il Pet Refiner* 22:93-4 O '43
90,000-ton Buna-S plant; project at Institute, W. Va. D. P. Thornton, jr. *il Nat Pet N* 35 pt 2:R358-62 Ag 4 '43
Petroleum in the war. B. K. Brown. *Am Gas J* 159:31-2+ S '43; Same. *Nat Pet N* 35:15-16 My 19 '43
Potential new sources for butadiene; acetylene may prove suitable raw material. H. F. Crow. *Nat Pet N* 35 pt 2:R284-5 Je 2 '43
Preparation of 1,3-butadiene from petroleum and its fractions. S. V. Lebedev and others. *ibid* *diag Oil & Gas J* 41:61, 63, 65, 67 F 11; 76, 78-9, 81 F 25 '43
Production of butadiene. G. Egloff and G. Hulla. *flow chart il Chem Ind* 51:718-24 N '42
Refinery-conversion phase of rubber plans explained; abstracts. B. K. Brown. Oil & Gas J 41:14-15, 23-9 Ja 14 '43; *Nat Pet N* 35:19-20, 22-4 Ja 13 '43
Refinery conversion program for manufacture of butadiene from petroleum; tabulation. *Nat Pet N* 35:22 Ja 20 '43
Safety precautions in manufacturing butadiene. C. E. Starr, jr. *ibid* *Nat Pet N* 35 pt 2:R521-2, R524-5 N 3 '43
Standardized butadiene-from-oil plant goes on stream at Baton Rouge. *il Nat Pet N* 35 pt 2:R314, R316 JI 7 '43
Synthetic-rubber development smoothing out some serious problems. A. L. Foster. *il Oil & Gas J* 41:87-9+ Mr 25 '43
U.S. synthetic rubber program moves forward; government plant at Institute, West Virginia. W. J. Murphy. *il Chem & Eng N* 21:864-77 Je 10 '43
Used equipment speeds Sun butadiene plant construction. J. P. O'Donnell. *il Oil & Gas J* 41:38-9+ N 26 '42
Utilities are a major factor in synthetic-rubber operations; government project for production of butadiene and styrene by Carbide & carbon chemicals corp., and manufacture of Buna-S by United States rubber co. C. O. Willson. *il Oil & Gas J* 42:29-30, 32 Je 3 '43
War-plant yields compared with Lake Charles refinery; report to the Gillette committee; abstracts. B. K. Brown. Oil & Gas J 41:23, 91 Ja 14 '43; *Nat Pet N* 35:24+ Ja 13 '43

BUTADIENE—Manufacture—Continued

War products from natural gas and natural gasoline. P. M. Raigorodsky and F. H. Dotterweich. bibliog diags Oil & Gas J 41:94, 97-8+ Ap 15 '43; Same. Gas Age 92:19-23 JI 29 '43; Same, with additional diags. Pet Refiner 22:83-9 My '43

Storage

Storage and containers for 1, 3-butadiene. diags Chem & Met Eng 49:117-19 N '42

BUTALDEHYDE. See Butyraldehyde**BUTANE**

Analysis of ethylene in presence of butane. J. J. Eberl. Ind & Eng Chem Anal ed 14: 853 N 15 '42

Bottled gas shortage worries West coast. Nat Pet N 35:32 S 29 '43

Butane and pentane content of petroleum products. W. L. Nelson. bibliog Oil & Gas J 42:58, 60 Ag 12 '43

Butane dries up; one oil company will hold all output for essential uses. Business Week p44+ S 18 '43

Butane-fired gas furnace heats huge intracamp bus. il Am Gas J 159:74 O '43

Butane pump-station equipment. P. Reed. il Oil & Gas J 41:43 D 10 '42

Empirical equation for thermodynamic properties of light hydrocarbons and their mixtures; mixtures of methane, ethane, propane, and *n*-butane. M. Benedict, G. B. Webb and L. C. Rubin. bibliog J Chem Phys 10:747-58 D '42

Heat capacities of *n* and hindered rotation in *n*-butane and isobutane. B. P. Dailey and W. A. Felsing. bibliog Am Chem Soc J 65: 44-6 Ja '43

Liquid-vapor equilibrium compositions in hydrogen chloride-*n*-butane system. J. H. Ottenweller, C. Holloway, Jr. and W. Weinrich. bibliog Ind & Eng Chem 35:207-9 F '43

Lone Star's central fractionator concentrates special products from natural gasoline. A. L. Foster. flow chart il Oil & Gas J 42:74, 76, 78+ Ag 26 '43

Low temperature adsorption of nitrogen, oxygen, argon, hydrogen, *n*-butane and carbon dioxide on porous glass and on partially dehydrated chabazite. P. H. Emmett and T. W. DeWitt. bibliog Am Chem Soc J 65:1253-62 JI '43

Normal butane conversion. R. C. Alden. diags Nat Pet N 35 pt 2:R222, R224 My 5 '43; Same. Pet Refiner 22:103-5 My '43; Same. Pet Eng (Ref annual) 14:271-2, 274 JI '43; Same abr. Oil & Gas J 41:59, 62 Ap 29 '43

Plant manufacture of HCl for use in isomerization. flow diag il Oil & Gas J 41:202-3+ Mr 25 '43

Positive-displacement variable-capacity pumps in butane-gasoline pipe-line service. E. A. Koenig. diags Oil & Gas J 42:129-30, 133-4+ S 23 '43

Raman spectra of four pairs of *meso* and *dl* disubstituted butanes. H. J. Taufen, M. J. Murray and F. F. Cleveland. bibliog Am Chem Soc J 65:1130-4 Je '43

Rapid infra-red analytical method for hydrocarbon mixtures and a routine spectrophotometer for plant control; analysis of *n*-butane-isobutane mixtures. R. R. Brat-tain and O. Beeck. il diags J Ap Phys 13: 699-705 N '42

Solubility of hydrogen in *n*-butane. E. E. Nelson and W. S. Bonnell. Ind & Eng Chem 35:204-6 F '43

Surface area of oxide coated cathodes by adsorption of gas at low pressures. L. A. Wooten and C. Brown. diag Am Chem Soc J 65:113-18 Ja '43

Surface tension of *n*-heptane and *n*-butane containing dissolved nitrogen. G. J. Reno and D. L. Katz. bibliog Ind & Eng Chem 35:1091-3 O '43

Viscosity of propane, butane, and isobutane. M. R. Lipkin, J. A. Davison and S. S. Kurtz, Jr. bibliog diags Ind & Eng Chem 34:976-8 Ag '42; Same. Pet Eng (Ref annual) 14:279-80 JI 1 '43

Analysis

Analysis of butane-isobutane mixture. A. W. Francis. bibliog Ind & Eng Chem Anal ed 15:447-8 JI 15 '43; Same. Nat Pet N 35 pt 2:R418+ S 1 '43

BUTANEDIOL. See Butylene glycol

BUTANOL. See Butyl alcohol

BUTANONE

Industrial applications of chemicals and related materials; methylacetone. Oil Paint & Drug Rep 142:70 D 14 '42

Methyl ethyl ketone extraction of rubber. L. E. Cheyney. bibliog Ind & Eng Chem 34: 1426-3 D '42

Rates and temperature coefficients of the hydroxyl ion catalyzed aldol condensation of benzaldehyde with methyl ethyl ketone and acetone. J. D. Gettler and L. P. Hammett. bibliog Am Chem Soc J 65:1824-9 O '43

BUTCHERS

Butchers' wages. Economist 143:585 N 7 '42

BUTENE

Asphalt-polybutene paints. H. C. Evans, D. W. Young and R. L. Holmes. il Ind & Eng Chem 35:481-8 Ap '43

Cadmium (P₄) photosensitized reactions of the lower olefins. D. J. LeRoy and E. W. R. Steacie. bibliog J Chem Phys 10:683-5 N '42

Ionization and dissociation by electron impact: butene-1. D. P. Stevenson. Am Chem Soc J 65:209-12 F '43

Methods of preparing butadiene. G. Egloff and G. Hulla. bibliog Oil & Gas J 41:36, 39-42+ D 3 '42

Role of neighboring groups in replacement reactions; the effects of small amounts of water on the reaction of silver acetate in acetic acid with some butene and cyclohexene derivatives. S. Winstein and R. E. Buckles. bibliog Am Chem Soc J 64:2787-90 D '42

BUTENOIC acid

Normal addition of hydrogen bromide to 3-butenic, 4-pentenic and 5-hexenoic acids in hexane. A. Michael and H. S. Mason. bibliog Am Chem Soc J 65:683-6 Ap '43

BUTLER, Missouri**Water supply**

Fifty-three years' development of a Missouri water plant. C. W. Miller. il Pub Works 74:16-17 Ag '43

BUTLER brothers

Without orders; allocates all scarce merchandise alphabetically among dealers. Business Week p86 JI 3 '43

BUTLER manufacturing company, Kansas City, Missouri

Brave new world, F.O.B.; from Kansas City, Butler manufacturing co. ships ready-made airports of sheet metal, thinks of shipping practically everything. il Fortune 28:124-7, 146+ Ag '43

BUTTE mines. See Copper mines and mining —Montana**BUTTER**

Butter could be made in tropics from butteroil and dry skim milk; abstract. G. E. Holm. Franklin Inst J 234:494 N '42

Butter extenders. Business Week p68 Mr 6 '43

Butter no better. Business Week p37-8 Ag 14 '43

Butter production in Cuba. For Comm W 11: 31 My 29 '43

Butter squeeze. Business Week p 19-20 D 26 '42

Caught in butter; traders failed to heed storm signals. Business Week p89-90 Ja 9 '43

Comparative nutritive value of butter and some vegetable fats. H. J. Deuel, Jr., E. Movitt and L. F. Hallman. bibliog Science 98:139-40 Ag 6 '43

Where the butter goes. Business Week p32 S 11 '43

Prices

Example in butter; principle of fixed area price. Business Week p37-8 F 20 '43

Rationing

Rationing of butter in Canada. Monthly Labor R 56:257 F '43

Statistics

Dairy products, 1938-1941. Survey of Cur Business 1942 Sup p115 [supplemented in monthly numbers]

BUTTER, Renovated

Cloverleaf butter co. v. Patterson, Commissioner of agriculture and industries of Alabama, et al. Pub Health Rep 58:245-6 F 5 '43

BUTTER fat

Rate of bacterial filtration and butterfat concentration in fresh milk during cooling. J. E. Nicholas, R. C. Montgomery and T. G. Anderson. Refrig Eng 45:334-5 My '43

BUTTER substitutes

In lieu of butter; Dyne, new spread, introduced in Madison by university foundation. *il* Business Week p37-8 O 30 '43

See also

Oleomargarine

BUTTERWORTH, Frank Willoughby, 1870-1943
Appreciation. G. A. Bass. por Brick & Clay Rec 102:26-7 Je '43

BUTTONS

Army gets new buttons. *il* Mod Plastics 20: 43-5+ D '42
Melamine again, for buttons and high wet-strength paper. *il* Sci Am 167:280-1 D '42

Advertising

Smart design, smart promotion lend style zip to a staple; what Bailey, Green & Elger are doing to glamorize buttons. O. Boschen. *il* Sales Management 52:22-3 S 1 '43

BUTTONWOOD (conocarpus erectus)

Chestnut extract substitute. A. Russell. Oil Paint & Drug Rep 143:7 Mr 22 '43

BUTYL alcohol

Conversion of an alcohol into the corresponding aldehyde by a less volatile aldehyde with the aluminium alkoxide as catalyst; the influence of an ethylene linkage in the reactant aldehyde. R. R. Davies and H. H. Hodgson. Soc Chem Ind J 62:109-10 Jl '43

Determination of halogens in organic compounds. R. R. Umhoefer. bibliog Ind & Eng Chem Anal ed 15:383-4 Je 15 '43

Fractionation of starch by selective precipitation with butanol. T. J. Schoch. bibliog *il* Am Chem Soc J 64:2957-61 D '42

General method for the synthesis of *t*-butyl esters. B. Abramovitch and others. Am Chem Soc J 65:986 My '43

Spectroscopic evidence of intermolecular transfer of protons. D. Williams and W. D. Stalcup. Am Chem Soc J 64:2684-6 N '42

System water-*n*-butanol-toluene at 30°. R. M. Fuoss. Am Chem Soc J 65:78-81 Ja '43

Vapor-liquid equilibria for commercially important systems of organic solvents; binary systems ethanol-*n*-butanol, acetone-water and isopropanol-water. A. S. Brunjes and M. J. P. Bogart. bibliog Ind & Eng Chem 35:255-60 F '43

Prices

Butyl alcohol pricing pool formed. Oil Paint & Drug Rep 144:5+ O 18 '43

BUTYLAMINE

Preparation of mixed, secondary aliphatic amines, RR'NH. H. R. Henze and D. D. Humphreys. bibliog Am Chem Soc J 64: 2873-80 D '42

BUTYL benzene

Isomeric *p*-dibutylbenzenes. G. F. Hennion and L. A. Auspos. bibliog Am Chem Soc J 65:1603-6 Ag '43

BUTYL benzoyl peroxide

Optically active acyl peroxides; preparation, decomposition, and use as catalysts for vinyl polymerization. C. S. Marvel, R. L. Frank and E. Prill. bibliog Am Chem Soc J 65:1647-52 Ag '43

BUTYL bromide

Criterion for the mechanism of the reaction between alkyl halides and hydroxylic solvents; reactions of *n*-butyl bromide. M. L. Bird, E. D. Hughes and C. K. Ingold. Chem Soc J p255-61 Je '43

BUTYL cellosolve

Effects of repeated exposure of rats to vapors of monoalkyl ethylene glycol ethers. H. W. Werner and others. bibliog J Ind Hygiene 25:374-9 O '43

BUTYL chloride

Hydrogen fluoride as a condensing agent; the addition of an alkyl chloride to the double bond. J. H. Simons and A. C. Meunier. Am Chem Soc J 65:1269-71 Jl '43
Ionization and dissociation by electron impact; normal propyl chloride and tertiary butyl chloride. D. P. Stevenson and J. A. Hipple. bibliog Am Chem Soc J 64:2766-8 D '42

BUTYL CRESOL

Alkylated cresols from refinery gases. W. Weinrich. *il* plan Ind & Eng Chem 35:264-72 Mr '43

BUTYLINDAN

Reactions and enolization of cyclic diketones; 3-*t*-butyl-1,2-diketohydrindene. C. F. Koelsch. bibliog Am Chem Soc J 65:1640-3 Ag '43

BUTYL lithium. See Lithium compounds**BUTYLMAGNESIUM bromide**

Reaction of *n*-butylmagnesium bromide with some aromatic ketones. H. M. Crawford, M. E. Saege and F. E. Warneke. Am Chem Soc J 64:2862-4 D '42

BUTYL methyl ketone

Photochemical studies; quantum yields during the photochemical decomposition of *n*-butyl methyl ketone. J. E. Wilson and W. A. Noyes, jr. bibliog Am Chem Soc J 65:1647-50 Ag '43

Photochemical studies; the photochemical decomposition of *n*-butyl methyl ketone. W. Davis, jr. and W. A. Noyes, jr. Am Chem Soc J 64:2676-8 N '42

BUTYL naphthalene

Butylnaphthalenes and their derivatives; β *tert*-butylnaphthalene. N. G. Bromby, A. T. Peters and F. M. Rowe. Chem Soc J p144-6 Ap '43

BUTYL rubber. See Rubber, Artificial**BUTYLENE**

Competition for butylenes between the 100-octane and synthetic-rubber programs; abstracts. B. K. Brown. Oil & Gas J 41:63 Ja 14 '43; Nat Pet N 35:16+ Ja 13 '43

Analysis**Bibliography**

Methods of analyzing for butylenes in cracked gas; list of references. W. L. Nelson. Oil & Gas J 42:70 O 14 '43

BUTYLENE glycol

Butadiene from grain in pilot plant stage; Schenley Distillers corp. at Lawrenceburg, Ind. *il* Chem Ind 53:198-9 Ag '43

By-product 1,3-butylene glycol. J. B. Cloke and R. M. Wolff. Am Chem Soc J 65:986-7 My '43

Production of acetylmethylcarbinol by the action of acetobacter suboxydans upon 2,3-butylene glycol. E. I. Fulmer, L. A. Underkofer and A. C. Bantz. bibliog Am Chem Soc J 65:1425-7 Jl '43

Production of 2, 3 butylene glycol by fermentation. G. A. Adams. Can Chem & Process Ind 27:390-1 Jl '43

BUTYRALDEHYDE

Conversion of an alcohol into the corresponding aldehyde by a less volatile aldehyde with the aluminium alkoxide as catalyst; the influence of an ethylene linkage in the reactant aldehyde. R. R. Davies and H. H. Hodgson. Soc Chem Ind J 62:109-10 Jl '43
Studies in the polyene series; condensation of 3-methylpent-2-en-3-yne (1,2-dimethylvinylacetylene) with butaldehyde, crotonaldehyde, and citral; anionotropic rearrangements with vinylacetylenecarbinols derived from $\alpha\beta$ -unsaturated aldehydes. I. M. Hellbron and others. Chem Soc J p265-8 Je '43

BUYERS. See Purchasing agents**BUYING. See Purchasing****BUYING habits**

Gasoline rationing forces women to change food shopping habits. Sales Management 51: 42-3 N 15 '42

Impact of shortages on marketing. C. F. Phillips. Harvard Business R 21 no4:434-8 [Jl] '43

Let them eat cake! some data on brand and product loyalty in the face of scarcity; 864 women queried. Ptr Ink 202:24, 28, 30 F 19 '43

BUYING habits—Continued

Milwaukee survey shows how war changes buying habits; public eats oftener, buys more fresh produce, smokes more and shops in independent stores. *Ptr Ink* 203: 23 Ap 9 '43

Warns of possible reversal in consumer buying psychology. *W. Street. Ptr Ink* 205:38 O 22 '43

What happens when the ghost walks for 810,430 war workers in 19 cities; pay dates and how, when, and how quickly, the housewife spends the money. *P. Salisbury. Sales Management* 52:16-18 My 1 '43

What war-born consumer habits will do to retailing. *B. E. Puckett. Ptr Ink* 205:98-9 O 8 '43

BUYING power. See Consumption (economics)

BY-PRODUCTS. See subdivision By-products under special subjects, e.g. Cement—Manufacture—By-products; Citrus fruit—By-products

BYRNES, James Francis, 1879-

Have we a war cabinet? Byrnes takes over control of home front. *por Steel* 112:75 Je 7 '43

Stabilization Director Byrnes plans strong fight against inflation. *E. Blair. Barron's* 23:4 F 8 '43

Still an umpire. *Business Week* p5 Je 5 '43

BYSSINOSIS. See Lungs—Dust diseases

C

CABBAGES

Kraut is out; packers' stocks are frozen. *Business Week* p83 O 23 '43

Quantitative field test for estimation of peroxidase. *W. B. Davis. Ind & Eng Chem Anal ed* 14:952-3 D 15 '42

Seed opus; price agency's utterance on *Brassica capitata*. *Business Week* p37 S 25 '43

CABINETS

Designs molding cabinet for schools. *H. J. McCaslin. Il diags Foundry* 70:114+ D '42

CABINETS, Kitchen. See Kitchen cabinets

CABINS

New buildings for 194X: motor camp. *Il diags plans Arch Forum* 72:120-2 My '43

CABINS, Airplane. See Airplanes—Cabins

CABLE laying

Buried telephone talk; plowing the new transcontinental telephone cable into the ground. *T. C. Smith. Il Sci Am* 168:161-3 Ap '43

CABLE railroads. See Railroads, Cable

CABLES

Observations of a bridge cable unspinner; operations on Tacoma Narrows bridge. *C. E. Andrew. Il diags Eng N* 131:347-9 Ag 26 '43

Unspinning Tacoma Narrows bridge cables. *C. E. Andrew. Il Eng N* 130:35-7 Ja 14 '43

See also

Bridges, Suspension	Telephone cables
Cableways	Wire rope
Electric cables	

Testing

Multiple testing of plane cables. *J. Wildner. diags Am Mach* 87:99 Mr 4 '43

CABLES, Submarine. See Electric cables, Submarine; Telegraph, Submarine

CABLEWAYS

Aerial tramway is transportation link at Pond Creek. *J. H. Dickerson. Il plan Coal Age* 47:65-7 D '42

Bolivia builds aerial ferry over Espritu Santo river. *For Comm W* 12:18 Jl 31 '43

Braking an inclined cableway with solenoid. *R. C. Newhouse. diag Rock Prod* 46:34 Ap '43

Flow diversion at Niagara falls; construction of weir. *H. C. Woods. Il diags map Civil Eng* 13:403-6 S '43

Long weir increases Niagara Falls power; cableway erection difficult job. *Il Eng N* 130:745-6 My 20 '43

Motor drive for eight-mile aerial tramway. *R. F. Emerson. Il Min Cong J* 29:41-2 Je '43

Sweden's aerial cableway; longest in the world. *For Comm W* 10:20-1 F 20 '43

See also

Conveying machinery

CACAO

Cacao and other food crops grown in El Oro province, Ecuador. *Science* 98:sup 12 S 3 '43

See also

Cocoa

CACODYLIC acid**Analysis**

Iodometric semimicroprocedure for determination of arsenic in sodium cacodylate and cacodylic acid. *V. Levine and W. M. McNabb. Ind & Eng Chem Anal ed* 15:76-7 Ja 15 '43

CADMIUM

Cadmium industry advisory committee. *Chem & Eng N* 21:979 Je 25 '43

Cadmium (Cd) photosensitized reactions of the lower olefins. *D. J. LeRoy and E. W. R. Steacie. bibliog J Chem Phys* 10:683-5 N '42

Determination of pyrophosphate by precipitation with cadmium and polarographic measurement of cadmium in the precipitate. *G. Cohn and I. M. Kolthoff. bibliog Ind & Eng Chem Anal ed* 14:886-90 N 15 '42

Distribution equilibria between molten metals and molten salts, with reference to the stability of intermetallic compounds in the molten state. *E. Heymann, R. J. L. Martin and M. F. R. Mulcahy. bibliog J Phys Chem* 47:473-84 O '43

Iridite process; method of protecting zinc and cadmium surfaces against corrosion. *Metal Finishing* 41:578 S '43

Minor metals, 1942. *A. F. Matthews. Eng & Min J* 144:74-5 F '43

Quenching of cadmium resonance radiation (3261A) by hydrocarbons and other gases. *E. W. R. Steacie and D. J. LeRoy. bibliog J Chem Phys* 11:164-71 Ap '43

Studies on the structure of thin metallic films by means of the electron microscope. *R. G. Picard and O. S. Duffendack. Il J Ap Phys* 14:291-305 Je '43

Conservation

How to conserve our supplies of cadmium; substitution of other coatings; improved plating practice. *K. G. Soderberg. Il Steel* 113:202-4 O 11 '43

CADMIUM alloys

Precipitation reaction in aged cold-rolled 1 per cent cadmium-copper; its effects on hardness, conductivity, and tensile properties. *R. H. Harrington and L. E. Cole. bibliog Il Am Soc for Metals Trans* 31:651-63; Discussion. 669-74 S '43

CADMIUM chloride

Distribution equilibria between molten metals and molten salts, with reference to the stability of intermetallic compounds in the molten state. *E. Heymann, R. J. L. Martin and M. F. R. Mulcahy. bibliog J Phys Chem* 47:473-84 O '43

CADMIUM plating

Cadmium plating. *G. Tramer. Metal Finishing* 41:211 Ap '43

Cadmium plating; abstract. *Z. Irenas. Metals & Alloys* 18:866+ O '43

How to conserve our supplies of cadmium; substitution of other coatings; improved plating practice. *K. G. Soderberg. Il Steel* 113:202-4 O 11 '43

Interpretation of the mechanism of bright electroplating. *J. A. Henricks. bibliog Electrochem Soc Trans* 82(preprint 22):237-56 O '42; Same. *Metal Finishing* 41:134-7, 202-6 Mr-Apr '43

CADMIUM pyrophosphate

Determination of pyrophosphate by precipitation with cadmium and polarographic measurement of cadmium in the precipitate. *G. Cohn and I. M. Kolthoff. bibliog Ind & Eng Chem Anal ed* 14:886-90 N 15 '42

CADY, Hamilton Perkins, 1874-1943

Sketch. R. Q. Brewster. Science 98:190-1 Ag 27 '43

CAESIUM. See Cesium**CAFESTEROL**

Cafesterol. P. N. Chakravorty, M. M. Wesner and R. H. Levin. biblog Am Chem Soc J 65:929-32 My '43

Cafesterol. H. Hauptmann and J. Franca. biblog Am Chem Soc J 65:31-5 Ja '43

Cafesterol; isocafesterol. P. N. Chakravorty and others. biblog Am Chem Soc J 65: 1325-8 JI '43

Cafesterol; supposed estrogenic activity of cafesterol. H. Hauptmann, J. Franca and L. Bruck-Lacerda. biblog Am Chem Soc J 65:393-4 My '43

CAFETERIAS. See Lunchrooms and cafeterias**CAFETERIAS, Employees'.** See Lunchrooms and cafeterias, Employees'**CAFFEIN**

Caffeine, vanillin, saccharin price ceilings proposed. Oil Paint & Drug Rep 143:3+ Ja 18 '43

Monsanto cocoa; plant at Bahia to extract butter for Europe; residues to U.S. for caffeine content. Business Week p74 Ap 24 '43

Ultraviolet absorption spectra of nitrogenous heterocycles; the blocking effect of methyl groups on the ultraviolet absorption spectra of some hydroxypurines and pyrimidines. J. R. Loofbouroow, M. M. Stimson and M. J. Hart. biblog Am Chem Soc J 65:148-51 F '43

CAISSONS

Heavy foundations drilled into rock; deep caissons with H-beam cores for extension to a public service building. R. E. White. il diags Civil Eng 13:19-22 Ja '43

Steel caissons support New Orleans dock; use of concrete filled cylinders. C. G. Capel. il Civil Eng 13:459-61 O '43

Welded caissons for naval dry docks; with cost data. C. A. Trexel and A. Amirikian. il diags Welding J 22:157-64 Mr '43; Same cond. Steel 111:100-2+ D 14 '42

CAKE

Quality and profit in a nickel's worth of cup cake. W. R. Van Meter. plan Food Ind 15: 63-9 Mr '43

CAKE mixers

Why not standardize food machinery. J. C. Haas. diags Food Ind 15:61+ S '43

CALAVO. See Avocados**CALCITE**

Calcite-dolomite staining tests. W. S. T. Smith. Econ Geol 38:420-2 Ag '43

CALCIUM

Addition of metals to some phenylated olefins in liquid ammonia solution. H. Gilman and J. C. Bailie. Am Chem Soc J 65:267-8 F '43

Calcium in steelmaking; abstract. L. Sanderson. Metals & Alloys 18:842 O '43

Calcium; prehistoric mineral has always been of major economic importance. L. Sanderson. Can Min J 63:779-80 D '42

Equilibria in a carbonaceous cation exchanger. H. F. Walton. biblog J Phys Chem 47: 371-82 My '43

Supposed graphite in carburized NE and S.A.E. steels; effect of calcium and barium. J. Welchner and R. W. Roush. il Metal Prog 43:889-96 Je '43

Analysis

Accurate determination of calcium without reprecipitation in the presence of aluminum, iron, magnesium, manganese, phosphorus, sodium, and titanium. W. H. McComas, Jr. and W. Riemann. 3d. biblog Ind & Eng Chem Anal ed 14:929-31 D 15 '42

Therapeutic use

New ascorbates; abstract. S. L. Ruskin and M. Pfaltz. Can Chem & Process Ind 27: 562 O '43

CALCIUM alloys

Calcium; prehistoric mineral has always been of major economic importance. L. Sanderson. Can Min J 63:779-80 D '42

CALCIUM aluminates

Hydrothermal reactions of tricalcium aluminate and its hydrates. G. M. Harris, W. G. Schneider and T. Thorvaldson. il Concrete (mill sec) 51:205-6 JI '43

Study of the system $\text{CaO-Al}_2\text{O}_3\text{-H}_2\text{O}$ at temperatures of 21° and 90° C. L. S. Wells, W. F. Clarke and H. F. McMurdie. biblog (52 titles) J Research Nat Bur Stand 30:367-409 My '43

CALCIUM ascorbate

New ascorbates; abstract. S. L. Ruskin and M. Pfaltz. Can Chem & Process Ind 27:562 O '43

CALCIUM carbide

Polymorphism of calcium carbide. M. A. Bredig. biblog J Phys Chem 46:801-19 O '42

CALCIUM carbonate

Brine stabilization with sodium hexameta-phosphate. F. W. Jessen and J. L. Battle. biblog il Ind & Eng Chem 35:650-4 Je '43

Calcium carbonate to quicklime. E. B. Wilson. diag J Chem Educ 20:302 Je '43

Industrial applications of chemicals and related materials; calcium carbonate, precipitated. Oil Paint & Drug Rep 143:62 Ap 26; 78 My 17 '43

Scalar diagram for pH of calcium carbonate equilibrium. A. A. Hirsch. Am Water Works Assn J 35:594-6 My '43

See also

Caliche

Dolomite

Limestone

CALCIUM chloride

Calcium chloride compounds of D- α -gluco-heptose (D-glycero-D-gulo-aldoheptose). H. S. Isbell and H. L. Frush. biblog J Research Nat Bur Stand 31:163-8 S '43

Calcium chloride in cement speeds setting time. H. F. Simons. Oil & Gas J 41:48, 50 F 18 '43

Condensation extractor prevents lading damage. il Ry Age 115:244-5 Ag 7 '43

Dustless treatment of coals with calcium chloride and other materials; abstract. R. A. Sherman and G. W. Land. Mech Eng 65:364-5 My '43

Dustless treatment of coals with materials other than oil. R. A. Sherman and G. W. Land. biblog il Min Cong J 28:48-50 D '42

Dustproofing coal with materials available in wartime. G. W. Land. il Coal Age 48: 57-61 S '43

Effect of calcium chloride admixture on strength of concrete cured at low temperatures. H. W. Russell. Roads & Sts 86:45-8 JI '43

Emergency pavement patching with pre-stabilized soil-aggregate mixes. R. L. Fosgurg. il Roads & Bridges 81:25+ Je '43

Heat contents at high temperatures of the anhydrous chlorides of calcium, iron, magnesium and manganese. G. E. Moore. Am Chem Soc J 65:1700-3 S '43

How can frost boils be prevented? effect of calcium chloride. il Roads & Bridges 80: 26+ N '42

Mechanics of frost heaving. Roads & Bridges 81:84-5 My '43

Specific heat and viscosity nomographs for calcium chloride brines. D. S. Davis. Ind & Eng Chem 34:1532 D '42

Specific heats at low temperatures of anhydrous chlorides of calcium, iron, magnesium and manganese. K. K. Kelley and G. E. Moore. biblog Am Chem Soc J 65: 1264-7 JI '43

Use of deliquescent materials in road construction. Roads & Bridges 81:96+ JI '43

Weighting acid with calcium chloride aids in freeing stuck tools. H. F. Simons. il diag Oil & Gas J 42:239, 241 S 23 '43

CALCIUM compounds

Preparation of purified inorganic compounds for use in spectrographic standards. R. C. Hughes. biblog il Opt Soc Am J 33:49-60 Ja '43

CALCIUM cyanamide

Sweden to manufacture calcium cyanamide. For Comm W 9:25 D 19 '42

CALCIUM fluoride

Fluorine content of plants fertilized with phosphates and slags carrying fluorides. W. H. MacIntire and others, *bibliog* *il Ind & Eng Chem* 34:1469-79 D '42

See also

Fluorspar**CALCIUM hydroxide**

Lime and lime slaking. H. E. Lordley, *Water Works & Sewerage* 90:sup151-2 Je '43

CALCIUM hypochlorite

pH factor in the hypochlorite bleaching of wood pulp; single-stage treatment of sulphite pulp. F. Casciani and G. K. Storin, *Paper Tr J* 115:33-40 N 12; 27-31 N 19 '42

Overcoming a bloodworm (chironomid) problem; Canton, N. C. J. C. Rickards, *il diags* *Publ Works* 74:11-12+ F '43

CALCIUM in the body

Effect of lead absorption on blood calcium. W. V. Jenrette and L. T. Fairhall, *bibliog* *Publ Health Rep* 53:1001-6 Ji 2 '43

Relation between the urinary excretion of citric acid and calcium; its implications for urinary calcium stone formation. E. Shorr and others, *bibliog* *Science* 96:587-8 D 25 '42

See also

Calcium—Therapeutic use

CALCIUM oxalate

Effect of pH on the solubility of calcium oxalate. W. H. McComas, Jr. and W. Rieman, 3d, *Am Chem Soc J* 64:2948-9 D '42

Solubility of calcium oxalate monohydrate in pure water and various neutral salt solutions at 25°. W. H. McComas, Jr. and W. Rieman, 3d, *bibliog* *Am Chem Soc J* 64:2946-7 D '42

CALCIUM oxide. See Lime**CALCIUM pantothenate**

Pantothenic acid; optical rotation as a measure of stability. D. V. Frost, *bibliog* *Ind & Eng Chem Anal ed* 15:306-10 My 15 '43

CALCIUM phosphates

Fertiliser manufacture; how calcium superphosphate is produced. *il Elec R (Lond)* 132:277-9 F 26 '43

See also

Phosphate rock**CALCIUM silicates**

Compound merwinite ($3\text{CaO} \cdot \text{MgO} \cdot 2\text{SiO}_2$) and its stability relations within the system $\text{CaO} \cdot \text{MgO} \cdot \text{SiO}_2$ (preliminary report). E. F. Osborn, *bibliog* *diags* *Am Cer Soc J* 26:321-32 O 1 '43

Observations on solid-phase inversions of calcium orthosilicate, constituent of dolomite-silica brick. S. Zerfoss and H. M. Davis, *bibliog* *Am Cer Soc J* 26:302-7 S 1 '43

X-ray patterns of hydrated calcium silicates. H. F. McMurdie and E. P. Flint, *J Research Nat Bur Stand* 31:225-8 O '43

CALCIUM sulfate

Molasses elaboration; removal of calcium sulfate; recovery of non-sugars. G. T. Reich, *bibliog* *flow diags* *il diags* *Am Inst Chem Eng Trans* 38:1049-66 D '42; Same, *Can Chem & Process Ind* 27:2-6 Ja '43

See also

Gypsum**CALCIUM sulfite**

Further comparison of sodium- and calcium-base sulphite acids; effect of decreasing time to maximum temperature with corresponding reduction in total cooking time. M. O. Schur and E. G. Ingalls, *Paper Tr J* 117:34-8 S 16 '43; Excerpts, *Paper Ind* 25:433 Ji '43

CALCIUM tungstate

Rapid gamma-ray inspection technique; use of calcium tungstate screens. R. C. Woods, *il diags* *Metals & Alloys* 17:764-6 Ap '43

See also

Scheelite**CALCULATING boards**

D.c. calculating board expanded. R. C. R. Schulze, *il Elec W* 120:1382 O 16 '43

CALCULATING devices

Calculator for plant engineers, electricians. V. W. Palen, *il Pet Eng* 15:180 O '43; Same, *Coal Age* 48:85 O '43; Same, *Rock Prod* 46:37 N '43

Graphical determination of power amplifier performance. R. I. Sarbacher, *Electronics* 15:52-6+ D '42

Simplified computers aid navigation. P. V. H. Weems, *il Aviation* 41:333-4 N '43

CALCULATING machines

Computation of polynomial functions by summation of finite differences. H. F. Bennett, *Opt Soc Am J* 33:519-26 S '43

Electromechanical calculator for directional-antenna patterns. C. E. Smith and E. L. Gove, *bibliog* *il diags* *Elec Eng* 62:Trans 78-83 F '43

See also

Differential analyzers

CALCULI, Urinary

Relation between the urinary excretion of citric acid and calcium; its implications for urinary calcium stone formation. E. Shorr and others, *bibliog* *Science* 96:587-8 D 25 '42

CALCULUS

Applications of the operational calculus to the theory of structures. L. A. Pipes, *J Ap Phys* 14:436-95 S '43

How to fair lines by graphical calculus. D. Madsen, *diags* *Aviation* 42:136-7, 139-40+ Ja; 137, 139+ Mr '43

CALENDAR

Three hundredth anniversary of Newton's birth; confusion caused by difference between Julian and Gregorian calendar. M. Mott-Smith, *Science* 96:sup8 N 13 '42

CALENDARS

Annual calendar review. *il Ind Marketing* 28:40-1 Ja; 32-3+ F '43

CALENDERS

Calendar coloring. F. O. Sundstrom, *il Paper Ind* 24:1132-4 F '43

Comparison of calendar treatments; patent coated paperboard treated with solutions of chlorinated starch, tapioca starch, and polyvinyl alcohol. A. Yraola, *Paper Tr J* 116:33-4 My 27 '43; Excerpts, *Paper Ind* 25:642+ S '43

CALGARY, Alberta**Water supply**

Operating experiences at the Calgary water-filtration plant. W. E. Robinson, *il Water & Sewage* 81:41-2, 54, 56+ Ap '43

CALGON. See Sodium hexametaphosphate**CALICHE**

Caliche deposits on southern High Plains, Texas. R. Sidwell, *map* *Am J Sci* 241:257-61 Ap '43

CALIFORNIA

See also

Gas, Natural—California
Geology—California
Hydroelectric plants—California
Mercury mines and mining—California

Petroleum—California
Petroleum industry and trade—California
Water, Underground—California

Antiquities

Camel, horse and bison associated with human burials and artifacts near Fresno. G. W. Hewes, *Science* 97:328-9 Ap 9 '43

Industries and resources

Out West, where a new industrial market booms; Pacific coast. E. R. Halperin, *Ind Marketing* 25:19-21 My '43

CALIFORNIA electric power company

Bonds and preferred stock offered. *Comm & Fin Chr* 158:1631-2 O 25 '43

CALIPERS

Quick calipering of root diameter of Acme threads. *il Ry Mech Eng* 117:426 S '43
Thickness calipers. S. Crawford, *diag* *Am Mach* 86:1366 N 26 '42

CALKING

New business for many; making homes more comfortable by caulking cracks around doors and windows. *Sheet Metal Worker* 33:42+ N '42

CALLAWAY Institute

Callaway research institute; new quarters and facilities. *Il Textile World* 93:86-7 Ap '43

CALONYCTION aculeatum

Isolation of an active substance from calonyction aculeatum capable of coagulating castilla latex. S. G. Wildman, A. V. McMullan and R. Griggs. *Science* 97:471-2 My 21 '43

CALORIFIC value. See Gas—Calorific value

CALORIMETERS and calorimetry

Cooling, dehumidifying; measuring capacities of air-conditioning equipment by the electric-calorimeter method. H. A. Whitesel. *diags Gen Elec R* 45:653-6 N '42

Induction furnace as a high temperature calorimeter and the heat of solution of silicon in liquid iron. J. Chipman and N. J. Grant. *bibliog Am Soc for Metals Trans* 31:365-78; Discussion. 378-9 Je '43

Phase equilibria in hydrocarbon systems; heat of solution of ethane and propane. R. A. Budenholzer, B. H. Sage and W. N. Lacey. *bibliog il diag Ind & Eng Chem* 35:1214-20 N '43

Simplified calorimetric studies of various types. D. B. Pattison, J. G. Miller and W. W. Lucasse. *bibliog J Chem Educ* 20:319-26 Jl '43

Spherical furnace calorimeter for direct measurement of specific heat and thermal conductivity. J. R. Winckler. *bibliog il diag Am Cer Soc J* 26:339-49 O 1 '43

Thermal data; the heat capacity, entropy, and free energy of formation of cyclohexane; a new method of heat transfer in low temperature calorimetry. R. A. Ruehrwein and H. M. Huffman. *bibliog diag Am Chem Soc J* 65:1620-5 Ag '43

See also

Specific heat

CAMBRIDGE, Massachusetts**Water supply**

Economical addition to Cambridge supply. T. W. Good. *Am Water Works Assn J* 35: 983-6 Ag '43

CAMBRIDGE instrument company

Cambridge instrument company; aeronautic instruments. R. Rick. *Il Aeronautical Eng R* 2:21 F '43

CAMELOIDS. See Auchenia**CAMELS**

Camel family fibers. A. C. Whitford. *Textile Col* 65:97-101 Mr '43

CAMEL'S hair

Camel family fibers. A. C. Whitford. *Textile Col* 65:97-101 Mr '43

Imitation camel's hair. *Textile Col* 65:434 O '43

CAMERA clubs

City documentation; continuing picture record of your town and locale. O. D. Burge. *Am Phot* 37:25 Mr '43

CAMERAS

Box camera for serious work. R. R. Voorhees. *Il Am Phot* 37:18-19 D '43

Calibration of camera shutters with the cathode-ray oscillograph. T. H. Bullock. *Il diags Electronics* 16:106-9+ J '43

Camera for stereoscopic microradiography. G. L. Clark and R. W. Byler. *bibliog il diags R Sci Instr* 14:277-8 S '43

Camera lucida as an aid in aerial photographic mapping; abstract. H. T. U. Smith and H. J. Peterson. *Franklin Inst J* 236: 409-10 O '43

Choosing a camera for a beginner. *Il Consumers' Research Bul* 11:21-3 Mr; 9-12 Ap; 13-14 My '43

De luxe color camera. P. W. Norris. *Il Am Phot* 37:26-7 Ap '43

Fast photos enable research scientists to study explosives. *Il Sci Am* 169:124 S '43

Fish-eye camera aids in study of lighting problems. *Il Sci Am* 168:268 Je '43

Illuminagraphic camera. F. Benford. *Il diags Opt Soc Am J* 33:440-3 Ag '43

Illuminagraphs; photographs for computing and analyzing illumination from extended sources. F. Benford. *Il diag Gen Elec R* 46:494-6 S '43

Rough testing of shutter speeds. J. H. Allen. *Il Am Phot* 37:30-1 Ap '43

Strip camera; to revolutionize some phases of postwar aerial commercial photography. *Business Week* p60 S 18 '43

Watches, field glasses, cameras; all are becoming scarce. *Consumers' Research Bul* 11:23 D '42

Rating

Twin-lens reflex camera. *Consumers' Research Bul* 11:7 Je '43

Standards

American standard for cameras (tripod connections). *diags Opt Soc Am J* 33:180-1 Mr '43

CAMERAS, Electron diffraction

Adsorption at the crystal-solution interface; an electron-diffraction investigation of crystal surfaces of pure sodium bromate and sodium bromate with adsorbed dyes. J. H. Elomquist and W. G. France. *bibliog J Phys Chem* 46:1044-50 D '42

Corrosion battle being waged with electronic diffraction camera. E. A. Gulbransen. *Sci Am* 169:78 Ag '43

Electron diffraction camera for studying surface finishes and control of corrosion, etc. *Il diags Steel* 113:92-3 Ag 23 '43

CAMERAS, Television. See Television cameras**CAMERAS, X ray.** See X ray apparatus**CAMOUFLAGE**

Camouflage is a design problem requiring imagination plus skill. *Il Product Eng* 14: 6-11 Ja '43

Camouflage paints and their application to road and building surfaces. L. G. Gabriel. *Chem & Ind* 62:3-6 Ja 2 '43

Camouflaging industrial plants. F. G. Beury. *Il Manuf Rec* 111:28-9+ N '42

Color vision; abstract. D. B. Judd. *Science* 96:sup3+ N 27 '42

Colorblindness and the detection of camouflage. D. B. Judd. *Science* 97:544-6 Je 18 '43

Disappearing marine; ponchos of water-repellent cloth bonded with polyvinyl butyral resin filler. *Il Mod Plastics* 20:68 Je '43

Dyeing of jute hessian fabrics. J. W. Brown. *Textile Col* 64:585-6 D '42

Effect of atmospheric haze on the camouflaging of aerial targets; abstract. F. Lohle. *Roy Aeronautical Soc J* 47:sup345-6 Jl '43

Exposure behaviour and colour matching problems with bitumen emulsion camouflage paint. J. A. Rawlinson and L. G. Gabriel. *Soc Chem Ind J* 62:111-12 Jl '43

Fort Belvoir; camouflage headquarters. *Il Arch Forum* 77:2, 4 N '42

Heat reflecting paint has camouflage properties; illustrations. *Heat & Ven* 39:56 D '42

Hints on effective camouflage. J. D. Campbell. *Il Aero Digest* 42:116-17, 224+ Je '43

How and why of camouflage. H. Goff. *Il Aviation* 41:104-5+ O '42; Same. *Pet Eng* 13:98, 100+ S; 14:33-4 '42; Same. *Steel* 111:72-3+ N 2 '42; Same. *Gas Age* 91:25-6+ Ja 28 '43; Same cond. *Aero Digest* 42:119-21+ My '43

Infra-red camouflage. L. E. Bowles. *Il Aero Digest* 42:159-60, 162+ F '43

Infrared camouflage; paints emerge from the panel stage. D. B. Williams and C. H. Wastle. *Il Can Chem & Process Ind* 27: 500-1 S '43

Infrared reflecting and fluorescent pigments on textiles for the armed forces. R. K. Jackson. *diag Am Dyestuff Rep* 32:259-60 Je 7 '43

New paints, glass fiber combine to make camouflage netting highly effective. H. E. Wise. *Steel* 112:80 Ja 25 '43

Predicting infrared reflectance of camouflage finishes. *Il Paint Oil & Chem R* 104: 10-12+ D 17 '42

Role of textiles in camouflage. *Il Textile World* 93:68-9 Jl '43

CAMP sanitation

Factors producing carbon monoxide from camp stoves. P. F. Scholander, L. Irving and G. A. Edwards. *bibliog J Ind Hygiene* 25:132-6 Mr '43

See also

Military training camps—Sanitation

- CAMPBELL, Levin H. Jr.** 1886-
Ordinance moves; Gen. Campbell puts the branches in the centers where they can keep in close touch with manufacturers. *por Business Week* p74+ N 28 '42
- CAMPBELL, Wyant and Cannon foundry company**
Thumbnail stock appraisal. *Mag of Wall St* 71:241; 72:92 D 12 '42, My 1 '43
- CAMPBOR**
Molal depression constant for camphor. W. B. Meldrum, L. P. Saxer and T. O. Jones. *bibliog Am Chem Soc J* 65:2023-5 O '43
- CAMPS**
New frontiers; summer camps bulging enrollments. *Business Week* p 18-19 Je 5 '43
See also
Labor camps
Military training camps
- CAMPS, Military**
Army camp water supply systems. J. Girand. *il plan Civil Eng* 13:219-21 My '43
Army lavatory conserves critical materials and water. *il diags plan Eng N* 130:686-7 My 6 '43
CCC buildings salvaged for army camps. *il Eng N* 131:162-4 JI 15 '43
Fuel and heating program at army cantonments. L. C. McCabe. *il Heating-Piping* 15:228-30 My '43
See also
Military posts
Military training camps
- CAMPS, Tourist.** *See* Tourist camps, hostels, etc.
- CAMS**
Adjustable cam compensates for errors; patent assigned to Fairchild aviation corp.; device developed primarily for compensating radio compasses. *diag Machine Design* 15:172+ S '43
Calculation of proportional cams for internal combustion engines. E. Rossner. *diags Automotive & Aviation Ind* 88:38-40 My 1 '43; *Discussion* (Calculation of proportional cams). C. H. Bouvy. 89:45+ S 1 '43
Cam milling made sure. D. E. Carpenter. *il diags Am Mach* 87:110-11 My 13 '43
Construction of monochromator cams for recording spectrophotometers. J. M. Moran. *bibliog diag R Sci Instr* 14:287-93 O '43
- CAMSHAFTS**
Camshaft salvage stunt. H. W. Gerhardt. *diags Bus Transportation* 22:60 My '43
Extending camshaft operating life for increased engine power output. F. Noltimier. *diags Pet Refiner* 22:100-4 JI '43
- CAN.** *See* Cans; Milk cans; Tin cans
- CAN sealing machines**
Arc welding in wartime redesign; sheet steel replaces aluminum for can sealing machine. S. Birkland. *il diags Metals & Alloys* 17:760-3 Ap '43
- CANADA**
Go north! United States and Canada cooperate in opening up a new frontier on route of today's troop movements to Alaska. *Business Week* p40+ JI 10 '43
Mapping Canada in peace and war. F. H. Peters. *il Civil Eng* 13:215-18 My '43
New Canada. *il Fortune* 28:106-15 JI '43
See also
Airports—Canada
Banks and banking—Canada
Chemical industries—Canada
Cost of living—Canada
Dairying—Canada
Fisheries—Canada
Gold mines and mining—Canada
Hydroelectric plants—Canada
Industrial mobilization—Canada
Insurance—Canada
Insurance, Automobile—Canada
Labor supply—Canada
Merchant marine—Canada
Mines and mineral resources—Canada
Mining industry and finance—Canada
Paper industry and trade—Canada
Petroleum industry and trade—Canada
Population—Canada
Railroads—Canada
- Roads—Canada
Steel workers—Canada
Wages—Canada
World war, 1939—Canada
Air force
Commissions for air crew. *Economist* 145:111-12 JI 24 '43
Army
Canadian army system. *Economist* 143:637-8 N 21 '42
Pay, allowances, etc.
Cost-of-living-bonus principle extended to dependents of men in armed forces. *For Comm W* 10:18 Mr 13 '43
Increased dependents' allowances for Canadian service men. *Int Labour R* 47:391-3 Mr '43; *Same. Monthly Labor R* 56:1114-16 Je '43
Commerce
North American way. C. M. Short. *il Banking* 35:31-2 My '43
See also
Shipping—Great Lakes
Commercial policy
Exporters worry; advise Ottawa to lay post-war lines in foreign trade. *Business Week* p46+ O 16 '43
New trade policy. *Business Week* p80-1 N 6 '43
Defenses
Lighting for national defense buildings and services. E. W. Moodie. *ilum Eng* 38:300-6 Je '43
Diplomatic and consular service
Canada consulate will open in New York city. *Comm & Fin Chr* 157:1691 My 6 '43
Canadian consulate opens in New York. *Comm & Fin Chr* 157:2275 Je 17 '43
Economic conditions
Business scene in Canada. B. C. Gardner. *Comm & Fin Chr* 157:389 Ja 28 '43
Canada in 1942. *Economist* 144:sup8-9 Mr 13 '43
Canada speeds activities in fourth war year. *il For Comm W* 9:3-5 D 26 '42
Canadian failures by provinces, monthly record. Published in Dun's statistical review; summary in Dun's review
Canadian failures by provinces, 1941 and 1942, annual and quarterly; and quarterly record by divisions of industry and by cities. *Dun's Stat R* 7:8, 15 F '43
Economic conditions in Canada during 1942. *Can Chem & Process Ind* 27:78 F '43
News by countries. *For Comm W* 10:14-17 Mr 6; 11:19-22 My 22; 12:13-16 Ag 7; 15-18 S 11; 13:13-16 O 16 '43
Threat to prices; Canadians will provide a critical test for anti-inflation line. *Business Week* p70+ Je 5 '43
Economic policy
Canada's rationing. D. Fellman. *il For Comm W* 10:5-9+ Ja 30 '43
Canadian subsidies ease pressure on prices. J. Backman. *il Dun's R* 51:14-20+ Ap '43
New order in force; business establishments were frozen at November 2, 1942 status. *For Comm W* 9:12 N 21 '42
Reconstruction planning in Canada. *Int Labour R* 48:351-4 S '43
Vanishing duties; agreement on production and distribution of agricultural commodities may signal end of U.S.-Dominion barriers. *Business Week* p40+ Ja 16 '43
Foreign relations
Diplomatic lineup: Ottawa would give each of United nations a voice in making decisions proportionate to its contribution to the project. *Business Week* p46+ JI 17 '43
United States
Linchpin of peace; Canada's historic opportunity. B. Hutchison. *il Fortune* 28:108-13+ JI '43; *Discussion*. D. T. Sharp. 28:44 O '43
North American way. C. M. Short. *il Banking* 35:31-2 My '43

CANADA—Foreign relations—United States—*Continued*

U.S., Canada agree on post war settlement. Comm & Fin Chr 156:2254 D 24 '42
 War should lead to closer relations between U.S. and Canada. H. D. Scully. Comm & Fin Chr 158:117 JI 8 '43

History

Canada's pungent past. il Fortune 28:108-13 JI '43

Industries and resources

Engineers and the British empire; industrial revolution in Canada. M. Smith. il maps Engineer 176:22-4 JI 9 '43
 Natural resources in scheme of national planning. J. S. Bates. Pulp & Pa of Can 44:359-62 Ap '43
 Overproduction in Canada. Economist 144: 690 My 29 '43

Politics and government

Hepburn fantasy. Economist 143:733-4 D 12 '42

Statistics

Canadian statistics. Survey of Cur Business 1942 Sup p174-6 [supplemented in monthly numbers]

CANADA dry ginger ale, Inc.

Low-priced stocks for large percentage gains. Mag of Wall St 71:636-6 Mr 20 '43
 Thumbnail stock appraisal. Mag of Wall St 72:631 S 18 '43

CANADIAN committee on pharmacopoeial standards

Pharmacopoeial standards. A. L. Davidson. Can Chem & Process Ind 27:104 F '43

CANADIAN congress of labor

Third regular convention 1942. Monthly Labor R 55:1222-3 D '42

CANADIAN electrical association

Annual meeting, 53d, Quebec, June 17-18. Edison Elec Inst Bul 11:223 JI '43; Elec W 119:2135 Je 26 '43

CANADIAN good roads association

Annual meeting, Lucerne-in-Quebec, Oct. 29. Roads & Bridges 80:36 N '42

CANADIAN industries limited

Annual report. Can Chem & Process Ind 27: 209+ Ap '43

CANADIAN institute on sewage and sanitation

Annual meeting, 9th, Toronto, Oct. 29-30. Water & Sewage 80:19-28, 64-6 N; 28-9, 46-7 D '42

CANADIAN life insurance officers association

Annual meeting, 50th, Toronto. Nat Underw (Life ed) 47:1 Je 4 '43

CANADIAN manufacturers association

Annual general meeting, 72d, Toronto, June 8-10. Can Chem & Process Ind 27:333-5+ Je '43

CANADIAN national railways

Canadian securities. B. Williams. Comm & Fin Chr 157:1299 Ap 8 '43
 Earnings, 1941 and 1942. Comm & Fin Chr 157:1738 My 10 '43
 How C.N.R. could make postwar jobs. Ry Age 115:109-10 JI 17 '43
 1942 record year for Canadian National system. Comm & Fin Chr 157:217 Ja 18 '43

CANADIAN Northwest. See Northwest, Canadian**CANADIAN Pacific railway**

Annual report, 1942. Ry Age 114:738-42 Ap 10 '43; Same. Comm & Fin Chr 157:1294-6 Ap 8 '43

Dividend policy to be reviewed as conditions warrant. Comm & Fin Chr 157:1939 My 24 '43

Engineers and the British empire. M. Smith. il Engineer 176:122-4 Ag 13 '43

Income account, 1939-1942. Comm & Fin Chr 157:1360 Ap 12 '43

2-8-2 type locomotives have high-tensile boiler shells. il Ry Age 114:946-7 My 15 '43

CANADIAN pulp and paper association

Annual meeting, 3d, Montreal. Pulp & Pa of Can (Convention no) 44:65-73 [F] '43; Paper Tr J 116:7, 14-15 F 4 '43; Can Chem & Process Ind 27:74 F '43

Technical section

Annual meeting, Montreal, Jan. 27-29. Pulp & Pa of Can (Convention no) 44:30-7 [F] '43

Summer meeting, Montebello, Quebec. Pulp & Pa of Can 44:579-82+ JI '43

Wartime machine shop board

Four million dollar business. F. G. Robinson. Pulp & Pa of Can (Convention no) 44:76-9 [F] '43

Woodlands section

Annual meeting, 25th, Montreal. Pulp & Pa of Can (Convention no) 44:171+ [F] '43

CANADIAN sanitation equipment association

New organization of manufacturers and equipment firms formed to co-operate with Canadian institute on sewage and sanitation. Water & Sewage 80:34+ N '42

CANADIAN underwriters' association

Marks 60th anniversary. A. Hurry. East Underw 44:19 JI 16 '43

CANADIAN water works equipment association

Annual meeting, Hamilton, Ont. April 9. Water & Sewage 81:35+ Ap '43

CANAIPI, Mario P.

Sketch. por(p174) Marine Eng 48:181 Ag '43

CANAL rays

Electrostatic focusing of high speed ion and electron beams. J. D. Craggs. il diags J Ap Phys 13:772-80 D '42

CANAL traffic**Statistics**

Waterway traffic, 1938-1941. Survey of Cur Business 1942 Sup p98-9 [supplemented in monthly numbers]

CANALS

Canal to the sea; two new deepwater routes proposed to eliminate winding Mississippi River channel. map Business Week p32,34 Ag 28 '43

More and bigger canals after war. Ry Age 114:641 Mr 27 '43

See also

Dredges Suez canal
 Irrigation canals Waterways

Canada

Engineers and the British empire; transport on the inland waterways. M. Smith. il diags map Engineer 176:42-5 JI 16 '43

See also

Chambly canal
 Welland ship canal

Florida

House subcommittee hears many views about Florida canal. Ry Age 114:635, 638 Mr 27 '43

President says work on Florida canal depends on end of shortages. Comm & Fin Chr 158:104 JI 8 '43

Great Britain

300-ft. contour canal line. J. F. Pownall. maps Engineering 156:281-2 O 8 '43

CANCELLATION of orders

Let's have no epidemic of cancellitis this time! H. E. Agnew. Ptr Ink 203:13-14 Ap 30 '43

CANCER

Biodynes; miracle of wound healing and tissue repair. L. M. Miller. il Sci Am 168: 14-16 Ja '43

Charles L. Mayer awards of the National science fund. Science 96:489-90 N 27 '42
 Endocrine control of prostatic cancer. C. Huggins. bibliog Science 97:541-4 Je 18 '43

Fellowships of the Finney-Howell research foundation. Science 97:372 Ap 23 '43

Gonadectomy and adrenal neoplasms. G. W. Woolley, E. Fekete and C. C. Little. Science 97:291 Mr 26 '43

Inositol, a tumor growth inhibitor. D. Laszlo and C. Leuchtenberger. Science 97:515 Je 4 '43

Medical school of the University of Minnesota; grants for research. Science 98:106 JI 30 '43

Presentation of the first Charles L. Mayer award. Science 97:504-5 J 4 '43

Radiological research laboratory of Columbia university. Science 96:533 D 11 '42

CANCER—Continued

- Ultracentrifugal and electrophoretic investigation of an ascitic fluid from a cancer patient. E. B. Sanigar, L. E. Krejci and E. O. Kraemer. *bibliog Franklin Inst J* 235:298-313 Mr '43
- Synthesis of 3'-alkyl-1,2-cyclopentenophenanthrenes. B. Riegel, M. H. Gold and M. A. Kubico. *bibliog Am Chem Soc J* 65:1772-6 S '43
- 1,2,9,10-Tetramethylantracene. R. B. Sandin, R. Kitchen and L. F. Fieser. *bibliog Am Chem Soc J* 65:2018-20 O '43
- Toxicity and histopathology of some azo compounds as influenced by dietary protein. M. I. Smith, R. D. Lillie and E. E. Stohman. *bibliog Pub Health Rep* 58:304-17 F 19 '43
- Vital stains; dye as carrier of iodine or arsenic into site of tumour. A. A. Goldberg. *Chem Soc J* p713-16 N '42

Statistics

- Incidence and prevalence of cancer of the lung. H. F. Dorn. *bibliog Pub Health Rep* 58:1265-71 Ag 20 '43
- Incidence of cancer in Denver, Colorado, 1939. H. J. Sommers. *bibliog Pub Health Rep* 57:1971-86 D 25 '42
- Incidence of cancer in Philadelphia, Pa. 1938. H. J. Sommers. *bibliog Pub Health Rep* 57:1843-57 D 4 '42

CANDY

- Candy vs. thirst. *Business Week* p66 Je 19 '43

Prices

- Gen. Max. wins; Circuit court upholds OPA; reduction in size of candy bars enjoined. *Business Week* p78+ My 22 '43

CANDY boxes

- All-America package competition award; Loft candy corp. *il Mod Packaging* 16:90+ Ap '43

CANDY factories**Employees**

- Increase of women's earnings in New York confectionery industry. *Monthly Labor R* 57:144-5 Jl '43

CANDY stores

- New buildings for 194X; bakery and candy store. *il diags plans Arch Forum* 72:104-5 My '43

CANDY trade

- Candy gets tight. *Business Week* p38-40 D 12 '42
- Candy kept cool; Whitman is booking orders for postwar delivery of refrigerated cabinets. *Business Week* p82+ O 2 '43
- Facts behind the Curtis Candy program of line expansion. O. Schnering. *il Sales Management* 52:24-6 N 1 '43
- Fewer sweets. *il Business Week* p32 Je 5 '43

Statistics

- Candy, sales by manufacturers, 1938-1941. *Survey of Cur Business* 1942 Sup p126 [supplemented in monthly numbers]

CANNABIDIOL

- Cannabis indica; an examination of the alkali-soluble portion of American hemp resin. A. Madinaveitia, P. B. Russell and A. R. Todd. *Chem Soc J* p628-30 O '42

CANNABINOL

- Cannabis indica; an examination of the alkali-soluble portion of American hemp resin. A. Madinaveitia, P. B. Russell and A. R. Todd. *Chem Soc J* p628-30 O '42
- Cannabis indica; some analogues and a water-soluble derivative of tetrahydrocannabinol. F. Bergel and others. *Chem Soc J* p286-7 Je '43
- Tetrahydrocannabinol analogs with marihuana activity. R. Adams and others. *bibliog Am Chem Soc J* 64:2653-5 N '42

CANNED food

- Baby food boom. *Business Week* p40-2 Mr 20 '43
- Brown's surprise; blessing canners for grade labeling. *Business Week* p71 Mr 6 '43
- Canada restricts sales of canned goods. *For Comm W* 9:27-8 D 19 '42
- Canners on trial; California league gets set for opening of antitrust action. *Business Week* p62 Ja 2 '43

- Canners' prospects begin to take shape. *Baron's* 23:7 Ap 12 '43
- Canning industry. *Union of South Africa. For Comm W* 11:31-2 Je 12 '43
- Cans go out. *Business Week* p58+ D 19 '42
- Consumer's lot; about as much canned vegetables in coming year, but less fruit and juices. *Business Week* p19-20 Jl 24 '43
- Corrosion of tin-nickel alloy coatings on steel in canned foodstuffs; abstract. H. R. Copson and W. A. Wesley. *Iron Age* 152:58-4 O 21 '43
- Developments in electrolytic tin plate from the can manufacturer's experience; abstract. K. W. Brighton. *Steel* 113:66 O 25 '43
- Food deal made; canners, agriculture, and OPA compromise. *Business Week* p79 Mr 20 '43
- Food packers and wholesalers hardest hit by new WPB order. *Ptr Ink* 201:58 D 18 '42
- Fruit canning expands in South Africa. A. R. Griffith. *il For Comm W* 12:5-7+ S 25 '43
- Fruit products and canned foods; technical and business problems of industry in British Columbia. *Can Chem & Process Ind* 27:129 Mr '43
- Grocers say city folk eat most of canned goods, deserve more points. *Ptr Ink* 202:29 F 26 '43
- How will rationing and grading of canned goods affect brands? *il Sales Management* 52:50-1 F 1 '43
- Lead-silver substitute solder safe for food can. *Steel* 113:127 Ag 23 '43
- Ontario's canned-goods pack, 1941 and 1942. *For Comm W* 10:31 F 13 '43
- Ration dilemma; OPA has to stall on its canned food program. *il Business Week* p 16-17 Ja 9 '43
- Safe substitute solder for food cans; report of War metallurgy committee on lead-silver solder. H. W. Gillett, E. J. Cameron and R. F. Griggs. *Metal Prog* 44:420-1+ S '43; *Abstract. Metals & Alloys* 18:596+ S '43
- See-through inspection with the fluoroscope. *il Mod Packaging* 17:66-7 S '43
- Subsidy payments on 4 canned vegetables. *Comm & Fin Chr* 157:2294 Je 17 '43

See also

- | | |
|-------------------------|--------------|
| Canned meat | Fruit juices |
| Canneries | Tin cans |
| Canning and preserv-ing | |

Advertising

- Del Monte's service program eases grocers' wartime business woes; Calpak. E. Gidlow. *il Sales Management* 52:24-6 Je 1 '43
- Food packers reveal how advertising helps solve their wartime problems; Printer's Ink survey. *Ptr Ink* 204:26, 28+ Ag 13 '43

Prices

- Canner conflict; OPA plan for 1944 pack. *Business Week* p86+ O 30 '43
- Facts show grade labels not needed for price control, Maxon says. *Ptr Ink* 204:44 S 24 '43
- Labels sneak in; prices set for canned grapefruit juice by grades. *Business Week* p18 Ja 30 '43

Standards

- Canned grapefruit; standard issued by the Agricultural marketing administration. *Food Ind* 15:72 Mr '43
- Grade A gain; canners who use U.S. standards on labels are staying out of grading fight. *Business Week* p94+ My 15 '43
- Grade labeling should spur, not kill, food advertising. *Ptr Ink* 201:16-17 D 25 '42

Statistics

- How we stand on canned goods supplies. *Business Week* p 16 Ja 9 '43

CANNED meat

- Boneless meat, new weapon for U.S. fighters; Armour & co. *il Mod Packaging* 16:66-70 Ja '43
- Britain will buy South American meat for U.S. forces overseas. *Comm & Fin Chr* 157:852 Mr 4 '43
- Conserving vitamin C in canning chicken; abstract. E. J. Redman, L. Buckley and R. T. Legault. *Food Ind* 14:103 D '42

CANNED meat—Continued

Control of thermophilic bacteria in canned meat mixtures. L. B. Jensen and W. R. Hess. *il Food Ind* 15:66-7 Mr '43

Patents

Recent patents; abstract. *Food Ind* 14:103-4 D '42

CANNERIES

End of a dream; Hapgood brothers' idea of taking workers into partnership winds up in court. *Business Week* p18-19 Jl 31 '43
15,000-acre victory garden; Deerfield packing corp., Seabrook farms, Bridgeton, N.J. *il Business Week* p20+ My 22 '43

See also

Tin cans

Employees

C-H-B salvages "scrap manpower" to save huge tomato pack; California conserving co. takes men out of jail under parole. *il Sales Management* 52:25, 28, 30 Ja 1 '43
Crop is saved; recruiting labor saves hundreds of tons of tomatoes. *Business Week* p20+ Ag 28 '43

Help for canners; soldiers encamped nearby permitted to volunteer. *Business Week* p20 Jl 31 '43

Simple techniques speed training of green help. J. F. Hale. *il Food Ind* 15:74+ Je '43

Equipment

Conservation of metals in cannery machines. *Metal Prog* 43:408 Mr '43

See also

Can sealing machines

Safety measures

Seasonal operation, year-round safety; Minnesota Valley canning company. V. Quackenbush. *il Nat Safety N* 46:51-2 N '42

Waste

Cannery waste disposal by lagooning. *Pub Works* 73:28 N '42

Cokato sewage disposal plant; novel design for handling canning and domestic wastes. W. E. King. flow diag *il plans Water Works & Sewerage* 90:359-65 O '43

How to meet the demand for better waste disposal. E. S. Fenelon. *il plans Food Ind* 15:34-6 Jl '43

New vacuum flotation process aids liquid waste disposal. A. J. Fisher. *il diags Food Ind* 15:87-9+ Jl '43

Vacuum flotation; a new process for sewage and industrial waste treatment. A. J. Fischer. *il diags Eng N* 130:297-301 F 25 '43

CANNERIES, Cooperative

Small canning plants will be built. *il plans Am Bld* 65:50-1 Ag '43

Town canneries; communities welcome idea of cooperative packing. *Business Week* p84 My 8 '43

CANNING and preserving

Canned to order; Burbank firm will pack products of your V-garden. *Business Week* p86+ Jl 17 '43

Canning caravan; adventure in war-time education through showmanship; Binghamton (N.Y.) gas works. E. E. Williams. *il Gas Age* 32:17-18 Jl 25 '43

Canning clinics click in Fall River, Mass. H. V. Potter. *il Gas Age* 32:13-14 Ag 26 '43

Canning technology. E. J. Cameron. *bibliog il Ind & Eng Chem* 35:38-42 Ja '43

Chemists adapt pectins to new industrial uses. C. W. Kaufman, E. R. Fehlberg and A. G. Olsen. *il diag Food Ind* 15:58-60 Ja '43

Color of canned peas. *J Chem Educ* 20:453+ S '43

Concentrating citrus juices by the vacuum method. J. L. Heid. *bibliog diags Food Ind* 15:62-4+ My; 64-6+ Je '43

Fruit and vegetable juice preparation and preservation. D. K. Tressler, C. S. Pederson and H. G. Beattie. *bibliog il diag Ind & Eng Chem* 35:96-100 Ja '43

Jar sales soar; WPB assures supplies for home canning. *Business Week* p68 Ap 17 '43

National board warns of dangers of oven-pack method of preserving. *East Underw* 44:22 S 3 '43

Preservation of citrus juices with sulphurous acid. A. W. E. Downer. *bibliog Soc Chem Ind J* 62:124-7 Ag '43

Preserving fruits with SO₂ to aid lend-lease program; Good jams can be made from SO₂ treated fruits; peaches, strawberries and youngberries. J. G. Woodroof and S. E. Cecil. *il Food Ind* 15:59-61 My; 67-8+ Je '43

Protection of natural green pigment in the canning of peas. J. S. Blair and T. B. Ayres. *bibliog il Ind & Eng Chem* 35:85-95 Ja '43

See also

Canned food
Canneries

Pressure cookers
Tin cans

Costs

Large fruit cuts canning costs; pilot-plant operations show that it takes less labor to can large peaches than small. L. O. Van Blaricom. *il Food Ind* 15:58-9 Je '43

CANNON. *See* Guns (ordnance)

CANNON, Aircraft. *See* Guns, Aircraft

CANS

Bonderized and lacquered steel sheet; German investigations; substitute for tinplate in fabrication of food cans. *Iron Age* 151:39+ Ja 14 '43; *Abstract. Chem Age (Lond)* 48:179-81 F 6 '43

Fiber cans as alternates for metal containers; abstract. R. P. Bigger. *Chem Ind* 52:608 My '43

Fibre cans on tin lines. *il Mod Packaging* 16:89+ My '43

Fishing kit for lifeboats. *il Mod Packaging* 16:164 Ap '43

German substitutes for tin plate; abstract. L. Schuster. *Metals & Alloys* 17:1056+ My '43

Metal can outlook. O. G. Jakob. *Soap & San Chem* 18:116 D '42

Rusted cans in V-boxes. *Mod Packaging* 17:53 S '43

See also

Can sealing machines
Canned food

Continental can company
Milk cans
Tin cans

CANS, Paper. *See* Paper containers

CANS, Tin. *See* Tin cans

CANTEENS

See also

Post exchanges

CANTEENS (flasks)

Birth of an army canteen. *il Mod Plastics* 20:71-3 Mr '43

CANTEENS, Industrial. *See* Lunchrooms and cafeterias, Employees'

CANTON, North Carolina

Water supply

Overcoming a bloodworm (chironomid) problem. J. C. Rickards. *il diags Pub Works* 74:11-12+ F '43

CANTONMENTS. *See* Military training camps

CANVAS bags

Test box car carrying canvas bags filled with distillate. *il Nat Pet N* 34:26 N 11 '42

CANYONS

Alpine mudflows in Grand Teton national park, Wyoming. F. M. Fryxell and L. Horberg. *il map Geol Soc Bul* 54:457-72, pl 1-2 Mr '43

Carboniferous formations of the Uinta and northern Wasatch mountains, Utah. J. S. Williams. *diag map Geol Soc Bul* 54:591-624, pl 1-3 *bibliog*(p623-4) Ap '43

Origin of Peace River canyon, British Columbia. H. H. Beach and J. Spivak. *bibliog map Am J Sci* 241:366-76 Je '43

CANYONS, Submarine

Imaginary submarine canyons. F. P. Shepard. *Science* 98:208-9 S 3 '43

CAPACITOR motors. *See* Electric motors, Induction

CAPACITORS. *See* Condensers (electricity)

CAPE BRETON island*See also*

Coal mines and mining—Cape Breton island

CAPETOWN, South Africa*See also*

Electricity supply—Capetown, South Africa

CAPILLARIESAttachment and detachment of dropping mercury under various conditions. I. M. Kolthoff and G. J. Kahan. *il Am Chem Soc J* 64:2553-7 N '42Dynamic viscosity of nitrogen. W. L. Sibbitt, G. A. Hawkins and H. L. Solberg. *bibliog diag A S M E Trans* 65:401-4; Discussion. 404-5 JI '43New method for the determination of electrokinetic potential in the flow of a semi-conducting liquid through a single capillary. W. G. Eversole and W. W. Boardman. *bibliog diags J Phys Chem* 46:914-26 N '42**CAPILLARITY***See also*Brownian movements
Surface active substances
Surface tension**CAPITAL**Capital and people, both at work. *Ptr Ink* 204:36 S 24 '43Capital flotations in the United States during the month of December and for the calendar year 1942. *Comm & Fin Chr* 157:303-5 Ja 25 '43Capital of society. *Trusts & Estates* 77:200-1 S '43Composition of income and ownership of capital by income classes in the United States in 1936. E. S. Tucker. *Am Stat Assn J* 33:187-200 Je '43Estimates of capital formation and offsets to saving. M. Hoffenberg and M. S. Lewis. *R Econ Stat* 25:141-52, 164-5 My '43Is income producing real estate a capital asset? *J Account* 76:258-9 S '43Money capital and its next of kin. *Ptr Ink* 204:84 S 3 '43New security issues for new capital and for refunding domestic totals, 1933-1942, by months, Jan. 1942-Jan. 1943. *Fed Res Bul* 29:246 Mr '43 [cont monthly]Nonrefund security flotations and capital structures. 1935-1937. J. E. Hubbard. *R Econ Stat* 25:192-201 Ag '43Preservation of capital; role of institutional investors. L. M. Simon. *Trusts & Estates* 75:539-43, 604-5; 76:11-16 D '42-Ja '43Securities issued, by type of security, type of issuer, etc. 1938-1941. Survey of *Cur Business* 1942 Sup p78-81 [supplemented in monthly numbers]There must be no bottlenecks preventing post-war flow of capital. J. N. Whipple. *Comm & Fin Chr* 158:905 S 2 '43Views capital markets entering upon period of great usefulness. E. Schram. *Comm & Fin Chr* 158:1028 S 9 '43We are living on capital; basic need of post-war world will be re-creation of assets used up during conflict. J. T. Adams. *Barron's* 23:3 Ja 11 '43Working capital, what is it? *Ptr Ink* 204:28 Ag 20 '43*See also*Banks and banking
Corporations—Finance
Dividends
Economics
Industry
Interest
InvestmentsLabor and capital
Labor and laboring classes
Monopolies
Profit
Stockholders
Trusts, Industrial**CAPITAL and labor.** *See* Labor and capital**CAPITAL transit company**Annual report. *Comm & Fin Chr* 157:779 Mr 1 '43Are utilities a proving ground for the race question? order to the Capital transit company. L. D. Farrar. *Pub Util* 31:805-14 Je 24 '43**Information department**Michigan 6363, it's Washington's most popular number. E. C. Giddings. *il Bus Transportation* 22:26-7 Ap '43**CAPITALISM**Big boys of business not cashing in, Thomas W. Lamont tells poet Benet. *Comm & Fin Chr* 158:225, 230-1 JI 15 '43Capitalism; sane and cockeyed. *Ptr Ink* 205:30 O 15 '43Capitalism; some misunderstood differences. *Ptr Ink* 204:31 Ag 13 '43Enterprise and efficiency. *Economist* 145:306-7 S 4 '43Free enterprise after the war. C. W. Phelps. *Am Business* 12:11-12 N '42Free enterprise depends on balance of profits, wages. J. P. Frey. *Steel* 112:76-7 Je 14 '43Free enterprise, past and future. E. Heilmann. *Trusts & Estates* 77:13-17 JI '43Free enterprise secret of achievement of American system. *Comm & Fin Chr* 158:118 JI 8 '43Freedom of enterprise, the fifth freedom. *Trusts & Estates* 77:120-1 Ag '43How did we get this way? anatomy of capitalism. H. B. Loomis and J. B. Knox. *Comm & Fin Chr* 156:1697+, 1785+, 1873+, 1961+, 2049+, 2145+, 2233+, 2313+, 157:49+, 177+ N 12, 19, 26, D 3, 10, 17, 24, 31 '42, Ja 7, 14 '43How to preserve free enterprise. S. O. Dunn. *Ry Age* 114:1083-6 My 29 '43Merits of competitive capitalism demonstrated in war production miracle; abstracts. E. A. Johnston. *Comm & Fin Chr* 157:1571+ Ap 29 '43; *Trusts & Estates* 76:419 My '43My dear Mr Laski; reply to Who are the real rulers of Britain? P. F. Cadman. *il Banking* 35:24-5+ Mr '43Our public utilities in a free enterprise system. F. J. McDiarmid. *Pub Util* 31:69-81 Ja 21 '43Outlook for private enterprise. H. L. Lutz. *Trusts & Estates* 75:548 D '42Private enterprise and capital needed for post-war rehabilitation. F. C. Crawford. *Comm & Fin Chr* 157:756 F 25 '43Road away from revolution; reprinted from *Atlantic Monthly*, April 1923. Woodrow Wilson. *Trusts & Estates* 77:19-20 JI '43Security and venture are complementary, says First national bank of Boston. *Comm & Fin Chr* 158:506 Ag 5 '43Security or freedom; abstracts. F. A. Moreton. *Ins Field (Fire ed)* 72:8-9 S 2 '43; *East Underw* 44:18+ S 3 '43; *Nat Underw* 47:4+ S 2 '43Spirit of enterprise, by E. M. Queeney. *Reviews. Business Week* p 123 JI 10 '43; *Comm & Fin Chr* 158:201+ JI 15 '43Spread gospel of free enterprise. C. Wampeler. *Comm & Fin Chr* 157:1476+ Ap 22 '43Unfettering private enterprise. *Trusts & Estates* 77:201-2 S '43What is capitalism? *Ptr Ink* 204:68 Ag 6 '43**CAPITALISTS and financiers**Who are the big money capitalists? *Ptr Ink* 204:100 S 17 '43Who are the capitalists of America? *Trusts & Estates* 76:511-12 Je '43**CAPITOLS**Disintegrated cut stone in Kentucky state capitol replaced by architectural concrete. *il diag Concrete* 51:4+ F '43**CAPRI blue**Methylene blue and other indicators in general acids; the acidity function. G. N. Lewis and J. Bigeleisen. *bibliog Am Chem Soc J* 65:1144-50 Je '43**CAPROIN**Aliphatic beta monoglycerides. B. F. Daubert, H. H. Fricke and H. E. Longenecker. *bibliog Am Chem Soc J* 65:1718-20 S '43**CAPROYLBENZYLIDENE glycerol**Aliphatic beta monoglycerides. B. F. Daubert, H. H. Fricke and H. E. Longenecker. *bibliog Am Chem Soc J* 65:1718-20 S '43**CAPRYLIN**Aliphatic beta monoglycerides. B. F. Daubert, H. H. Fricke and H. E. Longenecker. *bibliog Am Chem Soc J* 65:1718-20 S '43**CAPSULES, Gelatin**Tubes, capsules and enclosures. *il Can Chem & Process Ind* 27:248-9+ My '43

CAR. See Cars**CAR axles**

Welding cast iron axle-boxes. *il* Engineer 175: 118 F 5 '43

Testing

Fatigue strength of normalized and tempered versus as-forged full size railroad car axles. O. J. Horger and T. V. Buckwalter. *bibliog il* *diag* Am Soc for Metals Trans 31:559-76; Discussion. 576-81 S '43

CAR cards. See Advertising cards**CAR cooling**

Air filters; getting best service from air conditioning equipment for cars. J. V. Dobbs; W. J. Dawson. *il* Ry Mech Eng 117:339 J1 '43

Arc welded compressor suspension. J. F. Muller and G. C. Munoz. *il* *diags* Ry Mech Eng 117:50-2 Ja '43

Carrier precoolers for air conditioning. *il* Ry Mech Eng 117:431 S '43

Know your dust; filtration of air on air conditioned railroad equipment. *il* Ry Mech Eng 117:490 O '43

Long life for evaporators and condensers in air-conditioned cars. Ry Mech Eng 117: 189-90 Ap '43

Railroad air conditioning. G. T. Wilson. *il* Refrig Eng 45:323-6+ My '43

When you can't sell, help them service. B. F. Sturtevant policy. E. W. Andros. *il* Ind Marketing 28:62+ Mr '43

CAR couplings

Coupler and draft gear report; A.A.R. Mechanical division committee. *il* Ry Mech Eng 117:460-3 O '43

Coupler reclamation by electric-arc welding; Erie welding shop at Meadville, Pa. *il* *diags* Ry Mech Eng 117:416-19 S '43

Some information on automatic coupling of mine cars. L. C. Isley and F. J. Gleim. *diags* U S Bur Mines Information Circ 7245:1-6 '43

CAR dumpers

Phototube guards car dumper. *il* Elec W 118:2134 D 26 '42

CAR inspection

Car inspectors and car inspection. R. V. Ketrang. Ry Mech Eng 117:480 O '43

Spring nest capacity; importance of inspection. C. J. Holland. *diags* Ry Age 113:1027 D 26 '42

CAR lighting

B. & O. redecorates colonial diners. *il* *diags* Ry Age 114:830-1 Ap 24 '43; Same. Ry Mech Eng 117:209+ My '43

Car lighting without fixtures. *il* Ry Mech Eng 117:337 J1 '43

Modified dimout for New York subways; silver-bowl lamps keep within army requirements. E. C. Giddings. *il* Transit J 86: 402-4 N '42

110 volts for passenger cars; editorial. Ry Mech Eng 117:218 My '43; Discussion. W. S. H. Hamilton. 117:322 J1 '43

100-watt fluorescent lamps for passenger car lighting. Ry Mech Eng 117:139-40 Mr '43

CAR loadings. See Freight car service—Car load; Railroads—Freight**CAR retarders**

Retarder prevents shock and damage to mine cars. *plan* Coal Age 48:86 Mr '43

CAR shops

Tank car repairs heavy on C.N.J.; Elizabethport, N.J. car shop. *il* Ry Age 115: 208-10 J1 31 '43

See also

Railroads—Shops

Equipment

Helps for the car foreman; Erie's Penhorn shop speeds servicing; illustrations with text. Ry Mech Eng 117:481 O '43

Materials saved by car-brass trimmer. *il* *diags* Ry Mech Eng 117:144-5 Mr '43

Rivet heater with improved burner. *il* *diags* Ry Mech Eng 117:44-5 Ja '43

Three devices for the car shop. *il* Ry Mech Eng 117:219-20 My '43

With the car foremen and inspectors. Published in monthly numbers of Railway mechanical engineer

CAR springs

Broken car springs replaced in five minutes. C. E. Zimmerman. *diag* Am Mach 87:114 O 14 '43

Dynamically stable spring suspension for railway cars and motorcoaches. P. K. Bee-mer and F. C. Lindvall. *il* *diags* S A E J 50:521-7 D '42; Same. Automobile Eng 33: 283-7 J1 '43

Free height and spring cushioning capacity. C. J. Holland. Ry Mech Eng 117:121-2 Mr '43

High-speed freight-car trucks. J. A. Shafer. *il* *diag* Ry Mech Eng 116:539-41 D '42

Riding quality improved by snubbers on freight-car trucks. G. A. Lewis. Ry Mech Eng 117:210-12 My '43

Spring nest capacity; importance of inspection. C. J. Holland. *diags* Ry Age 113:1027 D 26 '42

CAR straps

Salvaging worn-out handstraps; Boston elevated railway. M. A. Jarrow. *diag* Mass Transportation 39:219 Je '43

CAR trucks

Design and construction of underframes for all-welded railroad passenger cars. J. E. Candlin, Jr. and A. M. Unger. *il* *diags* Welding J 22:309-18 My '43

High-speed freight-car trucks. J. A. Shafer. *il* *diag* Ry Mech Eng 116:539-41 D '42

Milwaukee's 81 new passenger cars. *il* Ry Age 114:657-9 Ap 3 '43; Ry Mech Eng 117: 159-60 Ap '43

Restoring worn truck columns and bolster guides. *diags* Ry Mech Eng 117:221 My '43

Riding quality improved by snubbers on freight-car trucks. G. A. Lewis. Ry Mech Eng 117:210-12 My '43

Stress analysis of passenger-car trucks. J. C. Travilla, Jr. and W. E. Burdick. *il* *diags* A S M E Trans 65:297-300 My '43

CAR ventilation

See also

Car cooling

CAR wheels

Chilled car wheels contribute to the war effort; inspection and research by Association of manufacturers of chilled car wheels. *il* Ry Age 115:596-9 O 16 '43

Wheel conditions and wheel shop practices. M. E. Fitzgerald. Ry Mech Eng 117:328-30 J1 '43

Manufacture

Boring mine car wheels to receive roller bearings. *il* Mach 49:136 Ja '43

CARACAS, Venezuela

Venezuela's capital shows results of modernization program. *For Comm* W 11:51 My 1 '43

CARAMELIZATION

Storage of synthetic citrus powders; caramelization by citric or tartaric acid and various sugars at high temperatures. W. E. Isaac. *il* Ind & Eng Chem 35:470-4 Ap '43

CARBAMATES

Carbamates of cellulose and cellulose acetate; preparation. W. M. Hearon, G. D. Hiatt and C. R. Fordyce. Am Chem Soc J 65:829-33 My '43

Carbamates of cellulose and cellulose acetate; stability toward hydrolysis. W. M. Hearon, G. D. Hiatt and C. R. Fordyce. Am Chem Soc J 65:833-6 My '43

CARBAMIC acid

Carbamic acid peptides; a new type of peptide and a new possible source of ammonia from proteins. A. H. Corwin and C. I. Damerel. *bibliog* Am Chem Soc J 65:1974-84 O '43

CARBARSONE

p-Aminobenzoic acid detoxication of carbar-sonone (p-carbamino phenyl arsenic acid) and certain other pentavalent phenyl arsonates administered in massive doses to rats. J. H. Sandground. *bibliog* Science 97:73-4 Ja 15 '43

Carbarsonone treatment for balantidium coli infections. M. D. Young and R. Burrows. *Pub Health Rep* 58:1272-3 Ag 20 '43

CARBIDE cutting tools. See Cutting tools, Carbide

CARBIDES

See also

- | | |
|------------------------|-------------------|
| Calcium carbide | Manganese carbide |
| Cutting tools, Carbide | Silicon carbide |
| | Tungsten carbide |

CARBINES. See Rifles—Manufacture

CARBINOLS

Quinoidation of triaryl compounds; hydroxynaphthylidiphenylcarbinols. L. C. Anderson and D. G. Thomas. *bibliog Am Chem Soc J* 65:234-8 F '43

Studies in the polyene series; a new anionotropic rearrangement; isomerisation of ethynylcarbinols from $\alpha\beta$ -unsaturated aldehydes. E. R. H. Jones and J. T. McCombie. *Chem Soc J* p261-4 Je '43

Studies in the polyene series; carbinols from propargyl acetal. I. M. Heilbron, E. R. H. Jones and H. P. Koch. *Chem Soc J* p735-7 D '42

Studies in the polyene series; condensation of 3-methylpent-2-en-4-yne (1:2-dimethylvinylacetylene) with butaldehyde, crotonaldehyde, and citral; anionotropic rearrangements with vinylacetylenecarbinols derived from $\alpha\beta$ -unsaturated aldehydes. I. M. Heilbron and others. *Chem Soc J* p265-8 Je '43

Studies in the polyene series; the preparation of ethynylcarbinols from $\alpha\beta$ -unsaturated aldehydes. E. R. H. Jones and J. T. McCombie. *Chem Soc J* p733-5 D '42

Thermal decomposition of certain polyarylated carbinols. C. F. H. Allen and J. A. VanAllan. *bibliog Am Chem Soc J* 65:1384-9 JI '43

CARBOHYDRASES

Classification of carbohydrases. W. W. Pigman. *bibliog J Research Nat Bur Stand* 30:257-65 Ap '43

CARBOHYDRATES

Citric acid cycle; sugar and fat-breakdown in tissue metabolism. F. L. Breusch. *bibliog Science* 97:490-2 My '43

Mucopolysaccharides and related substances. M. Stacey. *bibliog Chem & Ind* 62:110-12 Mr 20 '43

Quantitative estimation of acetyl in carbohydrate acetates. R. L. Whistler and A. Jeanes. *bibliog diag Ind & Eng Chem Anal* 15:317-18 My 15 '43

Some less familiar aspects of carbohydrate chemistry. W. L. Evans. *Chem R* 31:537-60 bibliog(61 references, p559-60) D '42

Viscosity and molecular weight; the nitrate of wood carbohydrate. S. Coppick. *bibliog Paper Tr J* 117:25-9 Ag 12 '43

See also

- | | |
|-----------|--------|
| Aldehydes | Starch |
| Cellulose | Sugars |
| Glucose | |

CARBON

Amber glass and the role of carbon. H. Moore and S. R. Scholes. *bibliog Am Cer Soc J* 26:58-60 F 1 '43

Bond integrals and spectra; with an analysis of Kynch and Penney's paper on the heat of sublimation of carbon. R. S. Mulliken and C. A. Rieke. *Rs Mod Phys* 14:259 Ap-JI '42

Diffusion rate of carbon in iron-cobalt alloys. R. Smoluchowski. *bibliog Phys R* 62:539-44 D 1 '42

Diffusion rates of carbon in iron-molybdenum and iron-tungsten alloys. R. Smoluchowski. *bibliog Phys R* 63:438-40 Je 1 '43

Effect of carbon on alloy steel ductility. M. F. Hawkes. *Iron Age* 152:9-50 JI 22 '43

Mechanism of the steam-carbon reaction. B. R. Warner. *bibliog Am Chem Soc J* 65:1447-51 Ag '43

Positions of the carbon atoms in austenite. N. J. Petch. *bibliog Iron & Steel Inst J* 145:111-23; Discussion. 124-8 no 1 '42

Trivalent carbon; unsymmetrical hexaaryl-dimethylperoxides. E. L. Buhle, Sister Mary Louis Whalen and F. Y. Wiselogle. *bibliog Am Chem Soc J* 65:584-6 Ap '43

See also

- | | |
|--------------|----------------------|
| Carbon black | Diamonds |
| Charcoal | Diamonds, Industrial |
| Coal | Graphite |
| Coke | |

Analysis

Absorption tube tares in carbon and hydrogen microdetermination. W. M. MacNevin and J. E. Varner. *bibliog Ind & Eng Chem Anal ed* 15:224-5 Mr 15 '43

Determines carbon in cast iron and steel. J. G. Donaldson. *diag Foundry* 71:117-18 Mr '43

Microdetermination of carbon in steels; modification of the standard carbon-hydrogen train. E. W. Balis, H. A. Liebafsky and E. H. Winslow. *diags Ind & Eng Chem Anal ed* 15:68-9 Ja 15 '43

New technique for the ultimate micro-analysis of organic compounds. R. Belcher and C. E. Spooner. *diags Chem Soc J* p313-16 JI '43

Isotopes

Use of the exchange between carbon dioxide, carbonic acid, bicarbonate ion, and water for isotopic concentration. A. F. Reid and H. C. Urey. *bibliog J Chem Phys* 11:403-12 S '43

CARBON, Activated

Activated carbon treatment of raw whisky. G. C. Williams and E. A. Fallin. *bibliog Ind & Eng Chem* 35:251-4 F '43

Air recovery by gas adsorption cuts equipment weight and costs; activated carbon units; air conditioning at Pratt & Whitney plant. *il diags Heating-Piping* 15:238-9 My '43

Benzole recovery by active carbon. A. K. Howell. *Gas J (Lond)* 242:337 S 15 '43

Catalytic activity of activated nitrogenous carbons. P. F. Bente and J. H. Walton. *bibliog il J Phys Chem* 47:133-48 F '43

Economic factors in converting recirculated air for ventilation; activated carbon gas adsorption supplemented by filtration and bacteria control. H. E. Ziel and H. Sleik. *bibliog diags plan Heating-Piping* 15:367-71; Discussion. 371-2 JI '43

Effect of active nitrogen and of certain nitrogen compounds on catalytic properties of carbon. P. F. Bente and J. H. Walton. *bibliog J Phys Chem* 47:329-37 Ap '43

Effect of carbon treatment on fish liver oils; vitamin A destruction and peroxide formation. L. O. Buxton. *bibliog Ind & Eng Chem* 34:1486-9 D '42

Giant gas masks to remove plant odors. H. Sleik. *il Mod Packaging* 16:88+ Ja '43

Jack & Heintz solves fume problem by installing air recovery equipment. *il diag Heat & Ven* 40:54-5 Ag '43

New York daily news; rotogravure printing plant recovers ink-solvent, employing activated carbon adsorption method. T. E. J. Moffett. *flow diag il Heat & Ven* 40:33-6 Ap '43

Survey made of activated carbon use for control of tastes and odors in water supplies; abstract. E. A. Sigworth. *Eng N* 131:478 S 23 '42

CARBON, Porous

Carbon, a refractory material. F. J. Vosburgh. *il diags Steel* 112:106-8, 110+ Ap 5 '43

CARBON, Structural

Carbon, a refractory material. F. J. Vosburgh. *il diags Steel* 112:106-8, 110+ Ap 5; 118, 120, 125+ bibliog(p 147) Ap 12 '43

Carbon and molded rubber seal blower rotors. *il diag Product Eng* 14:339 Je '43

CARBON black

Carbon black in all-reclaim tire treads. L. H. Cohan and J. F. Mackey. *India Rubber W* 107:469-70+ F '43

Carbon black in butyl rubber. L. B. Turner and others. *bibliog diags Ind & Eng Chem* 35:958-63 S '43

Carbon black in the paper industry; manufacture of black paper. L. H. Cohan. *il Paper Tr J* 115:42, 44+ N 26 '42

Conductivity of rubber tread stocks; effect of properties of carbon black. L. H. Cohan and J. F. Mackey. *bibliog Ind & Eng Chem* 35:806-8 JI '43

Density of carbon black by helium displacement. R. P. Rossman and W. R. Smith. *bibliog il diags Ind & Eng Chem* 35:972-6 S '43

Furnace oil for synthetic rubber. W. L. Nelson. *Black & Gas J* 41:62+ Mr 11 '43

CARBON black—Continued

Hitched to a star; synthetic rubber's need for greater quantity of carbon black. *Business Week* p48 D 26 '42

How District of Columbia uses dark concrete, made with emulsified carbon black. *H. C. Whitehurst, il Roads & Sts* 86:53 JI '43

pH, surface, and structure of colloidal carbons. *C. W. Sweitzer and H. A. Braendle, India Rubber W* 107:468+ F '43

Identification of carbon black by surface area measurements. *F. H. Amon, W. R. Smith and F. S. Thornhill, bibliog Ind & Eng Chem Anal* 15:256-8 Ap 15 '43

Saving the black; rubber companies urged to conserve scarce furnace black. *Business Week* p62+ My 29 '43

United carbon company wins patent suit. *Oil Paint & Drug Rep* 142:3+ D 14 '42

Manufacture

Natural gas, flames and carbon black. *K. Ford, il Gas Age* 91:26-8 Mr 11 '43

New carbon blacks to extend volume of synthetic rubber for tires. *il diag Nat Pet N* 35 pt 2:R195-8 My 5 '43

War products from natural gas and natural gasoline. *P. M. Raigorodsky and F. H. Dotterweich, diags Oil & Gas J* 41:98+ Ap 15 '43; Same. *Gas Age* 92:20-1 JI 29 '43

Statistics

Carbon black production and sales, 1941; abstract. *G. R. Hopkins and H. Backus, India Rubber W* 107:386+ Ja '43

Carbon black sales decline 30% in 1942. *India Rubber W* 108:269 Je '43; Same abr. *Gas Age* 92:41 JI 15 '43; Excerpt. *Oil Paint & Drug Rep* 143:44 My 31 '43

Carbon black use in 1941 reached new high record. *Rubber Age* 52:259 D '42

Terminology

Broad nomenclature for carbon blacks. *D. F. Cranor, India Rubber W* 107:378 Ja '43

Uniform carbon black nomenclature. *India Rubber W* 108:488; 109:48 Ag, O '43

Transportation

ODT approves plan for pooling carbon black cars. *Rubber Age* 54:59 O '43

CARBON brushes. See *Brushes* (electric machinery)

CARBON compounds

See also

Carbohydrates

Chemistry, Organic

Hydrocarbons

CARBON dioxide

Absorption of carbon dioxide by sodium hydroxide solutions in a packed column. *J. B. Tepe and B. F. Dodge, bibliog diag Am Inst Chem Eng Trans* 39:255-76 Ap '43

Electronic structures and spectra of triatomic oxide molecules. *R. S. Mulliken, bibliog il diags Rs Mod Phys* 14:204-15 Ap-JI '42

Emission spectrum of the ion CO^+ . *S. Mrozowski, Rs Mod Phys* 14:216-18 Ap-JI '42

Expansion in CO_2 . *Walter Kidde & Co., Belleville, N.J., il Fortune* 27:130-1 Je '43

Flash saturation and reaction periods in photosynthesis. *F. F. Rieke and H. Gaffron, bibliog J Phys Chem* 47:299-308 Ap '43

Function of carbon dioxide in producing efflorescence on plaster and cement products. *D. L. Bishop, bibliog pl J Research Nat Bur Stand* 30:361-6 My '43

Infrared prism spectrograph as a precision instrument. *R. A. Oetjen, C. Kao and H. M. Randall, bibliog il diag R Sci Instr* 13: 515-23 D '42

Ionization constant of carbonic acid in water and the solubility of carbon dioxide in water and aqueous salt solutions from 0 to 50°. *H. S. Harned and R. Davis, Jr, bibliog diags Am Chem Soc J* 65:2030-7 O '43

Low temperature adsorption of nitrogen, oxygen, argon, hydrogen, *n*-butane and carbon dioxide on porous glass and on partially dehydrated chabazite. *P. H. Emmett and T. W. DeWitt, bibliog Am Chem Soc J* 65:1253-62 JI '43

Separation of CO_2 . *diag Chem Ind* 53:234 Ag '43

Shattering and cracking of ice; role of carbon dioxide. *P. W. West, bibliog il Ind & Eng Chem* 34:1515-18 D '42

Significance of CO_2 for high altitude breathing; abstract. *H. Rehn, Roy Aeronautical Soc J* 47:supl58 Ap '43

Specific heat ratios in CO_2 . *L. Katz, bibliog J Chem Phys* 11:496-7 O '43

Supersonic measurements in CO_2 and H_2O at 98°C. *W. H. Pielemeier and W. H. Byers, bibliog Acoustical Soc Am J* 15:17-21 JI '43

Supersonic measurements in CO_2 at 6° to 100°C. *W. H. Pielemeier, bibliog Acoustical Soc Am J* 15:122-6 JI '43

L-Type doubling in linear polyatomic molecules. *G. Herzberg, bibliog Rs Mod Phys* 14:219-23 Ap-JI '42

Use of the exchange between carbon dioxide, carbonic acid, bicarbonate ion, and water for isotopic concentration. *A. F. Reid and H. C. Urey, bibliog J Chem Phys* 11:403-12 S '43

See also

Photosynthesis

Analysis

See also

Flue gas—Analysis

Industrial applications

Blasting rings from rotary kilns by means of Cardox. *R. Gibbs, diags Rock Prod* 46: 96, 98+ Ag '43

Carbon dioxide guards critical generators; Phelps-Dodge mine and reduction-works power plant at Morenci, Arizona. *P. W. Eberhardt, il diags Power* 87:738-9 N '43

Controlled atmosphere storage helps to keep fruits fresh. *D. V. Fisher, bibliog il Food Ind* 15:70-2+ My '43

Fire protection equipment on PAA Clippers. *il Aviation* 42:241+ Mr '43

Gas for protection; fire extinguishers for army, navy and war plants; other uses. *M. A. Laswell, il Safety Eng* 86:15-16, 20 Ag '43

Prevention of butadiene-air explosions by addition of nitrogen and carbon dioxide. *G. W. Jones and R. E. Kennedy, diag U S Bur Mines Rep of Invest* 3691:1-11 '43; Same abr. *Nat Pet N* 35 pt 2:R328-30 JI 7 '43

CARBON dioxide, Liquid

Chemical uses and methods of handling; solid and liquid carbon dioxide. *C. T. Longaker, il Chem Ind* 52:210-11+ F '43

Compressed gas actuator for aircraft; steel bottle filled with liquid carbon dioxide or compressed air that can be connected to hydraulic systems. *il diags Product Eng* 14:144-6 Mr '43

CARBON dioxide, Solid

Chemical uses and methods of handling; solid and liquid carbon dioxide. *C. T. Longaker, il Chem Ind* 52:210-11+ F '43

Dry-ice cabinet holds temperature within close limits. *il Sci Am* 169:34-5 JI '43

Dry ice kills coal pile fires. *Heat & Ven* 40:67 Ap '43; Same. *Gas Age* 91:31 My 20 '43

On thin ice; predicament of carbon dioxide industry last summer; next year it may be worse. *Business Week* p38 O 2 '43

Refrigerants used for expansion fits. *H. Smith, Elec W* 118:1798+ N 28 '42

Use of dry ice for testing; Douglas aircraft corp. *Aero Digest* 43:222 S '43

CARBON disulfide

Catalysts for the formation of carbon bisulphide from its elements; abstract. *L. J. Markovski and N. Khorosbkova, Chem & Met Eng* 50:187 O '43

Reaction of carbon disulfide with amine sulfides. *E. S. Blake, bibliog Am Chem Soc J* 65:1267-9 JI '43

Removal of organic sulphur compounds from gases. *N. Booth and L. J. Jolley, Soc Chem Ind J* 62:87-8 Je '43

Analysis

Photoelectric photometer for determining carbon disulfide in the atmosphere. *S. Silverman, bibliog il diags Ind & Eng Chem Anal ed* 15:592-5 S 15 '43

CARBON monoxide

- Decomposition of ethylene and carbon monoxide on metallic catalysts. A. R. McKinney. *J Phys Chem* 47:152-63 bibliog (p163) F '43
- Mechanism of the formation of Kohlschütter's silver sol. H. B. Weiser and M. F. Roy. *J Phys Chem* 47:325-9 Ap '43
- Sorption of carbon monoxide by metals; temperature variation experiments. C. W. Griffin. bibliog *Am Chem Soc J* 64:2610-13 N '42
- Spin doubling in the doublet sigma states of CO*. L. H. Woods. bibliog *Phys R* 63:431-2 Je 1 '43
- Viscosities of carbon monoxide, helium, neon, and argon between 80° and 300°K. coefficients of viscosity. H. L. Johnston and E. R. Grilly. bibliog *J Phys Chem* 46:948-63 N '42

Analysis

- Improved apparatus for the rapid determination of carbon monoxide. L. Shnidman. bibliog *il Am Gas Assn Mo* 25:405-8+ O '43 (to be cont)

CARBON monoxide poisoning

- Carbon monoxide. F. S. Rossiter. *Ind Med* 11:586-9 D '42
- Carbon monoxide; data regarding occurrence and effect. Heating-Piping 15:558-9 O '43
- Danger from carbon monoxide in the home. L. B. Berger and H. H. Schrenk. *U S Bur Mines Information Circ* 7238:1-8 '43
- Factors producing carbon monoxide from camp stoves. P. F. Scholander. L. Irving and G. A. Edwards. bibliog *J Ind Hygiene* 25:132-6 Mr '43
- Improved apparatus for the rapid determination of carbon monoxide. L. Shnidman. bibliog *il Am Gas Assn Mo* 25:405-8+ O '43
- Oxygen under pressure in carbon monoxide poisoning; effect on dogs and guinea pigs. E. End and C. W. Long. bibliog *J Ind Hygiene* 24:302-6 D '42
- Tunnel employees not affected by exhaust gases. *Eng & Min J* 144:77 My '43

CARBON oxides

- See also
Carbon dioxide
Carbon monoxide

CARBON oxysulfide. See Carbonyl sulfide**CARBON paper**

- New uses for carbon paper. S. L. Jerpbak. *il Bankers Mo* 59:497+ N '42

CARBON paste

- Aid to better welding. H. H. Griffith. *il Welding J* 22:902-3 N '43

CARBON products**Manufacture**

- Earnings in manufacture of carbon products for electrical industry, 1942. O. F. Brown. *Monthly Labor R* 56:329-35 F '43

CARBON tetrachloride

- Application of carbon tetrachloride-type fire-extinguisher liquid to burning magnesium chips and magnesium incendiary bombs. S. J. Pearce and others. *pls U S Bur Mines Rep of Invest* 3686:1-18 '43
- Breakdown and time-lag of dielectric materials; breakdown of liquid carbon tetrachloride. S. S. Attwood and W. H. Bixby. *Franklin Inst J* 235:259-72 Mr '43
- Chlorinolysis of chloroparaffins. E. T. McBee, H. B. Hass and C. Bordenca. bibliog *diags Ind & Eng Chem* 35:317-20 Mr '43
- Cleans jewels safely with tetrachloride; use of exhaust system and air blast. *Elec W* 119:484 F 6 '43
- Coordination of silver ion with unsaturated compounds; *cis-* and *trans-*-pentene. H. J. Lucas, R. S. Moore and D. Pressman. bibliog *Am Chem Soc J* 65:227-9 F '43
- Industrial degreasing agents. H. P. Quadland. *il Metal Finishing* 41:463-5 Jl '43
- Structure of liquid carbon tetrachloride. E. E. Bray and N. S. Gingrich. bibliog *J Chem Phys* 11:351-4 Ag '43
- Structure of liquid carbon tetrachloride. A. Elsenstein. bibliog *Phys R* 63:304-8 Ap 1 '43

- System ethyl alcohol-glycerol-carbon tetrachloride at 25°C. H. J. McDonald, A. F. Klunder and R. W. Lane. *J Phys Chem* 46:946-8 N '42

- Volume of mixing and the thermodynamic functions of benzene-carbon tetrachloride mixture. S. E. Wood and J. P. Brusie. bibliog *diags Am Chem Soc J* 65:1891-5 O '43

Analysis

- Analytical data for the systems carbon tetrachloride-acetic acid-benzene and carbon tetrachloride-tetrachloroethylene. W. R. McMillan and H. J. McDonald. *Ind & Eng Chem Anal ed* 15:114-16 F 15 '43
- Determination of fumigants; determination of ethylene dichloride and dichloroethylene; analysis of mixtures. F. P. W. Winteringham. *Soc Chem Ind J* 61:187-90 D '42
- Modification of the silica gel method for the determination of atmospheric organic solvent vapors. L. V. Cralley, T. E. Shea and L. J. Cralley. bibliog *J Ind Hygiene* 25:172-4 Ap '43

CARBON tetrachloride poisoning

- Carbon tetrachloride. M. Bowditch. *Ind Med* 12:440 Jl '43
- Carbon tetrachloride and health. W. H. Easton. *Safety Eng* 85:47-9 Ap '43
- Carbon tetrachloride, from the health viewpoint. H. P. Quadland. *Rubber Age* 53:141-2 My '43
- Carbon tetrachloride in industrial hygiene. W. H. Easton. bibliog *Ind Med* 12:1-3 Ja '43
- Chlorinated solvents in common wartime use. D. H. Byers. bibliog *Ind Med* 12:440-3 Jl '43
- Toxic anemia. E. Bröwning. *J Ind Hygiene* 25:126-7 Mr '43
- What the ventilating engineer should know about carbon tetrachloride. H. P. Quadland. *il Heat & Ven* 40:38-9 Mr '43

CARBON tetrafluoride

- Specific heats of carbon tetrafluoride from supersonic measurements. W. H. Byers. bibliog *J Chem Phys* 11:348-50 Ag '43

CARBONATES

- Use of the exchange between carbon dioxide, carbonic acid, bicarbonate ion, and water for isotopic concentration. A. F. Reid and H. C. Urey. bibliog *J Chem Phys* 11:403-12 S '43

See also

- Dolomite
Potassium carbonates
Sodium carbonates

Analysis

- Slide rule for carbonate equilibria and alkalinity in water supplies. A. A. Hirsch. bibliog *Ind & Eng Chem Anal ed* 14:943-6 D 15 '42

CARBONADE, Illinois**Water supply**

- Obtaining water from government lake during a drought. C. Fore. *il Pub Works* 74:25-6+ Je '43

CARBONIC acid

- See also
Carbon dioxide

CARBONYL compounds

- Aldol condensation; detection of carbonyl groups in aldehyds by use of Raman spectra. R. H. Saunders and others. bibliog *Am Chem Soc J* 65:1309-11 Jl '43
- Grignard reactions; enolization of aliphatic hindered carbonyl compounds. F. C. Whitmore and C. E. Lewis. *Am Chem Soc J* 64:2964-6 D '42
- Mechanism of the reaction between hindered carbonyl compounds and the Grignard reagent. R. T. Arnold and R. W. Liggett. bibliog *Am Chem Soc J* 64:2875-7 D '42

CARBONYL sulfide

- Removal of organic sulphur compounds from gases. N. Booth and L. J. Jolley. *Soc Chem Ind J* 62:87-8 Je '43

CARBONYLS

Estimation of carbonyl groups in chromic anhydride oxystarch and oxycellulose by means of hydroxylamine. E. K. Gladding and C. B. Purves. *bibliog* diags Paper Tr J 116:26-31 Ap 8 '43; Same cond. Paper Ind 25:306-9 Je '43

CARBORUNDUM. See Silicon carbide**CARBOSEAL**

Gas main conditioning. M. N. Jensen. *Am Gas J* 158:33-4 Ja '43

CARBOWAX compounds**Physiological effects**

Some pharmacological properties of polyethylene glycols of high molecular weight (carbowax compounds). H. F. Smyth, jr. and others. *J Ind Hygiene* 24:281-4 N '42

CARBOXYL group

Derivatives of N-carboxy- α -amino acid esters. M. Frankel and E. Katchalski. *bibliog* *Am Chem Soc J* 65:1670-4 S '43

Sapogenins; the position of the carboxyl group in oleanolic and glycyrrhetic acids. G. A. R. Kon and W. C. J. Ross. *Chem Soc J* p741-4 D '42

CARBOXYLATION

Carboxylation; direct introduction of the chloroformyl ($-\text{COCl}$) group into alicyclic and aliphatic acid chlorides. M. S. Kharasch, K. Eberly and M. Kleiman. *Am Chem Soc J* 64:2975-7 D '42

CARBOXYLIC acids

Antispasmodics; basic esters of some polynuclear carboxylic acids. R. R. Burtner and J. W. Cusic. *bibliog* *Am Chem Soc J* 65:1582-5 Ag '43

Catalytic reduction by formic acid under pressure; the preparation of aldehydes from carboxylic acids with titanium dioxide as catalyst. R. R. Davies and H. H. Hodgson. *Chem Soc J* p84-6 Mr '43

Long wave-length spectra of saturated carboxylic acids, esters, and salts. H. L. McMurry. *bibliog* *J Chem Phys* 10:655-60 N '42

See also

Fluorenonecarboxylic acids

CARBURETERS

Carburetor service on kerosene and distillate engines. *diag* *Roads & Sts* 85:55 N '42
Holley carburetor operating and servicing. E. E. Thorp. *il diags* *Aviation* 42:209-11+ O '43

Preventing idling failures in flight on 4-cylinder engines. *Aero Digest* 42:323-4 Ja '43

Manufacture

New Bendix carburetor plant. *il Aero Digest* 43:228 Jl '43

Stromberg injection carburetor production on large scale. J. Geschelin. *il Automotive & Aviation Ind* 88:18-22+ F 15 '43

Testing

Controlled air supply for supercharger, carburetor and engine testing. C. S. Leopold. *flow diags* *Refrig Eng* 46:85-7+ Ag '43

Ingenuity makes up for lack of special tools; air box doors and orifice changers for adjusting airplane carburetors produced by jobbing tool shop. G. Letsche. *il diag* *Iron Age* 152:58-9 Ag 26 '43

Speeding up measurements of air flow to aircraft engines and carburetors; adjustable orifices. J. P. Green. *il diags* *Instruments* 16:54-8+ F '43

CARBURIZING. See Case hardening**CARCINOMA.** See Cancer**CARD system in business**

How Graham-Paige controls materials; flexible card system furnishes factory and CMP records. R. G. French. *il Am Business* 13:14-15+ O '43

Metal and melting cost in a gray iron foundry. A. E. Grover. *il Foundry* 71:72-4, 159-62 Ja '43

Quick servicing aided by repair index; Hartford electric light company. *il Elec W* 119:492 F 6 '43

See also

Punched card system

CARDING of cotton. See Cotton carding**CARDIOGRAPH**

Electrical amplifying stethoscope and phonoelectrocardiograph. G. E. Donovan. *bibliog* *il diags* *Inst E E J* 90 pt 3:38-49 Je '43; Abstracts. *Electrician* 129:638 D 11 '42; *Elec R (Lond)* 131:720-1 D 4 '42; Discussion. *Inst E E J* 90 pt 3:49-52, 149-50 Je, S '43

See also

Pulse rate indicators

CARGO airplanes. See Airplanes, Freight**CARGO handling***See also*

Grain handling

Loading and unloading—Ships

CARIBBEAN region

Mexico, Central America and Cuba from an investment standpoint. V. L. Horoth. *Mag of Wall St* 72:18-20+ Ap 17 '43

See also

Agriculture—Caribbean region

CARIBOU

Caribou meat may supplement Canadian food rations. *For Comm W* 11:32 Je 12 '43

CARIUS tube. See Combustion tubes**CARLISLE, Floyd Leslie, 1881-1942**

Sketch. *por* *Elec W* 118:1623 N 14 '42; Paper Tr J 115:12 N 12 '42

CARMICHAEL, Leonard, 1898-

Portrait. *J Ap Phys* 14:381 Ag '43

CARNAUBA wax

Carnauba wax production; abstract. *Soap & San Chem* 19:113 F '43

CARNEGIE corporation

Annual report. W. A. Jessup. *Science* 96:585-7 D 25 '42

CARNEGIE-ILLINOIS steel corporation

Employees' fakes in rushing steel bring swift correction. *Steel* 112:32-3 Mr 29 '43

False tests not needed, Fairless says; Senate (Truman) committee hearing regarding steel plate production at the Irvin works. *Iron Age* 151:94+ Ap 1 '43

Senate committee, C-1 employees, President Perry mix it on defective plate charges against Carnegie-Illinois steel corp. *Iron Age* 151:130-1 Mr 25 '43

Suit brought over charges that tests of steel plate were falsified. *Eng N* 130:451 Ap 1 '43

Testing troubles; two indictments plus two suits in subspecification plates case. *Business Week* p27-8 O 23 '43

Truman findings expected to affect output only slightly. *il Steel* 112:49-50 Ap 26 '43; *Iron Age* 151:95-6 Ap 22 '43

CARNEGIE institute of technology

Coal research laboratory of the Carnegie institute of technology. *il Chem & Eng N* 21:359-61 Mr 25 '43

CARNEGIE institution of Washington

Presidential report. V. Bush. *Science* 96:sup 10 D 25 '42

CAROLINA bays

Origin of the Carolina bays, by D. Johnson. Review, by J. L. Ferguson. *Am Assn Pet Geologists* Bul 27:654-6 My '43; Reply. D. Johnson. 27:1008-9 Jl '43; Review, by C. W. Cooke. *Am J Sci* 241:583-9 S '43

CAROLINA power and light company

FPC bars write-ups. *Comm & Fin Chr* 157:128 Ja 11 '43

CAROTENE

Action of cold concentrated hydriodic acid on carotenes; structure and *cis-trans*-isomerization of some reaction products. A. Polgar and L. Zechmeister. *bibliog* *diags* *Am Chem Soc J* 65:1528-34 Ag '43

Carotene; preliminary report on diphenylamine as a stabilizer for carotene. K. T. Williams, E. Bickoff and W. Van Sandt. *bibliog* *Science* 97:96-8 Ja 22 '43

Dehydrated spinach; changes in color and pigments during processing and storage. H. J. Dutton, G. F. Bailey and E. Kohake. *bibliog* *il Ind & Eng Chem* 35:1173-7 N '43

Fortification of oil, fat, and flour; stability of added carotene and effect of antioxidants. P. W. Morgal, L. W. Byers and E. J. Miller. *bibliog* *Ind & Eng Chem* 35:794-7 Jl '43

CAROTENE—Continued

Analysis

- Determination of carotene in vegetable oils without saponification. E. Bickoff and K. T. Williams. *bibliog Ind & Eng Chem Anal* ed 15:266-8 Ap 15 '43
- Determination of pure carotene in plant tissue; a rapid chromatographic method. M. E. Wall and E. G. Kelley. *bibliog Ind & Eng Chem Anal* ed 15:18-20 Ja 15 '43
- Separation of carotenes from xanthophylls. A. J. Haagen-Smit, C. E. P. Jeffreys and J. G. Kirchner. *bibliog Ind & Eng Chem Anal* ed 15:179-80 Mr 15 '43

CAROTENOIDS

- Carotenoids of yellow corn grain. J. W. White, Jr., F. P. Zscheile and A. M. Brunson. *bibliog Am Chem Soc J* 64:2603-6 N '42
- cis-trans* Isomerization and spectral characteristics of carotenoids and some related compounds. L. Zechmeister and A. Polgár. *bibliog Am Chem Soc J* 65:1522-8 Ag '43
- cis-trans* Isomerization and spectral characteristics of gazanixanthin; further evidence of its structure. L. Zechmeister and W. A. Schroeder. *bibliog diag Am Chem Soc J* 65:1535-40 Ag '43
- Spectral characteristics and configuration of some stereoisomeric carotenoids including polycyclopentene and pro-v-carotene. L. Zechmeister and others. *bibliog Am Chem Soc J* 65:1940-51 O '43

CARPENTERS

- Army is training carpenters. *il Am Bld* 64: 69+ D '42

CARPENTRY

- See also*
Building
Floors

CARPET beetles

- Fabric pests; tentative fabric pest deterrent tests as standardized by joint association committee. F. W. Fletcher. *Soap & San Chem* 18:117, 119, 121+ D '42

CARPET factories

- Employees*

- War corps utilizes young men at Firth carpet co. *il Textile World* 93:86-7 S '43

CARPETS

- Non-static carpet weave is patented. *Franklin Inst J* 235:322-3 Mr '43
- Nullifying static electricity in rugs and carpets; conductive yarn runs into rubber composition-treated backing. *Rubber Age* 52:228 D '42
- Rugs in doubt; pessimistic outlook for floor covering industry. *Business Week* p48-9 Ap 24 '43

See also

Rugs

Testing

- Wear testing of carpets. H. F. Schiefer. *p13 J Research Nat Bur Stand* 29:333-79 N '42

CARRAGEEN

- Money in moss; widening uses for gums of seaweed. *il Business Week* p64+ S 18 '43
- Polysaccharides of carrageen moss (*chondrus crispus*); the linkage of the d-galactose residues and the etheral sulphate. J. Buchanan, E. E. Percival and E. G. V. Percival. *Chem Soc J* p51-4 F '43

CARRIER corporation, Syracuse, New York

- Conducts Institute of business for its plant and office workers; offers 14-week course to give them clearer perspective of cooperative capital-labor job. R. H. Ganly. *il Ptr Ink* 205:24-5+ O 15 '43
- Selling the staff; Carrier corp. is conducting lecture course among employees. *il Business Week* p104 O 30 '43

CARRIER current control

- Carrier control of sectionalizing air breaks; 33-kv. transmission system of the Philadelphia electric co. C. H. Faust. *il Elec W* 120:1504-5 O 30 '43
- Carrier current can provide more kwh; various applications to transmission line operation. G. S. Lunge. *il Elec West* 90:52-4 My '43
- Carrier-current differential protection for transformer banks. T. A. Cramer. *il diags Elec Eng* 62:Trans 545-8 Ag '43

- Electrical developments of 1942; carrier current. G. Bartlett. *il Gen Elec R* 46:18-19 Ja 43

- Powder company uses of electronic equipment. W. H. Blankmeyer. *il Electronics* 16:134-5, 169-70+ Mr '43
- Rhythmic control. S. A. Daines. *il Elec R (Lond)* 133:167-9 Ag 6 '43
- Water heater control releases peak kw.; Winnipeg hydro-electric system. J. G. Glassco. *il Elec W* 120:256-7 Jl 24 '43

- CARRIER current telephone. *See Telephone, Carrier current*

CARRIERS

- Public health service drinking water standards adopted Sept. 25, 1942, for drinking and culinary water supplied by common carriers in interstate commerce. *Pub Health Rep* 58:72-82 Ja 15 '43; Same. *Am Water Works Assn J* 35:104 Ja '43; Same. *Water & Sewage* 31:11, 34-6, 38-9 F '43; Same. *Water Works & Sewerage* 90:sup 125-7 Je '43

- Sanitation manual for land and air conveyances operating in interstate traffic. *Pub Health Rep* 58:159-93 Ja 29 '43

See also

- | | |
|--------------------------------------|---------------------------------|
| Air lines | Motor trucks in freight service |
| Electric railroads | Petroleum pipe lines |
| Freight car service | Postal service |
| Gas, Natural—Pipe lines | Public utilities |
| Interstate commerce | Railroad law |
| Interstate commerce commission | Railroads |
| Motor bus lines—Laws and regulations | Shipping |
| Motor trucks—Laws and regulations | Steamboat lines |
| | Street railroads |
| | Transportation |
| | Trolley buses |
| | Waterways |

CARROLL, Jean Franklin

- Portrait. *Business Week* p 16 Ag 28 '43

CARROLL college

Library

- Library for Carroll college, Waukesha, Wisconsin; views, plans, and construction outline. *Arch Forum* 78:66-70 Ap '43

CARROTS, Dried

- Dehydrated vegetables under the microscope; abstract. R. M. Reeve. *Food Ind* 15:129-30 S '43
- Dehydration of vegetables; carrots; picture flow sheet. *Food Ind* 15:64-7 F '43
- Facts of vegetable dehydration revealed by microscope. R. M. Reeve. *il diag Food Ind* 14:51-4+ D '42
- Vitamin A value of fresh and dehydrated carrots; abstract. R. H. Wilson, J. O. Thomas and F. deEds. *Food Ind* 15:109-10 Ja '43

CARS

- Few passenger car improvements were made in 1942. E. L. Woodward. *Ry Age* 114:37-9 Ja 2 '43
- Greater availability of passenger-train cars. J. A. Deppe. *Ry Age* 114:623-4 Mr 27 '43
- Passenger cars used intensively. *il Ry Age* 113:835-8 N 21 '42
- Plastics for the railroads. *il Ry Mech Eng* 117:453-5+ O '43
- Use of plastics in car construction; views of railroad men. *Ry Mech Eng* 117:320-1 Jl '43

See also

- | | |
|--------------------------|-----------------------|
| Baggage and express cars | Freight cars |
| Brakes | Grain cars |
| Car cooling | Mine cars |
| Car couplings | Motor cars (railroad) |
| Car lighting | Refrigerator cars |
| Car trucks | Sleeping cars |
| Car wheels | Street cars |
| Dining cars | Tank cars |

Bearings

- Better bearings; railroads conserve large stocks of bronze and babbitt by using lighter journal bearings. *Business Week* p90 Mr 27 '43
- Hot boxes a perennial problem. C. B. Smith. *Ry Age* 114:395-7 F 20 '43; Excerpt. *Ry Mech Eng* 117:120-1 Mr '43
- Lubrication and hot boxes. D. A. Reavis. *Ry Mech Eng* 117:400-2+ S '43; Same cond. *Ry Age* 115:305-8 Ag 21 '43

CARS—Bearings—Continued

Railroading on roller bearings. W. C. Sanders. *il Ry Age* 115:379-80 S 4 '43
 Service life of emergency bearings. *Ry Mech Eng* 117:483-4 O '43
 What about hot boxes? roundtable discussion. *Ry Mech Eng* 117:266-9 Je '43

Decoration

B. & O. redecorates colonial diners. *il diags Ry Age* 114:830-1 Ap 24 '43; Same. *Ry Mech Eng* 117:209+ My '43

Electric equipment

Flat belts for axle drives; maintenance methods. J. V. Dobbs; R. G. Cazanjan. *Ry Mech Eng* 117:434-6 S '43
 110 volts for passenger cars; editorial. *Ry Mech Eng* 117:218 My '43; Discussion. W. S. H. Hamilton. *il* 117:322 Jl '43

Equipment

Arc welded compressor suspension. J. F. Muller and G. C. Munoz. *il diags Ry Mech Eng* 117:50-2 Ja '43
 Milwaukee's 31 new passenger cars. *il Ry Age* 114:659-60 Ap 3 '43; *Ry Mech Eng* 117:160-2 Ap '43

See also
 Air brakes

Lubrication

Lubrication of journal boxes. H. J. Flannigan. *Ry Mech Eng* 117:278-9 Je '43

Manufacture

Plywood easily handled in railway car construction. E. L. Krietemier. *Ry Mech Eng* 117:368-9 Ag '43

Repair

Better tools needed for car repairs. F. G. Moody. *Ry Mech Eng* 117:177-8 Ap '43
 Questions and answers on welding practices (cont). *Ry Mech Eng* 116:535; 117:40, 181-2, 224, 324-5, 374-5 D '42-Ja, Ap-May, Jl-Ag '43
 Wheel conditions and wheel shop practices. M. E. Fitzgerald. *Ry Mech Eng* 117:328-30 Jl '43

Statistics

Passenger-train cars in 1942. A. J. McGinnis. *il Ry Age* 114:125 Ja 2 '43

CARS, Baggage and express. See Baggage and express cars**CARS, Clearance**

New York Central puts clearance matters on highly efficient basis; establishes central bureau and builds new clearance car. *il Ry Age* 114:1080-2+ My 23 '43

CARS, Electric railroad

Electric train haulage on Swiss railways. *il Electrician* 130:48 Ja 15 '43
 Increased carrying capacity on the South Shore line. M. Aldrich. *il Mass Transportation* 38:340 N '42
 New Swiss locomotives; electric motor coaches, Pilatus and Vitznau railways. *il Electrician* 129:546 N 20 '42

See also
 Street cars

CARS, Fire extinguishing. See Railroads—Fires and fire protection**CARS, Freight. See Freight cars****CARS, Instruction**

Education for Reading engineers; new fuel instruction car. *il Ry Age* 115:276-9 Ag 14 '43; Same. *Ry Mech Eng* 117:464-6 O '43

CARS, Steel

Milwaukee's 31 new passenger cars. *il Ry Age* 114:656-60 Ap 3 '43; *Ry Mech Eng* 117:157-62 Ap '43

Steels for railway rolling stock. C. Dinsdale. *table Engineer* 175:482-3 Je 18 '43

Manufacture

Design and construction of underframes for all-welded railroad passenger cars. J. E. Candlin, Jr. and A. M. Unger. *il diags Welding J* 22:309-18 My '43

CARS, Subway**Lighting**

See Car lighting

CARTELS. See Trusts, Industrial—International trusts

CARTER, Herbert Edmund, 1910-
 Lilly award made for amino acids study. *por Oil Paint & Drug Rep* 143:3+ Ap 5 '43

CARTER oil company

Fifty-year history of Carter oil co. closely parallels oil's growth. *Oil & Gas J* 41:50 My 6 '43

CARTOONS

Harmony at Hot Springs; Derso and Kelen portfolio of cartoons. *Fortune* 28:128-34 Ag '43

Have you a war cartoonist in your plant? James Barstow's Hopeless Hector and his house magazine editorial cartoons. *il Ptr Ink* 203:70+ My 7 '43

See also

Advertisements, Pictorial—Cartoons

CARTRIDGE brass. See Brass**CARTRIDGE cases**

Extrusion brasses from fired cartridge cases. J. Rae, Jr. *Engineering* 155:145, 165-6, 185, 205 F 19-Mr 12 '43; Excerpts. *Metal Prog* 44:74+ Jl '43

Remelting cartridge cases; abstract. J. Rae, Jr. *Metals & Alloys* 17:568 Mr '43
 Rust inhibitor for shell cases. *Iron Age* 151:66 Ap 8 '43

Steel cartridge case varnishes. W. H. Stephens. *Metals & Alloys* 18:82 Jl '43
 Steel for brass in the big guns. *Fortune* 27:76 Je '43

Manufacture

Annealing machine for steel cartridge cases. *il Mach* 49:224+ Jl '43

Automatic ejector for cartridge cases. J. Guerra. *diag Am Mach* 86:1433 D 10 '42
 Buick method for steel cartridge cases. *il Automotive & Aviation Ind* 88:39+ My 15 '43

Cage chutes for drawn parts. R. I. Miner. *diags Am Mach* 87:100-2 Je 24 '43

Cartridge cases continuously annealed. *il Iron Age* 151:57 My 6 '43

Catching cartridge defects at the source. G. J. Foss, Jr. *Metal Prog* 44:97 Jl '43

Cemented carbide dies for drawing steel cartridge cases. *Mach* 49:176 Je '43

Cleaning and finishing cartridge cases. A. J. Lehman. *il Iron Age* 152:40-2 O 21 '43

Corcoran-Brown, automobile headlamp maker, now producing steel cartridge cases in large quantities. J. Geschelin. *il Automotive & Aviation Ind* 89:22-5+ O 15 '43

Efficient handling; production of artillery cartridge cases; using H-P-M Fastraverse self-contained hydraulic presses. *il plan Steel* 111:92-4 N 23 '42

Electrostatic detearing; helps control drain-off when baking finish on dipped steel cartridge cases. H. P. Ransburg. *Steel* 113:106+ Ag 9 '43

Grinding cartridge case and bullet jacket dies. F. B. Whittemore, Jr. *diags Steel* 112:76+ Mr 22 '43

Hot cupping used by Buick for 75-mm. steel cartridge cases. *il diags Am Mach* 87:121-8 My 13 '43

Improved hydraulic presses for wartime requirements. J. H. Maude. *diags A S M E Trans* 65:289-90 My '43

Manufacture of steel cartridge cases. H. R. Turner. *il Metals & Alloys* 18:771-7 O '43
 Morrison annealing machines for steel cartridge cases. *il Mach* 49:181-2 Ja '43

Pickling steel cartridge cases. A. J. Lehman. *il Steel* 113:98, 100 Ag 23 '43

Pneumatic controls speed cartridge machining. A. W. Lancaster. *il Product Eng* 13:696-7 D '42

Selas produces automatic heat-treating machine which anneals mouth ends of steel cartridge cases. *il Am Mach* 87:125 Mr 18 '43

Sheldraw no. 151 compound for steel shell case drawing. *Am Mach* 87:118 Ap 1 '43

Shells of steel; produced in increasing volume by Buick. *il Manuf Rec* 112:30-1+ Je '43

Small-arms ammunition from one of Remington's new plants. C. O. Herb. *il diags Mach* 49:136-51 Ap; 142-51 Je '43

CARTRIDGE cases—Manufacture—Continued

- Steel artillery cartridge cases now produced by 50 manufacturers. H. R. Turner. *Steel* 111:42 D 21 '42
- Steel cartridge cases. R. B. Schenck. *Il S A E J* 51:229-33 J1 '43; Same abr. *Iron Age* 151:58-61 My 6 '43; Same cond. *Metal Prog* 43:912-16 Je '43; Same cond. *Mech Eng* 65:815-17 N '43
- Steel cartridge cases and how Buick makes them. *Il Steel* 112:92-5+ My 3 '43
- Steel cartridge cases are made successfully as small as .30-caliber. *Il Steel* 113:126+ S 20 '43
- Steel cartridge cases for artillery ammunition. H. R. Turner. *Il Metal Prog* 43:49-53 Ja '43
- Steel cartridge cases for 37-mm. shell. C. L. Patterson and H. R. Turner. *Il diags Am Mach* 87:113-24 J1 22 '43
- Steel cartridge cases from a Chase brass plant. C. O. Herb. *Il diags Mach* 50:137-52 O '43
- Steel cartridge cases; wartime developments to have far-reaching influence on future deep-drawing practice. H. R. Turner. *Steel* 112:46-8+ Ja 18 '43
- 20 mm. shell cases; use of carbide dies and several unusual machines; Stoner mfg. co. W. A. Phair. *Il diag Iron Age* 151:41-5 Ap 1 '43
- Use of cuprodine as a lubricant in the drawing of steel cartridges. G. S. Gardner. *Metal Finishing* 41:212 Ap '43
- Welding powder bag clips to cartridge cases. *Il Steel* 112:96+ My 3 '43

CARTRIDGE links

- Cleaning machine gun belt links; illustrations with text. *Iron Age* 152:74-5 O 28 '43
- Heat treating cartridge links; abstract. *Metals & Alloys* 16:948+ N '42

CARTRIDGES

- All-America package competition award; New Jersey machine corp. machinery for handling and packaging cartridges. *Il Mod Packaging* 16:87+ Ap '43
- All-America package competition award; Package machinery company loading of cartridges into clips and cartons. *Il Mod Packaging* 16:88, 128+ Ap '43
- Gift boxes for the Axis; cartridge boxes, cases and chests. G. T. Kellogg. *Il Mod Packaging* 16:72-5 Ja '43

Manufacture

- Conveyors aid cartridge manufacture; Lake City ordnance plant. *Il diags Am Mach* 87:113-20 Je 10 '43
- Machine gauges small cartridges automatically. *Iron Age* 151:49 Ja 28 '43
- Remington Arms: the rise of the foreman; he is sergeant of production on industry's battlefield. *Il Fortune* 27:93-6+ Ap '43
- Small-arms ammunition from one of Remington's new plants. C. O. Herb. *Il diags Mach* 49:136-51 Ap; 142-51 Je '43
- Surveys of liquid wastes from munitions manufacture; small arms ammunition. R. S. Smith and W. W. Walker. *Pub Health Rep* 58:1393-1404 S 17 '43

CARVACROLPHTHALEIN

- Carvacrolphtalein. M. H. Hubacher. *bibliog Am Chem Soc J* 64:2538-9 N '42

CARVER, George Washington, 1864-1943

- Sketch. *Oil Paint & Drug Rep* 143:122 Ja 11 '43; por *Manuf Rec* 112:30+ Ja '43

CASABLANCA conference, 1943

- Casablanca plans call for invasion of Europe and decisive action against Japan. F. D. Roosevelt. *Comm & Fin Chr* 157:756-7 F 25 '43
- Giraud halls results at Casablanca for France. *Comm & Fin Chr* 157:673 F 18 '43
- Morocco meeting. *Economist* 144:133-4 Ja 30 '43
- President reports on talks at Casablanca. *Comm & Fin Chr* 157:538 F 11 '43
- President returns to Washington from Casablanca conference, visited Liberia, Brazil and Trinidad. *Comm & Fin Chr* 157:493 F 4 '43
- Roosevelt, Churchill confer at Casablanca on war campaign; Giraud, De Gaulle there. *Comm & Fin Chr* 157:370 Ja 28 '43

CASE, J. I., company

- More war production for J. I. Case. *Barron's* 23:3+ Mr 1 '43

CASE, John Crowther

- Case, Faust new Socony directors. *por Oil & Gas J* 42:14 Je 3 '43

CASE hardening

- Carburizing characteristics of 0.20 per cent carbon alloy and plain carbon steels. G. K. Manning. *Il Am Soc for Metals Trans* 31:8-32; Discussion. 33-40 Mr '43
- Carburizing compounds reconditioned automatically. S. H. Brams. *Il diag Iron Age* 150:67-9 N 26 '42
- Carburizing gears in the electric salt bath furnace. W. F. Sorenson. *Il Metal Prog* 43:237-40 F '43
- Carburizing grades of NE steels. T. A. Trischman. *Metal Prog* 43:86+ Ja '43
- Carburizing test on NE 8020 and 8317. G. A. Nelson. *Metal Prog* 42:867 N '42
- Case depth. C. H. Bierbaum. *Metal Prog* 43:70 Ja '43
- Case depth; an attempt at a practical definition. F. E. Harris. *Il Metal Prog* 44:265-72 Ag '43
- Double hardening; process for motor car transmission gear wheels, involving two quenches; abstract. H. Glaubitz. *Automobile Engr* 33:236 J1 '43
- Engineering file facts; summary of case hardening methods. R. S. Burpo, jr., comp. *Metals & Alloys* 17:341-2 F '43
- Experience with NE (national emergency) alloy steels; type NE-9420. A. S. Jameson. *Il diags Steel* 112:100-1, 103-4, 106, 143 F 1 '43
- Flame cutting and hardening aid tank sprocket production. *Il Mach* 49:182-3 D '42
- Flame hardening tank turret ring races. T. E. Lloyd. *Il Iron Age* 151:64-5 Mr 25 '43
- Gas-air premixing and combustion for modern flame-hardening. R. F. Apter and H. W. Smith, jr. *diags Am Gas J* 158:11-14 Mr '43
- Hardenability of low carbon steel; abstract. S. von Hofsten. *Iron Age* 152:59 N 11 '43
- Hardening hammers for unit coal mills. J. H. Reichenbach. *Rock Prod* 46:49 Ja '43
- Hardening; new surface process developed in Germany. *Automobile Eng* 32:508 N '42
- Hardening shifter rods. J. Graham. *diag Metals & Alloys* 18:537 S '43
- High-speed tool steels; surface hardening by the cyaniding process; abstract. H. Scharmann. *Automobile Eng* 33:340 Ag '43
- Localized hardening machines, flame and induction methods. *Il Product Eng* 14:[723] insert 7 N '43
- NE (national emergency) alloy steels; successful applications of NE-8000 series. A. S. Jameson. *Il diag Steel* 111:112-14, 116, 118 D 7 '42
- New developments in flame hardening. S. Smith. *Il Welding J* 22:21-3 Ja '43
- New surface-hardening process. *Automotive & Aviation Ind* 88:200 Mr 15 '48
- Nonburning carburizer. *Il Steel* 111:102+ N 16 '42
- Ordinance flame hardening. S. Smith. *Il Welding J* 22:911-19 N '43
- Peened surfaces improve endurance of machine parts; abstracts. J. O. Almen. *Il Metal Prog* 43:209-15+ F '43; *Steel* 112:88-9+ Mr 8 '43; *Automotive & Aviation Ind* 88:25-32+ F 1 '43
- Plain carbon replaces alloy steels. A. S. Jameson. *Il Iron Age* 151:47-56 My 6 '43
- Principles of heat treating steel. H. L. Walker. *Il Cer Ind* 41:43-4, 46 Ag '43
- Properties of hardened steels. J. E. Erb. *bibliog Il diags Iron Age* 151:39-47 My 27 '43
- Quench control pays; Ross gear & tool co. R. Trautschold. *Il Steel* 112:106+ Mr 1 '43
- Railroad shop flame hardening. S. Smith and J. G. McIlhenny. *Il diags Ry Mech Eng* 117:422-5 S '43
- Railroads' use of flame hardening processes. F. C. Haase. *Il Ry Mech Eng* 116:511-14+; 117:18-20+ D '42-Ja '43
- Roller support speeds flame hardening; cable grooves of sheave wheels. *Il Am Mach* 87:95 J1 22 '43
- Screw machine steels as alloy steel substitutes. A. S. Jameson. *Il diags Iron Age* 152:52-8 S 16; 46-50 S 23; 69 O 28 '43

CASE hardening—Continued

- Steel carburization and decarburization; a theoretical analysis. J. K. Stanley. *Iron Age* 151:31-5 Ja 21; 86-9 Ja 28; 49-55 F 4 '43
- Straightening heat-treated parts. G. B. Berlien. *Diags Steel* 112:74+ Mr 29 '43
- Supposed graphite in carburized NE and S.A.E. steels; effect of calcium and barium. J. Welchner and R. W. Roush. *Il Metal Prog* 43:889-96 Je '43
- Surface hardening. 1942. R. J. Peters. *Il Metals & Alloys* 17:75-7 Ja '43
- Wartime metallurgy considers strategic materials. R. E. Orton and W. F. Carter. *biblog il Machine Design* 15:107-10 My; 111-14 Je '43

Electric hardening

- Casehardening large gears with high frequency current. G. C. Riegel. *Il Metal Prog* 44:78-83 Ji '43
- Case hardening with r-f energy; abstract. V. W. Sherman. *Electronics* 16:170+ Ag '43
- Future of induction heating; abstracts. F. W. Curtis. *Il(p56) Iron Age* 151:57-8 Ap 15 '43; *Machine Design* 15:168+ My '43
- Hardening by induction process speeds production; Tocco machine for hardening heavy sprockets. *Il Sci Am* 168:10 Ja '43; *Iron Age* 150:31 D 31 '42
- Heating gears for hardening by high-frequency induction. F. W. Curtis. *il diags Mach* 49:199-204 Ji '43; *Abstract. Iron Age* 151:63 My 27 '43
- Induction hardened parts for desert warfare. *Il Iron Age* 152:60 Ji 15 '43
- Induction hardening for ball mills. S. A. Covert. *Metals & Alloys* 17:349 F '43
- Induction hardening of parts interest machine tool builders. *Iron Age* 151:158 My 20 '43
- Induction heating; abstract. H. B. Osborn. *Jr. Iron Age* 152:44-5 O 21 '43
- Induction heating vs. carburizing. F. W. Curtis. *diags Elec W* 119:1896 Je 12 '43
- Parts hardening speeded, made versatile, by new electrical equipment. *Il Sci Am* 169:130-1 S '43
- Salt bath heat treatments for emergency steels. E. L. Vally. *tr. diags Iron Age* 151:60-2 Je 24 '43
- Thin case hardening with radio-frequency energy. V. W. Sherman. *il diags Aeronautical Eng R* 2:7+ My '43; *Abstract. Metal Prog* 44:261+ Ag '43
- Toughens skin of ordnance parts. *Il Steel* 112:102 F 8 '43
- What is the future of induction heating in heat treating, joining, forging, melting. F. W. Curtis. *il diags Steel* 112:76, 78 My 31; 117, 120+ Je 14 '43

Gas carburizing

- Developments in continuous gas carburizing. R. J. Cowan. *il diags Steel* 113:96+ S 13; 104-5+ S 27 '43
- Fundamentals of good carburization. J. K. Stanley. *Metal Prog* 42:849-55 N '42

Nitriding process

- Effect of niobium in nitriding steel; abstract. N. M. Voronov. *Chem & Met Eng* 50:198 Je '43
- Handling of liquid ammonia for nitriding and other atmospheres. C. V. Snell. *il diags Metal Prog* 43:245-8 F '43
- Liquid nitriding. J. G. Morrison. *Il Iron Age* 151:41-5 Ap 15 '43
- Nitrided tools; abstract. G. W. Esau. *Iron Age* 151:62 Ap 1 '43
- Nitriding furnaces. *Diags Automobile Eng* 33:277-82 Ji '43
- Nitriding tools in liquid salt baths. G. W. Esau. *il Steel* 113:104+ Ji 12 '43
- Principles of heat treating steel. H. L. Walker. *Cer Ind* 41:37-8 S '43

Shorter process

- Automatic machines for hardening steel parts. *Il Engineering* 154:447 D 4 '42
- Shorter machine for hardening steel rings. *Il Engineering* 156:187 S 3 '43
- Surface hardening; recent developments in shorter process machines. *Il Automobile Eng* 32:503-5 N '42; *Engineer* 174:385 N 6 '42

CASEIN

- Argentina casein importation allowed. *Oil Paint & Drug Rep* 143:3+ My 17 '43
- Argentine casein imports to be heavy. *Oil Paint & Drug Rep* 144:7+ Ag 9 '43
- Case for casein. *Business Week* p75-6 My 22 '43
- Casein importers association formed. *Oil Paint & Drug Rep* 143:4 Ap 12 '43
- Fibers for tomorrow; another protein fiber: casein. N. Clarey, jr. *Textile Col* 65:438-9 O '43
- Growth of pasteurella pests on a casein digest medium. L. D. Smith and R. L. Phillips. *Franklin Inst J* 235:536-45 My '43
- Industrial casein; patent. *Food Ind* 16:131 O '43
- Preparation of methionine and tryptophane-free casein hydrolysates. A. A. Albanese. *biblog Science* 98:46 Ji 9 '43
- Products from casein. F. C. Atwood. *Chem Ind* 51:864-6 D '42

See also

Whey

Analysis

- Detection of minute amounts of adenine and guanine in casein. A. Bloch. *Franklin Inst J* 236:219-24 Ag '43
- Refractometric determination of casein in skim milk. J. G. Brereton and P. F. Sharp. *biblog Ind & Eng Chem Anal ed* 14:872-4 N 15 '42

Prices

- Casein price ceilings set at higher levels. *Oil Paint & Drug Rep* 143:4 Ap 5 '43

CASH discount. See Discount, Cash**CASHEW nuts**

- India's 1942 cashew-nut crop. *For Comm W* 9:23-4 N 21 '42

CASHMERE

- Mohair and cashmere fibers. A. C. Whitford. *Textile Col* 65:1-4 Ja '43

CASINGHEAD gas. See Gas, Natural**CASINOS**

- Architecture of Brazil; Casino Pampulha, near Belo Horizonte. *il plans Arch Rec* 93:37-9 Ja '43

CASKETS. See Coffins**CASSAVA**

- Brazil's production of mandioca in 1942. *For Comm W* 10:23-4 Ja 9 '43
- Cassava growing encouraged in Kenya. *For Comm W* 12:24 Ji 31 '43
- Mandioca; executive commission established to control production, trade, and exports. *For Comm W* 13:16 O 2 '43

CASSAVA starch

- Cassava starch; development of an empire product. *Chem Age (Lond)* 48:248 F 27 '43

CASSITERITE

- Tin in Manitoba; discovery of metal in commercial quantities still being sought. J. D. Bateman. *il Can Min J* 64:273-8 My '43

CAST iron

- Acicular structure in nickel-molybdenum cast irons. R. A. Flinn, M. Cohen and J. Chipman. *biblog il Am Soc for Metals Trans* 30:1255-77; Discussion, 1278-83 D '42
- Addendum to second report of the research committee on high-duty cast irons for general engineering purposes. J. G. Pearce. *Inst Mech Eng J & Proc* 149:Proc 101-2 Je '43
- Babbitting of cast iron improved by new process. *il diag Product Eng* 14:228-30 Ap '43
- British open new laboratory. V. Delpoit. *il Foundry* 71:102-3 Ag '43
- Cast cutters boost milling capacity; combination of mechanite bodies and brazed tips. W. C. Whittem. *il diag Am Mach* 87:92-4 Ji 22 '43
- Cast dies for forging shells. P. Attenborough. *diags Metals & Alloys* 18:287-91 Ag '43
- Cast iron motor block repair. J. H. Davis. *Roads & Sts* 86:85 F '43
- Cast iron research; annual report of the British cast iron research association. *Engineer* 174:627-8 D 25 '42
- Cast iron rod comes back; how to repair castings. A. Havens. *il Am Mach* 87:103-10 O 14 '43

CAST iron—Continued

- Castings for ships and marine engines; meehanite. C. E. Herington. *Il Marine Eng* 47: 150-3 D '42
- Considers gray iron as an engineering material; abstracts of A.F.A. annual meeting papers. *Foundry* 71:184-5 Je '43
- Desulphurizing of cast iron. G. S. Evans. *Il diag Metals & Alloys* 16:876-80 N '42
- Determination by statistical methods of the average service life of 6-inch cast-iron water mains in Brooklyn, New York. A. V. Ruggles. tables N E Water Works Assn J 56:361-84; Discussion. 384-9 S '42
- Early cast iron stove plates of Pennsylvania. F. T. Sisco. *Il Min & Met* 24:18-19 Ja '43
- Effect of thorium on cast iron. W. Baukloh and H. Meierling. *Iron Age* 150:41 D 31 '42
- Enameled iron; abstract. W. Montgomery. *Metals & Alloys* 18:126+ JI '43
- First cast-iron cannon made in England. H. Schubert. bibliog *Iron & Steel Inst J* 146: 131-40 no 2 '42; Same. *Engineering* 155:5-6 Ja 1 '43
- Fluidity of cast iron; abstract. G. Burgess. *Metals & Alloys* 18:102+ JI '43
- Foundry metallurgy in the castings industry. J. W. Bolton. bibliog *Il Foundry* 71:84-5, 180-4 JI; 100-1+ Ag '43
- Gray iron castings; engineering properties; tabulation. F. G. Seifing, comp. *Metals & Alloys* 17:780 Ap '43
- Gray iron, 1942. C. H. Lorig. *Il Metals & Alloys* 17:60-1 Ja '43
- High-pressure iron castings; abstract. A. F. Hammond; S. E. Slater; J. King. *Metals & Alloys* 16:1108+ D '42
- High-strength cast irons for machinery parts. *Il diags Product Eng* 14:659-62 O '43
- How to solder cast iron. A. Eyles. *Am Mach* 87:108 S 16 '43
- Hydrogen and nitrogen in ferrous castings; abstract. C. A. Zapffe and C. E. Sims. *Iron Age* 151:174 My 6 '43
- Investigate cast iron in elevated temperature operation; War metallurgy committee. *Foundry* 71:75+ Ja '43
- Iron castings replace forgings for highly stressed parts. *Il diags Product Eng* 14:161-4 Mr '43
- Malleable iron castings in ordnance. J. H. Frye. *Il Steel* 13:34-6+ Ag 23 '43; Same. *Foundry* 71:102-4+ S '43
- Malleable iron castings, 1942. J. H. Lansing. *Metals & Alloys* 17:63-4 Ja '43
- Malleable iron fills wartime needs. C. Carmichael. *Il Machine Design* 14:96-8+ D '42
- Malleable irons; application of blackheart malleable cast iron in the war effort. *Metals & Alloys* 16:1156+ D '42
- Melting practice and properties of cast irons; abstract. A. I. Krynnitsky and C. M. Saeger, jr. *Metals & Alloys* 17:804+ Ap '43
- Piston rings of gray iron; a pictorial article. T. C. Jarrett. *Metals & Alloys* 17:1188-95 Je '43
- Progress in heat treatment of alloy cast iron. J. S. Vanick. *Foundry* 71:90-2+ JI; 96-7+ Ag '43
- Proposed American standard specifications for coal-tar-dip coating for cast iron pipe and fittings. *Il N E Water Works Assn J* 56:sup[2] 3-10 D '42
- Research on cast iron; annual report of British cast iron research association. *Engineering* 155:45 Ja 15 '43
- Research on cast iron; British cast iron research association laboratory. *Il Engineering* 155:445, 450 Je 4 '43
- Silicon loss between the rod and the deposited metal in oxycetylene welding of cast iron. R. M. Allen, F. F. Dennis and G. Swartz. *Welding J* 22:sup179-81 Ap '43
- Strength vs. composition of cast iron; abstract. A. Gimmy. *Metals & Alloys* 17:370+ F '43
- Theory of shrinkage in gray cast iron. G. A. Timmons. *Il diag Foundry* 70:82-3+ D '42; 71:80-1+ Ja '43
- Third report of the research committee on high-duty cast irons for general engineering purposes. J. G. Pearce. *Inst Mech Eng J & Proc* 149:Proc 103-12 Je '43
- War spurs foundry research. *Il diags Iron Age* 151:148-53 Ja 7 '43
- Wearproofing cast iron bushings. G. C. Masters. *Am Mach* 87:160 JI 8 '43

See also

- | | |
|-------------------------------|-----------------|
| Car wheels | Iron |
| Chilled iron | Iron founding |
| Corrosion and anti-corrosives | Iron metallurgy |
| Foundry practice | Fig iron |
| | Spiegeleisen |

Analysis

- Determines carbon in cast iron and steel. J. G. Donaldson. *diag Foundry* 71:117-18 Mr '43
- Spectrographic analysis of cast iron. F. B. Ling, J. McPheat and J. Arnott. *Il diag Engineer* 176:76-8 JI 23 '43

Graphitization

- Cupola-melted high duty cast irons; abstract. W. W. Braidwood. *Iron Age* 150:71 N 26 '42
- Effect of graphite particle size in the inoculation of gray cast iron. H. R. Dahlberg. bibliog *Il Foundry* 71:125, 128, 130+ Ag '43
- Kinetics of graphitization in white cast iron. H. A. Schwartz. *Il Am Soc for Metals Trans* 30:1328-55; Discussion. 1356-8 D '42
- Ladle inoculation improves gray iron properties and structure. H. W. Lowrie, jr. bibliog *Il Foundry* 71:126-7+ N '43 (to be cont)

Prices

- Gray iron castings prices. *Iron Age* 150:83-4 D 31 '42

Statistics

- Cast-iron boilers and radiators. Survey of Cur Business 1942 Sup p137-8 [supplemented in monthly numbers]

Testing

- Compression testing of cast iron. W. L. Collins. *Il diag Am Soc T M Proc* 42:111-13; Discussion. 114-15 '42
- Electrical resistance method for the determination of isothermal austenite transformations. F. B. Rote, W. C. Truckenmiller and W. F. Wood. bibliog *Il diags Am Soc for Metals Trans* 30:1359-73; Discussion. 1373-6 D '42
- Heat treatment effect on the torsion impact properties of meehanite. C. R. Austin and M. M. Lipnick. *diags Iron Age* 152:54-5 O 7 '43
- Notch sensitivity of alloyed cast irons subjected to repeated and static loads. W. L. Collins and J. O. Smith. bibliog *Il diags Am Soc T M Proc* 42:639-56; Discussion. 657-8 '42
- Some creep studies on cupola malleable cast iron. J. J. Kanter and G. Guarnieri. *Il Am Soc T M Proc* 42:659-67 '42
- Study malleable castings properties for military applications. O. W. Simmons, P. C. Rosenthal and C. H. Lorig. *diags Foundry* 71:102-4+ O; 122-5+ N; 106-8+ D '43
- Study of the chemical, physical and mechanical properties of permanent mold gray iron. R. Schneidewind and E. C. Hoenicke. *Il Am Soc T M Proc* 42:622-34; Discussion. 635-8 '42

CASTERS

- Selecting wheels and casters. J. W. Greve. *Il diags Machine Design* 15:120-3 JI; 141-4 Ag '43

CASTILE soap

- Castile soap. Consumers' Research Bul 11:10 F '43

CASTILLA elastica

- Isolation of an active substance from calonyction auleatum capable of coagulating castilla latex. S. G. Wildman, A. V. McMullan and R. Griggs. *Science* 97:471-2 My 21 '43

CASTILLO, Ramón S. 1873-

- Portrait. *Business Week* p 14 Je 12 '43

CASTING, Centrifugal

- Centrifugal casting. N. Janco. *Il diags Iron Age* 151:51-4 Ap 22 '43
- Centrifugal casting; Allis-Chalmers mfg. co.; abstract. H. B. Zuehlke. *Metals & Alloys* 18:100+ JI '43
- Centrifugal casting machine. *Il Iron Age* 152: 98 O 14 '43
- Centrifugal casting of bushings; abstract. *diags Mech Eng* 65:817-18 N '43
- Centrifugal casting; symposium. C. W. Briggs and others. *Il diags Iron Age* 151: 53-8 My 13; 62-8 My 20 '43

CASTING, Centrifugal—Continued

- Centrifugal steel castings. *il* Product Eng 14: [730] insert 14 N '43
- Centrifugally cast cylinder barrels for airplane engines; Ford motor co. E. F. Cone. *il* Metals & Alloys 16:1062-6 D '42
- Centrifugally cast steel; American cast iron pipe co. C. K. Donoho. *il* Iron Age 151: 52-8 Ap 1 '43; Same. Foundry 71:130-4+ Ap '43
- Centrifuging after the mold is filled with steel. W. F. Wright and J. B. Caine. *il* diags Foundry 71:90-3+ My '43
- Crucibles for centrifugal casting, a big new refractory market. diags Brick & Clay Rec 103:44 Ag '43
- Ford casts cylinder barrels centrifugally. *il* Foundry 71:98-9+ Ag '43
- Ford's centrifugal cast cylinders. C. S. Ricker. *il* diags plan Aviation 42:134-7+ Je '43
- Hydraulic drive spins steel casting machines. E. Bremer. *il* Foundry 71:154, 157 N '43
- Non-ferrous centrifugal castings; abstract. H. B. Zuehlke. Metals & Alloys 17:366+ F '43
- Panel discussion on the production of steel castings centrifugally. Foundry 71:95+ Mr '43
- Pours steel in cores spun vertically; Wehr steel company, Milwaukee. A. T. Baumer. *il* Foundry 71:94-5+ J1 '43
- Precision castings for ordnance and aircraft; jewelry manufacturers make small parts by lost wax centrifugal casting process. J. D. Wolf. *il* Metals & Alloys 18:784-8 O '43
- Steel sheaves are cast centrifugally. A. Johnson. *il* diags Foundry 71:139-41+ Je '43
- Tiny precision parts now cast centrifugally. *il* diags Product Eng 14:481 Ag '43

CASTING machines

- Centrifugal casting in vertical machines. A. T. Baumer. *il* Iron Age 151:57-8 My 13 '43
- Centrifugal casting with vertical spindle machines. F. C. Power. *il* diags Iron Age 151:55-7 My 13 '43
- Hydraulic drive spins steel casting machines. E. Bremer. *il* Foundry 71:154, 157 N '43

CASTINGS

- Brass and bronze castings conservation chart revised. Foundry 71:121, 193 N '43
- Castings' importance in munitions work amply demonstrated. Steel 112:425-6 Ja 4 '43
- Castings in aircraft construction; Vultee field division, Consolidated Vultee aircraft corp. D. M. Davis. *il* Iron Age 152:52-6+ N 4 '43
- Circuit-breaker castings; Mallory 3, a heat-treated chromium-copper alloy. L. B. Hunt. *il* Elec R (Lond) 131:713-15 D 4 '42
- Design of sand castings for quantity production. N. F. Hindle. *il* Metals & Alloys 17:770-5, 970-7, 1196-1202 bibliog(p1202) Ap-Je '43
- Down-grading chart for brasses and bronzes. C. S. Cole. Metal Prog 43:406-8 Mr '43; Same cond. Foundry 71:87+ Mr '43; Same cond. Steel 112:106+ Ap 12 '43
- Electric arc hot topping on ingots and castings developed many years ago by International nickel co. G. F. Sullivan. *il* diags Iron Age 151:56-60 F 11 '43
- Influence of crystal size and orientation upon the mechanical properties of metals in the cast condition. L. Northcott. Metal Prog 43:586+ Ap '43
- Machine-finish allowances for castings. N. F. Hindle. Metals & Alloys 17:1213 Je '43
- Metal-form applications. D. Basch. Metals & Alloys 17:98-9 Ja '43
- Plastic treatment for porous castings. Engineer 175:293 Ap 9 '43
- Porous castings; the use of plastic for plugging purposes. A. Rehbock. Automobile Eng 33:384 S '43
- Reclaiming porous castings with bakelite V.1845 and N.2106. W. Bowman. Iron Age 151:52-3 Ap 8 '43
- Relieving strains in castings; Landis tool co. Mach 49:167 My '43
- Salvage of porous castings. diags Chem Age (Lond) 49:15 J1 3 '43
- Sound 85-5-5 castings; abstract. W. F. Chubb. Metals & Alloys 17:372 F '43
- Trends in use of castings in ordnance. M. H. Davis. *il* Foundry 71:129+ Je '43

- War accelerates technical progress. Steel 112: 324-6+ Ja 4 '43
- Which form of non-ferrous casting? H. Chase. *il* Metals & Alloys 18:496-502 S '43

See also

Cast iron
Foundry practice
Steel castings

Cleaning

- Blast cleaning greatly facilitates inspection of bomb casings. *il* diags Steel 112:36+ My 24 '43
- Cleaning castings in a midwestern shop. *il* Foundry 71:116+ Ja '43; Same. Steel 112:92+ F 8 '43
- Cleaning castings with water and sand; hydroblast tumbling barrel. Foundry 71:134 Mr '43
- Conducting accurate test on abrasive performance. Foundry 71:166-7 Mr '43
- Snagging castings. G. S. Eisaman. *il* Foundry 71:119-20+ N '43

Inspection

- Ordnance inspection of castings. A. C. Richmond. *il* Iron Age 151:41-4 Ap 22 '43

Specifications

- American society for testing materials issues emergency specifications. Foundry 71: 137 My '43

Testing

- Campbell, Wyant & Cannon foundry co. installs million volt X-ray unit. E. Bremer. *il* Foundry 71:108-10+ O '43
- Correlation of the mechanical properties and radiographic appearance of magnesium alloy castings. R. S. Busk. Am Soc T M Proc 42:1076-83; Discussion. 1084-7 '42
- Inspection cut from two days to one hour; fixture with dial indicators checks location and diameter of ball-bearing fits. H. Bernadt. *il* diags Am Mach 87:105-6 J1 22 '43
- Radiography as an inspection tool; acceptance standards for light alloy castings. W. H. Burroughs. *il* Metal Prog 43:227-8 F '43
- Radiography in the foundry; abstract. W. Gladwell. Metals & Alloys 18:602+ S '43
- Radiography of aircraft castings. R. Taylor. Aero Digest 42:238, 240+ Ap '43
- Some calibration data and scatter measurements for the radiography of magnesium aircraft castings. L. W. Ball. Am Soc T M Proc 42:1064-70; Discussion. 1071-5 '42
- Studies of machined versus as-cast test specimens for copper-base alloy sand castings. J. J. Curran and others. *il* diags Am Soc T M Proc 42:199-214 '42
- Study of cassette design for the radiography of aircraft castings. L. W. Ball. diags Am Soc T M Proc 42:1156-64; Discussion. 1165 '42
- Testing the wall thickness of intricate castings. B. M. Thornton. *il* diags Engineering 155:361-2 My 7 '43
- X-ray inspection of castings; Army air forces' requirements. R. Katz. *il* Metal Prog 44:89-94 J1 '43

CASTOLIN eutectic process. *See* Oxyacetylene welding—Castolin eutectic process

CASTOR beans

- Brazil's castor-bean production in 1942. For Comm W 10:24-5 Ja 9 '43
- Castor oil. M. Richelsen. *il* Soap & San Chem 19:24-7, 69-70 Ja '43
- Chemistry of allergens; isolation and properties of an active protein-polysaccharide fraction. CB-1A, from castor beans. J. R. Spies and E. J. Coulson. bibliog Am Chem Soc J 65:1720-5 S '43
- Mexico to produce castor seeds for U.S. war industry. For Comm W 11:33 Ap 17 '43
- Mexico-U.S. castor bean pact signed. Oil Paint & Drug Rep 143:7+ Mr 15 '43
- Texas slighted? Brownsville mill for crushing castor beans. *il* Business Week p53-4+ Ap 24 '43

CASTOR oil

- Castor oil. M. Richelsen. *il* Soap & San Chem 19:24-7, 69-70 Ja '43
- Castor oil for civilian products. Chem & Eng N 21:1725 O 25 '43
- Castor oil in war and industry. J. E. Good. Paint Oil & Chem R 104:10-11, 34-5 D 3 '42

CASTOR oil—Continued

Dehydrated castor oil; abstract. B. Grisanti. *Chem & Met Eng* 50:196 S '43
More castor oil available. *Chem Ind* 53:402 S '43

CASTOR oil plant

New insecticide from castor plant. J. E. Good. *Oil Paint & Drug Recp* 143:4+ Ap 32 '43

CASTORIA. See Sterling drug, inc.

CASTS, Plaster. See Plaster casts

CASUALTY actuarial society

Annual meeting, New York, Nov. 20. East Underw 43:28-9 N 27 '42; Ins Field (Fire ed) 71:11-12 N 26 '42; Nat Underw 46:15+ N 26 '42; Weekly Underw 147:1253 N 25 '42

CASUALTY and surety underwriters, National bureau of. See National bureau of casualty and surety underwriters

CASUALTY insurance. See Insurance, Casualty

CATALASES

Study of crystalline beef liver catalase dried in the frozen state. A. L. Dounce and J. W. Howland. *Biblog Science* 97:21-3 Ja 1 '43

CATALOGING

Cataloguing manual for law libraries. E. Basnet. 356p biblog(p269-87) \$5 Wilson, H.W. '42

Introduction to cataloging and the classification of books. M. Mann. 2d ed 276p \$3.25 Am. lib. assn, Chicago '43
War and cataloging. K. Uehlin. *Special Lib* 34:117-18 Ap '43

CATALOGS

Butler Brothers split big general catalog into several smaller books. *Ptr Ink* 203:28 Ap 2 '43

Catalog copy tells all for Bailey; complete catalogs in business publications serving the iron and steel industry. *Il Ind Marketing* 28:52 My '43

Chicago mail order co. offers advertised brands, new lines; starts name change. *Ptr Ink* 204:52 Ji 16 '43

Comes the pinch; new catalogs reflect shortages in hard lines and housewares. *Business Week* p85-6 Ji 17 '43

Link-Belt replaces big catalog with streamlined edition. *Il Ind Marketing* 28:22-4 Ag '43

New mail-order book sells super-quality. *Ptr Ink* 202:24 Ja 15 '43

New Sears catalog. *Sales Management* 52: 67-8 Ji 15 '43

Specimen of the month catalog of Uhlemann optical company. *Il Inland Ptr* 111:35 Ag '43

Ward catalog given new dress. *Il Inland Ptr* 111:25-7 Ag '43

Zehrus of retailing; mail-order catalogs can't change their stripes; nevertheless, are meeting the war's challenge to selling fashions by mail. H. F. Keane. *Il Ptr Ink* 201:18-20 D 4 '42

See also
Trade directories

Bibliography

Business reference publications. *Ind Marketing* 27:109-10 O 25 '42

CATALYSIS

Catalysis as a biological factor. J. Alexander. *Science* 96:446-7 N 13 '42

Catalysis in the oxidation of lubricating oil. R. G. Larson and F. A. Armfield. *Biblog Il Ind & Eng Chem* 35:581-8 My '43

Catalytic dehydrogenation; catalytic conversion of alcohols into aldehydes, paraffins and olefins. E. J. Budin. *Biblog Am Chem Soc J* 65:1809-13 O '43

Catalytic dehydrogenation of alcohols to aldehydes in the presence of air. R. R. Davies and H. H. Hodgson. *Chem Soc J* p282-4 Jo '43

Catalytic hydrogenation rates; equipment and control. N. K. Anderson and C. A. Rowe. *flow sheet Il diags Ind & Eng Chem* 35:554-7 My '43

Catalytic hydrogenation rates; interpretation of results. R. B. Beckmann, A. E. Pufahl and O. A. Hougen. *Ind & Eng Chem* 35: 558-62 My '43

Catalyzed hydrolysis of amide and peptide bonds in proteins. J. Steinhardt and C. H. Fugitt. *biblog J Research Nat Bur Stand* 29:315-27 N '42

Concept of catalytic chemistry. A. V. Grosse. *biblog Il Ind & Eng Chem* 35:762-7 Ji '43
Cracking technology; catalytic cracking processes in use today. C. R. Wagner. *biblog flow sheet Oil & Gas J* 42:67-9 O 14 '43

Fluid catalysis operates on a principle of industrial importance. *Sci Am* 169:162 O '43

Fluid catalytic cracking plant begins operations at Bayway. *Il Chem & Met Eng* 50: 132-3 F '43

Homogeneous catalysis and solvent effects in a diene synthesis. A. Wassermann. *Chem Soc J* p623-6 O '42

Homogeneous catalysis of diene syntheses; a new type of third-order reaction. A. Wassermann. *Chem Soc J* p618-21 O '42

Mechanism of catalytic hydrogenation. E. K. Rideal. *Chem & Ind* 62:335-8 S 4 '43

Octane number of catalytic gasoline varied by operating methods. E. V. Murphree and others. *diags Oil & Gas J* 42:51, 53-5 Je 3 '43

Producing aviation gasoline by fluid catalytic cracking. *flow diag Il diags Nat Pet N* 35 pt 2:R251-2, R251-5 Je 2 '43

Spot reaction experiments; catalytic reactions. F. Feigl. *J Chem Educ* 20:137-41 Mr '43

Sulfonamide depression of inorganic catalytic action. P. J. Hanzlik and W. C. Cutting. *Science* 98:389-91 O 29 '43

Use of the exchange between carbon dioxide, carbonic acid, bicarbonate ion, and water for isotopic concentration. A. F. Reid and H. C. Urey. *biblog J Chem Phys* 11:403-12 S '43

What takes place in catalytic cracking. P. H. Faust. *Il Pet Refiner* 22:33-6 F '43

See also
Catalysts
Hydrogenation

Study and teaching

Teaching of catalysis. V. I. Komarevsky. *biblog Il J Chem Educ* 19:563-7 D '42

CATALYSTS

Anhydrous HF, tomorrow's refining process catalyst. A. L. Foster. *biblog Oil & Gas J* 41:125-6 Ja 7 '43

Application of palladium- and platinum-polyvinyl alcohol-vanadium catalysts. L. D. Stampino and F. E. Nord. *biblog Am Chem Soc J* 65:429-31 Mr '43

Best catalyst; Socony-Vacuum develops synthetic catalyst which will increase yield of high-octane gasoline. *Nat Pet N* 35:18 Mr 17 '43

Catalysts, ancient and modern. A. J. V. Underwood. *Chem & Ind* 61:476-8 N 21 '42

Catalysts of the activated montmorillonite type. R. C. Davidson, F. J. Ewing and R. S. Shute. *biblog flow diags Il diags Nat Pet N* 35 pt 2:R318-21 Ji 7 '43

Catalytic activity of activated nitrogenous carbons. P. F. Bente and J. H. Walton. *biblog Il J Phys Chem* 47:133-48 F '43

Catalytic activity of intermetallic compounds in the vapor-phase reduction of nitrobenzene. B. Berk and O. W. Brown. *biblog diag J Phys Chem* 46:364-8 N '42

Catalytic alkylation of benzene with ethylene. W. A. Pardee and B. F. Dodge. *biblog flow diag Ind & Eng Chem* 35:273-8 Mr '43; Same. *Il Nat Pet N* 35 pt 2:R180-4 Ap 7 '43

Catalytic coup; wide postwar applications anticipated for fluid catalyst. *Business Week* p64+ My 29 '43

Catalytic desulfurization of gasolines by cobalt molybdate process. A. C. Byrns, W. E. Bradley and M. W. Lee. *biblog diag Ind & Eng Chem* 35:1160-7 N '43

Catalytic hydrogenation of benzene over metal catalysts. P. H. Emmett and N. Skau. *biblog Am Chem Soc J* 65:1029-35 Jo '43

Catalytic interchange of groups in aliphatic amines. K. Nozaki. *Am Chem Soc J* 64: 2920-3 D '42

Catalytic oxidations of naphthalene series. R. N. Shreve and R. W. Welborn. *biblog Il diags Ind & Eng Chem* 35:279-88 Mr '43

CATALYSTS—Continued

Catalytic reduction by formic acid under pressure; a comparison of copper and nickel as catalysts. R. R. Davies and H. H. Hodgson. *Chem Soc J* p281-2 Je '43

Catalytic reduction by formic acid under pressure; the preparation of aldehydes from carboxylic acids with titanium dioxide as catalyst. R. R. Davies and H. H. Hodgson. *Chem Soc J* p84-6 Mr '43

Conduction, convection and heat release in catalytic converters. R. H. Wilhelm, W. C. Johnson and F. S. Acton. *il diags Ind & Eng Chem* 35:562-75 My '43

Conversion of an alcohol into the corresponding aldehyde by a less volatile aldehyde with the aluminium alkoxide catalyst; the influence of an ethylene linkage in the reactant aldehyde. R. R. Davies and H. H. Hodgson. *Soc Chem Ind J* 62:109-10 Jl '43

Decomposition of ethylene and carbon monoxide on metallic catalysts. A. R. McKinney. *bibliog J Phys Chem* 47:152-63 bibliog(p163) F '43

Determination of chloride in bauxite-supported anhydrous aluminum chloride catalysts; extraction and distillation methods. W. A. La Lande, Jr., H. Heinemann and W. S. W. McCarter. *diag Ind & Eng Chem Anal ed* 15:385-7 Je 15 '43

Effect of active nitrogen and of certain nitrogen compounds on catalytic properties of carbon. P. F. Bente and J. H. Walton. *bibliog J Phys Chem* 47:329-37 Ap '43

Effect of catalysts in vapor phase cracking. P. P. Borisov and M. V. Gaverdovskaya. *bibliog Nat Pet N* 35 pt 2:322-3 Jl 7 '43

Factors determining the course and mechanism of Grignard reactions. M. S. Kharasch and others. *Am Chem Soc J* 65:491-507 Ap '43

Hydrogen fluoride, the catalyst. J. H. Simons. *bibliog il Pet Refiner* 22:83-9 Je 83-7 Jl '43

Hydrogenolysis of sulfur compounds by Raney nickel catalyst. R. Mozingo and others. *bibliog Am Chem Soc J* 65:1013-16 Je '43

Hydrolysis of hydrogen cyanide in acetic acid solutions with mineral acids as catalysts. V. K. Kriebel, F. C. Duennel and E. Colton. *bibliog Am Chem Soc J* 65:1479-82 Ag '43

Influence of addenda on the inversion of l-menthone with acids in benzene; the effect of solvents in chemical reactions. A. Weissberger. *Am Chem Soc J* 65:242-5 F '43

Influence of the transition from ferromagnetism to paramagnetism on catalytic activity. G. Cohn and J. A. Hedvall. *bibliog J Phys Chem* 46:841-7 N '42

Inversion of l-menthone and the reaction of diazoacetic ester with the chloroacetic acids. A. Weissberger. *bibliog Am Chem Soc J* 65:245-6 F '43

Kinetics in acid media; condensation of o-benzoylbenzoic acid. C. W. Deane and J. R. Huffman. *bibliog(73 references) il Ind & Eng Chem* 35:684-94 Je '43

Kinetics of ammonia synthesis. P. H. Emmett and J. T. Kummer. *bibliog il Ind & Eng Chem* 35:677-83 Je '43

Mixed heteropoly acid catalysts for the vapor phase air oxidation of naphthalene. H. T. Brown and J. C. W. Frazer. *Am Chem Soc J* 64:2917-20 D '42

New catalyst yields more and improved gasoline. *Oil & Gas J* 41:38 Mr 11 '43

Optically active acyl peroxides; preparation, decomposition, and use as catalysts for vinyl polymerization. C. S. Marvel, R. L. Frank and E. Prill. *bibliog Am Chem Soc J* 65:1647-52 Ag '43

Solid catalysts and reaction rates. O. A. Hougen, K. M. Watson and O. A. Uyehara. *bibliog il Ind & Eng Chem* 35:529-45 My '43

Some boron trifluoride catalyzed alkylations of halobenzenes. G. F. Hennion and V. R. Pieronek. *bibliog Am Chem Soc J* 64:2751-2 D '42

Zinc oxide pigments; the surface area and catalytic activity. C. W. Siller. *bibliog il Am Chem Soc J* 65:431-4 Mr '43

See also

Antioxidants

Enzymes

Hormones

Vitamins

Vulcanization—Accelerators

CATCH basins

Removable catch basin gratings of interesting design. *il Roads & Sts* 86:51 Jl '43

CATERPILLARS

Co-operative pruners: Eastern tent caterpillars. C. H. Blake. *il Tech R* 45:304-5 Ap '43

CATGUT

Chile's catgut trade helps repair war's ravages. *For Comm W* 11:40 My 1 '43

CATHEDRALS

New foundations provided for a nineteenth century cathedral; St Joseph's cathedral, in Hartford, Conn. G. F. Flay, jr. and D. B. McKinley. *il diags Civil Eng* 13:85-7 F '43

CATHODE ray oscillographs. See Oscillographs. Cathode ray

CATHODE ray tubes

Cathode-ray control of television light valves. J. S. Donal, jr. *il diags Inst Radio Eng Proc* 31:195-208 My '43

Cathode-ray tube characteristics. *Radio N* 29:50 Mr '43

Cathode ray tube circuit; hydraulic analog; electronic circuit; applications. *il diags Product Eng* 14:652 O '43

Classification chart of RCA cathode-ray tubes. *Electronics* 16:178 O '43

Determination of the mean image curvature of cathode-ray-tube deflecting coils with double symmetry; abstract. Marshall and Schröder. *Wireless Eng* 20:406 Ag '43

Errors in the deflection of a cathode-ray beam by deflecting systems of single symmetry; abstract. G. Wendt. *Wireless Eng* 20:91 F '43

New frequency-comparison circuit for the cathode-ray tube. G. H. Rawcliffe. *diags Inst E E J* 89 pt 3:191-4 D '42

Production testing; cathode-ray tubes and light-beam galvanometers to test electrical products. C. M. Summers. *il diags Gen Elec R* 45:701-3 D '42

Sensitive cathode-ray voltmeter. Z. V. Harvalik. *diag R Sci Instr* 14:263-5 S '43

Signal converter; thermionic discharge tube for production of time base deflection potentials of a cathode-ray tube. P. Nagy and M. J. Goddard. *bibliog il diags Wireless Eng* 20:273-99 Je '43; Abstract. *Electronics* 16:198-200-4 O '43

Sixty years of electronics, 1883-1943; electron tubes for industry and communications; charts. *Electronics* 16:112a-112c Jl '43

See also

Oscillographs, Cathode ray

Power supply

Radio-frequency-operated high-voltage supplies for cathode-ray tubes. O. H. Schade. *il diags Inst Radio Eng Proc* 31:158-63 Ap '43; Abstract. *Electronics* 16:274+ Mr '43

CATHODE rays

Synchronized calibrator for sweep and gain in cathode-ray recording. S. A. Talbot. *bibliog diags R Sci Instr* 14:184-6 Je '43

CATHODES

Surface area of oxide coated cathodes by adsorption of gas at low pressures. L. A. Wooten and C. Brown. *diag Am Chem Soc J* 65:113-18 Ja '43

Thermionic emission from an oxide-coated cathode. H. Y. Fan. *bibliog diags J AP Phys* 14:552-60 O '43

See also

Electrodes

CATHODIC protection. See Metal protection; Pipe lines—Protection; Steel—Protection

CATTAILS

Cattails harvest on; substitute for kapok. *Business Week* p67-8 S 11 '43

Weeds to rescue; milkweed and cattails answer demand for kapok. *Business Week* p55-6+ D 5 '42

CATTLE**Diseases and pests**

Phenothiazine for cattle lice control. H. S. Telford, J. H. Longwell and J. A. Munro. *Science* 97:354 Ap 16 '43

Prices

Cattle prices, 1942-1943; graph. *Business Week* p14 O 30 '43

CATTLE industry and trade

Cattle and confusion. *il Fortune* 27:88-91+ Ap '43

Crisis in cattle. *Business Week* p48+ Mr 20 '43

Spare that cow! *Business Week* p20+ Ja 23 '43

Argentina

Beef-cattle industry in Argentina. *For Comm W* 10:27-8 Mr 6 '43

Morocco

Production of livestock in French Morocco, 1939-42. *For Comm W* 13:27 O 16 '43

Netherlands

Dutch cattle farmers in distress. *For Comm W* 11:28 Je 5 '43

Paraguay

Paraguay to improve livestock for home food needs. *For Comm W* 13:17 N 6 '43

CAULKING. See Calking**CAUSTIC embrittlement. See Boilers—Failures****CAUSTIC soda. See Sodium hydroxide****CAVENDISH, Henry, 1731-1810**

Henry Cavendish, M. Schofield. *Chem & Ind* 62:41-2 Ja 30 '43

CAVES

Mosses of Luray cavern, Virginia. W. B. Lang. *Science* 98:173-4 Ag 20 '43

Speleology; abstract. R. H. Oppermann. *Franklin Inst J* 235:434-5 Ap '43

CAVITATION

Cavitation in an elastic liquid. E. H. Kennard. *Phys R* 63:172-81 Mr 1 '43

See also

Hydraulic machinery

—Cavitation**CECIL and Presbrey, inc.**

Postwar experts; advertising agency forms technical board to study and ease future burdens of plants converting to war. *Business Week* p80 N 28 '42

CEDAR oil

Oil of cedar wood. E. Guenther. *il Soap & San Chem* 19:94-7+ My '43

CEILINGS

Effect of convection in ceiling insulation. G. B. Wilkes and L. R. Vianey. *il diags Heat-ing-Piping* 15:102-4 F '43

Moisture condensation on ceilings. *India Rubber W* 109:51 O '43

New rule for ceiling sweat problems. *Can Min J* 64:218 Ap '43

CELANESE corporation of America

Accused by FTC. *Comm & Fin Chr* 157:1266 Ap 5 '43

Annual report. *Comm & Fin Chr* 157:989 Mr 15 '43

Celanese replies; challenges FTC's right to compel it to label its fabrics as rayons. *Business Week* p90+ Je 12 '43

Thumbnail stock appraisal. *Mag of Wall St* 72:632 S 18 '43

CELERY

Electric service aids celery farms. *F. Vos. il Elec W* 120:1222+ O 2 '43

CELINA, Ohio**Sewerage**

Three years' treatment of sewage at Celina; activated sludge preceded by chemical treatment. P. A. Uhlmann. *il Pub Works* 74:13-17 Mr '43

CELL division (biology)

Production of multipolar mitoses in normal embryonic chick cells. E. F. Stilwell. *bibliog Science* 98:264-5 S 17 '43

CELLARS

Ratproofing cellarways. *diags Am Bld* 65:56 My '43

CELLODEXTRIN acetate

Celodextrin esters. *Can Chem & Process Ind* 27:413 Jl '43

CELLOPHANE

All-America package competition award; Adel precision products corp. cellophane bags for protecting shipments of metal parts. *il Mod Packaging* 16:114+ Ap '43

All-America package competition award; Shellmar products company paper-and-cellophane pouch for soup mixes. *il Mod Packaging* 16:86+ Ap '43

Cellophane seal; carbon dioxide replaces air in double-walled package. *Business Week* p66+ Mr 6 '43

Conservation of metal and rubber by cellulose sheetings. A. F. Wendler. *Paper Tr J* 115:34-6 D 3 '42

Floating on air; Bubbflil. *il Mod Plastics* 20:70+ D '42

How cigarette companies save cellophane. *il Mod Packaging* 17:74 S '43

New cellophane restrictions. E. Kanzler. *Mod Packaging* 16:51-2 F '43

Packaging requirements for dehydrated vegetables. J. R. Sanborn and G. J. Hucker. *Paper Tr J* 116:27-33 Ap 29 '43

Permeability of transparent wrappings. C. R. Oswin. *bibliog Soc Chem Ind J* 62:45-8 Ap '43

Rivets, cool and collected. *il Mod Packaging* 17:92-4 O '43

Technical data on DuPont's Bubbflil product. J. B. Quig. *il Rayon* 24:77-8, 119-21 F-Mr '43

See also

Dyes and dyeing—

Cellophane

CELLOSOLVE

Determination of monoalkyl ethers of ethylene glycol. H. W. Werner and J. L. Mitchell. *bibliog Ind & Eng Chem Anal* ed 15:375-6 Je 15 '43

Effects of repeated exposures of rats to vapors of monoalkyl ethylene glycol ethers. H. W. Werner and others. *bibliog J Ind Hygiene* 25:374-9 O '43

CELLS

Biodynes; miracle of wound healing and tissue repair. L. M. Miller. *il Sci Am* 168:14-16 Ja '43

Cellular division of space with minimum area. J. Lifshitz. *diags Science* 97:268 Mr 19 '43

Electro-biology; recording e.m.f.'s of living cells. *Elec R (Lond)* 132:315 Mr 5 '43

Some physical properties of living matter. C. H. Norris. *bibliog J Phys Chem* 46:1111-17 D '42

Ultraviolet flashes stimulate living cells; abstract. E. N. Harvey. *diag Electronics* 16:162+ My '43

See also

Cancer

Chromatin

Plant cells and tissues

Protoplasm

Tissues

CELLS, Electric. See Electric batteries; Photoelectric cells; Storage batteries**CELLULOSE**

Action of light on cellulose; application of copper number determinations to cellulose acetate. R. E. Montonna and C. C. Winding. *bibliog Ind & Eng Chem* 35:782-4 Jl '43

Action of light on cellulose; viscosity-concentration relations of cellulose acetate solutions. R. E. Montonna and C. C. Winding. *bibliog Ind & Eng Chem* 35:214-16 F '43

Action of ultraviolet light upon cellulosic materials; abstract. E. Heuser, R. A. Stillings and J. Van Nostrand. *Rayon* 24:532 O '43

Carbamates of cellulose and cellulose acetate; preparation. W. M. Hearon, G. D. Hiatt and C. R. Fordyce. *Am Chem Soc J* 65:829-33 My '43

Carbamates of cellulose and cellulose acetate; stability toward hydrolysis. W. M. Hearon, G. D. Hiatt and C. R. Fordyce. *Am Chem Soc J* 65:833-6 My '43

Cel-O-Seal cellulose closures. *il India Rubber W* 107:496 F '43

Chemical changes affecting the stability of cellulose insulation. F. M. Clark. *Electrochem Soc Trans* 83 (preprint 6):81-96 Ap '43

CELLULOSE—Continued

- Consumption of cellulose by the rayon industry, 1930-1942. Rayon 24:324 Je '43
- Copper compounds and cellulose. R. F. York. *bibliog Chem Age (Lond)* 48:243-4 F 27 '43
- Destructive distillation of lignocellulose. R. Katzen, R. E. Muller and D. F. Othmer. *bibliog diags Ind & Eng Chem* 35:302-5 Mr '43
- Determining the deterioration of cellulose caused by fungi. G. A. Greathouse, D. E. Klemme and H. D. Barker. *bibliog il Textile Col* 65:168-75 Ap '43
- Effect of acetylation on water-binding properties of cellulose; rag stock. J. C. Blettinger. *bibliog il Ind & Eng Chem* 35:474-80 Ap '43
- Effect of acetylation on water-binding properties of cellulose; relation between physical properties and hygroscopicity. W. H. Aiken. *bibliog Ind & Eng Chem* 35:1206-10 N '43
- Electron microscope and cellulose. R. B. Barnes and C. J. Burton. *bibliog il Ind & Eng Chem* 35:120-5 Ja '43
- Enzymic degradation of cell wall substances. D. H. F. Clayson. *bibliog Chem & Ind* 62:49-51 F 6 '43
- Gases evolved by the thermal decomposition of paper. E. J. Murphy. *bibliog Electrochem Soc Trans* 83 (preprint 17):217-28 Ap '43
- German industry makes more extensive research into development of wood chemistry. *Chem & Met Eng* 50:196+ F '43
- Hydrolysis and catalytic oxidation of cellulosic materials; characterization of cellulose. R. F. Nickerson. *bibliog il Ind & Eng Chem* 34:1480-5 D '42
- Kinetics of oxidation of cellulose with periodic acid. G. Goldfinger, H. Mark and S. Siggia. *bibliog Ind & Eng Chem* 35:1083-6 O '43
- Nature of fiber staining by iodine stains. H. W. Rowe. *bibliog Paper Tr J* 116:26-34 Mr 11 '43
- Nature of hydration and fiber bonding. J. d'A. Clark. *il diags Paper Ind* 25:382-6, 507-10 *bibliog (p510) JI-Ag* '43
- Nitric acid pulping of whole cotton; properties of celluloses obtained. J. D. Fleming and F. K. Cameron. *bibliog Ind & Eng Chem* 35:819-21 JI '43
- Plastics from cellulose; abstract. P. F. Robb. *Paint Oil & Chem R* 105:18 Ap 8 '43
- Reactions of cellulose in liquid sulfur dioxide. P. C. Scherer, jr. and L. C. Brooks. *bibliog Rayon* 23:657-8, 718-20 N-D '42
- Rôle of salts in the dyeing of cellulose with substantive dyes. F. L. Usher and A. K. Wahbi. *bibliog Soc Dyers & Col J* 58:221-8 N '42; Discussion. S. M. Neale. 59:148-9; Reply. F. L. Usher. 150-1 JI '43
- Self-ignition temperature of cellulose and magnesium. *Franklin Inst J* 234:492-3 N '42
- Ten years of fundamental research in the pulp, paper, and paperboard industry. H. F. Lewis. *Paper Tr J* 115:32-6 D 31 '42
- Ultraviolet light, its action on cellulose and protein sizes; abstract. M. de Buccar. *Paper Ind* 25:444 JI '43
- Viscosity and molecular weight; the nitrate of wood carboxylate. S. Coppick. *bibliog Paper Tr J* 117:25-9 Ag 12 '43
- X-ray studies of reactions of cellulose in non-aqueous systems; interaction of cellulose and primary amines. W. E. Davis and others. *bibliog Am Chem Soc J* 65:1294-9 JI '43
- See also*
- | | |
|-----------------|----------------|
| Cornstalks | Nitrocellulose |
| Cotton | Paper |
| Ethyl cellulose | Rayon |
| Holocellulose | Sulfite liquor |
| Lignin | |
- CELLULOSE acetate**
- Action of light on cellulose; application of copper number determinations to cellulose acetate. R. E. Montonna and C. C. Windling. *bibliog Ind & Eng Chem* 35:782-4 JI '43
- Action of light on cellulose; viscosity-concentration relations of cellulose acetate solutions. R. E. Montonna and C. C. Windling. *bibliog Ind & Eng Chem* 35:214-16 F '43
- Bobbin coils of cellulose acetate. *il Gen Elec R* 45:713 D '42
- Carbamates of cellulose and cellulose acetate; preparation. W. M. Hearon, G. D. Hiatt and C. R. Fordyce. *Am Chem Soc J* 65:829-33 My '43
- Carbamates of cellulose and cellulose acetate; stability toward hydrolysis. W. M. Hearon, G. D. Hiatt and C. R. Fordyce. *Am Chem Soc J* 65:833-6 My '43
- Cellulose acetate sheeting; its properties and applications. A. F. Caprio. *bibliog il Mod Packaging* 16:81-5+ Ag '43
- Formation of anhydro structures by the alkaline de-acetylation of a partly substituted cellulose acetate *p*-toluenesulfonate. T. S. Gardner and C. B. Purves. *bibliog Am Chem Soc J* 65:444-9 Mr '43
- Mechanical properties of cellulose acetate as related to molecular chain length. A. M. Sookne and M. Harris. *bibliog J Research Nat Bur Stand* 30:1-14 Ja '43
- Osmotic pressure and viscosity measurements with cellulose acetate fractions. A. Bartovics and H. Mark. *bibliog Am Chem Soc J* 65:1901-5 O '43
- Permeability of transparent wrappings. C. R. Cowin. *bibliog Soc Chem Ind J* 62:45-8 Ap '43
- Place of high acetyl cellulose acetate in the cellulosic family; abstract. M. Bentivoglio. *Mod Plastics* 21:98-9 N '43
- Plastic coatings in the post-war era. J. B. Cleveland. *il Textile World* 93:60-1 My '43
- Solvent uses of nitroparaffins. R. L. Ericsson. *bibliog il Ind & Eng Chem* 35:1026-30 O '43
- See also*
- | | |
|----------------------|----------------------|
| Lacquer and lacquer- | Rayon |
| ing | Varnish and varnish- |
| Lumarith | ing |
- Analysis**
- Analysis of cellulose derivatives; determination of free hydroxyl content. C. J. Malm, L. B. Genung and R. F. Williams, jr. *bibliog Ind & Eng Chem Anal ed* 14:935-40 D 15 '42
- Determination of small amounts of combined sulfur in cellulose derivatives. C. J. Malm and L. J. Tanghe. *bibliog Ind & Eng Chem Anal ed* 14:940-2 D 15 '42
- Quantitative estimation of acetyl in carboxylate acetates. R. L. Whistler and A. Jeanes. *bibliog diags Ind & Eng Chem Anal ed* 15:317-18 My 15 '43
- Testing**
- Mechanical tests of cellulose acetate. W. N. Findley. *il diags A S M E Trans* 65:479-87 JI '43; Same. *Mod Plastics* 20:99-105+ Mr '43
- Mechanical tests of cellulose acetate; creep. W. N. Findley. *il diags Am Soc T M Proc* 42:914-22 '42; Same. *Mod Plastics* 19:71-3+ Ag '42; Discussion. *Am Soc T M Proc* 42:923-6 '42
- CELLULOSE acetate butyrate**
- Air corps flashlight; housed in tough cellulose acetate butyrate. *il Mod Plastics* 20:63+ My '43
- Air hose for life rafts. *il Mod Plastics* 20:74 Mr '43
- Army foot tubs. L. T. Bordner. *il diags Mod Plastics* 20:82-3+ Je '43
- Civilian incendiary bomb extinguisher. *il diags Mod Plastics* 20:73-6 D '42
- Handful of power; electric hand drill injection molded. *il Mod Plastics* 20:55+ JI '43
- Lights for bailed-out bales; colored plastic lamps lashed to aerial delivery containers. *il Mod Plastics* 20:45-6 F '43
- Molded valves for oil well pumps. *il diags Mod Plastics* 20:83, 130 Ap '43
- Mopping up with thermoplastics. *il Mod Plastics* 20:59+ F '43
- Plastic housing replaces aluminum in improved design; Thor universal electric drill. *il diags Product Eng* 14:408-9 JI '43
- Tension springs in the nursery. *il Mod Plastics* 20:66-7 D '42
- Victory garden insect spray. *il Mod Plastics* 21:83+ S '43
- Yarn for screens; plastic-coated yarn woven into screen cloth replaces galvanized steel wire and bronze mesh. *il Mod Plastics* 20:70+ Mr '43

CELLULOSE acetate butyrate—Continued**Analysis**

Analysis of cellulose derivatives; determination of free hydroxyl content. C. J. Malm, L. B. Genung and R. F. Williams, Jr. *bibliog Ind & Eng Chem Anal ed* 14:935-40 D 15 '42

CELLULOSE acetate propionate**Analysis**

Analysis of cellulose derivatives; determination of free hydroxyl content. C. J. Malm, L. B. Genung and R. F. Williams, Jr. *bibliog Ind & Eng Chem Anal ed* 14:935-40 D 15 '42

CELLULOSE esters

Advances in plastics during 1942. J. W. Haught, *il Mod Plastics* 20:94-5 Ja '43
New plasticizers for vinyl resins and cellulose esters. D. W. Elam, H. M. Preusser and R. L. Page. *Mod Plastics* 20:95-7 My '43

Analysis

Analysis of cellulose derivatives; determination of free hydroxyl content. C. J. Malm, L. B. Genung and R. F. Williams, Jr. *bibliog Ind & Eng Chem Anal ed* 14:935-40 D 15 '42

Estimation of volatile acyl groups in cellulose esters. F. B. Cramer, T. S. Gardner and C. B. Purves *bibliog il Ind & Eng Chem Anal ed* 15:319-20 My 15 '43

CELLULOSE ethers*See also*

Ethyl cellulose

CELLULOSE nitrate. See Nitrocellulose**CELOTEX corporation**

Celotex helps dealers stay in business. *il Ptr Ink* 201:74 D 11 '42

Celotex to offer new stock. *Barron's* 23:9 Je 14 '43

Debentures offered. *Comm & Fin Chr* 158:482 Ag 2 '43

Listing of stocks. *Comm & Fin Chr* 158:83 Jl 5 '43

Low-priced stock for large percentage gains. *Mag of Wall St* 71:636 Mr 20 '43

Market leaders for 1943. *Mag of Wall St* 71:343-4 Ja 9 '43

Re-appraisal of companies in the news. *Mag of Wall St* 72:33-4 Ap 17 '43

Thumbnail stock appraisal. *Mag of Wall St* 72:685 O 2 '43

CEMENT

Brief history of lime, cement, concrete and reinforced concrete. J. O. Draffin. *bibliog (114 titles)* *diag W Soc E J* 48:14-47 Mr '43

Cement-treated base plus plant mix; road between Bradley and King City, California. A. N. Lund, *il Roads & Sts* 86:35-8 Jl '43

Fluorescence of carbon dioxide in producing efflorescence on plaster and cement products. D. L. Bishop. *bibliog pl J Research Nat Bur Stand* 30:361-6 My '43

Further phase-equilibrium studies involving the potash compounds of portland cement. W. C. Taylor. *bibliog pl J Research Nat Bur Stand* 29:437-51 D '42; Same cond. *Concrete (mill sec)* 51:122-3, 141-2 F-Mr '43

Heavy-traffic plain concrete pavement utilizes resin-treated cement; Vinsol. *il diag Concrete* 50:33 D '42

Mixed brands of cement on the same job. *Am Concrete Inst J* 14:135-7 N '42

New developments in cement industry; abstract. O. Bowles and E. V. Balser. *Concrete (mill sec)* 51:121 F '43

Stabilizing railway track base with portland cement grout. *il Concrete* 51:2-3+ Ag '43

Use of portland cement in making foundry molds. C. A. Sleicher. *Concrete (mill sec)* 51:228 S '43

See also

Concrete
Gunite

Mortar
Roads, Soil-cement

Alumina cement

Study of the system $\text{CaO-Al}_2\text{O}_3\text{-H}_2\text{O}$ at temperatures of 21° and 90°C. L. S. Wells, W. F. Clarke and H. F. McMurdie. *bibliog (52 titles)* *J Research Nat Bur Stand* 30:367-409 My '43

Analysis

Determination of the clinker content; use of alkalimeter. J. R. Romig and V. E. Wesels. *il diag Rock Prod* 46:62, 64+ Je '43
Magnesia in portland cement. J. L. Heltzman. *Rock Prod* 45:74+ D '42

Expansion and contraction

Long-time volume changes of portland cement bars. A. H. White and H. S. Kemp. *Am Soc T M Proc* 42:727-41 '42; Same. *Concrete (mill sec)* 50:232-3, 249-51; 51:105-7 S-O '42, Ja '43; Discussion. *Am Soc T M Proc* 42:742-9 '42

Fineness

Air-permeability method for determining fineness. R. L. Blaine and P. H. Bates. *Concrete (mill sec)* 51:144-5 Mr '43

Hydration

Crystals from portland cement hydration; electron microscope study. C. M. Slepcevic, L. Gildart and D. L. Katz. *bibliog il Ind & Eng Chem* 35:1178-87 N '43

Hydrothermal reactions of tricalcium aluminate and its hydrates. G. M. Harris, W. G. Schneider and T. Thorvaldson. *il Concrete (mill sec)* 51:205-6 Jl '43

Microscopic structure of hydrated portland cement. L. T. Brownmiller. *bibliog il Am Concrete Inst J* 14:193-210 Ja '43; Discussion. 14:sup212-212' Je '43

Manufacture

Controlling cement manufacture. *Chem Age (Lond)* 47:471-2 N 28 '42

Froth flotation mechanics and functions of various reagents. flow diags *il Concrete (mill sec)* 50:278-80; 51:102-3 D '42-Ja '43

Manufacturing low alkali portland cement clinker. H. McLarmour, E. L. McMaster and W. Jacques. *diag Rock Prod* 46:59, 67-8+ Jl '43

Proportioning a cement raw mix. J. A. Shanks. *Rock Prod* 46:80-1 S '43

See also

Cement kilns
Cement plants

By-products

By-products may brighten the outlook for the portland cement industry. A. J. Blank. *Concrete (mill sec)* 51:137-8 Mr '43

Prices

Cease and desist order against cement industry issued by FTC. *Steel* 113:46-7 Jl 26 '43

Cement industry asks court review of Federal trade commission order. *Concrete (mill sec)* 51:214-15 Ag '43

Cement is target; FTC's newest attack on basing-point systems. *Business Week* p92-4 Jl 31 '43

FTC on record as welcoming cement basing probe by Congress. *Concrete (mill sec)* 51:232 O '43

F.T.C. orders the cement producers to abandon delivered-price system. *Eng N* 131:180 Jl 29 '43

Setting

Calcium chloride in cement speeds setting time. H. F. Simons. *Oil & Gas J* 41:48, 50 F 18 '43

Specifications

Specifications for portland pozzolanas. A. J. Blank. *Rock Prod* 46:67+ O '43 (to be cont)

Standards

Some escape clauses in ASTM standards for cement. D. A. Abrams. *Concrete* 51:5-6 My '43

Strength

Some escape clauses in ASTM standards for cement. D. A. Abrams. *Concrete* 51:5-6 My '43

Testing

Air-permeability method for determining fineness. R. L. Blaine and P. H. Bates. *Concrete (mill sec)* 51:144-5 Mr '43

Cement and concrete sessions at A.S.T.M. annual meeting. *Concrete* 51:4-5+ Ag '43

CEMENT—Testing—Continued

Influence of sands, cements, and manipulation upon the resistance of concrete to freezing and thawing. W. C. Hansen. *Am Concrete Inst J* 14:105-23 N '42; Discussion. 14:sup124-124¹ Je '43

It is a felony to use mandatory tests of cement; order of War production board. D. A. Abrams. *Concrete* 51:8 Ap '43

Long-time volume changes in portland cement bars. A. H. White and H. S. Kemp. *Am Soc T M Proc* 42:727-41 '42; Same. *Concrete* (mill sec) 50:232-3, 249-51; 51:105-7 S-O '42, Ja '43; Discussion. *Am Soc T M Proc* 42:742-9 '42

Ten-year tests of high-early-strength cement concretes. L. Schuman. *J Research Nat Bur Stand* 29:397-403 D '42; Same cond. *Concrete* 51:8-9 F '43

Ten-year tests on commercial masonry cements. R. L. Blaine. *J Research Nat Bur Stand* 51:45-53 JI '43

Transportation

Transport of cement in bulk. *Il Engineering* 155:190 Mr 5 '43

War demands force British to adapt trucks for bulk cement delivery. *Eng N* 131:40 JI 1 '43

See also

Cement handling

CEMENT, Rubber. See Rubber cement

CEMENT clinkers

Composition and physical properties of aqueous extracts from portland cement clinker pastes containing added materials. G. L. Kalousek, C. H. Jumper and J. J. Tregoning. *bibliog J Research Nat Bur Stand* 30:215-55 Mr '43; Abstract. *Concrete* (mill sec) 51:208-9 JI '43

Determination of the clinker content; use of alkalimeter. J. R. Romig and V. E. Wesels. *Il diag Rock Prod* 46:62, 64+ Je '43

Effects of added materials on some properties of hydrating portland cement clinkers. E. S. Newman and others. *bibliog J Research Nat Bur Stand* 30:231-301 Ap '43; Same cond. *Concrete* (mill sec) 51:184-6, 210+ Je-JI '43

Manufacturing low alkali portland cement clinker. H. McLarmour, E. L. McMaster and W. Jacques. *diag Rock Prod* 46:59, 67-8+ JI '43

Nature of the prismatic dark interstitial material in portland cement clinker. W. C. Taylor. *bibliog pls J Research Nat Bur Stand* 30:329-46 Ap '43; Excerpts. *Concrete* (mill sec) 51:188-90+ Je '43

Proportioning a cement raw mix. J. A. Shanks. *Rock Prod* 46:80-1 S '43

CEMENT handling

Conveying cement long distances by pneumatic methods. *Il Concrete* (mill sec) 51:238-9 N '43

Move cement with air from silos to ships; loading plant of Permanente corporation. R. S. Torgerson. *Il Rock Prod* 46:123-4 Ja '43

Moving cement into storage with air. *Il Rock Prod* 46:52+ N '42

Speed up truck movement with bulk cement plant; Spokane portland cement co. also develops conveyor to load cars. *Il Rock Prod* 46:70 N '42

CEMENT industry and trade

By-products may brighten the outlook for the portland cement industry. A. J. Blank. *Concrete* (mill sec) 51:137-8 Mr '43

Shipments of portland cement restricted to regional zones. *Eng N* 131:359 S 2 '43

Finance

Cement companies net profit is among lowest earned in 1941. *Concrete* (mill sec) 51:231+ O '43

Statistics

Cement industry attains new high level of production in 1942. *Concrete* (mill sec) 51:146 Mr '43

Cement production above five-year average. *Rock Prod* 46:50 Ag '43

Cement production dropping off. *Rock Prod* 46:90 My '43

Portland cement industry in 1942; Bureau of mines final summary. *Concrete* (mill sec) 51:225+ S '43

Portland cement, 1938-1941. Survey of *Cur Business* 1942 Sup p162 [supplemented in monthly numbers]

Production and shipments of cement in first quarter of 1943. *Concrete* (mill sec) 51:194 Je '43

Types of raw materials and trends in their relative importance; production and percent of total output of portland cement in the United States, 1898-1914, 1926, 1929, 1933, 1935, and 1941. *Concrete* (mill sec) 51:186 Je '43

Brazil

Cement industry in Brazil. *For Comm W* 10:24 Ja 16 '43

Central America

Mexico increasing capacity of cement industry 60%; business opportunities in cement and lime in Mexico and Central America. *Rock Prod* 46:76-80 Ap '43

Chile

Cement for Chile. *Business Week* p58+ Ag 7 '43

Great Britain

Organisation and efficiency. *Economist* 145:104 JI 24 '43

Latin America

Growth of portland cement industry in Latin America. *Concrete* (mill sec) 51:130 F '43

Mexico

Making masonry cement in Mexico; Cementos Atoyac. S. A. A. J. Blank. *Il plan Rock Prod* 46:126-7 Ja '43

Mexico increasing capacity of cement industry 60%; business opportunities in cement and lime in Mexico and Central America. *Rock Prod* 46:76-80 Ap '43

Peru

Peruvian cement of good quality. *For Comm W* 12:35-6 S 4 '43

Puerto Rico

More cement for Puerto Rico; Ponce cement corporation will increase capacity of plant. J. A. Ferre. *Il Rock Prod* 46:44-7 My '43

United States

F.T.C. hits multiple basing point delivered-price system; Cement institute. *Oil Paint & Drug Rep* 144:3+ JI 26 '43

Postwar construction and its influence on the market for portland cement. *Concrete* (mill sec) 51:230-1 O; 2-4 N '43

CEMENT kilns

Big annual saving from all-welded tires for kilns, driers and coolers; with cost data. T. N. Haffner. *Il diags Concrete* (mill sec) 51:118-21 F '43

Cement kilns for other purposes, such as nodulization or agglomeration of iron ore, production of sponge iron or pig iron, calcination of petroleum coke, dolomite, limestone, etc. *Rock Prod* 46:54 Je '43

Manganese steel cement kiln parts. *Il Rock Prod* 46:45 D '42

One long kiln from two short kilns. *Il Rock Prod* 46:64-5+ Mr '43

Propose use of rotary cement kilns to increase steel production; sintering iron ore; pig iron production; Basset process. *Concrete* (mill sec) 51:200-1 JI '43

Rotary kilns for agglomerating ores. S. G. Thyrrer. *Il Steel* 113:116-18+ JI 5 '43

Uniform feeding of kilns. J. H. Reichenbach. *plan Rock Prod* 46:45-8 Ja '43

Utilizing idle rotary cement kilns in the war effort; sintering iron ore fines, blast furnace flue dust and other iron bearing materials. A. B. Andersen. *Il Rock Prod* 46:88+ Ag '43

See also

Cement plants

Control

Adapting control system to new products. H. G. Mead. *Il Rock Prod* 46:80-1 Ag '43

Automatic control cuts fuel costs. W. E. Reaser. *diag Rock Prod* 46:108+ Ag '43

Centralize control of rotary kilns. T. Offrell. *Il diag Rock Prod* 46:59-61+ Ag '43

CEMENT kilns—Continued

Firing

Cleaner plant with direct-firing; Medusa portland cement co. B. Nordberg. *il* Rock Prod 46:50 Je '43

Lining

Controlling factors for efficient rotary kiln operation; refractory lining materials and their proper installation. R. Gibbs. Rock Prod 46:74-5 Mr '43

Kiln lining record. V. E. Wessels. Rock Prod 46:54 Ja '43

CEMENT lined pipe

Cement lining of pipe in place at New Albany, Ind.; with cost data. F. A. Schaefer. *Am Water Works Assn J* 35:781-5 Je '43

Rejuvenate with Victoree lining. R. W. Esty. *il* Water Works & Sewerage 90:201-4 Je '43

CEMENT lining

Cement lining salvages hot water tanks. *diags Eng N* 131:482-3 S 23 '43

CEMENT plants

Cement to magnesium manufacture; Ford motor company uses cement plant in first stage. G. E. Stedman. *flow sheet il* Rock Prod 46:59-61+ Ja '43

Making masonry cement in Mexico; Cementos Atoyac, S. A. A. J. Blank. *il* plan Rock Prod 46:126-7 Ja '43

See also

Cement—Manufacture
Cement kilns

Electric equipment

Centralize control of rotary kilns. T. Offrell. *il* diag Rock Prod 46:59-61+ Ag '43

Operation and maintenance of motors in cement manufacture. P. McShane and W. W. McCullough. *il* Concrete (mill sec) 51:166-9+ My '43

Recent electrical developments applying to cement plant operation. R. H. Rogers. *il* Concrete (mill sec) 51:150-4 Ap '43

Equipment

Calaveras steps up production. *il* plan Rock Prod 45:40-3 N '42

Centrifuge steps up grinding efficiency; Lone star cement corporation. W. B. Lenhart. *il* diags Rock Prod 46:84-6 Ag '43

Cleaner plant with direct-firing; Medusa portland cement co. B. Nordberg. *il* Rock Prod 46:50-1+ Je '43

Close control of raw material; Kosmos portland cement co. W. B. Lenhart. *il* Rock Prod 46:48-9+ Jl '43

Construction plant for Fontana project. R. E. Martin. *il* Civil Eng 13:536 N '43

More cement for Puerto Rico; Ponce cement corporation will increase capacity of plant. J. A. Ferre. *il* Rock Prod 46:44-7 My '43

Nearly triple capacity Gulf cement. W. B. Lenhart. *il* Rock Prod 46:51-3 O '43

New Universal Atlas plant at Northampton, Penn. L. G. Sprague. *flow sheet il* Rock Prod 45:65-7+ D '42

One long kiln from two short kilns; Peerless cement corporation installs direct-firing coal mills and integral heat recuperator. *il* Rock Prod 46:64-5+ Mr '43

Speed up truck movement with bulk cement plant; Spokane portland cement co. also develops conveyor to load cars. *il* Rock Prod 45:70 N '42

See also

Cement kilns

Layout

Uniform feeding of kilns. J. H. Reichenbach. *plan* Rock Prod 46:45-8 Ja '43

Power

Getting most for electric dollars. C. D. Lawton. *flow sheet il* Rock Prod 46:58-61+ Mr '43

Power for the National portland cement co. of Brazil. *flow diag il* plans Power Pl Eng 47:62-70 Mr '43

Safety measures

New man is safety problem; regional safety meetings of Portland cement association discuss successful methods of teaching. Rock Prod 46:126-9 Ag '43

New workers' accident hazards; national safety council's cement and quarry section annual meeting. Rock Prod 45:68-9+ D '42

Safety is a boon to wartime cement-and-quarry manpower. J. J. Porter. *il* Concrete (mill sec) 51:155-6+ Ap '43

What the new man needs to know about safety. A. J. R. Curtis. Rock Prod 46:80+ Je '43

CEMENT research

Composition and physical properties of aqueous extracts from portland cement clinker pastes containing added materials. G. L. Kalousek, C. H. Jumper and J. J. Tregoning. *bibliog J Research Nat Bur Stand* 30:215-55 Mr '43; Abstract. Concrete (mill sec) 51:208-9 Jl '43

Comprehensive program of cement research. F. R. McMillan. *il* Civil Eng 13:491-3 O '43

Effects of added materials on some properties of hydrating portland cement clinkers. E. S. Newman and others. *bibliog J Research Nat Bur Stand* 30:281-301 Ap '43; Same cond. Concrete (mill sec) 51:184-6, 210+ Je-Jl '43

Further phase-equilibrium studies involving the potash compounds of portland cement. W. C. Taylor. *bibliog pl J Research Nat Bur Stand* 29:437-51 D '42; Same cond. Concrete (mill sec) 51:122-3, 141-2 F-Mr '43

Hydrothermal reactions of tricalcium aluminate and its hydrates. G. M. Harris, W. G. Schneider and T. Thorvaldson. *il* Concrete (mill sec) 51:205-6 Jl '43

Microscopic structure of hydrated portland cement. L. T. Brownmiller. *bibliog il* Am Concrete Inst J 14:193-210 Ja '43

Nature of the prismatic dark interstitial material in portland cement clinker. W. C. Taylor. *bibliog pls J Research Nat Bur Stand* 30:329-46 Ap '43; Excerpts. Concrete (mill sec) 51:188-90+ Je '43

Ten-year tests on commercial masonry cements. R. L. Blaine. *J Research Nat Bur Stand* 31:45-53 Jl '43

Tensile and other properties of concretes made with various types of cements. L. Schuman and J. Tucker, jr. *bibliog diags J Research Nat Bur Stand* 31:107-24, pl 1-2 Ag '43

CEMENTING

See also

Petroleum—Well cementing

CEMENTITE

Lattice spacings and crystal structure of cementite. W. Hume-Rothery, G. V. Raynor and A. T. Little. *diags Iron & Steel Inst J* 145:143-9; Discussion. 150-1 no 1 '42

CEMENTS

Cycleweld, a new bonding process. *il* Mod Plastics 21:65-9+ S '43

Cyclewelding applied successfully to airplane subassemblies. *il* Automotive & Aviation Ind 89:33+ O '43

Information on the cycleweld method of joining structures. S. G. Saunders. *Steel* 113:62+ S 27 '43

New laboratory cement; High-Pyseal. *R Sci Instr* 14:154 My '43

Plastics and plasticity. E. V. Crane. *Iron Age* 152:67-8 Ag 5 '43

Rubberless non-inflammable cement; Metro-tex. *Rubber Age* 52:132 N '42

Triple debut: U.S. Stoneware turning out new cement [Reanite], coating material, and elastic plastic [Tygon]. *Business Week* p52+ Jl '43

See also

Adhesives	/	Resinous products—
Cement	/	Adhesives
Glue	/	Rubber cement

CEMETERY trusts. See Trusts and trustees—Common trust funds

CENCO spectrophotometer. See Spectrophotometers

CENSORSHIP

Denies WPB unit practices censorship. D. M. Nelson. *Comm & Fin Chr* 158:428 Jl 29 '43

Science and the censor. *Science* 97:443 My 14 '43

CENSUS

Errors in card punching. W. E. Deming, B. J. Tepping and L. Geoffrey. *Am Stat Assn J* 37:525-36 D '42

CENSUS—Continued

Factors in the variability of response in enumerative studies. G. L. Palmer. *Am Stat Assn J* 38:143-52 Je '43

Some census aids to sampling. M. H. Hansen and W. E. Deming. *Am Stat Assn J* 38: 353-7 S '43

India

Indian census. *Economist* 145:272 Ag 28 '43

United States

Ration book poll. *Business Week* p76+ O 9 '43

CENSUS areas

Area figures for United States and Great Lakes states. C. S. Osborn and S. Osborn. *Science* 97:533-4 Je 11 '43

Census areas for the United States, 1940. C. E. Batschelet and M. J. Proudfoot. *Science* 98:107-9 Jl 30 '43; Reply. C. S. Osborn and S. Osborn. 98:323-4 O 8 '43

CENTERING (machine work)

Applications of live centers. J. G. Jergens. *diags Am Mach* 87:99 F 18 '43

Center marker and grinding jig. A. Kuehn. *diag Am Mach* 86:1438 D 10 '42

Center punch for accurate layout. C. F. Fitz. *diag Am Mach* 87:99 Ag 5 '43

Holroyd centring machine. *Il Automobile Eng* 33:27 Ja '43

Kent-Owens double-end centering machine for large work. *Il Mach* 49:208 F '43; *Am Mach* 87:137 F 18 '43; *Steel* 112:112+ Mr 1 '43

CENTRAL aircraft council

Central aircraft council formed by southern and midwestern manufacturers. *Automotive & Aviation Ind* 88:47+ Ap 1 '43

CENTRAL AMERICA

See also

Education—Central America	Roads—Central America
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Economic conditions

Mexico, Central America and Cuba from an investment standpoint. V. L. Horoth. *Mag of Wall St* 72:18-20+ Ap 17 '43

CENTRAL and south west utilities company

Death sentence defended by SEC. *Comm & Fin Chr* 156:2035 D 7 '42

Merger plan filed with SEC. *Comm & Fin Chr* 158:544 Ag 9 '43

CENTRAL Arkansas public service corporation

Plans to sell four subsidiaries. *Comm & Fin Chr* 157:2144 Je 7 '43

To be dissolved. *Comm & Fin Chr* 158:288 Jl 19 '43

To sell properties, etc. *Comm & Fin Chr* 157: 2345 Je 21 '43

CENTRAL Hanover bank and trust company

What is this bank stock worth? K. L. Trefftz. *Barron's* 23:5 Je 7 '43

CENTRAL Maine power company

Bonds offered. *Comm & Fin Chr* 156:2034-5 D 7 '42

Merger and financing. *Comm & Fin Chr* 156: 1739-40 N 16 '42

CENTRAL of Georgia railway

Reserves decision on interest. *Comm & Fin Chr* 156:2096 D 14 '42

CENTRAL railroad of New Jersey

Takes over operation. *Comm & Fin Chr* 158: 186 Jl 12 '43

CENTRAL states utilities corporation

SEC hearing. *Comm & Fin Chr* 158:1527-8 O 18 '43

CENTRAL VALLEY project, California

Great Central Valley project. *Il map Engi-neering* 156:261-3, 270 O 1 '43

Reclamation bureau studies projects' economic aspects. *Eng N* 130:255-6 F 18 '43

CENTRAL Vermont public service corporation

Submits merger proposal. *Comm & Fin Chr* 158:1344 O 4 '43

CENTRALIZED traffic control. *See* Railroads—Signals

CENTRIFUGAL casting. *See* Casting, Centrifugal

CENTRIFUGAL pumps. *See* Pumps, Centrifugal

CENTRIFUGES

Centrifugal separation in process industries; Chem & Met report. *diags Chem & Met Eng* 50:119-26 Jl '43

Centrifuge steps up grinding efficiency; Lone star cement corporation. W. B. Lenhart. *Il diags Rock Prod* 46:84-6 Ag '43

Centrifuge technique in research of glass cords; Preston laboratories new density measurement technique uses fine powder. L. G. Ghering. *Cer Ind* 40:58-9 Je '42

Centrifuge to test pilots' reactions to acceleration. *diag Instruments* 15:538 D '42

Easier method for determining suspended solids. A. L. Mathis. *Il Water Works & Sewerage* 90:386-7 O '43

How a centrifuge purifies oil. H. E. Rowe. *Elec W* 120:668 Ag 21 '43

Mechanical treatment destroys insects in foods. E. S. Stateler. *Il Food Ind* 15:82-3+ Jl '43

Some improvements for the analytical ultracentrifuge. D. H. Moore. *Il R Sci Instr* 14: 295-7 O '43

Ultracentrifugal and electrophoretic investigation of an ascitic fluid from a cancer patient. E. B. Sanigar, L. E. Krejci and E. O. Kraemer. *bibliog Franklin Inst J* 235: 298-313 Mr '43

See also

Oil reclamation

CEPHALOCROTON cordofanus

Investigation of the oil of the seeds of cephalocroton cordofanus. A. J. Henry and D. N. Grindley. *Soc Chem Ind J* 62:60 Ap '43

CEPHALOPODA, Fossil

Ozarkian and Canadian cephalopods; brevicones. E. O. Ulrich, A. F. Foerste and A. K. Miller. *diags Geol Soc Special Pa* no 49:1-240, pl 1-70 *bibliog*(p158-64) '43

CERAMIC

English and American ceramic design problems. T. S. Haile. *Am Cer Soc Bul* 21:317-20 D 15 '42

Original models for ceramic paintings and sculpture; abstract. M. Birkenbihl. *Am Cer Soc Bul* 21 (Cer A 21):228 N 15 '42

Perfects enamel glaze, sculptures ceramic mural; Waylande Gregory. *Il Cer Ind* 41:40 N '43

Salt glazing of ceramic ware. H. G. Schurecht. *bibliog diag Am Cer Soc Bul* 22: 45-6 F 15 '43

See also

Ceramic sculpture	Pottery—Decoration
Glassware—Decoration	Tiles, Decorative

Study and teaching

Educational aspects of ceramic art. J. S. Carey. *Am Cer Soc Bul* 22:35-7 F 15 '43

CERAMIC engineers

Discussion at board of trustees meeting on war status of ceramic engineers. *Am Cer Soc Bul* 22:231-5 Jl 15 '43

1943 graduates. *pors Brick & Clay Rec* 102: 30, 32, 34 Je '43

Report of special committee on the status of ceramic engineers with the Selective Service boards. *Am Cer Soc Bul* 22:180-5 Je 15 '43

CERAMIC engineers, Institute of. *See* Institute of ceramic engineers

CERAMIC guild of Cincinnati

Community goes ceramic. H. E. Marley. *Am Cer Soc Bul* 22:39-40 F 15 '43

CERAMIC industries

Experiences of a Czechoslovakian ceramist. K. Zimmer. *Cer Ind* 41:66, 68+ Ag; 58, 61-2 S '43

Free industrial enterprise challenge; will ceramic industries be prepared for continuity of change? G. H. McIntyre. *Am Cer Soc Bul* 22:153-5 My 15 '43

CERAMIC industries—Continued

Glass, pottery, enamel; where are these ceramic industries going in war-time and after, il diag Cer Ind 40:40-9 Ap; 41-3 My; 34-7 Ja '43

See also

Brick industry and trade	Glass trade
Cement industry and trade	Kilns
Clay industries	Pottery
Enamel and enameling	Refractory materials
Fire brick	Stoves, Ceramic
	Terra cotta
	Tile industry

Directories

Membership roster of the American ceramic society, Am Cer Soc Bul 22:325-52 O 15 '43

Exhibitions

Los Angeles and Chicago gift shows reflect demand for utility ware, il Cer Ind 40:42-6 Mr '43
 Los Angeles gift show does over three million dollar business; eighteenth semi-annual display, il Cer Ind 41:56-7 JI '43
 Pittsburgh gift show reflects ingenuity of American ceramic manufacturers, R. G. Gibney, il Cer Ind 40:54-5 F '43

History

Denison family; structural tile and brick, Am Cer Soc Bul 22:168-72 Je 15 '43

Canada

Ceramic industry in review, G. A. Kirkendale, bibliog Can Chem & Process Ind 27:9-12 Ja '43

CERAMIC materials

Ceramic construction distinguishes new Chicago subway, il Cer Ind 40:60, 62-3 My '43
 Ceramic materials; directory of ceramic materials used in manufacture of all types of enamel, glass and pottery products, with details of their properties, functions, etc., Cer Ind 40:30-105 Ja '43
 Ceramics as substitutes; abstract, Metals & Alloys 17:622 Mr '43
 Thermal and moisture expansion of ball clays and bodies fired to different temperatures, H. Thiemecke, Am Cer Soc J 26:173-9 Je 1 '43
 WPB conservation orders affecting the use of ceramic materials, Cer Ind 40:26-7 Ja '43
 War standards for ceramic materials for radio insulators, A. N. Goldsmith, il Ind Stand 14:81-3 Mr '43

See also

Clay	Refractory materials
Cordierite	Silica
Feldspar	Silicates
Kaolin	Steatite
Nephelite syenite	Talc

Analysis

Soluble sulfate content of pottery bodies during preparation, H. R. Shell and W. P. Cortelyou, Am Cer Soc J 26:179-85 Je 1 '43

Testing

Measurement of workability of ceramic bodies for plastic molding processes, E. C. Henry, diag Am Cer Soc J 26:37-9 Ja 1 '43
 Tests on whiteware materials, W. H. Earhart and J. H. Koenig; B. C. Burgess; R. F. Geller, Am Cer Soc Bul 22:8-14 Ja 15 '43

CERAMIC patents

Battelle develops body fired at 200-450° F.; resin for flux ingredient, il Cer Ind 40:62 Je '43

CERAMIC research

Present status of ceramic research, G. A. Bole, il Blast F & Steel Pl 31:150 Ja '43
 Report of committee on research, American ceramic society, Am Cer Soc Bul 22:235-44 JI 15 '43

Some physical procedures used in ceramic research, G. A. Bole and G. A. Loomis, il diags J Ap Phys 14:443-50 S '43

Vitrified cordierite bodies, L. E. Thiess, bibliog il Am Cer Soc J 26:99-102 Mr 1 '43

See also

Glass research

CERAMIC sculpture

Ceramic sculpture, P. Bogatay, Am Cer Soc Bul 22:66-7 Mr 15 '43
 Sculpture, its practice and malpractice, A. D. Jacobson, Am Cer Soc Bul 22:37-9 F 15 '43

CERAMIC stoves. See Stoves, Ceramic**CERAMICS**

American ceramic society 45th annual convention, Pittsburgh; with abstracts of papers, Cer Ind 40:28-40 My '43
 American ceramic society 45th annual meeting, Pittsburgh; with abstracts of papers, Brick & Clay Rec 102:16-19 My '43
 Ceramic chemistry; firing, methods and pyrometry, A. B. Hollowood, Chem Age (Lond) 48:85-6 Ja 16 '43
 Ceramic parts in design, il diags Machine Design 15:120-3 Ag '43
 Ceramics invade the fireplace market; fireplace grates, il Cer Ind 39:73 D '42
 Ceramics take on added duties in war-time, Sci Am 168:27-8 Ja '43
 Colloid chemistry in ceramics, A. L. Johnson, bibliog diags Am Cer Soc J 26:88-92 Mr 1 '43; Abstract, Can Chem & Process Ind 27:188 Ap '43
 Data on chemicals for ceramic use: formulas, molecular weights, colors, crystal forms, densities, refractive indices, melting points, boiling points, transition points, decomposition temperatures, Nat Research Council Bul 107:1-94 bibliog(1128 references, p74-94) Je '43
 Manpower problems, postwar preparations occupy OCIA meeting, Cer Ind 41:60, 62, 64 N '43; Brick & Clay Rec 103:24-5 N '43
 Properties of ceramics, a new approach to wider markets, il Cer Ind 40:41-3 My '43
 Uncommon clay, F. H. Norton, il Tech R 45:182-4, 192-4, F '43
 Wartime ceramics; problems and progress discussed at 40th annual Canadian ceramics convention, Montreal, Oct. 19-20, Can Chem & Process Ind 26:639-40-4 N '42

See also

Abrasives	Glazes
Brickmaking	Kilns
Cement	Porcelain
Clay	Pottery
Clay products	Refractory materials
Enamel and enameling	Slips (ceramics)
Fire brick	Stoneware
Glass	Terra cotta
	Tiles

also American ceramic society

Bibliography

Ceramic abstracts. Published in monthly numbers of American ceramic society Ceramic abstracts and Bulletin
 Ceramic abstracts compiled by the American ceramic society; author index and subject index to volume 21, Am Cer Soc Bul 21 (Cer A 21):251-310 D 15 '42

Dictionaries

Ceramic materials; directory of ceramic materials used in manufacture of all types of enamel, glass and pottery products, with details of their properties, functions, etc., Cer Ind 40:30-105 Ja '43

History

Edwin and Mary Scheier, il Am Cer Soc Bul 22:263-70 Ag 15 '43

See also

Tile industry—History

Standards*See also*

Pottery—Standards

CEREAL beverages. See Beverages

CEREAL institute
 Cereal industry forms promotion institute, Food Ind 15:87 Je '43

CEREALS. See Grain; Grain trade**CEREALS, Prepared**

Method of determining degree of cooking in cereal products; abstract, G. H. Benham, Food Ind 15:107 Ja '43

Advertising

Share-the-ride-plan for Ralston cereals, il Mod Packaging 16:62-3 F '43

CEREBRAL cortex. See Brain

CEREBROSPINAL fluid

Studies regarding a glutamine-like substance in blood and spinal fluid. M. M. Harris. *bibliog Science* 97:382-3 Ap 23 '43

CERENKOV, P. A.

Spatial asymmetry of Cerenkov radiation as a function of electron energy. H. O. Wyckoff and J. E. Henderson. *bibliog diags Phys R* 64:1-6 J1 1 '43

CERIC acid

Cerate and periodate oxidimetry; perchlorate-cerate and periodate ions as oxidants in the determination of organic compounds. G. F. Smith and F. R. Duke. *Ind & Eng Chem Anal ed* 15:120-2 F 15 '43

CERIUM

Cerium amalgam electrode and the thermodynamics of aqueous cerium(III) sulfate solutions. G. C. Walters and T. De Vries. *bibliog Am Chem Soc J* 65:119-22 Ja '43

Monazite; extraction of thorium and cerium. L. Sanderson. *Can Chem & Process Ind* 27: 451-2 Ag '43

Monazite sand. L. G. Houk. *U S Bur Mines Information Circ* 7233:1-19 '43

CERIUM nitrates

Determination of fluorine in organic compounds with cerous nitrate. M. L. Nichols and J. S. Olsen. *bibliog(61 references) diags Ind & Eng Chem Anal ed* 15:342-6 My 15 '43

CERIUM oxide

Cerium-logical arsenic substitute in glass batches. *Cer Ind* 40:37-8 Mr '43

CERIUM perchlorates

Oxidation potential of cerous-ceric perchlorates. M. S. Sherrill, C. B. King and R. C. Spooner. *bibliog Am Chem Soc J* 65:170-9 F '43

CERIUM sulfate

Cerium amalgam electrode and the thermodynamics of aqueous cerium(III) sulfate solutions. G. C. Walters and T. De Vries. *bibliog Am Chem Soc J* 65:119-22 Ja '43

CERRO COLORADO

Cerro Colorado, an isolated non-basaltic volcano in central New Mexico. H. E. Wright. *diags maps Am J Sci* 241:43-56, pl 1 Ja '43

CERROBEND. See Bismuth alloys

CERROMATRIX. See Bismuth alloys

CERROSAFE. See Bismuth alloys

CERTAIN-TEED products corporation

Debenture 5 1/2s/48. O. Ely. *Mag of Wall St* 71:362-3 Ja 9 '43

Plans an exchange of stock and refunding. *Comm & Fin Chr* 158:1822 N 8 '43

CESIUM

Absorption spectra of potassium, rubidium, and caesium. H. R. Kratz and J. E. Mack. *Rs Mod Phys* 14:104 Ap-J1 '42

Magnetic susceptibilities of metals dissolved in liquid ammonia. S. Freed and N. Sugarman. *bibliog diags J Chem Phys* 11:354-60 Ag '43

Rare alkalis in New England. F. L. Hess and others. *bibliog il diags map U S Bur Mines Information Circ* 7232:1-51 '43

CESSPOOLS

Sewage treatment for public institutions. R. C. Wheeler. *diags plan Pub Works* 74:17-18+ F '43

CETRARIA islandica. See Iceland moss

CETYL alcohol

Energy relations in film penetration. J. Schubert and G. E. Boyd. *bibliog J Chem Phys* 11:215 Ap '43

Rates of evaporation of water through compressed monolayers on water. I. Langmuir and V. J. Schaefer. *bibliog il Franklin Inst J* 235:119-62 F '43

CEYLON

Constitution

Ceylon's constitution. *Economist* 144:725-6 Je 5 '43

CHABAZITE

Low temperature adsorption of nitrogen, oxygen, argon, hydrogen, *n*-butane and carbon dioxide on porous glass and on partially dehydrated chabazite. P. H. Emmett and T. W. DeWitt. *bibliog Am Chem Soc J* 65:1253-62 J1 '43

CHAGAS' disease. See *Trypanosoma cruzi*

CHAIN gear

Chain drive advantages. *India Rubber W* 108:42 Ap '43

Chain drive life increased by periodic servicing. *diags Brick & Clay Rec* 101:40 D '42

First-aid for faithful chain drives; how to keep them running. *diags Coal Age* 48:76+ Ja '43

Maintenance of chain drive. *diags Power* 87: 267-9 Ap '43

R for making good chain drives better by A-1 lubrication. C. J. Copley. *il diags Power* 87:687-9+ O '43

Roller chain drives meet difficult conditions. F. A. Westbrook. *il Power Pl Eng* 47:32-3 N '43

CHAIN stores

Safeway, Kroger grocery chains accused of anti-trust violations. *Ptr Ink* 202:40 Ja 29 '43

Variety store outlook relatively favorable. *Barron's* 23:12 F 8 '43

See also

Marketing—Chain

store outlets

Self service stores

also Great Atlantic and Pacific tea company; Kroger grocery and baking company; Safeway stores, inc.; Woolworth, F. W., company

Advertising

Paid advertising best aid to public relations; A. & P., Bendix, Goodrich as examples. C. Byoir. *Ptr Ink* 203:17+ Je 18 '43

Finance

Expenses and profits of limited price variety chains in 1942. E. A. Burnham. *Harvard Univ Graduate School of Business Administration Bur of Business Research Bul* 118: 1-42 '43 (pa \$1)

Profit in variety. *Business Week* p100-1 Ag 14 '43

See also

First national stores,

inc.

Management

Certified facts tags give new personnel quick sales training; Western auto supply company. B. Bigelow. *il Ptr Ink* 202:58+ Mr 5 '43

Chain pledges post-war jobs; expansion program all set! Cussins & Fears, Columbus, plans mass distribution. F. LaClave. *il Ptr Ink* 205:17-19 O 29 '43

Purchasing

Chain localized; Kroger men in stores do buying. *il Business Week* p87-8 My 29 '43

Retailer tells manufacturers why they should sell to him; Gamble stores introduces itself to sellers by means of booklet. *il Ptr Ink* 202:66+ F 26 '43

Securities

Merchandising stocks; outlook for sales and profits; position of leading stocks. P. Dobbs. *il Mag of Wall St* 73:19-22 O 16 '43

Mixed sales and profit outlook for merchandising stocks; position of leading stocks. *il Mag of Wall St* 71:584-7 Mr 6 '43

Outlook for merchandising stocks in war and peace; position of leading stocks. P. Dobbs. *il Mag of Wall St* 72:522-5, 546 Ag 21 '43

Variety chains in wartime. H. Lawrence. *Barron's* 23:5 F 22 '43

Statistics

Independents gain at chain store expense; statistics, 1933-1942 and first quarter, 1943. *Business Week* p88 Je 12 '43

Retail trade; chain store sales and stores operated, 1938-1941. *Survey of Cur Business* 1942 Sup p34-5 [supplemented in monthly numbers]

CHAIN stores—Continued

Taxation

Chains tax-wary. *Business Week* p72+ N 14 '42

CHAIRS

Chain as manila rope substitute. *il Pulp & Pa of Can* 44:823 O '43
 Chain maintenance; abstract. F. W. Shaw. *Iron Age* 152:72 O '43
 Manila rope substitute suggested; weldless chains. *Oil & Gas J* 42:52 My 27 '43
 Ship launching by marine railway; use of long cast-steel chain. *il Comp Air M* 48: 7041 My '43; *Min & Met* 24:226 My '43
 Substitute suggested for manila rope; weldless chains. *Marine Eng* 48:188 My '43
 Watch weakest link; tips on inspecting chains and hooks used for hoists or slings. W. E. Rossnagel. *diags Power* 87:153+ Mr '43

See also

Chain gear

Manufacture

Anchor chains are now electric welded by Unionmelt method. H. W. Young. *il Steel* 112:54-6+ Ja 18 '43
 Unusual war-production problem handled by Canadian foundry; cast-steel chain. *il Roads & Bridges* 81:84 Ap '43
 Welder loads made non-coincident; making chains for Liberty ships. *il Elec W* 118:1989 D 12 '42

Testing

Testing the strength of ship chains. *il Mach* 49:147 My '43

CHAIRS

Better workplace, so more output, less fatigue; new chair and other changes aid sock inspector. E. J. Fitzgerald. *il Factory Management* 101:114-15 Mr '43
 Modern designs from Chicago; wooden furniture springs; resin-bonded plywood chairs, etc. L. Moholy-Nagy. *il Mod Plastics* 20:62-5+ D '42
 Office chair; welded design. E. T. Spencer. *il diags Welding J* 22:351-2 My '43
 This first-rate medium priced modern furniture is a wartime product. *il Arch Forum* 78:2 Je '43

CHALCONE

Factors determining the course and mechanism of Grignard reactions; the effect of metallic halides on the reaction of Grignard reagents with benzalacetophenone and with benzophenone. M. S. Kharasch and D. C. Sayles. *bibliog Am Chem Soc J* 64:2972-5 D '42

α,β -Unsaturated aminoketones; reaction of piperidine and N-methylbenzylamine with bromine derivatives of benzalacetone and benzalacetophenone. N. H. Cromwell and I. H. Witt. *Am Chem Soc J* 65:308-12 Mr '43

α,β -Unsaturated aminoketones; reaction of primary amines with 1,3-diketones and bromine derivatives of benzalacetophenone; ethylene imines. N. H. Cromwell, R. D. Babson and C. E. Harris. *bibliog Am Chem Soc J* 65:312-15 Mr '43

CHALCOPYRITE

Floating chalcopyrite from galena and sphalerite. flow sheet *Min Cong J* 29:30 S '43

CHAMBER of commerce of the United States Annual meeting, New York. *Business Week* p16 My 1 '43

Annual meeting, New York, April 27-29. *Comm & Fin Chr* 157:2109 Je 7 '43

Chamber of commerce appoints committee for post-war shipping. *Marine Eng* 48:178-9 S '43

Chamber of commerce discusses transportation at annual meeting, New York. *Ry Age* 114:867-9 My 1 '43

Chamber of commerce discusses war and postwar problems at 31st annual meeting. *Oil Paint & Drug Rep* 143:7+ My 3 '43

Johnston upheld. *Business Week* p14 Mr 20 '43

U.S. Chamber of commerce offers nine-point plan to preserve free economy. *Comm & Fin Chr* 158:28 Jl 1 '43

Insurance department

Insurance committee. *East Underw* 44:18 Je 11 '43; *Same. Nat Underw* 47:4 Je 10 '43; *Same. Nat Underw (Life ed)* 47:4 Je 11 '43
 U.S. Chamber of commerce announces appointment of members of insurance committee. *Comm & Fin Chr* 158:49 Jl 5 '43

CHAMBERS Bridge. See Excavating machinery

CHAMBERS of commerce

See also

Chamber of commerce of the United States United States junior chamber of commerce

CHAMBLBY canal

Centenary of Chamblby canal celebrated. *Pulp & Pa of Can* 44:757-8+ S '43

CHANDLER act. See Bankruptcy

CHANDLER medal

Presentation of the Charles Frederick Chandler medal to Dr Willard H. Dow. *Science* 97:483 My 28 '43

CHANDROSS, Morris L.

ASA names Chandross as new commodities engineer. *por Ind Stand* 14:193 Je '43

CHANGE houses. See Mine buildings

CHANNELS

Effect of turbulence and channel slope on translation waves. G. H. Keulegan and G. W. Patterson. *bibliog diags J Research Nat Bur Stand* 30:461-512 Je '43

Entrainment of air in flowing water; open channel flow at high velocities. L. S. Hall. *il Am Soc C E Proc* 68:1100-40 S '42; *Discussion*. 69:761-71, 847-57 My-Je '43

Flow around bends in stable channels. C. A. Mockmore. *bibliog il diags Am Soc C E Proc* 69:335-60 Mr '43; *Discussion*. 69:1147-53, 1317-18, 1594-6 S-O, D '43

Flow characteristics at rectangular open-channel junctions. E. H. Taylor. *il Am Soc C E Proc* 68:1521-30 N '42; *Discussion*. 69:905-6, 1154-6, 1293-7 Je, S-O '43

Flow in channels with vertically curved beds, by H. Lauffer; tr. and abstr. by C. E. Bardsley. *Am Soc C E Proc* 69:sup9-21 S '43

Hydraulic jump in sloping channels. C. E. Kindsvater. *bibliog il diags Am Soc C E Proc* 68:1473-86 N '42; *Discussion*. 69:311-15, 719-32, 924-6, 1097-1103 F, My-Je, S '43

Profile curves for open-channel flow. D. F. Gunder. *diags Am Soc C E Proc* 68:535-42 Ap '42; *Discussion*. 68:1035-6, 1244-6, 1413-23, 1646-8; 69:237-8 Je, S-N '42, F '43

Testing theoretical losses in open channel flow. J. G. Jones and J. H. Douma. *il Civil Eng* 12:613-15, 667-9 N-D '42

See also

Canals
 Rivers
 Stream flow

CHARA

Biological water conditioning; Judson reservoir, southern California; growth of Chara inhibits algae. H. C. Myers. *Water Works & Sewerage* 90:185-6 My '43

CHARACTER

See also

Personality
 Responsibility

CHARCOAL

Black future. *Business Week* p35 My 8 '43
 Charco gas engines in operation. *Pulp & Pa of Can* 44:745-6 S '43

Charcoal production in Australia; Eucoil process. *For Comm W* 11:28 My 22 '43

Charcoal shortage needs to be clarified by government. *Brick & Clay Rec* 103:7 Ag '43

Charcoal treatment of brandy. N. E. Tolbert and M. A. Amerine. *bibliog il Ind & Eng Chem* 35:1078-82 O '43

Clay plants conversion to charcoal suggested. *Oil Paint & Drug Rep* 143:7+ Je 14 '43

Destructive distillation of bagasse. D. F. Othmer and G. A. Fernstrom. *bibliog il diags Ind & Eng Chem* 35:312-17 Mr '43

English wood charcoals. L. G. G. Warne. *Soc Chem Ind J* 62:38-90, pl 1-2 Je '43

Heat of adsorption of ethyl chloride and of sulphur dioxide on sugar charcoal. S. J. Gregg. *Chem Soc J* p351-5 Ag '43

CHARCOAL—Continued

- Identification of powdered wood charcoals. L. G. G. Warne. *Il Soc Chem Ind J* 62: 141-4 S '43
- Periodic kilns can be converted to charcoal production. L. R. Whitaker. *Brick & Clay Rec* 103:15-16 JI '43
- Portable kilns for charcoal manufacture. Engineering 154:467-8 D 11 '42
- SWPC continues to urge brick kiln conversion for charcoal production. *Brick & Clay Rec* 103:13 S '43
- Synthetic-charcoal production in Barbados from megass (bagasse) and vacuum-pan molasses. *For Comm W* 12:19 JI 17 '43
- Your kilns can be used to make charcoal for the steel and iron industry. *Brick & Clay Rec* 102:34 My '43

Prices

- Hardwood charcoal prices celled by OPA. Oil Paint & Drug Rec 144:65 JI 26 '43

CHARCOAL iron

- Brazilian pipemaker operates four charcoal stacks. G. A. Maigne. *Il diags Steel* 112:68-70+ Ja 25 '43
- Charcoal iron shortage causes concern; hardwood supply scarce. *Steel* 112:77 My 3 '43
- Charcoal pig iron. R. H. Sweetser. *Il Iron Age* 152:43-7 JI 1 '43
- New charcoal iron stack is projected. *Steel* 113:77 N 8 '43
- Vanishing metal; supplies of charcoal iron drying up. *Il Business Week* p39-40 S 11 '43

CHARGE accounts (retail trade)

- Amendment to Regulation W; authorization of small items. *Fed Res Bul* 29:318 S '43
- Decline in consumer credit. *Fed Res Bul* 29: 485-91 Je '43
- Interpretation of Regulation W; charge account, defective article. *Fed Res Bul* 28: 1078-9 N '42
- Monthly estimates of short-term consumer debt. 1929-42. D. M. Holthausen. *tables Survey of Cur Business* 22:9-25 N '42
- Retail credit in wartime. R. M. Severa. *J Retailing* 19:35-40+ Ap '43
- Retail credit survey, 1942. *Fed Res Bul* 29: 604-6 JI '43
- Sears tries tab; has offered charge accounts to customers who use its telephone order service. *Business Week* p77-8 N 14 '42

CHARITIES

- Liability of charitable corporations; digest of recent cases. J. L. Roesch. *Spectator (Property ed)* 8:30-1+ N 26 '42

See also

- | | |
|---------------------|--------------------|
| Community chests | Money raising cam- |
| Community trusts | paings |
| Gifts (in business) | Social work |

CHARLESTON, West Virginia**Bridges**

- Concrete grade separation at South Charleston. L. L. Jemison. *Il diag plans Civil Eng* 13:356-8 Ag '43

CHARTERED life underwriters, American society of. See American society of chartered life underwriters**CHARTS**

- Position charts guide inexperienced workers at Vultee. *Il Automotive & Aviation Ind* 88:23 F 15 '43

CHARTS (calculating)

- Arc welding speed and cost figured graphically. H. A. Davies. *chart Iron Age* 151:58-9+ My 27 '43
- Chart facilitates determination of tank capacities. L. T. Monson. *Oil & Gas J* 41: 44+ D 10 '42
- Chart for calculation of pressure drop in gas lines. E. N. Kemler. *Pet Refiner* 22:107-12 S '43
- Chart for computing tensile stress. J. C. Gould. *Metal Prog* 44:431-2 S '43
- Chart for determining square root of a complex number; transmission line and filter calculations; reference sheet. R. G. Nisle. *Electronics* 16:127-8 Ag '43
- Chart for equivalent series and parallel circuits; reference sheet. R. Toombs. *Electronics* 16:109-10 Ap '43
- Chart for estimating fuel oil wasted; data sheet. *Heating-Piping* 14:729 D '42

- Chart for radio noise. J. M. Sowerby. *Wireless Eng* 20:327-30 JI '43
- Chart for the design and adjustment of concrete mixes. H. E. Burr. *Am Concrete Inst J* 15:53-9 S '43
- Charts and a direct method for design of cantilever retaining walls. W. A. Jones. *diags Am Concrete Inst J* 15:5-32 S '43
- Charts speed calculations for concrete columns. J. Zalkin. *Eng N* 130:505 Ap 8 '43
- Checking chart for dry chemical feeders. A. A. Hirsch. *Water Works & Sewerage* 90:290 Ag '43
- Comparative fuel costs shown by new chart. W. J. Shore. *Chem & Met Eng* 50:116 O '43
- Determining efficiency of screw threads; data sheet. R. D. Douglass and J. M. Dunford. *Machine Design* 15:83-4 Ja '43
- Direct-reading flow chart; determining rates of flow through orifice meters. R. H. Jenney. *Gas Age* 91:59+ Ap 22 '43
- Establishing grades on airfields; method for preparing an isometric grade chart. B. F. Lambert. *diag Eng N* 129:786-9 D 3 '42
- Fixed-end moments simplified by calculator. G. C. Brookhart. *Civil Eng* 13:283-4 Je '43
- Handy block and tackle chart for determining safe loads. W. F. Schaphorst. *Am Gas J* 159:30 Ag '43
- Helical compression springs; radial chart and nomograph. C. P. Nachod; J. S. Swearingen. *Product Eng* 14:681-2 O '43
- How to figure hog-fuel combustion. G. L. Graff. *Power* 87:325+ My '43
- How to size piping for steam, gases and vapors. E. N. Kemler. *14 charts Heat & Ven* 40:52-4+ O '43
- Impedance magnitude and phase angle charts; reference chart. T. C. Blow. *Electronics* 16: 94-5 Ja '43
- Influence charts for computation of stresses in elastic foundations. N. M. Newmark. *diags fold charts Ill U Eng Exp Sta Bul* 338:1-25 '42 (pa 35c)
- Logarithmic modulus chart for root and power calculations. J. D. Parent. *Chem & Met Eng* 50:118 Ag '43
- New chart for culvert design. R. R. Rowe. *Civil Eng* 13:543-4 N '43
- Nomographic chart for the design of floor beams. *Pet Refiner* 22:106 My '43
- Plexiglas rule for alignment charts. G. M. Mast. *Il Electronics* 16:200+ N '43
- Q for unloaded concentric transmission lines; alignment chart makes possible rapid determination of Q and sending-end impedance. R. C. Miedke. *Electronics* 16:139-40 S '43
- Rectangular moments of inertia and section moduli; reference book sheet. *Product Eng* 14:61-2 Ja '43
- Selecting helical and worm gearing; with alignment charts. R. D. Douglass and J. M. Dunford. *Machine Design* 14:119-21 D '42
- Selection of main line meters; charts designed to simplify problem. J. C. Thorsen. *diags Water Works & Sewerage* 90:221-7 Je '43
- Selection plan for V-belt drives conserves rubber; *Texrope econograph. Heating-Piping* 15:139-40 O '43
- Sewer charts based on Scobey's formula. P. E. Whittington. *Eng N* 131:548-50 O 7 '43
- Simple chart for computing log mean and comparing log and arithmetic means. J. D. Parent. *Chem & Met Eng* 49:120 N '42
- Structure chart for solving geological and mining problems. H. R. Bramel. *Eng & Min J* 144:82-3 JI '43
- Temperature coefficient of quartz crystals; two charts. N. L. Chalfin. *Electronics* 16: 147-8 N '43
- Transmission line charts. R. F. Baum. *Electronics* 16:92-4+ JI '43
- Turbine extraction chart. H. Steen-Johnsen. *diag Power Pl Eng* 47:110 Ag '43
- Universal resonance chart. H. G. Yates. *Engineer* 176:268-9 O 1 '43
- Use of alignment charts. W. F. Covil. *fold charts Boston Soc C E J* 30:205-11, 263-4 JI-O '43

CHARTS (calculating)—Continued

Viscosimetry and new graphical viscosity classifications. C. M. Larson and W. C. Schwaderer. *Oil & Gas J* 42:49-50+ *Jl* 15 '43

See also

Nomography

CHASE national bank of New York

Report to stockholders. W. W. Aldrich. *Comm & Fin Chr* 157:186-7 *Ja* 14 '43

What is this bank stock worth? K. L. Trefftz. *Barron's* 23:5 *My* 10 '43

CHASERS. See Thread cutting**CHASTEK-paralysis. See Foxes—Diseases****CHATTEL mortgages**

Production credit association competition hasn't reduced our loans; Farmers and merchants state bank, Wisconsin Dells, Wis. E. C. Amann. *il Bankers Mo* 59:554, 556 *D* '42

CHAULMOOGRA oil

Chaulmoogra oil in the treatment of leprosy. G. W. McCoy. *bibliog Pub Health Rep* 57: 1727-33 *N* 13 '42

CHECK cashing companies

Currency exchange losses heavy. *Nat Underw* 47:25 *Ag* 19 '43

Paper that pays; banks and Chicago currency exchanges. *Business Week* p103+ *Mr* 27 '43

CHECK lists

Good personnel relations help increase production. A. R. Cook. *Factory Management* 101:122-6 *O* '43

See also

Advertising—Check lists

CHECK-off system

U.S. gypsum co. challenges WLB order on union membership and dues check-off. *Comm & Fin Chr* 158:1327 *S* 30 '43

CHECKER brick

Develops cross-vent checker brick. *il diags Steel* 113:86 *Ag* 9 '43

CHECKS

Another tax accounting plan for farmers. *il Burroughs Clearing House* 28:8-9 *N* '43

Checking government checks; ODB's work. *il Banking* 36:23-5 *Ag* '43

How banks handle payroll checks; charges for service and ways of handling rush peaks. E. V. Odle. *il Burroughs Clearing House* 27:16-18+ *F* '43

Names for no-minimum-balance checking accounts. *Bankers Mo* 59:545 *D* '42

New business from war workers; special payroll draft-cashing service. M. Cushing. *il Banking* 36:31-2 *N* '43

Over-the-counter and off-the-knee; cashing checks for war workers and men in uniform. J. J. McCann. *il Banking* 35:32-4+ *D* '42; 41-2 *Ja* '43

Serving war workers; survey of banking practice in payroll checks. *il Banking* 35: 83-4 *Ja* '43

Simple pay deduction process; checkbook permits depositor to segregate deductions withheld. F. W. Hetzel. *il Banking* 35:26+ *Ap* '43

Treasury urges care in handling of new form of card checks. *Comm & Fin Chr* 158: 724 *Ag* 19 '43

Collection

All Iowa banks pay at par. D. E. Neiman. *Bankers Mo* 60:354-5 *Ag* '43

Bank liable under creditor-debtor relationship for collection of check misappropriated by depositor. *Banking Law J* 60:571-7 *Jl* '43

Easing of rule on returned unpaid checks announced by N.Y. Federal reserve bank. *Comm & Fin Chr* 158:430 *Jl* 29 '43

Making the most of delayed posting; Whitney national bank of New Orleans. J. Gilly, Jr. *il Burroughs Clearing House* 27: 16-18 *Mr* '43

New state law allows delayed return of items; clearing houses report change in rules. *Bankers Mo* 60:256-7 *Je* '43

90 clearing houses now return checks the next day. *map Bankers Mo* 60:197-9+ *My* '43

Send wires direct! improvements in inter-bank transactions. R. T. Elston. *Bankers Mo* 60:168+ *Ap* '43

Sixteen clearing houses have changed rules on return. *Bankers Mo* 60:108-9+ *Mr* '43

Too many dishonored items; what can be done about it. *Bankers Mo* 60:156-7+ *Ap* '43

Wires on returned items often unnecessary. *Bankers Mo* 60:8-9+ *Ja* '43

Design

Ask customers not to use confusing voucher checks. *il Bankers Mo* 60:296-7 *Jl* '43

Bankers Monthly recommends simplified check forms. *il Bankers Mo* 60:250-1 *Je* '43

Comments on headache checks. *Banking* 36: 29 *Jl* '43

Comments on the voucher check. *Bankers Mo* 60:402+ *S* '43

Cure for headache checks. A. Miller. *Banking* 35:32+ *Je* '43

Fewer errors and more checks per minute. E. C. Mills. *il Bankers Mo* 60:300-1 *Jl* '43

Headache checks. E. C. Johnson. *il Banking* 35:26-7 *My* '43

New check design helps to eliminate errors. *il Burroughs Clearing House* 27:7-8 *Mr* '43

Indorsement

Know your endorser campaign. *il Burroughs Clearing House* 27:21 *Mr* '43

Law

Action against bank for payment of check bearing forged indorsement not precluded by statute. *Banking Law J* 60:759-61 *S* '43

Bank liable for payment on forged indorsement of fictitious payee's name. *Banking Law J* 60:529-36 *Jl* '43

Bank liable under creditor-debtor relationship for collection of check misappropriated by depositor. *Banking Law J* 60:571-7 *Jl* '43

Bank's liability for no funds reply to telegram of holder of check. *Banking Law J* 60:556-63 *Jl* '43

Check payable to specified decedent's estate not bearer paper; *Bacher v. City national bank of Philadelphia*. *Banking Law J* 60: 659-74 *Ag* '43

Collecting bank liable to drawer for payment of forged check. *Banking Law J* 60:522-9 *Jl* '43

Contingent government check. C. R. Rosenberg, Jr. *Burroughs Clearing House* 27:44-5+ *My* '43

Delivery of check by mailing. C. R. Rosenberg, Jr. *Burroughs Clearing House* 27:29+ *N* '42

Drawee bank not liable in contract to holder of check for failure to honor check. *Banking Law J* 60:537-43 *Jl* '43

Impostor's endorsement valid; negligence with forged checks. C. R. Rosenberg, Jr. *Burroughs Clearing House* 27:29 *Ja* '43

Liability of bank for payment of forged checks from depositor's account. J. A. Noble. *Banking Law J* 60:741-6 *S* '43

Liability of bank where drawer makes notation on check. *Banking Law J* 60:649-52 *Ag* '43

Negligence in clearing corporation checks. C. R. Rosenberg, Jr. *Burroughs Clearing House* 27:30+ *Ag* '43

Telegraphic dishonor. C. R. Rosenberg, Jr. *Burroughs Clearing House* 28:48 *N* '43

Title to checks of holder in due course cannot be questioned by drawer. *Banking Law J* 60:652-6 *Ag* '43

See also

Checks—Protest

Protest

Eliminate protest. *Bankers Mo* 60:452-4+ *O* '43

Let's simplify protest procedure. G. R. Durang. *Bankers Mo* 60:245-6 *Je* '43

Protest fees vary widely; procedure is not uniform. *map Bankers Mo* 60:352-3 *Ag* '43

Protesting checks is a nuisance with no compensating income. *Bankers Mo* 60:247-8+ *Je* '43

CHECKS, Fraudulent

Bank liable for payment on forged indorsement of fictitious payee's name. *Banking Law J* 60:529-36 *Jl* '43

CHECKS, Fraudulent—Continued

- Collecting bank not liable to drawer of checks payable to fictitious payees. J. A. Noble. *Banking Law J* 60:627-31. Ag '43
- Is collecting bank liable on forged checks? C. R. Rosenberg, jr. *Burroughs Clearing House* 27:44 D '42
- Know your endorsers; program of the Secret service. F. J. Wilson. *Il Am Inst Banking Bul* 25:5-7 Ja '43
- Liability of bank for payment of forged checks from depositor's account. J. A. Noble. *Banking Law J* 60:741-6 S '43
- Tell your dealers how to cut down losses from forged checks! *Il Sales Management* 52:22-4 Ap 15 '43
- To 20,000 new tellers; forged government checks and counterfeit bills. F. J. Wilson. *Il Banking* 35:38-9 Ap '43

CHEESE

- Cuba's cheese industry. *For Comm W* 11:54-6 Je 5 '43
- For better cheese; Argentina to invoke new, higher standards. *Business Week* p54+ F 6 '43
- It takes a well-made cheese to meet export requirements. J. C. Marquardt. *Il Food Ind* 15:63 Je '43
- Keep cheese cold. *Consumers' Research Bul* 11:17 F '43
- Synthesis of vitamins by micro-organisms in relation to vitamin content of fancy cheeses; abstract. P. R. Burkholder, J. Collier and D. Moyer. *Food Ind* 15:128 O '43

Manufacture

- Bacteriophage and cheesemaking; abstract. L. J. Meanwell. *Chem & Ind* 62:73; Discussion. 73-4 F 20 '43
- Granular type cheese saves time, labor and equipment. J. C. Marquardt. *Food Ind* 15:69 My '43
- War demands call for quick-curing cheese. J. C. Marquardt. *Il Food Ind* 15:65+ Ja '43

Patents

- Cheese making. *Food Ind* 15:147-8 N '43

Rating

- Made-in-America cheeses. *Il Consumers' Research Bul* 11:5-8 D '42

Statistics

- Dairy products, 1938-1941. Survey of Cur Business 1942 Sup p115-16 [supplemented in monthly numbers]

CHEESE, Dried

- Army specifications for dehydrated foods. *Food Ind* 15:120-2 My '43
- New way to dehydrate cheese. *Il Food Ind* 15:80-1 O '43

CHEESE soup, Dried. See Soup, Dried**CHEMICAL abstracts (periodical)**

- Abstracting and indexing. E. J. Crane. *J Chem Educ* 20:537-9 N '43
- Further computations in chemical progress. E. Thomas. *Science* 97:159-60 F 12 '43
- Patent index for Chemical abstracts. *Science* 97:482 My 28 '43

CHEMICAL analysts. See Chemistry, Analytic**CHEMICAL apparatus**

- Apparatus for following the course of rapid chemical reactions in solution. E. O. Powell and J. H. Trendall. *Il diag Chem & Ind* 62:368-9 S 25 '43
- Apparatus for purification of hydrocarbons by recrystallization. J. L. Keays. *diag Ind & Eng Chem Anal ed* 15:391-2 Je 15 '43
- Apparatus for quantitative catalytic hydrogenation. L. M. Joshel. *diag Ind & Eng Chem Anal ed* 15:590-1 S 15 '43
- Automatic apparatus for determination of small concentrations of sulfur dioxide in air; application to hydrogen sulfide, mercaptan, and other sulfur and chlorine compounds. M. D. Thomas and others. *bibliog diags Ind & Eng Chem Anal ed* 15:287-90 Ap 15 '43
- Automatic leveling bulb lifter for butadiene analysis. W. R. Atwater. *diags Ind & Eng Chem Anal ed* 14:954 D 15 '42
- Briquetting press and electrode loader for spectrochemical analysis. H. C. Harrison and C. C. Ralph. *bibliog il diag Ind & Eng Chem Anal ed* 15:466-7 JI 15 '43

Constant temperature bath. diag Chem Ind

- 53:97 JI '43
- Control and measuring instruments; electrolytic analysis apparatus. *Il Chem Age (Lond)* 48:451-2 Ap 24 '43
- Delivery of liquids at low and constant rates. E. C. Page, jr. and J. C. Whitwell. *diags Ind & Eng Chem Anal ed* 15:435-7 JI 15 '43
- Device for the preparation and transfer of oxygen-free solutions. E. Haas and R. L. Platzman. *diag Science* 97:228 Mr 5 '43
- Electrochemical analysis; instruments for metallurgists. *Il Chem Age (Lond)* 48:445-7 Ap 24 '43
- Glass-covered immersion heater. J. H. Burrows and M. Reiss. *diags Chem & Ind* 62:215 Je 5 '43; *Same. Chem Ind* 53:96 JI '43
- Glass laboratory pump for gases or liquids. W. T. Olson and R. A. Spurr. *diag Ind & Eng Chem Anal ed* 15:467 JI 15 '43
- Laboratory deodorizer for fats and oils. A. E. Bailey and R. O. Feuge. *diag Ind & Eng Chem Anal ed* 15:280-1 Ap 15 '43
- Liquid flow at small constant rates; Rideal microdoser. R. O. King and R. R. Davidson. *diags Can Min J* 64:573-4 S '43
- Physics in chemical industry. A. J. Mee. *bibliog Chem Age (Lond)* 49:355-8 O 9 '43
- Pressure wash bottle for volatile solvents. L. W. Charkey and D. V. Zander. *diag Ind & Eng Chem Anal ed* 14:857 N 15 '42
- Proper care will prolong the life of chemical glassware. B. J. Lewis. *Il Chem & Eng N* 21:562-4 Ap 25 '43

Report on recommended specifications for microchemical apparatus; sulfur and halogens. diags Ind & Eng Chem Anal ed 15:230-4 Mr 15 '43**Review of organic microchemistry. L. T. Hallett. il diags Ind & Eng Chem Anal ed 14:956-93 bibliog(378 references, p990-3) D 15 '42****Sainte-Claire Deville hot-cold tube and some of its applications. R. C. Young. bibliog J Chem Educ 20:378+ Ag '43****Save 95% of strategic materials with porcelain pipe and fittings; Illinois electrical porcelain co. il Cer Ind 39:60+ D '42****Simple apparatus for experiments in electrochemistry. O. F. Steinbach. diag J Chem Educ 20:303-4 Je '43****Simple apparatus for small-scale catalytic hydrogenation. C. R. Noller and M. R. Barusch. diag Ind & Eng Chem Anal ed 14:907-8 N 15 '42****Simple device for preparing vapor-air mixtures. J. B. Gisclard. diag Ind & Eng Chem Anal ed 15:582 S 15 '43****Use of semimicro technic in elementary organic chemistry. N. D. Cheronis, P. G. Arvan and H. Telfeld. il J Chem Educ 20:431-7 S '43****Vacuum desiccator for the synthetic organic laboratory. F. P. Pingert. diag Ind & Eng Chem Anal ed 15:175 Mr 15 '43****Vacuum sublimation. M. H. Hubacher. diags Ind & Eng Chem Anal ed 15:448-50 JI 15 '43****Vacuum take-off receiver for solids. J. B. Hyman. diags Ind & Eng Chem Anal ed 15:90 F 15 '43****See also**

- | | |
|------------------------|------------------------|
| Absorption apparatus | Drying apparatus |
| Agitators | Electric furnaces, |
| Autoclaves | Laboratory |
| Balances | Evaporators |
| Centrifuges | Extraction apparatus |
| Chemical engineering | Filters and filtration |
| —Apparatus and | (technical chemistry) |
| supplies | Gases—Apparatus |
| Chemical laboratories | Kundt tube |
| —Equipment | Pipets |
| Chemical plants— | Stopcocks |
| Equipment | Vacuum pumps |
| Combustion tubes | Viscosimeters |
| Crucibles | Volumetric analysis |
| Distillation apparatus | —Apparatus |

Electric heating

- Electrically heated melting point apparatus. E. Dowzard and M. Russo. *il diag Ind & Eng Chem Anal ed* 15:219-21 Mr 15 '43

Patents**See also****Chemical patents**

CHEMICAL bank and trust company

Annual report. Comm & Fin Chr 167:374 Ja 28 '43

What is this bank stock worth? K. L. Treftz. Barron's 23:11 S 27 '43

CHEMICAL bonds

Addition compounds of trimethylamine with boron fluoride and its methyl derivatives. A. B. Burg and A. A. Green. Am Chem Soc J 65:1838-41 O '43

Addition of hydrogen to multiple carbon-carbon bonds; the electrolytic reduction of alkyl and aryl acetylenes. K. N. Campbell and E. E. Young. biblog Am Chem Soc J 65:965-7 My '43

Breaking of multiple bonds and the primary detonating explosives. L. R. Carl. biblog Franklin Inst J 235:553-75 Je '43

Donor-acceptor bonding; an electron diffraction investigation of the structure of dimethyl ether-boron trifluoride. S. H. Bauer, G. R. Finlay and A. W. Laubengayer. biblog Am Chem Soc J 65:889-95 My '43

Donor-acceptor bonding; etherates of boron trifluoride. A. W. Laubengayer and G. R. Finlay. biblog Am Chem Soc J 65:884-9 My '43

See also

Double bonds
Molecular association
Valence

CHEMICAL compounds. See Addition compounds; Chemicals; Intermetallic compounds; Isomers; Molecular compounds; Polymers; Salts; Stereochemistry; Synthesis

CHEMICAL council

Chemical council, seventh report. Chem & Ind 62:199-201 My 29 '43

CHEMICAL education

Analysis and research; abstract. R. C. Chirndale. Chem & Ind 62:185-6 My 15 '43

Progress report no. 9 of the committee on the professional training of chemists; with list of institutions qualified to offer professional training for chemists and chemical engineers. Chem & Eng N 21:1628+ O 10 '43

This Nation will need more chemists after the war. E. A. Hauser. J Chem Educ 20:513-15 O '43

Training of chemists. M. M. Travers. Chem & Ind 62:369-70 S 25 '43

Training programs for chemists. H. T. Briscoe. Chem & Eng N 21:1702-4 O 25 '43

See also

Chemical engineering Chemistry—Study
Study and teaching Study and teaching

CHEMICAL elements

Element no. 85. Science 97:112 Ja 29 '43
Search for element no. 87. F. R. Hirsch. Jr. diags Phys R 63:93-5 P 1 '43

See also

Atomic weights Periodic system
Atoms Transmutation
Isotopes (chemistry)
also names of elements, e.g. Arsenic;
Carbon; Oxygen; Sulfur

CHEMICAL engineering

Autoclaves for pressure-temperature reactions. D. B. Gooch. biblog il diags Ind & Eng Chem 35:927-46 S '43

Chemical engineering in the gas industry. Chem Age (Lond) 49:47-9 Jl 17 '43

Chemical engineering in the laundry industry. F. C. Harwood. Chem & Ind 61:469-72 N 14 '42

Human factor in chemical engineering processes. G. H. Milos. Inst Chem Eng Trans 19:48-55; Discussion. 55-60 '41

Importance of chemical engineering. Chem Age (Lond) 49:1-2 Jl 3 '43

Introduction to high vacuum in chemical industries. T. R. Olive. il diag Chem & Met Eng 50:162-5+ O '43

Measurement and control of process variables; Chem & Met report. J. C. Peters, T. R. Olive and others. il diags Chem & Met Eng 50:97-144 My '43 [reprints 50c]

Reservoirs of new engineering materials. W. E. Brinker. W Soc E J 48:68-76 Je '43

Scale models; new tool for chemical engineers. W. Allphin. Il Chem & Eng N 21:556-8 Ap 25 '43

See also

Acid handling
Chemical plants
Chemistry, Technical
Cooling, Industrial
Distillation
Drying
Evaporation
Extraction processes
Feed water purification
Filters and filtration (technical chemistry)
Food—Manufacture

Food factories—
Equipment
Leaching
Metallurgy
Mixing
Petroleum refineries
Refrigeration and refrigerating machinery
Refuse disposal
Sedimentation
Sewage disposal
Sublimation
Unit processes
Water purification

Apparatus and supplies

Chemical engineering catalog, 1943-44. 28th annual ed 1513p \$10 Reinhold pub. corp. 330 W 42d st, New York 18 '43

Chemical engineering equipment design. J. H. Rushton and H. C. Hesse. J Eng Educ 33:396-401 Ja '43

Chemical resistance of laminates. C. J. Straka. diags Mod Plastics 20:80-4, 136+ Jl '43

Composition of vapors from boiling binary solutions. D. F. Othmer. biblog il diags Ind & Eng Chem 35:614-20 My '43

Condensation of vapors; film coefficients for alcohols, esters, and ketones. D. F. Othmer and S. Berman. biblog il diags Ind & Eng Chem 35:1068-77 O '43

Principles of reactor design; gas-solid interface reactions. D. M. Hurt. biblog il Ind & Eng Chem 35:522-8 My '43

See also

Absorption apparatus
Acid resisting materials
Agitators
Autoclaves
Bleacheries—Equipment
Centrifuges

Chemical plants—
Equipment
Classifiers
Distillation apparatus
Drying apparatus
Evaporators
Extraction apparatus
Heat exchangers

Study and teaching

Chemical engineering equipment design. J. H. Rushton and H. C. Hesse. J Eng Educ 33:396-401 Ja '43

Colloid chemistry in chemical engineering courses. E. A. Hauser. J Eng Educ 33:402-6 Ja '43

Training programs for chemical engineers. W. L. McCabe. Chem & Eng N 21:1704-6 O 25 '43

Training women operators for chemical industry; University of Pittsburgh trains women for butadiene-styrene plant of Koppers united co. J. P. Coull. il diags Chem & Met Eng 50:116-18 Je '43

Tables, calculations, etc.

Conduction, convection and heat release in catalytic converters. R. H. Wilhelm, W. C. Johnson and F. S. Acton. il diags Ind & Eng Chem 35:562-75 My '43

Correlation of rate data. C. C. DeWitt. biblog Ind & Eng Chem 35:695-700 Je '43

Graphical interconversions for multicomponent systems. J. D. Leslie. Ind & Eng Chem 35:495-6 Ap '43

Heat, mass and momentum transfer in the flow of gases through granular solids. B. W. Gamson, G. Thodos and O. A. Hougen. biblog diag Am Inst Chem Eng Trans 39:1-32; Discussion. 32-5 F '43

Interconversions of polycomponent compositions by graphical methods. K. Sun and A. Silverman. Ind & Eng Chem 35:497-8 Ap '43

New approach to continuous reactor design. A. Brothman, A. P. Weber and E. Z. Barish. diags Chem & Met Eng 50:111-14 Jl; 107-10 Ag; 113-16 S '43

Principles of reactor design; gas-solid interface reactions. D. M. Hurt. biblog il Ind & Eng Chem 35:522-8 My '43

Relation of harmonic and logarithmic means. J. D. Parent. Chem & Met Eng 50:128 Je '43

CHEMICAL engineering—Tables, calculations, etc.—*Continued*

- Simple chart for computing log mean and comparing log and arithmetic means. J. D. Parent. *Chem & Met Eng* 49:120 N '42
- Solid catalysts and reaction rates. O. A. Hougen, K. M. Watson and O. A. Vyebara. *bibliog il Ind & Eng Chem* 35:529-45 My '43
- Technical data section; a selection of miscellaneous tables. *Chem Ind* 51:559-71 pt 2 (Buyer's guidebook) O '42
- Vapor pressure slide rule. F. T. Miles. *bibliog Ind & Eng Chem* 35:1052-61 O '43

See also

- Cooling towers
- Distillation—Tables, calculations, etc.

CHEMICAL engineers

- American chemical society and the War manpower commission; letter to H. T. Briscoe, of War manpower commission. C. L. Parsons. *Chem & Eng N* 21:656-9 My 10 '43; Excerpt. *Science* 97:503-4 Je 4 '43
- Chemical engineer in reconstruction. C. S. Garland. *Engineering* 155:316-17, 325-6 Ap 16-23 '43; Same cond. *Chem Age (Lond)* 48:393-6 Ap 10 '43
- Chemist vs. the chemical engineer. C. L. Parsons; S. D. Kirkpatrick. *Chem & Eng N* 20:1384 N 10 '42
- 1943-44 survey of chemistry and chemical engineering students made for the National roster of scientific and specialized personnel in cooperation with the American chemical society. E. M. Billings. *Chem & Eng N* 21:294-5 Mr 10 '43
- Occupational deferment of chemists and chemical engineers; amended data and recommendations. *Chem & Eng N* 21:1206-9 Ji 25 '43
- Training and responsibilities of chemical administrators. C. M. A. Stine. *Chem Ind* 52:325 Mr '43
- Training programs for chemical engineers. W. L. McCabe. *Chem & Eng N* 21:1704-6 O 25 '43

See also

- Chemical engineering
- Study and teaching

CHEMICAL equilibrium

- Chemistry at 1600. J. Chipman. *Am Soc for Metals Trans* 30:817-54 D '42
- Equilibria in a carbonaceous cation exchanger. H. F. Walton. *bibliog J Phys Chem* 47:371-32 My '43
- Equilibrium problems with more than one solution. P. Oesper. *J Chem Educ* 20:511 O '43
- Hydrothermal study of equilibria in the system alumina-water. A. W. Laubengayer and R. S. Weisz. *bibliog il Am Chem Soc J* 65:247-50 F '43
- Quantitative investigations of amino acids and peptides. E. H. Frieden, M. S. Dunn and C. D. Coryell. *J Phys Chem* 47:10-24, 85-94, 118-33 Ja-F '43

See also

- Phase rule and equilibrium

CHEMICAL formulas*See also*

- Chemistry—Notation

CHEMICAL industries

- Ahead, new industrial horizons. W. Gates. *il Mag of Wall St* 71:346-8 Ja 9 '43
- And pass the ammunition; expansion of the chemical industry. *Sci Am* 168:150 Ap '43
- Chemical industry and the war. P. Parrish. *bibliog il diags Chem Age (Lond)* 48:35-48, 73-4 Ja 9 '43
- Chemical industry in 1942. *Chem Age (Lond)* 48:31-3 Ja 9 '43
- Chemical residues of the war. W. S. Landis. *il Chem & Eng N* 21:539-44 Ap 25 '43
- Chemicals in war and peace. T. G. Joslin. *il Manuf Rec* 112:28-9 F '43
- Dow goes down to the sea; magnesium and war are making it a major power. *il Fortune* 26:110-13+ D '42
- Getting down to earth on post war plans. H. E. Thayer. *Chem & Met Eng* 50:106-8+ S '43
- Monsanto assays' products for their job potential after V day. F. J. Curtis. *Sales Management* 52:52+ F 15 '43

- News from the chemists' front; major companies report wartime developments. *Baron's* 23:20-7 S 20 '43
- 1942 electrical developments in the chemical industry. T. R. Rhea. *Chem & Eng N* 21:90-1 Ja 25 '43
- Peacetime prospects of the chemical industry. C. A. Higgins. *Comm & Fin Chr* 158:1+ Ji 1 '43
- Plans for the future. S. M. Spencer. *il Am Inst Banking Bul* 25:3-5, 32 Ap '43
- Production requirements of the chemical industry. J. W. Reynolds. *Chem & Eng N* 21:1708-11 O 25 '43
- Promise and problems of peace; chemical industry's postwar role. D. H. Killeffer. *Ind & Eng Chem* 35:1139-45 N '43
- Some important recent court decisions involving chemicals. L. T. Parker. *Chem Ind* 53:344-7 S '43
- WPB decentralization exempts chemical production projects. *Oil Paint & Drug Rep* 144:3+ O 25 '43
- War-time developments in solvents. A. M. Peake. *Chem Age (Lond)* 48:55-9 Ja 9 '43
- What you can use; guide to materials that are suitable for various purposes in chemical converting, compounding, and processing industries. Published in *Oil, paint and drug reporter*
- Why Vestal salesmen stuck to job; morale-building theme. C. E. Richards. *Ptr Ink* 204:32 Ji 16 '43

See also

- | | |
|----------------------------|---------------------------|
| Abrasives | Oil industries |
| Alcohol industry | Paint industry and trade |
| Anti-freeze solutions | Paper |
| Bleaching | Paper chemicals |
| Carnauba wax | Paper industry and trade |
| Ceramics | Plastic industries |
| Chemical plants | Potash |
| Chemical research | Pottery |
| Chemical workers | Rubber |
| Chemicals | Rubber industry and trade |
| Chemistry | Salt |
| Chemistry, Technical | Soap |
| Clay industries | Soap industry and trade |
| Cottonseed oil | Solvents |
| Drug trade | Sugar industry and trade |
| Dye industry | Tanning materials |
| Electrochemical industries | Textile industry |
| Electrochemistry | |
| Fertilizer industry | |
| Gas industry | |
| Glass | |
| Metallurgy | |

also names of chemical companies, e.g. Dow chemical company; Du Pont de Nemours, E. I., and company; Monsanto chemical company

Advertising

- Chemistry's front line of facts; Hercules powder company's advertising. T. Marvin. *il Chem Ind* 53:50-2 Ji '43
- Stay on your course is the thought that guides Hercules advertising. T. Marvin. *il Ind Marketing* 28:19-22+ Mr '43
- Why chemical industry should be a big post-war advertiser. J. O. Young. *il Ptr Ink* 203:60-2+ My 21 '43

Directories

- Buyer's guidebook number, 18th annual revision. W. J. Murphy, ed. *Chem Ind* 51:1-828 pt 2 (Buyer's guidebook) O '42 (pa 82)
- Chemical engineering catalog, 1943-44. 28th annual ed 1513p \$10 Reinhold pub. corp. 330 W 42d st. New York 18 '43
- Chemicals buying section; an alphabetical list of chemicals with their formulas, physical and chemical properties, uses, containers, tariff, shipping regulations, with a buyer's guide of manufacturers and distributors. *Chem Ind* 51:127-426 pt 2 (Buyer's guidebook) O '42
- Company directory; a geographical list of chemical manufacturers, importers and recognized distributors. *Chem Ind* 51:9-40 pt 2 (Buyer's guidebook) O '42
- Equipment and container buying section; an alphabetical list of apparatus, containers, equipment, laboratory supplies and packaging and labeling machinery, with a buyer's guide of manufacturers. *Chem Ind* 51:591-700 pt 2 (Buyer's guidebook) O '42

CHEMICAL industries—Directories—Continued

Raw materials buying section; an alphabetical list of natural raw materials, such as gums, metals, minerals, ores, naval stores, oils, natural pigments, etc. with their physical and chemical properties, uses, containers, tariff, shipping regulations, with a buyer's guide of suppliers. Chem Ind 51:41-125 pt 2 (Buyer's guide-book) O '42

Specialties buying section; an alphabetical list of industrial specialties for textile, leather, paper and pulp, rubber, ceramic, petroleum, coatings, plastics, electroplating, metal refining and working, laundry, drycleaning, for building and plant maintenance, and other chemical processing and agricultural uses, with a buyer's guide of manufacturers. Chem Ind 51:427-553 pt 2 (Buyer's guidebook) O '42

Exhibitions

Chemical exposition in war. Il Chem & Eng N 20:1627-34 D 25 '42

Chicago equipment preview. Chem & Met Eng 49:108-9+ N '42

National chemical exposition; list of exhibitors, descriptions of exhibits, Chicago, Nov. 24-29, plan Chem & Eng N 20:1402-6+ N 10 '42; Oil Paint & Drug Rep 142:35-8 N 23 '42

Production and maintenance equipment at the shows; the chemical show. Il Chem & Met Eng 49:102-5 D '42

Finance

Chemical finances, Dec. 1942. Chem Ind 52:115-16 pt 2 Ja '43 [cont monthly]

How the war has affected 16 leading chemical companies. 4 charts Chem Ind 53:325-31 S '43

Post-war growth in chemicals. S. B. Self. Barron's 23:3 Ag 23 '43

SEC shows chemical industry profit status. Chem Ind 53:548 O '43

Trend of war-time earnings; analysis of accounts of chemical companies. S. H. Withey. Chem Age (Lond) 48:422-4, 506-8; 49:162-3 Ap 17, My 8, Ag 14 '43

See also

Air reduction company

History

Chemical chronology, 1942. Chem Ind 52:34-8 Ja '43

News events of 1942. Chem Age (Lond) 48:66-9 Ja 9 '43

Securities

Chemical stocks and bonds. Chem Ind 52:116 pt 2 Ja '43 [cont monthly]

Investment audit of the chemical industry, now and after the war; with tabulation giving position of leading companies. R. P. Edwards; F. K. Dodge. Mag of Wall St 72:290-5+ Je 26 '43

Long-term chemical outlook optimistic; position of leading stocks. Mag of Wall St 71:646-7+ Mr 20 '43

Today's investment outlook for chemical stocks. R. P. Edwards. Mag of Wall St 71:349-50+ Ja 9 '43

Statistics

Chemical output reached total value of \$6,880,000,000 in 1942; with comparisons for 1939-1941. Oil Paint & Drug Rep 143:3 F 8 '43

Distribution of the chemical process industries by value of products in Middle West; table. Chem & Met Eng 49:84 N '42

Great advance in chemical production; gain of 55 per cent. in value of output, 48 per cent. in employment in 1942. W. H. Losee and H. McLeod. Can Chem & Process Ind 27:238-45+ My '43

Postwar prospects for the chemical process industries; Chem. & Met. report. Chem & Met Eng 50:95-126 F '43

State of chemical trade; current statistics, Dec. 31, 1942. Chem Ind 52:113-14 pt 2 Ja '43 [cont monthly]

Statistical reviews of minerals and chemicals in 1942. Chem Ind 53:266, 268+, 412, 414, 416 Ag-S '43

Wage, hour, employment, production, price trends; chemical industry vs. all industry. charts Chem & Eng N 21:1450-2 S 10 '43

Argentina

Rise and development of chemistry in the Argentine Republic. V. Arreguine. J Chem Educ 20:474-8 O '43

Trends in the Argentine chemical industry. F. Godwin. Il Chem & Eng N 21:316-17 Mr 10 '43

Austria

Austria under the Nazis; vital chemical and metal industries. Il Chem Age (Lond) 49:63-4 Jl 17 '43

Brazil

Chemical industry advances in Brazil. C. F. Bonilla. Il Chem & Met Eng 50:96-9 Mr '43

New industry; caustic soda supply. Business Week p46 Mr 6 '43

Organic chemicals in Brazil. Il Chem Age (Lond) 48:628-9 Je 12 '43

World-wide chemistry (cont). C. E. Nabuco de Araujo, jr. Chem & Eng N 20:1520-1; 21:51-2, 94-5, 774, 1626-7 N 25 '42, Ja 10-25, My 25, O 10 '43

California

New Almaden mine, the first chemical industry in California. H. M. Leicester. bibliog Il J Chem Educ 20:235-8 My '43

Canada

Canada builds chemical and explosives industries. J. Montagnes. Il Chem & Met Eng 50:98-101 S '43

Canada's chemical development. Chem Age (Lond) 49:289-91 S 18 '43

Canadian chemistry. S. J. Cook. Chem & Eng N 21:498 Ap 10 '43

Canadian chemistry. S. J. Cook. Chem & Eng N 21:1612 O 10 '43

Chemical and explosives programme in Canada. J. R. Donald. Can Chem & Process Ind 27:316-18 Je '43

Chemicals at war; Canada has geared explosives output to wartime pace. Il Business Week p37-8 Ja 30 '43

Control and administration of chemicals in Canada. H. M. Sunderland. Can Chem & Process Ind 27:246-7+ My '43

Great advance in chemical production; gain of 55 per cent. in value of output, 48 per cent. in employment in 1942. W. H. Losee and H. McLeod. Can Chem & Process Ind 27:238-45+ My '43

Chile

Chilean chemical picture. C. C. Concannon and A. H. Swift. Il For Comm W 13:8-9, 31-3 O 16 '43; Excerpts. Chem Age (Lond) 49:509-11 N 20 '43

China

Chinese chemists in England; chemical education and industry in China. Chem Age (Lond) 49:37 Jl 10 '43

Colombia

World-wide chemistry. A. Jorge-Sordo. Chem & Eng N 21:1198+ Jl 25 '43

Congo, Belgian

Belgian Congo produces chemicals for warfare. For Comm W 11:30 Je 26 '43

Czechoslovakia

Association of Czechoslovak scientists and technicians. Chem & Ind 62:271-2 Jl 17 '43

Detroit

Detroit chemists at war. R. E. Marce. Il Chem & Eng N 21:228-30 F 25 '43

Europe

Chemical industry of Europe; reports of German origin. Engineering 154:483 D 18 '42

German technical propaganda reveals "flourishing European chemical industry." W. G. Cass. Chem Ind 52:455 Ap '43

France

Chemical control in France. Chem Age (Lond) 48:225 F 20 '43

Germany

German economic war purpose holds world chemical control. W. Alwyn-Schmidt. Oil Paint & Drug Rep 143:74- Mr 1 '43

Germany seeks Dutch capital for development of industries in eastern Europe. Chem & Met Eng 50:159-61 Ja '43

CHEMICAL industries—Germany—Continued

Substitutes developed to meet war-time shortages. Chem Age (Lond) 47:559-60 D 19 '42
 World-wide chemistry. Chem & Eng N 20: 1652-4; 21:164-5, 567-8, 927-8, 1070-1 D 25 '42, F 10, Ap 25, Je 10, Ji 10 '43

Great Britain

Britain bounces back. P. Wooton. Chem & Met Eng 50:102 S '43
 British chemical developments. Can Chem & Process Ind 27:257-8 My '43
 British chemical developments. Can Chem & Process Ind 27:455-6 Ag '43
 Chemical developments in United Kingdom. For Comm W 12:18-19 Ji 17 '43
 Chemists and industrial control; concentration plans in allied industries; paint and gas industries. Chem Age (Lond) 47:555-6 D 19 '42
 Future of the chemical industry. H. D. McWowan. Engineer 176:311-12 O 15 '43
 International scope of British chemical industry emphasized by recent world developments. Chem & Met Eng 50:190-5 S '43
 Regional postwar development plans proposed for British chemical industry. Chem & Met Eng 50:182-5 O '43
 Shortages in plants, labor, and materials force adjustments in British chemical industry. Chem & Met Eng 50:192-4 F '43
 Trend of war-time earnings; analysis of accounts of chemical companies. S. H. Withey. Chem Age (Lond) 48:422-4, 506-8 Ap 17, My 8 '43
 Wartime changes in British chemical trade open new prospects for the future. Chem & Met Eng 50:156-8 Ja '43
 World-wide chemistry (cont). G. Abrahamson. Chem & Eng N 20:1371-2, 1655-7; 21: 93-4, 499, 684-5, 775-6, 992+, 1268-9, 1396, 1398-9, 1554+, 1753-5 N 10, D 25 '42, Ja 25, Ap 10, My 10-25, Je 25, Ag 10-25, S 25, O 25 '43

See also

Electrochemical industries—Great Britain
 Imperial chemical industries, limited

India

See also
 Plastic industries—India

Ireland

Chemical progress in Eire. R. M. Fox. Chem Age (Lond) 48:93-6 Ja 16 '43

Italy

Italian chemical resources. T. E. R. Singer. Il map Chem Ind 53:510-11 O '43
 Italy's chemical industries; Montecatini report for 1942. Chem Age (Lond) 48:536 My 15 '43
 Situation in Italy's chemical industry. For Comm W 11:24 Je 19 '43
 World-wide chemistry. Chem & Eng N 21: 566-7, 776 Ap 25, My 25 '43

Middle western states

Resources and manpower of the 14 middle-western states. maps Chem & Met Eng 49:85-100 N '42

Netherlands Indies

World-wide chemistry. Chem & Eng N 20: 1575-6 D 10 '42

New York (state)

Chemical companies dissolved by N.Y. state are listed. Oil Paint & Drug Rep 143:7-+ Ja 11 '43

Peru

Peru; chemical market. For Comm W 11:13 My 22 '43

Russia

Growth of industry in U.S.S.R. J. G. Tolpin. Chem & Eng N 21:166-9 F 10 '43
 Heavy chemicals in Russia; low-temperature research. M. Ruhemann. Chem Age (Lond) 47:421-3 N 14 '42

Sicily

Chemical industries of Sicily. A. H. Bennett. Chem & Ind 62:318-21 Ag 21 '43

South Africa

Chemicals in South Africa; development of local products. Chem Age (Lond) 48:160-1 Ja 30 '43
 Chemicals in South Africa; smaller firms remedying war-time import losses. Chem Age (Lond) 49:165-6 Ag 14 '43
 Chemicals in South Africa; the search for substitutes. Chem Age (Lond) 48:675 Je 26 '43
 Chemistry and industry in South Africa. Chem & Ind 62:164-5 My 1 '43
 South African chemical progress; leather research aids chemical industry; abstract. S. G. Shuttleworth. Chem Age (Lond) 47:427-8 N 14 '42
 South Africa's chemical industry. A. H. Swift. Il For Comm W 12:11-13+ S 11 '43

Spain

Chemical and allied industry in Spain. Chem Age (Lond) 48:245-6 F 27 '43
 Spain's chemical industry expands. A. H. Swift. Il For Comm W 11:10-11+ My 29 '43
 Spanish chemical industry. Chem Age (Lond) 47:586 D 26 '42
 Spanish chemical industry. Chem Age (Lond) 49:312 Ag 28 '43

Sweden

World-wide chemistry. Chem & Eng N 21: 95-6, 565-6 Ja 25, Ap 25 '43

United States

American contribution to vitamin production and use. R. E. Williams. Il Chem & Eng N 20:1644-6 D 25 '42
 Annual review; 1942 market trends and facts. Oil Paint & Drug Rep 143:37-106 Ja 11 '43
 Army-Navy E. Il Chem & Eng N 21:240-1 F 25 '43
 Chemical and related markets during 1942. Oil Paint & Drug Rep 143:60-+ Ja 11 '43
 Chemical chronology, 1942. Chem Ind 52:34-8 Ja '43
 Chemical industries branch, O.P.R.D., what it is and how it functions. D. B. Keyes. Chem & Met Eng 50:113-13 Je '43
 Chemical industry in the war effort. C. A. Thomas. Il Chem & Eng N 21:643-50 My 10 '43
 Chemical industry ready for peace; new products with unexploited markets available. S. B. Self. Barron's 23:17-19 S 20 '43
 Chemical plant construction planned for 1943-44. R. S. McBride. Chem & Met Eng 50: 111-12+ S '43
 Post-war growth in chemicals. S. B. Self. Barron's 23:3 Ag 23 '43
 Postwar prospects for the chemical process industries; Chem. & Met. report. Chem & Met Eng 50:96-126 F '43
 Representative men state their views. H. M. Bradbury and others. Oil Paint & Drug Rep 143:99-106, 138 Ja 11 '43
 Summary of war regulations up to Dec. 31, 1942; priorities, allocations, important price controls. Chem Ind 52:119-20 pt 2 Ja '43 [cont monthly]
 United States of America number. Chem & Ind 61:437-52 O 31 '42
 Widest chemical frontiers ahead. S. B. Self. Barron's 23:31-3 Ja 11 '43

See also

Du Pont de Nemours, Potash industry and
 E. I., and company trade—United
 Dye industry—United States
 States
 Manufacturing chem- Synthetic organic
 ists association chemical manufac-
 of the United States turers association

Wales

Chemical future for S. Wales. W. C. Devereux. flow sheet Chem Age (Lond) 49: 179-83 Ag 21 '43

CHEMICAL laboratories

Allied Chemical widens research activities. Oil Paint & Drug Rep 144:7-+ Ji 5 '43
 Determination of the precision of analytical control methods; Westvaco chlorine products corporation. R. F. Moran. bibliog Ind & Eng Chem Anal ed 15:361-4 Je 15 '43

CHEMICAL laboratories—Continued

New chemical laboratories of the Université de Montréal. R. Barre. *il Can Chem & Process Ind* 27:290-1 My '43

See also

Pharmaceutical laboratories
Rubber laboratories

Equipment

Electronic aids in chemistry. C. E. Jackson. *diags Radio N* 30:24-5+ N '43

Recent developments in laboratory apparatus; industrial needs met by standard equipment. R. H. Powell. *il Chem Age (Lond)* 48:443-5 Ap 24 '43

See also

Chemical apparatus Electric furnaces,
Crucibles Laboratory

Safety measures

Safety in the laboratory. J. Creevey. *Chem Age (Lond)* 49:385-6 O 16 '43

CHEMICAL libraries

Building a chemical library; Dow chemical company. M. W. Ellwood. *bibliog il Chem Ind* 53:189-93 Ag '43

Intelligence services for the chemist; S.C.I. symposium. *il Chem Age (Lond)* 49:392-4 O 16 '43

CHEMICAL literature

Further computations in chemical progress. E. Thomas. *Science* 97:159-60 F 12 '43

Problems of the scientific literature survey. G. Eglöff, M. Alexander and P. van Arsdell. *bibliog J Chem Educ* 20:393-8 Ag '43
Publications: pitfalls and problems. M. G. Mellon. *bibliog J Chem Educ* 20:534-7 N '43

CHEMICAL patents

Abstracts of foreign patents; collected from original sources and edited; Canadian patents. *Chem Ind* 52:127-8 pt 2 Ja '43 [cont monthly]

Alien properties now aid U.S. in production of chemicals and other war materials. *il Chem Ind* 52:734-7 Je '43

Chemical patents control lifted on 8 processes. *Oil Paint & Drug Rep* 144:3+ O 25 '43

Patent index for Chemical abstracts. *Science* 97:482 My 28 '43

Patent list. Published in weekly numbers of *Chemistry and Industry*

Patents vested by APC include more chemicals. *Oil Paint & Drug Rep* 144:3+ O 18 '43

Predictable experimental discoveries unpatentable. F. B. Drummond. *Chem & Eng N* 21:1146 JI 25 '43

Synthetic chemicals group discusses alien patents. *Oil Paint & Drug Rep* 142:3+ D 21 '43

Thiazoles and their uses in industry and medicine. R. F. Hunter. *Chem & Ind* 62:118-21 Mr 27 '43

U.S. chemical patents; *Off. gaz.*, vol. 542, nos. 3, 4; vol. 543, nos. 1, 2, 3. *Chem Ind* 52:121-2, 124-6 pt 2 Ja '43 [cont monthly]

See also

Dye patents	Petroleum refining—
Electrochemistry—	Patents
Patents	Resinous products—
Glass manufacture—	Patents
Patents	Rubber—Patents
Paper making—Pat-	Rubber, Artificial—
ents	Patents

CHEMICAL plants

Chemical plant construction planned for 1943-44. R. S. McBride. *Chem & Met Eng* 50:111-12+ S '43

Chemical plants conversion studied. *Oil Paint & Drug Rep* 142:5+ N 30 '42

Fallen animals, a little-known process industry. W. M. Robinson. *il Chem & Met Eng* 50:112-15 Ag '43

Rehabilitating idle plants in the Middle West; Iowa brewery makes industrial alcohol; beet sugar factory reopened. *il Chem & Met Eng* 49:107 N '42

See also

Canneries	Food factories
Canment plants	Glass factories
Clay products plants	Metallurgical plants
Drug factories	Paint factories
Fertilizer factories	Paper mills

Petroleum refineries	Sulfuric acid—Manu-
Rubber factories	facture
Sugar factories	

Accidents

Accident occurred. J. Creevey. *Chem Age (Lond)* 48:527-8 My 15 '43

Design

Catalytic hydrogenation rates; equipment and control. N. K. Anderson and C. A. Rowe. *flow sheet il diags Ind & Eng Chem* 35:554-7 My '43

Considering controllability in plant design. E. D. Haigler. *bibliog il Chem & Met Eng* 50:129-32 My '43

New approach to continuous reactor design. A. Brothman, A. P. Weber and E. Z. Barish. *diags Chem & Met Eng* 50:111-14 JI; 107-10 Ag; 113-16 S '43

Principles of reactor design; gas-solid interface reactions. D. M. Hurt. *bibliog il Ind & Eng Chem* 35:522-8 My '43

Solids catalysts and reaction rates. O. A. Hougen, K. M. Watson and O. A. Vyehara. *bibliog il Ind & Eng Chem* 35:529-45 My '43

Electric equipment

Automatic control; development of industrial designs and applications. *Electrician* 129:633-5 D 11 '42

Select electrical equipment for severe service. G. W. Donovan. *il Factory Management* 101:137-8 Ja '43

Employees

See Chemical workers

Equipment

Accessory features of chemical plant; cooperation between maker and user. C. H. Butcher. *Chem Age (Lond)* 47:526-9 D 12 '42

Anti-corrosion pumps; selecting alloys for the chemical industry. H. Seymour. *Chem Age (Lond)* 47:536-7 D 12 '42

Chemically treated wood in war and industry. W. P. Arnold. *il Chem & Eng N* 21:1163-71 JI 25 '43

CMP and the chemical industries. D. P. Morgan. *Chem & Met Eng* 49:88-90 D '42

Cutting maintenance costs by arc welding chemical process equipment. J. E. Gurvin. *il diags Chem & Met Eng* 50:117-18 Ap '43

Enamel linings for chemical plant. *Chem Age (Lond)* 47:554 D 19 '42

Equipment and container buying section; an alphabetical list of apparatus, containers, equipment, laboratory supplies and packaging and labeling machinery, with a buyer's guide of manufacturers. *Chem Ind* 51:591-700 pt 2 (Buyer's guidebook) O '42

Glass fibers offer possibilities in chemical process equipment. *il Chem Ind* 53:501 O '43

Lead equipment used in industry. F. E. Wormser. *bibliog Metal Prog* 43:223+ F '43

Maintenance steps to prolong instrument life. T. A. Cohen. *diags Chem Ind* 52:345-7 Mr '43

Measurement and control of process variables; *Chem & Met report*. J. C. Peters, T. R. Olive and others. *il diags Chem & Met Eng* 50:97-144 My '43 [reprints 50c]

Mechanical maintenance in process plants; *Chem & Met report*. *il diag Chem & Met Eng* 50:119-26 Ap '43

Modern developments in the design of plant for the concentration of sulphuric acid. F. Parrish. *il diags plans Inst Chem Eng Trans* 19:1-19; Discussion. 19-24 '41

Modernizing chemical color manufacture; Reichhold chemicals, inc. J. R. Callahan. *flow sheets il Chem & Met Eng* 50:106-11 Je '43

Pilot plant construction under wartime conditions; Wyandotte chemicals corporation. W. F. Waldeck. *il Chem Ind* 53:185-8 Ag '43

Plastic carrying buckets; substitute for rubber and ebonite; Lorival acid bucket. *Chem Age (Lond)* 48:70 Ja 9 '43

Production and maintenance equipment at the shows; the chemical show. *il Chem & Met Eng* 49:102-5 D '42

CHEMICAL plants—Equipment—Continued

Production of vitamins presents new operating problems; fine chemicals division of Gelatin Products. *il Chem & Eng N 21: 549-51 Ap 25 '43*

Rebuilding used equipment for the process industries. N. G. Farquhar. *il Chem & Met Eng 50:103-5 Je '43*

Stainless steel pipe, valves, and fittings resist corrosion of hormone process; Ciba pharmaceutical co. plant. *il Heating-Piping 15: 589 N '43*

Steam traps for chemical processes; factors governing selection to attain fuel efficiency. D. D. Howat. *il diags Chem Age (Lond) 47:519-25 D 12 '42*

Tantalum in chemical industry; resistance to chemical action; valuable physical properties. H. Seymour. *Chem Age (Lond) 47: 441-3 N 21 '42*

U.S. synthetic rubber program moves forward; government plant at Institute, West Virginia. W. J. Murphy. *il Chem & Eng N 21:864-77 Je 10 '43*

Use of inhibitors for aluminum chemical equipment. R. B. Mears and G. G. Eldredge. *il Electrochem Soc Trans 83 (preprint 16):201-15 Ap '43; Abstract. Can Chem & Process Ind 27:450 Ag '43*

See also

Absorption apparatus	Extraction apparatus
Agitators	Food factories—
Autoclaves	Equipment
Centrifuges	Heat exchangers
Clarifiers	Pressure vessels
Cooling towers	Screens
Distillation apparatus	Vacuum pumps
Evaporators	Vats

Experimental plants

Pilot plant construction under wartime conditions; Wyandotte chemicals corporation. W. F. Waldeck. *il Chem Ind 53:185-8 Ag '43*

Fires and fire protection

Fires at chemical and allied works. J. Creevey. *Chem Age (Lond) 48:643-4 Je 19 '43*

1942 fire record for chemical plants. L. F. Maar. *il Chem & Eng N 21:484-5+ Ap 10 '43*

Floors

How to select a concrete floor treatment. C. S. Glickman. *il Chem Ind 52:740-1 Je '43*

See also

Food factories—
Floors

Fuel

Ministry of fuel conference, May 12-13. *Chem & Ind 62:194-5 My 22 '43*

Heating and ventilation

Disk fans solve troublesome ventilating problems in a chemical plant. W. J. Shore. *il diags Chem & Met Eng 50:116 Mr '43*

Maintenance and repair

Mechanical maintenance in process plants; *Chem & Met report. il diags Chem & Met Eng 50:119-26 Ap '43*

Scheduled lubrication slashed upkeep costs; Dupont, Grasselli chemicals department. J. L. Bowman. *il Factory Management 101: 133-6 O '43*

Management

Chemical industry and the salvage campaign; abstract. J. A. Lee. *Chem & Met Eng 50: 146-7 Ja '43*

How industry is solving its manpower problems; Monsanto chemical co. F. J. Curtis. *Chem & Eng N 21:1712-14 O 25 '43*

Progress of the salvage program in chemical process industries. J. R. Callahan. *flow diags il Chem & Met Eng 50:113-15 Mr '43*

Revision and expansion of operating standards in the chemical industry. W. von Pechmann. *Chem & Eng N 21:1621-5 O 10 '43*

Models

Scale models; new tool for chemical engineers. W. Allphin. *il Chem & Eng N 21: 556-8 Ap 25 '43*

Power

1942 electrical developments in the chemical industry. Rubber Age 52:329 Ja '43

Power consumption of propeller-type agitators. C. E. Stoops and C. L. Lovell. *bibliog il diags Ind & Eng Chem 35:845-50 Ag '43*

Quality control

Determination of the precision of analytical control methods; Westvaco chlorine products corporation. R. F. Moran. *bibliog Ind & Eng Chem Anal 15:361-4 Je 15 '43*

Safety measures

Chemical work of the factory department; aspect of industrial health report. S. H. Wilkes. *Chem Age (Lond) 49:27-30 Ji 10 '43*

Explosion hazards in the chemical industry. T. A. Cohen. *diags Chem & Eng N 21:302-3 Mr 10 '43*

Hazards and control of industrial toxic solvents. W. M. Pierce. *bibliog Chem & Met Eng 49:35-7 D '42*

Health hazards in chemical industry. J. Creevey. *Chem Age (Lond) 49:184-5 Ag 21 '43*

Industrial safety gleanings. *Chem Age (Lond) 47:449-50 N 21 '42*

National safety congress papers, chemical section. *Chem & Eng N 21:1721-3 O 25 '43*

Safety for those new to industry. J. Creevey. *Chem Age (Lond) 48:419-20 Ap 17 '43*

Safety in industry. M. A. Snell. *bibliog J Eng Educ 33:794-817 Je '43*

Safety in styrene production. H. K. Eckert. *il Nat Pet N 35 pt 2:R530 N 3 '43*

Select electrical equipment for severe service. G. W. Donovan. *il Factory Management 101:137-8 Ja '43*

Some dangerous industrial vapours. *Chem Age (Lond) 49:387-8 O 16 '43*

Some pointers of safety wisdom. J. Creevey. *il Chem Age (Lond) 47:447-8, 551-2; 48: 91-2, 221-2, 325-7 N 21, D 19 '42, Ja 16, F 20, Mr 20 '43*

Waste

Acid waste disposal; abstract and discussion W. Rudolfs. *Eng N 129:715 N 19 '42*

CHEMICAL reaction

Acid-base relationships at higher temperatures. L. F. Audrieth and T. Moeller. *bibliog J Chem Educ 20:219-22 My '43*

Activation energy of the reaction $\text{CH}_4 + \text{HBr} \rightarrow \text{CH}_3 + \text{H}_2$ and the carbon-hydrogen bond strength in methane. H. C. Andersen and G. B. Kistiakowsky. *bibliog J Chem Phys 11:6-10 Ja '43*

Cadmium (^{210}Pb) photosensitized reactions of the lower olefins. D. J. LeRoy and E. W. R. Steacie. *bibliog J Chem Phys 10: 683-5 N '42*

Chemical reactions during vulcanization; liquid rubber latex. E. A. Hauser, D. S. le Beau and J. Y. L. Kao. *bibliog J Phys Chem 46:1099-1111 D '42*

Chemical separation of the isotopes of hydrogen by the addition of metals and compounds of metals to water, acids and bases; relative efficiencies of specific reactions; the effects of certain factors other than temperature. H. L. Johnston and C. O. Davis. *bibliog diags Am Chem Soc J 64:2613-20 N '42*

Chemistry of acrylonitrile; reactions with ketones. H. A. Bruson and T. W. Riener. *Am Chem Soc J 64:2850-8 D '42*

Concept of catalytic chemistry. A. V. Grosse. *bibliog il Ind & Eng Chem 35:762-7 Ji '43*

Course of reaction in the transformation of α,α -dibromoacetophenone to mandelic acid by means of aqueous alkali. E. B. Ayres and C. R. Hauser. *bibliog Am Chem Soc J 65:1095-6 Je '43*

Davy medal award to Professor C. N. Hinshelwood. H. Dale. *Science 97:30-1 Ja 8 '43*

Disproportionation of *o*-tolylidiphenylmethyl. P. W. Selwood and R. F. Preckel. *bibliog diags Am Chem Soc J 65:895-9 My '43*

Donor-acceptor bonding; an electron diffraction investigation of the structure of dimethyl ether-boron trifluoride. S. H. Bauer, G. R. Finlay and A. W. Laubengayer. *bibliog Am Chem Soc J 65:889-95 My '43*

CHEMICAL reaction—Continued

- Donor-acceptor bonding; etherates of boron trifluoride. A. W. Laubengayer and G. R. Finlay. bibliog Am Chem Soc J 65:884-9 My '43
- Experimental methods of determining the activation energies of elementary reactions. E. W. R. Steacie and D. J. Le Roy. diags Chem R 31:227-93 bibliog(382 references, p285-93) O '42
- Homogeneous catalysis of diene syntheses; a new type of third-order reaction. A. Wasermann. Chem Soc J p618-21 O '42
- Induced chlorination of maleic acid; evidence for chain reaction mechanisms. H. Taube. bibliog diags Am Chem Soc J 65:1876-82 O '43
- Influence of addenda on the inversion of *l*-menthone with acids in benzene; the effect of solvents in chemical reactions. A. Weissberger. Am Chem Soc J 65:242-5 F '43
- Investigation of the mechanism of chemical reactions with heavy oxygen. A. E. Brodsky and others. bibliog J Chem Phys 11:342 JI '43
- Mechanism of cyclization reactions. E. Berliner. bibliog Am Chem Soc J 64:2894-8 D '42
- Mechanism of the diazo-coupling reaction. H. H. Hodgson. bibliog Soc Dyers & Col J 58:228-31 N '42
- Mechanism of the reaction between hindered carbonyl compounds and the Grignard reagent. R. T. Arnold and R. W. Liggett. bibliog Am Chem Soc J 64:2875-7 D '42
- Method of study of the kinetics of chemical reactions. F. Olmer. bibliog J Phys Chem 47:313-17 Ap '43
- Method of thin films for the study of inter-metallic diffusion and chemical reactions at metallic surfaces. H. S. Coleman and H. L. Yeagley. II diags Am Soc for Metals Trans 31:105-21; Discussion. 121-4 Mr '43
- Nomograph for the estimation of the activation energies of unimolecular reactions. E. Warrick. J Chem Educ 20:134-5 Mr '43
- Reaction between ethylene derivatives and the halogens. S. V. Anantakrishnan and R. Venkataraman. bibliog(122 references) Chem R 33:27-55 Ag '43
- Reactions in solid state; reaction between sodium carbonate and quartz. G. Gibson and E. Ward. bibliog Am Cer Soc J 26:239-46 JI '43
- Reactions of atoms and free radicals in solution; decomposition of acetyl peroxide in aliphatic acids, a new synthesis of succinic acid and its substitution derivatives. M. S. Kharasch and M. T. Gladstone. bibliog Am Chem Soc J 65:15-17 Ja '43
- Reactions of certain neopentyl systems with electrophilic reagents. P. Skell and C. R. Hauser. bibliog Am Chem Soc J 64:2633-5 N '42
- Role of neighboring groups in replacement reactions; cyclohexene ethyl orthoacetate. S. Winstein and R. E. Buckles. bibliog Am Chem Soc J 65:613-18 Ap '43
- Role of neighboring groups in replacement reactions; retention of configuration in the reaction of some dihalides and acetoxyhalides with silver acetate. S. Winstein and R. E. Buckles. bibliog Am Chem Soc J 64:2780-6 D '42
- Role of neighboring groups in replacement reactions; retention of configuration in the reaction of the 3-bromo-2-butanols with phosphorus tribromide. S. Winstein. bibliog Am Chem Soc J 64:2791-2 D '42
- Role of neighboring groups in replacement reactions; the effect of the neighboring acetoxy group on the course of the replacement of the tosylate group of *trans*-2-acetoxycyclohexyl *p*-toluenesulfonate. S. Winstein, H. V. Hess and R. E. Buckles. bibliog Am Chem Soc J 64:2796-801 D '42
- Role of neighboring groups in replacement reactions; the effects of small amounts of water on the reaction of silver acetate in acetic acid with some butene and cyclohexene derivatives. S. Winstein and R. E. Buckles. bibliog Am Chem Soc J 64:2787-90 D '42
- Role of neighboring groups in replacement reactions; the identity of various preparations of 1,2-dibromocyclohexane. S. Winstein. bibliog Am Chem Soc J 64:2792-5 D '42
- Spot reaction experiments. F. Feigl. J Chem Educ 20:137-41, 174-8, 240-3, 298-301 Mr-Je '43
- Use of N¹⁵ as a tracer element in chemical reactions; the mechanism of the Fischer indole synthesis. C. F. H. Allen and C. V. Wilson. Am Chem Soc J 65:611-12 Ap '43
- See also
- | | |
|---------------------------|--------------------------|
| Arndt-Eistert reaction | Hydration |
| Barbier-Wieland reaction | Hydrogenation |
| Base exchanging compounds | Hydrolysis |
| Bromination | Metalation |
| Catalysis | Methylation |
| Catalysts | Michael reaction |
| Chemical equilibrium | Nitration |
| Chlorination | Oxidation |
| Condensation, Chemical | Perkin reaction |
| Dehydration | Photochemistry |
| Dehydrogenation | Polymerization |
| Diels-Alder reaction | Precipitation |
| Electrolysis | Reduction, Chemical |
| Explosions | Sandmeyer reaction |
| Friedel-Crafts reaction | Substitution (chemistry) |
| Grignard reagents | Synthesis |
| | Unit processes |
| | Unsaturation |
| | Willgerdt's reaction |
- Velocity
- Absorption of oxygen by glutathione in alkaline solutions; kinetics of the reaction at pH 13. M. B. Young and H. A. Young. Am Chem Soc J 65:1631-7 S '43
- Catalytic hydrogenation rates; equipment and control. N. K. Anderson and C. A. Rowe. flow sheet II diags Ind & Eng Chem 35:554-7 My '43
- Catalytic hydrogenation rates; interpretation of results. R. B. Beckmann, A. E. Pufahl and O. A. Hougen. Ind & Eng Chem 35:558-62 My '43
- Correlation of rate data. C. C. DeWitt. bibliog Ind & Eng Chem 35:695-700 Je '43
- Criterion for the mechanism of the reaction between alkyl halides and hydroxylic solvents; reactions of *n*-butyl bromide. M. L. Bird, E. D. Hughes and C. K. Ingold. Chem Soc J p255-61 Je '43
- Denaturation of tobacco mosaic virus by urea; kinetic aspects. M. A. Lauffer. bibliog Am Chem Soc J 65:1793-1802 O '43
- Electrostatic influence of substituents on reaction rates; saponification of ethyl benzoate, ethyl toluate, ethyl anisate, ethyl *p*-chlorobenzoate, and ethyl *p*-nitrobenzoate. D. Price and F. H. Westheimer. J Chem Phys 11:150-3 Mr '43
- Kinetics in acid media; condensation of *o*-benzoylbenzoic acid. C. W. Deane and J. R. Huffman. bibliog(73 references) Ind & Eng Chem 35:684-94 Je '43
- Kinetics of ammonia synthesis. P. H. Emmett and J. T. Kummer. bibliog II Ind & Eng Chem 35:677-83 Je '43
- Kinetics of oxidation of cellulose with periodic acid. G. Goldfinger, H. Mark and S. Siggia. bibliog Ind & Eng Chem 35:1083-6 O '43
- Kinetics of polymerization reactions. R. Ginell and R. Simha. bibliog Am Chem Soc J 65:706-27 Ap '43
- Kinetics of some exchange reactions of the type $RI + I^- \rightleftharpoons RI^* + I^-$ in alcoholic solution. H. A. C. McKay. Am Chem Soc J 65:702-6 Ap '43
- Kinetics of the ammonolysis of 9-phenyl-9-chlorofluorene by liquid ammonia. P. M. Williamson, R. C. Anderson and G. W. Watt. bibliog Am Chem Soc J 65:49-51 Ja '43
- Kinetics of the reaction between copper and iodine in aqueous (potassium iodide) solution. L. L. Bircumshaw and M. H. Everdell. pl diags Chem Soc J p598-605 O '42
- Kinetics of the transformation of hydrazine cyanate into semicarbazide. E. M. Baker and E. C. Gilbert. Am Chem Soc J 64:2777-80 D '42
- Organic reactions. H. Eyring, H. M. Hulburt and R. A. Harman. bibliog II Ind & Eng Chem 35:511-21 My '43
- Prediction of reaction rates. F. Daniels. bibliog diags Ind & Eng Chem 35:504-10 My '43

CHEMICAL reaction—Velocity—Continued

- Principles of reactor design; gas-solid interface reactions. D. M. Hurt. bibliog *il Ind & Eng Chem* 35:522-3 My '43
- Rate of solution of magnesium in acids. T. H. James. bibliog *Am Chem Soc J* 65:39-41 Ja '43
- Solid catalysts and reaction rates. O. A. Hougen, K. M. Watson and O. A. Vvehara. bibliog *il Ind & Eng Chem* 35:529-45 My '43
- Some remarks on the kinetics of vinyl derivative polymerization. J. Abere and others. bibliog *J Chem Phys* 11:379-86 Ag '43
- Speed of chemical reactions. H. Eyring. *Science* 97:sup 10+ Ap 2 '43
- Study of the dilatometric method of measuring rates of reactions: the application to the determination of the rate of hydrolysis of acetal. L. K. J. Tong and A. R. Olson. *diag Am Chem Soc J* 65:1704-7 S '43
- Transmission coefficient in the theory of absolute reaction rates. H. M. Hulburt and J. O. Hirschfelder. bibliog *J Chem Phys* 11:276-90 Je '43
- Vapor-phase esterification rates. H. F. Hoerig, D. Hanson and O. L. Kowalke. bibliog *diag Ind & Eng Chem* 35:575-80 My '43

CHEMICAL reagents

- Benzoin as fluorescent qualitative reagent for zinc. C. E. White and M. H. Neustadt. bibliog *Ind & Eng Chem Anal ed* 15:599-600 S 15 '43
- 5-Bromo-2-aminobenzoic acid as an analytical reagent. R. J. Shennan. *Soc Chem Ind J* 61:164 O '42
- Measurement of thickness of fired-on gold coatings on ceramic base materials. K. H. Ballard. *diag Ind & Eng Chem Anal ed* 14:868-9 N 15 '42
- New reagents for sodium in presence of lithium. E. R. Caley and L. B. Rogers. bibliog *Ind & Eng Chem Anal ed* 15:32-6 Ja 15 '43
- Photographically interesting fine chemicals as specific spot test reagents. A. Steigmann. *Soc Chem Ind J* 62:42-3 My '43
- Preference order for reagent chemicals. *Science* 98:338-9 O 15 '43
- Pseudo-saccharin chloride, a reagent for the identification of alcohols. J. R. Meadoe and E. E. Reid. *Am Chem Soc J* 65:457-8 Mr '43
- Reactions of certain neopentyl systems with electrophilic reagents. P. Skell and C. R. Hauser. bibliog *Am Chem Soc J* 64:2633-5 N '42
- Some allyl nitrophenyl thiosemicarbazides and their analytical properties. A. W. Scott and J. T. Andrews. *Am Chem Soc J* 64:2873-4 D '42
- Use of xanthidrol as a reagent for the characterization of primary amides. R. F. Phillips and B. M. Pitt. bibliog *Am Chem Soc J* 65:1355-7 Jl '43
- Vapor detector tubes and detector kit for some chemical agents used in gas warfare. P. F. Fenton. *J Chem Educ* 20:564-5 N '43

See also

Acetyl chloride
Bromothymol blue
Cerium sulfate
Chemicals
Dispersing agents
Dithizone
Fischer reagent
Grignard reagents
Hydrofluoric acid
Hydroxyquinoline
Luminol

Methylene blue
Nitroso-R-salt
Perchloric acid
Phenylhydrazine
Potassium iodide
Quinolinecarboxylic acid
Sodium thiosulfate
Solvents
Sulfamic acid

CHEMICAL research

- Abbott laboratories fellowships. *Science* 97:528 Je 11 '43
- Ahead, new industrial horizons. W. Gates. *il Mag of Wall St* 71:346-8 Ja 9 '43
- American aid to chemical research, pure and applied. R. Stevens. *Chem & Ind* 61:451-2 O 31 '42
- A.C.S. reviews progress in solving war needs at Detroit meeting. *Oil Paint & Drug Rep* 143:3+ Ap 19 '43
- American chemical society symposium. *Science* 98:sup12, 14 S 17 '43
- Chemical consultants and industry in war and in peace. W. J. Schepp. *Oil Paint & Drug Rep* 142:7, 71 N 16 '42

- Chemist looks at research; development cost comparisons. E. Ayres. *Sci Am* 167:250-2 D '42
- Chemistry at war; A.C.S. Detroit meeting points up significance of new developments. *Business Week* p80-2 Ap 24 '43
- Chemistry in international affairs. H. E. Howe. *Chem & Ind* 62:154-6 Ap 24 '43
- Chemists' institute discusses wartime research problems. *Oil Paint & Drug Rep* 143:3 My 24 '43
- Davy medal award to Professor C. N. Hinshelwood. H. Dale. *Science* 97:30-1 Ja 8 '43
- Detroit chemists at war. R. E. Marce. *il Chem & Eng N* 21:228-30 F 25 '43
- Du Pont fellowships in chemistry. *Science* 97:133 F 5 '43
- Electron microscopy in chemistry. V. K. Zworykin. bibliog *il diag Electronics* 16:64-8+ Ja '43; Same cond. *Ind & Eng Chem* 35:460-8 Ap '43
- Electronic aids in chemistry. C. E. Jackson. *diag Radio N* 30:24-5+ N '43
- Liquid ammonia research, 1941. G. W. Watt, W. B. Leslie and T. E. Moore. *Chem R* 31:525-36 bibliog(97 references, p534-6) D '42
- Liquid ammonia research, 1942. G. W. Watt, W. B. Leslie and T. E. Moore. bibliog(72 references) *Chem R* 32:219-29 Ap '43
- Mellon institute in wartime. *il Chem & Eng N* 21:467-78 Ap 10 '43
- Nichols medal address; role of Journal in furtherance of chemical research in America. *Chem & Eng N* 21:365-9 Mr 25 '43
- Pittsburgh women chemists active in research. A. R. Lowe. *il Chem & Eng N* 21:141-4 S 10 '43
- Plans for the future. S. M. Spencer. *il Am Inst Banking Bul* 25:3-5, 32 Ap '43
- Research and development; future of the chemical industry; abstracts. H. D. McGowan. *Chem Age (Lond)* 49:391 O 16 '43; *Engineer* 176:311-12 O 15 '43
- Research grants by the Buhl foundation for basic studies in chemistry. *il Chem & Eng N* 21:359-64 Mr 25 '43
- Search for element no. 87. F. R. Hirsh, Jr. *diag Phys R* 63:93-5 F 1 '43
- South African chemical progress; leather research aids chemical industry; abstract. S. G. Shuttleworth. *Chem Age (Lond)* 47:427-3 N 14 '42
- Thiazoles and their uses in industry and medicine. R. F. Hunter. *Chem & Ind* 62:118-21 Mr 27 '43
- What is research? L. T. Work. *Ind & Eng Chem* 35:221-2 F '43
- Widest chemical frontiers ahead. S. B. Self. *Barron's* 23:31-3 Ja 11 '43

See also

Aluminum research
Ceramic research
Chemical literature
Chemical plants—Experimental plants
Gas research
Metallurgical research
Paint research
Paper research
Petroleum research
Pharmaceutical research
Rubber research
Textile research

also Pittsburgh university. Mellon institute of industrial research

CHEMICAL smoke. See Smoke, Chemical**CHEMICAL societies**

- Chemical co-operation. *Chem Age (Lond)* 48:206-7 F 13 '43
- Chemical society consolidation. L. E. Westman. *Can Chem & Process Ind* 27:285-8+ My '43
- Organization of chemists. *Chem & Ind* 62:6-3 F 13 '43
- Post war planning and co-operation. H. V. Potter. *Chem & Ind* 62:91-3; Discussion. 93-4 Mr 6 '43
- Resolution for amalgamation at 26th Canadian annual chemical meeting. *Can Chem & Process Ind* 27:318-20 Je '43

See also

American chemical society
Chemical council
Manufacturing chemists association of the United States
Metropolitan micro-chemical society
Society of chemical industry

CHEMICAL society journal

- Nichols medal address; role of Journal in furtherance of chemical research in America. *Chem & Eng N* 21:365-9 Mr 25 '43

CHEMICAL stability

- Determination of the stability of oils and fats. N. D. Sylvester, L. H. Lampitt and A. N. Ainsworth, bibliog il diags Soc Chem Ind J 61:165-9 N '42
- Pantothenic acid; optical rotation as a measure of stability. D. V. Frost, bibliog Ind & Eng Chem Anal ed 15:306-10 My 15 '43
- Stability of racemates; mandelic acid and some of its derivatives. W. R. Angus and R. P. Owen, Chem Soc J p227-30 My '43

CHEMICAL stoneware. See Stoneware

CHEMICAL warfare

- Action of war gases. C. D. Leake and D. F. Marsh, bibliog il J Chem Educ 20:339-43+ JI '43; Abstract, Chem & Met Eng 50:177-9 Ag '43
- Bubbler for detection of war gases. C. Bovee, il Water Works & Sewerage 89:529-31 D '42
- Bubbler set for war gas detection. il Eng N 130:736-7 My 20 '43
- Chemical aspects of civilian defense. A. Gibson, J Chem Educ 20:265-70 Je '43
- Chemical contamination of water supplies. L. Rubin, bibliog N E Water Works Assn J 56:276-87 S '42
- Chemical identification of war gases. A. W. Clafin and F. C. Hickey, bibliog diags J Chem Educ 20:351-7 JI '43
- Duties of U.S. citizens defense corps in gas defense. Am Water Works Assn J 35:381-3 Mr '43
- Effects of war gases on water supplies; decontamination. H. H. Potter, N E Water Works Assn J 57:137-62 Je '43
- Gas defense organizations; the chemist's opportunity for community leadership. W. C. Moore, J Chem Educ 20:271-3 Je '43
- Organization of gas defense in the United States Citizens defense corps. E. W. Scott, J Chem Educ 20:273-5 Je '43
- Paper products as a factor in Chemical Warfare Service packaging. T. P. Steinmetz, Paper Tr J 117:31-3 D '43; Same cond. Paper Ind 25:788+ O '43; Abstract, Mod Packaging 17:93 N '43
- President warns Axis on use of poison gas. Comm & Fin Chr 157:2402 Je 28 '43
- Protection of civilians from vesicant agents. T. F. Bradley and others, il diags Chem & Eng N 21:373-5 Mr 25 '43
- Protection of food against chemical attack. M. B. Jacobs, bibliog J Chem Educ 20:282-6 Je '43
- Suggestions for a popular gas lecture, with practical training exercises. O. Eisenschiml, il Chem & Eng N 21:760-1 My 25 '43
- Vapor detector tubes and detector kit for some chemical agents used in gas warfare. P. F. Fenton, J Chem Educ 20:564-5 N '43

See also

- | | |
|--|---|
| Decontamination
(from gases, chemicals, etc.) | Gas masks
Mustard gas
Smoke screens |
| Food—Gas contamination | Smoke signals |

CHEMICAL workers

- A.C.S. 4th war conference, Pittsburgh, Sept. 6-11; manpower problem. Chem Ind 53:338-9 S '43
- Chemical industry manpower symposium at A.C.S. meeting. Oil Paint & Drug Rep 144:7+ S 13 '43
- Chemical producers urged to file manning tables. Oil Paint & Drug Rep 143:7 Mr 8 '43
- Chemical womanpower. H. Garry, il Chem Ind 52:445-9 Ap '43
- Critical occupations in production of chemicals. Chem & Met Eng 49:143 N '42
- Employee training program for chemical manufacturers; Agfa Ansoco division of General Aniline. W. von Pechmann, il diags Chem Ind 52:318-21 Mr '43
- Employment and wage trends in the chemical industry. Chem Ind 53:212 Ag '43
- Hazards and control of industrial toxic solvents. W. M. Pierce, bibliog Chem & Met Eng 49:85-7 D '42
- Human factor in chemical engineering processes. G. H. Miles, Inst Chem Eng Trans 19:48-55; Discussion, 55-60 '41
- Labor relations and collective bargaining in chemical industry; Chem & Met report. Chem & Met Eng 50:99-106 Ja '43
- Manpower problems serious in production of chemicals. Oil Paint & Drug Rep 144:3+ S 20 '43

- Medical precautions and treatments associated with the chemical industry. T. W. Nale, Ind Med 12:505-9 Ag '43
- Rift in chemicals; showdown battle looms between C.I.O. and U.M.W. district 50. Business Week p67-8 Ja 23 '43
- Silicosis; occurrence and control. W. M. Pierce, bibliog il Chem & Met Eng 49:110-12 N '42
- Status of technical manpower in the chemical industry; report. H. M. Harker, Chem & Eng N 21:84-5 Ja 25 '43
- Training of women for the chemical industries. J. Coull, Chem & Eng N 21:1707-8 O 25 '43
- Training women operators for chemical industry; University of Pittsburgh trains women for butadiene-styrene plant of Koppers united co. J. P. Coull, il diags Chem & Met Eng 50:116-18 Je '43
- Wage and hour standards in the chemical industry. W. B. Smith, il Chem Ind 53:45-8 JI '43

See also

- Chemists
Women as chemists

CHEMICAL writing

- Research reports by students. O. Grummitt, J Chem Educ 20:84-7 F '43

CHEMICALS

- ABC of chemical derivatives from petroleum. R. L. Wakeman and B. H. Weil, il Nat Pet N 34 pt 2:R412-16, R418; 35 pt 2:R22-5, R28-31, R60-5, R107-12, R161-4, R166-7, R170-1, R213-15, R220-1, R264-5, R268, R270 N 25 '42, Ja 6, F 3, Mr 3, Ap 7, My 5, Je 2 '43
- Advancing front of petroleum chemicals. R. K. Stratford, flow charts il Chem Ind 53:483-93 O '43
- Allocation of chemicals for other than military uses. Chem & Met Eng 49:206+ N '42
- BEW voids licenses for certain chemicals. Oil Paint & Drug Rep 143:5+ Mr 29 '43
- Bulk packaging of chemicals; wartime trends, postwar possibilities; shift to multiwall paper bags. il diags Chem & Met Eng 50:117-24 O '43
- Chemical allocations for January. Oil Paint & Drug Rep 143:7+ Ja 25 '43 [cont monthly]
- Chemical allocations made for December. Oil Paint & Drug Rep 142:3+ D 14; 3+ D 21 '42
- Chemical reclamation program extended. Chem Ind 52:729 Je '43
- Chemical wants of U.S. Oil Paint & Drug Rep 142:7+ D 7 '42
- Chemicals allocated for November. Oil Paint & Drug Rep 142:3+ N 23 '42
- Chemicals buying section; an alphabetical list of chemicals with their formulas, physical and chemical properties, uses, containers, tariff, shipping regulations, with a buyer's guide of manufacturers and distributors. Chem Ind 51:127-426 pt 2 (Buyer's guide-book) O '42
- Chemicals from fats. A. W. Ralston, il Chem & Eng N 21:3-6 Ja 10 '43
- Chemicals, solvents by natural-gas oxidation. R. J. Daugherty, il Oil & Gas J 41:36 Ja 21 '43
- Chemicals that aid in aircraft production. R. Sanders, il diags S A E J 51:23-30 Ja '43
- Coal, an abundant raw material for new chemicals; by Coal research laboratory staff of Carnegie institute of technology. bibliog il Chem Ind 52:202-4 F '43
- Consumption of chemicals, 1930-1942. Chem & Met Eng 50:124-5 F '43
- Control and administration of chemicals in Canada. H. M. Sunderland, Can Chem & Process Ind 27:246-7+ My '43
- Data on chemicals for ceramic use; formulas, molecular weights, colors, crystal forms, densities, refractive indices, melting points, boiling points, transition points, decomposition temperatures. Nat Research Council Bul 107:1-94 bibliog (1128 references, p74-94) Je '43
- Fine chemicals and drugs. M. L. Crossley, Chem & Ind 61:442-4 O 31 '42
- First year of the National registry of rare chemicals. M. H. Heeren, Chem & Eng N 21:1300+ Ag 10 '43

CHEMICALS—Continued

- Heavy chemicals. W. S. Landis. Chem & Ind 61:447-8 O 31 '42
- Industrial applications of the nitroparaffins. W. E. Scheer. flow sheet Chem Ind 52:473-6 Ap '43
- Insecticide chemicals needed for war food supply. R. S. McBride. Chem & Met Eng 50:101-3 Mr '43
- Outlook in aromatic chemicals. R. M. Stevenson. Soap & San Chem 18:115+ D '42
- Potash, plant food and chemical tool box. F. Kutnewsky. il diag Comp Air M 48:7033-8 My '43
- Problems of the natural gas industry under war conditions; chemical products, fuel, etc. K. S. Adams. Oil & Gas J 41:66, 68, 71-2 My 6 '43; Same. il Chem & Eng N 21:964-8 Je 25 '43
- Rare chemicals wanted by the National registry of rare chemicals. Science 96:331, 463, 554; 97:156, 216, 304, 396, 482, 574; 98:103, 192, 296, 380, 425 O 9, N 20, D 18 '42, F 12, Mr 5, Ap 2, 30, My 28, Je 25, Jl 30, Ag 27, O 1, 29, N 12 '43
- Raw materials buying section; an alphabetical list of natural raw materials, such as gums, metals, minerals, ores, naval stores, oils, natural pigments, etc. with their physical and chemical properties, uses, containers, tariff, shipping regulations, with a buyer's guide of suppliers. Chem Ind 51:41-125 pt 2 (Buyer's guidebook) O '42
- Raw materials uncovered as armies advance. Chem Ind 53:440+ O '43
- Some applications of fluorescent chemicals. J. A. Radley. bibliog Soc Dyers & Col J 59:137-40 Jl '43; Same. Can Chem & Process Ind 27:504-5+ S '43; Discussion. Soc Dyers & Col J 59:140 Jl '43
- Some important recent court decisions involving chemicals. L. T. Parker. Chem Ind 53:344-7 S '43
- Some recent contributions of the chemical industry to aviation. J. K. Hunt. il Aeronautical Eng R 1:109 N '42
- Synthetic organic chemicals, 1942. Chem & Met Eng 50:112-13 F '43
- War materials control. Oil Paint & Drug Rep 143:42+ Ja 11 '43
- War products from natural gas and natural gasoline. P. M. Raigorodsky and F. H. Dotterweich. bibliog diags Oil & Gas J 41:94, 97-8+ Ap 15 '43; Same. Gas Age 92:19-23 Jl 29 '43; Same, with additional diags. Pet Refiner 22:83-9 My '43; Abstract. Nat Pet N 35:14-16 Ap 14 '43
- Wartime chemicals from natural gas. G. Egloff. Pet Eng 14:33-8 N '42; Same. Science 96:502-5, 527-30 D 4-11 '42; Same. Inst Pet J 29:124-34 Ap '43; Same cond. Am Gas Assn Mo 25:21-2+, 71-2+ Ja-F '43; Same cond. Gas Age 90:22+ N 19 '42; Same. Am Gas J 157:21-2 D '42

See also

- | | |
|-----------------------|---------------------------|
| Acids | Hydrogen peroxide |
| Carbon dioxide, | Methyl chloride |
| Liquid | Oils and fats |
| Catalysts | Paint materials |
| Chemical industries | Paper chemicals |
| Chemical reagents | Plasticizers |
| Chemistry, Medical | Refrigerants |
| and pharmaceutical | Rubber chemicals |
| Chemistry, Technical | Salts |
| Cleaning compositions | Solvents |
| Dispersing agents | Sulfur dioxide, Liquid |
| Driers | Surface active substances |
| Drugs | Tanning materials |
| Dyes and dyeing— | Textile chemicals |
| Chemistry | Textile chemistry |
| Emulsifiers | Wetting agents |

Dictionaries

- Dictionary of metal finishing chemicals. Metal Finishing 41:23-4 Ja '43 [will be cont. regularly until the dictionary is complete]
- Encyclopedia of substitutes and synthetics. M. D. Schoenfeld. ed. 382p \$10 Philosophical lib, 15 E. 40th st, New York '43

Prices

- Chemical prices; range of quotations, 1941-1937. Chem Ind 51:574-81 pt 2 (Buyer's guidebook) O '42

- Chemicals, oils, and drugs price records, 1935, 1937-1939, 1941-42. Oil Paint & Drug Rep 143:54 Ja 11 '43
- Current market quotations chemicals and related materials (listed alphabetically by name of product, with indication of wartime status). Published in weekly numbers of Oil, paint and drug reporter
- OPA and price ceilings; efforts during 1942. Oil Paint & Drug Rep 143:44+ Ja 11 '43
- OPA ceilings 12 fine chemicals. Oil Paint & Drug Rep 143:4+ Ap 5 '43
- Upward swing to prices, 1929-1942. Chem & Met Eng 50:126 F '43
- Wholesale price indexes of chemicals, drugs, and all commodities, 1915-1943; chart. Chem & Eng N 21:1450 S 10 '43

Transportation

- Applications and handling of liquid synthetic anhydrous ammonia. R. J. Quinn. il Chem Ind 52:58-60 Ja '43
- Chemical container study broadened by War board. Oil Paint & Drug Rep 143:3+ My 10 '43
- Chemical containers for the duration. R. W. Lahey. Chem Ind 52:351-2 Mr '43
- Chemical producers asked to form shipment pool. Oil Paint & Drug Rep 143:3+ F 22 '43
- Chemical shipping pool widened. Oil Paint & Drug Rep 144:3+ Jl 19 '43
- Chemicals loading order revised. Oil Paint & Drug Rep 144:3+ N 1 '43
- Chemicals on the road; transport of chemicals in bulk. il Chem Age (Lond) 48:671-2 Je 26 '43
- Containers in war time. D. Knapp. Chem Ind 52:268-7 F '43
- Crosshaul and tankcar limits placed on chemical shipments. Oil Paint & Drug Rep 143:3+ F 1 '43
- Drum restrictions for certain chemicals removed. Chem Ind 53:226+ Ag '43
- I.C.C. changes of interest to chemical shippers summarized; February 10 regulations. R. W. Lahey. Chem & Eng N 21:486 Ap 10 '43
- I. C. C. proposes changes in regulations. R. W. Lahey. Chem Ind 51:732, 877-8 N-D '42
- I.C.C. transportation regulations amended. Chem Ind 52:216 F '43
- Liquid methyl chloride. K. S. Willson and others. il diags Chem & Eng N 21:1254-61 Ag 10 '43
- Liquid sulfur dioxide; manufacture, handling and use. C. S. Willson and others. il diags Chem Ind 52:178-86 F '43
- Proper methods of handling caustic soda. G. P. Vincent. il diags Chem Ind 51:728-31 N '42
- Tank car efficiency; ODT to require special permits for commodities not on essential list. Nat Pet N 35:32-3 Jl 28 '43
- 38 chemicals, vegetable oils in WPB cross-haul pool. Oil Paint & Drug Rep 143:3+ Ja 18 '43
- Transport by tank car. Chem Age (Lond) 48:667-8 Je 26 '43
- War-time care of containers. Chem Age (Lond) 48:661-3 Je 26 '43

*See also***Tank cars****Uses**

- Industrial applications of chemicals and related materials. Published in Oil, paint and drug reporter
- What you can use; guide to materials that are suitable for various purposes in chemical converting, compounding, and processing industries. Published in Oil, paint and drug reporter

CHEMISTRY

- Chemistry in international affairs. H. E. Howe. Chem & Ind 62:154-6 Ap 24 '43
- Some papers read before the Pittsburgh meeting of the American chemical society. Science 98:sup12, 14 S 17; sup12 S 24 '43

See also

- | | |
|----------------------|------------------------|
| Acids | Chemical reaction |
| Air | Chemicals |
| Alchemy | Chemists |
| Atomic weights | Colloids |
| Atoms | Color |
| Bases (chemistry) | Combustion |
| Biological chemistry | Condensation, Chemical |
| Potanical chemistry | Crystallization |
| Catalysis | |

CHEMISTRY—See also—Continued

Crystallography
Dissociation
Dyes and dyeing—
Chemistry
Electrochemistry
Electrolysis
Electrolytes
Electrons
Evaporation
Explosives
Fermentation
Gases
Geochemistry
Halogens
Hydrolysis
Ions
Liquids
Metallurgy
Metals
Mineralogy
Molecules
Oxidation
Periodic system

Photochemistry
Photographic chemistry
Poisons, Industrial
Radioactive substances
Reduction, Chemical
Rubber—Chemistry
Salt
Salts
Solids
Solution (chemistry)
Solvents
Spectrum
Stereochemistry
Sublimation
Synthesis
Textile chemistry
Thermochemistry
Transmutation (chemistry)
Waxes

Bibliography

Building a chemical library; Dow chemical company. M. W. Ellwood. bibliog il Chem Ind 53:189-93 Ag '43
Chemical abstracts; subject index, formula index, numerical patent index, supplement to list of periodicals, 1942. p7763-8569, xxx-ivp American chemical society, 1155 16th st. N.W. Washington, D.C. '42
List of books on display at the combined book exhibit, foyer, Masonic temple, Detroit. J Chem Educ 20:supXX+ Ap '43
Robert Child's chemical book list of 1641. W. J. Wilson. il J Chem Educ 20:123-9 Mr '43

Dictionaries and encyclopedias

Dictionary of bio-chemistry and related subjects. W. M. Malissot, ed. 579p \$7.50 Philosophical library, 15 E. 40th st, New York '43
Dictionary of metal finishing chemicals, Metal Finishing 41:23-4 Ja '43 [will be cont. regularly until the dictionary is complete]

Examinations

College chemistry testing program, 1941-1942. A. Calandra. bibliog J Chem Educ 20:141-4 Mr '43

Exhibits

Exhibit of chemical substances mentioned in the Bible. M. E. Weeks. J Chem Educ 20: 63-76 bibliog(p75-6) F '43

History

Carl Wilhelm Scheele (1742-1786). K. R. Webb. bibliog Chem & Ind 62:139-41 Ap 10 '43
Chapter of the history of chemistry in Vienna. M. Kohn. J Chem Educ 20:471-3 O '43
Chemical knowledge in the Old Testament. S. Isserow and H. Zahnd. J Chem Educ 20:327-35 bibliog(p332-5) Jl '43
Exhibit of chemical substances mentioned in the Bible. M. E. Weeks. J Chem Educ 20: 63-76 bibliog(p75-6) F '43
James Blythe Rogers, chemist, 1802-1852. E. F. Smith. J Chem Educ 20:287-91 Je '43
John Griscom, chemist. E. F. Smith. bibliog J Chem Educ 20:211-18 My '43
What's not new in chemistry. R. H. Wright. J Chem Educ 20:348-50 Jl '43

See also

Cavendish, Henry
Leblanc, Nicolas

Nomenclature

Complex compounds; their derivation and nomenclature. O. J. Stewart. J Chem Educ 20:230-1 My '43

See also

Chemistry, Inorganic
—Nomenclature

Notation

What is chemical notation all about? P. H. Faust. Pet Refiner 22:87-8 Mr '43

Periodicals

Nichols medal address; role of Journal in furtherance of chemical research in America. Chem & Eng N 21:365-9 Mr 25 '43

Publications: pitfalls and problems. M. G. Mellon. bibliog J Chem Educ 20:534-7 N '43
World distribution of chemical periodical publications. E. J. Crane. Chem & Eng N 21:1204 Jl 25 '43

Study and teaching

Chemistry and integration. Sister M. Xaveria Barton. J Chem Educ 20:382-4 Ag '43
Chemists and the teaching of chemistry. C. D. Howard. J Chem Educ 20:82-4 F '43
Guide posts to successful teaching. C. H. Stone. J Chem Educ 19:598-602 D '42
Kem-check. Sister Cecilia Louise. il J Chem Educ 20:27 Ja '43
Laboratory work and the scientific method. W. B. Thomas. J Chem Educ 20:379-80 Ag '43
Modern theory; a tool in teaching elementary college chemistry. H. H. Sisler and C. A. Vanderwerf. J Chem Educ 20:479-83+ O '43
Representation of periodic properties of the elements. T. H. Hazlehurst and F. J. Fornoff. diags J Chem Educ 20:77-9 F '43
Research reports by students. O. Grummitt. J Chem Educ 20:84-7 F '43
Teaching of chemistry in secondary schools. S. R. Humby and E. J. F. James. Chem & Ind 62:39-41 Ja 30 '43
Teaching the electronic theory of acids and bases in the general chemistry course. W. F. Luder. W. S. McGuire and S. Zuffanti. bibliog J Chem Educ 20:344-7 Jl '43

See also

Chemical education

Technology

See Chemistry, Technical

Argentina

Rise and development of chemistry in the Argentine Republic. V. Arreguine. J Chem Educ 20:474-8 O '43

Russia

Physical chemistry in the Soviet Union. N. Semenov. Chem & Eng N 20:1576-7 D 10 '42

CHEMISTRY, Analytic

Analysis and research; abstract. R. C. Chirnside. Chem & Ind 62:185-6 My 15 '43
Analysis of oils, fats and waxes used in industry. O. J. Schierholtz. bibliog il diag Can Chem & Process Ind 26:725-6+; 27:42+ D '42 Ja '43
Analytical chemistry of the rare earths; average atomic weight of the rare earths in a mixture. G. L. Barthauer, R. G. Russell and D. W. Pearce. bibliog Ind & Eng Chem Anal ed 15:548-9 S 15 '43
Analytical separations by means of controlled hydrolytic precipitation. R. Gilchrist. J Research Nat Bur Stand 30:89-99 F '43
Applied chemical analysis; American chemical society representative abstracts. Can Chem & Process Ind 27:292, 294+ My '43
Chemical requirements and chemical analysis. G. E. F. Lundell. bibliog Am Soc T M Proc 42:34-47 '42
Determination of the precision of analytical control methods; Westvac chlorine products corporation. R. F. Moran. bibliog Ind & Eng Chem Anal ed 15:361-4 Je 15 '43
High-speed analysis and control of plating solutions. G. Jernstedt. il Electrochem Soc Trans 82 (preprint 17):177-93 O '42; Same abr. bibliog Can Chem & Process Ind 27: 155-7 Mr '43
Laboratory cooking, mashing, and fermentation procedures. W. H. Stark and others. il diag Ind & Eng Chem Anal ed 15:443-6 Jl 15 '43
Mass spectrometer aids research. J. A. Hipple. il diags Electronics 16:120-4 N '43
Mixed solvent extraction; analytical method; application of analytical geometry. J. H. Wiegand. bibliog Ind & Eng Chem Anal ed 15:380-3 Je 15 '43
Photoelectric absorptiometer, the polarograph, and the spectrograph; a critical review. H. K. Whalley. Chem & Ind 61:495-7 D 5 '42
Physics in chemical industry. A. J. Mee. bibliog Chem Age (Lond) 49:355-8 O 9 '43
Recent developments in analytical chemistry. bibliog diags Chem Age (Lond) 48:5-10, 339-42+, 623-7; 49:205-9 Ja 2, Mr 27, Je 12, Ag 28 '43

CHEMISTRY, Analytic—Continued

Serological properties of simple substances; the composition of precipitates of antibodies and polyhaptenic simple substances; the valence of antibodies. L. Pauling, D. Pressman and C. Ikeda. *diags Am Chem Soc J* 64:3010-14 D '42

See also

Chromatographic analysis	Iodometry
Colorimetric analysis	Metallurgical analysis
Copper number	Microanalysis
Dye analysis	Mineralogical analysis
Electrochemical analysis	Oil analysis
Electrographic analysis	Plants—Chemical analysis
Gas analysis	Polarography
Gravimetric analysis	Spectrum analysis
Indicators and test papers	Sugar analysis
also subdivision of substances, e.g.	Volumetric analysis
Air—Analysis	Analysis under names of
Biological materials—Analysis	Petroleum—Analysis
Milk—Analysis	Steel—Analysis
Paper—Analysis	Water—Analysis
	Waxes—Analysis

Qualitative

Crystallography for routine analysis. C. H. Walker. *il diag Engineer* 175:432-4 Je 18 '43

Graphic representation of the qualitative scheme of analysis for the more common anions; method of Dobbins and Ljung. *J Chem Educ* 20:502-5 O '43

Identification of organic bases by means of the optical properties of diliturates (nitrobarbiturates); aliphatic amines. E. M. Plein and B. T. Dewey. *bibliog diags Ind & Eng Chem Anal ed* 15:534-6 Ag 15 '43

Qualitative analysis of microgram samples; separation, estimation, and identification of the more common ions of the hydrogen sulfide group. A. A. Benedetti-Pichler and M. Cefola. *bibliog il Ind & Eng Chem Anal ed* 15:227-30 Mr 15 '43

Qualitative semimicro-analysis with reference to Noyes and Bray's system; the aluminum group. C. C. Miller. *Chem Soc J* p72-4 F '43

Qualitative test for methoxy and other alkoxy groups; compounds encountered in pharmacology and toxicology. W. C. Tobie. *bibliog Ind & Eng Chem Anal ed* 15:433-4 Jl 15 '43

Removal of interfering anions in semimicro qualitative analysis. L. J. Curtman and S. Krakauer. *J Chem Educ* 20:399-400 Ag '43

Semimicro scheme of qualitative analysis for the anions. J. T. Dobbins and M. E. Kapp. *J Chem Educ* 20:118-20 Mr '43

Use of steel alloys as unknowns in elementary qualitative analysis. A. F. Schmelzle. *J Chem Educ* 20:183-4 Ap '43

X-ray analysis and chemical scale removal. S. C. Morian. *il diag Pet Refiner* 22:72-5 Ja '43

See also

Electrographic analysis

Quantitative

Analytical data for the systems carbon tetrachloride-acetic acid-benzene and carbon tetrachloride-tetrachloroethylene. W. R. McMillan and H. J. McDonald. *Ind & Eng Chem Anal ed* 15:114-16 F 15 '43

Analytical reactions involving ignition with manganous nitrate. M. J. Preising, O. F. Slonek and J. H. Keedy. *bibliog Ind & Eng Chem Anal ed* 14:875-7 N 15 '42

Determination of *o*-cresol in phenol by a cloud point method. W. Seaman, A. R. Norton and R. T. Foley. *bibliog Ind & Eng Chem Anal ed* 15:159-61 Mr 15 '43

Determination of water in aniline by a cloud point method; comparison of rapeseed oil with cottonseed-mineral oil mixtures. W. Seaman, A. R. Norton and J. J. Hugonnet. *Ind & Eng Chem Anal ed* 15:322-4 My 15 '43

Estimation of water in alcohol with aid of dicyclohexyl. G. R. Robertson. *bibliog Ind & Eng Chem Anal ed* 15:451-2 Jl 15 '43

Mass spectrometer as an analytical tool. H. W. Washburn, H. F. Wiley and S. M. Rock. *il diag Ind & Eng Chem Anal ed* 15:541-7 S 15 '43

Mass spectrometry; new quantitative method for determining light hydrocarbons in process control. *il diag Nat Pet N* 35 pt 2: R258-62 Je 2 '43

New thermoanalytical methods. D. Kaplan. *Chem & Ind* 61:431-2 O 24 '42; Same. *Can Chem & Process Ind* 27:39-40 Ja '43

Perchloric acid method for determination of silicon in ferrosilicon. L. Waldbauer and S. O. Rue. *bibliog Ind & Eng Chem Anal ed* 15:131 F 15 '43

Quantitative analysis by mass spectrometry. O. L. Roberts. *il diag Pet Eng* 14:109-11, 114-4 My '43

Quantitative decomposition of organic bromine and iodine compounds by the lime-fusion method. W. M. MacNevin and G. H. Brown. *Ind & Eng Chem Anal ed* 14:908 N 15 '42

Quantitative determination of benzene in the presence of cyclohexane. R. L. Bishop and E. L. Wallace. *il diag Ind & Eng Chem Anal ed* 15:563-5 S 15 '43

Quantitative determination of methoxyl and ethoxyl groups. L. M. Cooke and H. Hibbert. *bibliog Ind & Eng Chem Anal ed* 15:24-5 Ja 15 '43

Quantitative estimation of acetyl in carbohydrate acetates. R. L. Whistler and A. Jeanes. *bibliog diag Ind & Eng Chem Anal ed* 15:317-18 My 15 '43

Reductions with nickel-aluminum alloy and aqueous alkali; quantitative determination of halogens in organic compounds. E. Schwenk, D. Papa and H. Ginsberg. *Ind & Eng Chem Anal ed* 15:576-7 S 15 '43

Ultraviolet photometer for analysis of solutions. I. M. Klotz. *diag Ind & Eng Chem Anal ed* 15:277-8 Ap 15 '43

Viscometric method for determining free menthol in peppermint oil. L. J. Swift and M. H. Thornton. *bibliog Ind & Eng Chem Anal ed* 15:422-3 Jl 15 '43

See also

Colorimetric analysis	Iodometry
Electrochemical analysis	Oxidimetry
Gravimetric analysis	Turbidimetric analysis
Iodine number	Volumetric analysis

Study and teaching

Teaching of quantitative analysis. H. Diehl. *bibliog J Chem Educ* 19:584-9 D '42

Study and teaching

Analytical chemist; plea for better training in the future. *Chem Age (Lond)* 49:159-60 Ag 14 '43

Symposium on the teaching and practice of analytical chemistry. F. E. Brown and others. *J Chem Educ* 19:573-97 D '42

Training of analytical chemists from an industrial point of view. S. E. Q. Ashley. *bibliog J Chem Educ* 19:589-97 D '42

CHEMISTRY, Biological. See Biological chemistry

CHEMISTRY, Industrial. See Chemistry, Technical

CHEMISTRY, Inorganic

Bibliography

British chemical and physiological abstracts; B. I. General and inorganic industrial chemistry. Published monthly by Chemical society, London £1 15s

Nomenclature

Need for reform in inorganic chemical nomenclature. J. D. Scott. *Chem R* 32:73-97 bibliog(70 titles p94-7) F '43

Nomenclature of the nitrogen compounds of phosphorus and of sulfur. L. F. Audrieth, R. Steinman and A. D. F. Toy. *bibliog Chem R* 32:99-108 F '43

CHEMISTRY, Legal

Improved method of examination of spectrographic plates taken in forensic work. L. C. Nickolls. *Soc Chem Ind J* 62:31-2 F '43

CHEMISTRY, Medical and pharmaceutical

American medicinal chemistry. E. H. Volwiler. *Chem & Eng N* 20:1562 D 10 '42

CHEMISTRY, Medical and pharmaceutical—
Continued

Chemical side of chemotherapy. E. H. Northey, bibliog *il Ind & Eng Chem* 35:329-36 Ag '43

New penetrating vehicles and solvents. F. Herrmann, M. B. Sulzberger and R. L. Baer, *Science* 96:451-2 N 13 '42

Qualitative test for methoxy and other alkoxy groups; compounds encountered in pharmacology and toxicology. W. C. Tobie, bibliog *Ind & Eng Chem Anal ed* 15:433-4 JI 15 '43

See also

Alkaloids	Drugs
Anesthetics	Hormones
Anesthetics, Local	Immunity
Antiseptics	Mydriatics
Antispasmodics	Vaccines
Botany, Medical	Vitamins
Chemotherapy	
Disinfection and disinfectants	

CHEMISTRY, Organic

Chemical background for electrical properties of plastics. H. M. Richardson, *diags Elec W* 119:1291-4 Ap 17 '43

Electro-organic chemistry in the patent office. J. Rossman, *Electrochem Soc Trans* 84 (preprint 11):37-99 O '43

List of elementary organic compounds. E. F. Linhorst, *J Chem Educ* 20:184 Ap '43

Organic reactions. H. Eyring, H. M. Hulburt and R. A. Harman, bibliog *il Ind & Eng Chem* 35:511-21 My '43

Polarographically controlled syntheses, with particular reference to organic chemistry. J. J. Lingane, C. G. Swain and M. Fields, bibliog *diag Am Chem Soc J* 65:1348-53 JI '43

Recent advances in organic chemical methods; abstract. E. R. H. Jones, *Chem & Ind* 48:530 My 15 '43

Review of organic microchemistry. L. T. Hallett, *il diags Ind & Eng Chem Anal ed* 14:956-93 bibliog (378 references, p990-3) D 15 '42

Some aspects of starch chemistry in relation to tubsizing. R. W. Kerr, bibliog *il Paper Tr J* 115:30-4 D 3 '42

See also

Acids, Fatty	Esters
Alcohols	Ethers
Aldehydes	Glucosides
Alkaloids	Grignard reagents
Amines	Hydrocarbons
Carbohydrates	Ketones
Carbon	Proteins
Cellulose	Radicals (chemistry)
Condensation, Chemical	Stereochemistry
Cyclic compounds	Steric hindrance
Essential oils	Sugars

also Synthetic organic chemical manufacturers association

Bibliography

British chemical and physiological abstracts; B. II, Industrial organic chemistry. Published monthly by Chemical society, London £1 15s

Study and teaching

Use of semimicro technic in elementary organic chemistry. N. D. Cheronis and others, bibliog *il diag J Chem Educ* 20:431-7, 488-96 S-O '43

CHEMISTRY, Physical and theoretical

Chemical philosophy of Thomas Sterry Hunt. E. R. Atkinson, *J Chem Educ* 20:244-5 My '43

Modern theory; a tool in teaching elementary college chemistry. H. H. Sisler and C. A. Vanderwerf, *J Chem Educ* 20:479-83+ O '43

Physical chemistry in the Soviet Union. N. Semenov, *Chem & Eng N* 20:1576-7 D 10 '42

See also

Absorption	Chemical bonds
Activation	Chemical equilibrium
Adhesion	Chemical reaction
Adsorption	Colloids
Atomic weights	Condensation, Chemical
Atoms	Coordination (chemistry)
Boiling points	
Catalysis	
Catalysts	

Crystallization
Crystallography
Debye-Hückel theory
Deflocculation
Desorption
Dew points
Dissociation
Electrolysis
Electrolytes
Electrons
Emulsions
Equation of state
Evaporation
Fluorescence
Freezing points
Gases
Ionization, Electrolytic
Ionization, Gaseous
Ions
Isomerism
Isotopes
Magnetochemistry
Melting points
Mixtures

Molecular rearrangements
Molecular weights
Molecules
Partition (chemistry)
Periodic system
Photochemistry
Photosynthesis
Polymers
Quantum theory
Refraction, Molecular
Solids
Solubility
Solution (chemistry)
Stereochemistry
Surface phenomena
Surface tension
Thermochemistry
Thermodynamics
Thioxotropy
Transmutation (chemistry)
Valence
Vapor pressure
Wave mechanics

Study and teaching

Presentation of the thermodynamic functions in beginning physical chemistry. S. E. Wood, *J Chem Educ* 20:80-1 F '43

Why mineral technology schools should offer courses in low- and high-temperature chemistry. R. B. Sosman, *Min & Met* 24:355 Ag '43

Tables, calculations, etc.

Simplifications in the statistical analysis of physical-chemical data. G. Egloff and R. C. Kuder, bibliog *J Phys Chem* 46:926-33 N '42

CHEMISTRY, Technical

Chemical consultants and industry in war and in peace. W. J. Schepp, *Oil Paint & Drug Rep* 142:7, 71 N 16 '42

Chemical industry in the war effort. C. A. Thomas, *il Chem & Eng N* 21:643-50 My 10 '43

Chemical industry ready for peace; new products with unexploited markets available. S. B. Self, *Barron's* 23:17-19 S 20 '43

Chemical residues of the war. W. S. Landis, *il Chem & Eng N* 21:539-44 Ap 25 '43

Chemurgy and the war. R. S. Aries, *il Chem Ind* 52:188-92+ F '43

Fallen animals, a little known process industry. W. M. Robinson, *il Chem & Met Eng* 50:112-15 Ag '43

Ion exchange resins; new tools for process industries. F. J. Myers, bibliog flow sheet *il Ind & Eng Chem* 35:858-63 Ag '43

National survival through science. H. N. Holmes, *Science* 96:433-9 N 13 '42

News from the chemists' front; major companies report wartime developments. *Barron's* 23:20-7 S 20 '43

Peacetime values from a war technology. G. Egloff, *Science* 97:101-8 Ja 29 '43; Same, *il Chem & Eng N* 21:141-9 F 10 '43; Same, *Inst Pet J* 29:135-45 My '43

Physics in chemical industry. A. J. Mee, bibliog *Chem Age (Lond)* 49:355-8 O 9 '43

Progress in proteins. *il Sci Am* 169:160-2 O '43

Promise and problems of peace; chemical industry's postwar role. D. H. Killefer, *Ind & Eng Chem* 35:1139-45 N '43

Reservoirs of new engineering materials. W. E. Brinker, *W Soc E J* 48:68-76 Je '43

See also

Acetylene	Clay
Acid-resisting materials	Clay industries
Alcohol	Coal distillation
Alcohols	Coke-oven gas
Alloys	Corrosion and anti-corrosives
Ammonia	Cosmetics
Beverages	Cyanide process
Blast furnace gas	Dehydration
Bleaching	Distillation
Cellulose	Dyes and dyeing—Chemistry
Cement	Essential oils
Ceramics	Explosives
Chemical engineering	Fertilizers
Chemical industries	Filters and filtration (technical chemistry)
Chemical patents	
Chemicals	
Chemurgy	

CHEMISTRY, Technical—See also—Continued

Flavoring materials
 Fuel
 Gas
 Gas manufacture
 Glass manufacture
 Glue
 Lacquer and lacquer-
 ing
 Laundry
 Leather
 Metallurgy
 Oils and fats
 Ore treatment
 Paint
 Paper
 Paper making
 Paper making mate-
 rials
 Petroleum—Chem-
 istry
 Petroleum distilla-
 tion
 Petroleum refining
 Plastic materials

Porcelain
 Pottery
 Rayon
 Refractory materials
 Refrigerants
 Resinous products
 Rubber
 Soap
 Soap manufacture
 Solvents
 Soybeans
 Sugar
 Sulfuric acid
 Synthesis
 Tanning materials
 Textile chemistry
 Unit processes
 Varnish and varnish-
 ing
 Vulcanization
 Waste products
 Water purification
 Wood distillation
 Wood preservation

Bibliography

British chemical and physiological abstracts; abstracts B index 1942, 221p pa Bur. of chemical and physiological abstracts, 56 Victoria st, London, S.W. 1 '43
 British chemical and physiological abstracts; B, I. General and inorganic industrial chemistry. Published monthly by Chemical society, London £1 15s
 British chemical and physiological abstracts; B, II. Industrial organic chemistry. Published monthly by Chemical society, London £1 15s

Study and teaching

Training of analytical chemists from an industrial point of view, S. E. Q. Ashley. bibliog J Chem Educ 19:589-9 D '42

CHEMISTRY students

1943-44 survey of chemistry and chemical engineering students made for the National roster of scientific and specialized personnel in cooperation with the American chemical society, E. M. Billings. Chem & Eng N 21:294-5 Mr 10 '43

CHEMISTS

American chemical society and the War manpower commission; letter to H. T. Briscoe, of War manpower commission. C. L. Parsons. Chem & Eng N 21:656-9 My 10 '43; Excerpt. Science 97:503-4 Je 4 '43

A. C. S. candidates for 1943, pors Chem & Eng N 20:1353-6 N 10 '42

A.C.S. candidates for 1944, pors Chem & Eng N 21:1716-20 O 25 '43

Analytical chemist; plea for better training in the future. Chem Age (Lond) 49:169-60 Ag 14 '43

Chemical industry in the war effort; abstract. C. A. Thomas. Chem Ind 52:605 My '43

Chemical manpower for postwar industries, S. D. Kirkpatrick. Chem & Eng N 21:1714-15+ O 25 '43

Chemist and civilian defense, T. D. Stewart. J Chem Educ 20:263-5 Je '43

Chemists in the civil service, Can Chem & Process Ind 27:226+ Ap '43

Co-operation between chemist and doctor in factory welfare, F. S. Fowweather. Chem & Ind 61:524-6 D 26 '42

Economic status of the members of the American chemical society; committee report. Chem & Eng N 20:1289-93, 1497-1505, 1563-74, 1635-43 O 25, N 25-D 25 '42

Economic status of the members of the American chemical society; statement of the committee. Chem & Eng N 21:296-7 Mr 10 '43

Fathers and sons in chemistry; the chemical Bakers, R. S. Voris. Chem & Eng N 20: 1515 N 25 '42

Gas defense organizations; the chemist's opportunity for community leadership, W. C. Moore. J Chem Educ 20:271-3 Je '43

Getting the right job; a diagnosis designed for past, present, and future, V. Conquest; F. A. Anderson, L. W. Donaldson. Chem & Eng N 21:1330-4 Ag 25 '43

How to hold essential men, F. C. Whitmore. Chem & Eng N 21:751 My 25 '43

Incomes of chemists, Science 97:63 Ja 15 '43

Methods of starring American men of science, C. A. Browne. Science 98:281-2 S 24 '43

National service of the chemist, W. S. Landis. Oil Paint & Drug Rep 143:3+ My 24 '43

1943-44 survey of chemistry and chemical engineering students made for the National roster of scientific and specialized personnel in cooperation with the American chemical society, E. M. Billings. Chem & Eng N 21:294-5 Mr 10 '43

Occupational deferment of chemists and chemical engineers; amended data and recommendations, Chem & Eng N 21:1206-9 JI 25 '43

Problems affecting the unity of chemists; abstract, A. E. Dunstan. Chem & Ind 62:385 O 9 '43

Relationship of the chemist to medicine, V. du Vigneaud. Chem & Eng N 21:298-300 Mr 10 '43

Shell chemists again reject union claims. Chem & Eng N 21:300 Mr 10 '43

Time and motion studies for chemists, J. Bjorksten. bibliog(45 titles) il Chem & Eng N 21:1324-9 Ag 25 '43

Training programs for chemists, H. T. Briscoe. Chem & Eng N 21:1702-4 O 25 '43

Unionization of professional chemists, Can Chem & Process Ind 27:222 Ap '43

Unity, G. Burkart. Chem & Eng N 20: 1682+ D 25 '42

Utilization of scientific resources, F. C. Whitmore. Science 97:68-9 Ja 15 '43

See also

Chemical education

Women as chemists

also names of chemists, e.g.

Bache, Franklin	Hass, Henry Bohn
Black, Joseph	Haworth, Walter
Booth, James Curtis	Norman
Cavendish, Henry	Hinshelwood, Cyril
Dewey, Bradley	Norman
Egloff, Gustav	Leblanc, Nicolas
Green, Jacob	Scheele, Carl Wil-
Griscom, John	helm
Hand, William Flow-	Schmelkes, Franz
ers	Carl

Bibliography

Selected references to biographical sketches of 100 well-known chemists, G. L. Fraser. J Chem Educ 20:506-7 O '43

Salaries

Economic status of the members of the American chemical society; committee report. Chem & Eng N 20:1497-1505, 1635-43 N 25, D 25 '42

Monthly earnings of members of American chemical society, 1941. Monthly Labor R 56:776-80 Ap '43

Canada

Chemistry at the crossroads; some aspects of professional chemistry in Canada, L. Lortie. Can Chem & Process Ind 27:359-61 Je '43

Great Britain

Chemical co-operation, Chem Age (Lond) 48:206-7 F 13 '43

Chemist in the Civil service; the need for higher status, Chem Age (Lond) 49:187-90 Ag 21 '43

CHEMOTHERAPY

Antimalarial screening tests, L. T. Coggeshall. il Chem & Eng N 21:1152-3 JI 25 '43

Chemical side of chemotherapy, E. H. Northey. bibliog il Ind & Eng Chem 55:829-36 Ag '43

Chemical warfare on tropical diseases; drugs which protect our soldiers' lives, Chem Age (Lond) 48:501 My 8 '43

Chemotherapy; abstract, C. C. Lucas, Can Chem & Process Ind 27:160 Mr '43

Experimental chemotherapy of burns and shock; effects of systemic therapy on early mortality, S. M. Rosenthal, bibliog Pub Health Rep 53:513-22 Mr 26 '43

Experimental chemotherapy of burns and shock; methods; effects of local therapy upon mortality from shock, S. M. Rosenthal, bibliog Pub Health Rep 57:1923-35 D 18 '42

CHEMOTHERAPY—Continued

- Experimental chemotherapy of burns and shock; production of traumatic shock in mice; therapy with mouse serum and sodium salts. S. M. Rosenthal. *bibliog Pub Health Rep* 58:1429-36 S 24 '43
- Preparation of sulfanilamidoindazoles. C. E. Kwartler and P. Lucas. *Am Chem Soc J* 65: 1804-6 O '43
- Properties of the nitrogen-carbon-nitrogen system in N³-heterocyclic sulfanilamides. R. G. Shepherd, A. C. Bratton and K. C. Blanchard. *bibliog Am Chem Soc J* 64:2532-7 N '42
- Some fluorinated compounds of possible chemotherapeutic interest. E. Bograchov. *Am Chem Soc J* 65:1652-3 Ag '43
- Studies in chemotherapy; a theory of the relation of structure to activity of sulfanilamide type compounds. P. H. Bell and R. O. Roblin, jr. *bibliog Am Chem Soc J* 64: 2905-17 D '42
- Studies in chemotherapy; sulfanilamido heterocycles. G. W. Anderson and others. *Am Chem Soc J* 64:2902-5 D '42
- Synthetic application of o-6-bromoethylbenzyl bromide; sulphanilamide derivatives of 1:2:3:4-tetrahydroiso-quinoline. F. G. Holliman and F. G. Mann. *Chem Soc J* p737-41 D '42

See also

- | | |
|------------|---------------|
| Diasone | Sulfanilamide |
| Penicillin | Sulfonamides |

CHEMURGY

- Annual chemurgic conference, 9th, Chicago, March 24-25. *India Rubber W* 108:60-1 Ap '43
- Chemurgic research. E. S. Archibald; N. H. Grace; G. A. Adams. *Can Chem & Process Ind* 27:387-91 Ji '43
- Chemurgists discuss domestic sources of raw materials. *Chem Ind* 51:862-8 D '42
- Chemurgy and the war. R. S. Aries. *il Chem Ind* 52:188-92+ F '43
- Discussions at the 9th annual chemurgic conference in Chicago, March 24-25. *il Chem & Eng N* 21:488-91 Ap 10 '43
- Introduction to chemurgy. M. K. Schwitzer. *Chem Age (Lond)* 49:253-6 S 11 '43
- Present day use of natural oils and resins in printing inks. F. E. Petke and C. H. Allen. *il Chem Ind* 53:502-4 O '43
- Rubber from farm crops; research and development; abstracts of papers at Chemurgic conference. *Nat Pet N* 35 pt 2:R325-6 Ji 7 '43
- War plants record progress; editorial staff report of 4th Mid-American chemurgic conference. *il Chem Ind* 53:494-5 O '43
- Where Midwest agriculture and industry meet; Northern regional research laboratory, Peoria, Illinois. H. T. Herrick. *il Chem & Met Eng* 49:103-6 N '42

See also

- | | |
|---------------------|--------------------|
| Alcohol—Manufacture | Corn products |
| | Synthetic products |

CHENNAULT, Claire Lee, 1890-

- Chennault; the army couldn't defeat him. C. Caldwell. *pors Aero Digest* 43:112, 114-15+ Ji '43

CHEERT

- Study of chert as a deleterious constituent in aggregates. H. S. Sweet and K. B. Woods. *il Purdue Univ Eng Exp Sta, Research Ser* 86:1-106 *bibliog*(p94-6) '42 (pa 50c)

CHESSAPEAKE and Ohio railway

- Annual report. *Comm & Fin Chr* 157:1266-7 Ap 5 '43
- Asks for permit to pay stock dividend; taxability of stock dividend, etc. *Comm & Fin Chr* 158:1633 O 25 '43
- C. & O. stockholders get forthright report. *Ry Age* 114:914-15 My 8 '43
- C. & O. to reply. *Business Week* p109-10 O 30 '43
- Equipment trust certificates authorized; ICC conditions issue on cut in road's debt. *Comm & Fin Chr* 157:1940 My 24 '43
- Equipment trusts offered. *Comm & Fin Chr* 157:1738-9 My 10 '43
- How C. & O. plan affects Alleghany. *Baron's* 23:10 O 11 '43
- Position in Erie bond sale described. *Comm & Fin Chr* 157:862 Mr 8 '43

- Solution of Alleghany 1944 maturity in prospect; advance in C. & O. stock may make conversion privilege of value. A. Jansen. *Baron's* 23:15-16 Ap 12 '43

CHESTER, Colby Mitchell, 1877-
Sketch. *pors Mag of Wall St* 71:345 Ja 9 '43**CHESTER, Pennsylvania***Rapid transit*

- Congested Chester. G. J. MacMurray. *il Bus Transportation* 22:26-8 O '43

CHEWING gum

- Chewing gum is a war material. *il Fortune* 27:98-100+ Ja '43
- Chicle and chewing gum; what's the outlook today? D. R. Crone. *il For Comm W* 12:8-9, 34 Ag 14 '43
- Dubble bubble, toil and trouble. A. J. Stewart. *il Adv & Sell* 35:16+ D '42
- For interminable mastication: Nicaraguans want to chew their own. *For Comm W* 13: 29 O 30 '43

Advertising

- Wrigley gum promotes factory tools as preliminary to postwar selling. P. K. Wrigley. *il Ptr Ink* 205:22+ N 12 '43

CHIANG, Mei-ling (Sung) (Mme Chiang Kai-shek) 1892-

- Mrs. Chiang on tour of U.S. *Comm & Fin Chr* 157:924 Mr 11 '43
- Portrait. *Business Week* p92 F 27 '43
- Portrait. *Mag of Wall St* 72:165 My 29 '43
- Trials and errors. E. Janeway. *Fortune* 27: 60+ Ap '43

CHICAGO

- Planning for Chicago after the war. A. Lindell; E. Woods; H. Hoyt. *map W Soc E J* 48:117-26 S '43

See also

- Housing—Chicago
Motor bus lines—
Chicago

Bridges

- Development of the Chicago type bascule bridge. D. N. Becker. *il diagms maps Am Soc C E Proc* 69:263-93 F '43; Discussion. 69:892-4, 1037-43 Je, S '43
- Early movable bridges of Chicago. D. N. Becker. *il map Civil Eng* 13:421-4 S '43

Description

- Anniversary meeting, 50th, S.P.E.E., Chicago, June 18-20. *J Eng Educ* 33:571-9 Ap '43

Hotels

- Hotel payoff; Stevens goes under hammer to director of Kirkeby chain. *Business Week* p32+ S 18 '43
- Stevens hotel, Chicago sold to operator. *Comm & Fin Chr* 158:1077 S 13 '43
- Stevens pays off; sells to Army air forces. *Business Week* p 18 Ja 2 '43

Libraries

- Lakeview branch of the Chicago public library; views, plans, and construction outline. *Arch Forum* 78:86-8 Je '43

Museum of science and industry

- See* Museum of science and industry, Chicago

Public schools

- Teaching of Negro history in Chicago public schools. *Monthly Labor R* 56:721 Ap '43

Rapid transit

- Chicago brevities; one local transportation system. *Comm & Fin Chr* 157:1286 Ap 8 '43
- Chicago transit companies. *Pub Util* 31:38-40 Ja 7 '43
- Eight-cent fare for Chicago tractions made permanent; unification plan rejected. *Comm & Fin Chr* 157:1753 My 13 '43
- Traction case. *Comm & Fin Chr* 157:2166 Je 10 '43
- Wartime substation constructed by the Chicago surface lines. *il Mass Transportation* 39:35-6 Ja '43

See also

- Chicago—Subways
Chicago surface lines

CHICAGO—Continued

Sewerage

- Chicago plans for emergency sewer repair. T. D. Garry and A. J. Schafmayer. *il maps Civil Eng* 13:23-5 Ja '43
- Experience of Chicago in the preparation of fertilizer and in drying sludge for incineration. W. A. Dundas and C. P. McLaughlin. *flow diag map Am Soc C E Proc* 69:80-102 Ja '43
- Illinois water litigation, 1940-1941; petition by state of Illinois for temporary increase in diversion from Lake Michigan. J. L. Pearse. *bibliog map Am Soc C E Proc* 68:1689-1713 D '42; Discussion. 69:942-8 Je '43
- Sludge drying developments at Chicago. L. M. Johnson. *il Am Soc C E Proc* 69:1015-23 S '43; Discussion. 69:1144-6, 1307-8 S-O '43

Social conditions

- Case studies of nutrition; five Chicago cases. M. Dentler and R. Huenemann. *Ann Am Acad* 225:58-61 Ja '43

Streets

- Asphalt pavement on State street. V. Nicholson. *il Roads & Sts* 86:64-6 Mr '43

Subways

- Ceramic construction distinguishes new Chicago subway. *il Cer Ind* 40:60, 62+ My '43
- Chicago brevities; subway becomes a reality. *Comm & Fin Chr* 158:1490-1 O 14 '43
- Chicago's first subway placed in operation. *il map Eng N* 131:595-601 O 21 '43
- Clay products construction featured in new Chicago subway; stations and station areas. *il Brick & Clay Rec* 102:26-8 My '43
- Development of formulae for calculating ventilation for the Chicago subways. E. Brock. *diag W Soc E J* 48:76-91 Je '43
- Relocation of utility substructures; Chicago subway. J. B. Jackson. *il diag W Soc E J* 48:2-13 Mr '43
- Shield tunnels of the Chicago subway. K. Terzaghi. *diag plans Boston Soc C E J* 29:163-210 Jl '42; Discussion. 30:122-7 Ap '43
- Ventilating the new Chicago subway. W. E. Rasmus. *il diag plan Heating-Piping* 15:393-9 Ag '43

Water supply

- Chicago's water endangered by sewage in Lake Michigan. *Eng N* 131:169-70 Jl 22 '43
- Experience with wire-wound prestressed concrete pressure pipe in Chicago. W. W. DeBerard and W. B. Weldon. *il diag Am Water Works Assn J* 35:1263-80 O '43; Same abr. *Water Works & Sewerage* 90:378-83 O '43
- No emergency action required to meet Chicago water needs; city can check threatened pollution within the limits on lake diversion set by the U.S. Supreme court. *Eng N* 131:309 Ag 26 '43
- CHICAGO & eastern Illinois railroad**
- Railroad securities. *Comm & Fin Chr* 156:2149 D 17 '42
- Securities disturbing investors. J. S. Williams. *Mag of Wall St* 71:169 N 28 '42
- CHICAGO and north western railway**
- Begins court action to reopen reorganization case. *Comm & Fin Chr* 158:186 Jl 12 '43
- Court refuses petition; road wanted to pay RFC debt in full. *Comm & Fin Chr* 157:1647 My 3 '43
- Court rejects protest on plan. *Comm & Fin Chr* 158:1439 O 11 '43
- Court studies plea to halt plan. *Comm & Fin Chr* 158:1240 S 27 '43
- Eighth year in bankruptcy. *Comm & Fin Chr* 158:101-2 Jl 8 '43
- Files second brief. *Comm & Fin Chr* 157:863 Mr 8 '43
- Moves again to alter reorganization. *Comm & Fin Chr* 157:1940 My 24 '43
- North Western reorganization nearing completion. A. Jansen. *map Barron's* 22:19-20 D 7 '42
- Proposes payment of RFC loan. *Comm & Fin Chr* 156:2304 D 28 '42
- Railroad securities. *Comm & Fin Chr* 157:2361; 158:1001+ Je 24, S 9 '43
- Supreme court refuses to review reorganization issue. *Comm & Fin Chr* 157:1524 Ap 26 '43

Trustee authorized to pay interest; Supreme court gets more data on reorganization. *Comm & Fin Chr* 157:1360 Ap 12 '43

What are Chicago and North Western bonds worth? A. Jansen. *Barron's* 23:15 Mr 15 '43

CHICAGO and southern air lines, inc.

- Applies for Polar great circle air route. *Comm & Fin Chr* 157:1807 My 17 '43
- Domestic and foreign applications total 21,418 miles. *Comm & Fin Chr* 158:544 Ag 9 '43
- Pan American service to Latin America. *Comm & Fin Chr* 157:1940 My 24 '43
- Proposes air services to Rio de Janeiro and Buenos Aires. *Comm & Fin Chr* 158:1528 O 18 '43
- Proposes new air service to eight more states. *Comm & Fin Chr* 158:1344 O 4 '43

CHICAGO board of underwriters

- Brokers' Chicago board suit. *Nat Underw* 46:3+ D 17; 1+ D 24 '42; 47:1+ Mr 4 '43
- Chicago board launches program; prestige advertising; other aids to members. *Nat Underw* 47:3+ My 13 '43
- Large turnout at first insurance day. *Nat Underw* 47:1+ O 7 '43
- Legal battle in Chicago called ill advised. *Weekly Underw* 148:313+ F 6 '43
- Reviews Chicago Board battle. T. C. McConnell. *Nat Underw* 47:3+ My 20 '43

CHICAGO, Burlington and Quincy railroad

- Annual report. *Comm & Fin Chr* 157:1739 My 10 '43
- Burlington's credit status. M. Howe. *Barron's* 23:10-11 O 13 '43
- Promissory notes. *Comm & Fin Chr* 157:689 F 22 '43
- Subsidiary plans helicopter or other service. *Comm & Fin Chr* 158:84 Jl 5 '43

CHICAGO great western railway

- Generous returns on Chicago Great Western bonds; first 4s yield 5.24% and income 4½% furnish current income of 9.68%. A. Jansen. *Barron's* 23:10 Ag 30 '43

CHICAGO, Indianapolis & Louisville railway

- Drastic plan for the Monon. A. Jansen. *Barron's* 23:1-16 Ja 25 '43
- I.C.C.'s Monon plan cuts fixed charges. *Ry Age* 114:144+ Ja 2 '43
- Proposed reorganization plan. *Comm & Fin Chr* 157:8 Ja 4 '43
- Railroad securities. *Comm & Fin Chr* 157:53 Ja 7 '43
- Reorganization. *Comm & Fin Chr* 158:1344 O 4 '43
- Reorganization of Monon is approved. *Ry Age* 115:536+ O 2 '43
- CHICAGO mail order company**
- Banker-retailer; Lehman bros. arranges to buy into Chicago Mail Order. *Business Week* p109-10 N 6 '43
- Grants stock option to Lehman brothers. *Comm & Fin Chr* 158:1728 N 1 '43

CHICAGO, Milwaukee, St Paul & Pacific railroad

- Bondholders' group seeks modification of plan. *Comm & Fin Chr* 158:186 Jl 12 '43
- Committee outlines its objectives. *Comm & Fin Chr* 158:1031 S 13 '43
- Interest, abandonment; NASD on when issued securities. *Comm & Fin Chr* 157:1267 Ap 5 '43
- ICC rejects road's plea. *Comm & Fin Chr* 158:766 Ag 23 '43
- Railroad securities. *Comm & Fin Chr* 157:829 Mr 4 '43
- Reorganization case remanded to ICC. *Comm & Fin Chr* 157:2445 Je 28 '43
- Reorganization case reopened. *Comm & Fin Chr* 158:386 Jl 26 '43
- U.S. Supreme court upholds ICC reorganization plans. *Comm & Fin Chr* 157:1048+ Mr 22 '43

What are St Paul railroad bonds worth? A. Jansen. *Barron's* 22:18-19 D 21 '42

CHICAGO museum of natural history. See Field museum of natural history**CHICAGO, Rock Island & Pacific railway**

- Amendment to plan proposed by first and re-funding groups. *Comm & Fin Chr* 158:386 Jl 26 '43
- Annual report. *Comm & Fin Chr* 157:2145 Je 7 '43
- Chase protests ICC splitup of funds. *Comm & Fin Chr* 158:1240 S 27 '43

CHICAGO, Rock Island & Pacific railway—Cont.
 Listing of additional old bonds. Comm & Fin Chr 158:1633 O 25 '43
 Plan returned to ICC for action. Comm & Fin Chr 158:84 J1 5 '43
 Stocks suspended from dealings. Comm & Fin Chr 157:2446 Je 28 '43
 What are Rock Island bonds worth? A. Janzen. Barron's 23:19 F 8 '43

CHICAGO stock exchange
 Harry Payne elected chairman of board of governors of Chicago stock exchange. Comm & Fin Chr 157:2167 Je 10 '43
 Weekly record. Published in weekly Monday numbers of Commercial & financial chronicle

CHICAGO stock yards company
 Supreme court upholds \$4,000,000 tax assessment. Comm & Fin Chr 157:1553 Ap 26 '43

CHICAGO surface lines
 Chicago tractions afford investment opportunity. W. C. Haff. Comm & Fin Chr 156:1786+ N 19 '42
 Plan rejected by Commission. Comm & Fin Chr 157:1940 My 24 '43
 Reorganization. Comm & Fin Chr 158:1240 S 27 '43

CHICK, Alton Charles, 1896—
 Sketch. por(p611) Mech Eng 65:612 Ag '43

CHICK peas
 Chickpea production in Mexico. For Comm W 9:29 N 28 '42

CHICKENPOX
 Occurrence of whooping cough, chickenpox, mumps, measles and German measles in 200,000 surveyed families in 28 large cities, with list of references. S. D. Collins, R. E. Wheeler and R. D. Shannon. 40p U.S. National inst. of health, Washington; pa 10c Supt. of doc. '43

CHICLE
 Chicle and chewing gum; what's the outlook today? D. R. Cronk. il For Comm W 12:8-9, 34 Ag 14 '43

CHICORY
 Angles on the coffee outlook. For Comm W 9:21 N 21 '42
 Production, processing and uses of chicory; used by manufacturers of sauces, chocolate, baked foods, and other products. L. Stouffer. il Food Ind 15:63-5 O '43
 Roasting beverage materials. R. E. Kremers. bibliog il Food Ind 15:74-6 O '43

Prices

Chickory prices ceiled. Oil Paint & Drug Rep 142:7 D 21 '42

CHIGGERS
 Tropical chigoe in California. G. F. Augustson. Science 96:581 D 25 '42

CHIGOE. See Chiggers

CHILD, Robert
 Robert Child's chemical book list of 1641. W. J. Wilson. J Chem Educ 20:123-9 Mr '43

CHILD endowment. See Family allowances

CHILD labor
 Basic national policy on employment of youth. Monthly Labor R 56:883-4 My '43
 Emergency farm employment of nonfarm youth, 1942. Monthly Labor R 56:697-701 Ap '43
 Juvenile labour in wartime in the United States. bibliog Int Labour R 48:324-37 S '43
 Standards for young war workers. Monthly Labor R 56:694-7 Ap '43
 Trend of child labor, 1939 to 1942. E. A. Merritt. Monthly Labor R 56:450-67 Mr '43
 Wartime employment of boys and girls under 18. U S Children's Bur Pub 289:1-16; pa 5c Supt. of doc. '43
 Young manpower; protection against occupational hazards. il Nat Safety N 47:52+ F '43

Great Britain

Post-war employment of juveniles in Great Britain. Monthly Labor R 56:56-8 Ja '43
 Youth registration in Great Britain in 1942. Int Labour R 48:383-6 S '43

Russia

Wartime employment of women and children in the U.S.S.R. Int Labour R 48:361-4 S '43

CHILD labor laws

Children barred; war emergency has not modified laws. Business Week p99-100 J1 24 '43

CHILD welfare

Child neglect in war communities. I. M. Cavert. Personnel J 21:244-50 Ja '43
 Distribution of health services in the structure of state government; maternity-child health activities by state agencies. J. W. Mountin and E. Flook. Pub Health Rep 57:1791-1821 N 27 '42
 Employment in war work of women with young children. Monthly Labor R 55:1184-5 D '42

Wartime care of working mothers' children in Minneapolis. J. O. Louis. Monthly Labor R 57:107-8 J1 '43

Whose baby? child care problem. Business Week p32+ Mr 20 '43

See also

Day nurseries, Factory Housekeeping service (social work)

CHILDREN

See also

Child labor
 War and children

Care and hygiene

Facts about child health, 1943. U S Children's Bur Pub 294:1-15; pa 10c Supt. of doc. '43
 Standards of child health, education, and social welfare. U S Children's Bur Pub 287:1-20; pa 10c Supt. of doc. '42

See also

Day nurseries

Charities, protection, etc.

See also

Child welfare
 Family allowances

CHILDREN'S clothing. See Clothing and dress
 —Children; Infants' clothing

CHILDREN'S shoes. See Shoes, Children's

CHILDS company

Annual report. Comm & Fin Chr 157:1077 Mr 22 '43

Bankruptcy case to be referred to a special master. Comm & Fin Chr 157:2446 Je 28 '43

Company officials to assist trustee. Comm & Fin Chr 158:1128 S 20 '43

Files voluntary petition for reorganization, trustee appointed. Comm & Fin Chr 158:886 Ag 30 '43

Preferred stockholders committee. Comm & Fin Chr 158:186-7 J1 12 '43

Securities disturbing investors. J. S. Williams. Mag of Wall St 72:690 O 2 '43

To return deposited bonds; exchange plan opposed. Comm & Fin Chr 157:1940 My 24 '43

Will comply with judgment of court. Comm & Fin Chr 156:1950 N 30 '42

CHILE

See also

Cement industry and trade—Chile	Meat industry and trade—Chile
Fruit trade—Chile	Mining industry and finance—Chile
Housing—Chile	Social laws and legislation—Chile
Insurance, Social—Chile	
Labor and laboring classes—Chile	

Commerce

Chile under a microscope; what you need to know to sell there. J. D. Cathcart. il map Sales Management 52:28, 30 My 1 '43

Chilean company to stimulate and develop inter-American trade. For Comm W 9:14 N 28 '42

Chilean imports of eyeglasses, watches and clocks, 1941. For Comm W 12:37 S 4 '43

Commercial policy

Chilean board of foreign trade; its aims and activities. For Comm W 12:14 S 25 '43

CHILE—Continued**Economic conditions**

Brazil, Argentina, Chile, from an investment standpoint. V. L. Horoth. *Mag of Wall St* 71:683-5+ Ap 3 '43
News by countries. Published in Foreign commerce weekly

Industries and resources

Big doings in the Andes. J. F. Chapman. *il Business Week* p19-20+ D 12 '42
Chilean chemical picture. C. C. Concannon and A. H. Swift. *il For Comm W* 13:8-9, 31-3 O 16 '43

CHILEAN nitrate. See Sodium nitrate

CHILLED car wheels. Association of manufacturers of. See Association of manufacturers of chilled car wheels

CHILLED iron

Chilled car wheels contribute to the war effort; inspection and research by Association of manufacturers of chilled car wheels. *il Ry Age* 115:596-9 O 16 '43

CHILTON, Thomas Hamilton, 1899-
Chilton receives Eggleston medal. *por Chem & Eng N* 21:704 My 10 '43

CHIMBOTE, Peru

Peru developing new industrial center at Chimbote. *For Comm W* 13:34-5 N 6 '43

CHIMNEYS

Chimney loss measurements without CO₂ meters; nomogram for determining losses by temperature measurements. R. H. Parsons. *Engineer* 175:165-6 F 26 '43

Clay products can solve problem of supplying heating needs of military and war housing structures; combination of chimney furnace with new-style warm air circulating system. *diags Brick & Clay Rec* 102: 21-2 F '43

Couldn't say no; Texan compounds vent pipe of concrete, asbestos, and mystery mineral. *il Business Week* p74-5 My 22 '43

Design of foundations for stacks and towers. V. O. Marshall. *il diags Pet Refiner* 22:101-18 Ag '43; Discussion. S. Garnett. 22:128 O '43

Design of medium sized chimneys for forced draft. W. T. Miller and N. Arnold. *Heat & Ven* 40:26-7 Mr '43

Deterioration and maintenance of power plant structures. S. J. Pearson. *il Power Pl Eng* 47:63-6 Ag '43

Oil to coal conversion; chimneys. *Heat & Ven* 40:52-3 My '43

Stack and chimney design. W. L. Nelson. *Oil & Gas J* 42:62+ S 16 '43

When building chimneys check these points. *diags Brick & Clay Rec* 103:46+ S '43

See also

Flues

Heating

CHIMNEYS, Steel

Heat-saving method for steel chimneys. W. F. Schaphorst. *Chem Ind* 52:349 Mr '43

Method of design of steel stacks and foundation. S. Levine. *diags Pet Refiner* 22:104-5 Ap '43

Reinforcement welded on smoke stacks. *il Elec W* 119:1661 My 15 '43

CHINA

China faces political crisis. *Business Week* p48+ S 11 '43

See also

Air lines—China
Banks and banking—China

Cooperation—China
Finance—China
Food supply—China
Mines and mineral resources—China

Moving picture industry—China
Paper industry and trade—China

Science—China
World war, 1939—China

Army**Commissariat**

Diet of Chinese soldiers and college students in wartime. T. Shen. *Science* 98:302-3 O 1 '43

Commerce

China will buy mostly capital goods from U.S., says Soong. *Ptr Ink* 203:21 Ap 9 '43

Cultural relations

Visiting professor to China, Dr George B. Cressey. *Science* 98:320 O 8 '43

Economic conditions

Economic and health conditions in agriculture in China. *Monthly Labor R* 57:493-5 S '43

Economic policy

China's postwar plans; Chinese are blueprinting roads, railroads, airways, factories and they are already talking loans, markets, terms. T. H. White. *il Fortune* 28:150-6, 158+ O '43

Chinese economic policy in wartime. Y. Ho. *Int Labour R* 47:555-75 My '43

Chinese wartime economy. *Monthly Labor R* 55:1161-5 D '42

Reconstruction planning and economic organization in China. *chart Int Labour R* 48:345-7 S '43

Wartime economic and social organisation in Free China. *Int Labour R* 46:692-715 D '42

Exterritoriality

China rights treaty sent to Senate. *Comm & Fin Chr* 157:673 F 18 '43

U. S. Britain give up extraterritorial rights. *Comm & Fin Chr* 157:422 Ja 28 '43

Foreign relations

See also

China—Exterritoriality

Industries and resources

Blockaded China. *Economist* 144:824-5 Je 26 '43

Free China takes stock of its potentialities. C. K. Moser. *il map For Comm W* 11:3-7, 14-15 Ap 10 '43

Industrial development in China. *Int Labour R* 48:209-10 Ag '43; *Monthly Labor R* 57: 719-20 O '43

Investment in China's postwar industry. Kuang Tai Hu. *Harvard Business R* 21 no 3:309-20 [Ap] '43

Two resolutions adopted on China's post-war industrialization and foreign investments. *Comm & Fin Chr* 158:1116 S 16 '43

Intellectual life

Advancement of science in China during the past thirty years. C. H. Liu. *Science* 98: 47-51 Jl 16 '43

Science in China. Chung Yu Wang. *Science* 98:376-8 O 29 '43

Politics and government

Authority on draft constitution sees new step taken in China's march to constitutional government. *Comm & Fin Chr* 158: 1117 S 16 '43

Social conditions

Social policy in China. *Int Labour R* 47:622-5 My '43

CHINA clay. See Kaolin

CHINA grass. See Ramie

CHINA national aviation corporation

China's last lifeline. *il map Fortune* 27:106-10+ My '43

CHINA wood oil. See Tung oil

CHINCHILLA

Chinchillas snub; first domestic-bred pelts offered. *Business Week* p94 My 29 '43

CHINCHONA. See Cinchona

CHINESE

Chinese in southeastern Asia and the Philippines. P. G. Barnett. *Ann Am Acad* 226:32-49 Mr '43

CHINESE exclusion. See Chinese in the United States

CHINESE in California

China's own; subassemblies for planes to be made in California DPC plant organized and staffed by Chinese. *Business Week* p14-15 S 4 '43

CHINESE in the United States

Repeal of Chinese exclusion laws and amendment of naturalization act urged by FDR. *Comm & Fin Chr* 158:1507 O 14 '43

CHINESE institute of engineers

Chinese institute of engineers—reorganizes.
Mech Eng 64:919 D '42

CHIPCHASE, Dorothy

Woman safety engineer. Safety Eng 86:18 Ag '43

CHIRONOMIDAE. See Midges**CHISHIMA islands.** See Kurile islands**CHLORACNE**

Chloracne from cutting oils. L. Schwartz and F. A. Barlow. Pub Health Rep 57:1747-52, pl 1-6 N 20 '42

CHLORAL

Interaction of *p*-cresol and other phenols with chloral and its hydrate. M. P. Balfe and W. C. Webber. Chem Soc J p718-20 N '42

CHLORAL hydrate

Interaction of *p*-cresol and other phenols with chloral and its hydrate. M. P. Balfe and W. C. Webber. Chem Soc J p718-20 N '42

CHLORAMINE

Checking tuberculation by chloramine treatment. J. W. Ackerman. Water Works & Sewerage 90:sup169-70 Je '43

Chloramine for crenothrix; experience of Stillwater, Minnesota; abstract. H. S. Grove. Water & Sewage 81:20 Ja '43

CHLORANIL. See Tetrachloroquinone**CHLORATES**

See also

Sodium chlorate

Analysis

New thermoanalytical methods. D. Kaplan. Chem & Ind 61:431-2 O 24 '42; Same, Can Chem & Process Ind 27:39-40 Ja '43

CHLORIDES

Absence of coprecipitation of barium ion with the chlorides of the silver group and the sulfides of the copper and tin groups in the presence of ammonium ion. L. Lehrman and I. Mandel. bibliog J Phys Chem 47:264-6 Mr '43

First report on stress corrosion cracking of stainless steel in chloride solutions. M. A. Scheil and others. II diag Welding J 22:sup493-506 O '43

Fluidity of electrolytes. E. C. Bingham and R. T. Foley. bibliog J Phys Chem 47:511-27 O '43

Influence of *p*-substituents on the decomposition of zinc chloride double salts of diazonium chlorides by acetic anhydride. H. H. Hodgson and C. K. Foster. Chem Soc J p747-8 D '42

Recovery of chemicals from oil field brines awaits market for chloride compounds. II Nat Pet N 35 pt 2:R282-3 Je 2 '43

Structural effects of unsaturation and hyperconjugation in aldehydes, nitriles and chlorides as shown by their dipole moments in the vapor state. E. C. Hurdis and C. P. Smyth. bibliog Am Chem Soc J 65:89-96 Ja '43

See also

Boron chloride

Calcium chloride

Halides

Salt

Water supply—

Chloride content

Analysis

Analytical reactions involving ignition with manganous nitrate. M. J. Preising, O. F. Slonek and J. H. Reedy. bibliog Ind & Eng Chem Anal ed 14:875-7 N 15 '42

Determination of chloride in bauxite-supported anhydrous aluminum chloride catalysts; extraction and distillation methods. W. A. La Lande, Jr., H. Heinemann and W. S. W. McCarter. diag Ind & Eng Chem Anal ed 15:385-7 Je 15 '43

Determination of chloride in the presence of hydrosulfide or sulfide ion. M. M. Maglio and F. Fazio. Ind & Eng Chem Anal ed 15:265-6 Ap 15 '43

Turbidimetric determination of small amounts of chlorides. E. N. Luce, E. C. Denice and F. E. Akerlund. Ind & Eng Chem Anal ed 15:365-6 Je 15 '43

CHLORIDES in the body

Entrance of chloride with potassium into live rat muscle fibers. Cl-space error. W. S. Wilde. bibliog Science 98:202-3 Ag 27 '43

CHLORINATION

Chlorinated naphthalenes and diphenyls. L. Greenburg. bibliog Ind Med 12:520-1; Discussion. 521-2 Ag '43

Chlorination of 2,4-diketotetrahydropyrimidines by action of a mixture of superoxol and hydrochloric acid. T. B. Johnson. Am Chem Soc J 65:1218-19 Je '43

Chlorination of 4-phenylphenyl acetate in acetic acid. H. R. Schmidt, C. M. S. Savoy and J. L. Abernethy. Am Chem Soc J 65:296-7 F '43

Chlorinolysis of chloroparaffins. E. T. McBee, H. B. Hass and C. Bordenca. bibliog diags Ind & Eng Chem 35:317-20 Mr '43

Halogenation of certain esters in the biphenyl series; the chlorination of 4-phenylphenyl benzoate and 4-phenylphenyl benzenesulfonate. C. M. S. Savoy and J. L. Abernethy. Am Chem Soc J 64:2719-20 N '42

Halogenation of phenolic ethers and anilides; Arrhenius activation energies for di- and poly-substituted aromatic ethers. B. Jones. Chem Soc J p676-8 N '42

Induced chlorination of maleic acid; evidence for chain reaction mechanisms. H. Taube. bibliog diag Am Chem Soc J 65:1876-82 O '43

Kinetics of aromatic halogenation; the chlorination of hydrocarbons. P. B. D. de la Mare and P. W. Robertson. Chem Soc J p279-81 Je '43

Observations on the toxic effects resulting from exposure to chlorinated naphthalene and chlorinated phenyls with suggestions for prevention. H. Von Wedel, W. A. Holla and J. Denton. bibliog II Rubber Age 53:419-26 Ag '43

Studies in the biphenyl series; the attempted chlorination of the acetate, benzoate and benzenesulfonate of 4-(4-chlorophenyl)-phenol; 2-chloro-4-(4-chlorophenyl)-phenol. C. M. S. Savoy and J. L. Abernethy. Am Chem Soc J 65:1464-5 Ag '43

See also

Rubber—Chlorination Water purification—
Sewage disposal—
Chlorination

CHLORINATORS

New chlorinator; manufacture of sodium hypochlorite. diag Chem Age (Lond) 48:129 Ja 23 '43

CHLORINE

Angular correlation of successive gamma-rays. R. Beringer. bibliog diags Phys R 63:23-8 Ja 1 '43

Determination of chlorine vibrations in dichlorobenzenes from intensities and polarizations of their Raman lines. G. Nordheim and H. Sponer. J Chem Phys 11:253-62 Je '43

Determination of the nuclear spin of Cl³⁷. E. F. Shrader. diag Phys R 64:57-9 Ag 1 '43

Direct experimental determination of the electron affinity of chlorine. K. J. McCallum and J. E. Mayer. bibliog diags J Chem Phys 11:56-63 F '43

Effect of small additions of bleach liquor on the bacterial content of sulphite pulp. J. W. Appling and B. F. Shema. Paper Tr J 116:131-2 F 18 '43

Photochemical reaction of hydrogen and chlorine; a lecture demonstration. C. M. Furgason and J. W. Moore. II J Chem Educ 20:41-2 Ja '43

Some practical aspects of handling chlorine. C. F. Bingham. II diag Water Works & Sewerage 90:sup171-3 Je '43

See also

Halogens
Water purification—
Chlorination

Analysis

Colorimetric determination of chlorine residuals up to 10 ppm. with ortho-tolidine. N. S. Chamberlin and J. R. Glass. bibliog Am Water Works Assn J 35:1065-84, 1205-21 bibliog (p1083-4, 1221) Ag-S '43

CHLORINE—Analysis—Continued

- Control of chlorination; committee progress report. *Am Water Works Assn J* 34:1782-4 D '42
- Determination of high chlorine residuals; chemistry of the ortho-tolidin reactions. N. S. Chamberlin. *Water Works & Sewerage* 89:496-9 N '42
- Estimation of high chlorine residuals. A. E. Griffin and N. S. Chamberlin. *bibliog Am Water Works Assn J* 35:571-8 My '43
- Modification of the flash color test to control break-point chlorination. P. C. Laux and J. E. Nickel. *Am Water Works Assn J* 34:1785-6 D '42
- Semimicrodetermination of chlorine, bromine, and iodine in organic compounds. E. W. Peel, R. H. Clark and E. C. Wagner. *bibliog Ind & Eng Chem Anal ed* 15:149-51 F '43
- Use of *p*-aminodimethylaniline as an indicator for free chlorine. W. A. Moore. *Am Water Works Assn J* 35:427-8 Ap '43

Manufacture

- Electrolytic chlorine and caustic soda; pictorial flow sheet. *il Chem & Met Eng* 49:114-17 D '42
- Electrolytic chlorine; modern production plant. D. D. Howat. *diags Chem Age (Lond)* 49:379-84, 405-8 O 16-23 '43 (to be cont)

Safety measures

- Chlorine detector protects workers against poisoned air. T. A. H. Jeffery. *il diags Power* 87:514-15 Ag '43
- Handling shipments of liquid chlorine. R. J. Quinn. *il diags Chem Ind* 51:872-6 D '42
- How to handle chemicals safely. *diag Textile World* 93:103 S '43

Statistics

- Alkalis and chlorine, 1942. *Chem & Met Eng* 50:104-5 F '43

CHLORINE, Liquid

- Liquid chlorine systems. W. H. Magee. *plan Chem & Met Eng* 50:102-3 Ag '43
- Use of liquid chlorine in the treatment of water and sewage; memorandum of May 28, 1914. E. S. Chase. *Water Works & Sewerage* 90:345-6 S '43

Transportation

- Handling shipments of liquid chlorine. R. J. Quinn. *il diags Chem Ind* 51:872-6 D '42

CHLORINE, Solid

- Heat capacities of molecular lattices; some simple molecular solids. W. F. Brucksch, jr. and W. T. Ziegler. *bibliog J Chem Phys* 10:740-3 D '42

CHLORINE azide

- Chlorine azide, ClN₃; properties, behavior toward liquid ammonia, pentane, metals, phosphorus. W. J. Frierson, J. Kronrad and A. W. Browne. *bibliog Am Chem Soc J* 65:1696-8 S '43
- Chlorine azide; interaction of chlorine azide and silver azide, azino silver chloride, N₃AgCl. W. J. Frierson and A. W. Browne. *bibliog Am Chem Soc J* 65:1698-1700 S '43

CHLORINE compounds

- Allylic character of 2-(α -chloroalkyl)-benzimidazoles. H. Skolnik, J. G. Miller and A. R. Day. *bibliog Am Chem Soc J* 65:1854-8 O '43
- p*-Aminodimethylaniline; the *o*-chloro- and nitro-derivatives. E. E. Ayling, J. H. Gordin and L. E. Hinkel. *Chem Soc J* p755-8 D '42
- Bleaching solutions of chlorines and their self-production. G. Ullmann. *Textile Col* 65:227, 231, 253+ My-Je '43
- Chlorinated textile agents; abstract. G. Heron. *Soap & San Chem* 19:69 J1 '43
- Chlorine disinfectants. W. A. Hadfield. *Soap & San Chem* 19:105 Ag '43
- Reaction of some 2-(α -chloroalkyl)-benzimidazoles with potassium iodide in acetone solution. H. Skolnik, A. R. Day and J. G. Miller. *Am Chem Soc J* 65:1858-62 O '43

See also
Chlorides

Analysis

- Automatic apparatus for determination of small concentrations of sulfur dioxide in air; application to hydrogen sulfide, mercaptan, and other sulfur and chlorine compounds. M. D. Thomas and others. *bibliog diags Ind & Eng Chem Anal ed* 15:287-90 Ap 15 '43
- Determination of fumigants; determination of chlorohydrocarbons by thermal decomposition. F. P. W. Winteringham. *diag Soc Chem Ind J* 61:190-2 D '42
- Determination of fumigants; determination of chlorohydrocarbons in air by reaction in monoethanolamine. F. P. W. Winteringham. *diags Soc Chem Ind J* 61:186-7 D '42

CHLORINE institute

- Officers elected at annual meeting. *Oil Paint & Drug Rep* 143:3 F 1 '43

CHLORINOLYSIS. See Chlorination**CHLOROACETIC acid**

- Inversion of *l*-menthone and the reaction of diazoacetic ester with the chloroacetic acids. A. Weissberger. *bibliog Am Chem Soc J* 65:245-6 F '43
- Magneto-optic rotation; acetic and chloroacetic acids in polar and non-polar solvents. C. E. Waring, S. Steingiser and H. H. Hyman. *Am Chem Soc J* 65:1066-8 Je '43
- Monochloroacetic acid in wine. G. E. Mallory and R. F. Love. *Ind & Eng Chem Anal ed* 15:207-9 Mr 15 '43
- Monochloroacetic acid use in wine requested. *Oil Paint & Drug Rep* 144:3+ Ag 2 '43

CHLOROACETOPHENONE

- Condensation of chloroacetophenone with ethanol- and diethanol-amine and of chloroacetocatechol with β -methoxyethylamine. K. W. Brighton and E. E. Reid. *Am Chem Soc J* 65:479 Mr '43
- Experimental skin sensitization with war gases. R. W. Linton. *Franklin Inst J* 235:641-3 Je '43

CHLOROAMINE. See Chloramine**CHLOROBENZENE**

- Alcohol and acetone by solvent extraction; heat requirements of distillation and of combined distillation and extraction processes. D. F. Othmer and R. L. Ratcliffe, jr. *il diags Ind & Eng Chem* 35:798-805 J1 '43

CHLOROBENZOIC acid

- Electric moments of some substituted benzoic acids; the moments of *o*-, *m*- and *p*-fluorobenzoic acids, and of *o*-chloro and *o*-bromobenzoic acids. M. E. Hobbs and A. J. Weith, jr. *bibliog Am Chem Soc J* 65:967-71 My '43

CHLOROBENZOQUINOLINE

- Synthesis of 1-substituted aminobenzo(f) quinolines. A. C. Mueller and C. S. Hamilton. *bibliog Am Chem Soc J* 65:1017-18 Je '43

CHLOROBENZOYL peroxide

- Ester groups in polystyrene made with chloro- and bromobenzoyle peroxides. P. D. Bartlett and S. G. Cohen. *Am Chem Soc J* 65:543-6 Ap '43

CHLOROBROMAMINE acid

- Detection of zirconium with 5-chlorobromamine acid. J. H. Yoe and L. G. Overholser. *Ind & Eng Chem Anal ed* 15:73 Ja 15 '43

CHLOROCROTONIC acid

- Friedel-Crafts reaction with cinnamic, crotonic, and β -chlorocrotonic acids. C. F. Koelsch, H. Hochmann and C. D. Le Claire. *Am Chem Soc J* 65:59-60 Ja '43

CHLOROETHANOL. See Ethylene chlorohydrin**CHLOROFLUORENE**

- Kinetics of the ammonolysis of 9-phenyl-9-chlorofluorene by liquid ammonia. P. M. Williamson, R. C. Anderson and G. W. Watt. *bibliog Am Chem Soc J* 65:49-51 Ja '43

CHLOROFLUOROMETHANES

- Compressed gas for transformers; nitrogen and Freon. R. T. Stafford. *il Elec W* 118:1634 N 14 '42

- Freon for industrial uses eased by WPB. *Refriger Eng* 46:246 O '43

CHLOROFLUOROMETHANES—Continued

Thermal conductances and heat transmission coefficients of Freon refrigerants. W. H. Markwood, Jr. and A. F. Benning. *Refriger Eng* 45:95-9 F '43

CHLOROFORM

Rapid moisture determination in dehydrated foods. F. B. Johnston, *diag Can Chem & Process Ind* 27:100+ F '43

CHLOROFORMYL group

Carboxylation; direct introduction of the chloroformyl ($-\text{COCl}$) group into alicyclic and aliphatic acid chlorides. M. S. Kharasch, K. Eberly and M. Kleiman. *Am Chem Soc J* 64:2975-7 D '42

CHLOROHEPTANES

Chlorinolysis of chloroparaffins. E. T. McBee, H. B. Hass and C. Bordenca. *bibliog diags Ind & Eng Chem* 35:317-20 Mr '43

CHLOROMETHANE. See Methyl chloride**CHLORONITROPARAFFINS**

Dipole moment, induction and resonance in nitroethane and some chloronitroparaffins. E. C. Hurdis and C. P. Smyth. *bibliog Am Chem Soc J* 64:2829-34 D '42

CHLOROPALLADITE

Formal electrode potentials of palladium in aqueous hydrochloric and perchloric acid solutions; stability of chloropalladite ion. D. H. Templeton, G. W. Watt and C. S. Garner. *bibliog Am Chem Soc J* 65:1608-12 Ag '43

CHLOROPARAFFINS

Chlorinolysis of chloroparaffins. E. T. McBee, H. B. Hass and C. Bordenca. *bibliog diags Ind & Eng Chem* 35:317-20 Mr '43

CHLOROPENTANE

Nonchlorinated compounds derived from monochloropentanes. C. K. Hunt. *bibliog flow sheets Ind & Eng Chem* 35:1048-52 O '43

CHLOROPHENOL

New colour reactions of phenols. A. Steigmann. *Soc Chem Ind J* 61:180 N '42; Abstract. *Paint Oil & Chem R* 105:12 F 11 '43

CHLOROPHYLL

Chlorophyll fluorescence and energy transfer in the diatom *nitzschia closterium*. H. J. Dutton, W. M. Manning and B. M. Duggar. *bibliog J Phys Chem* 47:308-13 Ap '43

Dehydrated spinach; changes in color and pigments during processing and storage. H. J. Dutton, G. F. Bailey and E. Kohake. *bibliog Ind & Eng Chem* 35:1173-7 N '43

Photo-oxidation of chlorophyll. S. Aronoff and G. Mackinney. *bibliog Am Chem Soc J* 65:956-8 My '43

Tracer studies with radioactive hydrogen; some experiments on photosynthesis and chlorophyll. T. H. Norris, S. Ruben and M. B. Allen. *bibliog Am Chem Soc J* 64:3037-40 D '42

Analysis

Analysis of plant extracts for chlorophylls *a* and *b* using a commercial spectrophotometer. C. L. Comar. *Ind & Eng Chem Anal ed* 14:877-9 N 15 '42

Calibration of a photoelectric colorimeter for the determination of chlorophyll; relation between spectra of standards and accuracy of analytical results. C. L. Comar, E. J. Benne and E. K. Buteyn. *bibliog Ind & Eng Chem Anal ed* 15:524-6 Ag 15 '43

CHLOROPRENE

Statistical lengths of rubber-like hydrocarbon molecules. F. T. Wall. *bibliog J Chem Phys* 11:67-71 F '43

CHLOROPROPYNE

Raman spectra of acetylenes; symmetrical-top acetylenes. F. F. Cleveland and M. J. Murray. *bibliog J Chem Phys* 11:450-4 O '43

CHLOROTETRAMETHYLHEXADECANOL

Vitamin E; synthesis of 1-chloro-3,7,11,15-tetramethylhexadecanol-3, and its condensation with trimethylhydroquinone to form α -tocopherol. L. I. Smith and J. A. Sprung. *bibliog Am Chem Soc J* 65:1276-83 Jl '43

CHLOROTHIAZOLE

Conversion of 2-phenyl-4-chloromethylthiazole to 2-phenyl-4-hydroxymethyl-5-chlorothiazole. E. H. Huntress and K. Pfister. *3d. Am Chem Soc J* 65:1667-70 S '43

CHOCOLATE

Britain producing vitamin-fortified chocolate.

For Comm W 12:33 S 11 '43

Soap machine wraps chocolate; case history of war changes at Rockwood & co. *il Mod Packaging* 16:78-9+ F '43

Sweden's chocolate industry. For Comm W 12:28-9 S 11 '43

CHOCOLATE milk. See Milk, Chocolate**CHOKE coils. See Reactors****CHOLANIC acid**

Barbier-Wieland degradation of 3-hydroxy-12-ketocholanic acid. B. Riegel and R. B. Moffett. *bibliog Am Chem Soc J* 65:1971-3 O '43

Preparation of the homologs of 3-hydroxy-12-ketocholanic acid. E. Schwenk and others. *bibliog Am Chem Soc J* 65:549-51 Ap '43

CHOLEIC acid

Attempted asymmetric syntheses employing choleic acids. C. C. Reid and J. M. Sturtevant. *Am Chem Soc J* 65:125 Ja '43

Oxidative degradation of 4-stigmasteryl methyl ether. B. Riegel, E. W. Meyer and J. Beiswanger. *Am Chem Soc J* 65:325-8 Mr '43

CHOLESTANEDIOL

Acyl migration in steroids. V. A. Petrow, O. Rosenheim and W. W. Starling. *Chem Soc J* 1935-9 Mr '43

Preparation and properties of the 7-epimeric cholestanediols-3(β),7. O. Wintersteiner and M. Moore. *bibliog Am Chem Soc J* 65:1503-7 Ag '43

CHOLESTENOL

Dehydration of the 7-epimeric 3(β)-acetoxycholestanols-7; some transformation products of γ -cholestenol. O. Wintersteiner and M. Moore. *bibliog Am Chem Soc J* 65:1507-13 Ag '43

CHOLESTENYL acetate

Dehydration of the 7-epimeric 3(β)-acetoxycholestanols-7; some transformation products of γ -cholestenol. O. Wintersteiner and M. Moore. *bibliog Am Chem Soc J* 65:1507-13 Ag '43

Oxidation products of α -cholestenyl acetate. O. Wintersteiner and M. Moore. *bibliog Am Chem Soc J* 65:1513-16 Ag '43

CHOLESTEROL

Cholesterol in the rayon industry. L. I. Conrad. *bibliog il Rayon* 23:675-6 N '42

Dehydration of cholesterol in liquid sulfur dioxide. R. H. Levin. *bibliog Am Chem Soc J* 65:627-8 Ap '43

CHOLESTEROL oxide

Catalytic reduction of cholesterol α -oxide. H. E. Staveland. *bibliog Am Chem Soc J* 64:2723-4 N '42

CHOLESTERYL aminobenzoate

Preparation of cholesteryl *p*-aminobenzoate. D. Kritchewsky. *Am Chem Soc J* 65:480 Mr '43

CHOLIC acid

Preparation of desoxycholic acid from cholic acid. A. W. Schneider and W. M. Hoeft. *Am Chem Soc J* 65:485 Mr '43

See also

Dehydrocholic acid

CHOLINE

Raman spectra of amino acids and related compounds; sarcosine, ethanolamine, choline, betaine and betaine derivatives. J. T. Edsall. *bibliog Am Chem Soc J* 65:1767-70 S '43

CHOLINESTERASE

New method of determination of the cholinesterase activity. A. Sack and E. A. Zeller. *Science* 97:449-50 My 14 '43

d-Tubocurarine chloride and choline esterase. A. R. McIntyre and R. E. King. *Science* 97:69 Ja 15 '43

Type of cholinesterase present in brain tissue. B. Mendel and H. Rudney. *Science* 98:201-2 Ag 27 '43

CHONDODENDRON tomentosum

Curare alkaloids from chondodendron tomentosum. O. Wintersteiner and J. D. Dutcher. *bibliog Science* 97:467-70 My 21 '43

CHONDRUS crispus. See Carrageen**CHORIOMENINGITIS. See Meningitis**

CHRISTIANITY and war. See War and Christianity

CHRISTMAS

Christmas travel curb was effective. *Ry Age* 114:169 Ja 9 '43

Nelson urges war plants to observe Christmas. *Comm & Fin Chr* 156:1982 D 3 '42

CHRISTMAS business

Holiday outlook; shop now for Christmas. *R. W. Babson. Comm & Fin Chr* 158:1806+ N 4 '43

PX mail order; camp and ship stores add catalog items for home folks. *Business Week* p28+ D 5 '42

CHRISTMAS cards

Treasury approves 10c war stamps on Christmas card idea. *il Ptr Ink* 201:20 D 11 '42

See also

Advertisements—

Christmas cards

Christmas printing

CHRISTMAS clubs

Mutual savings bank Xmas clubs at record. *Comm & Fin Chr* 156:2080 D 10 '42

N.Y. state savings bank Xmas club funds down. *Comm & Fin Chr* 156:2253 D 24 '42

War bonds for everybody; Union dime savings bank Christmas club plan. *Banking* 35:80 Ja '43

Xmas club members to get \$410,000,000. *Comm & Fin Chr* 156:1992 D 3 '42

CHRISTMAS gifts

If you're giving her perfume. *Consumers' Research Bul* 12:22-4 N '43

What the men overseas want for Christmas. *Adv & Sell* 36:102, 106 O '43

CHRISTMAS printing

Christmas greetings! to help stimulate your imagination and sales! *il Inland Ptr* 110: 52-3 N '42

CHRISTMAS trees

Yule firs scarce. *Business Week* p30+ O 23 '43

CHROMAMMINES. See Chromium compounds

CHROMATIN

Methods and instruments for the selective irradiation of chromatin. *S. Zamenhof. bibliog diags R Sci Instr* 14:17-21 Ja '43

CHROMATOGRAPHIC analysis

Action of bases on 1-diazoanthraquinone-2-sulphonate and its derivatives. *J. I. Lynas-Gray and J. L. Simonsen. Chem Soc J* p45-7 F '43

Azoyl derivatives of sugars and separation by chromatographic adsorption. *G. H. Coleman and C. M. McCloskey. bibliog Am Chem Soc J* 65:1588-94 Ag '43

Chromatography as a means of separating amino acids. *J. L. Wachtel and H. G. Cassidy. bibliog Am Chem Soc J* 65:665-8 Ap '43

Colored chromatograms with higher fatty acids. *M. M. Graff and E. L. Skau. bibliog diags Ind & Eng Chem Anal* ed 15:340-1 My 15 '43

Component glycerides of linseed oil; segregation by chromatography; the thiocyanogen value of linolenic acid. *F. T. Walker and M. R. Mills. bibliog Soc Chem Ind J* 62: 106-9 Jl '43

Determination of carotene in vegetable oils without saponification. *E. Bickoff and K. T. Williams. bibliog Ind & Eng Chem Anal* ed 15:268-8 Ap 15 '43

Determination of pure carotene in plant tissue; a rapid chromatographic method. *M. E. Wall and E. G. Kelley. bibliog Ind & Eng Chem Anal* ed 15:18-20 Ja 15 '43

Experimental study of chromatography. *H. Weil-Malherbe. Chem Soc J* p303-12 Jl '43

Methods for resolution of enantiomorphs; chromatographic adsorption. *H. B. Hass, T. de Vries and H. H. Jaffé. bibliog Am Chem Soc J* 65:1486-8 Ag '43

Physical-chemical method for determination of vitamins D in fish liver oils. *D. T. Ewing and others. bibliog Ind & Eng Chem Anal* ed 15:301-5 My 15 '43

Problems in chromatography and in colloid chemistry illustrated by leaf pigments. *H. H. Strain. bibliog diags J Phys Chem* 46: 1151-61 D '42

Theory of chromatography. *D. DeVault. Am Chem Soc J* 65:532-40 Ap '43

Theory of chromatography. *J. Weiss. Chem Soc J* p297-303 Jl '43

CHROMIC acid

Anodizing in chromic acid; abstract. *E. Finnie. Metals & Alloys* 16:1116+ D '42

Chromic acid anodizing; abstract. *L. G. Tubbs. Metals & Alloys* 18:114+ Jl '43

Dyeing chromic acid anodized aluminum; black finishes. *M. Darrin and L. G. Tubbs. bibliog il Metal Finishing* 41:550-2+ S '43

CHROMIC anhydride. See Chromium oxides

CHROMITE

Chrome resources of Cuba. *T. P. Thayer. diags maps U S Geol S Bul* 935-A:1-74, pl 1-20; pa 11 Supt. of doc. '42

Chromite and magnesite refractories. *G. E. Seil. Blast F & Steel Pl* 30:1304-5 N '42

Chromite and quicksilver deposits of the Del Puerto area, Stanislaus county, California. *H. E. Hawkes, jr., F. G. Wells and D. P. Wheeler. jr. plans maps U S Geol S Bul* 936-D:79-110, pl 10-11; pa 30c Supt. of doc. '42

Chromite deposits of Red Bluff bay and vicinity, Baranof island, Alaska. *P. W. Guild and J. R. Balsley, jr. maps U S Geol S Bul* 936-G:171-87, pl 21-2; pa 20c Supt. of doc. '42

Ferro-alloys metals, 1942. *F. Betz, jr. Eng & Min J* 144:72 F '43

Layered or banded chromite at Campo Formoso, Bafá, Brazil. *W. D. Johnston, jr. and H. Copper A. de Souza. bibliog il maps Econ Geol* 38:287-97 Je '43

Leached derivatives of arsenopyrite and chromite. *R. Blanchard. il Econ Geol* 37: 596-626 N '42

Maintenance of the furnace linings in large basic open-hearth tilting furnaces by the use of chrome ore, magnesite and serpentine. *A. Jackson. Engineering* 156:265 O 1 '43

Manganese, chromite, and molybdenum; private and government funds are being directed to production. *il Min Cong J* 29:226 F '43

Manitoba chromium find. *J. P. de Wet. Can Min J* 63:721-2 N '42

Mineral dressing of Oregon beach sands. *J. Dasher, F. Fraas and A. Gabriel. diags U S Bur Mines Rep of Invest* 3668:1-19 '42

Mining in Manitoba in 1942. *J. P. de Wet. il diags map Can Min J* 64:74-80 F '43

New type concentrator cuts chromite dressing costs. *J. B. Huttli. il diags Eng & Min J* 144:638-70 O '43

Operating the Grau chrome mine. *A. O. Hall. il Min Cong J* 29:16-17 Mr '43

Some refractory properties of Washington chromite. *H. Wilson, K. G. Skinner and T. L. Hurst. pls U S Bur Mines Rep of Invest* 3694:1-31 '43

Strategic materials from low-grade and complex domestic ores. *R. R. Sayers. il Chem Ind* 51:342-6 D '42

CHROMIUM

Chromium, a water and sewage problem. *D. W. Graham. bibliog Am Water Works Assn J* 35:159-64 F '43

Determination of iron in the presence of chromium and titanium with the Jones reductor. *F. S. Grimaldi, R. E. Stevens and M. K. Carron. bibliog Ind & Eng Chem Anal* ed 15:387-8 Je 15 '43

Hard, corrosion-resistant, slippery; conversion of chromium to essential machine-shop material. *F. P. Peters. il Sci Am* 169: 112-14 S '43

Analysis

Spot test for chromium. *W. O. Philbrook. il Metal Prog* 42:1035-7 D '42

Isotopes

Artificial radioactivity of Cr⁵⁰. *J. J. O'Connor, M. L. Pool and J. D. Kurbatov. bibliog Phys R* 62:413-16 N 1 '42

Prices

Metals reserve co. revises domestic chrome and manganese price schedules to simplify purchasing policy. *Eng & Min J* 144:91 Je '43

CHROMIUM alloys

Circuit-breaker castings; Mallory 3, a heat-treated chromium-copper alloy. L. B. Hunt. *Il Elec R (Lond)* 131:713-15 D 4 '42

See also

Chromium steel
Iron alloys—Chromium alloys

Iron alloys—Chromium manganese alloys

CHROMIUM chlorides

Hydrate isomerism in the hydrated chromic chlorides; preparation of triethylenediamine chromium(III) chloride from hexaquo chromium(III) chloride. L. E. Marchi and J. P. McReynolds. *Am Chem Soc J* 65:480-1 Mr '43

CHROMIUM compounds

Chemical constitution of the chrome azo dyes. K. L. Dorman. *tables Am Dyestuff Rep* 32:47-66 F 1 '43

Chromium conservation in the leather industry. E. R. Theis and F. O'Flaherty. *Can Chem & Process Ind* 27:13 Ja '43

Dyeing of wool with chrome dyes; the meta-chrome process. C. B. Stevens, F. M. Rowe and J. B. Speakman. *Soc Dyers & Col J* 59: 165-71 Ag '43

Photographic reviews; chemistry of chromi-um salts. J. S. Friedman. *Am Phot* 36:35-7 D '42; 37:42-4 F '43

Studies in the chromamines; preparation of luteo salts. C. L. Rollinson and J. C. Bailar, Jr. *bibliog Am Chem Soc J* 65: 250-4 F '43

CHROMIUM copper steel

Cypriotic steels; acid-resisting properties; abstract. W. H. Hatfield. *Chem Age (Lond)* 48:482 My 1 '43

CHROMIUM cyanide

Oxidation potential of the chromocyanide-chromocyanide couple and the polarography of the chromium cyanide complexes. D. N. Hume and I. M. Kolthoff. *bibliog Am Chem Soc J* 65:1897-1901 O '43

CHROMIUM halides

Factors influencing the course and mechanisms of Grignard reactions; the effect of metallic halides on the reaction of Grignard reagents with vinyl halides and substituted vinyl halides. M. S. Kharasch and C. F. Fuchs. *Am Chem Soc J* 65:504-7 Ap '43

CHROMIUM manganese steel

High-manganese stainless steels; correlated abstract. D. J. Mack. *bibliog Il Metals & Alloys* 18:506-12 S '43 (to be cont)

Salt bath heat treatments for emergency steels. E. I. Valyi, tr. *diags Iron Age* 151: 60-2 Je 24 '43

CHROMIUM metallurgy

Chrome-X; product to replace ferrochrome. *Chem Age (Lond)* 47:407 N 7 '42

New type concentrator cuts chromite dressing costs. J. B. Huttli. *Il diags Eng & Min J* 144:68-70 O '43

Oregon chrome sands yield to magnetic separation. J. B. Huttli. *flow sheets Il Eng & Min J* 144:62-5 S '43

Strategic materials from low-grade and complex domestic ores. R. R. Sayers. *Il Chem Ind* 51:842-6 D '42

CHROMIUM mines and mining**California**

Chromite and quicksilver deposits of the Del Puerto area, Stanislaus county. H. E. Hawkes, Jr., F. G. Wells and D. P. Wheeler, Jr. *plans maps U S Geol S Bul* 936-D:79-110, pl 10-11; pa 30c Supt. of doc. '42

Operating the Grau chrome mine. A. O. Hall. *Il Min Cong J* 29:16-17 Mr '43

Cuba

Chrome resources of Cuba. T. P. Thayer. *diags maps U S Geol S Bul* 935-A:1-74, pl 1-20; pa \$1 Supt. of doc. '42

Oregon

Oregon chrome sands yield to magnetic separation. J. B. Huttli. *flow sheets Il Eng & Min J* 144:62-5 S '43

CHROMIUM molybdenum steel

Aircraft welders need special training; welding aluminum and chromium molybdenum steel. *Il Am Mach* 87:112-13 My 13 '43

Improved method reduces costs and boosts output in drawing chromium-molybdenum steel; Walter Kidde & co. production of high-pressure cylinders for carbon dioxide and oxygen. I. H. Such. *Il Steel* 113:90-1+ N 1 '43

Improved 12 per cent chromium steel containing molybdenum. *Il Metals & Alloys* 18: 55-62 Jl '43; Abstract. *Oil & Gas J* 42:70 O 7 '43

Welding of 4 to 6% chromium molybdenum titanium steel; resultant hardness. E. H. Wyche. *diags Welding J* 22:sup142-4 Mr '43

Testing

Corrosion of unstressed specimens of alloy steel by steam at temperatures up to 1800 F. G. A. Hawkins and others. *Il A S M E Trans* 65:301-7; Discussion. 307-8 My '43

Creep resistance of superheater tube steels in tube and bar form. J. A. Jones and W. E. Bardgett. *diags Engineer* 176:6-8 Jl 2 '43

CHROMIUM nickel steel

Arc welding tool steel with stainless electrodes. H. W. Rushmer. *Il diags Iron Age* 151:51-5 Mr 11 '43

Balancing the composition of cast 25 per cent chromium-12 per cent nickel type alloys. J. T. Gow and O. E. Harder. *Il diags Am Soc for Metals Trans* 30:855-919; Discussion. 919-35 D '42

Cyclic temperature acceleration of strain in heat resisting alloys. G. R. Brophy and D. E. Furman. *Il diags Am Soc for Metals Trans* 30:1115-30; Discussion. 1130-8 D '42

Mechanical properties of arc-welded chromium-nickel steel at low temperatures. V. S. Chernyak, Z. I. Golubeva and I. A. Steinberg. *Il diags Welding J* 22:sup437-8 S '43

Metallographic examination of 18 per cent chromium, 8 per cent nickel steel. *Il Am Soc T M Proc* 42:134-43 '42

Role of nitrogen in 18-8 stainless steel. H. H. Uhlig. *bibliog Il Am Soc for Metals Trans* 30:947-80; Discussion. 980-2 D '42

Testing

Huey corrosion test for 18-8 steel. F. Meunier and H. M. Schnadt. *Metal Prog* 42:564+ O '42; Discussion. J. H. G. Monypenny. 44:104-5 Jl '43

Mechanical properties of austenitic stainless steels. R. A. Lincoln and W. H. Mather. *J Aeronautical Sci* 10:253-60+ O '43

CHROMIUM ores

Chrome ore and chrome magnesite; steel plant refractories. J. H. Chesters. *Il Iron Age* 152:68-71 N 11 '43 (to be cont)

Rustless makes stainless steel from chrome ore by direct reduction. *Blast F & Steel Pl* 31:238 F '43

Turkish chrome; supplies for Britain and Germany in question. *Chem Age (Lond)* 48:98 Ja 16 '43

See also

Chromite

CHROMIUM oxides

Estimation of carbonyl groups in chromic anhydride oxystarch and oxycellulose by means of hydroxylamine. E. K. Gladding and C. B. Purves. *bibliog diags Paper Tr J* 116:26-31 Ap 8 '43; Same cond. *Paper Ind* 25:306-9 Je '43

See also

Chromite

CHROMIUM plating

Chrome plating extends pump-liner life. W. Meinecke. *Power* 87:762 N '43

Chrome plating improves cutting tools; abstract. D. G. Baird. *Management R* 32:342-3 S '43

Chrome plating various types of tools; abstract. A. Lundbye. *Iron Age* 151:62 Ap 1 '43

Chromium plate, its thickness and finish requirements. T. G. Coyle. *Steel* 113:113+ S 6 '43; Excerpts. *Iron Age* 152:72-3 Ag 5 '43; *Machine Design* 15:184+ S '43

Chromium-plated duralumin; abstract. A. Beerwald. *Metals & Alloys* 18:558+ S '43

Chromium plating molds. A. W. Logozzo. *Il Mod Plastics* 21:100, 146+ S '43

CHROMIUM plating—Continued

- Chromium plating of dies and tools. D. A. Cotton. *Il Metal Finishing* 41:343-7 Je '43
- Cylinder and ring life with porous chromium-plated rings. T. C. Jarrett. *Il Mech Eng* 65:633-5 S '43
- Doulton dechromator; economy in plating solutions. *Il Chem Age (Lond)* 48:484 My 1 '43
- Hard chrome plating; abstract. A. Fletcher. *Iron Age* 152:71 JI 8 '43
- Hard chrome plating for wear resistance and salvage. S. H. Brams. *Il Iron Age* 151:56-7+ F 4 '43
- Hard chromium and the perishable tool shortage. J. C. Bogle. *Metal Finishing* 41:76 F '43
- Hard, corrosion-resistant, slippery; conversion of chromium to essential machine-shop material. F. P. Peters. *Il Sci Am* 169:112-14 S '43
- Is chromium plating the answer to Diesel liner and ring wear? abstract. R. Pyles. *Il Power* 37:522-3 Ag '43
- Lundbye process can produce 300% increase in tool life; Lundbye chromium-plating process. G. W. Birdsall. *Il Steel* 112:100-2, 104+ Je 14; 84-6, 88+ Je 28 '43
- Porous chrome; abstract. H. Van der Horst. *Iron Age* 152:71-2 JI 8 '43
- Preparation of surfaces for hard chromium plating. A. W. Logozzo. *Il Metal Finishing* 41:15-18 Ja '43
- Racking in hard chrome plating; abstract. A. W. Logozzo. *Iron Age* 152:72-3 JI 8 '43
- Reclaiming precision gages by accurate control of chromium plated deposits. W. Irby, A. T. Clarke and F. R. Grover. *Il Diags Steel* 112:86-8, 90+ Ap 26 '43
- Results obtained by Pontiac with chromium-plated tools. *Mach* 49:197 JI '43
- Tool life increased by improved chromium plating process; relieving inherent hydrogen embrittlement through use of oil treatment. T. E. Lloyd. *Il Iron Age* 150:43-9 D 10 '42
- Tools revived; hard chrome-plating. *Business Week* p74+ Mr 6 '43

CHROMIUM poisoning

- Safe limits on mercury and chromates in air work places. P. A. Neal and F. H. Goldman. *Il Ind Stand* 14:79-80 Mr '43; Abstract. *Nat Safety* N 47:38 Je '43

CHROMIUM steel

- Ammonia converter of welded 5% chromium steel. J. Schuyten. *Il Diags Metal Prog* 43: 218-23 F '43; Same cond. *Nat Pet N* 35 pt 2: R406, R408-9 S 1 '43
- Diagram of nitrogen-bearing steels; abstract. H. Krainer and O. Mirt. *Metals & Alloys* 17:1064 My '43
- Heat exchanger restored to service by welding on partial baffles. W. H. Parlette. *Il Nat Pet N* 35 pt 2:R353 Ag 4 '43
- Improved 12 per cent chromium steel containing molybdenum. *Il Metals & Alloys* 18: 55-62 JI '43
- Iron Age NE steel; standard steel chart. J. I. Butzner, comp. *Iron Age* 151:supp My 6 '43
- Stainless steels; machining steels of high resistance to rust, acid and heat. *Automobile Eng* 33:419-20 O '43

See also

Chromium molybdenum steel

Chromium nickel steel
Steel, Stainless

Testing

- Tempering of two high-carbon high-chromium steels. O. Zmeskal and M. Cohen. *bibliog Il Am Soc For Metals Trans* 31:380-408; Discussion. 408-22 Je '43

CHROMIZING

- Steel chromizing. C. M. Cosman. *bibliog Il diag Iron Age* 150:49-53 N 26 '42

CHROMOSOMES

See also

Chromatin

CHRONOGRAPH

- Measuring muzzle velocity. A. F. Macconochie. *Il Diags Steel* 113:206-8, 210+ O 11 '43

CHRYSENE

- 1,2,3,4-dibenzphenanthrene and its derivatives; synthesis with chrysene as starting material. F. Bergmann and H. E. Eschinazi. *bibliog Am Chem Soc J* 65:1413-17 JI '43
- Preparation of derivatives of chrysene by means of the Robinson-Mannich base synthesis of unsaturated ketones. A. L. Wilds and C. H. Shunk. *Am Chem Soc J* 65:469-75 Mr '43
- Ultraviolet absorption spectra of some derivatives of chrysene. R. N. Jones. *bibliog Am Chem Soc J* 65:1815-18 O '43

CHRYSLER corporation

- Annual report. *Comm & Fin Chr* 157:989-90 Mr 15 '43
- Chrysler forging ahead. *Barron's* 23:1 Ag 23 '43
- Chrysler's earnings prospects. H. Lawrence. *Barron's* 23:6+ Mr 8 '43
- Peace-time leaders. *Mag of Wall St* 72:507 Ak 21 '43
- Stocks with three-way profit prospects. *Mag of Wall St* 71:708 Ap 3 '43
- Thumbnail stock appraisal. *Mag of Wall St* 71:289 D 26 '42
- To erect large war plant. *Comm & Fin Chr* 156:2304 D 28 '42

CHUCKS

- Boring chuck for thin walled cylinder. *Il Iron Age* 150:59 D 3 '42
- Boring chuck retains cylinder roundness. C. T. Packer. *Il Ry Mech Eng* 117:92-3 F '43
- Chuck for holding, disk-shaped work. *diag Mach* 49:160 Ja '43
- Grinder chuck jaws made interchangeable. C. Sleister. *Il Am Mach* 87:110 Je 10 '43
- Impression-cast chuck jaws made by casting Kirsites "A" alloy about a sample forging. H. F. Lenz. *Il Diags Iron Age* 152:54-7 Ag 5 '43
- Laminated chuck used for grinding gears. R. C. Ormarod. *diag Am Mach* 87:111 JI 22 '43
- Repetition chuck brought out by Hills (patents), ltd. *Il Engineer* 175:338 Ap 23 '43
- Suction chucking speeds grinding. *Diags Metal Finishing* 41:574 S '43
- Turret lathes. *Il diag Automobile Eng* 33:73-8 F '43

CHUCKS, Magnetic

- Production surface grinding to micro-inch finish; machine requirements; magnetic chuck usage; proper selection of coolant. H. J. Chamberland. *Il Iron Age* 152:54-6 N 11 '43

CHURCH and war. See War and Christianity**CHURCH architecture**

- New buildings for 194X: church. *Il plans Arch Forum* 72:82-3 My '43
- Religious buildings; study of church design, pre-war and postwar. *Il Diags plans Arch Rec* 93:69-84 Mr '43

CHURCH life insurance corporation

- Church pension fund affiliates directors. *Comm & Fin Chr* 157:1981 My 27 '43
- Results for 1942. *Comm & Fin Chr* 157:519 F 8 '43

CHURCH pension fund

- Annual report. *Comm & Fin Chr* 158:51 JI 5 '43; East Underw 44:11 Je 18 '43
- Dickey elected treasurer of Church pension fund. *Comm & Fin Chr* 158:1518 O 14 '43

See also

Church life insurance corporation

CHURCH properties fire insurance corporation

- Church pension fund affiliates directors. *Comm & Fin Chr* 157:1981 My 27 '43

CHURCHES

- Copper roofing for church and school. *Il diag Sheet Metal Worker* 34:25-6 F '43

See also

Cathedrals
Church architecture

CHURCHILL, Winston Leonard Spencer, 1874-

- Declaration of purpose; Mr Churchill's speech. *Economist* 144:381-3, 386-7 Mr 27 '43

CHUTES

- Cage chutes for drawn parts. R. I. Miner. *Diags Am Mach* 87:100-2 Je 24 '43

CHUTES—Continued

Flow in steep chutes with special reference to self-aeration, by R. Ehrenberger; tr. and abstr. by E. F. Wilsey. *diags Am Soc C E Proc* 69:sup31-41 S '43
 Laying out rectangular ducts and fittings; design and development of compound spiral duct to act as conveyor chute. O. W. Kothe. *diags Sheet Metal Worker* 33:29-30 D '42

New coal chute that eliminates stoker-hopper segregation is easy to make; patent. P. B. Richardson and M. R. Boye. *diags Power* 37:507-9 Ag '43

CIGAR boxes

Paper cigar box. *il Mod Packaging* 16:49 JI '43

CIGAR industry and trade

Cigar comes back. *Business Week* p76 D 12 '42

Cigars; survey of the industry. F. LaClave. *Ptr Ink* 205:17-19, 38+ N 5 '43

Advertising

Network radio builds distribution by selling \$1.80 item by mail order; pulls orders from 47 states, opens 140 new jobbing accounts for Melo Crown Stogies. W. J. Frankston. *Sales Management* 52:36+ JI 15 '43

CIGAR lighters

All-America package competition award; Cummer products company Emerge lighter fluid. *il Mod Packaging* 16:98+ Ap '43
 Spouted closure; lighter fluid container. *il Mod Plastics* 20:70 Ja '43

CIGARET industry and trade

Costly record; cigarette draft on leaf inventories; how cigarette brands stand. *Business Week* p82+ O 30 '43

Advertising

F.T.C. protests Old Gold claims. *il Ptr Ink* 202:62 Mr 12 '43

War brings new grouping of markets; war workers and service men; Hinds lotion and Camels posters. P. W. Combs. *il Ptr Ink* 203:52+ Ap 30 '43

Statistics

Cigarette story of 1942. G. R. Dunhill. *Adv & Sell* 36:32+ Mr '43
 253½ billion cigarettes last year; up 13.2 per cent. H. M. Wooten. *il Ptr Ink* 202:12-15+ Ja 29 '43

War spurs shift in smoking habits; graph. *Business Week* p32 O 2 '43

Taxation

Smoky East. *Business Week* p88+ My 22 '43

Great Britain

Cigarette manufacturers pool brands in United Kingdom. *For Comm W* 10:37 F 27 '43

CIGARET lighters. See Cigar lighters**CIGARET paper**

Fresh, but dry; Marvels with new wrapper, humectant, water-repellent paper. *Business Week* p75+ Je 26 '43

CIGARET rolling machines**Rating**

Cigarette-rolling machines. *il Consumers' Research Bul* 11:11-13 D '42

CIGARETS

All-America package competition award; Axton-Fisher tobacco co. *il Mod Packaging* 16:102+ Ap '43

Cigarettes; unique place in war economy. *Economist* 143:584 N 7 '42

Fresh, but dry; Marvels with new wrapper, humectant, water-repellent paper. *Business Week* p75+ Je 26 '43

How cigarette companies save cellophane. *il Mod Packaging* 17:74 S '43

CIMARRON mountains

Geology of the Cimarron range, New Mexico. J. F. Smith, Jr. and L. L. Ray. *bibliog diag map Geol Soc Bul* 54:891-924, pl 1-6 JI '43

CINCHONA

BEW flays RFC on cinchona program. *Oil Paint & Drug Rep* 144:3+ JI 5 '43

Cinchona cultivation pact signed by Costa Rica—United States. *Oil Paint & Drug Rep* 143:3 Mr 22 '43

Cinchona in Ceylon; what are the prospects? *For Comm W* 12:24 Ag 7 '43

Cinchona; new source in East Africa. *For Comm W* 13:29 O 23 '43

Cinchona purchase pact signed with Ecuador. *Oil Paint & Drug Rep* 143:4 Mr 15 '43

Cinchona seeds from Philippines to be planted in Central America. *Chem & Eng N* 21:1000 Je 25 '43

Maryland quinine; seedlings ready for air shipment to Latin America. *il Business Week* p32+ O 23 '43

Mexico has large planting of cinchona trees. *Chem & Met Eng* 50:224 My '43

Quinine progress in the war program. J. Jones. *Oil Paint & Drug Rep* 144:3+ JI 12 '43

CINCHONA alkaloids

Cinchona alkaloids in pneumonia; some ethers of apocuprene. R. S. Tipson, M. A. Clapp and L. H. Cretcher. *bibliog Am Chem Soc J* 65:1092-4 Je '43

See also

Quinine

CINCHONINALDEHYDE

Condensation reactions of cinchoninaldehyde and quinaldinaldehyde. H. Kaplan and H. G. Lindwall. *Am Chem Soc J* 65:927-8 My '43

CINCINNATI

See also

Gas supply—Cincinnati

Bridges

Cincinnati eliminates dangerous crossings. *il map Eng N* 130:156-7 F 4 '43

Industries

Some Cincinnati industries. A. O. Snoddy. *Am Inst Chem Eng Trans* 38:1037-47 D '42

Streets

Cincinnati expressway soon to be completed. *il map Eng N* 131:436-7 S 16 '43
 Maintaining 750 miles of streets and alleys; Cincinnati's wartime street program. C. E. Brokaw. *il Roads & Sts* 86:35-9 Ag '43

CINCINNATI gas and electric company

Merger approved by SEC. *Comm & Fin Chr* 156:1860 N 23 '42

CINCINNATI stock exchange

Weekly record. Published in weekly Monday numbers of Commercial & financial chronicle

CINCINNATI university

Centennial of the observatory of the University of Cincinnati. *Science* 98:359 O 22 '43

Grants for war research to the University of Cincinnati. *Science* 96:552-3 D 18 '42

Training for women in aeronautical engineering at the University of Cincinnati. *Science* 97:548-9 Je 18 '43

CINDER concrete. See Concrete—Cinder concrete

CINNABAR

Chromite and quicksilver deposits of the Del Puerto area, Stanislaus county, California. H. E. Hawkes, Jr., F. G. Wells and D. P. Wheeler, jr. *plans maps U S Geol S Bul* 936-D:79-110, pl 10-11; pa 30c Supt. of doc. '42

Quicksilver deposits near the Little Missouri river, Pike county, Arkansas. D. Gallagher. *diag maps U S Geol S Bul* 936-H:189-219, pl 23-35; pa 55c Supt. of doc. '42

Quicksilver deposits of the Parkfield district, California. E. H. Bailey. *U S Geol S Bul* 936-F:143-69, pl 17-20; pa 35c Supt. of doc. '42

Wild Horse quicksilver district, Lander county, Nevada. C. H. Dane and C. P. Ross. *maps U S Geol S Bul* 931-K:269-78, pl 45-7; pa 25c Supt. of doc. '42

CINNAMIC acid

Addition of dienes to certain di-o-methoxy-substituted cinnamic acids. R. Adams and R. B. Carlin. *bibliog Am Chem Soc J* 65:360-3 Mr '43

CINNAMIC acid—Continued

Addition of dienes to coumarin and to certain substituted cinnamic acids. R. Adams and others. *bibliog* Am Chem Soc J 65:356-60 Mr '43

Electrolytic reduction of cinnamic acid; a new preparative method for β -diphenyladipic acid. C. L. Wilson and K. B. Wilson. *bibliog* Electrochem Soc Trans 84 (preprint 4):25-35 O '43

Friedel-Crafts reaction with cinnamic, crotonic, and 8-chlorocrotonic acids. C. F. Koelsch, H. Hochmann and C. D. Le Claire. Am Chem Soc J 65:59-60 Ja '43

Friedel-Crafts reactions of 9-phenyl-dodecahydrophenanthrene-10-carboxylic acid. H. E. Eschlinazi and F. Bergmann. Am Chem Soc J 65:1411-12 J '43

Photochemical dimerization of *trans*-cinnamic acid. H. I. Bernstein and W. C. Quimby. *bibliog* Am Chem Soc J 65:1845-6 O '43

Synthesis of cinnamic acids from methyl acrylate or acrylonitrile and diazonium salts. C. F. Koelsch. Am Chem Soc J 65:57-8 Ja '43

CIRCLES

Calculating dimensions of segments of circles; data sheet. W. W. Johnson. *diags* Machine Design 15:255-6 O '43

Circle problem. H. Jonas. *Product Eng* 14:457 J '43; *Solutions*. 14:600-1 S '43

Length of chord for laying out equal spacings around a circle; data sheets. J. I. Hommel. *Mach* 49:205 Ap; 177 My '43

CIRCUS

Circus defrilled. *Business Week* p28 Ap 10 '43

Gas salesman doubles as calliope player; J. B. Carlisle, member of Gainesville community circus. K. Ford. *il Gas Age* 90:16+ D 31 '42

CITIES and towns

Cost of living in cities in relation to their size and latitude. E. L. Thorndike and E. Woodward. *Am Stat Assn J* 38:238-41 Je '43

Land-use control in the urban fringe of Portland, Oregon. F. Arpke. *map J Land & Pub Util Econ* 18:468-80 N '42

Planned communities; a speculative survey of their future. R. Wank. *il Arch Rec* 93:44-8 F '43

Socio-economic conditions and intercency variations of electric use. H. G. Knaf. *J Land & Pub Util Econ* 18:431-46 N '42; Same. *Edison Elec Inst Bul* 11:36-44 F '43

See also

City planning	Municipal bonds and
Market areas	other headings be-
Metropolitan districts	ginning Municipal
	Rapid transit

Growth

San Diego raises yellow chip fund to finance post-war plans. *Sales Management* 52:40+ Je 15 '43

Survival of cities; wartime growth. *Arch Forum* 78:35-6 Mr '43

Industries

Blueprint for action; Community action for postwar jobs & profits. *Adv & Sell* 36:88 O '43

Keep customers; Stillwater war industries, inc. *il Business Week* p32+ N 6 '43

Small town as base for post-war economic security; Commerce department working plan for community action. G. A. Nichols. *Ptr Ink* 204:23-4, 38+ S 17 '43

See also subdivision Industries under names of cities, e.g. Cincinnati—Industries; Detroit—Industries; Memphis, Tennessee—Industries; New Castle, Pennsylvania—Industries; Peoria, Illinois—Industries

United States

Estimated intercency differences in cost of living, March 15, 1943. *Monthly Labor R* 57:803-5 O '43

How WMC classifies cities; labor stringency determines their rank. *Business Week* p72 Ag 7 '43

U.S. population shifts resulting from the war; abstracts. P. M. Hauser. *il Am Gas Assn Mo* 25:87-90+ Mr '43; *Business Week* p19-20 F 13 '43

War and Main street; population prospects for 137 metropolitan areas. C. Vogel. *Barron's* 23:6 N 8 '43

CITIES service company

Annual report. *Comm & Fin Chr* 157:1740 My 10 '43

Changes effected. *Comm & Fin Chr* 158:288 J '43

Descriptions of holding companies. O. Ely. *Pub Util* 31:562-3 Ap 29 '43

May elect to dispose of utility business and keep oil units. *Comm & Fin Chr* 157:1077 Mr 22 '43

CITIES service power and light company

Begins integration. W. T. Hyde, jr. *Barron's* 23:7-8 O 18 '43

Files plan on subsidiaries. *Comm & Fin Chr* 158:1344 O 4 '43

Rehearing denied by SEC. *Comm & Fin Chr* 158:1129 S 20 '43

Seeks authority for sale of Public service co. of Colorado stock. *Comm & Fin Chr* 158:1528 O 18 '43

System to be dissolved; SEC orders company to limit operations to integrated set-up. *Comm & Fin Chr* 158:767 Ag 23 '43

CITIZENS defense corps

Organization of gas defense in the United States Citizens defense corps. E. W. Scott. *J Chem Educ* 20:273-5 Je '43

CITIZENSHIP

Citizenship cannot be cancelled because of membership in Communist party. *Comm & Fin Chr* 158:31 J '43

CITRAL

Studies in the polyene series; condensation of 3-methylpent-2-en-4-yne (1:2-dimethylvinylacetylene) with butaldehyde, crotonaldehyde, and citral; anionotropic rearrangements with vinylacetylenecarbinols derived from $\alpha\beta$ -unsaturated aldehydes. I. M. Heilbron and others. *Chem Soc J* p265-8 Je '43

Vitamin E; synthesis of 1-chloro-3,7,11,15-tetramethylhexadecanol-3, and its condensation with trimethylhydroquinone to form α -tocopherol. L. I. Smith and J. A. Sprung. *bibliog* Am Chem Soc J 65:1276-83 J '43

CITRIC acid

Citric acid allocated. *Oil Paint & Drug Rep* 143:5 Je 7 '43

Citric acid cycle; sugar and fat-breakdown in tissue metabolism. F. L. Breusch. *bibliog* Science 97:490-2 My 23 '43

Relation between the urinary excretion of citric acid and calcium; its implications for urinary calcium stone formation. E. Shorr and others. *bibliog* Science 96:587-8 D 25 '42

Storage of synthetic citrus powders; caramelization by citric or tartaric acid and various sugars at high temperatures. W. E. Isaac. *il Ind & Eng Chem* 35:470-4 Ap '43

CITRINE, Sir Walter McLennan, 1887-

Portrait. *Business Week* p80 Ja 9 '43

CITRONELLOL

Vitamin E; long chain aliphatic compounds with recurring isoprene units. L. I. Smith and G. F. Rouault. *bibliog* Am Chem Soc J 65:745-50 My '43

CITRUS fruit

Chemical industries of Sicily. A. H. Bennett. *Chem & Ind* 62:318-21 Ag 21 '43

Citrus family. *Science* 97:sup8 F 12 '43

Citrus-fruit situation, Egypt. *For Comm W* 12:35-6 Ag 21 '43

Palestine's citrus. *Economist* 145:238 Ag 21 '43

Spray residues of tartar emetic on citrus leaves; determination by iodometric titration. R. L. Busbey and R. A. Fulton. *Ind & Eng Chem Anal* ed 15:37-8 Ja 15 '43

Sunkist enjoyed biggest year; healthful qualities stressed. *Ptr Ink* 202:18 Ja 8 '43

See also

Grapefruit
Oranges

By-products

Sunkist research men test new citrus by-products. *Sales Management* 52:41-2 Ja 15 '43

Using all but the smell; off-size citrus fruits and cannery wastes. H. M. Wright. *il Sci Am* 168:168-70 Ap '43

CITRUS fruit—Continued**Cleaning**

Sudser saves soap in washer; compressed air discharges into soap solution to form suds which falls onto revolving brushes to clean citrus fruit. I. Feinberg. diag Food Ind 15:61 Ja '43

Statistics

Citrus fruits, 1938-1941. Survey of Our Business 1942 Sup p117 [supplemented in monthly numbers]

CITRUS fruit juices

Concentrating citrus juices by the vacuum method. J. L. Heid. bibliog diags Food Ind 15:62-4+ My; 64-6+ Je '43

Preservation of citrus juices with sulphurous acid. A. W. E. Downer. bibliog Soc Chem Ind J 62:124-7 Ag '43

Two methods for dehydrating citrus juices; spray drying and sublimation of moisture from frozen state. R. Holzcker. il diags Food Ind 15:62-3 Ag '43

CITY halls. See Municipal buildings**CITY planning**

Analyzing obsolescent neighborhoods; sampling technique by which Syracuse is accumulating background data for redevelopment and reconstruction plans. W. P. Crane. plans Arch Forum 79:120-2 O '43

Britain's plans are bold. D. Haskell. il diags plans map Arch Rec 93:42-9 Ap '43

Building's postwar pattern; with survey by states and cities. Arch Forum 77:70-2 N '42

Cities increase postwar planning. Eng N 131:206 Jl 29 '43

Cities plan for post-war. G. L. Merton. Mag of Wall St 73:24-5+ O 16 '43

City planning agencies playing important part in war effort. Eng N 130:364 Mr 11 '43

City planning; battle of the approach, shall it include strategy and tactics, or only tactics? il Fortune 28:164-8+ N '43

Electricity and town planning; railways part in London reconstruction scheme. diags map Electrician 131:54-5 Jl 16 '43

End of the great west? il map Arch Forum 79:51-2 Ag '43

Engineer, the architect, and the surveyor in town and country planning. H. J. Manzoni. Engineer 176:303-4 O 15 '43

Fundamentals of land planning; areas of agreement and disagreement on city and regional planning. M. L. Colean. Arch Forum 79:66-8+ O '43

Housing project, Bellmawr, N.J.; comments by the architects on planning the community. il diag plans Arch Forum 78:74-80 Ja '43

Large scale postwar plan proposed for Detroit by civic design group. map Eng N 131:497 S 30 '43

London sees the postwar city. W. G. Bowman. Eng N 131:123 Jl 15 '43

Municipal control of streets for new developments. F. E. Harley. il diag Pub Works 74:26, 28-9 Ap '43

New buildings for 194X in relation to plan of a hypothetical town of 76,000; city plan and traffic diagram. Arch Forum 72:70 My '43

Outlines of postwar patterns. E. Goble. Arch Rec 92:41-6+ N '42

Plan for London. map Engineer 176:46-8, 64-6 Jl 16-23 '43

Planned communities; a speculative survey of their future. R. Wank. il Arch Rec 93:44-8 F '43

Planning for Chicago after the war. A. Lindell; E. Woods; H. Hoyt. map W Soc E J 48:117-26 S '43

Planning principles applied in wartime; town for Willow Run workers. T. B. Augur. plans Arch Rec 93:72-7 Ja '43

Planning the postwar community. T. W. Mackesey and G. D. Clarke. il plan Arch Rec 93:78-82 Ja '43

Planning with you. il plan Arch Forum 79:38-4, 65-80 Ag '43

Plea for planning. M. L. Colean. Arch Forum 78:94+ F '43

Political art of planning. J. Hudnut. il Arch Rec 94:44-8 O '43

Poor Richard and blight. A. M. Greenfield. Arch Forum 79:42-3 Jl '43

Postwar city planning projects now underway. Eng N 130:820 Je 3 '43

Postwar housing program for urban areas. H. Bartholomew. il Civil Eng 13:276-8 Je '43

Postwar planning begins at home. Pub Util 31:638-42 My 13 '43

Post-war rebuilding of cities called challenge to private enterprise. A. M. Greenfield. Comm & Fin Chr 157:1966 My 27 '43

Practical planning exhibition. Engineer 176:287-8 O 8 '43

Program for city reconstruction. W. Gropius and M. Wagner. il plans maps Arch Forum 79:75-86 Jl '43

Questions for planners. C. W. Killam. Arch Rec 94:30+ Ag '43

Redevelopment project for New York; 98th Street crossway, demonstration in redevelopment. il plans Arch Forum 79:123-9+ O '43

San Diego raises yellow chip fund to finance post-war plans. Sales Management 52:40+ Je 15 '43

Satellite town for the Detroit area; proposal for a complete residential community of 15,000. il plans Arch Forum 79:91-9 O '43

Shall we ration crowding? F. J. Adams. Tech R 45:363-70+ My '43

Subdivision planning standards; time-saver standards. plan Arch Rec 93:84-5 Ja '43

Syracuse tackles its future. il map Fortune 27:120-3+ My '43

Three for rebuilding: Edward Hopkinson, Jr. Nicola Giulii, George E. Evans. Arch Forum 79:108+ S '43

Toward post-war planning for Yorkville. R. Tough and S. M. Robison. maps J Land & Pub Util Econ 18:486-94 N '42

Town of Willow Run; civic center and proposed neighborhood units. il plans Arch Forum 78:37-54 Mr '43

Town planning charter; abstract. H. W. Healy. Engineer 175:251 Mr 26 '43

Transport in the new London; editorial. Engineering 156:71-2 Jl 23 '43

Urban objectives. F. M. Babcock. Arch Forum 77:35+ D '42

Urban planning and public opinion; study by Bureau of urban research at Princeton university. C. M. Jones. J Land & Pub Util Econ 19:87-9 F '43

Urban redevelopment acts adopted in five states. Eng N 131:504 S 30 '43

Urban redevelopment corporations. A. C. Holden. J Land & Pub Util Econ 18:412-22 N '42

Would protect central business districts in plan for rebuilding of blighted areas. Comm & Fin Chr 158:34 Jl 1 '43

See also

Airports

Building laws and regulations

Housing

Housing surveys

Neighborhood planning

Regional planning

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Streets

Zone system

New York zoning committee disbands, objectives successfully accomplished; other cities take new actions on zoning commissions, laws. Eng N 129:815 D 10 '42

CIVIL aeronautics administration

Administrator Stanton. E. H. Forbes. Air Transport 1:93-5 S '43 (to be cont)

CAA; charged with the safety of aircraft and planning of radio networks and devices. il Radio N 29:100-30+ Je '43

Engineering the airways; problem is to handle traffic of 300,000 planes within three years after the war. il plan Fortune 28:128-33+ N '43

Technical functions and responsibilities of the Civil aeronautics administration. W. A. M. Burden and others. Aeronautical Eng R 2:7+ S '43

CIVIL aeronautics board

CAB defines its control over lines owned by ground carriers. Aviation N 1:7-8 S 6 '43

CAB examiners preparing to handle flood of route cases. Aviation N 1:35 Ag 2 '43

Federal airlines pose problems; Nation's post-war transport system. J. H. Frederick. il Aviation 42:227, 229+ My '43

CIVIL aeronautics board—Continued

Government reviews airline advertising expenditures. J. H. Frederick. *Ptr Ink* 203: 62+ Ap 2 '43; Reply (Civil aeronautics board defends right to set airline expenditures). L. W. Pogue. *Ptr Ink* 203:42 Ap 23 '43

Officials of CAB praise data presented at feeder investigation. B. Frederick. *Aviation* N 1:27-8 N 1 '43

CIVIL air patrol

CAP gets paid; Cleveland war plants pay retainers. *Business Week* p54 D 12 '42
CAP is transferred to War department. *Aviation* 42:245 Je '43

Civil air patrol is transferred to War department. *Civil Aero J* 4:73 Je 15 '43

Civil air patrol; radio has played an important part. K. K. Hoyt. *il Radio* N 29: 147-8+ Je '43

Completes year of service. E. L. Johnson. *il Aviation* 41:250-2 D '42

How the civil air patrol is serving the Nation at war. *il Aero Digest* 43:120+ J '43

Junior CAP aids young leaders; aviation and military training to outstanding high school students. G. Slack. *il Aviation* 42:237, 239+ J '43

Parachute delivery of vitally needed small parts. *il Aero Digest* 43:219 J '43

CIVIL engineering

Above and under ground; incidents from a long engineering experience around New York. J. H. Myers. *il diag plan Civil Eng* 13:377-80 Ag '43

American airbases across Africa. E. R. Littler and W. A. Creamer. *il Eng N* 130:216-18 F 11 '43

American society of civil engineers annual meeting, New York, Jan. 20-21. *Eng N* 130: 105, 109-12 Ja 28 '43

American society of civil engineers 73d annual convention, Los Angeles, July 28-29. *Eng N* 131:225-6+ Ag 5 '43

Civil engineering in 1942. *il diag Engineer* 175:24-6, supp 1, 4, 44-6, 64-5 Ja 8-22 '43

Civil engineer's comments on planning. A. B. Edwards. *Boston Soc C E J* 30:35-9 Ap '43

Organizational set-up of an architect-engineer. D. H. McCreery. *il Civil Eng* 13: 477-9 O '43

Practical planning exhibition. *Engineer* 176: 237-8 O 8 '43

Review and forecast, 1942-1943. *Eng N* 130: 183-5 F 11 '43

See also

Airports
Airways
Aqueducts
Blasting
Breakwaters
Bridges
Building
Canals
Culverts
Dams
Drainage
Dredging
Drilling and boring
(earth and rocks)
Dry docks
Earthwork
Filling
Flood control
Foundations
Highway engineering
Hydraulic engineering
Irrigation
Marine engineering
Mining engineering
Municipal engineering
Piers
Piles and pile driving
Pipe laying
Public works
Railroad engineering
Regional planning
Rivers
Roads
Sanitary engineering
Sewerage
Soil mechanics
Steel construction
Strains and stresses
Strength of materials
Subways
Surveying
Tunnels and tunneling
Water supply engineering

Bibliography

Current periodical literature. Published in monthly numbers of Civil engineering

Study and teaching

Army specialized training program for civil engineers. H. Beukema. *Civil Eng* 13:469-70 O '43

Tables, calculations, etc.

Strains, stresses, and shear in engineering problems. S. H. Woodard. *diag Am Soc C E Proc* 69:177-86 F '43; Discussion. *bibliog* 69: 562-70, 871-91, 1120-4, 1501-2 Ap, Je, S, N '43

CIVIL engineers

Civil engineers and the building industry. A. Binns. *Engineer* 175:133-4 F 12 '43

Civil engineers and the building industry; conference arranged by Institution of civil engineers. *Engineer* 174:186-8, 241-2, 323, 398-9, 486-7; 175:130-1 S 4, 18, O 16, N 13, D 11 '42, F 12 '43

Civil engineers' contractual relations with War department. H. H. Hale. *Civil Eng* 13:55 Ja '43

Engineer, the architect, and the surveyor in town and country planning. H. J. Manzoni. *Engineer* 176:303-4 O 15 '43

Renegotiation of war contracts; some practical applications in relation to the civil engineer. H. W. Loving. *Civil Eng* 13:88 F '43

Young engineers, watch your start; practical advice to graduates entering the construction field. H. O. Locher. *il Civil Eng* 13:11-14 Ja '43

See also

American society of civil engineers

CIVIL engineers, American society of. See American society of civil engineers

CIVIL rights**See also**

Searches and seizures

CIVIL service

Re-employment of ex-servicemen in public positions. C. L. Jamison. *bibliog Ann Am Acad* 227:104-10 My '43

See also

Government employees

Great Britain

Chemist in the Civil service; the need for higher status. *Chem Age (Lond)* 49:187-90 Ag 21 '43

Direct action? campaign among civil servants to break ban on affiliation to Trades union congress. *Economist* 144:784-5 Je 19 '43

Head of the Civil service. *Economist* 143:698 D 5 '42

Higher civil service. *Economist* 145:265-6 Ag 28 '43

Servants of the people. *Economist* 144:679-80 My 29 '43

Westminster on Whitehall. *Economist* 143: 564-5 N 7 '42

New Jersey

Bar civil servant's right to strike; New Jersey civil service commission. *Eng N* 129: 814 D 10 '42

United States

U.S. Civil service commission accepts ESMDT. G. W. Case. *J Eng Educ* 33:210-11 N '42

CIVIL service technical guild

Court action would stop employment of outside engineers by New York city; Civil service technical guild brings action. *Eng N* 131:124 J 15 '43

CIVILIAN defense

Action of war gases. C. D. Leake and D. F. Marsh. *bibliog il J Chem Educ* 20:339-43+ J '43; Abstract. *Chem & Met Eng* 50: 177-9 Ag '43

Affiliated hospital units for civilian defense. *Science* 98:169 Ag 20 '43

Bubbler set for war gas detection. *il Eng N* 130:736-7 My 20 '43

Can American water systems provide for civilian defense. K. J. Carl. *Am Water Works Assn J* 35:19-26 Ja '43

Chemical aspects of civilian defense. A. Gibson. *J Chem Educ* 20:265-70 Je '43

Chemist and civilian defense. T. D. Stewart. *J Chem Educ* 20:263-5 Je '43

Civilian defense and public water supply. U. S. Grant. *3d. Am Water Works Assn J* 35:1139-45 S '43

Civilian defense and public water supply. G. E. McCallum. *Am Water Works Assn J* 35: 27-9 Ja '43

Civilian defense needs; abstract and discussion. U. S. Grant. *3d. Eng N* 129:729 N 19 '42

Civilian defense program in Virginia. J. H. Wyse. *Am Water Works Assn J* 35:232-4 F '43

CIVILIAN defense—Continued

Duties of U.S. citizens defense corps in gas defense, *Am Water Works Assn J* 35:381-3 Mr '43

Engineers in civilian defense work; the Indiana plan for mobilization of public works and public utility agencies, *W. W. Cassidy, Roads & Sts* 86:74-6 F '43

Equal work? men and women in fire guard duty, *Economist* 143:628 N 21 '42

Fire guard program; abstract, *L. W. Hutchins, Safety Eng* 86:28-9 Ag '43

Maintenance of public water supplies for civilian defense, *D. W. Evans, Am Water Works Assn J* 35:30-3 Ja '43

Mobilizing home front civilian defense, *G. S. Van Schaick, East Underw* 43:22 D 11 '42

Organization and activities of the subcommittee on water supply of the California state council of defense, *C. G. Hyde, H. Reinhardt and M. R. Mackall, Am Water Works Assn J* 35:183-95 P '43

Organization of civilian defense, *D. A. Rookie, N E Water Works Assn J* 57:91-9 Jo '43

President's tribute to civilian defense workers, *Comm & Pn Chr* 167:2190 Jo 10 '43

Proceedings of the Air raid precautions school for water works instruction of the New England water works association and the Office of civilian defense, *N E Water Works Assn J* 57:81-168 Jo '43

Protection of civilians from vesicant agents, *T. F. Bradley and others, Il diags Chem & Eng N* 21:373-5 Mr 25 '43

Public education on war gases, *O. Elsen-schmid, J Chem Educ* 20:439-41 S '43

Selection of civilian evacuation routes; Pennsylvania chooses major highways for emergency movement, *R. F. Riegelmeier, Il Civil Eng* 12:659-60 D '42

Service truck for civilian defense and regular public works maintenance, *C. M. Pratt, Il Pub Works* 74:28-9+ Ji '43

Theater engineering committee report; subcommittee on civilian defense in theaters, *Soc Motion Picture Eng J* 40:82-6 P '43

Use of mobile units in the first aid and medical treatment of gas casualties, *J. T. Cassidy, Il diags J Chem Educ* 20:276-8 Jo '43

War activities of bankers; how English bank men give part-time services, *A. H. Ensor, Trusts & Estates* 77:141-2 Ag '43

War civilian security program; medical and cash benefits for injuries to civilian defense workers, *Am Water Works Assn J* 35:657-9 My '43

War department civilian protection school at Amherst college, Amherst, Mass., *H. C. Hall, N E Water Works Assn J* 56:294-301 S '43

See also

Air raids—Protective measures	Radio stations—Emergency stations
Camouflage	War emergency radio service
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Decontamination (from gases, chemicals, etc.)	

Insurance aspects

Benefits for OCD workers, *Nat Underw* 47:16 Ja 14 '43; Same, *Nat Underw (Life ed)* 47:6+ Ja 15 '43

Civilian defense work covered in New Jersey, *East Underw* 44:28 Ja 8 '43

Liability of volunteer war workers, *Ins Field (Fire ed)* 72:19 Ap 1 '43

OCD volunteers put under compensation plan, *Nat Underw (Life ed)* 47:1 Ja 8 '43; Same, *Nat Underw* 47:22 Ja 7 '43

Laws and regulations

Civilian defense manual on legal aspects of civilian protection, 242p, U.S. Office of civilian defense; 35c Supt. of doc. '43; Review, *Business Week* p24+ Ag 28 '43

Legal aspects of civilian defense volunteer services in Michigan, *G. R. Sidwell, Am Water Works Assn J* 35:656-7 My '43

CIVILIAN supply, Office of. See United States—War production board—Civilian requirements, Office of

CIVILIAN war benefits. See World war, 1939—Compensation of war victims

CIVILIZATION

Civilization and the arts, *W. M. Dixon, Il Fortune* 27:112-16, 120+ Ap '43
Toward a durable society, *R. M. Hutchins, Fortune* 27:153-60+ Jo '43

See also

Anthropology	Industry
Education	Inventions
also subdivision Civilization under names of countries, e.g. United States—Civilization	

CLAIMS**See also**

Damages	Railroads—Claims
Insurance—Adjustment of claims	Shipping—Claims
Motor bus lines—Claims	World war, 1939—Claims

CLAISEN rearrangement. See Molecular rearrangements

CLAM juice

Concentrating clam nectar by freezing; abstract, *N. M. Carter, Food Ind* 15:131 S '43

CLAMPS

Balanced clamp driving dog, *M. H. Ball, diag Am Mach* 86:1297 N 12 '42

Eccentric clamp facilitates machine set-up, *R. J. Amriem, diags Am Mach* 87:110 Jo '43

Improved clamp for sheet metal specimens, *J. B. Burke, diag Metall Prog* 44:431 S '43

Plate-carrying clamps, *L. Hardnack, diags Welding J* 23:618 Ag '43

CLAMS

Old starfish-clam question, *A. M. Reese, Science* 96:513-15 D 4 '42

CLARIFIERS

Method of adding acid when acid-treating pressure type clarifiers, *T. V. Graham, diag Can Min J* 63:784 D '42

Paper mill operating experiences with Accelerator softeners and clarifiers, *A. C. Rimbshoff, Il diags Paper Tr J* 116:43-8 My 13 '43

See also

Filters and filtration (technical chemistry)

CLARINET

Experimental study of the tone quality of the Boehm clarinet, *C. S. McGinnis, H. Hawkins and N. Sher, Il diags Acoustical Soc Am J* 14:228-37 Ap '43

CLARK, Edwin Kitson, 1866-1943

Sketch, *por Engineer* 176:332 Ap 23 '43; *Engineering* 155:335 Ap 23 '43

CLARK equipment company

Companies with record high earnings, *J. C. Harrington, Mag of Wall St* 71:526 F 20 '43

CLASSIFICATION**See also**

Files and filing (documents, etc.)

CLASSIFIED advertisements. See Advertisements, Classified

CLASSIFIERS

Centrifuge steps up grinding efficiency; Lone star cement corporation, *W. B. Lenhart, Il diags Rock Prod* 46:84-6 Ag '43

Improved Esperanza drag classifier, *diags Eng & Min J* 144:69 Ja '43

Variable rake speed improves classifier output, *H. S. Maxwell and W. B. Clark, Il Eng & Min J* 144:73-4 Ap '43

See also**Screens****CLAVACIN**

Clavacin and the press, *H. W. Anderson, Science* 98:282 S 24 '43

CLAY

Action of some aqueous solutions on clays of the montmorillonite group, *P. G. Nutting, U S Geol S Professional Pa* 197-F: 219-35; on 10c Supt. of doc. '43

Alum mfrs. want clay prepared by brick plants, *Il Brick & Clay Rec* 103:16-17 Ji '43

Alumina from clay, *Business Week* p59-60 Ji 24 '43

CLAY—Continued

- Ball clay in electrical porcelain bodies. L. E. Thiess. *il Am Cer Soc Bul* 21:250-2 N 15 '42
- Casting slip control. A. S. Watts. *Am Cer Soc Bul* 22:298 Ag 15 '43
- Cation and anion interchange with zinc montmorillonite clays. M. M. Elgabaly and H. Jenny. *bibliog J Phys Chem* 47:399-408 My '43
- Clays as colloidal electrolytes. C. E. Marshall and C. A. Krinbill. *bibliog J Phys Chem* 46:1077-90 D '42
- Colloid chemistry in ceramics. A. L. Johnson. *bibliog diags Am Cer Soc J* 26:88-92 Mr 1 '43; *Abstract. Can Chem & Process Ind* 27:188 Ap '43
- Contact filtration as an aid to wartime production. R. C. Davidson. *diags Oil & Gas J* 41:116, 120, 123-4- Mr 25 '43
- Decolorizing clays. Y. E. Stourdze. *Chem Ind* 61:758 N '42
- Earth pressure and shearing resistance of plastic clay; symposium. K. Terzaghi, R. B. Peck and W. S. Houzel. *diags Am Cer Soc E Proc* 68:857-950 Je '42; *Discussion*. 68:1216-24; 69:589-96, 733-6, 915-23 S '42, Ap-Je '43
- Expanded clay products. J. D. Sullivan, C. R. Austin and E. J. Rogers. *il Brick & Clay Rec* 101:46, 48 N '42
- Flow properties of coating clays at high rates of shear. K. A. Arnold. *il Paper Tr J* 117:28-34 Ag 26 '43; *Excerpts. Paper Ind* 25:64+ Ap '43
- How California rock and gravel co. cleans aggregates, sells red clay and promotes efficiency. W. L. Netherby. *il Rock Prod* 46:52-4+ Mr '43
- How to remove limestone pebbles from clay. Brick & Clay Rec 103:60 S '43
- Hydration-pressure relations in clays and heaving shale. H. H. Power, B. L. Towle and J. E. Plaza. *bibliog Oil & Gas J* 41:215+ N 12 '42
- Measurements of pore-water pressure in silt and clay; use of the elastic-wire strain meter. K. Terzaghi. *diags Civil Eng* 13:33-6 Ja '43
- Nature of colloidal clay as revealed by the electron microscope. B. T. Shaw. *bibliog il J Phys Chem* 46:1032-43 D '42
- Pilot-plant study of the Gray clay treating process. A. W. Cobb and L. Carlson. *flow diag Oil & Gas J* 41:33-6 N 19 '42
- Production of alumina from low-grade domestic materials; work in Bureau of mines pilot plants. R. S. Dean. *il Min & Met* 24:356-9; *Discussion* (Work done by agencies other than the Bureau of mines in treatment of low-grade aluminum ore). P. D. Wilson. 359-61 Ag '43
- Relation of undisturbed sampling to laboratory testing. D. M. Burmister. *Am Soc C E Proc* 69:1133-7 S '43
- Report of the Nonmetals division, fiscal year 1942; clays. O. C. Ralston and A. G. Stern. *U S Bur Mines Rep of Invest* 3675:22-7 '42
- Review of recent advances in drilling-mud control; colloidal chemistry of clays and shales. P. E. Chaney. *bibliog Oil & Gas J* 41:81-2+ N 12 '42; *Same. Pet Eng (Ref annual)* 14:47-50+ J1 1 '43
- Second report of the moulding materials sub-committee of the Steel castings research committee. Iron & Steel Inst J 146:393-454, pl 38-9 no 2 '42; *Excerpts. Engineering* 154:487-8 D 18 '42; *Discussion. Iron & Steel Inst J* 146:46-66 no 2 '42; *Engineering* 154:514 D 25 '42
- Sorption of NH₃ on montmorillonitic clay. I. Cornet. *bibliog diags J Chem Phys* 11:217-26 My '43
- Study of dyestuff absorption by fillers and their effect upon the color of filled papers. O. Kress and P. Trucano. *bibliog Paper Tr J* 117:31-8 S 2 '43
- Symposium on testing and classification of ball clays. *Am Cer Soc Bul* 21:248-91 N 15 '42
- Uncommon clay. F. H. Norton. *il Tech R* 46:182-4, 192+ F '43
- Varying basic factors involved in bloating of clays. C. R. Austin, J. L. Nunes and J. D. Sullivan. *il Brick & Clay Rec* 101:24-6 D '42
- See also
- | | |
|------------------|------------------|
| Bentonite | Loess |
| Bricks | Porcelain |
| Ceramics | Pottery |
| Foundation soils | Silicates |
| Fuller's earth | Slips (ceramics) |
| Kaolin | Soils |
- Aging
- Sample selection and aging. C. M. Franzheim. *Am Cer Soc Bul* 21:282-3 N 15 '42
- Analysis
- Mineralogical and rational analysis of ball clays. T. N. McVay. *Am Cer Soc Bul* 21:267-8 N 15 '42
- Nature of Georgia kaolin; evidence of chemical and colloidal analysis. L. Mitchell and E. C. Henry. *map Am Cer Soc J* 26:105-13 Ap 1 '43
- Nature of Georgia kaolins; evidence of mineralogical analysis. L. Mitchell and E. C. Henry. *bibliog Am Cer Soc J* 26:113-19 Ap 1 '43
- Soluble constituents. K. C. McCartt. *Am Cer Soc Bul* 21:266-7 N 15 '42
- Spectrochemical procedure in clay analysis. A. E. Austin and L. B. Bassett. *bibliog diags Am Cer Soc J* 26:185-8 Je 1 '43
- Classification
- Classification of ball clays. A. S. Watts. *Am Cer Soc Bul* 21:249 N 15 '42
- Expansion and contraction
- Thermal and moisture expansion of ball clays and bodies fired to different temperatures. H. Thiemecke. *Am Cer Soc J* 26:173-9 Je 1 '43
- Moisture content
- Thermal and moisture expansion of ball clays and bodies fired to different temperatures. H. Thiemecke. *Am Cer Soc J* 26:173-9 Je 1 '43
- Testing
- Casting-rate tests. C. M. Lambe. *bibliog Am Cer Soc Bul* 21:274-6; *Discussion*. 276 N 15 '42
- Clays and test bodies. R. M. Campbell. *Am Cer Soc Bul* 21:281-2 N 15 '42
- Critical analysis of Stokes' law as a basis for the determination of particle size of clays and nonplastic materials. E. M. King. *bibliog Am Cer Soc Bul* 21:258-60 N 15 '42
- Evaluation of plastic properties of clay masses. R. Russell, jr. *bibliog Am Cer Soc Bul* 21:271-4 N 15 '42
- Flow properties of coating clays at high rates of shear; abstract. K. A. Arnold. *Pulp & Pa of Can* 44:317-18 Mr '43
- Method of determining the pH of ball clays. G. J. Barker and E. Truog. *Am Cer Soc Bul* 21:263-5; *Discussion*. 265 N 15 '42
- Oxidation of ball clays. G. A. Bole. *bibliog Am Cer Soc Bul* 21:276-7 N 15 '42
- Particle shape and the behavior of clay as revealed by the electron microscope. R. P. Humbert. *il Am Cer Soc Bul* 21:260-3 N 15 '42
- Particle-size determinations. G. A. Loomis. *bibliog Am Cer Soc Bul* 21:257 N 15 '42
- Plasticity and workability of ball clays. E. C. Henry. *bibliog Am Cer Soc Bul* 21:269-71 N 15 '42
- Rehydration study of clays. L. H. Berkelhammer. *bibliog il Am Cer Soc J* 26:120-6 Ap 1 '43
- Relation of undisturbed sampling to laboratory testing. P. C. Rutledge. *diags Am Soc C E Proc* 68:1531-58 *bibliog*(p1557-8) N '42; *Discussion. bibliog* 68:1833-9; 69:577-83, 955-94 D '42, Ap, Je '43
- Structural viscosity studies of coating clay compositions; instrument for measuring and distinguishing thixotropy, dilatancy, plasticity, and Newtonian flow. G. H. Sheets. *bibliog il diag Paper Tr J* 116:28-36 Ja 21 '43
- Testing and classification of ball clays; thermal history. C. G. Harman and C. W. Parmelee. *Am Cer Soc Bul* 21:283-6 N 15 '42

CLAY—Testing—Continued

Testing ball clays for low-tension electrical insulators. A. J. Blume. *Am Cer Soc Bul* 21:252 N 15 '42

Testing whiteware clays. H. Wilson and H. Hixon. *il Am Cer Soc Bul* 21:287-91 N 15 '42

Water of plasticity. J. W. Whittemore. *Am Cer Soc Bul* 21:268-9 N 15 '42

Georgia

Hard and soft kaolins of Georgia. T. A. Klinefelter and others. bibliog U S Bur Mines Rep of Invest 36821-20 '43

Nature of Georgia kaolin; evidence of chemical and colloidal analysis. L. Mitchell and E. C. Henry. map *Am Cer Soc J* 26:105-13 AD 1 '43

Nature of Georgia kaolins; evidence of mineralogical analysis. L. Mitchell and E. C. Henry. bibliog *Am Cer Soc J* 26:113-19 Ap 1 '43

North Carolina

Mining and washing kaolin in western North Carolina. A. H. Hubbell. flow sheets *il Eng & Min J* 144:51-3+ Ja '43

Ohio

Ohio clay fields are source of fire clay and coal. *Brick & Clay Rec* 101:46 D '42

Texas

Maybe it's bentonite in your clay that makes it hard to handle. C. M. Furgason. bibliog *Brick & Clay Rec* 103:22-4+ S '43

CLAY drying

Drying structural clay products. H. L. Longenecker. *Brick & Clay Rec* 102:26-8 F '43

CLAY industries

Approve War council program to promote increased use of clay products. *Brick & Clay Rec* 102:13-15 Mr '43

Industry enthusiasm puts War council over. *Brick & Clay Rec* 101:14-16 D '42

Industry supports the War council program. *Brick & Clay Rec* 102:16-26 Ja '43

Practical promotion helps sell clay products; Southern brick & tile manufacturers assn. G. H. Merry. *il diags Brick & Clay Rec* 102:24-8 Ap '43

See also

Brick industry and trade	Fire brick
Brickmaking	Glazes
Clay products	Pottery
	Stoves, Ceramic

Advertising

Part of War council fund to be used for advertising and publicity. *Brick & Clay Rec* 103:14-16 O '43

Statistics

Clay products, 1938-1941. Survey of Cur Business 1942 Sup p162 [supplemented in monthly numbers]

Canada

Canada's clay-products industries, 1940. For Comm W 9:32 D 19 '42

CLAY mines and mining

Mining and washing kaolin in western North Carolina. A. H. Hubbell. flow sheets *il Eng & Min J* 144:51-3+ Ja '43

CLAY products

Clay products add beauty and utility to modern industrial building; G. D. Searle co. laboratories, Chicago. *il Brick & Clay Rec* 102:22-4 My '43

Clay products can solve problem of supplying heating needs of military and war housing structures; combination of chimney furnace with new-style warm air circulating system. *diags Brick & Clay Rec* 102:21-2 F '43

Clay products construction featured in new Chicago subway; stations and station areas. *il Brick & Clay Rec* 102:26-8 My '43

Clay products cut building time by two weeks on WAAC barracks at Des Moines. *il Brick & Clay Rec* 101:19-20 N '42

European structural clay products. F. E. Sonnenschein. *diags Brick & Clay Rec* 102:29-31 Mr '43

Expect to use one million clay fire baskets this winter. *diags Brick & Clay Rec* 102:15 Ja '43

Modular size of clay-products units. H. C. Plummer and E. F. Wanner. bibliog *il diags plans Am Cer Soc J* 26:307-20 S 1 '43

9,000,000,000 brick or tile needed for 1943 war building program! *il map Brick & Clay Rec* 101:10-13 N '42

No metal! ceramic cooking ware fills housewives' needs. bibliog *il Cer Ind* 40:48, 50+ F '43

Organize separate Clay products section in Building materials branch of WPB. *Brick & Clay Rec* 101:17-18 N '42

Salt glazes for structural building units. H. D. Foster. *il diags Am Cer Soc J* 26:60-7 F 1 '43

Salt glazes on structural clay building units. H. D. Foster. *il diags Ohio State U Eng Exp Sta Bul* 113:1-40 bibliog(p39-40) '42 (pa 40c)

Symposium on testing and classification of ball clays. *Am Cer Soc Bul* 21:248-91 N 15 '42

War council of the Structural clay products institute. D. Whitlock. *Am Cer Soc Bul* 22:214-17 JI 15 '43

War department considers use of clay practice bombs. *diags Brick & Clay Rec* 102:42 Ja '43

See also

Brickmaking	Fire brick
Bricks	Hollow tile
Ceramics	Porcelain
Clay industries	Pottery
Drain tile	Stoneware
Efflorescence	Stoves, Ceramic
Enamel and enamel-ing	Terra cotta
	Tiles

Color

Fired color of ball clays. I. A. Balinkin. *Am Cer Soc Bul* 21:278-81 N 15 '42

Manufacture

Fitting glazes to ceramic bodies. H. G. Schurecht. bibliog *diags Am Cer Soc J* 26:93-8 Mr 1 '43

Simplified use of triaxials aids in body control and development. *diags Cer Ind* 40:98, 100, 102 Ap '43

Use of electrolytes in manufacturing heavy clay products. R. H. E. Anwyl. *Brick & Clay Rec* 101:28, 30+ D '42

Use of soda ash for structural clayware production by Barker-Truog process. H. W. Harrington. *Am Cer Soc Bul* 22:57-60 Mr 15 '43

See also

Clay products plants	Sewer pipes, Vitrified
Kilns—Firing	clay

CLAY products, Expanded

Expanded clay products. J. D. Sullivan, C. R. Austin and E. J. Rogers. *il Brick & Clay Rec* 101:46, 48 N '42

Varying basic factors involved in bloating of clays. C. R. Austin, J. L. Nunes and J. D. Sullivan. *il Brick & Clay Rec* 101:24-6 D '42

CLAY products plants

Alliance clay product co. adapts plants to essential war industries; crating and shipping aircraft, etc. *il Brick & Clay Rec* 103:18 JI '43

Clay plants conversion to charcoal suggested. *Oil Paint & Drug Rep* 143:7+ Je 14 '43

Electric equipment

Take care of your electric motors, they're hard to replace. W. B. Dauberman and W. W. McCullough. *il Brick & Clay Rec* 102:14-16 Je '43

Employees

How wage and hour law applies to clay products industry. *Brick & Clay Rec* 103:48+ JI '43

More women workers taken into the clay industry. *Brick & Clay Rec* 103:19 JI '43

Equipment

Annual review section. *il Brick & Clay Rec* 102:42+ Ap '43

Clay products plants on war contracts can obtain needed repair parts. *Brick & Clay Rec* 102:13-14 Ja '43

CLAY products plants—Equipment—Continued

- Hammerrail grinding of dry pan tailings reduces pyrite specking in sewer pipe; Stillwater clay products co. *il* Brick & Clay Rec 102:33-4 Ja '43
- Near infrared, what it is, where you can use it. *il* Cer Ind 41:28-30 S '43
- Plasticity control system can be adjusted to individual plant. *il* diag Brick & Clay Rec 103:32-3 JI '43
- Production losses are cut to a minimum at this sewer pipe plant; Lee clay products co. *il* Brick & Clay Rec 103:21-2 JI '43
- Selecting the proper dry press. *il* Cer Ind 40:66, 68 Je '43
- Take care of your machines and equipment, they're hard to replace; maintenance practices, *il* diag Brick & Clay Rec 102:17-22 Ap '43

See also

Kilns

CLAY sculpture. See Ceramic sculpture

CLAY sewer pipe association

Promotional plan is presented at meeting, Columbus, Sept. 23. Brick & Clay Rec 103:10-12 O '43

CLAYWORKING machinery

J. C. Steele & sons. Am Cer Soc Bul 22:109-10 Ap 15 '43

CLEANING

- Distillation problems in dry cleaning. Textile Col 65:317-13 JI '43
- Drycleaning as a means of delousing garments. J. L. Stauby and A. C. Lloyd. Soap & San Chem 19:94-6 Ag '43
- Dry cleaning leather coats; abstract. L. G. Stockdale. Soap & San Chem 19:58 Mr '43
- Dry cleaning light fabrics; abstract. Soap & San Chem 19:61 F '43
- Effect of dry cleaning on lice. Textile Col 65:358 Ag '43
- Imitation camel's hair. Textile Col 65:434 O '43
- Problems in filter operation. Textile Col 65:127-8 Mr '43
- Report of committee on fastness to dry cleaning. C. A. Seibert. Am Dyestuff Rep 32:362-5 Ag 16 '43
- Some factors in detergency. F. D. Snell. Paper Tr J 116:128-30 F 18 '43
- Washing sheepskins. Textile Col 65:445 O '43
- What laundries and drycleaners expect of fabrics. W. E. Coughlin. Textile Col 65:435-6+ O '43 (to be cont)

See also

- Ball bearings—Cleaning
- Bleaching
- Boiler cleaning
- Citrus fruit—Cleaning
- Coal cleaning
- Dairies—Cleaning
- Degreasing
- Dishwashing
- Dust removal
- Dyes and dyeing
- Factories—Cleaning
- Felts (paper making)—Cleaning
- Floor cleaning
- Fruit—Cleaning
- Gas pipes—Cleaning
- Gloves—Cleaning

- Laundry
- Leather—Cleaning
- Machinery—Cleaning
- Masonry—Cleaning
- Metal cleaning
- Milk cans—Cleaning
- Motor bus engines—Cleaning
- Petroleum refineries—Cleaning
- Rugs—Cleaning
- Ships—Cleaning
- Soap
- Steel—Cleaning
- Upholstery—Cleaning
- Vegetables—Cleaning
- Water pipes—Cleaning

CLEANING compositions

- ABC of chemical derivatives from petroleum: detergents and lubricants. R. L. Wakeman and B. H. Weil. *il* Nat Pet N 35 pt 2: R161-4, R166-7, R170-1 Ap 7 '43
- Abrasive cleaners for use on pots and pans. *il* Soap & San Chem 19:30-1+ Ap '43
- Acid detergents in food sanitation. M. E. Parker. *il* Ind & Eng Chem 35:100-5 Ja '43
- Ammonia substitutes; development of liquid cleaners. Soap & San Chem 19:30-1 Ja '43
- Bactericidal detergents; abstract. A. K. Epstein and others. Soap & San Chem 19:74 N '43
- Cleaning of war time textiles. Textile Col 65:55-6 F '43
- D-12 discusses detergents. Soap & San Chem 19:57-8 JI '43
- Detergent Alconol. Chem & Met Eng 50:203 My '43

- Evaluation of detergents and wetting agents. Textile Col 64:519-21 N '42; Abstract. Soap & San Chem 19:61 F '43
- Evaluation of metal cleaners. H. Strow. *il* Metals & Alloys 18:503-5 S '43
- Finding new synthetic detergents for rayon hosiery. C. M. Robbins. Rayon 24:480 S '43
- Grease-cleaning compound. Soap & San Chem 19:69 F '43
- History of synthetic detergents. C. J. Sundel. bibliog Soap & San Chem 19:30-1+ JI '43
- How Purex escaped starvation from basic materials shortage; making own chlorine and caustic. Sales Management 52:58+ JI 15 '43
- Industrial degreasing agents. H. P. Quadland. *il* Metal Finishing 41:463-5 JI '43
- Manual of dairy detergents and cleaning practices. M. E. Parker. *il* Food Ind 15:78-80+ JI; 71-2+ Ag; 66-7 S '43
- Metal cleaning solutions; what they are, how to use them and why. R. W. Mitchell and M. T. Zinty. Am Mach 87:105-7 My 13 '43

- New synthetic detergent from petroleum; Teepol. Chem & Ind 62:112-13 Mr 20 '43; Same. Soap & San Chem 19:74 Je '43
- Properties of detergent solutions; comparison of detergent action and whiteness retention of laundry soap builders. T. H. Vaughn and A. Vittone, jr. bibliog Ind & Eng Chem 35:1094-8 O '43
- Rug and upholstery cleaners. Textile Col 65:377 Ag '43
- Rug and upholstery cleaners; formulation, production, sales. C. T. Small. Chem Ind 51:738-40 N '42
- Scouring cylinder machine felts. L. E. Rosser and W. B. Morehouse. *il* Paper Ind 24:931-5 D 42
- Some factors in detergency. F. D. Snell. Paper Tr J 116:128-30 F 18 '43; Abstract. Paper Ind 24:1294+ Mr '43
- Studies on synthetic detergents. J. C. Harris. Soap & San Chem 19:21-4 Ag; 29-31+ S '43
- Surface-active agents. F. D. Snell. bibliog *il* Ind & Eng Chem 35:107-17 Ja '43
- Synthetic detergents. F. D. Snell. bibliog *il* Soap & San Chem 19:27-30 O; 31-3+ N '43

See also

- Metal cleaning
- Saponins
- Silver polish
- Soap

- Sodium hexameta-phosphate
- Trichloroethylene

Analysis

- Proposed methods of chemical analysis of industrial metal cleaning compositions. diag Am Soc T M Proc 42:407-22 '42

Physiological effect

- Chronic toxicity of aerosol-O.T. A. E. Benaglia and others. J Ind Hygiene 25:175-80 My '43
- Effect of cleansing materials on the human skin; abstract. O. Schnorr; M. Schnitzler. J Ind Hygiene 25:sup86-8 Ap '43

Testing

- Cooperative studies on a laboratory method for evaluating synthetic detergents. J. B. Crowe. Am Dyestuff Rep 32:237-41 My 24 '43
- Quick positive test to show when metal surfaces are chemically clean. C. Nielsen. Steel 113:106, 108+ O 4 '43
- Salt water detergents for use aboard naval vessels. N. E. Ruckman, R. Hughes and F. E. Clarke. *il* Soap & San Chem 19:21-3 Ja '43

CLEANING industry

- Tough on cleaners; synthetic solvents are scarce. Business Week p69-70 Ag 14 '43

CLEANLINESS

See also

- Factories—Cleanliness

CLEARANCE cars. See Cars, Clearance

CLEARING houses

- New state law allows delayed return of items; clearing houses report change in rules. Bankers Mo 60:256-7 Je '43
- 90 clearing houses now return checks the next day. map Bankers Mo 60:197-9+ My '43

CLEARING houses—Continued

Sixteen clearing houses have changed rules on return. Bankers Mo 60:108-9+ Mr '43

See also

Bank clearings

Banks and banking

also New York clearing house association

CLEVELAND

This is Cleveland. P. James. Il Adv & Sell 36:28, 30+ J1 '43

Industries

Home shop pool; basement shops of the J. E. Doyle co.'s subcontractors. Business Week p51+ D 5 '42

Sewerage

Sewage treatment problems in Cleveland; abstract. J. W. Ellms. Water Works & Sewerage 89:479-80 N '42

Streets

Cleveland freeways a major problem; reconditioning state's system by the Ohio department of highways. R. C. Chaney. Il diags map Roads & Sts 86:40-4 Je '43

Water supply

Quarter century of development in Cleveland's water supply. A. G. Levy, S. C. Simmermacher and L. A. Marshall. Il diags plan map Am Water Works Assn J 35: 869-99 J1 '43

CLEVELAND, Cincinnati, Chicago and St Louis railway

Sale. Comm & Fin Chr 156:2304 D 28 '42

CLEVELAND electric illuminating company

C.E.I. purchase by city fought by county mayors. Elec W News ed 119:1039 Mr 27 '43

CLEVELAND health museum

Field training in health education at Cleveland health museum. Science 97:547 Je 18 '43

CLEVELAND stock exchange

Weekly record. Published in weekly Monday numbers of Commercial & financial chronicle

CLEVELAND terminals building company

To deposit bonds for exchange. Comm & Fin Chr 157:2246 Je 14 '43

CLEVELAND union terminals company

Generous returns on Cleveland Union Terminals bonds. A. Jansen. Barron's 23:15-16 Mr 29 '43

CLIFFORD, Francis William, 1880-1942

Sketch. T. A. Henry. Chem Soc J p201-2 Ap '43

CLIMATE

See also

Atmospheric temperature

Paleoclimatology

Rain and rainfall

CLIMATOLOGY

Research committee on climatology. H. D. Harradon. Science 98:170 Ag 20 '43

See also

Insolation

CLIMATOLOGY, Medical

See also

Altitude, Influence of

CLIMAX molybdenum company

Re-appraisal of companies in the news. Mag of Wall St 72:34 Ap 17 '43

CLINICAL laboratories. See Medical service, Industrial—Clinical laboratories**CLINICS, Psychological. See Psychological clinics****CLINKERS, Cement. See Cement clinkers****CLOCKS**

Mechanical movements and their design; clock transfer mechanism. F. Grover. diag Inst Mech Eng J & Proc 147:Proc 202-3 O '42

Prices

Clock ceiling set; OPA clamps \$1.65 lid on new war clock. Business Week p101 My 15 '43

Repair

Pendulum is back; horologists are willing to repair clocks. Business Week p38 O 30 '43

CLOCKS, Electric**Control**

Precision time control; amplified tuning fork power supply in National broadcasting company studios and control rooms at New York. Il diag Electronics 16:49+ D '42
Remote adjustment of synchronous clocks. A. Leeman. diag Electronics 16:158+ S '43
Tuning forks govern time; radio networks provided with split-second timing. Il Sci Am 168:172 Ap '43

CLOSED shop. See Open and closed shop**CLOSTRIDIUM**

Bacteriostatic action of sulfonamide compounds upon clostridia. S. I. Rosenthal. bibliog Pub Health Rep 58:5-9 Ja 1 '43
Mechanism of antitoxic immunity in clostridium perfringens (welchii) infections in guinea pigs. S. E. Stewart. Pub Health Rep 58:1277-80, pl 1-2 Ag 20 '43

CLOSURES. See Bag closing machines; Bottle caps and seals; Fruit jar rings; Packaging materials**CLOTH analysis. See Textile fabrics—Analysis****CLOTHESPINs**

Clothespins pinched. Business Week p31-2 S 18 '43

CLOTHING, Electrically heated

Making armmen's clothes; electrically heated garments. Il Elec R (Lond) 133:45-6 J1 9 '43

CLOTHING, Protective

Clothing the woman war worker. Il Ind Stand 14:69-71 Mr '43; Same cond. Nat Safety N 47:16-17+ My '43; Same cond. Safety Eng 85:11-12, 14 Ap '43
Dressed to kill accidents; safety work clothes for women. H. Shell. Il Safety Eng 86:37, 40-1+ O '43

Flame-proofed fabric used in protective garments. Nat Safety N 46:80-1 N '42

It's a woman's war, too; feminine influence in safety equipment market. E. W. Andrews. Il Nat Safety N 47:8-9+ Mr '43

Ply Garb. Pet Eng 14:152 D '42

Promote safety by showing women in ads safely dressed. G. Currier. Il Ind Market-ing 28:23-5+ Ap '43

Protective clothing in coal mines; abstract. C. F. Berner. Coal Age 48:137-8 Je '43

Safety clothing for all jobs. Il Nat Safety N 47:22-3+ Mr '43

Valets for workmen; care of protective clothing. Eng & Min J 144:80 Je '43

See also

Hats, Safety

Shoes, Safety

CLOTHING and dress

How much do you know about clothes made according to government wartime regulations; quiz and answers. E. G. Chambers. J Retailing 18:122, 128 D '42

Recent changes in the character of civilian textiles and apparel. L. B. Webb. bibliog Monthly Labor R 57:421-34 S '43

Slacks in the office? yes or no. Il Am Business 13:22, 27 Ap '43

Thermal insulating properties of clothing. S. Baxter and A. B. D. Cassie. diags Textile Inst J 34:T41-54 J1 '43

See also

Clothing, Protective

Fashion

Garters

Hats

Hosiery

Infants' clothing

Men's suits

Raincoats

Sweaters

Textile fabrics

Underwear

Uniforms

Work clothes

Children

How the children's wear industry is pooling showings for dealers. J. C. Cumming. Sales Management 52:39 Je 15 '43

See also

Shoes, Children's

Hygienic aspects

Clothing, room temperature, and comfort. W. Schweisheimer. Rayon 24:408 Ag '43

Munsingwear, inc. sponsors research on insulating properties of underwear at University of Minnesota. Heat & Ven 39:53 N '42
Self-antiseptic properties in clothing. L. H. James and A. C. Lundell. bibliog Il Soap & San Chem 19:93, 95-7+ Mr '43

CLOTHING and dress—Continued**Prices**

Cheaper textiles: WPB decision to loosen up on garments in lower-priced brackets. *Business Week* p72+ O 2 '43
 Price vs. quality; big merchandisers, cited by OPA, assert MPR 330 won't work. *il Business Week* p92+ S 25 '43

Rationing

Clothes ration anniversary. *Economist* 144: 736 Je 5 '43
 Clothes rationing? *Business Week* p94+ F 20 '43
 Clothes rationing in Britain: how's it working out? *For Comm W* 12:15 Jl 3 '43
 Clothes rationing in Elre. *For Comm W* 12: 31 Jl 10 '43
 Clothing ration. *Economist* 144:371+ Mr 20 '43
 Move to prevent clothes rationing. G. Montgomery. *Textile World* 93:72-3 Ag '43
 Planning the clothes ration. *Economist* 145: 116 Jl 24 '43

Standards

ASA asks for comments on proposed work clothes standards. *il Ind Stand* 14:285-6 O '43

CLOTHING trade

Five planks in Reliance's wartime sales management platform. J. W. Champion. *il Sales Management* 52:44+ S 15 '43
 How the children's wear industry is pooling showings for dealers. J. C. Cumming. *Sales Management* 52:39 Je 15 '43

See also

Clothing and dress	Men's suits
Dress industry	Underwear
Dry goods	Work clothes
Men's suiting fabrics	

Advertising

American Weekly promotion of men's wear. *il Sales Management* 52:80 Mr 1 '43
 Men's apparel. M. M. Lebensburger. *il Ptr Ink* 201:13-15+ N 20 '42
 Radio program convinces quality audience of lower-priced item's value; Clipper Craft clothes, national broadcast followed by local spot announcements. E. Mogul. *Ptr Ink* 204:26+ Jl 23 '43
 Saroyan did it, so why can't Zareh? J. Stenbuck. *il Adv & Sell* 36:44, 128 O '43

Labor conditions

Chicago plan of clothing workers arouses interest. *Nat Underw* (Life ed) 47:4 Ja 15 '43
 No pay rise asked; Hillman's clothing workers propose to adhere to present scale. *Business Week* p22+ Ap 10 '43
 Project group cover for all clothing workers. *Nat Underw* 47:22 Ja 7 '43; Same. *Nat Underw* (Life ed) 47:3 Ja 8 '43

Regulation

Cutting clothes closer. *il Business Week* p86 My 29 '43
 Tackling clothes; rationing improbable, but OCR is cooking up a priority scheme. *Business Week* p20+ Jl 24 '43

See also

Clothing and dress—
 Rationing

Statistics

Sales and inventories of retail apparel stores, 1939-first quarter. 1943; chart. *Survey of Cur Business* 23:2 Jl '43

Great Britain

Britain simplifies production for victory; utility program of British Board of trade; civilian clothing. D. M. Keezer. *il Dun's* R 51:13-19+ Je '43
 Clothing concentration. *Economist* 145:377 S 11 '43

United States

Move to prevent clothes rationing. G. Montgomery. *Textile World* 93:72-3 Ag '43
 Plenty of clothes. *Business Week* p88 Je 19 '43

Recent changes in the character of civilian textiles and apparel. L. B. Webb. *bibliog Monthly Labor R* 57:421-34 S '43
 Supply and price situation, 1942. *Fed Res Bul* 29:7-12 Ja '43

CLOUD chambers

Cloud-chamber and counter studies of cosmic rays underground. V. C. Wilson and D. J. Hughes. *bibliog il diags Phys R* 63:161-71 Mr 1 '43
 Cloud-chamber track of a decaying mesotron. R. P. Shutt. S. DeBenedetti and T. H. Johnson. *il Phys R* 62:552-3 D 1 '42; Same. *Franklin Inst J* 235:637-40 Je '43
 Hydrostatically supported cloud chamber of new design for operation at high pressures. T. H. Johnson, S. DeBenedetti and R. P. Shutt. *bibliog il diag R Sci Instr* 14:265-71 S '43

CLOUD point

Determination of o-cresol in phenol by a cloud point method. W. Seaman, A. R. Norton and R. T. Foley. *bibliog Ind & Eng Chem Anal* 15:159-61 Mr 15 '43
 Determination of water in aniline by a cloud point method; comparison of rapeseed oil with cottonseed-mineral oil mixtures. W. Seaman, A. R. Norton and J. J. Hugonot. *Ind & Eng Chem Anal* 15:322-4 My 15 '43

CLOUDS

Determining cloud depths; electronic photocal equipment; essential for safe aircraft flights. S. R. Winters. *diags Radio N* 30: 44-5+ O '43

CLOUDS, Photography of. *See* Photography of clouds

CLOVER

Farmers need more, not less lime; clovers are essential for high war-time production. C. M. Linsley. *il Rock Prod* 46:46-8 Ap '43
 Utilisation of phosphatic open-hearth slag; the availability of phosphoric acid as measured by yield and phosphorus recovery in barley and clover. L. E. Wright, A. Leachey and R. C. Turner. *Soc Chem Ind J* 62:28-31 F '43

CLUBS

Pity the clubman. *Business Week* p24+ Jl 31 '43

CLUTCHES

Aids renewal of worn clutch linings; patent assigned to the Marion steam shovel co. *diags Machine Design* 14:160+ D '42
 Clutch operates with Geneva mechanism; patent assigned to International business machines corp. *diags Machine Design* 15: 194+ Ag '43
 Clutch transmits vibrating motion; patent assigned to Submarine signal co. *diags Machine Design* 15:156 My '43
 Frictional phenomena; technical applications of external friction of solids. A. Gemant. *diags J Ap Phys* 14:512-14 O '43
 Lindsay centrifugal clutch. *diags Mech Handl'g* 30:359-61 Ag '43
 Powdered metal facings for clutches and brakes. M. S. Adler, R. E. Aufmuth and F. J. Lowey. *il Product Eng* 14:218-21 Ap '43

Manufacture

Self-adapting work support ring; manufacture of clutch disc for Cyclone 14's. B. Hatfield. *il diags Metals & Alloys* 17:787 Ap '43

COAGULATION

Mechanism of the mutual coagulation process. H. B. Weiser and W. O. Milligan. *bibliog J Phys Chem* 47:424-36 Je '43

See also

Blood—Coagulation	Water purification—
Colloids	Coagulation

COAL

Briquetting subbituminous coal. V. F. Parry and J. B. Goodman. *bibliog pls U S Bur Mines Rep of Invest* 3707:1-37 '43
 Changing scene; technical development of national resources. D. T. A. Townsend. *Chem Age (Lond)* 48:9-10 Ja 16 '43

COAL—Continued

Coal for steam raising. J. N. Waite. Inst E E J 90 pt 1:153-61 Ap '43; Same abr. Engineering 154:436-8 N 27 '42; Discussion. Inst E E J 90 pt 1:161-73, 397-416 Ap, S '43; Engineering 154:394, 414, 423 N 13-27 '42; Elec R (Lond) 131:617-18 N 13 '42; Electrician 129:533-6 N 13 '42

Coal is vital war material; review of Manual of instructions on proper firing methods. J. Howatt. Heating-Piping 15:582-4 N '43

Coal or oil? which is more economical? W. F. Schaphorst. chart Am Dyestuff Rep 32: 208 Ap 26 '43

Firebox design is important to quality of coal used. D. L. Wilson. diags Brick & Clay Rec 103:37-43 O '43

Fuels conference held by the American institute of mining and metallurgical engineers, Coal division, and the American society of mechanical engineers. Fuels division. diags Coal Age 47:96-1 N '42

Gain in coal stockpiles below expectations. Comm & Fin Chr 158:22 Jl 1 '43

Gray-iron foundry cupola using egg anthracite as fuel; abstract. J. F. K. Brown. Coal Age 48:102-4 Mr '43

Hydrogenation and liquefaction of coal; characterization of assay oils. L. L. Hirst and others. bibliog U S Bur Mines Tech Pa 645:1-27; pa 10c Supt. of doc. '42

Hydrogenation and liquefaction of coal; effect of petrographic composition and rank of coal. C. H. Fisher and others. diags map U S Bur Mines Tech Pa 642:1-162 bibliog(144 titles, p146-51) '42; Excerpts. Oil & Gas J 41:40-2, 44-1 Ja 21 '43

Report of advisory committee on survey of gas, coke and by-product making properties of American coals. J. S. Haug. Am Gas Assn Proc 1942:382-7

Smoke prevention association of America 37th annual convention, Pittsburgh, June 9-11. Coal Age 48:118-23 Jl '43

Supplementing anthracite with other fuels for home heating. W. T. Reid. diags U S Bur Mines Information Circ 7260:1-22 '43; Excerpt. Sheet Metal Worker 34:38 D '43

See also

Boilers—Firing
Coal distillation
Coal liquefaction
Coal mines and mining
Coal preparation
Coal trade

Coaling stations
Coke
Fuel
Gas
Lignite
Locomotives—Fuel

Analysis

Agar-agar as a coagulant for barium sulfate. E. J. Bogan and H. V. Moyer. bibliog Ind & Eng Chem Anal ed 14:849-50 N 15 '42

Analyses of Illinois coals. diags U S Bur Mines Tech Pa 641:1-245 bibliog(p20-3); pa 30c Supt. of doc. '42

Analyses of Pennsylvania bituminous coals; supplement of Technical paper 590. tables U S Bur Mines Tech Pa 645:1-19; pa 10c Supt. of doc. '42

Analysis and testing of coal. A. C. Fieldner. il Engineering 154:457-60, 496-500 D 4, 18 '42

Determination of surface oxidation of bituminous coal. J. A. Radspinner and H. C. Howard. bibliog diags Ind & Eng Chem Anal ed 15:566-70 S 15 '43

Microdetermination of volatile matter in coal and coal products. M. Neuworth and W. R. Kirner. bibliog Ind & Eng Chem Anal ed 15:359-60 My 15 '43

Mineral matter in coal. G. C. Sprunk and H. J. O'Donnell. bibliog U S Bur Mines Tech Pa 648:1-67; pa 15c Supt. of doc. '42

Proximate analysis of coal. J. Brown and A. S. Bean. Gas J (Lond) 241:248, 253, 255, 280, 283-4, 319, 345 F 24-Mr 17 '43

Proximate analysis of coal and its application. C. S. Darling. Blast F & Steel Pl 31:542, 544-5-1 My '43

Statistical study of the precision of methods for analysis of coal and coke. H. H. Lowry and C. O. Junge. Jr. Am Soc T M Proc 42:870-85; Discussion. 886-8 '42

Blending

Foundry coke from blending of southern coals. W. M. Mobley. Ind & Eng Chem 35: 148-50 F '43

Chemical treatment

Chemical fuel-savers and soot-removers. il Consumers' Research Bul 12:21-2 O '43

Chemistry

Coal oxidation. W. Fuchs, T. S. Polansky and A. G. Sandhoff. bibliog il Ind & Eng Chem 35:343-5 Mr '43

Effect of acids and alkalies upon carbonization products of coal. R. E. Brewer. bibliog U S Bur Mines Rep of Invest 3726:1-20 '43

Effect of oxidation on reactivity and swelling of Illinois coals. O. W. Rees and W. F. Wagner. bibliog Ind & Eng Chem 35:346-8 Mr '43

Possible new uses for coal; degradation of bituminous coals. H. C. Howard. bibliog il Ind & Eng Chem 35:156-61 F '43; Correction. 35:348 Mr '43

Coke making properties

See Coal—Testing

Geology

Coal-seam valleys revealed by relief model of workings; Beckley seam in Raleigh county, West Virginia. il Coal Age 48:67 O '43

Regional metamorphism of coal in southeastern West Virginia. E. T. Heck. maps Am Assn Pet Geologists Bul 27:1194-1225 bibliog(p 1223-5); Discussion. 1225-7 S '43

Liquefaction

See Coal liquefaction

Moisture content

Moisture losses in sampling coal. H. M. Cooper, N. H. Snyder and R. F. Abernethy. U S Bur Mines Rep of Invest 3670:1-14 '42

Prices

Retail prices and distribution of coal during 3½ years of war. Monthly Labor R 56: 999-1001 My '43

Retail prices of food and coal, 1941. In U S Bur Labor Statistics Bul 707:17-35 '42

Purchasing

See Coal purchasing

Swelling

Effect of oxidation on reactivity and swelling of Illinois coals. O. W. Rees and W. F. Wagner. bibliog Ind & Eng Chem 35:346-8 Mr '43

Experimental investigation of the British standard method for the crucible swelling test for coal. H. N. Ostborg, H. R. Limbacher and R. A. Sherman. bibliog il diags Am Soc T M Proc 42:851-64; Discussion. 865-9 '42

New test for swelling of coal. Blast F & Steel Pl 31:794 Jl '43

Testing

Analysis and testing of coal. A. C. Fieldner. il Engineering 154:457-60, 496-500 D 4, 18 '42

Anthracite as generator fuel for water-gas operations. L. L. Newman, C. C. Wright and A. W. Gauger. Gas Age 90:22-5 D 3 '42

Byproduct coke-oven tests of Washington coals. H. F. Yancey and others. pls U S Bur Mines Rep of Invest 3717:1-46 '43

Carbonizing properties and petrographic composition of Bakerstown-bed coal from No. 23 mine, Coketon, Tucker county, W. Va. and the effect of blending this coal with Pittsburgh-bed (Warden mine) coal. J. D. Davis and others. bibliog il U S Bur Mines Tech Pa 644:1-46; pa 15c Supt. of doc. '42

Carbonizing properties and petrographic composition of No. 2-bed coal from Bartoy mine and No. 5-bed coal from Wilkeson-Miller mine, Wilkeson, Pierce county, Washington. J. D. Davis and others. bibliog il U S Bur Mines Tech Pa 649:1-46; pa 10c Supt. of doc. '42

Carbonizing properties and petrographic composition of Taggart-bed coal from mines 30 and 31, Lynch, Harlan county, Ky. and the effect of blending this coal with Pocahontas no. 3- and no. 4-bed coals. J. D. Davis and others. il diag U S Bur Mines Tech Pa 650:1-45 bibliog(p43-5); pa 10c Supt. of doc. '43

COAL—Testing—Continued

Effect of oxidation on reactivity and swelling of Illinois coals. O. W. Rees and W. F. Wagner. *bibliog Ind & Eng Chem* 35:346-8 Mr '43

Evaluation of coals for carbonization; American standard test. *Gas J (Lond)* 240:351 D 16 '42

Experimental investigation of the British standard method for the crucible swelling test for coal. H. N. Ostborg, H. R. Limbacher and R. A. Sherman. *bibliog il diags Am Soc T M Proc* 42:851-64; Discussion. 865-9 '42

Influence of storage on caking and coking properties of coal. L. D. Schmidt, J. L. Elder and J. D. Davis. *bibliog il Ind & Eng Chem* 35:150-5 F '43

New test for swelling of coal. *Blast F & Steel Pl* 31:794 J1 '43

Performance characteristics of a coal-fired space heater. R. C. Cross. *il diag Heating-Piping* 15:46-50 Ja '43

Selection of coals for war-time carbonization by means of an improved engineering model of the coke oven; apparatus for studying stresses, strains and other coal characteristics during coking. J. H. Swinarski, M. C. Cryan and V. J. Altieri. *il plan diag Gas Age* 89:14-15 Je 18 '42; Same. *Am Gas Assn Proc* 1942:414-16

Transportation

Builds engine terminal to cope with growing coal traffic; B. & O. branch, Cowen, W. Va. *il map Ry Age* 115:414-17 S 11 '43

Coal transportation picture. *il Min Cong J* 29:80-1 My '43

River movement looms large in bituminous traffic. M. L. Branin. *map Coal Age* 48:64-6 O '43

See also
Coal handling

Argentina

New coal deposits discovered in Argentina. *For Comm W* 10:22 Mr 27 '43

Brazil

Interior coal deposits attract attention in Brazil. *For Comm W* 12:39 J1 10 '43

Illinois

Analyses of Illinois coals. *il maps U S Bur Mines Tech Pa* 641:1-245 *bibliog*(p20-3); pa 30c Supt. of doc. '42

Effect of oxidation on reactivity and swelling of Illinois coals. O. W. Rees and W. F. Wagner. *bibliog Ind & Eng Chem* 35:346-8 Mr '43

Iowa

Iowa coals in the national emergency. H. L. Olin. *il map Mech Eng* 65:343-6 My '43; Discussion. 65:678 S '43

Kansas

Carbonization of Bevier-bed coal from Kansas and production of blue water gas from the resulting coke. W. W. Odell. *U S Bur Mines Rep of Invest* 3671:1-21 '42

Kentucky

Carbonizing properties and petrographic composition of Taggart-bed coal from mines 30 and 31, Lynch, Harlan county, and the effect of blending this coal with Pocahontas no. 3- and no. 4-bed coals. J. D. Davis and others. *il diag U S Bur Mines Tech Pa* 650:1-45 *bibliog*(p43-5); pa 10c Supt. of doc. '43

Ohio

Ohio clay fields are source of fire clay and coal. *Brick & Clay Rec* 101:46 D '42

Oklahoma-Arkansas field

Quartz veins in the Ouachita mountains of Arkansas and Oklahoma (their relations to structure, metamorphism, and metalliferous deposits). H. D. Miser. *map Econ Geol* 38:107-10 Mr '43

Pennsylvania

Analyses of Pennsylvania bituminous coals; supplement of Technical paper 590. tables *U S Bur Mines Tech Pa* 645:1-19; pa 10c Supt. of doc. '42

See also
Coal mines and mining—Pennsylvania

United States

See also
Coal miners—United States
Coal mines and mining—United States
Coal supply—United States
Coal trade—United States

Washington (state)

Byproduct coke-oven tests of Washington coals. H. F. Yancey and others. *pls U S Bur Mines Rep of Invest* 3717:1-46 '43
Carbonizing properties and petrographic composition of No. 2-bed coal from Bartoy mine and No. 5-bed coal from Wilkeson-Miller mine, Wilkeson, Pierce county, Washington. J. D. Davis and others. *il U S Bur Mines Tech Pa* 649:1-46; pa 10c Supt. of doc. '42

West Virginia

Carbonizing properties and petrographic composition of Bakerstown-bed coal from No. 23 mine, Coketon, Tucker county, W. Va. and the effect of blending this coal with Pittsburgh-bed (Warden mine) coal. J. D. Davis and others. *bibliog il U S Bur Mines Tech Pa* 644:1-46; pa 15c Supt. of doc. '42
Natural coal gas in West Virginia. P. H. Price and A. J. W. Headlee. *bibliog map Am Assn Pet Geologists Bul* 27:529-37 Ap '43

Regional metamorphism of coal in southeastern West Virginia. E. T. Heck. *maps Am Assn Pet Geologists Bul* 27:1194-1225 *bibliog*(p1223-5); Discussion. 1225-7 S '43

See also
Coal mines and mining—West Virginia

COAL, Pulverized

Converting furnaces from oil to coal firing; boiler and metallurgical furnaces. R. M. Hardgrove. *diags plans Mech Eng* 65:573-80 Ag '43

Fluid coal. *Science* 97:sup8 Ja 22 '43
Pulverized coal for forge furnaces. R. B. Engdahl and F. E. Graves. *bibliog il diags A S M E Trans* 65:31-41; Discussion. 41-5 Ja '43

Pulverized coal for metallurgical furnaces. R. B. Engdahl. *bibliog il diags Iron Age* 150:27-31 D 31 '42

Utilizing pulverized coal in the metallurgical industries. C. F. Herington. *il diags plan A S M E Trans* 65:393-400 J1 '43

See also
Boilers—Pulverized coal firing
Diesel engines—Coal dust engines

Preparation

Coal chutes automatically vibrated. C. A. Cox. *diag Elec W* 120:336 J1 24 '43

Hardening hammers for unit coal mills. J. H. Reichenbach. *Rock Prod* 46:49 Ja '43

Ingenious conversion saves oil; Scott paper co. pulverizer equipment blows powdered coal through pipeline to former oil-fired boilers. *diags Power* 87:13-4 Ja '43

Repair sustains ball mill 5 months. *diag Elec W* 120:1540 O 30 '43

Report of the Nonmetals division, fiscal year 1942; coal investigations. O. C. Ralston and A. G. Stern. *pls U S Bur Mines Rep of Invest* 3675:33-8 '42; Excerpt (Preparation and combustion of pulverized coal). Concrete (mill sec) 51:160 Ap '43

Tabulate wear data to guide replacement; coal pulverizing mills and exhaustor fans. *Elec W* 118:2118-4 D 26 '42

20:1 speed units drive coal-pulverizer feeders. *il Power* 87:227 Ap '43

COAL as filter medium

Pennsylvania anthracite as a filter medium. H. G. Turner. *bibliog Ind & Eng Chem* 35:145-7 F '43

COAL ash

Cooperative investigation of the effect of furnace type and atmosphere on fusibility of coal ash. H. M. Cooper and R. F. Abernethy. U S Bur Mines Rep of Invest 3724: 1-43 '43

COAL bins

Coal bins for conversion heating plants. diags. Sheet Metal Worker 34:46, 48+ Ag '43
Full bin warning device. S. H. Kahler. diags Ry Mech Eng 117:433 S '43

Accidents

Method of rescuing coal operator buried under coal at plant of the Western Massachusetts electric company. diags Elec W 119:1314-15 Ap 17 '43

COAL bins, Concrete

Precast concrete coal boxes. 11 diags Rock Prod 46:88 Jl '43

COAL breakers

Coal-pocket design eliminates need for major repairs; use of Tegul-Vitrobond in joints. diags Coal Age 47:109 D '42

COAL burning equipment

Auxiliary heating equipment; connecting a coal-burning water heater to an oil-fired boiler. diags Consumers' Research Bul 11:18 D '42

Basis for conversion. H. E. Winkler. Dom Eng 161:65-9+ Ap '43; Same cond. il Heating-Piping 15:190-1 Ap '43

Chart for figuring the cost of oil to coal conversion. Power Pl Eng 47:100 Jl '43

Coal utilization makes progress with new stoves, stokers, and coal-oil mixtures. M. A. Mayers. Min & Met 24:81-2 F '43

Conversion from oil to coal fired steam generation. S. I. Rottmayer. chart Heating-Piping 15:220-4 My '43

Conversions lag; domestic users of fuel oil slow in shifting to coal. Business Week p37-8 N 14 '42

Converting furnaces from oil to coal firing; boiler and metallurgical furnaces. R. M. Hardgrove. diags Mech Eng 65:573-80 Ag '43; Excerpts. Power Pl Eng 47:78-81 Ag '43

Development and performance of a coal-fired unit heater. R. M. Rush. il diags A S M E Trans 65:279-86 My '43; Abstract. Engineering 155:277-8 Ap 2 '43

Direct-fired air heaters designed for dehydration and chemical processes. R. M. Rush and E. B. Reilly. il diags Mech Eng 65:513-14 Jl '43

From oil to coal for heating of the home and hot water. Consumers' Research Bul 11:11-13 O '42

How to save fuel at home. J. F. Barkley. U S Bur Mines Information Circ 7229:1-5 '42

Idea on fuel conservation; connecting coal burning water heater to oil-fired boiler. il Dom Eng 161:72-3 Mr '43

Liquid coal for oil conversions. T. W. Reynolds. il diags Heat & Ven 40:70-2+ Jl '43

Oil to coal conversion; reference section. il diags Heat & Ven 40:44-74 My '43

Oil-to-coal conversions speed up. Sheet Metal Worker 34:40+ Mr '43

Oil-to-coal conversions still necessary; Steam power and Fuel divisions of ASME, joint meeting. Power 87:320-1+ My '43

Performance characteristics of a downdraft coking furnace. J. R. Fellows. il diags Mech Eng 65:321-4 My '43

Pneumatic spreader stokers solve conversion problems. save \$25,000; Hunt-Rankin leather co. W. Macmichael. il diags Power 87:598-9+ S '43

Problems of conversion to coal; experience of typical companies. H. S. Knowlton. il plans Elec W 120:626-9 Ag 21 '43

Restrictions lifted on manufacture of coal stoves. Sheet Metal Worker 34:96 Ja '43

Smokeless heat; Fellows new down-draft furnace. il diags Business Week p94+ Ap 17 '43

Superheater response to fuel conversion. E. R. Kilsby. il diags Power Pl Eng 47:78-80 N '43

Use of the down-draft coking method for smokeless combustion. J. R. Fellows and J. C. Miles. il diags Heating-Piping 15: 431-5 Ag '43; Abstract. Sheet Metal Worker 34:38, 40 S '43; Discussion. Heating-Piping 15:435-7 Ag '43

Utilizing pulverized coal in the metallurgical industries. C. F. Herington. il diags plan A S M E Trans 65:393-400 Jl '43

Ways to obtain additional heat this winter. diags Consumers' Research Bul 11:10-11 N '42

Whither coal? Engineering 156:65-6 Jl 23 '43; Same. Mech Handling 30:389-93 S '43; Same cond. Engineering 176:53 Jl 16 '43

See also
Stokers, Mechanical

Prices

Price order revision speeds conversion. Dom Eng 160:43+ D '42

COAL cars

How many carloads could controls save? diags Dom Eng 161:46-8 My '43

COAL cleaning

Air-cleaning fines made practicable by dust separators; Elk Horn coal corp. J. H. Edwards. flow diags il Coal Age 48:49-53 Ja '43

Coal conservation by selective mining and reject recovery; Republic steel corporation, Indiana mine. E. B. Winning. flow sheet Min Cong J 28:41-2 D '42

Mechanical cleaning of coal proves an asset to the war effort. W. Chedsey. il Min Cong J 29:71-2 F '43

Mechanical cleaning paces 1942 bituminous preparation work. Coal Age 48:98-101 F '43

Reading's silt basins protect streams and save valuable coal. il diags Coal Age 48: 64-7 My '43

Some preliminary data on methods for allaying coal dust in tipples and cleaning plants. D. S. Kingery. bibliog pls U S Bur Mines Information Circ 7248:1-11 '43

Some small coal jigs for mechanical cleaning of coal at truck mines and other low-tonnage operations. B. W. Gandrud and G. T. Bator. pls U S Bur Mines Rep of Invest 3718:1-17 '43

See also

Coal preparation

Coal washing

COAL distillation

Coal processing and carbonization plants working at capacity; some improvements made. A. C. Fieldner. il Min & Met 24:80-1 F '43

Comparative yields of light oil, tar, and constituents from carbonization tests at 800°, 900°, and 1,000°C. C. R. Holmes, J. E. Wilson and J. D. Davis. 4 charts U S Bur Mines Rep of Invest 3695:1-12 '43

Effect of acids and alkalis upon carbonization products of coal. R. E. Brewer. bibliog U S Bur Mines Rep of Invest 3726:1-20 '43

History of coal distillation. K. R. Webb. Chem & Ind 62:158-9 Ap 24 '43; Discussion. E. A. Mott. 62:187 My 15 '43; Reply. 62:274 Jl 17 '43

See also

Coal liquefaction

Coke manufacture

Gas manufacture

COAL docks

Steel-shell piles for unusual foundation; concrete filled pipes for coal dock. H. T. Immerman. il diags Eng N 130:801-3 Je 3 '43

COAL dredging

Dredging coal seam from Ohio river; abstract. E. Drennan. Coal Age 48:106-7 Mr '43

COAL dust

British safety men seek new ways to make explosive gases and coal dust innocuous. diags Coal Age 48:97-8 My '43

Coal dust collector for a conveyor loading point; Bargoed colliery, South Wales. diags Min Cong J 29:18-21 Ja '43

Coal dust; methods of control. R. R. Sayers. il Min & Met 24:5-8 Ja '43

Control of dust underground. R. H. Honaker. Min Cong J 29:45-6 Jl '43

Dust reduction at the coalface by means of water sprays. C. G. Warner. J Ind Hygiene 25:303-5 S '43

Dustproofing coal with materials available in wartime. G. W. Land. il Coal Age 48: 57-61 S '43

COAL dust—Continued

Power salvaged by properly using otherwise waste coal; use of slurry and dust in one utility and three mine power plants. F. W. Richard. *il diags Coal Age* 48:65-9 Ag '43
Some preliminary data on methods for allaying coal dust in tipples and cleaning plants. D. S. Kingery. bibliog pls U S Bur Mines Information Circ 7248:1-11 '43

See also

Coal, Pulverized
Coal mines and mining—Rock dusting

COAL dust engines. See Diesel engines—Coal dust engines

COAL handling

Averts bottleneck in coal handling; Public service company of Oklahoma. *Elec W* 120:1550 O 30 '43

Bunker conveyor control relayed for flexibility. A. H. Beller. *il diags Elec W* 120:254-6 J1 24 '43

Coal and ash handling plant. J. F. R. Mitchell. *il diags plan Mech Handling* 30:200-4 My '43; Same cond. *Elec R (Lond)* 132:523-4 Ap 16 '43

Coal handling cost cut in two; Dubuque, Iowa, plant, Interstate power company. *il plan Elec W* 119:468 F 6 '43

Coal handling equipment in Rotterdam harbour. D. Rebbeck. *il Mech Handling* 30:188-91 My '43

Conveyor carriage spots coal on pile; Orange & Rockland electric company. *il Elec W* 120:482 Ag 7 '43

Drag scrapers offer safe, flexible solution to coal-storage problems. H. A. Roe. *il diags Power* 87:292-5, 444-6+ My, J1 '43

Gravity-bucket conveyors or pivoted-bucket carriers. W. H. Atherton. *il diags Mech Handling* 30:2-10, '61-71, 110-16, 162-5 Ja-Ap '43

How an eight-mile conveyor belt system reduced delays in coal haulage. E. J. Jones. *Min Cong J* 29:33 Ap '43

Moving a coal bridge. D. C. Tennant. *il Civil Eng* 12:677-8 D '42

New coal chute that eliminates stoker-hopper segregation is easy to make; patent. P. B. Richardson and M. R. Boye. *diags Power* 87:507-9 Ag '43

V-bucket elevator-conveyor. W. H. Atherton. *il diags Mech Handling* 29:204-1 N '42

You can meet WPB regulations when buying material-handling equipment. W. G. Hudson. *il Power* 87:658-60 O '43

See also

Coal docks
Coaling stations

COAL liquefaction

Coal's new horizons; will be source of future gasoline and oil fuel supply. H. L. Ickes. map *Coal Age* 48:54-6, 60-1 Ap '43

Costs and requirements in materials for making gasoline from coal. R. P. Russell. *Nat Pet N* 35 pt 2:R421-2, R424-6 S 1 '43

Hydrogenation and liquefaction of coal; characterization of assay oils. L. L. Hirst and others. bibliog U S Bur Mines Tech Pa 646:1-27; pa 10c Supt. of doc. '42

Hydrogenation and liquefaction of coal; effect of petrographic composition and rank of coal. C. H. Fisher and others. *il diags map U S Bur Mines Tech Pa* 642:1-162 bibliog (144 titles, p146-51) '42; Excerpts. *Oil & Gas J* 41:40-2, 44+ Ja 21 '43

Hydrogenation and liquefaction of coal; effect of temperature, catalyst, and rank of coal on rates of coal-hydrogenation reactions. H. H. Storch and others. bibliog U S Bur Mines Tech Pa 654:1-50; pa 10c Supt. of doc. '43; Excerpts. *Gas Age* 92:40, 42 D 16 '43; Abstract. *Chem & Met Eng* 50:185 Je '43

Lignite an important chemical reserve; German and United States supply; German hydrogenation process. *Chem Ind* 52:672, 760 Je '43

Low-temperature carbonisation; possible future products from coal. W. A. Bristow. *Chem Age (Lond)* 48:503-4 My 8 '43

Oil from coal and shale deposits. *Business Week* p50+ J1 31 '43

Oil from coal requires new mining methods. F. C. Greene. *Oil & Gas J* 42:68+ N 4 '43

Outlook for coal in supplying liquid fuels and coke. A. C. Fieldner. *Coal Age* 48:109-11 F '43

Petroleum substitutes study by government argued. *Oil Paint & Drug Rep* 144:3+ Ag 9 '43

Plants for liquid fuel from coal proposed in O'Mahoney bill. *Coal Age* 48:112 Ag '43

Synthetic-fuel plans approved; hearings before Senate committee. H. D. Ralph. *Oil & Gas J* 42:34-5 Ag 12 '43

Urgent study of oil from coal. *Nat Pet N* 35:19 J1 21 '43

Who should mine coal for petroleum synthesis? letter from Frank C. Greene; with comment. *Oil & Gas J* 42:80-1 S 30 '43

COAL loading machines

Loaders and 14 cars get output at Greenbrier truck mine. *il plan Coal Age* 47:60-2 D '42

Loader improvements; Federal no. 1 mine. Koppers coal division. *il diags Coal Age* 48:61-4 Ag '43

Mechanical loading adds to its gains at bituminous mines. *il Coal Age* 48:91-5 F '43

Pillars recovered with crawler loader and shuttle cars. I. A. Given. *il plan Coal Age* 47:53-5 N '42

Power loading underground. W. H. Richards. *il diags Mech Handling* 30:96-106 Mr '43

Report on underground supervision for mobile loading machines. *Min Cong J* 29:50-3 Mr '43

COAL miners

Absenteeism, a coal industry problem; British and American conditions. R. R. Sayers. bibliog *il Min Cong J* 29:23-7 My '43

Coal question. *Economist* 145:164-5 Ag 7 '43

Manpower and its efficient utilization; American mining congress. Coal division; abstracts of papers. *Coal Age* 48:79-81 Ag '43

Training new men speeded by TWI instruction methods. C. R. Dooley and G. M. Kirk. *il Coal Age* 48:49-51 Mr '43

See also

Coal strikes
Mining schools and education

Diseases and hygiene

Coal dust; methods of control. R. R. Sayers. *il Min & Met* 24:5-8 Ja '43

Canada

Emergency measures to staff Canadian coal mines. *Monthly Labor R* 57:34-5 J1 '43

Great Britain

Coal conciliation. *Economist* 144:460 Ap 10 '43
Conciliation in coal mining. *Economist* 144:699+ My 29 '43

Conditions in British coal-mining industry. *Monthly Labor R* 55:941-51 N '42

Man-power in coal. *Economist* 144:633 My 15 '43

Man-power in coal mining. *Economist* 145:216 Ag 14 '43

Miners' welfare. *Economist* 144:156 Ja 30 '43

Miners' welfare. *Economist* 145:341 S 4 '43

National conciliation machinery for British coal-mining industry. E. M. Hodgkinson. *Monthly Labor R* 56:1170-4 Je '43

National conciliation scheme for the coal mining industry in Great Britain. *Int Labour R* 48:218-21 Ag '43

Pit boys' wages. *Economist* 145:363 S 11 '43

Wages of pit boys. *Economist* 145:116 J1 24 '43

Illinois

U.M.W. and Illinois operators sign new pact with 8½-hour day including travel time. *Coal Age* 48:105 O '43

Indiana

Up-grading coal miners in Indiana; vocational instruction to prepare foreman to do better job. W. S. Harris. *Min Cong J* 29:39-40 Mr '43

Kentucky

Indiana refutes mine wage charges; denies sub-standard living basis exists. *Iron Age* 151:128 My 13 '43

COAL miners—Kentucky—Continued

Transformation of a coal mining town; Inland steel company's program, Wheelwright, Kentucky. L. M. Williams. *Il Min Cong J* 29:37-40 Ag '43

New South Wales

Prevention of coal-mine strikes in New South Wales. R. A. Kidder. *Monthly Labor R* 55:925 N '42

Pennsylvania

Anthracite wildcat, how deep did it scratch? W. Williams. *Il Coal Age* 48:62-7 F '43
Anthracite's woe. *Business Week* p17-18 My 8 '43

United States

Appalachian extension asked by Roosevelt; operators and miners agree on 30 days; with text of wage demands. *Coal Age* 48:103-4, 106+ Ap '43

At stake in coal fight, 37½c. *Business Week* p15-16 O 30 '43

Coal alarm grows. *Business Week* p17 My 1 '43

Coal miner crisis; manpower shortage in western coal mines. *Business Week* p74+ Ja 30 '43

Coal miners' fines may be waived. *Comm & Fin Chr* 157:2291 Je 17 '43

Coal miners return to work, strike halted, 15-day truce. *Comm & Fin Chr* 157:1684-5 My 6 '43

Coal miners' wage fight day by day, March 10-Oct. 26. *Business Week* p17 O 30 '43

Coal operators ask if President is capitulating. *Comm & Fin Chr* 158:228 JI 15 '43

Coal up again. *Business Week* p78 JI 31 '43
Employment and productivity of anthracite miners, 1942. *Monthly Labor R* 57:506-7 S '43

Eyes on the coal pile. *Business Week* p15-16 O 23 '43

Facts about the crisis. *Coal Age* 48:70c-70d My '43

48-hour work week approved for coal mining; W.L.B. voids Illinois portal-to-portal pay. *Coal Age* 48:98, 100 S '43

Higher coal pay affects producers. *Barron's* 23:10 My 3 '43

Illinois operators sign with U.M.W.; others press for action on WLB order. *Coal Age* 48:1164- Ag '43

Lewis acknowledges authority of NWLB; contract between Illinois coal association and District No. 12 of the UMW. *Comm & Fin Chr* 158:428, 431 JI 29 '43

Lewis fights for inflation. S. G. Thompson. *Barron's* 23:3 Mr 15 '43

Lewis slowed, not yet stopped. *Business Week* p15-16 My 8 '43

Manpower picture, one of replacement and job control. F. J. McSherry. *Coal Age* 48:82-4 F '43

Manpower squeeze, will it catch coal mining? *Il Coal Age* 48:46-9 Mr '43

Miners approve longer working schedule, ask higher wages, in 37th convention. *Coal Age* 47:45 N '42

Productivity and labor conditions in anthracite mines, 1937-41. J. A. Corgan and others. *Monthly Labor R* 56:270-1 F '43

Public relations; coal's no.2 job; how the public reported in survey. *Coal Age* 48:46-50 S '43

Reducing absenteeism in coal mines; abstracts of papers at meeting of Mine inspectors' institute of America. *Coal Age* 48:138-41 Je '43

Showdown in coal; workers hold out firmly for \$2 pay rise. *Business Week* p82-3 Mr 6 '43

See also

Coal strikes

COAL mines, Photography of. See *Photography of mines*

COAL mines and mining

Air surveys indicate air and power savings. J. H. Dickerson. *Coal Age* 48:32-4 Ap '43

American institute of mining and metallurgical engineers, Central Appalachian section meeting, Huntington, W.Va., Nov. 20-21. *Coal Age* 48:102 Ja '43

American mining congress, Coal division annual meeting of committees, Pittsburgh, Dec. 1. *Coal Age* 48:94+ Ja '43

American mining congress, Coal division war conference, Cincinnati, July 19-20. *Min Cong J* 29:23-32+ Ag '43; *Coal Age* 48:77-87 Ag '43

Balancing air flow to get the benefits of split currents; using a booster fan; making new openings or sinking new shafts. J. H. Dickerson. *diags Coal Age* 48:92-4 My '43

Coal mining institute of America, 56th annual meeting, Pittsburgh, Dec. 10-11. *Coal Age* 48:114, 116, 118+ Ja '43

Committees report to the annual conference of the Coal division, American mining congress. G. B. Southward. *Min Cong J* 28:45-7 D '42

Cornerstones of profitable mining scrutinized; silver anniversary boat trip of the Illinois mining institute, June 4-6. *Coal Age* 48:110-13 JI '43

Future development and education in mining foreshadowed at Pittsburgh coal mining institute meeting, May 28. *Coal Age* 48:123-4 JI '43

Illinois mining institute golden anniversary meeting, Springfield, Oct. 23. *Coal Age* 47:128-31 D '42

In room two-thirds of roof is in compression; semi-umbrella increases roof security. R. D. Hall. *diags Coal Age* 48:84-5 Je '43

Indiana coal mining institute annual meeting, Terre Haute, Dec. 12. *Coal Age* 48:86+ Ja '43

Room roof subjected to complex of stresses, being not a beam but a very thick slab. R. D. Hall. *diags Coal Age* 48:88, 90 Ag '43

West Virginia coal mining institute 35th annual meeting, Morgantown, Oct. 16-17. *Coal Age* 47:90+ N '42

Why mine roof does not bend or break down near edges of supporting coal pillars. *diag Coal Age* 48:86-7 Ap '43

See also

Coal dredging Coal mining machinery

Coal handling

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Accidents and explosions

Causes, cures and correctives of disasters sought at banquet meet of smoke eaters; 19th annual meeting of the National mine rescue association. *Coal Age* 48:85-6 Ja '43

Death and fatality rates at U.S. coal mines, by causes of accidents, January-December, 1941 and 1942; tabulation. *Coal Age* 48:119 Mr '43

Disaster barricade that uses compartments to keep afterdamp from trapped men. J. A. Scollon. *diag Coal Age* 48:72-3 Mr '43

Fatality rise marks safety developments in 1942. W. W. Adams. *Coal Age* 48:105-7 F '43

Historic accidents and disasters. *Il plan Engineer* 174:352-4, 372-4 O 30-N 6 '42

Increased care bears further fruit in another favorable safety record. J. T. Ryan, Jr. *Min & Met* 24:73 F '43

Lessons from disaster; abstract. P. J. McGraw. *Coal Age* 48:145-6 Je '43

New safety report facilitates study of mining accidents. W. M. Dake. *Coal Age* 48:58-9 Ja '43

Origin of first-aid training at Jermyn colliery, Hudson coal co. *Coal Age* 47:145-7 D '42

Right safety outlook more essential than ever in coal mining; accident statistics. *Coal Age* 47:71-3 D '42

See also

Coal mines and mining—Fires and fire protection

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Blasting

Darkwater cuts costs by trucking none of its overburden. R. D. Hall. *il diags Coal Age* 48:73-5 S '43

Explosives and haulage, themes of mining section, National safety council. *Coal Age* 47:84, 86, 88+ D '42

Retaining blasting tubes; Cardox; abstract. R. H. Nicholas. *Coal Age* 48:144-5 Je '43

Some information from an investigation on methods of confining cardox blasting devices in boreholes in certain coal mines. F. E. Griffith and C. H. Seeling. *pls U S Bur Mines Rep of Invest* 3714:1-13 '43

COAL mines and mining—Blasting—Continued
Way to cut toll of shottfiring accidents. C. Leigh. *Coal Age* 48:76+ S '43

See also

Coal mines and mining—Explosives

Costs

Construction costs for service haulage tracks. *diags Min Cong J* 29:44+ S '43

Degasification

Degasification of coal seams at a profit; developments in horizontal drilling offer means of obtaining large quantities of gas. L. Ranney. *diags Min & Met* 24:13-15 Ja '43; *Excerpts. Oil & Gas J* 41:28 Ja 14 '43; *Abstract. Coal Age* 48:102 Ja '43

Gas removed by putting vacuum pumps on boreholes. *il Coal Age* 48:87-8 My '43

Methods of drawing gas from coal. *Min & Met* 24:319 Jl '43

Natural coal gas in West Virginia. P. H. Price and A. J. W. Headlee. *bibliog map Am Assn Pet Geologists Bul* 27:529-37 Ap '43

Drawings

Studies, coal mines; drawings by Harry Sternberg. *Explosives Eng* 21:183-5, 193 S '43

Electric equipment

Amplidyne simplified; coal mine applications. D. Stoetzel. *diags Coal Age* 48:128-9 O '43
Analysis of the use of electricity at coal mines; progress report. F. A. Jones and others. *diags U S Bur Mines Rep of Invest* 3683:1-25 '43

Armature progress reflected in long-term detailed records; Zeigler no. 1 mine, Bell & Zoller coal & mining co. *il Coal Age* 47:67-8 D '42

Auxiliary pump assures certain and efficient operation; Packer collieries nos. 2, 3 and 4 of the Locust coal co. H. F. Brecker. *diags Coal Age* 47:63-4 D '42

Cable splicing; how factory methods can improve results; with illustrated instructions. R. B. McKinley and C. H. Seaberg. *il Coal Age* 48:67-9 Jl '43

Color coding of distribution power cables for polarity identification. *Min Cong J* 29:45-6 S '43

Deepwell unit takes over from six other pumps; Pursglove coal mining co. *il Coal Age* 48:85 Ap '43

Electrical controls on late model shovels; Amplidyne, Rototrol and Double Ward Leonard control devices for electric shovels and draglines. L. E. Briscoe. *Min Cong J* 29:37+ Jl '43

Flameproof mining control; gate-end box of automatic contactor type. *il Electrician* 130:189 F 19 '43

Increasing coal output; electricity's contribution at a new Scottish mine. *il Elec R (Lond)* 131:707-11 D 4 '42

Joint meeting of the New River and Winding Gulf electrical and mechanical institute, and the West Virginia section, American institute of electrical engineers, Beckley, W. Va., Feb. 11. *Coal Age* 48:110-13 Mr '43
Life prolonged by proper care of electrical tools. P. C. Zienke. *il Coal Age* 48:66-8 S '43

Lightning damage prevented by using proper apparatus. J. A. Civiletti. *diags Coal Age* 47:61-3 N '42

Major gains mark power and maintenance in 1942. *il Coal Age* 48:101-5 F '43
Modern colliery. *il Elec R (Lond)* 132:73-5 Ja 15 '43

Parts situation necessitates ordering year in advance. W. J. Walker. *il Coal Age* 48:69-70 S '43

Power shortcuts to meet wartime production goals; cooling transformers and motors; unusual transformer connections; off-standard transformers and motors. *il diags Coal Age* 48:64-5 S '43

Production insured by preventive electrical maintenance. H. L. Huntley. *il Coal Age* 48:69-71 Mr '43

Production insured by proper maintenance of mine motors. P. McShane and W. W. McCullough. *il diags Coal Age* 48:66-72 Je '43

Protecting trolleys ups tonnage, prevents fires and shocks; automatic reclosing circuit breakers. G. W. Creech. *il Coal Age* 48:75-6 Je '43

Rationalization of colliery electrical equipment. J. A. B. Horsley. *Inst E E J* 89 pt 2: 121-4 Ap '42; *Discussion* 89 pt 2:124-8, 485-91; 90 pt 2:116-18 Ap, O '42, Ap '43

Splicing and vulcanizing two-conductor concentric cables; reprinted, with revisions, from January 1938 issue, p28-29. T. E. Davies. *il diags Min Cong J* 29:14-15 Mr '43

Spring tension steadies heavy cables. *Coal Age* 47:77-8 N '42

Streamlining switchgear transactions speeds ordering and installation; use of diagrams and specifications. E. H. Beckert. *diags Coal Age* 47:102 D '42

2,200-hp. hoist survives storage and fire before use. *il Coal Age* 48:76-8 Ap '43

See also

Coal mines and mining—Power

Equipment

Aerial tramway is transportation link at Pond Creek. J. H. Dickerson. *il plan Coal Age* 47:65-7 D '42

Air-cleaning fines made practicable by dust separators; Elk Horn coal corp. J. H. Edwards. *flow diag il Coal Age* 48:49-53 Ja '43

Balanced equipment and cycle help loading; good maintenance insures good performance. *diags Coal Age* 48:80-3 My '43

Bituminous mines improve service equipment and methods. *il Coal Age* 48:95-8 F '43

Conservation of material. J. Pursglove, jr. *Min Cong J* 29:41-2 Jl '43

Facilities consolidated to maintain output when mine works out; Truax-Traer coal co. *il Coal Age* 48:55-7 Jl '43

Higher priorities still leave need for materials economy. J. L. G. Weysser. *Coal Age* 48:79-82 F '43

How priorities work to help coal mines sustain production. D. L. McElroy. *Coal Age* 47:49-50 N '42

Ingenuity on the repair and maintenance front. W. B. Pratt. *il Min Cong J* 29:35-6 Jl '43

Labor economies in track construction. C. C. Hagenbuch. *Min Cong J* 29:33 Jl '43

Loader and 14 cars get output at Greenbrier truck mine. *il plan Coal Age* 47:60-2 D '42

Permissible mine equipment approved during 1942. E. J. Gleim. *U S Bur Mines Information Cir* 7240:1-4 '43; *Same. Min Cong J* 29:31+ S '43

Right fan location can save money and help ventilation. J. H. Dickerson. *plans Coal Age* 47:58-60 N '42

Scrap pile; source of parts, equipment and guns. *il Coal Age* 48:64-5 Je '43

Shaft escapeway made by round tube integral with lining; Federal no. 1 mine, Koppers coal division. *diags Coal Age* 48:72-3 Ag '43

Snow Hill maintenance geared to mechanical-mining methods. H. N. Lowry, F. R. Miller and E. M. Ingleman. *il Coal Age* 48:56-63 My '43

Timber treatment pays out in southern West Virginia. *il Coal Age* 48:58-60 Jl '43

Underground air receiver in coal seam; no. 3 mine of the Northwestern improvement company. T. Murphy. *il diags Comp Air M* 47:6915-17 D '42

See also

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Explosives

Active list of permissible explosives and blasting devices approved prior to June 30, 1942. J. E. Tiffany and Z. C. Gaugier. *U S Bur Mines Rep of Invest* 3665:1-25 '42

Effects of sheaths on gaseous products from permissible explosives. E. J. Murphy and others. *bibliog U S Bur Mines Rep of Invest* 3705:1-41 '43

Federal explosives act; abstract. D. J. Keenan. *Coal Age* 48:141-3 Je '43

COAL mines and mining—Continued

Fires and fire protection

Fires and explosions; what causes them, how to prevent them. *il* Coal Age 48:68-73 O '43
 Gob fires put out by nozzle system and plenty of water; Lorain coal & dock co. *il* Coal Age 48:78-9 Je '43
 New wrinkles in fighting anthracite fire developed at Hazle Brook mine. S. H. Ash, W. C. Jones and E. W. Felegy. *il* plan Coal Age 47:72-3 N; 95-6 D '42
 Safety in mines investigations. Engineering 155:92 Ja 29 '43
 Some information on the transportation, storage, and handling of lubricants in and about coal mines. D. S. Kingery. *pls* U S Bur Mines Information Circ 7244:1-7 '43

Flood damage

Anthracite flood suggests need for better stream control. R. D. Hall. *map* Coal Age 47:66-7, 70-1 N '42

Gas generation

Underground gasification of coal. H. Rose. Gas J (Lond) 241:720 Je 9 '43

History

Coal of Cape Breton island; historical account. T. A. Rickard. *bibliog* *il* Can Min J 64:15-22 Ja '43

Management

Cutting waste and loss, goal in Snow Hill materials reclamation. G. F. Bieler, D. Green and J. Kyle. Coal Age 48:53-4 Ja '43
 Dishonest mine foreman. J. J. Rutledge. Explosives Eng 20:324-6 N '42
 How can mine foremen improve quality and dependability of their mine output? Coal Age 48:68 Ja '43
 Mine foreman and mine development. J. J. Rutledge. Explosives Eng 20:367-8 D '42
 Mine foreman and the check-up. J. J. Rutledge. Explosives Eng 21:55-6 Mr '43
 Organizing for increased production. J. M. Johnston. *il* Min Cong J 29:30-1 Jl '43
 Output per man-shift rises with seam thickness in W. Va. Coal Age 47:69-70 D '42
 Reducing absenteeism in coal mines; abstract of papers at meeting of Mine inspectors' institute of America. Coal Age 48:138-41 Je '43
 Report on underground supervision for mobile loading machines. Min Cong J 29:50-3 Mr '43
 Snow Hill maintenance geared to mechanical-mining methods. H. N. Lowry, F. R. Miller and E. M. Ingleman. *il* Coal Age 48:59-63 Mr '43
 Tested methods for increasing tonnage. *diags* Coal Age 48:72-86 My '43
 Transportation, maintenance, and ventilation get increasing attention, 1942. J. W. Buch. *il* Min & Met 24:79-80 F '43

Methods

Analyses of Illinois coals; methods of mining. A. L. Toenges and E. R. Maize. *plans* U S Bur Mines Tech Pa 641:24-33 '42
 Anthracite refines and improves methods in 1942. *il* Coal Age 48:74-8 F '43
 Coal as thin as 20 in. provides large output with conveyors. J. H. Edwards. *il* *diags* plan Coal Age 48:59-63 O '43
 Coal conservation by selective mining and reject recovery; Republic steel corporation, Indianola mine. E. B. Winning. *flow sheet* *il* *diags* Min Cong J 28:39-42 D '42
 Coal mining practice in Saskatchewan. K. E. Gustafson. *diags* *plans* Can Min J 64:198-207 Ap '43
 Conveyor layout cuts working area, simplifies operation. H. Sedinger. *diags* Coal Age 48:60-1 Ja '43
 Multiple-shift mechanical mining in some bituminous-coal mines; progress report 4, extraction of pillars with mechanized equipment. A. L. Toenges, E. R. Maize and F. A. Jones. *diags* U S Bur Mines Information Circ 7223:1-59 '42; Excerpt [conclusions]. Min Cong J 29:51-3 My '43
 Oil from coal requires new mining methods. F. C. Greene. Oil & Gas J 42:68+ N 4 '43
 Pillars recovered with crawler loader and shuttle cars. I. A. Given. *il* plan Coal Age 47:53-5 N '42

Removing seam impurities underground. J. J. Snure. Min Cong J 29:42-3 Jl '43
 Shaker mining pays at Winisle coal corporation property. *il* *diags* *plans* Coal Age 48:52-6 Mr '43
 Shuttle cars latest step in Oliver modernization. R. C. Oliver and I. A. Given. *il* *diags* plan Coal Age 48:60-3 Je '43
 Tested methods for increasing tonnage. *diags* Coal Age 48:72-86 My '43

See also

Coal mines and mining—Stripping operations

Power

Factors in sectionalizing mine power; abstract. D. J. Baker. Coal Age 48:124 Ja '43
 Fuel economy in collieries; abstract. H. E. Partridge. Elec R (Lond) 131:825 D 25 '42
 Good power at face means high productivity. *diags* Coal Age 48:84-6 My '43
 Ignition substation closely knit with little field wiring; Vesta-Shannopin coal division, Jones & Laughlin steel corp. C. R. Drum. *il* *diag* Coal Age 48:74-6 Ag '43
 Mine power; old principle offers wartime benefits; three-wire d.c. transmission. G. C. Barnes, jr. *diag* Coal Age 48:65-6 Jl '43
 Power needs met by equipment for using exhaust steam; Dering coal co. *il* *diags* Coal Age 48:63-4 Jl '43
 Power salvaged by properly using otherwise waste coal; use of slurry and dust in one utility and three mine power plants. F. W. Richart. *il* *diags* Coal Age 48:65-9 Ag '43

Protection

Plant defense handled by special organization at Lehigh navigation coal co. H. S. Gilbertson. Coal Age 47:74, 76 D '42

Rock dusting

British safety men seek new ways to make explosive gases and coal dust innocuous. *diag* Coal Age 48:39-8 My '43
 Progress in rock-dusting investigations halted for the duration of the war. H. F. Greenwald. Min & Met 24:78-9 F '43
 Study of decay of mine timber. J. N. Scudder, H. E. DeKay, jr. and A. L. Toenges. U S Bur Mines Rep of Invest 3710:1-14 '43

Safety measures

All-out safety a vital factor in the war effort. R. V. White. *il* Coal Age 48:55-6 Ja '43
 Alloy mine no. 2 celebrates safety award. *il* Explosives Eng 20:336-7 N '42
 British safety men seek new ways to make explosive gases and coal dust innocuous. *diag* Coal Age 48:39-8 My '43
 Coal division committee on safety; plans and procedure for carrying on work. L. C. Campbell. *il* Min Cong J 29:35-7 Ja '43
 Coal dust; methods of control. R. R. Sayers. *il* Min & Met 24:5-8 Ja '43
 Conserving labor by preventing roof falls. F. G. Smith. Min Cong J 29:32 Jl '43
 Control of dust underground. R. H. Honaker. Min Cong J 29:45-6 Jl '43
 Cushioned blasting; preliminary studies of gallery testing. A. R. T. Denues. *il* *diag* U S Bur Mines Rep of Invest 3674:1-37 *bibliog* (p36-7) 43
 Dust reduction at the coalface by means of water sprays. C. G. Warner. J Ind Hygiene 25:303-5 S '43
 Explosives and haulage, themes of Mining section, National safety council. Coal Age 47:84, 86, 88+ D '42
 Federal coal mine inspection has its first anniversary. D. Harrington. *map* Min Cong J 29:77-82 F '43
 Federal inspection program stresses greater service. Coal Age 48:140-1 Ag '43
 Federal inspection starts to move in promoting safety. R. R. Sayers. Coal Age 48:107-9 F '43
 Fires and explosions; what causes them, how to prevent them. *il* Coal Age 48:68-73 O '43
 First organization and work of the Coal-mine inspection division, Bureau of mines. U S Bur Mines Information Circ 7243:1-138 '43
 Ickes acts to promote maximum mine safety. Coal Age 48:142-3 Ag '43

COAL mines and mining—Safety measures—
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- Mine inspectors' institute of America 34th annual meeting, Columbus, May 24-25. *Coal Age* 48:137-47 *Je* '43
- Mine roof sealing to prevent slate falls. *il diag Min Cong J* 29:43-6 *Ap* '43
- Never knock out a tight post, for you and it will fall together. *il Coal Age* 48:87 *Ap* '43
- New men throw heavier burden on safety organization; Union Pacific coal co. E. McAuliffe. *Coal Age* 47:73 *D* '42
- Permissible mine equipment approved during 1942. E. J. Gleim. *U S Bur Mines Information Circ* 7240:1-4 '43; Same. *Min Cong J* 29:31+ *S* '43
- Rope life boosted by care in inspection and lubrication. F. Young. *il Coal Age* 47:64-5 *N* '42
- Safety and comfort feature special Isabella man-trip cars. S. M. Cassidy. *il Coal Age* 47:51-2 *N* '42
- Safety in wartime mining. E. R. Price. *Min Cong J* 29:44-5 *JI* '43
- Safety progress depends heavily on good supervision. R. J. Brennan; T. Coneby. *Coal Age* 48:57-8 *Ja* '43
- Should sprags be used in undercut of coal to keep mine roof from falling? *diags Coal Age* 48:76 *O* '43
- State-board questions. Published in monthly numbers of *Coal age*
- Tentative inspection standards for anthracite mines. *U S Bur Mines Information Circ* 7231:1-42 '43
- Treated timber at Isabella mine; Welton coal company. *il Min Cong J* 29:12-14 *Ja* '43
- 1211 coal mines in 24 states inspected by Bureau men. *Coal Age* 48:133-4 *Je* '43
- Ventilation survey methods. R. Mancha. *il Min Cong J* 29:87-8 *F* '43
- War-time safety highlights supervisory role in mining. W. Murphy; R. R. Newhouse. *Coal Age* 47:78, 80+ *D* '42
- Way to cut toll of shoftrfing accidents. C. Leigh. *Coal Age* 48:76+ *S* '43
- Work of the Safety division, fiscal year 1942. 4pls *U S Bur Mines Rep of Invest* 3698:1-140 '43

See also

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| Coal mines and min- | Coal mines and min- |
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Stripping operations

- Better business follows Schuyler modernization work. flow sheet *il Coal Age* 48:62-4 *Ja* '43
- Bituminous strippers expand output and improve facilities. *il Coal Age* 48:88-90 *F* '43
- Darkwater cuts cost by trucking none of its overburden. R. D. Hall. *il diags Coal Age* 48:71-5 *S* '43
- Facilities consolidated to maintain output when mine works out; Truax-Traer coal co. *il Coal Age* 48:55-7 *JI* '43
- Fox strip mine gets high tonnage with modern units. *il Coal Age* 48:73-5 *Je* '43
- Growth of anthracite stripping; abstract. O. W. Shimer, D. C. Helms and C. E. Brown. *Coal Age* 48:105-6 *Mr* '43
- Improving efficiency in strip mining; American mining congress, Coal division; abstracts of papers. *Coal Age* 48:86-7 *Ag* '43
- Mud area stripped by installing Chambers Bridge at Enos. G. H. Utterback. *il diag Coal Age* 48:62-3 *S* '43
- Preparation of coal from the Enos strip mine. W. L. Caler. *il Min Cong J* 29:32-5 *S* '43
- Shovel leveling done automatically by electronic units; equipment controls pairs of jacks. W. E. Gildersleeve and D. Stoetzel. *il diag Coal Age* 47:56-8 *N* '42
- Strip haulage tuned to new conditions at Streamline. *il Coal Age* 48:89-91 *My* '43
- Strip mine haulage. C. W. Woosley. *Min Cong J* 29:34-5 *JI* '43
- Strip-mine safety; abstract. T. C. Higgins. *Coal Age* 48:146-7 *Je* '43
- Strip-mining progress; abstract. B. Somers. *Coal Age* 48:111-12 *JI* '43
- Strip mining stimulated by war program. W. L. Burt. *il Min Cong J* 29:73-4 *F* '43

- Stripping expands. *il Business Week* p60+ *N* 6 '43
- Stripping with three- to nine-yard drag lines. H. Eiteljorg. *il Min Cong J* 29:46-7 *JI* '43
- Sun shines bright on Kansas coal. J. Harty and others. *il Explosives Eng* 21:124-7, 146-50 *JI* '43
- 33-yd. shovel uncovers 4,000 tons daily at Flamingo. *il Coal Age* 48:56-8 *Mr* '43
- Three pits; even production in outcrop stripping; E. B. Wood coal mining co. *il Coal Age* 48:70-1 *Ag* '43
- Walking dragline reclaims coal left in Civil War work; St Clair coal co. *il Coal Age* 48:64-6 *Mr* '43
- Working data presented at Pottsville, Pa. on mining steep beds by open cuts. O. Shimer. *Coal Age* 48:132-3 *Je* '43

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- Truck mines; progress in mining and preparation, Williamson county, Illinois. *il Coal Age* 48:67-9 *My* '43

Waste disposal

- Fight over silt; Philadelphia renews suit over coal dust washed into the Schuylkill river. *Business Week* p22+ *Je* 19 '43
- Reading's silt basins protect streams and save valuable coal. *il diags Coal Age* 48:64-7 *My* '43

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Coal waste

Canada

- Canada's coal scarcity serious. C. D. Howe. *Coal Age* 48:113-14 *JI* '43

Cape Breton Island

- Coal of Cape Breton island; historical account. T. A. Rickard. *bibliog il Can Min J* 64:15-22 *Ja* '43

Great Britain

- Coal comfort. *Economist* 145:511-12 *O* 16 '43
- Government mine operation falls Britain in wartime crisis; argument for the continuation of the American system. *Coal Age* 48:64-8 *O* '43

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Coal trade—Great Britain

Illinois

- Analyses of Illinois coals; production, distribution, and use. R. L. Anderson and J. W. McBride. *U S Bur Mines Tech Pa* 641:43-57 '42
- Truck mines; progress in mining and preparation, Williamson county. *il Coal Age* 48:67-9 *My* '43

Kansas

- Sun shines bright on Kansas coal. J. Harty and others. *il Explosives Eng* 21:124-7, 146-50 *JI* '43

Oklahoma

- Oklahoma supplies coking coals for new Texas blast furnaces. J. G. Puterbaugh. *map Steel* 113:264+ *O* 11 '43

Pennsylvania

- Anthracite flood suggests need for better stream control. R. D. Hall. *map Coal Age* 47:66-7, 70-1 *N* '42
- Bootleg deadline; illegal mining operations outlawed by Pennsylvania board. *Business Week* p34 *O* 30 '43

Russia

- Russia at war; Arctic fuel. *Economist* 145:497 *O* 9 '43

Saskatchewan

- Coal mining practice in Saskatchewan. K. E. Gustafson. *diags plans Can Min J* 64:198-207 *Ap* '43

Scotland

- Increasing coal output; electricity's contribution at a new Scottish mine. *il Elec R (Lond)* 131:707-11 *D* 4 '42

COAL mines and mining—Continued

United States

Bituminous coal mining takes a look at its wartime records. G. B. Southward. *il Min Cong J* 29:62-4 F '43

Capacity additions relatively small in bituminous mining; with partial list of new and reopened bituminous mines and mines on which construction was started in 1942. *il Coal Age* 48:84-6 F '43

Carl E. Newton to run country's coal mines. *Ry Age* 115:16-17 JI 3 '43

Coal industry, 1942. J. F. K. Brown and others. *il Min & Met* 24:77-83 F '43

Coal mines being returned to private ownership. *Comm & Fin Chr* 158:836 Ag 26 '43

Coal mines returned. *Business Week* p5 O 16 '43

Coal output affected by jitters of miners; more restrictions are a possibility. T. C. Campbell. *il Iron Age* 152:98-100 S 16 '43

Company stores rarely high by OPA. *Coal Age* 48:124-5 Je '43

Crisis which coal mining industry faces. C. E. Newton. *Min Cong J* 29:30-2 Ag '43

Denies plan to nationalize coal mines. C. E. Newton. *Comm & Fin Chr* 158:428 JI 29 '43

Get the coal! sole objective of C. E. Newton. *Business Week* p34+ Ag 28 '43

Glum about coal; Ickes moves to pass financial reins back to owners. *Business Week* p18-19 Ag 21 '43

Government control of coal mines. *Monthly Labor R* 56:1093-4 Je '43

Government operation of coal mines terminated. *Comm & Fin Chr* 158:1620 O 21 '43

Government releases over 100 coal mines; operating organization expanded. *Coal Age* 48:97-8 S '43

Ickes marks time. *Business Week* p17 JI 31 '43

Mine temperatures are quite irregular but mount 16 deg. toward south. *Coal Age* 48:78 O '43

More coal mines released. *Comm & Fin Chr* 158:1513 O 14 '43

No time limit on period of mine operation by Department of the interior. *Coal Age* 48:109-10 Ag '43

Operators fret as Ickes weighs extension of controls. *Business Week* p16-17 JI 3 '43

Progress in the anthracite industry, 1942. W. H. Lesser. *il Min Cong J* 29:65-7 F '43

Public relations; coal's no.2 job; how the public reported in survey. *Coal Age* 48:46-50 S '43

Regulations for operation of coal mines under government control. *Monthly Labor R* 57:237-8 Ag '43

Special case of John L. Lewis; his philosophy of expedience has immediate and long-term dangers. J. Chamberlain. *Fortune* 28:106-9+ S '43

What seizure means. *il Coal Age* 48:48a-48l JI '43

Who should mine coal for petroleum synthesis? letter from Frank C. Greene; with comment. *Oil & Gas J* 42:80-1 S 30 '43

See also

Coal miners—United States
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also American institute of mining and metallurgical engineers—Coal division

West Virginia

Output per man-shift rises with seam thickness in W.Va. *Coal Age* 47:69-70 D '42

War needs put idle coal mines to work; mines of the Christopher brothers; C. J. Burton. *il Explosives Eng* 21:186-7 S '43

Western states

Coal famine looming ahead in the growing industrial West. E. McAuliffe. *il Min Cong J* 29:41-4 My '43

COAL mining institute of America

Annual meeting, 56th, Pittsburgh, Dec. 10-11. *Coal Age* 48:114, 116, 118+ Ja '43

COAL mining machinery

Higher mining machinery output studied. *Coal Age* 48:153-4 F '43

Reducing delays in machine operation. A. K. Hert. *Min Cong J* 29:29-30 JI '43

War conditions influence sales of coal mining equipment in 1942. W. H. Young and others. *il Min Cong J* 29:68-70 F '43

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Conveyors

Coal as thin as 20 in. provides large output with conveyors. J. H. Edwards. *il diags plan Coal Age* 48:59-63 O '43

Coal dust collector for a conveyor loading point; Bargoed colliery, South Wales. *diags Min Cong J* 29:18-21 Ja '43

Conveyor idlers kept clean and efficient by proper lagging application. C. E. Chandler. *il diags Coal Age* 48:122+ F '43

Conveyor layout cuts working area, simplifies operation. H. Sedinger. *diags Coal Age* 48:60-1 Ja '43

Conveyor ventilation requires ample air and positive movement. J. H. Dickerson. *plans Coal Age* 48:67-9 Mr '43

Interlocking circuits permit efficient use of group conveyor systems. *diags Coal Age* 48:74+ Ja '43

Mechanical loading adds to its gains at bituminous mines. *il Coal Age* 48:91-5 F '43

Moving and resetting underground belt conveyors. *il diags Min Cong J* 29:43-6 Ag '43

New Red Jacket mine loads byproduct coal, conveyor-handled. *il map Coal Age* 48:80-3 Je '43

Shaker mining pays at Winisle coal corporation property. *il diags plans Coal Age* 48:52-6 Mr '43

Tripping problems. *il diags Mech Handling* 29:242-3 D '42

Underground belt conveyors. C. W. Gilmer. *il Min Cong J* 29:51-3 JI '43

Maintenance and repair

Modern shop eases mechanical-mining maintenance; Superior coal co. *il Coal Age* 48:79-81 Ap '43

Scrap pile; source of parts, equipment and guns. *il Coal Age* 48:64-5 Je '43

Statistics

Mechanical equipment shows sales drop while tonnage rises. W. H. Young and others. *Coal Age* 48:86-8 F '43

COAL-oil mixtures. See Fuel, Colloidal

COAL preparation

Analyses of Illinois coals; preparation of coal at Illinois mines. T. Fraser. *U S Bur Mines Tech Pa* 641:34-42 '42

Anthracite refines and improves methods in 1942. *Coal Age* 48:77-8 F '43

Ash control in coal washing plants. P. W. F. J. Moran. *il Mech Handling* 29:203-4+ N '42

Better business follows Schuyler modernization work. flow sheet *il Coal Age* 48:62-4 Ja '43

Coal inspection geared to quality at Orient mines. *il Coal Age* 48:74 O '43

Dustless treatment of coals with calcium chloride and other materials; abstract. R. A. Sherman and G. W. Land. *Mech Eng* 65:364-5 My '43

Dustless treatment of coals with materials other than oil. R. A. Sherman and G. W. Land. bibliog *il Min Cong J* 28:48-50 D '42

Dustproofing coal with materials available in wartime. G. W. Land. *il Coal Age* 48:57-61 S '43

Facilities consolidated to maintain output when mine works out; Truax-Traer coal co. *il Coal Age* 48:55-7 JI '43

Mechanical cleaning paces 1942 bituminous preparation work. *Coal Age* 48:98-101 F '43

Preparation of coal from the Enos strip mine. W. L. Caler. *il Min Cong J* 29:32-5 S '43

Preparation plus features Consolidation's Jenkins plant. J. H. Edwards. flow sheet *il diags plans Coal Age* 48:66-76 Ap '43

Quality coal for war and post-war markets. E. E. Keeler. *Min Cong J* 29:40-1 JI '43

Rational preparation of coal; abstract. R. Lessing. *Elec R (Lond)* 133:434 O 1 '43

Truck mines; progress in mining and preparation, Williamson county, Illinois. *il Coal Age* 48:67-9 My '43

COAL preparation—Continued

Washing and drying feature new Flamingo preparation plant. *Il* plan Coal Age 48:59-63 Mr '43

See also
Coal, Pulverized— Coal screening
Preparation Coal tipples
Coal cleaning Coal washing

COAL products

British chemical developments. Can Chem & Process Ind 27:455-6 Ag '43

Chemical use of coal in 1943 over 100,000,000 tons. Coal Age 48:136+ F '43; Same. *Il* Manuf Rec 112:28-9+ Mr '43; Same. Min Cong J 29:30-2 Mr '43

Coal, an abundant raw material for new chemicals; by Coal research laboratory staff of Carnegie institute of technology. bibliog *Il* Chem Ind 52:202-4 F '43

Coal by-products in the plastics industry. R. L. Wakeman. Blast F & Steel Pl 31:217-19, 320-2 F-Mr '43

Coal in industry. H. G. Guy and others. bibliog *Il* Ind & Eng Chem 55:139-61 F '43
Coal products, 1942. Chem & Met Eng 50:120-1 F '43

Coal, the source of many useful things. Rayon 24:113 Mr '43

Comparative yields of light oil, tar, and constituents from carbonization tests at 800°, 900°, and 1,000° C. C. R. Holmes, J. E. Wilson and J. D. Davis. 4 charts U S Bur Mines Rep of Invest 3695:1-12 '43

Future of coal products. W. A. Bristow. Chem Age (Lond) 49:388 O 16 '43

Long is the list; coal, a plentiful raw material. J. K. Hunt. *Il* Sci Am 168:196-8 My '43

Low-temperature carbonisation; possible future products from coal. W. A. Bristow. Chem Age (Lond) 48:503-4 My 8 '43

Outlook for coal in supplying liquid fuels and coke. A. C. Fieldner. Coal Age 48:109-11 F '43

Presidential address before Institution of gas engineers; chemical treatment of coal; the gas industry's service to chemistry. E. V. Evans. Gas J (Lond) 241:702-11 Je 9 '43; Excerpts. Chem Age (Lond) 49:55-8 Jl 17 '43

Report of advisory committee on survey of gas, coke and by-product making properties of American coals. J. S. Haug. Am Gas Assn Proc 1942:382-7

See also
Coal distillation Coke
Coal liquefaction Gas
Coal tar products

Analysis

Microdetermination of volatile matter in coal and coal products. M. Neuworth and W. R. Kirner. bibliog Ind & Eng Chem Anal ed 15:359-60 My 15 '43

COAL pulverizing. *See* Coal, Pulverized— Preparation

COAL purchasing

Coal cost check chart; data sheet. R. J. Buchanan. Power 87:133 F '43

Coal purchase and storage in order to assure the adequacy of the coal supply. T. J. Thomas. Heating-Piping 15:140 Mr '43

Purchasing of coal by industrial users. F. McNeill. Mech Handling 30:242-7, 254-6 Je '43

COAL research

Annual report of research and technologic work on coal, fiscal year 1942. A. C. Fieldner and W. E. Rice. bibliog 5 pls U S Bur Mines Information Circ 7241:1-63 '43

Battelle receives Bituminous coal research commission to study war fuel problems. Coal Age 48:48 Ja '43

Battelle undertakes largest coal project. Power 87:74c+ Ja '43

Bituminous coal research plans new program. Coal Age 48:142 S '43

British coal utilisation research association. E. Williams. Engineering 154:506 D 25 '42

British coal utilisation research association laboratories at Kingston. *Il* Chem Age (Lond) 49:82 Jl 24 '43

British coal utilisation research association new laboratories opened at Kingston by Sir Edward Appleton. Chem Age (Lond) 49:9 Jl 3 '43

British government contributes to coal research. For Comm W 10:25 Mr 6 '43

Case for coal research. J. G. Bennett. Engineering 156:35-6 Jl 9 '43

Coal, an abundant raw material for new chemicals; by Coal research laboratory staff of Carnegie institute of technology. bibliog *Il* Chem Ind 52:202-4 F '43

Coal as a raw material. Economist 145:346-7 S 4 '43

Coal research laboratory of the Carnegie institute of technology. *Il* Chem & Eng N 21:359-61 Mr 25 '43

Coal research program approved. Power Pl Eng 47:118 O '43

Coal research scheme; £1,000,000 joint development project. Chem Age (Lond). 47:582 D 26 '42; Economist 144:24 Ja 2 '43

Coal utilisation. Economist 144:632 My 15 '43

Coal utilisation research. Engineer 175:386-9 My 14 '43

Five-year research at Battelle approved by B.C.R. Coal Age 48:118 O '43

Fusain contents and exchange capacities of sulphonated coal fines; abstract. R. C. West and A. M. Buswell. Chem & Met Eng 49:169-70 N '42

Report of the Nonmetals division, fiscal year 1942; coal investigations. O. C. Ralston and A. G. Stern. pls U S Bur Mines Rep of Invest 3675:33-8 '42; Excerpt (Preparation and combustion of pulverized coal). Concrete (mill sec) 51:160 Ap '43

Research interest grows; with list of projects in progress or completed in 1942 or planned for 1943. *Il* Coal Age 48:111-18 F '43

Two and a half million dollar coal research program approved. Mech Eng 65:834 N '43

Variety and number of research projects stimulated by the war. E. R. Kaiser. *Il* Min & Met 24:82-3 F '43

COAL sampling

Coal sampling the clean way with vacuum cleaner nozzle. diag Elec W 120:1394 O 16 '43

Continuous one-way motion in sampling fine coal. *Il* diags Coal Age 47:80 N '42

Moisture losses in sampling coal. H. M. Cooper, N. H. Snyder and R. F. Abernethy. U S Bur Mines Rep of Invest 3670:1-14 '42

COAL screening

Factors in vibrating-screen choice and use. J. E. Dunn. Coal Age 47:135-6 D '42

COAL sizing

Effect of coal sizing on efficiency and operation of mechanical stokers. O. DeLorenzi. Blast F & Steel Pl 31:910, 912-13, 1042, 1044-5+ Ag-S '43; Same cond. Power Pl Eng 47:96-7+ Je '43

COAL stokers. *See* Stokers, Mechanical

COAL storage

Burn your coal in the firebox and not in the coal pile; hot spot indicators and dry ice protect against spontaneous combustion. diag Steel 113:104+ Ag 2 '43; Same cond. Nat Safety N 48:152-5 O '43

Coal dump heating; precautions which should be taken. H. Mitchell. Elec R (Lond) 133: 83-4 Jl 16 '43

Coal purchase and storage in order to assure the adequacy of the coal supply. T. J. Thomas. Heating-Piping 15:140 Mr '43

Drag-scraper equipment for coal storage. *Il* diags Engineering 156:145-8, 150 Ag 20 '43

Drag scrapers offer safe, flexible solution to coal-storage problems. H. A. Roe. *Il* diags Power 87:292-5, 444-5+ My, Jl '43

Dry ice kills coal pile fires. Heat & Ven 40: 67 Ap '43; Same. Gas Age 91:31 My 20 '43

Experience shows 116-ft. deep coal pile practical. *Il* diags Power 87:5-7 Ja '43

Fuel problems in war time. E. F. Burns. diags Paper Tr J 115:102-8 N 26 '42

Influence of storage on caking and coking properties of coal. L. D. Schmidt, J. L. Elder and J. D. Davis. bibliog *Il* Ind & Eng Chem 35:150-5 F '43

Irrigation quenches coal pile fire. L. Jones. Elec W 119:1336-7 Ap 17 '43

Outside storage of coal; recommended procedure based on British experience. T. Herdman. *Il* Chem Ind 53:197 Ag '43

COAL storage—Continued

- Protecting wartime stockpiles of coal from fire; hot spot indicators. *diags* Min Cong J 29:67 S '43
- Protection against spontaneous combustion in coal piles; hot spot indicators. *Blast F & Steel* Pl 31:244 F '43
- Storage of coal; revised and expanded edition of information circular 7211. J. F. Barkley. U S Bur Mines Information Circ 7235:1-14 '43; Same. *Am Water Works Assn J* 35:825-34 Je '43
- Storage of industrial coal. R. A. A. Taylor. *Engineering* 155:256 Mr 26 '43
- Storage of industrial coals. *il Steel* 113:110-11, 113, 116+ Ag 23 '43
- Store coal now to meet coming production peak. C. R. Earle. *il Power Pl Eng* 47:60-2 J1 '43
- Storing coal; method patented by W. T. Brown. *diags Power Pl Eng* 47:93 Ap '43
- COAL strikes**
- Anthracite wildcat, how deep did it scratch? W. Williams. *il Coal Age* 48:62-7 F '43
- Back-to-work move by coal miners gains. *Comm & Fin Chr* 158:30 J1 '43
- Coal disputes of 1943. *Monthly Labor R* 57:290-4 Ag '43; *Correction*. 57:537 S '43
- Coal miners return to work, strike halted, 15-day truce. *Comm & Fin Chr* 157:1684-5 My 6 '43
- Coal strike called off, Oct. 31 is new deadline. *Comm & Fin Chr* 157:2359 Je 24 '43
- Dues protested; anthracite walkout tied to increase in dues approved by U.M.W. convention. *Business Week* p80 Ja 16 '43
- Labor crisis brings seizure of coal mines; federal operating organization set up. *Coal Age* 48:112+ Je '43
- May 1 ushers in coal-mining stoppage; army seizures reported in prospect. *Coal Age* 48:119+ My '43
- Miners again strike. *Comm & Fin Chr* 157:2083 Je 3 '43
- Miners indicted; first prosecutions under Connally-Smith act. *Business Week* p17-18 J1 '43
- Prevention of coal-mine strikes in New South Wales. R. A. Kidder. *Monthly Labor R* 55:925 N '42
- Score on coal. *Business Week* p14 Je 26 '43
- Second mine stoppage ended by Lewis after Presidential intervention. *Coal Age* 48:103-4, 106, 108 Je '43
- Strike settlement cracks Little Steel formula. *Steel* 113:69-70 N 8 '43
- Unrest in coal. *Business Week* p64+ Ja 23 '43
- What seizure means. *il Coal Age* 48:48a-48l J1 '43
- COAL supply**
- Fuel problems in war time. E. F. Burns. *diags Paper Tr J* 115:102-8 N 26 '42
- World's fuel resources. J. G. Bennett. *Engineer* 176:68-9 J1 23 '43
- Canada**
- Canada mobilizes resources to meet fuel crisis. *Coal Age* 48:135+ Ag '43
- Less hot water and heat urged to meet Canada's fuel crisis. *Coal Age* 48:128+ S '43
- Great Britain**
- Coal for steam raising. J. N. Waite. *Inst E E J* 90 pt 1:153-61 Ap '43; Same *abr. Engineering* 154:436-8 N 27 '42; *Abstract. Elec R (Lond)* 131:585-6 N 6 '42; *Discussion. Inst E E J* 90 pt 1:161-73, 397-416 Ap S '43; *Engineering* 154:394, 414, 423 N 13-27 '42; *Electrician* 129:533-6 N 13 '42; *Elec R (Lond)* 131:617-18 N 13 '42
- Coal production and utilization. *Engineering* 154:612 D 25 '42
- Coal threat again. *Economist* 143:759 D 19 '42
- Coal utilisation research. *Engineer* 175:386-9 My 14 '43
- Conservation of resources; abstract. E. S. Grumell. *Elec R (Lond)* 133:542 O 22 '43
- Electricity and coal conservation. F. D. Parker. *Electrician* 129:466-7 O 30 '42
- Electricity and the fuel campaign. G. Lloyd George. *Electrician* 130:310-11 Mr 26 '43
- Fuel economy progress. *Electrician* 130:24 Ja 8 '43
- Fuel policy; select committee's report; abstracts of papers. *Elec R (Lond)* 132:761 Je 4 '43

- Fuel, power, and transport, a national programme. W. W. Adam. *diags Inst Mech Eng J & Proc* 149:Proc 113-17 Je '43
- Great Britain investigates possibilities of underground gasification of coal. *Chem & Met Eng* 50:186-8 J1 '43
- Nation, the consumer, and the fuel industries. D. Milne-Watson. *Gas J (Lond)* 240:153 N 4 '42; *Abstracts. Elec R (Lond)* 131:591 N 6 '42; *Electrician* 129:495 N 6 '42
- Steam, heat and power utilisation conference. *Engineering* 155:475-6, 499-500 Je 11-18 '43
- See also*
- Coal trade—Great Britain

Switzerland

- Fuel shortage in Switzerland. *Economist* 143:670 N 28 '42

United States

- Bureau of mines studies multiplicity of fuel problems. *Heat & Ven* 40:40 Ag '43
- Coal famine looming ahead in the growing industrial West. E. McAuliffe. *il Min Cong J* 29:41-4 My '43
- Coal shortage. *Science* 98:sup10 N 5 '43
- Coal stockpiles rise; average day's supply dips. *Elec W News* ed 120:1448 O 23 '43
- Coal's new horizons; will be source of future gasoline and oil fuel supply. H. L. Ickes. *map Coal Age* 48:54-6, 60-1 Ap '43
- Coking coals and their importance in winning the war. H. M. Chapman. *il Blast F & Steel Pl* 30:1378-9 D '42
- Eyes on the coal pile; will there be enough coal? *Business Week* p15-16 O 23 '43
- Fuel conservation program urged. *Pub Util* 32:241-2 Ag 19 '43
- Increasing coal stockpiles. *Gas Age* 92:56 J1 15 '43
- National fuel policy. R. M. Weidenhammer. *maps J Land & Pub Util Econ* 19:127-40 My '43
- Recent developments in fuels supply and demand. A. C. Fieldner. *bibliog W Soc E J* 48:127-47 S '43
- Stocks and consumption of bituminous and lignite coal in the United States, including retail yards; tabulation. W. H. Young, and T. W. Harris, jr. *Gas Age* 90:12 N 19 '42
- Wider powers to Ickes covering solid fuels. *Comm & Fin Chr* 157:1681 My 6 '43
- See also*
- Coal trade—United States

Western states

- Trends in the use of energy in the western states, with particular reference to coal. V. F. Parry. *diag map U S Bur Mines Rep* of Invest 3680:1-44 '43

COAL tar

- Acceptance and use of A.W.W.A. standard specifications for coal-tar enamel protective coatings for steel water pipe. D. Bronson and G. B. McComb. *il Am Water Works Assn J* 36:613-23 My '43
- Coal tar outlook. *Soap & San Chem* 18:113+ D '42
- Extinguishing magnesium fires with hard pitch derived from coal tar. H. R. Brown, I. Hartmann and J. Nagy. *pls U S Bur Mines Rep* of Invest 3672:1-17 '42
- Low-boil coaltar use restricted. *Oil Paint & Drug Rep* 143:4+ Ap 5 '43
- Low-temperature carbonisation; methods which may be adopted in German four-year plan. *Chem Age (Lond)* 47:467 N 28 '42; *Chem & Eng N* 20:1521 N 25 '42
- Performance data on enamel type pipe-line coatings. W. F. Rogers. *Pet Eng (Ref annual)* 14:162, 164, 166 J1 '43
- War-time replacement of asphaltic bitumen by tar products; abstract. G. H. Fuidge. *Chem & Ind* 62:216-17 Je 5 '43

Prices

- MPR no.447, coal tar, issued by OPA. *Gas Age* 92:16 S 9 '43
- COAL tar colors**
- See also*
- Dyes and dyeing

COAL tar products

Association of tar distillers; points from the annual report. *Chem Age* (Lond) 48:377 Ap 3 '43

Average monthly quotations in 1942. *Steel* 112:365 Ja 4 '43

Coal by-products in the plastics industry. R. L. Wakeman. *Blast F & Steel Pl* 31:217-19, 320-2 F-Mr '43

Coal tar chemicals, 1942. *Oil Paint & Drug Rep* 143:70+ Ja 11 '43

Coal tar solvents. F. E. Cislak. *Il Ind & Eng Chem* 35:1020-2 O '43

1942; review—tar and tar products. *Gas J* (Lond) 240:413 D 30 '42

See also

Benzene	Indene
Benzol (commercial benzene)	Naphthalene
Coal distillation	Phenol
Creosote	Pitch
	Toluene

COAL tipples

Semi-portable tipple handles large coal tonnage at low cost; Colwell plant of the Freebrook corp. *Il Coal Age* 48:61-2 Jl '43

Some preliminary data on methods for allaying coal dust in tipples and cleaning plants. D. S. Kingery. *bibliog pls U S Bur Mines Information Circ* 7248:1-11 '43

COAL trade

See also Eastern gas and fuel associates

Advertising

Service type of advertising nothing new to Blue Coal's radio program. B. Hall. *Il Ptr Ink* 202:50-1 Ja 8 '43

Finance

Prospects for the coal industries; outlook for bituminous better than for anthracite. R. W. Weidenhammer. *Barron's* 23:3 Ja 18 '43

There's still black gold in them thar hills; coal bonds and stocks. *Comm & Fin Chr* 157:484 F 4 '43

See also

Glen Alden coal company

Regulation

Bill to extend coal act introduced. *Coal Age* 48:128+ F '43

Coal-act extension favored by most bituminous operators. *Coal Age* 48:73-4 F '43

Coal act permitted to die Aug. 23, 1943; Ickes proposes district advisory boards. *Coal Age* 48:110+ Ag '43

Coal regulation; analysis of reasons for regulation, how it has operated, and what the industry faces in the future. *Coal Age* 48:54-60 Ag '43

How Ickes' coal powers are exercised. *Coal Age* 48:58-9 Je '43

OCR loses jurisdiction over civilian coal, oil. *Elec W News* ed 120:389 Jl 31 '43

Six field offices established by Ickes to supervise bituminous distribution. *Coal Age* 48:106+ O '43

Securities

Coal versus oil; with chart showing position of leading stocks. E. A. Krauss. *Mag of Wall St* 72:180-2+ My 29 '43

Statistics

Anthracite and bituminous coal, 1938-1941. *Survey of Cur Business* 1942 Sup p153-5 [supplemented in monthly numbers]

National fuel policy. R. M. Weidenhammer. *maps J Land & Pub Util Econ* 19:127-40 My '43

Production and stocks of Pennsylvania anthracite, 1940-1942; chart. *Survey of Cur Business* 23:2 F '43

Stocks and consumption of bituminous and lignite coal in the United States, including retail yards; tabulation. W. H. Young and T. W. Harris, jr. *Gas Age* 90:12 N 19 '42

Weekly coal and coke production statistics. Published in weekly Thursday numbers of *Commercial & financial chronicle*

Argentina

Argentine coal and coke imports from 1930 through the first 6 months of 1942. *For Comm W* 10:20 Ja 16 '43

Brazil

Brazil's coal situation; with statistics of imports and exports, 1931-1941. *For Comm W* 10:20 F 13 '43

Canada

Canadians urged to make most of available coal. *Coal Age* 48:123-4 O '43

Great Britain

Basis of coal bonus scheme. *Economist* 143:614 N 14 '42

Coal for captives; Britain has signed up to care for Sicily's needs. *Business Week* p65-6 Jl 31 '43

Coal in 1941. *Economist* 144:sup20 Mr 13 '42

Coal mines financial control. *Economist* 143:808-9 D 26 '42

Coal output bonus scheme. *Economist* 143:584 N 7 '42

Coal production. *Economist* 144:826-7 Je 26 '43

Coal utilisation. *Economist* 144:632 My 15 '43

Colliery freeholds. *Economist* 144:836 Je 26 '43

Conditions in British coal-mining industry. *Monthly Labor R* 55:341-51 N '42

Example of coal. *Economist* 145:387-8 S 18 '43

Pit production committees. *Economist* 143:771-2 D 19 '42

Statistics in the fuel and power industries. O. W. Roskill. *Engineering* 155:425-6 My 28 '43

Suspension of coal rebates. *Economist* 144:471 Ap 10 '43

See also
Coal supply—Great Britain

Louisville, Kentucky

Coal to Newcastle; Louisville adopts a central distributing system. *Business Week* p42 O 30 '43

Manchuria

Coal and fuel-oil production in Manchuria. *For Comm W* 11:27 Ap 10 '43

New Zealand

Large coal output in New Zealand. *For Comm W* 10:22-3 Ja 30 '43

Pennsylvania

Anthracite's woe. *Business Week* p17-18 My 8 '43

United States

Black diamonds get new lustre as postwar potentialities develop. *Steel* 113:70-1 Ag 23 '43

Coal delivers in a year marked by rationing of oil. *Coal Age* 48:68-72 F '43

Coal faces postwar readjustment; national fuel policy needed, to benefit both coal and oil industries. R. M. Weidenhammer. *Min & Met* 24:430-4 O '43

Coal guards gain; move to assure permanence of inroads into field of oil burners. *Business Week* p92+ Ag 21 '43

Coal industry, 1942. J. F. K. Brown and others. *Il Min & Met* 24:77-83 F '43

Coal may stretch; now a problem of distribution. *Business Week* p18-19 Jl 24 '43

Coal mining has a responsible job in 1943. T. J. Thomas. *Il Min Cong J* 29:59-61 F '43

Coal output in 1942 nearly a record. *Blast F & Steel Pl* 31:216 F '43

Fuel prospects for the coming winter. *map Sheet Metal Worker* 34:38, 40 Ag '43

New plan for coal delivery. *Sheet Metal Worker* 34:42 My '43

Officials call for fuel conservation; distribution measures taken. *Coal Age* 48:114 Ag '43

100,000,000 tons of coal may be needed in conversion from oil to coal. J. N. Snider. *Min Cong J* 29:65-6 Jl '43

Public relations; coal's no. 2 job; how the public reported in survey. *Coal Age* 48:46-50 S '43

Public relations in action. *Il Coal Age* 48:51-3, 55-6 S '43

Public relations in the coal mining industry. E. H. Walker. *Min Cong J* 29:38-40 Je '43

Retail prices and distribution of coal during 3½ years of war. *Monthly Labor R* 56:999-1001 My '43

COAL trade—United States—Continued

Steps taken for closer coal distribution. *Coal Age* 48:119-22+ Je '43

29 anthracite firms indicted on charges of price fixing. *Coal Age* 48:134+ F '43

See also

Coal strikes

Coal supply—United States

COAL washing

Ash control in coal washing plants. P. W. F. J. Moran. *il Mech Handling* 29:203-4+ N '42

Washing of coal in Brazil, new plant for Sao Paulo; abstract. A. Furia. *Chem & Met Eng* 50:190 Mr '43

See also

Coal cleaning

COAL waste

Power salvaged by properly using otherwise waste coal; use of slurry and dust in one utility and three mine power plants. F. W. Richart. *il diags Coal Age* 48:65-9 Ag '43

See also

Coal washing

COALING stations

Full bin warming device. S. H. Kahler. *diags By Mech Eng* 117:433 S '43

COAST changes

Shoreline erosion at La Jolla, Calif. F. P. Shepard. *il Civil Eng* 13:80-2 F '43

COAST guard. See United States—Coast guard**COAST patrol**

Blimps on patrol. R. G. Picinich, jr. *il Aero Digest* 43:116-17+ J1 '43

Down to the sea for subs; chasers of World war one come back as Y P boats. A. D. Rathbone. *il Sci Am* 168:4-6 Ja '43

Sub hunting by the coastal air patrol. *il Aero Digest* 42:113-14 My '43

COASTAL refraction, Theory of. See Electromagnetic theory**COATED paper. See Paper, Coated****COATING fabrics**

Blends for 32-oz. army overcoating. W. G. Holman. *il Textile World* 93:91 Ap '43

Manual of military fabrics; 32 oz. melton overcoating fabric covered by army specification no. 8-53-A. *il Textile World* 93:83-9 Ag '43

Study of the neutralization of carbonized 32 oz. olive-drab overcoating. K. S. LaFleur. *Am Dyestuff Rep* 32:275-9 Je 21 '43

Study of the sulfuric acid carbonizing bath used in carbonizing the government 32 oz. olive-drab overcoating. K. S. LaFleur. *il Am Dyestuff Rep* 32:473-6, 485-9 N 8 '43

Weaving OD army overcoatings. W. G. Holman. *Textile World* 93:66 Ja '43

COATING materials. See Finishing materials**COATING of fabrics. See Textile fabrics—Coating****COBALT**

Absorption of simple and complex cobalt ions on titanium dioxide. D. G. Nicholson. *Am Chem Soc J* 64:2820-2 D '42

Bureau of mines work on cobalt reviewed. *Min & Met* 24:445 O '43

Cobalt; its occurrence, chemistry, use and metallurgy. D. C. McLaren. *flowsheet il diag Can Min J* 64:341-50 Je '43

Cobalt use in driers allowed. *Oil Paint & Drug Rep* 143:7 Ja 4 '43

Minor metals, 1942. H. W. Davis. *Eng & Min J* 144:75 F '43

Prices in cobalt ore; producers in Canada will enjoy benefits of increase in price of silver. G. C. Bateman. *Can Min J* 63:718 N '42

Analysis

Cobalt determination by photo-electric comparison. W. W. Clarke. *Iron Age* 150:45 D 3 '42

Colorimetric determination of cobalt. R. J. DeGray and E. P. Rittershausen. *Ind & Eng Chem Anal* ed 14:558-9 N 15 '42

Colorimetric determination of cobalt with o-nitrosoresorcinol. L. G. Overholser and J. H. Yoe. *Ind & Eng Chem Anal* ed 15:310-13 My 15 '43

Colorimetric determination of cobalt with terpyridyl. M. L. Moss and M. G. Mellon. *Ind & Eng Chem Anal* ed 15:74-5 Ja 15 '43

Concentration methods in spectrographic analysis; recovery of cobalt, nickel, molybdenum, copper, and zinc from plant materials and soil extracts by 8-hydroxyquinoline. R. O. Scott and R. L. Mitchell. *bibliog Soc Chem Ind J* 62:4-8 Ja '43

Detection of metallic driers in varnishes and oils by spot test analysis. J. V. Atkinson. *bibliog. Paint Oil & Chem R* 106:10, 22-3 J1 '43

Rapid photometric determination of cobalt in steels using nitroso-R-salt. F. W. Haywood and A. A. R. Wood. *bibliog Soc Chem Ind J* 62:37-9 Mr '43

Recent developments in analytical chemistry. *Chem Age (Lond)* 48:623 Je 12 '43

Separation of iron from cobalt or nickel. R. J. DeGray and E. P. Rittershausen. *bibliog Ind & Eng Chem Anal* ed 15:26-7 Ja 15 '43

Use of phosphate for separation of cobalt from iron. V. North and R. C. Wells. *bibliog Ind & Eng Chem Anal* ed 14:559-60 N 15 '42

Isotopes

Nuclear energy levels in Fe⁵⁶ from the decay of Mn⁵⁶ and Co⁵⁷. L. G. Elliott and M. Deutsch. *bibliog Phys R* 63:321-2 Ap 1 '43

Radiations from radioactive Co⁵⁷. C. S. Cook and P. W. McDaniel. *bibliog Phys R* 62:412-13 N 1 '42

COBALT alloys

Diffusion rate of carbon in iron-cobalt alloys. R. Smoluchowski. *bibliog Phys R* 62:539-44 D 1 '42

Electrodeposition of cobalt-tungsten alloys from an acid plating bath. M. L. Holt, R. E. Black and P. F. Hoglund. *Electrochem Soc Trans* 84 (preprint 15):139-47 O '43

Influence of the transition from ferromagnetism to paramagnetism on catalytic activity. G. Cohn and J. A. Hedvall. *bibliog J Phys Chem* 46:841-7 N '42

See also

Iron alloys—Nickel cobalt alloys

COBALT chlorides

Absorption spectra of some double salts containing cobaltous chloride. M. L. Schultz and E. F. Lillek. *bibliog Am Chem Soc J* 64:2748-51 D '42

Factors determining the course and mechanism of Grignard reactions; analysis of gases formed during the reaction of phenylmagnesium bromide with organic halides in the presence of cobaltous halides. M. S. Kharasch, D. W. Lewis and W. B. Reynolds. *diag Am Chem Soc J* 65:493-5 Ap '43

Factors determining the course and mechanisms of Grignard reactions; the effect of metallic halides on the reaction of organolithium compounds with organic halides. M. S. Kharasch, D. W. Lewis and W. B. Reynolds. *Am Chem Soc J* 65:498-500 Ap '43

Factors determining the course and mechanisms of Grignard reactions; the oxidation of Grignard reagents, effect of metallic catalysts. M. S. Kharasch and W. B. Reynolds. *Am Chem Soc J* 65:501-4 Ap '43

COBALT compounds

Interchange of hydrogen isotopes with complex salts; kinetics of the interchange with the luteocobaltic complex. J. S. Anderson, H. V. A. Briscoe and N. L. Spoor. *diag Chem Soc J* p361-7 Ag '43

COBALT halides

Factors determining the course and mechanisms of Grignard reactions; the effect of metallic halides on the reaction of Grignard reagents with aromatic acyl halides. M. S. Kharasch, W. Nudenberg and S. Archer. *bibliog Am Chem Soc J* 65:495-8 Ap '43

Factors influencing the course and mechanisms of Grignard reactions; the effect of metallic halides on the reaction of Grignard reagents with vinyl halides and substituted vinyl halides. M. S. Kharasch and C. F. Fuchs. *Am Chem Soc J* 65:504-7 Ap '43

See also

Cobalt chlorides

COBALT metallurgy

Cobalt electrolytically refined. C. S. Oldach and R. Landau. *Metals & Alloys* 17:967-8 My '43

COBALT molybdate

Catalytic desulfurization of gasolines by cobalt molybdate process. A. C. Byrns, W. E. Bradley and M. W. Lee. bibliog diag Ind & Eng Chem 35:1160-7 N '43

COBALT ores

Bravoite from a new locality. C. A. Rasor. bibliog il Econ Geol 38:399-407 Ag '43

COBALT oxides

Mechanics of enamel adherence; influence of cobalt and nickel oxides on metal precipitation at ground coat-iron interface. R. M. King. bibliog diag Am Cer Soc J 26:358-60 O 1 '43

Mechanics of enamel adherence; role of cobalt oxide in metal and oxide precipitation during ground-coat firing cycle and determination of temperature and time intervals of precipitation. R. M. King. bibliog diag Am Cer Soc J 26:41-8 F 1 '43

Reactions of cobalt(III), cobalt(II), and iron(II) oxides in liquid ammonia. T. E. Moore and G. W. Watt. bibliog Am Chem Soc J 64:2772-5 D '42

COBB, John Edward, 1885-

Top-flight craftsmen. por Inland Ptr 111: 33 My '43

COCA

Opium and coca derivatives controlled. Oil Paint & Drug Rep 143:4 My 31 '43

COCA-COLA

Diplomacy problems Coca Cola met in opening the Mexican market. F. D. Gonda. il Sales Management 52:56+- Mr 15 '43
Pepsi-Cola beat; comparison with Coca-Cola. Business Week p86-8 S 11 '43

COCA-COLA company

Strategic habit stocks. J. C. Clifford. Mag of Wall St 72:542 Ag 21 '43

COCCIDIOIDES

Isolation of haplosporangium parvum n. sp. and coccidioides immitis from wild rodents; their relationship to coccidioidomycosis. C. W. Emmons and L. L. Ashburn. bibliog diag Pub Health Rep 57:1715-27, pl 1-4 N 13 '42

COCCIDIOIDOMYCOSIS

Coccidioidomycosis in wild rodents; a method of determining the extent of endemic areas. C. W. Emmons. bibliog Pub Health Rep 58: 1-5 Ja 1 '43

Isolation of haplosporangium parvum n. sp. and coccidioides immitis from wild rodents; their relationship to coccidioidomycosis. C. W. Emmons and L. L. Ashburn. bibliog diag Pub Health Rep 57:1715-27, pl 1-4 N 13 '42

COCHRANE, Edward Lull, 1892-

Portrait. Mach 50:133 N '43

COCKROACHES

Cockroaches and their control. M. H. Doner and E. G. Thomssen. bibliog il Soap & San Chem 19:94-7 S '43

Replacements materials for roach control. G. E. Gould. bibliog Soap & San Chem 19:90-3+ Ag '43

Roach powders; study of comparative effectiveness of insecticidal powder mixtures against the German cockroach. E. C. Klostermeyer. Soap & San Chem 19:98-9+ F '43

Roach powders; what composition for poisonous and non-poisonous types. il Soap & San Chem 19:7-8+ Ap '43

Sodium fluoride crayons for roach control. J. M. Hutzel. bibliog Soap & San Chem 19: 107, 109+ Ag '43

COCOA

Brazil nationalizes cocoa industry. For Comm W 12:24 Jl 10 '43

British West African cocoa trade. For Comm W 9:15 D 26 '42

Cocoa as oilseed. Economist 143:715; 145:88 D 5 '42, Jl 17 '43

Cocoa situation. Cuba. For Comm W 12:24 Ag 7 '43

Ecuador's 1942 cocoa crop. For Comm W 10: 21 F 20 '43

Mexican factory to make cocoa and cocoa butter. For Comm W 9:15 D 26 '42

Monsanto cocoa; plant at Bahia to extract butter for Europe; residues to U.S. for caffeine content. Business Week p74 Ap 24 '43

More for the table; supplies of coffee, sugar, and cocoa improving. Business Week p80+ Jl 17 '43

Prices

Costa Rican and Congan cocoa beans: action by OFA. For Comm W 11:26 My 15 '43

Statistics

Cocoa, 1938-1941. Survey of Cur Business 1942 Sup p125 [supplemented in monthly numbers]

COCOA milk. See Milk, Chocolate

COCOANUT GROVE fire. See Fires

COCOANUT oil

Ceylon's production and exports of coconut oil. For Comm W 13:25 O 2 '43

Coconut, babassu oils freed for inedible use. Oil Paint & Drug Rep 143:5 Je 7 '43

Coconut or copra oil, 1938-1941. Survey of Cur Business 1942 Sup p106 [supplemented in monthly numbers]

Custom-built fats. H. W. Vahlteich. bibliog il Chem & Eng N 21:1238-42 Ag 10 '43

FDA releases coconut, babassu oils for soap. Soap & San Chem 19:39 Jl '43

Review of the current supply situation. Soap & San Chem 19:31-2 O '43

Rosin replacement of coconut. Soap & San Chem 18:61-2 D '42

COCOONUTS

Ceylon's coconut production asset to United nations. For Comm W 13:16 O 9 '43

Honduran coconut production. For Comm W 9:20 D 26 '42

COD liver oil

Cod liver oil; important developments in processing at Canadian plant. il Can Chem & Process Ind 27:555-7+ O '43

Pruritus ani and absenteeism: a review of the literature, and report on a new form of adjuvant therapy. R. H. Aldrich. bibliog Ind Med 12:654-8 O '43

Analysis

Spectrophotometric and biological assay of vitamin A in oils. N. H. Coy, H. L. Sassaman and A. Black. bibliog Ind & Eng Chem Anal ed 15:441-3 Jl 15 '43

CO-EDUCATION

End of co-education in Russia. Economist 145:273 Ag 28 '43

COELENERATA

See also

Corals

COERCIVE force. See Magnetic measurements

COES, Harold Vinton, 1883-
Portrait. Mech Eng 65:56 Ja '43

COFFEE

Coffee and tea production; abstract. G. Son-nedecker. Science 96:sup10 N 13 '42

Extracting the most from your coffee ration. H. G. Parker. il Consumers' Research Bul 11:21-2 Ap '43

Fibre cans on tin lines. il Mod Packaging 16:89+ My '43

Keeping ahead of packaging crises. J. K. Evans. il Food Ind 15:72-3 Ap '43

More for the table; supplies of coffee, sugar, and cocoa improving. Business Week p80+ Jl 17 '43

New way to close coffee bags; by corrugating the tops. il Mod Packaging 16:77 Mr '43

Packaged coffee. il Sci Am 168:268 Je '43

Permeability of flexible materials. L. W. Elder. il Mod Packaging 16:69-71 Jl '43

Roasting beverage materials. R. E. Kremers. bibliog il Food Ind 15:74-6 O '43

Simple method of closing bags saves metal; developed by A. & F. G. Hightower. il Food Ind 15:56-7 Mr '43

Staling vs. rancidity in roasted coffee; relative effects of moisture, aroma oxidation, and aroma evaporation on staling. A. C. Shuman and L. W. Elder, jr. bibliog il Ind & Eng Chem 35:778-81 Jl '43

Staples paradox; coffee supply improves; sugar may get tighter. Business Week p22 My 1 '43

Stretching your coffee supply. J. Driver. Consumers' Research Bul 11:5-6 Ja '43

COFFEE—Continued

Why are stocks of coffee in this country so low? Consumers' Research Bul 11:2+ Ja '43

See also
Cafestrol

Rationing

Coffee by coupon. Business Week p14 N 28 '42

Coffee ration cut to one pound in six weeks. Comm & Fin Chr 157:672 F 18 '43

Coffee rationing begins with supplies ample. Comm & Fin Chr 156:2163 D 17 '42

Coffee rationing ends. Comm & Fin Chr 158:522 Ag 5 '43

COFFEE, Soluble

Coffee in foil for soldiers. Il Mod Packaging 16:65 Je '43

COFFEE, Substitutes for

Coffee stretchers. Business Week p62+ N 28 '42

COFFEE dust

Designing a coffee dust separator. diag Sheet Metal Worker 34:31-2 O '43

COFFEE pots

Extracting the most from your coffee ration. H. G. Parker. Il Consumers' Research Bul 11:21-2 Ap '43

COFFEE trade

Coffee industry hopes for increased ration; undertakes promotion program. Ptr Ink 203:64 Je 25 '43

Coffee stabilized; present imports about equal to consumption. Business Week p50 Ja 23 '43

Have another cup; coffee marketers to counteract advertising that makes civilian use of beverage seem unpatriotic. Business Week p82 Jl 17 '43

Inter-American coffee agreement to be extended. Comm & Fin Chr 157:1783 My 13 '43

With expanding government debt and higher taxes, looks for higher price levels in post-war era; address at National coffee convention. G. G. Paton. Comm & Fin Chr 158:1605+ O 21 '43

Advertising

Urge to have a second cup may herald end of coffee shortage, Pan-American bureau-National coffee association promotion. Il Ptr Ink 204:50 Jl 16 '43

Statistics

Angles on the coffee outlook; per capita imports, 1900-1940. For Comm W 9:21 N 21 '42

Coffee, 1938-1941. Survey of Cur Business 1942 Sup p125 [supplemented in monthly numbers]

Brazil

Coffee agreement helps Brazilian growers through shipping difficulties. For Comm W 11:32 Ap 17 '43

Haiti

Coffee-export control administration transferred. For Comm W 13:23 O 23 '43

Latin America

Latin American coffee. Economist 143:734 D 12 '42

Peru

Coffee production in Peru. For Comm W 10:21 Ja 16 '43

Salvador

El Salvador acts to regulate coffee industry. Comm & Fin Chr 156:1813 N 19 '42

COFFERDAMS

Cellular cofferdam serves as wall of ship construction basins. Il diag Eng N 131:588-94 O 21 '43

Douglas dam constructed in 13 months. Il Eng N 131:135-6 Jl 15 '43

Fighting water in a bridge foundation. Il diag Eng N 130:806-10 Je 3 '43

Salvaging of the John Cadwallader. D. S. Brierley. Il diag plan Marine Eng 48:182-7 Jl '43

Submerged shipways with steel sheeting walls. A. J. Ackerman; C. B. Jansen. Il diag Civil Eng 13:309-14 Jl '43

See also

Bridges—Foundations and piers

COFFINS

Burial business; cost of dying fluctuates; wartime regulations. Il Business Week p38+ S 25 '43

COHOE, Wallace Patten, 1875-

Chosen president of the Society of chemical industry. Chem & Ind 62:245 Jl 3 '43; Same, Can Chem & Process Ind 27:482+ Ag '43

COIL, E. Johnston

Portrait. Business Week p42 Jl 31 '43

COILS

Bobbin coils of cellulose acetate. Il Gen Elec R 45:713 D '42

Collapsible arbor speeds coil winding. Il Elec W 120:1200 O 2 '43

Heavy-duty winding machine. Il Elec W 119:1322 Ap 17 '43

Influence of nonuniform development of heat upon the temperature distribution in electrical coils and similar heat sources of simple form. M. Jakob. bibliog. A S M E Trans 65:593-602; Discussion. 602-5 Ag '43

Magnetic induction field of air-core coils; its application to high-frequency heating in valve manufacture. C. B. Kirkpatrick. diag Wireless Eng 20:372-82 Ag '43

Measuring coil characteristics without an impedance bridge. H. D. Brailsford. diag Electronics 16:86-8+ My '43

Voltage surges caused by contactor coils. J. R. Taylor and C. E. Randall. diag Inst E E J 90 pt 2:90-5; Discussion. 95-100 Ap '43

See also

Armatures Radio coils
Electromagnets Solenoids
Inductance coils

Testing

Testing of series coils. E. V. Clark. Electrician 129:690 D 25 '42

COILS (cables, ropes, etc.)**Tables, calculations, etc.**

Calculating the length of coils. chart Pulp & Pa of Can 44:488 My '43

Improved rule for figuring lineal feet on drum or reel. W. F. Schaphorst. diag Pulp & Pa of Can 44:448 My '43

Length of coils. W. F. Schaphorst. diag Chem Ind 52:349 Mr '43

COILS, Inductance. See Inductance coils**COILS, Pipe**

Handling small water quantities with the siphon or ejector pump; removal of condensate from small cooling coils. F. F. Stevenson. Il diag Heating-Piping 15:138-9 Mr '43

How to meet war time restrictions in heating and air conditioning design; radiators and coils. T. W. Reynolds. Heat & Ven 40:60F F '43

Radiant heating and cooling for a new plant cafeteria. T. N. Adam. Il diag plans Heating-Piping 15:277-80 Je '43

Water sprayed direct expansion coils. W. Goodman. diag chart Heating-Piping 15:165-8, 243-8, 295-9, 350-2 Ap-Jl '43

COINAGE

Coinage in wartime. Economist 143:803-4 D 26 '42

COINCIDENCE counting

Angular correlation of successive gamma-rays. R. Beringer. bibliog diag Phys R 63:23-8 Ja 1 '43

COINS

Iron pennies now and 2000 years ago. T. T. Read. Min & Met 24:407 S '43

Mexican subsidiary coinage. For Comm W 10:19 Ja 30 '43

New alloy for five-cent coins; copper-silver-manganese. Franklin Inst J 235:285-8 Mr '43

New five-cent coin is 56% copper, 35% silver. Comm & Fin Chr 157:585 F 11 '43

New one-cent coin to be of zinc-coated steel; three-cent coin planned. Comm & Fin Chr 157:73 Ja 7 '43

COKE-oven gas—Continued

Separation of gases; partial liquefaction by refrigeration. M. Ruhemann. *diag Inst Pet J* 28:227-30 O '42

COKE ovens

Coke oven plant construction and development in 1942. W. A. Leech, jr. flow sheets bibliog *il diags Blast F & Steel Pl* 31:60-7 Ja '43

Fabricating steel coke oven doors; with cost data. H. A. Immisch. *il diags Steel* 113:113-14+ Ag 2 '43

Fuel requirements of carbonizing plant. S. Pexton. *diags Gas J (Lond)* 241:55-6, 61, 63 bibliog(p56), 83-6, 116-18 Ja 13-27 '43

Natural gasoline enrichment of producer gas for use in underfiring coke ovens. W. O. Keeling. *diag Gas Age* 92:27-8+ JI 15 '43; Same. *Am Gas Assn Mo* 25:375-7 S '43

Underfiring a coke-oven battery with refinery oil gas. E. E. Witham and J. H. Long. *diags Gas Age* 91:27-30, 32 Je 17 '43; Same. *Am Gas J* 159:27-31 JI '43

Underfiring with natural gas-air mixture at Chicago. G. A. Scott. *diags Blast F & Steel Pl* 31:898-901 Ag '43

See also

Coke manufacture
Coke-oven gas

Models

Selection of coals for war-time carbonization by means of an improved engineering model of the coke oven; apparatus for studying stresses, strains and other coal characteristics during coking. J. H. Swinarski, M. C. Cryan and V. J. Altieri. *il plan diag Gas Age* 89:14-15 Je 18 '42; Same. *Am Gas Assn Proc* 1942:414-16

COKE plants**Accidents**

Coke-oven accidents in the United States, calendar year 1941. W. W. Adams and V. E. Wrenn. *U S Bur Mines Tech Pa* 651:1-19; pa 10c Supt. of doc. '43

Equipment

See also

Coke ovens

COKE plants, By-product

Coke oven plant construction and development in 1942. W. A. Leech, jr. flow sheets bibliog *il diags Blast F & Steel Pl* 31:60-7 Ja '43

See also

Coke manufacture—
By-products

COKE research

Better coke for more pig iron production. A. C. Fieldner. *Blast F & Steel Pl* 30:1279-81+ N '42

Increased pig-iron output through improved coke. L. D. Schmidt, W. C. Schroeder and A. C. Fieldner. *pl U S Bur Mines Rep of Invest* 3711:1-58 '43

COLBERT, Edwin Harris, 1905-

Presentation of the Daniel Giraud Elliot medal for 1935. W. K. Gregory. *Science* 97:433-4 My 14 '43

COLBURN, Irving Wightman, 1861-1917

Irving Wightman Colburn; inventor of continuous flat-drawing window-glass machine. W. P. Clarke. *por(p31) Am Cer Soc Bul* 22:32-4 F 15 '43

COLCHICUM

Colchicum is not immune to effects of its own drug. *Science* 97:sup9 Ja 22 '43

COLD

See also

Cooling

Refrigeration and
refrigerating ma-
chinery

Temperature, Low

Therapeutic use

Cryotherapy. *Sci Am* 169:21-2 JI '43

Reduced temperature anesthesia for surgery of trauma: case report. J. M. Dzib and R. K. Brown. *Ind Med* 12:79-80 F '43

COLD (disease)

Can colds be prevented? no effective method; not vaccines, not vitamins. R. H. Feldt. *Sci Am* 169:20-1 JI '43

Colds in industry; abstract. S. S. Leopold. *Safety Eng* 84:43 D '42; Same. *Foundry* 71:150 Ja '43; Same. *Nat Safety N* 47:36+ Ja '43; Same. *Ind Med* 12:24 Ja '43

Fighting the common cold. *il Factory Management* 100:103 D '42

Oral prophylaxis against upper respiratory infections. T. B. Herron. *bibliog Ind Med* 12:590-3 S '43

Treatment of the common cold. H. J. Davis. *Ind Med* 12:426-7 JI '43

See also

Influenza

COLD cathode lamps. See Electric lamps, Fluorescent—Cold cathode

COLD cathode tubes. See Vacuum tubes—Cold cathode tubes; X ray tubes

COLD creams. See Cosmetics

COLD metal process company

Government action seeks to void Cold metal process co.'s patents of the Steckel mill. *Steel* 113:66 Ag 2 '43

Patents at stake; Dept. of justice seeks to win cancellation in cold rolling process, alleging fraud. *Business Week* p56+ O 2 '43

COLD rooms. See Testing laboratories—Cold rooms

COLD storage

Air circulation problems in holding rooms and beef and hog chill rooms. A. L. Byfield. *diag Refrig Eng* 45:417-18 Je '43

Cold storage of food. H. C. Lythgoe. *bibliog il Ind & Eng Chem* 35:29-38 Ja '43

Cooling, heating used to protect flying suits; storage of wool-and-fur suits. L. W. Clifford. *Refrig Eng* 44:321 N '42; Same. *Heat & Ven* 40:34 Mr '43

Demand for refrigeration. D. L. Fiske. *Refrig Eng* 46:321-48 bibliog(p346) N '43

Importance of the atmosphere in the cold storage of apples. R. M. Smock. *bibliog Refrig Eng* 45:331-3 My '43

Miniature cold-storage plants coming? *For Comm W* 12:20 S 18 '43

Some factors influencing the toxicity of ozone to fungi in cold storage. R. D. Watson. *bibliog diag Refrig Eng* 46:103-6 Ag '43

See also

Refrigeration and
refrigerating ma-
chinery

COLD storage locker insurance. See Insurance, Cold storage locker

COLD storage lockers

Conservation of perishables by refrigeration. M. E. Pennington. *bibliog il Ind & Eng Chem* 35:62-6 Ja '43; Same. *Refrig Eng* 45:89-92 F '43

Effect of locker storage on the quality of pork. E. J. Young and J. A. McIntosh. *bibliog Refrig Eng* 45:100-3 F '43

Frozen food locker plant. *il plan Am Bld* 65:46+ Je '43

Home locker. W. Carver. *il Refrig Eng* 46:157-61+, 237-9+ S-O '43

Lockers pay off; frozen food plants bulge. *Business Week* p19-20+ Ap 17 '43

More locker plants coming; industry sees huge post-war expansion. *il Sales Management* 52:30, 32, 34 JI 15 '43

Post-war problems of the locker industry. S. Bull. *Refrig Eng* 46:310-11, 364 N '43

Preliminary results from the use of freezing plates for locker plant freezing and farm freezing and storage cabinets; with observations on farm operated cabinets. C. W. DuBois and D. K. Tressler. *diags Refrig Eng* 46:25-30+ JI '43

Refrigerating equipment dealer operates locker plant. J. E. Hubel. *il Refrig Eng* 46:175-6 S '43

Tile most suitable for cold storage locker. *il Brick & Clay Rec* 103:44 S '43

COLD storage warehouses

Effect of structural interruptions of insulation in warehouses. J. F. Stone. *diags Refrig Eng* 46:243-5 O '43

New refrigeration plant in a Durham warehouse. R. E. Ogletree. *il Refrig Eng* 45:93-4+ F '43

Space is scarce; cold storage warehouses are better than 80% filled. *Business Week* p29+ S 11 '43

- COLD storage warehouses—Continued**
Warehouses ease. Business Week p37-8 Ap 17 '43
Wartime refrigerated warehousing. J. R. Shoemaker. Refrig Eng 46:168-9+ S '43
- COLD treatment of metals.** See Metals, Cold treatment of
- COLD welding of engines.** See Gas and oil engines—Maintenance and repair
- COLD working of metals.** See Metals, Cold working of
- COLEMAN, Stewart P.** 1899-
Directs world-wide programming of oil for Allies. por Nat Pet N 35:2 Ag 11 '43
- COLGATE-PALMOLIVE-PEET company**
Annual report. Comm & Fin Chr 157:1360-1 Ap 12 '43
- COLLAGEN**
Structure of fibrous proteins. M. L. Huggins. bibliog(60 references) Chem R 32:195-218 Ap '43
- COLLATERAL.** See Loans—Collateral; Loans, Bank—Collateral
- COLLATING machines**
Work simplification applied to collating. II Factory Management 101:127-8 Jl '43
- COLLECTING of accounts**
Accomplishments of a collection department operating without collectors; Ohio fuel gas company. H. S. Hahn. Am Gas Assn Proc 1942:117-20; Discussion. 120-3
Gross charge for collecting overdue bills upheld. J. N. Greene. Am Gas J 158:23 My '43
Positive collection system; Washington water power company of Spokane. Elec W 120: 1220+ O 2 '43
Psychology of credit letters; appeals that bring in the checks. H. M. Sommers. Credit & Fin Management 45:11-14, 30 Mr '43
Psychology of credit letters; examples of letters in later stages of collections. H. M. Sommers. Credit & Fin Management 45: 13-14+ Je '43
Psychology of credit letters; intermediate stage of collection appeals. H. M. Sommers. Credit & Fin Management 45:15-21+ Ap '43
Psychology of credit letters; later stages of collection appeals. H. M. Sommers. Credit & Fin Management 45:15-18 My '43
Psychology of credit letters; phases of retail collection appeals. H. M. Sommers. Credit & Fin Management 45:11-15 S '43
Psychology of credit letters; questioning an established customer who is slipping. H. M. Sommers. Credit & Fin Management 45:10-13, 29 Mr '43
Reducing old accounts while selling currently. R. Cracraft. Credit & Fin Management 45:18-19 Ja '43
Turn-over as a collection gauge; war brings need for shorter collection period. J. E. Walsh. Credit & Fin Management 45:15-16 F '43
See also
Billing Credit departments
Credit Salesmen and credit
- COLLECTIVE bargaining**
A.S.C.E. expands its activities relating to employment conditions; local sections authorized to set up machinery under which engineers can be independently represented in collective bargaining. Eng N 131:645 O 28 '43
Basis for good labor relations. S. G. Blaylock. II Eng & Min J 144:71-4 O '43
Collective bargaining and salaries for professional engineering employees; bargaining units organized in local sections of American society of civil engineers. E. B. Whitman. Civil Eng 13:513-14 N '43
Collective bargaining bill, Ontario. Pulp & Pa of Can 44:545-6 Je '43
Collective bargaining for professional engineers; report of American society of civil engineers committee on employment conditions. Civil Eng 13:552-3 N '43
Collective bargaining in Canadian government plants. Monthly Labor R 56:474-5 Mr '43
Collective-bargaining law of Ontario. Monthly Labor R 57:58-9 Jl '43
Engineers protest affiliation with sub-professionals; professional group intervenes in WLB case. Civil Eng 13:337-8 Jl '43
Foremen freed; Shell's supervisors finally withdrawn from workers' bargaining unit. Business Week p84+ S 18 '43
How collective bargaining works; a survey of experience in leading American industries; review, by C. A. Myers. Mech Eng 65:208-9 Mr '43
Industrial relations and utility labor. J. C. McIntosh. Pub Util 32:477-81 O 14 '43
Is nation-wide bargaining ahead? abstract. A. E. Roth. Management R 32:361-2 O '43
Kaiser doctrine; policy governing units that expand after contract is signed. Business Week p88+ F 20 '43
Kaiser's contracts; NLRB charges against Coast shipbuilder. Business Week p94-5 N 28 '42
Labor relations and collective bargaining in chemical industry; Chem & Met report. Chem & Met Eng 50:99-106 Ja '43
Supreme court sustains employer's right to voice views on union election. Comm & Fin Chr 158:1594 O 21 '43
Types of union recognition in effect in January 1943. Monthly Labor R 56:284-91 F '43
Union bypassed; circuit court affirms right of individual to squawk to boss. Business Week p112+ Jl 10 '43
Union membership and collective bargaining by foremen. Monthly Labor R 56:1049-53 Je '43
See also
Employees—Length of service National labor relations board
Employees' representation in management Trade agreements
- COLLEGE architecture**
Additions to Wheaton college, Norton, Mass.; views, plans, and construction outline. Arch Forum 78:81-8 Ja '43
See also
College buildings
Dormitories
- COLLEGE buildings**
Science building addition, Wheaton college. II plans Arch Forum 78:85-8 Ja '43
See also
Dormitories
- Power**
Compressed air in colleges; in laboratories, libraries and in power plants. G. K. Saurwein. II Power 87:314-15 My '43
- COLLEGE education**
See also
College students
- COLLEGE graduates**
Industry points way to selection of college trained men; recruiting programs of various industries. II Ry Age 116:313-18 Ag 21 '43
See also
Engineering graduates
- COLLEGE libraries**
Impact of the war on one college library; Riggs memorial library, Georgetown university. P. Temple. Special Lib 34:413-16 O '43
See also
Carroll college—Library Harvard university—Libraries
- COLLEGE library architecture.** See Library architecture
- COLLEGE professors and instructors**
National learned society groups and the public interest. L. C. Karpinski. Science 97: 422-3 My 7 '43
See also Engineering colleges—Professors and instructors
- COLLEGE students**
Adjustments of young people; Stephens College women. C. J. Marsh. Personnel J 21: 231-8 Ja '43
Periodical reading habits of university students. V. Georges. J Business 16:204-5 Jl '43
See also
Chemistry students

COLLEGE students—Continued**Employment**

- Cooperatives among students in the United States, 1941. F. E. Parker. *Monthly Labor R* 56:702-20 Ap '43
 Students in half-time office jobs. F. C. Minaker. *Il Am Business* 13:36-7 Ap '43

COLLEGES and universities

- See also*
 College buildings Land grant colleges
 Engineering colleges Medical colleges
also names of colleges and universities, e.g.

- Bryn Mawr college
 Illinois university
 Michigan university
 Consult Education index for additional material

Curriculum

- Instruction in library use: a needed addition to the university curriculum. R. S. Hutton. *bibliog Assn of Sp Lib & Inf Bur Proc* 1942:27-30

Finance

- Budget of the University of Wisconsin. *Science* 98:168-9 Ag 20 '43
 Successful investing formulas; Vassar College's plan for common stock control. L. Tomlinson. *Barron's* 23:18 Ag 16 '43

Gifts, legacies, etc.

- Bequest for the endowment of the Technical institute of Northwestern university. *Science* 97:38-9 Ja 8 '43
 College gift fund plans for graduating classes. F. A. Tucker. *Nat Underw (Life ed)* 47:19 Ji 23 '43
 Gifts received by the University of Wisconsin. *Science* 97:155 F 12 '43

Professional service*See Professional service***Research**

- Gifts and grants to the University of Wisconsin. *Science* 98:103 Ji 30 '43
 Our university welding research workers and their laboratories. *bibliog il Welding J* 22: sup97-100, sup145-9, sup185-8 Mr-May '43
 Research at a government arsenal in co-operation with universities. L. S. Fletcher. *J Eng Educ* 33:781-6; Discussion. L. M. K. Boelter; A. W. Hixson. 786-93 Je '43
 Research work in welding at the University of Illinois. *il Welding J* 22:sup273-7 Ji '43

- See also*
 Purdue research Rochester university
 foundation —Industrial X ray laboratory

War service

- Education for war; a report on U.S. colleges and universities in 1942. *il Fortune* 26:132-7+ D '42
 Recent developments in army and navy college training programs. H. T. Heald. *J Eng Educ* 33:496-501 Mr '43
 War services of the University of Illinois. *Science* 97:156 F 12 '43

Latin America

- See also*
 Agricultural colleges
 —Latin America

United States

- Abstract of a plan for collaboration between colleges and universities and the Department of agriculture with special reference to training replacements during the war. *Science* 97:95-6 Ja 22 '43
 Future of the college. *Economist* 145:11-12 Ji 3 '43
 Wartime maintenance of scientific production. J. S. Nicholas. *Science* 96:393-5 O 30 '42; Same *abr. Mech Eng* 64:907-8 D '42

COLLIMATION

- Telescopes; a monthly department for the amateur telescope maker. A. G. Ingalls. *diags Sci Am* 168:284-6 Je '43

COLLINS and Aikman corporation

- Low-priced stocks for large percentage gains. *Mag of Wall St* 71:636 Mr 20 '43

- Securities disturbing investors. J. S. Williams. *Mag of Wall St* 71:600+ Mr 6 '43

COLLISIONS at sea

- Tug liable to consign for cargo damage and repairs to tow barge. *East Underw* 44: 35 N 5 '43
 Vessel overtaking tug and tow is held liable for collision damage. *East Underw* 44:37 S 17 '43

COLLOIDAL fuel. See Fuel, Colloidal**COLLOIDAL graphite. See Graphite****COLLOIDS**

- Advances in colloid chemistry. J. J. Bikerman. *il Chem Age (Lond)* 48:88-90 Ja 16 '43

- Aerosol method patented; making insecticidal aerosols with liquefied gases; assigned to Secretary of agriculture. P. N. Annand. *il Soap & San Chem* 19:117, 119 O '43

- Applications of the electron microscope in colloid chemistry. L. Marton. *bibliog il J Phys Chem* 46:1023-32 D '42

- Clays as colloidal electrolytes. C. E. Marshall and C. A. Krimbill. *bibliog J Phys Chem* 46: 1077-90 D '42

- Colloid chemistry in ceramics. A. L. Johnson. *bibliog diags Am Cer Soc J* 26:88-92 Mr 1 '43; Abstract. *Can Chem & Process Ind* 27:188 Ap '43

- Colloid chemistry in chemical engineering courses. E. A. Hauser. *J Eng Educ* 33: 402-6 Ja '43

- Electrolytic properties of solutions of paraffin-chain quaternary ammonium salts. A. B. Scott and H. V. Tartar. *bibliog diags Am Chem Soc J* 65:692-8 Ap '43

- Electrophoresis of colloids under wartime conditions. K. G. Stern. *bibliog R Sci Instr* 14:187 Je '43

- Elimination of sorption-desorption hysteresis in hydrous oxide gels; tantalum pentoxide, stannic oxide, and titanium dioxide. H. B. Weiser. W. O. Milligan and W. C. Simpson. *bibliog J Phys Chem* 46:1051-9 D '42

- Estimation of carbonyl groups in chronic anhydride oxystarch and oxycellulose by means of hydroxylamine. E. K. Gladding and C. B. Purves. *bibliog diags Paper Tr J* 116:26-31 Ap 8 '43; Same cond. *Paper Ind* 25:306-9 Je '43

- Estimation of colloidal properties of ferric oxide and iron oxide purifying material. F. Gibadlo. *Gas Age* 91:24-5+ My 6 '43

- Hydration-pressure relations in clays and heaving shales. H. H. Power, B. L. Tawle and J. B. Plaza. *bibliog il diags Am Pet Inst Proc* 23(4):64-76 '42; Same. *Oil & Gas J* 41:215+ N 12 '42; Discussion. *Am Pet Inst Proc* 23(4):76-7 '42

- Hydrophilic organic colloids in drilling muds; abstract. G. R. Gray. *Chem & Met Eng* 50:182 Ap '43

- Insecticidal aerosol production; spraying solutions in liquefied gases. L. D. Goodhue. *bibliog il diags Ind & Eng Chem* 34:1456-9 D '42

- Magnetic structure of iron crystals; colloid patterns on silicon-iron crystals. W. C. Elmore. *il diags Phys R* 62:486-93 N 1 '42
 Mechanism of the formation of Kohlschütter's silver sol. H. B. Weiser and M. F. Roy. *J Phys Chem* 47:325-9 Ap '43

- Mechanism of the mutual coagulation process. H. B. Weiser and W. O. Milligan. *bibliog J Phys Chem* 47:424-36 Je '43

- Migration data in solutions of a colloidal electrolyte; laurylsulfonic acid. M. E. L. McBain. *bibliog J Phys Chem* 47:196-204 Mr '43

- Nature of colloidal clay as revealed by the electron microscope. B. T. Shaw. *bibliog il J Phys Chem* 46:1032-43 D '42

- New effects due to anisotropy of colloidal particles. R. E. D. Clark. *diags Chem & Ind* 62:348-50 S 11 '43

- Origin and the complications of electric double refraction and of electric dichroism in dilute dispersed systems. W. Heller. *Rs Mod Phys* 14:390-409 *bibliog*(82 references, p408-9) O '42

- Osmotic properties of solutions of some typical colloidal electrolytes. J. W. McBain and O. E. A. Bolduan. *bibliog J Phys Chem* 47: 94-103 F '43

- Oxidation of rubber and its colloid chemical results. R. Houwink. *bibliog diags India Rubber W* 107:369-77 Ja '43

COLLOIDS—Continued

- Problems in chromatography and in colloid chemistry illustrated by leaf pigments. H. H. Strain, bibliog *J Phys Chem* 46: 1151-61 D '42
- Properties of rubber solutions and gels. M. L. Huggins, bibliog *Ind & Eng Chem* 35: 216-20 F '43
- Reversible aggregations of colloidal particles; isothermal reversible sol syneresis. W. Heller, bibliog *J Phys Chem* 46:783-93 O '42
- Review of recent advances in drilling-mud control; colloidal chemistry of clays and shales. P. E. Chaney, bibliog *Oil & Gas J* 41:81-2+ N 12 '42
- Stochastic problems in physics and astronomy; probability methods in stellar dynamics. S. Chandrasekhar, diags *Rs Mod Phys* 15:1-89 bibliog(p87-9) Ja '43
- Testing aerosols against houseflies. E. R. McGowan, J. H. Fales and L. D. Goodhue, bibliog *diag Soap & San Chem* 19:99+ S '43
- Theory of dissolution of gels. A. Tobolsky, bibliog *J Chem Phys* 11:290-3 Je '43
- Theory of molecular size distribution and gel formation in branched-chain polymers. W. H. Stockmayer, bibliog *J Chem Phys* 11:45-55 F '43
- X-ray diffraction studies on precipitated cuprous and cupric sulfides. H. B. Weiser, W. O. Milligan and J. M. Marshall, jr. bibliog *J Phys Chem* 47:496-501 O '43

See also

- | | |
|--------------------|---------------|
| Adsorption | Glue |
| Brownian movements | Micelles |
| Catalysis | Proteins |
| Cellulose | Silica gel |
| Dispersion | Smoke |
| Electrophoresis | Soil colloids |
| Emulsions | Suspensions |
| Gelatin | Thixotropy |
| Gelation | |
- COLLYER insulated wire company**
- Collyer Insulated Wire named in U.S. indictment; conspiracy to manufacture and deliver defective wire and cable charged. *Elec W News* ed 119:2070 Je 19 '43

COLOMBIA*See also*

- | | |
|-----------------------|--------------------------------------|
| Bonds, Government— | Petroleum industry |
| Colombia | and trade—Colombia |
| Chemical industries— | |
| Colombia | Social laws and legislation—Colombia |
| Paleontology—Colombia | Steel industry and trade—Colombia |

Economic conditions

- News by countries. *For Comm W* 9:15-16 N 28 '42; 11:15-16 Je 19; 12:16-17 Ag 7 '43

Economic policy

- Financial and other provisions in economic plan. *For Comm W* 11:17 My 29 '43

Industries and resources

- Wanted: ships and machinery. J. F. Chapman, *il map Business Week* p 19-20, 22+ Ja 2 '43

Social conditions

- Problem of social security in Colombia. E. Herrnstadt, *Int Labour R* 47:426-49 Ap '43

- COLONIAL products research council.** See Great Britain—Colonies

COLONIES

- People's peace in the colonies. W. Benson, *Int Labour R* 47:141-68 F '43
- United nations and the Philippines. S. Osmeña, *Ann Am Acad* 228:25-9 JI '43

See also

- Geopolitics
- Great Britain—Colonies
- COLOR**
- Adaptation in color space. D. E. Spencer, *il Opt Soc Am J* 33:10-17 Ja '43
- Blackout lighting using the principle of mutual exclusion by color; tests using variety of window coatings, filters, and light sources. R. A. Wank and E. H. Wakefield, *diag Illum Eng* 38:41-4 Ja '43

- Cause of the variation of the colour of crystals of commercial sodium and potassium ferrocyanide [cyanoterrate(II)]. H. E. Williams, *Chem Soc J* p223-7 My '43
- Color and constitution of polymethine dyes. K. F. Herzfeld and A. L. Sklar, bibliog *Ra Mod Phys* 14:294-302 Ap-JI '42
- Color chips assist in comparing colors in industry; Ostwald system. *il Sci Am* 168:200 My '43
- Color mechanizes; problems in harmony; color tools developed by the Container corp. of America. *il Business Week* p70-1+ N 21 '42
- Color-mixing and matching. L. F. Wade, *Metal Finishing* 41:255-6 Ap '43
- Color-mixing systems; color vs. colorant mixture. D. R. Dohner and C. E. Foss, diags *Opt Soc Am J* 32:702-8 D '42
- Color-order systems. Munsell and Ostwald. M. E. Bond and D. Nickerson, diags *Opt Soc Am J* 32:709-19 D '42
- Color reaction for natural pigments and phenols. H. Tauber and S. Laufer, *Am Chem Soc J* 65:736-7 Ap '43
- Color test for some highly reactive organometallic compounds. H. Gilman and L. A. Woods, bibliog *Am Chem Soc J* 65:33-4 Ja '43
- Coloured hydrocarbons; polyenes and cumulenes. G. S. Ranshaw, *Chem Age (Lond)* 47:417-20 N 14 '42
- Colors and color-temperature of lighting. C. E. Weitz, *Rayon* 24:501-3 S '43
- Concept of color. bibliog diags *Opt Soc Am J* 33:544-54 O '43
- Final report of the O.S.A. subcommittee on the spacing of the Munsell colors. S. M. Newhall, D. Nickerson and D. B. Judd, bibliog diags *Opt Soc Am J* 33:335-418 JI '43
- Geometry of color space. D. E. Spencer, bibliog diags *Franklin Inst J* 236:293-302 S '43
- Historical background and evolution of the colorimetry report. L. A. Jones, bibliog *Opt Soc Am J* 33:534-43 O '43
- Investigations on the intrinsic properties of the color domain. L. Silberstein, *Opt Soc Am J* 33:1-10 Ja '43
- Keyboard for color. E. G. Jacobson, *il diags Mod Plastics* 20:57-8+ F '43
- Language for color. *il Mod Packaging* 16:44-6+ F '43
- Love of color among primitive arctic peoples. A. Fiala, *Textile Col* 64:555-6 D '42
- Metric based on the composite color stimulus. P. Moon and D. E. Spencer, bibliog diags *Opt Soc Am J* 33:270-7 My '43
- Metric for color space. P. Moon and D. E. Spencer, bibliog diags *Opt Soc Am J* 33: 260-9 My '43
- Nature and causes of small color differences in industry; lighting for their detection. A. H. Taylor, *il Opt Soc Am J* 32:651-8 N '42
- New colour reactions of phenols. A. Steigmann, *Soc Chem Ind J* 61:180 N '42; Abstract. *Paint Oil & Chem R* 105:12 F 11 '43
- Psychological color solid. D. Nickerson and S. M. Newhall, bibliog *il diags Opt Soc Am J* 33:419-22 JI '43
- Quinoidation of triaryl compounds; bromonaphthylidiphenylchloromethanes. L. C. Anderson and D. Johnston, *Am Chem Soc J* 65:239-42 F '43
- Report of committee on color. I. H. Godlove, *Am Dyestuff Rep* 32:340-9 Ag 2 '43
- Reversible chromatic thermosensitivity. E. W. Blank, bibliog *J Chem Educ* 20:171-4 Ap '43
- Saponins and sapogenins; some color reactions of triterpenoid sapogenins. C. R. Noller and others, *Am Chem Soc J* 64:3047-9 D '42
- Simple three-color mixer using filtered colors. W. F. Grether, *diag Science* 93:248 S 10 '43
- Simplified discussion of color and constitution of azo dyes. W. B. Reynolds, *Am Dyestuff Rep* 32:455-6, 465-7 O 25 '43
- Some factors and implications of color constancy. H. Helson, bibliog *il Opt Soc Am J* 33:555-67 O '43
- Specification of small chromaticity differences. D. L. MacAdam, bibliog diags *Opt Soc Am J* 33:18-26 Ja '43
- Systematic investigation of the color and dyeing properties of the aminoacridines; the five monoaminoacridines. A. Albert and C. L. Bird, bibliog *Soc Dyers & Col J* 59: 74-6 Ap '43

COLOR—Continued

- Trichromatic specifications for intermediate and special colors of the Munsell system. W. C. Granville, D. Nickerson and C. E. Foss. bibliog Opt Soc Am J 33:376-85 JI '43
- Tristimulus specification of the Munsell book of color from spectrophotometric measurements. K. L. Kelly, K. S. Gibson and D. Nickerson. bibliog charts Opt Soc Am J 33:355-76 JI '43; Same. J Research Nat Bur Stand 31:55-76 Ag '43
- Tristimulus specifications for intermediate and special colors of the Munsell system. W. C. Granville, D. Nickerson and C. Foss. bibliog Opt Soc Am J 32:745-6 D '42
- α , β -Unsaturated aminoketones; color and constitution. N. H. Cromwell and R. S. Johnson. Am Chem Soc J 65:316-19 Mr '43
- Visual observations in the infra-red. J. M. Preston. II Soc Dyers & Col J 59:141-3 JI '43

See also

- | | |
|----------------------------|-----------------------|
| Bricks—Color | Light, Colored |
| Camouflage | Milk, Dried—Color |
| Clay products—Color | Paint |
| Colorimeters and | Paper—Color |
| colorimetry | Pigments |
| Colorimetric analysis | Piping—Identification |
| Dichroism | Silica brick—Color |
| Dyes and dyeing | Sugar—Color |
| Enamel and enameling—Color | Television—Color |
| Glass—Color | Water purification— |
| Inter-society color | Color removal |
| council | |

Psychology

- Emotions versus measurement in teaching color. N. C. Meier. bibliog II diag Opt Soc Am J 32:699-702 D '42
- Lighting and air conditioning; color influence and comfort. H. M. Sharp. Heat & Ven 39:42 N '42

Standards

- Color conference notes. A. C. Hardy. Textile Col 65:7-8; Discussion. L. A. Jones. 8 Ja '43
- Color mobilized. Business Week p53 D 5 '42
- Color standard makes possible more accurate specification. II Inland Ptr 111:36 My '43
- Color standardization. Textile Col 65:48+ F '43
- Common language of new standard simplifies color specification. II Product Eng 14:91-4 F '43
- New color standards; abstract. D. B. Judd. Science 96:sup 10 D 4 '42
- New standard simplifies ordering and matching colors. Iron Age 151:72 F 13 '43
- Ordering colors simplified. A. G. Mezerik. Ptr Ink 201:30, 32 D 25 '42
- Practical color description and specification hailed by press and industry; American war standard. H. R. Mauersberger. bibliog Rayon 24:13-15 Ja '43
- Specification and description of color; American war standard. bibliog Illum Eng 37:607-9 N '42; Same. Soc Motion Picture Eng J 40:277-80 My '43; Same without bibliog. Opt Soc Am J 32:694-6 N '42
- Standard system of color determination is adopted. Am Mach 86:1460k D 10 '42
- War standard coordinates systems for specifying and describing color. II Ind Stand 13:302-5 D '42; Same. Paint Oil & Chem R 105:18+ Ja 28 '43; Same. Am Dyestuff Rep 32:118-20 Mr 1 '43

Study and teaching

- Emotions versus measurement in teaching color. N. C. Meier. bibliog II diag Opt Soc Am J 32:699-702 D '42
- Results of a questionnaire on color in art education. R. B. Farnum. Opt Soc Am J 32:720-6 D '42

Terminology

- ISCC-NBS color names. D. Nickerson. bibliog Am Cer Soc Bul 22:306-10 S 15 '43

COLOR blindness

- Colorblindness and the detection of camouflage. D. B. Judd. Science 97:544-6 Je 18 '43
- Congenital and acquired anomalies of color vision. E. Murray. Science 96:448 N 13 '42
- Effectiveness of vitamin A in the treatment of defective color vision. J. H. Elder. bibliog Science 97:561-2 Je 18 '43

- Evolution of color vision tests. E. Murray. Opt Soc Am J 33:316-34 bibliog(52 titles, p332-4) Je '43
- Facts of color-blindness. D. B. Judd. Opt Soc Am J 33:294-307 bibliog(62 titles, p306-7) Je '43
- Methodology in test preparation. F. L. Dimmick. Opt Soc Am J 33:308-15 Je '43
- Single judgment test for red-green discrimination. L. H. Hardy. II Opt Soc Am J 33:512-14 S '43
- Symposium of invited papers on color-blindness and color-blindness tests; abstracts. Opt Soc Am J 33:350-2 Je '43

COLOR fastness. See Dyes, Fastness of**COLOR in advertising**

- What about the new half-page four-color magazine units? study made of those appearing in McCall's, Ladies' home journal and Woman's home companion. G. W. Tasker. II Ptr Ink 201:11-12 N 27 '42

COLOR in architecture*See also*

- Bricks—Color

COLOR in industry

- Bouncing light rays; colors with high reflection improve lighting. A. Perry. II Safety Eng 85:9-10+ F '43
- Color code for pipe lines. Power Pl Eng 47:102 Ja '43
- Color mechanizes; problems in harmony; color tools developed by the Container corp. of America. II Business Week p70-1+ N 21 '42
- Color signals freshness in operating policies; buses and uniforms, San Antonio transit company. II Bus Transportation 22:50-1 Ag '43
- Co-ordinates paint and light to improve working conditions, increase production. M. Denning. A. A. Brainerd and R. A. Massey. II Steel 111:74+ D 21 '42
- Dynamic color; painting of machinery and shop as safety measure. R. A. Massey. II Nat Safety N 48:12-13+ Ag '43
- How color can aid seeing. F. Birren. II Factory Management 101:140-1 Ja '43
- How color conditioning aids production. Management R 32:213-14 Je '43
- Industrial safety and lighting improved by bright paint colors; expansion of the three-dimensional seeing idea. II Rayon 24:551-2 O '43
- Lubrication color guide from container to bearing. G. F. Keeley. II Factory Management 101:[insert]76a Ap '43
- Nature and causes of small color differences in industry; lighting for their detection. A. H. Taylor. II Opt Soc Am J 32:651-8 N '42
- Production and colour. Automobile Eng 33:208 My '43
- Salvaging light; how more light may be supplied to industrial workers without increasing current consumed. A. P. Peck. II Sci Am 163:58-60 F '43
- Salvaging waste light for victory. A. A. Brainerd and R. A. Massey. II diags Illum Eng 37:738-51 D '42; Same cond. Edison Elec Inst Bul 10:341-3+ S '42; Discussion. Illum Eng 37:751-7 D '42
- Using color to train women; Jacobs aircraft engine company. F. W. Rohde. Factory Management 101:298+ S '43
- Why not use color? F. Birren. II Nat Safety N 47:12-13+ Je '43

See also

- Machinery—Painting
Paper—Color

COLOR in plastic materials

- Calculation of the color of pigmented plastics. J. L. Sanderson. bibliog Opt Soc Am J 32:727-36 D '42
- Coloring materials for copolymer vinyl chloride-acetate compounds. F. G. Clark. bibliog II Ind & Eng Chem 35:368-74 Mr '43

COLOR in the ceramic industries*See also*

- | | |
|----------------------------|-------------|
| Bricks—Color | Glass—Color |
| Clay products—Color | Glazes |
| Enamel and enameling—Color | |

COLOR in the textile industries*See also*

- Dyes and dyeing
Textile printing

COLOR matching

- Calculation of the color of pigmented plastics. J. L. Saunderson. *bibliog Opt Soc Am J* 32:727-36 D '42
- Color-mixing and matching. L. F. Wade. *Metal Finishing* 41:255-6 Ap '43
- Color; qualitative and quantitative color analysis by the recording photoelectric spectrophotometer. N. F. Barnes. *il diags Gen Elec R* 45:645-8 N '42
- Determination of permissible tolerances in color matching. J. H. Skinkle and W. W. Platt. *Am Dyestuff Rep* 31:537-41 N 9 '42
- Exposure behaviour and colour matching problems with bitumen emulsion camouflage paint. J. A. Rawlinson and L. G. Gabriel. *Soc Chem Ind J* 62:111-12 JI '43
- How color comparators work. J. Keating. *diags Radio N* 30:41+ Ag '43
- Matching shades in the beater. J. R. Roberts. *il Paper Ind* 24:1040-1 Ja '43
- Shade matching in dyeing and textile printing. *Textile Col* 65:235-8, 274 Je '43
- Significance and limitations of the C.I.E. standard observer tables; abstract and discussion. J. Guild. *Light & Lighting* 36:42 Mr '43
- Specification of small chromaticity differences. D. L. MacAdam. *bibliog diags Opt Soc Am J* 33:18-26 Ja '43

COLOR measurement

- Applications of near infra-red spectrophotometry. E. I. Stearns. *Opt Soc Am J* 33:27-30 Ja '43
- Calculation of the color of pigmented plastics. J. L. Saunderson. *bibliog Opt Soc Am J* 32:727-36 D '42
- Color; qualitative and quantitative color analysis by the recording photoelectric spectrophotometer. N. F. Barnes. *il diags Gen Elec R* 45:645-8 N '42
- Determination of color of paracarumarone-indene resins. C. S. Reeve. *Paint Oil & Chem R* 105:16+ Ja 14 '43
- Evaluation of light fastness by means of a spectrophotometer; presented for the A. A. T. C. C. Northern New England section by E. S. Chapin. *Am Dyestuff Rep* 31:600-2 D 7 '42
- Fired color of ball clays. I. A. Balinkin. *Am Cer Soc Bul* 21:278-81 N 15 '42
- Fundamental study of factors influencing color of porcelain enamels. R. L. Cook and A. I. Andrews. *il Am Cer Soc J* 26:73-6 Mr 1 '43
- G.E. recording photoelectric spectrophotometer for the graphic measurement of color. *il diag Rayon* 24:15-16 Ja '43
- Geometry of color space. D. E. Spencer. *bibliog diags Franklin Inst J* 236:293-302 S '43
- Grading of soft sugars; photoelectric reflectance measurements. T. R. Gillett and A. L. Holven. *bibliog il diags Ind & Eng Chem* 35:210-14 F '43
- Influence of moisture on browning of dried whey and skim milk. H. Doob, Jr., A. Willmann and P. F. Sharp. *bibliog il Ind & Eng Chem* 34:1460-8 D '42
- Metric for color space. P. Moon and D. E. Spencer. *bibliog diags Opt Soc Am J* 33:260-9 My '43
- Nature and causes of small color differences in industry; lighting for their detection. A. H. Taylor. *il Opt Soc Am J* 32:651-8 N '42
- Spectrophotometer in the textile industry. C. Monog and W. von Bergen. *bibliog il diags Am Dyestuff Rep* 32:1-8, 17-23 Ja 4 '43
- Tristimulus specification of the Munsell book of color from spectrophotometric measurements. K. L. Kelly, K. S. Gibson and D. Nickerson. *bibliog charts Opt Soc Am J* 33:355-76 JI '43; Same. *J Research Nat Bur Stand* 31:55-76 Ag '43

See also

- Color matching
Colorimeters and colorimetry
Colorimetric analysis

COLOR of animals

- Color changes in animals. G. H. Parker. *Science* 97:sup10 Ap 30 '43

COLOR of insects

- Electron microscope study of some structural colors of insects. T. F. Anderson and A. G. Richards, Jr. *bibliog il diags J Ap Phys* 13:748-58 D '42

COLOR of plants*See also*

- Carotenoids
Chlorophyll

COLOR photography

- Adaptation of dye coupling for color and monochrome. F. R. Poole. *Instruments* 16:610 O '43
- Adventures in kodachrome processing. C. H. Schotofor. *Am Phot* 37:8-9 O '43
- Color alone does not make a picture. F. Bond. *Am Phot* 36:12-15 D '42
- Color photography. J. S. Friedman. *Published in American photography*
- Comparison method for kodachrome exposures. D. M. Bender. *il Am Phot* 37:26-7 F '43
- De luxe color camera. P. W. Norris. *il Am Phot* 37:25-7 Ap '43
- Direct processes for making photographic prints in colour. C. E. K. Mees. *Soc Dyers & Col J* 59:101-3 My '43
- Exposure for kodachrome. H. L. Woodward, Jr. *Am Phot* 37:12-14 Ja '43
- Kodachrome duplicating box. R. W. Hufnagle. *il diag Am Phot* 37:38-9 My '43
- Kodachrome image. J. S. Friedman. *Am Phot* 37:42-3+ Je; 43-4+ O '43
- New methods for photographing the anterior eye. W. E. Foel and K. M. Hayden. (*Public health rep supp* 167) 4p 3pl U.S. Public health service, Washington; pa 10c Supt. of doc. '42
- Theory of color reproduction. J. S. Friedman. *Am Phot* 37:40-1+ D '43

See also

- Television—Color

Patents

- Color photography; recent patents. J. S. Friedman. *Am Phot* 37:38-41 Ja '43
- COLOR printing**
- Anilin inks and drying systems. F. E. Boughton. *diag Inland Ptr* 110:54-6 Mr '43
- New color print process. J. S. Friedman. *Am Phot* 37:38 S '43
- Printing colors with sandpaper. W. Van Gasbeek. *il Inland Ptr* 111:47-8, 52-3 Ag '43
- Relation of paper to printing on multicolor high-speed presses. L. W. Claybourn. *Paper Tr J* 116:25-6 Ap 29 '43; *Excerpts. Paper Ind* 25:312+ Je '43
- Wet color printing. *Inland Ptr* 110:68 Mr '43
- William Kurtz and the beginnings of process printing. J. H. McFarland. *Inland Ptr* 111:29-31 Ag '43

See also

- Textile printing

COLOR prints

- Meter for color projection printing. G. M. Brock. *il diag Am Phot* 37:38-9 Ag '43

COLOR sense

- Color vision; abstract. D. B. Judd. *Science* 96:sup8-1 N 27 '42
- Evolution of color vision. G. L. Walls. *diags J Ap Phys* 14:161-5 Ap '43

See also

- Color blindness

Testing

- Evolution of color vision tests. E. Murray. *Opt Soc Am J* 33:316-34 bibliog(52 titles, p332-4) Je '43
- Farnsworth-Munsell 100-hue and dichotomous tests for color vision. D. Farnsworth. *diags Opt Soc Am J* 33:568-78 O '43
- Inter-society color council color aptitude test; abstract. F. L. Dimmick. *Opt Soc Am J* 32:745 D '42
- Methodology in test preparation. F. L. Dimmick. *Opt Soc Am J* 33:308-15 Je '43
- Single judgment test for red-green discrimination. L. H. Hardy. *il Opt Soc Am J* 33:512-14 S '43
- COLOR television.** *See Television—Color*
- COLOR temperature**
- Colors and color-temperature of lighting. C. E. Weitz. *Rayon* 24:501-3 S '43
- COLOR vision.** *See Color sense*

COLORADO*See also*

Gas, Natural—Colorado
 radio resources—Colorado
 Geology—Colorado
 Oil fields—Colorado

COLORADO and southern railway

Colorado & Southern adjusts its finances.
 Ry Age 114:720 Ap 10 '43

Data given by Schram; no evidence false rumors were circulated by NYSE firms.
 Comm & Fin Chr 158:1529 O 18 '43

Debt plan. Business Week p88-9 Ja 9 '43

COLORADO-BIG THOMPSON project

Construction work to be resumed. Eng N 131:243 Ag 12 '43

COLORADO fuel and iron company

To pay principal and interest on bonds, bank loans. Comm & Fin Chr 157:343 Ja 25 '43

COLORADO milling and elevator company

Files amendment with SEC. Comm & Fin Chr 158:1528-9 O 18 '43

COLORADO river

High silt content of Colorado river. map Eng N 130:502-3 Ap 8 '43

Boulder Dam project

Earth movers. il Fortune 28:98-107+ Ag; 118-23+ S '43

Water peace? Business Week p 18 Je 5 '43

COLORADO school of mines

Contributions in geology, 1942. J. C. Haff and others. Colorado School of Mines (Golden) Quarterly 37:1-48 Jl '42 (pa 50c)

COLOR glass. See Glass, Colored**COLOR light. See Light, Colored****COLORIMETERS and colorimetry**

Calibration of a photoelectric colorimeter for the determination of chlorophyll; relation between spectra of standards and accuracy of analytical results. C. L. Comar, E. J. Benne and E. K. Buteyn. bibliog Ind & Eng Chem Anal ed 15:524-6 Ag 15 '43

Color index; light-colored petroleum products. I. M. Diller and others. bibliog Ind & Eng Chem Anal ed 15:367-73 Je 15 '43

How color comparators work. J. Keating. diags Radio N 30:41+ Ag '43

Lumetron colorimeter. il Chem Ind 51:757 N '42

Sixty years of colorimetry; Lovibond tintometer; abstract. G. S. Fawcett. Light & Lighting 36:82 Je '43

See also

Color measurement
 Colorimetric analysis
 Reflectometers

COLORIMETRIC analysis

Ascorbic acid; rapid determination in fresh, frozen, or dehydrated fruits and vegetables. H. J. Loeffler and J. D. Ponting. bibliog Ind & Eng Chem Anal ed 14:846-9 N 15 '42

Calibration of a photoelectric colorimeter for the determination of chlorophyll; relation between spectra of standards and accuracy of analytical results. C. L. Comar, E. J. Benne and E. K. Buteyn. bibliog Ind & Eng Chem Anal ed 15:524-6 Ag 15 '43

Chemical differentiation between niacinamide and niacin in pharmaceutical products. D. Melnick and B. L. Oser. Ind & Eng Chem Anal ed 15:355-6 My 15 '43

Chemistry of indium; a colorimetric method for the estimation of small amounts of indium. T. Moeller. bibliog Ind & Eng Chem Anal ed 15:270-2 Ap 15 '43

Chromogenic reagent for vitamin C determinations. R. A. Koenig, T. L. Schiefelbusch and C. R. Johnson. Ind & Eng Chem Anal ed 15:181-2 Mr 15 '43

Cobalt determination by photo-electric comparison. W. W. Clarke. Iron Age 150:45 D 3 '42

Color reactions of 1,10-phenanthroline derivatives. M. L. Moss, M. G. Mellon and G. F. Smith. Ind & Eng Chem Anal ed 14:931-3 D 15 '42

Colorimetric determination of alkyl benzene sulfonates. J. C. Harris. bibliog Ind & Eng Chem Anal ed 15:254-6 Ap 15 '43

Colorimetric determination of boron in steel using quinalizarin reaction. G. A. Rudolph and L. C. Flickinger. il Steel 112:114+ Ap 5 '43; Same. Foundry 71:168-70 My '43

Colorimetric determination of chlorine residuals up to 10 ppm. with ortho-tolidine. N. S. Chamberlin and J. R. Glass. bibliog Am Water Works Assn J 35:1065-84, 1205-21 bibliog (p1083-4, 1221) Ag-S '43

Colorimetric determination of cobalt. R. J. DeGray and E. F. Rittershausen. Ind & Eng Chem Anal ed 14:858-9 N 15 '42

Colorimetric determination of cobalt with o-nitrosoresorcinol. L. G. Overholser and J. H. Yoe. Ind & Eng Chem Anal ed 15:310-13 My 15 '43

Colorimetric determination of cobalt with terpyridyl. M. L. Moss and M. G. Mellon. Ind & Eng Chem Anal ed 15:74-5 Ja 15 '43

Colorimetric determination of copper with 1,10-phenanthroline. M. L. Moss and M. G. Mellon. bibliog Ind & Eng Chem Anal ed 15:115-18 F 15 '43

Colorimetric determination of fluoride in natural waters with thorium and alizarin. N. A. Talvite. bibliog Ind & Eng Chem Anal ed 15:620-1 O 15 '43

Colorimetric determination of hydrogen peroxide. G. M. Eisenberg. bibliog Ind & Eng Chem Anal ed 15:327-8 My 15 '43

Colorimetric determination of iron with 2,2'-bipyridyl and with 2,2',2''-terpyridyl. M. L. Moss and M. G. Mellon. bibliog Ind & Eng Chem Anal ed 14:862-5 N 15 '42

Colorimetric determination of trinitrobenzene in dinitrobenzene. M. L. Moss and M. G. Mellon. bibliog Ind & Eng Chem Anal ed 14:861-2 N 15 '42

Colorimetric determination of vitamin C. M. L. Isaacs. Ind & Eng Chem Anal ed 14:948-9 D 15 '42

Colorimetric method for the determination of sodium. E. A. Arnold and A. R. Pray. Ind & Eng Chem Anal ed 15:294-6 Ap 15 '43

Concentration methods in spectrographic analysis; recovery of cobalt, nickel, molybdenum, copper, and zinc from plant materials and soil extracts by 8-hydroxyquinoline. R. O. Scott and R. L. Mitchell. bibliog Soc Chem Ind J 62:4-8 Ja '43

Determination of aliphatic nitrate esters; colorimetric method. H. Yagoda. bibliog diags Ind & Eng Chem Anal ed 15:27-9 Ja 15 '43

Determination of aluminum in biological material. J. Cholack, D. M. Hubbard and R. V. Story. bibliog Ind & Eng Chem Anal ed 15:57-60 Ja 15 '43

Determination of benzene; detection and estimation of benzene in the presence of toluene, xylene, and other substances. B. H. Dolin. bibliog Ind & Eng Chem Anal ed 15:242-7 Ap 15 '43

Determination of blood in packing-house by-products. R. Reiser and G. S. Fraps. bibliog Ind & Eng Chem Anal ed 14:851-3 N 15 '42

Determination of combined formaldehyde in organic compounds and in cellulose formal. C. L. Hoffpauir, G. W. Buckaloo and J. D. Ghrrie. Ind & Eng Chem Anal ed 15:605-6 S 15 '43

Determination of free gossypol in cottonseed meal; a colorimetric method. C. M. Lyman, B. R. Holland and F. Hale. Ind & Eng Chem Anal ed 15:489-91 Ag 15 '43

Determination of furfural. I. J. Duncan. bibliog Ind & Eng Chem Anal ed 15:162-4 Mr 15 '43

Determination of iron in water; a modified colorimetric procedure. F. J. Hallinan. Ind & Eng Chem Anal ed 15:510-12 Ag 15 '43

Determination of microquantities of certain proteins; colorimetric method. D. Pressman. bibliog Ind & Eng Chem Anal ed 15:357-9 My 15 '43

Determination of small amounts of molybdenum in tungsten and molybdenum ores. F. S. Grimaldi and R. C. Wells. bibliog Ind & Eng Chem Anal ed 15:315-16 My 15 '43

Determination of the phenols content of surface waters. R. D. Scott. Am Water Works Assn J 35:592-4 My '43

Determination of tungsten in low-grade tungsten ores. F. S. Grimaldi and V. North. bibliog Ind & Eng Chem Anal ed 15:652-4 O 15 '43

COLORIMETRIC analysis—Continued

- Determination of vitamin B₁ (thiamine) in extracts and concentrates; comparison of biological and chemical methods. R. A. Brown and others. *bibliog Ind & Eng Chem Anal* ed 15:494-5 Ag 15 '43
- Determining an alkali carbonate in the presence of an alkali bicarbonate; a colorimetric method. W. T. Sumerford, D. Dalton and R. Johnson. *bibliog Ind & Eng Chem Anal* ed 15:38-9 Ja 15 '43
- Diethylaminoethanol as a reagent for the detection and colorimetric determination of small amounts of trinitrotoluene in air. F. H. Goldman and D. E. Rushing. *J Ind Hygiene* 25:164-71 Ap '43
- Dithizone method for the rapid determination of copper. G. H. Bendix and D. Grabenstetter. *bibliog Ind & Eng Chem Anal* ed 15:649-52 O 15 '43
- Elimination of fluoride interference in the molybdenum blue reaction. L. T. Kurtz. *bibliog Ind & Eng Chem Anal* ed 14:855 N 15 '42
- Estimation of high chlorine residuals. A. E. Griffin and N. S. Chamberlin. *bibliog Am Water Works Assn J* 35:571-8 My '43
- Estimation of minute amounts of tetryl in the atmosphere. F. E. Goldman and D. E. Rushing. *J Ind Hygiene* 25:195-6 My '43
- Estimation of the sulfonamides; a rapid and accurate micromethod. S. W. Lee, N. B. Hannay and W. C. Hand. *bibliog Ind & Eng Chem Anal* ed 15:403-6 Je 15 '43
- Extraction and colorimetric estimation of certain metals as derivatives of 8-hydroxyquinoline. T. Moeller. *bibliog Ind & Eng Chem Anal* ed 15:346-9 My 15 '43
- Germinicidal quaternary ammonium salts in dilute solution; a colorimetric assay method. M. E. Auerbach. *bibliog Ind & Eng Chem Anal* ed 15:492-3 Ag 15 '43
- Lipoid oxidase studies; a method for the determination of lipoxidase activity. R. J. Sumner. *bibliog Ind & Eng Chem Anal* ed 15:14-15 Ja 15 '43
- Methylene chloride; in the extraction and determination of vitamin A and oil in soupfin shark livers. P. C. Tompkins and R. A. Bolomey. *bibliog Ind & Eng Chem Anal* ed 15:437-9 Jl 15 '43
- Microdetermination of arsenic in biological material. J. A. Sultzberger. *bibliog diag Ind & Eng Chem Anal* ed 15:408-10 Je 15 '43
- Photo-colorimetric study of the oxidation of nitric oxide at low pressures. J. H. Smith. *bibliog Am Chem Soc J* 65:74-8 Ja '43
- Photoelectric colorimeter detects alcohol in breath; method of diagnosing moderate intoxication. L. A. Greenberg. *diag Electronics* 16:222-4 Je '43
- Photoelectric method for the determination of ascorbic acid. H. F. W. Kirkpatrick. *Soc Chem Ind J* 62:39-41 Mr '43
- Photometric determination of benzene, toluene, and their nitro derivatives. H. D. Baernstein. *bibliog Ind & Eng Chem Anal* ed 15:251-3 Ap 15 '43
- Photometric determination of reduced and total ascorbic acid. M. Hochberg, D. Melnick and B. L. Oser. *bibliog diag Ind & Eng Chem Anal* ed 15:182-8 Mr 15 '43
- Photometric determination of silica in the presence of phosphates. M. C. Schwartz. *bibliog Ind & Eng Chem Anal* ed 14:893-5 N 15 '42
- Photometric estimation of silicon in magnesium and magnesium alloys. A. J. Boyle and V. V. Hughey. *bibliog Ind & Eng Chem Anal* ed 15:618-19 O 15 '43
- Photometric routine estimation of traces of lead by dithizone; application to materials used in the manufacture of cosmetics. J. Schultz and M. A. Goldberg. *bibliog Ind & Eng Chem Anal* ed 15:155-8 F 15 '43
- Rapid colorimetric method for the quantitative determination of starch in textile fabrics. R. L. McEwen. *Am Dyestuff Rep* 32:371-3 Ag 16 '43
- Rapid determination of soluble nutrients in soil and plant extracts by means of a photoelectric colorimeter. B. Wolf. *bibliog diag Ind & Eng Chem Anal* ed 15:248-51 Ap 15 '43
- Rapid photometric determination of cobalt in steels using nitroso-R-salt. F. W. Haywood and A. A. R. Wood. *bibliog Soc Chem Ind J* 62:37-9 Mr '43
- Semimicroanalysis of saline soil solutions. E. P. Reitemeyer. *bibliog Ind & Eng Chem Anal* ed 15:393-402 Je 15 '43
- Separation of iron from cobalt or nickel. R. J. DeGray and E. P. Rittershausen. *bibliog Ind & Eng Chem Anal* ed 15:26-7 Ja 15 '43
- Solanine, glycoside of the potato; its isolation and determination. H. S. Rooke and others. *bibliog Soc Chem Ind J* 62:20-4 F '43
- Spectrophotometric determination of iron with *o*-phenanthroline and with nitro-*o*-phenanthroline. J. P. Mehlig and H. R. Hulett. *bibliog Ind & Eng Chem Anal* ed 14:869-71 N 15 '42
- Spectrophotometric determination of magnesium by titan yellow. E. E. Ludwig and C. R. Johnson. *bibliog Ind & Eng Chem Anal* ed 14:895-7 N 15 '42
- Stability of the cupric-ammonia color system. J. P. Mehlig. *Ind & Eng Chem Anal* ed 14:903 N 15 '42
- Studies in filter photometry. M. C. Schwartz and L. W. Morris. *bibliog il diag Ind & Eng Chem Anal* ed 15:20-3 Ja 15 '43
- Use of *p*-aminodimethylaniline as an indicator for free chlorine. W. A. Moore. *Am Water Works Assn J* 35:427-8 Ap '43
- See also
Indicators and test papers
- COLORIMETRY committee.** See Optical society of America—Colorimetry committee
- COLORING materials.** See Dyes and dyeing; Pigments
- COLORING matter**
See also
Dyes and dyeing Stains and staining
Pigments (microscopy)
- COLORING matter in food**
Dietetic aspects of colours in food; abstract. H. E. Cox. *Chem & Ind* 62:185 My 15 '43
- COLORS**
Language and application of colors to metals. E. Engel. *Metal Finishing* 41:488-90 Ag '43
- See also
Black Gray
Blue Pigments
Color Red
- COLUMBIA broadcasting system**
Thumbnail stock appraisal. *Mag of Wall St* 71:289 D 26 '42
Trust suit dismissed. *Comm & Fin Chr* 158:1633 O 25 '43
- COLUMBIA conserve company**
End of a dream; Hapgood brothers' idea of taking workers into partnership winds up in court. *Business Week* p18-19 Jl 31 '43
- COLUMBIA gas and electric corporation**
Annual report. *Comm & Fin Chr* 157:1421 Ap 19 '43
Contracts for natural gas. *Comm & Fin Chr* 158:886 Ag 30 '43
Descriptions of holding companies. O. Ely. *Pub Util* 31:430-2 Ap 1 '43
Inter company transactions. *Comm & Fin Chr* 158:1729 N 1 '43
Receives extended time to restore balances. *Comm & Fin Chr* 157:129 Ja 11 '43
Reduces debt. *Comm & Fin Chr* 157:2146 Je 7 '43
Violated anti-trust laws; investments in natural gas companies void. *Comm & Fin Chr* 158:1129 S 20 '43
- COLUMBIA oil and gasoline corporation**
Dissolution plan approved. *Comm & Fin Chr* 157:129 Ja 11 '43
Gives up control over Panhandle Eastern. *Comm & Fin Chr* 157:1267 Ap 5 '43
SEC rejects plea; must dispose of holdings; denies trust decrees modified. *Comm & Fin Chr* 156:1861 N 23 '42
Winding up plan; stockholders to receive \$1 per share. *Comm & Fin Chr* 157:1421 Ap 19 '43

COLUMBIA river

Preserving Columbia River salmon fisheries; controlled migration creates new spawning grounds. D. A. Dedel. *il map Civil Eng* 13:181-4 Ap '43

Bonneville dam

18 gates closed at Bonneville. *Elec W* 120:1356 O 16 '43

Grand Coulee dam

Design and construction of the concrete multiple arch bridge over the spillway of Grand Coulee dam. E. R. Dexter. *il diags Am Concrete Inst J* 14:149-63 Ja '43; Discussion. 14:sup164-164' Je '43
Grand Coulee pits adapted to Shasta turbines. *il Elec W* 119:592-3 F 20 '43

Power utilization

Administration of federal power projects. C. H. Pritchett. *J Land & Pub Util Econ* 18:379-90 N '42
Guarding power; additional water storage sought for Bonneville and Grand Coulee; Idaho and Montana object. *il map Business Week* p39-40 Je 19 '43

COLUMBIA university

Honorary doctorates conferred. *Science* 97:529 Je 11 '43
School of dental and oral surgery of Columbia university. *Science* 97:37-8 Ja 8 '43

COLUMBIUM

Columbium in high temperature steel. D. W. Rudorf. *Metals & Alloys* 17:186+ Ja '43; Same. *Oil & Gas J* 41:123 My 6 '43
Effect of niobium in nitriding steel; abstract. N. M. Voronov. *Chem & Met Eng* 50:198 Je '43
Rare element prospecting in pegmatites. T. T. Quirke and H. E. Kremers. *bibliog Econ Geol* 38:173-87 My '43

COLUMBIUM foil

Columbium foil as filter for Mo K β radiation. L. K. Frevel and H. W. Rinn. *R Sci Instr* 13:504 N '42

COLUMNS

Buckling of aluminum-alloy columns and plates. H. L. Langhaar. *diags J Aeronautical Sci* 10:218-22 Jl '43
Numerical procedure for computing deflections, moments, and buckling loads. N. M. Newmark. *bibliog diags Am Soc C E Proc* 68:691-718 My '42; Discussion. 68:783-7; 69:153-62, 427-30 My '42, Ja, Mr '43
Tapered and stepped columns designed for minimum weight. A. H. Church. *diags Product Eng* 14:499-502 Ag '43
Timber rigid frames and trussed columns; navy shop buildings. C. G. Jennings and M. N. Salgo. *il Eng N* 131:139-41 Jl 15 '43

See also

Architecture
Strains and stresses
Strength of materials

COLUMNS, Concrete

Beam-method of design for eccentrically-loaded columns. O. Albert. *diags Eng N* 130:365-7 Mr 11 '43; Discussion. 130:662-3, 871; 131:186-7 My 6, Je 17, Jl 29 '43
Charts speed calculations for concrete columns. J. Zalkin. *Eng N* 130:505 Ap 8 '43
Column design in question. J. F. P. Tate. *diag Eng N* 131:665 N 4 '43
Economy method of computing steel for reinforced concrete columns. O. Albert. *diags Civil Eng* 13:104-5 F '43
Precast columns and timber bents combined for rigid frames. *il diags Eng N* 131:535-7 O 7 '43
Precast concrete column for crane bay. *il diags plans Arch Rec* 92:58-9 D '42
Timber bowstring trusses supported on buttressed concrete columns for U.S. army hangar. *il diags Eng N* 129:771-4 D 3 '42

COLUMNS, Steel

Perforated cover plates for steel columns; compressive properties of plates having a net-to-gross cross-sectional-area ratio of 0.33. A. H. Stang and M. Greenspan. *diags J Research Nat Bur Stand* 30:411-26, pl 1-2 My '43

Perforated cover plates for steel columns; compressive properties of plates having circular perforations and a width-to-thickness ratio of 53. A. H. Stang and M. Greenspan. *bibliog pl diags J Research Nat Bur Stand* 30:177-202 Mr '43

Perforated cover plates for steel columns; compressive properties of plates having ovaloid perforations and a width-to-thickness ratio of 53. A. H. Stang and M. Greenspan. *diags pl J Research Nat Bur Stand* 30:15-39 Ja '43

Significance of the secant and tangent moduli of elasticity in structural design. D. S. Wolford. *bibliog il diags J Aeronautical Sci* 10:169-79 Je '43

Steel columns of rolled wide flange section; progress report nos. 1-2, Committee on technical research. American institute of steel construction. B. Johnston and L. Cheney. *il diags Lehigh Univ Circ* 178:1-38 bibliog(p37-8); 179:34 '42

Transformer buses on columns cut substation steelwork in two. *il diags Elec W* 119:1770-1 My 29 '43

Testing

Hydraulically supported spherically seated compression testing machine platens. R. L. Templin. *il diags Am Soc T M Proc* 42:968-76 '42

COMBED yarn spinners association. Southern. See Southern combed yarn spinners association

COMBUSTION

Automatic combustion control for steel plant boilers; firing with blast furnace gas with coal as auxiliary fuel. M. J. Boho. *il plan Blast F & Steel Pl* 31:430, 432-4, 447-8 Ap '43

Coal is vital war material; review of Manual of instructions on proper firing methods. J. Howatt. *Heating-Piping* 15:582-4 N '43

Combustion of natural gas. G. M. Stearns. *Oil & Gas J* 41:48 D 24; 229 D 31 '42

Converting to coal? stoker application to oil conversion. H. E. Winkler. *il Heating-Piping* 15:190-1 Ap '43

How to figure hog-fuel combustion. G. L. Graiff. *Power* 87:325+ My '43

Instrument panel for combustion tests of domestic fuel-burning equipment. P. R. Wischnief and R. C. Cross. *il(cover) Instruments* 15:448+ N '42

Oil to coal conversion; combustion. *il diags Heat & Ven* 40:66, 68, 70 My '43

Use of the down-draft coking method for smokeless combustion. J. R. Fellows and J. C. Miles. *il diags Heating-Piping* 15:431-5 Ag '43; Abstract. *Sheet Metal Worker* 34:38, 40 S '43; Discussion. *Heating-Piping* 15:435-7 Ag '43

See also

Boilers—Control	Gas burners
Boilers—Firing	Ignition
Flames	Inflammable mixtures
Fuel	Kilns—Firing
Gas and oil engines—	Oxidation
Combustion re-	Smoke prevention
search	

COMBUSTION, Heat of

Heats of combustion; the heats of combustion of ethyl methyl ketone and ethylene oxide. R. S. Crog and H. Hunt. *J Phys Chem* 46:1162-3 D '42

Thermal data; heats of combustion and free energies of some compounds containing the peptide bond. H. M. Huffman. *bibliog J Phys Chem* 46:885-91 N '42

COMBUSTION, Submerged

Submerged combustion; gas burners for heating pickling tanks. F. E. Lane. *Gas J (Lond)* 242:229-30 Ag 25 '43

Submerged combustion takes its place in the war industries. W. G. See. *Metal Finishing* 40:653-6 D '42

COMBUSTION research. See Gas and oil engines—Combustion research

COMBUSTION tubes

Modification of the Carius combustion tube to minimize losses by explosion; pressures attained on heating nitric acid to 300° C. C. L. Gordon. *bibliog diag J Research Nat Bur Stand* 30:107-11 F '43

COMETS

- Comet lost for past twenty years found again; comet d'Arrest. C. A. Federer, jr. Science 98:sup10 N 5 '43
 Comets discovered in Finland. Science 96:sup8+ N 13 '42
 Head of comets. Science 98:sup10 O 15 '43
 New comet, Diamaca. Science 98:sup10 S 24 '43
 Report on the Oterma comet. Science 98:sup10 S 3 '43
 Star-like nucleus of comet Whipple 2. Science 97:sup11 Ap 30 '43
 Whipple comet. Science 96:sup 12 D 25 '42

Spectra

- Evidence for the presence of CH₂ molecules in comets. G. Herzberg. Il Rs Mod Phys 14:195-7 Ap-Jl '42
 Intensity measurements on emission bands in cometary spectra. A. McKellar. bibliog Rs Mod Phys 14:179-89; Discussion. S. Mrozowski. 189 Ap-Jl '42
 Molecular bands in cometary spectra; identifications. P. Swings. bibliog Rs Mod Phys 14:190-4 Ap-Jl '42
 Physical theory of comets in the light of spectroscopic data. N. T. Bobrovnikoff. bibliog Rs Mod Phys 14:164-78 Ap-Jl '42
 Spectra of comets; structural texture of comets; illustrations. G. Van Biesbroeck. Rs Mod Phys 14:160-3 Ap-Jl '42
 Two new discoveries; cometary puzzle solved. H. N. Russell. Il Sci Am 168:64-5 F '43

Bibliography

- Physical theory of comets in the light of spectroscopic data; bibliography, 1864-1941. (465 references) Rs Mod Phys 14:172-8 Ap-Jl '42

COMIC strips. See Advertisements, Pictorial—Comic strips**COMINTERN.** See International, Third**COMMERCE**

- Cargo planes can expand world trade. G. F. Bauer. Il Aviation 41:213-14, 217+ N '42
 Don't bank on foreign trade; serious obstacles seen on that road to post-war unemployment relief. J. Hirsch. Barron's 23:11 Ap 5 '43
 Five postwar trade problems. A. E. Taylor. Harvard Business R 21 no2:150-63 [Jal '43
 Foreign balances in U.S. and London. Nat City Bank p81-3 Jl '43; Same abr. Comm & Fin Chr 158:227 Jl 15 '43
 Freedom to trade. E. A. Johnston. Electrician 131:209-10 Ag 27 '43
 Pattern of world trade; study by Economic intelligence service of the League of nations. Economist 144:97-9 Ja 23 '43
 Post-war foreign trade. A. N. Gentes. Credit & Fin Management 45:8-10+ S '43
 World trade, when peace comes. W. C. Taylor. Il For Comm W 11:3-4, 27 My 29 '43

See also

- | | |
|-----------------------|-----------------------|
| Accounting | Merchandizing |
| Advertising | Merchant marine |
| Balance of payments | Money |
| Banks and banking | Peddlers and peddling |
| Business | Ports |
| Commercial statistics | Prices |
| Competition | Purchasing |
| Contracts | Restraint of trade |
| Credit | Shipment of goods |
| Delivery of goods | Shipping |
| Exchanges | Stock exchange |
| Export trade | Tariff |
| Foreign exchange | Trade marks |
| Free ports and zones | Transportation |
| Imports | Trusts, Industrial— |
| Insurance, Marine | International trusts |
| Interstate commerce | Waterways |
| Interstate commerce | World war, 1939— |
| commission | —Commerce |
| Maritime law | |
| Marketing | |
- also subdivision Commerce under names of countries, e.g. Great Britain—Commerce; United States—Commerce

COMMERCE and industry association of New York

- Annual report. Comm & Fin Chr 156:1900 N 26 '42
 Commerce and industry association forms Industrial relations bureau. Comm & Fin Chr 158:1922 N 11 '43

COMMERCIAL aeronautics. See Aeronautics, Commercial**COMMERCIAL arbitration.** See Arbitration**COMMERCIAL arbitration commission, international.** See International commercial arbitration commission**COMMERCIAL buildings**

- Commercial buildings poised for post-war starting gun. Il Am Bld 65:52-3+ Ja '43
 More cars, superhighways will set post-war pattern for commercial building. K. C. Welch. Il diag plans Am Bld 65:39-45+ Je '43

See also

- | | |
|-----------------------------|------------------|
| Bank buildings | Office buildings |
| Insurance company buildings | Store buildings |
| | Warehouses |

COMMERCIAL correspondence

- Amputate that business letter! a letter shortening contest. V. Young. Ptr Ink 204:24-5 S 3 '43
 Gas is rationed? postage stamps aren't! letters carry a heavier business burden than ever before. V. Young. Ptr Ink 201:46, 48-9 D 18 '42
 How to get more room in your correspondence files. L. W. Bishop and others. Il Bankers Mo 59:496+ N '42
 Letter-writing rules alone won't produce a good letter. R. Dorff. Ptr Ink 202:78+ Mr 5 '43
 Letter writing secret, and it's simple, too. C. A. Emley. Ptr Ink 203:96 Je 11 '43
 Letters; correspondence practices of John J. Fitzpatrick, plumbing and heating contractor. Dom Eng 162:71+ O '43
 Make your business letters specific. V. Young. Ptr Ink 205:26, 29 N 5 '43
 Make your letters sing! rhythm and cadence. V. Young. Ptr Ink 203:38+ Je 25 '43
 Psychology of credit letters (cont). H. M. Sommers. Credit & Fin Management 44:10-13+ D '42; 45:10-13+ Ja; 7-9+ F; 11-14+ Mr; 15-21+ Ap; 15-18 My; 13-14+ Je; 7-10+ Jl; 10-11 Ag; 11-15 S; 12-13 O '43
 Smile-words make successful letters. V. Young. Ptr Ink 203:21+ My 7 '43
 Want a good letter? then relax and express your personality! V. Young. Ptr Ink 202:78+ Mr 26 '43
 Why write as we talk? P. Frank. Ptr Ink 203:104 Je 25 '43

See also

- | | |
|------------------------|---------------|
| Collecting of accounts | Mailing lists |
| | Sales letters |

Form letters

- How to sell bank service by direct mail; personalized form letters. R. E. Doan. Bankers M 145:478-527 D '42

COMMERCIAL credit company

- Annual report. Comm & Fin Chr 157:780 Mr 1 '43
 Another look. Mag of Wall St 72:638+ S 18 '43
 Deposits under offer; Manufacturers' casualty insurance co. Comm & Fin Chr 157:130 Ja 11 '43

- Purchase offer; stock of Manufacturers casualty insurance co. Comm & Fin Chr 156:2096 D 14 '42

COMMERCIAL electric refrigeration association

- Commercial refrigeration; reconstitution of the C.E.R.A. Elec R (Lond) 132:112 Ja 22 '43; Electrician 130:76 Ja 22 '43

COMMERCIAL investment trust corporation

- Annual report. Comm & Fin Chr 157:990 Mr 15 '43

COMMERCIAL law**See also**

- | | |
|----------------------------------|-----------------------------------|
| Advertising—Laws and regulations | Foreign exchange |
| Arbitration | Fraud |
| Attachment and garnishment | Government regulation of industry |
| Banking law | Income tax |
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| Corporation law | Partnership |
| Food laws and legislation | Patent laws and legislation |
| | Price fixing |
| | Prices—Regulation |

COMMERCIAL law—See also—*Continued*

Railroad law	Trade marks
Real property	Trust companies
Restraint of trade	Trusts, Industrial
Sales	Trusts and trustees

Study and teaching

American institute of accountants examination in commercial law, May 14, 1943. J Account 76:251-5 S '43

Bolivia

Lead foil and other toxic materials used in connection with food: importation prohibited. For Comm W 11:16-17 Je 12 '43
Preparing shipments to Bolivia. E. W. Skartvedt. II For Comm W 10:7-10+ F 13 '43

COMMERCIAL paper

Commercial paper and bankers' acceptances outstanding, Aug. 1941-Nov. 1942. Fed Res Bul 29:66 Ja '43 [cont monthly]

See also

Acceptances, Trade
Negotiable instruments
Promissory notes

COMMERCIAL policy

Accounting control for peace; the future of international prosperity. A. Grey. J Account 75:397-407 My '43

Battle for foreign trade has begun. G. B. Collingwood. Mag of Wall St 72:451-3+ Ag 7 '43

Effects of economic-military alliance with Great Britain. V. L. Horoth. II Mag of Wall St 73:8-10+ O 16 '43

How to avoid a revival of injurious autarchic policies. For Comm W 12:19 Ag 21 '43

Jobs at stake in world trade plans; difference between American and British proposals. W. Von Tresckow. Barron's 23:3+ My 3 '43

Post-war international finance and investment. J. B. Condliffe. Trusts & Estates 76:229 Mr '43

Reciprocal accords ease wartime stresses. J. C. Rovensky. For Comm W 10:18-19 F 27 '43

Slow progress in winning international agreements on post-war commercial policy foreseen. J. Viner. Comm & Fin Chr 158:507 Ag 5 '43

Tariff commission report on commercial policies and trade relations of European possessions in Caribbean area. For Comm W 13:20 O 16 '43

Technical force; economic stress; basic influences of technological innovation on economy emphasize need for freedom of trade. R. E. Freeman. Tech R 45:423-4, 452+ Je '43

Trade policies of foreign countries during 1942. H. Chalmers. For Comm W 10:3-4+ Ja 30; 3-6+ Mr 13 '43

See also

Commercial treaties and agreements	International commercial arbitration
Free ports and zones	commission
Free trade and protection	Tariff

also subdivision Commercial policy under names of countries, e.g. United States—Commercial policy

COMMERCIAL products

Classification standards for commodities issued. Oil Paint & Drug Rep 144:3+ Ag 16 '43

Southeastern Asia and the Philippines as a market. A. R. Upgren. Ann Am Acad 226:9-21 Mr '43

See also

Raw materials
Substitutes

COMMERCIAL solvents corporation

Companies favored by research. Mag of Wall St 73:32 O 16 '43

COMMERCIAL statistics

Accounting control for peace; the future of international prosperity. A. Grey. J Account 75:397-407 My '43

Commercial history and review of 1942. Economist 144:sup3-27 Mr 13 '43

U.S. cash foreign trade; 1942 figures reveal significant trends. G. A. Witherow. For Comm W 11:4+ Ap 3 '43

See also

Balance of payments	Imports—Statistics
Export trade—Statistics	Market statistics

COMMERCIAL treaties and agreements

Argentina-Ecuador unconditional and unlimited most-favored-nation commercial treaty. For Comm W 13:6-7 O 9 '43

Australia; most-favored-foreign-nation treatment extended to the United States. For Comm W 10:12 Mr 6 '43; Same. Bankers M 146:346 Ap '43

Brazil-Chile new most-favored-nation treaty of commerce and navigation provisionally effective. For Comm W 11:14-15 My 8 '43

Brazil-Paraguay commercial treaty providing reciprocal duty concessions. For Comm W 13:7-8 O 9 '43

Chile-Colombia commercial treaty ratified. For Comm W 9:9-10 D 26 '42

Chile-Mexico most-favored-nation commercial agreement. For Comm W 11:14 Je 5 '43

Chile-Peru most-favored-nation commercial treaty approved. For Comm W 11:16-17 My 8 '43

Colombia-Ecuador unconditional and unlimited most-favored-nation commercial treaty with reciprocal tariff concessions signed. For Comm W 13:21-2 O 23 '43

Extension of the reciprocal trade agreements act. J. D. Conover. Min Cong J 29:31-3 Je '43

Facilities for interchanging goods: a criterion of a sane world order; abstract. C. Bunn. For Comm W 10:13 F 20 '43

Finland-Sweden agreement governing trade and credits during first 6 months of 1943. For Comm W 9:11-12 D 26 '42

Finland-Sweden, Slovakia, Croatia, trade agreements. For Comm W 12:18 S 25 '43

Germany-Sweden agreement governing trade and payments during 1943. For Comm W 10:14-15 Ja 23 '43

House group favors trade pacts renewal. Comm & Fin Chr 157:1593+ Ap 29 '43

Iceland-U. S. trade agreements signed. For Comm W 12:24 S 4 '43; Comm & Fin Chr 158:1018 S 9 '43

Iran-United States; trade agreement. S. Goldberg. For Comm W 11:14-15+ Ap 24 '43

Iran-U. S. trade pact. Comm & Fin Chr 157:1405 Ap 15 '43

Mexico and United States; new trade agreement. For Comm W 10:3-5, 30-1 Ja 16 '43

Mexico and U. S. sign new trade agreement. Comm & Fin Chr 157:199 Ja 14 '43

Mexico-U. S. trade agreement is signed. Oil Paint & Drug Rep 143:3+ Ja 4 '43

Norway-Sweden arrangement for exchange of merchandise during 1943. For Comm W 10:17 Mr 27 '43

Portugal-Hungary trade agreement concluded. For Comm W 10:22 Mr 13 '43

Portugal-Spain commercial agreement concluded. For Comm W 12:17 Ji 31 '43

Reciprocal trade agreements act extended for two years without any restrictions. Comm & Fin Chr 157:2287 Je 17 '43

Renewal of Trade agreements act urged upon Congress by American economic association. Comm & Fin Chr 157:1579 Ap 29 '43

Renewal of Trade agreements act vital to peace hopes. F. E. Hasler. Comm & Fin Chr 157:1500 Ap 22 '43

Switzerland-Turkey commercial and payments accord signed. For Comm W 13:19 O 2 '43

Switzerland-Turkey special commercial protocol effective. For Comm W 10:22 Mr 13 '43

Tariff, reciprocal trade and mining. E. Just. Eng & Min J 144:76-8+ Ap '43

War knits closer economic ties for American republics. J. C. Rovensky. II map Steel 112:74-5+ My 3 '43

Why reciprocal trade agreements are important to advertisers! C. H. Minor. Ptr Ink 203:73-5 My 14 '43

COMMISSARIAT. See United States—Army—Commissariat

COMMISSIONS (compensation)*See also*Insurance agents— Salesmen—Salaries
Commissions and commissions**COMMISSIONS, Federal.** *See* United States—Executive departments; also names of commissions, e.g. Federal trade commission; Interstate commerce commission**COMMITTEE for congested production areas.** Relief for congested centers planned in major war production areas. Eng N 131:171 JI 22 '43**COMMITTEE for economic development**

CED calls productive employment outstanding need of country after war; first report on post-war planning. Comm & Fin Chr 158:1512 O 14 '43

C.E.D. to analyze post-war potential. Sales Management 52:18 My 1 '43

Committee plans to win the peace. P. G. Hoffman, II Dun's R 51:7-12 Je '43; Same abr. Comm & Fin Chr 157:921+ Mr 11 '43

Community plans peacetime jobs; lessons from Peoria's experience. II Dun's R 51:11-15+ Ag '43

Employment quota plan evolved by post-war business committee; abstract. L. H. Rich. Iron Age 151:107-8 Mr 13 '43

55,000,000 jobs! planning now for postwar merchandising. G. A. Nichols. Ptr Ink 202:13-14, 47-9 Ja 8 '43

Grass roots effort is required; up to Nation's employers to provide more jobs at end of war than they did in 1940. P. G. Hoffman. Steel 112:97 Je 7 '43

Headquarters now in New York. Comm & Fin Chr 158:1818 N 4 '43

How designers can benefit through C.E.D. activities. Product Eng 14:539-42 S '43

Industry plans for the future. P. G. Hoffman. Mach 50:167-70 S '43

Industry's part in winning the peace. C. S. Fletcher. Credit & Fin Management 45:22-6 JI '43

Industry's plan for prosperity. R. W. Rills. II Adv & Sell 35:15-16 My '43

Jobs for 55,000,000 aim of businessmen's committee. Steel 112:22-3 Ja 11 '43

Marketing's role in solving the postwar problems of industry. E. L. Lindseth. Ind Marketing 28:35-8 Ag '43

Men behind the Committee for economic development. Am Business 13:16-18, 20-1 Ja '43

Opportunity, dynamics of free society. W. Benton. Ind Marketing 28:37-8+ Je '43

Peoria plans for post-war. L. K. Urquhart. Factory Management 101:94-6+ My '43

Plan A for postwar planning; who's in C.E.D., how it will operate, what it's doing, what to expect of it; report to executives. Business Week p27-9+ Ja 2 '43

Postwar; National industrial conference board address. P. G. Hoffman. Mech Eng 65:594-6 Ag '43; Same abr. Machine Design 15:114-15 S '43

Postwar pled pipers. Arch Forum 78:36+ F '43

Postwar planning. P. G. Hoffman. Oil Paint & Drug Rep 144:64+ O 11 '43

Post-war planning from the grass-roots. Barron's 23:10 Ja 4 '43

Preparation for peace by CED; abstracts. P. G. Hoffman. Ins Field (Pittsburgh Conv Daily ed) 72:1+ S 17 '43; Nat Underw (Life ed) Daily ed 47:5+ S 17 '43; Heat & Ven 40:47-50 O '43

Pushes postwar planning. Am Business 13:14-15 My '43

U.S. business sticks neck out on post-war job challenge; Peoria test campaign. G. A. Nichols. Ptr Ink 203:50, 52+ Ap 23 '43

Winning the peace; wider dissemination of benefits of industrial production the problem. W. Von Tresckow. Barron's 23:3 Ag 9 '43

Work of the Committee for economic development. C. L. Wilson. Edison Elec Inst Bul 11:203-6 JI '43

Your business after the war. E. Whitmore. II Am Business 13:7-10, 24 Ja '43

COMMITTEE on water and sewage works development

Committee on water and sewage works development. E. L. Filby. Water & Sewage 81:20-1+ Ag '43

COMMITTEES

When a committee votes by mail. B. E. Livingston. Science 97:67 Ja 15 '43

COMMODITY control

Britain simplifies production for victory; utility program of British Board of trade; civilian clothing. D. M. Keezer. II Dun's R 51:13-19+ Je '43

Civilian funnel; emerges as crux of consumer problem. Business Week p17-18 O 2 '43

Civilian gets a breather. Business Week p17 Ap 17 '43

More for civilians; refrigerators, washing machines, vacuum cleaners, electric irons. Business Week p 19 Ag 28 '43

Need for materials control. D. M. Nelson. Ry Age 115:131-2 JI 24 '43

Price and rationing control. L. A. Stack. Credit & Fin Management 45:28 O '43

See also

Priorities and allocations—World war, 1939—Commodity control

United States—War production board—Controlled materials plan

COMMODITY credit corporation

Administration's alternative to rollback program would have been to permit wage increases. E. Blair. Barron's 23:4 JI 5 '43

Behind the CCC; battle to prolong life of lending agency. Business Week p22+ O 9 '43

Fast one by CCC? purchase of oil meals at old ceiling and resale at new tops. Business Week p32+ S 4 '43

House sustains President's veto of bill banning subsidy payments; Senate again rejects plan. Comm & Fin Chr 158:129, 132-3 JI 8 '43

President signs CCC bill. Comm & Fin Chr 158:333 JI 22 '43

Protest against the CCC rate cut. Banking 36:48 Ag '43

Purposes and practices during 1942. Oil Paint & Drug Rep 143:50 Ja 11 '43

Spread too far? some congressmen think CCC should stop foreign buying. Business Week p104-6 JI 31 '43

COMMODITY exchanges. *See* Exchanges**COMMON trust fund.** *See* Trusts and trustees—Common trust funds**COMMONS, Charles**

Lt. Charles Commons wins army ordnance award. por Brick & Clay Rec 103:8 Ag '43

COMMONWEALTH and southern corporation

Annual report. Comm & Fin Chr 158:386-7 JI 26 '43

Common stock capitalization order of SEC affirmed. Pub Util 31:653-4 My 13 '43

Commonwealth & Southern gauges the future. W. T. Hyde, Jr. Barron's 23:5 O 11 '43

Descriptions of holding companies. O. Ely. Pub Util 32:296-8 S 2 '43

Directors approve plan to change capitalization. Comm & Fin Chr 157:1553 Ap 26 '43

Dividend approved. Comm & Fin Chr 158:187 JI 12 '43

Files plan with SEC. Comm & Fin Chr 158:2036 D 7 '42

George Putnam fund registers opposition to proposed plan. Comm & Fin Chr 157:2247 Je 14 '43

Hearings. O. Ely. Pub Util 31:826-7 Je 24 '43

New Commonwealth & Southern plan. Pub Util 31:631-2 My 13 '43

Preferred holders object to plan. Comm & Fin Chr 158:1529 O 18 '43

Sale approved. Comm & Fin Chr 157:1176 Mr 29 '43

SEC allows deal. Comm & Fin Chr 157:1421-2 Ap 19 '43

SEC rejects proposal to reduce stated value of preferred to facilitate dividend payments. Comm & Fin Chr 157:1361 Ap 12 '43

SEC sets June 7 for hearing on capitalization plan. Comm & Fin Chr 157:1940-1 My 24 '43

Study forecasts postwar power picture. Pub Util 32:304-8 S 2 '43

Values in Commonwealth & Southern. W. T. Hyde, Jr. Barron's 23:19 Ap 26 '43

COMMONWEALTH Edison company

Consolidated income account, 1939-1942.
Comm & Fin Chr 157:1078 Mr 22 '43
Thumbnail stock appraisal. Mag of Wall St
72:309 Je 26 '43

COMMUNICABLE diseases. See Infectious diseases**COMMUNICATION, Electric.** See Electric communication**COMMUNICATION, International**

Wanted: a bright young octopus; need and suggested plans for consolidation of American international communication companies.
H. Corey. Pub Util 31:143-51 F 4 '43

COMMUNICATION, Military

Army signal service. W. D. Hamlin. Il Radio
N 28:120-2+ N '42

How enlisted men learn; Signal corps training in radio and wire communication. F. C. Shidel. Il Radio N 28:70-3+ N '42

Invasion communications; jobs of the Signal corps are many and varied. R. L. Sigerson. Il Sci Am 169:53-5 Ag '43

War communication systems in boxes; Western electric co. expert packers. Il Mod Packaging 17:76-80 O '43

War matériel; Signal Corps activity in designing new devices. Il Product Eng 14: 195-9 Ap '43

See also

Military telegraph	Radio operators,
Military telephone	Military
Radio communication,	
Military	

COMMUNICATION, Secret. See Radio telephone—Secrecy**COMMUNICATION and traffic**

Giant communications triumvirate planned; Postal-Western merger foreshadows reshuffling of phone, telegraph and world services. O. J. Gingold. Barron's 23:3 Je 7 '43

Postwar mass employment in public works. T. B. Spitzer. Pub Util 32:15-18 Jl 8 '43

See also

Aeronautics	Rapid transit
Aeronautics, Commercial	River traffic
Air lines	Road traffic
Airways	Roads
Canals	Shipping
Commerce	Ships—Communication
Electric traction	Street railroads
Highway transportation	Street traffic
Motor vehicles	Telegraph
Postal service	Telephone
Radio communication	Television
Radio facsimile	Transportation
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	Waterways

COMMUNICATIONS commission, Federal. See Federal communications commission**COMMUNISM**

Foe of the reds; Pittsburgh attorney leads fight against Communists in unions. Business Week p99-101 S 11 '43

See also

International, Third

COMMUNIST International. See International, Third**COMMUNIST party (Great Britain)**

Communists in conference. Economist 145:42 Jl 10 '43

COMMUNIST party (United States)

Citizenship cannot be cancelled because of membership in Communist party. Comm & Fin Chr 158:31 Jl 1 '43

COMMUNITY advertising

California sells travel dreams now, to be realized post war. Il Ptr Ink 202:32+ Mr 19 '43

Campaign sells 20,000 victory gardens to citizens of Alhambra. Sales Management 52: 68 Mr 15 '43

Santa Cruz solves the hegira problem; advertising campaign of Santa Cruz gas and electric co. under direction of Chamber of commerce. W. B. Stoddard. Am Gas J 159: 28 Ag '43

COMMUNITY centers

Housing project, Bellmawr, N.J.; community building. Il plan Arch Forum 78:78-9 Ja '43

Town of Willow Run; civic center and proposed neighborhood units. Il plans Arch Forum 78:37-54 Mr '43

COMMUNITY chests**Advertising**

Advertising puts over charity drive in face of heavy odds; Montgomery Ward's retail sales department acts as advertising agency for Chicago's community fund drive. Il Ptr Ink 201:56, 58 D 18 '42

COMMUNITY gas and power company

Amended plan of integration filed with SEC. Comm & Fin Chr 158:573 Ag 9 '43

Files simplification plan. Comm & Fin Chr 157:601 F 15 '43

SEC orders company to liquidate. Comm & Fin Chr 158:187-8 Jl 12 '43

COMMUNITY property

Down to cases; community property. L. A. Burke. Spectator (Life ed) 151:26-7 S; 10-11 O '43

Estate position of assets under joint ownership. H. S. Koster. Trusts & Estates 76: 241 Mr '43

Policies property under Texas law; abstracts. W. A. Vinson. East Underw 44:13 O 8 '43; Weekly Underw 149:739 O 9 '43

Will tax on community property be upheld? R. W. Smith. Trusts & Estates 76:85-8 Ja '43

COMMUNITY trusts

Soldier and sailor trust funds. C. C. Luhnnow. Trusts & Estates 75:557-9 D '42

COMMUTATORS

How to space brushes on commutators; illustrated instructions. Power 87:124-5 F '43

Maintenance of traction motor commutators. B. J. Barva. Il diag Mass Transportation 39:117-19 Mr '43

Resurfacing and air curing commutators on Diesel-electric locomotives. J. W. Teker. Il diag Diesel Power 21:498-9 Je '43

Unreeling device regulates bar stock; cutting and straightening of small commutator bars. L. G. Bergstrom. Il Elec W 120:508-7 Ag 7 '43

Vacuum cleans dust from commutator. S. H. Slemán. Il diag Factory Management 101: 146+ Mr '43

What causes burn spots? commutator bars. Power 87:56-8 Ja '43

Where pain meant gain; comparators for inspecting acorn-sized commutators. Il Comp Air M 48:7149 S '43

COMPANY names. See Business names; Corporate names**COMPANY reports.** See Corporations—Reports and yearbooks**COMPANY stores**

Billion-dollar baby. Il Business Week p76, 78+ S 4 '43

Company stores rated fairly high by OPA. Coal Age 48:124-5 Je '43

COMPANY towns

See also

Mining towns

COMPANY unions

Too cooperative; labor-management committee bred a company-dominated union. Business Week p96+ O 30 '43

Veeco must refund company union dues. Elec W 119:1966 Je 12 '43

See also

Employees' representation in management

COMPARATORS

Accessories for Sigma mechanical comparator. Il Engineering 156:47-8 Jl 16 '43; Engineer 176:37-8 Jl 9 '43

Contour comparator; new F.S. optical comparator. Il Instruments 16:582+ S '43

Especially equipped comparator speeds inspection of aircraft radio part. Il Mach 49:141 Je '43

Optical problems in design of comparator. F. J. Acton. Il diag Machine Design 15: 81-4 O '43

Sigma vertical comparators. Il Automobile Eng 33:332, 333 Ag '43

Transparencies for optical comparators. Il Iron Age 151:61 F 25 '43

COMPARATORS—Continued

Where pain meant gain; comparators for inspecting acorn-sized commutators. *Il Comp Air M 48:7149 S '43*

COMPARS. See Vinyl compounds

COMPASS

Bendix gyro flux gate compass. *Il Automotive & Aviation Ind 89:37 N 1 '43; Aviation N 1:10 O 18 '43*

Magnesy remote reading compass. *D. W. Smith. Il diags Aeronautical Eng R 2:31, 33, 35-6 My '43*

See also

Radio compass

COMPENSATION (law)

See also

Damages

Eminent domain

Requisitioning

Workmen's compensation

COMPETITION

Competition and the free enterprise system; what will be the type of our after-the-war economy? *C. W. Phelps. Credit & Fin Management 45:10-11+ F '43*

Complacency, your competitor and the post-war market. *M. K. Powers. Il Dun's R 51:11-13+ Ap '43*

Death of competition dangerous; abstract. *H. Ickes. Nat Pet N 34:15 N 18 '42*

Point rationing will create horizontal competition. *Ptr Ink 201:66 D 11 '42*

Post war competitive trends in consumer durable goods. *E. A. Krauss. Il Mag of Wall St 72:285-7+ Je 26 '43*

Restoring freedom. *Fortune 26:supp-9-13 D '42*

Will better products solve your post-war competition problem? *F. Manning. Sales Management 52:40+ J1 1 '43*

See also

Chain stores

Monopolies

Price fixing

Trusts, Industrial

COMPETITION, Unfair

F.T.C. hits multiple basing point delivered-price system; Cement Institute. *Oil Paint & Drug Rep 144:3+ J1 26 '43*

See also

Employees, Selling to

Federal trade commission

Misbranding

Restraint of trade

COMPETITIVE bidding. See Securities—Marketing

COMPLAINTS

Novel booklet aids retailers in coping with customer complaints; Pepsodent company explains its difficulties. *Ptr Ink 202:31 F 19 '43*

COMPLEMENT (immunity)

Human complement. *E. E. Ecker and others. Science 98:43-4 J1 9 '43*

Recent advances in the chemistry of complement. *L. Pillemer. bibliog(99 references) Chem R 33:1-26 Ag '43*

COMPLEMENT fixation

Complement fixation in rickettsial diseases. *H. Plotz. Science 97:20-1 Ja 1 '43*

Improved antigen for complement fixation in American trypanosomiasis. *D. J. Davis. Pub Health Rep 58:775-7 My 14 '43*

Non-virulent frozen and dried antigens for complement-fixation tests with central nervous system virus infections. *J. Casals. Science 97:337-8 Ap 9 '43*

COMPLEX numbers. See Numbers, Complex**COMPLEX salts.** See Salts, Complex

COMPONENTS scheduling plan. See United States—War production board—Components scheduling plan

COMPOUND words

Many atrocities perpetrated in field of language; dimout. *E. N. Teall. Inland Ptr 110:52 F '43*

COMPRESSED air

Air-starting principles. *Diesel Power 21:411+ My '43*

Before you select air-compressor drive. *C. G. Kohl. Il Power 87:376-7+ Je '43*

Compressed air can do many odd jobs; Tinnerman products, Inc. *A. M. Hoffman. Il Comp Air M 48:7066-7 Je '43*

Compressed air for war production; special section. *diags Power 87:237-52 Ap '43*

Compressed air helps the needleworker; trapunto work. *A. Wolff. Il Comp Air M 48:7012-13 Ap '43*

Compressed air in colleges; in laboratories, libraries and in power plants. *G. K. Saurwein. Il Power 87:314-15 My '43*

Compressed air in the steel mill; with flow chart of steel making. *Il Comp Air M 48:7043-4 My '43*

Compressed-air low-water alarm. *diags Power 87:120-1 F '43*

Compressed air replaces steam in derrick of wrecker; technique for moving wrecked railroad cars containing explosives or flammable materials. *W. J. Flannigan. Nat Safety N 47:28 Ap '43*

Compressed gas actuator for aircraft; steel bottle filled with liquid carbon dioxide or compressed air that can be connected to hydraulic systems. *Il diags Product Eng 14:144-6 Mr '43*

Dismantling gas holder. *diag Eng N 130:763 My 20 '43*

How to get the most from compressed air. *C. W. Gibbs. Il diags Factory Management 100:119-23 D '42*

Improvised aftercoolers for compressed air. *diag Heating-Piping 14:721 D '42*

Pointers on keeping compressed air clean. *D. F. Moynihan. Power 87:50 Ja '43*

Positive dual-action air door used in Resurrection mine. *D. L. Myers. diags Eng & Min J 144:76-7 My '43*

Protection against compressed-air explosions. *E. MacDermid. Power 87:493c+ J1 '43*

Sudser saves soap in washer; compressed air discharges into soap solution to form suds which falls onto revolving brushes to clean citrus fruit. *I. Feinberg. diag Food Ind 15:61 Ja '43*

Telephone cables tested with compressed air. *Comp Air M 48:7175 O '43*

35 miles of compressed air help beat the promise; Addressograph-multigraph corp. *Il Steel 113:125-6 J1 12 '43*

Use of compressed air saves vital materials; circuit breaker. *H. W. Martin. Il diags Machine Design 15:145-6+ Ap '43*

Victory in the grounded air; operation and maintenance of compressors. *W. H. Wheeler. Il Power Pl Eng 47:35-6+ Ap '43*

See also

Air brakes

Air compressors

Air lifts

Caissons

Pneumatic control

Pneumatic conveying

Pneumatic machinery

Pneumatic tools

Moisture content

Why allow water in compressed air? *C. W. Gibbs. Il diags Power 87:26-8 Ja '43*

Physiological effect

Control of safety and health of men working under compressed air on the Queens Midtown tunnel. *E. Levy. Am Soc C E Proc 63:1030-5 S '43*

COMPRESSED air circuit breakers. See Electric circuit breakers—Oilless

COMPRESSED air lines

Air lines and accessories. *diag Eng & Min J 144:78-9 My '43*

Eliminating moisture from a paint spray compressed air line; problem. *Power Pl Eng 47:85 J1 '43; Solutions. diags 47:93-6 S '43*

Gone with the wind; leakage in air lines. *C. W. Gibbs. Il diags Comp Air M 48:6960-1 F '43*

Pressure drop in compressed-air pipe; chart. *Power 87:561 Ag '43*

Recommended arrangements for pneumatic tools; chart for use in determining suitable hose arrangements; data sheet. *C. W. Gibbs. Factory Management 101:152 Mr '43*

COMPRESSED food. See Food, Compressed

COMPRESSED gases. See Gases, Compressed

COMPRESSIBILITY

Compressibility of composition cork; used as gasket material on liquid-filled electrical equipment. *L. P. Hart, Jr. Elec W 118:1640, 1812 N 14-28 '42*

Pressure-volume-temperature relations of 2,2-dimethylbutane. *W. A. Felsing and G. M. Watson. bibliog Am Chem Soc J 65:1889-91 O '43*

COMPRESSIBILITY—Continued

Pressure-volume-temperature relations of 2,2,4-trimethylpentane. W. A. Felsing and G. M. Watson. *bibliog* Am Chem Soc J 65:780-1 My '43

See also

Elasticity

COMPRESSORS

Arc welded compressor suspension. J. F. Muller and G. C. Munoz. *il* *diags* Ry Mech Eng 117:50-2 Ja '43

Centrifugal compressors. J. R. Zwickl. *diag* Refrig Eng 45:177-83 Mr '43

Compressor and condensing unit substitutions. S. R. Hirsch. *il* Refrig Eng 45:160-2 Mr '43

Experiment in the operation of improvised compressor units; automobile engine as compressor for air or gas injection. F. Squires. *il* *diag* Oil & Gas J 42:62, 64+ J1 15 '43

Low temperatures by means of multi-stage and other compression systems. H. Sloan. *diags* Refrig Eng 45:419-25 Je '43

Too low a head pressure can cost money. A. B. Duryee. *Power* 87:755 N '43

See also

Air compressors

Ammonia compressors

Gas compressors

Manufacture

Milling of compressor beds cut by 60 per cent; 131-ton milling and boring machine at the plant of Cooper-Bessemer corp. *Steel* 113:104 S 13 '43

COMPROLLERS. See Controllers**COMPULSORY insurance. See** Insurance, Compulsory**COMPULSORY labor. See** Labor, Compulsory**COMPULSORY military service. See** Military service, Compulsory**COMPULSORY saving. See** Saving, Compulsory

CANNON, Charles Cuthbert, 1889—Cannannon to advise Chilean government. *por* Chem & Eng N 21:1744 O 25 '43

Portrait. *Oil Paint & Drug Rep* 144:3 O 18 '43

CONCENTRATION of industry. See Industrial mobilization—Concentration policy**CONCENTRATORS**

Improvements in concentrating sulfuric acid. M. J. Kalous. *diags* Ind & Eng Chem 35:387-90 Ap '43

CONCILIATION service. See United States—Labor, Department of—Conciliation service**CONCRETE**

Brief history of lime, cement, concrete and reinforced concrete. J. O. Draffin. *bibliog* (114 titles) *diags* W Soc E J 48:14-47 Mr '43

Concrete cone anchor replaces steel. I. Eckhart. *diags* Elec W 118:2136 D 26 '42

Concrete strengthens welded steel base. *il* *diag* Iron Age 152:73 O 7 '43

Concrete technology as affected by war conditions. M. N. Clair. *Boston Soc C E J* 30:169-82 J1 '43

Developments in concrete; abstracts of American society for testing materials papers. *Eng N* 131:160-1 J1 15 '43

Discussion of report of committee 511; ACI manual of concrete inspection. A. B. Cohen and others. *Am Concrete Inst J* 13:sup541-60 N '42

Factors influencing the reflectivity of white portland cement concretes. C. W. Muehlenbruch and E. H. Miller. *diag* Am Soc T M Proc 42:775-85; Discussion. 786 '42

From barges to bathtubs. *Fortune* 28:18+ J1 '43

Increasing the reflectivity of concrete by additions of high-calcium lime. C. W. Muehlenbruch and B. Marcin. *Eng N* 131:325 Ag 26 '43

Modulus of elasticity of concrete; abstract. R. C. Valore, Jr. and J. C. Yates. *Franklin Inst J* 235:528-9 My '43

Technical progress section; advertisers supply information on materials, products, services. *il* *diags* Am Concrete Inst J 14:329-83 F '43

White concrete reflecting curbs for safe driving. *il* *Mass Transportation* 39:225 Je '43

See also

Bridges, Concrete

Cement

Concrete, Reinforced

Concrete construction

Concrete lining

Concrete products

Gunitite

Pavements, Concrete

Pipes, Concrete

Roads, Concrete

Sewers, Concrete

Tanks, Concrete

Aggregate

Advantages of stockpiling aggregates. S. Walker; T. C. Powers. *Am Concrete Inst J* 14:597-8 Je '43

Birmingham slag company; slag, gravel and concrete plants. B. Nordberg. *il* *Rock Prod* 45:46-59, 96-7+ D '42

Construction plant for Fontana project. R. E. Martin. *il* *diag* Civil Eng 13:533-6 N '43

Developments in methods of testing and specifying coarse aggregates. L. H. Tuthill. *Am Concrete Inst J* 14:21-32 S '42; Discussion. 14:sup32-32' Je '43

Effect of air-entraining admixture with bad aggregates; use of vinsol resin. *Rock Prod* 46:114+ Ag '43

Fatigue tests of light weight aggregate concrete beams. H. A. Williams. *il* *Am Concrete Inst J* 14:441-7 Ap '43

Find mountains of heavy aggregate in New Jersey; mine-dump of iron ore, garnet stone and hornblendes. *il* *Concrete* 51:23 J1 '43

Gap gradings for concrete aggregates. L. B. Mercer. *Am Concrete Inst J* 14:509-11 F '43

Influence of the durability of aggregate upon the durability of the resulting concrete. H. H. Munger. *Am Soc T M Proc* 42:787-803; Discussion. 804-7 '42

Investigations on falling blast-furnace slags. T. W. Parker and J. F. Ryder. *bibliog* Iron & Steel Inst J 146:21-61, pl 1-2 no 2 '42

Light weight aggregate to save steel. F. E. Richart; H. F. Thomson. *Am Concrete Inst J* 14:137-8 J '42

Lightweight concrete slabs form exterior of big industrial building; Haydite concrete used; Worthington pump and machinery company. *il* *Concrete* 51:10+ Ap '43

Method of mix control for light weight aggregates. H. G. Collins. *Am Concrete Inst J* 14:139-40, 214-15 N '42-Ja '43

Million tons for Douglas dam; Birmingham slag company builds plant to produce aggregates and stone sand. B. Nordberg. *il* *Rock Prod* 45:54-8 D '42

New markets for lightweight concrete made with natural and manufactured aggregate. G. W. Hoffmann. *il* *Rock Prod* 46:91-3 J1 '43

Processed aggregates; expanded shales for light-weight concretes. *Chem Age (Lond)* 48:351-2 Mr 27 '43

Processing 250,000 tons of aggregates; Union sand and gravel co. R. S. Torgerson. *il* *diag* *Rock Prod* 45:44-5+ N '42

Sand blending; simple mathematical methods of determining size distribution. F. C. Bond. *Rock Prod* 45:60+ O '42; Discussion (Clarifying the sand blending problem). 46:55 Mr '43

Span river with belt conveyors for Fontana Dam aggregates; rod mills reduce crushed stone to fine aggregate. W. B. Lenhart. *flow sheet* *il* *Rock Prod* 46:49-57+ S '43

Study of chert as a deleterious constituent in aggregates. H. S. Sweet and K. B. Woods. *il* *Purdue Univ Eng Exp Sta, Research Ser* 86:1-106 *bibliog* (p94-6) '42 (pa 50c)

Supplementary data on the effect of concrete aggregate having low thermal coefficient of expansion. J. C. Pearson. *Am Concrete Inst J* 15:33-7 S '43

Use of coral aggregate. B. E. Nutter. *il* *Am Concrete Inst J* 15:61-5 S '43

Volume changes in concrete; effect of aggregate; abstract and discussion. F. H. Jackson and W. F. Kellerman. *Eng N* 130:147 Ja 28 '43

Bibliography

Current reviews of significant contributions in foreign and domestic publications. Published in American concrete Institute Journal

CONCRETE—Continued

Cinder concrete

Conditioning cinders to prevent popping in cinder concrete. R. E. Copeland. Concrete 51:16+ Ap '43
Expanding sales through dealers; Little rock lumber and coal co. Alma, Mich. installs equipment to manufacture cinder concrete block. W. B. Lenhart. il Rock Prod 46: 86-8 S '43

Coloring

How District of Columbia uses dark concrete, made with emulsified carbon black. H. C. Whitehurst. il Roads & Sts 86:53 JI '43

Curing

As an integral curing agent, anti-hydro increases the strength and decreases the permeability of portland cement mixes. il Am Concrete Inst J 14:374-5 F '43
Curing room in Denver's laboratory is automatically operated. A. Cavarra. il Concrete 51:33 JI '43
Effect of calcium chloride admixture on strength of concrete cured at low temperatures. H. W. Russell. Roads & Sts 86:45-8 JI '43
Effect of curing compounds on the quality of concrete; abstract. B. G. Long and H. K. Kurtz. Eng N 131:332-3 Ag 26 '43
Factors about use of membranous compounds for curing concrete. G. P. Hevenor. il Concrete 51:18-20 Ja '43
High-pressure steam cured concrete products. Rock Prod 46:95 Mr '43
Hunt process; concrete curing compounds. Am Concrete Inst J 14:372-3 F '43
Membrane curing; its history, development, and the advantages. il Am Concrete Inst J 14:377-81 F '43
Practical method provides water spray for curing concrete pavement slabs. H. F. Clemmer. il Concrete 50:8+ D '42
Wartime construction of concrete pavements. Pub Works 73:19-20 D '42
Wartime restrictions affect curing methods for concrete roads. il Roads & Bridges 81: 26-7, 64, 66+ F '43; Excerpt. Concrete 51: 33-4 Ap '43

Durability

Function of entrained air in concrete. H. L. Kennedy. il Am Concrete Inst J 14:529-42 Je '43; Discussion. 14:sup544-544+ N '43
Influence of the durability of aggregate upon the durability of the resulting concrete. H. H. Munger. Am Soc T M Proc 42:787-803; Discussion. 804-7 '42
Some observations on durability; use of catalyst-dispersing-agent TDA. H. L. Kennedy. Am Concrete Inst J 14:344-5 F '43

See also

Pavements, Concrete—Scaling

Expansion and contraction

Shrinkage of concrete exposed to the weather. J. C. Pearson and R. F. Adams. Am Concrete Inst J 14:131-2 N '42
Some factors influencing the strength of concrete containing admixtures of powdered aluminum. C. A. Menzel. diags Am Concrete Inst J 14:165-84 Ja '43
Some long time tests of concrete; strength and expansion tests. M. O. Withey and K. F. Wendt. il Am Concrete Inst J 14:221-35 F '43
Supplementary data on the effect of concrete aggregate having low thermal coefficient of expansion. J. C. Pearson. Am Concrete Inst J 15:33-7 S '43
Volume changes in concrete; effect of aggregate; abstract and discussion. F. H. Jackson and W. F. Kellerman. Eng N 130: 147 Ja 28 '43

Failure

Cement or aggregates? disintegration of concrete by chemical processes studied by A.S.T.M. committees. Rock Prod 46:112, 114+ Ag '43

Width and spacing of tensile cracks in axially reinforced concrete cylinders. D. Watstein and D. E. Parsons. bibliog pls diags J Research Nat Bur Stand 31:1-24 JI '43

See also

Concrete—Freezing

Finishing

Declare new form liner produces case-hardened surface; Hydron. il Concrete 50:23 D '42
Inspection of concrete floor finish construction. A. J. Boase. Am Concrete Inst J 14: 97-101 N '42; Discussion. 14:sup104-104+ Je '43
Selecting the surface texture for Sears architectural concrete building. il Concrete 51: 5-6 F '43
Study of the mechanical finishing of concrete pavements. Roads & Bridges 81:50 Ja '43

Freezing

Concrete protection afforded by freeze-resistant resin from pine wood; Vinsol. Sci Am 169:228-9 N '43
Frost and concrete; discussion of paper by A. R. Collins. D. I. Watson. Chem & Ind 62:151-2 Ap 17 '43
Frost-resistance of concrete. A. R. Collins. il Soc Chem Ind J 62:113-16 Ag '43
Frozen concrete; 1942 ACI convention Quiz session. Am Concrete Inst J 14:127-9 N '42
Influence of sands, cements, and manipulation upon the resistance of concrete to freezing and thawing. W. C. Hansen. Am Concrete Inst J 14:105-23 N '42; Discussion. 14:sup124-124+ Je '43
Influence of the durability of aggregate upon the durability of the resulting concrete. H. H. Munger. Am Soc T M Proc 42:787-803; Discussion. 804-7 '42

See also

Concrete construction in winter

Mixing

See Concrete mixing

Moisture content

Variation in test strength of concrete and mortar specimens according to moisture content at time of test. F. L. Fitzpatrick. Am Concrete Inst J 14:133-4 N '42

Painting

Paint and waterproofing applied to concrete ships. Am Concrete Inst J 14:593-4 Je '43

Prestressing

Electric prestressing of reinforcing steel. K. P. Billner and R. W. Carlson. il Am Concrete Inst J 14:585-92 Je '43; Discussion. 14:sup592-592+ N '43
Electric prestressing of reinforcing steel used for small house construction; passage of low voltage current through rods coated with thermoplastic material. K. P. Billner. il Eng N 131:406-8 S 9 '43
Experience with wire-wound prestressed concrete pressure pipe in Chicago. W. W. DeBerard and W. B. Weldon. il diag Am Water Works Assn J 35:1263-80 O '43; Same abr. Water Works & Sewerage 90: 378-83 O '43
Navy builds prestressed concrete tanks. R. B. Garrabrant. il Eng N 130:135-7 Ja 28 '43
New method used to make prestressed concrete pipe. il diag Eng N 131:476-8 S 23 '43
100,000-barrel concrete tanks for fuel oil built by prestressing reinforcing rods. il diags Nat Pet N 35 pt 2:120 Ja 6 '43
Prestressed concrete design principles and reinforcing units. H. Schorer. bibliog il diags Am Concrete Inst J 14:493-528 Je '43; Discussion. 14:sup528-528+ N '43
Recent developments in structural engineering. R. H. Evans. Engineering 155:155-6 F 19 '43
Theory of pre-stressed design of concrete tanks is described. C. Dobell. Nat Pet N 35 pt 2:R448 O 6 '43
Wire-wound prestressed concrete pressure pipe. E. B. Crepps. il diags Am Concrete Inst J 14:545-55 Je '43

Shrinkage

See Concrete—Expansion and contraction

CONCRETE—Continued

Specifications

High early strength concrete specifications for architects, design engineers, construction engineers. Am Concrete Inst J 14:376 F '43

Strength

Effect of calcium chloride admixture on strength of concrete cured at low temperatures. H. W. Russell. Roads & Sts 86:45-8 J1 '43

Effect of time of haul on strength and consistency of ready-mixed concrete. G. C. Cook. Am Concrete Inst J 14:413-26 bibliog(p425-6) Ap '43; Same cond. il Rock Prod 46:76-8, 80+ My '43; Discussion. Am Concrete Inst J 14:sup428¹-428² N '43

Load required to compress concrete and rock. G. B. Sowers. il Civil Eng 13:389-90 Ag '43

Plasticity ratio of concrete and its effect on the ultimate strength of beams. V. P. Jensen. bibliog diags Am Concrete Inst J 14:565-82 Je '43; Discussion. bibliog 14:sup584¹-584² N '43

Powdered aluminum as an admixture to concrete. R. W. Carlson. il Am Soc T M Proc 42:808-18; Discussion. 819-20 '42

Proposed recommended stresses for unreinforced concrete; reported by ACI committee 322. A. J. Boase. Am Concrete Inst J 14:93-5 N '42; Same abr. Eng N 130:42 Ja 14 '43

Some factors influencing the strength of concrete containing admixtures of powdered aluminum. C. A. Menzel. diags Am Concrete Inst J 14:165-84 Ja '43

Some long time tests of concrete; strength and expansion tests. M. O. Withey and K. F. Wendt. il Am Concrete Inst J 14:221-38 F '43

Tensile and other properties of concretes made with various types of cements. L. Schuman and J. Tucker, jr. bibliog diags J Research Nat Bur Stand 51:107-24, pl 1-2 Ag '43

Testing

Cement and concrete sessions at A.S.T.M. annual meeting. Concrete 51:4-5+ Ag '43

Discussion of report of committee 611; ACI manual of concrete inspection. A. B. Cohen and others. Am Concrete Inst J 13:sup541-80 N '42

Effect of curing compounds on the quality of concrete; abstract. B. G. Long and H. K. Kurtz. Eng N 131:332-3 Ag 26 '43

Effect of time of haul on strength and consistency of ready-mixed concrete. G. C. Cook. Am Concrete Inst J 14:413-26 bibliog(p425-6) Ap '43; Same cond. il Rock Prod 46:76-8, 80+ My '43; Discussion. Am Concrete Inst J 14:sup428¹-428² N '43

Fatigue tests of light weight aggregate concrete beams. H. A. Williams. il Am Concrete Inst J 14:441-7 Ap '43

Influence of sands, cements, and manipulation upon the resistance of concrete to freezing and thawing. W. C. Hansen. Am Concrete Inst J 14:105-23 N '42

Machine developed to test mass concrete in place. il Eng N 131:537 O 7 '43

Powdered aluminum as an admixture to concrete. R. W. Carlson. il Am Soc T M Proc 42:808-18; Discussion. 819-20 '42

Project report on a study of methods of measurement of the length of cores drilled from concrete structures. il diags Am Soc T M Proc 42:249-59 '42

Properties and behavior underwater of plastic concrete. P. J. Halloran and K. H. Talbot. il diags Am Concrete Inst J 14:461-92 Je '43; Discussion. 14:sup492¹-492² N '43

Some long time tests of concrete; strength and expansion tests. M. O. Withey and K. F. Wendt. il Am Concrete Inst J 14:221-38 F '43

Supplementary data on the effect of concrete aggregate having low thermal coefficient of expansion. J. C. Pearson. Am Concrete Inst J 15:33-7 S '43

Ten-year tests of high-early-strength cement concretes. L. Schuman. J Research Nat Bur Stand 23:397-403 D '42; Same cond. Concrete 51:8-9 F '43

Tensile and other properties of concretes made with various types of cements. L. Schuman and J. Tucker, jr. bibliog diags J Research Nat Bur Stand 51:107-24, pl 1-2 Ag '43

Variation in test strength of concrete and mortar specimens according to moisture content at time of test. F. L. Fitzpatrick. Am Concrete Inst J 14:133-4 N '42

Vibratory remodeling test as a measure of concrete workability. C. E. Wuerpel. il Am Concrete Inst J 15:70-5 S '43

See also

Concrete—Durability

Transportation

Ready-mixed concrete men urged to adopt pooled delivery plan. E. M. Brady. Concrete 51:14+ Ap '43

Waterproofing

See Waterproofing

Workability

Vibratory remodeling test as a measure of concrete workability. C. E. Wuerpel. il Am Concrete Inst J 15:70-5 S '43

Wrecking

Find breaking of concrete a profitable specialty. J. E. Hubel. il Concrete 51:5-6 Ap '43

CONCRETE, Effect of alkalis on Cement or aggregates? disintegration of concrete by chemical processes studied by A.S.T.M. committees. Rock Prod 46:112, 114+ Ag '43

CONCRETE, Porous

Installation of a new gallery in Elkhart, Indiana; installing porous concrete pipe. C. L. Link. il diag Pub Works 73:14-15+ D '42

CONCRETE, Ready-mixed. See Concrete mixing—Ready-mixed concrete

CONCRETE, Refractory

Refractory concrete for kiln crowns outlasts fire brick. il Brick & Clay Rec 101: 50 N '42

CONCRETE, Reinforced

Analysis of stresses in simple and continuous beams and girders. H. L. Wagner. Roads & Bridges 81:62-72+ Je '43

Balanced design for reinforced concrete. A. J. Boase and C. E. Morgan. diags Am Concrete Inst J 14:277-96 F '43

Bomb-resistant air raid shelters. H. E. Wessman. il diags Am Concrete Inst J 14:241-50 F '43

Brief history of lime, cement, concrete and reinforced concrete. J. O. Draffin. bibliog(114 titles) diags W Soc E J 48:14-47 Mr '43

Effect of vinsol resin on bond between concrete and steel. C. E. Wuerpel. Am Concrete Inst J 14:129-30 N '42

Glover three-pin reinforced-concrete frame buildings. il diags Engineering 155:506-7, 510 Je 25 '43

National emergency specifications for the design of reinforced concrete buildings to conserve steel. Am Concrete Inst J 14:85-92 N '42

Plasticity ratio of concrete and its effect on the ultimate strength of beams. V. P. Jensen. bibliog diags Am Concrete Inst J 14:565-82 Je '43; Discussion. bibliog 14:sup584¹-584² N '43

Prestressed concrete, design principles and reinforcing units. H. Schorer. bibliog il diags Am Concrete Inst J 14:493-528 Je '43; Discussion. 14:sup528¹-528² N '43

Reinforce concrete with steel guy wire. Elec W 120:664 Ag 21 '43

Reinforced brick and concrete substituted for steel kiln shells. V. J. Azbe. diag Rock Prod 46:78-9 S '43

Reinforced concrete; wartime restrictions. D. Peabody. Boston Soc C E J 30:183-6 J1 '43

Simplified analysis of skewed reinforced concrete frames and arches. R. M. Hodges. diags Am Soc C E Proc 69:635-63 My '43; Discussion. 69:1044-8, 1465-79 S, N '43

Simplified design for munitions igloos. il diags Eng N 131:676-81 N 4 '43

Where reinforced concrete construction may now be used; WPB announces relaxation of restrictions. Concrete 51:36 Mr '43

See also

Bridges, Concrete
Concrete construction
Concrete slabs

CONCRETE, Reinforced—Continued**Testing**

- Impact resistance of reinforced concrete slabs. R. W. Kluge. *il* diags *Am Concrete Inst J* 14:397-412 Ap '43; Discussion. 14:sup412-412 N '43
- Load test of a slab with all bars lapped. H. M. Hadley. *il* diags *Civil Eng* 13:435-6 S '43
- Native cane reinforcement in concrete; Clemson College tests. H. E. Glenn. *il* *Civil Eng* 13:386-8 Ag '43
- Reinforced concrete corners in tension. C. J. Posey and O. Kofoid. *il* diags *Am Concrete Inst J* 15:41-52 S '43
- Width and spacing of tensile cracks in axially reinforced concrete cylinders. D. Watstein and D. E. Parsons. bibliog pls diags *J Research Nat Bur Stand* 31:1-24 Ji '43

CONCRETE barges. See Barges, Concrete

CONCRETE bathtubs. See Bathtubs, Concrete

CONCRETE blocks

- Army hospital built of concrete blocks. *il* *Eng N* 130:356-7 Je 10 '43
- Barge places 90-ton breakwater blocks at Leixoes, Portugal. C. H. Crutwell. *il* diags *Eng N* 131:149-51 Ji 15 '43
- Blocks of heavy concrete to serve as crane counterweights. *il* *Concrete* 50:30 D '42
- Concrete block cleared in Florida collapse. *Rock Prod* 46:92 S '43
- Concrete block for defense. *il* *Rock Prod* 46:90 S '43
- Concrete blocks for sabotage protection. G. W. Hoffmann. *il* diags *Eng N* 130:918-19 Je 24 '43
- Concrete blocks used to line shield-driven tunnel in London. G. L. Grove. *Eng N* 130:803 Je 3 '43
- Haydite units supply sound insulation in NBC building. *il* *Concrete* 51:21 Ji '43
- How this concrete contractor restores old farm buildings. *il* *Concrete* 51:14+ Je '43
- McCraday-Rodgers supplies largest housing projects. *il* *Concrete* 50:14-15 D '42
- Pre-cast concrete curb in Lee, Massachusetts; with cost data. L. A. Airoidi. *il* *Pub Works* 74:26+ S '43
- Selling the farm market; Kissel concrete block co. W. B. Lenhart. *il* *Rock Prod* 46:83, 86+ Ap '43
- Special block for parkway paving along Long Island railroad right of way. *il* *Concrete* 51:18 S '43
- War housing projects to use concrete products; United cement products company supplies block for Planeview war housing project, Wichita, Kansas. R. S. Torgerson. *il* *Rock Prod* 46:135-6 Ag '43

Manufacture

- Build more efficient block plant; Worrall bros. W. B. Lenhart. *il* *Rock Prod* 46:78-9 F '43
- Conditioning cinders to prevent popping in cinder concrete. R. E. Copeland. *Concrete* 51:16+ Ap '43
- Expanding sales through dealers; Little rock lumber and coal co. Alma, Mich. installs equipment to manufacture cinder concrete block. W. B. Lenhart. *il* *Rock Prod* 46:86-8 S '43
- Gearing plant for war business; Cinder concrete products, inc. *il* *Rock Prod* 45:100, 102 D '42
- Heavy and lightweight units produced for forty-eight homes in York. *il* *Concrete* 51:28 Ja '43
- Hoernings of Menasha, American royal family, operate concrete block plant. *il* *Concrete* 51:20 N '43
- Machine-made specialties; Union concrete pipe co. *il* *Rock Prod* 45:60-2, 72-3 N '42
- Making light weight acoustic block; Haydite products co. R. S. Torgerson. *il* *Rock Prod* 46:87-8 Ap '43
- Making 20,000 blocks a day; Ellis concrete products co. R. Torgerson. *il* *Rock Prod* 46:84-5+ Mr '43
- Manufactures and sells all building supplies; J. P. Burroughs & sons. *il* *Rock Prod* 46:79 O '43
- Roller conveyors speed block production; Hollystone co. R. S. Torgerson. *il* *Rock Prod* 46:112-13+ Ja '43

- Selling concrete block in Los Angeles area; Graystone tile co. *il* *Rock Prod* 46:80+ O '43
- Short cuts in a block plant; Cinder concrete products co. *il* *Rock Prod* 46:137 Ag '43
- Slag aggregates for concrete block. B. Nordberg. *il* *Rock Prod* 45:95-7+ D '42
- Taking the concrete block plant to job; big naval training station. E. Johnson. *il* *Rock Prod* 46:73-5 My '43

CONCRETE breakwaters. See Breakwaters, Concrete

CONCRETE brick**Manufacture**

- New units for big jobs; Concrete products corporation. W. B. Lenhart. *il* *Rock Prod* 46:102-3+ Je '43

CONCRETE bridges. See Bridges, Concrete

CONCRETE buildings

- Architectural concrete building aids arsenal in its fourth war. *il* *Concrete* 51:36 S '43
- Concrete and concrete masonry produce hemp processing plants. diags *Concrete* 51:26-7 Ji '43
- Contractors find farrowing houses easy to promote. *il* diags *Concrete* 51:14+ Ji '43
- Effect of structural interruptions of insulation in warehouses. J. F. Stone. diags *Refrig Eng* 46:243-5 O '43
- Farm construction declared best outlet for concrete contractors. plan *Concrete* 51:16+ My '43
- Lightweight concrete slabs form exterior of big industrial building; Haydite concrete used; Worthington pump and machinery company. *il* *Concrete* 51:10+ Ap '43
- Plans and construction procedure for concrete masonry farm buildings. *il* diags plan *Concrete* 51:10+ Je '43

See also

Concrete houses

CONCRETE coal bins. See Coal bins, Concrete

CONCRETE columns. See Columns, Concrete

CONCRETE conduits. See Conduits, Concrete

CONCRETE construction

- Arched concrete shell for industrial roof; extension to Westinghouse plant. H. C. Schwerin. *il* *Civil Eng* 13:213-14 My '43
- Big field open for unreinforced concrete in industrial tanks and basins. H. Moore. *il* diags plan *Concrete* 50:2-3 D '42
- Big powerhouse of Santee-Cooper project is masterpiece in quality concrete. *il* diags *Concrete* 51:2-3+ F '43
- Big volume of concrete in non-concrete homes. *Concrete* 51:20 My '43
- Concrete and timber aid fast war plant construction. *il* *Eng N* 130:666-70 My 6 '43
- Concrete construction is replacing timber in British wartime housing. *Eng N* 130:741 My 20 '43
- Concrete in Brazil's building program. *il* *Concrete* 51:4-5+ S '43
- Concrete masonry goes to war. *il* *Concrete* 51:10-11, 20 Ag '43
- Concrete structures house men and materials of war; buildings erected for army and navy. *il* *Concrete* 51:10-11, 20+ S '43
- Concrete technology as affected by war conditions. M. N. Clair. *Boston Soc C E J* 30:169-82 Ji '43
- Concrete to the rescue. H. Manchester. *il* *Tech R* 45:417-18+ Je '43
- Discussion of report of committee 611; ACI manual of concrete inspection. A. B. Cohen and others. *Am Concrete Inst J* 13:sup541-80 N '42
- Good organization and local materials help speed construction; steel framework with concrete foundation and walls; Midwest war plant. *il* *Eng N* 131:298-9 Ag 19 '43
- How to build a concrete milk-cooling tank. diags *Am Bld* 64:45+ N '42
- Huge reinforced concrete aircraft plant built on principle of assembly line. N. V. Clements. *il* *Concrete* 51:4-5 Ja '43
- Industrial alterations and home building seen as prospects for contractors. *Concrete* 51:26+ F '43
- Industrial buildings of precast concrete. *il* diags *Eng N* 130:302-5 F 25 '43
- Magazine separation determines plan of ordnance depot. A. C. Polk. *il* *Civil Eng* 13:26-8 Ja '43

CONCRETE construction—Continued

More successful precast products in mullions, beams and sills. *il* diag Concrete 51:16+ Ja '43

New plants of 1942; Westinghouse addition to transformer tank plant. *il* Factory Management 101:E83-E85 Ap '43

New plants of 1942; Wright Aeronautical single-story plant. *il* Factory Management 101:E76-B78 Ap '43

Poultry-house construction provides one contractor with good business. *diags* plan Concrete 51:14+ Ja '43

Poured around its predecessor; Monterey County courthouse, Salinas, California. *il* plans Arch Rec 94:48-50 Ag '43

Precast building frames now being used in England. Eng N 131:164 JI 15 '43

Precast concrete joists form basis for beam and girder floor system; Indiana state prison. L. C. Bernard. *il* diags Concrete 51:10-11+ O '43

Precast concrete supports crane runway and conserves big tonnage of steel. *il* diag Concrete 51:2-3 Mr '43

Precast units cut cost and time on seaplane ramps. *diags* Eng N 130:306-9 F 25 '43

Prefabricated house; concrete, forerunner to the movement. *il* diags Arch Forum 78:67-78 F '43

Recent developments in structural engineering. R. H. Evans. Engineering 155:155-6 F 19 '43

Rigid-frame concrete industrial plant; magnesium-alloying plant; fireproofing secured by eliminating windows. A. F. Plant and S. J. Detrick. *il* diags Eng N 131:334-8 Ag 26 '43

Special features mark addition to May company building, Denver; combination of steel columns and reinforced concrete slabs without drop panels. W. H. Wheeler. *il* diags Civil Eng 13:73-5 F '43

War plant with glass walls; required maximum daylighting and 85 percent of the building at constant temperature and humidity. *il* Eng N 130:288-91 F 25 '43

Warspeed erection shortcut; aircraft engine plant; Wright aeronautical corp. *il* Steel 112:108+ F 1 '43

Wartime construction of factory buildings; building-types study; with time-saver standards. *il* diags Arch Rec 92:51-66 D '42

What's ahead for concrete construction after the war? Concrete 51:34-5, 38 Ag '43

Where reinforced concrete construction may now be used; WPB announces relaxation of restrictions. Concrete 51:36 Mr '43

See also

Barges, Concrete	Floors, Concrete
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Columns, Concrete	Joists, Concrete
Concrete, Reinforced	Reservoirs, Concrete
Concrete blocks	Roofs, Concrete
Concrete houses	Sewers, Concrete
Concrete lining	Ships, Concrete
Concrete mixing	Tanks, Concrete
Concrete placing	Walls, Concrete
Concrete plants	Water towers, Concrete
Concrete slabs	Wharves, Concrete
Culverts, Concrete	
Dams, Concrete	

Anchorage

Strength of steel anchors in concrete. H. E. Graham. *diags* Eng N 130:560-1 Ap 22 '43

Bibliography

Current reviews of significant contributions in foreign and domestic publications. Published in American concrete institute journal

Cost

Cost comparison of wood, steel and concrete warehouses. A. F. Comstock. *diags* Eng N 130:626-9 Ap 22 '43

Design

Analysis of stresses in simple and continuous beams and girders. H. L. Wagner. Roads & Bridges 81:62-72+ Je '43

Balanced design for reinforced concrete. A. J. Boase and C. E. Morgan. *diags* Am Concrete Inst J 14:277-96 F '43

Beam-method of design for eccentrically-loaded columns. O. Albert. *diags* Eng N 130:365-7 Mr 11 '43; Discussion. 130:662-3, 871; 131:186-7 My 6, Je 17, JI 29 '43

Bomb-resistant air raid shelters. H. E. Wessman. *il* diags Am Concrete Inst J 14:241-50 F '43

Bureau of reclamation practice in design of joints for concrete buildings. S. Judd. *diags* Am Concrete Inst J 14:557-63 Je '43

Charts and a direct method for design of cantilever retaining walls. W. A. Jones. *diags* Am Concrete Inst J 15:5-32 S '43

Concentric-ring concrete tank for Topeka. *il* diags Eng N 131:194-7 JI 29 '43

Concrete reservoirs of the vertical-beam type. C. M. Stanley, jr. *diags* Am Soc C E Proc 68:1679-88 D '42; Discussion. *diags* 69:456-7, 619-29, 716-18 Mr-May '43

Design of box culverts. C. R. Burky. *diags* Am Concrete Inst J 14:33-52 S '42; Discussion. 14:sup521-52* Je '43

Glover three-pin reinforced-concrete frame buildings. *il* diags Engineering 155:506-7, 510 Je 25 '43

Long span concrete roof construction. C. H. Mayer. *il* diags Am Concrete Inst J 14:389-96 Ap '43

Multiple-arch concrete roof saves steel; plant built for Chrysler corp. *il* diags Eng N 130:21-4 Ja 14 '43

National emergency specifications for the design of reinforced concrete buildings to conserve steel. Am Concrete Inst J 14:85-92 N '42

Practical design of foundations for vertical and horizontal vessels. J. A. Shjarback. *diags* Nat Pet N 35 pt 2:R459-60, R462-3+ O 6 '43

Prestressed concrete, design principles and reinforcing units. H. Schorer. *bibliog.* *il* diags Am Concrete Inst J 14:493-528 Je '43; Discussion. 14:sup528-528* N '43

Proposed recommended stresses for unreinforced concrete; reported by ACI committee 222. A. J. Boase. Am Concrete Inst J 14:93-5 N '42; Same abr. Eng N 130:42 Ja 14 '43

Reinforced concrete corners in tension. C. J. Posey and O. Kofoid. *il* diags Am Concrete Inst J 15:41-52 S '43

Semi-circular arched conduit with uniform symmetrical loading. S. U. Benscoter. *diags* Am Concrete Inst J 14:297-306 F '43

Simplified analysis of skewed reinforced concrete frames and arches. R. M. Hodges. *diags* Am Soc C E Proc 69:635-63 My '43; Discussion. 69:1044-8, 1465-79 S, N '43

Simplified design for munitions igloos. *il* diags Eng N 131:676-81 N 4 '43

Simplified equations for concrete beams. J. F. P. Tate. *diag* Eng N 131:388-9 S 9 '43; Discussion. 131:584-5, 735 O 21, N 18 '43

Theory of pre-stressed design of concrete tanks is described. C. Dobell. Nat Pet N 35 pt 2:R448 O 6 '43

See also

Columns, Concrete

Failures

Concrete block cleared in Florida collapse. Rock Prod 46:92 S '43

Fire resistance

Thin concrete roof withstands fire test. J. E. Kalinka. *il* diags Eng N 130:804-5 Je 3 '43

Forms

Building an 82-acre concrete roof with traveling retractable forms; Dodge-Chicago plant, Division of Chrysler corp. *il* diags Eng N 130:874-7 Je 17 '43

Building concrete ships in prefabricated forms. *il* Eng N 129:902-6 D 31 '42

Concrete arch roof for Kansas City factory; movable forms speed construction of Pratt and Whitney plant. T. Wood. *il* Civil Eng 13:363-5 Ag '43

Declare new form liner produces case-hardened surface; Hydron. *il* Concrete 50:23 D '42; Same. Mach 50:170 S '43

Many-sized reservoir simplifies formwork. *il* diag Eng N 130:904-5 Je 17 '43

Selecting the surface texture for Sears architectural concrete building. *il* Concrete 51:5-6 F '43

CONCRETE construction—Forms—Continued

Series of mobile roof forms speed aircraft engine factory; Pratt & Whitney plant. *il Steel* 111:41 D 28 '42

TVA saves steel with cantilever forms on Douglas dam. *J. C. Patchen. il diags Eng N* 130:562-4 Ap 22 '43

Twin drydocks constructed under water. *il diags Eng N* 129:704-6 N 19 '42

Use plywood form panels on outlet works of large flood-control dam. *il Concrete* 51:4+ Ap '43

Warspeed system of construction in concrete; traveling form system as used for longer spans. *il diags Arch Rec* 92:52-5 D '42

Joints

Bureau of reclamation practice in design of joints for concrete buildings. *S. Judd. diags Am Concrete Inst J* 14:557-63 Je '43

Rapid construction

New ideas in job organization speed work on army warehouses of concrete. *il Concrete* 51:4-5 Jl '43

Rapid concreting hastens completion of big buildings for navy. *Concrete* 51:27 Ja '43

Repair

Repairing old concrete structures. *E. B. Spencer. il Concrete* 51:14+ N '43

Repairs save concrete tank after settlement causes cracks. *diags Eng N* 130:754-5 My 20 '43

Safety measures

Prevention of accidents on concrete construction. *L. C. Hammond. il Concrete* 51:33-5 Ja '43

Tables, calculations, etc.

Charts speed calculations for concrete columns. *J. Zalkin. Eng N* 130:505 Ap 8 '43

Economy method of computing steel for reinforced concrete columns. *O. Albert. diags Civil Eng* 13:104-5 F '43

Plasticity ratio of concrete and its effect on the ultimate strength of beams. *V. P. Jensen. bibliog diags Am Concrete Inst J* 14:565-82 Je '43

CONCRETE construction, Subaqueous

Cellular cofferdam serves as wall of ship construction basins. *il Eng N* 131:592-4 O 21 '43

Dry docks for United States navy. *il diags Engineer* 176:164, 165-7, 182-4, 210-11 Ag 27-S 10 '43

Graving-dock construction under water. *il Engineering* 156:121-4, 130 Ag 13 '43

Properties and behavior underwater of plastic concrete. *P. J. Halloran and K. H. Talbot. il diags Am Concrete Inst J* 14:461-92 Je '43; Discussion. 14:sup492-492^a N '43

Ship construction basins of thin concrete for building concrete ships at Tampa, Fla. *il Eng N* 131:152-5 Jl 15 '43

Simplified methods of building paved seaplane slipways; Prepakt concrete. *C. P. Disney. il diags Roads & Bridges* 81:15-16+ Ja '43

Submerged shipways with steel sheeting walls. *A. J. Ackerman; C. B. Jansen. il diags Civil Eng* 13:309-14 Jl '43

Twin drydocks constructed under water. *il diags Eng N* 129:702-9 N 19 '42

See also

Breakwaters, Concrete
Bridges—Foundations and piers
Dams, Concrete

CONCRETE construction, Underground

Build industrial reinforced concrete tunnel without blocking street traffic connecting two buildings of Caterpillar tractor company. *il diags Concrete* 51:8 My '43

Multiple-box drain for airbase runoff. *il Eng N* 130:678-81 My 6 '43

Underground automatic continuous booster pumping station. *W. Molis. il plan Pub Works* 73:11-12+ N '42

CONCRETE construction in mines**See also**

Mine bulkheads, Concrete

CONCRETE construction in winter

Concrete paving in low temperatures. *Engineering* 156:16-17 Jl 2 '43

Concrete paving in near-zero weather; runways for airport. *il Eng N* 130:547-50 Ap 22 '43

Highway over dam rebuilt in winter. *il Eng N* 130:682-4 My 6 '43

How to keep jobs rolling all winter. *il Am Bld* 65:33+ N '43

Million-yard winter paving job on large eastern airbase. *il diags Roads & Sts* 86:35-40 My '43

No delays for winter; Certified concrete co. equipment for heating aggregates and water. *R. S. Torgerson. il Rock Prod* 46:68-70 O '43

Place million yards of air-base pavement in six cold-weather months. *il Concrete* 51:10-11 My '43

Ready-mixed plant delivers warm concrete in coldest weather. *il plan Concrete* 51:10-11+ Ja '43

Rigid-frame footbridge replaces suspension type over the Moira river at Belleville, Ont. *C. A. Mott. il Roads & Bridges* 81:24+ Ja '43

Supplying warm ready-mixed concrete to war construction projects; Grand Rapids gravel company. *il Concrete* 51:16+ Mr '43

Winter construction methods followed at bomber base. *il Concrete* 51:2-5 O '43

CONCRETE culverts. See Culverts, Concrete

CONCRETE dams. See Dams, Concrete

CONCRETE floors. See Floors, Concrete

CONCRETE footings. See Footings, Concrete

CONCRETE handling

Big concrete plant speeds power dam. *il plan Eng N* 129:854-6 D 17 '42

Mixing, distributing, placing, concrete at Cherokee dam. *W. D. Nowlin. il Concrete* 51:2-4+ My '43

See also

Concrete placing

CONCRETE houses

Concrete house of the future; Ketchin brick and tile co. demonstration house. *il Rock Prod* 46:72+ F '43

Electric prestressing of reinforcing steel used for small house construction; passage of low voltage current through rods coated with thermoplastic material. *K. P. Billner. il Eng N* 131:406-8 S 9 '43

McCready-Rodgers supplies largest housing projects. *il Concrete* 50:14-15 D '42

Prefabricated house; concrete, forerunner to the movement. *il diags Arch Forum* 78:67-78 F '43

CONCRETE industry

What's ahead for concrete construction after the war? *Concrete* 51:34-5, 38 Ag '43

See also

Concrete products

CONCRETE joists. See Joists, Concrete

CONCRETE lining

Buenos Aires underground railway. *E. Kindel. diags Engineer* 175:184-7 Mr 5 '43

Concrete blocks used to line shield-driven tunnel in London. *G. L. Grove. Eng N* 130:803 Je 3 '43

Corrosion protection of storage tanks; gunite lining, galvanized and aluminum roofs, etc. *F. L. Newcomb, E. S. Dixon and C. F. Kelly. il diags Am Pet Inst Proc* 23(3):38-58 '42; Excerpts. *Nat Pet N* 34 pt 2:R397-403 N 25 '42

Gunite linings for purifiers. *J. H. Erwin. il diags Am Gas J* 158:21-3 My '43

Lining inclined section of Delaware aqueduct. *C. G. Hoerner. il diags plan Civil Eng* 13:139-43 Mr '43

No delays to war traffic on this tunnel repair job; repair of concrete lining simplified by installing liner plates; Pittsburgh & West Virginia railroad. *il Ry Age* 113:910-12+ D 5 '42

Placing concrete lining in a 19-ft. tunnel; hydro-electric project in northern California. *il diags Eng N* 131:604-6 O 21 '43

Prefabricated reinforcing steel for tunnel lining. *L. M. Leedom. il Civil Eng* 13:282-3 Je '43

See also

Concrete placing

Gunite

CONCRETE masonry. See Concrete blocks; Concrete slabs

CONCRETE masonry association, National. See National concrete masonry association

CONCRETE mixers

Smith tilting-drum concrete mixer. *il* Engineering 156:106 Ag 6 '43

CONCRETE mixing

Chart for the design and adjustment of concrete mixes. H. E. Burr. *Am Concrete Inst J* 15:53-9 S '43

Discussion of report of committee 611: *ACI manual of concrete inspection*. A. B. Cohen and others. *Am Concrete Inst J* 13:sup641-80 N '42

Dollar economies in concrete proportioning. R. F. Moss. *Eng N* 130:906-8 Je 17 '43

Effect of calcium chloride admixture on strength of concrete cured at low temperatures. H. W. Russell. *Roads & Sts* 86:45-8 Jl '43

Function of entrained air in concrete. H. L. Kennedy. *il* *Am Concrete Inst J* 14:529-42 Je '43; Discussion. 14:sup644-544 N '43

How to estimate, select for concrete. *Am Eld* 65:56 Jl '43

Influence of sands, cements, and manipulation upon the resistance of concrete to freezing and thawing. W. C. Hansen. *Am Concrete Inst J* 14:105-23 N '42; Discussion. 14:sup124-124⁸ Je '43

Lean-mix concrete used for roads; forming pavements by rolling. D. V. Darwin. *Eng N* 130:685 My 6 '43

Method of mix control for light weight aggregates. H. G. Collins. *Am Concrete Inst J* 14:139-40, 214-15 N '42-Ja '43

Mixed brands of cement on the same job. *Am Concrete Inst J* 14:135-7 N '42

Mixing, distributing, placing concrete at Cherokee dam. W. D. Nowlin. *il* *Concrete* 51:2-4 My '43

Powdered aluminum as an admixture to concrete. R. W. Carlson. *il* *Am Soc T M Proc* 42:808-18; Discussion. 819-20 '42

Pozzolith; cement-dispersing, water-reducing agent for concrete. *il* *Am Concrete Inst J* 14:358-62 F '43

Precision in batching concrete. *il* *Pub Works* 74:21-2+ S '43

Proposed recommended practice for measuring, mixing and placing concrete. *diags Am Concrete Inst J* 13:93-117 N '41; Discussion. 13:sup120-120⁴ Je '42; Discussion. F. L. Fitzpatrick. 14:312-14 F '43

See also

Concrete—Aggregate

Ready-mixed concrete

Auxiliary plants enable ready-mixed concrete industry to service big construction projects. *il* *Concrete* 51:37-8 F '43

Boichot at Lansing is big producer of ready-mixed concrete. *il* *Concrete* 50:11+ D '42

Cheaper to move plant to job; Ready mixed concrete corporation, Indianapolis, has built five plants to cut down mileage of hauls. F. J. Pirmann. *il* *map Rock Prod* 46:70-1+ D '42

Concrete operations in six states; U.S. transit mix concrete corporation. *il* *diags map Rock Prod* 46:62-4, 66, 109 Ja '43

Control methods for uniformity; ready mixed concrete plant of I. M. Ludington's sons. W. B. Lenhart. *il* *Rock Prod* 46:73-4 Ap '43

Effect of time of haul on strength and consistency of ready-mixed concrete. G. C. Cook. *Am Concrete Inst J* 14:413-26 bibliog (p425-6) Ap '43; Same cond. *il* *Rock Prod* 46:76-8, 80+ My '43; Discussion. *Am Concrete Inst J* 14:sup428-428¹ N '43

From boats to aggregates. *il* *Rock Prod* 46:65-6 Jl '43

Gravity flow batching; Powell brothers. *il* R. S. Torgerson. *Rock Prod* 45:60-1 D '42

How ready-mixed concrete men work out pooling plan; Fox River Valley ready-mixed concrete producers. *Concrete* 51:19 My '43

Manufacturers and sells all building supplies; J. P. Burroughs & sons. *il* *Rock Prod* 46:78-9+ O '43

National ready mixed concrete association, annual meeting; abstracts of technical papers. *Rock Prod* 46:48-9 F '43

No delays for winter; Certified concrete co. equipment for heating aggregates and water. R. S. Torgerson. *il* *Rock Prod* 46:68-70 O '43

100 percent conveyor belt plant; Birmingham slag company ready mix concrete plant as part of slag plant. B. Nordberg. *il* *Rock Prod* 45:46-8+ D '42

Ready-mixed concrete costs. *Rock Prod* 46:110-12 O '43

Ready-mixed concrete finds new market in farm construction work. *Concrete* 51:11 Je '43

Ready-mixed concrete men urged to adopt pooled delivery plan. E. M. Brady. *Concrete* 51:14+ Ap '43

Ready-mixed plant completely equipped for big production. *il* *Concrete* 51:14 My '43

Ready-mixed plant delivers warm concrete in coldest weather. *il* *plan Concrete* 51:10-11+ Ja '43

Saves tires and gas; Arrow sand and gravel co. builds batching plant near war construction. B. Nordberg. *il* *diags Rock Prod* 46:62-3+ Mr '43

Speed up aircraft plant with ready mix concrete; Walt Keeler concrete co. *il* *Rock Prod* 46:84 Je '43

Supplying warm ready-mixed concrete to war construction projects; Grand Rapids gravel company. *il* *Concrete* 51:16+ Mr '43

Who invented ready-mixed concrete? D. A. Abrams. *il* *Concrete* 51:16+ Je '43

CONCRETE pavements. See Pavements, Concrete

CONCRETE piling

Mexican bridge has unique foundations. *diags Eng N* 130:588-90 My 6 '43

Old timber trestle approaches replaced by 65-ft. concrete piles; Dismal Swamp region near Suffolk, Va. *Concrete* 51:18+ Jl '43

CONCRETE pipes. See Pipes, Concrete

CONCRETE placing

Chain belt co. hopper tower for placing concrete on small jobs. *il* *diags Rock Prod* 46:46-7 O '43

Construction machinery co. develops pneumatic gun for placing concrete. *il* *Concrete* 51:34 S '43

Mixing, distributing, placing concrete at Cherokee dam. W. D. Nowlin. *il* *Concrete* 51:4+ My '43

Pipe for delivering concrete has renewable bend feature. *diag Eng N* 131:689 N 4 '43

Properties and behavior underwater of plastic concrete. P. J. Halloran and K. H. Talot. *il* *diags Am Concrete Inst J* 14:461-92 Je '43; Discussion. 14:sup492-492¹⁰ N '43

Pump delivers concrete for Dubuque bridge deck. *il* *Eng N* 129:880-1 D 24 '42

See also

Concrete construction
Concrete, Subaqueous
Concrete lining

CONCRETE plants

Auxiliary plants enable ready-mixed concrete industry to service big construction projects. *il* *Concrete* 51:37-8 F '43

Big concrete plant speeds power dam. *il* *plan Eng N* 129:854-6 D 17 '42

Supplying warm ready-mixed concrete to war construction projects; Grand Rapids gravel company. *il* *Concrete* 51:16+ Mr '43

See also

Concrete construction	Concrete products
Concrete mixing—	plants
Ready-mixed concrete	Roads, Concrete—
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Costs

Ready-mixed concrete costs. *Rock Prod* 46:110-12 O '43

Equipment

Army can't wait; Henry J. Kaiser co. sets up concrete batching plant with long conveyors. A. Lindley. *il* *Rock Prod* 46:56-7+ Mr '43

Moving cement into storage with air. *il* *Rock Prod* 45:52+ N '42

Ready-mixed plant completely equipped for big production. *il* *Concrete* 51:14 My '43

Ready-mixed plant delivers warm concrete in coldest weather. *il* *plan Concrete* 51:10-11+ Ja '43

Saves tires and gas; Arrow sand and gravel co. builds batching plant near war construction. B. Nordberg. *il* *diags Rock Prod* 46:62-3+ Mr '43

CONCRETE plants—Continued**Location**

Cheaper to move plant to job; Ready mixed concrete corporation, Indianapolis, has built five plants to cut down mileage of hauls. P. J. Firmsmann. *Il* map Rock Prod 45:70-1+ D '42

CONCRETE products

Concrete boards for farm buildings; Dodson manufacturing co. *Il* Rock Prod 46:84+ S '43

Heavy concrete for counterbalances for overhead industrial doors. Concrete 51:21 Ja '43
More successful precast products in mullions, beams and sills. *Il* diag Concrete 51:16+ Ja '43

Precast concrete for lighting standards; diagrams. Eng N 130:448 Mr 25 '43

Trash burner suggests wider products market. *Il* Concrete 51:27 S '43

What an order! 100,000 concrete lawn rollers keep Thomas busy. Concrete 51:18 My '43

See also

Bathtubs, Concrete	Joists, Concrete
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Concrete slabs	Tanks, Concrete

Manufacture

Concrete manhole covers and ash receptacles; Best block co. *Il* Rock Prod 45:63-4 N '42

Concrete replacing cast iron; bathtubs, manhole covers, and traffic buttons; Otto Buehner & company. R. S. Torgerson. *Il* Rock Prod 45:103-4 D '42

Concrete shower bases save critical metals; Advance cast stone co. also manufactures granite-faced block, cast stone panels and tile. R. S. Torgerson. *Il* Rock Prod 46:104, 106 Je '43

Employs cast stone molds for mass output of shower-bath bases; Badger concrete company. Concrete 51:18 My '43

Increases business by diversifying; Graystone concrete products co. makes varied line. R. S. Torgerson. *Il* Rock Prod 45:66, 69 N '42

Non-absorbent mold material for casting concrete beams. Eng N 131:411 S 9 '43

See also

Concrete blocks—	Concrete products
Manufacture	plants

CONCRETE products industry

Concrete products in the war; National concrete masonry association. Rock Prod 46: 87-90 Mr '43

Future concrete markets. R. S. Torgerson. *Il* Rock Prod 46:69-70 F '43

Looking at the concrete products industry of 1942-1943. W. G. Kaiser. *Il* Concrete 51:20, 22+ F '43

Make keel blocks for shipyards; concrete products manufacturers in the East pool manufacturing facilities. *Il* Rock Prod 46: 116-17 Ja '43

Products and pipe fields surveyed by WPB. maps Concrete 51:24 Ag '43

Sells products by telephone; Gray's concrete products co. *Il* Rock Prod 46:132, 134 Ag '43

Wisconsin products men meet in Milwaukee. Rock Prod 46:93-4 Mr '43

CONCRETE products plants*See also*

Concrete blocks—
Manufacture

Equipment

All sizes up to 9 ft. diameter; Choctaw culvert and machinery co. W. B. Lenhart. *Il* Rock Prod 46:84, 86+ JI '43

Build more efficient block plant; Worrall bros. W. B. Lenhart. *Il* Rock Prod 46:78-9 F '43

Buyers' directory; equipment, machinery, materials and allied products required by users of portland cement. Concrete 51:69-77 F '43

Concrete industries exposition in print. *Il* diag Concrete 51:44-6, 55-8, 60+ F '43

Expanding sales through dealers; Little rock lumber and coal co. Alma, Mich. installs equipment to manufacture cinder concrete block. W. B. Lenhart. *Il* Rock Prod 46:86-8 S '43

Gearing plant for war business; Cinder concrete products, inc. *Il* Rock Prod 45:100, 102 D '42

Machine-made specialties; Union concrete pipe co. *Il* Rock Prod 45:60-2, 72-3 N '42

Making 20,000 blocks a day; Ellis concrete products co. R. Torgerson. *Il* Rock Prod 46:84-5+ Mr '43

New units for big jobs; Concrete products corporation. W. B. Lenhart. *Il* Rock Prod 46:102-3+ Je '43

Roller conveyors speed block production; Hollostone co. R. S. Torgerson. *Il* Rock Prod 46:112-13+ Ja '43

Rolling long joists off the line; Gravel products corporation manufactures joists by compressing concrete. W. B. Lenhart. *Il* Rock Prod 46:68, 70-1 My '43

Slag aggregates for concrete block. B. Nordberg. *Il* Rock Prod 45:96-7+ D '42

CONCRETE pumping. See Concrete placing**CONCRETE research**

Comprehensive program of cement research. F. R. McMillan. *Il* Civil Eng 13:491-3 O '43

Function of entrained air in concrete. H. L. Kennedy. *Il* Am Concrete Inst J 14:529-42 Je '43; Discussion. 14:sup544-544' N '43

Native cane reinforcement in concrete; Clemson College tests. H. E. Glenn. *Il* Civil Eng 13:386-8 Ag '43

CONCRETE reservoirs. See Reservoirs, Concrete

CONCRETE roads. See Roads, Concrete

CONCRETE roofs. See Roofs, Concrete

CONCRETE scaling. See Pavements, Concrete—Scaling

CONCRETE sewers. See Sewers, Concrete

CONCRETE ships. See Ships, Concrete

CONCRETE slabs

Concrete pavements without steel. L. E. Andrews. *Il* diag Civil Eng 13:224-6 My '43

Design of slab and stringer highway bridges. N. M. Newmark and C. P. Siess. *diag* Pub Roads 23:157-64 Ja '43

Flat-slab concrete roof found economical; with cost data. J. Field. *Il* diag Eng N 131: 637-8 O 21 '43

Lightweight concrete slabs form exterior of big industrial building; Haydite concrete used; Worthington pump and machinery company. *Il* Concrete 51:10+ Ap '43

Long-span flat slabs in bomber plant call for unusual floor design. *Il* diag Concrete 51:2-3 Je '43

Native cane reinforcement in concrete; Clemson College tests. H. E. Glenn. *Il* Civil Eng 13:386-8 Ag '43

Old concrete slab salvaged for new road. C. A. Rothrock. *Il* diag Eng N 130:671-4 My 6 '43

Practical method provides water spray for curing concrete pavement slabs. H. F. Clemmer. *Il* Concrete 50:8+ D '42

Precast units cut cost and time on seaplane ramps. *diag* Eng N 130:306-9 F 25 '43

Simple working formula for corner-load stresses in concrete pavements. M. G. Spangler. *Il* Roads & Bridges 81:17+ Ja '43; Abstract. Concrete 51:12-13 F '43

See also

Concrete-wood slabs

Testing

Impact resistance of reinforced concrete slabs. R. W. Kluge. *Il* diag Am Concrete Inst J 14:397-412 Ap '43; Discussion. 14: sup142-142' N '43

Load test of a slab with all bars lapped. H. M. Hadley. *Il* diag Civil Eng 13:435-6 S '43

Methods followed in determining stresses in corners of pavement slabs. M. G. Spangler. *diag* Concrete 51:33-5 My '43

Structural design of concrete pavements; experimental study of the Westergaard analysis of stress conditions in concrete pavement slabs of uniform thickness. L. W. Teller and E. C. Sutherland. *bibliog* *Il* diag Pub Roads 23:167-212 Ap '43

CONCRETE stairways. See Stairways, Concrete

CONCRETE storehouses. See Storehouses, Concrete

CONCRETE tanks. See Tanks, Concrete

CONCRETE walls. See Walls, Concrete

- CONCRETE** water tanks. See Water tanks, Concrete
- CONCRETE** water towers. See Water towers, Concrete
- CONCRETE** wharves. See Wharves, Concrete
- CONCRETE-wood slabs**
Concrete reinforced with timber. A. Boyd. diags Eng N 130:448 Mr 25 '43
- Designing and constructing creosoted timber bridges and culverts. W. D. Keeney. II diags Pub Works 74:22-3 Ja '43
- Laminated timber bridge deck developed in Arizona. R. A. Hoffman. diags Civil Eng 13:390-1 Ag '43
- Timber-concrete bridge decks used in Florida. W. E. Dean. II diags Civil Eng 13:175-7 Ap '43

Testing

- Oregon tests on composite (timber-concrete) beams. C. B. McCullough. II diags Am Concrete Inst J 14:429-40 Ap '43
- Tests of composite timber and concrete beams. F. E. Richard and C. B. Williams, Jr. II diags Ill U Eng Exp Sta Bul 343:1-60 bibliog(p58-60) '43 (pa 70c); Same cond. Am Concrete Inst J 14:253-76 F '43
- CONDENSATE** wells. See Gas, Natural—Disillate wells

CONDENSATION

- Condensation of vapors; film coefficients for alcohols, esters, and ketones. D. F. Othmer and S. Berman. bibliog II diags Ind & Eng Chem 35:1068-77 O '43

See also

Humidity

CONDENSATION, Chemical

- Aldol condensation; detection of carbonyl groups in aldols by use of Raman spectra. R. H. Saunders and others. bibliog Am Chem Soc J 65:1309-11 Ji '43
- Aldol condensation; the reaction of isobutyraldehyde with its aldol. R. H. Saunders, M. J. Murray and F. F. Cleveland. bibliog Am Chem Soc J 65:1714-17 S '43
- Condensation of acylols with ethyl acetate. R. B. Woodward and E. R. Blout. bibliog Am Chem Soc J 65:562-5 Ap '43
- Condensation of amino alcohols with benzene. C. M. Suter and A. W. Ruddy. Am Chem Soc J 65:762-3 My '43
- Condensation of chloroacetophenone with ethanol- and diethanol-amine and of chloroacetatechol with β -methoxyethylamine. K. W. Brighton and E. E. Reid. Am Chem Soc J 65:479 Mr '43
- Condensation of ethyl α -acetylpropionate with ethyl chlorofumarate. R. B. Woodward and W. A. Reed. bibliog Am Chem Soc J 65:1569-72 Ag '43
- Condensation of 2-furanacetic acid with *o*-nitrobenzaldehyde. E. D. Amstutz and E. R. Spitzmiller. Am Chem Soc J 65:367-9 Mr '43
- Condensation of methyl dipropyl carbinols with phenol in the presence of aluminum chloride. R. C. Huston and C. R. Meloy. bibliog Am Chem Soc J 64:2655-7 N '42
- Condensation of some aromatic ketones with ethyl succinate. C. L. Hewett. Chem Soc J p585-7 O '42
- Condensation of unsaturated amines with aromatic compounds; the preparation of β -substituted phenethylamines. A. W. Weston, A. W. Ruddy and C. M. Suter. bibliog Am Chem Soc J 65:674-7 Ap '43
- Condensation reactions of cinchoninaldehyde and quinaldinaldehyde. H. Kaplan and H. G. Lindwall. Am Chem Soc J 65:927-8 My '43
- Condensations by sodium; furelylene disodium; comments on the aromatic properties of furan. A. A. Morton and G. H. Patterson. bibliog Am Chem Soc J 65:1346-8 Ji '43
- Condensations by sodium; metalation of benzene, toluene and xylene; the orienting influence of sodium and the influence of alkyl groups on metalation. A. A. Morton, E. L. Little, Jr. and W. O. Strong, Jr. bibliog Am Chem Soc J 65:1339-46 Ji '43
- Condensations; the acylation of the anions of certain esters with ethyl carbonate. C. R. Hauser, B. Abramovitch and J. T. Adams. Am Chem Soc J 64:2714-15 N '42

- Condensations; the alkylation of β -keto esters with alcohols and ethers in the presence of boron trifluoride. J. T. Adams, B. Abramovitch and C. R. Hauser. bibliog Am Chem Soc J 65:552-4 Ap '43
- Hydrogen fluoride as a condensing agent; aralkyl ketones. J. H. Simons and E. O. Ramler. bibliog Am Chem Soc J 65:1390-2 Ji '43
- Hydrogen fluoride as a condensing agent; the addition of an alkyl chloride to the double bond. J. H. Simons and A. C. Meunier. Am Chem Soc J 65:1269-71 Ji '43
- Indirect phenol-aldehyde condensations. J. B. Niederl and J. S. McCoy. bibliog Am Chem Soc J 65:629-31 Ap '43
- Investigation of pyrazole compounds; the condensation of α -carbethoxyacetothioacetanilide with hydrazines. A. Weissberger and H. D. Porter. Am Chem Soc J 65:732-4 Ap '43
- Ketone synthesis; the condensation of acid anhydrides with olefins. A. C. Byrns and T. F. Doumani. bibliog II diags Ind & Eng Chem 35:349-53 Mr '43
- Methods of preparing butadiene; dehydrogenation, dehydrogenation plus condensation of ethanol. G. Egloff and G. Hulla. bibliog Oil & Gas J 41:45-8 D 10 '42
- Para acylation of polyalkylbenzophenones by aryl 2,4,6-trialkylbenzoates. R. C. Fuson and others. bibliog Am Chem Soc J 64:2573-6 N '42
- Rates and temperature coefficients of the hydroxyl ion catalyzed aldol condensation of benzaldehyde with methyl ethyl ketone and acetone. J. D. Gettler and L. P. Hammett. bibliog Am Chem Soc J 65:1824-9 O '43
- Reactions of retenequinonimine and phenanthraquinonimine with aldehydes; a new example of an aldol-type of condensation. C. W. C. Stein and A. R. Day. bibliog Am Chem Soc J 64:2567-9 N '42
- Reactions of retenequinonimine and phenanthraquinonimine with Schiff bases; a new example of an aldol-type of condensation. C. W. C. Stein and A. R. Day. bibliog Am Chem Soc J 64:2569-73 N '42
- Some boron trifluoride catalyzed alkylations of halobenzenes. G. F. Hennion and V. R. Pieronek. bibliog Am Chem Soc J 64:2751-2 D '42
- Synthesis of olefin hydrocarbons by catalytic condensation and dehydration of aliphatic aldehydes. V. I. Komarewsky and T. H. Kritchewsky. Am Chem Soc J 65:547-8 Ap '43

See also

- Michael reaction
- Phenol condensation products

CONDENSED milk. See Milk, Condensed

CONDENSERS

- Commercial electric refrigeration condensing units; commercial standard (emergency) CS(E)107-43. Refrig Eng 45:251-6 Ap '43
- Compressor and condensing unit substitutions. S. R. Hirsch. II Refrig Eng 45:160-2 Mr '43
- Heat transfer coefficients for condensers. G. T. Atkins, Jr. bibliog II Oil & Gas J 41:180, 183, 185-6+ Mr 25 '43
- Liquid chlorine systems. W. H. Magee. plan Chem & Met Eng 50:102-3 Ag '43
- Long life for evaporators and condensers in air-conditioned cars. Ry Mech Eng 117:189-90 Ap '43
- Recent developments in refrigeration. D. Gordon. II diags Engineer 174:415-17 N 20 '42; Same. Engineering 154:434 D 18 '42
- Refrigeration; notebooks; evaporative condensers reduce water bills 90-95%. T. Mitchell. II Power 87:543 Ag '43
- Wartime standards are adopted for refinery still tubes. Nat Pet N 35 pt 2:R66-7 F 3 '43
- Welded steel tube for condensers and heat exchangers. A. F. Zoll. II diags Pet Eng 14:35-7, 40 F '43

See also

Distillation apparatus

CONDENSERS (electricity)

- Aluminum electrolytic condensers. P. Robinson and J. Burnham. II diags Electrochem Soc Trans 83 (preprint 24):261-77 Ap '43
- Application of series capacitors to resistance welding machines. R. M. Partington. II diags Welding J 22:26-31 Ja '43

CONDENSERS (electricity)—Continued

- Capacitor bank, 20,000 kva., on Longview substation. J. R. Curtin. *il* diags Elec W 119:64-6 Ja 9 '43
- Capacitor effects; generator action in motors. V. Mayer. diags Elec R (Lond) 133:479-81 O 8 '43
- Capacitor of 5,000 kva. for substation regulation. W. W. Perry and D. M. Umphrey. *il* diags Elec W 119:1954-6 Je 12 '43
- Capacitors improve generator service. *il* Elec W 118:1804 N 23 '42
- Capacitors installed at substations. diags Elec W 119:622 F 20 '43
- Condenser field rewound in shop. *il* Elec W 120:850 S 4 '43
- Condenser fields re-insulated in utility's own shops; Southern California Edison co. *il* Elec West 91:49 Ag '43
- Critical-material conservation in induction-motor manufacture. H. M. Hobart. Elec Eng 62:Trans 549-52 Ag '43
- Electronic liquid level indicator. S. C. Coromiti. bibliog diags R Sci Instr 13:484-8 N '42
- How to apply capacitors. C. V. Fields. *il* Factory Management 101:135-6 Ja '43
- How to construct wood racks for pole-mounted capacitors. E. H. Kendall. diags Elec W 120:1548 O 30 '43
- How to mount pole-type distribution capacitors. diags Elec W 119:36 Ja 9 '43
- Installing power factor condensers. diag Engineer 174:462-3 D 4 '42
- Locate static condensers at strategic points; with cost data. L. M. Duryee. Power Pl Eng 47:87-8 Ja '43
- Mobile capacitor units for emergency loading of transformers in open delta. H. B. Wolf and G. G. Mattison. *il* diags Elec Eng 62:Trans 83-6 F '43
- Role of capacitors in war work. R. E. Marbury. *il* Power Pl Eng 47:82-4+ S '43
- Safe capacitor selection for power-factor improvement. J. E. Barkle. *il* diag Power 87:230-2+ Ap '43
- Self-excited oscillations of capacitor-compensated long-distance transmission systems. R. B. Bodine, C. Concordia and G. Kron. bibliog diags Elec Eng 62:Trans 41-4 Ja '43
- Series capacitors; where place? how big? S. Lubin. Elec W 119:1324, 1484, 1644, 1808, 1996, 2162; 120:124+, 346+, 500 Ap 17-Ag 7 '43
- Shunt capacitors; report of AIEE committee on power transmission and distribution. bibliog (79 titles) diags Elec Eng 62:Trans 222-30 My '43
- Static phase modifier; applicability and availability of reactor-capacitors to supply system regulated kilovar requirements. J. W. Butler and L. W. Foster. *il* diag Gen Elec R 46:171-3 Mr '43
- Steady-state and transient-stability analysis of series capacitors in long transmission lines. J. W. Butler, J. E. Paul and T. W. Schroeder. bibliog diags Elec Eng 62:Trans 58-65 F '43
- 24,000-kva. capacitor speeds electrons. W. F. Westendorp. *il* Elec W 119:644+ F 20 '43
- WPB studies war uses for stained mica. Elec Eng 62:511-12 N '43
- See also*
Radio condensers
- Testing**
- Capacitors; testing for proper operation. R. Berti. Ry Mech Eng 117:385 Ag '43; Correction. 117:436 S '43

CONDENSERS (optics)

- One-ray system for designing spherical condensers for moving picture equipment. L. T. Sachtleben. diags Soc Motion Picture Eng J 39:358-74 D '42

CONDENSERS (steam)

- Automatic uniform rolling-in of small tubes. F. F. Fisher and E. T. Cope. *il* diags A S M E Trans 65:53-9; Discussion. 59-60 Ja '43
- Chlorinated condensers water averts cleaning, saves fuel; Millers Ford station. R. D. Gillespie and L. P. Sudrabin. *il* Elec W 119:2112-14 Je 26 '43
- Condenser deaerates Trenton Channel feed. R. Briscoe. plan Elec W 119:1775 My 29 '43

- Condenser tubes stretched in place; hydraulic ram device. diags Elec W 118:1632+ N 14 '42

- Dry and flush algae from condenser tubes. Elec W 120:1554 O 30 '43

- Heat transmission in surface condensers. T. Petty. bibliog Inst Mech Eng J & Proc 145: Proc 106-14 Je '41; Discussion. 148:Proc 113-19 Ja '43

- How much condensing water is needed here? how to determine amount of water to condense certain amount of steam. Power Pl Eng 47:104+ Ag '43; Discussion. 47:104+ O '43

- How vacuum affects turbine capacity. G. L. Graiff. chart Power 87:8-9 Ja '43

- Review of recent progress in heat transfer. C. H. Lander. bibliog Inst Mech Eng J & Proc 148:Proc 106-110 Ja '43

- Surface condenser maintenance. C. C. Custer. diags Power Pl Eng 47:74-6 F '43

See also

- Steam engines
Steam plants—Equipment
Steam turbines

- CONDENSERS, Radio.** *See* Radio condensers
- CONDITIONING of yarn.** *See* Yarn—Moisture content

- CONDUCTIVITY bridge.** *See* Electric instruments

CONDUITS

- Relocation of utility substructures; Chicago subway. J. B. Jackson. *il* diag W Soc E J 48:2-13 Mr '43

See also

- Aqueducts Pipe lines
Culverts Water conduits
Electric conduits

CONDUITS, Concrete

- Big concrete pipe ducts speed war project; heating, power, water and other services; General electric company. *il* Eng N 129: 326-7 D 31 '42

- Precast box conduits for runway drainage. C. R. Otto. *il* diags Eng N 130:899-900 Je 17 '43

- Semi-circular arched conduit with uniform symmetrical loading. S. U. Benscoter. diags Am Concrete Inst J 14:297-306 F '43

CONES

- Cone sawed from bar stock. H. J. Chamberland. diag Am Mach 87:96 Ap 15 '43

- Contraction cone for a wind tunnel. B. Szczeniowski. J Aeronautical Sci 10:311-12 O '43

- CONFECTIONERS' association, National.** *See* National confectioners' association

CONFECTIONERY*See also*

- Candy trade
Ice cream, ices, etc.

CONFERENCES*See also*

- Business conferences
Foremen's conferences
Sales conferences

CONFLICT of laws

- When securities issued in one state, payable in another lead to conflict of laws. M. L. Hayward. Barron's 22:20 D 21 '42

- CONGESTED production areas, Committee for.** *See* Committee for congested production areas

CONGLOMERATE

- Archean sedimentation. F. J. Pettijohn. Geol Soc Bul 54:925-72, pl 1-12 bibliog (p969-72) Jl '43

- Origin of siliceous Dockum conglomerates. R. Roth. bibliog *il* maps Am Assn Pet Geologists Bul 27:622-31 My '43

CONGO, Belgian

- Industries and resources**
- Belgian Congo's all-out war production. For Comm W 13:11 O 9 '43
- Production in the Congo. Economist 144:147-8 Ja 30 '43

CONGOLEUM-NAIRN, inc.

Congoleum converting to war business; report for 1942. H. Lawrence. Barron's 23:5 Mr 15 '43

Low-priced stocks for large percentage gains. Mag of Wall St 71:636+ Mr 20 '43

Thumbail stock appraisal. Mag of Wall St 72:309 Je 26 '43

CONGRESS. See United States—Congress**CONGRESS of industrial organizations**

CIO board reiterates no-strike declaration in six-point resolution. Iron Age 151:126+ My 20 '43

C.I.O. gets ready to fight for room in shipyards. Business Week p72 Ap 3 '43

CIO urges WLB to broaden policies; other resolutions and officers elected at Boston convention. Comm & Fin Chr 156:2070 D 10 '42

CIO's view of labor conscription; letter sent to Paul McNutt. P. Murray. Personnel J 21:330-3 Mr '43

Convention, Boston. Business Week p 108-10 N 21 '42

Convention, 5th, Boston, Nov. 1942. Int Labour R 47:107-14 Ja '43; Monthly Labor R 55:1219-22 D '42

It's C.I.O. at Sun; union wins by a nose. Business Week p92+ JI 17 '43

President calls on CIO for aid to prevent inflation. Comm & Fin Chr 156:1983 D 3 '42

See also

United mine workers of America

CONGRESSMEN

Congressman; a case history. Il Fortune 27:76-80+ Ap '43

40 fighting congressmen; names of consumers' committee. Ptr Ink 204:36 Ag 20 '43

CONIFERS

See also

Douglas fir

Pine

Spruce

CONJUGATION (chemistry)

Hyperconjugation in methyl butadienes as shown by dipole moments. N. B. Hannay and C. P. Smyth. Am Chem Soc J 65:1931-4 O '43

CONKLIN, Edmund Smith, 1884-1942

Sketch. R. H. Seashore, R. C. Davis and J. R. Kantor. Science 97:393-4 Ap 30 '43

CONKLIN, Edwin Grant, 1863-

Presentation of the John J. Carty medal and award. O. E. Buckley. Science 97:434-5 My 14 '43

CONNALLY, Reagan P.

Portrait. Business Week p 17 Ag 28 '43

CONNALLY-SMITH act. See Strikes—Law**CONNECTICUT**

See also

Rain and rainfall—Connecticut

CONNECTICUT general life insurance company

Annual report. Comm & Fin Chr 157:601-2 F 15 '43

CONNECTING rods

Iron castings replace forgings for highly stressed parts. Il diags Product Eng 14:161-4 Mr '43

Manufacture

Contour machining Diesel connecting rods. H. J. Chamberland. Il Diesel Power 21:702 Ag '43

Forging an 84-lb. connecting rod for Diesel engine. Il Automotive & Aviation Ind 89:26-7 O 1 '43

Snyder semi-automatic machine for weighing and balance-milling connecting rods. Il Automotive & Aviation Ind 88:44 Je 15 '43

CONNECTORS, Timber. See Wood construction**CONSCIENTIOUS objectors**

High court rules against conscientious objectors. Comm & Fin Chr 157:2110 Je 7 '43

CONSCRIPTION. See Military service, Compulsory**CONSERVATION of resources**

America's natural resources; new perspectives on many industries depend on raw materials reserves. H. F. Travis. Il Mag of Wall St 72:342-4+ JI 10 '43

Industry asked to cooperate in national conservation campaign. Comm & Fin Chr 158:434 JI 29 '43

Nation-wide conservation and the utilities. C. A. Esser. Pub Util 32:414-26 S 30 '43

Reorganization of conservation work in Maryland. J. D. Corrington. Science 97:140-1 F 5 '43

Voluntary conservation gets another chance. Pub Util 32:636-7 N 11 '43

See also

Copper—Conservation

Forest conservation

Gas, Natural—Conservation

Mines and mineral resources

Petroleum—Conservation

Raw materials

Regional planning

Soil conservation

Tin—Conservation

Water conservation

Water supply

also United States—War production

board—Conservation division

CONSOLIDATED aircraft corporation (now

Consolidated Vultee aircraft corporation)

Post-war plans. H. Lawrence. Barron's 23:5 F 22 '43

Ten years' progress. H. A. Sutton. Il Aeronautical Eng R 1:49 N '42

To merge with Vultee aircraft inc. Comm & Fin Chr 157:439 F 1 '43; Steel 112:76 F 1 '43

CONSOLIDATED cigar corporation

Debentures offered. Comm & Fin Chr 158:288, 573 JI 19 Ag 9 '43

CONSOLIDATED Dearborn corporation

From real estate to electronics. Scherck. Richter co. of St Louis, Mo. Comm & Fin Chr 158:84-5 JI 5 '43

CONSOLIDATED Edison company of New York

Annual report. Comm & Fin Chr 157:1554 Ap 26 '43

CONSOLIDATED electric and gas company

Declarations effective. Comm & Fin Chr 158:1823 N 3 '43

Files new plan. Comm & Fin Chr 158:188 JI 12 '43

Files proposal with SEC. Comm & Fin Chr 157:217-18 Ja 18 '43

Sale of assets of subsidiaries. Comm & Fin Chr 158:1240 S 27 '43

SEC approves steps in simplification of system. Comm & Fin Chr 156:2096, 2127 D 14 '42

To sell Lynchburg gas co. Comm & Fin Chr 158:289 JI 19 '43

CONSOLIDATED natural gas company

Listing of capital stock. Comm & Fin Chr 158:1634 O 25 '43

Public utility securities. Comm & Fin Chr 158:1798 N 4 '43

CONSOLIDATED oil corporation

Low-priced stocks for large percentage gains. Mag of Wall St 71:634 Mr 20 '43

CONSOLIDATED statements

American Car and Foundry decision. G. O. May. J Account 74:517-22 D '42

Is the profession going legalistic? R. H. Montgomery. J Account 74:523-4 D '42

Richard Thomas; statement. Economist 145:212, 217-18 Ag 14 '43

CONSOLIDATED steel corporation

Annual report. Comm & Fin Chr 157:130 Ja 11 '43

CONSOLIDATED Vultee aircraft corporation

Bouncing baby; Consolidated-Vultee merger. Business Week p103-5 Mr 20 '43

Consolidated celebrates its 20th anniversary. Il Aviation 42:122-36+ Ap '43

Listing of stocks on New York stock exchange. Comm & Fin Chr 157:1422 Ap 19 '43

Merger of Consolidated and Vultee aircraft companies. Comm & Fin Chr 157:1078 Mr 22 '43

CONSOLIDATION coal company

Plan approved. Comm & Fin Chr 157:2346 Je 21 '43

CONSTANTINOPLE (Istanbul)**Saint Sophia**

Construction of an ancient dome. J. C. Rathbun. *il* Civil Eng 13:397-8 Ag '43

CONSTITUTIONAL law

See also

Administration, Public
Treaties

CONSTRUCTION battalions. See United States—Navy—Construction battalions

CONSTRUCTION camps

Alcan, America's glory road; supply, equipment and camps. H. W. Richardson. *il* map Eng N 129:907-14 D 31 '42

Building the Inter-American highway. A. N. Carter. *il* Eng N 131:219-22 Jl 29 '43

CCC camp becomes construction quarters. *il* Eng N 129:812-13 D 10 '42

CONSTRUCTION equipment

Army equipment pool aids contract work. *il* Eng N 130:348-50 Mr 11 '43

Construction plant for Fontana project. R. E. Martin. *il* diag Civil Eng 13:533-6 N '43 (to be cont)

Critical shortage of construction equipment. Roads & Bridges 81:108+ S '43

Equipment for war use released by pooling plan. Eng N 131:303 Ag 19 '43

More contractors' idle equipment sought for non-construction uses. Eng N 131:177 Jl 22 '43

New code clears way for allocation of new, used construction equipment. Eng N 129:669 N 12 '42

New restrictions on construction machinery. Am Bld 64:64, 80-2 D '42

See also

Cableways
Concrete plants
Cranes, derricks, etc.
Excavating machinery
Hoisting machinery
Roads—Construction equipment

Maintenance and repair

How army overhauls big stuff at Fort Logan shop. *il* Roads & Sls 86:76-7 S '43

How Eastern equipment distributor is aiding war program. H. J. McKeever. *il* Roads & Sls 86:71-2, 74, 76-7 Mr '43

Hundreds of overhauls in this field shop. *il* Roads & Sls 86:82-4 O '43

Practical equipment maintenance in building a naval supply depot in Pennsylvania. P. Copenhaver. *il* Eng N 130:292-6 F 25 '43

We grease 'em and no foolin'; shop of Megarry brothers, grading and paving airport at Alexandria, Minn. H. J. McKeever. *il* Roads & Sls 86:75-6, 78-9 Ag '43

Welding pointers; rebuilding and hard-facing construction equipment. diags Roads & Sls 86:84-6 O '43

Rental prices

Equipment rental rates, 1942. Eng N 130:612 Ap 22 '43

OPA dump truck rental regulations revised. Roads & Sls 86:50 Jl '43

CONSTRUCTION equipment, Used

Business where buying is as much a job for advertising as is selling; Equipment corporation of America uses advertising to buy, rent, and sell used construction equipment. R. E. Appel. *il* Ind Marketing 28:28-30+ Ar '43

Used construction equipment now under WPTB control. Roads & Bridges 81:88, 90+ O '43

Used construction equipment sought by both army and navy. *il* Eng N 131:495-6 S 30 '43

CONSTRUCTION schedules. See Building—Rapid construction

CONSULTANTS, Business. See Business consultants

CONSUMER clearing house

Consumers' front set up in Washington to ground buyers' organizations in fundamentals of pressure campaigns. Business Week p76 My 1 '43

CONSUMER loans. See Loans, Bank—Small loans

CONSUMERS

Consumer movement is not dead! R. Amber-son. *Ptr Ink* 203:15-16+ My 14 '43

Consumer takes a hand in post-war planning. M. Wilson. *il* *Ptr Ink* 203:23 Je 11 '43

40 fighting congressmen; names of consumers' committee. *Ptr Ink* 204:36 Ag 20 '43

Just what is the typical consumer? A. W. Lewin. *Adv & Sell* 36:108+ S '43

These professors aren't unrealistic; home economists influence the buying habits of practically every literate American. F. Nye. *Ptr Ink* 203:78+ Ap 23 '43

Warms of possible reversal in consumer buying psychology. W. Street. *Ptr Ink* 205:38 O 22 '43

See also

Consumer clearing house
Consumption (economics)

CONSUMERS power company

SEC ruling, permits Morgan Stanley & co. to reduce charge for underwriting bonds. Comm & Fin *Chr* 157:519-20 F 8 '43

CONSUMPTION (economics)

Coming squeeze, on civilian business, on your living standard. W. Gates. *Mag of Wall St* 71:624-6+ Mr 20 '43

Consumer spending in 1941 and 1942. D. S. Brady. *Trusts & Estates* 75:456 N '42

Effect of stored up purchasing power on our post-war economy. W. S. Landis. *Comm & Fin Chr* 158:1397+ O 7 '43

Effects of income redistribution. L. A. Metzler. *R Econ Stat* 25:49-57 F '43

Forced or induced saving; an exploration into its synonyms and homonyms. F. Machup. *bibliog R Econ Stat* 25:26-39 F '43

Joe Doakes has more loose money, less to spend in '43. E. R. Smith. *Adv & Sell* 36:36+ Jl '43

Money illusion and demand analysis. J. Marschak. *R Econ Stat* 25:40-8 F '43

Nationwide civilian consumer survey begun for OCR by Census bureau. *Comm & Fin Chr* 158:1924 N 11 '43

Saving or spending? A. Gray. *Ptr Ink* 205:22 O 29 '43

Taxation and consumer spending. R. E. Paul. *Trusts & Estates* 76:319-20 Ap '43

Temporal stability of consumption patterns. W. A. Wallis. *R Econ Stat* 24:177-83 N '42

Who has the loose money in wartime? E. R. Smith. *il* *Adv & Sell* 36:120+ F '43

See also

Budget, Household
Buying habits
Consumers
Grade marks
Industry
Market surveys
Prices
Production
Purchasing
Quality of products

Statistics

American economy in 1942: consumer expenditures; with comparisons for earlier years. C. A. R. Wardwell and R. B. Bangs. *Survey of Cur Business* 23:16-17 Ja '43

Consumer expenditures. *Survey of Cur Business* 23:4-5 S '43

Consumer expenditures, 1939-1942. *Survey of Cur Business* 23:7-8 Ap '43

Estimates of consumer spending. M. Hoffenberg and M. S. Lewis. *R Econ Stat* 25:123-3, 161-3 My '43

Index numbers of physical volume of civilian purchases per head of civilian population, 1932-1943; table. *Survey of Cur Business* 23:9 F '43

Monthly estimates of short-term consumer debt, 1929-42. D. M. Holthausen. *tables Survey of Cur Business* 22:9-25 N '42

National income and national product in 1942; consumers' expenditures. M. Gilbert and G. Jaszi. *Survey of Cur Business* 23:13-14 Mr '43

National product and income in the first half of 1943; consumer expenditures. G. Jaszi. *Survey of Cur Business* 23:10-11 Ag '43

Statistical laws of family expenditure. H. Working. *Am Stat Assn J* 38:43-56 Mr '43

See also

Market statistics

CONTACT angle

Evaluation of effective displacement pressures for petroleum oil-water silica systems. P. C. Benner, C. G. Dodd and F. E. Bartell. *bibliog* *diags* Oil & Gas J 41:199-200, 203-4+ N 12 '42

CONTACT lenses. See Lenses, Contact**CONTACT print method.** See Mineralogical analysis**CONTACTS, Electric.** See Electric contacts**CONTAINER corporation of America**
Annual report. *Comm & Fin* Chr 157:689 F 22 '43**CONTAINER glass.** See Glass containers**CONTAINER industries**

Developments in the near and the post-war future; abstract. S. W. Burnham. *Mod Packaging* 16:71 My '43

Outlook for the can companies. *Barron's* 22: 12 D 21 '42

See also

American can com- Tin cans
pany United States—War
Glass containers production board—
Paper board industry Containers division
Paper containers
also Specialty flexible container manu-
facturers institute

Directories

Equipment and container buying section; an alphabetical list of apparatus, containers, equipment, laboratory supplies and packaging and labeling machinery, with a buyer's guide of manufacturers. *Chem Ind* 51:591-700 pt 2 (Buyer's guidebook) O '42
Equipment and container company directory; an alphabetical listing of equipment and container manufacturers and dealers. *Chem Ind* 51:585-9 pt 2 (Buyer's guidebook) O '42

Canada

Container situation. *Can Chem & Process Ind* 27:197 Ap '43

CONTAINER system (freight handling)

Container system lowers transportation costs; State railways of Chile. *For Comm W* 10: 14 F 13 '43

CONTAINERS

Award winners, 12th annual all-America package competition. *il Mod Packaging* 16: 81-148 Ap '43

Between the lines; substitute containers. *Chem Ind* 51:704-5 N '42

Ceramic containers answer to shortage problems of cosmetic manufacturers. *il Cer Ind* 41:76+ Ag '43

Container situation; glass bottles, closures, and paper packaging needs for insecticides and disinfectants. E. F. Bertrand. *Soap & San Chem* 19:111+ Ja '43

Containers, closures; discussion at meeting of Toilet goods association. *Oil Paint & Drug Rep* 143:67+ My 17 '43

Containers cut, permitted use reduced 5%. *Business Week* p14 O 16 '43

Containers in war time. D. Knapp. *Chem Ind* 52:206-7 F '43

Everything for paints but metal; Pabco containers. J. K. Novins. *il Mod Packaging* 16: 48-9+ Mr '43

New restrictions on metal containers. *Soap & San Chem* 19:41+ Ja '43

Outlook for containers and closures as revealed in panel discussion at T.G.A. convention. *Mod Packaging* 16:54-5, 96, 98+ Jl '43

Packaging boxed; new container styles. *il Business Week* p68+ N 21 '42

Packaging institute discussion; government viewpoint. *Mod Packaging* 16:73-7 D '42

Packaging pinch. *Business Week* p82-3 Jl 10 '43

Packaging trends. A. H. Warth. *bibliog il Ind & Eng Chem* 35:43-6 Ja '43

Proprietary products need containers, white-ware can be used. *Cer Ind* 41:46 Jl '43

Storage and containers for 1,3-butadiene. *diags Chem & Met Eng* 49:117-19 N '42

Substitute materials replacing steel and tin plate containers. *il Steel* 112:79 Ap 26 '43

Users tighten their belts. *il Mod Packaging* 16:44-8 Ja '43

WPB establishes quotas for drug, chemical closures. *Oil Paint & Drug Rep* 143:3+ Ja 4 '43

What is relation of WFA to WPB containers branch? *il Mod Packaging* 17:96-7+ O '43

Whiteware containers can help ease packaging situation. *Cer Ind* 40:31-2 Je '43

You will see favorite brands in more than one container. *il Mod Packaging* 17:81-3+ O '43

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Bags	Labels
Bottle caps and seals	Milk containers
Bottles	Oil containers
Boxes	Package design
Candy boxes	Package goods
Canteens (flasks)	Paper bags
Cellophane	Paper containers
Container industries	Pressure vessels
Cotton bags	Tanks
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Glass containers	Tubes (containers)
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board—Containers division	

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How Orloff cosmetics capitalized the reuse value of containers. *il Sales Management* 52:22-4 F 1 '43

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CONTAINERS (for shipping)

All-America package competition award; Ohio boxboard company won reinforced shipping container for fruit and vegetables. *il Mod Packaging* 16:84+ Ap '43

All-America package competition award; Reynolds metals co. combining sheets of lead foil, kraft paper, bond paper, asphaltic sealers, cellophane and thermoplastic adhesives to make containers that replace metal can. *Mod Packaging* 16:85+ Ap '43

Apples in molded pulp trays. *il Mod Packaging* 16:40-1 Jl '43

Award winners, 12th annual all-America package competition. *il Mod Packaging* 16:110-12+ Ap '43

Better containers for overseas shipments; steps taken to improve quality. *For Comm W* 11:39 Ap 24 '43

Between the lines; practically all materials used in commercial packaging will become scarce. *Chem Ind* 52:233 F '43

Blood on the move; Church containers. *Business Week* p20+ Jl 17 '43

Bulk packaging of chemicals; wartime trends, postwar possibilities; shift to multi-wall paper bags. *il diags Chem & Met Eng* 50:117-24 O '43

Changes in ICC regulations for the transportation of dangerous articles. *Chem Ind* 52:63 Ja '43

Chemical container study broadened by War board. *Oil Paint & Drug Rep* 143:3+ My 10 '43

Chemical containers for the duration. R. W. Lahey. *Chem Ind* 52:351-2 Mr '43

Chemical containers in America. *Chem Age (Lond)* 48:668-9 Je 26 '43

Church containers used for blood shipments. *il Refrig Eng* 44:396 D '42

Coast firm makes millions of moisture-proof paper containers. *Sales Management* 52:46-7 My 1 '43

Concrete molds turned into fibre drums. *il Mod Packaging* 16:58+ My '43

Crating airplanes. *il Mod Packaging* 16:166+ Ap '43

Developes new shipping case; double wall corrugated board. *Paper Tr J* 116:11 Ap 1 '43

Development of weatherproof solid-fibre and corrugated shipping containers designed for overseas shipment. E. R. Hankins. *Paper Tr J* 116:27-9 Mr 4 '43; Abstract. *Paper Ind* 24:1292+ Mr '43

Fish packers like fibre containers. *il Mod Packaging* 16:44-6+ Jl '43

High-speed sealing for weatherproof cases. G. B. Cloran and F. C. Campins. *il diags Mod Packaging* 16:116, 118+ D '42

CONTAINERS (for shipping)—Continued

- I. C. C. proposes changes in regulations. R. W. Lahey. Chem Ind 51:732, 877-8 N-D '42
- Method to obtain buoyancy of paper shipping cases. T. J. Nelson. diag Paper Tr J 116:34 My 6 '43
- Mobile piano for overseas canteens. il Mod Packaging 17:76+ S '43
- New multiwall paper bags protect products in outdoor storage. R. W. Lahey. il Chem & Eng N 21:1556, 1558+ S 25 '43
- Oil for the theatres of war. il Mod Packaging 16:45-8+ D '42
- Oil-products containers remain a problem. J. P. O'Donnell. il Oil & Gas J 41:25-6 F 4 '43
- Packaging. R. W. Lahey. Chem & Eng N 21:486-7+ Ap 10 '43 [cont semi-monthly]
- Packaging dehydrated foods; abstract. F. S. Leinbach. Mod Packaging 16:75 My '43
- Packaging materials. C. L. Sheldon. Chem & Eng N 21:600+ Ap 25 '43; Same abr. Mod Packaging 16:68-9; Discussion. 69-70 My '43
- Performance of nailed and wirebound wooden cases for luncheon meat. V. Wright. il Mod Packaging 16:176, 178+ Ap '43
- Pillow in a carton. il Mod Packaging 16:56-7+ D '42
- Preference rating order P-140; text. Chem & Eng N 21:562-3 Ap 25 '43
- Refrigerated container designed for food now speeds blood for Red cross. R. H. Oppermann. Franklin Inst J 235:350 Ap '43
- Shipping container shortage; glass industry's most urgent problem. Glass Ind 24:381-2, 391+ S '43
- Steel stitched cartons for wire. il Mod Packaging 16:72 Ag '43
- Synthetic rubber fuel tank; Mareng cells. il Sheet Metal Worker 33:25 N '42
- V-box stylists say no sleeves. il Mod Packaging 16:44-5, 108 Ag '43
- WPB orders allocation of container board. Paper Tr J 116:10 Mr 11 '43
- War-time care of containers. Chem Age (Lond) 48:661-3 Je 26 '43
- What armed forces want. Mod Packaging 16:76-7 My '43
- What containers for the sky trains? il Mod Packaging 17:46-9+ S '43

See also

- Bags Cotton bags
Barrels Food containers
Containers, Steel

Cleaning

- Cleaning drums which have held flammable substances; hazards and precautions. Nat Safety N 47:40 Ja '43; Same. Metal Finishing 41:535 Ag '43
- Drum reconditioning by Newark steel drum company; the sandblast process. il Chem Ind 52:215-16 F '43
- Industrial safety cleanings. Chem Age (Lond) 49:185-6 Ag 21 '43

Reuse

- Don't throw that container away; abstract. H. B. McKean. Management R 32:264-5 J1 '43
- Reclaiming drums. H. Lustfield. Mod Packaging 16:60-1+ Ag '43
- Re-use campaign ties in with L-317. R. L. Van Boskirk. Mod Packaging 17:106+ N '43
- CONTAINERS, Glass.** See Glass containers
- CONTAINERS, Paper.** See Paper containers
- CONTAINERS, Steel**
- Clinic cures ailing steel drums. il diag Nat Pet N 35:26-7 Mr 24 '43
- Drum reconditioning by Newark steel drum company; the sandblast process. il Chem Ind 52:215-16 F '43
- Improved method reduces costs and boosts output in drawing chromium-molybdenum steel; Walter Kidde & co. production of high-pressure cylinder for carbon dioxide and oxygen. I. H. Such. il Steel 113:90-1+ N 1 '43
- New type rustproof lining for drums; Nidex. A. Wachter and N. Stillman. flow plan il Oil & Gas J 41:214, 219, 221 Mr 25 '43
- Steel available for fabrication into drums; drums available. R. W. Lahey. Chem & Eng N 21:970 Je 25 '43

- Steel containers for edible and inedible oils; for paints. Chem & Eng N 21:1738 O 25 '43
- Steel drums for reuse and sale to be located by DSC Oil Paint & Drug Rep 143:3+ Ap 5 '43

See also

- Tanks, Steel
- CONTAINERS, Wood.** See Wood containers
- CONTINENTAL baking company**
- Thumbnail stock appraisal. Mag of Wall St 71:177 N 28 '42
- CONTINENTAL can company**
- Annual report. Comm & Fin Chr 157:814-15 Mr 1 '43
- Peace-time leaders. Mag of Wall St 72:509+ Ag 21 '43
- CONTINENTAL Illinois national bank and trust company**
- What is this bank stock worth? K. L. Trefftz. Barron's 23:16 Ap 19 '43
- CONTINENTAL insurance company**
- Income statement, 1939-1942. Comm & Fin Chr 157:520 F 8 '43
- CONTINENTAL steel corporation**
- Another look. Mag of Wall St 72:478 Ag 7 '43
- CONTINENTS**
- Continental drift and ancient dunes. J. R. Peters. Science 98:60 J1 16 '43
- Mammals and the nature of continents. G. G. Simpson. bibliog Am J Sci 241:1-31 Ja '43
- CONTRACT bonds.** See Insurance, Surety and fidelity—Contract bonds
- CONTRACTORS**
- Airport contractor gets "E" for fast job; Austin road company. il Roads & Sts 86: 63 O '43
- Contractors pool on jobs, cut expenses, increase profits. Sales Management 52:86 Ap 15 '43
- Earth movers. il Fortune 28:98-107+ Ag; 118-23+ S; 138-44+ O '43
- Help for contractors; legal problems. Dom Eng 160:57 N '42; 161:96-9 Ja; 66+ Mr '43
- Restore fire-damaged homes; contractor rebuilds 75 a year. il Am Bld 65:32-3 S '43
- To halt turnover; California pact has stabilized state's construction labor. Business Week p102-3 O 30 '43
- See also*
- Construction equip- Electric contractors
ment Road contractors
also Associated general contractors of America
- Advertising**
- Ad shows contractors don't profit on war. Ptr Ink 205:79 O 1 '43
- Directories**
- Contractors, Canada; roads, bridges, airports, earthmoving. Roads & Bridges 81:68-76 J1 '43
- CONTRACTORS' equipment.** See Construction equipment
- CONTRACTORS' equipment floater insurance.** See Insurance, Contractors' equipment floater
- CONTRACTS**
- How to determine validity of gas corporation's contract. L. T. Parker. Am Gas J 158:28-30+ Ja '43
- Legal questions. Dom Eng 161:96-9 Ja '43
- See also*
- Arbitration
Building contracts
Engineering contracts
Heating contracts
Labor contracts
Mortgages
- Petroleum—Well drilling—Contracts
Restraint of trade
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- CONTRACTS, Cost-plus**
- See also*
- Contracts, Government—Cost-plus contracts
- CONTRACTS, Government**
- Approving redesigns on air force contracts. E. C. Duval. il Machine Design 15:115-17 Je '43

CONTRACTS, Government—Continued

- Army equipment pool aids contract work. *il*
Eng N 130:348-50 Mr 11 '43
- Civil engineers' contractual relations with War department. H. H. Hale. *Civil Eng* 13:55 Ja '43
- Contractors' forms under MPR 251; for use by contractors operating under Maximum price regulation 251. *Sheet Metal Worker* 34:20-1 Mr '43
- How to do business with the navy. R. Faegre. *Paper Ind* 25:780+ O '43
- Incentives pay; navy's new contract offers immunity from renegotiation and a crack at bonus money. *Business Week* p17 Ag 7 '43
- Machine tool panels reduce "into-production" time; committees of trouble shooters aid war material manufacturers. L. C. Messick. *Am Mach* 87:1202 Mr 4 '43
- Military shopping; Maritime commission and army try new buying plans. *Business Week* p18 Mr 6 '43
- Need critical metals to finish war contract? phone WPB's MRD. *Steel* 111:103-4 D 7 '42
- New method for handling appeals under War department contracts. J. W. Gaskins. *Eng N* 131:28 Jl 1 '43
- Renegotiation after taxes, provision for necessary reserves for postwar transition, and changes in contract termination policies to protect employees suggested. *Steel* 113:92+ S 6 '43
- Set 1,000 kw. minimum demand on U.S. contracts. *Elec W News* ed 118:1857 D 5 '42
- War contracts and allocations to southern states total \$19,618,847,000 through December, 1942. *map Manuf Rec* 112:47 Ap '43
- WPB director issues order on contract policy. *Credit & Fin Management* 45:27 O '43
- Worried about specifications? here's Washington answer. C. S. Cole. *Machine Design* 15:104-6+ My '43
- Would ignore rates in war contracts. *Ry Age* 114:684 Ap 3 '43

See also

- Priorities and allocations, Smaller war plants
Industrial corporation
Purchasing, United States—War
Government production board

Accounting

- Accounting problems in presentation of cost-plus-fixed-fee contracts in financial statements. G. D. Bailey. *J Account* 74:503-10 D '42
- Accounting problems of war contracts. G. D. Bailey. *J Account* 75:211-19 S '43
- Accounting requirements of the Navy price adjustment board. N. L. McLaren. *J Account* 76:287-94 O '43
- Accounting under cost plus fixed fee contracts. *J Account* 75:148-52 F '43
- Administrative audit of time and material vendors' charges. *J Account* 75:560-8 J '43
- Auditing procedures for government receivables. J. W. Smart. *J Account* 76:9-10 Jl '43
- Computing contract termination payments; abstract. K. G. Kramer. *Management R* 32:389-91 O '43
- Confirmation of receivables from the government. G. Rea. *J Account* 76:166-7 Ag '43
- Consistency in cost figures, other aids urged. J. W. McEachern. *Iron Age* 152:120+ Ag 12 '43
- Cost systems for contracts with forward pricing articles. N. H. Ball. *N A C A Bul* 24:963-70 Ap 15 '43
- Credits in government contracting; abstract. G. J. Thomas. *Management R* 32:110-11 Mr '43
- Development of contract renegotiation and function of the price adjustment boards. E. F. Dow. *N A C A Bul* 24:1125-49 My 15 '43
- Functions of the governmental accountant in renegotiation. M. C. Troper. *J Account* 75:213-18 Mr '43
- Government policies in cost definitions under cost-plus-fixed-fee contracts. M. C. McIntosh. *N A C A Bul* 24:891-901 Ap 1 '43
- Mechanics of renegotiation. C. G. Blough. *J Account* 75:200-12 Mr '43
- Overtime premium in accounting for government contracts. *J Account* 76:265-6 S '43

- Practice in accounting for continuing expenditures arising from wartime production, compiled by the Research and technical service department. National association of cost accountants. *N A C A Bul* 24:925-49 sec 3 Ap 1 '43
- Practice in accounting for non-recurring expenditures arising from wartime production. *N A C A Bul* 24:1017-43 sec 3 Ap 15 '43
- Practice in depreciating and amortizing investment in machinery and equipment. *N A C A Bul* 24:1109-22 sec 3 My 1 '43
- Presenting financial data in contract renegotiation. H. T. McAnly. *J Account* 76:147-54 Ag '43
- Protesting exclusions of costs under CPFF contracts. B. D. Beckerlegge. *J Account* 76:415-18 N '43
- Reasonable expenses under government contracts; abstract. D. M. Russell. *Management R* 32:34-5 Ja '43
- Some accounting aspects of renegotiation. G. Jones. *J Account* 76:376-82 N '43
- Some practical problems and recent developments in costing government contracts. J. P. Healey. *N A C A Bul* 24:305-23 N 15 '42
- System for handling war work; how J. R. Booth limited keeps account of work for wartime machine shop board. *Pulp & Pa* of Can 43:953-4 D '42
- Tax problems of war contractors. J. K. Lasser. *J Account* 76:409-14 N '43
- Termination problems as seen by the public accountant. R. M. Griffiths. *J Account* 76:119-24 Ag '43
- Tools and equipment purchased for use on government contract. *J Account* 75:267-9 Mr '43
- War contract accounting. J. W. Smart. *J Account* 75:42-5 Ja '43
- War contracts, costs, and profits. V. H. Stempf. *J Account* 75:496-509 Je '43
- War department cost interpretations. *J Account* 75:181-4 F '43
- Will cancellation mean cash or chaos to you on "C" day? J. H. Winchester and A. B. Bourquard. *N A C A Bul* 25:99-108 O 1 '43

Adjustment of losses

- Navy to use insurance company adjusting service. *Nat Underw* 47:1+ S 9 '43

Cost-plus contracts

- Accounting problems in presentation of cost-plus-fixed-fee contracts in financial statements. G. D. Bailey. *J Account* 74:503-10 D '42
- Accounting under cost plus fixed fee contracts. *J Account* 75:148-52 F '43
- Bureau of yards and docks abandons cost-plus-fixed-fee contracts. *Eng N* 130:772 M 27 '43
- CPFF contracts. B. H. Kline. *J Account* 76:442 N '43
- Government policies in cost definitions under cost-plus-fixed-fee contracts. M. C. McIntosh. *N A C A Bul* 24:891-901 Ap 1 '43
- Protesting exclusions of costs under CPFF contracts. B. D. Beckerlegge. *J Account* 76:415-18 N '43
- Some practical problems and recent developments in costing government contracts. J. P. Healey. *N A C A Bul* 24:305-23 N 15 '42
- Trend away from the cost type of war contract. J. S. Seidman. *J Account* 75:521-3 Je '43
- War department cost interpretations. *J Account* 75:181-4 F '43

Costs

- Cost data on war construction projects. *Eng N* 130:632 Ap 22 '43

Finance

- Broaden V-loan rules to aid war financing. *Comm & Fin Chr* 158:1018 S 9 '43
- Broadened basis for Regulation V loans. *Fed Res Bul* 29:849-50 S '43
- Evolution of war contract financing. L. C. Bertram. *Banking* 35:46-7 Je '43
- Finance and credit risks on war contracts. W. A. Lawrence. *Credit & Fin Management* 45:12-13 Ag '43
- Guaranteed war loans; first year of operations. *Fed Res Bul* 29:377 My '43

CONTRACTS, Government—Finance—Cont.

How to recover; capital expenditures to be repaid on a certificate of non-necessity. *Business Week* p105-6 My 15 '43

Inside study of "V" bank loans. D. F. Valley, *il Burroughs Clearing House* 27:16-18+ N '42

Lend-lease and WSA to guarantee war loans. *Comm & Fin Chr* 157:1783 My 13 '43

Let's tackle the first post-war problem, now; termination of war contracts. R. A. Foulke, *il Dun's R* 51:7-14+ My '43

New financial safeguards for war contractors are clarified. H. Bratter. *Banking* 35:46-7+ F '43

New form of agreement for guaranteed war production loans; first year's operation. *Comm & Fin Chr* 157:1596 Ap 29 '43

Plant financing in a war economy; problem of new facility financing. M. D. Ketchum. *J Business* 16:28-50 Ja '43

Rediscouunts; eligibility of notes evidencing guaranteed loans. *Fed Res Bul* 28:1079-80 N '42

Regulation V's first birthday. H. Bratter. *Banking* 35:42+ Ap '43

Report guarantees for war production loans; April 6 to end of 1942. *Comm & Fin Chr* 157:759 F 25 '43

Some practical problems and recent developments in costing government contracts. J. P. Healey. *N A C A Bul* 24:305-23 N 15 '42

V-loans and contract termination. *Management R* 32:351-2 S '43

War loan financing; guarantee agreement. *Fed Res Bul* 29:379-90 My '43

War loans. T. F. Regan. *Am Inst Banking Bul* 25:23-4+ Ja '43

Wartime guides for your business; financing war production. W. H. Hillyer. *Barron's* 22:8 N 23 '42

Wartime guides for your business; how Document N, Plan DPC, Plan EPF, or Regulation V can help you finance contracts. W. H. Hillyer. *Barron's* 22:7 N 30 '42

Wartime guides for your business; non-federal financing of war production. W. H. Hillyer. *Barron's* 22:4 D 7 '42

Fraud

War frauds unit is investigating 900 cases currently. *Iron Age* 152:72+ Ag 19 '43

Insurance aspects

Army engineers wartime insurance peak passed. *Nat Underw* 47:4 Ag 5 '43

Army insurance organization. J. C. O'Connor. *Nat Underw* 47:3+ J1 1 '43

Army rating plan is set up for group covers. *Nat Underw* 47:19+ Mr 11 '43; *Nat Underw* (Life ed) 47:1+ Mr 12 '43

Assails War department rating scheme extension. H. McGee. *Nat Underw* 47:1+ J1 22 '43

Bond producers press fight for expense allowance. *Nat Underw* 47:19 S 2 '43

Broker shouldn't be linked to agents. C. O. Pate. *Nat Underw* 47:15+ Ap 29 '43

Cancelled contracts cause credit cover activity. *Nat Underw* 47:21 My 6 '43

Canceled War dept. contracts will be settled promptly; policy interests bonding men. *Nat Underw* 47:21 Ag 19 '43

Can't reduce U. & O. on possibility of renegotiation. *Nat Underw* 47:13 Ap 15 '43

Compensation trends; abstracts. W. F. Roerber. *Weekly Underw* 147:1386-7 D 12 '42; *East Underw* 43:90 D 11 '42

Corporate suretyship for navy contracts. *East Underw* 44:44 My 7 '43

DPC using War dept. plan on lump sum contracts. *Nat Underw* 47:15 Ag 5 '43

Demand arises for legal liability cover. *Nat Underw* 47:1+ Ja 28 '43

Escalator clause is added to insurance lexicon. *Nat Underw* 47:22 O 21 '43

Experience gained on war projects business seen as guidepost to future. G. E. Morrissey. *East Underw* 44:39+ Mr 12 '43

Form contract bond producers organization. *Nat Underw* 47:15+ Ja 14 '43

Group life premiums studied by service insurance offices. *Nat Underw* (Life ed) 47:1 Mr 5 '43

Holds pension trusts are deductible funds; War department statement. *East Underw* 44:5+ O 8 '43; *Nat Underw* (Life ed) 47:15 O 8 '43

Instruction manual for insurance on navy projects. L. F. Beck. *East Underw* 44:38 N 5 '43

Insurance contract renegotiation. *Nat Underw* 47:3 Ag 12; 9 Ag 26 '43

Navy insurance division program working smoothly. J. C. O'Connor. *Nat Underw* 47:3+ F 4 '43

New ship repair contract has been worked out. *Nat Underw* 47:28 J1 15 '43

Property insurance dropped from some army contracts. *Nat Underw* 46:8 N 19 '42

Refunds said to be nearly \$1,000,000; U.S. demands based on good experience. *Nat Underw* 47:19 F 18 '43

Restoration of bond requirements will aid war effort. E. H. Cushman. *Credit & Fin Management* 45:11-14 Ap '43; *Abstract. East Underw* 44:54 Ap 30 '43

Reviews development of cover on war projects; abstracts. L. F. Beck. *Nat Underw* 47:22 My 27 '43; *East Underw* 44:18 My 21 '43

State laws may stop federal renegotiation. *Nat Underw* 47:3+ S 2 '43

Surety producers present plea to company men; commission problems in the contract bond field. *Nat Underw* 47:21+ My 20 '43

Tennessee official rules policies must be supervised by agents. *East Underw* 44:54 Ap 16 '43

U.S. will pay more under War dept. group rating plan. *Nat Underw* 47:51 O 14 '43; *Same. Nat Underw* (Life ed) 47:3 O 15 '43

War department acts to reduce insurance data going abroad. *East Underw* 44:1+ Ja 8 '43

War dept. rating plan debated in committee; also new compensation program. *East Underw* 44:29 O 15 '43

War department rating plan gets frigid comment at meeting of actuaries. *Nat Underw* (Life ed) 47:4 Je 11 '43

War department's comprehensive rate plan opposed in California. *Nat Underw* 47:17+ Je 24 '43

War department's plan to control group insurance cost, commissions. *East Underw* 44:13 Mr 12 '43

War projects plan for group cover is revised. *Nat Underw* 47:24 My 27 '43; *Same. Nat Underw* (Life ed) 47:1 My 28 '43

Will require bonds on war housing contracts. *East Underw* 44:27 My 21 '43

Labor problems

Anti-discriminatory clauses in government contracts are mandatory: FDR. *Comm & Fin Chr* 158:1922 N 11 '43

Contract shuffle; place orders in less cramped labor areas. *Business Week* p18-19 My 1 '43

Labour conditions in British government contracts. *Int Labour R* 47:507-9 Ap '43

Labor laws for government work. *Iron Age* 152:71-2 S 9 '43

Reviews overtime pay requirements under Wage-hour and Public contracts laws. L. M. Walling. *Comm & Fin Chr* 157:841+ Mr 4 '43

Warren objects; Comptroller General voids President's fair employment order. *Business Week* p99 N 6 '43

Laws and regulations

Executive order dealing with war contracts; contracts of the Department of commerce. *Fed Res Bul* 23:1186 D '42

Informal cashes in; electrical contractors in Pittsburgh suit pay \$260,000, but U.S. gets half, and informer faces huge income tax. *Business Week* p39-40 Ag 21 '43

Supreme court rules on contract delays; United States vs. Brooks-Calaway co. *Eng N* 130:155 F 4 '43

Pooling

Wartime guides for your business; cooperative idea. W. H. Hillyer. *Barron's* 22:20 D 14 '42

West Coast pools help small business weather the war. *Sales Management* 51: 48+ D 15 '42

CONTRACTS, Government—Continued

Postwar settlements

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Renegotiation

Accounting requirements of the Navy price adjustment board. N. L. McLaren. J Account 76:287-94 O '43

Agencies retreat. Business Week p14-15 Ap 10 '43

Aims and spirit of over-all renegotiation of war contracts. A. J. Browning. J Account 75:285-6 Mr '43

Change in renegotiation law opposed by Jesse Jones and Randolph Paul. Comm & Fin Chr 158:1193 S 23 '43

Changes in the federal laws which affect the renegotiation of war contracts. C. G. Blough. N A C A Bul 24:532-40 Ja 1 '43

Charges renegotiation is needless drag on Nation's war effort. S. B. Pettengill. Comm & Fin Chr 158:334 Jl 22 '43

Constitutionality of act tested in suit filed by J. F. Lincoln. Steel 113:71 N 8 '43

Contract renegotiation activities are harmonized; Joint price adjustment board. Oil Paint & Drug Rep 144:3+ O 25 '43

Contract renegotiation saved \$2.5 billion. Comm & Fin Chr 157:2112 Je 7 '43

Corrections for Contracts act suggested. J. F. Lincoln. Steel 113:54 O 25 '43

Critics of act point out lack of postwar changeover provision. Steel 112:64-5+ Je 28 '43

Development of contract renegotiation and function of the price adjustment boards. E. F. Dow. N A C A Bul 24:1125-49 My 15 '43

Disclose effect of renegotiation on earnings. E. Schram. Comm & Fin Chr 157:1967 My 27 '43

Excessive profits, an enigma? H. J. Landry. J Account 75:330-3 Ap '43

Factors and flaws of contract renegotiation. R. L. Hoadley. Aviation 42:121+ My '43

Factors considered in renegotiation. J Account 76:279-80 S '43

Facts about the renegotiation of war contracts. A. J. Browning. Mech Eng 65:135-6 F '43

Filing reports in renegotiation proceedings; Securities and exchange commission amendments to rule X-13A-6 and form 8-K. J Account 76:183 Ag '43

First year of renegotiation. N. L. McLaren. J Account 75:487-9 Je '43

For more profits; machine tools and textiles press for liberalization of the renegotiation law. Business Week p17-18 Je 26 '43

Formula for adjusting prices on war materials contracts proposed. Steel 111:102 D 7 '42

Functions of the governmental accountant in renegotiation. M. C. Troper. J Account 75:213-18 Mr '43

Holds pension trusts are deductible funds; War department statement. East Underw 44:5+ O 8 '43; Nat Underw (Life ed) 47:15 O 8 '43

Hopes are brighter for bill permitting postwar reserve funds. Iron Age 152:90 S 23 '43

Industry holds postwar outlook warrants renegotiation changes; National machine tool builders' association publishes pamphlet. Steel 113:74-5+ S 13 '43

Inequities of contract renegotiation. R. Seybold. Trusts & Estates 75:599-600 D '42

Joint board formed for renegotiation. Aviation 41:21-2 N 1 '43; Iron Age 152:80 O 28 '43; Comm & Fin Chr 158:1807 N 4 '43; Credit & Fin Management 45:17 N '43

Law not in good standing with Congress, House hearing shows. Steel 113:90-1 S 20 '43

Law to be revised, not repealed. Steel 113:67 O 4 '43

Mechanics of renegotiation. C. G. Blough. J Account 75:200-12 Mr '43; Excerpt. Management R 32:307-9 Ag '43

More about renegotiation of contracts. G. R. Shields and H. J. Galloway. Eng N 129:931-3 D 31 '42

Navy is balked; Lincoln Electric rebels at refund. Business Week p27-8+ O 2 '43

1 1/2 billion by renegotiation. Business Week p 15 Ja 9 '43

Possible substitute for renegotiation. R. T. Griswold. Credit & Fin Management 45:20 Ag '43

Post-war reserves vs. subsidies. V. H. Stempf. N A C A Bul 25:207-19 N 1 '43

Power contracts not subject to renegotiation. Elec W News ed 119:1715 My 22 '43

Presenting financial data in contract renegotiation. H. T. McAnly. J Account 76:147-54 Ag '43

Private enterprise, to survive, must keep lean and efficient. M. Karker. Ptr Ink 201:78+ N 13 '42

Procedure on renegotiation of war contracts called superior to other proposed methods. A. J. Browning. Comm & Fin Chr 156:1977+ D 3 '42

Profit control; case histories. Business Week p19-20 F 20 '43

Profit in wartime; what is the proper basis for renegotiation. J. L. Carey. Credit & Fin Management 44:4-6 D '42; Excerpts. Trusts & Estates 76:276-7 Mr '43

Profit rules set; army, navy, and maritime commission's regulations for voluntary renegotiation. Business Week p27-8 Ap 17 '43

Renegotiation act amendment urged. H. M. Simon. Oil Paint & Drug Rep 144:3+ O 4 '43

Renegotiation and bank loans. M. Karker. Banking 36:30+ Ag '43

Renegotiation and the machine tool industry. A. G. Bryant. Automotive & Aviation Ind 89:117-18+ O 1 '43

Renegotiation as a public relations job for American business. M. H. Karker. Ind Marketing 27:19-21+ D '42

Renegotiation at the crossroads. Business Week p15-16 S 25 '43

Renegotiation; comments on renegotiation policy and procedure. C. L. Turner. J Account 76:344-5 O '43

Renegotiation of contract prices. T. H. Sanders. Harvard Business R 21 no2:164-82 [Ja] '43

Re-negotiation of contracts. H. J. Taylor. Mod Plastics 20:56-8 Je '43

Renegotiation of contracts; analysis of principles and policies of the government departments. E. H. Cushman. Credit & Fin Management 45:18-20 28-30 Jl '43

Renegotiation of DPC contracts will decrease machine tool earnings. Iron Age 152:95 Jl 22 '43

Renegotiation of war contracts. Arch Forum 78:112+ Mr '43

Renegotiation of war contracts; report of committee investigating the National defense program. J Account 75:462-5 My '43

Renegotiation of war contracts results in savings of \$3.5 billion through June 30, 1943. Comm & Fin Chr 158:616 Ag 12 '43

Renegotiation of war contracts; some practical applications in relation to the civil engineer. H. W. Loving. Civil Eng 13:88 F '43

Renegotiation poses several U. & O. questions. Nat Underw 47:1 Jl 15 '43

Renegotiation seen from two sides. B. Stubblefield. Textile World 93:62 Ja '43

Renegotiation, termination, and costs. M. E. Peloubet. J Account 76:45-53 Jl '43

Renegotiation: what it is; what it does; how it works. R. P. Patterson. J Dun's R 51:8-13+ Ja '43; Abstract. Management R 32:108-9 Mr '43

Reserves to meet indeterminable war costs. V. H. Stempf. J Account 76:383-90 N '43

Review of joint statement on renegotiation. G. N. Farrand. J Account 75:408-13 My '43

Seek to co-ordinate methods in renegotiating contracts. Steel 112:93 My 17 '43

Services agree to uniform renegotiation procedure. Am Mach 87:128c Ap 15 '43

Small business and renegotiation. W. T. Hedlund. Business Week p107 F 13 '43

Small business seeks contracts exemption. Comm & Fin Chr 158:115 Jl 8 '43

Smaller companies may be exempt from war contract renegotiation. Steel 112:37 Ja 11 '43

Some accounting aspects of renegotiation. G. Jones. J Account 76:376-82 N '43

Some side-lights on government regulations affecting business; speed-up for renegotiation. Credit & Fin Management 45:21-2 Ag '43

CONTRACTS, Government—Renegotiation—
Continued

State laws may stop federal renegotiation. Nat Underw 47:3+ S 2 '43
 Subcommittee of House ways and means committee holds Vinson bill hearings. Credit & Fin Management 45:17+ N '43
 Tentative amendments drawn for new renegotiation law. Aviation N 1:20-1 Ag 30 '43

Tool builders' position analyzed in statement to House committee. Steel 113:78-9 J 12 '43

Tool builders tell House group of injustices under the present act. Steel 113:91-2 J 15 '43

Uniform price adjustment policy adopted by procurement agencies. Steel 112:97 Ap 12 '43

Urges changes in renegotiation law. J. V. Scott. Comm & Fin Chr 158:1316 S 30 '43
 Vinson report proposes changes in laws governing renegotiation. Credit & Fin Management 45:25-6 O '43

War contract renegotiation banned on 32 materials. Oil Paint & Drug Rec 143:3+ Mr 22 '43

War contractors fare well in renegotiations. Steel 111:34-5+ D 28 '42

War contractors hampered and harried under present law. Steel 113:50-1 S 27 '43

War contracts, costs, and profits. V. H. Stempf. J Account 75:496-509 Je '43

War, Navy and Treasury departments and Maritime commission issue joint statement. Iron Age 151:64+ Ap 29 '43

Why renegotiation is disliked. Barron's 23:8 S 20 '43

You can't write profits in red ink. R. L. Hoadley. charts Aviation 42:114-16+ O '43

Subcontracting

Auto dealer becomes army tank subcontractor: Youngstown Buick co. G. R. Reiss. II Steel 111:73, 80 N 23 '42

Big prime contractors distribute more than half of war dollars to outside firms; NAM survey. Comm & Fin Chr 157:2389 Je 24 '43

Centralized planning for small plants; subcontractors' system; Aircraft products & equipment corp. J. H. Stephens. II Aviation 42:217+ Mr '43

Consolidated subcontract system coordinates schedules. H. G. Golem. II Aviation 42:195+ Ap '43

Douglas subcontracting system. F. W. Conant. Automotive & Aviation Ind 88:32-3+ Je 1 '43

Fraser of American Locomotive thanks subcontractors who helped build tank-killer. D. W. Fraser. Comm & Fin Chr 157:1482 Ap 22 '43

Home shop pool; basement shops of the J. E. Doyle co.'s subcontractors. Business Week p51+ D 5 '42

Moves initiated to spread out available work; prime contractors asked to subcontract in less critical labor areas. Steel 113:59 Ag 16 '43

New co-operative program formed to aid small manufacturing plants. Steel 112:56 Ap 26 '43

Outworking and production. Engineer 176:288-9 O 8 '43

Outworking in practice. Engineering 156:296 O 8 '43

Scientific management applied to subcontracting; helps step up war production at Link-belt ordnance co. R. Trauttschold. II Steel 112:74-5 F 22 '43

Share the bodies; army spreads work on its truck mountings; wood bodies. Business Week p98 D 12 '42

Subcontracting increases output of tube mill; Summerill tubing co. D. E. Lukens. II Steel 112:128-30, 132 Ap 12 '43

Subcontracting made to work; American type founders has created a separate division. J. Haydock. flow chart II Am Mach 87:83-6 S 2 '43

Subcontractors attain precision by well engineered program of setup and inspection; Stewart-Warner corp. H. E. Fleming. II Steel 112:104-5, 128+ Je 7 '43

Subcontractors furnish many parts to large war producers. Automotive & Aviation Ind 89:52+ Ag 1 '43

Subcontractors section (cont). II Aviation 41:221+ D '42

Utility sells customers' abilities to produce bits and pieces; machine shops in Oregon and Washington supplying parts for Liberty ships. D. B. Leonard. II Elec W 118:2098-100 D 26 '42

Wartime guides for your business; how to go after sub-contracts. W. H. Hillyer. Barron's 22:5-6 N 16 '42

See also
 Industrial cooperation

also Canadian pulp and paper association—Wartime machine shop board

Termination

Advocates single over-all claim to cover cancelled war business. C. L. Collens. Comm & Fin Chr 158:1328 S 30 '43

Are you prepared for contract termination? R. L. Hoadley. Aviation 42:126+ Ag '43

Army's procedure intended to effect fair, fast settlements. Steel 113:38-9 Ag 30 '43

Audit of termination claims. J Account 75:470-80 My '43

Big VT credit; Nash-Kelvinator. Business Week p106 O 2 '43

Broaden V-loan rules to aid war financing. Comm & Fin Chr 158:1018 S 9 '43

Broadened basis for Regulation V loans. Fed Res Bul 29:849-50 S '43

Broadened V loan plan to aid war contractors in event of termination. Iron Age 152:118+ S 23 '43

Cancellation demands action, and quick. R. L. Hoadley. Aviation 42:119+ N '43

CED calls productive employment outstanding need of country after war; prompt settlement of contracts terminated by government important to attaining goal. Comm & Fin Chr 158:1512 O 14 '43

Comptroller General and termination audits. J Account 76:369-71 N '43

Congress seeks fair termination provision. H. D. Ralph. Burroughs Clearing House 27:19-20 S '43

Congressmen hear of delays in settlements on canceled orders. Steel 113:50-1+ O 25 '43

Contract payoff; formula already emerging. Business Week p17-18 My 15 '43

Contract relief. Business Week p19 Mr 6 '43

Contract termination in the automotive industry. J. H. Marks. Automotive & Aviation Ind 89:17+ N 1 '43

Cushioning the conversion job; government providing financial assistance to war contractors. II Steel 113:156-7 O 11 '43

Economic group offers 4-point program to speed settlement; revised bill provides partial advance payments. Steel 113:60-1+ O 18 '43

Ending contracts. Business Week p16-17 Je 26 '43

Ending war contracts. Arch Rec 94:7+ J 1 '43

Formula for speedy settlement of terminations. M. R. Beery. charts Steel 113:112-13+ S 20 '43

Government seeks to calm contract termination fears. Aviation N 1:15 Ag 23 '43

Handling material and subcontractor claims under cancelled government contracts. J. T. Stubbs. Credit & Fin Management 45:7-9+ Ag '43

Industry looks to Washington for elimination of uncertainties on war contracts. Credit & Fin Management 45:4-7+ N '43

Issues and policies of contract termination. A. B. Hawes. N A C A Bul 24:749-60 Mr 1 '43

Jobs after the war; war contract termination. II Factory Management 101:82-8 O '43

Let's tackle the first post-war problem, now; termination of war contracts. R. A. Foulke. II Dun's R 51:7-14+ My '43

Magnitude of reconversion job. Trusts & Estates 77:322-4 O '43

Needed, a shock absorber for peace! what will happen when war production stops? P. Fitzpatrick. Credit & Fin Management 45:7-8 Mr '43

New type V loans to aid war contractors. H. D. Ralph. Burroughs Clearing House 28:20 O '43

No rubber stamp; Comptroller General in controversy over contract termination. Business Week p22+ O 30 '43

CONTRACTS, Government—Termination—Cont.
 Payoff scheme; procurement officials are re-drafting contract termination clause. *Business Week* p14 Ag 14 '43
 Post-war credit for small business. *W. Mitchell. Banking* 35:29-30 My '43
 Postwar cushion; new type of V loan to protect contractors' working capital. *Business Week* p103+ S 11 '43
 Postwar readjustment is job for government and business. *Oil Paint & Drug Rep* 144:3+ Ag 9 '43
 Postwar readjustments. *M. T. Copeland. Oil Paint & Drug Rep* 144:46+ O 11 '43
 Proposed manual for audit of claims on termination of fixed-price supply contracts. *J Account* 75:556-9 Je '43
 Regulation V's first birthday; post-war conversion. *H. Bratter. Banking* 35:42+ Ap '43
 Renegotiation, termination, and costs. *M. E. Peloubet. J Account* 76:45-53 Jl '43
 Revision of Regulation V is hailed as aid to war contractors after termination. *Credit & Fin Management* 45:4-7+ O '43
 Settlement of war contracts. *Nat City Bank* p29-32 Mr '43
 Settling war contracts fairly. *T. W. Grasse. Banking* 36:27+ N '43
 Termination goal. *Business Week* p17-18 O 16 '43
 Termination of contracts for the convenience of the government. *M. C. McIntosh. J Account* 75:295-300 Ap '43
 Termination of fixed-price war contracts; advance determination of cost methods. *D. Peacock. Credit & Fin Management* 45:4-7+ Ap '43; *Abstract. Management R* 32:188-90 My '43
 Termination of war contracts. *G. S. Olive. J Account* 76:35-44 Jl '43
 Truth about cutbacks. *D. M. Nelson. J Factory Management* 101:82-7 Jl '43; *Same cond. Management R* 32:322-4 S '43
 Uniform termination clause sought for war contracts. *Burroughs Clearing House* 27:19-21 Ag '43
 Urges Congress adopt practical view on war contract termination. *C. S. Dewey. Comm & Fin Chr* 158:1686+ O 28 '43
 Urges progressive retirement of industries from war effort. *W. D. Fuller. East Underw* 44:26 My 28 '43
 War contract cancellation policy formulated in advance of major need. *Comm & Fin Chr* 157:1488 Ap 22 '43
 War contract settlements aimed at tideover funds. *Oil Paint & Drug Rep* 144:3+ S 6 '43
 War contract termination. *E. A. Camman. N A C A Bul* 24:1301-15 Jl 15 '43
 War contract termination. *D. Peacock. J Account* 75:219-30 Mr '43
 War contract termination policy. *Chem Ind* 53:296+ S '43
 War contract termination—three viewpoints. *W. H. Garbade; R. M. Griffiths; V. Z. Brink. J Account* 76:113-32 Ag '43
 War contracts cancellation terms issued by War Dept. *Oil Paint & Drug Rep* 144:3+ Ag 23 '43
 War contracts, costs, and profits. *V. H. Stempf. J Account* 75:496-509 Je '43
 War department issues manual for settlement of terminated contracts. *Credit & Fin Management* 45:4-7, 30-1 S '43
 War department releases on contract termination. *G. N. Farrand. J Account* 76:309-17 O '43
 What earnings dislocations? from contract cancellations; from war production shifts. *W. Gates. Il Mag of Wall St* 72:227-9+ Je 12 '43
 When army cancels its contracts. *T. W. Jones. Textile World* 93:83 S '43
 When your war contracts are canceled. *H. Isham. Am Business* 13:16+ Ag '43
 Whip to crack? new unit may compose differences. *Business Week* p14-15 O 23 '43
 Will cancellation mean cash or chaos to you on "C" day? *J. H. Winchester and A. E. Bourquard. N A C A Bul* 25:99-108 O 1 '43

Canada

Wartime contracts; points of interest in Canadian practice. *E. A. Pinto. Elec R (Lond)* 132:755-6, 775-6 Je 4-11 '43

Great Britain

Labour conditions in British government contracts. *Int Labour R* 47:507-9 Ap '43
 Supply contracts; progress in costing. *Economist* 143:713 D 5 '42
 War contract prices. *Economist* 144:428-9 Ap 3 '43

CONTRACTS, Letting of

See also
 Contractors

CONTRACTS, Municipal

Avoid legal pitfalls; procedure of selling Diesel engines to municipalities must comply strictly with state laws and city ordinances. *L. T. Parker. Diesel Power* 21:212+ Mr '43

CONTRIBUTORY negligence. See Negligence, Contributory

CONTROL, Electric. See Electric control

CONTROL, Hydraulic. See Hydraulic control

CONTROL, Pneumatic. See Pneumatic control

CONTROL, Radio. See Radio control

CONTROL, Remote. See Electric control

CONTROL boards

Job-scheduling board saves printer many delays. *Il Inland Ptr* 111:32 Jl '43
 Machine load board keeps plant in balance. *E. J. Keenan. Il Factory Management* 101:82-3+ F '43
 Monthly work schedules dramatized by unique production board; Marlite wall panels and Marsttag molding. *Il Marine Eng* 48:190-1 My '43

CONTROL equipment

Application for temperature control and safety protection by Wheelco instruments co. *diag Metal Finishing* 41:154 Mr '43
 Automatic controls on periodic dryer speed production of hand-made refractory shapes; Malvern (Ark.) brick & tile co. *R. F. Grady, Jr. il Brick & Clay Rec* 102:41-3 Je '43
 Automatic controls speed up production. *F. Merish. Textile World* 93:76 O '43
 Boiler-house measurement and control for efficient fuel utilization. *G. H. Barker and A. L. Hancock. Inst E E J* 90 pt 2:217-27; *Discussion. 227-32 Ag '43*
 Consistency control and metering systems. *Pulp & Pa of Can* 43:374-5 D '42
 Control instruments in pulp and paper production. *C. D. DeMers. il Paper Ind* 25:275-8 Jl '43
 Forced-oscillation approach to the problem of the automatically-controlled continuous process. *P. R. Ewald. diags Instruments* 16:474-6, 506 Ag '43
 Instrumentation in kraft pulp mills. *A. J. Philip. flow diag il diags Pulp & Pa of Can* 44:367-77 Ap '43
 Instrumentation under wartime demands revolutionizes manufacturing procedures. *Il diag Rayon* 24:151-3 Mr '43
 Instruments in the pulp and paper industry. *J. N. Franklin. Pulp & Pa of Can* 43:306-10, 434-5+; 695-7, 817-20+, 950-2; 44:304-6, 499-500, 530, 653-5 Mr, My, Ag, O, D '42, Mr, Je, Ag '43
 Measurement and control in the natural gasoline plant. *C. G. Cortelyou. il diags Pet Eng (Ref annual)* 14:321-4, 326-8 Jl 1 '43
 Measurement and control of process variables; Chem & Met report. *J. C. Peters, T. R. Olive and others. il diags Chem & Met Eng* 50:97-144 My '43 [reprints 50c]
 Metered results; where precise control is imperative. *Business Week* p51-2 Ja 30 '43
 New equipment. *Il Iron Age* 152:62-4 S 23 '43
 New equipment; heat treating and process control. *Il Iron Age* 151:69-70 Mr 11 '43
 New processes require more powerful automatic-control equipment. *J. B. McMahon. diags Oil & Gas J* 41:90, 93-4, 96 Mr 25 '43
 On-the-job adjustments of air-operated recorder-controllers. *J. G. Ziegler. il Instruments* 16:394-7, 594-6+ Jl, O '43
 Plasticity control system can be adjusted to individual plant. *Il diag Brick & Clay Rec* 103:32-3 Jl '43
 Possibilities of automatic kiln control. *J. R. Green. il diags plan Rock Prod* 46:62-5, 68-9 Ag '43

CONTROL equipment—Continued

Process lags in automatic-control circuits. J. G. Ziegler and N. E. Nichols, bibliog diags. A S M E Trans 65:433-40; Discussion. 440-4 J1 '43

Why automatic controllers may behave like human beings; the modes of control. M. F. Behar, Instruments 15:459-61 N '42

See also

Electric controllers	Pressure regulators
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also subdivision	Control under special subjects, e.g.
Airplanes—Control	Steam turbines—Control
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Maintenance and repair

Maintenance of electronic controls. W. D. Cockrell, il Chem Ind 53:58-61 J1 '43; Same. Pet Refiner 22:119-22 Ag '43; Same. Gen Elec R 46:489-92 S '43; Same. Paper Ind 25:503-6 Ag '43; Same. Rock Prod 46:102, 104+ Ag '43; Same cond. Power 37:446-8+ J1 '43; Same cond. Aero Digest 43:211, 213+ S '43

Terminology

Automatic control terminology. Chem & Met Eng 50:125 My '43

CONTROLLED materials plan. See United States—War production board—Controlled materials plan

CONTROLLERS

Controller's part in postwar planning. T. C. McCobb, Am Business 13:38 Je '43

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Sales conventions

CONVERSION of factories. See Factories—Conversion

CONVERSION tables

Technical data section; a selection of miscellaneous tables. Chem Ind 51:559-71 pt 2 (Buyer's guidebook) O '42

CONVERTERS

Blackening-out of converter furnaces; abstract. W. Trinks, diag Mech Handling 29:230 D '42

Continuous production of manganese-steel castings from the Tropenas converter. L. W. Bolton and J. Hill, diags Engineering 156:158-60, 177-8 Ag 20-27 '43

Hints on converter practice. F. G. Seifing, Foundry 71:87+ F '43

Production of uniform steel for a light castings foundry. C. H. Kain and L. W. Sanders, Engineer 174:39-40 J1 10 '42; Same. Foundry 71:144-7 F '43; Same cond. Iron Age 150:101-2+ O 1 '42

See also

Bessemer process

CONVERTERS, Electric. See Electric converters, Synchronous

CONVERTIBLE bonds. See Bonds, Convertible

CONVERTIBLE stocks. See Stocks, Preferred—Convertible stocks

CONVEYANCING

Modernization of real property law; suggestions for improving procedure in transfers of realty. R. G. Patton, Trusts & Estates 77:79-83 J1 '43

CONVEYING machinery

A.C. Spark plug division employs conveyor lines to produce British T-1 bomb-sight. S. H. Brams, Iron Age 152:76 N 4 '43

Automatic timing on furnace loads; General Electric type TSA-10 timer; use to measure elapsed distance in travel of conveyor. Blast F & Steel Fl 31:sup49 Ap '43

Automatic units for heat treating high explosive shells. D. H. Gardner and J. Walther, il diags Metal Prog 42:861-6 N '42

Cage chutes for drawn parts. R. I. Miner, diags Am Mach 87:100-2 Je 24 '43

Carburizing compounds reconditioned automatically. S. H. Brams, il diag Iron Age 150:67-9 N 26 '42

Castings poured on mechanized conveyor at Chevrolet magnesium foundry. J. Geschelin, il Automotive & Aviation Ind 89:36-8+ O 1 '43

Conveying and elevating; Redler en-masse system. il diag Mech Handling 30:379-82 S '43

Conveyor system installed in New York express terminal, il plan Ry Age 115:602-5 O 16 '43

Conveyor systems for production machines; diagrams. Product Eng 14:298-9, 436-7 My, J1 '43

Conveyorized assembly line and vertical jigs speed output of airplane wings at Murray corp.'s plant. il Steel 112:70, 72 F 15 '43

Conveyors aid cartridge manufacture; Lake City ordnance plant. il diags Am Mach 87: 113-20 Je 10 '43

Conveyors save space in aircraft plant; finishing operations. F. M. Bates, il diags Metal Finishing 41:58-9 Ja '43

Conveyors save this plant's manpower for production; Wright aeronautical corp. il Factory Management 101:84-8 F '43

Curtiss-Wright's Indiana propeller plant. il Aero Digest 42:181, 188, 190+ Ap '43

Curtiss-Wright's newest propeller plant. P. B. Terhorst, il Mach 49:152-63 Ag '43

Electric conveyances in air-foam rubber production. C. B. Risher and J. Grotzinger, il plan Elec Eng 62:250-4 Je '43

Flight level; assembly line conveyor speeds bomber production. il diags Steel 112:125-6 My 17 '43

Gravity-bucket conveyors or pivoted-bucket carriers. W. H. Atherton, il diags Mech Handling 30:2-10, 61-71, 110-16, 162-5 Ja-Apr '43

Handling device for thin steel sheets. W. M. Halliday, diags Mech Handling 30:393-7 S '43

How Kaiser builds Liberty ships; line assembly of deck houses at the Richmond shipyards, il diags plans Am Mach 86:1299-1306 N 12 '42

Insures flow and no traffic jam; overhead conveyor line. il Factory Management 101: 104 J1 '43

Mass production methods used at Bell plant to build Alracobras. J. Geschelin, il Automotive & Aviation Ind 89:22-6+ S 15 '43

Mechanical handling of annealing and pickling operations. il Mech Handling 30:343-4 Ag '43

Mechanized assembly line to double output of P-38 fighters. R. R. Kay, il Automotive & Aviation Ind 89:32-3+ J1 15 '43

Miles of conveyors in propeller plant. il Steel 112:81 Ap 19 '43

Minor faults cause failure. E. Ingham, diags Mech Handling 30:205-7 My '43

Modern chip handling. A. M. Perrin, plan Metal Prog 43:566-7 Ap '43

New Curtiss-Wright propeller conveyor-assembly line. il Aviation 42:185 My '43

Overhead rotary conveyors in Douglas paint booths. il Automotive & Aviation Ind 88:27 F 1 '43

Package transfer mechanism. W. M. Halliday, diags Mech Handling 30:107-9 Mr '43

Packard builds aircraft engines on a conveyor line basis. F. M. Reck, il Aero Digest 42:164, 166-8+ F '43

Pours triplex steel on conveyor; Rouge plant of Ford motor co. A. H. Allen, il Foundry 71:94-5+ S '43

Production sheet cuts; conveyor for handling sheet metal parts; Vultee aircraft inc.; illustrations. Iron Age 151:54-5 Ag 8 '43.

Roll out the warplanes by means of conveyorized production lines; Curtiss Wright corp. A. D. Palmer, jr. il Steel 112:92-4 Mr 22; 94-6 Mr 29 '43

Roller conveyors speed block production; Hollystone co. R. S. Torgerson, il Rock Prod 46:112-13+ Ja '43

Steel landing mats; conveyors help turn them out by the square mile. G. R. Reiss, il Steel 113:112-14+ Ag 9 '43

Timed operations pace conveyors in Vengeance bomber assembly. R. McCulloch, il diags Am Mach 87:97-108 Ap 1 '43

Unique outdoor conveyor system transports cotton bales from warehouse to the opener room at Facolet mfg. co. il Textile World 93:80-1 My '43

V-bucket elevator-conveyor. W. H. Atherton, il diags Mech Handling 29:204-11 N '42

Widespread use of conveyorized assembly systems. il Aero Digest 43:182-3 Ag '43

CONVEYING machinery—Continued

Yarn conveyors at May Hosiery, S. Schwartz, il diags Textile World 93:2-3 O '43
You can meet WPB regulations when buying material-handling equipment. W. G. Hudson, il Power 87:658-60 O '43

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Conveying machinery	Monorail conveyors
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Belt conveyors

Army can't wait; Henry J. Kaiser co. sets up concrete batching plant with long conveyors. A. Lindley, il Rock Prod 46:56-7+ Mr '43

Belt conveying at the Morenci ore reduction plant. J. H. Johansen, il diags plan Min & Met 23:286-9 My '42; Same. Mech Handling 30:156-61 Ap '43

Belt delivers fill for Youghiogheny earth dam, il diags Eng N 129:777-80 D 3 '42

Conveyor aids parts inspection; N. W. Woodworth co.; illustrations with text. Iron Age 152:66 Ag '43

Ford masks engine parts on a conveyor; make ready of aluminum and magnesium castings for spray painting, il Am Mach 87:75-7 S 30 '43

Help yourself by mechanical handling; Lyons & co. Strand Corner House, il Mech Handling 30:311-12 Jl '43

How an eight-mile conveyor belt system reduced delays in coal haulage. E. J. Jones, Min Cong J 29:33 Ap '43

Mavor and Coulson driving gear from belt conveyors, il diags Engineering 155:87-8, 90 Ja 29 '43

More wings for Airacobras; constant motion production lines aid unskilled women workers; Bell aircraft corp. C. F. Lozon, il diags Aviation 42:126-40 F '43

100 percent conveyor belt plant; Birmingham slag company ready mix concrete plant as part of slag plant, B. Nordberg, il Rock Prod 45:46-8+ D '42

Over mile of belt, quarry to mill; National cement co. W. B. Lenhart, il diags Rock Prod 46:58-62 S '43

Phosphate washer reject successfully concentrated on moving conveyor belts; flotation equipment used in Coronet company's re-treatment plant. A. H. Hubbell, flow-sheet il diags Eng & Min J 143:51-4 D '42

Practical operation conveyor belts. M. C. Dow and H. A. Harnden, il diags Rock Prod 45:52+ F; 56-7 Ap; 42-3 Jl; 47 S; 53-5, 80-1 N '42; 46:58+ F; 66+ Je; 49+ D '43

Span river with belt conveyors for Fontana Dam aggregates; rod mills reduce crushed stone to fine aggregate. W. B. Lenhart, flow sheet il Rock Prod 46:49-57+ S '43

2400 tons of sinter per day; Youngstown sheet & tube co. il Iron Age 150:32-5 D 31 '42

Underground belt conveyors. C. W. Gilmer, il Min Cong J 29:51-3 Jl '43

Chain conveyors

Automatic plating; application of materials handling, il Elec R (Lond) 133:3-8 Jl 2 '43

Chain conveyor removes ashes, il Elec W 120:112 Jl 10 '43

Control

Bunker conveyor control relayed for flexibility; American Gas & Electric station. A. H. Beiler, il diags Elec W 120:254-6 Jl 24 '43

Rotating pipe conveyors

Rotating pipe makes good calcine conveyor; solves burned rock disposal problem at mercury mine. W. Bradley, il Eng & Min J 144:74-5 Ap '43

Screw conveyors

Installs screw conveyor to handle culet; Armstrong cork co. il Cer Ind 41:56 O '43

CONVEYING machinery, Portable

Cookson's adjustable boom conveyor, il diags Mech Handling 30:197-9 My '43

Mitro Portabelt mobile conveyor, il diags Mech Handling 30:72-5 F '43

Robson mobile conveyor, il Mech Handling 30:131 Mr '43

CONVEYOR belting. See Belting, Conveyor

CONVICT labor

Assembly work in prisons; Borstal girls produce radio power units, il Electrician 131:371 O 15 '43

See also

Prison industries

CONVOY

Guardians of the convoys; blimps in lighter-than-air branch of naval coastal patrol service. E. H. Forbes, il Aviation 41:197-9 N '42

CONVULSANTS

Derivatives of pyridine acids; N-(2-acylaminoethyl)-nicotinamides. E. M. Hodnett and V. E. Stewart, bibliog Am Chem Soc J 65:254-5 F '43

See also

Anticonvulsants

Antispasmodics

COOKBOOKS

Lady, do you need a cookbook? G. Starr, bibliog Consumers' Research Bul 12:17-20 Ag '43

See also

Advertisements—

Cookbooks and

recipes

COOKERY

How to cook food for quick freezing; flavor and vitamin retention in pork and beans. Food Ind 15:69+ O '43

See also

Bakers and bakeries	Desserts, Frozen
Baking	Electric cooking
Bread	Food mixes
Cake	Gas cooking
Coffee	Shortening
Cookbooks	Stoves

Fish

Nation's food; fish as food; the cooking of fish. L. C. Baker, bibliog Chem & Ind 62:356-9 S 18 '43

Meat

Cooking methods acquire new importance in times of meat scarcity. B. W. Gardner, Jr. Consumers' Research Bul 12:24 O '43

Nation's food; meat as food; the effect on meat of cooking and processing. L. C. Baker, bibliog Chem & Ind 61:468-60 N 7 '42

Proper meat cookery. B. W. Gardner, Jr. il Consumers' Research Bul 11:13-17 Ap '43

Vegetables

Vitamin-C content of raw and cooked vegetables. L. H. Lampitt, L. C. Baker and T. L. Parkinson, bibliog Soc Chem Ind J 62:61-7 My '43

COOKIES

Cookies for rookies catches on; Burnett sponsors nationally, il Sales Management 52:31-2 Ja 1 '43

Using sugar to best advantage under rationing. J. Micka, il Food Ind 15:69-71+ Je; 74-5 Jl '43

COOKING utensils. See Kitchen utensils

COOLING

Condensation of water vapour from air. M. Hirsch, diags Inst Chem Eng Trans 19:69-78; Discussion, 78-81 '41

Douglas aircraft company's Tulsa plant is year-round air conditioned. R. F. Hurt, il diags Heat & Ven 40:54-61 S '43

Evaporative-cooling primer for textile management. M. H. Irons, Mech Eng 65:115-18 F '43; Same. Rayon 24:261-5 My '43; Abstract. Textile World 93:71 Ja '43

Facts about gas summer air conditioning. F. E. Vandavear and W. B. Kirk, il diags Am Gas Assn Mo 25:389-93+ O '43

Gas summer air conditioning; with cost data. H. P. Morehouse, diags Am Gas Assn Mo 25:189-95 My '43

How moisture that destroys some mine roofs is removed by sprinkling with water. Coal Age 48:70 Jl '43

COOLING—Continued

Kitchen air conditioning features Kansas City drive-in restaurant. *il* Heat & Ven 40:60-1 Ap '43

Moisture removal in room coolers. A. H. Eberhard. *il* diag Heat & Ven 39:26-7 D '42

Optimum surface distribution in panel heating and cooling systems; second progress report of research sponsored by A.S.H.V.E. in cooperation with the University of California. B. F. Raber and F. W. Hutchinson. *il* diags Heating-Piping 15:602-14 N '43

Radiant heating and cooling for a new plant cafeteria. T. N. Adlam. *il* diags plans Heating-Piping 15:277-80 Je '43

Servel announces operating data for cooling. map Gas Age 92:69 O 21 '43

Spray canopy for roof cooling. A. B. Tappen. diags Power El Eng 47:77-8 F '43; Same. *il* Refrig Eng 45:163-4, 224 Mr '43

Study of actual vs. predicted cooling load on an air conditioning system. J. N. Livermore. *il* diags Heating-Piping 15:197-204 Ap '43; Discussion. 15:377-8 Jl '43

Water-spray cooling system for flat roof buildings. A. B. Tappen. diags Eng N 130: 816-17 Je 3 '43

Water spray versus sun heat; roof spray systems for supplementing air conditioning. Dom Eng 160:56-+ D '42

See also

Air conditioning	Cooling of water
Air diffusers	Electric transformers
Airplane engines—	—Cooling
Cooling	Milk cooling
Car cooling	Refrigeration and
Cold storage	refrigerating ma-
Condensers	chinery
Cooling equipment	

Tables, calculations, etc.

Cooling refinery air; determination of amount of mechanical refrigeration or ice required. W. F. Schaphorst. chart Pet Eng 14:78 Ag '43

Summer comfort factors as influenced by the thermal properties of building materials. C. O. Mackey and L. T. Wright, Jr. Heating-Piping 14:750-7 D '42; Discussion. 15:150-2 Mr '43

Year-round sun angles for the U.S.; reference data. map Heat & Ven 39:58a-58b D '42

COOLING, Industrial

Controlled air supply for supercharger, carburetor and engine testing. C. S. Leopold. flow diags Refrig Eng 46:85-7+ Ag '43

Cooling barrel plating units. R. B. Eyre. plan Metal Finishing 41:493-4 Ag '43

Cooling increases bolt strength in steam turbines; patent assigned to Westinghouse electric & manufacturing co. diag Machine Design 15:174+ S '43

Cooling sulfur dioxide gas; SO₂ waste heat boiler. diags Pulp & Pa of Can 44:320 Mr '43

Countercurrent multitubular heat exchangers; comparison of design methods; applied to cooling aniline and to cooling and heating oil. M. G. Larian. bibliog *il* Ind & Eng Chem 35:840-4 Ag '43

Egg cooling with Votator reduces bacterial growth. *il* Chem & Eng N 21:918 Je 10 '43

Electro-brazing with water-cooled tongs. G. E. Prussien. *il* diag Iron Age 151:67 Mr 4 '43

Establishment of cooling curves of welds by means of electrical analogy. V. Paschkis. bibliog diags Welding J 22:462-83 O '43

Improved aftercoolers for compressed air. diag Heating-Piping 14:721 D '42

Low temperature test cabinet for industrial use. R. E. Borden. *il* Refrig Eng 44:372 D '42

Low temperature cabinets. R. H. Swart. *il* diag Refrig Eng 46:17-20, 39, 52-3+ Jl '43

Low temperature refrigeration requirements in war production. C. L. Olin. *il* diags Refrig Eng 45:83-7, 172-5 F-Mr '43

Measurement of cooling rates associated with arc welding and their application to the selection of optimum welding conditions. W. F. Hess and others. *il* diags tables Welding J 22:sup377-422 S '43

1942 report of technical committee no. 3; industrial refrigerating machinery. Refrig Eng 44:390 D '42

Piping and cooling quenching fluids. F. F. Stevenson and N. U. Stryker. *il* Heating-Piping 15:16-19 Ja '43

Piping connections for cooling stamping blocks by refrigeration. F. F. Stevenson. *il* Heating-Piping 15:91-2 F '43

Proper cooling of kilns helps control salt glazed tile color; Metropolitan brick co. *il* Brick & Clay Rec 102:18-19 Je '43

Refrigeration used in making airframe parts; cold treatment of aluminum; Hudson motor car company. Refrig Eng 45:342 My '43

Resistance welding underwater; stream of water cools work. J. A. Merryman. *il* Steel 112:56+ Ja 25 '43

Save 12 hours in cooling manifold; Ohio River station, Evansville. Elec W 120:1027-8 S 18 '43

\$6,000 saved by reducing tank cooling wind. *il* diag Cer Ind 41:51-3 Ag '43

Wind-tunnel cooling. A. N. Tifford. bibliog J Aeronautical Sci 10:98-100 Mr '43

See also

Cold storage	Metals, Cold treat-
Cooling water	ment of
Lubrication and	Steel, Quenching of
lubricants (cutting	Testing laboratories
and grinding)	—Cold rooms

COOLING equipment

Automatic fan speed control for unit coolers. S. C. Segal. diags Refrig Eng 46:177-9 S '43

Handling small water quantities with the siphon or ejector pump; removal of condensate from small cooling coils. F. F. Stevenson. *il* diag Heating-Piping 15:138-9 Mr '43; Discussion. 15:173 Ap '43

Importance of air conditioning to war effort; conversion to war work of existing refrigerating machines. Heating-Piping 15:400 Ag '43

Refrigeration notebook; know-how of choosing summer air conditioners. T. Mitchell. plan Power 87:702, 761 O-N '43

Removal of refrigeration equipment from existing comfort conditioning systems for use in war production. C. S. Leopold. Heating-Piping 15:78-9 F '43

Salvaging existing refrigeration for emergency work. W. L. Fleisher. Refrig Eng 45: 235-8+ Ap '43

Steam jet vacuum cooling units. L. S. Stinson. *il* diags Refrig Eng 46:316-20 N '43

See also

Cooling towers

Advertising

When you can't sell, help them service. B. F. Sturtevant policy. E. W. Andros. *il* Ind Marketing 28:62+ Mr '43

Testing

Cooling, dehumidifying; measuring capacities of air-conditioning equipment by the electric-calorimeter method. H. A. Whitesel. diags Gen Elec R 45:653-6 N '42

Revisions in A.S.R.E. circular no. 25, Tentative A.S.R.E. standard methods of rating and testing forced-circulation air coolers for commercial and industrial refrigeration. Refrig Eng 46:349 N '43

COOLING of milk. See Milk cooling

COOLING of water

Report of task committee of WPB; water cooler industry advisory committee. Refrig Eng 45:256+ Ap '43

See also

Cooling towers

COOLING ponds

Certain aspects of cooling tower design and operation. R. C. Kelly. Pet Eng 14:72, 74+ F '43

COOLING towers

Certain aspects of cooling tower design and operation. R. C. Kelly. Pet Eng 14:72, 74+ F '43, 92, 95+ Mr '43

Cooling tower ups generator capacity. Elec W 120:856+ S 4 '43

Modern cooling tower applications. W. Cramer. *il* diags Refrig Eng 46:305-9+ N '43

Old power plant carries war load; Washington terminal company. *il* Ry Age 115:5-7 Jl 3 '43

Performance and selection of mechanical-draft cooling towers. J. Lichtenstein. bibliog diag A S M E Trans 65:779-87 O '43

COOLING towers—Continued

Piping and cooling quenching fluids. F. F. Stevenson and N. U. Stryker. *Il Heating-Piping* 15:16-19 Ja '43
 Spray nozzle performance in a cooling tower. L. M. K. Boelter and S. Hori. *bibliog il diags Heating-Piping* 15:259-66 My '43

COOLING water

Automatic flow switch for water-cooled apparatus. R. W. Gouley. *diag Science* 98:330 O 8 '43
 Chlorinated condensing water averts cleaning, saves fuel; Millers Ford station. R. D. Gillespie and L. F. Sudrabin. *il Elec W* 119:2112-14 Je 26 '43
 Chlorination of cooling water. *il Chem Age (Lond)* 48:295-6 Mr 13 '43
 Correct stabilizing treatment plus tailored control eliminate scale in cooling systems. W. H. Thompson and J. W. Ryznar. *bibliog il Oil & Gas J* 42:43, 46, 49-51 S 16 '43
 Corrosion of water pipes in a steel mill. C. L. Clark and W. J. Nungesser. *bibliog il Am Soc for Metals Trans* 31:304-14 Je '43;
 Same cond. *Oil & Gas J* 42:65-6+ O 7 '43;
 Discussion. *Am Soc for Metals Trans* 31:314-20 Je '43
 Getting rid of scale in engine water jackets. H. Stevens. *il diags Bus Transportation* 22:44-6 Je '43
 Handling emergency shutdowns at blast furnace plants due to failure of cooling water supply. W. H. Burnett. *Steel* 112:108+ Mr 1 '43
 Heat exchange and engine cooling systems; cooling water treatment. *diags Diesel Power* 21:914-18+ O '43
 How much condensing water is needed here? how to determine amount of water to condense certain amount of steam. *Power Pl Eng* 47:104+ Ag '43
 Practical methods for improving plant cooling water systems. *il Nat Pet N* 35 pt 2: R148-50 Ap 7 '43
 Too low a head pressure can cost money. A. B. Duryee. *Power* 87:755 N '43
 Treatment of boiler water; problems encountered in cooling-water systems. W. A. Tanzola. *Oil & Gas J* 41:45-7+ Ap 22 '43
 Water-cooled tube supports for oil tubes in heaters. *diags Nat Pet N* 35 pt 2:R165 Ap 7 '43
 Water for grain alcohol distilleries. C. S. Boruff, B. Smith and M. G. Walker. *flow diag ind & Eng Chem* 35:1211-13 N '43
 Water sprayed direct expansion coils. W. Goodman. *diag chart Heating-Piping* 15: 165-8, 243-8, 295-9, 350-2 Ap-Jl '43

COONEY, John R.

President of Loyalty group. C. Axman. *por East Underw* 44:17-18 Mr 5 '43

COOPERATION

Co-operative movement and post-war reconstruction. J. McFadyen. *Int Labour R* 47:417-25 Ap '43
 Co-ops go ahead. *Business Week* p40 Ap 10 '43

See also

Advertising, Co-operative	Farmers' cooperative oil associations
Benefit societies	Housing, Cooperative
Building and loan associations	Medical service—
Cooperative associations	Group plan
Electric service,	Petroleum refineries, Cooperative
Rural—Cooperative lines	Profit sharing
	Purchasing, Cooperative
	Trade unions

China

Co-operative movement in China. *Economist* 143:605-6 N 14 '42
 Co-ops grow up. *il Business Week* p16 F 6 '43

France

Work of reconstruction cooperatives in France after first World war. V. J. Teresh-tenko. *Monthly Labor R* 57:278-83 Ag '43

Germany

Cooperative movement in Germany. F. E. Parker. *Monthly Labor R* 56:1131-47 Je '43

Great Britain

Co-operative reconstruction. *Economist* 144: 799+ Je 19 '43

India

Place of village co-operative industries in the Indian economy. *Int Labour R* 47:102-3 Ja '43

North Dakota

Operations of cooperatives in North Dakota, 1941-42. *Monthly Labor R* 56:1147-8 Je '43

South America

Cooperative movements in South America. J. D. Lecron. *il For Comm W* 11:14-15, 37 My 22 '43

United States

Activities of consumers' cooperatives in 1942. *Monthly Labor R* 57:756-61 O '43
 Consumers' cooperation in the United States in 1941. *Monthly Labor R* 55:980-99 N '42
 Co-op alcohol; leases on two new grain plants. *Business Week* p32+ Ap 17 '43
 Co-op movement. *Adv & Sell* 36:21 Mr '43
 Cooperatives among students in the United States, 1941. F. E. Parker. *Monthly Labor R* 56:702-20 Ap '43
 Cooperatives and post-war problems. *Monthly Labor R* 56:86-91 Ja '43
 Developments in consumers' cooperation in 1942. *Monthly Labor R* 56:499-515 Mr '43
 2,500,000 co-op members launch centennial expansion campaign. L. M. Hughes. *il Sales Management* 52:18-20 O 15 '43

See also

Consumer clearing house

COOPERATION, International. See International cooperation

COOPERATIVE advertising. See Advertising, Cooperative; Radio advertising, Cooperative

COOPERATIVE associations

Co-op in meat; Cincinnati dealers getting together to slaughter their own. *Business Week* p100-1 Jl 31 '43
 Girding for co-ops; new lobby organized in Chicago. *Business Week* p98-9 S 25 '43

See also

Cooperative league of the U.S.A.	Farmers' cooperative oil associations
Electric service,	National rural electric cooperative association
Rural—Cooperative lines	

Advertising

Co-op radio program to show post-war problems. *Ptr Ink* 202:47 F 12 '43
 Co-ops win air. *il Business Week* p85 F 13 '43

2,500,000 co-op members launch centennial expansion campaign. L. M. Hughes. *il Sales Management* 52:18-20 O 15 '43

Statistics

Activities of consumers' cooperatives in 1942. *Monthly Labor R* 57:756-61 O '43
 Consumers' cooperation in the United States in 1941. *Monthly Labor R* 55:980-99 N '42
 Cooperatives among students in the United States, 1941. F. E. Parker. *Monthly Labor R* 56:702-20 Ap '43
 Co-ops: up 25%. *Business Week* p72+ Ap 17 '43

Operations of cooperatives in North Dakota, 1941-42. *Monthly Labor R* 56:1147-8 Je '43

COOPERATIVE associations, Wholesale

Co-operative movement; Co-operative wholesale society, year ended Jan. 9th. *Economist* 144:508-9 Ap 17 '43

Co-operative position; Co-operative wholesale society. *Economist* 144:24 Ja 2 '43

COOPERATIVE housing. See Housing, Cooperative**COOPERATIVE league of the U.S.A.**

Co-ops win air. *il Business Week* p85 F 13 '43

2,500,000 co-op members launch centennial expansion campaign. L. M. Hughes. *il Sales Management* 52:18-20 O 15 '43

COOPERATIVE radio advertising. See Radio advertising, Cooperative

COOPERATIVE stores. See Cooperation**COOPERS and coopeage**

Some old tools in Hereford museum. F. C. Morgan. *Engineer* 174:477-8 D 11 '42

COORDINATION (chemistry)

- Coordination and valence. A. A. Blanchard. bibliog J Chem Educ 20:454-60 S '43
 Coordination of silver ion with unsaturated compounds; *cis*- and *trans*-2-pentene. H. J. Lucas, R. S. Moore and D. Pressman. bibliog Am Chem Soc J 65:227-9 F '43
 Coordination of silver ion with unsaturated compounds; mixtures of trimethylethylene and cyclohexene. H. J. Lucas, F. W. Billmeyer, Jr. and D. Pressman. bibliog Am Chem Soc J 65:230-1 F '43

COORDINATION number

- Stereochemistry of coordination number eight. L. E. Marchi, W. C. Fernelius and J. P. McReynolds. Am Chem Soc J 65:329-33 Mr '43

COPAIBA

- Copaiba and copaiba oil. E. Guenther. bibliog il Soap & San Chem 19:25-7, 69-70 Ag '43

COPAIBA oil

- Copaiba and copaiba oil. E. Guenther. bibliog il Soap & San Chem 19:25-7, 69-70 Ag '43

COPALS

- Congo copal boosted by resin advisers. Oil Paint & Drug Rep 143:4 Ap 12 '43
 Copal piles up. Business Week p30 Ap 24 '43

COPERNICUS, Nicolaus, 1473-1543

- Copernican quadricentennial. Science 97:504 Je 4 '43
 Copernican quadricentennial celebration. Science 97:417-18 Mr 7 '43
 Copernicus celebration at the Polish institute of arts and sciences in America. Science 97:549 Je 18 '43
 Four hundredth anniversary of the death of Copernicus. Science 97:460 My 21 '43
 Nicolaus Copernicus. Engineering 155:413-14 My 21 '43
 Nicholas Copernicus, father of modern astronomy, 1543-1943. S. P. Mizwa. Science 97:192-4 F 26 '43

COPOLYMERIZATION. See Polymerization**COPPER**

- Catalysis in the oxidation of lubricating oil. R. G. Larsen and F. A. Armfield. bibliog il Ind & Eng Chem 35:581-8 My '43
 Catalytic activity of intermetallic compounds in the vapor-phase reduction of nitrobenzene. B. Berk and O. W. Brown. bibliog diag J Phys Chem 46:964-8 N '42
 Catalytic reduction by formic acid under pressure; a comparison of copper and nickel as catalysts. R. R. Davies and H. H. Hodgson. Chem Soc J p281-2 Je '43
 Complex ions; the magnetic moments of some complex ions of nickel and copper. C. D. Russell, G. R. Cooper and W. C. Vosburgh. bibliog Am Chem Soc J 65:1301-6 Jl '43
 Copper and brass, 1942. R. A. Wilkins. Metals & Alloys 17:54-5 Ja '43
 Copper and its alloys in wrought form; tabulations. M. G. Steele. Metal Prog 44:720 O '43
 Copper snatch; requisitioning under way against holders of 66,000,000 lb. Business Week p30+ N 28 '42
 Coppers containing selenium, tellurium, and bismuth. G. L. Bailey and A. P. C. Hallows. Engineering 155:276 Ap 2 '43
 Effect of copper on hot-dip zinc coatings. W. G. Imhoff. bibliog Metal Finishing 40:636-40+ D '42
 Heavy metal compounds as toxic agents. G. H. Young and W. K. Schneider. il Ind & Eng Chem 35:436-8 Ap '43
 Investigations of ferromagnetic impurities. F. W. Constant, R. E. Faires and H. E. Lander. bibliog Phys R 63:441-5 Je 1 '43
 Kinetics of the reaction between ascorbic acid and oxygen in the presence of copper ion. E. Silverblatt, A. L. Robinson and C. G. King. bibliog Am Chem Soc J 65:137-41 F '43
 Kinetics of the reaction between copper and iodine in aqueous (potassium iodide) solution. L. L. Bircumshaw and M. H. Everdell. pl diag Chem Soc J p598-605 O '42
 Reaction of gases on the surface of a single crystal of copper. A. T. Gwathmey and A. F. Benton. bibliog il J Phys Chem 46:969-80 N '42

- Studies on the structure of thin metallic films by means of the electron microscope. R. G. Picard and O. S. Duffendack. il J Ap Phys 14:291-305 Je '43
 Time lag of impulse breakdown at high pressures. J. D. Cobine and E. C. Easton. bibliog J Ap Phys 14:321-31 Jl '43
 Transition state theory of the formation of thin oxide films on metals. E. A. Gulbransen. diags Electrochem Soc Trans 33 (preprint 4):53-65 Ap '43

See also

- | | |
|---------------------------|-------------------------|
| Brass | Copper mines and mining |
| Bronze | Copper ores |
| Copper alloys | Roofing, Copper |
| Copper industry and trade | Tubes, Copper |
| Copper metallurgy | Wire, Copper |

Analysis

- Color reactions of 1,10-phenanthroline derivatives. M. L. Moss, M. G. Mellon and G. F. Smith. Ind & Eng Chem Anal ed 14:931-3 D 15 '42
 Colorimetric determination of copper with 1,10-phenanthroline. M. L. Moss and M. G. Mellon. bibliog Ind & Eng Chem Anal ed 15:116-18 F 15 '43
 Concentration methods in spectrographic analysis; recovery of cobalt, nickel, molybdenum, copper, and zinc from plant materials and soil extracts by 8-hydroxyquinoline. R. O. Scott and R. L. Mitchell. bibliog Soc Chem Ind J 62:4-8 Ja '43
 Copper and sulfide in developers; fogging action; polarographic analysis. R. M. Evans, W. T. Hanson and P. K. Glasoe. bibliog Soc Motion Picture Eng J 40:88-96 F '43
 Determination of copper with 8-quinolinecarboxylic acid. J. R. Gilbreath and H. M. Haendler. bibliog Ind & Eng Chem Anal ed 14:866-7 N 15 '42
 Determination of metallic copper and cuprous oxide in commercial cuprous oxide pigments. I. Baker and R. S. Gibbs. bibliog Ind & Eng Chem Anal ed 15:505-8 Ag 15 '43
 Dithizone method for the rapid determination of copper. G. H. Bendix and D. Grabenstetter. bibliog Ind & Eng Chem Anal ed 15:649-52 O 15 '43
 Polarographic analysis of copper and zinc in brass plate; a rapid control method. W. P. Tyler and W. E. Brown. Ind & Eng Chem Anal ed 15:520-3 Ag 15 '43
 Stability of the cupric-ammonia color system. J. P. Mehlig. Ind & Eng Chem Anal ed 14:903 N 15 '42
 Sulphur and phosphorus in copper; two methods of determination. D. J. Bullivant. Chem Age (Lond) 48:181-2 F 6 '43
 Systematic polarographic metal analysis; characteristics of arsenic, antimony, bismuth, tin, lead, cadmium, zinc, and copper, in various supporting electrolytes. J. J. Lingane. bibliog Ind & Eng Chem Anal ed 15:583-90 S 15 '43

Conservation

- Conductor redesign saves copper. A. A. Osipovich. diags Elec Eng 62:410-11 S '43
 Copper records. Business Week p52+ F 13 '43
 Flush valve made of plastics to save copper. il diag Product Eng 14:270-1 My '43
 Higher lighting voltages save copper; ten ways of making power available to light industrial plant with fluorescent lamps. F. C. Winkler and H. G. Barnett. diags Elec W 120:816-18 S 4 '43
 Make copper work harder; select motors for maximum load, wiring distribution for maximum use, make controllers take more. L. F. Adams. Elec West 89:62-4 N '42
 Plan your wartime power distribution system to conserve copper; electric haulage. L. W. Birch. il Min Cong J 29:33-6 Ag '43
 Planned motor drives save steel and copper. R. H. Smith. il diags Steel 113:108-9+ Jl 19 '43
 Save copper in war plant power distribution systems. D. L. Beeman and W. J. McLachlan. il diags Power Pl Eng 46:64-7 D '42
 Saving copper in electric units; abstract. D. F. Miner. Metals & Alloys 16:1154+ D '42

COPPER—Conservation—Continued

Steel in switchgear saves 75 to 80 per cent of copper formerly required. L. F. Dytrt. *il Steel* 112:56-7+ *Ja* 11 '43

Metallography

Directional characteristics of single-texture-structure copper strip; abstract. M. Cook and T. L. Richards. *Engineering* 156:294 O 8 '43

Effects of various solute elements on the hardness and rolling textures of copper. R. M. Brick, D. L. Martin and R. P. Angier. *bibliog diags Am Soc for Metals Trans* 31:675-95; Discussion. 695-8 S '43

Precipitation reaction in aged cold-rolled 1 per cent cadmium-copper; its effects on hardness, conductivity, and tensile properties. R. H. Harrington and L. E. Cole. *bibliog il Am Soc for Metals Trans* 31:651-69; Discussion. 669-74 S '43

Rupture tests at 200 degrees cent. on some copper alloys. E. R. Parker and C. Ferguson. *il Am Soc for Metals Trans* 31:699-714; Discussion. 714-15 S '43

Prices

Electrolytic copper, Connecticut valley, monthly, 1929-1942; tabulation. *Iron Age* 151:210 *Ja* 7 '43

Idle copper scrap bonus dropped. *Comm & Fin Chr* 157:2297 *Je* 17 '43

Price, wholesale, electrolytic (New York) 1933-1941. *Survey of Cur Business* 1942 Sup p142 [supplemented in monthly numbers]

Wartime price control of copper, lead, zinc; premium price plan. J. D. Sumner. *Min & Met* 24:9-11 *Ja* '43

Specifications

Commercial coppers; a digest of common specifications; tabulation. R. S. Burpo, jr, comp. *Metals & Alloys* 17:989 *My* '43

Welding

Modern welding methods for copper and copper alloys. J. J. Vreeland. *il Welding J* 22:784-92 O '43

Welding copper plant. *Chem Age (Lond)* 47:406-7 *N* 7 '42

COPPER acetates

New reagents for sodium in presence of lithium. E. R. Caley and L. B. Rogers. *bibliog Ind & Eng Chem Anal ed* 15:32-6 *Ja* 15 '43

COPPER alloys

Bearings and bearing corrosion. L. Raymond. *bibliog il diag S A E J* 50:533-7 D '42; Same, without bibliog. *Automobile Eng* 33:369-72 S '43

Beryllium-copper. E. M. Foster. *il Electrician* 131:56-8 *JI* 16 '43

Beryllium-copper alloys. L. David. *Chem Age (Lond)* 47:502-3 D 5 '42

Beryllium; facts about the metal. *il Metal Prog* 43:904-7+ *Je* '43

Beryllium, its sources and uses. *Min & Met* 24:232-4 *My* '43; Abstracts. *Steel* 112:111-12+ *My* 10 '43; *Iron Age* 151:46, 118 *Ap* 29 '43

Circuit-breaker castings; Mallory 3, a heat-treated chromium-copper alloy. L. B. Hunt. *il Elec R (Lond)* 131:713-15 D 4 '42

Copper and its alloys in wrought form; tabulations. M. G. Steel. *Metal Prog* 44:720 O '43

Effect of selenium, tellurium, and bismuth on copper. M. Cook and G. Parker. *Engineering* 155:338, 345 *Ap* 23-30 '43

Effects of various solute elements on the hardness and rolling textures of copper. R. M. Brick, D. L. Martin and R. P. Angier. *bibliog diags Am Soc for Metals Trans* 31:675-95; Discussion. 695-8 S '43

Fatigue strength of copper alloys; abstract. A. R. Anderson and C. S. Smith. *Metals & Alloys* 17:623 *Mr* '43

Influence of crystal size and orientation upon the mechanical properties of metals in the cast condition. L. Northcott. *Metal Prog* 43:586+ *Ap* '43

Magnetic properties of solid solutions; the paramagnetic alloys of copper and nickel. A. R. Kaufmann and C. Starr. *bibliog Phys R* 63:445-50 *Je* 1 '43

Modern welding methods for copper and copper alloys. J. J. Vreeland. *il Welding J* 22:784-92 O '43

New alloy for five-cent coins; copper-silver-manganese. *Franklin Inst J* 235:285-8 *Mr* '43

Precipitation reaction in aged cold-rolled 1 per cent cadmium-copper; its effects on hardness, conductivity, and tensile properties. R. H. Harrington and L. E. Cole. *bibliog il Am Soc for Metals Trans* 31:651-69; Discussion. 669-74 S '43

Predicting spring performance of beryllium copper wire and strip. H. G. Williams. *il Iron Age* 152:62-7 *JI* 8 '43

Processing beryllium-copper; abstract. L. B. Hunt. *Metals & Alloys* 17:694+ *Mr* '43

Quality inspection of beryllium copper. W. Martin. *il Metals & Alloys* 17:1203-7 *Je* '43

Quantitative spectroscopy applied to some impurities in 70-30 cupro-nickel. W. D. France. *Opt Soc Am J* 32:681-5 *N* '42

Reclaiming tin from scrap brass; large scale operation an essential. A. G. Arend. *il Chem Age (Lond)* 49:11-14 *JI* 3 '43

Representative micrographs of copper-base alloys. *il Metal Prog* 44:636-9 O '43

Sound 85-5-5-5 castings; abstract. W. F. Chubb. *Metals & Alloys* 17:372 *F* '43

Study of inverse segregation suggests new method of making certain alloys. M. L. Samuels, A. R. Elsea and K. Grube. *bibliog il diags Am Soc for Metals Trans* 31:459-82; Discussion. 482-6 *Je* '43

Thermal expansion of some industrial copper alloys. P. Hildner and C. Dickson. *bibliog J Research Nat Bur Stand* 31:77-82 *Ag* '43

Working of cast copper-base alloys. *diags Am Mach* 87:125-40 O 14 '43

See also

Aluminum bronze

Brass

Brazing

Bronze

Chromium copper

steel

Gilding metal

Gun metal

Manganese bronze

Monel metal

Testing

Creep characteristics of some copper alloys at elevated temperatures. H. L. Burghoff, A. I. Blank and S. E. Maddigan. *bibliog il Am Soc T M Proc* 42:668-89; Discussion. 690-1 '42

Rupture tests at 200 degrees cent. on some copper alloys. E. R. Parker and C. Ferguson. *il Am Soc for Metals Trans* 31:699-714; Discussion. 714-15 S '43

COPPER compounds

Copper compounds and cellulose. R. F. York. *bibliog Chem Age (Lond)* 48:243-4 *F* 27 '43

Diazonium borofluorides; the preparation of arylcopper compounds. F. A. Bolth, W. M. Whaley and E. B. Starkey. *bibliog Am Chem Soc J* 65:1456-7 *Ag* '43

Heavy metal compounds as toxic agents. G. H. Young and W. K. Schneider. *il Ind & Eng Chem* 35:436-8 *Ap* '43

Interpretation of the Sandmeyer reaction; further evidence in favour of a mechanism involving anionoid halogen. H. H. Hodgson, S. Birtwell and J. Walker. *Chem Soc J* p720-3 *N* '42

See also

Copper nitrate

Copper oxides

COPPER founding

Experiences in pouring copper with high conductivity. A. Campbell. *Foundry* 71:112 *JI* '43

COPPER hydroxide

Influence of age and surface conditions on the reactivity of certain precipitates. T. H. James. *bibliog J Phys Chem* 46:1068-76 *D* '42

Preparation of symmetrical azo-compounds, the positional influence of the nitro-group on the decomposition of nitronaphthalene-diazonium sulphates by cuprous hydroxide, and an improved method for the production of 2-nitronaphthalene. H. H. Hodgson, E. Leigh and G. Turner. *Chem Soc J* p744-6 *D* '42

COPPER industry and trade**See also**

Anacoda copper

mining company

Revere copper and

brass, inc.

COPPER industry and trade—Continued

Advertising

Lessons learned from war production key
Revere's post-war planning, M. Beulck, *il*
Ptr Ink 205:20-1+ N 5 '43

Securities

Copper stocks in belated upturn. Barron's
23:1 J1 '43
Realistic appraisal of the copper stocks. E.
A. Krauss, *Mag of Wall St* 72:357-9+ J1
10 '43
What's wrong with the lagging copper stocks?
J. C. Clifford, *Mag of Wall St* 71:690-2+
Ap 3 '43

Statistics

Copper, 1938-1941. Survey of Cur Business
1942 Sup p142
Copper, 1942. H. H. Wanders, *Eng & Min J*
144:64-5 F '43
Copper; production, consumption, exports,
etc., 1930-1942; tabulations. Automotive &
Aviation Ind 88:76 Mr 15 '43
1940 domestic production of copper-lead-zinc;
tabulation. G. M. Fowler, *Eng & Min J*
143:51-2 N '42
Some light on our metal output. Barron's
23:6 My 31 '43

Chile

Chilean copper supplies. Economist 144:592
My 8 '43

United States

Supply and demand for copper. H. O. King.
il Metal Prog 42:374-6 N '42

COPPER metallurgy

Blast furnace for solving blast furnace problems. J. S. Stewart, *il diags Eng & Min J*
144:64-8 J1 '43
Copper metallurgy in Australia; reverberatory
smelting recommended for higher yield. P.
R. Middleton. *Chem Age (Lond)* 47:501-2
D 5 '42
Copper metallurgy, 1942. E. A. Peretti. *Eng &
Min J* 144:101-2 F '43
Copper ore reduction, 1942. A. E. Wheeler and
H. Y. Eagle. *il Min & Met* 24:68-9 F '43
Copper refining; processes and plant. *il Elec
R (Lond)* 132:443-7 Ap 2 '43
Floating chalcopryrite from galena and sphalerite.
flow sheet *Min Cong J* 29:30 S '43
Morenci expands to meet war demand. J. B.
Huttl. flow sheet *il Eng & Min J* 144:60-3
J1 '43
Trends in reverberatory smelting of copper.
R. W. Chambers. *diags plan Can Min J*
64:210-18, 296-300 bibliog(p300) Ap-May '43

History

John Edwards, Cornish industrialist; copper
smelting and application of steam engines.
T. R. Harris. *Engineering* 154:365, 416-17 N
6, 20 '42

COPPER miners

Look at labor-management activities in the
Butte copper mines. R. Newcomb. *il Min
Cong J* 29:14-19 Ag '43
Recent productivity changes in copper mining.
M. C. Heins and K. A. Middleton.
Monthly Labor R 57:258-64 Ag '43
Training miners for greater copper production.
O. A. Dingman. *il Min Cong J* 29:
20-7 Je '43

COPPER mines and mining

See also

Anaconda copper
mining company
Copper ores

Alaska

Nickel-copper deposits on the west coast of
Chicagof Island, Alaska. W. T. Pecora. *maps
U S Geol S Bul* 936-1:221-43, pl 36-7; pa 20c
Supt. of doc. '42

Arizona

Bagdad; Arizona's latest porphyry copper. J.
B. Huttl. *il diags plan Eng & Min J* 144:
62-6 Je '43

Morenci expands to meet war demand. J. B.
Huttl. flow sheet *il Eng & Min J* 144:58-63
J1 '43

Michigan

Copper recovery. *il Business Week* p42+ Je
26 '43
Scrap recovery campaign in Michigan iron
and copper country a model. *il Min & Met*
24:316-17 J1 '43

Montana

Butte mines stress maintenance and salvage
as vital under war conditions. S. Veazey, Jr.
and H. M. Courtney. *il Eng & Min J* 144:
51-4 Mr '43
Central pump station serves Butte mines.
M. McCanna. *il diags Comp Air M* 48:7143-5
S '43
Look at labor-management activities in the
Butte copper mines. R. Newcomb. *il Min
Cong J* 29:14-19 Ag '43
Mitchell slice stoping as practiced at Butte.
L. F. Bishop. *il diags Min Cong J* 29:38-44
S '43

Oregon

Paragenesis of some gold and copper ores of
southwestern Oregon. W. R. Lowell. *bibliog
il map Econ Geol* 37:557-95 N '42

Quebec

Gold and copper of Quebec; history. T. A.
Rickard. *bibliog il map Can Min J* 64:
501-6 Ag '43

United States

Copper mines achieving new goals. *il Min
Cong J* 29:21 F '43

Utah

Copper mining and the Utah copper mine.
R. S. Lewis. *il Elec Eng* 62:473-9 N '43

COPPER nickel alloys

Thermal expansion of some industrial copper
alloys. P. Hidnert and G. Dickson. *bibliog J
Research Nat Bur Stand* 31:77-82 Ag '43

COPPER nitrate

Reactions of group IV R₄M compounds with
silver and copper salts. H. Gilman and L.
A. Woods. *bibliog Am Chem Soc J* 65:435-7
Mr '43

COPPER number

Action of light on cellulose; application of
copper number determinations to cellulose
acetate. R. E. Montonna and C. C. Wind-
ing. *bibliog Ind & Eng Chem* 35:782-4 J1
'43

COPPER ores

Metals to win the war; what to look for and
where. G. M. Fowler. *map Eng & Min J*
143:50-2 N '42
Nickel-copper deposit at Funter bay, Admiralty
Island, Alaska. J. C. Reed. *maps U S
Geol S Bul* 936-0:349-61, pl 51-2; pa 15c Supt.
of doc. '42
Nickel-copper deposit at Snipe bay, Baranof
Island, Alaska. J. C. Reed and G. O. Gates.
diag map U S Geol S Bul 936-M:321-30, pl
43; pa 10c Supt. of doc. '42
Paragenesis of some gold and copper ores of
southwestern Oregon. W. R. Lowell. *bibliog
il map Econ Geol* 37:557-95 N '42

See also

Chalcopryrite

COPPER oxides

Action of cuprous oxide on diazotised amines
in ethyl-alcoholic acid solution. H. H.
Hodgson and H. S. Turner. *Chem Soc J*
p748-9 D '42
Action of cuprous oxide on diazotised amines;
reactions in solutions of various alcohols
and organic solvents; preparation of 1:6-
dinitronaphthalene. H. H. Hodgson and H.
S. Turner. *Chem Soc J* p86-9 Mr '43

Application of copper-oxide rectifiers for resistance
welding. R. L. Briggs. *il diags
Welding J* 22:252-6 Ap '43

Contact non-linearity, with reference to the
metal rectifier and the carborundum ceramic
non-linear resistor. A. Fairweather.
il diags Inst E E J 89 pt 1:499-518 bibliog
(p517-18) N '42

Copper-oxide rectifiers in standard broadcast
transmitters. R. N. Harmon. *il Inst Radio
Eng Proc* 30:534-5 D '42

Copper-oxide rectifiers; Jack of many trades.
J. L. Watts. *diags Power* 37:372+ Je '43

COPPER oxides—Continued

- Electrical conductivity and isothermal Hall effect in cuprous oxide. W. Feldman. bibliog diags Phys R 64:113-18 Ag 1 '43
- Flexibility of the cuprous oxide rectifier for automatic control equipment in electroplating. G. E. Huenerfauth. diags Electrochem Soc Trans 83 (preprint 7):97-103 Ap '43

Analysis

- Determination of metallic copper and cuprous oxide in commercial cuprous oxide pigments. I. Baker and R. S. Gibbs. bibliog Ind & Eng Chem Anal ed 15:505-8 Ag 15 '43

COPPER plating

- Copper deplating. Steel 112:64 Ja 11 '43
- Make patterns by electrolytic process. A. K. Laukel. Foundry 70:146-9 D '42

COPPER roofing. See Roofing, Copper**COPPER soaps.** See Soap, Metallic**COPPER sulfate**

- Absorption of oxygen by glutathione in alkaline solutions; kinetics of the reaction at pH 13. M. B. Young and H. A. Young. Am Chem Soc J 65:1681-7 S '43
- Anhydrous copper sulfate in the Kjeldahl nitrogen determination. C. Beatty, 3d. Ind & Eng Chem Anal ed 15:476 J 15 '43
- Control of algae. F. E. Hale. il Water Works & Sewerage 90:sup139-40 Je '43
- Control of micro-organisms and aquatic vegetation in lakes and streams. L. F. Warrick. bibliog il Water Works & Sewerage 90:267-72 J 15 '43
- Copper and sulfide in developers; fogging action; polarographic analysis. R. M. Evans, W. T. Hanson and P. K. Glasoe. bibliog Soc Motion Picture Eng J 40:88-96 F '43
- Copper gets in its pores; electrolytic process protects wood from insects. il Elec West 91:61 O '43
- Copper sulphate trade got by U.S. exporters. Oil Paint & Drug Rep 144:7+ J 12 '43
- Electrolytic treatment averts pile infestation. il diag Elec W 119:2117-19 Je 26 '43
- Overcoming a bloodworm (chironomid) problem; Canton, N.C. J. C. Rickards. il diags Pub Works 74:11-12+ F '43
- Timber copperplated to frustrate worms. H. W. Young. il diag Comp Air M 48:7060-2 Je '43

Prices

- Copper sulphate ceiling by OPA. Oil Paint & Drug Rep 143:7+ Ap 5 '43

COPPER sulfides

- X-ray diffraction studies on precipitated cuprous and cupric sulfides. H. B. Weiser, W. O. Milligan and J. M. Marshall, jr. bibliog J Phys Chem 47:496-501 O '43
- See also Chalcopyrite

COPPER tartrate

- Polarographic characteristics of stannous and cupric tartrate complexes and amperometric titration of tin with cupric ion in tartrate medium. J. J. Lingane. bibliog Am Chem Soc J 65:866-72 My '43

COPPER tubes. See Tubes, Copper**COPPER wire.** See Wire, Copper**COPPERAS.** See Iron sulfates**COPPERWORK**

- Rolling of copper; abstract. C. W. MacGregor and L. Coffin, jr. Metals & Alloys 17:1008 My '43

See also

- Copper—Welding
- Copper founding

COPPERWORK, Architectural

- Copper roofing for church and school. il diag Sheet Metal Worker 34:25-6 F '43

COPRA

- Copra, 1938-1941. Survey of Cur Business 1942 Sup p106 [supplemented in monthly numbers]
- Mozambique's production and exports of copra. For Comm W 13:19 O 9 '43

See also

- Coconut oil

COPRECIPITATION. See Precipitation**COPY preparation.** See Printing, Practical—Copy preparation**COPY research council**

- Light on an interesting advertising group: the Copy research council. E. Peterson. il Ptr Ink 204:32+ J 23 '43

COPY writers. See Advertising copy writers**COPYING processes**

- Apeco photocopy machine makes photo-exact copies. il Oil & Gas J 41:121-2 Ap 29 '43
- Copying from books. J. R. Battisto. diags Am Phot 37:11 Ja '43
- Duplicate tracing minimizes drafting work. J. W. Greve. il diags plan Machine Design 15:141-3 N '43
- Goodyear plicofilm now speeds making of templates. Steel 111:82 N 30 '42
- How Bell Aircraft makes operations sheets. il Am Business 13:24-5+ O '43
- Method of recording macro-structures; contact ink impression used as negative for production of positive print on sensitized paper. G. A. Cottell. il Engineering 155:81-3 Ja 29 '43
- New process simplifies template reproduction; Transphoto film template reproduction process. il Aviation 42:179, 181+ J 1 '43
- Photographic templates may be adopted in oil-industry fabricating shops. P. Reed. il Oil & Gas J 42:40, 42+ S 2 '43
- Photoprint process of loft layout reproduction. F. B. Marshall. il diags plan Aviation 42:154-6, 159-61 Ap '43
- Photo-template processes that lessen drafting work. il Product Eng 13:707-9 D '42
- Rendering and reproduction methods for graphic illustrations. J. Gonzales and R. R. Wiese. il diags Product Eng 14:664-7 O '43
- Reproduction of diagrams on metal surfaces by photography. il Engineering 156:310 O 15 '43
- Republic's rapid reproduction system. D. C. Cooke. il Aero Digest 42:221-2+ My '43
- Abstract. Steel 113:88+ S 27 '43
- Template-making shortcuts in airplane manufacture; General Motors X-ray activated material prints from negative to positive plates by phosphorescence. G. E. Stedman. il Steel 111:70-1+ N 23 '42
- Templet duplication by dry offset printing; abstract. W. A. Collins and J. T. Barnes. Automotive & Aviation Ind 87:48 N 15 '42

See also

- Blueprints
- Carbon paper
- Microfilms
- Photography—Copying

COPYRIGHT

- So you have an idea you want to protect? H. Hirschman. Ptr Ink 201:21+ D 11 '42

See also

- Patent laws and legislation
- Trade marks

CORALS

- Revision of the suborders families, and genera of the scleractinia. T. W. Vaughan and J. W. Wells. diags Geol Soc Special Pa no 44:1-363, pl 1-51 bibliog(1024 titles, p247-93) '43

- Use of coral aggregate. B. E. Nutter. il Am Concrete Inst J 15:61-5 S '43

CORALS, Fossil

- Growth-rate of a Devonian reef-coral (prismatophyllum). H. Faul. bibliog pl Am J Sci 241:579-82 S '43

CORD RACING. See Tire fabrics**CORDAGE****See also**

- Rope
- Manufacture
- Earnings, hours, and labor turn-over in cordage and twine plants, October 1942. N. Buchalter. Monthly Labor R 56:355-6 F '43

CORDIERITE

- Vitrified cordierite bodies. L. E. Thiess. bibliog il Am Cer Soc J 26:99-102 Mr 1 '43

CORDITE

- Cordite made in Canada; flow sheet. il Chem & Met Eng 50:130-3 O '43

CORE oils

- Bottoms from rerun pressure distillate converted to industrial oils. il Oil & Gas J 42:40, 43 J 1 '43

CORE OVENS

Coal stokers for core ovens, A. Roberts, Jr. II *Diags Foundry* 70:75+ D '42
New core drying oven aids casting production, J. Hubel, *Foundry* 71:118+ Ja '43

CORE sampling. See Petroleum--Well drilling--Sampling

COREOPSIS grandiflora, Nutt.

Anthochlor pigments; the pigments of *coreopsis grandiflora*, Nutt. T. A. Geissman and C. D. Heaton, *bibliog Am Chem Soc J* 65:877-83 Ap '43

CORES

Allocate core costs to individual castings, A. E. Grover, *Foundry* 71:130-2+ Je '43
Aluminum castings poured in cores; Acme pattern & tool co. W. G. Gude, II *Foundry* 71:96-9+ S '43

Constructing boxes for blowing cores, R. F. Lincoln and E. J. Swink, II *Foundry* 71:106-7+ O '43

Core blowing in a semi-production foundry, Z. J. Madacey, II *Foundry* 71:136-8+ Je; 86-8+ JI '43

Corebinders; abstract, A. Tipper, *Metals & Alloys* 17:370 F '43

Core binders fulfill many requirements, H. W. Dietert, *Foundry* 70:143-5+ D '42

Cores for magnesium castings, N. M. Erlskin and G. Walker, II *Foundry* 71:140-1+ Ap; 96-7+ My '43

Cores for steel castings; abstract, S. W. Brinson and J. A. Duma, *Metals & Alloys* 18:552+ S '43

Cylinder head cores made without wires; Aviation division, Studebaker corp. P. Dwyer, II *Foundry* 71:84-5, 150-1 F '43

Molding sands and materials; abstract, *Metals & Alloys* 18:104+ JI '43

Pours steel in cores spun vertically; Wehr steel company, Milwaukee, A. T. Hauner, II *Foundry* 71:94-5+ JI '43

Second report of the moulding materials subcommittee of the Steel castings research committee, Iron & Steel Inst J 146:393-454, pl 38-9 no 2 '42; Excerpts, *Engineering* 154:487-8 D 18 '42; Discussion, Iron & Steel Inst J 146:455-66 no 2 '42; *Engineering* 154:514 D 25 '42

Stern frames cast in cores; Penn steel castings co. P. Dwyer, II *Foundry* 71:99-101+ O '43

Time saving core breaker, II *Iron Age* 152:68 O 7 '43

CORIOLIS acceleration. See Acceleration

CORK

Compressibility of composition cork; used as gasket material on liquid-filled electrical equipment, L. P. Hart, Jr. *Elec W* 118:1640, 1812 N 14-28 '42

For un-stockpiling, *Business Week* p16-17 JI 10 '43

More cork soon, *Business Week* p50 N 28 '42

New long-range cork program, *For Comm W* 12:26 JI 10 '43

Release of cork cheers bottlers, *Ptr Ink* 203:50 Je 25 '43

U.S.-grown cork, II *Business Week* p39 Ja 2 '43

CORN

A-B-C's of the corn situation, *Business Week* p16 Je 19 '43

Alcohol producers' corn needs studied, *Oil Paint & Drug Rep* 143:7+ Mr 29 '43

Carotenoids of yellow corn grain, J. W. White, Jr., F. P. Zschelle and A. M. Brunson, *bibliog Am Chem Soc J* 64:2608-6 N '42

CCC loan rates raised for 1942 corn crop, *Comm & Fin Chr* 156:2254 D 24 '42

Corn comes back, *Business Week* p86 O 16 '43

Corn for war; urge cut in hog feeding next year, *Business Week* p78+ O 23 '43

Corn, 1938-1941, Survey of Cur *Business* 1942 Sup p118 [supplemented in monthly numbers]

Corn stalemate, *Business Week* p18 Je 26 '43

Effect of storage of corn on the chemical properties of its proteins and on its growth-promoting value; abstract, D. E. Jones, J. P. Divine and C. E. F. Gersdorff, *Food Ind* 15:121 Mr '43

Fungal amylases as saccharifying agents in the alcoholic fermentation of corn, Lu Cheng Hao, E. I. Fulmer and L. A. Underkötter, *bibliog diag Ind & Eng Chem* 35:814-18 JI '43; Same abr, *Chem Age (Lond)* 49:261-4 S 11 '43

King Corn enters critical period, *Barron's* 23:7 JI 12 '43

Plea for corn; mills processing the grain fear shutdowns; farmers feed it to hogs, *Business Week* p22+ Je 12 '43

Protein from corn germ, *Science* 98:sup 10 S 10 '43

Seed corn boom; checkup reveals virtually all white hybrid stock sold, *Business Week* p105-6 F 13 '43

Prices

Corn prices frozen to halt advances, *Comm & Fin Chr* 157:505 F 4 '43

CORN exchange bank trust company
What is this bank stock worth? K. L. Troftz, *Barron's* 23:5 My 24 '43

CORN oil

Drying oils from liquid fats; fractionation by solvent extractions, A. W. Kleinsmith and H. K. Kraybill, *bibliog Ind & Eng Chem* 35:674-6 Je '43

CORN products

Pacific war's scope affects corn refiners, *Barron's* 22:12 N 23 '42

Plea for corn; mills processing the grain fear shutdowns; farmers feed it to hogs, *Business Week* p22+ Je 12 '43

Seek to ease cereal binder pinch, *Steel* 118:66 JI 5 '43

See also

Corn oil	Cornstarch
Corn sirup	Zeln
Cornstalks	

CORN sirup

Baumé-dextrose equivalent-dry substance tables for corn sirup and corn sugar, E. E. Fauser and others, *bibliog diags Ind & Eng Chem Anal ed* 15:193-200 Mr 15 '43

Dextrins from corn sirup; effect of dextrose equivalent of sirup on properties, J. W. Evans and W. R. Fetzner, *bibliog Ind & Eng Chem* 35:439-41 Ap '43

CORN starch. See Cornstarch

CORN sugar. See Dextrose

CORNCOB

Industrial corncobs, *Sci Am* 169:224-5 N '43

CORNEA

Superficial vascularization of the cornea; the result of riboflavin therapy, H. R. Sandstead, *bibliog Pub Health Rep* 57:1821-5 N 27 '42

CORNELL maritime press

Moves to larger quarters, *Marine Eng* 48:236+ Je '43

CORNING glass works**See also**

Pyrex

CORNSTALKS

Neutral sizing material for insulating board, L. K. Arnold and J. B. McLeod, *Paper Ind* 25:156 My '43

Utilization of cornstalks in the manufacture of paper and paperboard, S. D. Wells and R. L. Steller, *bibliog flow sheet II diag Paper Tr J* 116:45-51 Ap 15 '43; Excerpts, *Paper Ind* 24:1288+ Mr '43

CORNSTARCH

Action of macerans enzyme on a component of corn starch, R. W. Kerr, *Am Chem Soc J* 64:3044-5 D '42

Amioca, a new industrial starch, C. G. Caldwell, *bibliog II Paper Tr J* 117:27-9 O 14 '43; Same, *Rayon* 24:541-3 O '43

Baumé-dry substance tables for starch suspensions, J. E. Cloland, E. E. Fauser and W. R. Fetzner, *diags Ind & Eng Chem Anal ed* 15:334-6 My 15 '43

Fractionation of starch by selective precipitation with butanol, T. J. Schoch, *bibliog II Am Chem Soc J* 64:2957-61 D '42

Multiple amylose concept on starch; the isolation of an amylose in crystalline form, R. W. Kerr and G. M. Severson, II *Am Chem Soc J* 65:193-8 F '43

Non-carbohydrate substances in the cereal starches, E. J. Schoch, *Am Chem Soc J* 64:2954-6 D '42

CORNSTARCH—Continued

Production of waxy corn and waxy sorghum starches; abstract. M. M. McMasters and G. E. Hilbert. Chem & Met Eng 50:175-6 Ag '43

Research promises relief from starch troubles. R. S. McBride. il Food Ind 15:56-7 Ja '43
Significance of the degradation of starch by macestrans amylase. R. W. Kerr. bibliog Am Chem Soc J 65:188-93 F '43

Waxy cornstarch as a replacement for tapioca. H. H. Schopmeyer, G. E. Felton and C. L. Ford. bibliog il Ind & Eng Chem 35:1168-72 N '43

CORONA (electricity)

Corona in gases at low pressures. J. D. Craggs and J. M. Meek. il Phys R 64: 249-50 O '43

Positive and negative point-to-plane corona in pure and impure hydrogen, nitrogen, and argon. G. L. Weissler. bibliog diag Phys R 63:96-107 F '43

CORPOLIN. See Glycerin, Substitutes for**CORPORATE names**

Similarity of corporate name of banks insufficient to prevent use of name; National bank in North Kansas City v. Bank of North Kansas City. Banking Law J 60: 863-70 O '43

See also

Business names

CORPORATE real estate association of Philadelphia

Cooperative management for real estate; how Philadelphia financial institutions are protecting values and cutting costs. F. J. Smith. Trusts & Estates 75:499-500, 502-3 N '42

CORPORATION law

Distribution of surplus on reduction of capital. J Account 76:87-8 Jl '43

Legal obligations of foreign gas corporations. L. T. Parker. Am Gas J 158:32-4 Ap '43

Reimbursement of directors and officers for expenses of actions against them based on their official conduct. Banking 35:44+ Ja '43

See also

Banking law
Commercial law
Corporations—Reorganization
Dividends
Proxies

Public utilities commissions
Railroad law
Securities—Law
Trusts, Industrial

Georgia

Homecoming bid; Georgia passes new law easing holding company taxes. Business Week p106-7 Mr 13 '43

Great Britain

Company law reform. Economist 145:19-20 Jl 3 '43

Spain

New reserve requirements for incorporated companies. For Comm W 9:21-2 D 12 '42

CORPORATION schools

Conducts Institute of business for its plant and office workers; Carrier corporation offers 14-week course to give them clearer perspective of cooperative capital-labor job. R. H. Ganly. il Ptr Ink 205:24-5+ O 15 '43

CORPORATIONS

How to evaluate management in common stock selection. L. O. Hooper. Mag of Wall St 71:518-19+ F 20 '43

See also

Banks and banking
Building and loan associations
Corporation law
Electric utilities
Gas companies
Government corporations
Government ownership
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Investment trusts
Oil companies
Proxies
Public utilities
Railroads
Securities—Law
Stockholders
Stocks
Street railroads
Trust companies
Trusts, Industrial

Accounting

Accounting and regulation. G. O. May. J Account 76:295-301 O '43

Accounting for amortization of war facilities.

G. N. Farrand. J Account 76:419-20 N '43
American Car and Foundry decision. G. O. May. J Account 74:517-22 D '42
Auditors worry. Business Week p98+ D 19 '42

Computation of earnings and profits included in invested capital. V. H. Maloney. J Account 75:414-25 My '43

Controlled materials plan. G. N. Farrand. J Account 75:247-60 Mr '43

Current problems on amortization. C. L. Turner. J Account 75:30-5 Ja '43

Excess profits tax relief claims under section 722. P. D. Seghers. J Account 76:96-112 Ag '43

Excessive profits, an enigma? H. J. Landry. J Account 75:330-3 Ap '43

General relief provisions of the excess profits tax. T. M. Wilkins. J Account 75:306-29 Ap '43

Integrated plan for postwar reserve allowances. W. A. Cooper. J Account 76:192-9 S '43

Post-war reserves vs. subsidies. V. H. Stempf. N A C A Bul 25:207-19 N 1 '43

Reporting of war accounting practices; survey of 1942 annual reports of nine corporations. S. Gilman. J Account 76:200-10 S '43

Tax adjustment control. H. W. Funk. J Account 75:137-9 F '43

Taxation in accounts. Economist 144:366 Mr 20 '43

Your new taxes; proper order of calculation simplifies task of computing corporate levies. L. J. Freeman. Barron's 22:8 D 14 '42

See also

Bank accounting
Cost accounting
Financial statements
Government loans to industry—Accounting
Inventories
Profit

Profit and loss statements
Public utilities—Accounting
Stocks, Preferred—Redemption premiums

Directors

Reimbursement of directors and officers for expenses of actions against them based on their official conduct. Banking 35:44+ Ja '43

Directors, Junior

Employee's part in bank management. J. G. Renshaw. Trusts & Estates 75:494-7 N '42
Multiple management re-examined. T. R. Reid. Advanced Management 8:60-3 Ap '43

Finance

American Car and Foundry decision. G. O. May. J Account 74:517-22 D '42

Appraising the annual reports and balance sheets. J. C. Clifford. Mag of Wall St 71: 459-61+, 520-2+, 579-81+, 651-3+ F 6-Mr 20 '43

British and Canadian profits, 1938-1941; tabulation. Economist 144:306 Mr 6 '43

Canadian securities; what has happened to Canadian corporations since the beginning of the war. B. Williams. Comm & Fin Chr 157:1675 My 6 '43

Clues to dividends and prices, from third quarter earnings. H. F. Travis. Mag of Wall St 73:86+ O 30 '43

Combustion revival of private financing; investment bankers plan for large public issues. G. B. Collingwood. il Mag of Wall St 72: 395-7+ Jl 24 '43

Companies favored by highly liquid positions. J. S. Williams. Mag of Wall St 72:626-7+ S 18 '43

Companies to emerge stronger from the war than before. L. O. Hooper. Mag of Wall St 71:656-8 Mr 20 '43

Controller's part in postwar planning. T. C. McCobb. Am Business 13:38 Je '43

Corporate earnings down in first nine months despite enlarged operations. Comm & Fin Chr 156:2167 D 17 '42

Corporate earnings hold 1942 rate; first quarter profits. Barron's 23:7 Je 28 '43

Corporate earnings in first half of 1943 above last year, Conference board reports. Comm & Fin Chr 158:1118 S 16 '43

Corporate net earnings only slightly below 1941. Survey of Cur Business 22:9 D '42

CORPORATIONS—Finance—Continued

- Corporate profits. Survey of Cur Business 23:4-5 Je '43
- Corporation profits, 1938-1941. Survey of Cur Business 1942 Sup p73-4 [supplemented in monthly numbers]
- Dividends hold. Business Week p103+ F 20 '43
- Dynamic future of common stock investment. G. S. Kent. *il Mag of Wall St* 72:64-8, 104-5, 120-2, 154-6, 170-2+ My 1-29 '43
- Earnings, before taxes, up 113.8%; net declines 18.1%. Steel 112:60-1 Mr 8 '43
- Earnings not what they seem; 1943 first half earnings compared with 1942. Barron's 23:9 Ag 2; 16 Ag 9; 9 Ag 16; 2 Ag 23 '43
- Earnings of large war material manufacturers. Nat City Bank p52-4 My '43
- Earnings of leading corporations in 1941-42. Nat City Bank p43-7 Ap '43
- Earnings of manufacturing companies in 1941-42. Nat City Bank p32-5 Mr '43; Excerpt. Automotive & Aviation Ind 88:234 Mr 15 '43
- Earnings up? Business Week p111+ Je 26 '43
- Economist profit figures. Economist 144:708 My 29 '43
- Exploding fallacies in post-war corporate picture. L. Stern. *Mag of Wall St* 72:670-1, 699 O 2 '43
- Financial executive's wartime job. H. C. Perry. Credit & Fin Management 45:28-9 My '43
- First quarter corporate earnings only slightly above 1942 despite sharply larger sales. Comm & Fin Chr 157:2284 Je 17 '43
- First quarter earnings disclose divergent trends. W. Gates. *Mag of Wall St* 72:69-71+, 129-31+ My 1-15 '43
- '42 corporate sales up; net after taxes down; current position deteriorates. Conference board. Comm & Fin Chr 157:1872 My 20 '43
- Funding depreciation and maintenance reserves under war conditions. W. A. Hosmer. Harvard Business R 21 no 3:369-84 [Ap] '43
- Growth companies and their future. H. F. Travis. *il Mag of Wall St* 72:126-8+ My 15 '43
- Half year's earnings; net income of leading corporations, 1942 and 1943. Nat City Bank p90-2 Ag '43
- Higher earnings in 1943. W. Gates. *Mag of Wall St* 72:392-4+, 456-7, 493-4 JI 24-Ag 7 '43
- Impact of federal taxes on the earnings of business corporations. J. W. Hooper. N A C A Bul 24:877-91 Ap 1 '43
- In the groove; corporate profits, first quarter of 1943. Business Week p98+ My 1 '43
- Industrial profits, 1942; with comparisons, 1932-1941. Economist 144:sup6 Mr 13 '43
- Industry's post-war conversion assets. V. Catozella. Barron's 23:3, 8 Ag 16 '43
- Internal revenue bureau outlines procedure for liquidating corporation as war loss. Comm & Fin Chr 157:65 Ja 7 '43
- Investment banking industry will have vast financing responsibilities after the war. Comm & Fin Chr 158:2+ JI 1 '43
- Just gauge for executive compensation. J. C. Baker. Harvard Business R 22 no 1:75-87 [O] '43
- Let's tackle the first post-war problem, now; termination of war contracts. R. A. Foulke. *il Dun's R* 51:7-14+ My '43
- Making money in stock trading; tricks of capitalization, leverage and participating securities. Barron's 22:7 D 28 '42
- Managing a business for stockholders through the vicissitudes of inflation. I. Wright. Comm & Fin Chr 158:97+ JI 8 '43; Discussion. 158:201+, 299, 402+ JI 15, 22, 29 '43
- Mid-year 1943 re-appraisals of earnings and dividend forecasts. *il Mag of Wall St* 72: 405-17+, 463-75+, 521-9+, 571-81+ JI 24-S 4 '43
- Net comes hard; corporate earnings still rising, but at great cost in taxes. Business Week p102-3+ S 4 '43
- Net income of leading corporations, first quarter; comparisons with 1942. Nat City Bank p54 My '43
- Net results; income reports for 1942. Business Week p99-101 F 13 '43
- New corporate security issues; proposed uses of proceeds, yearly 1934-1942, monthly Feb. 1941-Dec. 1942. Fed Res Bul 29:165 F '43 [cont monthly]
- Nine steps now for business planning. T. C. McCobb. Trusts & Estates 77:24 JI '43
- Nonrefunding security flotations and capital structures, 1935-1937. J. B. Hubbard. R Econ Stat 25:192-201 Ag '43
- Plant financing in a war economy; problem of new facility financing. M. D. Ketchum. J Business 16:28-50 Ja '43
- Position of miscellaneous companies. *Mag of Wall St* 71:542-3; 72:579-80 F 20, S 4 '43
- Present savings and postwar markets. S. H. Slichter. Harvard Business R 22 no 1:1-73 pt 2 [O] '43
- Problems in the funding of tax and other reserves. W. A. Hosmer. N A C A Bul 24: 1049-75 My 1 '43
- Profit outlook of four industries; iron and steel, chemical, motor, and aircraft. B. Ravits. Barron's 23:4 My 17 '43
- Profits still rise. Business Week p106-7+ N 6 '43
- Profits under restraint; with computations for last quarter, 1942. Economist 144:241-2 F 20 '43
- Raising funds; volume of new issues still isn't large. Business Week p105-6 O 16 '43
- Recent trends in corporate profits. T. Smith and R. Sherman. Survey of Cur Business 23:23-8 Je '43
- Reinvestment of corporate earnings; review of current economic literature. D. S. Tucker. Mech Eng 64:899-900+ D '42
- Second quarter reports in light of today's situation. W. Gates. *Mag of Wall St* 72: 516-17, 549 Ag 21 '43
- SEC survey of return on invested capital. Comm & Fin Chr 157:1488 Ap 22 '43
- Six months net income of 340 industrial companies 14% above 1942. Comm & Fin Chr 158:607 Ag 12 '43
- Special reserves arising out of the war; study by research department of American institute of accountants. J Account 76:391-408 N '43
- Standstill earnings; Economist new profits series, with figures for quarterly period ending Sept. 30, 1942. Economist 143:639-40 N 21 '42
- Tax toll climbs. Business Week p102 N 14 '42
- Taxes impede accumulation of reserves against post-war needs executives report. Comm & Fin Chr 158:706 Ag 19 '43
- Third quarter earnings and annual figures. 1917-19, 1927-29, and 1941-43. Nat City Bank p122-4 N '43
- Total corporate income during first half of 1943. Survey of Cur Business 23:5-7 S '43
- Trusts to foods; Public utility holding co. now canning Stokely's fruits and vegetables. Business Week p105-6 S 18 '43
- Twenty-five largest manufacturing corporations add \$2,000,000,000 in assets. Conference board says. Comm & Fin Chr 156: 2061 D 10 '42
- 20 war-active companies financially ready for peace. J. C. Clifford. *Mag of Wall St* 72: 454-5+ Ag 7 '43
- Wartime industrial expansion and post-war reserves. Nat City Bank p 102-5 S '43
- What earnings dislocations? from contract cancellations? from war production shifts? W. Gates. *il Mag of Wall St* 72:227-9+ Je 12 '43
- Which companies are building up equity values? J. S. Williams. *Mag of Wall St* 72: 176-7+ My 29 '43
- Which industries offer best prospects for 1943? G. W. Mathis. *il Mag of Wall St* 71: 328-32, 377-80 Ja 9 '43
- Which stock groups will lead? which lag? E. K. Dodge. *Mag of Wall St* 72:85-7, 110 My 1 '43
- Windfalls in millions; from recovery of foreign assets by American corporations. G. B. Collingwood. *il Mag of Wall St* 72:224-6+ Je 12 '43

See also

- | | |
|------------------------------|-------------------|
| Dividends | Railroads—Finance |
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| Profit | Stockholders |
| Public utilities—Finance | Stocks |
| | Surplus |
| | Warehousing |

CORPORATIONS—Continued

Reorganization

- Basiss after reorganizations. J. K. Lasser. J Account 76:67-9 J1 '43
 Company A delivers all of its properties to Company B in 1933 in consideration of B issuing all of its stock to A's stockholders. J Account 76:343 O '43
 Effect of excess profits tax law on current reorganizations. M. Austin. J Account 75:106-23 F '43
 Section 270 of the Federal bankruptcy act. C. S. J. Banks. J Account 76:331-41 O '43
 Stockholders' participation in reorganization. J. L. Dohr. J Account 75:383 Ap '43
 Strange ground for receivership. M. L. Hayward. Barron's 23:5 Ag 16 '43
 Treatment of created surplus in corporate reorganization. J Account 76:351 O '43
 Trustees as business managers; Canadian practice of trustee receivers and reorganization managers. F. R. MacKelcan. Trusts & Estates 77:152-6 Ag '43

See also
 Railroads—Receiver-ships

Reports and yearbooks

- Annual reports grow less formidable; what transportation companies are doing to streamline reports. II Bus Transportation 22:41 My '43
 Appraising the annual reports and balance sheets. J. C. Clifford. Mag of Wall St 71:453-61+, 520-2+, 579-81+, 651-3+ F 6-Mr 20 '43
 Calendar of corporation reports and taxes; May-October. Credit & Fin Management 45:30-1 My; 38-9 J1 '43
 Calendar of dates for taxes and reports for January and February. Credit & Fin Management 45:27-8 Ja '43
 Financial statements in annual reports to stockholders; Securities and exchange commission opinion. J Account 76:188-9 F '43
 Katy's report appears in pictures and colors; Missouri-Kansas-Texas preliminary 1942 report to stockholders. II Ry Age 114:465 Mr 6 '43
 Management's show window; abstract. L. H. Renn. Management R 32:32-3 Ja '43
 More annual reports tell stockholders the facts of advertising. P. H. Erbes, jr. II Ptr Ink 202:21-3+ Ja 15 '43
 Must not disclose production rates. Comm & Fin Chr 156:2168 D 17 '42
 NYSE adopts uniform financial report form. Comm & Fin Chr 156:2060 D 10 '42
 Postponement of annual reports. J Account 75:90-1 Ja '43
 Proxy rules and annual reports. J Account 75:509 Je '43; Discussion. 76:73-4, 167-8 J1 Ag '43
 Putting the annual report together; LeTourneau builds good will among stockholders, employees, and the public. G. C. McNutt. II Ind Marketing 27:22-3+ D '42
 Still more black-out; paper control. Economist 144:432-3 Ap 3 '43
 Stockholders' forum; what is missing in corporate reports? Mag of Wall St 71:222-3+ D 12 '42
 Understanding through the annual report; address at meeting of Controllers' institute; abstracts. E. M. Voorhees. Comm & Fin Chr 158:1325+ S 30 '43; Trusts & Estates 77:430-3 N '43

See also
 Employees, Reports to

Size

- Can small business work with big business? E. Whitmore. II Am Business 13:10-12+ Ap '43
 Exonerates 95 or 99% of corporations from recent criticisms of big business. H. A. Wallace. Comm & Fin Chr 158:831 Ag 26 '43
 Growing concentration of industrial production. H. L. Blackburn. Mag of Wall St 72:623-5+ S 18 '43
 In defence of big business. Economist 145:147 J1 31 '43

Taxation

- Advocates a general sales tax; corporate tax angles. S. Harris. East Underw 44:40 Mr 12 '43

- Business taxes often take more than net earnings. Conference board finds. Comm & Fin Chr 158:611 Ag 12 '43
 Calendar of corporation reports and taxes; May-October. Credit & Fin Management 45:30-1 My; 38-9 J1 '43
 Calendar of dates for taxes and reports for January and February. Credit & Fin Management 45:27-8 Ja '43
 Computation of earnings and profits included in invested capital. V. H. Maloney. J Account 75:414-25 My '43
 Computations under Section 722. J. K. Lasser. J Account 75:531-3 Je '43
 Construction volume statistics for computing 1942 corporation taxes; construction volume 1925-1942. Eng N 130:647 Ap 29 '43
 Corporate structures and federal income taxation; comparison with English tax. G. O. May. Harvard Business R 22 no 1:10-18 [O] '43
 Corporate taxes near peak. W. Gates. Mag of Wall St 73:60-2+ O 30 '43
 Corporation taxes and the wartime tax structure. R. E. Paul. II Dun's R 52:10-15+ J1 '43
 Corporation taxes for 1942; reference tables for computing taxes. Adv & Sell 35:58, 60, 62 D '42
 Deferred maintenance; suggests that United States bonds equal to amount of deductions must be held in segregated fund. W. A. Hosmer. J Account 76:161-2 Ag '43
 Effects of taxes upon corporate policy. 136p National industrial conference board, 247 Park av, New York 17 '43
 Effects of the 1942 federal tax law on corporations. J. K. Lasser. II Dun's R 51:11-17 F '43
 Employees' pension trusts and annuity plans under section 162. Revenue act of 1942. M. Kurtz. J Account 75:124-30 F '43
 Estimated corporate profits, before and after federal taxes; tables and charts. Automotive & Aviation Ind 88:86-7 Mr 15 '43
 Expert points to opportunities for refunds under 1942 Revenue law. J. K. Lasser. Banking 35:44-5+ F '43
 Federal tax policy in relation to corporate security. P. W. Ellis. Comm & Fin Chr 158:1325+ S 30 '43
 Fundamental definition of taxable corporate income changed again in new law. Comm & Fin Chr 156:2168 D 17 '42
 Future of income tax; taxes on business. Economist 145:389-90 S 18 '43
 Homecoming bid; Georgia passes new law easing holding company taxes. Business Week p106-7 Mr 13 '43
 How the tax law aids borrowers. J. K. Lasser. Banking 35:29+ Ja '43
 Impact of federal taxes on the earnings of business corporations. J. W. Hooper. N A C A Bul 24:377-91 Ap 1 '43
 Impact of soaring corporate taxes upon steel is analyzed. W. W. Ruch. Iron Age 152:102+ O 23 '43
 Integrated plan for postwar reserve allowances. W. A. Cooper. J Account 76:192-9 S '43
 Many corporate tax cuts likely; Section 722 provides relief for companies whose burden is abnormal. J. P. Reeves. Barron's 23:3+ Ap 5 '43
 New Treasury regulations and pension plans. G. Simons. East Underw 44:3+ J1 23; 9+ J1 30 '43
 1942 corporation income tax laws; pension trust aspects. P. W. Cook. East Underw 44:17 Ap 2 '43
 Pension trust regulations issued; text of regulations. Nat Underw (Life ed) 47:1-2, 18-20+ J1 16 '43; Same abr. East Underw 44: 4, 13-15 J1 16 '43
 Pension trust regulations released. P. G. Evans. Comm & Fin Chr 158:425+ J1 29 '43
 Possible substitute for renegotiation. R. T. Griswold. Credit & Fin Management 45:20 Ag '43
 Problems in the funding of tax and other reserves. W. A. Hosmer. N A C A Bul 24:1049-75 My 1 '43
 Reserves assured; Congress intends to include provision for postwar conversion in the tax bill. Business Week p18-20 O 23 '43

CORPORATIONS—Taxation—Continued

- Reserves to meet indeterminable war costs. V. H. Stempf. J Account 76:383-90 N '43
- Section 270 of the Federal bankruptcy act. C. S. J. Banks. J Account 76:331-41 O '43
- Study in taxes. Business Week p91+ D 5 '42
- Study significance of new pension trust rules. Nat Underw (Life ed) 47:1+ J 16 '43
- Systematized tax work in the business office; abstract. E. V. Tomborgh. Management R 32:33-4 Mr '43
- Tax dangers in current wage and salary rate raises. J. M. Crimmins. Am Business 13: 10-11 F '43
- Tax problems of war contractors. J. K. Lasser. J Account 76:409-14 N '43
- Tax toll climbs. Business Week p102 N 14 '42
- Taxation of industry. Economist 144:615 My 15 '43
- Taxes as they affect our customers; points credit men should consider. J. J. Lang. Credit & Fin Management 45:15-17+ J '43
- Treasury believes tax refunds sufficient to absorb post-war losses. Iron Age 152:103+ O 23 '43
- Treasury income tax ruling for employees' pension, stock bonus and profit-sharing trusts. Comm & Fin Chr 158:229 J 15 '43
- Unsound tax program can destroy capitalistic democracy. J. W. Hanes. Comm & Fin Chr 158:1485, 1499 O 14 '43
- Upkeep and taxes; deferred maintenance, a legitimate charge against earnings. Business Week p42 N 6 '43
- Your new taxes; carryback relief provisions. L. J. Freeman. Barron's 23:8-10 Ja 11 '43
- Your new taxes; computations of affiliated groups, treatment of capital gains and losses. L. J. Freeman. Barron's 22:13 D 21 '42
- Your new taxes; levies payable for short periods. L. J. Freeman. Barron's 23:19 Ja 4 '43
- Your new taxes; proper order of calculation simplifies task of computing corporate levies. L. J. Freeman. Barron's 23:8 D 14 '42
- Your new taxes; when debt is paid off at discount, change in rules on capital reduction. L. J. Freeman. Barron's 23:7 Mr 1 '43

See also

- | | |
|---------------------|-------------------|
| Excess profits tax | Mine taxation |
| Insurance companies | Public utilities— |
| —Taxation | Taxation |

CORPORATIONS, Government. See Government corporations

CORRELATION (geology)

- Correlation of the Devonian sedimentary formations of North America, with correlation chart (folding). G. A. Cooper and others. Geol Soc Bul 53:1729-93 bibliog (p 1789-93) D '42
- Correlation of the glacial border drift of north central Wisconsin. F. D. Hole. bibliog diag maps Am J Sci 241:498-516, pl 1 Ag '43
- Geologic correlation of areal gravitational and magnetic studies in New Jersey and vicinity. G. P. Woollard. bibliog Geol Soc Bul 54:791-818, pl 1-5 Je '43
- Helium indexes for several minerals and rocks. N. B. Keevil. Am J Sci 241:680-93 N '43
- Non-marine ostracoda from the lower Pennsylvanian in the southern Appalachians, and their bearing on inter-continental correlation. H. W. Scott and C. H. Summer-son. bibliog Am J Sci 241:653-75, pl 1-2 N '43

CORRELATION (statistics)

- Choice of the dependent variable in regression analysis. F. V. Waugh. Am Stat Assn J 38:210-14; Discussion. M. Ezekiel. 214-16 Je '43
- Correlation concepts and the Doolittle method. D. J. Cowden. Am Stat Assn J 38:327-34 S '43
- Correlations between functions of variables. G. A. Baker. Am Stat Assn J 37:537-9 D '42
- Mechanical determination of correlation coefficients and standard deviations. J. R. Platt. diag Am Stat Assn J 38:311-18 S '43
- Recent developments in correlation technique. P. S. Dwyer. bibliog(37 titles) Am Stat Assn J 37:441-60 D '42

CORRESPONDENCE schools and courses

See also United States armed forces institute

CORRESPONDENT banks. See Banks and banking—Correspondent banks

CORRESPONDING states, Law of
Correlating fluid viscosity. A. S. Smith and G. G. Brown. bibliog Ind & Eng Chem 35: 705-11 Je '43

CORROSION and anti-corrosives

- Antitrust insurance for airplane engines. A. M. Hoffmann. il Comp Air M 48:6941-2 Ja '43
- Battle of corrosion won; approved methods for the preservation of engines. A. Ayers. S A E J 51:sup49-50 Ag '43
- Caustic in vapor stream halts corrosion; West Coast natural gasoline plant. il Pet Refiner 22:111 Ap '43
- Combat corrosion in west Texas. H. F. Simons. il Oil & Gas J 41:61, 63 F 25 '43
- Corrosion and fouling of ships. G. D. Bengough and V. G. Shepherd. Engineering 155:358-60, 378-80, 416-17 Ap 30-May 7, 21 '43; Discussion. 155:354-5, 363-4 Ap 30-May 7 '43
- Corrosion by phosphorus compounds in boiler gases. H. J. Bush. Inst Chem Eng Trans 19:45-7 '41
- Corrosion causes and remedies in fine wire magnet coils. B. W. Erikson. il Product Eng 14:158-60 Mr '43
- Corrosion in distillate wells. T. S. Bacon and E. A. Brown. il Oil & Gas J 41:91-2 Ap 15 '43
- Corrosion of iron by ammonia. H. J. McDonald and M. Feller. Chem & Met Eng 50:111 Ag '43
- Corrosion of lead-indium diffusion alloys. J. M. Freund, H. B. Linford and P. W. Schutz. diags Electrochem Soc Trans 84 (preprint 7):61-5 O '43
- Corrosion of magnesium alloys; abstract. C. J. Bushrod. Metals & Alloys 17:630+ Mr '43
- Corrosion of metals in air. W. H. J. Vernon. bibliog Chem & Ind 62:314-18 Ag 21 '43
- Corrosion of tin-nickel alloy coatings on steel in canned foodstuffs; abstract. H. R. Copson and W. A. Wesley. Iron Age 152:53-4 O 21 '43
- Corrosion protection for magnesium alloys. il diags Product Eng 14:493-8 Ag '43
- Corrosion protection of storage tanks; gunite lining, galvanized and aluminum roofs, etc. F. L. Newcomb, E. S. Dixon and C. F. Kelly. il diags Am Pet Inst Proc 23(3):38-58 '42; Excerpts. Nat Pet N 34 pt 2:R397-403 N 25 '42
- Dehydration to prevent corrosion; moisture-proof wrappings and silica gel for metal parts. il Mod Packaging 16:69-72+ Mr '43
- Deterioration of lubricating oils; soybean lecithin as an inhibitor. J. J. Jacobs and D. F. Othmer. bibliog il diag Ind & Eng Chem 35:883-9 Ag '43
- Electrochemistry of corrosion. C. L. Bulow. diag Metal Finishing 41:553-5, 631-3+ S-O '43
- Explosions of gas cylinders containing automobile fuel. A. M. Portevin. Metal Prog 43: 242 F '43
- High-pressure corrosion controlled by chemicals. H. F. Simons. il diag Oil & Gas J 42:2-30, 33-4 S 2 '43
- Instances of corrosion in electric relays; phosphor-bronze springs. R. Wood and G. H. Wyatt. Soc Chem Ind J 62:110-11 J '43
- New aspects in the prevention of damage to materials by hot water, from the hygienic and chemical-technical viewpoints. F. Konrich and L. W. Haase. Am Water Works Assn J 35:1133-4 Ag '43
- New package dehydrator; granular silica gel used in packaging guns, planes, and machinery. H. H. Wilkinson. il Chem & Eng N 21:1054-5 J 10 '43; Same. Marine Eng 43:220+ Ag '43
- New type rustproof lining for drums; Nidex. A. Wachter and N. Stillman. flow plan il Oil & Gas J 41:214, 219, 221 Mr 25 '43
- Nomograph for calculation of corrosion rates. L. D. Yates and E. P. Tait. Metal Prog 42:1059 D '42
- Petroleum specialty protects Lafayette's fittings and machinery. Oil & Gas J 42:56 Ag 26 '43
- Protecting magnesium against corrosion. W. G. Harvey. il Aero Digest 41:233+ N '42

CORROSION and anti-corrosives—Continued

- Refrigeration notebook; learn money-saving ways to retard brine corrosion. T. Mitchell. *il Power* 87:630 S '43
- Relative corrodibility of some common metals and alloys; tabulation. J. Strauss, comp. *Metal Prog* 44:800 O '43
- Rust inhibitor for shell cases. *Iron Age* 151: 66 Ap 8 '43
- Rusted cans in V-boxes. *Mod Packaging* 17: 53 S '43
- Slushing type rust preventives. S. L. Bishkin. bibliog *il diags Nat Pet N* 35 pt 2:R225-64+ My 5 '43
- Study of corrosion and erosion of unfired pressure vessels. A. J. Phillips. *il Locomotive* 44:133-42 Ja '43
- Thermodynamic considerations in the corrosion of metals. J. C. Warner. bibliog *Electrochem Soc Trans* 83 (preprint 5):67-80 Ap '43
- Tube corrosion of furnace walls. G. S. Gethen. *il diags Power Pl Eng* 47:74-8 O '43
- Use of inhibitors for aluminum chemical equipment. R. B. Mears and G. G. Eldredge. *il Electrochem Soc Trans* 83 (preprint 15): 201-15 Ap '43
- Water production creates corrosion problems in western Kansas. N. Williams. *il Oil & Gas J* 41:41-3 Mr 18 '43
- Zinc yellow in the inhibition of corrosion-fatigue of steel in sodium chloride solution. C. G. Fink, W. D. Turner and G. T. Paul. bibliog *il Electrochem Soc Trans* 83 (preprint 13):159-82 Ap '43

See also

- | | |
|-------------------------------|--------------------------------------|
| Acid resisting materials | Paint, Protective |
| Aluminum—Protection | Petroleum refineries—Corrosion |
| Boilers—Corrosion | Pipe coating |
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| Fire extinguishers—Corrosion | Pipe lines—Protection |
| Galvanizing | Steel—Protection |
| Gasoline pipe lines—Corrosion | Water pipes—Corrosion |
| Metal coating | Water pipes—Protection |
| Metal protection | Water purification—Corrosion control |

Bibliography

- Bibliography of boiler corrosion, and methods of prevention. T. H. Turner. *Inst Mech Eng J & Proc* 149:Proc 85-8 My '43

Testing

- Bearings and bearing corrosion. L. Raymond. bibliog *il diags S A E J* 50:533-7 D '42; Same, without bibliog. *Automobile Eng* 33: 369-72 S '43
- Corrosion of bearing alloys. L. M. Tichvinsky. bibliog *il diags S A E J* 51:69-76 Mr '43; Abstract. *Automotive & Aviation Ind* 88:24 Ap 1 '43
- Corrosion of metals and alloys by flue gases. L. Shnidman and J. S. Yeaw. bibliog *il diags Ind & Eng Chem* 34:1436-44 D '42
- Corrosion of stressed alloy-steel bars by high-temperature steam. H. L. Solberg and others. *il diags A S M E Trans* 65:47-52 Ja '43
- Corrosion of unstressed specimens of alloy steel by team at temperatures up to 1300 F. G. A. Hawkins and others. *il A S M E Trans* 65:301-7; Discussion. 307-8 My '43
- Corrosion test data; guide to the selection of substitute materials. R. T. Barnes, Jr., J. W. Wing and T. E. Lagerstrom. *il diags Pulp & Pa of Can (Convention no)* 44:135-8+ [F] '43
- Effect of zinc on corrosion-fatigue of steels. N. Stuart and U. R. Evans. *Engineering* 155:336-7 Ap 23 '43
- Fatigue tests as a means of evaluating corrosion damage of sheet metals. W. H. Mutchler and J. A. Kies. *il diags Am Soc T M Proc* 42:568-72; Discussion. 573-5 '42
- Heat treatment vs. corrosion of duralumin; abstract. J. C. Arrowsmith and G. Murray. *Metals & Alloys* 17:612+ Mr '43
- Huey corrosion test for 18-8 steel. F. Meunier and H. M. Schnadt. *Metal Prog* 42:564+ O '42; Discussion. J. H. G. Monypenny. 44:104-5 Jl '43

Identification of rust on iron and steel. R. O. Clark. *Ind & Eng Chem Anal* ed 15:464-5 Jl 15 '43

Influence of stress on the corrosion pitting of steel in distilled water. D. J. McAdam, Jr. and G. W. Geil. bibliog *il Am Soc for Metals Trans* 30:1159-98; Discussion. 1198-1201 D '42

Lead-coated steel; abstract. G. Soderberg. *Metals & Alloys* 13:586+ S '43

Oxidation-corrosion of lubricating oils. C. L. Pope and D. A. Hall. bibliog *il diags Nat Pet N* 35 pt 2:R279-81 Je 2 '43

Potential service performance of lubricating oils; laboratory evaluation. G. W. Waters and E. C. Larson. bibliog *il diags Ind & Eng Chem Anal* ed 15:550-9 S 15 '43

Prescriptions for head cracks in 24ST rivets; laboratory tests of strengths, corrosion resistance, heat treatments, and aging. E. C. Hartmann, C. F. Westcoat and M. W. Brennecke. *il Aviation* 42:139-43+ N '43

Salt spray vs. seawater testing; abstract. C. E. Heussner. *Metals & Alloys* 17:1062+ My '43

Studies of the adherence and corrosion resistance of silver plate on steel; abstract. F. C. Mesle. *Iron Age* 152:68-9 Jl 8 '43

Study of some soluble inhibitors, with special reference to heat transfer and water-line attack. R. S. Thornhill and U. R. Evans. *diags Iron & Steel Inst J* 146:73-103, pl 5; Discussion. 103-5 no 2 '42

Super-aluminum alloys for aircraft structures. K. R. Jackman. *il diags Aviation* 42: 156-7, 159, 161+ O '43

Testing corrosion electrically. *diags Chem Ind* 52:613 My '43

Vibration, humidity, temperature and pressure test generators and chambers. W. W. MacDonald. *il diags Electronics* 16:32-6+ F '43

Underground corrosion

Corrosion and cathodic protection simplified. G. R. Olson. *diags Gas Age* 92:25-30, 32 S 23 '43

Performance data on enamel type pipe-line coatings. W. F. Rogers. *Pet Eng (Ref annual)* 14:162, 164, 166 Jl 1 '43

Preventive maintenance by systematic pipeline inspection. D. F. Van de Water. bibliog *Pet Eng* 14:74+ My '43

Progress report on iron corrosion research fellowship. R. L. Starkey. *Am Gas Assn Proc* 1942:329-30

Repair of corroded casing strings in old Kansas wells. N. Williams. *il Oil & Gas J* 42:46-7 Jl 8 '43

Soil areas corrosive to metallic iron through activity of anaerobic sulfate-reducing bacteria. R. L. Starkey and K. M. Wright. bibliog *Am Gas Assn Mo* 25:223-8 My '43

Tests on the corrosion of buried ferrous metals. J. C. Hudson, T. A. Banfield and H. A. Holden. *Iron & Steel Inst J* 146:107-26; Discussion. 127-9 no 2 '42

CORROSION research

American coordinating committee on corrosion 5th annual meeting, Pittsburgh, April 10. *Science* 97:437 My 14 '43

Corrosion battle being waged with electronic diffraction camera. E. A. Gulbransen. *Sci Am* 169:78 Ag '43

Corrosion of metals in air. W. H. J. Vernon. bibliog *Chem & Ind* 62:314-18 Ag 21 '43

Distribution of galvanic corrosion; nickel-steel couple. H. R. Copson. *diags Electrochem Soc Trans* 84 (preprint 17):159-69 O '43

Electron diffraction camera for studying surface finishes and control of corrosion, etc. *il diags Steel* 113:92-3 Ag 23 '43

First report on stress corrosion cracking of stainless steel in chloride solutions. M. A. Scheil and others. *il diags Welding J* 22: 35493-506 O '43

Iron alloy scaling. M. J. Day and G. V. Smith. *diags Ind & Eng Chem* 35:1098-1103 O '43

Marine corrosion; first report of a joint committee of the iron and steel institute and the British iron and steel federation. *Engineer* 175:415-16 My 21 '43; Discussion. *Engineering* 155:435-6 My 28 '43

New methods for examination of corroded metal; abstract and discussion. F. A. Champion. *Engineering* 156:273-4 O 1 '43

CORROSION research—Continued

- Probability—integral of the t -function. U. R. Evans. *Engineering* 156:295 O 8 '43
- Problem of copper and galvanized iron in the same water system. L. Kenworthy. *Engineering* 156:85-6, 125, 164, 205 J1 30, Ag 13, 27, S 10 '43
- Progress report on iron corrosion research fellowship. R. L. Starkey. *Am Gas Assn Proc* 1942:329-30
- Rust films being studied by special balance; abstract. E. A. Gulbransen. *Sci Am* 168: 30-1 Ja '43
- Tests on the corrosion of buried ferrous metals. J. C. Hudson, T. A. Banfield and H. A. Holden. *Iron & Steel Inst J* 146:107-26; Discussion. 127-9 no 2 '42
- Thermodynamic considerations in the corrosion of metals. J. C. Warner. *bibliog Electrochem Soc Trans* 83 (preprint 5):67-80 Ap '43

CORROSION resisting materials

- Acid and alkali resistance of plastics. J. Delmonte. *bibliog Mod Plastics* 20:91-4+ D '42
- Anti-corrosion pumps; selecting alloys for the chemical industry. H. Seymour. *Chem Age (Lond)* 47:536-7 D 12 '42
- Corrosion of metals and alloys by flue gases. L. Schnidman and J. S. Yeaw. *bibliog il diags Ind & Eng Chem* 34:1436-44 D '42
- Effect of copper on hot-dip zinc coatings. W. G. Imhoff. *bibliog Metal Finishing* 40: 636-40+ D '42
- Lead equipment used in industry. F. E. Wormser. *bibliog Metal Prog* 43:223+ F '43
- Longer-lived digester parts; Amsco alloy F-12. *il Paper Tr J* 116:14 Mr 11 '43
- New refractory compositions resistant to molten rock phosphate. G. R. Pole and A. W. Beinlich, Jr. *bibliog il diag Am Cer Soc J* 26:21-37 Ja 1 '43
- Non-corrosive materials; plastics and resins in the textile mill. R. Trautschold. *il Rayon* 23:729-32 D '42
- Tantalum in chemical industry. H. Seymour. *Chem Age (Lond)* 47:441-3 N 21 '42
- Tygon, a new synthetic corrosion-resistant material. *il Product Eng* 14:88-90 F '43; *Mod Plastics* 20:85-6+ Mr '43

See also

- | | |
|-------------------------------|---------------------------------------|
| Acid resisting materials | Iron alloys—Chromium manganese alloys |
| Bakelite | Monel metal |
| Chemical plants—Equipment | Paint, Protective |
| Chromium nickel steel | Rubber |
| Chromium steel | Rubber lining |
| Corrosion and anti-corrosives | Steel, Corrosion resisting |
| Detel | Steel, Stainless |
| | Stoneware |

CORRUGATED paper board. *See* Paper board, Corrugated

CORSETS

Battle for girdles; foundation garment industry. *Business Week* p91-2 Je 19 '43

Advertising

- Formfit tells dealers, if you can't sell corsets, retread 'em. *il Sales Management* 52: 32+ Je 1 '43
- When goods are scarce, copy can experiment. *Ptr Ink* 205:93 O 22 '43

CORTICOTROPIC substances. *See* Pituitary body

CORUNDUM

- Domestic corundum partially replacing imports. *For Comm W* 12:34 J1 24 '43
- Equilibrium relationships on the liquidus surface in part of the $MnO-Al_2O_3-SiO_2$ system. R. B. Snow. *bibliog il diags Am Cer Soc J* 26:11-20 Ja 1 '43

COSMETIC shops

- Cosmetic shop for R. H. Macy & co. *il plan Arch Forum* 79:94-6 S '43

COSMETICS

- All-America package competition award; F. N. Burt co., inc. *il Mod Packaging* 16:82, 138+ Ap '43
- Aminohydroxy derivatives; some industrial applications. *Chem Age (Lond)* 49:333-4 O 2 '43

Are further restrictions necessary for cosmetics? M. G. deNavarre. *il Adv & Sell* 36:118+ F '43

Beauty carries on. *Business Week* p77-8+ My 1 '43

Britain's wartime cosmetic industry. *For Comm W* 12:4+ J1 10 '43

Ceramic containers answer to shortage problems of cosmetic manufacturers. *il Cer Ind* 41:76+ Ag '43

Cosmetic carousel; war's stern demands now alter the old mechanism. E. M. Schwarzauber. *il For Comm W* 12:6-7+ J1 31 '43

Cosmetic 5-10c items may be forced off mart. *Oil Paint & Drug Rep* 143:3+ Ap 26 '43

Cosmetics through wars and revolutions. *il Mod Packaging* 16:60-2+ Ja '43

Glycols in cosmetics may be hazardous. *Oil Paint & Drug Rep* 143:5+ My 31 '43

How a design is born; Mary Dunhill shell design for cosmetics and perfume. *il Mod Packaging* 17:78-9 N '43

How Orloff cosmetics capitalized the re-use value of containers. *il Sales Management* 52: 22-4 F 1 '43

How Seaforth built he-man appeal into a line of toiletries. *il Sales Management* 51: 34, 36 D 15 '42

One bottle with multiple duties; Dermetics, inc. *il Mod Packaging* 16:58 J1 '43

Outlook for cosmetics. M. G. de Navarre. *Adv & Sell* 36:46 O '43

Packaging pinch. *Business Week* p82-3 J1 10 '43

Pharmacological considerations in the choice of cosmetic materials; abstract. O. S. Gibbs. *Oil Paint & Drug Rep* 143:63 My 17 '43

Photometric routine estimation of traces of lead by dithizone; application to materials used in the manufacture of cosmetics. J. Schultz and M. A. Goldberg. *bibliog Ind & Eng Chem Anal ed* 15:155-8 F 15 '43

Protective hand creams; abstract. H. S. Redgrove. *Soap & San Chem* 19:62 Ja '43

Showcase garden; Revlon's containers. *il Mod Packaging* 16:52-3+ J1 '43

Soap rationing; system in Britain for control of soap and cosmetic sales. M. Pye. *Soap & San Chem* 19:29-31 Je '43

Some pharmacological properties of polyethylene glycols of high molecular weight (carbowax compounds). H. F. Smyth, Jr. and others. *J Ind Hygiene* 24:281-4 N 42

WPB activities. C. A. Willard. *Oil Paint & Drug Rep* 143:63-6 My 17 '43

See also

- | | |
|----------------------|--------------------------|
| Leg make-up products | Toilet goods association |
| Toilet goods | |

Manufacture

- Putting the air in air-spun; compressed air finds a new use in preparing cosmetic powders and rouge. S. M. Dunham. *il Power* 86:890-1 D '42

Prices

- Cosmetic pricing regulation. *Oil Paint & Drug Rep* 143:3+ My 17 '43

COSMIC rays

Absorption curve and production of slow cosmic-ray protons at low altitude. V. H. Regener. *Phys R* 64:252-3 O 1 '43

Cosmic-ray stars at 10,000 feet. W. E. Hazen. *il Phys R* 63:213-14 Mr 1 '43

Further tests of the atom-annihilation hypothesis as to the origin of the cosmic rays. R. A. Millikan, H. V. Neher and W. H. Pickering. *Phys R* 63:234-45 Ap 1 '43

Hydrostatically supported cloud chamber of new design for operation at high pressures. T. H. Johnson, S. DeBenedetti and R. P. Shutt. *bibliog il diag R Sci Instr* 14:265-71 S '43

Improved cosmic-ray radio sonde. W. H. Pickering. *diags R Sci Instr* 14:171-3 Je '43; *Abstract, Electronics* 16:212+ D '43

Mesonotron mass and heavy tracks on Mt Evans. C. E. Nielsen and W. M. Powell. *bibliog il Phys R* 63:334-5 Mr 1 '43

Multiple production of penetrating particles by cosmic-ray protons and neutrons. W. E. Hazen. *Phys R* 64:257 O 1 '43

Multiple production of secondary cosmic-ray particles in the lower atmosphere. V. H. Regener. *bibliog diags Phys R* 64:250-2 O 1 '43

Nature of the primary particles responsible for cosmic-ray phenomena. W. F. G. Swann. *Phys R* 63:210-11 Mr 1 '43

COSMIC rays—Continued

New cosmic ray theory; abstract. W. F. G. Swann. *Science* 97:sup10 Ap 30 '43

Physics in 1942. T. H. Osgood. *Il J Ap Phys* 14:60-4 F '43

Production of secondaries in paraffin by primary cosmic-ray particles. M. Schein, M. Iona, jr. and J. Tabin. *diag Phys R* 64: 253-4 O 1 '43

Radio sonde. W. H. Pickering. *Il diags Inst Radio Eng Proc* 81:483-5 S '43

Statistical mechanics of processes observed in cosmic-ray phenomena. G. Wataghin. *Phys R* 64:248 O 1 '43

Theory of cosmic-ray mesons. J. Hamilton, W. Heitler and H. W. Peng. *bibliog Phys R* 64:78-94 Ag 1 '43

Variation of mesotron intensity with altitude and latitude, together with allied phenomena, and the bearing of these matters on the nature of the primary particles. W. F. G. Swann. *Franklin Inst J* 236:1-7, 111-39 Jl-Ag '43

See also

Mesotrons

Components

Absorption of the hard component of the cosmic radiation. M. E. Rose. *bibliog Franklin Inst J* 236:9-45 Jl '43

Electrons in equilibrium with the penetrating component of cosmic rays in lead at 10,000 feet and at sea level. W. E. Hazen. *bibliog Il Phys R* 64:7-10 Jl 1 '43

Intensity of cosmic rays at low altitude and the origin of the soft component. K. Greisen. *bibliog diags Phys R* 63:323-33 My 1 '43

Intensity

Intensity of cosmic rays at low altitude and the origin of the soft component. K. Greisen. *bibliog diags Phys R* 63:323-33 My 1 '43

Relation of the cosmic radiation to geomagnetic and heliophysical activities. J. W. Broxon. *bibliog diags Phys R* 62:508-22 D 1 '42

Ionization effects

Specific primary ionization of cosmic rays in helium. W. E. Hazen. *Il Phys R* 63:107-10 F 1 '43

Showers

Burst production in a gas volume. M. Sinha. *Il Phys R* 64:248-9 O 1 '43

Cloud-chamber and counter studies of cosmic rays underground. V. C. Wilson and D. J. Hughes. *bibliog Il diags Phys R* 63:161-71 Mr 1 '43

Effect of radiation damping on burst production. S. Kusaka. *bibliog Phys R* 64:256-7 O 1 '43

Large cosmic-ray bursts in an unshielded ionization chamber. R. E. Lapp. *diag Phys R* 64:129-30 S 1 '43

Origin of large bursts under thick shields. R. E. Lapp. *diag Phys R* 64:254 O 1 '43

Spin of the mesotron from burst measurements. R. E. Lapp. *Phys R* 64:255-6 O 1 '43

Theory of cosmic-ray showers; further contributions to the fluctuation problem. W. T. Scott and G. E. Uhlenbeck. *Phys R* 62: 497-508 D 1 '42

Underground studies

Cloud-chamber and counter studies of cosmic rays underground. V. C. Wilson and D. J. Hughes. *bibliog Il diags Phys R* 63: 161-71 Mr 1 '43

COSMOGONY

Cooling planet; abstract. P. G. Nutting. *Science* 97:sup 10 Je 18 '43

COSMOLOGY

See also

Astronomy
Earth

COST

Cost-output relation for the U.S. steel corporation. C. A. Smith. *R Econ Stat* 24: 166-76 N '42

See also

Cost accounting Mining costs
Cost of living Power cost
Labor cost Prices
also subdivision Cost, Cost of operation
and Costs under special subjects, e.g.
Building—Cost; Locomotives—Cost of
operation; Railroads—Costs; Trolley buses
—Cost of operation

Definition

Government policies in cost definitions under cost-plus-fixed-fee contracts. M. C. McIntosh. *N A C A Bul* 24:891-901 Ap 1 '43

COST accounting

Allocate core costs to individual castings. A. E. Grover. *Foundry* 71:130-2+ Je '43

Cost-output relation for the U.S. steel corporation. C. A. Smith. *R Econ Stat* 24: 166-76 N '42

Development of contract renegotiation and function of the price adjustment boards. E. F. Dow. *N A C A Bul* 24:1125-49 My 15 '43

Development of cost accounting. Blast F & Steel Pl 31:1161-3 O '43

Establishing control of factory overhead. R. W. Herr. *N A C A Bul* 24:1399-1415 Ag 15 '43

For streamlining cost-accounting principles. T. C. McCobb. *Comm & Fin Chr* 156: 2162 D 17 '42

Government policies in cost definitions under cost-plus-fixed-fee contracts. M. C. McIntosh. *N A C A Bul* 24:891-901 Ap 1 '43

Metal and melting cost in a gray iron foundry. A. E. Grover. *Il Foundry* 71:72-4, 159-62 Ja '43

Original cost studies; mistake made by approaching problem from appraisal standpoint. J. B. Klainer. *Pub Util* 30:842-50 D 17 '42

Pension plans. V. H. Stempf. *N A C A Bul* 24:521-31 Ja 1 '43

Police your costing system with adequate control. A. C. Kiechlin. *Inland Ptr* 112:39-41 O '43

Practice in accounting for continuing expenditures arising from wartime production, compiled by the Research and technical service department, National association of cost accountants. *N A C A Bul* 24:925-49 sec 3 Ap 1 '43

Practice in accounting for non-recurring expenditures arising from wartime production. *N A C A Bul* 24:1017-43 sec 3 Ap 15 '43

Preparation for post-war progress. L. M. Cherne. *N A C A Bul* 24:1315-30 Jl 15 '43

Production and cost control in a small war plant. W. Flatow. *Iron Age* 152:70-2+ S 16 '43

Protractive costing; application to electricity undertakings. R. C. Golding. *Elec R (Lond)* 131:651-3 N 20 '42

Research accounting. D. H. Sheehan and F. J. Curtis. *Ind & Eng Chem* 35:225-6 F '43

Standard classification of public assistance costs. C. R. Rorem. *J Account* 75:438-41 My '43

Ten years' progress in management; cost accounting and budgetary control. J. A. Willard. *A S M E Trans* 65:228-30 Ap '43

War department cost interpretations. *J Account* 75:181-4 F '43

Will your prices be in line? check production costs. L. B. Evans. *Ind Marketing* 28: 78+ Ag '43

See also

Accounting Labor cost—Accounting
Budget, Business ing
Contracts, Govern- Machinery, Replace-
ment—Accounting ment of
Depreciation Overhead expense
Factories—Account- Payrolls—Accounting
ing Sales costs—Account-
ing

Bibliography

Current cost literature. *N A C A Bul* 24:409+ sec 2 D 1 '42 [cont monthly]

COST accounting—Continued**Standard costs**

- Application of standard costs to the aircraft industry. H. C. Nichols. N A C A Bul 24:953-62 Ap 15 '43
 Do standard costs aid war production? H. J. Myers. N A C A Bul 25:3-16 S 1 '43
 Some accounting suggestions; would reduce expenses and improve records. H. O. Letiecq. Pub Util 32:287-91 S 2 '43
 Struggles with standards. W. H. Franklin. N A C A Bul 24:373-83 D 1 '42

COST of living

- Effectiveness of price control. D. D. Humphrey. Survey of Cur Business 23:14-15 F '43
 Stabilization of cost of living by wage and price control. Monthly Labor R 55:917-24 N '42
 Wage rates and living costs in a war economy. M. S. Brody. J Business 16 pt 2:1-38 J1 '43

See also

- | | |
|-------------------|--------------------|
| Budget, Household | Rent |
| Food—Prices | Saving |
| Prices | Standard of living |

Statistics

- American economy in 1942: commodity prices and the cost of living; with figures for earlier years. C. A. R. Wardwell and R. B. Bangs. Survey of Cur Business 23:18-20 Ja '43
 Bureau of labor statistics cost-of-living index in wartime. F. M. Williams. Monthly Labor R 57:82-95 J1 '43
 Changes in cost of living in large cities. November 15, 1942. Monthly Labor R 56:100-3 Ja '43 [cont monthly]
 Changes in Labor dept. living costs index. Comm & Fin Chr 157:2035 Je 3 '43
 Cost of living in cities in relation to their size and latitude. E. L. Thorndike and E. Woodyard. Am Stat Assn J 38:238-41 Je '43
 Cost of living in 1941. U S Bur Labor Statistics Bul 710:1-41; pa 10c Supt. of doc. '42
 Cost of living in the United States and Canada, 1939-1942; chart. Survey of Cur Business 23:2 F '43
 Cost of living index misleading as to electricity; situation to be remedied. Edison Elec Inst Bul 11:316 O '43
 Cost of living indexes in wartime. F. M. Williams, F. R. Rice and E. D. Schell. Am Stat Assn J 37:415-24 D '42
 Cost of living, 1938-1941. Survey of Cur Business 1942 Sup p16 [supplemented in monthly numbers]
 Cost of living, United States, Canada, United Kingdom, Germany, Netherlands, Switzerland, 1932-1941 and monthly Nov. 1941-Nov. 1942. Fed Res Bul 29:107 Ja '43 [cont monthly]
 Estimated intercity differences in cost of living. March 15, 1943. Monthly Labor R 57:803-5 O '43
 Income payments, consumer expenditures, and cost of living, 1940-first quarter 1943; chart. Survey of Cur Business 23:1 O '43
 Index numbers of cost of living and food prices in various countries. Int Labour R 47:126-31 Ja '43 [cont quarterly]
 Index revised; cost-of-living index to take account of changes in wartime diet. Business Week p18-19 Ap 17 '43
 Indexes of cost of controlled and uncontrolled goods and services. F. R. Rice. Monthly Labor R 56:104-8 Ja '43
 Indexes of earnings, cost of living, and real wages; chart and tables. Automotive & Aviation Ind 88:89 Mr 15 '43
 Observations on the cost of living index of the Bureau of labor statistics. L. Teper. bibliog Am Stat Assn J 38:271-84; Discussion. A. J. Wickens and F. M. Williams. 284-6 S '43
 Purchasing power of the dollar, 1933-1941. Survey of Cur Business 1942 Sup p20 [supplemented in monthly numbers]
 Wages outrun living costs. Steel 113:59-60 Ag 23 '43
 Washington's battle of the indexes. Business Week p5 My 1 '43
 What's happening to the cost of living; Aug. 1939, Jan. and Sept. 1941, and Sept. 1942-Sept. 1943. Business Week p27 N 6 '43

Wholesale prices and the cost of living. Survey of Cur Business 23:11-12 J1 '43

Canada

- Canadian subsidies ease pressure on prices. J. Backman. il Dun's R 51:14-20+ Ap '43
 C. of L. refigured. Business Week p60 My 1 '43
 Food subsidies in Canada. Economist 144:145 Ja 30 '43

Germany

- European design; stability of living costs in Britain and Germany. Business Week p20+ Mr 13 '43

Great Britain

- Britain's index. Business Week p50 Mr 13 '43
 European design; stability of living costs in Britain and Germany. Business Week p20+ Mr 13 '43
 Subsidized control of living costs in Canada and Great Britain. Monthly Labor R 56:32 Ja '43
 Wage rates and living costs in a war economy; wage-rate control in Great Britain and the United States. M. S. Brody. J Business 16 pt 2:6-11 J1 '43

Iceland

- Cost of living in Iceland, 1941 and 1942. Monthly Labor R 55:1014 N '42

Mexico

- Cost of living and price regulation in Mexico. A. W. Patterson. Monthly Labor R 57:244-50 Ag '43

New York (state)

- Living costs of woman workers in New York, 1942. Monthly Labor R 57:100 J1 '43

Puerto Rico

- Incomes and expenditures of wage earners in Puerto Rico, 1940-41. A. C. Hanson. Monthly Labor R 56:223-32 F '43
 Living costs in Puerto Rico. J. Cornfield. Monthly Labor R 57:806-16 O '43

United States

- Changes in cost of living in large cities. November 15, 1942. Monthly Labor R 56:100-3 Ja '43 [cont monthly]
 Costs under fire; OPA and WFA to drive down cost-of-living index by buying crops and selling at loss. Business Week p16-17 Ag 7 '43
 Hop in the index. Business Week p38 My 29 '43
 Hourly wage rate study stresses need for reducing living costs. C. Bowles. Comm & Fin Chr 158:1111 S 16 '43
 Living costs rose 9% in year of war. Comm & Fin Chr 157:509 F 4 '43
 Living costs since beginning of retail price control. M. J. Ulmer. Monthly Labor R 57:66-81 J1 '43
 OWI booklet on fight to control living costs. Comm & Fin Chr 157:1400 Ap 15 '43
 Wages keep ahead of prices. Ins Field (Life ed) 72:6 S 3 '43
 What's happening to the cost of living. Business Week p24 Ja 2; 89 F 6; 96 Mr 27; 38 My 29; 104 J1 31 '43

See also

- Cost of living—Statistics

Washington, D.C.

- Changes in living costs of federal employees in Washington, D.C. from December 1940 to December 1941. In U S Bur Labor Statistics Bul 710:29-33 '42

- COST of living bonus.** See Wage payment plans
COST-plus contracts. See Contracts, Government—Cost-plus contracts

COSTA RICA*See also*

- | | |
|---------------------|----------------------|
| Gold mines and min- | Hydroelectric plants |
| ing—Costa Rica | —Costa Rica |

Economic conditions

- News by countries. For Comm W 11:15-16 My 15; 16-17 Je 19; 12:14-15 Ag 14; 17 S 25; 13:16-17 O 16 '43

COSTUME*See also*Clothing, Protective
Clothing and dress**COTTAGES**Compact cottage in New England; views and plans. Arch Rec 93:46-7 My '43
Planned for the future; lakeside summer cottage. II plan Arch Rec 92:40 D '42
Small cottage of wood construction with finished walls act as stiff slabs rather than covered frames; views, plans and construction outline. Arch Forum 77:76-7 N '42*See also*Bungalows
Country houses
Week-end houses**COTTON**Cotton variety and yarn quality. G. W. Pfeifferberger. Textile World 93:74-7 JI '43
Drive for cotton; Wickard increases 1943 goal. Business Week p110 Mr 13 '43
Hydrolysis and catalytic oxidation of cellulosic materials; characterization of cellulose. R. F. Nickerson. bibliog II Ind & Eng Chem 34:1480-5 D '42
Nitric acid pulping of whole cotton; properties of celluloses obtained. J. D. Fleming and F. K. Cameron. bibliog Ind & Eng Chem 35:819-21 JI '43
Oxycellulose made by a new method. A. J. Hall. diag Textile Col 65:148-50 Ap '43
Plastics from cellulose; abstract. P. F. Robb. Paint Oil & Chem R 105:18 Ap 8 '43
Puerto Rican Sea Island cotton. E. S. Ortiz. Rayon 24:202-3, 233-4 Ap-My '43
Vital cotton crop. Business Week p108-9 JI 24 '43*See also*Bleaching—Cotton
Cellulose
Cotton fabrics
Cotton fibers
Cotton manufacture
Cotton mills
Cotton trade
Cottonseed
Cottonseed oil
Dyes and dyeing—Cotton**Bleaching***See* Bleaching—Cotton**Dyeing***See* Dyes and dyeing—Cotton**Immunized cotton**

Manufacture of immunized cotton. A. J. Hall. Textile Col 65:52 F '43

Moisture contentDrying of textiles. A. C. Walker. diag Textile Col 65:389-95, 422-4 S '43
Graphical method for obtaining oven dry cotton percentages in government lining fabrics. H. C. Haller and A. Feigendreger. bibliog Am Dyestuff Rep 32:301-2, 311-14 JI 5 '43*See also*

Cotton yarn—Moisture content

PricesCotton stabilized. Business Week p105-6 My 1 '43
Production in cotton goods adversely affected by narrow margins. W. R. Bell. Comm & Fin Chr 157:1979 My 27 '43
Proposal for ceilings on cotton. Nat City Bank p50-1 My '43
Wheat and cotton price factors. Barron's 23:3 F 8 '43**Standards**

Staple length of cotton. E. Lord. II Textile Inst J 33:T205-40 D '42

Statistics*See also*

Cotton trade—Statistics

Testing*See also*
Cotton fabrics—Testing
Cotton fibers—Testing
Cotton yarn—Testing**Uses**

Cotton serving the Nation. J. L. Crain. II Manuf Rec 112:28-9+ JI '43

See also

Cotton fabrics—Uses

India

Karnatak cotton: improvement; abstract. S. H. Prayag. Textile Inst J 34:A110 Mr '43

See also

Cotton trade—India

Russia

Strange cotton. Business Week p50-1 F 27 '43

Texas

Irony in cotton; shortage of cottonseed products. Business Week p32 Mr 13 '43

United StatesCotton planting 10% over allotments allowed. Comm & Fin Chr 157:1316 Ap 8 '43
Cotton. United States crop number one. A. L. Ward. Manuf Rec 112:39+ Ag '43
Good-sized cotton crop in prospect. Barron's 23:6 Ag 16 '43
United States cotton supply. Manuf Rec 112:59+ Mr '43*See also*

Cotton trade—United States

COTTON, Immunized. *See* Cotton—Immunized cotton**COTTON bags**

Cotton for cotton; bale bagging. II Business Week p22+ F 6 '43

COTTON baling

Cotton for cotton; bale bagging. II Business Week p22+ F 6 '43

COTTON Belt railway. *See* St Louis southwestern railway**COTTON carding**Assigning card-room jobs to women; time studies and analysis. E. H. Hellmwell. II Textile World 93:62-3 Mr '43
Breaking card room bottlenecks. Textile World 93:132-3 F '43
Study of the effects of extracting and drying on the carding and spinning of raw stock dyed cotton; presented for the A.A.T.C.C. Southeastern section by L. E. Whittelsey. Am Dyestuff Rep 31:628-9 D 7 '42**COTTON-cement shingles.** *See* Shingles, Cotton-cement**COTTON combing**Comber waste and yarn quality. M. E. Campbell and J. M. Cook. Textile World 93:80 JI '43
Combers at Trenton cotton mills. II Textile World 93:33 Ja '43**COTTON drying**Drying of textiles. A. C. Walker. diag Textile Col 65:389-95, 422-4 S '43
Study of the effects of extracting and drying on the carding and spinning of raw stock dyed cotton; presented for the A.A.T.C.C. Southeastern section by L. E. Whittelsey. Am Dyestuff Rep 31:628-9 D 7 '42**COTTON dust**

Byssinosis, report of two cases and review of literature. H. L. Bolen. bibliog II J Ind Hygiene 25:215-24 Je '43

COTTON exchanges*See also*

New York cotton exchange

COTTON fabricsBritish standard utility cloths. II Textile World 93:86-7 Je '43
Commercial standard CS103-42, cotton and rayon velour. Textile Col 65:31-2 Ja '43
Cooperative studies on a laboratory method for evaluating synthetic detergents. J. B. Crowe. Am Dyestuff Rep 32:237-41 My 24 '43

Cotton fabric styles for 1943. H. E. Reed. II Textile World 93:72-3 Ja '43

Cotton replacing fur in many cold climate garments for soldiers. Textile Col 64:558 D '42

COTTON fabrics—Continued

- Cotton slasher blanket; cotton mills experiment with newly developed fabric. *Textile World* 92:140 N '42
- Cotton tire cord terms. *Textile World* 92:95 D '42
- Damage to textile fibers and fabrics in finishing processes. *Textile Col* 65:379-82 S '43
- Deterioration of flameproofed cotton fabric. A. S. Tweedie and C. H. Bayley. *Am Dyestuff Rep* 32:427-3 S 27 '43
- Fabrics for military purposes; coated HH balloon cloth; cotton drill and sheeting specification amended. *il Textile World* 92:80 D '42
- Fabrics for military purposes; cotton marquise for sandfly bars; fabrics for use in outfits for WAACS. *il Textile World* 92:70 N '42
- Imperfections in woven fabrics. T. Nelson. *il Textile World* 93:93 My '43
- Manual of military fabrics; 8.5-oz. herringbone twill. *il Textile World* 93:94-5 Je '43
- Manual of military fabrics; 8.2-oz. cotton twill. *il Textile World* 93:88-9 Ap; 82-3 My; 72-3 Jl '43
- Manual of military fabrics; 9-oz. sateen. *il Textile World* 93:94-5 S '43
- Manual of military fabrics; no. 6 cotton duck, type I. diag *Textile World* 93:90-1+ O '43
- Manual of military fabrics; 6-oz. cotton twill; manufacturing and processing details for shirting fabrics. *il Textile World* 93:72-4 Mr '43
- Manual of military fabrics; wind-resistant cotton cloth; manufacturing and processing details. *il diag Textile World* 93:83-5 F '43
- Pigments as applied to textiles. E. Sewell. *Rayon* 24:607-8 N '43 (to be cont)
- Role of textiles in camouflage. *il Textile World* 93:68-9 Jl '43
- Tendering of cotton fabrics. F. M. Steadman. *Textile Col* 65:302+ Jl '43
- Water-resistant fabric utility. G. A. Slowinske. bibliog *il diag Am Dyestuff Rep* 32:85-91 F 15 '43
- What the government buys; cotton fabrics woven. *Textile World* 93:86-7 F '43

See also

- | | |
|------------------------|-------------------------------|
| Cotton weaving | Mercerizing |
| Denim | Rayon fabrics—Cotton mixtures |
| Duck (textile) | Terry fabrics |
| Dyes and dyeing—Cotton | Tire fabrics |

Protection

- Fireproofing cotton and woolen fabrics. R. Van Tuyle. *il Am Dyestuff Rep* 32:297-301 Jl 5 '43
- Flameproofing military fabrics; processes which afford protection against fire, water, mildew. W. W. Chase. *Textile World* 93:90 Ap '43
- Guarding cotton from mildew, dry rot, and termites. *il Business Week* p48 My 8 '43
- Mildewproofed cotton fabrics. J. E. Goodavage. *Am Dyestuff Rep* 32:265-70 Je 7 '43; Abstract. *Textile World* 93:92-3 Je '43
- Modern fireproofing. *Textile Col* 65:57-62 F '43
- Modern mildew proofing. P. E. N. Cillium. *Textile Col* 65:359-65+ Ag '43
- Protecting textiles from silverfish. C. L. Mantell and E. May. *il Mod Plastics* 20:51-3+ F '43
- Soil suspension method for testing mildew resistance of treated fabrics. M. S. Furry and M. Zametkin. bibliog *il Am Dyestuff Rep* 32:395-8 S 13 '43

Testing

- Determining the deterioration of cellulose caused by fungi. G. A. Greathouse, D. E. Klemme and H. D. Barker. bibliog *il Textile Col* 65:168-75 Ap '43
- Effect of laundering and laundry-bleaching processes on cotton, linen and viscose fabrics. E. Honegger and A. Schnyder. *pl Textile Inst J* 34:T29-40 Je '43
- Fatigue of fabrics. W. F. Busse and others. bibliog *diag J Ap Phys* 13:715-24 N '42
- Report of committee on accelerated ageing tests for sulfur-dyed materials. T. R. Smith. *Am Dyestuff Rep* 32:380-4 Ag 30 '43
- Resistance of textiles to micro-organisms. *Can Chem & Process Ind* 27:480+ Ag '43

Uses

- Cotton fabric for lining roadside ditches. *Pub Works* 74:39 Ja '43
- Spliced cotton belts; abstract. R. W. Mallick. *Iron Age* 151:63 Ap 1 '43

Wool mixtures

- See Woolen and worsted fabrics—Cotton mixtures

COTTON fibers

- Effect of environment on hair characters and spinning value in Sea Island cotton. J. B. Hutchinson. *Textile Inst J* 34:T61-9 S '43
- New methods of measuring the properties of cotton fibers. K. L. Hertel. *il Rayon* 24:529-31, 603-4 O-N '43
- Plastic-bonded cotton fiber. M. A. Goldman and G. A. Olsen. *il Mod Plastics* 20:100, 130+ My '43
- Staple length of cotton. E. Lord. *il Textile Inst J* 33:T205-40 D '42

- See also Mercerizing

Testing

- Quick detection of fiber damage; chemical and microscopic tests. W. Krauss. *il Textile World* 93:76-7 Ja '43

COTTON finishing

- Chemically resistant cotton. *Textile World* 93:85 Ag '43
- Dyeing and finishing of cotton piece goods for the government. M. M. Calhoun, Jr. *Am Dyestuff Rep* 32:327; Discussion. 328 Jl 19 '43
- Finishing of army ducks with special reference to mildewproofing. E. C. Bertolet. *Am Dyestuff Rep* 32:214-19, 226-7 My 10 '43
- Kier boiling cotton piece goods. A. G. Tate. *il Textile World* 93:91-3 Ag '43
- Linen-like finishes on cotton fabrics. A. J. Hall. *Textile Col* 65:432-3 O '43
- Manual of military fabrics; 8.2-oz. cotton twill. *Textile World* 93:72-3 Jl '43
- Silky appearance in textile materials. *Textile Col* 65:345-8 Ag '43

See also

- Cotton fabrics
Cotton sizing
Mercerizing

COTTON goods

- Service study of women's full-fashioned hosiery manufactured from four varieties of long staple American cotton. M. B. Hays, R. L. Rogers and M. C. Boyer. bibliog. *Am Dyestuff Rep* 32:187-90, 209-11 Ap 26 '43

See also

- Cotton fabrics
Cotton yarn

COTTON growing

- Cotton allotments in the Mississippi Delta new-growth area. J. E. Mason, J. Land & Pub Util Econ 18:447-57 N '42
- Fume cultivator used for cotton. M. G. Barnwell. *il Textile World* 93:90 Ag '43

COTTON handling

- Unique outdoor conveyor system transports cotton bales from warehouse to the opener room at Pacolet mfg. co. *il Textile World* 93:80-1 My '43

COTTON insurance. See Insurance, Cotton**COTTON linters**

- Price ceiling for cotton linters. *Rayon* 24:556 O '43

COTTON machinery

- Consider the drafting operation. R. Wentworth. *il Textile World* 93:75-8 Je '43
- Cotton roving frame of all-welded design; abstract. W. Shaw. *diag Textile World* 93:95 Mr '43
- Exhaust from picker machines. R. L. Grayford. *diag Sheet Metal Worker* 34:27-9 S '43
- Installation of future cotton spinning mills. J. Buckley. insert[tables] *Textile Inst J* 34:P1-13; Discussion. P14-16 Ja '43

See also

- | | |
|-------------------------|--------------------|
| Cotton picking machines | Spinning machinery |
| Chinese looms | Textile machinery |

Lubrication

- How to set up card-room lubrication schedules. E. H. Helliwell. *Textile World* 92:88-9 N '42

COTTON machinery—Continued**Maintenance and repair**

Opener and picker maintenance. Textile World 93:67 Ja '43

COTTON manufacture

Control of neps, naps and specks; investigated, and opening, picking, carding settings given. E. H. Helliwell. *il* Textile World 93:84-5+ S '43

Manpower key to output increase. G. Montgomery. Textile World 93:64 J1 '43

See also

Cotton carding	Cotton spinning
Cotton machinery	Cotton weaving
Cotton mills	Cotton yarn
Cotton oiling	

Patents

Manufacture of immunized cotton. A. J. Hall. Textile Col 65:52 F '43

COTTON mills*See also*

Cotton manufacture

Air conditioning

Humidifier as a production tool; Bibb mfg. co. cotton waste mill. H. L. Galsion and H. L. Kempaner. *il* Textile World 93:92-5 J1 '43

Employees

Assigning card-room jobs to women; time studies and analysis. E. H. Helliwell. *il* Textile World 93:62-3 Mr '43

Beaumont opens personnel building. *il* Textile World 93:99 Ja '43

Byssinosis, report of two cases and review of literature. H. L. Bolen. *ibid* *il* J Ind Hygiene 25:215-24 Je '43

Cotton trade wages. Economist 144:84 Ja 16 '43

Effect of incentive payments on hourly earnings; fabrication of nonferrous metals. E. M. Olsen. Monthly Labor R 56:849-57 My '43

Personnel program keyed to times; Pacolet mill at New Holland. *il* Textile World 93:82-4 Ag '43

Post-war textile manpower plans in England. A. W. Williams. Textile World 93:82-3 Je '43

Recruitment for the cotton industry. Chem & Ind 62:132 Ap 3 '43

Workers for new jobs quickly; vocational school and plant executives cooperate. *il* Textile World 93:57-8 Mr '43

Equipment

Infra-red units push up denim output; drying endless-felt belt used in production process. *il* Elec W 120:134+ J1 10 '43

Installation of future cotton spinning mills. J. Buckley. *Insert[tables]* Textile Inst J 34:Pl-13; Discussion. P14-16 Ja '43

Large-package twisting at Quaker Meadows. *il* Textile World 92:82+ D '42

Remodeled opener-picker room; Green River mills. *il* Textile World 93:84-5 Mr '43

Unique outdoor conveyor system transports cotton bales from warehouse to the opener room at Pacolet mfg. co. *il* Textile World 93:80-1 My '43

Layout

Cloth-room is streamlined; Woodside cotton mills. T. O. Ott, jr. *il* Textile World 93:82-3 Ap '43

Lighting

Lighting in the cotton industry; abstract and discussion. J. W. Howell. Light & Lighting 36:36+ Mr '43

Three-dimensional seeing now. *il* Textile World 93:70-3 My '43

Management

Internal reorganization of a cotton mill. J. Airey. Textile Inst J 33:P124-30; Discussion. P130-2 D '42

Let's talk about our twisters. W. F. Crowder. *il* Textile World 93:111 F '43

To improve winding efficiency pay more attention to operatives and to upkeep of machine. W. F. Crowder. Textile World 93:80-1 O '43

Your weave-room supply system; proper bin arrangement and card index system. W. A. Newell. *il* Textile World 93:80-1 Ap '43

Painting

Color combinations recommended by E. I. Du Pont de Nemours & co., inc., for painting ceilings, walls, and equipment in various departments of a textile mill. Textile World 93:72 My '43

Power

Characteristics and power requirements of spinning frames. E. A. Untersee. Elec Eng 59:Trans 1-4, 336-8 Ja, Je '40; Abstract. Textile World 93:98-9 S '43

COTTON neps

Control of neps, naps and specks; investigated, and opening, picking, carding settings given. E. H. Helliwell. *il* Textile World 93:84-5+ S '43

COTTON oiling

Oiling cotton at the picker. E. H. Helliwell. Textile World 93:87 J1 '43

COTTON picking machines

Cotton picker success at last; International Harvester's device equals 50 to 80 manual workers. *il* Steel 111:25-6 N 30 '42; Same. Manuf Rep 111:30-1 D '42

Mechanical picker again; International Harvester's improved machine. *il* Textile World 93:104 Ja '43

Mechanical picker; two-row Morco cotton stripper. *il* Business Week p71+ O 16 '43

COTTON research

Callaway research institute; new quarters and facilities. *il* Textile World 93:86-7 Ap '43

Cotton research plan described. Textile World 93:94 My '43

New methods of measuring the properties of cotton fibers. K. L. Hertel. *il* Rayon 24:529-31, 603-4 O-N '43

Textile research and development. R. H. Pickard. Textile Inst J 34:P95-102 Je '43; Same. Am Dyestuff Rep 32:399-404 S 13 '43

COTTON sizing

Cotton slasher blanket; cotton mills experiment with newly developed fabric. Textile World 92:140 N '42

COTTON spinning

Consider the drafting operation. R. Wentworth. *il* Textile World 93:75-8 Je '43

Effect of environment on hair characters and spinning value in Sea Island cotton. J. B. Hutchinson. Textile Inst J 34:T61-9 S '43

End breakage problem. C. McElroy and M. Gross. Textile World 92:88 Je '43

Fiber from the spinner's viewpoint. C. D. Brandt. Rayon 24:351-3 J1 '43

Hank-clock production constants. C. McElroy and M. Gross. Textile World 93:131-2 Ap '43

How many drawing processes? Textile World 93:89 J1 '43

How to make up the loom book. F. H. Gunther and M. Gross. Textile World 93:84 O '43

Humidifier as a production tool; Bibb mfg. co. cotton waste mill. H. L. Galsion and H. L. Kempaner. *il* Textile World 93:92-5 J1 '43

Installation of future cotton spinning mills. J. Buckley. *Insert[tables]* Textile Inst J 34:Pl-13; Discussion. P14-16 Ja '43

Know your cotton spinning drafts; chart. C. McElroy and M. Gross. Textile World 93:86-7 Ag '43

Large-package twisting at Quaker Meadows. *il* Textile World 92:82+ D '42

Maintenance of spinning frames. *il* Textile World 93:82-3 Mr '43

Picker-room lap-weight control. R. W. Mitchem. Textile World 93:86-7 Mr '43

Staple length of cotton. E. Lord. *il* Textile Inst J 33:T205-40 D '42

Study of the effects of extracting and drying on the carding and spinning of raw stock dyed cotton; presented for the A.A.T.C.C. Southeastern section by L. E. Whitteley. Am Dyestuff Rep 31:628-9 D 7 '42

COTTON spinning—Continued

Yarn-count constants. C. McElroy and M. Gross. Textile World 92:85 D '42

See also

Cotton yarn

COTTON stalks

Cotton stalks for synthetic lumber; with cost data. F. W. zur Burg. bibliog diagrs Paper Ind 25:612-15 S '43

COTTON textile institute

Annual meeting, New York, Oct. 22. Textile World 92:68-9 N '42

Annual meeting, 17th, New York, Oct. 19-20. Rayon 24:572 N '43; Textile World 93:110-11 N '43

COTTON trade

Cotton in post-war world discussed at National cotton conference-forum. Comm & Fin Chr 157:2111 Je 7 '43

Cotton industry in the reconstruction and post-war period. W. A. Grierson. Textile Inst J 35:P106-10; Discussion. P110-14 N '42

First national cotton forum held in N.Y. under auspices of Cotton exchange. Comm & Fin Chr 157:500 F 4 '43

See also

Cotton—Prices

Cotton yarn

Statistics

Cotton and cotton manufactures, 1938-1941. Survey of Cur Business 1942 Sup p165-7 [supplemented in monthly numbers]

Ten years of cotton-textiles; tabulation. W. R. Bell. Textile World 93:137 Ap '43

Brazil

Lint-cotton production, 1941-42. For Comm W 12:30 Ag 7 '43

Dominican Republic

Dominican Republic's exports and imports, 1940 and 1941. For Comm W 10:25 Ja 2 '43

Great Britain

Cotton merchants. Economist 143:715 D 5 '42

Cotton textiles in 1942. Economist 144:sup24-5 Mr 13 '43

Cotton trade organisation. Economist 144:507-8 Ap 17 '43

Cotton trade reconstruction. Economist 143:614-15 N 14 '42

Future for cotton. Economist 144:398 Mr 27 '43

Internal reorganisation of a cotton mill. J. Airey. Textile Inst J 33:P124-30; Discussion. P130-2 D '42

Post-war problems of the British cotton industry. Z. Nawrocki. Textile Inst J 34:P26-38 F '43

Post-war textile manpower plans in England. A. W. Williams. Textile World 93:82-3 Je '43

Size of cotton firms. Economist 143:678 N 23 '42

India

Cotton in India. Textile Col 65:382 S '43

Government assumes control of cotton-textile industry. For Comm W 12:25-6 Ag 21 '43

Indian production and manufacture. For Comm W 10:31 Mr 20 '43

India's cotton position, today. D. R. Crone. Il For Comm W 12:19-21+ S 4 '43

Latin America

Cotton-textile industry south of the Rio Grande. M. E. Wambsganss. Il For Comm W 11:10-13+ Ap 24 '43; Same. Textile Col 65:305-7, 339-41 Jl-Ag '43

Mexico

Mexican cotton consumption jumps 50 percent. For Comm W 9:20 N 14 '42

Peru

Extent and disposition of Peru's cotton crop, 1935-1942. For Comm W 13:38 O 23 '43

Peru's production and exports, 1942. For Comm W 11:35 Ap 17 '43

Puerto Rico

Puerto Rican Sea Island cotton. E. S. Ortiz. Rayon 24:202-3, 233-4 Ap-May '43

Puerto Rico's new and notable contribution; fine cotton for balloon cloth. For Comm W 11:27 My 1 '43

Salvador

El Salvador regulates cotton production. For Comm W 9:43 D 5 '42

Southern states

Future of the cotton textile industry in the South. C. T. Murchison. Manuf Rec 112:26-74 My '43

Great future seen for the cotton South. L. H. Hodges. Il Manuf Rec 112:34-5+ Ag '43

United States

American cotton industry in 1942. W. R. Bell. Rayon 24:225 My '43

Army reports to cotton industry at N.Y. forum. Comm & Fin Chr 157:1311 Ap 8 '43

Cotton consumption slumps; labor situation; reduced profits expected. Barron's 23:6 Ag 23 '43

Cotton loan premiums, discounts for 1943. Comm & Fin Chr 157:367 Ja 28 '43

Cotton mill margins still squeezed. Barron's 23:7 My 3 '43

Cotton mills and the war. H. Comer. Il Manuf Rec 112:61, 78 S '43

King Cotton notes changing times; science and new ideas summoned to meet competition. Barron's 23:7 Ag 30 '43

Less goods for civilians foreseen. R. T. Fisher. Textile World 93:73 O '43

Problem in cotton. Business Week p103+ F 13 '43

Report on cotton industry; abstract. W. R. Bell. Rayon 24:110-11 Mr '43

Watch cotton move into loan stocks. Barron's 22:6 N 30 '42

COTTON waste

Comber waste and yarn quality. M. E. Campbell and J. M. Cook. Textile World 93:80 Jl '43

See also

Cotton stalks

COTTON weaving

Determining and recording picker-lap weights. E. H. Helliwell. diag Textile World 93:131-2 Je '43

Imperfections in woven fabrics. T. Nelson. Il Textile World 93:93 My '43

Loomfixers' manual; cotton section (cont). I. Moberg. Il Textile World 92:119 D '42; 93:98 Ag '43

Technique of battery filling. M. B. Jones. Textile World 93:85 Ag '43

Your weave-room supply system; proper bin arrangement and card index system. W. A. Newell. Il Textile World 93:80-1 Ap '43

See also

Cotton fabrics

COTTON weighting

Silk weighting, with notes on cotton weighting. Textile Col 65:453-4 O '43

COTTON winding

To improve winding efficiency pay more attention to operatives and to upkeep of machines. W. F. Crowder. Textile World 93:80-1 O '43

COTTON workers

Studies on strains of aerobacter cloacae responsible for acute illness among workers using low-grade stained cotton. B. H. Caminita and others. bibliog Pub Health Rep 58:1165-83, pl 1-2 Jl 30 '43

See also

Cotton mills—Employees

COTTON yarn

Consider the drafting operation. R. Wentworth. Il Textile World 93:75-8 Je '43

Control of neps, naps and specks; investigated, and opening, picking, carding settings given. E. H. Helliwell. Il Textile World 93:84-6+ S '43

Cotton variety and yarn quality. G. W. Pfeifferberger. Textile World 93:74-7 Jl '43

Effect of twist on contraction. A. J. Woodbury. Textile World 93:81 Mr '43

Go into reverse on textile outlook; combed yarn meeting. Textile World 93:79 O '43

How many drawing processes? Textile World 93:89 Jl '43

COTTON yarn—Continued

Imported English spun cotton yarns; controls over consumption. Rayon 24:62-3 F '43
 Picker-room lap-weight control. R. W. Mitchem. Textile World 93:86-7 Mr '43
 Use of combed cotton yarns in hosiery. Rayon 24:6-7 Ja '43
 Yarn strength factors. E. H. Helliwell. Textile World 93:74-5 My '43

See also
 Angola yarn

Moisture content

Yarn conditioning for processing. G. Ullmann. Textile Col 65:23-5, 41 Ja '43

Testing

Serigraph tests for yarn strength prove more reliable than skein or lea tests. G. West. Textile World 93:88-9 My '43
 Service study of women's full-fashioned hosiery manufactured from four varieties of long staple American cotton. M. B. Hays, R. E. Rogers and M. C. Boyer. bibliog Am Dyestuff Rep 32:187-90, 209-11 Ap 26 '43

COTTONSEED

Cottonseed association hears federal plan for stable marketing. Oil Paint & Drug Rep 143:7 My 24 '43
 Cottonseed standards for grading revised. Oil Paint & Drug Rep 144:5+ S 13 '43
 Cottonseed utilization, Peru. For Comm W 12:25 Jl 24 '43
 Egyptian cottonseed production. For Comm W 10:30 Mr 27 '43
 Essential cottonseed. A. L. Ward. il Manuf Rec 112:26-7+ F '43
 Toxicity studies with the fungicide tetrachloro-para-benzoquinone (spergon). T. H. McGavack and others. bibliog il J Ind Hygiene 25:98-111 Mr '43

Statistics

Vegetable oils and products, 1938-1941. Survey of Cur Business 1942 Sup p106-7 [supplemented in monthly numbers]

COTTONSEED flour

Nutritive value of cotton, peanut, and soy seeds. T. F. Zucker and L. Zucker. bibliog Ind & Eng Chem 35:868-72 Ag '43

COTTONSEED meal

Irony in cotton; shortage of cottonseed products in Texas. Business Week p32 Mr 13 '43

Analysis

Determination of free gossypol in cottonseed meal; a colorimetric method. C. M. Lyman, B. R. Holland and E. Hale. Ind & Eng Chem Anal ed 15:489-91 Ag 15 '43

Prices

Cottonseed, soybean, peanut meals celled. Oil Paint & Drug Rep 144:7+ Ag 9 '43

COTTONSEED oil

Determination of water in aniline by a cloud point method; comparison of rapeseed oil with cottonseed-mineral oil mixtures. W. Seaman, A. R. Norton and J. J. Hugonet. Ind & Eng Chem Anal ed 15:322-4 My 15 '43

Drying oils from liquid fats: fractionation by solvent extractions. A. W. Kleinsmith and H. R. Kraybill. bibliog Ind & Eng Chem 35:674-6 Je '43

New use for cottonseed oil; substitute for imported palm oil in making tin plate. W. W. Skinner. il diag Manuf Rec 112:34-6 Jl '43

Statistics

Vegetable oils and products, 1938-1941. Survey of Cur Business 1942 Sup p107 [supplemented in monthly numbers]

COUMARAN. See Dihydrobenzofuran**COUMARIN**

Addition of dienes to coumarin and to certain substituted cinnamic acids. R. Adams and others. bibliog Am Chem Soc J 65:356-60 Mr '43

COUNSELORS, Employees'. See Employees' counselors**COUNTER cards. See Advertising, Point-of-sale****COUNTERBALANCES. See Locomotives—Counterbalances****COUNTERFEITS and counterfeiting**

Know your checks and money! watch for increase in forged signatures and counterfeit money during war. il Nat Pet N 35:38 Mr 10 '43

Organize a know your money contest. F. J. Wilson. il Banking 36:46-7 Ag '43

To 20,000 new tellers; forged government checks and counterfeit bills. F. J. Wilson. il Banking 35:38-9 Ap '43

COUNTERS (electrons, ions, etc.)

Angular correlation of successive gamma-rays. R. Beringer. bibliog diags Phys R 63:23-8 Ja 1 '43

Cloud-chamber and counter studies of cosmic rays underground. V. C. Wilson and D. J. Hughes. bibliog il diags Phys R 63:161-71 Mr 1 '43

Counting method for the determination of small amounts of radium and of radon. L. P. Curtiss and F. J. Davis. pl diags J Research Nat Bur Stand 51:181-95 S '43

See also

Geiger-Müller counters

COUNTING machines and devices

Counting devices find wide use in steel industry. S. H. Fuller. il Steel 113:106, 108+ Ag 16 '43

Efficiencies, for particle determination, of the Electrotor meter, the ultramicroscope, and the settlement counter. S. C. Blacktin. Soc Chem Ind J 61:161-2 O '42

Electronic beam control. S. R. Winters. il diags Radio N 29:18-19+ Ja '43

Standardized counting devices. H. G. Weiser. diag Instruments 16:33 Ja '43

COUNTRY banks. See Banks and banking—Country banks**COUNTRY houses**

House in Cos Cob, Conn.; with views, plans, and construction outline. Arch Forum 79: 81-5 Ag '43

House in Wayzata, Minn.; large house at Lake Minnetonka; with views, plans, and construction outline. Arch Forum 79:86-7 Ag '43

Rugged simplicity in Seattle. il plan Arch Rec 92:47 N '42

COUNTRY life**See also**

Subsistence homesteads

COUNTY buildings**See also**

Courthouses

COUNTY employees

No self-insurance for county employees' annuities. Nat Underw (Life ed) 47:9 O 15 '43

COUNTY engineering

Well organized county bridge modernization program; Grand Forks county, N.D. J. W. Harty. il Pub Works 73:24-6+ D '42

See also

Roads, County

COUNTY lands

County land as a factor in adjusting the agriculture of western North Dakota. R. E. Huffman. J Land & Pub Util Econ 18: 435-9 N '42

Selective selling and leasing of county land in North Dakota. M. H. Taylor. J Land & Pub Util Econ 19:238-42 My '43

COUNTY roads. See Roads, County**COUPLERS, Car. See Car couplings****COUPLINGS**

Barcus flexible shaft coupling. il Engineering 155:476 Je 11 '43

Electric couplings for marine Diesels. J. A. Wasmund. il Machine Design 15:138-9 Ap '43

Fluid torque converter and coupling. R. Eksbergian. diags Franklin Inst J 235:441-78, pl 1 My '43

Hydraulic couplings for marine Diesels. R. G. Olson. diags Machine Design 15:137-8 Ap '43

Permits frictionless axial movement; patent assigned to Mather & Platt ltd. diag Machine Design 15:153 F '43

COUPLINGS—Continued

Power recovery in testing aircraft engines. C. A. Chayne. *il* diags Automotive & Aviation Ind 87:26-8, 84+ D 15 '42
Simple method for calculating hydraulic coupling performance. R. E. Bruckner. *il* diags Product Eng 13:698-703 D '42

See also

Car couplings Joints
Clutches Joints, Universal

COURAGE

Chief engineer receives distinguished service medal for heroism. Marine Eng 48:160-1 F '43

Soldier's faith; a remarkable testament from Mr Justice Oliver Wendell Holmes from address delivered at Harvard in 1895. Fortune 27:99 Ap '43

COURTHOUSES

Economical county courthouse; Lenoir county, Kinston, N. C. *il* plans Arch Rec 94:54-5 Ag '43

Poured around its predecessor; Monterey County courthouse, Salinas, California. *il* plans Arch Rec 94:48-50 Ag '43

Heating and ventilation

Court house system combines panel heating and cooling, conditioning; Yakima County, Wash. court house. E. L. Weber. diags Heating-Piping 15:13-15 Ja '43

COURTS

See also

United States—Supreme court

COURTS, Small claims. *See* Small claims courts

COVER plates. *See* Columns, Steel

COVERS (printing)

Typographic clinic; folder on conservation of gas. H. N. King. *il* Inland Ptr 111:43 Je '43

See also

Advertising mediums
—Trade journal covers

COWLINGS. *See* Airplane engines—Cowlings

COWS

See also

Cattle industry and trade

COXWOLD case. *See* Insurance, Marine—War risks

CRABS

Quest for crab; king crab fishing in Alaskan waters. *il* Business Week p68 Je 19 '43

CRAMP shipbuilding company

Case for the Navy? labor trouble at Cramp shipyard; congressman asks Navy to take over. Business Week p104+ O 23 '43

CRANE company

Crane company's large reserves. H. Lawrence. Barron's 23:8 Mr 8 '43
Market leaders for 1943. Mag of Wall St 71:344 Ja 9 '43

CRANES, derricks, etc.

Blocks of heavy concrete to serve as crane counterweights. *il* Concrete 50:30 D '42

Bucyrus-Erie 250-ton railway crane. *il* Engineering 154:446 D 4 '42

Coles mobile cranes. *il* diag Mech Handling 30:79-80 F '43

Harvey Frost & co. portable crane. *il* Mech Handling 30:171-2 Ap '43

Job-made crane frame for heavy loads. *il* diags Eng N 131:389 S 9 '43

Le Tourneau 35-ton self-propelled mobile crane. *il* Engineering 155:170, 177 F 26 '43

Mobile stiff leg crane for airfields. *il* diag Product Eng 14:142-3 Mr '43

Overhead railways speed bomber parts handling at Willow Run. E. H. Doerger. *il* Steel 113:108-10 S 13 '43

Precast concrete supports crane runway and conserves big tonnage of steel. *il* diag Concrete 51:2-3 Mr '43

Special handling of forgings halves the quenching time. *il* Mech Handling 30:440-1 O '43

Stiffleg-traveler sets 78-ton girders; erecting Arroyo Seco river bridge at Los Angeles. P. R. Watson. *il* Roads & Sts 86:52-3 S '43

Timber derricks for shipyard use. *il* diags Eng N 130:742-3 My 20 '43

20-ton crane built of scrap saves 18-months production time. *il* Blast F & Steel Pl 31:548 My '43

Two traveling tower derricks erect huge timber blimp hangar. *il* diags Eng N 130:542-6 Ap 22 '43

Electric equipment

Tate 5-ton petrol-electric jib crane. *il* diags Mech Handling 30:213-18 My '43

Maintenance and repair

Traveling crane troubles and their causes; data sheets. Factory Management 101:150 My; 146, 148, 150 Je '43

Safety measures

Crane overload warning device prevents accidents in shipyards. Eng N 129:853 D 17 '42

Know your crane signals. *il* Safety Eng 85:26 Mr '43

Looking at crane hazards through a safety engineer's eyes. W. E. Rossnagel. diags Power 87:519-21+ Ag '43

Statistics

Electric overhead cranes, 1938-1941. Survey of Cur Business 1942 Sup p145 [supplemented in monthly numbers]

CRANIOLOGY. *See* Skull

CRANKCASES

Positive crankcase ventilation; its effect on sludging and engine wear. Bus Transportation 22:36-7 Je '43

Manufacture

Grinding steel crankcases for aircraft engines; Bryant internal chucking grinders. P. C. Durland. *il* diags Mach 49:129-39 My '43

Latest type of equipment at Chevrolet's new forge plant. J. Geschelin. *il* Automotive & Aviation Ind 89:20-3+ Jl 15 '43

CRANKSHAFTS

Axial vibration of Diesel engine crankshafts. R. Poole. diags Inst Mech Eng J & Proc 146:Proc 167-82, pl 1-2 F '42; Discussion. 148:Proc 197-218 Mr '43

Damps transverse shaft vibration; patent assigned to General motors corp. diags Machine Design 14:158+ D '42

Iron castings replace forgings for highly stressed parts. *il* diags Product Eng 14:161-4 Mr '43

Metallizing crankshafts in an engine lathe. W. B. Meyer. *il* diags Diesel Power 21:121-4 F '43; Same abr. Welding J 22:426-9 Je '43

Manufacture

Assembling 16-ton Liberty ship engine crankshaft; Joshua Hendy iron works. *il* Marine Eng 48:215-16 S '43

Big plant expansion at Ohio Crankshaft. J. Geschelin. *il* Automotive & Aviation Ind 89:20-4 S 1 '43

Cast crankshafts save labor and material in Diesel engine construction. *il* Marine Eng 48:282 S '43

Machine work saved by Buick change in heat-treating and specifications; crankshafts and other engine parts. H. Chace. *il* Am Mach 87:75-7 Ap 1 '43

New plants of 1942; Ohio Crankshaft. *il* Factory Management 101:B68-B70 Ap '43

Progress in precision; inspection methods through the automotive age to World war II; abstract. O. J. Snider. S A E J 51:sup65 Jl '43

Testing

Bending fatigue strength of machined crankshafts after straightening, with notes on the stress distribution obtained by extensometer and X-ray measurements; abstract. R. Schmidt. Roy Aeronautical Soc J 47:sup353-5 Jl '43

Methods of stress determination in engine parts. C. Lipson. *il* diags S A E J 51:120-4 Ap '43

CRANSTON, Rhode Island

Sewerage

- Compact sewage treatment works units at Cranston. R. W. Horne. flow diag il Civil Eng 13:417-20 S '43
- Cranston, Rhode Island, builds complete new sewerage works for 53,000 people. R. W. Horne. il diags plans Boston Soc C E J 30:66-121 Ap '43
- Up-to-the-minute sewage disposal plant and sewerage system. R. W. Horne. il plan Pub Works 74:20-3, 40+ My '43
- CRAWFORD, Frederick Coolidge, 1891-N.A.M. raises sights to victory, with Crawford, por(cover) Business Week p16 D 5 '42
- CRAYFISH
Crawfish industry, Union of South Africa. For Comm W 11:24-5 My 15 '43
- CRAZING. See Glazes
- CREAM
Development of a positive phosphatase test in refrigerated, pasteurized cream; abstract. F. W. Barber and W. C. Frazier. Food Ind 15:143 Jl '43
- WPB whips cream. Business Week p50 Ja 16 '43
- CREAM separators
Cream separator part. il Mod Plastics 20:73 My '43
- Molded dairy equipment. il Mod Plastics 21:80 S '43
- CREAMS, Cosmetic. See Cosmetics
- CREAMS, Protective. See Ointments
- CREASING of textiles
Textile applications of natural and synthetic resins. M. H. Gurley, Jr. Rayon 23:726-7 D '42
- CREATIVE ability
Man's most creative years: then and now. H. C. Lehman. bibliog Science 98:393-9 N 5 '43
- CREDIT
Analysis of financial statements; observations from a credit man's viewpoint. D. H. Hotchkiss. Credit & Fin Management 45:4-6+ Ja '43
- Ancestry of insured credit. il Banking 35:23-4 Je '43
- Appraisal of post war credits. E. W. Lane. Credit & Fin Management 45:4-6+ Ag '43
- Banks and consumer credit. T. E. Savage. Bankers M 146:102-4, 106-21, 193-22 F-Mr '43
- Beyond the balance sheet; war brings new factors in credit appraisals. E. A. Obstfeld. Credit & Fin Management 45:17-18 O '43; Abstract. Management R 32:458-9 D '43
- Constructive credit for small business; essential ingredient of the post-war reconstruction program. W. Shepherdson. Credit & Fin Management 45:15-18 Mr '43
- Consumer credit outstanding down 36% in '42. Comm & Fin Chr 157:586 F 11 '43
- Contraction of book credits is good business. M. S. Ludio. Credit & Fin Management 45:29 O '43
- Credit men seeking more information from financial statements. il Credit & Fin Management 45:9-11 My '43
- Credit, today and tomorrow. H. H. Heimann. Credit & Fin Management 45:6-9+ Je '43; Abstract. Comm & Fin Chr 157:2189 Je 10 '43
- Decline in consumer credit. Fed Res Bul 29:485-91 Je '43
- Decline in consumer short-term debt; year subsequent to effective date of Regulation W. Fed Res Bul 28:1180-1 D '42
- Finance and credit risks on war contracts. W. A. Lawrence. Credit & Fin Management 45:12-13 Ag '43
- Impact of taxes on credit. C. E. Fernald. Credit & Fin Management 45:10-12+ Je '43
- Planning for peacetime credit. G. C. Klippel. Credit & Fin Management 45:4-6 Jl '43
- Post-war balance sheet; war era brings new factors to analyze. J. Miller. Credit & Fin Management 45:24-6 S '43
- Ratio analysis will show signs of impending danger. C. L. Merwin. Credit & Fin Management 45:29-30 Ap '43
- Retail credit in the postwar world. C. N. Schmalz. Harvard Business R 22 no 1:63-74 [O] '43

Retail credit in wartime. R. M. Severa. J Retailing 19:35-40+ Ap '43

Retail credit survey, 1942. Fed Res Bul 29:604-8 Jl '43

Taxes as they affect our customers; points credit men should consider. J. J. Lang. Credit & Fin Management 45:15-17+ Jl '43

Unusual problems facing credit management. E. B. Moran. Paint Oil & Chem R 104:12-13 D 31 '42; Excerpt. Am Business 12:10-11 N '42

See also

Accounts receivable
Agricultural credit
Assignment of book accounts
Bankruptcy
Banks and banking
Billing
Business failures
Charge accounts (retail trade)
Collecting of accounts
Credit departments
Discount, Cash
Finance companies
also American bankers association—Credit policy commission; National association of credit men

Financial statements
Government loans and grants
Government loans to industry
Instalment plan
Insurance—Credit aspects
Loans, Small
Military service—Credit aspects
Salesmen and credit
Securities
Warehouse receipts

Bibliography

Consumer credit and finance. (Business literature v 15, no 7) 2p Business branch, Newark public lib, Newark, N.J. Mr '43

Law

Judgment against bank in credit inquiry case is reversed. Credit & Fin Management 45:22-4 Mr '43

See also

Loans, Small—Laws and regulations

Statistics

Monthly estimates of short-term consumer debt, 1929-42. D. M. Holthausen. tables Survey of Cur Business 22:9-25 N '42

Canada

Consumer credit regulations amended and consolidated. For Comm W 10:13-14 F 6 '43

Chile

Public and private credit, 1930 and 1941. For Comm W 9:17 D 19 '42

Latin America

Latin-American credit survey; semi-annual report on collections. P. J. Gray. map Credit & Fin Management 45:22-5 F '43

Latin-American credit survey; 30th semi-annual report on credits and collections. P. J. Gray. Credit & Fin Management 45:24-6 Ag '43

Latin American credits and collections are good; survey covering first half of 1943. P. J. Gray. For Comm W 12:30 Jl 31 '43

CREDIT (economics)
Power of credit creation. Economist 143:641 N 21 '42

See also

Agricultural credit
Banks and banking
CREDIT, Agricultural. See Agricultural credit

CREDIT, Bank
Bank credit in war-times; economic trends. E. E. Agger. Credit & Fin Management 45:14-17, 21 Ja '43

War finance and bank credit. H. E. Agger. Trusts & Estates 76:323-4 Ap '43

See also
Agricultural credit
Insurance—Credit aspects
Intermediate credit banks
Loans, Bank

CREDIT, Foreign

See also

Credit—Latin America
CREDIT, International
See also
Finance, International

CREDIT agencies, Government. See Government loans and grants

CREDIT and insurance. See Insurance—Credit aspects; Insurance, Credit

CREDIT associations

Affiliated associations in N.A.C.M. listed by cities and giving names of associations and their secretaries. *Credit & Fin Management* 45:36-7 Ja '43

See also National association of credit men

CREDIT counseling

Credit counseling for employees. L. E. Yavner and H. Seidman. *Personnel J* 22:91-6 S '43

CREDIT departments

Bank's relation to the mercantile credit department. W. E. Atkinson. *Credit & Fin Management* 45:8-10+ Ap '43

Credits in 1943. H. W. Adkins. *Credit & Fin Management* 45:20+ Mr '43

Importance of customer relationships. W. A. Taylor. *Credit & Fin Management* 45:10-11 O '43

Maintaining goodwill in war-time. A. L. Campbell. *Credit & Fin Management* 45:8-9 O '43

Overbuying in war-time prosperity; problems faced by credit men. E. S. Horwitz. *Credit & Fin Management* 44:30-1+ D '42

Psychology of credit letters (cont). H. M. Sommers. *Credit & Fin Management* 44:10-13+ D '42; 45:10-13+ Ja; 7-9+ F; 11-14+ Mr; 15-21+ Ap; 15-18 My; 13-14+ Je; 7-10+ Jl; 10-11 Ag; 11-15 S; 12-13 O '43

Ratio analysis as a sales aid; methods of United States shoe corp. A. T. Woodward. *Credit & Fin Management* 45:4-6+ F '43

Turn-over as a collection gauge; methods of Oscar Mayer & co. J. E. Walsh. *Credit & Fin Management* 45:15-16 F '43

See also

Credit managers
Salesmen and credit

Records

Accounts receivable system saves valuable war time; handles increased volume without additional employees. L. A. E. Gleason. *Credit & Fin Management* 45:18-20+ N '43

How American Chicle handles accounts receivable. J. Garth. *Il Am Business* 13:22-3+ My '43

CREDIT insurance. See Insurance, Credit

CREDIT interchange bureaus

How credit interchange conserves credit manpower. H. C. Jackson. *Credit & Fin Management* 45:28 Mr '43

CREDIT managers

Wanted—a creditman who is a salesman. J. T. O'Neill. *Credit & Fin Management* 45:16-17 S '43

Yesterday, today and tomorrow; why credit men need their association now. E. W. Lane. *Credit & Fin Management* 44:14-16+ D '42

CREDIT unions

Operations of credit unions, 1942. Monthly Labor R 57:762-5 O '43

See also

Loans, Small

CREEP of materials

Creep and creep recovery in plasticized polyvinyl chloride. H. Leaderman. *bibliog Ind & Eng Chem* 35:374-8 Mr '43

Creep in aircraft plywoods. J. Delmonte and E. Watkins. *Aero Digest* 43:306-7+ Jl '43

Elasticity, creep and recovery of acetate and viscose rayon yarns. H. Mark and J. Press. *bibliog Rayon* 24:297-9, 339-41, 405-7 Je-Ag '43

Mechanical tests of cellulose acetate; creep. W. N. Findley. *Il diag Am Soc T M Proc* 42:914-22 '42; Same. *Mod Plastics* 19:71-3+ Ag '42; Discussion. *Am Soc T M Proc* 42:923-6 '42

CREEP of metals

Creep and heat resistant steel castings. F. Schulte. *Il Iron Age* 152:54-8 S 30; 64-8 O 7 '43

Creep characteristics of some copper alloys at elevated temperatures. H. L. Burghoff, A. I. Blank and S. E. Maddigan. *bibliog Il Am Soc T M Proc* 42:668-89; Discussion. 690-1 '42

Creep of metals at elevated temperatures; the hyperbolic-sine relation between stress and creep rate. P. G. McVetty. *bibliog A S M E Trans* 65:761-7; Discussion. 767-9 O '43

Creep of metals measured by electronics. *Sci Am* 168:124+ Mr '43

Creep strength; its relation to fatigue strength; abstract. V. Dehlinger. *Automobile Eng* 33:202 My '43

Creep test gives new data to turbine designers. *Il Sci Am* 168:61 F '43

Effect of deoxidation practice on creep strength of carbon-molybdenum steel at 850 and 1000 F. R. F. Miller. *bibliog Il A S M E Trans* 65:309-14; Discussion. 314-16 My '43

11½-year creep test. *Engineering* 155:357 Ap 30 '43

Investigation of the behaviour of metals under deformation at high temperatures; structural changes in carbon steels caused by creep and graphitisation. C. H. M. Jenkins, G. A. Mellor and E. A. Jenkinson. *bibliog Iron & Steel Inst J* 145:51-86, pl 1-12 no 1 '42; Summary. *Iron Age* 149:48 Ap 23 '42

Moly-steel creep data released. *Elec W* 118:1979 D 12 '42

100,000-hour creep test. E. L. Robinson. *Il Mech Eng* 65:166-8 Mr '43

Precision in creep testing. J. A. Fellows. *Metal Prog* 42:1088, 1090 D '42

Some creep studies on cupola malleable cast iron. J. J. Kanter and G. Guarnieri. *Il Am Soc T M Proc* 42:659-67 '42

See also

Steel—Testing—Temperature effects

CRENOTHRIX. See Iron bacteria

CREOLE petroleum corporation

Merger ratified. *Comm & Fin Chr* 158:768 Ag 23 '43

New reorganization plan. *Comm & Fin Chr* 158:574 Ag 9 '43

Peace-time leaders. *Mag of Wall St* 72:550 Ag 21 '43

To vote on merger. *Comm & Fin Chr* 157:1422 Ap 19 '43

CREOSOL

Some derivatives of creosol. J. H. Fletcher and D. S. Tarbell. *bibliog Am Chem Soc J* 65:1431-2 Jl '43

CREOSOTE

Burning of creosote-pitch mixtures. *diags Engineer* 175:352-4 Ap 30 '43

Burning of pitch creosote mixtures; discussion. *Gas J (Lond)* 241:524, 529 Ap 28 '43

Creosote-oil trade faces post-war test. J. R. Beaman. *Il For Comm W* 12:9-13+ Ag 21 '43

Use of creosote in mounting fleas and other arthropods on slides. I. Fox. *Science* 96:478 N 20 '42

Analysis

Determination of phenol and *m*-cresol in coal distillation products by means of the Specter photo-electric absorptiometer. T. S. Harrison. *Soc Chem Ind J* 62:119-23 Ag '43

CREPE

Pre-embossing in the processing of rayon crepe fabrics. *Textile Col* 64:515-17 N '42; Excerpt. *Rayon* 24:124 Mr '43

CREPE paper

Retail prices for crepe paper. *Paper Tr J* 115:14 N 12 '42

CRESOL

Alkylated cresols from refinery gases. W. Weinrich. *Il plan Ind & Eng Chem* 35:264-72 Mr '43

Determination of *o*-cresol in phenol by a cloud point method. W. Seaman, A. R. Norton and R. T. Foley. *bibliog Ind & Eng Chem Anal ed* 15:159-61 Mr 15 '43

Fluidity of nylon solutions in *m*-cresol: measurement of chemical damage in nylon textiles. J. Boulton and D. L. C. Jackson. *diag Soc Dyers & Col J* 59:21-6 F '43

Imported cresylic acid. L. A. Schlueter. *Soap & San Chem* 19:107+ Jl '43

CRESOL—*Continued*

Interaction of *p*-cresol and other phenols with chloral and its hydrate. M. P. Balfe and W. C. Webber. *Chem Soc J* 718:20 N '42

Nitrosation of phenols; the three cresols and their methyl ethers; some semicarbazide reactions. H. H. Hodgson and E. A. C. Crouch. *Chem Soc J* p221-3 My '43

Petroleum type cresylics. B. W. Conn. *Soap & San Chem* 19:109+ JI '43

Remarks on the absorption spectra of phenylalanine and tyrosine in connection with the absorption in toluene and paracresol. H. Spöner. *bibliog J Chem Phys* 10:672-6 N '42

Separation of individual cresols and xylenols from their mixtures. D. R. Stevens. *bibliog il Ind & Eng Chem* 35:655-60 Je '43

Vitamin E; long chain aliphatic compounds with recurring isoprene units. L. I. Smith and G. F. Rouault. *bibliog Am Chem Soc J* 65:745-50 My '43

See also

Phenols

Analysis

Determination of phenol and *m*-cresol in coal distillation products by means of the Spekker photo-electric absorptiometer. T. S. Harrison. *Soc Chem Ind J* 62:119-23 Ag '43

Prices

Cresylic acid ceilings for imported A and B. Oil Paint & Drug Rep 143:4 Mr 22 '43

CRESSEY, George Babcock, 1896-
Visiting professor to China. *Science* 98:320 O 8 '43

CRESTON, Iowa

Water supply

Creston bought water works, doubled capacity and eliminated shortage; with cost data. J. B. Russell. *il Pub Works* 74:14-15 My '43

CRESYLIC acid. *See* Cresol

CRETACEOUS period. *See* Geology, Stratigraphic—Cretaceous

CRIBS

Check dams on New York highways. *il Pub Works* 73:30+ N '42

Fundamentals for designing low dams; timber crib dams. *diags Pub Works* 73:36+ N '42

Toledo water supply; intake crib. *il Engineer* 175:136-8 F 12 '43

CRILE, George Washington, 1864-1943

Sketch. D. Marine. *Science* 97:277-8 Mr 26 '43

CRIME and criminals

Crime detection; electronic devices. R. P. Turner. *il diags Radio N* 30:20-2+ S '43

See also

Counterfeits and counterfeiting	Juvenile delinquency
Embezzlement	Police
Fraud	Radio telephone—Police uses

CRIMEA

Crimea. *Science* 98:sup10 O 29 '43

CRIMINAL law

See also

Assault and battery	Evidence (law)
Competition, Unfair	Fraud

CRINOIDEA, Fossil

Evolution and classification of paleozoic crinoids. R. C. Moore and L. R. Laudon. *Geol Soc Special Pa* no 46:1-153, pl 1-14 *bibliog*(p118-29) '43

Trichinocrinus, a new camerate crinoid from lower Ordovician (Canadian?) rocks of Newfoundland. R. C. Moore and L. R. Laudon. *diag Am J Sci* 241:262-8, pl 1-2 Ap '43

Zygotocrinus, a new fossil inadunate crinoid genus. E. Kirk. *bibliog pl Am J Sci* 241: 640-6 O '43

CRIPPLES

Facts about crippled children, 1943. U S Children's Bur Pub 293:1-14 '43

See also

Artificial limbs
Disabled—Rehabilitation

CRISTOBALITE

Equilibrium relationships on the liquidus surface in part of the MnO-Al₂O₃-SiO₂ system. R. B. Snow. *bibliog il diags Am Cer Soc J* 26:11-20 Ja 1 '43

CRITICAL constants

Critical properties of volatile hydrocarbon mixtures. F. Kurata and D. L. Katz. *bibliog Am Inst Chem Eng Trans* 38:995-1021 D '42

Ethanol-water system; vapor-liquid properties at high pressures. J. Griswold, J. D. Haney and V. A. Klein. *bibliog il diag Ind & Eng Chem* 35:701-4 Je '43

Simple derivation of the existence of a critical temperature. F. L. Hahn. *J Chem Educ* 20:233-4 My '43

CRITICAL point

Statistical theory of liquids. G. Jaffé. *Phys R* 63:318-21 Ap 1 '43

CRITICAL solution temperature

Analysis of butane-isobutane mixture. A. W. Francis. *bibliog Ind & Eng Chem Anal ed* 15:447-8 JI 15 '43; Same. *Nat Pet N* 35 pt 2:R418+ S 1 '43

Estimation of water in alcohol with aid of dicyclohexyl. G. R. Robertson. *bibliog Ind & Eng Chem Anal ed* 15:451-2 JI 15 '43

See also

Aniline point

CRITICAL temperature. *See* Critical constants

CROBAUGH, Clyde Julian, 1895-

Fenn college sponsors post-war course for Cleveland executives. *Sales Management* 52: 60-1 Ap 1 '43

CRONAK process. *See* Zinc—Protection

CROPS

Crop news good. *Barron's* 23:6 Ag 16 '43
June crop report analyzed. *Barron's* 23:4 Je 21 '43

Latest crop report analyzed. *Barron's* 23:6-7 S 20 '43

Present crop outlook bright. *Barron's* 23:6 Ja 18 '43

Seven fat years; large 1943 contribution. *Barron's* 23:5+ O 18 '43

Soil and crop basis of better nutrition. L. A. Maynard. *bibliog il Chem & Eng N* 21: 217-20 F 25 '43

Some ground regained by crops. *Barron's* 23: 9 JI 19 '43

Weatherman a slacker so far this year; May crop prospects less promising than in 1942. *Barron's* 23:7 My 17 '43

See also

Barley	Jute
Corn	Oats
Cotton	Rice
Drying (crops)	Rye
Flax	Tobacco
Insurance, Agricultural	Wheat

Statistics

Agricultural department general crop report as of August 1, 1943. *Comm & Fin Chr* 158: 716-17 Ag 19 '43

Crop report, by Federal reserve districts. Published in Federal reserve bulletin

New wheat condition figures, based on weather factors, for the prairie provinces. F. H. Sanderson. *Am Stat Assn J* 37:473-83; Reply. C. F. Wilson. 483-8 D '42

CROSS, Hardy, 1885-

Hardy Cross method; its practical application in determining flows and heads in pipe systems. D. R. Taylor. *flow charts diags Water Works & Sewerage* 90:77-91 Mr '43

CROSS connections. *See* Water distribution—Cross connections

CROSS-hauling. *See* Transportation in war

CROSS ties. *See* Railroad ties

CROSSARMS. *See* Electric lines—Crossarms

CROTALINE

Structure of monocrotaline; proof of the position of the double bond in retronecine. R. Adams and J. E. Mahan. *bibliog Am Chem Soc J* 65:2009-12 O '43

Structure of monocrotaline; structure of retronecine and related bases. R. Adams, M. Carmack and J. E. Mahan. *bibliog Am Chem Soc J* 64:2593-7 N '42

CROTALINE—Continued

Structure of monocrotaline: the proof of primary and secondary hydroxyl groups in retronecine. R. Adams and K. E. Hamlin, Jr. *bibliog* Am Chem Soc J 64:2597-9 N '42

CROTALALDEHYDE

Manufacture of butadiene from ethyl alcohol. J. A. Gamma and T. Inouye, *bibliog* flow diags Chem & Met Eng 50:94-7 Ja '43

Studies in the polyene series; condensation of 3-methylpent-2-en-4-yne (1:2-dimethylvinylacetylene) with butaldehyde, crotonaldehyde, and citral; anionotropic rearrangements with vinylacetylenecarbinols derived from $\alpha\beta$ -unsaturated aldehydes. I. M. Heilbron and others. *Chem Soc J* p265-8 Je '43

Studies in the polyene series; the anionotropic rearrangement of the acetylenic glycol from crotonaldehyde. I. M. Heilbron, E. R. H. Jones and R. A. Raphael. *Chem Soc J* p268-70 Je '43

Studies in the polyene series; the condensation product of 1-hexyne with crotonaldehyde and its anionotropic rearrangement. I. M. Heilbron, E. R. H. Jones and R. A. Raphael. *Chem Soc J* p264-5 Je '43

CROTONIC acid

Friedel-Crafts reaction with cinnamic, crotonic, and β -chlorocrotonic acids. C. F. Koelsch, H. Hochmann and C. D. Le Claire. *Am Chem Soc J* 65:59-60 Ja '43

CROWLEY, Leo Thomas

Alien property man. O. McKee. *por* Banking 35:30-1+ D '42

Cool man for a hot spot. *por*(cover) Business Week p5 JI 24 '43

CROWN cork and seal company

Good post-war prospects. H. Lawrence. *Baron's* 22:13 N 30 '42

CROWN tested rayon. See Rayon fabrics—Testing**CROZET, Claudius, 1790-1864**

Founder's day services at V.M.I. honor memory of Col. Claudius Crozet. *por* Civil Eng 13:57-8 Ja '43

CROZIER, William, 1885-1942

Sketch. M. L. Cooke. *Advanced Management* 8:34 Ja '43

CRUCIBLES

Crucibles for centrifugal casting, a big new refractory market. *diags* Brick & Clay Rec 103:44 Ag '43

Crucibles need care because of shortage of graphite. F. L. Wolf. *Foundry* 71:105+ S '43

New refractory compositions resistant to molten rock phosphate. G. R. Pole and A. W. Beinlich, Jr. *bibliog* il *diag* Am Cer Soc J 26:21-37 Ja 1 '43

CRUISERS. See Warships**CRUSHED stone. See Stone, Crushed****CRUSHING**

Centrifuge steps up grinding efficiency; Lone star cement corporation. W. B. Lenhart. *il diags* Rock Prod 46:84-6 Ag '43

Feldspar grinding plant in Tennessee. A. H. Hubbell. *il Eng & Min J* 143:67-8 D '42

Frictional phenomena; technical applications of external friction of solids. A. Gemant. *diags J Ap Phys* 14:519-21 O '43

Grinding five sizes in one operation; Thomasville stone and lime co. flow sheet *il* Rock Prod 46:64-6 O '43

Grinding North Carolina mica. flowsheet *il Eng & Min J* 144:73-5 My '43

New chart simplifies the study of crushing and screening problems. R. Gibbs. *Chem & Met Eng* 50:134 Je '43

Studies of subseam sizing; grinding and grinding efficiencies. I. M. Six. *bibliog* il *Can Min J* 64:147-55 Mr '43

See also

Ball mills	Ore treatment
Coal, Pulverized—	Stone, Crushed
Preparation	

CRUSHING machinery

Control assures maximum production; grinding or pulverizing. M. Mosher. *diag* Machine Design 15:190+ Ap '43

Crusher has rigid cast steel, welded members. *il diag* Product Eng 13:692-3 D '42

Electronic-control feeding for pulverizers and crushers. *il* Rock Prod 46:77 Mr '43

Farm grinding equipment. *il Elec R* (Lond) 133:247 Ag 20 '43

Feldspar-grinding plant in North Carolina. *il Eng & Min J* 144:73-5 Ag '43

Grinding media from Salisbury granite. *Eng & Min J* 143:61 N '42

Gyratory crusher repair. *diag* Eng & Min J 144:87 JI '43

How to make crushers last longer. *diags* Roads & Sts 85:49 N '42

Million tons for Douglas dam; Birmingham slag company builds plant to produce aggregates and stone sand. B. Nordberg. *il* Rock Prod 45:54-8 D '42

More fines, fewer screen changes; New Enterprise stone & lime co. B. Nordberg. *il diags* Rock Prod 46:44-6 Je '43

More service from rock crushers. L. S. Hackney. *il Eng N* 131:279-80 Ag 12 '43

100 percent conveyor belt plant; Birmingham slag company ready mix concrete plant as part of slag plant. B. Nordberg. *il* Rock Prod 45:46-8+ D '42

Reduce capital outlay and operating cost with welded-base jaw crushers. R. W. Heer and W. A. Eckley. *il Concrete* (mill sec) 51:171-3+ My '43

Reduce gravel to sand to meet specifications; River sand and gravel co. W. B. Lenhart. *il* Rock Prod 46:48-9 Je '43

Rolls do the entire job; crushing at Paul Frank quarries. W. B. Lenhart. *il diag* Rock Prod 46:48-51 Mr '43

See also

Ball mills
Tube mills

Manufacture

Welding main frame of gyratory crushers reduces cost and maintenance charges. G. D. Becker. *il diags* Concrete (mill sec) 51:134-6 Mr '43

CRYOSCOPY. See Freezing points**CRYPTOSTEGIA grandiflora**

Cryptostegia and related new activities of Haiti's SHADA. T. A. Fennell. *il* For Comm W 13:3-5+ N 6 '43

Cryptostegia research in Haiti. R. Symontowne. *il* India Rubber W 108:148-50, 259-61 My-Je '43

Lalach plating of cryptostegia; other crude rubber news. *Rubber Age* 52:146 N '42

CRYPTOXANTHOL

Carotenoids of yellow corn grain. J. W. White, Jr., F. F. Zscheile and A. M. Brunson. *bibliog* Am Chem Soc J 64:2603-6 N '42

CRYPTOZOITES (term)

Malarial cryptozoites. C. G. Huff, F. Coulston and W. Cantrell. *Science* 97:236 Mr 26 '43

CRYSTAL Lake, Wisconsin

Study of the plant microfossil succession in the bottom deposits of Crystal Lake, Vilas county and the peat of an adjacent bog. L. R. Wilson and A. T. Cross. *bibliog* Am J Sci 241:307-15 My '43

CRYSTALLIZATION

Adsorption at the crystal-solution interface; an electron-diffraction investigation of crystal surfaces of pure sodium bromate and sodium bromate with adsorbed dyes. J. H. Blomquist and W. G. France. *bibliog* J Phys Chem 46:1044-50 D '42

Adsorption of riboflavin by lactose; influence of concentration. A. Leviton. *il Ind & Eng Chem* 35:589-93 My '43

Apparatus for purification of hydrocarbons by recrystallization. J. L. Keays. *diag* Ind & Eng Chem Anal ed 15:391-2 Je 15 '43

Automatic temperatures of crystallization. G. L. Seavey. *diags* Instruments 16:2-3 Ja '43

Compound merwinite (3CaO·MgO·2SiO₂) and its stability relations within the system CaO-MgO-SiO₂ (preliminary report). E. F. Osborn. *bibliog* diags Am Cer Soc J 26:321-32 O 1 '43

Electrical conduction and recrystallization in thin Pb films deposited at low temperatures. E. L. Armi. *bibliog* diag Phys R 63:451-4 Je 1 '43

Fe-Ni-S system; an introduction with new data on the crystallization of pyrrhotite and pentlandite. J. E. Hawley, G. L. Colgrove and H. F. Zurbriigg. *bibliog* il *Econ Geol* 38:335-88 Ag '43

CRYSTALLIZATION—Continued

- Mixed unsaturated glycerides of liquid fats; low-temperature crystallization of whale oil. T. P. Hilditch and L. Maddison. Soc Chem Ind J 61:169-73 N '42
- Plagioclase twinning. R. C. Emmons and R. M. Gates. bibliog Geol Soc Bul 54:287-303, pl 1-4 Mr '43
- Recrystallization and flowage in Appalachian quartzite. R. E. Fellows. bibliog fold map Geol Soc Bul 54:1399-1431, pl 1-12 S '43
- Strain-hardening and recrystallization. C. H. Mathewson. diags Iron Age 152:54-8 O 28 '43
- Studies on the chemistry of the fatty acids; the isolation of linoleic acid from vegetable oils by low temperature crystallization. J. S. Frankel, W. Stoneburner and J. E. Brown. bibliog Am Chem Soc J 65:259-62 F '43

See also

Crystallography
Crystals

CRYSTALLOGRAPHY

- Crystal structure of gadolinium formate, $Gd(OOCCH_3)_3$. A. F. Pabst. bibliog diags J Chem Phys 11:145-9 Mr '43
- Crystal structure of magnesium carbide. M. A. Bredig. Am Chem Soc J 65:1482-3 Ag '43
- Crystal structure of Pb_3O_4 . S. T. Gross. bibliog diags Am Chem Soc J 65:1107-10 Je '43
- Crystal structure of phosphorus pentachloride. D. Clark, H. M. Powell and A. F. Wells. diags Chem Soc J 64:62-5 O '42
- Crystal structures of Fe, FeO and Fe_3O_4 and their interrelations. H. J. Goldschmidt. bibliog Iron & Steel Inst J 146:157-74; Discussion. 175-80 no 2 '42
- Crystals from portland cement hydration; electron microscope study. C. M. Sliepcevich, L. Gildart and D. L. Katz. bibliog il Ind & Eng Chem 35:1178-87 N '43
- Frequency spectrum of crystalline solids; general theory and applications to simple cubic lattices. E. W. Montroll. J Chem Phys 11:481-95 O '43
- Methods for specifying quartz crystal orientation and their determination by optical means. W. L. Bond. diags Bell System Tech J 22:224-62 J1 '43
- Optical crystallographic studies with the polarizing microscope; axial dispersion with change of sign; other dispersion measurements. W. M. D. Bryant. bibliog il Am Chem Soc J 65:96-102 Ja '43
- Optical crystallographic studies with the polarizing microscope; ellipsoidal dispersion in the picrates of various amines. J. Mitchell, Jr. and W. M. D. Bryant. bibliog il Am Chem Soc J 65:128-37 F '43
- Packing in ionic minerals. H. W. Fairbairn. diags Geol Soc Bul 54:1305-74 bibliog (p 1373-4) S '43
- Phase transformations of normal paraffins. C. G. Gray. bibliog Inst Pet J 29:226-34 Ag '43
- Photographic latent image; lattice energy and related quantities for a hypothetical silver bromide crystal having the cubic ZnS type of structure. M. L. Huggins. bibliog diags J Chem Phys 11:412-19 S '43
- Propagation of order in crystal lattices. J. Ashkin and W. E. Lamb, Jr. bibliog Phys R 64:159-78 S 1 '43
- Quartz crystals oriented by X-ray diffraction method. il diag Electronics 16:98+ F '43
- Statistics of two-dimensional lattices with four components. J. Ashkin and E. Teller. Phys R 64:178-84 S 1 '43
- Structure of molecular compounds; the crystal structure of *p*-iodoaniline-*s*-trinitrobenzene. H. M. Powell, G. Huse and P. W. Cooke. Chem Soc J p153-7 Ap '43

See also

Crystallization
Isomorphism
Mineralogy

Polymorphism
Solutions, Solid

also names of minerals, e.g. Feldspar;
Quartz

X ray studies

- Basic principles of X-ray diffraction. R. Taylor. il diags Automotive & Aviation Ind 89:28-30 J1 15 '43

Crystallography for routine analysis. C. H. Walker. il diag Engineer 175:492-4 Je 18 '43

- Lattice spacings and crystal structure of cementite. W. Hume-Rothery, G. V. Raynor and A. T. Little. diags Iron & Steel Inst J 145:143-9; Discussion. 150-1 no 1 '42
- Positions of the carbon atoms in austenite. N. J. Petch. bibliog Iron & Steel Inst J 145:111-23; Discussion. 124-8 no 1 '42
- X-ray patterns of hydrated calcium silicates. H. F. McMurdie and E. P. Flint. J Research Nat Bur Stand 31:225-8 O '43
- X-ray study of reactions involving accelerators; orientation of crystalline phases on stretching of rubber stocks. G. L. Clark, R. L. LeTourneau and J. M. Ball. il Ind & Eng Chem 35:198-204 F '43
- X-ray study of the A_2 point of pure iron using the Geiger-Müller counter. A. P. Wangsgard. bibliog diags Am Soc for Metals Trans 30:1303-22; Discussion. 1322-7 D '42
- Zinc oxide smoke as a reference standard in electron wave-length calibration. C. Lu and E. W. Malmberg. bibliog R Sci Instr 14:271-3 S '43

CRYSTALS

- Adsorption at the crystal-solution interface; an electron-diffraction investigation of crystal surfaces of pure sodium bromate and sodium bromate with adsorbed dyes. J. H. Blomquist and W. G. France. bibliog J Phys Chem 46:1044-50 D '42
- Boron; preparation and properties of pure crystalline boron. A. W. Laubengayer and others. bibliog il diags Am Chem Soc J 65:1924-31 O '43
- Cause of the variation of the colour of crystals of commercial sodium and potassium ferrocyanide [cyanoferrate(II)]. H. E. Williams. Chem Soc J p223-7 My '43
- Configuration of starch and the starch-iodine complex; optical properties of crystalline starch fractions. R. E. Rundle and D. French. bibliog il Am Chem Soc J 65:558-61 Ap '43
- Crystalline compounds observed in water treatment. C. E. Imhoff and L. A. Burkardt. bibliog(40 references) il Ind & Eng Chem 35:873-82 Ag '43
- Discovery of quartz crystal deposits and new production methods. G. Sonneck. Science 98:sup10 Ag 6 '43
- Electron diffraction. G. P. Thomson. Engineering 155:436, 444-5 My 28-Je 4 '43; Same abr. Engineer 175:409 My 21 '43
- Electron transfer spectra and their photochemical effects. E. Rabinowitch. bibliog(84 references) diags Rs Mod Phys 14:112-31 Ap-J1 '42
- Electronic energy bands in body-centered iron. M. F. Manning. bibliog Phys R 63:190-202 Mr 1 '43
- Electronic energy bands in face-centered iron. J. B. Greene and M. F. Manning. bibliog Phys R 63:203-10 Mr 1 '43
- Equilibrium relationships on the liquidus surface in part of the $MnO-Al_2O_3-SiO_2$ system. R. B. Snow. bibliog il diags Am Cer Soc J 26:11-20 Ja 1 '43
- Extreme properties of matter. C. G. Darwin. Engineering 155:105-6 F 5 '43; Same abr. Engineer 175:65-6 Ja 22 '43
- Frequency spectrum of crystalline solids; general theory and applications to simple cubic lattices. E. W. Montroll. J Chem Phys 11:481-95 O '43
- Heat capacities of molecular lattices; some simple molecular solids. W. F. Brucksch, Jr. and W. T. Ziegler. bibliog J Chem Phys 10:740-3 D '42
- Influence of crystal size and orientation upon the mechanical properties of metals in the cast condition. L. Northcott. Metal Prog 43:586+ Ap '43
- Laboratory evidence concerning the interpretation of asymmetrical crystals. E. Armstrong. diags Econ Geol 38:533-5 S '43
- Magnetic and optical anisotropy of selected microscopic crystals and the linear magneto-optical anisotropy of their suspensions. W. Heller, G. Quimfe and Y. Ta. bibliog il Phys R 62:479-86 N 1 '42
- Magnetic structure of iron crystals; colloid patterns on silicon-iron crystals. W. C. Elmore. il diags Phys R 62:486-93 N 1 '42

CRYSTALS—Continued

Mathematics of the physical properties of crystals. W. L. Bond. *Bell System Tech J* 22:1-72 Ja '43

Quantitative investigations of amino acids and peptides; structural characteristics of some amino acids. G. Albrecht and others. *bibliog il J Phys Chem* 47:24-30 Ja '43

Reaction of gases on the surface of a single crystal of copper. A. T. Gwathmey and A. F. Benton. *bibliog il J Phys Chem* 46:969-80 N '42

Spectra of ions in crystals and solutions; spectra of ions in fields of various symmetry in crystals and solutions. S. Freed. *bibliog il Rs Mod Phys* 14:105-11 Ap-Jl '42

Superionics in biology; abstract. J. G. Lynn and others. *Electronics* 16:154-1 My '43

Thermal conductivity of nonmetallic single crystals. W. J. Knapp. *bibliog diags Am Cer Soc J* 26:48-55 F 1 '43

See also

Piezoelectricity

Polymorphism

Quartz

CRYSTALS, Piezoelectric

Mineral survey for piezo-electric materials; with list of minerals. W. L. Bond. *Bell System Tech J* 22:145-52 Jl '43

Proposed standard conventions for expressing the elastic and piezoelectric properties of right and left quartz. W. G. Cady and K. S. Van Dyke. *bibliog diags Inst Radio Eng Proc* 30:495-9 N '42

Quartz crystal applications. W. P. Mason; W. L. Bond. *il diags Bell System Tech J* 22:178-262 Jl '43

Quartz crystal cuts for oscillator plates. L. A. Elbl. *il diags Electronics* 16:110-12+ Jl '43

Quartz crystals in production; processing steps used at the August E. Miller laboratories. *il Electronics* 16:105-7 O '43

Quartz crystals oriented by X-ray diffraction method. *il diags Electronics* 16:98+ F '43

Radio-quality quartz crystals. *Science* 97: sup12 Ap 9 '43

Rochelle salt crystal devices of low impedance; Monobar unit. F. W. Tibbets. *il diags Electronics* 16:88-90+ Ap '43

Temperature coefficient of quartz crystals; two charts. N. L. Chalfin. *Electronics* 16: 147-8 N '43

See also

Radio frequency—

Crystal control

CUBA

Cuban post-war group. *Comm & Fin Chr* 153:1235 S 23 '43

Latin America practices safety. M. Moas. *il Nat Safety N* 46:32+ N '42

See also

Finance—Cuba

Manganese mines

and mining—Cuba

Meat industry and

trade—Cuba

Mines and mineral

resources—Cuba

Oil industries—Cuba

Taxation—Cuba

Economic conditions

Mexico, Central America and Cuba from an investment standpoint. V. L. Horoth. *Mag of Wall St* 72:18-20+ Ap 17 '43

News by countries. *For Comm W* 10:19 Mr 13; 12:18-19 S 11; 13:18-19 O 30 '43

Economic policy

Cuba creates Board of economic warfare. *For Comm W* 11:24-5 Je 26 '43

Industries and resources

Cuba's cheese industry. *For Comm W* 11:5+ Je 5 '43

CUBE root

Accurate cube root by use of the slide rule. D. A. duPlantier. *Eng N* 131:698 N 4 '43

CUCUMBERS

Bacteriological changes in cucumber fermentation. J. L. Etchells and I. D. Jones. *bibliog il Food Ind* 15:54-6 F '43

CHE campaign induces farmers to plant more pickle patches. *Sales Management* 52: 18 My 1 '43

Physical and chemical changes in cucumber fermentation. I. D. Jones and J. L. Etchells. *Food Ind* 15:62-4 Ja '43

CUCURBITA foetidissima

Examination of the fatty oil from buffalo guord seed. J. W. Wood and H. A. Jones. *Am Chem Soc J* 65:1783 S '43

CUDAHY packing company

Annual report. *Comm & Fin Chr* 157:8+ Ja 4 '43

CULLETT. See Glass making materials**CULTIVATORS**

Flame cultivator used for cotton. M. G. Barnwell. *il Textile World* 93:90 Ag '43

CULTURE mediums

Quieting paramedium for class study. J. B. Buck. *Science* 97:494 My 28 '43

See also

Bacteriology—Culture

mediums

CULVERTS

Alcan highway; culverts and bridges. H. J. McKeever. *il diags Roads & Sts* 86:40-1 F '43

Bridge and culvert flow areas; current practice in determining runoff. F. W. Greve. *il Civil Eng* 13:331-2 Ag '43

Designing and constructing creosoted timber bridges and culverts. W. D. Keeney. *il diags Pub Works* 74:18-24+ Ja '43

Developments in the use of timber for bridges and culverts. E. M. Winegar. *il Roads & Bridges* 31:41+ Mr '43

Highway grading and culverts, Missouri; unit prices. *Eng N* 130:78 Ja 14 '43

Hydraulics of culverts. F. T. Mavis. (Bul. 56) 34p Pa 50c Pennsylvania state college, Engineering experiment station, State College, Pa. '43

Hydrological factors in the design of culverts and small bridges. F. W. Grove. *Roads & Bridges* 31:32, 66+ Ap '43

New chart for culvert design. R. R. Rowe. *Civil Eng* 13:543-4 N '43

Utilizing siphon principles in culvert design. *diags Pub Works* 74:22-4+ Je '43

CULVERTS, Concrete

Design of box culverts. C. R. Burky. *diags Am Concrete Inst J* 14:33-52 S '42; Discussion. 14:sup52-52⁸ Je '43

Minimizing use of critical materials by concrete bridge and culvert construction. *il diags Pub Works* 74:32, 34, 36-7 Ja '43

No steel in Kansas concrete culverts. T. W. Oliver. *il diags Eng N* 131:484-8 S 23 '43

Precast concrete culvert solved troublesome channel problem; Bessemer & Lake Erie bridge, south of Springboro, Pa. *il Ry Age* 114:282-4 Ja 30 '43

Retirement of old viaduct speeds traffic on two railroads; bridge near Lakeview, N.Y. replaced by embankment over concrete culvert. *il diags Ry Age* 114:316-18+ F 6 '43

Well organized county bridge modernization program; Grand Forks county, N.D. J. W. Harty. *il Pub Works* 73:24-6+ D '42

CUMBERLAND, Maryland

Post-war home builders' club will please come to order. J. L. Cooley. *il Banking* 36:21-3 N '43

CUMENE

Density and refractive index of cumene. J. E. Troyan. *bibliog Am Chem Soc J* 64:3056 D '42

Polysopropylbenzenes; preparation and properties of two di-, two tri-, and one tetra-isopropylbenzene. A. Newton. *bibliog Am Chem Soc J* 65:320-3 Mr '43

CUMULENES

Coloured hydrocarbons; polyenes and cumulenes. G. S. Ranshaw. *Chem Age* (Lond) 47: 417-20 N 14 '42

CUNARD steam ship company

Statement to stockholders. P. E. Bates. *Economist* 144:538 Ap 24 '43

CUPOLA furnaces

Cupola-melted high duty cast irons; abstract. W. W. Braidwood. *Iron Age* 150:71 N 26 '42

Cupola melting of loose cast iron borings. S. L. Feduska. *il Metals & Alloys* 17:316-19 F '43

Foundry cupola. I. R. Loss; D. Polderman; D. J. Reese. *il Comp Air M* 48:7106-14 Ag '43

CUPOLA furnaces—Continued

- Gray-iron foundry cupola using egg anthracite as fuel; abstract. J. F. K. Brown. *Coal Age* 48:102-4 Mr '43
 High test iron production is not difficult. A. P. Alexander. *il diags Foundry* 71:92-4+ Mr '43
 Iron from the basic cupola; abstract. E. S. Renshaw. *Metals & Alloys* 18:872+ O '43
 Savings to be effected in cupola melting. J. Lowe. *Foundry* 71:158+ N '43

Air supply

- Effect of moisture in blast air. R. J. Cowan. *il diags Iron Age* 150:43-50 N 12; 46-50 N 19 '42

Design

- Foundry cupola; today's cupola. D. Polderman. *il Comp Air M* 48:7108-10 Ag '43

Lining

- Basic cupola lining aids desulphurization. E. S. Renshaw. *Foundry* 71:171-2 S '43
 Conserving foundry refractories. C. E. Bales and F. McCarthy. *bibliog Foundry* 71:95+ My '43
 Testing cupola furnace linings. J. M. Robitschek. *diag Brick & Clay Rec* 102:51-2, 54+ Ap; 47-50 My '43

CUPRAMMONIUM solution

- Cuprammonium viscosity as a control method review. T. W. Toovey. *Paper Ind* 24:1162-5 F '43

CUPRODINE. See Lubrication and lubricants (metal drawing)**CURARE**

- Curare alkaloids from chondodendron tomentosum. O. Wintersteiner and J. D. Dutcher. *bibliog Science* 97:467-70 My 21 '43
 d-Tubocurarine chloride and choline esterase. A. R. McIntyre and R. E. King. *Science* 97:69 Ja 15 '43

CURBS

- Concrete curb and combination curb and gutter; Nebraska specifications. *Pub Works* 74:32 Ag '43
 Factors influencing the reflectivity of white portland cement concretes. C. W. Muhlenbruch and E. H. Miller. *diag Am Soc T M Proc* 42:775-85; Discussion. 786 '42
 Pre-cast concrete curb in Lee, Massachusetts; with cost data. L. A. Airoidi. *il Pub Works* 74:26+ S '43
 Typical curb sections and cul-de-sacs; time-saver standards. A. Geiffert, jr. *Arch Rec* 93:83, 86 Ja '43
 White concrete reflecting curb for safe driving. *il Mass Transportation* 39:225 Je '43

CURLING of paper. See Paper—Curling**CURRENT meters**

- Use of current meters in measuring pipe discharges; abstract. C. Rohwer. *Am Water Works Assn J* 35:1363 O '43

CURTAINS

- See also*
 Shower curtains

CURTIN, John Francis, 1912-

- Sketch. *por(p46) Civil Eng* 13:47 Ja '43

CURTISS-WRIGHT corporation

- Charged with making defective engines. *Comm & Fin Chr* 158:289 Jl 19 '43
 Ten years' progress. A. V. Linden. *Aeronautical Eng R* 1:51 N '42

CURVE plotting

- Electromechanical calculator for directional-antenna patterns. C. E. Smith and E. L. Gove. *bibliog il diags Elec Eng* 62:Trans 78-83 F '43

- Fitting a physical property mortality curve; use of a special form of graph paper. J. F. Brennan. *Mech Eng* 65:824 N '43

- Profile curves for open-channel flow. D. F. Gunder. *diags Am Soc C E Proc* 68:535-42 Ap '42; Discussion. 68:1035-6, 1244-6, 1413-23, 1646-8; 69:297-8 Je, S-N '42, F '43

- Profile surfaces; method of evaluating roughness numerically. G. Schmaltz. *Automobile Eng* 32:518 D '42

- Statistical analysis in hydrology. L. R. Beard. *Am Soc C E Proc* 68:1077-88 S '42; Discussion. 68:1458-64, 1661-9, 1847-9; 69:299-305, 995-1005 O-D '42, F, Je '43

CUSTOMER relations

- Consumer relations stressed by International harvester co. Roads & Bridges 81:84 O '43
 Credits in 1943. H. W. Adkins. *Credit & Fin Management* 45:20+ Mr '43
 Holding customers when you cannot serve them. E. Whitmore. *il Am Business* 13:10-12 My '43
 Maintaining goodwill in war-time. A. L. Campbell. *Credit & Fin Management* 45:8-9 O '43
 Thank you notes to old trade build post-war good will. *Sales Management* 51:41 N 15 '42

See also

- | | |
|---------------------|---------------------|
| Banks and banking | Electric utilities— |
| —Customer relations | Customer relations |
| Complaints | Gas companies—Cus- |
| Dealer relations | tomers relations |

CUTLERY**Manufacture***See also*

- Knives—Manufacture

CUTTING*See also*

- | | |
|---------------|----------------------|
| Gear cutting | Oxyacetylene cutting |
| Metal cutting | Steel cutting |
| Milling | Thread cutting |

CUTTING lubricants. See Lubrication and lubricants (cutting and grinding)**CUTTING machines**

- DeWalt foundry metal-cutting and tube-cutting machines. *il Mach* 50:218+ N '43
 Friction cutting; metals and other materials; bandsaw operated at extremely high speeds. A. A. Schwartz. *il Steel* 113:104-5 N 8 '43
 Materials saved by car-brass trimmer. *il diags Ry Mech Eng* 117:144-5 Mr '43

See also

- | | |
|-----------------------|------------------------|
| Broaching machines | Oxyacetylene cutting |
| Cutting tools | Paper cutting machines |
| Gear cutting machines | Reamers |
| Metal cutting | Saws |
| Milling cutters | Screw machines |

CUTTING of metals. See Metal cutting**CUTTING-OFF machines**

- Abrasive wheel salvages steel for ships. *il Am Mach* 87:83 S 30 '43
 Cutting off work up to 30 in. diameter; lathe with new type of tool developed by Anthony tool co. *il Iron Age* 151:60 Ap 1 '43
 Etna tube cutoff machine. *il Am Mach* 87:120 S 30 '43
 Using abrasive cut-off wheels. F. A. Upper. *il Foundry* 71:115+ O '43

See also

- Saws, Metal working

CUTTING oils. See Lubrication and lubricants (cutting and grinding)**CUTTING tools**

- Are sharp cutting edges necessary on rough cuts? L. J. St Clair. *diags Iron Age* 151:55 F 11 '43
 Bearing and tool damage by galling. E. L. Hemingway. *il Iron Age* 152:54-60 Jl 15 '43
 Brazing discarded cutters. *il Metals & Alloys* 18:82 Jl '43
 Burn-removing tool improved. W. M. Peck. *diag Am Mach* 86:1365 N 26 '42
 Centralized grinding for single-point tools. W. E. Ainsworth. *il Iron Age* 152:51-3 S 23 '43
 Chrome plating improves cutting tools; abstract. D. G. Baird. *Management R* 32:342-3 S '43
 Chrome plating various types of tools; abstract. A. Lundbye. *Iron Age* 151:62 Ap 1 '43
 Chromium plating of dies and tools. D. A. Cotton. *il Metal Finishing* 41:343-7 Je '43
 Cut tool costs by teaching workers to appreciate tool values. G. E. Stedman. *il Steel* 112:78-80+ My 24 '43; Abstract. *Management R* 32:254-6 Jl '43
 Cutting tool utilizes discarded saw blades. E. B. Smith, jr. *diags Am Mach* 87:107 Je 10 '43
 Cutting tools and lubricants, 1942. O. W. Boston. *Metals & Alloys* 17:69-71 Ja '43

CUTTING tools—Continued

Cutting tools; effect of shape on wear; abstract. H. Ferchland. *Automobile Eng* 33: 172 Ap '43

Designs for recessing tools. J. G. Jergens. *diags Am Mach* 86:1501 D 24 '42

Diamond tools; methods employed by A. Shaw and son in preparing stones for industrial applications. *il Automobile Eng* 33: 312-13 Ag '43

Edges fortified; nitriding of cutting tools at Fleetwings. *Business Week* p64+ J1 24 '43

Form tools salvaged by low-temperature brazing. *il Iron Age* 152:62 Ag 19 '43

General Motors standardizes tool salvage methods. *il Aero Digest* 42:218-16+ Ap '43

Getting maximum production from high speed steel tools. R. S. Burpo, jr., comp. *Metals & Alloys* 18:77, 79 J1 '43

Hand-stoning conserves cutting tools. *il Aero Digest* 43:201+ S '43

Hard chromium and the perishable tool shortage. J. C. Bogle. *Metal Finishing* 41: 76 F '43

Heat treatment plant for steel tools; L. M. S. railway. *il Engineer* 176:213-14 S 10 '43; *Engineering* 156:206 S 10 '43

High-speed steel tipped tools at General Electric; furnace brazing and hardening. *Mach* 49:177 Je '43

High-speed steel tools; silver brazing; Armstrong cork co. *il Steel* 113:78 S 27 '43

Holders for Ardoloy cutting tools. *il Engineering* 155:347 Ap 30 '43

Longer tool life by hand stoning. *il Iron Age* 152:60 S 9 '43

Low temperature welding of broken tools; using Castolin eutectic alloy. *il Iron Age* 151:66 Mr 25 '43

Lundbye process can produce 300% increase in tool life; Lundbye chromium-plating process. G. W. Birdsall. *il Steel* 112:100-2, 104+ Je 14; 84-6, 88+ Je 28 '43

Machining aluminum; general characteristics of tools. *Aviation* 41:185 D '42

Machining, 1942. H. Ernst and M. E. Merchant. *Metals & Alloys* 17:68-9 Ja '43

Machining of magnesium. A. M. Lennie. *diags Am Mach* 87:86-8 Mr 4; 88-90 Mr 18 '43

Macromet treatment improves life of cutting tools. E. R. Yarham. *Am Mach* 87:164 F 18 '43

Make your tools last longer; conservation program. *Steel* 113:106-7+ J1 5 '43

Milling of extruded aluminum spars; cutting tools; sawing tool steel; abstract. A. A. Schwartz. *Iron Age* 151:64 Ap 1 '43

New cutter increases production. L. I. Walden. *il Am Mach* 87:86 Ja 7 '43

New equipment. *il diags Iron Age* 150:72-4 N 26 '42; 151:67-70 Mr 25 '43

New method of tool finishing. *il Automotive & Aviation Ind* 89:68 J1 15 '43

Nitrided tools; abstract. G. W. Esau. *Iron Age* 151:62 Ap 1 '43

Nitriding tools in liquid salt baths. G. W. Esau. *il Steel* 113:104+ J1 12 '43

One method of meeting cutting-tool material problems. H. A. Tobey. *Mech Eng* 65:259-60 Ap '43; *Abstract. Mach* 49:163-4 Ja '43

Protective finish is applied to steel without the use of critical materials; Penetrate process. *il Steel* 112:106+ F 22 '43

Reclaiming high-speed steel tools by an improved welding process. T. Sutton. *il Steel* 111:88, 90 N 30 '42

Reclaiming tools by low-temperature brazing at International Harvester plants. H. E. Fleming. *il Steel* 111:122, 124+ D 7; 88, 90 D 14 '42

Repair adds life to spline cutter. *il diag Am Mach* 86:1357 N 26 '42

Results obtained by Pontiac with chromium-plated tools. *Mach* 49:197 J1 '43

Role of toolsteel in the war effort. S. C. Spalding. *il Metal Prog* 44:425-30 S '43

Saving tools; broken and worn machine tool cutters returned to work. *il Business Week* p60+ F 13 '43

Small tool reclamation; abstract. A. Havens. *Metals & Alloys* 17:394+ F '43

Small tools; results of the Macromet treatment. *Automobile Eng* 33:169 Ap '43

Super grinding prolongs tool life. R. Traut-schold. *Steel* 112:112 Je 21 '43

Surplus war tools, piled up at Detroit, forecast problems at war's end. S. H. Brams. *Iron Age* 152:72+ J1 22 '43

Tool bit design; data for the machining of various materials. *diags Aviation* 42:173 Mr '43

Tool bit shapes for use in tool holder; diagrams. *Aviation* 42:175 Mr '43

Tool life increased by improved chromium plating process; relieving inherent hydrogen embrittlement through use of oil treatment. T. E. Lloyd. *il Iron Age* 150:43-9 D 10 '42

Tool reclamation pays its way; International harvester company. W. A. Johnson and L. Schultz. *il Am Mach* 87:83-5 O 23 '43

Tool reclamation saves huge total of hours on war production job; International harvester co.; abstract. W. A. Johnson. *Iron Age* 151:90C Mr 18 '43

Tool salvage exhibit at General Motors. *il Iron Age* 151:62, 64 F 4 '43

Tool salvaging by low-temperature joining; with cost data; Castolin eutectic process. B. Laune. *Welding J* 22:423-5 Je '43

Unskilled labor creates new tooling problems. O. W. Winter. *il Am Mach* 87:95-6 Mr 18 '43

See also
Machine tools Saws
Milling cutters Tool steel

Manufacture

Arc welding tool steel with stainless electrodes. H. W. Rushmer. *il diags Iron Age* 151:51-5 Mr 11 '43

Braze-hardening high-speed-steel tipped tools; controlled atmosphere electric furnace, using Drycolene. *il Steel* 112:108 My 10 '43; Same. *Welding J* 22:274+ Ap '43; Same. *Iron Age* 152:47 J1 1 '43

Cartridge tools made for long life; Lake City ordnance plant. *il Am Mach* 87:109-12 J1 8 '43

Chromium plate, its thickness and finish requirements. T. G. Coyle. *Steel* 113:118+ S 6 '43; Excerpts. *Iron Age* 152:72-3 Ag 5 '43

Deliveries slow, GM makes own. *il Steel* 112: 71+ Ap 5 '43

Heat treater looks at tool design. A. S. Eves. *Iron Age* 152:45+ S 23 '43

Heat treatment of high-speed steel tools. W. A. Schlegel. *il Steel* 112:106, 109+ Je 28 '43

Latest methods of using arc welding to produce high-speed cutting tools. J. A. Neumann. *diags Steel* 113:249, 252+ O 11 '43

Multi-flame jig facilitates the brazing of tool bits to shanks. *il Mach* 49:139-41 Ja '43

Quick cheap way of making high-speed steel-tipped tools. C. B. Ericson. *il Welding J* 21:834-5 D '42; Same. *Steel* 112:94, 96 F 1 '43

Tipping cutting tools saves important alloying materials. D. G. Clark. *il Steel* 112: 123+ Ap 5 '43

Tool-tipping by brazing; tabulation. *Metals & Alloys* 18:317 Ag '43

Tool-tipping by welding. *Metals & Alloys* 18: 819 O '43

Tool-tipping procedure; data sheets. *Mach* 49: 205 Ag; 50:205 S '43

Tool tipping procedures for high speed steel. *Iron Age* 152:62-3 J1 15 '43; Same cond. *Steel* 113:106b J1 5 '43

Two methods of brazing high speed steel tips; copper brazing and hardening with a hydrogen atmosphere furnace; silver soldering and tempering with an oxyacetylene torch. B. S. Lement and W. B. Kennedy. *il Iron Age* 150:55-8 N 19 '42; Same. *Steel* 112:90, 92+ F 15 '43; Same cond. *Mach* 49:201-3 D '42

Standards

Buick plant standardizes diamond tools. *il Mach* 49:200-1 Ap '43

How to conserve tools through standardization. P. Miller. *diags Steel* 112:82+ F 22 '43

Testing

Projection inspection of form tools. W. Stewart. *il Am Mach* 87:78-9 Ap 1 '43

CUTTING tools, Carbide

Carbide tipped tools automatically ground. *il* Iron Age 151:69-70 My 20 '43

Carbide tool crib system used by Warner & Swasey. T. E. Lloyd. *il* Iron Age 150:45-7 D 24 '42

Carbide tools on turret lathes; abstract. C. W. Coffin. *Metals & Alloys* 17:1250+ Je '43

Carbides, the royalty of cutting-tool materials. A. A. Schwartz. *il* Steel 113:84-6 O 18 '43

Carboloy offers carbide tool brazing equipment and engineering service in cooperation with G.E. *il* Am Mach 87:126 Je 10 '43

Cemented-carbide burring tools. *il* Iron Age 152:69 S 16 '43

Cemented carbide tools; German practice. Automobile Eng 32:91-4 Mr '42; Same cond. *Metals & Alloys* 17:584+ Mr '43

Cemented carbides; a review of the development and application of tipped tools. *il* Automobile Eng 33:161-4 Ap '43

Clamped-on carbide tool tips. *diags* Metals & Alloys 16:905 N '42

Cutting metals from the user's point of view. L. B. Dorsner. *Mech Eng* 65:257-8 Ap '43; Abstract. Mach 49:164-5 Ja '43

Design standards for roller-turner tools. R. D. Mack. *diags* Am Mach 87:87-8 S 2 '43

Firth and Brown carbide-tipped tools. *il* Engineering 155:236 Mr 19 '43

Ford reclaims tungsten carbide chips. *diag* Iron Age 152:61 JI 15 '43; Same. Steel 113:105 Ag 16 '43

Grinding carbide tools. W. L. Kennicott. *il* Steel 113:114+ S 6 '43

How to get the most out of carbide tools. M. F. Judkins. *Mach* 50:163-4 S '43

New slants on carbide tools; typical failures in shell machining operations and how to overcome them. G. G. Thompson. *diags* Iron Age 151:59-63 Mr 25 '43

Put carbide applications in hands of specialist. K. R. Beardslee. *il* Iron Age 152:62-4 S 16 '43

Recent developments in carbides vs. high-speed steel. H. A. Oldenkamp and J. McFadyen. *il* *diags* Mech Eng 65:253-6 Ap '43; Abstract. Mach 49:165 Ja '43

Recommended tool angles, feeds, speeds, etc. for machining with cemented-carbide tools; data sheets. C. G. Williams. *Mach* 49:163 D '42; 137 Ja; 135 F '43

Rifle drilling with carbides; International business machines, inc. T. R. Skoftefeld. *il* Am Mach 87:83-5 Ag 19 '43

Shear type tools and how to use them. F. W. Lucht. *diags* Mach 49:169-71 Mr '43; Same. Steel 112:106, 124+ Je 14 '43

Small furnace for brazing carbide tips. *il* Iron Age 150:58 N 19 '42

Teaming up carbide tools. G. G. Thompson. *diags* Iron Age 151:62-3 F 11 '43

Three-torch setup for tool brazing. H. R. James. *plan* Am Mach 86:1365 N 26 '42

Tipping worn high-speed steel tools with cemented carbide. C. Blade. *il* Mach 50:198+ N '43

20 mm. shell cases; use of carbide dies and several unusual machines; Stoner mfg. co. W. A. Phair. *il* *diag* Iron Age 151:41-5 Ap 1 '43

Vega's experience with carbide milling cutters. R. G. Owen. *il* *diags* Mach 49:152-9+ JI '43

Worn high speed steel tools tipped with carbide. J. S. Gillespie. *diags* Iron Age 150:70-1 N 26 '42; Same. Ry Mech Eng 117:129-30 Mr '43

Advertising

Carboloy visual training slidefilm program is sold at cost to users. *il* Ind Marketing 28:46, 48+ F '43

Manufacture

Carbide tools tipped by induction brazing. P. Miller. *il* Am Mach 87:106-7 O 14 '43

Making carbide tipped flat boring cutters; diagrams and illustrations. Iron Age 152:54-5 S 23 '43

Tool brazing speeded by electronic induction heating; new grinding system. *il* *diags* Steel 112:90, 92+ My 31 '43; Same abr. Iron Age 151:60 My 27 '43

Standards

Standard carbide tips for special tools. P. W. Miller. *diags* Iron Age 151:63-4 Je 3 '43; Same. Steel 113:118+ Ag 23 '43

CYANIDE process

Basic theory of the cyanide process. D. C. McLaren. flow sheets *il* *diag* Can Min J 63:570-7, 767-78; 64:565-72 S, D '42, S '43

Chemicals for gold mining; latest plant and treatment methods in South Africa. *il* Chem Age (Lond) 47:465-7 N 28 '42

New type cyanide plant at Petorca. Eng & Min J 143:110 D '42

Sand leaching at Nangodi; small-scale cyanidation enterprise in West Africa. W. H. Dennis. *diag* Eng & Min J 144:65-7 Mr '43

CYANIDES

Study of the products obtained by the reducing action of metals upon salts in liquid ammonia solution; the reduction of complex cyanides. J. W. Eastes and W. M. Burgess. *Am Chem Soc J* 64:2715-16 N '42

Tertiary alkyl primary amines, RR'R'CNH₂. H. R. Henze, B. B. Allen and W. B. Leslie. *Am Chem Soc J* 65:87-9 Ja '43

See also

Nitriles**CYANINES**

Effects of environment and aggregation on the absorption spectra of dyes. S. E. Sheppard. *bibliog* (60 references) *il* Rs Mod Phys 14:303-40 Ap-JI '42

Quinoxaline cyanines. A. H. Cook, J. Garner and C. A. Perry. *Chem Soc J* p710-13 N '42

Some effects of solvents upon the absorption spectra of dyes; chiefly polymethine dyes. S. E. Sheppard, P. T. Newsome and H. R. Brigham. *bibliog* *diags* Am Chem Soc J 64:2923-37 D '42

Spectra of dye molecules; absorption and resonance in dyes. L. G. S. Brooker. *Rs Mod Phys* 14:275-93 Ap-JI '42

Thiazinocyanines; cyanines containing the dihydro-1:3-thiazine nucleus. F. M. Hamer and R. J. Rathbone. *Chem Soc J* p243-9 My '43

CYANITE

India kyanite substitutes. T. N. McVay and H. Wilson. *Brick & Clay Rec* 102:21 My '43

Kyanite insulating refractories by the dry-press method; abstract. J. W. Whittemore and A. W. Allen. *Am Cer Soc Bul* 22 (Cer A 22):75 My 15 '43

Marketing kyanite and allied minerals. N. C. Jensen. U S Bur Mines Information Circ 7234:1-20 *bibliog* (p18-20) '43

Substitution of topaz, domestic kyanite, and synthetic mullite-corundum for India kyanite. T. N. McVay and H. Wilson. *bibliog* map Am Cer Soc J 26:252-66 Ag 1 '43

CYANOGEN

Effect of substituents on the acid strength of benzoic acid; the cyano group. M. Kilpatrick and R. D. Eanes. *Am Chem Soc J* 65:589-90 Ap '43

CYANOETHYLATION

Chemistry of acrylonitrile; cyanoethylation of active hydrogen groups. H. A. Bruson and T. W. Riener. *Am Chem Soc J* 65:23-7 Ja '43

Chemistry of acrylonitrile; cyanoethylation of alpha, beta-unsaturated compounds. H. A. Bruson and T. W. Riener. *bibliog* Am Chem Soc J 65:18-23 Ja '43

CYANOGEN (free radical)

Intensity anomalies and perturbations in the CN bands. A. T. Wager. *bibliog* *il* *diags* Phys R 64:18-31 JI 1 '43

CYANOGEN compounds

See also

Hydrocyanic acid**CYANOMOLYBDATE**

Structure of Mo(CN)₆⁴⁻. G. Racah. *bibliog* J Chem Phys 11:214 Ap '43

CYANURIC triamide

See Melamine

CYCLES

Foundation for the study of. See Foundation for the study of cycles

CYCLEWELD cement. See Cements

CYCLIC compounds

- Absorption of light by 1,5-dien-3-yne in the region 2300-2900 Å. H. Bastron, R. E. Davis and L. W. Butz. *Am Chem Soc J* 65: 973-5 My '43
- Alcyclic-aromatic isomerization. E. C. Horn- ing. *Chem R* 33:89-135 bibliog(144 refer- ences, p132-5) O '43
- Aromatic cyclodehydration; 1,2,3,4-dibenzo- phenanthrene. C. K. Bradsher and L. Ra- poport. *Am Chem Soc J* 65:1646-7 Ag '43
- Aromatic cyclodehydration; the mechanism of the cyclization of *o*-benzylphenones. C. K. Bradsher and E. S. Smith. bibliog. *Am Chem Soc J* 65:854-7, 1643-5 My, Ag '43
- Cyclization of hydrocarbon mixtures. S. J. Green. bibliog il diags *Inst Pet J* 28:179-208 S '42
- Decalin-1:5-dione and 2:2'-diketodicyclo- pentyl. B. J. F. Hudson and R. Robinson. *Chem Soc J* p691-3 N '42
- Indanone ring closure of unsymmetrical β,β -diarylpipronic acids. C. F. H. Allen and J. W. Gates, jr. bibliog *Am Chem Soc J* 65:422-4 Mr '43
- Mechanism of cyclization reactions. E. Ber- liner. bibliog *Am Chem Soc J* 64:2894-8 D '42
- Molecular volume and structure. T. W. Gib- ling. *Chem Soc J* p661-6 N '42
- Number of structural isomers in simple ring compounds. T. L. Hill. bibliog *J Phys Chem* 47:253-60, 413-21 Mr, Je '43
- Preparation of β -(2-methyl-6-oxo-1-cyclo- hexen-1-yl)-propionic acid. E. Schwenk and E. Bloch. *Am Chem Soc J* 64:3050-1 D '42
- CYCLOBUTANE**
- Cyclobutane derivatives; *cis*-1,3-cyclobutane- dicarboxylic acid. E. R. Buchman, A. O. Reims and M. J. Schlatter. *Am Chem Soc J* 64:2703-5 N '42
- Cyclobutane derivatives; the degradation of *cis*- and *trans*-1,2-cyclobutanedicarboxylic acids to the corresponding diamines. E. R. Buchman and others. bibliog *Am Chem Soc J* 64:2696-700 N '42
- Cyclobutane derivatives; the thermal de- composition of *trans*-1,2-cyclobutane-bis- (trimethylammonium) hydroxide. E. R. Buchman, M. J. Schlatter and A. Reims. bibliog *Am Chem Soc J* 64:2701-3 N '42
- Infra-red and Raman spectra of polyatomic molecules; cyclobutane. T. P. Wilson. bib- liog *J Chem Phys* 11:369-78 Ag '43

CYCLODEHYDRATION. See Dehydration

CYCLOHEXANE

- Cracking cyclohexane; thermal and catalytic decomposition at high pressures. V. Haen- sel and V. N. Ipatieff. bibliog il diag *Ind & Eng Chem* 35:632-8 Je '43
- Heat capacity and entropy, heats of transi- tion, fusion and vaporization and the vapor pressures of cyclohexane; the vibrational frequencies of alicyclic ring systems. J. G. Aston, G. J. Szasz and H. L. Fink. bib- liog *Am Chem Soc J* 65:1135-9 Je '43
- Infra-red absorption spectrum and configura- tion of cyclohexane. R. S. Rasmussen. bib- liog *J Chem Phys* 11:249-52 Je '43
- Liquid-liquid phase equilibria of the system cyclohexane-methyl alcohol in the presence of various salts as third components. E. L. Eckfeldt and W. W. Lucasse. bibliog *J Phys Chem* 47:164-83 F '43
- Lyotropic order and the effects of sodium salts on the miscibility of cyclohexane and methyl alcohol. E. L. Eckfeldt and W. W. Lucasse. bibliog *J Phys Chem* 47:183-9 F '43
- Quantitative determination of benzene in the presence of cyclohexane. R. L. Bishop and E. L. Wallace. *il diag Ind & Eng Chem Anal ed* 15:563-5 S '43
- Thermal data; the heat capacity, entropy, and free energy of formation of cyclo- hexane; a new method of heat transfer in low temperature calorimetry. R. A. Ruehr- wein and H. M. Huffman. bibliog diag *Am Chem Soc J* 65:1620-5 Ag '43

Physiological effect

- Physiological response of rabbits to cyclo- hexane, methylcyclohexane, and certain derivatives of these compounds. J. F. Treon, W. E. Crutchfield, jr. and K. V. Kitzmiller. bibliog diags *J Ind Hygiene* 25: 199-214, 323-47 Je, O '43

CYCLOHEXANOL

- Adsorption at solid-liquid interfaces; determi- nation of adsorption by adhesion-tension and interfacial-tension measurements on binary organic liquid systems. F. E. Bartell and F. C. Benner. bibliog diags *J Phys Chem* 46:847-59 N '42

CYCLOHEXANONE

- Conversion of Δ^2 -cyclohexenones and cyclo- hexanones into spirohydantoin. H. R. Henze, R. C. Wilson and R. W. Townley. bibliog *Am Chem Soc J* 65:963-5 My '43

CYCLOHEXENE

- Coordination of silver ion with unsaturated compounds; mixtures of trimethylethylene and cyclohexene. H. J. Lucas, F. W. Bill- meyer, jr. and D. Pressman. bibliog *Am Chem Soc J* 65:230-1 F '43
- Hydrogen fluoride as a condensing agent; the addition of an alkyl chloride to the double bond. J. H. Simons and A. C. Meunier. *Am Chem Soc J* 65:1269-71 Jl '43
- Methods of preparing butadiene. G. Egloff and G. Hulla. bibliog *Oil & Gas J* 41:41-4, 46-7 N 19 '42
- Raman spectra of hydrocarbons; diiso- butylene, cyclohexene, and dipentene. F. F. Cleveland. bibliog *J Chem Phys* 11:301-6 Jl '43
- Role of neighboring groups in replacement reactions; cyclohexene ethyl orthoacetate. S. Winstein and R. E. Buckles. bibliog *Am Chem Soc J* 65:613-18 Ap '43
- Role of neighboring groups in replacement reactions; the effects of small amounts of water on the reaction of silver acetate in acetic acid with some butene and cyclo- hexene derivatives. S. Winstein and R. E. Buckles. bibliog *Am Chem Soc J* 64:2787-90 D '42
- CYCLOHEXENONE**
- Alkylation of 3-methyl-4-carbomethoxy-2-cyclo- hexen-1-one (Hagemann's ester) and re- lated substances. L. I. Smith and G. F. Rouault. bibliog *Am Chem Soc J* 65:631-5 Ap '43
- Conversion of Δ^2 -cyclohexenones and cyclo- hexanones into spirohydantoin. H. R. Henze, R. C. Wilson and R. W. Townley. bibliog *Am Chem Soc J* 65:963-5 My '43
- CYCLOHEXYLAMINE**
- α,β -Unsaturated aminoketones; reaction of primary amines with 1,3-diketones and bromine derivatives of benzalacetophenone; ethylene imines. N. H. Cromwell, R. D. Babson and C. E. Harris. bibliog *Am Chem Soc J* 65:312-15 Mr '43

CYCLOPENTADIENE

- Homogeneous catalysis and solvent effects in a diene synthesis. A. Wassermann. *Chem Soc J* p623-6 O '42
- Model experiments on the use of cyclo- pentadiene in the synthesis of sterol-like compounds. C. F. Koelsch and F. J. Lucht. *Am Chem Soc J* 65:1240-2 Je '43

CYCLOPENTANE

- Heat capacity and entropy, heats of transi- tion, fusion and vaporization and the vapor pressures of cyclopentane; evidence for a non-planar structure. J. G. Aston, H. L. Fink and S. C. Schumann. *Am Chem Soc J* 65:341-6 Mr '43
- Preparation of cyclopentane from an Okla- homa natural gasoline. J. W. Tooke. *Ind & Eng Chem* 35:392-3 S '43

CYCLOPENTENE oxide

- Malonic ester synthesis and Walden inver- sion. W. E. Grigsby and others. bibliog *Am Chem Soc J* 64:2606-10 N '42

CYCLOPENTENOPHENANTHRENE

- Synthesis of 3'-alkyl-1,2-cyclopentenophen- anthrenes. B. Riegel, M. H. Gold and M. A. Kubico. bibliog *Am Chem Soc J* 65:1772-6 S '43

CYCLOPROPANE

Formation of cyclopropanes from mono-halides; some reactions of 1-chloro-2-methyl-2-phenylpropane (neophyl chloride). F. C. Whitmore, C. A. Weisgerber and A. C. Shabica, jr. *bibliog Am Chem Soc J* 65: 1469-71 Ag '43

CYCLOPROPANOL

Reaction of epichlorohydrin with the Grignard reagent; some derivatives of cyclopropanol. G. W. Stahl and D. L. Cottle. *Am Chem Soc J* 65:1782-3 S '43

CYCLOTRON

Atom smashing; present and future. G. A. Pettitt. *Civil Eng* 13:160 Mr '43
Cyclotron. T. F. Wall. *il diags Engineering* 156:201-3, 223-5 S 10-17 '43

Cyclotron targets; preparation and radiochemical separations; arsenic and germanium. J. W. Irvine, jr. *il bibliog il J Phys Chem* 46:910-14 N '42

Model demonstrating the cyclotron principle. E. E. Grassel. *il diags J Chem Educ* 20:460-1 S '43

CYCLOVERSION process. See Gasoline—Manufacture

CYLINDERS

Boring chuck for thin walled cylinder. *il Iron Age* 150:59 D 3 '42
Computing areas of cylinders. *Can Min J* 64: 282 My '43

Contents of horizontal cylinders. J. Tarrant. *chart Water Works & Sewerage* 90:sup274-5 Je '43

General instability of monocoque cylinders. N. J. Hoff. *il diags J Aeronautical Sci* 10:105-14+ Ap '43

Width and spacing of tensile cracks in axially reinforced concrete cylinders. D. Watstein and D. E. Parsons. *il diags J Research Nat Bur Stand* 31:1-24 JI '43

CYLINDERS (engines, etc.)

Cylinder sleeve extractor. *il diags Ry Mech Eng* 117:323-4 JI '43

Engine cylinder clearance. G. M. Stearns. *Oil & Gas J* 41:158 N 26 '42

Porous chrome; abstract. H. Van der Horst. *Iron Age* 152:71-2 JI 8 '43

Reconditioning cylinder blocks and fitting sleeves. *il diags S A E J* 51:sup49-51 F '43

Shrinking a steel cylinder onto a cast iron cylinder. *il diags Power Pl Eng* 47:108+ Je '43

Manufacture

Aluminum cylinder heads for aircraft engines; Servel foundry. G. E. Stedman. *il Steel* 112:102-5 Ap 12; 114-16 Ap 19 '43

Buick aluminum foundry embodies best practices for mass production of aircraft engine cylinder heads. *il Automotive & Aviation Ind* 88:26-9+ Mr 1 '43

Buick speeds production of aluminum alloy aircraft cylinder heads. A. H. Allen. *il Foundry* 70:66-71, 150-3 D '42

Buick's cylinder head foundry. *il Aero Digest* 42:192-3, 195-6, 199 F '43

Centrifugally cast cylinder barrels for airplane engines; Ford motor co. E. F. Cone. *il Metals & Alloys* 16:1062-6 D '42

Cylinder head cores made without wires; Aviation division. Studebaker corp. P. Dwyer. *il Foundry* 71:84-5, 150-1 F '43

Ford casts cylinder barrels centrifugally. *il Foundry* 71:98-9+ Ag '43

Ford's centrifugal cast cylinders. C. S. Ricker. *il diags plan Aviation* 42:134-7+ Je '43

Grinding thin-walled cylinders; Pratt & Whitney aircraft engine. *il Iron Age* 151:51 Mr 18 '43

In-line machining of aircraft cylinder heads; Greenlee transfer type machine built for Studebaker. W. A. Phair. *il diags Iron Age* 152:66-73 Ag 12 '43

Machine lapping that couldn't be done; Allison division of General Motors. *il Am Mach* 87:92-3 Ap 15 '43

Machining cyclone cylinders; Wright aeronautical corp. *il Aero Digest* 42:219-20+ Ja '43

Too hot to handle, but workers work fast; installing parts in heated airplane cylinder head. *il Iron Age* 151:61 My 20 '43

Testing

Cylinder walls; a method of recording rapidly changing temperatures; abstract. H. Pfriem. *Automobile Eng* 33:125 Mr '43

Wear

Cylinder and ring life with porous chromium-plated rings. T. C. Jarrett. *il Mech Eng* 65:633-5 S '43

Influence of Diesel fuel properties on engine deposits and wear. G. H. Cloud and A. J. Blackwood. *il S A E J* 51:408-14, 419-20 N '43; Same cond. *Diesel Power* 21:1032-6+ N '43

Influence of lubricating oil viscosity on cylinder wear. H. A. Everett. *il S A E J* 51:165-9 My '43; Abstract. *Automotive & Aviation Ind* 88:25+ Ap 1 '43

State of German research on wear, with special reference to the wear of cylinders and piston rings; abstract. R. Poppinga. *il Roy Aeronautical Soc J* 46:sup416-17 N '42; Same. *Automobile Eng* 33:38 Ja '43

CYPRIOT steels. See Chromium copper steel

CYPRUS**Economic conditions**

Trade and industry in Cyprus. *Economist* 144: 76 Ja 16 '43

CYSTINE

Catalytic hydrogenation of cystine. K. E. Kavanagh. *il bibliog Am Chem Soc J* 64:2721 N '42

CYTOSINE**Analysis**

Sensitive color reaction for the detection of uracil and cytosine. T. B. Johnson. *Science* 98:90-2 JI 23 '43

CZECHOSLOVAKIA**Foreign relations****Poland**

Polish-Czech difficulties. *Economist* 144:684-5 My 29 '43

German occupation

Czech industry under the Nazis. *il Chem Age (Lond)* 49:330-1 O 2 '43

Industries and resources

Industry in the Protectorate. *Economist* 145: 238-9 Ag 21 '43

D**DAGUERREOTYPES**

First governmental application of photography; Anthony daguerreotypes and north-eastern boundary controversy between the United States and Great Britain. D. D. Nibbelink. *il bibliog il Franklin Inst J* 236: 265-71 S '43

DAIRIES

See also
Milk houses
Milk plants

Cleaning

Manual of dairy detergents and cleaning practices. M. E. Parker. *il Food Ind* 15:78-80+ JI; 71-2+ Ag; 66-7 S '43

Electric equipment

See also
Pasteurizers, Electric

Equipment

See also
Cream separators

Power

Natural gas power for creamery refrigeration cuts operating costs by 50%; Knudsen creamery. J. Kearns. *il Am Gas J* 158:25-6 My '43

DAIRY products

Changing status of the dairy industry. G. W. Mathis. *il Mag of Wall St* 71:170-2+ N 28 '42

Milk rations seen. *Business Week* p52+ Je 12 '43

DAIRY products—Continued

Production and processing of dairy products. W. C. Waite. Ann Am Acad 225:206-9 Ja '43

Sales jump when Armour shows dealers how to push dairy products. W. J. Simmons. il Sales Management 51:21-2 D 1 '42

See also

Butter	Lactic acid
Casein	Milk
Cheese	Milk trade
Dyne	

Transportation

1500-mile milk route shows transport trends. il Am Business 13:30-1 Je '43

DAIRY waste

Treatment of sewage and certain trade waste waters by a new system of alternating double filtration. A. Parker. il diag plan Inst Chem Eng Trans 19:82-92; Discussion. 92-7 '41

DAIRYING*See also*

Milk
Milk trade

Finance

Changing status of the dairy industry. G. W. Mathis. il Mag of Wall St 71:170-2+ N 28 '42

Argentina

Anglo-American dairy-poultry mission to Argentina. For Comm W 12:34 Ag 21 '43
Argentine production decreases. For Comm W 11:25 My 8 '43

Canada

Dairy products; Canada's 1942 milk production. For Comm W 10:22 Ja 23 '43

Great Britain

Maypole dairy company, limited, 45th annual general meeting, London. Economist 144: 637-8 My 15 '43

United States

Dairy industry faces declining production. Barron's 23:7 Ag 9 '43
Dairy industry is confronted with a huge war responsibility. T. G. Montague. Comm & Fin Chr 157:393 Ja 28 '43
How rationing will affect dairies. Barron's 23:12 Ja 4 '43
Wartime changes in dairy industry. Barron's 23:6 Je 28 '43

DALLAS, Texas**Water supply**

Wartime administrative problems of the Dallas city water works. H. A. Hunter. Am Water Works Assn J 35:73-6 Ja '43

DALTON'S law

Dalton's law of partial pressures and Amagat's law of additive volumes. E. C. Craven. Chem & Ind 62:27-8 Ja 16 '43

DAMAGES

Claims against Panuco and pier to be decided in same proceeding. East Underw 43: 30 D 18 '42

Damages for breach of contract to drill well. Gas Age 92:58+ O 21 '43

Joinder of liability insurer with assured as party defendant in damage suit. Weekly Underw 149:99 J1 10 '43

See also

Accidents, Industrial	Negligence
Eminent domain	Negligence, Con-
Employers' liability	tributory
Motor bus lines—	Workmen's compen-
Claims	sation
Municipal liability	

DAMPING capacity. See Hysteresis (mechanics)

DAMPING of vibration. See Vibration

DAMPNESS in buildings

Basement waterproofing; time-saver standards. diags Arch Rec 93:79-82 My '43

Comparative resistance to vapor transmission of various building materials. L. V. Teesdale. Heating-Piping 14:736-42 D '42; Discussion. 15:152 Mr '43

Estimating water vapor transmission through walls; reference data. Heat & Ven 40:42a-42b Mr; 74a-74b Ap '43

Humidity control in underground bombproof spaces. E. Ledoux. il diags Heating-Piping 14:6-8, 364-6; 15:34-6 Ja, Je '42, Ja '43
Moisture condensation on ceilings. India Rubber W 109:51 O '43
New rule for ceiling sweat problems. Can Min J 64:218 Ap '43
Preventing building condensation. F. B. Rowley, A. E. Algren and C. E. Lund. diag Sheet Metal Worker 33:46 N '42

DAMS

Aggregates for an earth-fill dam; excavating, transporting and screening gravel for Santa Fe dam, California. il Rock Prod 45: 46-9 N '42

Air force targets; Tirso dam and powerhouse, Sardinia. il diag Engineer 175:443-5 Je 4 '43

Belt delivers fill for Youghiogheny earth dam. il diags Eng N 129:777-80 D 3 '42

Civil engineering in 1942. il diag Engineer 175:44-6 Ja 15 '43

Construction of the Milton Seaman dam by Greeley, Colo.; with cost data. R. E. Seaman and C. G. Klein. il Pub Works 74:24+ Mr '43

Cresosoted wood dam for water supply; low earth dam with wood core wall, spillway of wood sheet piling, wooden flume. il Pub Works 74:22 Ag '43

Design of recent TVA projects; unified plan for 34 major hydroelectric and steam power plants. G. R. Rich. il diag plans Civil Eng 13:144-7 Mr '43

Engineering study of glacial drift for an earth dam, near Fergus, Ontario. R. F. Lesget. il plan map Econ Geol 37:531-56 N '42

Engineers and the British empire; water control schemes in Australia. M. Smith. il map Engineer 176:200-2 S 10 '43

More power water flows into the Great Lakes; projects will divert water from Hudson bay. maps Power 87:14-15 Ja '43

Permeability of Mud Mountain Dam core material. A. S. Cary, B. H. Walter and H. T. Harstad. diag Am Soc C E Proc 63: 1089-98 S '42; Discussion. 68:1843-6; 69:615-18 D '42, Ap '43

Reading's silt basins protect streams and save valuable coal. il diags Coal Age 48:64-7 My '43

Reservoir storage capacity enlarged to meet Norfolk water demands. il Eng N 130:898 Je 17 '43

Welding innovations for high dams; arc welding as applied to penstocks. G. L. Yetter. il Elec West 90:65-7 Ap '43

Youghiogheny dam nears completion. il diags Explosives Eng 21:43-7 Mr '43

See also

Columbia river—	Hydroelectric plants
Grand Coulee dam	Irrigation
Dikes (engineering)	Reservoirs
Earth pressure	Spillways

Cost

Contract unit bid prices; list of projects showing how contractors bid in 1942-1943. Eng N 130:641+ Ap 22 '43

Core borings, Liberty dam, Maryland; unit prices. Eng N 129:800 D 3 '42

Dam and diversion channel, Los Angeles, Calif.; unit prices. Eng N 131:286 Ag 12 '43

Raising Ross dam, Seattle; unit prices. Eng N 130:102+ Mr 25 '43

Demolition

Air force targets; Ruhr dams and water power stations. il Engineer 175:405-9 My 21 '43

Effect of air warfare on hydro dam building. J. E. Bullard. il Pub Util 32:611-18 N 11 '43

German dams attacked successfully. J. D. Lewin. il diag map Eng N 130:890-4 Je 17 '43

Real reasons for astounding success of RAF's low-level attacks on German dams. il Power 87:686 O '43

Ruhr dam bombing threatens German steel industry with water power shortage. map Iron Age 151:116 My 27 '43

Ruhr power dams breached. il Elec West 91: 41-3 J1 '43

DAMS—Demolition—Continued

Two large dams in Germany breached by British bombers. *il Eng N 130:719+* My 20 '43

Design

Aeration of spillways. G. H. Hickox. *il diags Am Soc C E Proc 68:1777-96 D '42; Discussion, 69:422-4, 785-8, 868-70, 1461-2 Mr, My-Je, N '43*

Design of circular spillway modified to cure pulsating discharge; San Pablo reservoir. J. W. Trahern. *il Eng N 131:25-7 J1 1 '43*

Design of recent TVA projects; Chatuge and Nottely projects. M. L. Dickinson. *il diags plan Civil Eng 13:413-16 S '43*

Design of recent TVA projects; Cherokee and Douglas projects. J. C. Nowell. *il plans Civil Eng 13:373-6 Ag '43*

Design of recent TVA projects; Kentucky dam, power house, and lock. E. H. Weileman. *il diags Civil Eng 13:257-60 Je '43*

Design of recent TVA projects; Watts Bar and Fort Loudoun. T. Mundal. *il diags plan Civil Eng 13:205-8 My '43*

Design of Shasta dam. K. B. Keener. *il diags plan Civil Eng 13:272-5, 317-20, 427-30 Je-J1, S '43*

Dry-stone dam. diags plans Engineer 175:491 Je 18 '43

Earth-filled dam at Santa Fe, New Mexico; puddled core of Nichols dam uses material from reservoir. J. N. Van Sant. *il Civil Eng 13:366-9 Ag '43*

Recent developments in structural engineering. R. H. Evans. Engineering 155:176 F 26 '43

Scalton dam on the Lois river, British Columbia. *il diags map Engineering 154:441-3, 450 D 4 '42*

Failures

Analysis of the failure of an earth dam during construction; abstract. L. F. Cooling and H. Q. Golder. *diag Am Water Works Assn J 35:970-1 J1 '43*

Earthfill dam in Idaho fails in sudden slump. Eng N 131:109 J1 8 '43

Historic accidents and disasters; Bouzey dam. *il diags Engineer 174:452-5 D 4 '42*
Historic accidents and disasters; Bradfield dam, Sheffield. *il diag Engineer 174:432-3, 435 N 27 '42*

Foundations

Foundation grouting of reservoir. H. C. McCrea. *il diags Pub Works 74:23-4, 28 S '43*

Introduction to soil mechanics. W. L. Lowe-Brown. *diags Engineer 175:145-6 F 19 '43*

Pressure and consolidation measurements at a western earth-fill dam. E. L. Armstrong. *il diags plan Civil Eng 12:682-4 D '42*

Seismic subsurface exploration on the St Lawrence River project. E. R. Shepard and R. M. Haines. *il diags map Am Soc C E Proc 68:1743-61 D '42; Discussion, 69:584-6, 861-7, 1608-10 Ap, Je, D '43*

Model testing

Hydraulic structures; model-prototype conformity. J. E. Warnock and H. G. Dewey, jr. *il diags Am Soc C E Proc 68:1269-94 O '42; Discussion, 69:316-20 F '43*

Meter measurements of dam discharge; model-prototype conformity. E. Soucek. *Am Soc C E Proc 68:1352-65 O '42; Discussion, 69:417-21, 1115-19 Mr, S '43*

Reconstruction

Tiburcio Benegas dam, Argentina. *il diags Engineer 176:14 J1 2 '43*

Testing

Pressure and consolidation measurements at a western earth-fill dam. E. L. Armstrong. *il diags plan Civil Eng 12:682-4 D '42*

DAMS, Concrete

Big concrete plant speeds power dam. *il plan Eng N 129:854-6 D 17 '42*

Concrete structures house men and materials of war; TVA dams. *il Concrete 51:20+* S '43

Construction plant for Fontana project. R. E. Martin. *il diag Civil Eng 13:533-6 N '43 (to be cont)*

Design and construction methods for a tight plug in a concrete dam. *il diags Eng N 130:684 My 6 '43*

Design of recent TVA projects; Apalachia and Ocoee No.3. H. W. Goodhue, R. L. Smart and A. A. Meyer. *il diag plan Civil Eng 13:465-8 O '43*

Design of recent TVA projects; the Fontana project. C. V. Davis and A. A. Meyer. *il diag plan Civil Eng 13:305-8 J1 '43*

Design of Shasta dam. K. B. Keener. *il diags plan Civil Eng 13:272-5, 317-20, 427-30 Je-J1, S '43*

Douglas dam closed in 13 months. *il Eng N 130:328 Mr 4 '43*

Douglas dam constructed in 13 months. *il Eng N 131:134-8 J1 15 '43*

Fundamentals for designing low dams. diags Pub Works 73:20-1+ N '42

Huge concrete dams provide water for the thirsty lands of Mexico. A. O. Alba. *il Concrete 51:33-4 Je '43*

Million tons for Douglas dam; Birmingham slag company builds plant to produce aggregates and stone sand. B. Nordberg. *il Rock Prod 45:54-8 D '42*

Million yards concrete for dam; Shipshaw power development, Quebec. *il Rock Prod 46:52-4 Je '43*

Mixing, distributing, placing concrete at Cherokee dam. W. D. Nowlin. *il Concrete 51:2-4+ My '43*

Progress report on Shasta Dam operations. Eng N 130:853 Je 10 '43

River diversion at Shasta dam. D. C. May. *il diags Eng N 131:397-9 S 9 '43*

San Vincente dam will provide more water for San Diego. *il Eng N 130:406 Mr 25 '43*

Scalton dam on the Lois river, British Columbia. *il diags map Engineering 154:441-3, 450 D 4 '42*

Span river with belt conveyors for Fontana Dam aggregates; rod mills reduce crushed stone to fine aggregate. W. B. Lenhart. *flow sheet il Rock Prod 46:49-57+ S '43*

TVA saves steel with cantilever forms on Douglas dam. J. C. Patchen. *il diags Eng N 130:562-4 Ap 22 '43*

Two T.V.A. dams served from one plant. B. Nordberg. *il Rock Prod 45:49-51 D '42*

Use plywood form panels on outlet works of large flood-control dam. *il Concrete 51:4+ Ap '43*

World's record broken on Douglas Dam construction. Elec W News ed 119:688 F 27 '43

Cost

Dam and dike, California; unit prices. Eng N 131:554 O 7 '43

Repair

Model shows Hales Bar under-flow reduction. *il Eng N 130:158 F 4 '43*

DANCING, Photography of. See Photography of dancing

DANCING schools

Advertising

Arthur Murray's advertising lessons; ad rules for branch managers. P. James. *il Adv & Sell 36:21-2, 68+ N '43*

DANDELIONS

See also

Kok-sagzy

DANIEL, John Franklin, 1873-1942

Sketch. R. M. Eakin. Science 97:8-10 Ja 1 '43

DANIELS, Josephus, 1862-

Our debt to Josephus Daniels. L. A. Hawkins. Gen Elec R 46:423 Ag '43

DARCY's law. See Fluids

DARIEN

Pioneer in Darien; completion of Pan American highway. R. Tewkesbury. *il map For Comm W 11:11-12+ Ap 17 '43; Same, with additional il. Explosives Eng 21:80-3, 94 My '43*

DARK adaptation. See Eye—Accommodation and refraction

DARLAN, Jean, 1881-1942

Darlan assassinated; Giraud chosen successor. Comm & Fin Chr 157:73 Ja 7 '43

President says negotiations with Darlan are only temporary expedient in stress of battle. Comm & Fin Chr 156:2071 D 10 '42

DATES

Iraq raises standards of date export trade. For Comm W 12:31 S 4 '43
New highway diverted traffic, so roadside stand went mail-order; Russell C. Nicoll's Valerie Jean date shop, Thermal, California. il Ptr Ink 202:47, 54 Mr 26 '43

DAVIS, Champion McDowell, 1879-
President of Atlantic coast line railroad. por Manuf Rec 111:38 N '42

DAVIS, Chester Charles, 1887-
Appointed to control food production and distribution. Comm & Fin Chr 157:1212 Ap 1 '43

Bread or bacon? it's up to Davis. por Business Week p 14-15 Je 5 '43

C. C. Davis resigns as food administrator; Marvin Jones is appointed successor. Comm & Fin Chr 158:27 J1 1 '43

Davis' tough job. Business Week p14 Ap 3 '43
Portrait. Business Week p15 Je 26 '43

DAVIS, Harvey Nathaniel, 1881-
Portrait. Am Mach 86:1390s N 26 '42
Portrait. J Ap Phys 14:396 Ag '43

DAVIS, John Marcus, 1871-
J. M. Davis, D.L. & W. chairman, retires Feb. 1. por Ry Age 114:315 F 6 '43

DAVITS
Davitt calculations. F. K. Ruprecht. diags Marine Eng 48:184-7 Mr '43

DAY nurseries, Factory
How Curtiss cares for workers' children. il Aero Digest 42:264+ F '43

Industry minds the baby; abstract. E. Johns. Management R 32:100-1 Mr '43

Kaiser's children; shipbuilder opens first of new nurseries, red tape snarls other projects. il Business Week p40+ My 22 '43

DAYLIGHT
Illumination from a non-uniform sky. P. Moon and D. E. Spencer. diags Illum Eng 37:707-22; Discussion. 722-6 D '42

Study on measurements of daylight; the influence of polarized light. H. H. Hausner. bibliog il Illum Eng 38:382-90 J1 '43

See also

Windows

DAYLIGHT, Artificial

See also

Sunshine, Artificial

DAYLIGHT saving

Cleveland Reserve on Eastern war time; time zones vary. Comm & Fin Chr 157:856 Mr 4 '43

DAYTON, Ohio

Industries

Dayton initiates model manpower plan; wins renewed war contracts. Iron Age 152:126+ S 2 '43

Dayton labor control plan. Factory Management 101:276+ O '43; Dun's R 51:10-12+ O '43

DCAT. See New York board of trade—Drug, chemical and allied trades section

DEADLY nightshade. See Belladonna

DEAF

Employment

Hard-of-hearing workers are good employees. R. C. Black. bibliog il Mech Eng 65:724-6 O '43

DEAF, Instruments for. See Hearing aids, Mechanical

DEALER helps

Celotex helps dealers stay in business. il Ptr Ink 201:74 D 11 '42

Dealer-inspected equipment to be given Farm Commando emblem; Allis-Chalmers program to help outlets stay on by servicing. il Ptr Ink 202:59-60 Ja 1 '43

Dealers swap slow items for goods in demand; International silver company helps dealers exchange non-selling patterns. il Ptr Ink 204:30+ S 10 '43

Del Monte's service program eases grocers' wartime business woes; Calpak. E. Gidlow. il Sales Management 52:24-6 Je 1 '43

Elsie helps the grocer. il Mod Packaging 16: 66 J1 '43

Firestone pushes multiple lines to insure survival of retail stores. D. Martin. il Sales Management 51:24-5 D 15 '42

Formfit tells dealers, if you can't sell corsets, retreat 'em. il Sales Management 52: 32+ Je 1 '43

Helping dealers through the war and preparing them for the peace; Johns-Manville dealer educational program. A. A. Hood. il Ind Marketing 28:54, 59-60, 64 F '43

How G-E helps its distributors survive. il Ptr Ink 203:23-4 My 28 '43

How the farm market is reached through clinics; Johns-Manville company. M. Beuick. il Ptr Ink 205:25-6 O 29 '43

Its product on ice, Timken sustains name through service and advertising. D. G. Baird. il Sales Management 52:22-4 Ap 1 '43

McKesson offers druggists a hand in training green sales help. L. M. Hughes. il Sales Management 52:36+ Ag 15 '43

McKesson program eases retailers' burden of training sales help; new distributing handbook. R. H. Ganly. il Ptr Ink 204:17, 72 J1 30 '43

Novel booklet aids retailers in coping with customer complaints; Pepsodent company explains its difficulties. Ptr Ink 202:31 F 19 '43

Pacific gas & electric co. helps dealers step up repair services. il Sales Management 51:58-9 D 1 '42

Posters help balance nation's market basket; Del Monte buy-for-a-week plan. il Mod Packaging 16:77-8+ Ja '43

Retailers turn to self-service: what are you doing about it? J. C. Cumming. il Sales Management 52:64-6 Ap 15 '43

Sales jump when Armour shows dealers how to push dairy products. W. J. Simmons. il Sales Management 51:21-2 D 1 '42

Sealtest's duration selling plan helps grocers maintain volume; National dairy products' promotion aids for pushing unrationed foods. L. M. Hughes. il Sales Management 52:24-5 Ag 1 '43

Sixty-five ways for salesmen to help dealers stay in business. A. A. Hood. Sales Management 51:18-20 D 1 '42

Washington news-letter helps rug dealers solve war problems; Alexander Smith & sons. il Sales Management 52:44-5 F 1 '43

What's cooking on the sales front; salesmen help customers. J. H. Van Deventer. Ind Marketing 27:40, 44 D '42

See also

Advertising—Dealer cooperation	Display of merchandise
Advertising—Dealer help	Salesmanship—Service
Advertising, Point-of-sale	Salesmen, Retail—Training
	Show windows

DEALER relations

Consumer questionnaire is part of this down-to-earth post-war promotion; Crane co. program. il Ptr Ink 203:20-2 My 28 '43

Does faithful service pay? this letter has the answer. Sales Management 52:84+ Je 15 '43

How smaller advertisers can hold dealer goodwill. E. B. Weiss. il Ptr Ink 204:29+ J1 30 '43

How the children's wear industry is pooling showings for dealers. J. C. Cumming. Sales Management 52:39 Je 15 '43

Importance of customer relationships; our dealers will remember our help now. W. A. Taylor. Credit & Fin Management 45:10-11 O '43

Retailer looks at his wartime mail. A. H. Van Voris. il Ptr Ink 204:20-2 J1 9 '43

Six ways to keep in touch with customers when men can't travel. J. C. Cumming. Sales Management 52:36, 38 F 15 '43

Swift salesmen learn to handle hurried dealers with kid gloves. Sales Management 52: 70+ Mr 1 '43

Tell your dealers how to cut down losses from forged checks! il Sales Management 52:22-4 Ap 15 '43

Wholesaler advertises in dealer's defense. il Ptr Ink 202:38 Mr 26 '43

See also

Dealer helps

Price discrimination

Sales policies

DEALER schools

How G-E helps its distributors survive. *il*
Ptr Ink 203:23-4 My 23 '43

DEAMINATION

Action of cuprous oxide on diazotised amines.
 H. H. Hodgson and H. S. Turner. *Chem*
Soc J p748-9 D '42; 86-9 Mr '43

DEATH

—of the shadow of death. T. D. Eliot. *Ann*
Am Acad 229:87-99 S '43

DEATH, Presumption of

Presumption of death from absence. L. A.
 Burke. *Spectator* (Life ed) 150:26 My; 23
 Je '43

DEATH rates. See Mortality—Statistics**DEBATES and debating**

Wartime debating. W. T. Dunn. *Am Inst*
Banking Bul 24:12+ O '42

DEBENZYLATION

Catalytic debenzylation; the effect of substi-
 tution on the strength of the O-benzyl and
 N-benzyl linkages. R. Baltzy and J. S.
 Buck. *Am Chem Soc J* 65:1984-92 O '43

DEBT

Decline in consumer short-term debt; year
 subsequent to effective date of Regulation
 W. Fed Res Bul 28:1180-1 D '42

Drastic decline in private debt. H. M. Tre-
 maine. *Mag of Wall St* 72:448-50+ Ag 7 '43
 How consumer debt has changed; 1939-1943;
 chart. *Business Week* p42 Je 19 '43

Indebtedness in the United States, 1929-41.
 U S Bur For & Dom Com. *Economic Ser*
 21:1-91; pa 15c Supt. of doc. '42

Monthly estimates of short-term consumer
 debt, 1929-42. D. M. Holthausen. tables
Survey of Cur Business 22:9-25 N '42

Public and private debt in the United States,
 1916-42. R. B. Bangs. *Survey of Cur Busi-
 ness* 23:22-5 My '43

Sees mathematics of debt answer to most
 economic ills. W. C. Everett. *Comm & Fin*
Chr 158:100 J1 8 '43

See also

Bankruptcy	Credit
Collecting of ac-	Debtor and creditor
counts	Moratorium

DEBT, Employees'

Credit counseling for employees. L. E. Yav-
 ner and H. Seidman. *Personnel J* 22:91-6 S
 '43

DEBTOR and creditor

Novation of indebtedness by note not affected
 by taint of usury of original transaction.
Banking Law J 60:845-8 O '43

Promise to pay as soon as I am able. C. R.
 Rosenberg, jr. *Burroughs Clearing House*
 27:32 S '43

Wartime relief from civil obligations in Great
 Britain. R. F. J. Sanders. *Ann Am Acad*
 227:62-8 My '43

See also

Bankruptcy
 Moratorium

DEBTS, Public

Debt in our national economy. G. R. Ericson.
Credit & Fin Management 44:19-22 D '42

Gambling in European dollar bonds. F. M.
 Stern. *Barron's* 22:18+ D 7 '42

No currency dilution and increasing produc-
 tivity key to post-war debt problem; ab-
 stracts. G. W. Spinney. *Comm & Fin Chr*
 158:1871+ N 11 '43; *Inv Banking* 14:14-15
 N '43

Should a government debt, internally held,
 be called a debt at all? A. Hahn. *Banking*
Law J 60:506-14 J1 '43

See also

Bonds, Government
 Municipal bonds

Belgium

Belgian state debt soars; figures for 1938-
 1942. *For Comm W* 11:22 My 22 '43

Canada

See also
 Bonds, Government—
 Canada

Chile

Chilean bond payment. *Comm & Fin Chr*
 157:375 Ja 28 '43

Chilean funds available for debt service.
Comm & Fin Chr 157:205 Ja 14 '43

Transfer of interest payments on Swiss franc
 bonds suspended. *For Comm W* 11:24 My
 1 '43

Cuba

Public debt. *For Comm W* 10:17 Mr 6 '43;
 Same. *Bankers M* 146:347 Ap '43

Ecuador

Public debt as of Dec. 31, 1942. *For Comm*
W 13:11 N 6 '43

Egypt

Egyptian debt redemption. *Economist* 145:373
 S 11 '43

Finland

Finland pays U.S. on World war debt. *Comm*
 & *Fin Chr* 157:2268 Je 17 '43

Finland signs debt pact. *Comm & Fin Chr*
 158:1626 O 21 '43

Florida

Florida gas tax amendment favorable to road
 and road district issues. H. G. Carrison.
Comm & Fin Chr 158:1963+ D 3 '42

Great Britain

Britain's war debts. *Economist* 145:180-1 Ag 7
 '43

National debt at March 31, 1923, 1939-1942.
Economist 144:457 Ap 10 '43

See also

Bonds, Government
 —Great Britain

India

India, out of debt. *For Comm W* 12:37 S 4
 '43

Mexico

Details revealed of Mexican debt payment.
Comm & Fin Chr 156:2334 D 31 '42

Mexican debt plan is now in operation. *Comm*
 & *Fin Chr* 158:609 Ag 12 '43

Mexico plan to resume foreign debt pay-
 ment. *Comm & Fin Chr* 156:2169 D 17 '42

Mexico resumes foreign debt payment. *Comm*
 & *Fin Chr* 158:305 J1 22 '43

Mexico will resume foreign debt payment.
Comm & Fin Chr 158:33 J1 1 '43

Nicaragua

Nicaragua to pay off commercial debt. *Comm*
 & *Fin Chr* 157:1791 My 13 '43

Paraguay

Paraguayan war debt canceled by Brazil.
Comm & Fin Chr 157:1883 My 20 '43

Russia

War and American investments. M. Winkler.
Comm & Fin Chr 157:1857+ My 20 '43; Dis-
 cussion. C. Marks; V. H. Mardfin. 157:
 1954+ My 27 '43

United States

Can the United States support a 300 billion
 dollar debt? O. G. Saxon. *Comm & Fin*
Chr 157:1753+ My 13 '43; Excerpts. *Trusts*
 & *Estates* 77:21-2 J1 '43; Discussion. *Comm*
 & *Fin Chr* 157:1862+ 1953+ 2057+, 2161+
 2261+, 2377; 158:512 My 20, 27, Je 3, 10, 17,
 24, Ag 5 '43

Can we support a \$300 billion federal debt?
 J. D. C. Weldon; H. L. Blackburn. *Mag of*
Wall St 72:232-4 Je 12 '43

Challenge of post-war deficit financing. *Comm*
 & *Fin Chr* 157:2059+ Je 3 '43

Dangers of unamortized perpetual debt.
Trusts & Estates 76:218 Mr '43

Economic implications of internal public
 debts. W. W. Aldrich. *Bankers M* 146:122-
 4, 126-33 F '43; Abstracts. *Comm & Fin*
Chr 157:353+ Ja 28 '43; *Trusts & Estates*
 76:113-14 F '43

Effect of public debt on future business ac-
 tivities. M. Nadler. *Comm & Fin Chr* 158:
 1485+ O 14 '43

Federal debt approaches \$3,000 per U.S.
 family. *Barron's* 22:1 D 14 '42

Forsees national debt of \$250 billion but de-
 clares Nation can liquidate it. W. L. Hem-
 ingway. *Comm & Fin Chr* 157:201 Ja 14 '43

Gross debt, end of month, 1938-1941. *Survey*
 of *Cur Business* 1942 Sup p74 [supplemented
 in monthly numbers]

DEBTS, Public—United States—Continued

Gross public debt and obligations fully guaranteed by the U. S. government, monthly Jan. 1940-Oct. 1942; chart, Survey of Cur Business 22:3 D '42

It ain't hay; national debt. Business Week p113-14 D 12 '42

\$100,000,000,000; visualizing the public debt; charts. R. W. Bachelor. Banking 35:36-7 D '42

Our post-war national debt. O. G. Saxon. Comm & Fin Chr 158:1293-+ S 30 '43

Post-war debt and taxes. H. Morgenthau. Trusts & Estates 76:328 Ap '43

President permits debt limit bill to become law without signature; objects to salary rider. Comm & Fin Chr 157:1381 Ap 15 '43

Public and private debt in the United States, 1916-42. R. B. Bangs. Survey of Cur Business 23:22-5 My '43

Public debt. Fed Res Bul 29:589-90 JI '43

Public debt issue and postwar plans. H. G. Moulton. Trusts & Estates 76:497-8 Je '43

Recent increase in public debt; changes in ownership. Fed Res Bul 28:1071-4 N '42

Statutory debt limitation as of Dec. 31, 1942. Comm & Fin Chr 157:204 Ja 14 '43

U.S. can carry \$200 billion debt, preserve credit and avoid inflation. R. Weisman. Comm & Fin Chr 158:99-+ JI 8 '43

United States government debt, volume and kind of securities, June and Dec. 1939-1941 and Nov. 1941-Nov. 1942. Fed Res Bul 29:71 Ja '43 [cont monthly]

Where's the money coming from? S. Chase. Comm & Fin Chr 158:1784-+ N 4 '43; Discussion. 158:2012 N 18 '43

Would solve war debt problem by enforced savings. W. I. King. Comm & Fin Chr 158:1485, 1496-7 O 14 '43

See also

Bonds, Government—United States

Venezuela

Public debt, 1942. For Comm W 10:19 F 13 '43

DEBYE-HÜCKEL equation

Values of the constants in the Debye-Hückel equation for activity coefficients. G. G. Manov and others. bibliog Am Chem Soc J 65:1765-7 S '43

DEBYE-HÜCKEL theory

Revised constants for the Debye-Hückel theory. H. I. Stonehill and M. A. Berry. Am Chem Soc J 64:2724-5 N '42; Discussion. 65:1249-50 Je '43

DECAHYDRONAPHTHALENE. See Decalin**DECALIN**

Synthesis and rearrangement of some decahydro- and tetrahydronaphthalenediols. J. English, jr. and G. Cavaglieri. bibliog Am Chem Soc J 65:1085-9 Je '43

DECALINDIONE

Decalin-1:5-dione and 2:2'-diketodicyclopentyl. B. J. F. Hudson and R. Robinson. Chem Soc J p691-3 N '42

DECAMETHYLENE adipate

Viscosities of polyester solutions; application of the melt viscosity-molecular weight relationship to solutions. P. J. Flory. bibliog J Phys Chem 46:870-7 N '42

DECANE

Phase equilibria in hydrocarbon systems; methane-decane system. H. H. Reamer and others. bibliog Ind & Eng Chem 34:1526-31 D '42

Preparation of nonane and decane α,ω -dicarboxylic acids. W. P. Hall and E. E. Reid. Am Chem Soc J 65:1468 Ag '43

DECATUR, Stephen, 1779-1820

Daring Stephen Decatur. por Fortune 27:126-7 F '43

DECCA records, inc.

Agreement with union. Comm & Fin Chr 158:1241 S 27 '43

Financial condition. Mag of Wall St 72:600 S 4 '43

DECIMALS

Slide rule decimals; simple and practicable method of determining position. P. F. Marx. ii Pet Eng 14:78, 80 JI '43

DECLARATORY judgments

Advertiser, fighting stipulation, sues F.T.C.; Miles laboratories, inc. asks U.S. court for declaratory judgment. Ptr Ink 201:20-1 D 25 '42

DECOLORIZATION

Decolorizing clays. Y. E. Stourdze. Chem Ind 51:758 N '42

TNT wastes. S. Schott, C. C. Ruchhoff and S. Megregian. diag Ind & Eng Chem 35:1122-7 O '43

See also

Bleaching
Fuller's earth

Glass—Decolorization
Petroleum refining

DECOMPOSITION

Barium and strontium sulfate decomposition in aqueous solution. R. N. Shreve and H. F. Wiegandt. bibliog Ind & Eng Chem 35:608-13 My '43

Catalytic degradation of heptaldehyde in vapor phase. T. J. Suen and S. Fan. Am Chem Soc J 65:1243-5 Je '43

Cracking cyclohexane; thermal and catalytic decomposition at high pressures. V. Haensel and V. N. Ipatieff. bibliog ii diag Ind & Eng Chem 35:632-8 Je '43

Decomposition of ethylene and carbon monoxide on metallic catalysts. A. R. McKinney. J Phys Chem 47:152-63 bibliog(p163) F '43

Influence of *p*-substituents on the decomposition of zinc chloride double salts of diazonium chlorides by acetic anhydride. H. H. Hodgson and C. K. Foster. Chem Soc J p747-8 D '42

Kinetics of hypiodite decomposition. Choh Hao Li and C. F. White. bibliog Am Chem Soc J 65:335-9 Mr '43

Kinetics of the decomposition of trinitrobenzoic acid in dioxane-water mixtures. D. Trivich and F. H. Verhoek. Am Chem Soc J 65:1919-24 O '43

Kinetics of the thermal decomposition of *n*-propyl and isopropyl formates. R. E. Anderson and H. H. Rowley. bibliog J Phys Chem 47:454-63 Je '43

Mechanism of the thermal decomposition of diacyl peroxides in dilute solution in organic solvents; abstract and discussion. A. E. Oxford. Chem & Ind 62:54 F 6 '43

Photochemical studies; quantum yields during the photochemical decomposition of *n*-butyl methyl ketone. J. E. Wilson and W. A. Noyes, jr. bibliog Am Chem Soc J 65:1547-50 Ag '43

Photochemical studies; the photochemical decomposition of *n*-butyl methyl ketone. W. Davis, jr. and W. A. Noyes, jr. Am Chem Soc J 64:2676-8 N '42

Preparation of allyl and methallyl methacrylates by the thermal decomposition of allyl and methallyl α -acetoxyisobutyrate. C. E. Rehberg, C. H. Fisher and L. T. Smith. bibliog Am Chem Soc J 65:1003-6 Je '43

Rate of decomposition of hydrogen peroxide in concentrated solutions. R. Livingston. bibliog J Phys Chem 47:260-4 Mr '43

Thermal decomposition of certain polyarylated carbinols. C. F. H. Allen and J. A. VanAllan. bibliog Am Chem Soc J 65:1384-9 JI '43

Thermal decomposition of hydrocarbons, resonance stabilization and isomerization of free radicals. A. Kossiakoff and F. O. Rice. bibliog Am Chem Soc J 65:590-5 Ap '43

Thermal decomposition of quaternary ammonium phenolates, with reference to the Claisen rearrangement. D. S. Tarbell and J. R. Vaughan, jr. bibliog Am Chem Soc J 65:231-3 F '43

Thermal decomposition of the dibromide of β -methyl- $\alpha,\alpha,\gamma,\gamma$ -tetraphenylpropene. C. F. Koelsch and R. V. White. Am Chem Soc J 65:1639-40 Ag '43

See also

Electrolysis
Hydrolysis

DECONTAMINATION (from gases, chemicals, etc.)

Effects of war gases on water supplies; decontamination. H. H. Potter. N E Water Works Assn J 57:137-62 Je '43

DECONTAMINATION (from gases, chemicals, etc.).—*Continued*

Training and organization of technical consultants to deal with chemical and bacterial contamination. L. A. Bradley. N E Water Works Assn J 56:271-5 S '42

See also

Food—Gas contamination

DECORATION and ornament

See also

Carpets

Design

Enamel and enameling

Furniture

Pottery

Show windows

Textile printing

DECORATION and ornament, Architectural

See also

Mural painting and decoration

Sheet metal work, Architectural

DEERFIELD packing corporation

Bonds and preferred stock offered. Comm & Fin Chr 157:991-2 Mr 15 '43

DEFECTIVE and delinquent classes

See also

Handicapped

DEFENCE industries ltd.

Review of the activities and accomplishments. Can Chem & Process Ind 27:134+ Mr '43

DEFENSE contracts. *See* Contracts, Government**DEFENSE** housing. *See* Housing—United States—Defense workers**DEFENSE** loans. *See* Loans, Bank—Defense loans**DEFENSE** plant corporation

Assaults DPC arrangement. L. C. Hilgemann. Nat Underw 46:1+ N 26 '42

Cancelling detinning plants, DPC winds up first large-scale program. Iron Age 152:85 JI 29 '43

Defense plant corporation; fire and extended coverage; comprehensive liability. Spectator (Property ed) 8:30-1 D 10 '42

Mississippi disallows 5% deal on risks of DPC. Nat Underw 47:28 F 4 '43

New deal plans industry control. Business Week p15-16 Mr 20 '43

Plant financing in a war economy; problem of new facility financing. M. D. Ketchum. J Business 16:28-50 Ja '43

Seventy per cent of DPC plant projects already in operation. Steel 112:46 Mr 29 '43

Threat of government insurance; details of DPC program; abstracts. C. W. Pierce and others. East Underw 43:16+ D 4 '42; Nat Underw 46:2+ D 3 '42

\$25 billion federal investment in American industry; what should be done with it? E. A. Krauss. Mag of Wall St 72:618-19+ S 18 '43

Vast investment in plants gives government great power, but Jones predicts a fair deal. Iron Age 152:79-80 JI 29 '43

Withdraw opposition to DPC plan; report at N.A.I.A. East Underw 44:37 O 15 '43; Nat Underw 47:1+ O 14 '43

DEFENSE supplies corporation

'43 DSC loss put at 100 million; with list of claims for excess cost of moving products. Nat Pet N 35:3+ S 29 '43

DEFENSE workers. *See* Housing—United States—Defense workers; Munition factories—Employees**DEFERRED** maintenance bonds (proposed). *See* Bonds, Government—Deferred maintenance bonds (proposed)**DEFICIENCY** diseases

Deficiency stomatitis. H. R. Sandstead. (Public health rep supp 163) Tp, pl 1-2 U.S. Public health service, Washington; pa 10c Supt. of doc. '43

Effect of tryptophane deficiency on reproduction. A. A. Albanese, R. M. Randall and L. E. Holt, jr. bibliog Science 97:312-13 Ap 2 '43

Natural occurrence of riboflavin deficiency in the eyes of dogs. T. D. Spies. bibliog Science 98:369-70 O 22 '43

Types of nutritional deficiency; symposium. Ann Am Acad 225:29-42 Ja '43

See also

Beriberi

Vitamins

DEFLATION (finance)

Price deflators for consumer commodities and capital equipment, 1929-42. H. Shavell. Survey of Cur Business 23:13-21 My '43

War bond hedge against post-war deflation. Barron's 23:1 S 13 '43

DEFLOCCULATION

Influence of sodium silicate composition on its behavior with sodium carbonate as a casting slip deflocculant. A. E. Currier. Am Cer Soc J 26:67-71 F 1 '43

DE FOREST, Lee, 1873-

Saga of the vacuum tube; Dr Lee de Forest at height of his career; many of his patents discussed. G. F. J. Tyne. bibliog il diags Radio N 30:26-8+ S; 26-7+ O '43

DEFORMATION of rocks. *See* Geodynamics**DEFORMATIONS** (mechanics)

Deformation under load of rigid plastics. R. Burns. Mod Plastics 21:111-12 S '43

Deformation under pressure of brazed aluminum tank. L. W. Combs. il diags Product Eng 14:581-2 S '43

General stress-strain-time formula. P. G. Nutting. bibliog Franklin Inst J 235:513-24 My '43

Investigation of the behaviour of metals under deformation at high temperatures; structural changes in carbon steels caused by creep and graphitisation. C. H. M. Jenkins. G. A. Mellor and E. A. Jenkinson. bibliog Iron & Steel Inst J 145:51-86, pl 1-12 no 1 '42

Investigation of the lateral distortion produced in mild steel plates by oxyacetylene cutting. C. C. Osgood. il diags Welding J 22:sup308-16 JI '43

Marine propeller blade deflection. J. F. C. Conn. diags Engineering 156:58-60 JI 16 '43

See also

Elasticity

Plasticity

Strains and stresses

DEGASIFICATION of coal mines. *See* Coal mines and mining—Degasification**DEGREASING**

Adapting certain type vapor degreasers for cleaning small parts. B. D. Ostrow. il Metal Finishing 41:486-7 Ag '43

Chlorinated solvent exposures at degreasing operations. K. M. Morse and L. Goldberg. bibliog il Ind Med 12:706-13 O '43

Fraser-Heller metal degreasing system. il diags Engineering 155:146-7 F 19 '43

Industrial degreasing agents. H. P. Quadland. il Metal Finishing 41:463-5 JI '43

Interlocked controls feature vapor degreaser. il diags Product Eng 14:697 N '43

Mechanical lift speeds degreasing operation. R. L. Dunlap. Factory Management 101:228+ Mr '43

Operation of modern degreasers; abstract. J. W. Dammers. Iron Age 152:68-9 JI 15 '43

DEGREE-days. *See* Heating—Tables, calculations, etc.**DEGREES**, Engineering

Professional engineering degrees. G. M. Butler. J Eng Educ 33:696-7 My '43

DEGUELIN

Occurrence of rotenone and related substances in the seeds of the berbera tree; procedure for the separation of deguelin and tephrosin. E. P. Clark. Am Chem Soc J 65:27-9 Ja '43

DEHALOGENATION

Reductions with nickel-aluminum alloy and aqueous alkali; quantitative determination of halogens in organic compounds. E. Schwenk, D. Papa and H. Ginsberg. Ind & Eng Chem Anal ed 15:576-7 S 15 '43

DEHUMIDIFIERS

Condensation extractor prevents lading damage. il Ry Age 115:244-5 Ag 7 '43

Direct dehumidification by solid adsorption as applied in industrial refrigeration processes. G. L. Simpson. il Refrig Eng 45:246-50 Ap '43

DEHUMIDIFIERS—Continued

Gas air conditioning attains acceptance in 1942 and stands ready to expand. *Am Gas Assn Proc* 1942:164-5; Same abr. *Heating-Piping* 15:196+ Ja '43

Gas air conditioning; 1942 report of the American gas association's joint committee; abstract. *Heating-Piping* 15:196+ Ja '43

Natural gas solves the problems of a gelatin producer; air dryer. C. Culbertson. *il diag Gas Age* 32:15-16+ Ag 12 '43

Ordinance plant; shortens time between powder and ultimate shell loading by use of dehumidifier. *Heat & Ven* 40:55 Ap '43

War industries make wide use of gas-fired dehumidifiers; subcommittee report to annual convention of American gas association. *il Heat & Ven* 39:50-1 N '42

Testing

Cooling, dehumidifying; measuring capacities of air-conditioning equipment by the electric-calorimeter method. H. A. Whitesel. *diags Gen Elec R* 45:653-6 N '42

DEHYDRATED food. See Food, Dried; Vegetables, Dried

DEHYDRATION

Aromatic cyclodehydration; 9-alkyl- and 9-aryl-10-phenylanthracenes. C. K. Bradsher and E. S. Smith. *Am Chem Soc J* 65:451-2 Mr '43

Aromatic cyclodehydration; 9,10-dialkylphenanthrenes. C. K. Bradsher and S. T. Amore. *bibliog Am Chem Soc J* 65:2016-17 O '43

Aromatic cyclodehydration; 1,2,3,4-dibenzo-phenanthrene. C. K. Bradsher and L. Rapoport. *Am Chem Soc J* 65:1646-7 Ag '43

Aromatic cyclodehydration; the mechanism of the cyclization of *o*-benzylphenones. C. K. Bradsher and E. S. Smith. *bibliog Am Chem Soc J* 65:854-7, 1643-5 My, Ag '43

Dehydrating effect of disinfectants on egg-albumin solutions. A. Steigmann. *Soc Chem Ind J* 61:178-80 N '42

Dehydration of alcohols; *t*-amyl alcohol and the related dimethylenepentylcarbinol. F. C. Whitmore and others. *bibliog Am Chem Soc J* 64:2970-2 D '42

Dehydration of cholesterol in liquid sulfur dioxide. R. H. Levin. *bibliog Am Chem Soc J* 65:627-8 Ap '43

Dehydration of the 7-epimeric 3(β)-acetoxystereanols-7; some transformation products of 7-cholesterol. O. Wintersteiner and M. Moore. *bibliog Am Chem Soc J* 65:1507-13 Ag '43

Methods of preparing butadiene; dehydration, dehydrogenation plus condensation of ethanol. G. Egloff and G. Hulla. *bibliog Oil & Gas J* 41:45-8 D 10 '42

New data on activated bauxite desiccants. R. G. Capell, R. C. Amoro and J. W. Moore. *bibliog diags Chem & Met Eng* 50:107-10 Ji '43

Some standard thermal dehydration curves of minerals. P. G. Nutting. *U S Geol S Professional Pa* 197-E:197-217; pa 5c Supt. of doc. '43

Synthesis of olefin hydrocarbons by catalytic condensation and dehydration of aliphatic aldehydes. V. I. Komarevsky and T. H. Kritchevsky. *Am Chem Soc J* 65:547-8 Ap '43

See also

Drying	Gas, Natural—De-
Drying (fruits and	hydration
vegetables)	Tar—Dehydration
Evaporation	

DEHYDRATION of fruits and vegetables. See Drying (fruits and vegetables)

DEHYDRATORS. See Drying apparatus

DEHYDROASCORBIC acid

Analysis

Photometric determination of reduced and total ascorbic acid. M. Hochberg, D. Melnick and B. L. Oser. *bibliog diag Ind & Eng Chem Anal ed* 15:182-8 Mr 15 '43

DEHYDROCHOLIC acid

Catalytic reduction of dehydrocholic acid in presence of Raney nickel. W. M. Hoehn and H. E. Ungnade. *bibliog Am Chem Soc J* 65:124 Ja '43

DEHYDROGENATION

Catalytic dehydrogenation; catalytic conversion of alcohols into aldehydes, paraffins and olefins. E. J. Badin. *bibliog Am Chem Soc J* 65:1809-13 O '43

Catalytic dehydrogenation of alcohols to aldehydes in the presence of air. R. R. Davies and H. H. Hodgson. *Chem Soc J* p282-4 Je '43

Catalytic dehydrogenation of 2-substituted-5,6,7,8-tetrahydronaphthalene derivatives. M. S. Newman and H. V. Zahm. *bibliog Am Chem Soc J* 65:1097-1101 Je '43

Methods of manufacturing synthetic-rubber intermediates. C. R. Wagner. *diags Oil & Gas J* 41:44+ N 26 '42

Methods of preparing butadiene. G. Egloff and G. Hulla. *bibliog Oil & Gas J* 41:136+ N 26; 36, 39-42+ D 3; 45-51 D 10 '42

Used equipment speeds Sun butadiene plant construction. J. P. O'Donnell. *il Oil & Gas J* 41:38-9+ N 26 '42

Vinyl alcohols; 1,4-dehydrogenation. R. C. Fuson and R. E. Foster. *bibliog Am Chem Soc J* 65:913-15 My '43

DEINKING. See Waste paper

DELAWARE and Hudson railroad

Amendments to bond plan proposed by bondholders group. *Comm & Fin Chr* 157:690 F 22 '43

Approves plan. *Comm & Fin Chr* 158:669 Ag 16 '43

Asks court approval of plan. *Comm & Fin Chr* 157:1648 My 3 '43

Court reserves decision on bond adjustment program. *Comm & Fin Chr* 157:2346 Je 21 '43

Debt adjustment plan approved; summary of report of the Commission. *Comm & Fin Chr* 157:1268 Ap 5 '43

Debt plan approved. *Comm & Fin Chr* 156:2305 D 28 '42

D. & H. to pay 10%. *Business Week* p70 Ja 2 '43

Problems of financing. *Comm & Fin Chr* 156:2317 D 31 '42

Railroad securities. *Comm & Fin Chr* 158:1489 O 14 '43

Status of extended D. & H. 4s. A. Jansen. *Barron's* 23:18-19 Je 7 '43

DELAWARE aqueduct. See Aqueducts

DELAWARE, Lackawanna and western railroad

Annual report. *Comm & Fin Chr* 157:815 Mr 1 '43

Appeals court stops road from paying rail rental. *Comm & Fin Chr* 157:520 F 8 '43

Merger agreement by D.L. & W. and Utica line. *Comm & Fin Chr* 158:1439 O 11 '43

Would merge New York, Lackawanna & Western; tax litigation settlement. *Comm & Fin Chr* 157:2247-8 Je 14 '43

DELAWARE power and light company

FPC approves program submitted on disposition of charges. *Comm & Fin Chr* 157:440 F 1 '43

Financing plan filed with SEC. *Comm & Fin Chr* 158:1345 O 4 '43

Merger deal approved by SEC. *Comm & Fin Chr* 158:1529-30 O 18 '43

Securities offered. *Comm & Fin Chr* 158:1730 N 1 '43

DELINQUENCY

Laboratory experiment on delinquency and effluence. O. F. Steinbach. *J Chem Educ* 20:146 Mr '43

DELIVERY of goods

Delivery by bike, barge and buggy instead of auto. *Ptr Ink* 204:33 Ji 2 '43

Lots of gas, but—commercial vehicles in East ordered to reduce mileage further. *Business Week* p26-7 Je 5 '43

Wartime effects on retail delivery. O. P. Robinson. *J Retailing* 19:14-17 F '43

See also

Drivers as salesmen
Milk delivery
Oil delivery

Delivery to dealers

Grocery trailers cut store delivery costs. *il Food Ind* 15:68-9 Ja '43

DELOUSING. See Lice

DELPHINIUM elatum

Alkaloids of the seeds of delphinium elatum, L. J. A. Goodson. Chem Soc J p139-41 Mr '43

DELTA

See also
Mississippi river—
Delta

DEMAGNETIZATION

Adiabatic demagnetization of iron alum. J. A. Sauer. bibliog diag Phys R 64:94-112 Ag 1 '43

Demagnetizer for tool bench. H. W. Secor. plan Am Mach 86:1368-9 N 26 '42

DEMAND and supply

Wage rates and living costs in a war economy; demand and supply trends, 1939-42. M. S. Brody. J Business 16 pt2:16-20 Jl '43

DEMAND factor

After-diversity demand. P. Schiller. Elec R (Lond) 132:475-7 Ap 9 '43
Evaluation of incompletely diversified loads. W. L. Tadlock. il Elec Eng 62:485-92 N '43

DEMAND meters

Demand meters guide bank loading. il Elec W 119:1318 Ap 17 '43
Duplex meter set for load surveys. il diag Elec W 119:1337-8 Ap 17 '43
Graphic demands made over to indicating. T. E. Lobect. il Elec W 120:1020 S 18 '43
Proper oil quantity for register motors. il Elec W 119:622 F 20 '43
Unfreezing bearings of register motors. diag Elec W 118:1806 N 28 '42

Testing

Universal checker for all demand registers. il diag Elec W 119:484 F 6 '43

DEMBER, Harry L.

1882-1943
Sketch. G. Winchester. Science 97:502-3 Je 4 '43

DEMEROL

Morphine substitute available to public. Oil Paint & Drug Rep 144:7 S 6 '43

DEMINERALIZATION

Demineralizing industrial water and process liquids. E. Nordell. il Chem & Met Eng 50:112-15 O '43
Demineralizing process of water softening; latest development in the use of zeolites. S. B. Applebaum. il diags Water & Sewage 81:13-16+ O '43; Same. Am Water Works Assn J 35:1479-86 N '43

DEMOBILIZATION

Army to help men get jobs when demobilized. R. P. Patterson. Comm & Fin Chr 157:498 F 4 '43
Chemical manpower for postwar industries. S. D. Kirkpatrick. Chem & Eng N 21:1714-15+ O 25 '43
Collective bargaining and re-employment of veterans. R. P. Brecht. Ann Am Acad 227: 94-103 My '43
Coming great shifts in our civilian economy. H. M. Tremaine. il Mag of Wall St 72:513-15, 547 Ag 21 '43
Demobilization; problems and their complexity. W. Jowitt. Economist 144:816-17 Je 26 '43
Demobilization problems in the electric industry. G. A. T. Burdett. Electrician 131: 357-8 O 8 '43
Demobilization will bring enormous problem of re-employment. reports Conference board. Comm & Fin Chr 157:1979 My 27 '43
From uniforms to what? H. J. Taylor. India Rubber W 109:147-9 N '43
From war to work; urban employment patterns. H. S. Swan. il Tech R 45:75-6+ D '42
How demobilization will be felt; tabulation by states. Business Week p98 S 11 '43
If Germany falls this year, what about industry? business? your investments? L. Stern. il Mag of Wall St 72:280-4+ Je 26 '43
Jobs after the war. R. W. Babson. Comm & Fin Chr 158:831 Ag 26 '43
Jobs after the war; reemployment of veterans. Factory Management 101:88-92 Jl '43

Labor has program to maintain full employment during period of demobilization. B. Shishkin. Comm & Fin Chr 158:1716 O 28 '43

Mr Bevin gives his word. Economist 145:360-1 S 11 '43

Mustering-out security. F. D. Roosevelt. Trusts & Estates 77:115 Ag '43

Postwar readjustment is a local problem; returned servicemen and (net) demobilized munitions workers by states. J. F. Kurie. Adv & Sell 36:38+ S '43

Postwar readjustment is job for government and business. Oil Paint & Drug Rep 144:3+ Ag 9 '43

Practical demobilisation. Economist 145:489-90 O 9 '43

President hails first crack in Axis; post-war plan for service men. Comm & Fin Chr 158: 519+ Ag 5 '43

President urges post-war education for veterans, proposes \$1,000,000,000 program. Comm & Fin Chr 158:1813 N 4 '43

Presidential group offers program for post-war readjustment of military, civil personnel. Comm & Fin Chr 158:532 Ag 5 '43

Private industry accepts President's nomination as job provider. F. C. Crawford. Comm & Fin Chr 158:517+ Ag 5 '43

Professional workers. Economist 145:74 Jl 17 '43

Re-education of the returned soldier and sailor. M. A. Cartwright. Ann Am Acad 227:111-21 My '43

Relative severity of post-war demobilization by states. E. Benoit-Smullyan. map Monthly Labor R 57:1-4 Jl '43

Reserves for that day; Armistice day to World war II. R. A. Foulke. Banking 35:23-4+ My '43

Reversing Selective service suggested for post-war readjusting to civil life. C. A. Gray. Comm & Fin Chr 157:1690 My 26 '43

Road to peace; Conference on postwar readjustment of civilian and military personnel. Business Week p14 Ag 7 '43

Soldier into civilian; welfare problems. Economist 144:323-4 Mr 13 '43

Soldiers, jobs, and the peace. Fortune 28:111-15+ O '43

Soldiers return; more than a million mustered out. Business Week p98 Je 26 '43

See also

Prisoners of war,
Returned
Soldiers, Discharged

DEMOBILIZATION, Industrial. See Contracts, Government—Termination; Factories—Reconversion

DEMOCRACY

Americanism stands for freedom and brotherhood of plain people. H. A. Wallace. Comm & Fin Chr 157:1881+ My 20 '43

Balancing economic power. J. C. O'Mahoney. Trusts & Estates 76:225-6+ Mr '43

Democracy and free enterprise, in peace and in war. J. B. Hill. Pub Util 30:775-80 D 3 '42

Economic planning in a democratic society. D. F. Pegrum. bibliog J Land & Pub Util Econ 19:18-27 F '43

Principles of democracy first, basis of lasting peace. H. A. Wallace. Comm & Fin Chr 158:1109+ S 16 '43

Recognition of cultural diversities in the postwar world. R. Benedict. Ann Am Acad 228:101-7 Jl '43

To keep American tradition alive we must blaze trail for the world. W. O. Douglas. Comm & Fin Chr 158:1085, 1100-1 S 16 '43

See also

Liberty

DEMOCRATIC party

Southern Democrat renounces the new deal party. L. C. Phillips. Manuf Rec 112:32-3+ Ag '43

DEMOGRAPHY

Preview of the postwar generation, it will be smaller; but it can be demographically sounder. map Fortune 27:116-17+ Mr '43

DEMOLITION of buildings. See Wrecking

DEMONSTRATION houses. See Houses, Model

DEMOREST, Max Harrison, 1910-1942
Memorial. N. M. Fenneman. por(pl) bibliog
Geol Soc Proc 1942:173-7 Ap '43
Sketch. F. E. Matthes. Science 97:131-2 F 5 '43

DENATURED alcohol. See Alcohol, Denatured
DENDROCTONUS piceaperda. See Spruce bark beetle

DENGUE fever
Dengue fever in Honolulu. Science 98:sup12 S 24 '43

DENHAM, Henry George, 1880-1943
Sketch. W. Cullen. Chem & Ind 62:134 Ap 3 '43

DENIM
Ersatz canvas; blue denim impregnated with Detroit Graphite's Cemtex found substitute in railroad uses. Business Week p54 Mr 13 '43

DENISON family
Denison family; structural tile and brick. pors Am Cer Soc Bul 22:168-72 Je 15 '43

DENITRATION
Computations on the denitration of aqueous mixtures of sulphuric and nitric acids with steam. G. E. Stephenson. Soc Chem Ind J 62:17-20 F '43

DENMARK

Commerce

Occupied Denmark's foreign-trade trends. il For Comm W 12:5+ Ag 7 '43

Economic conditions

Full employment in Denmark. Economist 145: 110-11 Jl 24 '43

German occupation

Denmark's supplies. Economist 143:576 N 7 '42

Occupied Denmark's foreign-trade trends. il For Comm W 12:5+ Ag 7 '43

War in Denmark. Economist 145:335 S 4 '43

Industries and resources

Acute fuel shortage in Denmark. For Comm W 11:29 My 29 '43

Politics and government

State of Denmark; election of March 23rd. Economist 144:421 Ap 3 '43

DENNISON manufacturing company

To eliminate certain stocks, etc. Comm & Fin Chr 156:1951 N 30 '42

DENSITOMETERS

Electronic voltage regulator for precise densitometric measurements. H. W. Dietert and M. F. Hasler. diag Opt Soc Am J 33:45-9 Ja '43

Helium densitometer for use with powdered materials. W. C. Schumb and E. S. Rittner. diag Am Chem Soc J 65:1692-5 S '43

Measuring faint light; application of selenium cells. T. T. Baker. il diag Elec R (Lond) 132:343-5 Mr 12 '43

New methods for the evaluation and recording of piston-skirt deposits. H. R. Luck, T. A. Rogers and A. G. Cattaneo. il diag S A E J 51:38-44+ F '43; Same. Automobile Eng 33:321-5 Ag '43; Abstract. Automotive & Aviation Ind 87:32+ D 1 '42

Null-reading photoelectric microdensitometer for use in turbidimetry and abridged spectrophotometry. J. G. Baler, jr. bibliog il diag Ind & Eng Chem Anal ed 15:144-8 F 15 '43

Photoelectric densitometer. C. C. Smith. diag Electronics 15:79+ D '42
Simple reflection densitometer. W. A. Reedy. il Am Phot 37:10-11 O '43

DENSITY. See Specific gravity

DENTAL colleges

School of dental and oral surgery of Columbia university. Science 97:37-8 Ja 8 '43

See also Harvard school of dental medicine

DENTAL education

See also
Dental colleges

DENTAL hygiene

Dental ill-health, in relation to absenteeism. H. A. Hooper. il Ind Med 12:3-5 Ja '43

Influence of acid fumes upon the teeth of workers in pickle, accumulator and acid works in Westphalia; abstract. W. Ludewig. J Ind Hygiene 25:sup35-6 F '43
Toothbrushes and tooth care. il Consumers' Research Bul 12:5-8 S '43

DENTAL instruments and apparatus

Electricity in dentistry; improved appliances and lighting. il Electrician 131:319-21 O 1 '43

Redesigned dental surveyor. il Mod Plastics 21:94+ N '43

DENTAL materials

Molding vinyl copolymer dentures. A. W. Browne. il Mod Plastics 20:71-2 Ag '43

DENTAL plates

Molding vinyl copolymer dentures. A. W. Browne. il Mod Plastics 20:71-2 Ag '43

DENTAL research

Nutrition-dental caries fellowship at Mellon institute. il Chem & Eng N 21:363-4 Mr 25 '43

DENTAL service, Industrial

Dental ill-health, in relation to absenteeism. H. A. Hooper. il Ind Med 12:3-5 Ja '43

Industrial dentistry; Los Angeles County dental society questionnaire. Ind Med 12:682+ O '43

Looking into industry's mouths; dental department will conserve manpower. E. H. Thomas. Nat Safety N 48:34, 36+ Ag '43
Place of dentistry in industrial health programs. L. D. Heacock. bibliog Ind Med 12:672+ O '43

DENTIFRICES

Abrasion of dentifrices. Soap & San Chem 19:63 S '43

All-America package competition award; Colgate-Palmolive-Peet company; cone-shaped paper container for tooth powder. il Mod Packaging 16:96+ Ap '43

Novel booklet aids retailers in coping with customer complaints; Pepsodent company explains its difficulties. Ptr Ink 202:31 F 19 '43

Psychology plus, pays! faith in human integrity brings 58 per cent response in denture wearer survey for Polident. A. B. Day. il Ptr Ink 203:42+ Je 11 '43

War time dentifrice market. il Soap & San Chem 19:28-9 My '43

Advertising

How to test copy: an example in its simplest form; case history on Polident. R. Manville. il Ptr Ink 202:17-18+ Mr 5 '43

What the Reader's digest forgot to report on the dentifrice cases. L. C. Stone. Sales Management 52:48+ O 1 '43

DENTISTRY

See also

Dental plates
Electricity in dentistry

Dictionaries

English-Spanish, Spanish-English dental vocabulary, including many medical terms. J. S. F. Marie. 159p \$4 Jaques Cattell press, Lancaster, Pa. '43

DENTISTS' offices

Lighting

Lighting of dental offices; prepared by the committee on lighting practice of the Illuminating engineering society. il Illum Eng 38:24-40 Ja '43

DENTURES. See Dental plates

DENVER

Field notes from the farm country. Fortune 27:122+ Je '43

Good neighbor, Denver showing how city and army camp can get on peacefully and profitably. Business Week p30+ Jl 24 '43

DENVER & Rio Grande western railroad
Asks ICC for rehearing. Comm & Fin Chr 157:1941 My 24 '43

Court approves plan. Comm & Fin Chr 158: 1130 S 20 '43

I.C.C. revamps its plan for D. & R.G.W. Ry Age 115:25-6 Jl 3 '43

Petition submitted to reopen reorganization plan. Comm & Fin Chr 157:2147 Je 7 '43

Railroad securities. Comm & Fin Chr 158: 101 Jl 8 '43

DENVER & Rio Grande western railroad—Cont.
 Railroad securities. Comm & Fin Chr 158:
 1297+ S 30 '43
 Reorganization modified. Comm & Fin Chr
 158:85 J1 5 '43
 What are Denver Rio Grande bonds worth?
 A. Jansen. Barron's 23:10+ J1 26 '43

DENVER formation
 Cretaceous-tertiary boundary in the Denver
 basin, Colorado. R. W. Brown. map Geol
 Soc Bul 54:65-86, pl 1-2 biblog(p84-6) Ja
 '43

DENVER post
 Post milepost; Denver newspaper financial
 facts. il Business Week p70+ O 2 '43

DENVER tramway corporation
 Recapitalization plan. Comm & Fin Chr 158:
 1130 S 20 '43

DEODORIZATION
 Laboratory deodorizer for fats and oils. A.
 E. Bailey and R. O. Feuge. diag Ind & Eng
 Chem Anal ed 15:280-1 Ap 15 '43

See also
 Sewage disposal—
 Odor removal

DEODORIZERS
 Connor's carbon canisters. Fortune 27:50+
 Mr '43

DEPARTMENT store outlets. See Marketing—
 Department store outlets

DEPARTMENT stores
 Engineering in a department store. J. C.
 Prather. flow diag il Civil Eng 13:433-4 O
 '43

Largest department stores of many cities
 promote post-war home savings. il Am Bld
 65:43+ J1 '43

Retail credit in the postwar world. C. N.
 Schmalz. Harvard Business R 22 no 1:63-
 74 [O] '43

Sees shortages favoring national brands;
 other department-store merchandising an-
 gles. A. C. Kaufman. Ptr Ink 202:20-1+
 Mr 19 '43

White sales, 1943. Business Week p34+ Ja 9
 '43

See also
 Marketing—Depart-
 ment store outlets
 Store buildings

Advertising

Squaring the circle; Franklin Simon, New
 York store, redesigns its advertising format
 and Dr M. F. Agha explains why the
 pattern was chosen. il Adv & Sell 36:40+
 J1 '43

Treasury, SEP and 40 department stores
 collaborate in bond show; traveling show
 will tour country. Ptr Ink 203:35-6 Ap 16
 '43

Employees

Rivalry ditched; A.F.L. and C.I.O. unions
 join forces. Business Week p96-7 D 19 '42

Stores must pay; NWLB applies Little Steel
 formula to employees of five Pittsburgh
 stores. Business Week p100-1 J1 3 '43

Temporary truce; department store pacts
 signed in Pittsburgh. Business Week p86+
 O 2 '43

Wartime personnel problems in department
 stores; survey of over 50 leading department
 stores. J. W. Wingate. J Retailing
 19:2-9+ F '43

Finance

Department store outlook. Economist 144:694-
 5 My 29 '43

Operating results of department and spe-
 cialty stores in 1942. M. P. McNair. Har-
 vard Univ. Graduate School of Business
 Administration. Bur of Business Research
 Bul 117:1-52 '43 (pa \$2.50)

Wartime inflation and department stores. M.
 P. McNair. Harvard Business R 22 no 1:40-
 53 [O] '43

Hours of business

Department store hours; opening and closing
 hours changed for relief of traffic conges-
 tion; reports of various transit companies.
 Transit J 86:453-4 D '42

Insurance requirements

Urges true research in insurance. W. F.
 Kimball. Nat Underw 47:2+ My 27 '43

Management

Big stores turn emergency to advantage. W.
 Alwyn-Schmidt. Barron's 23:9 N 8 '43

Department store opens swap shop. Ptr Ink
 203:57 Ap 23 '43

Gasless shopping; department stores try mail
 order and phone schemes. Business Week
 p90+ N 21 '42

Postwar merchandising problems. J. E.
 Davidson. J Retailing 19:67-73+ O '43
 10% less each week; Lord & Taylor cuts
 prices on antique furniture, and objects of
 art. Business Week p61-2 Mr 6 '43

Repair service

Wartime conservation and repair services;
 survey of leading department stores. M.
 Feldman and A. Schiffer. J Retailing 19:10-
 13 F '43

Securities

Merchandising stocks; outlook for sales and
 profits; position of leading stocks. P. Dobbs.
 il Mag of Wall St 73:19-22 O 16 '43

Service

Wartime conservation and repair services;
 survey of leading department stores. M.
 Feldman and A. Schiffer. J Retailing 19:10-
 13 F '43

Statistics

Cost of prosperity, department store sales in
 1942 were high enough to slash costs to
 lowest level in 14 years. Business Week
 p94-6 J1 31 '43

Department and specialty store trade in 1942.
 J Retailing 19:86-8 O '43

Department store sales, Atlanta Federal re-
 serve district; revised series, monthly,
 1935-1942. Survey of Cur Business 22:22
 D '42

Department store sales, Cleveland Federal
 reserve district, revised series, monthly,
 1913-1942. Survey of Cur Business 23:32
 Ap '43

Department store sales hit new crescendo;
 graphs. Business Week p16 F 27 '43

Department store sales in selected U.S.
 cities, 1939-1942. Sales Management 52:58
 Ag 1 '43

Increase in department store sales and
 orders. Fed Res Bul 29:298-9 Ap '43

Inflated inventory drains off rapidly. Busi-
 ness Week p94 F 13 '43

Monthly indexes of sales and stocks, Jan.
 1939-Nov. 1942; Weekly index of sales, June
 1939-Jan. 1943; Sales and stocks by major
 departments, Oct. 1942. Fed Res Bul 29:86-7
 Ja '43 [cont monthly]

Retail trade; department store sales, by Fed-
 eral reserve districts, etc. 1938-1941. Survey
 of Cur Business 1942 Sp p35-7 [supple-
 mented in monthly numbers]

Sales by Federal reserve districts and by
 cities in terms of percentage change from
 corresponding period of preceding year. Fed
 Res Bul 29:86 Ja '43 [cont monthly]

Sales of department stores, adjusted for
 seasonal variation, 1935-first half 1943;
 chart. Survey of Cur Business 23:1 O '43

Wartime inflation and department stores. M.
 P. McNair. Harvard Business R 22 no 1:40-
 53 [O] '43

Stock

How far can bulk packaging go? il Mod
 Packaging 16:39-43+ F '43

DEPENDENCY benefits. Office of. See United
 States—War department—Office of depend-
 ency benefits

DEPOLARIZATION

Depolarization studies of Raman lines; a
 simplified method. G. Glockler and H. T.
 Baker. biblog diags J Chem Phys 11:446-9
 O '43

Method for determining depolarization fac-
 tors in Raman spectra. D. H. Rank, R. J.
 Pfister and H. H. Grimm. diags Opt Soc
 Am J 33:31-5 Ja '43

DEPOSIT insurance. See Banks and banking—
 Guaranty of deposits

DEPOSITS, Bank. See Bank deposits

DEPOSITS, Safe. See Safe deposits

DEPOSITS of ores. See Ore deposits

DEPRECIATION

Allowable deduction for depreciation; Virginian hotel corporation of Lynchburg v. Helvering. J. L. Dohr. J Account 76:86-7 J1 '43

Depreciation allowances. Economist 144:17-18 Ja 2 '43

Depreciation in perspective. H. C. Hasbrouck. Am Gas Assn Mo 25:156-7 Ap '43

Depreciation problem. C. O. Fisher. Pub Util 31:576-7 Ap 29 '43

Depreciation records are highly important. A. C. Kiechlin. Inland Ptr 110:38-40 Ja '43

Depreciation schedule, U.S. Bureau of internal revenue; buildings, building equipment, construction equipment, bridges, utilities. Eng N 130:622, 624 Ap 22 '43

Funding depreciation and maintenance reserves under war conditions. W. A. Hosmer. Harvard Business R 21 no 3:369-84 [Ap] '43

Institute executives ask for adequate time to review NARUC depreciation committee report. Edison Elec Inst Bul 11:277-9 S '43

Is straight-line depreciation more realistic? opposed to sinking-fund method. A. V. Roberts. Pub Util 31:207-19 F 18 '43

NARUC depreciation report. O. Ely. Pub Util 32:561-3, 760-2 O 28, D 9 '43

New depreciation fallacy; reserve requirement theory. L. R. Nash. Pub Util 30:761-74 D 3 '42

Practice in depreciating and amortizing investment in machinery and equipment. N A C A Bul 24:1109-22 sec 3 My 1 '43

Problems in the funding of tax and other reserves. W. A. Hosmer. N A C A Bul 24:1067-75 My 1 '43

Summary of developments in depreciation accounting. H. L. Gruhn. Am Gas Assn Proc 1942:68-70

Summary of NARUC depreciation report. Pub Util 32:437-8 S 30 '43

Test case showing computation of depreciation under the group plan by the asymptotic method. H. G. Avery. Edison Elec Inst Bul 11:76-8+ Mr '43

Virginian hotel corporation; Supreme court decision on excessive depreciation. P. G. Evans. J Account 76:347 O '43

See also

Cost accounting

Definition

Depreciation; a suggested definition. J Account 76:250 S '43

DETAILS

Safety detail includes automatic lights. C. Donie. diag Coal Age 48:80 Ja '43

DERBY, Elias Hasket. 1739-1799

Mr Derby of old Salem. por Fortune 28:136-7 Ag '43

DERBY, Harry L. 1882-

Portrait. Chem & Eng N 21:890 Je 10 '43

DERMACENTOR andersoni

Salmonella enteritidis; experimental transmission by the Rocky Mountain wood tick

dermacentor andersoni Stiles. R. R. Parker and E. A. Steinhilber. Pub Health Rep 58:1010-12 J1 2 '43

DERMATITIS. See Skin—Diseases

DERRICKS, etc. See Cranes, derricks, etc.

DERRICKS, Oil well

Drilling well inside city limits made noiseless and safe; enclosed derrick. W. A. Sawdon. il Pet Eng 14:47-50 Mr '43

Shell soundproofs test well. L. P. Stockman. il Oil & Gas J 41:55-6, 59 F 25 '43

Summary of manufacturers' report on derrick sales, 1937-1941, inclusive. Am Pet Inst Proc 23(4):143-56 '42

Standards

Report of subcommittees of A.P.I. committee on the standardization of standard rigs and derricks. Am Pet Inst Proc 23(4):137-42 '42

DERRIS

Analysis

Evaluation of derrick root. K. B. Edwards. Soc Chem Ind J 61:192-4 D '42; Reply. H. E. Coomber, J. T. Martin and S. H. Harper. 62:73-5 My '43

DESERTS

Camel tread sand tires for use in the desert. India Rubber W 108:494 Ag '43

Drilled well for good desert ground. A. F. Ayres. diag Elec W 119:88 Ja 9 '43

Soil-cement pavement for desert airbase. il Eng N 129:921-5 D 31 '42

DESICCATION. See Drying

DESIGN

Canadian armament redesigns conserve critical materials and increase products. J. Montagnes. il Product Eng 14:327-32 Je '43

Coordinating standards work with design and production. B. C. Boulton. Product Eng 14:565-7 S '43

Design for sale! why are there not more architects designing products in industry?

K. K. Stowell. Arch Rec 94:41 Ag '43

Design fundamentals for phenolics. J. A. Petho. il diags Mod Plastics 20:77-8+ D '42

Design futures; revolution foreseen with return of peace. C. P. Hornung. il Tech R 45:176-8, 201-2+ F '43

Drexel flout furniture tradition; offers demountable Pakto line. il Sales Management 52:62-3 Ap 1 '43

Future of product design. P. Muller-Munk. il Mod Plastics 20:76-7+ Je '43

How Lightfoot Schultz put gift appeal into a line of soap. il Sales Management 52:54 Ap 15 '43

How to expedite army and navy approvals of redesigns. il Product Eng 13:684-8 D '42

Industrial design at Caltech. il Arch Forum 77:2, 4 D '42

Industrial designer is no miracle man. B. Stevens. il Ind Marketing 28:19-21+ O '43

Modern designs from Chicago. L. Moholy-Nagy. il Mod Plastics 20:62-5+ D '42

New design quirks ease rubber headache on garters and braces. il Sales Management 52:50-1 My 1 '43

Of art, imagination and madness: these displays stop the crowds; Staples-Smith design for retailers, manufacturers and publishers. il Sales Management 52:22-3 F 15 '43

Organization and control of mass production; analyzing product design. E. A. Boyan. Factory Management 101:99-102 S '43

See also

Airplanes—Design

Airplanes, Military—Design

Automobiles—Design

Bridge design

Concrete construction—Design

Locomotives—Design

Machinery—Design

Steel construction—Design

Structural engineering—Design

Protection

See also

Patent laws and legislation

DESIGN, Architectural. See Architecture, Domestic—Designs and plans

DESIGN, Decorative

See also

Textile printing

DESKS

Government offices try Stricker plan; Ramspeck committee probing methods to reduce red tape. il Am Business 13:16-17 O '43

DES MOINES, Iowa

Field notes from the farm country. Fortune 27:120-1 Je '43

DESMOTROPOSANTONIN

Studies in the santonin series; the two new desmotropo-santonins and the two new desmotropo-santonous acids. H. Minlon, C. Lo and L. J. Chu. bibliog Am Chem Soc J 65:1780-1 S '43

DESORPTION

Electrification and luminescence phenomena accompanying desorption of gases from metals. J. W. McBain and C. I. Glassbrook. bibliog Am Chem Soc J 65:1908-9 O '43

DESOXYBENZONIN

Reaction of *n*-butylmagnesium bromide with some aromatic ketones. H. M. Crawford, M. E. Saeger and F. E. Warneke. Am Chem Soc J 64:2862-4 D '42

DESOXYCHOLIC acid

Preparation of desoxycholic acid from cholic acid. A. W. Schneider and W. M. Hoehn. Am Chem Soc J 65:485 Mr '43

DESOXYCORTICOSTERONE

Conversion of desoxycorticosterone to pregnandiol-3 (a), 20 (a). W. R. Fish, B. N. Horwitt and R. I. Dorfman. *Science* 97:227-8 Mr 5 '43

DESSERTS, Frozen

British food technologists improvise to meet shortages; manufacturers of frozen desserts kept on making products acceptable to consumers without "essential" ingredients. H. B. Cronshaw. *Food Ind* 15:57+ F '43

Frozen desserts need the right stabilizer. B. I. Masurovsky. *bibliog Food Ind* 14: 66-7 D '42

DESTROYERS. See Torpedo boat destroyers**DETECTION** of metals. See Metals—Detection**DETECTIVES**

Sabotage hunt; abstract. F. M. Bogert. *Management R* 32:241 Jl '43

DETEL

Chlorinated rubber; an outstanding modern chemical product. *Chem Age (Lond)* 48: 224-5 F 20 '43

DERGENCE. See Cleaning**DETERGENTS.** See Cleaning compositions**DETERMINISM.** See Free will and determinism**DETONATION**

Breaking of multiple bonds and the primary detonating explosives. L. R. Carl. *bibliog Franklin Inst J* 235:553-75 Je '43

See also

Explosives**DETONATORS**

Makes disks, seats and inspects automatically; foil disk assembly machine. W. S. McArdle. *il Metal Prog* 44:274 Ag '43; Same. *Mach* 49:204 Ag '43

Structural features of typical American commercial detonators. R. L. Grant. *pls U S Bur Mines Rep of Invest* 3696:1-30 bibliog(50 titles, p28-30) '43

DETONATORS, Electric

Calculating current requirements for detonators in parallel. *Can Min J* 64:66 F '43

Explosives; chapter from Truck trail handbook of United States Forest service. *diags Roads & Sts* 88:52-6+ Ap '43

Safer blasting near power lines; device prevents cap wires from fouling cables in seismograph shooting. M. D. McCarty. *il Explosives Eng* 21:192+ S '43

Structural features of typical American commercial detonators. R. L. Grant. *pls U S Bur Mines Rep of Invest* 3696:8-27 '43

DETROIT

International port; air terminal proposed for joint use of U.S. and Canada in Windsor with a high-speed highway to Detroit. *Business Week* p66+ My 22 '43

Large scale postwar plan proposed for Detroit by civic design group. *map Eng N* 131:497 S 30 '43

Postwar chest; Mayor wants city income tax for specified public works. *Business Week* p45 Je 19 '43

See also

Housing—Detroit
Labor supply—Detroit

Real estate business
—Detroit

Industries

Automobile city produces weapons for victory. R. B. Bennett. *il Chem & Eng N* 21:152-6 F 10 '43

Detroit in wartime. W. M. Cahill. *il Chem & Eng N* 21:308-10 Mr 10 '43

Detroit stopgap; new formula of production control in relation to manpower supply. *Business Week* p98-9 O 16 '43

Detroit's big job; war production at rate of eight billion dollars a year. *Business Week* p18 Jl 10 '43

Freeze pattern; Detroit offers a study in stabilization. *Business Week* p93-4 D 19 '42

U. of M., Detroit commerce board, sponsor industrial clinics. *Sales Management* 52: 56+ Jl 1 '43

See also

Chemical industries—
Detroit

Tank automotive
center, Detroit

Streets

Davison limited highway. Wayne county. H. A. Shuptrine and J. C. Mead. *il diag map Civil Eng* 12:673-6; 13:15-18 D '42-Ja '43

Water supply

Annual report, 1941, Department of water supply. M. E. Flentje. *Am Water Works Assn J* 35:1114-15 Ag '43

Booster station built in record time in Detroit. L. E. Ayres. *il diags plans map Eng N* 131:472-5 S 23 '43

DETROIT Edison company

Earnings, 1939-1942. *Comm & Fin Chr* 157: 690 F 22 '43

Petition by city for lower rates dismissed. *Comm & Fin Chr* 158:484 Ag 2 '43

DETROIT stock exchange

Weekly record. Published in weekly Monday numbers of Commercial & financial chronicle

DEUTERIUM

Interchange of hydrogen isotopes with complex salts; kinetics of the interchange with the lutecobaltic complex. J. S. Anderson, H. V. A. Briscoe and N. L. Spoor. *diag Chem Soc J* p361-7 Ag '43

Spectroscopic evidence of intermolecular transfer of protons. D. Williams and W. D. Stallcup. *Am Chem Soc J* 64:2684-6 N '42

See also

Hydrogen—Isotopes

DEUTERIUM chloride. See Hydrochloric acid —Deuterium chloride

DEUTERIUM compounds

Differences in the vapor pressures, heats of vaporization, and triple points of nitrogen (14) and nitrogen (15) and of ammonia and trideuteroammonia. I. Kirshenbaum and H. C. Urey. *bibliog diag J Chem Phys* 10: 706-17 D '42

Dissociation pressures of compounds of ammonia and trideuteroammonia with some metallic salts. A. B. Hart and J. R. Partington. *diags Chem Soc J* p104-18 Mr '43

Infra-red and Raman spectra of polyatomic molecules; trideuteronitromethane. T. P. Wilson. *bibliog J Chem Phys* 11:361-8 Ag '43

Polymerization of gaseous hydrogen and deuterium fluorides. R. W. Long, J. H. Hildebrand and W. E. Morrell. *bibliog diags Am Chem Soc J* 65:182-7 F '43

Raman spectrum and molecular vibrations of nitric and deuteronic acids. O. Redlich and L. E. Nielsen. *bibliog Am Chem Soc J* 65:654-60 Ap '43

Studies in stereochemistry; the preparation of d-1-deutero-2-methylbutane and the study of its optical rotation. H. C. Brown and C. Groot. *Am Chem Soc J* 64:2563-6 N '42

DEVELOPMENT work. See Electric utilities—Development work; Railroads—Development work

DEVIATION (statistics). See Variation (statistics)

DEVORE and Reynolds company

Annual report. *Comm & Fin Chr* 157:602 F 15 '43

DEVONIAN period. See Geology, Stratigraphic —Devonian

DEW points

Dew-point indicator guards heat treatment of war production components. *il diag Instruments* 15:545-6 D '42

Dew point of flue gases of fuels containing sulfur. J. S. Yeaw and L. Shnidman. *bibliog Power Pl Eng* 47:68-71 Ja; 69-71 F; 73-5 Mr '43

Electrical weatherman guards war production; electronic dew point recorder for furnace atmospheres. *Power Pl Eng* 47:79 Je '43

Improvement of dew-point determination. J. A. Van den Akker and W. A. Wink. *Science* 97:494 My 28 '43

Phase equilibria in hydrocarbon systems; composition of dew-point gas in ethane-water system. H. H. Reamer and others. *bibliog il Ind & Eng Chem* 35:790-3 Jl '43

DEWBERRIES

Good jams can be made from SO₂ treated fruits; peaches, strawberries and young-berries. J. G. Woodroof and S. R. Cecil. *il Food Ind* 15:67-8+ Je '43

DEWEY, Bradley, 1887-

Father, sons, and daughter, in chemistry. *por Chem & Eng N* 21:30 Ja 10 '43
Portrait. *Chem & Eng N* 21:1503 S 25 '43
Sketch. *por Chem & Eng N* 21:1716 O 25 '43

DEWEY, Davis Rich, 1858-1942

Sketch. *por Tech R* 45:139 Ja '43
Sketch. B. A. Rogers and D. S. Tucker. *Am Stat Assn J* 38:107-9 Mr '43

DEWEY, Thomas Edmund, 1902-

Sketch. *por*(cover) *Spectator (Life ed)* 150: 66 Ap '43

DE WITT, Carroll L. 1863-1942

Sketch. *por East Underw* 44:23 Ja 8 '43

DEXTRINS

Dextrins from corn sirup; effect of dextrose equivalent of sirup on properties. J. W. Evans and W. R. Fetzer. *bibliog Ind & Eng Chem* 35:439-41 Ap '43

DEXTROSE

Baumé-dextrose equivalent-dry substance tables for corn sirup and corn sugar. E. E. Fauser and others. *bibliog diags Ind & Eng Chem Anal ed* 15:193-200 Mr 15 '43

Dextrins from corn sirup; effect of dextrose equivalent of sirup on properties. J. W. Evans and W. R. Fetzer. *bibliog Ind & Eng Chem* 35:439-41 Ap '43

See also

Glucose

Analysis

Sugar determination in starch hydrolyzates by yeast fermentation and chemical means. A. S. Schultz and others. *bibliog Ind & Eng Chem Anal ed* 15:496-8 Ag 15 '43

DIABASE

Distribution of helium and radioactivity in rocks; helium age investigations of diabase and granodiorites from Yellowknife, Northwest Territories, Canada. N. B. Keevil, A. W. Jolliffe and E. S. Larsen. *map Am J Sci* 240:831-46 D '42

DIABETES

Diabetes fatalities. G. Hirschfeld. *map Spectator (Life ed)* 150:22-9 Ja '43

DIACETYL

Quantum yield of diacetyl fluorescence. G. M. Almy and P. R. Gillette. *bibliog diags J Chem Phys* 11:188-95 Ap '43

DIACETYLPEROXIDE

Mechanism of the thermal decomposition of diacyl peroxides in dilute solution in organic solvents; abstract and discussion. A. E. Oxford. *Chem & Ind* 62:54 F 6 '43

DIAGNOSIS

See also

Complement fixation

DIAGNOSIS, Radioscopic

Automatic control of exposure in photo-fluorography. R. H. Morgan. *diags Pub Health Rep* 58:1533-41, pl 1-2 O 15 '43

Iodinated organic compounds as contrast media for radiographic diagnosis; ethyl esters of iodinated straight and branched chain phenyl fatty acids. J. T. Plati, W. H. Strain and S. L. Warren. *bibliog Am Chem Soc J* 65:1273-6 J1 '43

Opportunities in the newer methods of tuberculosis case finding. H. E. Hilleboe. *Pub Health Rep* 58:1094-1101 J1 16 '43

DIALKYLPHENANTHRENE. See Phenanthrene**DIALKYLQUINOLINES**

New syntheses of heterocyclic compounds; 2:3-dialkylquinolines. V. A. Petrow. *Chem Soc J* 69:3-6 N '42

DIALS, Instrument

Engraving for the aircraft industry; John Meerloo & sons. *il Iron Age* 152:58-60 O '43

DIALYSIS

Rapid method of dialysis. R. C. Rose. *Soc Chem Ind J* 62:44 Mr '43

DIAMINES. See Amines**DIAMONDS**

Diamond monopoly. *Economist* 144:736 Je 5 '43

Diamond production. *Economist* 145:440 S 25 '43

Diamond supplies. *Economist* 144:309-10 Mr 6 '43

Union of South Africa; diamond agreement. *For Comm W* 11:22 Je 19 '43

Advertising

Marriages, income, promotion, turn diamond sales upward. *Sales Management* 52:34+ N 1 '43

DIAMONDS, Industrial

Quick plant standardizes diamond tools. *il Mach* 49:200-1 Ap '43

Diamond dies for wire drawing; abstract. B. P. Dudding, C. G. Eden and R. E. Leeds. *Metals & Alloys* 17:358+ F '43

Diamond dust is recovered for hardest war industry jobs; used to polish tungsten carbide wire drawing dies; abstract. C. B. Shopmeyer. *Franklin Inst J* 235:433 Ap '43

Diamond tools; methods employed by A. Shaw and son in preparing stones for industrial applications. *il diags Automobile Eng* 33:309-15 Ag '43

Industrial diamonds. *Economist* 144:768 Je 12 '43

Mission aims to expand South American diamond output. *For Comm W* 12:24 J1 31 '43

No corner in industrial diamonds. *Economist* 145:343 S 4 '43

DIAPERS

Infant industry; diaper services. *Business Week* p52+ Ap 10 '43

DIAPHRAGMS

Freely oscillating piston diaphragm; abstract. A. Sommerfeld. *Wireless Eng* 20:456-6 S '43

Tensometer stiffness test for elastomers at low temperatures. B. K. Green, R. G. Chollar and G. J. Wilson. *il diags Rubber Age* 53:319-27 J1 '43

DIARRHEA

Outbreak of infant diarrhea in a Maine hospital. *Pub Health Rep* 58:1560-1 O 15 '43

Studies of the acute diarrheal diseases; cultural observations on the relative efficacy of sulfonamides in shigella dysenteriae infections. A. V. Hardy and others. *bibliog Pub Health Rep* 58:689-99 Ap 30 '43

DIASONE

Diasone, a new and active chemotherapeutic agent. G. W. Raiziss. *bibliog Science* 98:350 O 15 '43

DIASTEREOMERS. See Isomers**DIAMONDS**

Chlorophyll fluorescence and energy transfer in the diatom *nitzschia closterium*. H. J. Dutton, W. M. Manning and B. M. Duggar. *bibliog J Phys Chem* 47:308-13 Ap '43

DIAZO compounds

Action of aliphatic diazo compounds upon α,β -unsaturated ketones; benzalacetone and diazomethane. L. I. Smith and K. L. Howard. *Am Chem Soc J* 65:165-6 F '43

Action of aliphatic diazo compounds upon α,β -unsaturated ketones; *cis*- and *trans*-dibenzoyl ethylene. L. I. Smith and K. L. Howard. *bibliog Am Chem Soc J* 65:159-64 F '43

Action of bases on 1-diazoanthraquinone-2-sulphonate and its derivatives. J. I. Lynas-Gray and J. L. Simonsen. *Chem Soc J* p45-7 F '43

Decomposition of diazo-compounds in neutral solution; some observations on the diazo-coupling reaction. H. H. Hodgson and E. Marsden. *Chem Soc J* p379-80 Ag '43

Influence of the 6-nitro-group on the halogenation, nitration, mercuration, and diazo-coupling of 6-nitro-1-naphthylamine and of some related naphthalides. H. H. Hodgson and H. S. Turner. *Chem Soc J* p391-4 Ag '43

Mechanism of the diazo-coupling reaction. H. H. Hodgson. *bibliog Soc Dyers & Col J* 58:228-31 N '42

See also

Diazotization

DIACETIC acid

Influence of addenda on the inversion of *l*-menthone with acids in benzene; the effect of solvents in chemical reactions. A. Weissberger. *Am Chem Soc J* 65:242-5 F '43

DIAZOACETIC acid—Continued

Inversion of *l*-menthone and the reaction of diazoacetic ester with the chloroacetic acids. A. Weissberger, bibliog Am Chem Soc J 65:245-6 F '43

DIAZOAMINO compounds

Printing with azoic dyes. E. P. 466846. A. J. Hall. Textile Col 65:196-7+ My '43

DIAZOMETHANE

Action of aliphatic diazo compounds upon α,β -unsaturated ketones; benzalacetone and diazomethane. L. I. Smith and K. L. Howard. Am Chem Soc J 65:165-6 F '43

Action of diazomethane upon acyclic sugar derivatives; halogen derivatives. M. L. Wolfrom and R. L. Brown. bibliog il Am Chem Soc J 65:1516-21 Ag '43

Action of diazomethane upon acyclic sugar derivatives; ketose synthesis. M. L. Wolfrom, R. L. Brown and E. F. Evans. bibliog il Am Chem Soc J 65:1021-7 Je '43

DIAZOMORPHOLIDES

Aryl diazomorpholides. R. A. Henry and W. M. Dehn. Am Chem Soc J 65:479-80 Mr '43

DIAZONIUM compounds

Action of cuprous oxide on diazotised amines in ethyl-alcoholic acid solution. H. H. Hodgson and H. S. Turner. Chem Soc J p748-9 D '42

Action of cuprous oxide on diazotised amines; reactions in solutions of various alcohols and organic solvents; preparation of 1:6-dinitronaphthalene. H. H. Hodgson and H. S. Turner. Chem Soc J p86-9 Mr '43

Diazonium borofluorides; the preparation of arylcopper compounds. F. A. Bolth, W. M. Whaley and E. B. Starkey. bibliog Am Chem Soc J 65:1456-7 Ag '43

Influence of *p*-substituents on the decomposition of zinc chloride double salts of diazonium chlorides by acetic anhydride. H. H. Hodgson and C. K. Foster. Chem Soc J p747-8 D '42

Interpretation of the Sandmeyer reaction; further evidence in favour of a mechanism involving anionoid halogen. H. H. Hodgson, S. Birtwell and J. Walker. Chem Soc J p720-3 N '42

Mechanism of the diazo-coupling reaction. H. H. Hodgson. bibliog Soc Dyers & Col J 58:228-31 N '42

Preparation of symmetrical azo-compounds, the positional influence of the nitro-group on the decomposition of nitronaphthalene-diazonium sulphates by cuprous hydroxide, and an improved method for the production of 2-nitronaphthalene. H. H. Hodgson, E. Leigh and G. Turner. Chem Soc J p744-6 D '42

Synthesis of cinnamic acids from methyl acrylate or acrylonitrile and diazonium salts. C. F. Koelsch. Am Chem Soc J 65:57-8 Ja '43

DIAZOTIZATION

Preparation of diazo-naphthols and nitration of 4-bromoaceto-1-naphthalide. H. H. Hodgson and S. Birtwell. Chem Soc J p321-2 JI '43

Symmetrical biaryls from diazotized amines; reducing agents. E. R. Atkinson and others. bibliog Am Chem Soc J 65:476 Mr '43

DIBENZANTHRONE

Dinitrodibenzanthrone. D. J. Bennett, R. R. Pritchard and J. L. Simonsen. Chem Soc J p31-3 Ja '43

DIBENZODIOXIN

Metalation of thianthrene and dibenzo-*p*-dioxin. H. Gilman and C. G. Stuckwisch. bibliog Am Chem Soc J 65:1461-4 Ag '43

DIBENZOFURAN

Direct thallation of dibenzofuran. H. Gilman and R. K. Abbott, Jr. bibliog Am Chem Soc J 65:122-3 Ja '43

DIBENZOPHENANTHRENE

Aromatic cyclodehydration; 1,2,3,4-dibenzophenanthrene. C. K. Bradsher and L. Rapoport. Am Chem Soc J 65:1464-7 Ag '43

1,2,3,4-Dibenzophenanthrene and its derivatives; synthesis with chrysene as starting material. F. Bergmann and H. E. Eschmazi. bibliog Am Chem Soc J 65:1413-17 JI '43

DIBENZOTHIOXIN. See Phenoxathiin

DIBENZOYLETHYLENE

Action of aliphatic diazo compounds upon α,β -unsaturated ketones; *cis*- and *trans*-dibenzoyl ethylene. L. I. Smith and K. L. Howard. bibliog Am Chem Soc J 65:159-64 F '43

DIBENZYLIDENE mannitol

2,3,4,5-Dibenzylidene-D-mannitol and some of its derivatives. W. T. Haskins, R. M. Hann and C. S. Hudson. Am Chem Soc J 65:1419-22 JI '43

DIBROMOACETOPHENONE

Course of reaction in the transformation of α,α -dibromoacetophenone to mandelic acid by means of aqueous alkali. E. B. Ayres and C. R. Hauser. bibliog Am Chem Soc J 65:1095-6 Je '43

DIBROMOBUTANE

Raman spectra of four pairs of *meso* and *dl* disubstituted butanes. H. J. Taufen, M. J. Murray and F. F. Cleveland. bibliog Am Chem Soc J 65:1130-4 Je '43

DIBROMOCYCLOHEXANE

Role of neighboring groups in replacement reactions; the identity of various preparations of 1,2-dibromocyclohexane. S. Winstein. bibliog Am Chem Soc J 64:2792-5 D '42

DIBROMOETHYLENE

Equilibrium of gaseous dibromoethylenes. R. M. Noyes and R. G. Dickinson. Am Chem Soc J 65:1427-9 JI '43

DIBROMOFLUORENE

Conversion of 2,7-dibromofluorene to 2,7-dibromophenanthrene. W. G. Brown and B. A. Bluestein. Am Chem Soc J 65:1235-6 Je '43

DIBROMONITROETHYLBENZENE

New insecticide material; study of toxicity of alpha beta dibromo-beta-nitroethylbenzene in oil sprays against houseflies. E. R. McGovran, M. S. Schechter and J. H. Fales. Soap & San Chem 19:107+ Mr '43

DIBROMOPHENANTHRENE

Conversion of 2,7-dibromofluorene to 2,7-dibromophenanthrene. W. G. Brown and B. A. Bluestein. Am Chem Soc J 65:1235-6 Je '43

DIBUTYLAMINE

Catalytic interchange of groups in aliphatic amines. K. Nozaki. Am Chem Soc J 64:2920-3 D '42

DIBUTYLBENZENE

Isomeric *p*-dibutylbenzenes. G. F. Hennion and L. A. Auspos. bibliog Am Chem Soc J 65:1603-6 Ag '43

DIBUTYL phthalate**Prices**

Dibutyl phthalate gets sliding price ceiling. Oil Paint & Drug Rep 144:4 Ag 2 '43

DICARBOXYLIC acids

Cyclobutane derivatives; *cis*-1,3-cyclobutanedicarboxylic acid. E. R. Buchman, A. O. Reims and M. J. Schlatter. Am Chem Soc J 64:2703-5 N '42

Cyclobutane derivatives; the degradation of *cis*- and *trans*-1,2-cyclobutanedicarboxylic acids to the corresponding diamines. E. R. Buchman and others. bibliog Am Chem Soc J 64:2696-700 N '42

Preparation of nonane and decane α,ω -dicarboxylic acids. W. P. Hall and E. E. Reid. Am Chem Soc J 65:1468 Ag '43

DICHLORIDES

Addition of hydrogen fluoride to halo-olefins. A. L. Henne and E. P. Plueddemann. bibliog Am Chem Soc J 65:1271-2 JI '43

DICHLOROBENZENE

Determination of chlorine vibrations in dichlorobenzenes from intensities and polarizations of their Raman lines. G. Nordheim and H. Sponer. J Chem Phys 11:253-62 Je '43

DICHLOROBUTANE

Raman spectra of four pairs of *meso* and *dl* disubstituted butanes. H. J. Taufen, M. J. Murray and F. F. Cleveland. bibliog Am Chem Soc J 65:1130-4 Je '43

DICHLORODIETHYL sulfide. See Mustard gas

DICHLORODIFLUOROMETHANE

Charging Freon-12 systems with methyl chloride or sulfur dioxide. *Refrig Eng* 46: 245 O '43

Insecticidal aerosol production; spraying solutions in liquefied gases. L. D. Goodhue. *bibliog il diags Ind & Eng Chem* 34:1456-9 D '42

Refrigeration notebook. T. Mitchell. *il diag Power* 87:261, 331 Ap-My '43

Testing aerosols against houseflies. E. R. McGovran, J. H. Fales and L. D. Goodhue. *bibliog diag Soap & San Chem* 19:99+ S '43

DICHLOROETHYLENE

Advances in plastics during 1942; vinylidene chloride polymers. R. D. Lowry. *bibliog Mod Plastics* 20:128+ Ja '43

Vinylidene chloride polymers. R. C. Reinhardt. *bibliog* (59 references) *il diag Ind & Eng Chem* 35:422-8 Ap '43

Vinylidene chloride polymers; characteristics of Saran. W. C. Goggin and R. D. Lowry. *Am Gas J* 159:23-5 O '43

See also

Saran

Analysis

Determination of fumigants; determination of ethylene dichloride and dichloroethylene; analysis of mixtures. F. P. W. Winteringham. *Soc Chem Ind J* 61:187-90 D '42

DICHLOROFLOURESCCEIN

Rapid determination of sodium chloride in the presence of protein; application to salt-cured food products. W. J. Dyer. *bibliog Ind & Eng Chem Anal ed* 15:439-40 JI 15 '43

DICHLOROPHENOLINDOPHENOL

Photometric determination of reduced and total ascorbic acid. M. Hochberg, D. Melnick and B. L. Oser. *bibliog diag Ind & Eng Chem Anal ed* 15:132-8 Mr 15 '43

DICHLOROPROPANE

Promising new soil amendment and disinfectant; mixture of 1-3 dichloropropylene and 1-2 dichloropropane. W. Carter. *Science* 97:383-4 Ap 23 '43

DICHLOROPROPYLENE

Promising new soil amendment and disinfectant; mixture of 1-3 dichloropropylene and 1-2 dichloropropane. W. Carter. *Science* 97:383-4 Ap 23 '43

DICHIROISM

Configuration of starch and the starch-iodine complex; the dichroism of flow of starch-iodine solutions. R. E. Rundle and R. R. Baldwin. *bibliog diags Am Chem Soc J* 65:554-8 Ap '43

Origin and the complications of electric double refraction and of electric dichroism in dilute dispersed systems. W. Heller. *Rs Mod Phys* 14:390-409 *bibliog* (82 references, p408-9) O '42

DICKINSON, Clinton Roy, 1888-1943

Requiem, by R. D. *Ptr Ink* 202:19, 48 Mr 5 '43

Sketch. *por Ptr Ink* 202:11-12 F 26 '43

DICOUMARIN

Influence of fever upon the action of 3,3-methylene-bis(4-hydroxycoumarin) (dicumarol). R. K. Richards. *Science* 97:313 Ap 2 '43

DICTOGRAPH

Crime detection; electronic devices. R. P. Turner. *il diags Radio N* 30:20-1 S '43

DICUMAROL. See Dicoumarin**DICYANOBENZALDAZINE**

4,4'-Dicyanobenzaldazine. H. J. Barber and R. Slack. *bibliog Am Chem Soc J* 65:1776-7 S '43

DICYCLOHEXYL

Friedel-Crafts reactions of 9-phenyl-dodecahydrophenanthrene-10-carboxylic acid. H. E. Eschinazi and F. Bergmann. *Am Chem Soc J* 65:1411-12 JI '43

Sterical course and the mechanism of the diene reaction. F. Bergmann and H. E. Eschinazi. *bibliog Am Chem Soc J* 65:1405-11 JI '43

DICYCLOHEXYL

Estimation of water in alcohol with aid of dicyclohexyl. G. R. Robertson. *bibliog Ind & Eng Chem Anal ed* 15:451-2 JI 15 '43

DICYCLOPENTADIENE**Analysis**

Cryoscopic analysis of styrene, indene, and dicyclopentadiene. E. H. Smoker and P. E. Eurchfield. *Ind & Eng Chem Anal ed* 15: 128-9 F 15 '43

DIE casting

Beware impurities in zinc alloys. *Metal Prog* 43:330 Je '43

Cast-to-form die-casting dies; abstract. H. K. Barton. *Metals & Alloys* 17:814+ Ap '43

Die-casting mold parts two ways. H. Thornton. *il Am Mach* 87:92-3 Ap 1 '43

Die casting, 1942. B. E. Sandell. *Metals & Alloys* 17:87-8 Ja '43

Die castings for the war effort; Mount Vernon die casting corp. G. Nyseius. *il Metals & Alloys* 18:42-7 JI '43

Die castings in war production. D. L. Colwell. *il Machine Design* 15:98-100 S '43

Factors to be considered when designing die-castings. H. Chase. *il diags Product Eng* 14:237-41, 303-6, 376-9 Ap-Je '43

Fatigue testing of zinc-base alloy die castings. E. H. Kelton. *il diags Am Soc T M Proc* 42:692-705; Discussion. 706-7 '42

Foundry warning; strict specifications for zinc-base die castings must be maintained. *Business Week* p72+ Ap 10 '43

Industry voting on recommended standard to assure uniform quality. *Steel* 112:72 Ap 19 '43

Kirkstite die casting technique. L. C. Costello. *il Iron Age* 151:60-4 Je 10 '43

Light-weight sextant improved by plastics and die-castings. *il diags Product Eng* 13: 689-91 D '42

Machine die castings producers, directory. *Machine Design* 15:211 O '43

Tests bear fruit; inspection of facilities for die-casting aluminum and zinc. *Business Week* p72+ My 22 '43

War accelerates technical progress. *Steel* 112:277-8 Ja 4 '43

Which form of non-ferrous casting? H. Chase. *il Metals & Alloys* 18:496-502 S '43

See also Doehler die casting company

DIE casting machines

Die castings for the war effort; Mount Vernon die casting corp. G. Nyseius. *il Metals & Alloys* 18:42-7 JI '43

DIELECTRIC. See Dielectric constants**DIELECTRIC constants**

Cylindrical cavity resonators containing several dielectric media. *J Ap Phys* 14:363 JI '43

Dielectric; instrument for dielectric constant determination. J. H. Jupe. *diag Elec R (Lond)* 133:271-3 Ag 27 '43

Dielectric constant and loss angle of dry and wet sand for centimetric waves; abstract. E. Löb. *Wireless Eng* 20:345 JI '43

Dielectric dispersion and absorption of water and some organic liquids. W. P. Conner and C. P. Smyth. *bibliog diag Am Chem Soc J* 65:382-9 Mr '43

Dielectric properties of animal fibers. J. Errera and H. S. Sack. *bibliog diags Ind & Eng Chem* 35:712-16 Je '43

Dipole moment, induction and resonance in nitroethane and some chloronitroparaffins. E. C. Hurdis and C. P. Smyth. *bibliog Am Chem Soc J* 64:2829-34 D '42

Effect of pressure upon the dielectric constants of liquids. B. B. Owen and S. R. Brinkley, jr. *bibliog Phys R* 64:32-6 JI 1 '43

Electrical and mechanical properties of the system Buna S-gilsonite. A. H. Selker, A. H. Scott and A. T. McPherson. *bibliog J Research Nat Bur Stand* 31:141-61 S '43

Influence of hindered molecular rotation on the dielectric constants of water, alcohols, and other polar liquids. G. Oster and J. G. Kirkwood. *bibliog J Chem Phys* 11:175-8 Ap '43

Potential of silver concentration cells with liquids of low dielectric constant. A. Gemant. *bibliog diag J Chem Phys* 10:723-30 D '42

Q-meter for power factor and dielectric constant. D. M. Hill. *il diags Elec W* 120: 1365+ O 16 '43

DIELECTRIC constants—Continued

Solubility effect in solvents of low-dielectric constant; a study of the solubility effect in benzene. A. A. Vernon and J. P. Master-son. *bibliog Am Chem Soc J* 64:2322-3 D '42
 Ultra-high frequency oscillations of cylindrical cavity resonators containing two and three dielectric media. D. Middleton. *bibliog diag Phys R* 63:343-51 My 1 '43

DIELECTRIC losses

Frictional phenomena; technical applications of the internal friction of solids. A. Gemant. *J Ap Phys* 14:267-70 Je '43

DIELECTRIC polarization. See Polarization, Dielectric

DIELECTRIC power factor. See Power factor, Dielectric

DIELECTRICS

Application of guard electrodes in dielectric measurements. E. W. Greenfield. *il diags R Sci Instr* 13:489-92 N '42

Breakdown and time-lag of dielectric materials; breakdown of liquid carbon tetrachloride. S. S. Attwood and W. H. Bixby. *Franklin Inst J* 235:259-72 Mr '43

Dielectric-recovery characteristics of large air gaps. G. D. McCann and J. J. Clark. *bibliog il diags Elec Eng* 62:Trans 45-52 Ja '43

Dipole theory and the characteristics of organic insulators. T. F. Wall. *Engineering* 156:81-3 J1 30 '43

Effect of dielectrics and solvent upon the regeneration in acid solution of alkali-faded bromophenol blue. E. S. Amis and J. B. Price. *bibliog J Phys Chem* 47:338-48 Ap '43

Electric breakdown and cumulative ionization. B. Davydov. *Phys R* 64:156-8 S 1 '43

Liquid dielectrics; sixty-cycle power factors, conductivities, and polar contents of systems containing sulfur or nitrogen compounds in liquid paraffin. J. D. Piper and others. *bibliog Ind & Eng Chem* 34:1505-9 D '42

Manufacture and testing of oils and oil-resin saturants for use in electrical equipment. A. W. Thompson and J. C. Wood-Mallock. *Inst E E J* 90 pt 2:35-53 *bibliog*(p52-3); Discussion. 53-64 F '43

Measurement of anomalous dispersion in opaque dielectrics. A. W. Lawson. *diags R Sci Instr* 14:38-43 F '43

Possible use of ferruginous talcs in steatite dielectrics. L. E. Kane and H. G. Ueltz. *Am Cer Soc J* 26:389-92 N 1 '43

Progress in engineering knowledge during 1942. P. L. Alger and J. Stokley. *Gen Elec R* 46:94-5 F '43

Refresher for dielectric calculations. E. W. Greenfield. *diags Elec Eng* 62:445-8 O '43

See also

Insulating materials	Power factor, Dielec-
Insulation (electric)	tric
Polarization, Dielec-	
tric	

DIELS-ALDER reaction

Diels-Alder diene synthesis. J. A. Norton. *Chem R* 31:319-523 *bibliog*(427 references, p515-23) O '42

Mechanism of the Diels-Alder reaction. R. B. Woodward. *Am Chem Soc J* 64:3058-9 D '42

Sterical course and the mechanism of the diene reaction. F. Bergmann and H. E. Eschinazi. *bibliog Am Chem Soc J* 65:1405-11 J1 '43

DIENE number

Woburn iodine absorption method; use in combination with partial iodine values for the determination of diene numbers. J. D. von Mikusch and C. Frazier. *bibliog Ind & Eng Chem Anal* ed 15:109-13 F 15 '43

DIENE synthesis. See Synthesis

DIES

Aluminum alloy forging dies; considerations in their design and use. R. F. Duff. *il S A E J* 51:sup23-4 N '43

Auto dies saved; industry compromises. *Business Week* p80 Ap 10 '43

Carbide dies for steel shell cases. E. Glen. *il diags Metals & Alloys* 17:536-8 Mr '43

Cast dies for forging shells. P. Attenborough. *diags Metals & Alloys* 18:287-91 Ag '43

Casting die wedges for light metal flanging; wedge made of Kirksite. L. C. Costello. *il diag Iron Age* 152:70-3 O 28 '43

Cemented-carbide dies for drawing steel cartridge cases. *Mach* 49:176 Je '43

Chromium plating of dies and tools. D. A. Cotton. *il Metal Finishing* 41:343-7 Je '43

Cutting costs on perforating dies; use of masonite and Cerromatrix. E. H. Ruder. *il diags Aviation* 42:165-7+ Ag '43

Cutting zinc alloy dies for salvage. C. J. Frey. *diags Aviation* 42:134 Mr '43

Deep-drawing helps to build Flying Fortresses. B. K. Bucey. *il Mach* 49:186-91 J1 '43

Design of aluminum hammer forgings. *il diags Iron Age* 151:58-63 Je 17 '43

Designs of deep-drawn shapes made by simple dies and welding. E. H. Hautz. *il diags Product Eng* 13:728-30 D '42

Douglas drop hammer technique; use of Cecostamps, rubber pads and Kirksite dies. P. Stayboldt. *il Iron Age* 152:58-61 J1 8 '43

Forming acrylic resin sheets with plastic dies. K. J. Leeg. *il Iron Age* 152:68-70 S 9 '43

Impact extrusion and cold pressing of airplane parts. P. Koenig. *il diags S A E J* 51:415-19 N '43; Same cond. *Automotive & Aviation Ind* 89:38-40 O 15 '43

Increase of performance of hot work tools. W. Hauffer. *Iron Age* 152:44-8 S 2 '43

Liquid phenolic resins for tooling. K. J. Leeg. *bibliog il Mod Plastics* 20:65-6+ J1 '43

Low-cost dies for aircraft parts; use of semi-plastic materials, such as masonite and bakelite. B. Schlenzig. *il diags Am Mach* 86:1307-14 N 12 '42

Modern methods of handling and storing dies and fixtures. B. C. Brosheer. *il Am Mach* 87:88-91 O 28 '43

Plastic reduces cost of piercing dies; Vega aircraft corporation. R. Kennedy. *il diags Am Mach* 87:83-6 My 27 '43

Power presses; die cushion size and ring holding pressure required; tonnage capacity. *Aviation* 41:161, 163 N '42

Punch and die life increased by colloidal graphite lubricant. *Iron Age* 151:58 My 13 '43

Quenching dies minimize gear grinding. F. A. Equin. *diags Am Mach* 87:98-100 O 14 '43

Quicker and cheaper setup method for drop-hammer dies. *il Aero Digest* 42:157 My '43

Reclaiming Kirksite dies in aircraft manufacture; metal spraying. *il Steel* 111:66+ D 28 '42

Tooling for bombers at Willow Run. *il diags Am Mach* 86:1443-52 D 10 '42

See also

Die casting

Design

Dies for stirrup springs for 40-mm. percussion fuze. *il diags Am Mach* 86:1522-4 D 24 '42

Maintenance of press tools; good dowels extend die life. H. R. Hageman. *diags Am Mach* 86:1286-7 N 12 '42

Maintenance of press tools; savings begin with design. H. R. Hageman. *diags Am Mach* 86:1358-9 N 26 '42

Maintenance of press tools; stops and guides. H. R. Hageman. *diags Am Mach* 86:1438-7 D 10 '42

Two die designs that won awards. *il Mach* 50:174-5 O '43

Manufacture

Aircraft dies made in one-fourth the time by Algoma products. *diags Steel* 113:104 S 13 '43

Arc welded die sets. I. V. Stovern. *diags Iron Age* 152:62-5 N 4 '43

Cast zinc-base dies produce aircraft stampings. *il Foundry* 71:144+ J1 '43

Coring Kirksite dies. W. G. McConkey. *il Iron Age* 151:64-6 Ap 8 '43

Development of a cast resin stretch press die. L. J. Jaworski. *il Aero Digest* 42:230, 235 Ap '43

Die distortion and cracking. A. L. Olson. *il Metals & Alloys* 18:322 Ag '43

Fabricating drop hammer dies; illustrated instructions. C. J. Frey and S. S. Kogut. *Aviation* 41:158-60 D '42

DIES—Manufacture—Continued

- Fabricating plastic dies for acrylate sheets. K. J. Leeg. *il* diags Aviation 41:143, 145+ N '42
- Grinding cartridge case and bullet jacket dies. F. B. Whittemore, jr. diags Steel 112:76+ Mr 22 '43
- Hard-facing hot trimming dies. *il* diags Am Mach 87:98-100 S 16 '43
- Hardening high speed taps and dies in the electric salt bath. P. C. Farren. *il* Metal Prog 44:625-31 O '43
- New method of making metal drop hammer dies; use of Cerrobend. H. G. Groehn. *il* Aero Digest 43:229, 231 S '43
- Steel dies from scrap locomotive axles. *il* Ry Mech Eng 116:541 D '42
- Steel, plastics and zinc used in combination die set. J. C. Wright. *il* diags Iron Age 151:68-70 Je 17 '43
- Welded forming dies made from steel plate replace castings; with cost data. W. E. Klauber. *il* diags Am Mach 87:85-6 Ap 1 '43
- DIES** committee. See Government investigations
- DIESEL, Rudolf**, 1858-1913
- Is the name Diesel engine just? O. Nonnenbruch. *por* Diesel Power 21:911-13 O '43
- DIESEL**-electric locomotives. See Locomotives, Diesel-electric
- DIESEL** engine stations. See Electric plants (central stations)—Diesel engine stations; Power plants—Diesel engine plants
- DIESEL** engines
- Antelope Valley farmers profit from irrigation by Diesel pumping units; with cost data. M. D. Fugh. *il* Diesel Power 21:713-14 Ag '43
- Chrysler Diesel engines; Ind-3 and M-12. *il* Automotive & Aviation Ind 89:42+ Ag 1 '43
- Diesel auxiliary power units for large aircraft. E. M. Wilson. *Aero Digest* 42:259+ Mr '43
- Diesel engine tune-up. T. L. Mino. *diag* Bus Transportation 22:58 Ag '43
- Diesel performance here and abroad; American and British reports. *Power* 87:256-8 Ap '43
- Diesels grow up. *Business Week* p50+ O 16 '43
- Engineering piston rings for high-speed Diesels. P. S. Lane and S. Nixon. *diags* S A E J 50:528-32 D '42
- Fulton iron work's type BGS engine; construction, recommended maintenance, operating adjustments. *il* diags Diesel Power 21:821-4 S '43
- Future of packaged power. *il* Diesel Power 20:995-6 D '42
- Ingenuous conversion to Diesel provides completely portable power unit; for pumping crude oil through trunk line. *il* Diesel Power 21:805 S '43
- Non-marine Diesel markets. G. W. Grupp. *Diesel Power* 21:936-3, 940, 942-3 O '43
- Other uses for Diesel engines by American railroads. B. W. Reynolds. *Diesel Power* 21:943+ O '43
- Portable power unit for pipe line pumping. *il* Pet Eng 15:146 O '43
- Recent engine and accessory developments of interest to the Diesel field. *il* diags Diesel Power 21:500-14+ Je '43
- Rules and regulations of war production agencies explained and interpreted; data for manufacturers, distributors and users of Diesel engines and Diesel powered equipment. *Diesel Power* 21:52-3+, 140+, 227-33, 331-7, 417-24 Ja-My '43
- SAE Diesel engine and Fuels and lubricants joint meeting, Cleveland, June 2-3. S A E J 51:sup26+ JI '43
- SAE Diesel group plays big part in ASME Peoria power conference; abstracts of papers. S A E J 50:sup49-56 JI '42
- SAE war engineering production meeting; Diesel-engine sessions. S A E J 51:sup 73-6 F '43
- Superior type KNB engine; construction, recommended maintenance, operating adjustments. *il* Diesel Power 21:922-6 O '43
- Who will make money in Diesels? P. Dobbs. *il* Mag of Wall St 73:84-5, 97-8 O 30 '43

Why Diesel? *diag* Diesel Power 20:981-2 D '42

See also

Electric plants (central stations)—
Diesel engine stations

Locomotives, Diesel
Power plants—Diesel
engine plants

Accidents

Recent Diesel engine accidents. *il* Locomotive 44:175-7 Ap '43

Air supply

Air cleaners; their construction and operation; for gas or gasoline engines, Diesel engines or air compressors. *diags* Diesel Power 21:725-7 Ag '43

How to layout Diesel intake systems. G. Boyer. *diags* Power 87:111-13+ F '43

Bearings

Oil engine bearings; various materials for main and connecting-rod big-ends. A. B. Willi. *bibliog* *il* diags Automobile Eng 32:535-42 D '42

Restoring babbitt-type journal bearings. *il* diags Diesel Power 21:138-9 F '43

Bibliography

References to Diesel engines and their lubrication. W. L. Nelson. *Oil & Gas J* 41:234 N 12 '42

Coal dust engines

Economic limitations of the coal-dust engine; cost data. H. Wahl. *Engineering* 156:183-5 S 3 '43

Control

Governors for Diesel engines. *il* diags Diesel Power 21:927-32 O '43

Vitamins for Diesel power; comparison of several types of control used to obtain best engine performance. W. H. Smith and A. H. Candee. *diags* Ry Mech Eng 116:334-7, 381-3 JI-Ag '43

Cooling

Air accumulation in jacket-water system. J. B. Sims. *diag* Diesel Power 21:620 JI '43

Heat exchange and engine cooling systems. *diags* Diesel Power 21:914-18+, 1037-41, 1130-3+ O-D '43

Positive jacket-water temperature control by variable-pitch fans; road and dirt-moving machinery. K. W. Anderson. *il* Diesel Power 21:944-6 O '43

Cost of operation

1940 oil-engine power cost report. *Diesel Power* 20:992-4 D '42

Design

Arc-welded design helps reduce weight of large Diesel engines; Nordberg manufacturing company. *il* diags Product Eng 14:176-8 Mr '43

Cranking power and torque requirements at subzero temperatures. H. L. Knudsen. *il* S A E J 51:280-4 Ag '43

Honn oil engine; a scheme for controlling the ignition point. *diag* Automobile Eng 33:238 Je '43

More hp per lb of Diesel. P. H. Schweitzer. *il* diags Power 87:591-3+, 674-7+ S-O '43

Porting of two-stroke cycle Diesel engines. P. H. Schweitzer. *diags* Diesel Power 20:401-3, 477-9, 575-6, 651-5, 727-9, 817-20, 917-21, 989-91, 21:39-42, 131-6, 213-17, 1145-7 My '42-Mr. D '43

Two-stroke Diesel with exhaust turbo-supercharger. J. W. Swisstonoff and A. A. Kuritz. *diags* Automotive & Aviation Ind 87:28-31 N 15; 26-30 D 1 '42

Directories

Buyers' guide; names and addresses of manufacturers of Diesel engines and accessory products. *Diesel Power* 21:54-83, 517-57 Ja, Je '43

Efficiency

Definition of volumetric efficiency. P. H. Schweitzer. *diag* Engineering 155:178-9 F 26 '43; Same. *Automobile Eng* 33:107-8 Mr '43; Abstract. *Automotive & Aviation Ind* 88:40+ Ja 1 '43

Improving two-stroke cycle engine performance by exhaust pipe tuning. S. Belllove. *bibliog* *Diesel Power* 21:608-13 JI '43

DIESEL engines—Continued**Equipment**

Some valuable pointers on gage design and accuracy. C. L. Hastings. *il* *diags* Diesel Power 21:826-8 S '43

Exhaust

Combustion indicator tests Diesel engine exhaust smoke. *il* *diag* Electronics 16:116-My '43

Diesel engines underground; effect of sulfur content of fuel on composition of exhaust gas. L. B. Berger and others. U S Bur Mines Rep of Invest 3713:1-13 '43

Diesel engines underground; effect on composition of exhaust gas of variables influencing fuel injection. J. C. Holtz and others. 2 pls U S Bur Mines Rep of Invest 3700:1-24 '43

Effect of Diesel fuel on exhaust smoke and odor. R. S. Wetmiller and L. E. Endsley. *jr.* *diags* S A E J 50:509-20 D '42

Generator room heated by Diesel silencer. W. E. Van Deusen. *diag* Elec W 119:300 Ja 23 '43

Good exhaust practice improves Diesel performance. G. Boyer. *diags* Power 87:10-12 Ja '43

Improved Penn State smokemeter. P. H. Schweitzer. *il* *diags* Instruments 15:346-50 S '42; Same cond. Oil & Gas J 41:182-3+ Ja 28 '43

Improving two-stroke cycle engine performance by exhaust pipe tuning. S. Belllove. *bibliog* Diesel Power 21:608-13 Jl '43

Photoelectric smoke meter. *il* *diag* Diesel Power 21:408 My '43

Porting of two-stroke cycle Diesel engines. P. H. Schweitzer. *diags* Diesel Power 21:131-6 F '43

Principles of acoustics used to quiet Diesels; utilizing waste energy in exhaust gas to improve scavenging; abstract. R. L. Leadbetter. S A E J 51:sup28+ Jl '43

Use of Diesel engines in tunnels. S. H. Ash and L. L. Naus. U S Bur Mines Information Circ 7222:1-26 '42; Conclusions. Nat Safety N 47:42+ Je '43

Failure

Diesel engine wreck caused by water in cylinders. Locomotive 44:202-3 Jl '43

Insurance company experience with internal combustion engines. H. J. Vander Eb. Locomotive 44:173-5 Ap '43

Fuel

Additives for Diesel fuels. Nat Pet N 35 pt 2:R499-502 N 3 '43

Clean fuel is good insurance. *diag* Diesel Power 21:414 My '43

Cold-starting tests on Diesel engines. H. R. Porter. *il* *diags* S A E J 51:356-61+ O '43

Diesel engines underground; effect of sulfur content of fuel on composition of exhaust gas. L. B. Berger and others. U S Bur Mines Rep of Invest 3713:1-13 '43

Diesel fuel from vegetable oils; abstract. A. Furia. Chem & Met Eng 50:191 Ag '43

Effect of Diesel fuel on exhaust smoke and odor. R. S. Wetmiller and L. E. Endsley. *jr.* *diags* S A E J 50:509-20 D '42

Influence of Diesel fuel properties on engine deposits and wear. G. H. Cloud and A. J. Blackwood. *il* S A E J 51:408-14, 419-20 N '43; Same cond. Diesel Power 21:1032-6+ N '43

Leeds Transport's producer gas program; producer gas units for Diesel engine buses. W. V. Morland. Mass Transportation 39:256 Jl '43

Less Diesel fuel available after war; abstract and discussion. C. M. Larson. S A E J 51:sup61 Jl '43

Manufacture of 100-octane fuel encroaches on Diesel-oil volume. Oil & Gas J 42:38 Je 10 '43

Modern filter development as applied to fuel and lube oil systems of Diesel engines; abstract. C. A. Winslow. S A E J 51:sup26+ O '43

Possibilities of the dual-fuel engine. A. Vincze. *il* *diags* Diesel Power 21:491-3 Je '43

Rotary pumps for Diesel fuel. B. P. Hetler. *diags* Diesel Power 21:223-4 Mr '43

Fuel feeding

Diesel engines underground; effect on composition of exhaust gas of variables influencing fuel injection. J. C. Holtz and others. 2pls U S Bur Mines Rep of Invest 3700:1-24 '43

Diesel nozzle for two fuels. O. T. Sygall. *il* *diags* Power 87:40 Ja '43

Diesel nozzles now tested for accurate delivery of oil. *il* Sci Am 167:282-3 D '42

Effect of injection pumps on cold starting. M. M. Roensch. S A E J 51:277-9 Ag '43

How to keep injection systems on the job in wartime. G. H. Menefee. *il* *diags* Power 87:751-3 N '43

Quantity-speed characteristics of fuel injection systems. O. F. Zahn, jr. *bibliog* Automotive & Aviation Ind 88:40-2+ Ap 1; 34-7 Ap 15 '43

Servicing fuel injection nozzles. P. H. Schweitzer. *il* *diags* Diesel Power 21:706-12 Ag '43

Stroboscope unmasks fuel injection; Diesel laboratory of Pennsylvania state college. P. H. Schweitzer. *il* *diag* Automotive & Aviation Ind 89:32-4 S '43

Testing Diesel engine injection spray nozzles. *il* Marine Eng 47:120 N '42

History

Is the name Diesel engine just? O. Nonnenbruch. *il* Diesel Power 21:911-13 O '43

Ignition

Honn oil engine; scheme for controlling the ignition point. *diag* Automobile Eng 33:238 Je '43

Importance of accessory equipment in cold starting of Diesel engines. W. J. Pelizzoni. *il* *diags* S A E J 51:94-8 Mr '43

Instrumentation in the study of Diesel combustion. E. W. Landen and L. A. Blanc. *il* *diags* A S M E Trans 65:121-5 F '43

Lubrication

Control of oil consumption in the high-speed four-cycle automotive Diesel engine; abstract. A. T. Stahl. S A E J 51:64 F '43

Deterioration of lubricating oils; soybean lecithin as an inhibitor. J. J. Jacobs and D. F. Othmer. *bibliog* *il* *diag* Ind & Eng Chem 35:883-9 Ag '43

Diesel engine lubricant. Business Week p54+ O 16 '43

Experiences with high-altitude operation of Diesel engines. A. C. Wheeler. *flow* *diag* *il* Diesel Power 20:1001-2+ D '42

Heavy-duty lubricating oils for naval Diesel engines. E. N. Klemgard. *il* S A E J 50:284-98 Jl '42

Modern filter development as applied to fuel and lube oil systems of Diesel engines; abstract. C. A. Winslow. S A E J 51:sup26+ O '43

Oil filter improvements parallel engine development. C. A. Winslow. Diesel Power 21:329-30 Ap '43

Piston rings and oil control in two-cycle high-output Diesel engines. F. G. Shoemaker and R. Allbright. S A E J 51:31-2 Ja '43

Study of Diesel lubricants and fuels; abstract. H. Stäger and H. Künzler. Chem & Met Eng 50:197 Ap '43

Viscage viscosity comparator. *il* Diesel Power 21:430-2 My '43

Youngstown Miller purifier for Diesel engine oil. *il* *diag* Ry Mech Eng 117:192-3 Ap '43

Maintenance and repair

Brushes for engine maintenance. *il* Diesel Power 21:426 My '43

Coast guard mechanics training course at G-M institute. *il* Marine Eng 48:180-1 Jl '43

Diesel- and gas-engine maintenance; special section. L. N. Rowley. *il* *diags* Power 87:379-94 Je '43

Diesel engine maintenance in the navy. T. G. Reamy. Mech Eng 65:628-32+ S '43; Same cond. Marine Eng 48:176-80 Jl '43

Diesel engine service now and later. E. M. Sheehan. Diesel Power 21:817+ S '43

Engine block and head repairs by cold welding. *il* *diags* Diesel Power 21:818-19 S '43

DIESEL engines—Maintenance and repair—Continued

How to keep injection systems on the job in wartime. G. H. Menefee. *il* *diags* *Power* 87:751-3 N '43

Is chromium plating the answer to Diesel liner and ring wear? abstract. R. Pyles. *il* *Power* 87:522-3 Ag '43

Metal spray keeps 'em Dieseling; Chicago motor coach co. *il* *Bus Transportation* 22:46-7 F '43

Metallizing crankshafts in an engine lathe. W. B. Meyer. *il* *diags* *Diesel Power* 21:121-4 F '43; Same abr. *Welding J* 22:426-9 Je '43

Piston ring experiences at the Denton, Texas, municipal plant. *il* *Diesel Power* 21:803-5 S '43

Proper maintenance of engines will pay dividends. R. A. Hundley. *Diesel Power* 21:838-9 S '43

Railcar oil engines in the Argentine; methods of repair and overhaul. C. R. Parker. *il* *diags* *Engineer* 174:425-8, 437-9, 464-6, 483-6 N 20-D 11 '42

Servicing fuel injection nozzles. P. H. Schweitzer. *il* *diags* *Diesel Power* 21:706-12 Ag '43

Welding reclaims fractured Diesel cylinder. R. C. Wilson. *Diesel Power* 21:310 Ap '43

Manufacture

Contour machining Diesel connecting rods. H. J. Chamberland. *il* *Diesel Power* 21:702 Ag '43

Jacketed elbow now welded; weight cut 40 percent. *il* *diags* *Product Eng* 13:694 D '42

Noise

Principles of acoustics used to quiet Diesels; utilizing waste energy in exhaust gas to improve scavenging; abstract. R. L. Leadbetter. *S A E J* 51:sup28+ J1 '43

Rating

Rating supercharged engines on the basis of the mean temperature of the cycle; with application to Büchi system. R. Miller. *diags* *A S M E Trans* 65:685-90; Discussion. 690-6 Ag '43

Scavenging

Porting of two-stroke cycle Diesel engines. P. H. Schweitzer. *diags* *Diesel Power* 20:401-3, 477-9, 575-6, 651-5, 727-9, 817-20, 917-21, 989-91; 21:39-42, 131-6, 213-17, 1145-7 My '42-Mr. D '43

Principles of acoustics used to quiet Diesels; utilizing waste energy in exhaust gas to improve scavenging; abstract. R. L. Leadbetter. *S A E J* 51:sup28+ J1 '43

Specifications

1943 Diesel engine specifications. *Diesel Power* 21:311-22, 324-5 Ap '43

Starting

Air-starting principles. *Diesel Power* 21:411+ My '43

Cold starting for Diesel engines. P. M. Heldt. *diags* *Automotive & Aviation Ind* 88:24-6+ My 1; 30-2 My 15 '43

Cold-starting tests on Diesel engines. H. R. Porter. *il* *diags* *S A E J* 51:356-61+ O '43

Cranking power and torque requirements at subzero temperatures. H. L. Knudsen. *il* *S A E J* 51:280-4 Ag '43

Diesel engine starting methods. *il* *diags* *Diesel Power* 21:125-30 F '43

Effect of injection pumps on cold starting. M. M. Roensch. *S A E J* 51:277-9 Ag '43

Importance of accessory equipment in cold starting of Diesel engines. W. J. Pelizzoni. *il* *diags* *S A E J* 51:94-8 Mr '43

There's a Diesel starting system to fit your plant's needs. *il* *diags* *Power* 87:731-3 N '43

Use of glow plugs in cold starting Diesel engines. A. F. Klingner. *diags* *Automotive & Aviation Ind* 89:28-9+ O 1 '43

Superchargers

Diesel makes exhaust gas, turbine supplies kilowatts; Sulzer brothers, Switzerland, report experience with supercharged 2-cycle oil engines. *diags* *Power* 86:888-9 D '42

Elliott-Lyholm supercharger. A. Lyholm, R. B. Smith and W. A. Wilson. *il* *diags* *S A E J* 51:193-7 Je '43; Same. *Diesel Power* 21:601-4 J1 '43; Same. *Automobile Eng* 33:483-6 N '43

Hamilton-Whitfield blower. J. E. Whitfield. *il* *diag* *Diesel Power* 21:409-11 My '43

Interesting applications of supercharged automotive-type Diesel engines. *il* *Diesel Power* 20:986-8 D '42

More hp per lb of Diesel. P. H. Schweitzer. *Power* 87:712a+ O '43

New development in two-stroke Diesels; system developed by Sulzer brothers. *il* *diag* *Automotive & Aviation Ind* 88:30-1+ Mr 1 '43

Positive-displacement supercharger. J. L. Ryde. *il* *diag* *S A E J* 50:304-13 J1 '42

Rating supercharged engines on the basis of the mean temperature of the cycle; with application to Büchi system. R. Miller. *diags* *A S M E Trans* 65:685-90 Ag '43; Abstracts. *Power* 86:971 Mid-D '42; *Automotive & Aviation Ind* 88:40 Ja 1 '43; Discussion. *A S M E Trans* 65:690-6 Ag '43

Two-stroke Diesel with exhaust turbo-supercharger. J. W. Swisstonoff and A. A. Kuritz. *diags* *Automotive & Aviation Ind* 87:28-31 N 15; 26-30 D 1 '42

Temperature

Rating supercharged engines on the basis of the mean temperature of the cycle; with application to Büchi system. R. Miller. *diags* *A S M E Trans* 65:685-90; Discussion. 690-6 Ag '43

Use of entropy in practical Diesel engine applications. O. Adams. *Pet Eng* 14:43, 46, 48 Ag '43

Terminology

Diesel engineering terms. *Diesel Power* 21:834-6 S '43 (to be cont)

Testing

Artificial-load rheostat. E. Simpson. *diag* *Power* 87:690-1 O '43

Combustion analysis of the two-stroke-cycle Diesel engine; testing device perfected by Cities service research laboratories. *il* *diags* *Diesel Power* 21:308-10 Ap '43

Instrumentation in the study of Diesel combustion. E. W. Landen and L. A. Blanc. *il* *diags* *A S M E Trans* 65:121-5 F '43

Valves

Butterfly valve applications for Diesel engines. *il* *Diesel Power* 21:948+ O '43

Vibration

Axial vibration of Diesel engine crankshafts. R. Poole. *diags* *Inst Mech Eng J & Proc* 146:Proc 167-82, pl 1-2 F '42; Discussion. 148:Proc 197-218 Mr '43

Design office problem in the estimation of the torsional resonance characteristics of small marine Diesel-propulsion units. R. W. S. Mitchell. *diag* *Inst Mech Eng J & Proc* 149:Proc 133-42 S '43

Diesels suspended in rubber. P. C. Roche. *il* *diag* *Diesel Power* 21:219-22 Mr '43

Measurement of torsional vibrations. R. Stansfield. *diags* *Inst Mech Eng J & Proc* 148:Proc 175-93 Mr '43; Same abr. *Engineering* 154:178-80, 198-200 Ag 28-S 4 '42; Same abr. *Engineer* 174:77-9, 101-2 J1 24-31 '42; Discussion. *Engineering* 154:74 J1 24 '42

Design office problem in the estimation of the torsional resonance characteristics of small marine Diesel-propulsion units. R. W. S. Mitchell. *diag* *Inst Mech Eng J & Proc* 149:Proc 133-42 S '43

Diesels suspended in rubber. P. C. Roche. *il* *diag* *Diesel Power* 21:219-22 Mr '43

Measurement of torsional vibrations. R. Stansfield. *diags* *Inst Mech Eng J & Proc* 148:Proc 175-93 Mr '43; Same abr. *Engineering* 154:178-80, 198-200 Ag 28-S 4 '42; Same abr. *Engineer* 174:77-9, 101-2 J1 24-31 '42; Discussion. *Engineering* 154:74 J1 24 '42

Design office problem in the estimation of the torsional resonance characteristics of small marine Diesel-propulsion units. R. W. S. Mitchell. *diag* *Inst Mech Eng J & Proc* 149:Proc 133-42 S '43

Diesels suspended in rubber. P. C. Roche. *il* *diag* *Diesel Power* 21:219-22 Mr '43

Measurement of torsional vibrations. R. Stansfield. *diags* *Inst Mech Eng J & Proc* 148:Proc 175-93 Mr '43; Same abr. *Engineering* 154:178-80, 198-200 Ag 28-S 4 '42; Same abr. *Engineer* 174:77-9, 101-2 J1 24-31 '42; Discussion. *Engineering* 154:74 J1 24 '42

Design office problem in the estimation of the torsional resonance characteristics of small marine Diesel-propulsion units. R. W. S. Mitchell. *diag* *Inst Mech Eng J & Proc* 149:Proc 133-42 S '43

Diesels suspended in rubber. P. C. Roche. *il* *diag* *Diesel Power* 21:219-22 Mr '43

Measurement of torsional vibrations. R. Stansfield. *diags* *Inst Mech Eng J & Proc* 148:Proc 175-93 Mr '43; Same abr. *Engineering* 154:178-80, 198-200 Ag 28-S 4 '42; Same abr. *Engineer* 174:77-9, 101-2 J1 24-31 '42; Discussion. *Engineering* 154:74 J1 24 '42

Design office problem in the estimation of the torsional resonance characteristics of small marine Diesel-propulsion units. R. W. S. Mitchell. *diag* *Inst Mech Eng J & Proc* 149:Proc 133-42 S '43

Diesels suspended in rubber. P. C. Roche. *il* *diag* *Diesel Power* 21:219-22 Mr '43

Measurement of torsional vibrations. R. Stansfield. *diags* *Inst Mech Eng J & Proc* 148:Proc 175-93 Mr '43; Same abr. *Engineering* 154:178-80, 198-200 Ag 28-S 4 '42; Same abr. *Engineer* 174:77-9, 101-2 J1 24-31 '42; Discussion. *Engineering* 154:74 J1 24 '42

Design office problem in the estimation of the torsional resonance characteristics of small marine Diesel-propulsion units. R. W. S. Mitchell. *diag* *Inst Mech Eng J & Proc* 149:Proc 133-42 S '43

Diesels suspended in rubber. P. C. Roche. *il* *diag* *Diesel Power* 21:219-22 Mr '43

Measurement of torsional vibrations. R. Stansfield. *diags* *Inst Mech Eng J & Proc* 148:Proc 175-93 Mr '43; Same abr. *Engineering* 154:178-80, 198-200 Ag 28-S 4 '42; Same abr. *Engineer* 174:77-9, 101-2 J1 24-31 '42; Discussion. *Engineering* 154:74 J1 24 '42

DIESEL engines, Automotive—Continued

- Reduced maintenance costs follow rapid improvements in truck Diesels. T. Collins. *il Diesel Power* 21:494-6 Je '43
 West Coast war industries throb to pulse of Diesel truck and tanker. M. D. Pugh. *il maps Diesel Power* 21:406-7 My '43

See also

Locomotives, Diesel**DIESEL engines, Marine**

- Development of the Doxford marine oil engine. W. K. Wilson. *il diags Engineering* 155:61-4, 70, 121-2, 141-3, 161-3, 181-2, 201-2, 210 Ja 22, F 12-Mr 12 '43
 Developments in Diesel ships; symposium. *il Power* 86:970 Mid-D '42
 Diesel engine maintenance in the navy. T. G. Kearny. *Mech Eng* 65:628-32+ S '43; Same cond. *Marine Eng* 48:176-80 Jl '43
 Diesel prime mover has won the navy; abstract. L. F. Small. *S A E J* 51:sup26+ Jl '43
 European Diesel engine development. *Marine Eng* 48:177-8 F '43
 Heavy-duty lubricating oils for naval Diesel engines. E. N. Klemgard. *il S A E J* 50:284-98 Jl '42
 Ingenuity essential in repair of sub Diesels; abstract. R. J. Moore. *S A E J* 51:sup63 Jl '43
 Light-weight Diesel engine. J. C. Feters. *Marine Eng* 48:215-16 Jl '43; Same. *il Diesel Power* 21:715-16+ Ag '43; Same cond. *Automotive & Aviation Ind* 88:25+ Je 15 '43; Abstract. *S A E J* 51:sup63 Jl '43
 Marine-Diesel auxiliaries. R. L. Boyer. *Mech Eng* 65:431-2 Je '43
 Medium-size Diesel engines in post-war marine service. G. Lefebvre. *il Marine Eng* 48:210-12 O '43
 New German marine engine; Deutz 12-cylinder V-type Diesel. *Automotive & Aviation Ind* 89:19+ Jl 15 '43
 Pre-war Diesels help meet demand for fish. *il Marine Eng* 48:216+ Ag '43
 Shipbuilding and marine engineering in 1942. *il Engineer* 175:73-4 Ja 22 '43
 Solving the Diesel drive problem; symposium under joint sponsorship of Society of naval architects and marine engineers and American society of mechanical engineers. G. McConechy and others. *il diags Machine Design* 15:135-9 Ap '43
 Some aspects of Diesel engines for navy main propulsion. E. W. Mills. *Mech Eng* 65:625-7 S '43
 Use of Diesel engines in post-war marine service. R. Cramer, jr. *il diags Marine Eng* 48:207-9 O '43

Design

- Design office problem in the estimation of the torsional resonance characteristics of small marine Diesel-propulsion units. R. W. S. Mitchell. *diag Inst Mech Eng J & Proc* 149:Proc 133-42 S '43

Gearing

- Geared drives; marine Diesels. B. V. E. Nordberg. *il Machine Design* 15:136-7 Ap '43

DIESEL locomotives. See Locomotives, Diesel**DIET**

- Amino acids and human requirements. W. E. Gaunt. *bibliog Chem & Ind* 62:127-30; Discussion. 130-1 Ap 3 '43
 Case studies of nutrition; symposium. *Ann Am Acad* 225:52-65 Ja '43
 Cirrhosis. *Sci Am* 168:269-70 Je '43
 Custom-built fats. H. W. Vahlteich. *bibliog il Chem & Eng N* 21:1238-42 Ag 10 '43
 Diet of Chinese soldiers and college students in wartime. T. Shen. *Science* 98:302-3 O 1 '43
 Edema in vitamin E deficient chicks. H. R. Bird. *Science* 97:98 Ja 22 '43
 How good is our national diet? E. F. Phipard. *Ann Am Acad* 225:66-71 Ja '43
 Lesions in rats given sulfaguanidine in purified diets. L. L. Ashburn and others. *bibliog Public Health Rep* 57:1883-91, pl 1-2 D 11 '42
 Recommended daily dietary allowances adopted by Food and Nutrition Board, National research council in 1941; diet plans that meet allowances. *Business Week* p66-7 Jl 10 '43

- Regional patterns of dietary deficiency; symposium. R. E. Butler and others. *bibliog Ann Am Acad* 225:43-51 Ja '43

- Relation of food intake to response of mice inoculated with Lansing strain of murine poliomyelitis virus. C. Foster and others. *Science* 97:207-8 F 26 '43

- Role of folic acid and biotin in the utilization of pantothenic acid by the rat. L. D. Wright and A. D. Welch. *bibliog Science* 97:426-7 My 7 '43

- Social milieu of malnutrition. J. D. Black, comp. *Ann Am Acad* 225:142-9 Ja '43

- Some obstacles in the path towards an optimum diet. A. J. Carlson. *Science* 97:385-90, 412-16 Ap 30-May 7 '43

- Teaching wives to plan meals. *il Factory Management* 101:93-4 Ja '43

- Tooth decay; abstract. J. D. Boyd. *Science* 97:sup10+ My 28 '43

- Toxicity and histopathology of some azo compounds as influenced by dietary protein. M. I. Smith, R. D. Lillie and E. F. Stohman. *bibliog Pub Health Rep* 58:304-17 F 19 '43

- Types of nutritional deficiency; symposium. *Ann Am Acad* 225:29-42 Ja '43

- Value of meat in the diet. B. W. Gardner, jr. *diags Consumers' Research Bul* 11:15-17 Ja; 13-15 F '43

- White, national, or wholemeal bread. J. D. Robertson. *bibliog Chem & Ind* 62:222-5 Je 12 '43

See also

- | | |
|-----------|----------|
| Food | Proteins |
| Nutrition | Vitamins |

DIETHOXYETHANE. See Acetal**DIETHYLALDEHYDE. See Acetal****DIETHYLAMINOETHANOL**

- Diethylaminoethanol as a reagent for the detection and colorimetric determination of small amounts of trinitrotoluene in air. F. H. Goldman and D. E. Rushing. *J Ind Hygiene* 25:164-71 Ap '43

- Estimation of minute amounts of tetryl in the atmosphere. F. H. Goldman and D. E. Rushing. *bibliog J Ind Hygiene* 25:195-6 My '43

DIETHYL carbonate

- Condensations; the acylation of the anions of certain esters with ethyl carbonate. C. R. Hauser, B. Abramovitch and J. T. Adams. *Am Chem Soc J* 64:2714-15 N '42

DIETHYL stilbestrol

- Synthesis of polyenes; a new synthesis of diethylstilbestrol. M. S. Kharasch and M. Kleiman. *bibliog Am Chem Soc J* 65:11-15 Ja '43

DIETHYL succinate

- Viscosities of polyester solutions; application of the melt viscosity-molecular weight relationship to solutions. P. J. Flory. *bibliog J Phys Chem* 46:870-7 N '42

DIETHYLENE glycol

- Dehydration of natural gas. R. W. Parker. *flow diags il Pet Eng* 14:110+ Ja '43
 Natural gas pipe line dehydration. H. N. Wade. *il Pet Eng* 14:100, 102, 104 Ap '43

DIETITIANS

- Opportunities for Negro women as dietitians. *Monthly Labor R* 57:104-5 Jl '43

DIFFERENCE equations

- Computation of polynomial functions by summation of finite differences. H. F. Bennett. *Opt Soc Am J* 33:519-26 S '43

DIFFERENTIAL analyzers

- Mechanical integration in solution of electrical problems; abstracts. D. E. Hartree. *Electrician* 130:469-70 My 7 '43; *Elec R (Lond)* 132:616 My 7 '43; Discussion. *Electrician* 130:470-1 My 7 '43

DIFFERENTIAL equations

- Integration of linear second-order differential equations by means of punched cards. M. Kormes. *R Sci Instr* 14:118 Ap '43

- New analytical method for solving van der Pol's and certain related types of non-linear differential equations, homogeneous and non-homogeneous. J. Shohat. *J Ap Phys* 14:40-8 Ja '43

DIFFERENTIAL equations—Continued

Periodic processes in free pseudo-linear oscillatory systems. B. V. Bulgakov. *diag Franklin Inst J* 235:591-616 Je '43

See also

Differential analyzers

DIFFRACTION

Theory of the halftone process; the diffraction theory, calculation of the light distribution. J. A. C. Yule. *diags Franklin Inst J* 235:483-98 My '43

DIFFRACTION gratings

Identification of orders and ghosts in grating spectra by diffracting slits. H. S. Pomerance and H. G. Beutler. *il Rs Mod Phys* 14:66-7 Ap-Jl '42

DIFFRACTION of electrons. See **Electrons—Diffraction**

DIFFRACTION of X rays. See **X rays—Diffraction**

DIFFUSERS, Air. See **Air diffusers**

DIFFUSION

Coefficients of thermal diffusion of neon and argon and their variation with temperature. L. G. Stier. *bibliog Phys R* 62:548-51 D 1 '42

Diffusion of air through monel metal. H. S. Coleman and H. L. Yeagley. *il diags J Chem Phys* 11:135-9 Mr '43

Diffusion of vapors into an air stream flowing viscously and vertically. L. M. K. Boelter. *bibliog diag Am Inst Chem Eng Trans* 39:557-64 Ag '43

Diffusion rates of carbon in iron-molybdenum and iron-tungsten alloys. R. Smoluchowski. *bibliog Phys R* 63:438-40 Je 1 '43

Energies for self-diffusion in zinc. H. B. Huntington. *Phys R* 63:383-4 My 1 '43

Method of thin films for the study of inter-metallic diffusion and chemical reactions at metallic surfaces. H. S. Coleman and H. L. Yeagley. *il diags Am Soc for Metals Trans* 31:105-21; Discussion. 121-4 Mr '43

Sedimentation and diffusion behavior of certain nucleic acid preparations. H. G. Tenenent and C. F. Vilbrandt. *bibliog Am Chem Soc J* 65:424-8 Mr '43

Separation of gas mixtures by thermal diffusion. B. Leaf and F. T. Wall. *bibliog J Phys Chem* 46:820-6 O '42

Steel carburization and decarburization, a theoretical analysis. J. K. Stanley. *bibliog (69 references) Iron Age* 161:49-55 F 4 '43

Study of diffusion in glass. J. A. Pask and C. W. Parmelee. *bibliog il Am Cer Soc J* 26:267-77 Ag 1 '43

Study of the diffusion velocity of ovalbumin in relation to its molecular weight. L. Friedman and B. R. Ray. *bibliog diags J Phys Chem* 46:1140-50 D '42

Thermal diffusion with ammonia. W. W. Watson and D. Woernley. *bibliog Phys R* 63:181-4 Mr 1 '43

See also

Colloids

Gases

Osmosis

DIFFUSION of rays. See **Electrons—Reflection, scattering, etc.**; **Light, Scattering of**; **Mesotrons—Scattering**; **Protons—Scattering**; **Raman effect**

DIFFUSION pump. See **Vacuum pumps**

DIFLUORIDES

Addition of fluorine fluoride to halo-olefins. A. L. Henne and E. P. Plueddemann. *bibliog Am Chem Soc J* 65:1271-2 Jl '43

DIGESTERS (paper making)

Digester linings; abstract. V. Terling. *Paper Ind* 25:674 S '43

Heat-transfer characteristics of an indirectly-heated digester. J. G. L. Caulfield, L. C. Jenness and G. L. Nystrom. *diag Paper Tr J* 115:25-9 D 3 '42

Heat utilization in sulphate mills; use of flash steam from the digester blow to heat hot water for pulp washing. H. T. Baker. *Paper Tr J* 117:32-4 Jl 15 '43

Instruments in the pulp and paper industry. J. N. Franklin. *Pulp & Pa of Can* 44:304-6 Mr '43

Longer-lived digester parts; Amsco alloy F-12. *il Paper Tr J* 116:14 Mr 11 '43

Sulphite blow heat and gas recovery. J. N. Swartz. *il diag Pulp & Pa of Can (Convention no)* 44:139-42 [F] '43

Failures

Reports on Albemarle explosion. *Paper Tr J* 116:14 Je 17 '43

DIGESTION

Ether soluble fraction of navy beans and the digestion of starch; retarding influence of bean oil. D. E. Bowman. *Science* 98:308-9 O 1 '43

DIGITALIS

Digitalis and some of its derivatives. H. Gold. *bibliog Science* 97:125-9, 150-3 F 5-12 '43

DIHYDROBENZOFURAN

Chemistry of vitamin E; synthesis and properties of 2-isopropyl-4,6,7-trimethyl-5-hydroxycoumaran. L. I. Smith and J. A. King. *bibliog Am Chem Soc J* 65:441-4 Mr '43

Polyalkylbenzenes: 4,6,7-trimethylcoumaran-3-one and its conversion into 2-isopropyl-4,6,7-trimethyl-5-hydroxycoumaran. L. I. Smith and others. *bibliog Am Chem Soc J* 65:1594-9 Ag '43

Studies in the coumaran series. R. T. Arnold and J. Moran. *bibliog Am Chem Soc J* 64:2936-8 D '42

DIHYDROERGOSTEROL

Steroids with double bonds between quaternary carbon atoms; the structure of α -dihydroergosterol. H. E. Staveland and G. N. Bollenback. *bibliog Am Chem Soc J* 65:1290-4 Jl '43

DIHYDROGLYOXALINE. See **Imidazoline**

DIHYDROXYMALEIC acid

Oxidation processes; the effect of reducing agents on the autooxidation of some photographic developing agents. A. Weissberger, D. S. Thomas, jr. and J. E. LuValle. *bibliog Am Chem Soc J* 65:1489-95 Ag '43

DIHYDROXYPHENANTHRENE

Experiments on the synthesis of substances related to the sterols; the preparation of 2:7-dihydroxyphenanthrene and certain derivatives. J. W. Cornforth and R. Robinson. *Chem Soc J* p684-9 N '42

DIHYDROXYPHENAZINE

Bacterial inhibition by metabolite analogues; reactions and antibacterial properties of *p*-diazine di-N-oxides. H. McIlwain. *Chem Soc J* p322-5 Jl '43

DIHYDROXYPHENYLPROPYLAMINE

Phenethylamines; dimethoxy and dihydroxyphenyl-*n*-propylamines (β -methyl- β -phenethylamines). E. H. Woodruff. *bibliog Am Chem Soc J* 64:2859-62 D '42

DIHYDROXYQUINOXALINE

Photographically interesting fine chemicals as specific spot test reagents. A. Steigmann. *Soc Chem Ind J* 62:42-3 Mr '43

Synthesis of aminobenzoyleneureas and of dihydroxyquinoxalines isomeric with luminol. E. H. Huntress and J. V. K. Gladding. *bibliog Am Chem Soc J* 64:2644-9 N '42

DIHYDROXYSTEARIC acid

Dihydroxy-stearic acid and vitamin K deficiency. E. E. Lockhart, H. Sherman and R. S. Harris. *Science* 96:542-3 D 11 '42

Mechanism of the oxidation of oleic and elaidic acids and their methyl esters by hydrogen peroxide in acetic acid; further observations on the configurations of the 9:10-dihydroxystearic acids. G. King. *Chem Soc J* p37-8 Ja '43

Stereochemical relationships of the 9:10-oxidostearic acids and the 9:10-dihydroxystearic acids. D. Atherton and T. P. Hilditch. *Chem Soc J* p204-8 My '43

DIISOBUTYLENE

Ketone synthesis; the condensation of acid anhydrides with olefins. A. C. Byrns and T. F. Doumani. *bibliog il diag Ind & Eng Chem* 35:349-53 Mr '43

Raman spectra of hydrocarbons; diisobutylene, cyclohexene, and dipentene. F. E. Cleveland. *bibliog J Chem Phys* 11:301-6 Jl '43

DIKES (engineering)

Dikes to protect Cumberland field from flood waters of dam at Denison, Texas. *Oil & Gas J* 41:35 Ap 22 '43
 Permeable dikes built of wire fencing to halt erosion by the Little Miami river. *il diags* map Eng N 131:674-5 N 4 '43

See also

Dams
 Earthwork

DIKETENE

Structure of diketene. F. O. Rice and R. Roberts. *bibliog diag Am Chem Soc J* 65: 1677-81 S '43

DIKETONES. See Ketones**DILATOMETERS**

Influence of alloying elements on the critical points of steels as measured by the dilatometer. R. N. Gillmor. *il Am Soc for Metals Trans* 30:1377-1404; Discussion. 1404-18 D '42

Quantitative study of austenite transformation. R. A. Flinn, E. Cook and J. A. Fellows. *bibliog il diags Am Soc for Metals Trans* 31:41-66; Discussion. 66-70 Mr '43
 Recording dilatometer for metal specimens. L. R. Stanton. *diags Engineering* 155:518-19 Je 25 '43

Study of the dilatometric method of measuring rates of reactions; the application to the determination of the rate of hydrolysis of acetal. L. K. J. Tong and A. R. Olson. *diag Am Chem Soc J* 65:1704-7 S '43

DILUTURATES. See Nitrobarbiturates**DILL oil**

U.S. production of oil of dill. E. Guenther. *il Food Ind* 15:73-5 My; 72-3 Je '43

DILL pickles. See Pickles**DILUTION, Heat of**

Heats of dilution and relative heat contents of aqueous solutions of lanthanum chloride and lanthanum sulfate at 25°. C. C. Nathan, W. E. Wallace and A. L. Robinson. *bibliog Am Chem Soc J* 65:790-4 My '43

Heats of dilution of aqueous solutions of glycine at 25°. W. E. Wallace, W. F. Offutt and A. L. Robinson. *bibliog Am Chem Soc J* 65:347-50 Mr '43

DIMEDONE. See Dimethylcyclohexanedione**DIMENSIONAL analysis**

Euler's number. H. A. Thomas. *Mech Eng* 65:210-11 Mr '43; Discussion. 65:372, 597 My, Ag '43

Power consumption of propeller-type agitators. C. E. Stoops and C. L. Lovell. *bibliog il diags Ind & Eng Chem* 35:345-50 Ag '43

Rolling ball viscometer. R. M. Hubbard and G. G. Brown. *bibliog il Ind & Eng Chem Anal ed* 15:212-18 Mr 15 '43

DIMERIZATION. See Polymerization**DIMETHYLVINYL alcohol**

β,β -Dimethylvinyl alcohol. R. C. Fuson and S. P. Rowland. *Am Chem Soc J* 65:992-3 My '43

DIMETHOXYBENZENE. See Veratrole**DIMETHOXY compounds**

Addition of dienes to certain di-*o*-methoxy-substituted cinnamic acids. R. Adams and R. B. Carlin. *bibliog Am Chem Soc J* 65:360-3 Mr '43

DIMETHOXYPHENYLPROPYLAMINE

Phenethylamines; dimethoxy and dihydroxy-phenyl-*n*-propylamines (β -methyl- β -phenethylamines). E. H. Woodruff. *bibliog Am Chem Soc J* 64:2859-62 D '42

DIMETHYLACRYLIC acid

Polyalkylbenzenes; the reaction between dimethylacrylic acid and *m*-xylene. L. I. Smith and L. J. Spillane. *bibliog Am Chem Soc J* 65:202-3 F '43

DIMETHYLLALLYL alcohol

Further observations on the optically active α -dimethylallyl alcohols. M. P. Balfe and others. *Chem Soc J* p348-51 Ag '43

DIMETHYLAMINOAZOBENZENE

Toxicity and histopathology of some azo compounds as influenced by dietary protein. M. I. Smith, R. D. Lillie and E. F. Stohman. *bibliog Pub Health Rep* 58:304-17 F 19 '43

DIMETHYLANILINE

Temperature-concentration equilibria in the system dimethylaniline-sulfur dioxide. J. R. Bright and W. C. Fernellus. *bibliog Am Chem Soc J* 65:637-9 Ap '43

DIMETHYLBUTADIENE. See Isoprene**DIMETHYLBUTANE**

Heats of vaporization of some hexanes. J. F. Lemons and W. A. Felsing. *bibliog diag Am Chem Soc J* 65:46-8 Ja '43

Pressure-volume-temperature relations of 2,2-dimethylbutane. W. A. Felsing and G. M. Watson. *bibliog Am Chem Soc J* 65:1889-91 O '43

DIMETHYLBUTYNE

Raman spectra of acetylenes; symmetrical-top acetylenes. F. F. Cleveland and M. J. Murray. *bibliog J Chem Phys* 11:450-4 O '43

DIMETHYLCYCLOHEXANEDIONE

Catalytic hydrogenation of dimedone (dimethylidihydroresorcinol), and a preparation of 1:1-dimethylcyclopentane. T. Henshall. *Soc Chem Ind J* 62:127-8 Ag '43

DIMETHYLCYCLOPENTANE

Catalytic hydrogenation of dimedone (dimethylidihydroresorcinol), and a preparation of 1:1-dimethylcyclopentane. T. Henshall. *Soc Chem Ind J* 62:127-8 Ag '43

DIMETHYLDIHYDRORESORCINOL. See Dimethylcyclohexanedione**DIMETHYL ether. See Methyl ether****DIMETHYNEOPENTYL CARBINOL**

Dehydration of alcohols; *t*-amyl alcohol and the related dimethyneopentylcarbinol. F. C. Whitmore and others. *bibliog Am Chem Soc J* 64:2970-2 D '42

DIMETHYLPEROXIDES

Trivalent carbon; unsymmetrical hexaaryl-dimethylperoxides. E. L. Buhle, Sister Mary Louis Whalen and F. Y. Wiselogle. *bibliog Am Chem Soc J* 65:584-6 Ap '43

DIMETHYL phenylindene

Action of methylmagnesium iodide on methyl α -phenylcinnamate and a synthesis of 1:1-dimethyl-2-phenylindene. C. F. Koelsch and P. R. Johnson. *Am Chem Soc J* 65:565-7 Ap '43

DIMETHYLPHENYL isovaleric acid

Nitration of β -polyalkylphenylisovaleric acids; β -[3,5-dimethylphenyl]-isovaleric acid. L. I. Smith and L. J. Spillane. *Am Chem Soc J* 65:282-9 F '43

DIMETHYLVALERAMIDE

Electrolytic reduction of amides; *N,N*-dimethylvaleramide and acetalanide. S. Swann, jr. *bibliog Electrochem Soc Trans* 84 (preprint 8):67-73 O '43

DIMETHYL yellow

Influence of addenda on the inversion of *i*-menthone with acids in benzene; the effect of solvents in chemical reactions. A. Weissberger. *Am Chem Soc J* 65:242-5 F '43

DIMETHYLENE-D-MANNITOL

2,3,4,5-Dimethylene-*D*-mannitol and a second dimethylene-*D*-mannitol. W. T. Haskins, R. M. Hann and C. S. Hudson. *Am Chem Soc J* 65:67-70 Ja '43

DIMOUT. See Lighting—War measures**DINEEN, Robert E.**

Head of N.Y. insurance department. *Comm & Fin Chr* 158:1515 O 14 '43

DINING. See Dinners and dining**DINING cars**

B. & O. redecorates colonial diners. *il diags Ry Age* 114:830-1 Ap 24 '43; Same. *Ry Mech Eng* 117:209-1 My '43

Blackout dining cars. *il Ry Age* 115:732 N 6 '43

OPA sets ceiling prices for diners. *Ry Age* 115:28 Jl 3 '43

DINING rooms

Freedom gained and space saved by combining living and dining areas. *il plans Arch Rec* 92:60-1 N '42

DINITROBENZENE

Colorimetric determination of trinitrobenzene in dinitrobenzene. M. L. Moss and M. G. Mellon. *bibliog Ind & Eng Chem Anal ed* 14:861-2 N 15 '42

DINITROCHLOROBENZENE

Polymerization of styrene in the presence of nitrobenzene, 2,4-dinitrochlorobenzene and nitromethane. C. C. Price and D. A. Durham. *bibliog Am Chem Soc J* 65:757-9 My '43

DINITRODIBENZANTHRONE

Dinitrodibenzanthrone. D. J. Bennett, R. R. Pritchard and J. L. Simonsen. *Chem Soc J* p31-3 Ja '43

DINITRODIBROMOFLUORESCIN

Methylene blue and other indicators in general acids; the acidity function. G. N. Lewis and J. Bigeleisen. *bibliog Am Chem Soc J* 65:1144-50 Je '43

DINITRONAPHTHALENE

Action of cuprous oxide on diazotized amines; reactions in solutions of various alcohols and organic solvents; preparation of 1:6-dinitronaphthalene. H. H. Hodgson and H. S. Turner. *Chem Soc J* p86-9 Mr '43

Monoreduction of dinitronaphthalenes in acid solution and of 1:5- and 1:6-dinitronaphthalene by aqueous sodium sulphide. H. H. Hodgson and H. S. Turner. *Chem Soc J* p318-19 JI '43

1:3:5:7-Tetranitronaphthalene and the isomeric tetranitro-derivatives obtained from 2:6-dinitronaphthalene by nitration. J. Chatt and W. F. Wynne. *Chem Soc J* p33-6 Ja '43

DINNERS and dining

Dishes and dining. C. Atherton. *Am Cer Soc Bul* 22:311-12 S 15 '43

DINNERWARE. See **Tableware****DIOLEFINS.** See **Olefins****DIONNE quintuplets**

Launching the Quint fleet. *Il Marine Eng* 48:188-90 Je '43

DIOXANE

Acidic ionization constant of glycine in dioxane-water solutions. H. S. Harned and C. M. Birdsall. *bibliog Am Chem Soc J* 65:54-7 Ja '43

Basic ionization constant of glycine in dioxane-water solutions. H. S. Harned and C. M. Birdsall. *bibliog Am Chem Soc J* 65:1117-19 Je '43

Crystalline complexes of arsenic, antimony and bismuth trihalides with dioxane. C. J. Kelley and P. A. McCusker. *bibliog Am Chem Soc J* 65:1307-9 JI '43

Kinetics of the decomposition of trinitrobenzoic acid in dioxane-water mixtures. D. Trivich and F. H. Verhoek. *Am Chem Soc J* 65:1919-24 O '43

Solvent polarization error and its elimination in calculating dipole moments. I. F. Halverstadt and W. D. Kumler. *bibliog Am Chem Soc J* 64:2988-92 D '42

Ternary system: dioxane-ethanol-water. C. H. Schneider and C. C. Lynch. *bibliog Am Chem Soc J* 65:1063-6 Je '43

Total and partial pressures of binary mixtures of dioxane in benzene at 25°. F. C. Teague and W. A. Felsing. *Am Chem Soc J* 65:485-6 Mr '43

DIOXANE sulfotrioxide

Sulfonation of methallyl chloride; mobility of the olefinic linkage in unsaturated sulfonic acids. C. M. Suter and F. G. Bordwell. *Am Chem Soc J* 65:507-17 Ap '43

DIP and strike. Determination of

Graphical and mechanical determination of the true dip from magnetically orientatable cores taken in crooked holes. G. D. Hobson. *diags Inst Pet J* 28:274-80 N '42

Inspection and analysis of formation samples; orientation of cores. L. C. Uren. *diag Pet Eng* 14:53, 55-6, 58 Ag '43

S.P. dipmeter. H. G. Doll. *il diags Pet Eng* (Ref annual) 14:17-19, 22, 24 JI 1 '43

Structural determinations from diamond drilling. J. B. Mertie, jr. *Econ Geol* 38:298-312 Je '43

Structure chart for solving geological and mining problems. H. R. Bramel. *Eng & Min J* 144:32-3 JI '43

DIPENTENE

Raman spectra of hydrocarbons; diisobutylene, cyclohexene, and dipentene. F. F. Cleveland. *bibliog J Chem Phys* 11:301-6 JI '43

DIPHENIC acid

Fluorenones and diphenic acids; establishment of authentic 1-bromo- and 4-bromo-fluorenones. E. H. Huntress, K. Pfister, 3d and K. H. T. Pfister. *bibliog Am Chem Soc J* 64:2845-9 D '42

DIPHENYL

Chlorinated naphthalenes and diphenyls. L. Greenburg. *bibliog Ind Med* 12:520-1; Discussion. 521-2 Ag '43

Halogenation of certain esters in the biphenyl series; the chlorination of 4-phenylphenyl benzoate and 4-phenylphenyl benzenesulfonate. C. M. S. Savoy and J. L. Abernethy. *Am Chem Soc J* 64:2719-20 N '42

Observations on the toxic effects resulting from exposure to chlorinated naphthalene and chlorinated phenyls with suggestions for prevention. H. Von Wedel, W. A. Holla and J. Denton. *bibliog Il Rubber Age* 53:419-26 Ag '43

Studies in the biphenyl series; the attempted chlorination of the acetate, benzoate and benzenesulfonate of 4-(4-chlorophenyl)-phenol: 2-chloro-4-(4-chlorophenyl)-phenol. C. M. S. Savoy and J. L. Abernethy. *Am Chem Soc J* 65:1464-5 Ag '43

DIPHENYLDIAPIC acid

Electrolytic reduction of cinnamic acid; a new preparative method for $\beta\gamma$ -diphenyldiadic acid. C. L. Wilson and K. B. Wilson. *bibliog Electrochem Soc Trans* 84 (preprint 4):25-35 O '43

DIPHENYLAMINE

Carotene; preliminary report on diphenylamine as a stabilizer for carotene. K. T. Williams, E. Bickoff and W. Van Sandt. *bibliog Science* 97:96-8 Ja 22 '43

DIPHENYLBUTANE

Bromination of diphenylalkanes and the preparation of some stilbene derivatives; $\beta\gamma$ -diphenyl-n-butane. H. J. Barber, R. Slack and A. M. Woolman. *Chem Soc J* p99-101 Mr '43

DIPHENYLCYCLOOCTANDIONE

Synthesis of 2,6-diphenylcyclooctandione-1,5. S. Wawzonek. *Am Chem Soc J* 65:839-43 My '43

DIPHENYLOXYINDANONE

Action of acids on 2,3-diphenyl-2,3-epoxyindanone. C. F. Koelsch and C. D. Le Claire. *Am Chem Soc J* 65:754-5 My '43

DIPHENYLETHANE

Bromination of diphenylalkanes and the preparation of some stilbene derivatives; $\alpha\beta$ -diphenylethane. S. Bance, H. J. Barber and A. M. Woolman. *Chem Soc J* p1-4 Ja '43

Synthesis of derivatives of diphenylethane related to materials occurring naturally; stilbene-2-acetic acid. S. Natelson and S. P. Gottfried. *Am Chem Soc J* 64:2962-3 D '42

DIPHENYLETHYLENE

Addition of metals to some phenylated olefins in liquid ammonia solution. H. Gilman and J. C. Bailie. *Am Chem Soc J* 65:267-8 F '43

Organostromium compounds. H. Gilman and others. *bibliog Am Chem Soc J* 65:268-70 F '43

DIPHENYLHEXANE

Effect of temperature on liquid-liquid equilibrium; benzene-acetone-water system and dodecane-1,6-diphenylhexane-furfural system. S. W. Eriggs and E. W. Comings. *il diags Ind & Eng Chem* 35:411-17 Ap '43

DIPHENYLINDENE

Thermal isomerization of some indene derivatives. C. F. Koelsch and P. R. Johnson. *Am Chem Soc J* 65:567-73 Ap '43

DIPHENYLNAPHTHALENE

Dialkylation of naphthalene; the synthesis of 2,6-diphenylnaphthalene. C. C. Price and A. J. Tomisek. *bibliog Am Chem Soc J* 65:439-40 Mr '43

DIPHENYLNITROGEN

Reversible photochemical processes in rigid media: the dissociation of organic molecules into radicals and ions. G. N. Lewis and D. Lipkin. *bibliog Am Chem Soc J* 64:2801-8 D '42

DIPHENYLOCTATETRAENE

Stereoisomeric diphenyloctatetraenes: L. Zechmeister and A. L. LeRosen. bibliog diag Am Chem Soc J 64:2755-9 D '42

DIPHENYLOSENIUM dibromide

Spectrophotometric determination of the dissociation constants of diphenylselenium dibromide and diphenylselenium diiodide. J. D. McCullough. bibliog Am Chem Soc J 64:2672-6 N '42

DIPHENYLOSENIUM diiodide

Spectrophotometric determination of the dissociation constants of diphenylselenium dibromide and diphenylselenium diiodide. J. D. McCullough. bibliog Am Chem Soc J 64:2672-6 N '42

DIPHENYLTHIOCARBAZONE. See Dithizone**DIPHENYL trichloroethane**

Army louse powder and other insecticidal possibilities of diphenyl trichloroethane from which it is being manufactured. Soap & San Chem 19:101, 103+ J '43

DIPHENYLENE

Benzocyclooctatetraenes: diphenylene and tetraphenylene. W. S. Rapson, R. G. Shutteworth and J. N. van Niekerk. Chem Soc J p326-7 J '43

DIPHOSGENE

Carboxylation; direct introduction of the chloroformyl (—COCl) group into alicyclic and aliphatic acid chlorides. M. S. Kharasch, K. Eberly and M. Kleiman. Am Chem Soc J 64:2975-7 D '42

DIPHTHERIA

Extent of immunization and case histories for diphtheria, smallpox, scarlet fever, and typhoid fever in 200,000 surveyed families in 28 large cities. S. D. Collins and C. Council. Pub Health Rep 58:1121-51 bibliog(p1150-1) J '43

Parental and familial factors in the acceptance of diphtheria and smallpox immunization. L. Breslow, P. R. Shalit and G. W. Anderson. Pub Health Rep 58:384-96 Mr '43

DIPLOMATIC and consular service

See also United States—Diplomatic and consular service

DIPOLE moment. See Electric moment**DIPYRIDYL**. See Bipyridine**DIRAC, Paul Adrien Maurice, 1902-**

Dirac's new method of field quantization. W. Pauli. Rs Mod Phys 15:175-207 J '43

DIRECTION finding apparatus

Automatic loop simulator for Link trainer halves training time; Morris type direction finder simulator. H. Davis. Instruments 16:198 Ap '43

Avigation by radio. L. LeKashman. II maps Radio N 30:19-21+ O '43

Instrument approach by radio direction finder. C. H. McIntosh. diags Aviation 42:224-5+ My; 206-7, 209+ Je '43

Instrument approach system. P. Caporale. II diags Radio N 29:121-5+ Je '43

Land influences in direction-finding with metric waves; abstract. E. Guyenot. Wireless Eng 19:578-9 D '42

Marine radio direction finders. R. Grafton. diags Radio N 30:28-9+ O '43

Visual direction finders. D. S. Bond. diags Electronics 16:140-3 N '43 (to be cont)

See also

Radio compass

DIRECTIONAL antennas. See Radio antennas—Directional antennas**DIRECTORIES**

See also

Ceramic industries—Petroleum refineries

Directories—Directories

Engineers—Directories—Radio apparatus industries—Directories

Machinery industry—Trade associations—Directories

Trade directories

Consult Public affairs information service for list of directories

DIRECTORS. See Bank directors; Corporations—Directors**DIRICHLET principle**. See Potential, Theory of**DIRIGIBLES**. See Airships**DIRKSEN bill**. See United States—Power administration, Office of (proposed)**DISABILITY insurance**. See Insurance, Disability; Insurance, Life—Disability provisions**DISABLED**

Physically handicapped; orthopedic impairment, major part of problem. B. D. Karpinos. Pub Health Rep 58:1573-92 bibliog(p1591-2) O 22 '43

See also

Handicapped

Rehabilitation

Better than before; program of rehabilitation of handicapped. L. Moholy-Nagy. II Tech R 48:21-3+ N '43

Disabled; scheme for reemployment. Economist 144:100-1 Ja 23 '43

FCD. Published monthly by Federation of crippled & disabled, inc., 163 W. 57th st, New York

First hundred thousand; civilian air raid casualties. Economist 143:532-3 O 31 '42

Handicapped workers can help beat labor shortage. H. R. Wallace. II Inland Ptr 112:61-3 O '43

Industrial medicine, rehabilitation and the war effort. E. P. Chester. Ind Med 12:27-8 Ja '43

Late rehabilitation of the injured; a survey of seven years' experience in an industrial clinic; abstract. A. Miller. J Ind Hygiene 25:sup166-7 O '43

Man salvage; vocational rehabilitation in Connecticut. E. P. Chester. Nat Safety N 47:34, 36 Ja '43

National rehabilitation advisory council. Comm & Fin Chr 158:1711 O 28 '43

On its own legs; prosthetics industry sees \$100,000,000 year in artificial limbs and braces. II Business Week p34+ Ag 7 '43

Rehabilitation. Ind Med 12:111-12 F '43

Rehabilitation and resettlement of disabled persons in Great Britain. Int Labour R 48:43-55 J '43

Rehabilitation; recent developments in Connecticut. J. H. Biram. Ind Med 12:146-8 Mr '43

We hire men and women who are physically handicapped; Minneapolis artificial limb company. R. Trautman. II Factory Management 101:116-17+ Ja '43

See also

Soldiers, Disabled—

Rehabilitation

DISACCHARIDES

Sorbitol glycosides and 2,3,4,5,6-O-penta-methyl sorbitol. M. L. Wolfson and T. S. Gardner. bibliog Am Chem Soc J 65:750-2 My '43

Synthesis of certain disaccharide acetates in the mannose series. E. A. Talley, D. D. Reynolds and W. L. Evans. bibliog Am Chem Soc J 65:575-82 Ap '43

See also

Glucosido arabinose

DISASTERS

Address; civilian defense aid in local disasters. J. M. Loughlin. N E Water Works Assn J 57:83-90 Je '43

Historic accidents and disasters (cont). II diags plans Engineer 174:352-4, 372-4, 432-3, 435, 452-5; 175:84-8; 176:238-9+, 258-9 O 30-N 6, 27-D 4 '42, Ja 29, S 24-O 1 '43

See also

Air raids

DISCHARGED soldiers. See Soldiers, Discharged**DISCOUNT**

See also

Interest

Rates

Federal reserve bank discount rates. Published in monthly numbers of Federal reserve bulletin

Money rates in foreign countries; discount rates of central banks. Published in monthly numbers of Federal reserve bulletin

DISCOUNT, Cash

Psychology of credit letters; abuse of net terms. H. M. Sommers. Credit & Fin Management 45:10-11 Ag '43

DISCOUNT, Cash—Continued

Psychology of credit letters; discussion of discount abuses. H. M. Sommers. Credit & Fin Management 46:7-10+ J1 '43

DISCOUNT, Trade

See also

Price cutting
Price discrimination
Price policies

DISCOUNT house. See Retail trade

DISCOVERIES in science. See Scientific research

DISCRIMINANT function

Use of the discriminant function for more than two groups; estimating age class of deer. B. B. Day and M. M. Sandomire. *Bibliog Am Stat Assn J* 37:461-72 D '42

DISCUSSION

Manual for discussion-type meetings. Mech Eng 65:523-4 J1 '43

See also

Debates and debating

DISEASES

See also

Anemia
Arthritis
Beriberi
Cancer
Deficiency diseases
Diabetes
Epidemics
Heart—Diseases
Heredity of disease
Infantile paralysis
Infectious diseases
Influenza
Leprosy
Lungs—Dust diseases
Malaria
Meningitis
Mental diseases
Mortality
Pneumonia
Public health
Rheumatic fever
Rocky Mountain spotted fever
Sickness
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Thrombosis
Trichina and trichinosis
Tuberculosis
Typhoid fever
Typhus fever
Venereal diseases
War and disease
Weil's disease
Whooping cough
Worms, intestinal and parasitical

Statistics

Disabling morbidity among industrial workers, third quarter of 1942, with a note on the occurrence of the respiratory diseases, 1933-42. W. M. Gafafer. *Pub Health Rep* 58:232-4 F 5 '43

Morbidity and mortality from specific causes during 1942 and recent preceding years. *Pub Health Rep* 58:730-44 My 7 '43

Nation-wide study of the bacterial etiology of the pneumonias. A. S. Rumreich and others. *map Pub Health Rep* 58:121-35 Ja 22 '43

Sickness absenteeism among industrial workers, first quarter of 1943, with an inquiry into the occurrence of the respiratory diseases, 1934-43. W. M. Gafafer. *Pub Health Rep* 58:1273-7 Ag 20 '43

See also

Cancer—Statistics
Mortality—Statistics
Sickness

DISEASES, Industrial

Co-operation between chemist and doctor in factory welfare. F. S. Fowweather. *Chem & Ind* 61:524-6 D 26 '42

Industrial epididymitis and epididymo-orchitis. M. L. Amdur. *Ind Med* 12:371-3 Je '43

Occupational disease considerations. E. R. Hayhurst. *bibliog Ind Med* 12:443-6 J1 '43

Occupational disease is main problem of future. H. D. Sayer. *Nat Underw* 47:17+ Ja 14 '43

Studies on strains of aerobacter cloacae responsible for acute illness among workers using low-grade stained cotton. B. H. Caminita and others. *bibliog Pub Health Rep* 58:1165-83, pl 1-2 J1 30 '43

Trends in occupational disease. I. Gray. *bibliog Ind Med* 12:202-6 Ap '43

See also

Heat cramps
Lead poisoning
Lungs—Dust diseases
Poisons, Industrial
Sickness
Silicosis
Skin—Diseases
Workmen's compensation

DISHWASHING

Abrasive cleaners for use on pots and pans. *Il Soap & San Chem* 19:30-1+ Ap '43

Army's government issue laundry soap. *Il Soap & San Chem* 19:28-9+ Ja '43

DISHWASHING machines

Disinfection of dishes; abstract. *Soap & San Chem* 19:69 J1 '43

DISINFECTION and disinfectants

Acclimatization of bacteria to disinfectants used in the paper and paperboard industry. J. W. Appling and E. F. Shema. *Il Paper Tr J* 117:101-4 S 30 '43; Same cond. *Paper Ind* 25:906, 908-9 N '43

Aerosol bactericides; abstract. M. A. Lesser. *Soap & San Chem* 19:121 J1 '43

Antibacterial effect of enzymatic xanthine oxidation. F. Lipmann and C. R. Owen. *bibliog Science* 98:246-8 S 10 '43

Anti-bacterial substances from moulds; puberulic acid, $C_8H_{16}O_6$ and puberulonic acid, $C_8H_{14}O_6$, metabolic products of a number of species of penicillium. A. E. Oxford, H. Raistrick and G. Smith. *Chem & Ind* 61:485-7 N 23 '42

Antibacterial substances; penicillin; contribution from the Research division, Chas. Pfizer & co. *bibliog Il Chem & Eng N* 21:1430-4+ S 10 '43

Bacterial inhibition by metabolite analogues; reactions and antibacterial properties of p-diazine di-N-oxides. H. McIlwain. *Chem Soc J* p322-5 J1 '43

Bactericidal detergents; abstract. A. K. Epstein and others. *Soap & San Chem* 19:74 N '43

Chemical sterilization of the air; abstract. B. H. Jennings and E. Bigg. *Science* 98:sup10+ O 15 '43

Dehydrating effect of disinfectants on egg-albumin solutions. A. Steigmann. *Soc Chem Ind J* 61:178-80 N '42

Destruction of bacteria in the commercial laundry. L. W. Wright. *Il Soap & San Chem* 19:31-3+ Ag '43

Disinfectants and antiseptics; a summary of scientific advances during 1942. E. G. Klarman. *bibliog (74 references) Soap & San Chem* 19:97+ Ja '43

Disinfectants for the armed forces; disinfection of small quantities of water by individual soldier in the field. G. F. Reddish. *Soap & San Chem* 19:101+ Ag '43

Effect of propamidine on bacterial growth. H. I. Kohn. *bibliog Science* 98:224 S 3 '43

Effect of propamidine on bacterial metabolism. F. Bernheim. *Science* 98:223 S 3 '43

Germicidal quaternary ammonium salts in dilute solution; a colorimetric assay method. M. E. Auerbach. *bibliog, Ind & Eng Chem Anal ed* 15:492-3 Ag 15 '43

How disinfectants may act; a mechanism of absorption. D. P. Evans and A. G. Fishburn. *Chem Age (Lond)* 49:293 S 18 '43

Inoculated penicillin dressing. G. H. Robinson and J. E. Wallace. *Science* 98:329-30 O 8 '43

Liquid sabotage; Lukens plant disinfected after flood. H. Armand. *Il Safety Eng* 85:20-2 Ja '43

Market outlook for disinfectant materials. J. Varley. *Soap & San Chem* 19:107 J1 '43

Synthetic phenol disinfectants. J. Varley. *Soap & San Chem* 19:103+ Ag '43; Same abr. *Oil Paint & Drug Rep* 143:32C-32D Je 14 '43

Tests show bactericidal power of ultra-violet. D. W. Johnson and C. G. Harrel. *Il Food Ind* 15:92-3 J1 '43

See also

Antiseptics
Chlorine
Formaldehyde
Fumigants
Fungicides
Insecticides
also National association of insecticide and disinfectant manufacturers

Specifications

Disinfectant specifications. E. G. Klarman. *Soap & San Chem* 19:97, 99+ J1 '43; Excerpts. *Oil Paint & Drug Rep* 143:32C Je 14 '43

Testing

Disinfectant testing. C. M. Brewer. *bibliog Soap & San Chem* 19:101, 103+ Ap '43

DISINFECTION of seed. See Seed disinfection

- DISINTEGRATION** of mesotrons. See Mesotrons
- DISMISSAL** wage. See Wages—Dismissal wage
- DISPENSARIES, Industrial**
Industrial dispensary. E. B. Lamb. *Il Ind Med* 12:270-4 My '43
- DISPENSERS** (for powders)
Types of paper dispensers for powders. *Il Mod Packaging* 16:58-61+ Je '43
- DISPERSING** agents
Pozzolith; cement-dispersing, water-reducing agent for concrete. *Il Am Concrete Inst J* 14:358-62 F '43
Soap, an important dispersing agent. G. Leffingwell. *bibliog* (56 references) *Il Chem Ind* 52:337-40 Mr '43
Some observations on durability; use of catalyst-dispersing-agent TDA. H. L. Kennedy. *Am Concrete Inst J* 14:344-5 F '43
Soybean protein dispersions as printing ink vehicles. A. F. Schmutzler and D. F. Othmer. *bibliog il Ind & Eng Chem* 35:1196-1202 N '43
What you can use; materials suitable for various purposes in processing industries; dispersing agents for emulsifying soap. *Oil Paint & Drug Rep* 144:74 S 6; 52 N 29; 62 D 13 '43 (to be cont)
- DISPERSION**
Pigment dispersion with surface-active agents. E. K. Fischer and C. W. Jerome. *bibliog il Ind & Eng Chem* 35:1336-43 Mr '43
Soap's role in the plastics industry. G. Leffingwell. *bibliog Mod Plastics* 21:87-8+ O '43
Soybean protein dispersions as printing ink vehicles. A. F. Schmutzler and D. F. Othmer. *bibliog il Ind & Eng Chem* 35:1196-1202 N '43
See also
Colloids
Particles
Wetting agents
- DISPERSION, Molecular**
Molar dispersion and refraction of free and bonded ions. N. Bauer and K. Fajans. *bibliog Am Chem Soc J* 64:3023-34 D '42
- DISPERSION of rays**
Dispersion of silicate glasses as a function of composition. M. L. Huggins, K. H. Sun and D. O. Davis. *bibliog Opt Soc Am J* 32:635-50 N '42
Measurement of anomalous dispersion in opaque dielectrics. A. W. Lawson. *diags R Sci Instr* 14:38-43 F '43
Optical crystallographic studies with the polarizing microscope; axial dispersion with change of sign; other dispersion measurements. W. M. D. Bryant. *bibliog il Am Chem Soc J* 65:96-102 Ja '43
Optical crystallographic studies with the polarizing microscope; ellipsoidal dispersion in the pirates of various amines. J. Mitchell, Jr. and W. M. D. Bryant. *bibliog il Am Chem Soc J* 65:128-37 F '43
- DISPERSOIDS**. See Colloids
- DISPLAY of merchandise**
All-American package competition award; Garden City publishing co. counter display merchandiser. *Il Mod Packaging* 16:108+ Ap '43
Impulse displays are keynote of Ferry-Morse victory garden drive. D. Ferry. *Il Sales Management* 52:70+ Ap 15 '43
More emphasis on household aids; Bellman super markets in Toledo. *Il Mod Packaging* 16:78+ Ag '43
News story at point of sale. *Il Mod Packaging* 16:82-3+ Ja '43
No retreat for brand names at point of sale; replies to questionnaire. *Il Mod Packaging* 16:81-5, 118+ Je '43
Of art, imagination and madness: these displays stop the crowds; Staples-Smith design for retailers, manufacturers and publishers. *Il Sales Management* 52:22-3 F 15 '43
Pre-packs for rugs; fiber tubes, display cases. *Il Mod Packaging* 16:158, 160, 162 Ap '43
Retailers turn to self-service: what are you doing about it? J. C. Cumming. *Il Sales Management* 52:64-6 Ap 15 '43
Specific jobs displays can do. E. T. Sajous. *Il Mod Packaging* 16:64-5+ Mr '43
- Two kinds of sunshine get together; joint display of Loose-Wiles biscuit co. and Florida citrus commission. *Il Mod Packaging* 16:63 Mr '43
See also
Exhibits, Traveling
Show windows
- DISPOSALL**. See Refuse grinders
- DISPROPORTIONATION** reaction. See Chemical reaction
- DISSERTATIONS, Academic**
Doctorates in science. E. A. Henry. *Science* 97:333-5 Ap 9 '43
- DISSOCIATION**
Addition compounds of trimethylamine with boron fluoride and its methyl derivatives. A. B. Burg and A. A. Green. *Am Chem Soc J* 65:1838-41 O '43
Disproportionation of *o*-tolylidiphenylmethyl. P. W. Selwood and R. F. Preckel. *bibliog diags Am Chem Soc J* 65:895-9 My '43
Dissociation of hexaerythanes; equilibria involving mixed ethanes. C. M. Himel and M. B. Mueller. *Am Chem Soc J* 65:1654-5 Ag '43
Dissociation pressures of compounds of ammonia and trideuterammonia with some metallic salts. A. B. Hart and J. R. Partington. *diags Chem Soc J* p104-18 Mr '43
Ionization and dissociation by electron impact; butene-1. D. P. Stevenson. *Am Chem Soc J* 65:209-12 F '43
Ionization and dissociation by electron impact; isobutylene, propane, and propylene. D. P. Stevenson and J. A. Hipple. *bibliog Am Chem Soc J* 64:2769-72 D '42
Ionization and dissociation by electron impact; normal propyl chloride and tertiary butyl chloride. D. P. Stevenson and J. A. Hipple. *bibliog Am Chem Soc J* 64:2766-8 D '42
Ionization and dissociation by electron impact; the methyl and ethyl radicals. J. A. Hipple and D. P. Stevenson. *bibliog diags Phys R* 63:121-6 F 1 '43
Reversible photochemical processes in rigid media: the dissociation of organic molecules into radicals and ions. G. N. Lewis and D. Lipkin. *bibliog Am Chem Soc J* 64:2801-8 D '42
Sainte-Claire Deville hot-cold tube and some of its applications. R. C. Young. *bibliog J Chem Educ* 20:378+ Ag '43
Second dissociation constant of *p*-phenolsulfonic acid and pH values of phenolsulfonate-chloride buffers from 0° to 60° C. R. G. Bates, G. L. Siegel and S. F. Acree. *bibliog J Research Nat Bur Stand* 31:205-23 O '43
- DISSOCIATION, Electrolytic**. See Ionization, Electrolytic
- DISSOLUTION**. See Solution (chemistry)
- DISTANCES**
See also Insurance, Liability—Policies—Distance limiting clauses
- DISTILLATE** wells. See Gas, Natural—Distillate wells
- DISTILLATION**
Alcohol and acetone by solvent extraction; heat requirements of distillation and of combined distillation and extraction processes. D. F. Othmer and R. L. Ratcliffe, Jr. *il diags Ind & Eng Chem* 35:798-805 Jl '43
Binary systems involving ethylene chlorohydrin; vapor-liquid equilibria. H. B. Snyder and E. C. Gilbert. *bibliog Ind & Eng Chem* 34:1519-21 D '42
Composition of vapors from boiling binary solutions. D. F. Othmer. *bibliog il diags Ind & Eng Chem* 35:614-20 My '43
Destructive distillation of bagasse. D. F. Othmer and G. A. Fernstrom. *bibliog il diags Ind & Eng Chem* 35:312-17 Mr '43
Destructive distillation of lignocellulose. R. Katzen, R. E. Muller and D. F. Othmer. *bibliog diags Ind & Eng Chem* 35:302-5 Mr '43
Distillation problems in dry cleaning. Textile Col 65:317-18 Jl '43
Equilibria in ethanol-water system at pressures less than atmospheric. A. H. Beebe, Jr. and others. *Ind & Eng Chem* 34:1501-4 D '42

DISTILLATION—Continued

Isopropyl alcohol-water system; plate factors in fractional distillation of isopropyl alcohol-water system. W. M. Langdon and D. B. Keyes. *bibliog Ind & Eng Chem* 35: 464-9 Ap '43

Molecular distillation. K. C. D. Hickman. *U Chem & Eng N* 20:1561-2 D '42

Molecular distillation; theory apparatus and application. W. F. Withers. *bibliog Can Chem & Process Ind* 26:667-8+ N '42

Natural gas analysis by fractional distillation. G. M. Stearns. *diag Oil & Gas J* 41:195 Ja 28 '43

Principles of stripping operations; particularly steam distillation. H. J. Garber and F. Lerman. *bibliog Am Inst Chem Eng Trans* 39:113-31 F '43

Sulfonation of aniline; application of partial-pressure distillation. J. J. Jacobs, Jr., D. F. Othmer and A. Hokanson. *Ind & Eng Chem* 35:321-3 Mr '43

Sulfonation of naphthalene; application of partial-pressure distillation. D. F. Othmer, J. J. Jacobs, Jr. and W. J. Buschmann. *bibliog diag Ind & Eng Chem* 35:326-9 Mr '43

See also

Alcohol	Evaporation
Brandy	Petroleum distillation
Coal distillation	Petroleum refining
Distilleries	Water, Distilled
Essential oils	

Tables, calculations, etc.

Batch rectification; effect of fractionation and column holdup. R. Edgeworth-Johnstone. *bibliog II Ind & Eng Chem* 35:407-10 Ap '43

Extension of H.T.U. method to plate column distillation. J. A. Gerster, J. H. Koffolt and J. R. Withrow. *bibliog II diag Am Inst Chem Eng Trans* 39:37-55; Discussion. 55-62 F '43

Nomograph for finding k in Smoker's equation for binary distillation. C. H. Bisesi. *Pet Refiner* 22:86-7 Ag '43

See also

Distillation apparatus—Design

DISTILLATION apparatus

Advantages of large diameter crude still towers. E. F. Brummerstedt. *II diag Pet Refiner* 22:91-2 O '43

Central fractionating plant. F. H. Love. *flow diag II Pet Eng* 14:174, 176, 178 S '43

Determination of high pressure vapor-liquid equilibria; the vapor-liquid equilibrium of benzene-toluene. J. Griswold, D. Andre and V. A. Klein. *bibliog diags Am Inst Chem Eng Trans* 39:223-40 Ap '43; Same. *Pet Refiner* 22:99-106 Je '43

Distilling apparatus for ships' lifeboats. G. Keenan. *diags Engineer* 176:26-8 J 9 '43

Efficient low-holdup laboratory column. J. R. Bower, Jr. and L. M. Cooke. *bibliog diags Ind & Eng Chem Anal ed* 15:290-3 Ap 15 '43

Equilibrium still for miscible liquids; data on ethylene dichloride-toluene and ethanol-water. C. A. Jones, E. M. Schoenborn and A. P. Colburn. *bibliog II diag Ind & Eng Chem* 35:666-72 Je '43

Fractional-distillation microapparatus. C. Tiedcke. *bibliog diag Ind & Eng Chem Anal ed* 15:81-2 Ja 15 '43

Glass rectifiers now being used for industrial alcohol production. *Sci Am* 169:132 S '43

High-vacuum rectifying column employing multiple redistillation. R. M. Schaffner, J. R. Bowman and J. Coull. *diag Nat Pet N* 35 pt 2:R272-4, R276 Je 2 '43

Home-made still purifies mercury. *diag Elec W* 119:1974 Je 12 '43

Hot reflux to still improves plant operation. *flow diag II Oil & Gas J* 42:68-9 Ag 19 '43

How to drink sea water; Herron's safety-stills. *Fortune* 28:68, 74 Ag '43

Improved steam-distillation apparatus. C. V. Bowen and W. F. Barthel. *diag Ind & Eng Chem Anal ed* 15:596 S 15 '43

Ingenuity and scrap solve still problem. H. F. Bjork. *II Chem Ind* 53:49 JI '43

Jenkins stills become steam boilers. *II Oil & Gas J* 42:48 O 28 '43

Lone Star's central fractionator concentrates special products from natural gasoline. A. L. Foster. *flow chart II Oil & Gas J* 42:74, 76, 78+ Ag 26 '43

Molecular still designed for small charges. J. R. Matchett and J. Levine. *diag Ind & Eng Chem Anal ed* 15:296 Ap 15 '43

Molecular still of new design. F. W. Quackenbush and H. Steenbock. *bibliog II diags Ind & Eng Chem Anal ed* 15:465-70 JI 15 '43

Overall plate efficiency of commercial hydrocarbon fractionating columns as a function of viscosity. H. G. Drickamer and J. R. Bradford. *bibliog Am Inst Chem Eng Trans* 39:319-57 Je '43; Same. *Pet Refiner* 22:105-18 O '43; Same *abr. Nat Pet N* 35 pt 2: R378-82 Ag 4 '43; Discussion. *Am Inst Chem Eng Trans* 39:357-60 Je '43

Problem of the high pressure stills; raising temperature of steam supply. *diag Power En Eng* 47:95 S '43; Solutions. *diags* 47:94-6 N '43

Rectifying columns packed with glass fibers speed up production of ethyl alcohol. *Franklin Inst J* 236:234 Ag '43

Simple water still. T. C. Herndon. *II J Chem Educ* 20:291 Je '43

Studies of liquid holdup in packed towers. E. W. Jesser and J. C. Elgin. *bibliog diags Am Inst Chem Eng Trans* 39:277-98 Je '43

Tilting arc flow divider suitable for reflux ratio control. S. Palkin and S. A. Hall. *bibliog diag Ind & Eng Chem Anal ed* 14: 901-2 N 15 '42

Towers required in superfractionating for 100-octane gasoline. W. L. Nelson. *Oil & Gas J* 42:31+ JI 1 '43

Tube heater-fractionating tower combination. R. G. Lovell. *II Pet Eng* 14:140+ S '43

Vacuum distillation equipment for volatile solids. L. Bolstad and R. E. Dunbar. *diags Ind & Eng Chem Anal ed* 15:464 JI 15 '43

Vacuum sublimation and molecular distillation apparatus. B. Riegel, J. Beiswanger and G. Lanzl. *II diags Ind & Eng Chem Anal ed* 15:417-21 JI 15 '43

Cost

Cost of pressure vessels and pressure fractionating columns. F. C. Fowler and G. G. Brown. *Am Inst Chem Eng Trans* 39:241-54 Ap '43; Same. *Pet Eng (Ref annual)* 14: 190, 192-4, 196 JI 1 '43

Design

Design calculations for plate columns. E. M. Baker and R. A. Lindsay. *Ind & Eng Chem* 35:418-21 Ap '43

Effect of vapor load on plate efficiency in fractionating columns. G. G. Brown and F. J. Lockhart. *bibliog Am Inst Chem Eng Trans* 39:63-73 F '43; Same. *Nat Pet N* 35 pt 2:R140-3 Mr 3 '43; Same. *Pet Eng (Ref annual)* 14:229-30, 232, 234 JI 1 '43; Discussion. *Am Inst Chem Eng Trans* 39:73-5 F '43

Extension of H.T.U. method to plate column distillation. J. A. Gerster, J. H. Koffolt and J. R. Withrow. *bibliog II diags Am Inst Chem Eng Trans* 39:37-55; Discussion. 55-62 F '43

High-vacuum rectifying column employing multiple redistillation. R. M. Schaffner, J. R. Bowman and J. Coull. *diag Am Inst Chem Eng Trans* 39:77-91; Discussion. 91-2 F '43

Liquid capacity of bubble cap plates. A. J. Good, M. H. Hutchinson and W. C. Rousseau. *II diags Ind & Eng Chem* 34:1445-52 D '42; Same. *Pet Eng (Ref annual)* 14:301-2, 304-8 JI 1 '43

Safe design for stills with open firing. W. J. Shore. *II Chem & Met Eng* 50:118 Ap '43

Manufacture

Design and construction of a 35-ft diameter arc-welded vacuum fractionating tower. E. F. Brummerstedt. *II diags Nat Pet N* 35 pt 2:R74-6, R78-80, R82-3 F 3 '43

Fractionating tower fabricated from tank steel. E. Sterrett. *II Pet Refiner* 22:90-2 Ja '43

DISTILLED water. See Water, Distilled

DISTILLERIES

Ethyl alcohol operation by Trenton valley distillers corporation. *il Chem & Eng* N 20: 1690-1 D 25 '42

Granular wheat flour increases alcohol yields; Park & Tilford distillery. *R. T. Handren. il Chem Ind* 53:350-2 S '43

Modern distillery; pictured flow sheet. *Chem & Met Eng* 49:126-3 N '42

New alcohol process cuts costs; Balls-Tucker process, Park & Tilford's Brownsville distillery, R. L. Taylor. *il diag Chem Ind* 53:53-5 J1 '43

Water for grain alcohol distilleries. C. S. Boruff, B. Smith and M. G. Walker. *flow diag Ind & Eng Chem* 35:1211-13 N '43

See also

Brandy

Employees

Training of women for the-chemical industries. J. Coull. *Chem & Eng* N 21:1707-8 O 25 '43

DISTILLERS corporation-Seagrams, Ltd.

Acquisition of Frankfort plant, public financing planned. *Comm & Fin Chr* 158:1730 N 1 '43

DISTILLING industries

Big liquor suit; Cummins distilleries corp. *Business Week* p99 Je 5 '43

Food and drink; National Distillers buying into Sardi, a firm specializing in dehydration. *Business Week* p67-8 S 4 '43

See also

Alcohol industry

Whisky

Finance

Distillers face involuntary gamble. S. B. Self. *Barron's* 23:1 Mr 29 '43

Insurance requirements

Issue new market value clause for whisky in Kentucky. *Nat Underw* 47:1+ S 16 '43; *Spectator* (Property ed) 9:33 N 4 '43

May adjust whiskey dispute; companies willing to pay losses on market value basis. *Weekly Underw* 148:677+ Mr 27 '43

OPA bulk whiskey price ceiling creates problems. *Nat Underw* 47:1+ Mr 11 '43

Whisky insurance total increases. *Weekly Underw* 148:137+ Ja 9 '43

Securities

Appraising the liquor industry in war and peace; position of leading stocks. H. N. Bulow. *il Mag of Wall St* 71:588-90 Mr 6 '43

Soft drinks versus liquor stocks. H. F. Travis. *Mag of Wall St* 72:93-5+ My 1 '43

Varying outlook for liquors; position of leading stocks. G. W. Mathis. *Mag of Wall St* 72:417+ J1 24 '43

DISTORTION meter. See Radio Instruments**DISTRIBUTION (economics)**

Civilian funnel; emerges as crux of consumer problem. *Business Week* p17-18 O 2 '43

Distribution in future will be different! J. P. Callaway. *Ptr Ink* 204:20, 98 S 10 '43

Distribution policy poser sent to Senate small business group. *Oil Paint & Drug Rep* 142: 3+ D 28 '42

Estimates of distributed income. M. Hoffenberg and M. S. Lewis. *R Econ Stat* 25:113-23 My '43

Further restrictions on travel, shipments foreseen by Nelson. *Comm & Fin Chr* 156:2327 D 31 '42

Middlemen's stake in hold-the-line. *Barron's* 23:7 Ap 19 '43

Road ahead in distribution. J. F. Dewhurst. *Comm & Fin Chr* 158:1398+ O 7 '43

See also

Chain stores

Cooperation

Market surveys
Marketing

Cost

Nature of marketing costs. J. E. Jeuck. *J Business* 16:7-13 Ja '43

Profit planning for the small business. C. J. Whipple. *il Am Business* 13:13-16+ Je '43

DISTRIBUTIVE education. See Retail trade—Study and teaching**DISTRICT bank, limited**

Statement to the shareholders. R. N. Barclay. *Economist* 144:125-6 Ja 23 '43

DISULFIDES

Physical properties and chemical constitution; alkyl sulphides, disulphides, sulphites, sulphates, and orthophosphates. A. I. Vogel and D. M. Cowan. *Chem Soc J* p16-24 Ja '43

DITHIZONE

Dithizone method for the rapid determination of copper. G. H. Bendix and D. Grabenstetter. *bibliog Ind & Eng Chem Anal* ed 15:649-52 O 15 '43

Improved method for the preparation of dithizone (diphenylthiocarbazon). J. H. Billman and E. S. Cleland. *Am Chem Soc J* 65:1300-1 J1 '43

Microdetermination of lead by dithizone with an improved lead-bismuth separation. K. Bambach and R. E. Burke. *bibliog Ind & Eng Chem Anal* ed 14:904-7 N 15 '42

Microdetermination of mercury in organic compounds. H. W. Eckert. *bibliog Ind & Eng Chem Anal* ed 15:406-7 Je 15 '43

Photometric routine estimation of traces of lead by dithizone; application to materials used in the manufacture of cosmetics. J. Schultz and M. A. Goldberg. *bibliog Ind & Eng Chem Anal* ed 15:155-8 F 15 '43

Preparation of diphenylthiocarbazon and diphenylthiocarbazon (dithizone). O. Grummitt and R. Stickle. *bibliog Ind & Eng Chem Anal* ed 14:953-4 D 15 '42

Soap which indicates the presence of mercury fulminate. H. S. Mason and J. Botvinick. *bibliog Pub. Health Rep* 58:1183-6 J1 30 '43

Specific tests for mercury with dithizone membrane papers. A. Steigmann. *Soc Chem Ind J* 62:43-4 Mr '43

DITTUS-BOELTER equation

Nomograph of Dittus-Boelter equation. C. J. Ryant, Jr. *Ind & Eng Chem* 35:1187-8 N '43

DIVERSIFICATION in industry

And now soy oil; diversification program. *Business Week* p30+ O 30 '43

Diversification of war products at Minneapolis-Moline plant. J. Geschelin. *il Automotive & Aviation Ind* 89:18-24+ N 1 '43

Facts behind the Curtiss Candy program of line expansion. O. Schnering. *il Sales Management* 52:24-6 N 1 '43

DIVERSITY factor

After-diversity demand. P. Schiller. *Elec R (Lond)* 132:475-7 Ap 9 '43

Diversity factors; estimating the capacity of rising mains. E. E. Jolly. *il diags Elec R (Lond)* 133:330-4 S 10 '43

DIVIDEND notices

Dividend notices as institutional advertisements. W. Smith. *il Ptr Ink* 205:22-3+ O 22 '43

DIVIDENDS

Clues to dividends and prices, from third quarter earnings. H. F. Travis. *Mag of Wall St* 73:86+ O 30 '43

Current federal tax notes; stock dividend of common stock on common stock not taxable. P. G. Evans. *Trusts & Estates* 76: 293-4 Mr '43

Dividend limitation. *Economist* 145:212 Ag 14 '43

Dividend paid in stock not taxable by government. Supreme Court rules. *Comm & Fin Chr* 157:1022 Mr 18 '46

Dividends. Published in weekly Monday numbers of Commercial & financial chronicle

Dividends hold. *Business Week* p103+ F 20 '43

High court to review stock dividend tax. *Comm & Fin Chr* 156:2165 D 17 '42

Higher earnings in 1943; what about higher dividends? W. Gates. *Mag of Wall St* 72: 392-4+, 456-7, 493-4 J1 24-Ag 7 '43

Investment trusts; dividend policy. *Comm & Fin Chr* 156:2151+ D 17 '42

Legislation and litigation in re stock dividends. W. L. Ashbaugh. *J Account* 76:11-13 J1 '43

Low priced dividend-payers. *Mag of Wall St* 71:487, 545 F 6-20 '43

DIVIDENDS—Continued

Mid-year 1943 re-appraisals of earnings and dividend forecasts. *il* Mag of Wall St 72: 405-17+, 463-75+, 521-9+, 571-81+ *Jl* 24-S 4 '43

Monthly dividend payments, 1941-42. T. Smith. Survey of Cur Business 22:26-8 N '42
 Moratorium on dividends? Trusts & Estates 77:350-1 O '43

NYSE common stock dividends down 1.5% in first quarter. *Comm & Fin Chr* 157:2270 *Je* 17 '43

NYSE common stock dividends up slightly in first half of 1943. *Comm & Fin Chr* 158: 508 Ag 5 '43

NYSE revises policy on stock dividends. *Comm & Fin Chr* 158:1704 O 28 '43

1943 special re-appraisals of earnings and dividend forecasts. *Mag of Wall St* 71:471-84+, 533-43, 583-97+, 637-50+ *F* 6-Mr 20 '43

Paying dividends in arrears. J. K. Lasser. *J Account* 75:531 *Je* '43

Raising bank dividend rates now would be mistake. L. Fraser. *Comm & Fin Chr* 157: 373 *Ja* 28 '43

Recent trends in corporate profits; dividend payments. T. Smith and R. Sherman. Survey of Cur Business 23:24-7 *Je* '43

Relation of officers' remuneration to company dividends. *Mag of Wall St* 71:701+ *Ap* 3 '43

Stockholder wins; Supreme court refuses to sustain tax on prorata stock dividend. *Business Week* p98 *Mr* 6 '43

Stocks; cash dividend payments and rates, 1938-1941. Survey of Cur Business 1942 Sup p84-5 [supplemented in monthly numbers]

Stocks in line for higher dividends. O. Ely. *Mag of Wall St* 71:166-7+ *N* 28 '42

Stocks in line for year-end dividends. J. C. Clifford. *Mag of Wall St* 73:14-15+ *O* 16 '43

Supreme court rules dividends paid in stock are not subject to federal income tax. *Comm & Fin Chr* 157:1392 *Ap* 15 '43

Taxability of stock dividends; U.S. Supreme court decisions. J. L. Dohr. *J Account* 75: 466-8 *My* '43

See also

Corporations—Finance Securities Stocks

DIVIDING (machine work)

See also

Graduating

DIVING, Submarine

Diving amplifier. D. W. Gellerup. *il* *diag* Electronics 16:170+ *S* '43

DIVISION of words. See Word division**DIXIE highway**

New bridges on the Dixie highway. *il* *diags* Eng N 131:469-71 *S* 23 '43

DOANE, Rennie Wilbur, 1871-1942

Sketch. J. M. Miller. *Science* 98:273-4 *S* 24 '43

DOBSON, Gordon Miller Bourne, 1889-

Rumford medal award. H. Dale. *Science* 97: 29 *Ja* 8 '43

DOCKERS. See Longshoremen**DOCKS**

Dock construction in Iran. D. B. McKinley. *il* *diag* Civil Eng 13:522-4 *N* '43

See also

Coal docks
 Dry docks
 Piers

DOCOSAHEXAENOIC acid

Course of autooxidation reactions in polyisoprenes and allied compounds; observations on fish-oil acids. E. H. Farmer and D. A. Sutton. *Chem Soc J* p122-5 *Mr* '43

DOCOSANE

Effect of temperature on liquid-liquid equilibrium; benzene-acetone-water system and docosane-1,6-diphenylhexane-furfural system. S. W. Briggs and E. W. Comings. *il* *diags* Ind & Eng Chem 35:411-17 *Ap* '43

DOCUMENTARY films. See Moving pictures—Documentary films**DOCUMENTS**

See also

Files and filing (documents, etc.) Government publications

DOCUMENTS, Preservation of

Irreplaceable values; fire menace to records and historic documents. P. W. Eberhardt. *il* Nat Safety N 48:66-7+ *O* '43

DODD, Edward Lewis, 1875-1943
 Sketch. C. D. Simmons. *Am Stat Assn J* 38: 247-8 *Je* '43

DODECYLAMINE

Studies on high molecular weight aliphatic amines and their salts; the behavior of various salts of dodecylamine in water, ethanol and benzene. C. W. Hoerr and A. W. Ralston. *bibliog* Am Chem Soc J 64: 2824-9 *D* '42

DODGE, Joseph Morrell, 1890-

Portrait. *Banking* 36:14 *O* '43

DODGE CITY, Kansas

Field notes from the farm country. *Fortune* 27:121-2 *Je* '43

DOEHLER die casting company

Exceptional expansion. H. Lawrence. *Baron's* 23:5 *Mr* 29 '43

DOG food**Rating**

Wartime rations for dogs. *Consumers' Research Bul* 11:7-9 *Ja* '43; Correction. 11:7 *Mr* '43

DOGS

Dogpower; Conoco trains man's best friend to be saboteur's worst enemy. *il* Nat Pet N 35:19 *Ja* 6 '43

Men and dogs guard Continental plants. *il* Pet Refiner 22:104+ *F* '43

Some modern dogs of war; canine guards help at plants of Puget Sound power & light co. J. H. Leach. *il* Elec West 90:51 *My* '43

Trained dogs supplement refinery guard system. *il* Oil & Gas J 41:44-5 *D* 31 '42

Diseases

Natural occurrence of riboflavin deficiency in the eyes of dogs. T. D. Spies. *bibliog* Science 98:369-70 *O* 22 '43

DOHERTY, Robert Ernest, 1885-

Portrait. Eng N 131:3 *Jl* 1 '43
 President of the Society for the promotion of engineering education, 1943-1944. *por* J Eng Educ 34:7-8 *S* '43

DOLOMITE

Basic cupola lining aids desulphurization. E. S. Renshaw. *Foundry* 71:171-2 *S* '43

Calcite-dolomite staining tests. W. S. T. Smith. *Econ Geol* 38:420-2 *Ag* '43

Cement to magnesium manufacture; Ford motor company uses cement plant in first stage. G. E. Stedman. *flow sheet* *il* Rock Prod 46:59-61+ *Ja* '43

Discussion on open-hearth furnace refractories. *Iron & Steel Inst J* 145:307-22 *no* 1 '42; Abstract. *Engineering* 153:505 *Je* 26 '42

Dolomite-base refractories. A. Schallis. *map* U S Bur Mines Information Circ 7247:1-11 '42

Dolomite refractories. J. H. Chesters. *il* Iron Age 152:48-53 *Ag* 5; 86-9+ *bibliog* (p89+) *Ag* 12 '43

Economic considerations in the recovery of magnesia from dolomite. A. Schallis. U S Bur Mines Information Circ 7247:1-53 *bibliog* (p45-53) '43

Geology of Wasson field, Yoakum and Gaines counties, Texas. W. T. Schneider. *diags* maps *Am Assn Pet Geologists Bul* 27:479-523 *Ap* '43

High-grade dolomite deposits in the United States. J. H. Weitz. *map* U S Bur Mines Information Circ 7226:1-86 *bibliog* (p83-6) '42

Linings of large basic open-hearth tilting furnaces. A. Jackson. *Iron & Steel Inst J* 146:9-16 *no* 2 '42; Same. *Engineering* 154: 216-17, 224-5 *S* 11-18 '42; Same. *Blast F & Steel Pl* 31:316-19 *Mr* '43; Discussion. *Iron & Steel Inst J* 146:16-19 *no* 2 '42

Magnesium from sea water and dolomite supplies war effort. G. A. Bileque. *il* Min Cong J 29:30-1 *F* '43

Study of literature on separation of magnesia from lime in dolomite and similar materials, 1817 to 1943. G. E. Seil and others. *comps. bibliog* (461 titles) *Am Cer Soc J* 26:218-38 *Jl* 1 '43

DOME mines, limited

Thumbnail stock appraisal. *Mag of Wall St* 72:311 *Je* 26 '43

DOMES

Construction of an ancient dome, Sancta Sophia, Constantinople. J. C. Rathbun. *il* Civil Eng 13:397-8 Ag '43

DOMESTIC animals

See also

Cattle	Mules
Dogs	Poultry
Horses	Swine
Live stock	

DOMESTIC appliances

Post-war planning in England. B. Mittel. *il* Gas Age 92:23-4 J 15 '43

See also

Electric apparatus and appliances, Domestic	Gas appliances, Domestic
Electric cooking	Gas cooking
	Refrigerators
	Stoves

DOMESTIC engineering

See also

Heating	Plumbing
Hot water supply	Sanitary engineering
Lighting	Ventilation

DOMESTIC finance

See also

Budget, Household

DOMINICAN REPUBLIC

See also

Petroleum laws and regulations—Dominican Republic	Roads—Dominican Republic
---	--------------------------

Economic conditions

Dominican Republic tackles war problems. J. Harding and J. A. E. Orloski. *il* For Comm W 10:6-9, 26-8 Ja 16 '43
News by countries. *il* For Comm W 11:18-19 My 29 '43

DONETS basin, Russia

Donets basin; economic significance of the great industrial region. E. C. Ropes. *il* For Comm W 13:3-5+ O 30 '43

DONNAN equilibrium

Role of salts in the dyeing of cellulose with substantive dyes. F. L. Usher and A. K. Wahbi. *bibliog* Soc Dyers & Col J 58:221-8 N '42; Discussion. S. M. Neale. 59:148-9; Reply. F. L. Usher. 150-1 J 1 '43

DONOR-acceptor bonding. See Chemical bonds**DOOLITTLE solution of equations**

Correlation concepts and the Doolittle method. D. J. Cowden. *Am Stat Assn J* 38:327-34 S '43

DOOM palm. See Palms**DOORS**

Window and door details; design data. *Arch Forum* 79:66 J 1 '43

DOORS, Folding

Folding partitions; center-hung and edge-hung doors; time-saver standards. *diags* Arch Rec 93:85-6 Mr '43

DOORS, Mechanically operated

Hangar door details; time-saver standards. W. J. Ward, jr. *diags* Arch Rec 94:77-80 J 1 '43

Heavy concrete for counterbalances for overhead industrial doors. *Concrete* 51:21 Ja '43

DOORS, Mine. See Mine doors**DOORS, Rolling**

Wood rolling door. *il* Ry Age 114:160 Ja 9 '43

DOORS, Sliding

Hangar door details; time-saver standards. W. J. Ward, jr. *diags* Arch Rec 94:80 J 1 '43
Sheet metal workers' catechism; attaching corrugated sheets; sliding door. W. Neubecker. *diags* Sheet Metal Worker 34:29-30 J 1 '43

DOPE, Airplane. See Airplane dope**DOPPLER effect**

Atomic beam apparatus for studying the atomic spectra of gases, especially hydrogen. J. E. Mack and E. C. Barkofsky. *bibliog* *il* *diags* *Rs Mod Phys* 14:82-93 Ap-J 1 '42

Extension of the Doppler principle to discontinuous periodic effects. L. Fleischmann. *diags* Acoustical Soc Am J 15:103-5 O '43

Frequency modulation distortion in loud speakers. G. L. Beers and H. Belar. *bibliog* Soc Motion Picture Eng J 40:207-21 Ap '43

DORMITORIES

British hostels for unmarried war workers *il* *diags* plans Arch Forum 78:65-70 Ja '43
Dormitory; girls' dormitory for the University of California; with views, plans, and construction outline. *Arch Forum* 79:48-51 J 1 '43

Dormitory plan in two versions; first and second Willow Lodge projects near Ypsilanti, Michigan. *il* plans Arch Rec 94:54-60 O '43

Dormitory standards. *il* *diags* plans Arch Rec 94:75-7 S '43

Hostels for Britain's war workers. F. R. S. Yorke. *il* *diags* plans Arch Rec 94:79-82 S '43

Study in substitutes; plumbing and heating equipment; dormitory for ship builders. *il* Dom Eng 161:57-8+ Ap '43

DOTEN, Carroll Warren, 1871-1942

Sketch. F. E. Armstrong. *Am Stat Assn J* 37:543 D '42

DOUBLE bonds

Basicity studies of tertiary vinyl amines. R. Adams and J. E. Mahan. *bibliog* Am Chem Soc J 64:2588-93 N '42

Mechanism of additions to double bonds; the nature of the activated complex in bimolecular diene syntheses. A. Wassermann. *Chem Soc J* p812-17 O '42

Organic reactions. H. Eyring, H. M. Hulburt and R. A. Harman. *Ind & Eng Chem* 35:517-18 My '43

Steroids with double bonds between quaternary carbon atoms; the oxidation of α -ergosterol acetate. H. E. Staveland and G. N. Bollenback. *bibliog* Am Chem Soc J 65:1285-9 J 1 '43

Steroids with double bonds between quaternary carbon atoms; the structure of α -dihydroergosterol. H. E. Staveland and G. N. Bollenback. *bibliog* Am Chem Soc J 65:1290-4 J 1 '43

Steroids with double bonds between quaternary carbon atoms; the structure of α -spinasterol. H. E. Staveland and G. N. Bollenback. *bibliog* Am Chem Soc J 65:1600-3 Ag '43

Structure of monocrotaline; proof of the position of the double bond in retronecine. R. Adams and J. E. Mahan. *bibliog* Am Chem Soc J 65:2003-12 O '43

See also

Conjugation (chemistry)

DOUBLE refraction. See Refraction, Double**DOUGHERTY, Nathan Washington, 1886-**

Sketch. *por* Civil Eng 12:696 D '42

DOUGLAS, Lewis W. 1894-

Sketch. *por*(p172) Marine Eng 48:176-7 Ag '43

DOUGLAS aircraft company, incorporated

Bright future foreseen for Douglas aircraft co. in postwar production of transport planes. *Steel* 113:72, 74-5 Ag 9 '43

Expands from two to seven plants within two years. *Steel* 112:63+ Ap 26 '43

Ten years' progress. R. Neville. *il* Aeronautical Eng R 1:55 N '42

DOUGLAS fir

Douglas fir, 1938-1941. Survey of Cur Business 1942 Sup p133 [supplemented in monthly numbers]

Douglas fir plywood for aircraft. N. S. Perkins. *diags* Aero Digest 42:260+ Mr '43

Effect of chemical-wood ratio in pulping Douglas fir by the sulphate process. J. S. Martin and M. W. Bray. *Paper Tr J* 117:29-33 S 16 '43

How plywood is produced. *il* Eng N 130:750-3 My 20 '43

Susceptibility of wood to decay; effect of urea and other nitrogen compounds. F. H. Kauffert and E. A. Behr. *bibliog* *il* Ind & Eng Chem 34:1510-15 D '42

DOW, Willard Henry, 1897-

Columbia honor to Dr Dow. *por* Paint Oil & Chem R 105:45 My 6 '43

Dow voices techno-economic views at presentation of Charles Frederick Chandler medal. *por* Oil Paint & Drug Rep 143:3+ My 24 '43

DOW, Willard Henry—Continued

Presentation of the Charles Frederick Chandler medal. Science 97:483 My 28 '43
 Science at work. Business Week p111 My 29 '43
 Willard Dow wins Chandler medal. por Oil Paint & Drug Rep 143:3+ Ap 12 '43

DOW chemical company

Dow Chemical financing. Barron's 23:13 O 25 '43
 Dow Chemical's advertising philosophy in war and peace. R. A. Brewer. Ind Marketing 28:32-4+ Ag '43
 Dow goes down to the sea; magnesium and war are making it a major power. il Fortune 26:110-13+ D '42
 News from the chemists' front. Barron's 23:27 S 20 '43
 Registers new stock with SEC. Comm & Fin Chr 158:1730 N 1 '43

DOWEL pins

Maintenance of press tools; good dowels extend die life. H. R. Hageman. diags Am Mach 86:1286-7 N 12 '42

DOWMETAL. See Magnesium alloys**DOXFORD marine engines. See Diesel engines, Marine****DOYLE, Mrs Ada V.**

Women can be successful in insurance as revealed by career of Ada V. Doyle. por Weekly Underw 148:6 Ja 2 '43

DOYLE, C. C.

Home shop pool; basement shops of the J. E. Doyle co.'s subcontractors. Business Week p51+ D 5 '42

DRAFT

Construction of kiln influences correct firing draft. J. G. Seanor. il Brick & Clay Rec 102:24-5 Je '43

See also

Blowers	Mechanical draft
Combustion	Ventilation
Fans, Mechanical	

DRAFT, Mechanical. See Mechanical draft**DRAFT, Military. See Military service—Labor problems; Military service, Compulsory****DRAFT gages**

Fast-acting sensitive draft gage. L. W. Winbolt. diags Instruments 16:19 Ja '43
 Stop that leak! L. S. Lyon. diags Power Pl Eng 47:85+ O '43

DRAFT gears

Coupler and draft gear report; A.A.R. Mechanical division committee. il Ry Mech Eng 117:460-3 O '43

DRAFTING room management

Manpower problems in the engineering department. il Product Eng 14:704-7 N '43

DRAFTING room practice

Design practices in use of title blocks. il Product Eng 14:284-7 My '43
 Drawing an angle with scale and compass. diag Eng N 130:316 F 25 '43

Drawing economy; use of skeleton working sketches. J. L. Gaved. Elec R (Lond) 131:784 D 18 '42

Duplicate tracing minimizes drafting work. J. W. Greve. il diags plan Machine Design 15:141-3 N '43

Ink v. pencil tracings. D. S. Causer. Engineering 155:255 Mr 26 '43

Lettering on engineering drawings; mechanical means. F. P. Kuhl. il diags Power Pl Eng 46:89-90 D '42; Same. Edison Elec Inst Bul 40:415+ N-D '42; Same. Gas Age 90:20-1 N 19 '42; Excerpts. Elec W 118:1798 N 28 '42; Heat & Ven 40:41 Ap '43; Eng N 130:690 My 6 '43

Master layouts for production use; abstract. S. R. Carpenter. diags Automotive & Aviation Ind 87:47-8 N 15 '42

Method for detailing pipe bends extending in two planes. diags Pet Refiner 22:107 Jl '43

Photo-template processes that lessen drafting work. il Product Eng 13:707-9 D '42

Rubber stamps save drafting time. L. H. Remiker. il Am Mach 87:93 Ap 1 '43

Saving work in the drafting-room by the use of rubber stamps. Mach 49:238 Ap '43

Stamps facilitate drafting work. il diags Machine Design 15:93 Mr '43

Supplementary plane pipe bends. S. C. Zinman. diags Heating-Piping 15:86-8, 128-31 F-Mr '43

See also

Airplanes—Manufacture—Drafting room practice
 Engineering drawing

Standards

Drafting standards revised. F. G. Higbee. diags Machine Design 15:140 Ag '43
 Standardizing engineering drawing sheets. F. P. Kuhl. diags Machine Design 15:140 Ap '43

DRAFTING rooms**Equipment**

Gang scriber facilitates accurate drafting. A. H. Allen. il diags Machine Design 15:123-5 S '43
 Transparencies for optical comparators. il Iron Age 151:61 F 25 '43

DRAFTS

Automatic audit for drafts, cashier's checks, bank money orders. T. W. Long. il Bankers Mo 60:10-11 Ja '43

Draft system simplified. J. D. Barnette. Bankers Mo 60:404 S '43

Purchaser of demand draft entitled to restitution of money paid because of impossibility of presentment for payment. Banking Law J 60:857-60 O '43

DRAIN tile

Heavy-duty clay tile drains. V. O. McClurg. il Eng N 131:263 Ag 12 '43

DRAINAGE

Complicated municipal drainage problem in Sudbury, Ont.; flooding remedial measures; with cost data. N. B. MacRostie. il Water & Sewage 81:20-2+ Mr '43

Dry-stone dam. diags plans Engineer 175:491 Je 18 '43

Land drainage machinery. il Engineer 175:420-1, 442-3 My 28-Je 4 '43

Machinery for land drainage. Engineering 155:346-7 Ap 30 '43

Steep Rock; roads, bridges, earth and rock moving, pumping—then an iron mine. il map Roads & Bridges 81:42-8+ S '43

See also

Airports—Drainage	Roads—Drainage
Drain tile	Sewerage
Dredging	Wellpoint system
Irrigation	

England

Problems of land drainage; Fenlands; legal problems. E. Latham. Engineering 156:22-4, 44-5 Jl 9-16 '43

DRAINAGE, House**See also**

Plumbing
 Sewerage

DRAINAGE laws**Great Britain**

Problems of land drainage; Fenlands; legal problems. E. Latham. Engineering 156:22-4 Jl 9 '43

DRAINAGE of airports. See Airports—Drainage**DRAKE, Lyman M. 1867-1943**

Sketch. por Nat Underw 47:2+ My 27 '43

DRAPEY**See also**

Trimmmings (for drapery, upholstery, etc.)

DRAWBRIDGES. See Bridges, Movable**DRAWING****See also**

Drafting room practice	Graphic methods
Engineering drawing	Perspective

DRAWING, Mechanical. See Mechanical drawing**DRAWING instruments**

Lotting mouse saves time in drawing straight lines. il diags Product Eng 14:24 Ja '43

DRAWING of metal. See Metal-drawing

DRAWING paper

- Printed sheets for engineering drawings. F. P. Kuhl. *il diag Gas Age* 91:21+ S '11 '43; Same. *Power Pl Eng* 47:91-2 S '43
Selecting engineering department papers. H. A. Perkins and D. H. Hunter. *il Machine Design* 15:69-71 Ja '43

DRAWING room practice. See Drafting room practice

DRAWINGS

See also

- Advertisements, Pictorial—Drawings Coal mines and mining—Drawings
Airplanes—Drawings Power plants—Drawings

DREDGES

Maintaining mining machinery. *Mech Handling* 30:19-21 Ja '43

Electric equipment

Submerged salvaged; salt encrusted dredge motors dried out by infrared lamps. *il Elec West* 90:45 Ja '43

DREDGING

- Dredged depth measurements aided by double target row. *il Eng N* 129:846 D 17 '42
Dredging hard material in rough water; comparative volume and cost data for a suction and a sea-going ladder dredge. R. C. Jensen. *il Eng N* 130:493-5 Ap 8 '43
Remove overburden by pumping; Fordyce gravel company. W. B. Lenhart. *il Rock Prod* 46:48-50 Ag '43

See also

- Coal dredging
Dredges
Gold dredging

DRESS goods

Seam strength of common rayon dress fabrics. J. Lederer. *il Rayon* 24:26-7 Ja '43

DRESS industry

Fall opening plan for dresses; an example of planning a stock assortment. B. F. Miller. *J Retailing* 18:118-22 D '42

DRESS patterns. See Patterns (dress)

DRESSER manufacturing company

Annual report. *Comm & Fin Chr* 157:690-1 F 22 '43
Thumbnaill stock appraisal. *Mag of Wall St* 72:366 Jl 10 '43

DREXEL institute of technology, Philadelphia

College gift fund plans for graduating classes. F. A. Tucker. *Nat Underw (Life ed)* 47:119 Jl 23 '43

DRIED beef. See Beef, Dried

DRIED cheese. See Cheese, Dried

DRIED eggs. See Eggs, Dried

DRIED food. See Food, Dried

DRIED fruit juices. See Fruit juices, Dried

DRIED meat. See Meat, Dried

DRIED milk. See Milk, Dried

DRIED potatoes. See Potatoes, Dried

DRIED soup. See Soup, Dried

DRIED spinach. See Spinach, Dried

DRIED vegetables. See Vegetables, Dried

DRIERS

Cobalt use in driers allowed. *Oil Paint & Drug Rep* 143:7 Ja 4 '43

See also

Drying oils

Analysis

Detection of metallic driers in varnishes and oils by spot test analysis. J. V. Atkinson. *bibliog Paint Oil & Chem R* 106:10, 22-3 Jl 1 '43

DRIERS (apparatus). See Drying apparatus

DRIFT

Correlation of the glacial border drift of north central Wisconsin. F. D. Hole. *bibliog diags maps Am J Sci* 241:498-516, pl 1 Ag '43

Engineering study of glacial drift for an earth dam, near Fergus, Ontario. R. F. Leggett. *il plan map Econ Geol* 37:531-56 N '42

See also

Eskers

DRIFT, Continental. See Continents

DRILLING and boring (earth and rocks)

Diary on a deep well drilling job. C. M. Roberts. *il diag Eng N* 129:928-30 D 31 '42
Heavy foundations drilled into rock; deep caissons with H-beam cores for extension to a public service building. R. E. White. *il diags Civil Eng* 13:19-22 Ja '43

How to design exhaust hoods; hoods for dust control: total enclosures and screening. J. M. Dalla Valle. *diags Heat & Ven* 40: 65-8 Jl '43

Leakage survey practices using pneumatic drills and leakage indicators. R. N. Townsend and R. E. Haun. *bibliog il Gas Age* 92:49-51+ O 21 '43

Mont Cenlis tunnel doomed hand drilling. C. H. Vivian. *il diags Comp Air M* 48:6978-81 Mr '43

Underground channels utilized for airport drainage. *il diag plan Eng N* 130:498-9 Ap 8 '43

Use of wetting agents in reducing dust produced by wet drilling in basalt. J. A. Johnson. *U S Bur Mines Rep of Invest* 3678: 1-27 '43

Water lance sinks ground rods 25 ft. *il Elec W* 120:102+ Jl 10 '43

See also

- | | |
|-------------------------|------------------------|
| Drills, Oil well | Quarries and quarrying |
| Excavation | Rock drills |
| Mining methods | Tunnels and tunneling |
| Petroleum—Well drilling | Wells |

History

Early history of water-well drilling in the United States. C. W. Carleton. *bibliog il diags Econ Geol* 38:119-36 Mr '43

DRILLING and boring (metal working, etc.)

Boring mine car wheels to receive roller bearings. *il Mach* 49:136 Ja '43

Center-drilling attachment for tailstock. D. E. McDonald. *diag Mach* 49:193-4 F '43

Drilling deep holes in magnesium alloys. W. W. Gilbert and A. M. Lennie. *bibliog il diags Mech Eng* 64:877-87 D '42; Discussion. G. Schlesinger. 65:441-2 Je '43

Dynamite removes broken drills. F. N. Mueller. *il Am Mach* 86:1369-70 N 26 '42

Grind deep-hole drills properly. F. O. Hoagland. *il diags Am Mach* 87:91-3 F 18 '43

Index jig speeds radial drill work. F. Pfeiffer. *diag Am Mach* 87:95 Ap 29 '43

Machined casting drilled in five-way jig. F. Scriber. *diags Am Mach* 87:108 Jl 22 '43

Microscopic precision tool. I. H. Such. *il Steel* 113:98-100+ S 13 '43

New method for removal of broken tools from drilled holes; application of arc welding. H. J. Burnett and C. E. Hansling. *il Automotive & Aviation Ind* 87:30-1, 88, 90 N 1 '42

Rifle drilling with carbides; International business machines, inc. T. R. Skoftefeld. *il Am Mach* 87:83-5 Ag 19 '43

Rotary table reduces down time; two-position work tables are used by the Crane company. *il diags Am Mach* 87:99 O 28 '43

Speeding up car-shop drilling. *il Ry Mech Eng* 117:49 Ja '43

Spindles drilled faster; use of turret lathes. D. H. Samuelson. *il Am Mach* 87:74-5 Ja 7 '43

Tool drills angular holes. *il Am Mach* 87:107 Je 24 '43

See also

- | | |
|-------------------------------|-----------------------|
| Broaching | Machine shop practice |
| Cutting tools | Metal cutting |
| Drilling and boring machinery | |

Tables, calculations, etc.

Radial drill press operations; time-data sheet. *Am Mach* 87:109, 111 F 4; 133, 135 F 18; 117, 119 Mr 4; 121, 123 Mr 18; 109, 111 Ap 1; 125, 127 Ap 15; 113, 115 Ap 29; 131 My 13 '43

Tools of our trade; how to run a drilling machine; feeds and speeds; tap sizes and thread dimensions. *Am Mach* 87:107-10 Ap 15 '43

DRILLING and boring machinery

Barnes' two spindle deep hole boring machine. *il Am Mach* 87:131 Ag 19 '43

DRILLING and boring machinery—Continued

- Boring car decking for rivet head clearance. *il Ry Mech Eng* 116:542 D '42
- Boring machine built from scrap. W. Dzus. *il Am Mach* 86:1363 N 26 '42
- Cam sleeves hold drills for grinding sub-lands. G. R. Allgrunn. *diag Am Mach* 87:108-9 S 16 '43
- DeVlieg builds jigmill which combines functions of horizontal boring mills and of j borsers. *il Am Mach* 86:1319 N 12 '42
- Drill head for stern tubes. C. A. Bloom and M. Harkless. *il diag Am Mach* 87:90-1 Ag 5 '43
- Drill press fixture for replacing jigs and templates. C. W. Fuller. *il Automotive & Aviation Ind* 89:39 J1 '43
- Drilling and tapping fuse bodies; operations performed on Kingsbury machine. *il diag Mach* 49:127-40 Mr '43
- Floating head utilizes integral drive; tapping head of radial drill. R. S. Arnold. *il Machine Design* 15:192+ Ap '43
- High-speed super-sensitive drill press. C. T. Packer. *il Am Mach* 87:102-3 Mr 18 '43
- Kent duplex driller. *il Automobile Eng* 33:27-8 Ja '43
- Kitchen and Wade four-spindle drilling machine. *il Automobile Eng* 33:375-6 S '43
- Lund three spindle diamond boring machine. *il (p289) Automobile Eng* 33:290 J1 '43
- Magnetic-base frame holds air drill on work. *il Comp Air M* 48:6967 F '43; Same. *Ry Mech Eng* 117:140 Mr '43; Same cond. *Marine Eng* 48:174 Mr '43
- Reliance patent drill guard. *il Automobile Eng* 33:412-13 O '43
- Removing broken drills by arc welding. H. J. Burnett and C. E. Hansling. *il Steel* 112:76-8+ F 22 '43
- Repair of broken drills by the Metrovick atomic hydrogen arc. *il Engineer* 175:293 Ag 9 '43; *Engineering* 155:327 Ap 23 '43
- Tooling for boring and facing torpedo ends. I. F. Yeoman. *il Mach* 49:152-4 Je '43
- Tools of our trade; how to run a drilling machine. *il Am Mach* 87:97-112 Ap 15 '43
- Tough drilling jobs licked by new method; Sensitive drill head. G. E. Stedman. *il Steel* 111:56-9 D 28 '42
- Tunnel-type drilling equipment; Eastern aircraft division. General motors corp. D. C. Stewart, and W. F. Ocenasek. *il diag Am Mach* 87:100-1 J1 8 '43
- 25 per cent speed increase by new drilling technique; Rego Karweit driller developed by Bastian-Blessing co. W. A. Phair. *il Iron Age* 151:48-51 Je 17 '43
- Universal drill fixture saves day per week; marine gear castings; General electric company. *il Iron Age* 151:73 F 18 '43
- Urguhart, Lindsay and Robertson Orchar boring and profiling machine. *il Automobile Eng* 33:117-18 Mr '43
- See also
Broaching machines
Machine tools
Reamers

Manufacture

- Good finish despite war restrictions; Cincinnati Bickford tool company. G. H. Robertson. *il Am Mach* 87:104-5 O 28 '43

DRILLS. See Drilling and boring machinery**DRILLS, Oil well**

- Slim-hole rigs used in drilling new Challaco field, Argentina. *il Oil & Gas J* 41:80+ D 31 '42

Standards

- Report of A.P.I. committee on the standardization of rotary drilling equipment. *Am Pet Inst Proc* 23(4):186-90 '42

DRILLS, Rock. See Rock drills**DRINKING fountains**

- Bubbling drinking fountains. A. P. Hitchens and O. A. Ross. *Am Water Works Assn J* 35:165-7 F '43; Abstract. *Safety Eng* 86:52-3 Ag '43

DRINKING water standards. See Water supply—Standards**DRINKING water systems**

- Drinking water; a natural aid to health and efficiency. *il Nat Safety N* 47:170 Mr '43
- Drinking water on construction jobs; hazards and precautions. *Nat Safety N* 47:57+ Je '43
- Report of task committee of WPB; water cooler industry advisory committee. *Refriger Eng* 45:256+ Ap '43
- DRIVE-in and curb services**
- Drive-in restaurant; Lobello's, Dallas, Tex. *il Am Bld* 65:42+ Je '43
- DRIVER-HARRIS company**
- Thumbnail stock appraisal. *Mag of Wall St* 72:92 My 1 '43
- DRIVERS, Automobile. See Automobile drivers**
- DRIVERS, Motor bus. See Motor bus drivers**
- DRIVERS, Motor truck. See Motor truck drivers**
- DRIVERS as salesmen**
- How much progress are unions making in organizing salesmen? answer from southern California area. J. H. Collins. *Sales Management* 52:84+ Ag 1 '43
- Unions have substantial foothold among Frisco sales organizations. E. Gidlow. *Sales Management* 52:66+ O 1 '43
- DROP forging. See Forging**
- DROP hammers. See Hammers, Drop**
- DROUGHTS**
- Demarcation of drought areas and its uses; abstract. W. R. Baldwin-Wiseman. *Am Water Works Assn J* 35:1236 S '43
- Obtaining water from government lake during a drought. C. Fore. *il Pub Works* 74:25-6+ Je '43
- Water and the 1941 drought in Georgia. M. T. Thomson. *il map Civil Eng* 13:475-6 O '43
- DRUG factories**
- Laboratory for modern medicine; manufacturing plant for G. D. Searle & co. *il plans Arch Rec* 93:49-60 Je '43
- Management
- Raw materials control at the Wm. S. Merrell company. F. J. Messmann. *il Chem Ind* 53:194-6 Ag '43
- DRUG habit**
- Follow-up study of treated narcotic drug addicts. M. J. Pescor. *Pub Health Rep Sup* 170:1-18; pa 5c Supt. of doc. '43
- DRUG stores**
- Ask Tony, the pushcart man. R. J. Ingram. *il Mod Packaging* 16:67-9+ F '43
- Duration window units. *il Mod Packaging* 16:72 F '43
- Where drug store sales are heading; pictograph. *Sales Management* 52:47 Je 15 '43
- DRUG trade**
- Contest puts drive into distribution through wholesalers; Purepac corporation. T. J. Mahon. *il Ptr Ink* 202:22-4, 28 Mr 5 '43
- Druggists at work; to legalize buying pools for small retailers. *Business Week* p96+ Ag 14 '43
- Economic impact of the sulfonamides on the drug industry. J. S. Zinsser. *il Chem & Eng N* 21:1159-62 J1 25 '43
- Grocers muscle in; druggists can't retaliate. *Business Week* p62+ Mr 27 '43
- McKesson offers druggists a hand in training green sales help. L. M. Hughes. *il Sales Management* 52:36+ Ag 15 '43
- McKesson program eases retailers' burden of training sales help; new distributing handbook. R. H. Ganly. *il Ptr Ink* 204:17, 72 J1 30 '43
- Pharmaceutical manufacturers hold war problems conference. *Oil Paint & Drug Rep* 143:7+ Je 21 '43
- Postwar period. C. W. Dunn. *Oil Paint & Drug Rep* 144:40+ O 11 '43
- Sterling streamlines corporate setup and makes radical policy changes. L. M. Hughes. *Sales Management* 52:32, 34, 36 Ap 15 '43
- Vitamin sales boom as harried retailers battle for distribution rights. R. C. Fyne. *il Sales Management* 52:72+ Je 15 '43

DRUG trade—Continued

Who should sell vitamins, druggist or grocer?
A. Gray. Adv & Sell 36:28 O '43

See also

Chemistry, Medical
and pharmaceutical
Squibb, E. R., and
sons

Sterling drug, inc.

also American drug manufacturers association;
also American pharmaceutical manufacturers association; Federal wholesale druggists association

Advertising

Argentina clamps down on drug advertising.
Ptr Ink 205:52 O '43

Co-op radio clicks for fair-trade drug products in California; manufacturers bear cost of four-station campaign in behalf of 2,700 retail druggists. Sales Management 52:30 Je 15 '43

New Mennen series advises how to help relieve shortage of doctors. Il Ptr Ink 202:33 Ja 8 '43

September drug promotion in New York and New England features large sizes. Il Ptr Ink 204:76 S 10 '43

Toward a measure of pharmaceutical advertising effectiveness. B. Belley. J Business 16:107-14 Ap '43

Vitamins, advertised direct to the public, hit \$150,000,000 per year. Ptr Ink 203:33-5 Ap 23 '43

Whelan's comic advertisement fills 8-page Sunday supplement. Ptr Ink 204:26 Jl 16 '43

Public relations

Publicizing drugs; Bernays program. Business Week p103-4 N 6 '43

Regulation

Drug, cosmetic makers discuss packaged products with OPA. Oil Paint & Drug Rep 143:7+ Ja 11 '43

Drug manufacturers complain about OPA questionnaire mess. Oil Paint & Drug Rep 142:3+ D 7 '42

FTC on the pan; proprietary drug trade, takes labeling woes to Congress and to courts. Business Week p90+ My 29 '43

FTC turns coat; new tough policy may foreshadow drastic changes in advertising. Business Week p95-6 N 21 '42

Medicinals export affidavit revised. Oil Paint & Drug Rep 144:7 O 4 '43

OPA sets policy on private formulas. Oil Paint & Drug Rep 142:7+ D 14 '42

WPB control of drugs. F. J. Stock. Oil Paint & Drug Rep 144:52+ O 11 '43

See also

Drugs—Laws and legislation

Securities

Will drug companies continue at peak? G. W. Mathis. Mag of Wall St 73:80-1+ O 30 '43

Statistics

Botanical drugs, spices and gums. Published in weekly numbers of Oil, paint and drug reporter

Drugs, and fine chemicals. Published in weekly numbers of Oil, paint and drug reporter

Africa

From caravan to corner drug store; French Africa. E. M. Schwarzauber. Il For Comm W 10:14-17+ F 27 '43

Argentina

Argentina tightens control over pharmaceutical products. Oil Paint & Drug Rep 144:3+ O 4 '43

Regulations for production, advertising, and sale of pharmaceutical products revised. For Comm W 13:12 O 16 '43

Brazil

Pharmaceutical specialties; new prerequisites for licensing. For Comm W 9:15 D 12 '42

Cuba

Cuban drug trade rules protested by U.S. makers. Oil Paint & Drug Rep 144:7+ Jl 26 '43

Great Britain*See also*

Boots pure drug company

Latin America

Total war in South America; struggle for markets there still finds Germany a formidable foe. S. Ross. Barron's 23:3 Jl 12 '43
U.S. drugs supply Latin American trade. Oil Paint & Drug Rep 144:51 Jl 19 '43

United States

Drug administration activities during 1942. Oil Paint & Drug Rep 143:55 Ja 11 '43

Drug industry enters a new era; proprietary companies moving into sulfa, vitamin and hormone fields. S. B. Self. Barron's 23:9 My 10 '43

Drug industry in war. J. G. Searle. Oil Paint & Drug Rep 143:49-50 My 10 '43

Drug supplies after the war. C. F. Shook. Oil Paint & Drug Rep 143:7+ Ap 12 '43

Drugs and fine chemicals, botanical drugs, spices, and gums. 1942. Oil Paint & Drug Rep 143:89-90, 93-5 Ja 11 '43

Medicinals held adequate for civilian requirements; special war meeting of National wholesale druggists association. Oil Paint & Drug Rep 143:3+ Ap 26 '43

OPA names drug industry advisers. Oil Paint & Drug Rep 144:5+ Ag 2 '43

Pharmaceutical manufacturers discuss men and materials. Oil Paint & Drug Rep 142:7+ D 14 '42

Proprietary association discusses production, supplies, prices. Oil Paint & Drug Rep 143:7+ My 24 '43

Rationing pains; baking and drug trades feel pinch. Business Week p30-2 Ap 17 '43

DRUGS

All-America package competition award; Abbott laboratories cottoning mechanism for drug bottle filling. Il Mod Packaging 16:113+ Ap '43

A.P.M.A. discusses war problems; drugs to make a better world. Oil Paint & Drug Rep 143:50+ Je 21 '43

Belladonna, digitalis, aconite, peppermint held essential war crops. Oil Paint & Drug Rep 143:3+ My 3 '43

Botanical drug survey. T. Lewis. Oil Paint & Drug Rep 143:50-1 My 24 '43

Fine chemicals and drugs. M. L. Crossley. Chem & Ind 61:442-4 O 31 '42

Hormone profits; pregnant mares yield estrogenic hormone, helpful in menopausal treatment. Business Week p70-1 S 11 '43

Postwar surpluses; abstract. T. W. Delahanty. Oil Paint & Drug Rep 143:53+ Je 21 '43

Proprietary scientists discuss supplies. Oil Paint & Drug Rep 142:4+ D 14 '42

WPB control of drugs. F. J. Stock. Oil Paint & Drug Rep 144:52+ O 11 '43

WPB drug controls. F. J. Stock. Oil Paint & Drug Rep 143:51-2, 52A My 10 '43

See also

Anticonvulsants

Antispasmodics

Aspirin

Atabrin

Botany, Medical

Capsules, Gelatin

Chemistry, Medical

and pharmaceutical

Clavacin

Convulsants

Curare

Diethyl stilbestrol

Digitalis

Drug trade

Marhuana

Penicillin

Poisons

Quinine

Thiouracil

Laws and legislation

Drug misbranding authority of FDA reviewed by high court. Oil Paint & Drug Rep 144:3+ O 18 '43

Marmola hit again; the weight-reducer loses another round. Business Week p62+ Mr 6 '43

Veterinary medicinals false label drive set. Oil Paint & Drug Rep 144:3+ O 18 '43

See also

Drug trade—Regulation

Manufacture

Raw materials control at the Wm. S. Merrell company. F. J. Messmann. Il Chem Ind 53:194-6 Ag '43

DRUGS—Manufacture—Continued

Solvent extraction with special reference to drug and fine chemical manufacture; abstract. G. C. Green. *Chem & Ind* 62:85 F 27 '43

See also
Drug factories

Prices

Chemicals, oils, and drugs price records, 1935, 1937, 1939, 1941-42. *Oil Paint & Drug Rep* 143:54 Ja 11 '43

Drug pricing schedule to allow for research. *Oil Paint & Drug Rep* 143:4 Ja 18 '43

Packaged drug price ceiling exempts crude botanicals. *Oil Paint & Drug Rep* 143:3-4 My 17 '43

Testing

Antimalarial screening tests. L. T. Coggeshall. *il Chem & Eng N* 21:1152-3 Jl 25 '43

DRUNKENNESS

Intoxication indicated by photoelectric analysis of breath. *diag Sci Am* 169:216 N '43

Photoelectric colorimeter detects alcohol in breath; method of diagnosing moderate intoxication. L. A. Greenberg. *diag Electronics* 16:222-4 Je '43

DRY cleaning. See Cleaning**DRY docks**

Cellular cofferdam serves as wall of ship construction basins. *il diags Eng N* 131: 588-94 O 21 '43

Dry docks for United States navy. *il diags Engineer* 176:164, 165-7, 182-4, 210-11 Ag 27- S 10 '43

Graving-dock construction under water. *il Engineering* 156:121-4, 130 Ag 13 '43

Maryland Drydock expands facilities. *Marine Eng* 48:148 Mr '43

New 1500-ton railway dry dock at Venezuelan naval base. *il Marine Eng* 47:152, 154 N '42

Pneumatic device launches floating dry docks. O. H. Pilkey. *diags Civil Eng* 13:546-7 N '43

Progress on dry dock construction at Cramp shipyard. *il Marine Eng* 47:176-4 N '42

Properties and behavior underwater of plastic concrete. P. J. Halloran and K. H. Talbot. *il diags Am Concrete Inst J* 14:461-92 Je '43; Discussion. 14:sup492-492¹⁶ N '43

Steel caissons support New Orleans dock; use of concrete filled cylinders. C. G. Cappel. *il Civil Eng* 13:459-61 O '43

Twin drydocks constructed under water. *il diags Eng N* 129:702-9 N 19 '42

Welded caissons for naval dry docks; with cost data. C. A. Trexel and A. Amirikian. *il diags Welding J* 22:157-64 Mr '43; Same cond. Steel 111:100-2-4 D 14 '42

DRY goods

Retailers see rationing tangles, acute goods shortage, for 1943. *Sales Management* 52: 33 F 1 '43

Vanishing era; big dry goods jobbers going West. *Business Week* p49 Ja 23 '43

See also
Department stores Knit goods
Hosiery Textile fabrics

DRY ice. See Carbon dioxide, Solid

DRY rot

Dry rot in the textile industry. E. Hardy. *Am Dyestuff Rep* 31:541-2 N 9 '42

DRYDEN, John Fairchild, 1839-1911

Sketch. por Spectator (Life ed) 149:14-17 D '42

DRYING

Engineering discussion of the desiccation of human blood plasma. D. C. Pfeiffer. *bibliog il diags Mech Eng* 65:325-31 My '43; Discussion. 65:676-7 S '43

Handling thermoplastic materials. *il diags Mod Plastics* 20:80-2-4 Ap '43

Heat, mass and momentum transfer in the flow of gases through granular solids. B. W. Gamson, G. Thodos and O. A. Hougen. *bibliog diag Am Inst Chem Eng Trans* 39: 1-32; Discussion. 32-5 F '43

Humidity measurements in presence of water-soluble salts. G. C. Williams and R. J. Williams. *bibliog Ind & Eng Chem* 35: 730-2 Je '43

Influence of moisture on browning of dried whey and skim milk. H. Doob, Jr., A. Willmann and F. F. Sharp. *bibliog il Ind & Eng Chem* 34:1460-8 D '42

Predrying molding powders. W. E. Rahm, M. L. Macht and G. M. Kuettel. *il Mod Plastics* 20:86-7-4 My '43

Principles and applications of drying or dehydration. J. L. Erisman. *il diags W Soc E J* 47:250-9 D '42

Quick-dried by infra-red. *il Factory Management* 101:121-3 F '43

Spray method; liquid drying. S. Van Deest. *Heating-Piping* 15:440-1 Ag '43

See also
Bricks—Drying Ink—Drying
Cotton drying Paint—Drying
Dehydration Paper drying
Drying apparatus Rayon drying
Electric motors— Sewage sludge—Dry-
 ing
Infrared rays—Indus- Textile drying
 trial heating

DRYING (crops)

Drying of farm crops. W. H. Cashmore. *Chem & Ind* 62:278-81; Discussion. 281-2 Jl 24 '43

See also
Wheat—Drying

DRYING (fruits and vegetables)

Dehydrating fruits, vegetables in community canning plants. J. A. Schaller. *il diags Food Ind* 15:56-8 Ap '43

Dehydration of food by radio-frequency energy. V. W. Sherman. *Engineer* 176:205 S 10 '43

Dehydration of fruits and vegetables. W. V. Cruess. *bibliog il Ind & Eng Chem* 35:53-61 Ja '43

Dehydration of fruits offers important wartime advantages. E. M. Mraak and others. *bibliog il Food Ind* 15:59-62 Ap '43

Dehydration of vegetables; carrots; picture flow sheet. *Food Ind* 15:64-7 F '43

Dehydration of vegetables in domestic gas range ovens. F. E. Vandaveer. *il Am Gas Assn Mo* 25:343-8 S '43

Dehydrator mess; WPB program for manufacture of home units. *Business Week* p24-4 Ag 21 '43

Dehydrator uses new technics; potato and onion dehydration. Simplot plant. L. V. Burton. flow sheet *il plan Food Ind* 15:59-63-4 N '43

Dehydrator uses radiant heat principle; Puget Sound power & light co.'s fruit and vegetable dryer. *il diags Elec West* 91:68-9 Ag '43

Domestic gas range oven dehydration. W. H. Colwell. *diag Am Gas J* 158:44-5 Ap '43

Drying of foods. W. R. Marshall, jr. *bibliog il Heating-Piping* 14:527-31, 588-91-4, 671-3, 724-8; 15:10-12 S '42-Ja '43; Discussion. 14:658 N '42

Drying of foods. W. R. Marshall, jr. *diag Heating-Piping* 15:567-72 N '43

Electricity in new food process; dehydration development. *il Electrician* 131:151-3 Ag 13 '43

Equilibrium moisture content of dehydrated vegetables. B. Makower and G. L. Dehority. *bibliog il Ind & Eng Chem* 35:193-7 F '43

Farm dehydrator uses electric heat. *diags Elec W* 119:1498 My 1 '43

Food dehydration and air conditioning; reference section. *il diags Heat & Ven* 39:36-50 D '42

Food dehydration; electronic method. *Science* 98:sup 10 Ag 27 '43

Food dehydration; severe operating conditions for electric motors. *il Elec R (Lond)* 133: 195-8 Ag 13 '43

Home dehydration offers new possibilities for food preservation. *il Sci Am* 168:29-30 Ja '43

Home dehydrators for victory gardeners. *il Business Week* p64 My 1 '43

Home dehydrators for victory gardeners. *il diags Elec West* 90:51-3 Mr '43; Abstract. *Elec W* 119:1666-4 My 15 '43

Home food drier. *Business Week* p46-4 F 20 '43

How potato shreds are made. flow diag *il Food Ind* 15:47-9 Mr '43

DRYING (fruits and vegetables)—Continued

Infrared dehydration of meats and vegetables tested; preliminary investigations of carrots, sweet potatoes, turnip greens, beef and pork successful. F. M. Tiller, E. E. Litkenhouse and W. Turbeville. bibliog il Food Ind 15:77-94 O '43

Methods for quick freezing and dehydrating mushrooms. H. J. Brunell, W. B. Esselen, Jr. and F. P. Griffiths. bibliog il Food Ind 15:74-5+ N '43

Multistage dehydration produces better food at lower cost. L. V. Burton. diags Food Ind 15:51-3 My '43

Potatoes baked, then dehydrated to avoid loss of product. O. E. Stamborg and H. Beresford. flowsheet il Food Ind 15:78-9 S '43

Preserving food by dehydration in gas-range oven. C. P. Monaghan. il diag Gas Age 91: 21-4 Ap 8 '43

Preserving foods by drying with gas. il diags Am Gas Assn Mo 25:187-8 My '43

Significance of enzyme reaction to dehydration of vegetables; abstract. W. V. Cruess and M. A. Joslyn. Food Ind 15:120 F '43

Small dehydrators for vegetables. S. G. Davis, W. B. Esselen, Jr. and F. P. Griffiths. bibliog il diags Food Ind 15:54-7 My; 53-5+ Je '43

Some engineering problems of the new vegetable dehydration industry. W. B. Van Arsdell. Heating-Piping 15:157-60 Mr '43

Some preliminary investigations on dehydration of fruits and vegetables with infrared energy. J. E. Nicholas. il Franklin Inst J 236:235-91 S '43

Truth about home dehydration of fruits and vegetables. il diags Consumers' Research Bul 12:9-12 Ag '43

Tunnel dehydrators and their use in vegetable dehydration. W. B. Van Arsdell. bibliog diags Food Ind 14:43-6+ O; 47-50+ N; 47-50+ D '42

Tunnel dehydration; vegetable drying. D. A. Forberg. Heating-Piping 15:439-40 Ag '43

24 ways to improve vegetable dehydration. L. V. Burton. il Food Ind 14:40-2+ D '42

Two methods for dehydrating citrus juices; spray drying and sublimation of moisture from frozen state. R. Holzcker. il diags Food Ind 15:62-3 Ag '43

Where to locate that dehydration plant. L. V. Burton. il Food Ind 15:72-3+ F '43

See also

Food, Dried

Fruit, Dried

Vegetables, Dried

Costs

This is what it costs to dehydrate vegetables. W. D. Ramage and C. L. Rasmussen. diags plans Food Ind 15:64-71+ JI; 66-7+ Ag; 75-7+ S '43

DRYING (meat)

Dehydration of meat. H. R. Kraybill. il diag Ind & Eng Chem 35:46-50 Ja '43; Excerpts. Mech Handling 30:192-6 My '43

Dried meat. E. C. Bate-Smith, C. H. Lea and J. G. Sharp. diags Soc Chem Ind J 62:100-4 JI '43

Drying of meats; rate of dehydration of uncooked cured ground meats. E. C. Ritchell, E. L. Piret and H. O. Halvorsen. il Ind & Eng Chem 35:1189-95 N '43

Infrared dehydration of meats and vegetables tested; preliminary investigations of carrots, sweet potatoes, turnip greens, beef and pork successful. F. M. Tiller, E. E. Litkenhouse and W. Turbeville. bibliog il Food Ind 15:77-94 O '43

Principles and applications of drying or dehydration. J. L. Erisman. il W Soc E J 47:256-8 D '42

DRYING agents

New data on activated bauxite desiccants. R. G. Capell, R. C. Amero and J. W. Moore. bibliog diags Chem & Met Eng 50:107-10 JI '43

See also

Driers

Drying oils

Silica gel

DRYING apparatus

All-welded decal drying system saves over \$3000 yearly; Royal china co. H. C. Hebenstreit. il Cer Ind 40:50-2 Mr '43

Appliance field hustles to meet demand for home dehydrators. R. C. Fyne. il Sales Management 52:66, 68+ Ag 1 '43

Automatic controls on periodic dryer speed production of hand-made refractory shapes; Malvern (Ark.) brick & tile co. R. F. Grady, Jr. il Brick & Clay Rec 102:41-3 Je '43

Dehydrated foods aid war effort and offer promising market for gas fuel. H. W. Heisterkamp. il Am Gas Assn Mo 25:55-7+ F '43

Dehydration of meat. H. R. Kraybill. il diag Ind & Eng Chem 35:46-50 Ja '43

Dehydrator uses radiant heat principle; Puget Sound power & light co.'s fruit and vegetable dryer. il diags Elec West 91:68-9 Ag '43

Design of drying machines for agricultural products; abstract. W. H. Cashmore. Chem & Ind 62:141-2 Ap 10 '43

Direct-fired air heaters designed for dehydration and chemical processes. R. M. Rush and B. B. Reilly. il diags Mech Eng 65: 511-14 JI '43

Dried egg; the preparation, examination, and storage of spray-dried whole egg. E. C. Bate-Smith, J. Brooks and J. R. Hawthorne. Soc Chem Ind J 62:97-100 JI '43

Drying cabinets. il Chem Age (Lond) 48:454-5 Ap 24 '43

Drying of farm crops. W. H. Cashmore. Chem & Ind 62:278-81; Discussion. 281-2 JI 24 '43

Drying of foods. W. R. Marshall, Jr. bibliog il Heating-Piping 14:588-91+, 671-3, 724-8; 15: 10-12 O '42; Ja '43

Drying of foods. W. R. Marshall, Jr. diag Heating-Piping 15:567-72 N '43

Drying structural clay products. H. L. Longenecker. Brick & Clay Rec 102:26-8 F '43

Food dehydration. il Steel 112:72-3, 76 Ap 12 '43

Food dehydration. J. C. Patterson. il diags Refrig Eng 45:401-4+ Je '43

Food dehydration and air conditioning; types and design of dryers; reference section. il diags Heat & Ven 39:41-9 D '42

Hersey two-stage dehydrator. diag Food Ind 15:107 F '43

Home dehydrators for victory gardeners. il Business Week p64 My 1 '43

Home food drier. Business Week p46+ F 20 '43

How to build a dehydrator to dry food at home. diags Am Bld 65:54 Je '43

Infrared dehydration of meats and vegetables tested; preliminary investigations of carrots, sweet potatoes, turnip greens, beef and pork successful. F. M. Tiller, E. E. Litkenhouse and W. Turbeville. bibliog il Food Ind 15:77-94 O '43

Low-temperature drying; vacuum drums and shelves. Chem Age (Lond) 48:557-8 My 22 '43

Radiant gas heat in baking, curing and drying operations. C. P. Mann. il diag Gas Age 92:21-3+ S 9 '43; Same. Chem Ind 53: 332-5 S '43; Same abr. Can Chem & Process Ind 27:613-15 N '43

Small dehydrators for vegetables. S. G. Davis, W. B. Esselen, Jr. and F. P. Griffiths. bibliog il diags Food Ind 15:54-7 My; 53-5+ Je '43

Spray drying system for food products. diag Food Ind 14:87 D '42

Tunnel dehydrators and their use in vegetable dehydration. W. B. Van Arsdell. bibliog diags Food Ind 14:43-6+ O; 47-50+ N; 47-50+ D '42

See also

Centrifuges	Hand driers
Electric heating, Industrial	Kilns
	Paper drying

Patents

Drier patent; Frank J. Lang, Niagara Falls, N.Y., assignor to International paper company. Paper Ind 24:1306 Mr '43

Spray drying. Food Ind 15:127 My '43

Textiles

Clarifying radiant heat applications in textile finishing. G. R. Van Kampen. il Rayon 24:431-2 Ag '43

DRYING apparatus—Textiles—Continued

Drying operations are speeded up at Progrès-sive silk finishing co. by use of gas-fired radiant heaters. *il* Textile World 92:73 N '42

Infra-red boosts drying speed. *il* diag Textile World 93:56-8 Ja '43

Infra-red units push up denim output; drying endless felt belt used in production process. *il* Elec W 120:134+ JI 19 '43

New developments in handling of rayon cut staple. J. W. Reinhardt. *il* diags Rayon 24: 470-1 S '43

New facts on infra-red drying. S. L. Grapnel. *il* Textile World 93:94-5 Ag '43; Discussion (More data on infra-red). F. G. McGlaughlin. 93:88 O '43

Rodney Hunt machine co. small dryer. *il* Textile World 93:97 My '43

Thermex high-frequency drying equipment. *diag* Textile World 93:114 Ap '43

Welded-steel drying cylinder. F. A. Helin. *diag* Textile World 93:114 Ap '43

DRYING oils

Drying oils; abstract. T. P. Hilditch. Chem & Ind 62:123 Mr 27 '43

Drying oils from liquid fats; fractionation by solvent extractions. A. W. Kleinsmith and H. R. Kraybill. *bibliog* Ind & Eng Chem 35:674-6 Je '43

Oil isomerization. F. Battline. *bibliog* Paint Oil & Chem R 105:13-16 My 6 '43

Oils for finishing materials. S. T. Dingman. *il* Metal Finishing 41:597-600+ S '43

Paint technicians discuss drying oils and war program. *Oil Paint & Drug Rep* 143:7, 40 My 17 '43

Petroleum drying oil in exterior paint. E. W. McMullen. *Paint Oil & Chem R* 105:30-1 Je 3 '43

Present day use of natural oils and resins in printing inks. F. E. Petke and C. H. Allen. *il* Chem Ind 53:502-4 O '43

Principal oils used in drying industries, United States, average 1931-40, and 1942; charts. *Oil Paint & Drug Rep* 143:49 Je 7 '43

Protective coating oils use restricted by WPB. *Oil Paint & Drug Rep* 143:5+ Je 21 '43

Quest for quick-drying oil. *Fortune* 26:82+ D '42

Some functions of segregated oils in the paint industry. P. H. Faucett. *Paint Oil & Chem R* 106:9-10 S 9 '43

Some newer oils for varnishes, by Chicago club. *Oil Paint & Drug Rep* 144:58 N 1 '43

Substitutes for linseed oils in exterior paints. *Oil Paint & Drug Rep* 143:5-4 Mr 8 '43

Same. *Paint Oil & Chem R* 105:14+ Mr 11 '43

See also

Castor oil

Linseed oil

Tung oil

DUAL banking. See Banks and banking—Dual system

DUBUQUE, Iowa

Bridges

Pump delivers concrete for Dubuque bridge deck. *il* Eng N 129:880-1 D 24 '42

Three-span continuous truss bridge with the middle span a tied arch. *il* diags Eng N 130:282-7 F 25 '43

DUCK (textile)

Determining the deterioration of cellulose caused by fungi. G. A. Greathouse, D. E. Klemme and H. D. Barker. *bibliog* *il* Textile Col 65:168-75 Ap '43

Finishing of army ducks with special reference to mildewproofing. E. C. Bertolero. *Am Dyestuff Rep* 32:214-19, 226-7 My 10 '43

Fire resistant duck. J. R. Redmond. *Am Dyestuff Rep* 32:375-8 Ag 30 '43

Manual of military fabrics; no. 6 cotton duck, type I. *diag* Textile World 93:90-1+ O '43

DULCIN

Aspects of chemistry of flavouring materials. T. F. West. *bibliog* Chem & Ind 62:46-9 F 6 '43

DUMORTIERITE

Marketing kyanite and allied minerals. N. C. Jensen. *U S Bur Mines Information Circ* 7234:11-12 '43

DUMPING appliances

OFA dump truck rental regulations revised. Roads & Ss 86:50 JI '43

Transport of cement in bulk. *il* Engineering 155:190 Mr 5 '43

DUNES. See Sand dunes

DUNLOP rubber company

Annual general meeting, 44th, London. Economist 144:770 Je 12 '43

DUPLEX process. See Steel metallurgy—Duplex process

DUPLICATING processes. See Copying processes

DU PONT, Lammot, 1880-

Portrait. Chem & Eng N 21:890 Je 10 '43

DU PONT de Nemours, E. I., and company

Annual report. Comm & Fin Chr 157:691 F 22 '43

News from the chemists' front. *il* Barron's 23:23-4 S 20 '43

DURABLE goods

Durable goods industries' earnings compared, 1941-1942. Steel 112:89 Mr 15 '43

Effective use of key salesmen in wartime; capital goods industries. K. B. Keefer. *Ind Marketing* 28:42+ My '43

Post war competitive trends in consumer durable goods. E. A. Krauss. *il* Mag of Wall St 72:285-7+ Je 26 '43

Price deflators for consumer commodities and capital equipment, 1929-42. H. Shavell. Survey of Cur Business 23:13-21 My '43

DURALUMIN

Chromium-plated duralumin; abstract. A. Beerwald. Metals & Alloys 18:558+ S '43

Heat treatment vs. corrosion of duralumin; abstract. J. C. Arrowsmith and G. Murray. Metals & Alloys 17:612+ Mr '43

Resilience of duralumin vs. steel; abstract. L. P. Dudley. Metals & Alloys 17:840+ Ap '43

DURAMOLD

Details of Duramold fabrication. S. M. Fairchild. *il* Aero Digest 42:232, 235-6, 239 F '43

Duramold speeds stabilizer production. H. Chase. *il* Aviation 42:150-1, 153+ Je '43

DURHAM, North Carolina

Water supply

Experiences with manganese removal at Durham. R. S. Phillips. *il* Water Works & Sewerage 90:263-5 JI '43

DUROMETER. See Hardness—Testing

DUST

Dust, a potent enemy of military vehicles. L. F. Overholt. *Automotive & Aviation* Ind 89:30 JI 15 '43

Dust problems in military vehicle operation. L. F. Overholt. *il* S A E J 51:381-4 O '43

Industry watches its dust. *Management* R 32: 341-2 S '43

Measurements of concentrations of air-borne dusts. T. Bedford and C. G. Warner. *bibliog* J Ind Hygiene 24:315-21 D '42

Testing toxic atmospheres. N. R. Bernz. *bibliog* *il* Heating-Piping 15:236-7 My '43

See also

Coal dust

Coffee dust

Dust removal

Flue dust

Gas, Natural—Dust

problem

Lungs—Dust diseases

Respiratory apparatus

Silicosis

Sulfur dust

Wood dust

Analysis

New method for the determination of free silica in industrial dusts. A. Salazar and L. Silverman. *bibliog* *il* diag J Ind Hygiene 25:139-48 Ap '43

DUST bowl. See Great Plains region

DUST collectors

Aget-Detroit dust collector for grinding, sanding, and spraying operations. *il* Metal Finishing 41:509 Ag '43

Close control of raw material; dust collecting system. Kosmos portland cement co. W. B. Lenhart. *il* Rock Prod 46:48-9 JI '43

Coal dust collector for a conveyor loading point; Bargoed colliery, South Wales. *diags* Min Cong J 29:18-21 Ja '43

DUST collectors—Continued

- Control and collection of industrial dust. E. D. Powers. *il* diags plan Rock Prod 45:58-60 F; 46-8 Ap; 48-9+ S '42; 46:66-8 Mr; 70, 72 Je '43
- Correcting proportions of main pipe. R. L. Grayford. *diags* Sheet Metal Worker 34:25-6 J1 '43
- Designing a coffee dust separator. *diags* Sheet Metal Worker 34:31-2 O '43
- Disappearing dust; pattern shop and foundry of R. K. LeBlond machine tool company. *il* Safety Eng 86:24-5 O '43
- How to design exhaust hoods; hoods for dust control; total enclosures and screening. J. M. Dalla Valle. *diags* Heat & Ven 40:65-9 J1 '43
- Hygienic disposal of collected dry dusts. C. A. Snyder. *il* *diag* Ind Med 12:59-60 Ja '43
- New equipment; plant service apparatus. *il* Iron Age 151:71-2 My 20 '43
- Wet system keeps stone plant clean; General crushed stone co. B. Nordberg. *il* Rock Prod 46:52-3 J1 '43
- DUST counting.** See Dust sampling
- DUST diseases.** See Lungs—Dust diseases; Silicosis
- DUST explosions**
- Blasts in check; preventives growing with new uses for metal dusts. *Business Week* p60+ O 9 '43
- Chemical work of the factory department; aspect of industrial health report. S. H. Wilkes. *Chem Age* (Lond) 49:27-30 J1 10 '43
- Dust explosion codes; National fire codes published. *East Underw* 44:26 F 26 '43
- Dust is dynamite. E. P. Caldwell, Jr. *il* Safety Eng 84:48-50 O; 13, 16 N; 35-8 D '42
- Fires and explosion; hazards of flammable gases, vapors, liquids and dusts. W. J. Burke. *Safety Eng* 85:31+ Mr '43
- New standards show how to prevent dust explosions. H. R. Brown. *il* Ind Stand 14: 59-62 F '43; Same. *Weekly Underw* 148:588+ Mr 13 '43

See also

- Coal dust
Rubber dust

DUST removal

- Control and collection of industrial dust. E. D. Powers. *il* *diags* plan Rock Prod 45: 58-60 F; 46-8 Ap; 48-9+ S '42; 46:66-8 Mr; 70, 72 Je '43
- Control that dust. H. M. Nichols. *il* Safety Eng 86:13-14+ Ag '43
- Dust-free grinding and blast cleaning; Lodge & Shipley machine tool company. F. Schoeffler. *il* Nat Safety 47:18-19+ My '43
- Dust is dynamite. B. P. Caldwell, Jr. *il* Safety Eng 84:46-50 O; 13, 16 N; 35-8 D '42
- Dust separation. *Safety Eng* 85:44 Mr '43
- Dust under control. J. M. Kane. *il* Nat Safety N 47:18-19+ Ja '43
- Hygienic disposal of collected dry dusts. C. A. Snyder. *il* *diag* Ind Med 12:59-60 Ja '43
- Industrial housekeeping. *il* Nat Safety N 47: 168+ Mr '43
- Some preliminary data on methods for allaying coal dust in tipples and cleaning plants. D. S. Kingery. *bibliog* pls U S Bur Mines Information Circ 7248:1-11 '43
- Taking dust out of industry. *il* Sci Am 169: 157-9 O '43
- Use of wetting agents in reducing dust produced by wet drilling in basalt. J. A. Johnson. U S Bur Mines Rep of Invest 3678:1-27 '43

See also

- Air filters
Dust collectors
Electric precipitation
Exhaust systems
- Flue dust
Gas, Natural—Dust
problem

DUST sampling

- Criteria of dust determination; effects of particle-deposition technique. S. C. Blackthorn. *Chem Age* (Lond) 48:575-9 My 29 '43
- Minnesota dust counter; comparative performance of four different types of dust counters. F. B. Rowley and R. C. Jordan. *diags* Engineering 154:401-4 N 20 '42
- New type adhesive impingement dust counter. F. B. Rowley and R. C. Jordan. *il* *diags* J Ind Hygiene 25:293-302 S '43
- Portable electrostatic precipitator. W. L. Lea. *il* *diag* J Ind Hygiene 25:152-6 Ap '43

- Testing toxic atmospheres. N. R. Bernz. *bibliog* *il* Heating-Piping 15:236-7 My '43

DUST separators. See Dust collectors**DUTCH GUIANA****Economic conditions**

- War economy of the Guianas. W. R. Scott. *il* For Comm W 11:5-10 Ap 17 '43

Industries and resources

- Rice cultivation in Surinam. For Comm W 12:22-3 J1 17 '43

DWELLINGS. See Architecture, Domestic; Houses; Housing projects**DWIGHT manufacturing company**

- Stock offered. *Comm & Fin* Chr 158:769 Ag 23 '43

DYE analysis

- Applications of near infra-red spectrophotometry. E. I. Stearns. *Opt Soc Am* J 33: 27-30 Ja '43
- Method for the rapid identification of the arylamine residue in compounds of the naphthol AS series. E. J. Cross and P. W. Carlene. *bibliog* Soc Dyers & Col J 59:191-2 S '43
- Some notes on the examination of dyestuffs. P. H. Anderson. *Textile Col* 65:448+ O '43

DYE auxiliaries. See Dyes and dyeing—Chemistry**DYE factories****Employees**

- Training dye plant workers in the present emergency; presented for the A.A.T.C.C. Mid-west section by W. A. Stringfellow. *Am Dyestuff Rep* 31:632-3+ D 7 '42

DYE industry

- Dyestuffs, textile and leather chemicals, 1942. *Oil Paint & Drug Rep* 143:78+ Ja 11 '43
- Recent development of dyestuffs and the textile industry. R. L. Elliott. *Textile Inst J* 34:P21-5 F '43; Correction. 34:P78 Ap '43

United States

- Dyes will be even better. J. H. Sachs. *il* Sci Am 169:121-2+ S '43
- Dyestuff industry expansion enormous. R. E. Sumner. *Rayon* 23:667-8 N '42
- Dyestuffs conservation. A. L. Lippert. *Oil Paint & Drug Rep* 142:7+ N 16 '42; Same. *Am Dyestuff Rep* 31:571-3 N 23 '42; Discussion. 32:10-12 Ja 4 '43
- Dyestuffs, pigments use curtailed. *Oil Paint & Drug Rep* 143:4+ Ja 25 '43

DYE intermediates

- Derivatives of 1:2:4:5-tetrachlorobenzene; nitro- and amino-compounds. A. T. Peters, F. M. Rowe and D. M. Stead. *Chem Soc J* p233-5 My '43
- Polyhalogeno-o-anisidines and their derivatives. W. S. W. Harrison, A. T. Peters and F. M. Rowe. *Chem Soc J* p235-7 My '43

DYE patents

- Aldehyde amines; a new aid in the dyehouse. P. H. Anderson. *Textile Col* 65:367-8 Ag '43
- Application of azoic dyes to cellulose materials. A. J. Hall. *Textile Col* 65:293+ J1 '43
- Azoic dyes; problem to simplify their application. A. J. Hall. *Textile Col* 65:49-50 F '43
- Water-soluble rayon dyes. A. J. Hall. *Textile Col* 65:194-5 My '43

DYE plants. See Dyes and dyeing—Natural dyes**DYE research**

- Dyes will be even better. J. H. Sachs. *il* Sci Am 169:121-2+ S '43

DYE stripping. See Dyes and dyeing—Stripping**DYE testing**

- Atmospheric (gas) fading of colored cellulose acetate. C. A. Seibert. *il* *Am Dyestuff Rep* 31:647-9 D 7 '42; Same. *Rayon* 23:724-5; 24:39-4 D '42-Ja '43
- Color fastness of certain types of dyes on women's and children's wearing apparel fabrics. H. E. Borton and others. *bibliog* *il* *diags* *Am Dyestuff Rep* 31:603-27 D 7 '42
- Coloring materials for copolymer vinyl chloride-acetate compounds. F. G. Clark. *bibliog* *il* Ind & Eng Chem 35:368-74 Mr '43

DYE testing—Continued

- Evaluation of dye intensity. F. O. Sundstrom. *il Paper Ind* 24:327-31 N '42
- Report of committee on accelerated ageing tests for sulfur-dyed materials. T. R. Smith. *Am Dyestuff Rep* 32:380-4 Ag 30 '43
- Report of committee on group M; fastness to washing of dyed and printed manufactured organic fibers. D. P. Knowland. *Am Dyestuff Rep* 32:248-50 My 24 '43
- Report of the committee cooperating with the government on uniform fabrics. L. A. Olney. *Am Dyestuff Rep* 31:644-6 D 7 '42
- Report of the committee on accelerated ageing tests for sulfur dyed materials. T. R. Smith and A. H. Gaede. *Am Dyestuff Rep* 31:650-1 D 7 '42
- Spectrophotometer in the textile industry. C. Monogo and W. von Bergen. *bibliog il diags Am Dyestuff Rep* 32:1-8, 17-23 Ja 4 '43

See also

Dyes, Fastness of
Fade-ometer

Standards

- ASA committee recommends labels to show colorfastness of textiles. *il Ind Stand* 13: 271-2 N '42

DYEHOUSES**Employees**

- Women in finishing plants. *Am Dyestuff Rep* 32:438-9 O 11 '43

Equipment

- Cleaning resins from dye kettles. *Textile World* 92:101 D '42
- How to extend the life of monel dyehouse equipment. *il Rayon* 24:44-6 Ja '43

DYEING machines

- Riggs & Lombard continuous indigo dyeing machines for woolen fabrics. *il Textile World* 93:95-6 Mr '43; *Rayon* 24:154 Mr '43
- Some textile finishing machines. K. S. Laurie. *il diags Engineer* 175:176-8 F 26 '43; *Same. Engineering* 156:218-19 Mr 12 '43

DYES, Fastness of

- ASA committee recommends labels to show colorfastness of textiles. *il Ind Stand* 13: 271-2 N '42
- Analysis of 84 qualities of cotton dress prints; color fastness results. M. E. Hays and G. E. Frankenberg. *Rayon* 23:669 N '42
- Atmospheric (gas) fading of colored cellulose acetate. C. A. Seibert. *bibliog il diags Am Dyestuff Rep* 29:363-70; *il* 31:647-9 Jl 22 '40, D 7 '42; *Same* (pt.2). *Rayon* 23:724-5; 24:33-4 D '42-Ja '43; *Discussion. Am Dyestuff Rep* 29:370-4 Jl 22 '40
- Calibration of fade-ometers; presented for the A.A.T.C.C. New York section by P. J. Wood. *il Am Dyestuff Rep* 31:595-9+ D 7 '42

- Color fastness and physical properties of wool and rayon gabardines. H. M. Fletcher and H. M. S. Sherwood. *bibliog Am Dyestuff Rep* 32:280, 291-6 Je 21 '43

- Color fastness of certain types of dyes on women's and children's wearing apparel fabrics. H. E. Borton and others. *bibliog il diags Am Dyestuff Rep* 31:603-27 D 7 '42
- Effect of dielectrics and solvent upon the regeneration in acid solution of alkali-faded bromophenol blue. E. S. Amis and J. B. Price. *bibliog J Phys Chem* 47:338-48 Ap '43

- Evaluation of light fastness by means of a spectrophotometer; presented for the A.A.T.C.C. Northern New England section by E. S. Chapin. *Am Dyestuff Rep* 31:600-2 D 7 '42

- Fastness to weathering of the army O.D. shade dyed by the monochrome method. N. G. Koehler. *Am Dyestuff Rep* 32:481-2+ N 8 '43

- Fibrox. C. C. Wilcock and C. P. Tattersfield. *Soc Dyers & Col J* 59:119-24 Je '43; *Abstract. Textile Col* 65:419+ S '43

- Recommendations of ASA committee L-14 to the Federal trade commission on the colorfastness of textiles. *Am Dyestuff Rep* 31: 543-6 N 9 '42

- Report of committee on group M; fastness to washing of dyed and printed manufactured organic fibers. D. P. Knowland. *Am Dyestuff Rep* 32:248-50 My 24 '43

- Rubbing and bleeding of dyestuffs in printing and dyeing of textiles. *Textile Col* 64: 373-6, 411-12, 424-8, 467-71+; 65:34-7 Ag-O '42, Ja '43

DYES, Natural. See Dyes and dyeing—Natural dyes

DYES and dyeing

- Aldehyde amines; a new aid in the dyehouse. P. H. Anderson. *Textile Col* 65:367-8 Ag '43
- Alphabetical list of new products developed since October 1941. *Am Dyestuff Rep* 31: 653-60 D 7 '42
- Application of water dispersed pigment colors to textiles. F. G. La Planz. *Am Dyestuff Rep* 32:261-3; *Discussion. 263-4 Je 7 '43*
- Coloring materials for copolymer vinyl chloride-acetate compounds. F. G. Clark. *bibliog il Ind & Eng Chem* 35:368-74 Mr '43

- Dyeing problems arising out of wartime conditions. J. A. Eastwood. *Textile Col* 64: 545-6 N '42

- Dyestuffs conservation. A. L. Lippert. *Oil Paint & Drug Rep* 142:7+ N 16 '42

- Fibrox. C. C. Wilcock and C. P. Tattersfield. *Soc Dyers & Col J* 59:119-24 Je '43; *Abstract. Textile Col* 65:419+ S '43

- Glycerine in newer dyeing and finishing processes. G. Leffingwell and M. A. Lesser. *bibliog Textile Col* 65:398, 400-2 S '43
- High-temperature heating with hot water in dyehouses. P. L. Geiringer. *il Textile World* 93:100-1 S '43

- Meeting changing conditions. R. W. Jacoby. *Am Dyestuff Rep* 32:192-8; *Discussion. 198-9 Ap 26 '43*

- Phosphorescence of adsorbed tryptaflavine and its quenching by oxygen. J. Franck and P. Fringsheim. *bibliog J Chem Phys* 11:21-7 Ja '43

- Processing government fabrics; hosiery dyeing and fabric finishing discussed at recent A.A.T.C.C. meeting. *Textile World* 93:96 Jl '43

- Rubbing and bleeding of dyestuffs in printing and dyeing of textiles. *Textile Col* 64: 373-6, 411-12, 424-8, 467-71+; 65:34-7 Ag-O '42, Ja '43

- Salvaging hats by redyeing them. G. Rice. *Textile Col* 65:115-16 Mr '43

- Shade matching in dyeing and textile printing. *Textile Col* 65:235-8, 274 Je '43

- Spectrophotometer in the textile industry. C. Monogo and W. von Bergen. *bibliog il diags Am Dyestuff Rep* 32:1-8, 17-23 Ja 4 '43

- Surface replicas containing dye for use in the light microscope. V. J. Schaefer. *il Metal Prog* 44:72-4 Jl '43

- War widens soap usage in textiles. G. W. Lyfingwell. *bibliog Textile Col* 65:83-4 F '43

See also

- | | |
|-------------------------|----------------------------------|
| Bleaching | Indigo |
| Blue | Indigosol |
| Color matching | Methylene blue |
| Color printing | Pigments |
| Coloring matter in food | Stains and staining (microscopy) |
| Dye industry | Sulfur dyes |
| Dye patents | Textile printing |
| Dyeing machines | Wetting agents |
| Dyes, Fastness of | |

Aluminum

See Aluminum—Coloring

Aralac

- Dyeing and finishing of Aralac fabrics. *il Rayon* 24:146 Mr '43

- Processing of Aralac. H. E. Millson. *il Textile Col* 65:198-203, 206, 208-10, 245-52, 280-2, 294-8 My-Jl '43

- Scouring and dyeing of Aralac blends. H. E. Hager. *il Rayon* 24:30-2, 87-8 Ja-F '43

Cellophane

- Role of salts in the dyeing of cellulose with substantive dyes. F. L. Usher and A. K. Wahbi. *bibliog Soc Dyers & Col J* 53: 221-8 N '42; *Discussion. S. M. Neale. 59:148-9; Reply. F. L. Usher. 150-1 Jl '43*

Chemistry

- Adsorption at the crystal-solution interface; an electron-diffraction investigation of crystal surfaces of pure sodium bromate and sodium bromate with adsorbed dyes. J. H. Blomquist and W. G. France. *bibliog J Phys Chem* 46:1044-50 D '42

DYES AND DYING—Chemistry—Continued

- Aldehyde amines; a new aid in the dyehouse. P. H. Anderson. *Textile Col* 65:367-8 Ag '43; Abstract. *Chem Ind* 53:357 S '43
- Alkaline reduction of dyestuffs during dyeing. A. Carbone. *Am Dyestuff Rep* 32:415-18 S '43
- Chemical constitution of the chrome azo dyes. K. L. Dornan. *tables Am Dyestuff Rep* 32:47-66 F 1 '43
- Color and constitution of polymethine dyes. K. F. Herzfeld and A. L. Sklar. *bibliog Rs Mod Phys* 14:294-302 Ap-Jl '42
- Derivatives of 3':2'-acenaphthoylbenzoic acid. A. T. Peters and F. M. Rowe. *bibliog Soc Dyers & Col J* 59:52-4 Mr '43
- Diffusion of solubilized dyes in water and through membranes. R. B. Dean and J. R. Vinograd. *bibliog J Phys Chem* 46:1091-8 D '42
- Dyeing of nylon with direct cotton, azoic and vat dyes. C. M. Whittaker. *bibliog Soc Dyers & Col J* 59:69-73; Discussion. 73-4 Ap '43; Same. *Am Dyestuff Rep* 32:335-8, 353-6 Ag 2 '43
- Dyeing of nylon with dispersed dyes. T. Vickerstaff. *bibliog Soc Dyers & Col J* 59:92-101 My '43
- Effect of dielectrics and solvent upon the regeneration in acid solution of alkali-faded bromophenol blue. E. S. Amis and J. B. Price. *bibliog J Phys Chem* 47:338-48 Ap '43
- Effect of solvents on the absorption spectra of dyes; some dyes other than cyanines. S. E. Sheppard and P. T. Newsome. *Am Chem Soc J* 64:2937-46 D '42
- Effects of environment and aggregation on the absorption spectra of dyes. S. E. Sheppard. *bibliog* (60 references) *il Rs Mod Phys* 14:303-40 Ap-Jl '42
- Identification of some sulphonic acid reduction products of azo dyes. P. Chen and E. J. Cross. *bibliog Soc Dyers & Col J* 59:144-8 Jl '43
- Mechanism of formation of leuco-triphenylmethane dyes, and an analogy in the Perkin reaction. R. R. Davies and H. H. Hodgson. *bibliog Soc Dyers & Col J* 59:196-8 S '43
- Mechanism of formation of orange II alumina color lakes. A. Voet. *bibliog J Phys Chem* 47:191-6 Mr '43
- Polymerization of the free radicals of the Wurster dye type; the dimeric resonance bond. L. Michaels and S. Granick. *bibliog Am Chem Soc J* 65:1747-55 S '43
- Quinoxaline cyanines. A. H. Cook, J. Garner and C. A. Perry. *Chem Soc J* p10-13 N '42
- Recent advances in fur dyeing. H. Weisskopf. *Am Dyestuff Rep* 32:163-4 Mr 29 '43
- Recent development of dyestuffs and the textile industry. R. L. Elliott. *Textile Inst J* 34:P21-5 F '43; Correction. 34:P78 Ap '43
- Resist processes; a new method of reducing the affinity of wool for acid dyes. G. H. Elliott and J. B. Speakman. *bibliog Soc Dyers & Col J* 59:185-91 S '43
- Role of salts in the dyeing of cellulose with substantive dyes. F. L. Usher and A. K. Wahbi. *bibliog Soc Dyers & Col J* 58:221-8 N '42; Discussion. S. M. Neale. 59:148-9; Reply. F. L. Usher. 150-1 Jl '43
- Simplified discussion of color and constitution of azo dyes. W. B. Reynolds. *Am Dyestuff Rep* 32:455-6, 465-7 O 25 '43
- Sodium chlorite, an oxidant for vat and sulfur dyes. G. P. Vincent. *Chem & Eng N* 21:1176-7 Jl 25 '43
- Some effects of solvents upon the absorption spectra of dyes; chiefly polymethine dyes. S. E. Sheppard, P. T. Newsome and H. R. Brigham. *bibliog diags Am Chem Soc J* 64:2923-37 D '42
- Some lesser known dyers' assistants: anthraquinone. H. Peters. *Textile Col* 65:387-8 S '43
- Some of the recent developments in the field of thioyanates. J. H. Clayton and E. Bann. *bibliog Chem & Ind* 61:420-2 O 17 '42; Abstract. *Textile Col* 65:50-1 F '43
- Spectra of dye molecules; absorption and resonance in dyes. L. G. S. Brooker. *Rs Mod Phys* 14:275-93 Ap-Jl '42
- Systematic investigation of the colour and dyeing properties of the aminoacridines; the five monoaminoacridines. A. Albert and C. L. Bird. *bibliog Soc Dyers & Col J* 59:74-6 Ap '43
- Technical notes of interest to hosiery and yarn dyers; abstracts. C. E. Ordway. *Am Dyestuff Rep* 31:675-6 D 21 '42; *Textile Col* 64:576; Discussion. 576-+ D '42
- Theory and practice of the reduction and oxidation of indanthrone and its derivatives (indanthren blues). H. A. Brassard. *Soc Dyers & Col J* 59:127-9 Je '43
- Thiazinocyanines; cyanines containing the dihydro-1:3-thiazine nucleus. F. M. Hamer and R. J. Rathbone. *Chem Soc J* p243-9 My '43
- Thiazoles and their uses in industry and medicine. R. F. Hunter. *Chem & Ind* 62:118-21 Mr 27 '43

Cotton

- Azoic dyes; problem to simplify their application. A. J. Hall. *Textile Col* 65:49-50 F '43
- Direct cotton dyes, common salt, and common sense. C. M. Whittaker. *Soc Dyers & Col J* 58:253-6 D '42; Abstract. *Textile Col* 65:195-6 My '43
- Dyeing and finishing of cotton piece goods for the government. M. M. Calhoun, jr. *Am Dyestuff Rep* 32:327; Discussion. 328 Jl 19 '43
- Dyeing of government army and navy shades on half hose; army tan and navy black mercerized yarn and army cotton-wool hose. J. V. Boone. *Am Dyestuff Rep* 32:304-6 Jl 5 '43
- Dyeing to government specifications with sulfur colors. *Am Dyestuff Rep* 32:109-14 Mr 1 '43; Same. *Textile Col* 64:534-5, 539-41 N '42
- Finishing of army ducks with, special reference to mildeproofing. E. C. Bertolet. *Am Dyestuff Rep* 32:214-19, 226-7 My 10 '43
- Mordants for cotton dyeing; abstract. A. Furia. *Chem & Met Eng* 50:197-8 S '43
- Reducing time of vat dyeing with textone. A. L. Dubeau, E. G. Fenrich and G. P. Vincent. *Am Dyestuff Rep* 32:175-6 Ap 12 '43; Abstract. *Textile World* 93:90 Je '43
- Report of committee on accelerated ageing tests for sulfur-dyed materials. T. R. Smith. *Am Dyestuff Rep* 32:380-4 Ag 30 '43
- Report of the committee on accelerated ageing tests for sulfur dyed materials. T. R. Smith and A. H. Gaede. *Am Dyestuff Rep* 31:650-1 D 7 '42
- Study of the effects of extracting and drying on the carding and spinning of raw stock dyed cotton; presented for the A.A.T.C.C. Southeastern section by L. E. Whittelsey. *Am Dyestuff Rep* 31:628-9 D 7 '42
- Tiger stripes in army socks; frequently traced to mercerization. *diags Textile World* 93:97 S '43

Cotton—rayon

- Dyeing cotton-rayon mixtures. H. P. Baumann. *Textile Col* 65:53-4 F '43

Cotton—wool

- Alkaline reduction of dyestuffs during dyeing; experimental work on wool-cotton army hose. A. Carbone. *Am Dyestuff Rep* 32:415-18 S 27 '43
- Color faults in angola yarn. *Textile Col* 65:458-9 O '43
- Dyeing of government army and navy shades on half hose; army tan and navy black mercerized yarn and army cotton-wool hose. J. V. Boone. *Am Dyestuff Rep* 32:304-6 Jl 5 '43
- Dyeing of Morley goods. G. Webster. *Soc Dyers & Col J* 59:54-6 Mr '43
- Dyeing of union fabrics. E. B. Abbott. *Textile Col* 65:441-5 O '43

Fluorescence

- Demonstration of the protozoan parasite of quail malaria by fluorescence microscopy. R. L. Patton and R. L. Metcalf. *Science* 98:184 Ag 20 '43
- Processing of Aralac. H. E. Millson. *il Textile Col* 65:198-203, 206, 208-10 My '43
- Some applications of fluorescent chemicals. J. A. Radley. *bibliog Soc Dyers & Col J* 59:137-40 Jl '43; Same. *Can Chem & Process Ind* 27:504-5+ S '43; Discussion. *Soc Dyers & Col J* 59:140 Jl '43

DYES and dyeing—Continued**Food**

See Coloring matter in food

FurRecent advances in fur dyeing. H. Weisskopf. *Am Dyestuff Rep* 32:163-4 Mr 29 '43**History**

Kermes, an ancient dyestuff. B. Brown. *Textile Col* 65:187-9 My '43
 Madder, ancient and medieval. B. Brown. *Textile Col* 65:93-5, 141-4 Mr-Apr '43

HosieryAlkaline reduction of dyestuffs during dyeing; experimental work on wool-cotton army hose. A. Carbone. *Am Dyestuff Rep* 32:415-18 S 27 '43Dyeing acetate hosiery. H. Logan. *Rayon* 24:253-4 My '43Dyeing hosiery in war time. N. D. White. *il Rayon* 24:481-2 S '43Dyeing of government army and navy shades on half hose; army tan and navy black mercerized yarn and army cotton-wool hose. J. V. Boone. *Am Dyestuff Rep* 32:304-6 Jl 5 '43Effect of the present war on the hosiery dye house; presented for the A.A.T.C.C. South central section by W. J. Harrison. *Am Dyestuff Rep* 31:630-1 D 7 '42Processing government fabrics; hosiery dyeing and fabric finishing discussed at recent A.A.T.C.C. meeting. *Textile World* 93:96 Jl '43Technical notes of interest to hosiery and yarn dyers. C. B. Ordway. *Am Dyestuff Rep* 31:675-6 D 21 '42Tiger stripes in army socks; frequently traced to mercerization. *diags Textile World* 93:97 S '43**Jute**Dyeing of jute hessian fabrics. J. W. Brown. *Textile Col* 64:585-6 D '42**Knit goods**Dyeing procedures for rayon hosiery and knit fabrics. J. A. Hopwood. *Rayon* 24:200-1 Ap '43**Metachrome process**Dyeing of wool with chrome dyes; the metachrome process. C. B. Stevens, F. M. Rowe and J. B. Speakman. *Soc Dyers & Col J* 59:165-71 Ag '43**Mordants**Developments in mordanting; polymerized products and resins as binding agents. *Am Dyestuff Rep* 32:393-4 Ag 30 '43Fibrox. C. C. Wilcock and C. P. Tattersfield. *Soc Dyers & Col J* 59:122 Je '43**Natural dyes**Animal sources of dyes; insect and other contributors. E. Hardy. *Textile Col* 64:563-4 D '42Kermes, an ancient dyestuff. B. Brown. *Textile Col* 65:187-9 My '43Lichen colors. A. E. Karr. *Textile Col* 64:431-6; 65:74-82, 85 bibliog(p81-2, 85) S '42, F '43Love of color among primitive arctic peoples. A. Fiala. *Textile Col* 64:555-6 D '42Saponin from the species of buddleia. C. D. Mell. *Textile Col* 65:114 Mr '43Woad; the ancient universal dye. B. Brown. *Textile Col* 65:427-8+ O '43

See also

Indigo
Madder**Bibliography**Natural dye substitutes. A. E. Karr. *Am Dyestuff Rep* 32:241-2, 314 My 24, Jl 5 '43**Nylon**Dyeing of nylon with direct cotton, azoic and vat dyes. C. M. Whittaker. *bibliog Soc Dyers & Col J* 59:69-73; Discussion. 73-4 Ap '43; Same. *Am Dyestuff Rep* 32:335-8, 353-6 Ag 2 '43Dyeing of nylon with dispersed dyes. T. Vickersstaff. *bibliog Soc Dyers & Col J* 59:92-101 My '43Setting, dyeing and finishing nylon hosiery. H. H. Mosher. *Textile Col* 64:542-4 N '42**Nylon—Aralac**Processing of Aralac. H. E. Millson. *Textile Col* 65:297-8 Jl '43**Paper**Calendar coloring. F. O. Sundstrom. *il Paper Ind* 24:1132-4 F '43Dyeing paper in the beater. J. R. Roberts. *il Paper Ind* 24:341-3 D '42Evaluation of dye intensity. F. O. Sundstrom. *il Paper Ind* 24:827-31 N '42Matching shades in the beater. J. R. Roberts. *il Paper Ind* 24:1040-1 Ja '43Study of dyestuff absorption by fillers and their effect upon the color of filled papers. O. Kress and P. Trucano. *bibliog Paper Tr J* 117:31-8 S 2 '43; Abstract. *Paper Ind* 25:550-1 Ag '43**Rayolanda**Rayolanda. X. A. J. Hall. *Textile Col* 65:431-2 O '43**Rayon**Atmospheric (gas) fading of colored cellulose acetate. C. A. Seibert. *bibliog il diags Am Dyestuff Rep* 29:363-70; 31:647-9 Jl 22 '40, D 7 '42; Same (pt.2). *Rayon* 23:724-5; 24:33-4 D '42-Ja '43; Discussion. *Am Dyestuff Rep* 29:370-4 Jl 22 '40Color fastness and physical properties of wool and rayon gabardines. H. M. Fletcher and H. M. S. Sherwood. *bibliog Am Dyestuff Rep* 32:280, 291-6 Je 21 '43Cutting down time in piece dyeing. N. D. White. *Rayon* 24:195-6 Ap '43Dyeing acetate hosiery. H. Logan. *Rayon* 24:253-4 My '43Dyeing and finishing of rayon Milanese knitted fabric. *Textile Col* 64:581-4 D '42; Abstract. *Soc Dyers & Col J* 59:17 Ja '43Dyeing hosiery in war time. N. D. White. *il Rayon* 24:481-2 S '43Dyeing of acetate rayon. *Textile Col* 64:559-62; 65:63, 85-6 D '42, F '43Dyeing of rayon and some new developments. J. Hopwood. *Am Dyestuff Rep* 32:153-6 Mr 29 '43Dyeing procedures for rayon hosiery and knit fabrics. J. A. Hopwood. *Rayon* 24:200-1 Ap '43Dyeing procedures for rayon woven goods. J. A. Hopwood. *Rayon* 24:245-6 My '43Dyeing rayon hosiery. *Am Dyestuff Rep* 32:439-40 O 11 '43Fibrox. C. C. Wilcock and C. P. Tattersfield. *Soc Dyers & Col J* 59:119-24 Je '43; Abstract. *Textile Col* 65:419+ S '43Postwar fibers, colors, finishes. *Am Dyestuff Rep* 32:440-1 O 11 '43Rayon dyeing. P. M. Joshi. *Textile Col* 65:263-7 Je '43Report of committee on group M; fastness to washing of dyed and printed manufactured organic fibers. D. P. Knowland. *Am Dyestuff Rep* 32:248-50 My 24 '43Solving a rayon hosiery problem; 51 gauge rayon stocking has badly streaked boot. *Rayon* 24:37-8 Ja '43Some problems of the cellulose acetate rayon dyer. G. H. Lister. *Soc Dyers & Col J* 59:89-91 My '43Vat dyeing of viscose rayons. A. R. Wachter. *Textile Col* 64:571-2 D '42; Abstract. *Textile World* 93:71 Mr '43Water-soluble rayon dyes. A. J. Hall. *Textile Col* 65:194-5 My '43

See also

Dyes and dyeing—
Cotton—rayon**Rayon—Aralac**Processing of Aralac. H. E. Millson. *Textile Col* 65:250-2, 280-1, 294-6 Je-Jl '43**Redwood fiber**Dyeing of redwood fibers. H. Luttringhaus. *il Rayon* 24:489-90 S '43**Stripping**Stripping and re-dyeing of rags. N. C. Gee. *Textile Col* 65:369-70 Ag '43**Vat dyes**Assistants for dyeing with vat dyes. A. J. Hall. *Textile Col* 65:148 Ap '43

DYES and dyeing—Vat dyes—Continued

- Dyeing and finishing of cotton piece goods for the government. M. M. Calhoun, Jr. *Am Dyestuff Rep* 32:327; Discussion. 328 JI 19 '43
- Reducing time of vat dyeing with textone. A. L. Dubeau, E. G. Fenrich and G. P. Vincent. *Am Dyestuff Rep* 32:175-6 Ap 12 '43; Abstract. *Textile World* 93:90 Je '43
- Sodium chlorite, an oxidant for vat and sulfur dyes. G. P. Vincent. *Chem & Eng N* 21:1176-7 JI 25 '43
- Textile printing; the rise in temperature of the ager. A. B. Meggy. *Soc Dyers & Col J* 59:192-6 S '43
- Vat dyeing of civilian fabrics; conservation order M-103 necessitated development of new color combinations. C. N. Rabold. *Textile World* 93:108+ F '43
- Vat dyeing of viscose rayons. A. R. Wachter. *Textile Col* 64:571-2 D '42; Abstract. *Textile World* 93:71 Mr '43
- Vat dyeing OD army underwear. O. W. Clark. *Textile World* 93:104-5 Ap '43

See also

Indanthrene blue

Wool

- Analysis of the selective combination of wool with acids in mixtures. J. Steinhart, bibliog *J Research Nat Bur Stand* 29:425-36 D '42
- Chemical constitution of the chrome azo dyes. K. L. Dorman, tables *Am Dyestuff Rep* 32:47-66 F 1 '43
- Color and distortion defects in piece-dyed worsteds. *Textile Col* 65:383-6 S '43
- Color fastness and physical properties of wool and rayon gabardines. H. M. Fletcher and H. M. S. Sherwood, bibliog *Am Dyestuff Rep* 32:280, 291-6 Je 21 '43
- Combination of wool protein with acids in mixtures, and its relation to the acid dyeing of wool. J. Steinhart, C. H. Fugitt and M. Harris, bibliog *J Research Nat Bur Stand* 29:417-24 D '42; Same. *Textile Col* 65:15-17, 22, 40 Ja '43
- Continuous dyeing of navy fabric. *Textile World* 93:80 Ja '43
- Continuous indigo piece dyeing. *Textile Col* 65:291-2 JI '43
- Determination of permissible tolerances in color matching. J. H. Skinkle and W. W. Platt. *Am Dyestuff Rep* 31:537-41 N 9 '42
- Dyeing of acid and chrome colors on wool without acetic acid. E. I. Noble. *Textile Col* 64:522-5 N '42
- Dyeing of carbonized pieces, with special reference to carbonising faults. S. L. Peel. *Soc Dyers & Col J* 59:2-6 Ja '43; Same. *Textile Col* 65:239-44 Je '43
- Dyeing of wool with chrome dyes; the meta-chrome process. C. B. Stevens, F. M. Rowe and J. B. Speakman. *Soc Dyers & Col J* 59: 165-71 Ag '43
- Dyeing woolen piece goods for the navy; continuous indigo dyeing on woolen piece goods. G. O. Linberg, *il Am Dyestuff Rep* 32:33-9, 318-20 Ja 18, JI 19 '43; Discussion. 32:40-1, 106 Ja 18, Mr 1 '43
- Dyeing woolen piece goods for the navy; general requirements and specifications. W. F. Frien. *Am Dyestuff Rep* 32:28-9; Discussion. 40-1 Ja 18 '43
- Dyeing woolen piece goods for the navy; piece goods dyeing with leuco ester of indigo. R. E. Derby. *Am Dyestuff Rep* 32: 30-2+, 320-3 Ja 18, JI 19 '43; Discussion. 32:40-1, 324-6 Ja 18, JI 19 '43
- Economy in the use of sodium dichromate when dyeing wool with mordant dyestuffs. L. P. Rendell. *Textile Col* 65:20 Ja '43
- Fastness to weathering of the army O.D. shade dyed by the monochrome method. N. G. Koehler. *Am Dyestuff Rep* 32: 481-2+ N 8 '43
- Influence of acid dyes on the setting properties of wool fibres. G. H. Elliott and J. B. Speakman. *Soc Dyers & Col J* 59:124-6 Je '43
- Microscopical observations of wool dyeing. G. L. Royer, H. E. Millson and E. I. Stearns. *il Am Dyestuff Rep* 32:285-90 Je 21 '43
- Microscopical study of dyed wool. G. L. Royer and C. Maresh, bibliog *il Am Dyestuff Rep* 32:181-6 Ap 12 '43

- Piece dyeing heavy woolsens. *Textile Col* 65: 366 Ag '43
- Resist processes; a new method of reducing the affinity of wool for acid dyes. G. H. Elliott and J. B. Speakman, bibliog *Soc Dyers & Col J* 59:185-91 S '43
- Riggs & Lombard continuous indigo dyeing machines for woolen fabrics. *il Textile World* 93:95-6 Mr '43; Rayon 24:154 Mr '43
- Stripping and re-dyeing of rags. N. C. Gee. *Textile Col* 65:369-70 Ag '43
- Study of the neutralization of carbonized 32 oz. olive-drab overcoating. K. S. LaFleur. *Am Dyestuff Rep* 32:275-9 Je 21 '43
- Top dyeing and blending. H. E. Meinelt. *Textile Col* 64:573+ D '42; Same cond. *Am Dyestuff Rep* 32:461+ O 25 '43
- See also
- Dyes and dyeing—
Cotton—wool

Wool—Aralac

- Processing of Aralac. H. E. Millson. *Textile Col* 65:248-50, 296-7 Je-JI '43

Wool—rayolanda

- Rayolanda X. A. J. Hall. *Textile Col* 65: 431-2 O '43

Wool—redwood fiber

- Dyeing of redwood fibers. H. Luttringhaus. *il Rayon* 24:489-90 S '43

Yarn

- Technical notes of interest to hosiery and yarn dyers. C. B. Ordway. *Textile Col* 64: 576+ D '42

DYES and dyeing, Photographic

- Early color theories. J. S. Friedman. *Am Phot* 37:44-5 My '43
- Optical sensitization. J. S. Friedman. *Am Phot* 37:36-8 N '43
- Optical sensitizing of silver halides by dyes; the optical sensitizing properties of fluorescein dyes in relation to their spectral absorption and constitution. S. E. Sheppard, R. H. Lambert and R. D. Walker, bibliog *J Chem Phys* 11:263-75 Je '43
- Photographic chemistry; the polymethine dyes. J. S. Friedman. *Am Phot* 37:37 JI '43
- Photographic plates sensitive to visible and invisible light. *Science* 98:sup8 O 22 '43
- Preparation of the sensitizing dyes. J. S. Friedman. *Am Phot* 37:38-41 S '43
- Some effects of solvents upon the absorption spectra of dyes; chiefly polymethine dyes. S. E. Sheppard, P. T. Newsome and H. R. Brigham, bibliog *diags Am Chem Soc J* 64:2923-37 D '42

DYNAMIC stiffness (term)

- Dynamic stiffness and effective inertia methods in modern torsional vibration theory. R. G. Manley, bibliog *diags Roy Aeronautical Soc J* 47:5-21 Ja '43

DYNAMIC symmetry. See Symmetry, Dynamic**DYNAMICS**

- Experimental investigations in aircraft dynamics. W. B. Bergen, bibliog *il diags J Aeronautical Sci* 10:233-9 O '43
- Falling bar problem. R. T. Liddicoat. *J Eng Educ* 33:508-13 Mr '43

See also

- | | |
|------------------|--------------------|
| Aerodynamics | Moments of inertia |
| Hydrodynamics | Thermodynamics |
| Machinery—Design | Vibration |
| Mechanics | |

DYNAMICS of a particle

- Fundamental equations of electron motion (dynamics of high speed particles). L. A. MacColl, bibliog *Bell System Tech J* 22: 153-77 JI '43

DYNAMITE

- Dynamite removes broken drills. F. N. Mueller. *il Am Mach* 86:1369-70 N 26 '42
- Industrial blasting; technological progress. F. J. Byrne. *il Sci Am* 169:56-8 Ag '43

See also

Blasting**DYNAMOMETERS**

- Electrical power equipment loads aircraft engines under test. R. H. Wright, *il diags Power* 87:604-6 S '43

DYNAMOMETERS—Continued

- Horsepower meter for aircraft. J. C. Luttrell and W. A. Petrasek. *il* diags Aeronautical Eng R 2:35-6, 39 Je '43; Excerpts. Elec Eng 62:501-2 N '43
- Interlock for electric dynamometers. C. H. Haarman. *diag* Am Mach 86:1504 D 24 '42
- Measure 25,000 lb. with 5,000-lb. scale; using dynamometer in pre-stretching conductors on river-span section of Omaha-Median line. *diag* Elec W 119:66 Ja 9 '43
- Oil-well pumping practices; plunger travel from cards. J. Zaba. *diags* Oil & Gas J 42: 43-4 S 2 '43
- Oil-well pumping practices; sucker-rod load measurement. J. Zaba. *Oil & Gas J* 42:34, 36-7 JI 22 '43
- Power consumption of propeller-type agitators. C. E. Stoops and C. L. Lovell. *bibliog* *il* diags Ind & Eng Chem 35:845-50 Ag '43
- Power saving on test beds. *diag* Elec R (Lond) 132:39-40 Ja 8 '43
- Regenerative engine testing. *il* Elec R (Lond) 132:35-9 Ja 8 '43
- Torsion dynamometer uses Vernier scales; patent assigned to Farrel-Birmingham co. *diag* Machine Design 15:182+ Ap '43

DYNAMOS. See Electric generators, Direct current

DYNAMOTORS

Dynamotor filtering. H. Goldberg. *il* diags Radio N 29:13+ Mr '43

DYNE

In lieu of butter; new spread, introduced in Madison by university foundation. *il* Business Week p37-8 O 30 '43

DYSENTERY

Studies of the acute diarrheal diseases; cultural observations on the relative efficacy of sulfonamides in shigella dysenteriae infections. A. V. Hardy and others. *bibliog* Pub Health Rep 58:689-99 Ap 30 '43

DYSMENORRHEA. See Menstruation

E

E awards. See Incentives in industry

EAR

Direct observations of the acoustic oscillations of the human ear. H. G. Kobrak. *diags* Acoustical Soc Am J 15:54-6 JI '43

See also

Hearing

EAR plugs

Ear plugs; molded to measure from plastic. *il* Sci Am 168:12 Ja '43

EARTH

Cooling planet; abstract. P. G. Nutting. Science 97:sup 10 Je 18 '43

Meteorites and an earth-model. R. A. Daly. Geol Soc Bul 54:401-55 *bibliog*(p452-5) Mr '43

Quantitative evaluation of the influence of the lithosphere on the anomalies of gravity. R. Gunn. Franklin Inst J 236:47-65 JI '43

Quantitative study of isobaric equilibrium and gravity anomalies in the Hawaiian Islands. R. Gunn. Franklin Inst J 236:373-90 O '43

See also

Continents
Folds (geology)
Geochemistry
Geodynamics
Geology
Geophysics
Glacial geology
Gravity
Magnetism, Terrestrial

Meteorology
Mines and mineral resources
Ore deposits
Paleoclimatology
Paleontology
Physical geography
Water, Underground

Age

How old the earth. Franklin Inst J 235:74 Ja '43

Electric constants

See also

Soils—Electric properties

Internal structure

Interior of the earth viewed in relation to earthquake causes; measurements of terrestrial magnetism tell us little about earthquakes but may tell us much about the interior of the earth. W. A. Lynch. J Ap Phys 14:127-30 Mr '43

Interior of the earth viewed in relation to earthquake causes; tectonophysics or the physics of earth deformation. J. B. Macellwane. *bibliog* J Ap Phys 14:131-3 Mr '43

Interior of the earth viewed in relation to earthquake causes; what geodesy can tell us about immediate and ultimate causes of earthquake. N. H. Heck. *bibliog* *il* diags J Ap Phys 14:104-14; Discussion. M. K. Hubbert. 115 Mr '43

Interior of the earth viewed in relation to earthquake causes; what radioactivity tells us about the interior of the earth. V. F. Hess. *bibliog* J Ap Phys 14:116-20 Mr '43

Interior of the earth viewed in relation to earthquake causes; what seismology can tell us about the structure of the earth's interior. E. A. Hodgson. *bibliog* J Ap Phys 14:121-6 Mr '43

Interior of the earth viewed in relation to earthquake causes; what we learn from thermodynamics. J. Lynch. J Ap Phys 14: 134-6 Mr '43

Rotation

Horizontal path along the earth's surface of a projectile or plane under constant tangential acceleration. W. S. Kimball. Franklin Inst J 236:67-79 JI '43

Path equation for motion on the surface of the rotating earth in a uniform parallel field of force with initial velocity along the field. W. S. Kimball. Franklin Inst J 235: 273-83 Mr '43

Shot-put and the earth's rotation. P. Kirkpatrick. Science 97:138 F 5 '43

Special form of Coriolis' compound centripetal acceleration due to the rotating earth. W. S. Kimball. *diags* Franklin Inst J 234: 453-72 N '42

EARTH construction

Stabilized earth blocks for protective construction. R. G. Hennes. *il* diags Washington U Eng Exp Sta Bul 111:1-24 '43 (pa 25c)

See also

Adobe
Pisé

EARTH filled walls. See Walls, Concrete—Earth filled walls

EARTH movements

Earth shock is responsible for much bomb damage. W. H. Hayes. Sci Am 168:79 F '43

See also

Landslides
Mud flow

EARTH pressure

Analogy for horizontal forces on partially buried structures. H. M. O'Neil. *diags* Eng N 131:324-5 Ag 26 '43

Determination of lateral passive soil pressure and its effect on tunnel stresses. M. A. Drucker. *diags* Franklin Inst J 235: 499-512 My '43

Earth pressure and shearing resistance of plastic clay; symposium. K. Terzaghi, R. S. Peck and W. S. Housel. *diags* Am Soc C E Proc 68:857-950 Je '42; Discussion. 68: 1216-24; 69:589-96, 915-23 S '42, Ap, Je '43

Earth pressure measurements in open cuts, Chicago (Ill.) subway. R. B. Peck. *diags* Am Soc C E Proc 68:900-28 Je '42; Discussion. 68:1216-18; 69:733-6 S '42, My '43

General solution for earth pressures. A. K. Brown. Civil Eng 12:685-7 D '42

Lateral pressure of sand. A. A. Fordham. *il* diags Engineering 155:341-2, 350 Ap 30 '43

See also

Dams
Earthwork

EARTH shock. See Earth movements

EARTH temperature

See also

Mine temperature
Petroleum—Well temperature

EARTHENWARE. See Stoneware

EARTHENWARE stoves. See Stoves, Ceramic
EARTHING. See Electric distribution—Grounding

EARTHQUAKE insurance. See Insurance, Earthquake

EARTHQUAKES

Interior of the earth viewed in relation to earthquake causes; measurements of terrestrial magnetism tell us little about earthquakes but may tell us much about the interior of the earth. W. A. Lynch. *J Ap Phys* 14:127-30 Mr '43

Interior of the earth viewed in relation to earthquake causes; tectonophysics or the physics of earth deformation. J. B. Macelwane. bibliog *J Ap Phys* 14:131-3 Mr '43
 Interior of the earth viewed in relation to earthquake causes; what geodesy can tell us about immediate and ultimate causes of earthquake. N. H. Heck. bibliog *il diags J Ap Phys* 14:104-14; Discussion. M. K. Hubbert. 115 Mr '43

Interior of the earth viewed in relation to earthquake causes; what radioactivity tells us about the interior of the earth. V. F. Hess. bibliog *J Ap Phys* 14:116-20 Mr '43

Interior of the earth viewed in relation to earthquake causes; what seismology can tell us about the structure of the earth's interior. E. A. Hodgson. bibliog *J Ap Phys* 14:121-6 Mr '43

Interior of the earth viewed in relation to earthquake causes; what we learn from thermodynamics. J. Lynch. *J Ap Phys* 14:134-6 Mr '43

New seismograph for the National astrophysical observatory of Mexico. *Science* 97: sup 10 Ap 2 '43

Seismological evidence for roots of mountains. B. Gutenberg. *diags Geol Soc Bul* 54:473-98, pl 1-3 bibliog(p495-8) Ap '43

California

Earthquakes and structure in southern California. B. Gutenberg. bibliog *diags maps Geol Soc Bul* 54:499-526, pl 1 Ap '43

Japan

Japanese earthquake. *Science* 97:sup9 Je 25 '43

EARTHQUAKES and building

Frame buildings for a western cantonment designed to resist earthquake stresses. D. H. McCreery. *il diag Civil Eng* 13:269-71 Je '43

Stress analysis of tall towers; four methods for calculating stresses and required shell thicknesses for vessels used in refineries; towers designed for high winds or seismic forces. E. F. Brummerstedt. bibliog *il diags Nat Pet N* 35 pt 2:R539-40, R542-3 N '43

EARTHS. Rare. See Rare earth metals; Rare earths

EARTHWORK

Alaska highway; effect of climate and soils on design. A. C. Clark. *il Civil Eng* 13: 209-12 My '43

Belt delivers fill for Youghiogheny earth dam. *il diags Eng N* 129:777-80 D 3 '42
 Dirt to bury the Axis; rapid earth moving project in air base construction. *Safety Eng* 36:21 Ag '43

Earth-filled dam at Santa Fe, New Mexico; puddled core of Nichols dam uses material from reservoir. J. N. Van Sant. *il Civil Eng* 13:366-9 Ag '43

How flight strips are being built. *il diags Eng N* 130:128-32 Ja 28 '43

700 acres of pavement; design and construction features of huge western air base. H. J. McKeever. *il diags Roads & Sts* 86:41-8 S '43

See also

Dams
 Dikes (engineering)
 Drainage
 Dredging
 Drilling and boring (earth and rocks)
 Earth pressure
 Embankments
 Excavating machinery
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 Filling

Foundation soils
 Foundations
 Irrigation canals
 Levees
 Railroads—Earthwork
 Roads—Subgrades
 Soil mechanics
 Soils—Testing
 Tunnels and tunneling

EASTER

Early and late Easter dates. A. Pogo. *Science* 97:354 Ap 16 '43

EASTERN air lines, inc.

Decade with Eastern air lines, inc. C. Froesch. *il Aeronautical Eng R* 1:95 N '42
 14 new routes proposed. *Comm & Fin Chr* 158:1346 O 4 '43

EASTERN gas and fuel associates

Eastern Gas and Fuel 48 in improved position. A. Jansen. *Barron's* 23:16 S 20 '43

EASTERN Minnesota power corporation

Amended plan before SEC. *Comm & Fin Chr* 157:2040 My 31 '43

EASTMAN, Joseph Bartlett, 1882-
 Portrait. *Ry Age* 115:133 Ji 24 '43

EASTMAN kodak company
 Annual report. *Comm & Fin Chr* 157:1269 Ap 5 '43

EATING. See Dinners and dining

EATON manufacturing company
 Stocks with three-way profit prospects. *Mag of Wall St* 71:709-10 Ap 3 '43

EBULLIOSCOPY. See Boiling points

ECHINODERMATA, Fossil

Geology and biology of North Atlantic deep-sea cores between Newfoundland and Ireland; mollusca; echinodermata; miscellaneous fossils and significance of faunal distribution. H. A. Rehder; A. H. Clark; L. G. Henbest. *U S Geol S Professional Pa* 196-D:107-33, pl 20-3; pa 30c Supt. of doc. '42

New Ordovician cystidean echinoderms from Oklahoma. R. S. Bassler. *Am J Sci* 241:694-703, pl 1 N '43

Bibliography

Bibliographic and faunal index of paleozoic pelmatozoan echinoderms. R. S. Bassler and M. W. Moody. *Geol Soc Special Pa* no 45:1-734 '43

ECKEL, Edwin Clarence, 1875-1941
 Memorial. A. C. Spencer. *por(pl)* *Geol Soc Proc* 1942:179-87 bibliog(pl82-7) Ap '43

ECLIPSES, Solar

Eclipse of the sun. W. Davis. *Science* 97: sup10 Ja 15 '43

Field strength of Delhi 3 and Delhi 4 at Calcutta during the solar eclipse of September 21, 1941. S. P. Chakravarti. *Inst Radio Eng Proc* 31:269-70 Je '43

ECOLOGICAL society of America

Officers, editors and chairmen. *Science* 97:372 Ap 23 '43

Twenty-five-year effort at saving nature for scientific purposes. V. E. Shelford. *Science* 98:280-1 S 24 '43

ECOLOGY

See also

Paleoecology

ECONOMIC conditions

War workers answer these questions on post-war conditions. F. LaClave. *Ptr Ink* 204: 11-14 Ag 6 '43

See also

Business conditions	Labor supply
Cost of living	Natural resources
Economic policy	Reconstruction
Economic statistics	(World war, 1939-)
Food supply	Standard of living
Geography, Economic	
also subdivision	Economic conditions under names of countries and regions, e.g. Germany—Economic conditions; United States—Economic conditions

ECONOMIC councils

Economic council established in Bolivia. *For Comm W* 10:10 Ja 23 '43

Establishment of a National economic council in Bolivia. *Int Labour R* 47:222 F '43

ECONOMIC development, Committee for. See Committee for economic development

ECONOMIC geography. See Geography, Economic

ECONOMIC geology (periodical)

Economic geology; index to volume XXXVII. *Econ Geol* 37:649-60 D '42

ECONOMIC planning

- A.B.A. economic policy commission sees need for stabilization machinery; place of the United States in post-war economy. Comm & Fin Chr 158:1301-2, 1314-15 S 30 '43
- Britain today. T. North. Harvard Business R 21 no 3:291-7 [Ap] '43
- Committee for economic development pushes postwar planning. Am Business 13:14-15 My '43
- Competition and the free enterprise system; what will be the type of our after-the-war economy? C. W. Phelps. Credit & Fin Management 45:10-11+ F '43
- Economic planning in a democratic society. D. F. Pegrum. bibliog J Land & Pub Util Econ 19:13-27 F '43
- Economic plans of other nations. Burroughs Clearing House 23:28 N '43
- Economist urges immediate action to avert unemployment problem. E. P. Schmidt. Steel 112:72-3 Ap 26 '43
- Engineer as planner. R. E. Flanders. Mech Eng 65:789-91 N '43
- Facts, figures and promises. A. W. Hawkes. Comm & Fin Chr 158:1293, 1308-9 S 30 '43
- Financial and other provisions in economic plan of Colombia. For Comm W 11:17 My 29 '43
- Individual freedom and economic planning. W. F. Hauhart. Comm & Fin Chr 158:1869, 1880+ N 11 '43
- Industry must assume initiative in creating jobs after the war to preserve free enterprise. Comm & Fin Chr 157:1785 My 13 '43
- Joint action for savings protection; role of institutional investors in fiscal and economic planning. L. M. Simon. Trusts & Estates 76:11-16 Ja '43
- Looking forward. F. S. Brown. Advanced Management 8:2-5 Ja '43
- NRBP reports on postwar used to prod Congress. Eng N 130:387+ Mr 13 '43
- New deal plans industry control. Business Week p15-17, 108-9 Mr 20 '43
- New deal postwar plan; production for employment, with a minimum job quota for each industry. Business Week p15 Ja 16 '43
- N.Y. savings bank committee calls for united action to coordinate post-war planning. Comm & Fin Chr 157:1474+ Ap 22 '43
- Nine important problems you and I will face on V-day. L. McCanne. Sales Management 51:21-3 N 15 '42
- Planned economy and free enterprise. C. W. Phelps. Comm & Fin Chr 158:1085, 1094-5 S 16 '43; Discussion. 158:1305, 1491 S 30, O 14 '43
- Planning for peace. G. B. Galloway. Advanced Management 8:64-7 Ap '43
- Possible effects on national advertising of international tendency to insure freedom from want; Beveridge plan. Adv & Sell 36: 19-20 Mr '43
- Postwar; National industrial conference board address. P. G. Hoffman. Mech Eng 65: 594-6 Ag '43
- Postwar planning. Steel 112:60, 62-3 F 1; 60, 62-3 F 8; 58-9 F 15; 50, 52-3 F 22; 66+ Mr 1; 64, 66-7 Mr 8; 66, 68-71 Mr 15; 40, 42-3 Mr 22; 42, 44-5 Mr 29 '43
- Post war planning and co-operation. H. V. Potter. Chem & Ind 62:91-3; Discussion. 93-4 Mr 6 '43
- Post-war programme for the United States. Int Labour R 47:450-65 Ap '43
- President offers Congress post-war program and security, work and relief system; reports of the National resource planning board. Comm & Fin Chr 157:1017, 1024-5 Mr 18 '43
- Rebuilding world a task for governments after war, League of nations report holds. Comm & Fin Chr 157:2071 Je 3 '43
- Re-shaping America for the post-war world. G. S. Kent. Il Mag of Wall St 72:560-3+ S 4 '43
- Responsibility of post-war planning must be shared equally by all. G. A. Sloan. Comm & Fin Chr 158:927 S 2 '43
- Social and economic post-war program submitted to Congress. Oil Paint & Drug Rep 143:3+ Mr 15 '43
- Social planning in a democracy. C. E. Noyes. Advanced Management 7:146-51 O-D '42

- Strategy of post-war recovery; report of the Economic policy commission of the American bankers association. Il Banking 36:24-6+ O '43
- Washington's postwar planning. E. K. Lindley. Ind Marketing 28:68+ Je '43
- What can the government do to promote postwar re-employment? B. M. Anderson. Comm & Fin Chr 158:1589, 1599-1600, 1602 O 21 '43; Discussion. 158:1783, 1792-3, 1872-2, 2103+, 2105+, 2206+, 2538-9 N 4, 11, 25, D 2, 23 '43

See also

- | | |
|-------------------------------------|-----------------------------------|
| Committee for economic development | National planning association |
| Economic councils | National resources |
| Economic policy | planning board |
| Land utilization | Reconstruction (World war, 1939-) |
| also subdivision names of countries | Economic policy under |

Bibliography

- Selected bibliography on postwar planning; sampling of books, pamphlets, magazine and newspaper articles by National planning association, Washington. Steel 112: 66, 68-71 Mr 15 '43

ECONOMIC planning, International

- Access to raw materials in the postwar world. K. E. Knorr. Harvard Business R 21 no 3:385-96 [Ap] '43
- British view; post-war policies in securities market, international currency arrangements, world's food. D. Tyerman. Barron's 23:9 N 8 '43
- Good neighbors co-operate; joint approach of government and private enterprise in United States and other American republics required to foster sound economic hemispheric development. W. P. Machold. Steel 112:52-3 My 24 '43
- International aspects of postwar food and agriculture. F. L. McDougall. Ann Am Acad 225:122-7 Ja '43
- Mechanisms of postwar planning. J. B. Condliffe. Ann Am Acad 228:78-83 Jl '43
- Our stake in the pre-peace conferences. Il Business Week p53-60 My 22 '43
- Transition from war to peace economy; analysis of international report issued by Economic, financial and transit department of League of nations. E. J. Riches and L. B. Jack. Int Labour R 48:1-22 Jl '43

See also

- | | |
|--------------------|---------------------|
| Atlantic charter | United nations food |
| Reconstruction | conference, 1943 |
| (World war, 1939-) | |

ECONOMIC policy

- Functional finance, friend or foe of private capital? debate at New school for social research. M. V. Guardiola and others. Comm & Fin Chr 157:2057, 2066 Je 3 '43
- Guard against private as well as government monopoly; report to Senate special committee on postwar economic policy and planning; abstracts. J. C. O'Mahoney. Steel 113:56-6 O 18 '43; Oil Paint & Drug Rep 144:3+ O 18 '43
- Hell bent for regimented danger. T. K. Quinn. Ptr Ink 203:36+ My 7 '43
- How to assure postwar prosperity; extracts from National association of manufacturers booklet, Jobs, freedom, opportunity. Ry Age 114:859-61 My 1 '43
- Labor has a choice; it can be swallowed by the state, or remain free in society. J. Chamberlain. Il Fortune 27:124-7+ Je '43
- People's peace in the colonies. W. Benson. Int Labour R 47:141-68 F '43
- Political security, internal stability essential in solving post-war problems. R. H. Brand. Comm & Fin Chr 158:1486, 1493-5 O 14 '43
- Post-war economic policy discussed in League publication. Comm & Fin Chr 158:319 Jl 22 '43
- Suggestions for attainment of expanding world economy. H. Chalmers. For Comm W 11:17 My 22 '43
- Toward a mixed economy; abstract. S. Chase. Management R 32:238-40 Jl '43
- Transition from war to peace economy; analysis of an international report issued by Economic, financial and transit department of League of nations. E. J. Riches and L. B. Jack. Int Labour R 48:1-22 Jl '43

ECONOMIC policy—Continued20th century economics. *Economist* 144:6-7

Ja 2 '43

Utility principle. *Economist* 144:384-5 Mr 27

'43

Winning the peace; wider dissemination of benefits of industrial production the problem. W. Von Tresckow. *Barron's* 23:3 Ag 9

'43

You can't lick an economic theory by knocking its sales manager! T. S. Shore. *Ptr Ink* 202:15-17 Ja 22 '43*See also*

Capitalism	Industry and state
Commercial policy	Money
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Economic planning	(World war, 1939-)
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	Taxation

also subdivision Commercial policy and Economic policy under names of countries, e.g. United States—Economic policy

ECONOMIC research*See also*

Financial research
Trade unions—Research work

Bibliography

Ten years' progress in management; management research. E. H. Hempel. *A S M E Trans* 65:252-8 Ap '43

ECONOMIC stabilization, Office of. *See* United States—Economic stabilization, Office of

ECONOMIC statistics

Century of prices; business cycle, national income and real wages. H. M. Tremaine. *Mag of Wall St* 72:36-7+ Ap 17 '43

Essays in honor of Professor Joseph A. Schumpeter. *R Econ Stat* 25:1-100 F '43

Estimates of national output, distributed income, consumer spending, saving, and capital formation. M. Hoffenberg and M. S. Lewis. *bibliog R Econ Stat* 25:101-74 My '43

Measurement of business activity in the Puget Sound area. G. I. Butterbaugh. *bibliog map J Business* 16:1-72 pt 2 Ap '43

National income and national product in 1942. M. Gilbert and G. Jaszi. *tables Survey of Cur Business* 23:10-26 Mr '43

National product and income in the first half of 1943. G. Jaszi. *Survey of Cur Business* 23:9-14 Ag '43

Price deflators for consumer commodities and capital equipment, 1929-42. H. Shavell. *Survey of Cur Business* 23:13-21 My '43

See also

Business statistics	Industrial statistics
Cost of living—Statistics	Labor and laboring classes—Statistics
Employment—Statistics	Production—Statistics
Income—Statistics	Saving—Statistics
Index numbers (economics)	Wages—Statistics

ECONOMIC warfare, Ministry of. *See* Great Britain—Economic warfare, Ministry of

ECONOMICS

Changing mind of America; effect of the scrapping of ideas upon our future. R. P. Crawford. *Barron's* 23:3-4 Mr 29 '43

Economics of innovation; adjustment of the national economy to new products. R. E. Freeman. *Tech R* 45:313-14+ Ap '43

Theories of the new deal economists. L. H. Haney. *Comm & Fin Chr* 158:1397, 1406-9 O 7 '43; Discussion 158:1689-+ 1782, 1794-5, 1991-+, 2007 O 28, N 4, 18 '43

See also

Advertising—Economic aspects	Commerce
Agriculture—Economic aspects	Competition
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Strikes

Tariff

Taxation

Trade unions

Transportation

Trusts, Industrial

Wages

War—Economic aspects

World war, 1939—

Economic aspects

Bibliography

Economics of reading. A. H. Cole. *Harvard Business R* 21 no4:485-95 [Jl] '43

Study and teaching

Economics and engineering education. J. K. Finch. *J Eng Educ* 33:416-21 Ja '43

Economics as a study for civil engineers. W. E. Howland. *J Eng Educ* 33:386-7+ Ja '43

Terminology

Dynamics, statics, and the stationary state. P. A. Samuelson. *bibliog R Econ Stat* 25: 58-68 F '43

ECONOMICS, Mathematical

Essays in honor of Professor Joseph A. Schumpeter. *R Econ Stat* 25:1-100 F '43

Production function for Canadian manufactures. P. Daly and P. H. Douglas. *Am Stat Assn J* 38:178-86 Je '43

ECONOMIST (periodical)

First hundred years, 1843-1943. *Economist* 145:291-9 S 4 '43

ECUADOR*See also*

Gold mines and mining—Ecuador	Moving picture industry—Ecuador
-------------------------------	---------------------------------

Economic conditions

News by countries (cont). *For Comm W* 9:18-19 N 28 '42; 10:13-14 Ja 2; 17-18 F 20; 16 Mr 20; 11:19-20 Ap 24; 19-20 My 29; 12: 16-18 Jl 3; 16-17 Ag 14; 17-18 S 18 '43
Revival in El Oro. J. M. Clark. *il map For Comm W* 12:5-8+ Ag 21 '43

Industries and resources

Balsa. Ecuador's contribution to war effort. V. Kinnard. *il For Comm W* 9:5-+ N 14 '42
Cacao and other food crops grown in El Oro province. *Science* 98:sup 12 S 3 '43
Ecuadoran economic changes. T. J. Pursley. *il For Comm W* 10:8-11+ Mr 6 '43
Yumbos, beads, and rubber; commerce in the far places. *il For Comm W* 10:9+ Mr 27 '43

EDDY currents

Eddy-current drive improves operation; tube draw benches. N. E. Wenzel. *diag Machine Design* 15:114-15 Ap '43

Eddy-current losses in single-conductor paper-insulated lead-covered unarmoured cables of a single-phase system. A. H. M. Arnold. *Inst E E J* 89 pt 2:636-45 D '42

EDEN, (Robert) Anthony, 1897-

Eden back in London after Washington talks. *Comm & Fin Chr* 157:1390 Ap 15 '43

EDISON, Thomas Alva, 1847-1931

Electronics; its start from the Edison effect sixty years ago. W. C. White. *por(cover) Gen Elec R* 46:537-41 O '43

Thomas A. Edison's influence on the United States navy. H. G. Bowen. *Edison Elec Inst Bul* 11:133-5 My '43

EDISON electric institute

Annual meeting, 11th. New York, June 3. *Edison Elec Inst Bul* 11:189+ Jl '43; *Pub Util* 31:832-40 Je 24 '43

Annual meeting. New York, June 3. *Elec W News* ed 119:1857-60 Je 5 '43

Customer service meeting, 10th. Chicago. *Elec W News* ed 119:1531-2 My 8 '43

EDISON electric institute—Continued

- E.E.I. publications and service material.
Edison Elec Inst Bul 11:317-18 O '43
Fall meetings of committees, Edison Elec
Inst Bul 11:343-7 N '43
Joint sessions of transmission and distribu-
tion and electrical equipment committee
groups, Chicago, May 10-13. Elec W News
ed 119:1712-13 My 22 '43
Personnel of committees for 1943-1944. Edi-
son Elec Inst Bul 11:280-6 S '43
Transmission and distribution committee
meeting, Pittsburgh, Feb. 11-12. Edison
Elec Inst Bul 11:79-81 Mr '43

EDISON electric institute medals

- Twenty-four Edison electric institute awards
for resuscitation made in 1942. M. B.
Woods. *Edison Elec Inst Bul* 11:52-6,
85-9 F-Mr '43

EDISON medal

- E. H. Armstrong, Edison medalist; address
by A. Hazeltine, with response by E. H.
Armstrong. *Elec Eng* 62:147-51 Ap '43

EDISTIN

- Effects of inorganic electrolytes on the lib-
eration of —SH in proteins. N. F. Burk.
bibliog J Phys Chem 47:104-18 F '43

EDITING

- Arbitrary editorial changes in scientific
papers; nouns used as adjectives. W. C.
Boyd. *Science* 98:197-8 Ag 27 '43

EDITORS

- Sixteen business editors receive awards for
editorial achievement. *Ind Marketing* 28:
64, 66+ O '43

EDMONTON, Alberta

- Alberta boom town. *Ind Business Week* p42
Jl 10 '43

EDUCATION

- Address; humanities and technical education.
F. B. Snyder. *J Eng Educ* 34:47-9 S '43
Educating a democracy. G. B. Langford. *Can*
Min J 64:279-82 My '43
Ferment in education. *Ind Fortune* 28:136-40+
Jl '43

See also

- | | |
|---------------------------------|--|
| Agricultural educa-
tion | Mining schools and
education |
| Chemical education | Moving pictures in
education |
| Colleges and uni-
versities | Museums |
| Employees, Training
of | Nutrition education |
| Engineering educa-
tion | Technical education |
| Industrial education | Trade schools |
| Libraries | United States—Army
—Education |
| Consult Education
references | Vocational education
Index for additional
references |

Bibliography

- Education index, July 1942-June 1943. 674p
H. W. Wilson co, New York '43

*Periodicals**Bibliography*

- Classified list of educational periodicals, Sep-
tember 1943. 32p American association of
school administrators, National education
association, 1201 Sixteenth street, N.W.
Washington 6, D.C. '43

Central America

- International agreements on education be-
tween the Central American republics. *Int*
Labour R 47:223 F '43

Europe

- Re-education of post-war Europe is U.S.
aim. *Comm & Fin Chr* 157:1502 Ap 22 '43

Great Britain

- Content of education; Norwood report. *Econ-*
omist 145:135-6 Jl 31 '43
Dual system. *Economist* 143:538 O 31 '42
Good intentions in education. *Economist* 145:
97-9 Jl 24 '43
Public service for all; Norwood committee
on the curriculum of secondary schools.
Economist 145:131-2 Jl 31 '43

Russia

- End of co-education in Russia. *Economist* 145:
273 Ag 28 '43

- Engineering education in the Soviet Union.
J. G. Tolpin. *J Eng Educ* 34:133-49 O '43

United States

- Educational institutions also convert to war
production; change expected to have pro-
found effect on postwar methods. *Steel* 111:
44+ D 21 '42

EDUCATION, Higher*See also*

- Colleges and univer-
sities

EDUCATION, Secondary

- Content of education; Norwood report. *Econ-*
omist 145:135-6 Jl 31 '43

EDUCATION of workers*See also*

- Employees, Training Industrial education
of Vocational education

EDUCATIONAL advertising. See Advertising, Educational

- EDWARDS, Dean Gray, 1882-**
Sketch. *por Civil Eng* 12:694-5 D '42

EDWARDS, John, 1731-1807

- John Edwards, Cornish industrialist; copper
smelting and application of steam engines.
T. R. Harris. *Engineering* 154:365, 416-17
N 6, 20 '42

EELS

- Electric trap keeps eels out of turbine. H. C.
Akins. *diags Elec W* 120:1540 O 30 '43

EELS, Electric. See Electric eels**EFFICIENCY***See also*

- Ability
Time saving

EFFICIENCY, Industrial

- Better workplace, so more output, less fa-
tigue; new chair and other changes aid
sock inspector. E. J. Fitzgerald. *il Factory*
Management 101:114-15 Mr '43

- Commercial sound enlists; the microphone
and the loudspeaker join in war effort to
increase efficiency of operations. G. R.
Ewald. *il Sci Am* 168:70-2 F '43

- Good labor standards increase production. W.
B. Smith. *Personnel J* 21:323-9 Mr '43

- Human factor in chemical engineering pro-
cesses. G. H. Miles. *Inst Chem Eng Trans*
19:48-55; Discussion. 55-60 '41

- Intelligent selfishness and manufacturing. J.
F. Lincoln. *Am Gas J* 158:16 Je '43

- People in war production; digest, with com-
mentary, of a British study. C. S. Slo-
combe. *Personnel J* 22:154-71 N '43

- President opposes longer work week as lower-
ing productive efficiency. *Comm & Fin Chr*
156:1816 N 19 '42

- Price of efficiency; disparities in movement
of production and employment. *Business*
Week p116 Ap 24 '43; Discussion. O. Tead.
Advanced Management 8:37 Ap '43

- Production committees. *Economist* 144:501-2,
507 Ap 17 '43; Excerpts. *Monthly Labor R*
58:1110-12 Je '43

- Revision and expansion of operating stand-
ards in the chemical industry. W. von Pech-
mann. *Chem & Eng N* 21:1621-5 O 10 '43

- Ten years' progress in management; job
standardization and work simplification. H.
B. Maynard. *A S M E Trans* 65:225-8 Ap
'43

- To simplify is to save; Glenn L. Martin
company, Baltimore. O. H. P. Champlin.
il Factory Management 101:98-104 Je '43

- War time problems, planning, and per-
formance; discussion. A. G. Ramsey and
others. *Inst Mech Eng J & Proc* 148:Proc
57-65 D '42

- Washington stressing efforts to boost indus-
trial efficiency to obtain more manpower.
E. Blair. *Barron's* 23:4 Mr 15 '43

- Workers simplify their own jobs; Walter
Kidde & company work simplification
training plan. *il Am Mach* 86:1495-7 D 24
'42

EFFICIENCY, Industrial—Continued

Would a longer work week pay? J. K. Westerfield. *Am Business* 12:16-18 D '42

See also

Ability tests	Machine shop management
Business management	Machinery, Replacement of
Employees—Rating	Motion study
Employment management	Music in industry
Executives	Office management
Factories—Lighting	Planning
Factory management	Schedules
Fatigue	Skill
Foremen	Standardization
Idleness, Industrial	Tardiness (employees)
Industrial engineering	Time saving
Industrial management	Time study

EFFLORESCENCE

Function of carbon dioxide in producing efflorescence on plaster and cement products. D. L. Bishop. *bibliog pl J Research Nat Bur Stand* 30:361-6 My '43

Laboratory experiment on deliquescence and efflorescence. O. F. Steinbach. *J Chem Educ* 20:146 Mr '43

Moisture penetration of brick walls can be controlled; workmanship important in making mortar joints. *diags Brick & Clay Rec* 103:34, 36 Ag '43

EFFORT rating. See Time study**EGG albumin. See Albumin****EGG trade**

Egg output still rising. *Barron's* 23:6 Ja 25 '43

Egg profit widens. *Business Week* p34+ S 11 '43

Egg scramble; both chickens and eggs are in big demand. *Business Week* p19-20 Ag 7 '43

Too many eggs. *Business Week* p84+ O 23 '43

Statistics

Poultry and eggs, 1938-1941. Survey of Cur *Business* 1942 Sup p125 [supplemented in monthly numbers]

Argentina

Argentina's egg exports increasing. *For Comm W* 9:27-8 D 12 '42

Egypt

Egypt's egg exports, 1937-1941. *For Comm W* 10:23 Ja 23 '43

EGGS

Bacteriological studies on the natural fermentation process of preparing egg white for drying; abstract. L. S. Stuart and H. E. Goresline. *Food Ind* 15:122 F '43

See also

Egg trade

Analysis

Mayonnaise and salad dressing yolk content. F. J. Cahn and A. K. Epstein. *Ind & Eng Chem Anal ed* 15:281-2 Ap 15 '43

Yolk monograph for mayonnaise and salad dressing. D. S. Davis. *Ind & Eng Chem Anal ed* 15:595 S 15 '43

Preservation

Egg cooling with Votator reduces bacterial growth. *il Chem & Eng N* 21:918 Je 10 '43

Transportation

All-America package competition award; Inland container corp. fibreboard egg case. *il Mod Packaging* 16:110, 116 Ap '43

EGGS, Dried

Army specifications for dehydrated foods. *Food Ind* 15:58+ My '43

Directory of egg drying plants. *Food Ind* 15:76 J1 '43

Dried egg; the effect of moisture content on the initial quality of spray-dried whole egg and deterioration during storage. J. R. Hawthorne. *Soc Chem Ind J* 62:135-7 S '43

Dried egg; the preparation, examination, and storage of spray-dried whole egg. E. C. Bate-Smith, J. Brooks and J. R. Hawthorne. *Soc Chem Ind J* 62:97-100 J1 '43

Dried egg; the relation between water content and chemical changes during storage. J. Brooks. *bibliog Soc Chem Ind J* 62:137-9 S '43

Dried whole egg powder; abstract. M. W. Thistle, J. A. Pearce and N. E. Gibbons. *Food Ind* 15:123 Ag '43

Drying of meat and eggs; abstract. J. R. Vickery. *Chem & Ind* 62:84 F 27 '43

Effect of dehydration upon the vitamin A content of eggs. S. M. Hauge and F. P. Zscheile. *Science* 96:536 D 11 '42

Egg profit widens. *Business Week* p34+ S 11 '43

Heat and moisture damage dried eggs; abstract. W. H. White and M. W. Thistle. *Food Ind* 15:127-3 O '43

Influence of temperature on the beating and baking properties of spray-dried egg. J. R. Hawthorne and E. B. Bennion. *Soc Chem Ind J* 61:151-3 O '42

Sanitation pays dividends to the egg dehydrator. H. E. Goresline, L. S. Stuart and V. H. McFarlane. *il Food Ind* 15:90-1+ J1 '43

These food plants converted to do special war job; cereal, confectionery, dairy and sugar-grinding plants converted packaging lines to supply cartons of dried eggs. T. F. Cass, jr. *il Food Ind* 14:43-6 D '42

Too many eggs. *Business Week* p84+ O 23 '43

Vitamin content of spray-dried whole egg. A. A. Klose, G. I. Jones and H. L. Fevold. *bibliog Ind & Eng Chem* 35:1203-5 N '43

EGGS, Frozen

How to produce frozen eggs that the housewife can use. P. J. Schaible and C. G. Card. *il Food Ind* 15:67-8 My '43

Paper boxes for frozen eggs. *il Mod Packaging* 16:96-7 Je '43

EGLOFF, Gustav, 1886-

Honored by Columbia university. *por Oil Paint & Drug Rep* 143:3 Je 7 '43

Honored by Columbia university. *por Pet Refiner* 22:120 Je '43

Personalities in chemistry. A. D. McFadyen. *por Chem Ind* 53:349-50 S '43

EGYPT

See also

Trade unions—Egypt

Economic conditions

Egypt in 1942. *Economist* 144:sup13 Mr 13 '43

Inflation in 3 countries of the Middle East. K. C. Dougall. *For Comm W* 12:12-15+ S 18 '43

EJECTING devices (machine work)

Automatic ejector for cartridge cases. J. Guerra. *diag Am Mach* 36:1433 D 10 '42

EJECTORS. See Steam jets**EKATERINBURG. See Sverdlovsk, Russia****ELAIDIC acid**

Mechanism of the oxidation of oleic and elaidic acids and their methyl esters by hydrogen peroxide in acetic acid; further observations on the configurations of the 9:10-dihydroxystearic acids. G. King. *Chem Soc J* p37-8 Ja '43

ELASTIC fabrics

First elastic textile yarn not made of rubber; vinyl resin yarn. *Rayon* 24:7 Ja '43

ELASTIC goods

New design quirks ease rubber headache on garters and braces. *il Sales Management* 52:50-1 My 1 '43

ELASTICITY

Anomalies of elasticity and flow and their interpretation. R. Simha. *bibliog J Phys Chem* 47:348-63 Ap '43

Anomalous flow in glasses. N. W. Taylor. *bibliog J Phys Chem* 47:235-53 Mr '43

Creep and creep recovery in plasticized polyvinyl chloride. H. Leaderman. *bibliog Ind & Eng Chem* 35:374-8 Mr '43

Dispersion of elastic waves in solid circular cylinders. G. E. Hudson. *bibliog Phys R* 63:46-51 Ja 1 '43

Elasticity, creep and recovery of acetate and viscose rayon yarns. H. Mark and J. Press. *bibliog Rayon* 24:297-9, 339-41, 405-7 Je-Ag '43

Elasticity of igneous rocks at high temperatures and pressures. F. Birch. *bibliog Geol Soc Bul* 54:263-85 F '43

ELASTICITY—Continued

- Equations of state for natural and synthetic rubber-like materials; unaccelerated 'natural soft rubber. R. L. Anthony, R. H. Caston and E. Guth. *bibliog J Phys Chem* 46:826-40 O '42
- Flow and recovery properties of viscose rayon yarn. J. J. Press. *bibliog* (90 titles) *J Ap Phys* 14:224-33 My '43
- General method of approximation to the influence function of an elastic system. E. Saibel. *bibliog Franklin Inst J* 234:535-47 D '42
- Mathematics of the physical properties of crystals. W. L. Bond. *Bell System Tech J* 22:1-72 Ja '43
- Mechanical properties of polymeric materials. A. Tobolsky and H. Eyring. *bibliog J Chem Phys* 11:125-34 Mr '43
- Method of testing the elasticity of synthetic rubbers at low temperatures; Elastensometer. G. D. Kish. *il diags Rubber Age* 53: 131-5 My '43; Same. *Aero Digest* 42:245-6, 257+ My '43; Same. *Am Gas J* 158:9-12 Je '43; Same. *Oil & Gas J* 42:43-4+ Je 3 '43; Same cond. *Pet Eng* 14:128+ My '43
- Minimum buckling load for spherical shells; abstract. K. I. Friedrichs. *Roy Aeronautical Soc J* 47:sup150-1 Ap '43
- Modulus of elasticity of concrete; abstract. R. C. Valore, jr. and J. C. Yates. *Franklin Inst J* 235:528-9 My '43
- Problem of combined stress. J. J. Guest. *Engineering* 155:21-3, 101-2, 222, 281-2, 303-4 Ja 8, F 5, Mr 19, Ap 9-16 '43
- Proposed standard conventions for expressing the elastic and piezoelectric properties of right and left quartz. W. G. Cady and K. S. Van Dyke. *bibliog diags Inst Radio Eng Proc* 30:495-9 N '42
- Ring method for measuring elastic moduli. A. King. *R Sci Instr* 14:33-4 F '43
- Significance of the secant and tangent moduli of elasticity in structural design. D. S. Wolford. *bibliog il diags J Aeronautical Sci* 10:169-79 Je '43
- Some mechanical properties of plastics and metals under sustained vibrations; mild steel, duralumin, laminated plastics, polymethyl methacrylate. B. J. Lazan. *bibliog il diags A S M E Trans* 65:87-98 F '43; Same cond. *Mod Plastics* 20:83-8+ N '42; Discussion. A S M E Trans 65:98-104 F '43
- Some physical properties of living matter. C. H. Norris. *bibliog J Phys Chem* 46:1111-17 D '42
- Statistical lengths of rubber-like hydrocarbon molecules. F. T. Wall. *bibliog J Chem Phys* 11:67-71 F '43
- Stress-strain characteristics of vinyl elastomers. M. C. Reed. *il Ind & Eng Chem* 35:429-31 Ap '43
- Symmetrically loaded base slab on an elastic foundation. S. U. Benscoter. *diags Am Soc C E Proc* 69:691-704 My '43; Discussion. 69: 1125-32, 1503-4 S, N '43
- Testing elasticity of synthetic rubbers at low T; Elastensometer. *diag Gas Age* 91: 48+ Je 17 '43
- Theory of the elastic properties of rubber. H. M. James and E. Guth. *J Chem Phys* 11:455-81 O '43

See also

- | | |
|--------------------------|-----------------------|
| Deformations (mechanics) | Photoelasticity |
| Fatigue in metals | Plasticity |
| Hysteresis (mechanics) | Resiliometers |
| | Strains and stresses |
| | Strength of materials |

ELASTI-GLASS

- FTC hears final testimony in Elasti-glass suit. *Glass Ind* 24:64 F '43

ELASTOMERS (term)

- Stress-strain characteristics of vinyl elastomers. M. C. Reed. *il Ind & Eng Chem* 35:429-31 Ap '43

ELECTIONS

- Electoral reform. *Economist* 145:7 J1 3 '43
- Right of election. *Economist* 144:686 My 29 '43

United States

- British view of the results of U.S. elections. S. Pribichevich. *Fortune* 27:166+ Ja '43

- President paid at the polls for his failure to purge his administration. E. Janeway. *Fortune* 26:26+ D '42

ELECTRIC accidents. See Electricity, Injuries from

ELECTRIC alarms

- Alarm indicates tie line overload. S. H. Coleman. *plan Factory Management* 101:132 F '43
- Alarm safeguards hot-water temperature. O. M. Roberts. *diag Power* 87:122 F '43
- Bearings pitted by ground alarm surges. T. M. Blakeslee. *diags Elec W* 119:81-2 Ja 9 '43
- Crane overload warning device prevents accidents in shipyards. *Eng N* 129:853 D 17 '42
- Electric eyes control tunnel traffic; mine of Utah copper co., Bingham, Utah. *il Elec West* 90:59 Mr '43
- Electronic bearing alarm system applied to journals of Diesel-electric locomotives. *il Ry Mech Eng* 117:437 S '43
- Intrusion alarms. C. E. Jackson. *il diags Radio N* 29:14-16+ My '43
- Protection of property by electronic methods. F. M. Farmer. *il Electronics* 16:120-2+ Mr '43
- Simple alarm systems for the home. *diags Consumers' Research Bul* 11:24-6 Mr; 12: 21-4 Ag '43
- Simplified carrier-failure and tone alarm system for broadcast stations. J. Herold. *diag Electronics* 16:315-16 Mr '43

ELECTRIC analogies. See Heat transmission—Electric analogies; Mechanics—Electric analogies

ELECTRIC apparatus and appliances

- Demonstration apparatus. C. C. Downie. *Elec R (Lond)* 132:77-8 Ja 15 '43
- Electrical application of new thermoplastics. T. S. Carswell and T. Alfrey, jr. *Elec W* 119:1951-3 Je 12 '43
- Electrical engineering in 1942. *il Engineer* 175:19-20, 37-40, 57-9, 76-7 Ja 1-22 '43
- Engineering in wartime. L. A. Umansky. *Aero Digest* 42:360-4 My '43
- Models speed war production; helping to solve problems in design and equipment layout. H. E. Chesebro. *il Gen Elec R* 46: 271-3 My '43

- War workers' hostels. *il Elec R (Lond)* 132: 571-3 Ap 30 '43

See also

- | | |
|----------------------------------|-------------------------------|
| Armatures | Electric meters |
| Clocks, Electric | Electric motors |
| Coils | Electric protective apparatus |
| Commutators | Electric rectifiers |
| Condensers (electricity) | Electric transformers |
| Dynamos | Electricity in mining |
| Electric cables | Electromagnets |
| Electric circuit breakers | Inductance coils |
| Electric controllers | Photoelectric cells |
| Electric converters, Synchronous | Radio apparatus |
| Electric furnaces | Refrigerators, Electric |
| Electric generators | Refuse grinders |
| Electric instruments | Relays |
| Electric inverters | Selsyn apparatus |
| Electric machinery | Storage batteries |
| | Voltage regulators |

Manufacture

- Conserving vital materials for war. J. Horn. *il diags Gen Elec R* 46:385-9, 449-54 J1-Ag '43
- Industrial know-how wins battles on production front; General electric company. *il diags Steel* 112:82-3, 110+ Ja 28 '43
- Powder metallurgy used for war production; magnets, lamp filaments; Westinghouse electric and manufacturing company. P. R. Kalischer. *Marine Eng* 48:212 Je '43
- Sealed glass bushings. W. W. Grigorieff and C. M. Lampman, jr. *bibliog il diags Am Cer Soc J* 26:83-7 Mr 1 '43
- Wartime soldering. R. Arbib. *Elec R (Lond)* 131:777-9 D 18 '42
- Women and welding plant; building electric welding machines. *il Electrician* 130:534 My 28 '43

ELECTRIC apparatus and appliances—Cont.**Merchandizing**

Sales group optimistic; Utilization section conference of the Northwest electric light & power assn., Portland, June 11-12. Elec West 91:55-9 J1 '43

See also

Electric apparatus and appliances, Domestic—Merchandizing	Electric apparatus industry Electric industries Electric utilities—Appliance selling
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Patents

New patents. Published in weekly numbers of Electrical review (London)

Repair

Appliance repairing offers useful career. Elec W 119:1164+ Ap 3 '43

Farm appliance repair clinic; Wattmobile, traveling demonstration project of Cornell university extension service. M. H. Lloyd. il Elec W 120:1048 S 18 '43

Promoting appliance repair to dealers; Mississippi power & light company. L. M. Taylor. Elec W 119:998+ Mr 20 '43

Recruits from the handicapped; how appliance service company is solving problem of repair manpower. Elec West 90:51 Ja 43

Utah repair school; educational course sponsored by the Electrical league of Utah. Elec West 90:53 Ja '43

Wartime service instructs customers; Los Angeles Bureau of power & light. il Elec West 91:74-5 O '43

Standards

Industry's need of engineering uniformity. C. A. Powel. Edison Elec Inst Bul 11:213-15 J1 '43

Standardization brings economy, especially when coupled with repetitive manufacture. S. W. Scarfe. Elec West 90:89-91 Je '43

Your stake in heavy apparatus standardization. H. V. Erben. Edison Elec Inst Bul 11:211-12+ J1 '43

Testing

Instrument for the determination of contact making and breaking time. W. Richter and W. H. Elliot. il diags Elec Eng 62: Trans 14-16 Ja '43

Production testing; cathode-ray tubes and light-beam galvanometers to test electrical products. C. M. Summers. il diags Gen Elec R 45:701-3 D '42

Surge testing. C. M. Foust. bibliog il Gen Elec R 45:629-32 N '42

ELECTRIC apparatus and appliances, Domestic After-diversity demand. P. Schiller. Elec R (Lond) 132:475-7 Ap 9 '43

Children's contest spreads appliance conservation story; Wisconsin electric power company. Elec W 119:1618-19 My 15 '43

Domestic appliances, sales billed, 1938-1941. Survey of Cur Business 1942 Sup p146

Electrical possibilities of pre-fabricated buildings; abstracts. G. Smith. Electrician 130:351 Ap 2 '43; Elec R (Lond) 132:451 Ap 2 '43

Future of domestic appliances. F. D. Parker. Electrician 130:317-19 Mr 26 '43

Home dehydrators for victory gardeners. il diags Elec West 90:51-3 Mr '43; Abstract. Elec W 119:1666+ My 15 '43

Home service canvass gives customer service advice. il Elec W 120:998-9 S 18 '43

Pacific gas & electric co. offers appliance check-up. Elec W 119:1340+ Ap 17 '43

Skipping through on the home appliance front. Pub Util 31:708-9 My 27 '43

See also

Electric cooking	Electricity in the home
Electric heaters	
Electric stoves	Refrigerators, Electric
Electric water heaters	

Manufacture

Earnings in manufacture of electrical appliances, 1942. O. C. Clark. Monthly Labor R 56:526-33 Mr '43

Merchandizing

Hartford has post-war appliance purchase plan; advance savings, invested in war bonds, on future delivery through regular dealer channels. Elec W 119:76 Ja 9 '43

Sell today, deliver tomorrow; war savings for consumer goods; Nugent plan, the McFall plan, and that of Hartford electric light company. C. E. Greenwood. Edison Elec Inst Bul 11:47-8 F '43

See also

Electric utilities—Appliance selling

Repair

Chicago dealers focus on repair. J. N. Walton. Elec W 120:680+ Ag 21 '43

Jewelers teach a lesson in repair; small-appliance repair department on sales floor; Des Moines electric light company. il Elec W 118:1992+ D 12 '42

Proves value of repair clinics; Central Hudson gas & electric corporation. J. E. Briggs. il Elec W 120:364+ S 4 '43

Safety measures

Reducing hazards of electric appliances. il Consumers' Research Bul 11:15-17 N '42

Used appliances

Appliance lure; dealers devise schemes to get old electrical gadgets out of attics. Business Week p86+ Je 12 '43

N.Y. adopts idle appliance resale plan. Elec W 120:473-4 Ag 7 '43

No electric appliances to sell? then buy and repair old ones; Proctor electric company. R. M. Oliver. il Ptr Ink 204:19-20 J1 2 '43

Trading post; Utah dealers offer public a method of swapping appliances. Elec West 91:58 Ag '43

ELECTRIC apparatus industry

Appliance lure; dealers devise schemes to get old electrical gadgets out of attics. Business Week p86+ Je 12 '43

Conserving vital materials for war. J. Horn. il diags Gen Elec R 46:385-9, 449-54 J1-Ag '43

Graybar sets up six committees to plan for post-war period. H. Metz. Sales Management 52:76+ Ap 15 '43

Housewares evolution; San Diego wholesaler switches appliance department to general housewares. il Elec West 90:50-1 Ja '43

How employee publications aid the battle of production; Western electric company uses six of them. M. Jackson. il Ptr Ink 202:20, 24+ F 26 '43

How wholesalers are helping to win the war, electrical wholesalers supply small parts to ship builders, plane makers and other prime armament manufacturers. A. W. Sullivan. il Ptr Ink 203:78+ Ap 9 '43

No electric appliances to sell? then buy and repair old ones; Proctor electric company. R. M. Oliver. il Ptr Ink 204:19-20 J1 2 '43

Pacific gas & electric co. helps dealers step up repair services. il Sales Management 51:58-9 D 142

Postwar plan, Westinghouse electric & mfg. co. il Cer Ind 41:42, 44-5 N '43

Post-war planning set-up; Graybar Electric's seven sub-committees. T. Kenyon. Ptr Ink 204:65+ Ag 6 '43

Replacements that require no priorities. Elec West 90:73 My '43

Rural America, market for postwar appliances. H. Slattery. il Adv & Sell 36:22+ S '43

Serious shortages in manpower for appliance maintenance disturbing to dealers. Edison Elec Inst Bul 10:413-14+ N-D '42

Some observations on postwar distribution problems. C. E. Greenwood. Edison Elec Inst Bul 11:333-6 N '43

Switchgear equipment transactions are streamlined. E. H. Beckert. il Chem Ind 51:736 N '42; Same. Steel 112:114+ F 15 '43

ELECTRIC apparatus industry—Continued

Value of major imports of electrical machinery and apparatus, 1940 and 1941. For Comm W 10:20 Ja 16 '43

See also

Electric apparatus and appliances, Domestic—Merchandizing

Electric home and farm authority
Electric industries
Electric utilities—Appliance selling

also General electric company; Westinghouse electric and manufacturing company

Accounting

Office appliances in the electric industry. S. H. Withey. Electrician 131:299-301 S 24 '43
Planning of electrical operations. S. H. Withey. Electrician 130:243-4 Mr 5 '43

Advertising

Boastless commercials build good-will, Westinghouse finds; John Nesbitt's dramatic human stories. L. M. Hughes. il Sales Management 52:88+ O 1 '43
Hotpoint continues bond theme in new campaign. Ptr Ink 203:72 Ap 23 '43
Tel-another dealer idea campaign offers war bonds as prizes. il Ptr Ink 204:23 S 24 '43
Universal's V-day plan; a program for building post-war demand; Landers, Frary & Clark introduce a plan in national and business magazines to help dealers. Sales Management 52:44+ O 15 '43
Westinghouse coins a word; conservice. E. J. Hegarty. il Ptr Ink 203:65+ My 7 '43

See also

Refrigerators, Electric—Advertising

Directories

Authorized electrical appliance service stations in the eleven western states. Elec West 91:69-72 S '43
Manufacturers' directory; with list of western branch offices or western representatives. Elec West 90:115-41 Ap '43

Finance

Electrical equipment backlogs large. Barron's 22:12 D 7 '42

Regulation

WPB curtails electric appliances. Pub Util 31:438-9 Ap 1 '43

Securities

Electrical equipments favored in war and peace; position of leading stocks. Mag of Wall St 71:534-5+ F 20 '43
Electrical equipments in war and peace; facts about leading makers of electrical goods. G. W. Mathis. Mag of Wall St 72:245-7+ Je 12 '43
Electronics provides tools for many industries; new uses for electron tubes have stimulated interest in electrical equipment stocks. M. Pescatello. Barron's 23:9 JI 26 '43

Service

G-E teaches new techniques to housewives befuddled by war. il Sales Management 52:37, 40 Mr 1 '43
How appliance manufacturers are meeting their big challenge: servicing! how 17 manufacturers are keeping units functioning, dealers going. A. White. il Ptr Ink 204:17-19+ S 3 '43
Three-year plan keeps G-E appliances in shape for duration service; a huge training and re-training program for service men. Sales Management 52:36, 40-2 Je 1 '43
Westinghouse emphasizes repetition in training service men. E. J. Hegarty. il Ptr Ink 204:24-5 S 10 '43

Statistics

Electrical equipment, 1938-1941. Survey of Cur Business 1942 Sup p146-7 [supplemented in monthly numbers]
Manufacturing, 1942. Elec W 119:274-5 Ja 23 '43

Argentina

Argentine foreign trade, figures for first half of 1942. Elec R (Lond) 133:117 JI 23 '43
Argentine imports, 1940 and 1941 compared. Elec R (Lond) 132:395-6 Mr 19 '43; Same cond. For Comm W 11:29-30 My 29 '43

British Columbia

Work for leagues to do despite war; Electrical service league of British Columbia. R. Hall. Elec West 90:48 Mr '43

California

Service school summarized; joint training program in southern California. il Elec West 90:69 My '43

What about parts and manpower? survey by Bureau of radio and electrical appliances of San Diego county. Elec West 89:50-2 D '42

Chicago

Chicago dealers carried on in '42. Elec W 119:804+ Mr 6 '43

Chicago dealers focus on repair. J. N. Walton. Elec W 120:680+ Ag 21 '43

Ecuador

Imports of Ecuador, 1940 and 1941 compared. Elec R (Lond) 132:396 Mr 19 '43

Great Britain

British electrical and allied manufacturers' association annual meeting, London, April 15. Elec R (Lond) 132:585-6 Ap 30 '43

British Thomson-Houston company; post-war planning. W. C. Lusk. Electrician 130:333-4 Mr 26 '43

Economies in electrical equipment; recommendation of the D.I.E.E. to meet emergency. Electrician 130:267-8 Mr 12 '43

Engineering outlook, Engineering 155:123-5 F 12 '43

Export trade; organisation to meet altered conditions. H. W. Bosworth. Elec R (Lond) 132:57-8 Ja 8 '43

Manufacturers' activities in 1942. il Electrician 129:685-6+; 130:9-10, 27-8, 53-4, 81-2, 108 D 25 '42; Ja 29 '43

Manufacturing progress, 1942. il Elec R (Lond) 132:51-3, 91-3 Ja 8-15 '43

Outworking in practice. Engineering 156:296 O 8 '43

Progress in 1942. il Electrician 130:137-9 F 5 '43

War risks insurance; guidance for electrical traders. F. E. Sugden. Elec R (Lond) 131:684 N 27 '42

Iraq

Electrical imports of Iraq, 1940. Elec R (Lond) 131:695 N 27 '42

Imports of Iraq, 1940 and 1941 compared. Elec R (Lond) 133:260 Ag 20 '43

Iraq's electrical imports decrease; figures for 1940 and 1941. For Comm W 13:24 O 16 '43

Latin America

Standards in Latin America; with particular reference to electrical standards. A. Magno-Rodriguez. il Ind Stand 14:225-9 Ag '43

Persia

Iran's imports of electrical machinery, 1940-41. For Comm W 9:22 N 21 '42

Peru

Peru's electrical imports; 1940 and 1941 compared. Elec R (Lond) 132:56 Ja 8 '43

Spain

Production in Spain. For Comm W 13:29-30 O 23 '43

Spain's electrical imports; statistics for first half of 1942. Elec R (Lond) 132:853-4 Je 25 '43

Spain's imports of electrical goods, 1941 and first 6 months, 1942. For Comm W 12:24 Ag 14 '43

Tanganyika Territory

Imports into Tanganyika, 1940 and 1941. For Comm W 10:25 Mr 13 '43

Trinidad

Imports of electrical goods into Trinidad. For Comm W 11:26 Je 19 '43

Imports of Trinidad, 1940 and 1941 compared. Elec R (Lond) 132:580 Ap 30 '43

United States

American exports; increased electrical shipments in 1940. Elec R (Lond) 132:297-8 F 26 '43

ELECTRIC apparatus industry—United States
—Continued

Manufacturers' output up 50 percent. M. McGraw. Elec W 119:280-1 Ja 23 '43

Power plant industry meets all war demands in 1942. il Power Pl Eng 47:82-6, 112 F '43

These rosy dreams of the future; history indicates caution. W. M. Carpenter. Edison Elec Inst Bul 11:257-9 S '43

War production rulings as they affect the industry. W. Harrison. Illum Eng 37:814-17 D '42

Western states

Authorized electrical appliance service stations in the eleven western states. Elec West 91:69-72 S '43

Now it's repairs; western appliance industry. Elec West 90:72-89 F '43

ELECTRIC arc

Dethermalizing arc quenchers. L. F. Hunt and F. H. Cole. bibliog il diags Elec Eng 62:Trans 720-4 N '43

Electric arc hot topping on ingots and castings developed many years ago by International nickel co. G. F. Sullivan. il diag Iron Age 151:56-60 F '11 '43

Physics of the arc and the transfer of metal in arc welding; review of the literature to February 1942. W. Spraragen and B. A. Lengyel. bibliog (178 titles) il diags Welding J 22:sup2-42 Ja '43

Plastic arc-tracking. E. C. De Baene. il Elec W 119:2044-5 Je 12 '43

See also

Electric circuit breakers	Electric lamps, Mercury vapor
Electric contractors	Electric welding, Arc
Electric lamps, Arc	

ELECTRIC arc welding. See Electric welding, Arc**ELECTRIC associations**

Co-ordinating committees; teamwork in engineering; abstract. R. O. Kapp. Elec R (Lond) 132:358 Mr 12 '43

ELECTRIC batteries

How to charge flashlight cells. Steel 113:96 S 27 '43

Method of recharging dry cells for flashlights. il diag Gas Age 92:15-16 Jl 29 '43

Reclaiming used flashlight batteries. M. E. Kennedy. il diag Electronics 16:148+ O '43

Theory of galvanic cells subject to fields of force; the electric and magnetic field. F. O. Koenig and S. W. Grinnell. bibliog J Phys Chem 46:980-1005 N '42

See also

Electrolytic cells	Radio receiving apparatus—Power supply
Photoelectric cells	Storage batteries

Protection

Batteries for the battlefield; packaging method. il Mod Packaging 17:70-1+ S '43

ELECTRIC bond and share company

Annual report. Comm & Fin Chr 157:1556, 1742 Ap 26, My 10 '43

Case review barred by Supreme court. Comm & Fin Chr 157:344 Ja 25 '43

Descriptions of holding companies. O. Ely. map Pub Util 31:629-30 My 13 '43

Outlook for Bond and Share preferred. A. L. Smith. Barron's 23:5 N 8 '43

Plan approved by SEC. Comm & Fin Chr 157:440 F 1 '43

President holds dissolution unnecessary. Comm & Fin Chr 158:1530 O 18 '43

Report to stockholders. Comm & Fin Chr 156:2129 D 14 '42

SEC brief assails two Bond & Share companies. Elec W News ed 119:1871 Je 5 '43

SEC overruled. Comm & Fin Chr 157:131 Ja 11 '43

Seeks authority to retire preferred shares. Comm & Fin Chr 157:816 Mr 1 '43

What is Electric Bond and Share worth? W. T. Hyde, Jr. Barron's 23:16 My 17 '43

ELECTRIC brakes. See Brakes, Electric**ELECTRIC brazing. See Brazing****ELECTRIC brooders. See Poultry brooders, Electric****ELECTRIC busbars. See Busbars****ELECTRIC cable reels**

Mobile power unit reels wire and cable. H. M. Jensen. il diag Elec W 119:84 Ja 9 '43

ELECTRIC cables

Critical materials in wire and cable. A. Dunham. il Elec West 91:60-3 Ag '43

Design, manufacture, and installation of 120-kv oil-filled cables in Canada. D. M. Farnham and O. W. Titus. il diags Elec Eng 61:Trans 881-9 D '42

Four ways to conserve cable. G. M. Rogers. il diags Ry Mech Eng 117:338 Jl '43

Gas-filled cables; abstract. C. J. Beaver and E. L. Davey. Elec R (Lond) 132:510 Ap 16 '43; Discussion. Electrician 130:424-6 Ap 23 '43; Elec R (Lond) 132:555-6 Ap 23 '43

How service was made available to war production plant with minimum use of critical material; supplying both 25 and 60 cycle service. plans Edison Elec Inst Bul 11:15-16 Ja '43

How to get the most out of wire, cable, cord. Factory Management 101:137-44 Jl '43

Insulating oil for cables. S. Beckinsale. Inst E E J 90 pt 2:3-14 F '43

Insulation stripping machine for electric cables. il Engineering 56:27 Jl 9 '43

Nine companies fined \$77,500 on charges of price-fixing. Elec W 119:668 F 20 '43

Okonite's motion picture practice; new color sound-film. R. S. Hayes. il map Ind Marketing 28:64+ Ag '43

One of four cables is three-phase spare; insuring continuity of supply of transmission lines laid underground. P. L. Dellis. diag Elec W 120:856 S 4 '43

Polyvinyl chloride cables. Electrician 131:384 O 15 '43

Polyvinyl chloride (P.V.C.) cables. Engineer 176:309 O 15 '43

Standard bending roll used to salvage electric cable. il diags Iron Age 151:51 F 25 '43

22-kV paper-insulated cables; economy in use of lead for jointing. diags Electrician 130:187-8 F 19 '43

Use reclaimed parts, salvage copper wire; two machines developed. A. H. Bardewyck. diags Elec W 120:852 4 '42

War-time conductors. Electrician 130:241-2 Mr 5 '43

Wire and cable; effect of rubber shortage; abstract. R. A. Schatzel. Rubber Age 53:60 Ap '43

See also

Electric conductors	Electric wire
Electric conduits	Insulation (electric)
Electric lines	Telephone cables

also General cable corporation

Cooling

Survey possible cable cooling methods, diag Elec W 119:486 F 6 '43

Identification

Color coding of distribution power cables for polarity identification. Min Cong J 29:45-6 S '43

Installation

Aerial cables serve as station ties connecting main generating station and the associated switch house. il Elec W 119:967-8 Mr 20 '43

Cable-laying plough. P. K. Davis. il diags Elec R (Lond) 133:99-101 Jl 23 '43

Fittings guide cable pull line. diags Elec W 118:2130 D 26 '42

How to install a single-conductor pothead. diag Elec W 120:340 Jl 24 '43

How to make a guide for pulling cable. il diags Elec W 119:1332 Ap 17 '43

How to make service connections with non-fusible crab joints; wiring diagrams. Elec W 118:1808 N 28 '42

Installation, splicing of aerial messenger cable. A. C. Fort and J. W. Carver. il Elec W 120:454-6 Ag 7 '43

Low-pressure, gas-filled cables go on 34.5-kv. duty; Indiana service corporation. S. W. Winje and M. F. Schonefeld. il diags Elec W 120:1158-60 O 2 '43

Oilstatic cables for 13.8-kv. generator leads. F. P. Fairchild. il diags Elec W 119:1284-6 Ap 17 '43

ELECTRIC cables—Installation—Continued

Pulling loads on single- and multiple-conductor impregnated-paper lead-encased cable, solid type. A. P. S. Bellis, bibliog il diag Elec Eng 62:Trans 138-48 Mr '43

Wood cable racks used to save steel. diags Elec W 119:1136 Ap 3 '43

See also

Electric conduits

Joints

Cable splicing; how factory methods can improve results; with illustrated instructions. R. B. McKinley and C. H. Seaberg. il Coal Age 48:67-9 Jl '43

Do's and don'ts of lead burning. T. G. Hieronymus. il diags Elec W 120:1188, 1190 O 2 '43

Emergency cable has 17 splices; silfos soldering technique. diags Elec W 119:312+ Ja 23 '43

G.P.O. example; reducing amount of solder to be used on cable joints. Electrician 129:550 N 20 '42; Same, Chem Age (Lond) 47:506 D 5 '42

How to apply waterproof tarpaulin to cable joints. diags Elec W 120:1038 S 18 '43

How to construct bifurcating cable joint; 10 to 15-kv. paper-insulated, single-conductor cable. diag Elec W 119:792 Mr 6 '43

How to construct 10-15-kv. cable joint; diagrams and tables. Elec W 119:1648 My 15 '43

How to make mains cable connections with non-fusible crab joints; diagrams. Elec W 118:1649 N 14 '42

How to make service connections with non-fusible crab joints; wiring diagrams. Elec W 118:1808 N 28 '42

Low-voltage joints; eliminating lead sleeves. H. W. Breeze. diag Elec R (Lond) 132:317-18 Mr 5 '43

Redesigned cable couplers reduce machining and save scarce materials. il diags Product Eng 14:264-5 My '43

Manufacture

Hard wire braiding; development of new machine carrier. il Electrician 129:501-2 N 6 '42

Resistance welding underwater; stream of water cools work. J. A. Merryman. il Steel 112:56+ Ja 25 '43

Protection

Cables, how to make them last. R. B. McKinley and L. D. Madsen. il diags Elec W 119:1606-9, 1776-9 My 15-29 '43

Electric cable insulation from synthetic rubbers. S. E. McCrary and others. India Rubber W 107:167-62+, 265-71 N-D '42

Electric cable insulation; the replacement of rubber by thermo plastics; abstract. H. Beck. Automobile Eng 33:97 Mr '43

High rupturing capacity fuses; their discriminative value on cable networks. S. H. Fowles. il Elec R (Lond) 132:11-14 Ja 1 '43

High-voltage-ignition-cable design for aircraft. H. H. Wermin. il Elec Eng 62:Trans 716-19 N '43

How to fireproof lead-sheathed cable; illustrated instructions. A. C. Avril and G. Lineback. Elec W 119:972 Mr 20 '43

Low-pressure, gas-filled cables go on 34.5-kv. duty; Indiana service corporation. S. W. Winje and M. F. Schonefeld. il diags Elec W 120:1158-60 O 2 '43

Nitrogen rejuvenates belted paper cable. G. K. Tashjian and C. H. Hunter. Elec W 119:1769 My 29 '43

Spring tension steadies heavy cables. il Coal Age 47:77-8 N '42

Wiring economies under wartime code; higher temperature capabilities of wires insulated with oil base rubber compounds. L. C. Peterman. Elec W 119:2119-20 Je 26 '43

See also

Electric cables—
Sheathing

Rating

Graphical determination of cable ratings. H. Waddicor. diags Inst E E J 90 pt 2:192-200 Je '43

Repair

Cable sheath breaks repaired in duct. T. G. Hieronymus. Elec W 120:324+ Jl 24 '43

Electric cable fault locator and vulcaniser. il diags Engineer 176:173-4 Ag 27 '43

Lead pipe pothead and cable splices. E. E. Schmidt. Elec W 118:1638 N 14 '42

Special torch tip for lead burning. il Elec W 120:676+ Ag 21 '43

Splicing and vulcanizing two-conductor concentric cables; reprinted, with revisions, from January 1938 issue, p28-29. I. E. Davies. il diag Min Cong J 29:14-15 Mr '43

Sheathing

Eddy-current losses in single-conductor paper-insulated lead-covered unarmoured cables of a single-phase system. A. H. M. Arnold. Inst E E J 89 pt 2:636-45 D '42

Standards

New edition of standard recognizes wide use of URC weatherproof wire. C. T. Sinclair. il Ind Stand 14:146-8 Mr '43

Temperature

Effect of magnetic heating on cables. W. H. Burlison. Elec W 119:968+ Mr 20 '43

Guide for wartime conductor temperatures for power cables in service. bibliog Elec Eng 62:Trans 606-10 S '43

Interim report on emergency overloads on overhead conductors. bibliog Elec Eng 62:Trans 588-90 S '43

Magnetic heat neutralized. C. O. Von Dannenberg. Elec W 119:1490+ My 1 '43

Terminals

Fundamentals of potheads. C. W. Sward. il Elec W 120:494 Ag 7 '43

Gas-filled cable pothead compoundless. J. H. Nicholas. il diag Elec W 119:1482+ My 1 '43

Impulse voltage and 60-cycle life tests of 22-kv cables and cable terminals. W. P. Cook. diags Edison Elec Inst Bul 11:273-6 S '43

Sleeves for sealing oil-impregnated cable ends; Alcho-ro fluxes. diag Electrician 131:133-4 Ag 6 '43

Testing

Air breakers chop charging current. il Elec W 119:1322 Ap 17 '43

Cable repairs; compact fault-finding set. diag Elec R (Lond) 133:8 Jl 2 '43

Cable testing. H. C. Anderson. il diags Gen Elec R 45:621-3 N '42

Checking cables in aircraft with Rotobridge tester. D. A. Griffin. il diag Electronics 16:200+ Je '43

D.c. gradient fixes cable fault location. L. T. Frantz. Elec W 119:1156 Ap 3 '43

Eddy-current losses in single-conductor paper-insulated lead-covered unarmoured cables of a single-phase system. A. H. M. Arnold. Inst E E J 89 pt 2:636-45 D '42

Fault localisation. G. W. Stubbs. diags Electrician 130:169-71 F '43

Impulse strength of solid and gas-filled high voltage cables. A. Gemant. bibliog Franklin Inst J 234:519-33 D '42

Impulse voltage and 60-cycle life tests of 22-kv cables and cable terminals. W. P. Cook. diags Edison Elec Inst Bul 11:273-6 S '43

Locates cable fault with milliammeter. A. A. Schulke. diags Power 87:620-1 S '43

Pulling loads on single- and multiple-conductor impregnated-paper lead-encased cable, solid type. A. P. S. Bellis. bibliog il diag Elec Eng 62:Trans 138-48 Mr '43

Results of emergency overload tests on 24-kv, 3-conductor paper and lead cable. G. B. McCabe and J. Stichler. Edison Elec Inst Bul 10:406-9 N-D '42

ELECTRIC cables, Submarine

Electrical and mechanical properties of the system Buna S-gilsonite. A. H. Selker. A. H. Scott and A. T. McPherson. bibliog J Research Nat Bur Stand 31:141-61 S '43

Flux navigator; enables WABC's personnel to reach island station in fog; magnetic field from power cable guides vessel. D. D. Jones. il diags Electronics 16:74-7+ F '43

Impregnated paper for submarine cable. R. J. Wiseman. il Elec W 120:1348-9 O 16 '43

ELECTRIC cables, Submarine—Continued

Low-pressure, gas-filled cables go on 34.5-kv. duty; Indiana service corporation. S. W. Winje and M. E. Schonefeld. *il* *diags* *Elec W* 120:1158-60 O 2 '43

Submarine cable repairs; abstract. J. C. A. Fraser. *Elec R* (Lond) 131:678 N 27 '42

ELECTRIC capacitors. See Condensers (electricity)

ELECTRIC capacity

Calculator for plant engineers, electricians. V. W. Palen. *il* *Pet Eng* 15:180 O '43; Same. *Coal Age* 48:85 O '43; Same. *Rock Prod* 46:37 N '43

Detecting small mechanical movements; vacuum tube circuit for detecting mechanical movements as small as a millionth of an inch, by converting them into capacitance changes. J. C. Frommer. *diags* *Electronics* 16:104-5 JI '43

Electrical capacity of the double layer. W. G. Eversole and C. R. Estee. *J Chem Phys* 11:156 Mr '43

Radio-frequency capacitometer; cathode-ray-tube instrument for precise radio-frequency measurement of capacitance and inductance. F. J. Moles. *il* *diags* *Gen Elec R* 46:457-9 Ag '43

Relation between ζ -potential and the electrical capacity of the double layer. W. G. Eversole and C. R. Estee. *J Chem Phys* 11:63-6 F '43

ELECTRIC cells. See Electric batteries; Photoelectric cells; Storage batteries

ELECTRIC charges

Direct determination of the charge of the β -particle. Y. Beers. *bibliog* *Phys R* 63:77-85 F 1 '43

Generation of electric charges by moving rubber-tired vehicles. S. S. Mackeown and V. Wouk. *diags* *Elec Eng* 62:Trans 207-10 My '43

Method for measuring small electric charges. R. M. Showers. *bibliog* *diags R Sci Instr* 14:35-7 F '43

See also

Space charge

ELECTRIC circuit breakers

ABC formula guides fuse co-ordination. R. F. Quinn. *Elec W* 119:2115-17 E 26 '43

Aircraft circuit breakers. C. W. Kuhn. *il* *diags* *Elec Eng* 62:Trans 642-5 O '43

Breaker contacts plated in place. A. C. Zeese. *il* *Elec W* 119:1478 My 1 '43

Electrical developments of 1942; switchgear. G. Bartlett. *il* *Gen Elec R* 46:13-15 Ja '43

Electrical engineering in 1942. *il* *Engineer* 175:39-40 Ja 8 '43

Experience with oil circuit reclosers on REA systems. L. M. Moore and B. O. Watkins. *Elec Eng* 62:Trans 531-5 Ag '43

Fuses v. oil circuit-breakers; their spheres in medium-voltage AC industrial installations. G. Cluley. *Elec R* (Lond) 132:143-6 Ja 29 '43

High-voltage high-rupturing-capacity cartridge fuse and its effect on protection technique. K. Dannenberg and W. J. John. *bibliog* *il* *diags* *Inst E E J* 89 pt 2:565-76 D '42; Abstract. *Electrician* 128:363-4 Ap 17 '42; Discussion. *Inst E E J* 89 pt 2:576-84; 90 pt 2:269-72 D '42, Ag '43

How to determine short-circuit current and interrupting capacity of interrupting devices. W. A. Holland. *Gen Elec R* 46:499-500 S '43

How to maintain oil circuit breakers. N. P. Wilson. *Chem Ind* 53:95 JI '43; Same. *Power* 87:763-4 N '43

How to operate; disconnect switches, oil circuit breakers, air-break switches. *Elec W* 118:1974 D 12 '42

Industrial switchgear maintenance. P. R. Pierson. *il* *Blast F & Steel* 31:1007-8+ S '43

Insulating oil in relation to circuit breaker failures. W. F. Cooper. *bibliog* *Inst E E J* 90 pt 2:23-8; Discussion. 53-64 F '43

Interim report on application and operation of automatic reclosing equipment on stub feeders. *Elec Eng* 62:Trans 536-40 Ag '43

Interim report on application and operation of circuit breakers and switchgear. *bibliog* *Elec Eng* 62:Trans 481-2 JI '43

Interrupting capacity; what it means and how it is calculated. W. A. Holland. *il* *diags* *Power Pl Eng* 47:68-71, 79 My '43

Line relayed to adjust local stations to local loads. J. F. Pennington and J. T. Logan. *bibliog* *il* *diag* *Elec W* 119:1295-7 Ap 17 '43

Motor controls need short-circuit protection. R. M. Eichner. *il* *diag* *Factory Management* 101:135-8 Je '43

Power circuit breaker upkeep and trouble shooting; data sheets. W. A. Holland. *Factory Management* 101:148+ Ja '43

Progress in engineering knowledge during 1942; circuit protection. P. L. Alger and J. Stokley. *Gen Elec R* 46:119-20 *bibliog*(p136) F '43

Protecting trolleys ups tonnage, prevents fires and shocks; automatic reclosing circuit breakers. G. W. Creech. *il* *Coal Age* 48:75-6 Je '43

Reactors in busbars; their effect on circuit-breaker rating. *diag* *Elec R* (Lond) 132:408 Mr 26 '43

Selecting short-circuit protection for low-voltage motor circuits. W. G. Taylor. *il* *Power Pl Eng* 47:79-81+ O '43

Switchgear dispersal; modern primary distribution centre. *il* *diag* *Elec R* (Lond) 132:241-6 F 19 '43

Switchgear practice in Europe and America. J. E. MacNeill. *il* *diags* *Elec Eng* 61:609-13 D '42

Switching overvoltage hazard eliminated in high-voltage oil circuit breakers. L. F. Hunt, E. W. Boehne and H. A. Peterson. *bibliog* *il* *diags* *Elec Eng* 62:Trans 98-106 F '43

See also

Electric fuses

Electric switches

Control

How to close, trip circuit breakers. G. J. Easley. *il* *diags* *Elec W* 120:488, 674, 840, 1028, 1188, 1388, 1550+, 1724 Ag 7-N 13 '43

New control system for automatic parallel operation of load-ratio-control transformers. S. Minnecl and S. B. Farnham. *bibliog* *diags* *Elec Eng* 62:Trans 488-93 JI '43

On relay recloses several breakers. H. A. P. Langstaff. *diag* *Elec W* 120:1384 O 16 '43

Design

Multirifice interrupter for high-voltage oil circuit breakers. L. R. Ludwig and W. M. Leeds. *bibliog* *il* *diags* *Elec Eng* 62:Trans 119-25 Mr '43

Vital materials conserved in new circuit breaker design. *il* *diags* *Product Eng* 14:406-7 JI '43

Manufacture

Circuit-breaker castings; Mallory 3, a heat-treated chromium-copper alloy. L. B. Hunt. *il* *Elec R* (Lond) 131:713-15 D 4 '42

Oilless

Air-blast circuit breakers. A. R. Blandford. *il* *Electrician* 130:246-8 Mr 5 '43; Abstract. *Elec R* (Lond) 132:320 Mr 5 '43; Discussion. *Electrician* 130:274-6 Mr 12 '43; *Elec R* (Lond) 132:353-4 Mr 12 '43

Air-break switchgear; tests on a new design. *il* *Elec R* (Lond) 132:416 Mr 26 '43

Air breakers chop charging current. *il* *Elec W* 119:1322 Ap 17 '43

Design and operation of high-voltage axial air-blast circuit breakers. A. K. Leuthold. *il* *diags* *Elec Eng* 61:Trans 869-75 D '42

Dorman and Smith new air circuit breaker. *il* *Electrician* 130:271-2 Mr 12 '43; *Engineering* 155:515 Je 25 '43

Metropolitan-Vickers low-voltage circuit-breaker. *il* *diag* *Electrician* 131:107-8 JI 30 '43; Same cond. *Elec R* (Lond) 133:245-6 Ag 20 '43

New 50,000-kva 5-kv oilless circuit-breaker and metal-clad switchgear unit. R. C. Dickinson and B. I. Hayford. *il* *diags* *Elec Eng* 62:Trans 302-6 Je '43

Some air-blast circuit-breaker installations in Canada. H. W. Haberl and R. A. Moore. *il* *diags* *Elec Eng* 61:Trans 859-63 D '42

Switchgear maintenance and trouble shooting; air circuit breakers. W. A. Holland. *Factory Management* 100:132, 134 D '42

ELECTRIC circuit breakers—Oilless—Continued

Use of compressed air saves vital materials; circuit breaker. H. W. Martin. *il* diags Machine Design 15:145-6+ Ap '43
Vertical-flow compressed-air circuit breaker and its application on a 132-kv power system. H. A. P. Langstaff and B. P. Baker. bibliog *il* diags Elec Eng 62:Trans 188-92 Ap '43

Protection

Oil-impregnated-paper high-voltage condenser bushings for circuit breakers and transformers. H. J. Lingal, H. L. Cole and T. R. Watts. bibliog diags Elec Eng 62:Trans 269-75 Je '43

Repair

Arc welding used to rebuild oil circuit breakers castings; abstract. diag Elec W 119:1152 Ap 3 '43
Windlass facilitates breaker tank removal. *il* diag Elec W 119:1661 My 15 '43

Small size

Electrical protective devices for aircraft. J. C. Lebens, jr. *il* diag Aero Digest 42:237+ Mr '43

Testing

Cathode-ray oscillograph applied to long-time switching transients. G. W. Dunlap and N. Rohats. *il* diags Elec Eng 62:Trans 231-4 My '43
Dethermalizing arc quenchers. L. F. Hunt and F. H. Cole. bibliog *il* diags Elec Eng 62:Trans 720-4 N '43
Primary injection set; inexpensive method of making tests on switchgear. C. C. Kirby. *il* diags Elec R (Lond) 132:507-9 Ap 16 '43
Some factors affecting the design of alternators for switchgear testing. V. Easton. bibliog Inst E E J 90 pt 2:202-11; Discussion. 212-16 Ag '43

Tripping

Rapid release latches analyzed for performance. C. Thumin. diags Product Eng 14:740-2 N '43
Routine tests assure good trip circuits. Elec W 119:1152+ Ap 3 '43

ELECTRIC circuits

Analysis of certain circuits in cathodic protection. G. N. Scott. *il* diags Am Pet Inst Proc 23(4):36-48 '42
Circuit calculations; examples of graphical methods. G. W. Stubbings. diags Elec R (Lond) 132:449-50 Ap 2 '43
Circuit planning data from a distribution engineer's notebook. C. N. Clark. Elec W 120:660 Ag 21 '43
Electrical circuit analysis of torsional oscillations. L. A. Pipes. bibliog diags J Ap Phys 14:352-62 JI '43
Electrical transducer circuit for use with capacity pick-up devices. E. V. Potter. diags U S Bur Mines Rep of Invest 3685: 1-7 '43; Same. R Sci Instr 14:130-5 My '43; Abstract. Electronics 16:150+ JI '43
Equivalent circuits for oscillating systems and the Riemann-Christoffel curvature tensor. G. Kron. bibliog diags Elec Eng 62:Trans 25-32 Ja '43
Equivalent circuits to represent the electromagnetic field equations. G. Kron. Phys R 64:126-8 Ag 1 '43
Geiger-Mueller counter pulse size. C. W. Miller. diag R Sci Instr 14:68-76 Mr '43
General reactance theorem for electrical, mechanical, and acoustical systems. D. Maa. bibliog Inst Radio Eng Proc 31:365-71 JI '43
Impedance of some simple electrical circuits; reference sheet. B. Dudley. diags Electronics 15:75-7 D '42
Improved current integrator. J. M. Blair. bibliog diag R Sci Instr 14:64-7 Mr '43
Linear power scales; diagrams for series impedance circuits. G. F. Freeman. Elec R (Lond) 132:210-12 F 12 '43
Method for determining the normal modes of Foster's reactance networks. W. R. LePage. bibliog diags Elec Eng 62:Trans 674-8 N '43
New spectroscopic source unit. M. F. Hasler and H. W. Dietert. *il* diag Opt Soc Am J 33:218-28 Ap '43

Operation of vapor tube rectifier circuits with opposing direct voltages. J. M. Fluke. diags Electronics 16:100-3 Je '43
Overvoltage protection of current-transformer secondary windings and associated circuits. R. E. Kaufmann and G. Camilli. *il* diags Elec Eng 62:Trans 467-72 JI '43
Pilot-wire circuits for protective relaying, experience and practice. Elec Eng 62:Trans 210-14 My '43
Simplified scaling circuit. D. DeVault. diag R Sci Instr 14:23 Ja '43
Steady-state and hunting equivalent circuits of long-distance transmission systems. G. Kron. diags Gen Elec R 46:337-42 Je '43
Steady state currents of electrical networks. D. L. Waidelich. J Ap Phys 13:706-12 N '42
Surge-generator circuits. E. Fisher. J Ab Phys 14:341-2 JI '43
Unbalanced loads; simple method for three-phase circuit calculations. G. W. Stubbings. diags Elec R (Lond) 131:679-80 N 27 '42
Use of counter circuits in frequency dividers. E. L. Kent. diags Acoustical Soc Am J 14: 175-8 Ja '43
Useful equivalent circuit for a five-winding transformer. L. C. Aicher, jr. bibliog diags Elec Eng 62:Trans 66-70 F '43

See also

Electric conductors	Electric transmission
Electric distribution	Impedance
Electric lines	Radio circuits
Electric rectifiers	Short circuits

Mechanical analogies

Analogy in engineering. A. W. Ashton. diags Inst E E J 90 pt 1:120-4 Mr '43

ELECTRIC clocks. See Clocks, Electric**ELECTRIC codes**

Compulsory code of wiring. Electrician 129: 609-10 D 4 '42
War revision of meter code. F. B. Silsbee. Ind Stand 13:314 D '42

See also

Electric wiring—
Safety measures

ELECTRIC communication

ASA approves standard electrical symbols for use on communication drawings. W. L. Heard. Ind Stand 13:269-71 N '42
Electric communications, the past and present illuminate the future. L. Espenschied. Inst Radio Eng Proc 31:395-402 Ag '43
International telecommunications. A. S. Angwin. Engineering 156:316-17, 357 O 15, 29 '43; Excerpts. Engineer 176:310-11 O 15 '43; Electrician 131:373-5 O 15 '43; Abstract. Elec R (Lond) 133:499-500 O 15 '43
Special library for telecommunications; Postmaster-General's department, Melbourne, Australia. B. Robertson. Special Lib 34:89-93 Mr '43
Wave guides in electrical communication. J. Kemp. bibliog (62 references) diags Inst E E J 90 pt 3:90-114 S '43

See also

Radio communication	Telephone
Radio telegraph	Television
Telegraph	

Bibliography

Bell system technical journal; tables of contents and cumulative index, volumes XI-XX, 1932-1941. 48p. Am. telephone and telegraph co, 195 Broadway, New York

International aspects**See also**

Telegraph, Submarine

Study and teaching

Better training for communication engineering. S. G. Lutz. J Eng Educ 33:713-34 My '43
University education and industrial training of engineers, with particular reference to telecommunications. W. Jackson. Inst E E J 90 pt 3:53-60; Discussion. 61-72 Je '43

ELECTRIC commutators. See Commutators**ELECTRIC condensers. See Condensers (electricity)**

ELECTRIC conduction

Electrical conduction and recrystallization in thin Pb films deposited at low temperatures. E. L. Armi. bibliog diag Phys R 63: 451-4 Je 1 '43

ELECTRIC conductivity

Beryllium-copper. E. M. Foster. il Electrician 131:56-8 Jl 16 '43

Conduction of electricity in highly insulating liquids. C. Pao. bibliog diags Phys R 64: 60-74 Ag 1 '43

Conductivity of rubber tread stocks; effect of properties of carbon black. L. H. Cohan and J. F. Mackey. bibliog Ind & Eng Chem 35:306-8 Jl '43

Effect of high electrostatic fields on the conductivity of tungsten. P. L. Vissat. bibliog diag Phys R 64:119-25 Ag 1 '43

Electrical conductivity and isothermal Hall effect in cuprous oxide. W. Feldman. bibliog diags Phys R 64:113-18 Ag 1 '43

Electrical conductivity of lead chromate. T. W. Lashof. bibliog diags J Chem Phys 11: 196-202 Ap '43

Electrical conductivity of molten blast furnace slags; abstract. A. E. Martin and G. Derge. Iron Age 151:59-60 F 25 '43

Electrical properties of neoprene. F. L. Yerzley. il Ind & Eng Chem 35:330-5 Mr '43

Experiences in pouring copper with high conductivity. A. Campbell. Foundry 71:112 Jl '43

Intrinsic electric strength and conductivity of varnish films and their variation with temperature. A. M. Thomas and M. V. Griffith. bibliog diags Inst E E J 89 pt 1: 487-98 N '42

Liquid dielectrics; sixty-cycle power factors, conductivities, and polar contents of systems containing sulfur or nitrogen compounds in liquid paraffin. J. D. Piper and others. bibliog Ind & Eng Chem 34:1505-9 D '42

Measurement of electrical conductivity for stratified ground; abstract. J. Grosskopf and K. Vogt. Wireless Eng 19:71 F '42; Discussion. W. Pfister. 19:521-2 N '42

Photo-conductivity of lead chromate. J. E. Goldman and A. W. Lawson. diags Phys R 64:11-18 Jl '43

Precipitation reaction in aged cold-rolled 1 per cent cadmium-copper; its effects on hardness, conductivity, and tensile properties. R. H. Harrington and L. E. Cole. bibliog il Am Soc for Metals Trans 31:651-69; Discussion. 669-74 S '43

Properties affecting resistance welding; table. K. Rose, comp. Metals & Alloys 18:529 S '43

Thermal and electrical conductivities of tungsten and tantalum. M. Cox. bibliog Phys R 64:241-7 O 1 '43

Variable ratio-arm conductivity bridge. W. F. Luder. il diag R Sci Instr 14:1-3 Ja '43

See also

Dielectric constants	Electric resistance
Dielectrics	Electrolytes—Con-
Electric conductors	ductivity

ELECTRIC conductors

Adding conductors raises line capacity. C. M. Allen. il diags Elec W 119:763 Mr 6 '43

Ampere capacity for copper bars, rods and tubing; tables. R. C. Fink. Elec W 120:492 Ag 7 '43

Conductor material for buses. W. Deans. Elec W 118:2120 D 26 '42

Conductor redesign saves copper. A. A. Osipovich. diags Elec Eng 62:410-11 S '43

Conductor sizes for distribution secondaries. P. Morrill. Elec W 120:1210 O 2 '43

Correcting overloads on conductors. Ry Mech Eng 117:56-9 Ja '43

Data and instructions on use of galvanized iron wire as line conductor material. Elec W 118:1637 N 14 '42

Formulas for calculating short-circuit forces between conductors of structural shape. T. J. Higgins. bibliog diags Elec Eng 62:Trans 659-63 O '43

Formulas for the calculation of the inductance of linear conductors of structural shape. T. J. Higgins. bibliog diags Elec Eng 62:Trans 53-8 F '43

Formulas for the geometric mean distances of rectangular areas and of line segments. T. J. Higgins. J Ap Phys 14:188-95 Ap '43

Formulas for the inductance of rectangular tubular conductors. T. J. Higgins. diag J Ap Phys 13:712-15 N '42

How to arrange bus conductors for an a.c. system. W. Deans. il Elec W 119:986 Mr 20 '43

How to determine three-phase secondary drop copper and ACSR; chart. F. C. Rand. Elec W 118:1642 N 14 '42

Installing iron wire for line conductors. il Elec W 118:1804+ N 23 '42

New formulas for calculating short-circuit stresses in bus supports for rectangular tubular conductors. T. J. Higgins. diag J Ap Phys 14:151-4 Mr '43

New formulas for the inductance and reactance of square tubular conductors. T. J. Higgins. diag J Ap Phys 14:185-7 Ap '43

Plastic insulations for conductors. E. D. Youmans. Elec W 120:457-9, 812-15 Ag 7, S 4 '43

Practical shapes of d.c. bus conductors. W. Deans. il Elec W 119:794+ Mr 6 '43

60-cycle universal transmission line chart for hard-drawn stranded copper conductors. J. M. Shepley and C. B. Walton. Elec W 119: 472-3, 638 F 6-20 '43

Skin effect in bimetallic conductors; copper-covered steel conductor. B. R. Teare, jr. and J. R. Webb. bibliog il diags Elec Eng 62:Trans 297-302 Je '43

Some problems in transmission-line design; with cost data. A. Hurke. diags map Inst E E J 90 pt 2:158-71; Discussion. 172-85 Je '43

Structural steel shapes as a.c. conductors. S. C. Killian and A. K. Alsaker. diags Elec W 118:1773-5 N 28 '42

What shape conductors for electrical busbars? W. Deans. il diags Power 87:87-90 F '43

See also

Busbars	Insulation (electric)
Electric cables	Radio conductors
Electric transmission	Skin effect
Electric wire	Solenoids

Semi-conductors

Contact non-linearity, with reference to the metal rectifier and the carborundum ceramic non-linear resistor. A. Fairweather. il diags Inst E E J 89 pt 1:499-518 bibliog(p517-18) N '42

Temperature compensation of instruments with negative coefficient resistors; use of semi-conducting materials as series neutralizers. J. R. Pattee. bibliog il Electronics 16:102-5+ Ag '43

Temperature

Ampere load limits for copper in overhead lines. A. H. Kidder and C. B. Woodward. Elec Eng 62:Trans 148-52 Mr '43

Current-carrying capacity of overhead conductors. H. A. Enos. Elec W 119:1612-14 My 15 '43

Interim report on emergency overloads on overhead conductors. bibliog Elec Eng 62: Trans 588-90 S '43

Temperature rise of conductors for buses. W. Deans. Elec W 119:300+ Ja 23 '43

Thermal rating of overhead line wire. M. Zucker. bibliog il Elec Eng 62:Trans 501-7 Jl '43

ELECTRIC conduits
How fibre duct can save conduit in industrial wiring. H. E. Stafford. diags Elec W 119:1642 My 15 '43

How to connect composition conduits for underground service; diagrams. I. C. Dietze. Elec W 120:114 Jl 70 '43

How to connect underground service conduits (composition to metal). I. C. Dietze. diags Elec W 119:2157 Je 26 '43

Resistance study on a conduit-return system; wiring system at the University of Wisconsin. E. Bennett and R. Schuette. Elec W 119:339-40 Mr 20 '43

Substation control lines in fibre duct. il Elec W 120:462 Ag 7 '43

Switching station modified to save copper and steel; treated timbers for structures and galvanized conduit for buses. P. H. Adams. il diag Elec W 119:1946-9 Je 12 '43

Water in conduit systems; prevention. Ry Mech Eng 117:142-3 Mr '43

ELECTRIC connectors

- Development of quick disconnect plugs for aircraft. D. H. Loukota. *il Aero Digest* 41:210, 212, 215 N '42
 Hot-line tool installs connectors. J. W. Sample. *il Elec W* 120:482+ Ag 7 '43
 Punch and die idea jumps output; pierces elongated holes in terminal connectors. *il Steel* 113:90 O 25 '43

ELECTRIC contactors

- Aircraft contactors. F. J. Russell and A. P. Charbonneau. *il Elec Eng* 62:Trans 563-6 S '43
 Maintenance of electrical contactors. W. W. McCullough. *il Power Pl Eng* 47:90-2 Je '43
 Solenoid contactor aircraft units. *il Electronics* 16:163+ Ja '43
 Voltage surges caused by contactor coils. J. R. Taylor and C. E. Randall. *diags Inst E E J* 90 pt 2:90-5 Ap '43; Abstracts. *Electrician* 129:557-8 N 20 '42; *Engineering* 155:19 Ja 1 '43; Discussion. *Inst E E J* 90 pt 2:95-100 Ap '43; *Electrician* 129:558-9 N 20 '42

ELECTRIC contacts

- Breaker contacts plated in place. A. C. Zeese. *il Elec W* 119:1478 My 1 '43
 Contact bounce. P. H. Estes. *il diags Gen Elec R* 46:321-3 Je '43
 Contact non-linearity, with reference to the metal rectifier and the carborundum ceramic non-linear resistor. A. Fairweather. *il diags Inst E E J* 89 pt 1:499-518 bibliog(p517-18) N '42
 Design of electrical contacts for trouble-free service. J. D. Kleis. *il Product Eng* 14:733-7 N '43
 Effect of the war program on electrical contact materials. C. E. Gwyn, jr. *Steel* 113:126 Jl 12 '43
 Instrument for the determination of contact making and breaking time. W. Richter and W. H. Elliot. *il diags Elec Eng* 62:Trans 14-16 Ja '43
 Possibility of reducing electrical contact resistance of aluminum and aluminum alloys; abstract. C. Wagner and V. Stein. *Roy Aeronautical Soc J* 47:sup293 Je '43
 Sticking regulator contacts remedied. G. Read. *diag Elec W* 120:456 Ag 7 '43

ELECTRIC contractors

- Contracting industry. G. A. T. Burdett. *Electrician* 130:141-2 F 5 '43
 Informer cashes in; electrical contractors in Pittsburgh suit pay \$260,000, but U.S. gets half, and informer faces huge income tax. *Business Week* p39-40 Ag 21 '43
 Supply swappers; electrical contractors in Chicago exchange needed items. *Business Week* p66 D 12 '42

Accounting

- Replacement of equipment; accounting problems. S. H. Withey. *Electrician* 129:582-3 N 27 '42

ELECTRIC control

- Automatic control; development of industrial designs and applications. *Electrician* 129:633-5 D 11 '42
 Central control for boilers; form of Ward-Leonard control. J. W. Young. *diags Engineering* 154:461-2 D 11 '42
 Centralize control of rotary kilns. T. Offrell. *il diag Rock Prod* 46:59-61+ Ag '43
 Direct-current amplifier and its application to industrial measurements and control. D. C. Gall. *il diags Inst E E J* 89 pt 2:434-43; Discussion. 443-6 O '42; Abstract. *Electrician* 128:249-51 Mr 20 '42
 Electrical controls on late model shovels; Amplidyne, Rototrol and Double Ward Leonard control devices for electric shovels and draglines. L. E. Briscoe. *Min Cong J* 29:37+ Jl '43
 Electrical developments of 1942; control. G. Bartlett. *il Gen Elec R* 46:22-4 Ja '43
 Electrical remote control. C. J. Dorr and L. N. Galton. *il diags Electronics* 15:60-4, 173-4 N; 57-60+ D '42
 Electro-hydraulic thruster. *il diags Mech Handling* 29:212-14 N '43
 Experimental details for a precision high temperature control utilizing the Hull circuit. C. E. Waring and G. Robison. *il diags R Sci Instr* 14:143-6 My '43

- Fast clock switch for automatic control circuits. M. L. Yeater. *diags R Sci Instr* 14:146-7 My '43
 How to connect controls, meters and relays for parallel 220-kv. transmission lines; diagram. *Elec W* 118:1980 D 12 '42
 Interlocked controls feature vapor degreaser. *il diag Product Eng* 14:697 N '43
 Load pickup by a group of ignitron rectifiers; application to large electrochemical loads, such as aluminum cell lines. L. W. Morton and D. I. Bohn. *bibliog diags Elec Eng* 62:Trans 679-84 N '43
 New equipment. *il Iron Age* 152:73-6 S 16 '43
 Novel automatic control system; concentrators of Utah copper co. *diag Eng & Min J* 144:86 Jl '43
 Pneumatic vs electrical automatic control. E. L. Stilson. *il diags Chem & Met Eng* 50:137-9 My '43
 Precise control enhances machine performance. F. Felix. *il diags Machine Design* 15:132-4+ Ap '43
 Processing lines for electrolytic tinning. J. R. Erbe. *il diags Steel* 111:128-30+ D 7 '42
 Progress in engineering knowledge during 1942; industrial motors and control. P. L. Alger and J. Stokley. *diag Gen Elec R* 46:122-4 bibliog(p136) F '43
 Redler bin level control. *il diag Mech Handling* 30:361-2 Ag '43
 Resonant electrical control systems. D. W. Moore, jr. *il diags Elec Eng* 62:436-9 O '43; Same. *diags J Aeronautical Sci* 10:285-8+ O '43; Same. *Instruments* 16:250-2+ My '43
 Selecting components for electrical controls. H. I. Stanback. *il Machine Design* 15:119-24 Ap '43
 Unified system of boiler control. *il diag Engineer* 176:284-5 O 8 '43
 VDM propeller pitch changing mechanism. *diags Automotive & Aviation Ind* 38:40-1 F 15 '43
 Versatile amplidyne control for electric shovels. D. Stoetzel. *il diag Eng & Min J* 143:53-5 N '42
 Vitamins for Diesel power; autoload control. W. H. Smith and A. H. Candee. *il diags Ry Mech Eng* 117:381-3 Ag '43
 Wartime drives and controls. *il diags Machine Design* 15:114-18+ Ap '43

See also

- | | |
|--------------------------|----------------------------------|
| Airplanes—Control | Electric switches |
| Carrier current control | Photoelectric cells—Control uses |
| Clocks, Electric—Control | Radio control |
| Electric controllers | Thyatron |
| Electric motors—Control | Valves—Electric control |
| | Voltage regulation |

ELECTRIC controllers

- Controller resistances. *Electrician* 130:87-9, 110 Ja 22-29 '43
 Make copper work harder; select motors for maximum load, wiring distribution for maximum use, make controllers take more. L. F. Adams. *Elec West* 89:62-4 N '42
 Selecting motors and controls for wartime conditions. *Machine Design* 15:151-3 Ap '43

ELECTRIC converters*See also*

- Electric rectifiers
ELECTRIC converters, Synchronous
 Load regulating system for synchronous converters. L. H. Fletemeyer. *il diags Electrochem Soc Trans* 83 (preprint 12):147-57 Ap '43; Excerpts. *Elec W* 119:1994 Je 12 '43; *Chem & Met Eng* 50:179-80 O '43

ELECTRIC cooking

- Cooking schedules cut load, cost. *Elec W* 119:1498+ My 1 '43
 Estimating electric loads for military-training bases, federal housing, and other wartime projects. H. M. Potts. *Elec Eng* 62:Trans 246-54 My '43
 Large scale electric cooking. G. A. T. Burdett. *Electrician* 129:531-2, 555-7 N 13-20 '42
 War workers' hostels. *il Elec R (Lond)* 132:571-3 Ap 30 '43

See also

- | | |
|---|--------------------------------|
| Bakers and bakeries | Electric stoves |
| —Electric equipment | Restaurants—Electric equipment |
| ELECTRIC cooperative associations. See Electric service, Rural—Cooperative lines | |

ELECTRIC cords

Alarmed at rapid deterioration of electric cord. H. A. Fanckboner. Nat Underw 47:3+ Mr 18 '43

How to get the most out of wire, cable, cord. Factory Management 101:137-44 J1 '43

ELECTRIC current limiters

Automatic voltage compensator for resistance welding control. E. M. Callender and R. S. Phair. Il diags Elec Eng 62:Trans 701-5 N '43

Interim report on overloading current-limiting reactors. Elec Eng 62:Trans 611-12 O '43

New one-cycle directional overcurrent relay. W. C. Morris. Il diags Elec Eng 62:Trans 725-7 N '43; Same. Gen Elec R 46:571-4 O '43

Rotating regulator for arc furnaces; Rototrol. R. A. Geiselman, C. C. Levy and W. R. Harris. Il diags Elec Eng 62:Trans 671-4 N '43

Short-circuit rating and testing of current-limiting reactors. J. G. Wellings and R. V. Wheeler. diags Inst E E J 89 pt 2:473-9; Discussion. 479-84 O '42

ELECTRIC current rectifiers. See Electric rectifiers

ELECTRIC currents

Energy flow in electric systems; the V_i energy-flow postulate. J. Slepian. diags Elec Eng 61:Trans 835-41 D '42

Make and break network theorem of Helmholtz. diags Wireless Eng 20:319-22 J1 '43

Mechanical forces on buses due to fault currents. S. C. Killian. diags Elec W 118:1938-40 D 12 '42

Steady state currents of electrical networks. D. L. Waidelich. J Ap Phys 13:706-12 N '42

See also

Electric measurements Electric transient phenomena
Electric transformers Electric waves

ELECTRIC currents, Alternating

A.c. vector mathematics. R. Feinberg. bibliog Electrician 129:474-5 O 30 '42

A.c. vector representation; fundamental principles involving the use of the operator j . A. G. Powell. Elec R (Lond) 132:577-8 Ap 30 '43

History of a-c wave form, its determination and standardization. F. Bedell. bibliog (39 titles) Elec Eng 61:Trans 864-8 D '42

How to arrange bus conductors for an a.c. system. W. Deans. Il Elec W 119:386 Mr 20 '43

Jubilee of three-phase transmission. Engineering 155:252 Mr 26 '43

Marked oscillograph tracings. R. W. Ahlquist. Il diags Gen Elec R 46:179-82 Mr '43

Method for a-c network analysis using resistance networks. W. E. Enns. diag Elec Eng 61:Trans 875-80 D '42

Paired-phase bus bars for large polyphase currents. L. E. Fisher and R. L. Frank. bibliog Il diags Elec Eng 62:Trans 71-7 F '43

Short-circuit currents; how such currents in low-voltage a-c systems can be reliably calculated. A. E. Anderson. bibliog diag Gen Elec R 46:316-19, 399-401 Je-J1 '43

Symmetrical component currents. G. W. Stubblings. Electrician 131:61-2 J1 16 '43

See also

Electric circuits

ELECTRIC cutouts

See also

Electric fuses

ELECTRIC cutting

See also

Saws, Electric

ELECTRIC detonators. See Detonators, Electric

ELECTRIC discharges

Acetylene polymer produced in electric discharge. G. Glockler and C. A. Hollingsworth. diag Electrochem Soc Trans 84(preprint 16):149-58 O '43

Channel of the spark discharge. J. W. Flow-ers. bibliog diags Phys R 64:225-35 O 1 '43

Dielectric-recovery characteristics of large air gaps. G. D. McCann and J. J. Clark. bibliog Il diags Elec Eng 62:Trans 45-52 Ja '43

Electric breakdown and cumulative ionization. B. Davydov. Phys R 64:156-8 S 1 '43

Electric characteristics of the ozonator discharge. T. C. Manley. bibliog Il diags Electrochem Soc Trans 84 (preprint 14):127-38 O '43

Gas discharge devices. C. D. Prater. diags Radio N 29:24-5+ My '43

Localization of the discharge in G-M counters. M. H. Wilkening and W. R. Kanne. diags Phys R 62:534-7 D 1 '42

New spectroscopic source unit. M. F. Hasler and H. W. Dietert. Il diag Opt Soc Am J 33:218-28 Ap '43

See also

Corona (electricity) Lightning
Electric sparks Vacuum tubes
Ionization, Gaseous X rays

ELECTRIC distribution

Alternate materials, methods. H. H. Minor. diags Elec West 90:39-40 Ja '43

Busway plant distribution. L. Siebert. Il diags Elec West 89:64-5 D '42; 90:44-5 Ja '43

City distribution by solid low-voltage networks. B. Wood. bibliog diags Inst E E J 89 pt 2:400-11; Discussion. 412-33 O '42

Distribution design under difficult conditions; shell-loading plant. H. A. Lynette. diags Elec W 118:1770-2 N 28 '42

Distribution of electricity. R. B. Anderson. Inst E E J 90 pt 1:113-16 Mr '43

Electric power distribution for open-pit mines and quarries. J. E. Forland. Il diags Min Cong J 29:28-34 Ja; 42-9 Mr '43

Electric propagation on long lines terminated by lumped networks. M. G. Malti and M. Golomb. bibliog Franklin Inst J 235:41-73, 101-18 Ja-F '43

Factory distribution. J. G. Craven and J. Collins. Il Elec R (Lond) 133:363-6 S 17 '43

Factory distribution; special safety provisions. Il Elec R (Lond) 132:169-73 F 5 '43

Harmonics and load balance of multiphase rectifiers; considerations in the selection of the number of rectifier phases. R. D. Evans. bibliog Elec Eng 62:Trans 182-7 Ap '43

House-to-house feeds on defense projects. plan Elec W 119:1121 Ap 3 '43

How service was made available to war production plant with minimum use of critical material; supplying both 25 and 60 cycle service. plans Edison Elec Inst Bul 11:15-16 Ja '43

How to apply capacitors. C. V. Fields. Il Factory Management 101:135-6 Ja '43

Industrial load; wartime problems of Manchester's electricity undertaking. Il Elec R (Lond) 131:609-13 N 13 '42

Interim report on overloading distribution transformers. bibliog Elec Eng 62:Trans 516-17 Ar '43

Kilovar supply on Public service electric and gas company system. H. K. Sels. map Edison Elec Inst Bul 11:329-32+ N '43

Line relayed to adjust local stations to local loads. J. F. Pennington and J. T. Logan. bibliog Il diag Elec W 119:1295-7 Ap 17 '43

Loop systems and their essentials. J. S. Parsons and H. G. Barnett. diags Elec W 119:1481 My 1 '43

Make and break network theorem of Helmholtz. diags Wireless Eng 20:319-22 J1 '43

Metering interchange and supply facilities; service to war production plant. H. M. Johnson. diag Elec W 119:1609-11 My 15 '43

Modern distribution; heavy-supply sub-stations. Il Elec R (Lond) 133:433-7 O 15 '43

Network theorem of Pleijel. G. W. O. Howe; J. H. Mole. diags Wireless Eng 20:472, 487 O '43

Phase transformation of single-phase load. W. R. Brownlee. diag Elec W 119:1476 My 1 '43

Plan your wartime power distribution system to conserve copper; electric haulage. L. W. Birch. Il Min Cong J 29:33-6 Ar '43

Plant power, minus the bottlenecks; Wright's Ohio engine plant, electrical distribution system. W. D. Drummond. Il diags Aviation 42:157-9+ N '43

ELECTRIC distribution—Continued

Power-system interconnection in Quebec. W. R. Way. *diags Elec Eng* 61:Trans 841-7 D '42

Progress in engineering knowledge during 1942; industrial power supply. P. L. Alger and J. Stokley. *il diag Gen Elec R* 46:120-2 bibliog(p136) F '43

Purchased electric power helps Bayou line fill war assignment. E. L. Robinson. *il Oil & Gas J* 42:209-10 S 23 '43

Rational distribution. F. J. Elliott. *Elec R (Lond)* 132:7-9 Ja 1 '43

Regulator range checked by annual one-day survey. P. H. Jeynes. *Elec W* 119:1445-7 My 1 '43

Save copper in war plant power distribution systems. D. L. Beeman and W. J. McLachlan. *il diags Power Pl Eng* 46:64-7 D '42

Savings from increased capacity. J. V. Kresser. *il Elec West* 90:93-4 Je '43

Switchgear dispersal; modern primary distribution centre. *il diag Elec R (Lond)* 132:241-6 F 19 '43

System-voltage programs release capacity margins. *diags Elec W* 120:1170-2 O 2 '43

Technical and economical design of electrical distribution in a large factory. J. S. Blacklock. *Engineering* 155:65-6, 85-6 Ja 22-29 '43; *Abstract. Electrician* 130:61-3 Ja 15 '43

Transmission and distribution of electricity, with special reference to war-time conditions. J. N. Robertson. *Inst E E J* 90 pt 1:117-19 Mr '43

See also

Busbars	Electric service,
Electric cables	Rural
Electric conductors	Electric substations
Electric conduits	Electric transformers
Electric currents	Electric transmission
Electric lines	Electric wiring
Electric plants—Interconnection	Electric wiring, Interior
Electric power	Street lighting
Electric rectifiers	Voltage regulation

Change-over

Rectifiers replace converters in 25 to 60 cycle changeover. S. J. Fairbanks and P. B. Garrett. *il map Mass Transportation* 39:245-9+ J1 '43

Unique d.c. supply. *il Elec R (Lond)* 131:641-5 N 20 '42

Cost

Cost of adding auto-transformer. *Elec W* 120:1044 S 18 '43

Grounding

"A" 3-phase system has grounding merits. W. T. Taylor. *diag Elec W* 118:1628 N 14 '42

Applying grounding transformers. H. Fahnoe. *diags Elec W* 119:984, 1160 Mr 20-Apr 3 '43

Bare neutral saves critical material. J. C. Runyon. *diags Elec W* 119:440-2 F 6 '43

Correlation of system overvoltages and system-grounding impedance. *bibliog Elec Eng* 62:Trans 17-24 Ja '43

Drilled well for good desert ground. A. F. Ayres. *diag Elec W* 119:88 Ja 9 '43

Grounding scheme for staged fault test. A. Chantry. *diags Elec W* 119:474+ F 6 '43

How to ground distribution equipment. *Elec W* 120:486 Ag 7 '43

How to provide grounding systems for generating stations and large substations. W. W. Lewis. *diags Elec W* 119:1320 Ap 17 '43

Method for driving ground rods. W. C. Schmidt. *il Elec W* 119:2162+ Je 26 '43

Water lance sinks ground rods 25 ft. *il Elec W* 120:102+ J1 10 '43

See also

Water pipes—Electric grounding

Grounds and faults

ABC formula guides fuse co-ordination. R. F. Quinn. *Elec W* 119:2115-17 Je 26 '43

Carrier control of sectionalizing air breaks; 33-kv. transmission system of the Philadelphia electric co. C. H. Faust. *il Elec W* 120:1504-5 O 30 '43

Damage local and less with fault bus relaying. I. C. Eppley. *il diags Elec W* 120:633-4 Ag 21 '43

D.c. gradient fixes cable fault location. L. T. Frantz. *Elec W* 119:1156 Ap 3 '43

D.c. on live a.c. bus to locate grounds. W. C. Noddings. *diag Elec W* 120:500 Ag 7 '43

Disconnect inching averts accidents and outages. E. R. Paige. *il Elec W* 119:2124-5 Je 26 '43

Distance relay protection for subtransmission lines made economical. L. J. Audin and A. E. van C. Warrington. *il diags Elec Eng* 62:Trans 574-8 S '43

Effects of mutual induction between parallel transmission lines on current flow to ground faults. J. I. Holbeck and M. J. Lantz. *diags Elec Eng* 62:Trans 712-15 N '43

Electronics detects grounds on field. A. H. Bardewyck. *diag Elec W* 119:1637 My 15 '43

Experience with oil circuit reclosers on REA systems. L. M. Moore and B. O. Watkins. *Elec Eng* 62:Trans 531-5 Ag '43

Fault data; scientific use through collaboration of supply undertakings. J. A. Sumner. *Elec R (Lond)* 133:131-4 J1 30 '43

Fault localisation. G. W. Stubbings. *diags Electrician* 130:169-71 F 12 '43

Interim report on application and operation of automatic reclosing equipment on stub feeders. *Elec Eng* 62:Trans 536-40 Ag '43

Mechanical forces on buses due to fault currents. S. C. Killian. *diags Elec W* 118:1938-40 D 12 '42

New high-interrupting-capacity fuse for voltages through 133 kv. H. H. Fahnoe. *il diags Elec Eng* 62:Trans 630-5 O '43

New one-cycle directional overcurrent relay. W. C. Morris. *il diags Elec Eng* 62:Trans 725-7 N '43; *Same. Gen Elec R* 46:571-4 O '43

New single-pole service restorer; application of Vibratorque motor. E. E. Tugby. *diags Elec Eng* 61:Trans 889-92 D '42

Performance requirements for relays on unusually long transmission lines. F. C. Poage and others. *bibliog diags Elec Eng* 62:Trans 275-83 Je '43

Phantom circuit signals outages. *diags Elec W* 120:1186 O 2 '43

Pilot-wire circuits for protective relaying, experience and practice. *Elec Eng* 62:Trans 210-14 My '43

Pilot-wire relaying on a metropolitan system. T. G. LeClair and E. L. Michelson. *bibliog diags Elec Eng* 62:Trans 511-15 Af '43

Protective relaying for long transmission lines. A. R. van C. Warrington. *bibliog il diags Elec Eng* 62:Trans 261-8 Je '43

Short-circuit analysis; faults between two phases. T. F. Wall. *diags Elec R (Lond)* 133:43-4 J1 9 '43

Staged-fault tests on 154-kv. line. *il Elec W News* ed 118:1708 N 21 '42

Surge propagation; cable faults due to lightning. T. F. Wall. *diags Engineering* 154:361 N 6 '42

See also

Short circuits

Stability

Capacity released by load swing control; frequency indicator operated by frequency standard received by radio. J. E. McCormack. *diag Elec W* 118:1775-7 N 28 '42

Governor maintenance improves stability. *Elec W* 120:1376 O 16 '43

One of four cables is three-phase spare; insuring continuity of supply of transmission lines laid underground. P. L. Dellis. *diag Elec W* 120:356 S 4 '43

Static phase modifier; applicability and availability of reactor-capacitors to supply system regulated kilovolt requirements. J. W. Butler and L. W. Foster. *il diag Gen Elec R* 46:171-3 Mr '43

Steady-state and transient-stability analysis of series capacitors in long transmission lines. J. W. Butler, J. E. Paul and T. W. Schroeder. *bibliog diags Elec Eng* 62:Trans 58-65 F '43

System-voltage control in the war emergency. A. E. Silver. *Edison Elec Inst Bul* 11:260-4 S '43

Transmission-line and system problems in supplying large electric-arc furnaces during wartime. B. M. Jones. *bibliog il diags Elec Eng* 62:Trans 197-202 Ap '43

ELECTRIC distribution—Continued

Tables, calculations, etc.

- Circuit planning data from a distribution engineer's notebook. C. N. Clark. *Elec W* 120:660 Ag 21 '43
- Conductor sizes for distribution secondaries. F. Morrill. *Elec W* 120:1210 O 2 '43
- Diversity factors; estimating the capacity of rising mains. E. E. Jolly. *il diags Elec R (Lond)* 133:330-4 S 10 '43
- Estimating electric loads for military-training bases, federal housing, and other wartime projects. H. M. Potts. *Elec Eng* 62: Trans 246-54 My '43
- Evaluation of incompletely diversified loads. W. L. Tadlock. *il Elec Eng* 62:485-92 N '43
- How to determine setting for feeder regulators; line drop compensator setting chart. *Elec W* 120:108 JI 10 '43
- Method for a-c network analysis using resistance networks. W. E. Enns. *diag Elec Eng* 61: Trans 875-80 D '42
- Regulation and load division in three-phase four-wire networks. J. L. Beaver. *diags Elec Eng* 62:84-5 F '43
- Short-circuit calculations. *diag Elec R (Lond)* 132:72 Ja 15 '43
- Three-phase star-connected loads. G. W. Stubbings. *Electrician* 129:689-9 D 25 '42
- Voltage drop for 3-phase circuits; chart. *Power* 87:205 Mr '43
- ELECTRIC double layer**
- Electrical capacity of the double layer. W. G. Eversole and C. R. Estee. *J Chem Phys* 11:156 Mr '43
- Mechanism of the mutual coagulation process. H. B. Weiser and W. O. Milligan. *bibliog Phys Chem* 47:424-36 Je '43
- Relation between ζ -potential and the electrical capacity of the double layer. W. G. Eversole and C. R. Estee. *J Chem Phys* 11:63-6 F '43
- ELECTRIC driving**
- Application of direct motor drive with use of electric motor. N. Williams. *il diags Oil & Gas J* 41:31-4 F 4 '43
- Automatic change-over for exciter drive. *il Elec W* 119:624 F 20 '43
- Automatic frequency-controlled oscillator and amplifier for driving mechanical vibrators. E. V. Potter. *diags U S Bur Mines Rep of Invest* 3702:1-10 '43; Same. *R Sci Instr* 14:207-15 JI '43; Abstract. *Electronics* 16: 194+ N '43
- Correct selection prevents gear speedreducer headaches. W. F. Plume. *diags Power* 87: 169-72 Mr '43
- Determining exact horsepower needed for a particular job may reveal important possible savings. J. A. Setter. *il Steel* 112:84+ F 22 '43; Same. *Gen Elec R* 46:183-4 Mr '43; Same. *Rock Prod* 46:44-5 Mr '43; Same. *Elec West* 90:81 Ap '43; Same. *Min Cong J* 29:41 Ap '43; Same abr. *Eng & Min J* 144:92 Ag '43
- Eddy-current drive improves operation; tube draw benches. N. E. Wenzel. *diag Machine Design* 15:114-15 Ap '43
- Electrical practice in American zinc co.'s mines. J. H. Edwards. *il Eng & Min J* 143: 62-5 N '42
- Flat belt drives as integral parts. C. Carmichael. *il diags Machine Design* 15:125-7+ Ap '43
- Food dehydration; severe operating conditions for electric motors. *il Elec R (Lond)* 133:195-8 Ag 13 '43
- Fundamentals of wind tunnel control. R. R. Longwell. *il diag Aviation* 42:162-3+ O '43
- How to determine WR^2 by running a simple test. L. H. Berkley. *diags Product Eng* 13: 704-6 D '42; Discussion. 14:181-2, 454-5 Mr, JI '43
- Hydraulic vs. electric drives; abstract. R. A. Cole. *Iron Age* 151:56-7 Ap 15 '43
- Industrial production's electrical aids. L. F. Stone. *Elec W* 118:1945 D 12 '42
- Motor drive for eight-mile aerial tramway. R. F. Emerson. *il Min Cong J* 29:41-2 Je '43
- Motors do a better job; by means of electron tubes, direct-current motors can be operated from alternating-current power lines. *diag Sci Am* 169:166-8 O '43

- New electronic variable-speed drive; Thymotrol. S. D. Fendley. *il diags Power Pl Eng* 47:64-8 F '43; Same. *Paper Tr J* 116:33-7 F 11 '43; Same. *Gen Elec R* 46:225-30 Ap '43; Same cond. *Iron Age* 151:58-61 Mr 18 '43; Same cond. *Radio N* 29:11-13+ My '43; Excerpts. *Automotive & Aviation Ind* 88: 32-3+ Mr 1 '43
- Operating characteristics of electric motor drives. L. H. Berkley. *Product Eng* 14: 370-3 Je '43
- Planned motor drives save steel and copper. R. H. Smith. *il diags Steel* 113:108-9+ JI 19 '43
- Precise control enhances machine performance. F. Felix. *il diags Machine Design* 15: 132-4+ Ap '43
- Selection and maintenance of speed reducers. F. A. Westbrook. *il Power Pl Eng* 47:73-4 JI '43
- Standby power speeds machining. *il Factory Management* 101:130+ F '43
- Tension control motor bases. F. A. Westbrook. *il Power Pl Eng* 47:72-3 F '43
- Testing for victory; motor control system, and operating sequence applied to dynamic-balancing machine, testing marine turbine-propulsion gear. *il Gen Elec R* 46:403 JI '43
- Two motors solve multispeed problem. C. Bachmann. *diag Power* 87:691 O '43
- Unique installation; special features pertaining to explosives factory conditions. *il Elec R (Lond)* 132:309-12 Mr 5 '43
- Variable rake speed improves classifier output. H. S. Maxwell and W. B. Clark. *il Eng & Min J* 144:73-4 Ap '43
- Variable speed drives extend use of machines. F. A. Westbrook. *il Power Pl Eng* 47:69-90 JI '43
- Work your motors harder, to save critical materials; recommended loading. R. W. Monroe. *Factory Management* 101:134-6 JI '43

See also

- | | |
|---------------------------------------|-----------------------------|
| Airplanes—Electric equipment | Mine hoisting, Electric |
| Electric motors | Mine pumping, Electric |
| Electricity in mining | Pumping machinery, Electric |
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| Machine tools—Electric driving | |

Cement plants

- Getting most for electric dollars. C. D. Lawton. *flow sheet il Rock Prod* 46:58-61+ Mr '43

Conveying machinery

- Automatic plating; application of materials handling. *il Elec R (Lond)* 133:3-8 JI 2 '43
- Bunker conveyor control relayed for flexibility. American Gas & Electric station. A. H. Beiler. *il diags Elec W* 120:254-6 JI 21 '43
- Electric conveyances in air-foam rubber production. C. B. Risler and J. Grotzinger. *il plan Elec Eng* 62:250-4 Je '43
- High speed conveyor operation. *Power Pl Eng* 47:108 Ap '43
- Mechanised foundry. *il Elec R (Lond)* 132: 205-9 F 12 '43

Excavating machinery

- Electricity applied to single-bucket excavators. P. H. R. Durand. *il diags plans Inst E E J* 89 pt 2:585-604 D '42; Excerpts. *Mech Handling* 29:110-12 Je '42; Abstract. *Electrician* 128:507-8 My 22 '42; Discussion. *Inst E E J* 89 pt 2:604-9 D '42

Foundries

- Foundry change-over; electricity replaces steam for power. *il Elec R (Lond)* 132:771-3 Je 11 '43

Machine tools

See Machine tools—Electric driving

Paper mills

- Electrical developments of 1942; paper mills. G. Bartlett. *Gen Elec R* 46:29 Ja '43
- Features of adjustable-speed electric drives to meet the requirements of the paper industry. R. R. Baker. *il diags Paper Tr J* 116:26-32 Mr 25 '43; Same cond. *Paper Ind* 25:80-2+ Ap '43

ELECTRIC driving—Paper mills—Continued

Rototrol provides operating advantages in the pulp and paper industry. W. R. Harris. *il diags Paper Tr J 115:35-6, 38+* N 26 '42

Power plant auxiliaries

Combustion control; system of the Metropolitan-Vickers electrical co. *il diag Elec R (Lond) 132:423 Mr 26 '43*
 Insuring auxiliary energy supply. *diag Elec W 119:63 Ja 9 '43*
 Soot blower, with special reference to the present position of power and automatic operation of mechanical blowers. R. J. Glinn. *il diags Inst E E J 89 pt 2:543-8 D '42; Same cond. Inst Mech Eng J & Proc 149:Proc 93-8, Pl 1-2 Je '43*
 Steam vs. electrically driven auxiliaries; problem. *diag Power Pl Eng 47:92 Mr '43; Solutions. diags 47:92-6 My '43*
 20:1 speed units drive coal-pulverizer feeders. *il Power 87:227 Ap '43*

Rolling mills

Electrical developments in the steel industry during 1942. F. Mohler. *il Blast F & Steel Pl 31:76-9 Ja '43; Same cond. Steel 112:98+* F 1 '43
 Electrical developments of 1942; steel mills. G. Bartlett. *il diag Gen Elec R 46:30-2 Ja '43*
 Electrical developments on plate mills. A. F. Kenyon. *il Blast F & Steel Pl 30:1406-7 D '42*
 Hot strip mills double plate tonnage. F. Felix. *il diag Steel 111:110-11+ D 7 '42*
 Recent developments in steel plant electrification. A. F. Kenyon. *il Blast F & Steel Pl 31:88-92 Ja '43*
 Standard costs for power consumption of rolling mills. F. Ryder. *bibliog Blast F & Steel Pl 31:1030-5, 1152-4 S-O '43*
 Steel mill sectionalizes drive; Columbia steel co.'s continuous rod mill. G. L. Beaver. *il diags Elec West 91:43-6 Ag '43*
 Unified drives increase rod mill production. F. R. Grant and G. L. Beaver. *il Steel 113:120-2+ S 6 '43*
 What the amplitudyne has contributed to reversing mill drives. C. B. Huston. *il diags Blast F & Steel Pl 31:654-8 Je '43*

Rubber factories

Novel synchronized drive for processing machines; Selsyn system in plant of Hood rubber co. A. F. Metzger and W. Hansen. *il India Rubber W 107:381 Ja '43*
 Tyre manufacture; selected drives from a large rubber mixing and handling installation. *il diag Elec R (Lond) 131:543-7 O 30 '42*

Textile mills

Characteristics and power requirements of spinning frames. E. A. Untersee. *Elec Eng 59:Trans 1-4, 336-8 Ja, Je '40; Abstract. Textile World 93:98-9 S '43*
 Cushion starters on woolen cards; Peerless woolen mills. *il diags Textile World 92: 97-8 D '42*
 Flax milling. *il Elec R (Lond) 133:427-30 O 1 '43*
 Speed control assumes added weight under wartime impetus. *il diags Rayon 24:93-6, 149-51 F-Mr '43*

ELECTRIC earthing. See Electric distribution—Grounding

ELECTRIC eels

Electric fish; abstract. R. T. Cox. *Science 97: sup10 My 21 '43*

ELECTRIC engineering

Abstracts of technical papers at the AIEE national technical meeting, New York, January 25-29. *Elec Eng 62:27-34 Ja '43*
 American institute of electrical engineers, winter meeting, New York, Jan. 25-29. *Elec Eng 62:115-27 Mr '43*
 American institute of electrical engineers winter meeting, New York, Jan. 25-29. *Elec W 119:445-52 F 6 '43*
 American institute of electrical engineers, summer meeting, Cleveland, June 21-25. *Elec W 120:80-5 Jl 10 '43*
 Analogy in engineering. A. W. Ashton. *diags Inst E E J 90 pt 1:120-4 Mr '43*
 Electrical developments of 1942. G. Bartlett. *il diags Gen Elec R 46:6-60 Ja '43*

Electrical engineers and the post-war period. C. L. Fortescue. *bibliog Inst E E J 90 pt 1:20-8 Ja '43; Same cond. Engineering 154:315-16, 338 O 16-23 '42; Same cond. Engineer 174:300-1, 312-14 O 9-16 '42; Abstracts. Elec R (Lond) 131:455-6 O 9 '42; Electrician 129:387-9 O 9 '42*
 Engineering in wartime. L. A. Umansky. *Aero Digest 42:360-4 My '43*
 Industry's need of engineering uniformity. C. A. Powell. *Edison Elec Inst Bul 11:213-15 Jl '43*
 Interpretation of statistical data. W. F. Cooper. *Inst E E J 90 pt 1:83-8 F '43*
 Linear power scales; diagrams for series impedance circuits. G. F. Freeman. *Elec R (Lond) 132:210-12 F 12 '43*
 Mechanical-electrical design of power plants co-ordinated. N. J. Walker and B. E. Hagy. *Elec W 119:1615-17 My 15 '43*
 Models speed war production; helping to solve problems in design and equipment layout. H. E. Chesebro. *il Gen Elec R 46: 271-3 My '43*

Progress in engineering knowledge during 1942. P. L. Alger and J. Stokley. *il diags Gen Elec R 46:90-137 bibliog(p133-7) F '43*
 Rural electrification engineering and electroagricultural engineering. M. M. Samuels. *Elec Eng 62:Trans 193-7 Ap '43*
 Science, electrical engineering and the war effort. R. G. Parrott. *Inst E E J 90 pt 1: 59-62 F '43*
 Silver anniversary of symmetrical components. *Elec Eng 62:294-5 Jl '43*
 War demands re-emphasize power supply fundamentals. D. M. Jones. *Elec W 119: 599-600 F 20 '43*

Wartime electrical tasks programmed at Pittsfield; Northeastern district technical meeting of the A.I.E.E. *Elec W 119:1307-8 Ap 17 '43*

Waste in electrical construction in war plants. C. H. Shaw. *diags Elec W 120:995-7 S 18 '43*

See also

Armatures	Radio communication and other headings beginning Radio
Automobiles—Electric equipment	Railroads—Electric equipment
Commutators	Railroads—Electrification
Electric apparatus and appliances and other headings beginning Electric	Ship propulsion, Electric
Electricity	Ships—Electric equipment
Electricity in mining	Telegraph
Electricity in the petroleum industry	Telephone
Electricity on the farm	Voltage regulation
Electricity supply	Watt hour meters
Hydroelectric plants	

Bibliography

Accessions to the library. *Inst E E J 89 pt 1: 451-3, 485-6, 525; 90 pt 1:149-50, 186, 217, 253-60, 307 O-D '42, Ad-Ag '43*
 E.E.I. publications and service material. *Edison Elec Inst Bul 11:317-18 O '43*

Dictionaries

Dictionary of electrical terms, including electrical communication. S. R. Roget. 4th ed rev & enl 432p \$4 Pitman pub. corp. 2 W. 45th st. New York '43

History

History of a-c wave form, its determination and standardization. F. Bedell. *bibliog(39 titles) Elec Eng 61:Trans 864-8 D '42*
 Tesla's contribution to electric power. C. F. Scott. *bibliog Elec Eng 62:351-5 Ag '43*

Safety measures

See also	
Electric equipment—	Electric utilities—
Safety measures	Safety measures
Electric protective apparatus	Electric wiring—
	Safety measures
	Insulation (electric)
also subdivision	Protection under special headings, e.g. Electric lines—Protection; Electric motors—Protection; Electric transformers—Protection

ELECTRIC engineering—Continued**Study and teaching**

- Critical review of education and training for engineers. A. P. M. Fleming. *Inst E E J* 89 pt 1:376-88 S '42; Discussion. 89 pt 1: 388-435; 90 pt 1:417-24 S '42, S '43
- Demonstration apparatus. C. C. Downie. *Elec R (Lond)* 132:77-8 Ja 15 '43
- Development of technical literature. L. H. A. Carr. *Inst E E J* 90 pt 1:63-6 F '43; Abstracts. *Electrician* 129:391-2 O 9 '42; *Elec R (Lond)* 131:469 O 9 '42
- Electronic applications, a new curriculum in electrical engineering. T. S. Gray and R. H. Frazier. *Il diag Electronics* 16:122-4 O '43
- Engineer in the making—and afterwards. W. Sutcliffe. *Inst E E J* 90 pt 1:78-82 F '43; Abstract. *Elec R (Lond)* 131:593 N 6 '42
- Report of the education and training and personnel sub-committee (no. 1) to the post-war planning committee of the Institution of electrical engineers. *Engineering* 155:476-7, 484-5, 504-5 Je 11-25 '43; Same. *Inst E E J* 90 pt 1:223-33 Je '43; Excerpts. *Electrician* 130:491-3 My 14 '43; *Engineer* 175:389 My 14 '43; *Automobile Eng* 33:235-7 Je '43; Abstract. *Elec R (Lond)* 132:652-3 My 14 '43; Discussion. *Elec R (Lond)* 132: 674 My 21 '43
- Supply training schemes. F. D. Parker. *Electrician* 131:295-6 S 24 '43
- Training supply engineers. T. H. Carr. *Elec R (Lond)* 133:338 S 10 '43

See also Electric communication—Study and teaching

Tables, calculations, etc.

- A.c. board saves critical materials; calculating board analysis prevents unnecessary purchasing; five specific cases. C. F. Wagner. *diags Elec W* 120:460-1 Ag 7 '43
- A.c. vector mathematics. R. Feinberg. *bibliog Electrician* 129:474-5 O 30 '42
- Circuit calculations; examples of graphical methods. G. W. Stubbings. *diags Elec R (Lond)* 132:449-50 Ap 2 '43
- Comparison of the transform and classical methods. W. V. Lyon. *diags Elec Eng* 62: 198-203 My '43
- Complex numbers in electrical engineering laboratory. E. A. Hertzler. *diags J Eng Educ* 33:217-27 N '42
- Energy flow in electric system; the Vi energy-flow postulate. J. Slepian. *diags Elec Eng* 61:Trans 835-41 D '42
- Engineering mathematics. G. W. Stubbings. *Electrician* 129:635-6 D 11 '42
- Equivalent circuits for oscillating systems and the Riemann-Christoffel curvature tensor. G. Kron. *bibliog diags Elec Eng* 62: Trans 25-32 Ja '43
- Formulas for calculating short-circuit forces between conductors of structural shape. T. J. Higgins. *bibliog diags Elec Eng* 62:Trans 659-63 O '43
- Formulas for the calculation of the inductance of linear conductors of structural shape. T. J. Higgins. *bibliog diags Elec Eng* 62: Trans 53-8 F '43
- Formulas for the geometric mean distances of rectangular areas and of line segments. T. J. Higgins. *J Ap Phys* 14:188-95 Ap '43
- How to determine short-circuit current and interrupting capacity of interrupting devices. W. A. Holland. *Gen Elec R* 46:499-500 S '43
- Inherent asymmetry; unbalanced voltage with three phases in same plane. *Elec R (Lond)* 133:102 JI 23 '43
- Interrupting capacity; what it means and how it is calculated. W. A. Holland. *Il diags Power Pl Eng* 47:68-71, 79 My '43
- Inverse functions of complex quantities. H. B. Dwight. *bibliog Elec Eng* 61:Trans 850-3 D '42
- Mechanical integration in solution of electrical problems; abstract. D. R. Hartree. *Electrician* 130:469-70 My 7 '43; *Elec R (Lond)* 132:616 My 7 '43; Discussion. *Electrician* 130:470-1 My 7 '43
- New formulas for calculating short-circuit stresses in bus supports for rectangular tubular conductors. T. J. Higgins. *diag J Ap Phys* 14:151-4 Mr '43

New formulas for the inductance and reactance of square tubular conductors. T. J. Higgins. *diag J Ap Phys* 14:185-7 Ap '43

Polysphase metering corrections by cosine method. H. G. Yarrill. *diags Elec W* 120: 1161-3 O 2 '43

- Practical calculation of electrical transients on power systems. R. D. Evans and R. L. Witzke. *diags Elec Eng* 62:Trans 690-6 N '43
- Refresher for dielectric calculations. E. W. Greenfield. *diags Elec Eng* 62:445-8 O '43
- Short-circuit currents; how such currents in low-voltage a-c systems can be reliably calculated. A. E. Anderson. *bibliog diag Gen Elec R* 46:316-19, 399-401 Je-JI '43
- Short-circuit values; an application of symmetrical component analysis. T. F. Wall. *diags Elec R (Lond)* 132:281-2 F 26 '43
- Steady state currents of electrical networks. D. L. Waidelich. *J Ap Phys* 13:706-12 N '42
- Symmetrical component analysis; vectorial treatment for standard short-circuit solution. R. N. Buttery. *diags Elec R (Lond)* 132:113-15 Ja 22 '43
- Symmetrical component currents. G. W. Stubbings. *Electrician* 131:61-2 JI 16 '43
- Symmetrical components. G. W. Stubbings. *Electrician* 130:34-5 Ja 8 '43
- Theory of cascading of induction motors mechanically coupled to a.c. commutator motors. W. B. Coulthard. *bibliog diags Franklin Inst J* 236:167-90 Ag '43
- Three-phase vector conventions. B. C. Lee. *diags Electrician* 131:7-8 JI 2 '43
- Unbalanced loads; simple method for three-phase circuit calculations. G. W. Stubbings. *diags Elec R (Lond)* 131:679-80 N 27 '42

See also

Electric circuits
Electric distribution
—Tables, calculations, etc.

Electric transmission—Tables, calculations, etc.
Inductance
Power factor
Reactive power

Terminology**See also**

Electric symbols

ELECTRIC engineers

- Industrial administration; how it affects the electrical engineer; training in administration. G. A. T. Burdett. *Elec R (Lond)* 131: 615-16 N 13 '42
- Latin American ties urged on U.S. engineers. *Elec W News* ed 120:4 JI 3 '43
- Sales-service engineers. G. A. T. Burdett. *Electrician* 130:515-16 My 21 '43
- Style in engineering; influence of temperament upon work. W. T. J. Atkins. *Elec R (Lond)* 133:514 O 15 '43
- Training for administration. H. Shaw. *bibliog Inst E E J* 90 pt 1:109-12 Mr '43

See also

American institute of illuminating electrical engineers
neering society
also names of engineers, e.g. Slepian, Joseph

Salaries

- Chief engineers' salaries; Association's report and a rejoinder. *Elec R (Lond)* 132:589-90 Ap 30 '43
- Power engineers' salaries. *Elec R (Lond)* 132: 45-6 Ja 8 '43

ELECTRIC equipment

- Compressibility of composition cork; used as gasket material on liquid-filled electrical equipment. L. P. Hart, jr. *Elec W* 115:1640, 1812 N 14-25 '42
- Conservation of materials. H. S. Osborne. *Il Elec Eng* 62:290-3 JI '43
- Electrical developments of 1942. G. Bartlett. *Il diags Gen Elec R* 46:6-60 Ja '43
- Review of power and mechanical equipment; motors, switches, other electrical equipment. *Il Power* 86:949-55 Mid-D '42
- Saving copper in electric units; abstract. D. F. Miner. *Metals & Alloys* 16:1154-4 D '42

See also

Electric apparatus
and appliances
Electric cables
Electric control
Electric converters
Electric driving
Electric instruments
Electric lighting

ELECTRIC equipment—See also—*Continued*

Electric plants (central stations)—
Equipment
Electric power
also subdivision Electric equipment under special subjects, e.g.
Automobiles
Bakers and bakeries
Chemical plants
Coal mines and mining
Factories
Hospitals
Quarries and quarrying
Railroads
Restaurants
Rolling mills
Ships
Shipyards

Bibliography

Publications tell how to conserve critical materials. Elec Eng 62:40-1 Ja '43
Ways of conserving critical material to aid wartime electrical industry. Elec Eng 62:181-5 Ap '43

Failures

Analysis of failures clue to trouble control. E. W. Whitmer. Elec W 120:990-2 S 18 '43

Maintenance and repair

Adequate electrical maintenance essential to transportation. W. J. Clardy. Il Elec Eng 62:Trans 517-21 Ag '43
Apparatus maintenance check chart. H. C. Park. Elec West 89:69 D '42

Electronic control; maintenance and troubleshooting tips. W. D. Cockrell. Il Paper Ind 25:503-6 Ag '43; Same. Rock Prod 46:102, 104+ Ag '43; Same cond. Power 87:446-8+ J '43

High-voltage plant; maintenance difficulties with modern designs. J. H. M. Sykes. diags Elec R (Lond) 131:551-3 O 30 '42

How G-E helps its distributors survive. Il Ptr Ink 203:23-4 My 28 '43

How to maintain bushings. L. Wetherill and C. W. Davis. Elec W 120:1542 O 30 '43

How to set up a maintenance program. H. C. Park. Elec West 91:62-4 O '43

If fire or flood damages electrical equipment. W. W. McCullough. Il Factory Management 101:125-7 My '43

Maintenance guide for electrical systems. Elec W 119:1328, 1484 Ap 17-My 1 '43

Maintenance problems. H. Yeomans. Elec R (Lond) 132:76-7 Ja 15 '43

Maintenance that cuts out production stoppages; Belmont radio corporation. H. J. Tendick. Factory Management 101:78, 80 Ap '43

Maintenance tips on electric traction equipment. J. C. Thirlwall. Il Mass Transportation 39:73-5 F '43

Organised maintenance. H. Greaves. Elec R (Lond) 132:579-80 Ap 30 '43

Organized maintenance keeps machinery running. A. Heckman. Il Power Pl Eng 47:86-7 Mr '43

Parts situation necessitates ordering year in advance. W. J. Walker. Il Coal Age 48:69-70 S '43

Power circuit breaker upkeep and trouble shooting; data sheets. W. A. Holland. Factory Management 101:148+ Ja '43

Problems in factories; wartime difficulties of the maintenance engineer. C. J. Bennett. Elec R (Lond) 132:78-2 J 11 '43

Production insured by preventive electrical maintenance. H. L. Huntley. Il Coal Age 48:69-71 Mr '43

Relay and switch upkeep and trouble shooting; data sheets. W. A. Holland. Factory Management 101:134+ F '43

Repair and emergency work of a maintenance engineer; abstracts. J. Southern. Electrician 130:418 Ap 23 '43; Elec R (Lond) 132:560 Ap 23 '43

Repair problem. Business Week p78 D 12 '42

Royal corps of electrical and mechanical engineers at work. Il Elec R (Lond) 131:781-2 D 18 '42

Salvage wire, hardware, lamps, insulators; reclamation department of Puget Sound power & light company. Il Elec W 119:1450-1 My 1 '43

Simple maintenance of electrical equipment may prevent costly shutdowns. E. H. Lamberger. Il Oil & Gas J 41:46-8 Mr 4 '43

Switchgear maintenance and trouble shooting. W. A. Holland. Factory Management 100:130, 132, 134 D '42

Temperature and electric insulation. H. C. Park. Elec West 90:57-8 Mr '43

Two-man crews maintain war plant supply circuits. W. S. Cronin. Il Elec W 119:596-8 F 20 '43

Wartime maintenance of electrical installations and equipment; discussion. Inst E E J 39 pt 2:528-32 D '42

Wartime modifications of industrial maintenance and operating practice. F. L. Davis. Il diags Paper Tr J 117:30-5 O 14 '43

Works maintenance problems. G. A. T. Burdett. Electrician 131:276-7 S 17 '43

Safety measures

Disconnect inching averts accidents and outages. E. R. Paige. Il Elec W 119:2124-5 Je 26 '43

Electric equipment. Il Nat Safety N 47:126-8+ Mr '43

Emergency standards; Underwriters' laboratories. A. Small. Il Nat Safety N 47:16-17+ Ap '43

Factory distribution; special safety provisions. Il Elec R (Lond) 132:169-73 F 5 '43

Safety requirements for sterlilamps in air conditioning systems. A. R. Dennington. Il diags Heat & Ven 40:46-9 Mr '43

Silent sentinel, the electric fuse. G. P. Byrne. Nat Safety N 47:68 Je '43

See also

Insulation (electric)

Standards

ASA electrical committees report on year's activities. Il Ind Stand 14:26-9 Ja '43

Check list and status of EEL standards and specifications. E. V. Sayles. Edison Elec Inst Bul 11:348 N '43

New war standard is first in series on resistors. Il Ind Stand 14:213 J1 '43

Standard symbols for electrical power and control diagrams. J. W. Cooke. Il diags Ind Stand 14:165-70 My '43

Standards in Latin America; with particular reference to electrical standards. A. Magno-Rodriguez. Il Ind Stand 14:225-9 Ag '43

See also

Elevators, Electric—
Standards

Relays—Standards

Testing

Electrical system testing device speeds final assembly of lightning. Il Aero Digest 41:153+ N '42

Transportation

War communication systems in boxes; Western electric 60 expert packers. Il Mod Packaging 17:76-80 O 43

ELECTRIC eye. See Photoelectric cells

ELECTRIC fans, Ventilating

Disk fans solve troublesome ventilating problems in a chemical plant. W. J. Shore. Il diag Chem & Met Eng 50:116 Mr '43

Fans; their types, characteristics, and application. C. G. Ferguson. diags Inst Mech Eng J & Proc 148:Proc 1-19, pl 1-10 N '42; Same cond. Engineer 173:274-6, 294-6 Mr 27-31 '42; Discussion: Inst Mech Eng J & Proc 148:Proc 20-5; 149:Proc 146-60 N '42, S '43

How to prevent oscillations in large inertia fan drives; Pennsylvania Turnpike tunnels. E. O. Marty, S. F. Henderson and F. Richardz. Il diag Heating-Piping 15:80-1 F '43

Standardized heating and ventilating equipment for fighting ships. T. H. Urdahl, J. Everetts, Jr. and W. C. Whittlesey. Il diag Heating-Piping 15:333-6, 419-21 J1-Ag '43

ELECTRIC field

Coating by the electric spray method. H. Ransburg. Metal Finishing 40:621-3 N '42; Same. Steel 112:126+ Je 7 '43

Dosimetry and local distribution of energy in the electric high frequency field. K. S. Lion. Il diags J Ap Phys 14:545-51 O '43

Effect of high electrostatic fields on the conductivity of tungsten. P. L. Vissat. bibliog diag Phys R 64:119-25 Ag 1 '43

ELECTRIC field—Continued

Effect of high electrostatic fields upon the vaporization and resistance of molybdenum filaments. W. P. Reid. *bibliog Phys R* 63: 369-86 My 1 '43

Effect of high electrostatic fields upon the vaporization of molybdenum. G. B. Estabrook. *bibliog diags Phys R* 63:352-8 My 1 '43

Electrostatic detearing: helps control drain-off when baking finish on dipped steel cartridge cases. H. P. Ransburg. *Steel* 113: 106+ Ag 9 '43

High-frequency electric-field heating for non-metallic materials; Thermex process. T. R. Olive. *il diags Chem & Met Eng* 50:102-4 Ap '43

Theory of galvanic cells subject to fields of force; the electric and magnetic field. F. O. Koenig and S. W. Grinnell. *bibliog J Phys Chem* 46:980-1006-N '42

ELECTRIC filters

Filter bans 25-cycle from ground relay. R. B. Squires. *il diags Elec W* 119:2164 Je 26 '43

Measurement of torsional vibrations. R. Stansfield. *diags Inst Mech Eng J & Proc* 148:Proc 179-93 Mr '43; Same *abr. Engineering* 154:179-80, 198-200 Ag 28-S 4 '42; Same *abr. Engineer* 174:101-2 J1 31 '42

Performance curves for *m*-derived filters. W. J. Cunningham. *diags J Ap Phys* 13: 765-72 D '42

See also

Radio filters

ELECTRIC fires

Electrical fires; danger from fire hose jets. S. F. Barclay. *Elec R (Lond)* 133:539-40 O 22 '43

Fire fighting by scientific methods; Hawaiian electric co. H. Heinrich. *il Elec West* 91: 70-2 O '43

Fire precautions with electric motors. *Gas Age* 90:15 D 31 '42

Safeguarding water in electrical fires. *Elec W* 119:620+ F 20 '43

ELECTRIC fish screen. See Fish protection**ELECTRIC flashlights**

Air corps flashlight; housed in tough cellulose acetate butyrate. *il Mod Plastics* 20:63+ My '43

All-American package competition award; Carlton lamp corp. containers for flashlight bulbs. *il Mod Packaging* 16:97+ Ap '43

How to charge flashlight cells. *Steel* 113:96 S 27 '43

Lights for bailed-out bales; colored plastic lamps lashed to aerial delivery containers. *il Mod Plastics* 20:45-6 F '43

Lights that save lives; plastic-housed flashlight for life preservers. *il Mod Plastics* 20: 53+ D '42

Method of recharging dry cells for flashlights. *il diag Gas Age* 92:15-16 J1 29 '43

Reclaiming used flashlight batteries. M. E. Kennedy. *il diag Electronics* 16:148+ O '43

Safety of life at sea; General electric company's jacket life-light. *Electrician* 129:605 D 4 '42

ELECTRIC furnaces

See also

Electric heating

Electric heating, Industrial

Electrometallurgy

Control

Experimental details for a precision high temperature control utilizing the Hull circuit. C. E. Waring and G. Robison. *il diags R Sci Instr* 14:143-6 My '43; *Abstract. Electronics* 16:202+ J1 '43

Power supply

Transmission-line and system problems in supplying large electric-arc furnaces during wartime. B. M. Jones. *bibliog il diags Elec Eng* 62:Trans 197-202 Ap '43

ELECTRIC furnaces, Annealing

Heat treatment; processes connected with the extrusion and drawing of light alloys. *il Elec R (Lond)* 133:397-401 S 24 '43

ELECTRIC furnaces, Carburizing

Carburizing gears in the electric salt bath furnace. W. F. Sorenson. *il Metal Prog* 43: 237-40 F '43

ELECTRIC furnaces, Foundry

Private enterprise?—and how! plant was built from scrap to produce for war. Thys and Miller electric steel foundry. R. O. McGowan. *il Elec West* 91:52-4 O '43

Rocking electric furnace; a silver anniversary. H. W. Gillett; A. E. Rhoads. *il diags Electrochem Soc Trans* 83 (preprint 3):21-45 Ap '43

ELECTRIC furnaces, Heat treating

Advance of the electric furnace. H. Greaves. *Electrician* 131:4-5 J1 2 '43

Choose a heat-treating furnace wisely. R. W. Steenrod. *il Elec West* 91:54-5 O '43

Electric salt baths in Germany; abstract. C. Albrecht. *Metals & Alloys* 18:130+ J1 '43

Electrical developments of 1942; heating. G. Bartlett. *il Gen Elec R* 46:26-7 Ja '43

Heat treating output doubled by installation of continuous furnace; Triplex screw co. H. White. *il Steel* 113:86+ O 25 '43

Heat treatment plant for steel tools; L. M. S. railway. *il Engineer* 176:213-14 S 10 '43; *Engineering* 156:206 S 10 '43

Salt bath heat treatments for emergency steels. E. I. Valyi, tr. *diags Iron Age* 151: 60-2 Je 24 '43

Salt bath treatment of aircraft parts. S. M. DePoy. *il Automotive & Aviation Ind* 89: 38-40+ N 1 '43

ELECTRIC furnaces, Heating

Extrusion of light alloys; preheating and hydraulic operations. *il Elec R (Lond)* 133: 297-8 S 3 '43

Atmospheric control

Proposed method of test for effect of controlled atmospheres upon alloys in electric furnaces. *il diag Am Soc T M Proc* 42: 180-3 '42

ELECTRIC furnaces, High frequency

Induction furnace as a high temperature calorimeter and the heat of solution of silicon in liquid iron. J. Chipman and N. J. Grant. *bibliog Am Soc for Metals Trans* 31:365-78; Discussion. 378-9 Je '43

Induction heat is P R. F. T. Chesnut. *Steel* 113:74, 76 Ag 30 '43

Induction heating equipment. K. Rose, comp. *Metals & Alloys* 18:75 J1 '43

ELECTRIC furnaces, Laboratory

Small electric furnace made with two insulating firebricks. *il Chem Ind* 52:613 My '43

Thermocouples; calibrating thermocouples at fixed points with tin, lead, and aluminum freezing-point furnaces. H. B. Lancaster and A. W. Brunot. *il diags Gen Elec R* 45: 649-52 N '42

ELECTRIC furnaces, Metallurgical

Aluminum production. *il Elec R (Lond)* 132: 3-6 Ja 1 '43

Electric furnaces in nickel industry. A. G. Arend. *il Electrician* 130:225-7 F 26 '43

Metal-powdering furnace; reclamation of bearing metals; abstract. J. N. Bradley and H. O'Neill. *Elec R (Lond)* 132:124 Ja 22 '43

Modern electrical resistance alloys. A. G. Arend. *diags Electrician* 131:250-2 S 10 '43

Smelting iron ores electrically. H. Cowes. *il diags Iron Age* 150:41-4 D 3; 50-4 D 10 '42

See also

Electric furnaces,

Heat treating

Electric furnaces,

Steel making

Electrometallurgy

Control

Amplidynes for arc-furnace control. G. E. Shaad. *il diag Blast F & Steel P* 31:879-82 Ag '43

Constant heating rate control by the thermocouple-rectifier bias principle. R. J. Smith. *diags Metal Prog* 44:613-16 O '43

ELECTRIC furnaces, Non-ferrous melting

Induction furnace for melting aluminum alloys. M. Tama. *il diags Metals & Alloys* 17:326-9 F '43

Low-frequency induction melting. A. G. Arend. *diags Electrician* 129:478-80 O 30 '42

ELECTRIC furnaces, Non-ferrous melting—
Continued

Melt aluminum alloys in low-frequency furnace. H. L. Edsall. *Il Foundry* 71:164-5 My '43

Manufacture

Making custom built furnaces on a production line; Ajax electric furnace corp. H. L. Edsall. *Il Steel* 113:88, 90+ Ag 9 '43

ELECTRIC furnaces, Steel making

Electric arc melting furnaces; abstract. S. Arnold. *3d. Steel* 113:145 O 11 '43

Graphite rod melting furnaces; abstract. W. Geller and H. Hönig. *Metals & Alloys* 17:1008 My '43

Increasing the yield of electric furnaces. H. F. Walther. *Il Metal Prog* 44:111-12 JI '43

New electric furnace will increase country's output 65,000 tons; South Chicago works of Carnegie-Illinois steel corporation. *Il Blast F & Steel* P1 31:1018 S '43

Production of uniform steel for a light castings foundry. C. H. Kain and L. W. Sanders. *Engineer* 174:38-40 JI 10 '43; Same. *Foundry* 71:82, 141-7 F '43; Same cond. *Iron Age* 150:101-2+ O 1 '42

Wartime production of constructional steels in the basic electric furnace. H. W. McQuaid. *Blast F & Steel* P1 31:641-4, 776-9 Je-JI '43; Same abstr. *Steel* 113:112-14+ JI 12 '43

Control

Arc-furnace control by Regulux exciters. T. B. Montgomery and T. H. Bloodworth. *Il diags Elec Eng* 62:Trans 650-4 O '43

Rotating regulator for furnaces; Rototrol. R. A. Geiselman, C. C. Levy and W. R. Harris. *Il diags Elec Eng* 62:Trans 671-4 N '43

Testing

Study of voltage transients in arc-furnace circuits. J. B. Hodum and J. B. Rice. *bibliog il diags Elec Eng* 62:Trans 556-62 Ag '43

ELECTRIC fuses

ABC formula guides fuse co-ordination. R. F. Quinn. *Elec W* 119:2115-17 Je 26 '43

Dorman floating-contact distribution fuse. *Il Engineering* 155:346 Ap 30 '43

Electrical protective devices for aircraft. J. C. Lebens, jr. *Il diags Aero Digest* 42:235, 237, 239+ Mr '43

Feeders fused for increased generation. J. C. Smith. *Il diag Elec W* 119:1142+ Ap 3 '43

Fuse displays teach practical lessons. A. D. Hewey. *Il Elec W* 119:1168 Ap 3 '43

Fuses and plugs. *Electrician* 131:349-51 O 8 '43

Fuses v. oil circuit-breakers; their spheres in medium-voltage AC industrial installations. G. Cluley. *Elec R (Lond)* 132:143-6 Ja 29 '43

High rupturing capacity fuses; their discriminative value on cable networks. S. H. Fowles. *Il Elec R (Lond)* 132:11-14 Ja 1 '43

High-voltage fuses in place of oil circuit breakers. B. D. Dexter. *Il diags Elec W* 120:1014+ S 18 '43

High-voltage high-rupturing-capacity cartridge fuse and its effect on protection technique. K. Dannenberg and W. J. John. *bibliog il diags Inst E E J* 89 pt 2:565-76 D '42; Abstract. *Electrician* 128:363-4 Ap 17 '42; Discussion. *Inst E E J* 89 pt 2:576-84; 90 pt 2:269-72 D '42, Ag '43

How to determine short-circuit current and interrupting capacity of interrupting devices. W. A. Holland. *Gen Elec R* 46:499-500 S '43

Johnson & Phillips repeating fuse. *Il Elec R (Lond)* 133:18 JI 2 '43

Material conservation in fuse switch design; abstract. L. L. Crump. *Il diag Elec W* 119:1314 Ap 17 '43

Motor controls need short-circuit protection. R. M. Eichner. *Il diag Factory Management* 101:135-8 Je '43

New high-interrupting-capacity fuse for voltages through 133 kv. H. H. Fahnoe. *Il diags Elec Eng* 62:Trans 630-5 O '43

Protecting meters with fuses. *Electronics* 16:185+ JI '43

Replace 33-kv. fuses from safety rack. B. J. Hungate. *Il Elec W* 120:324 JI 24 '43

Selecting short-circuit protection for low-voltage motor circuits. W. G. Taylor. *Il Power P1 Eng* 47:79-81+ O '43

Silent sentinel, the electric fuse. G. P. Byrne. *Nat Safety N* 47:68 Je '43

Surge propagation; fuse failures on rural lines due to lightning. T. F. Wall. *diags Engineering* 154:361-2 N 6 '42

Switch and fuses replace circuit breaker on 60-kv. subs. C. E. Baugh. *Il Elec West* 31:47-8 AS '43

Transformer fusing. H. L. Lowe. *diags Elec W* 113:1968, 2128+; 119:100-1, 308, 474, 632 D 12 '42-F 20 '43; Correction. 119:790 Mr 6 '43

Testing

How do you test fuses? *Power* 87:478-80 JI '43

ELECTRIC generator sets

Future of packaged power. *Il Diesel Power* 20:995-6 D '42

ELECTRIC generators

Electrical developments of 1942; power generation. G. Bartlett. *Il Gen Elec R* 46:8-10 Ja '43

High inertia generators designed to save copper. *Steel* 112:116 Ap 5 '43

Increasing output of generating equipment. *Il Elec Eng* 62:285-90 JI '43

Maintaining electric motors and generators. E. H. Lamberger and W. W. McCullough. *Il Pet Eng* 14:190+ My '43

Maintenance hints on your motors and generators. *Roads & Sts* 36:79-83 JI '43

Problem of the wind dynamo. W. E. Warilow. *Il Electrician* 130:643-4 Je 25 '43

Surge-generator circuits. E. Fisher. *J Ap Phys* 14:341-2 JI '43

What is the generator power factor? *Power* 87:338-9+ My '43

See also

Amplidyne generator	Hydroelectric plants
Armatures	Power plants
Commutators	Radio generators
Cyclotron	Vacuum tubes—Generating action
Electric machinery	
Electric plants	

Manufacture

General Electric builds turbine generators for the navy; illustrations. *Mach* 50:158-63 N '43

Machine cutting for assembly line fabrication. C. O. Adams. *Il Welding J* 22:776-9 O '43

Parallel operation

Fundamentals of paralleling. A. C. Nerenberg. *Il diags Power P1 Eng* 47:90-1 N '43

Protection

Carbon dioxide guards critical generators; Phelps-Dodge mine and reduction-works power plant at Morenci, Arizona. P. W. Eberhardt. *Il diags Power* 87:738-9 N '43

Elevated neutral protects generators. E. A. Crellin. *diag Elec W* 118:1947-8 D 12 '42

Lightning damage prevented by using proper apparatus. J. A. Civatelet. *diags Coal Age* 47:61-3 N '42

Neutral relays guard reactors, generators. H. E. Chambers. *diags Elec W* 119:634 F 20 '43

New generator differential relay. A. J. McConnell. *bibliog il diags Elec Eng* 62:Trans 11-13 Ja '43

Overloads are in prospect; some needed precautions. J. W. Batchelor. *Il Power* 87:84-6 F '43

Repair

Expediting inspection and overhaul of steam turbine generators. R. A. Hake. *Il Power P1 Eng* 47:67 Ap '43

Testing

Testing generator dielectric absorption under adverse humidity conditions of Brazilian plants. A. V. DeBeech. *Il diags Elec W* 119:1766-8 My 29 '43

ELECTRIC generators, Alternating current

Airplane engine power recovered on test; synchronous alternator connected to engine under test by means of magnetic coupling. *Iron Age* 150:49 D 10 '42

Alternator protection; application of circulating current systems. A. Abbott. *diags Elec R (Lond)* 133:202-4 Ag 13 '43

ELECTRIC generators, Alternating current—*Continued*

- Motor pinch-hits for ac generator. G. M. Hardy. *il* diags Power 87:603- S '43
 Small a-c generators and their applications. A. J. Girdwood. *il* diags Elec Eng 62:449-55 O '43

Control

- Electronic exciter for a-c generators; combination voltage regulator and exciter. A. Benson and R. Heidbrak. diags Electronics 16:112-14+ Ag '43
 Electronic regulators for a-c generators. A. Benson. diags Electronics 16:104-7 Ap '43
 New regulator controls generator rkva. output. J. T. Logan. Elec W 118:2090-1 D 26 '42

Cooling

- Cooling tower ups generator capacity. Elec W 130:856+ S 4 '43

Design

- Some factors affecting the design of alternators for switchgear testing. V. Easton. bibliog Inst E E J 90 pt 2:202-11; Discussion. 212-16 Ag '43

Installation

- Have you ever put a new ac generator in service? J. Wilson. *il* diags Power 87:301-3+ My '43

Protection

- A.c. generators; protective equipment in continental practice. W. Szwander. diags Electrician 130:543-6 My 28 '43

Temperature

- Operation of nonsalient-pole-type generators supplying a rectifier load. M. D. Ross and J. W. Batchelor. bibliog *il* diags Elec Eng 62:Trans 667-70 N '43

Testing

- Artificial loading of alternators. diags Power 87:336-8 My '43

- Operation of nonsalient-pole-type generators supplying a rectifier load. M. D. Ross and J. W. Batchelor. bibliog *il* diags Elec Eng 62:Trans 667-70 N '43

Windings

- Repairs turbine-generator rotor winding. F. E. Schubert. diags Power 87:547 Ag '43
 Travelling waves in high-voltage alternator windings. E. Friedländer. bibliog diags Inst E E J 89 pt 2:492-506 O '42; Discussion. 89 pt 2:506-8; 90 pt 2:83-8 O '42, F '43

ELECTRIC generators, Direct current

- Design relationships for d-c generators for use in aircraft. S. R. Bergman. *il* diags Elec Eng 62:Trans 613-16 O '43

- Direct-current rigs for deep-drilling operations. R. A. J. Dawson. diags Pet Eng 14: 33-6 Ag; 165-6, 169-70, 172 S '43

- Electrical equipment for aircraft, dc generators. P. M. Heidt. *il* diag Automotive & Aviation Ind 87:36-9 D 15 '42

- High output generating systems. W. F. Fell. *il* diags Aviation 42:167, 169-70+ Je '43
 Unique d.c. supply. *il* Elec R (Lond) 131: 641-5 N 20 '42

See also

- Amplidyne generators

Windings

- Testing of series coils. E. V. Clark. Electrician 129:690 D 25 '42

ELECTRIC generators, Portable**Manufacture**

- Ninety per cent guts; D. W. Onan & sons, Minneapolis. *il* Fortune 27:136-7 Je '43

ELECTRIC generators, Synchronous

- Interim report on application and operation of out-of-step protection. bibliog diags Elec Eng 62:Trans 567-73 S '43

- Large wind-driven synchronous generators. T. F. Wall. Engineering 155:421-3, 461-3, 501-3 My 28, Je 11, 25 '43

- Power recovery in testing aircraft engines. C. A. Chayne. *il* diags Automotive & Aviation Ind 87:26-8, 84+ D 15 '42

- Power-recovery system of testing aircraft engines. G. E. Cassidy, W. A. Mosteller and W. L. Wright. *il* diags Gen Elec R 46:239-46 Ap '43; Same. Elec Eng 62:Trans 240-6 My '43; Same cond. Aero Digest 42:223-4, 227, 263+ F '43

Tables, calculations, etc.

- Power pulsation between synchronous generators. T. Warming. diags A S M E Trans 65:165-73; Discussion. 173-6 Ap '43

- Quadrature synchronous reactance of salient-pole synchronous machines. R. V. Shepherd and C. E. Kilbourne. bibliog Elec Eng 62: Trans 684-9 N '43

- Synchronous machines; their vector relationships. G. F. Freeman. diags Elec R (Lond) 133:13-15 Jl 2 '43

- ELECTRIC hardening.** See Case hardening—Electric hardening

ELECTRIC heaters

- Electrofin unit heaters. *il* Electrician 131:179 Ag 20 '43

- Fire clay now used in electric heaters to save copper and steel. *il* Brick & Clay Rec 102:47 F '43

- Hurseal oil-electric heater. *il* Electrician 131: 42 Jl 9 '43

See also

- Electric stoves
 Electric water heaters

ELECTRIC heating

- British climate and the space-heating engineer. R. Grierson. bibliog diags Inst E E J 90 pt 1:187-95 My '43

- Domestic development; heating and other applications. Elec R (Lond) 132:813-14 Je 18 '43

- Domestic heating; balanced system proposed; abstracts. J. Dalton. Elec R (Lond) 132: 479-80 Ap 9 '43; Electrician 130:370-1 Ap 9 '43

- Electric heating in war-time. G. A. T. Burdett. Electrician 129:659-60 D 18 '42

- Electricity and coal conservation. F. D. Parker. Electrician 129:466-7 O 30 '42

- Reflected radiant heating. A. G. H. Dent. Electrician 130:15-17 Ja 1 '43

- Some problems in the application of electric heating to residential and commercial premises; with cost data. W. Gilchrist. diags Inst E E J 89 pt 2:377-90 O '42; Excerpts. Electrician 128:71-2 Ja 30 '42; Abstract. Elec R (Lond) 130:78 Ja 16 '42; Discussion. Inst E E J 89 pt 2:390-9 O '42; Elec R (Lond) 130:115-16 Ja 23 '42

- Space and water heating. F. D. Parker. Electrician 130:113-15 Ja 29 '43

- Space and water heating; design of installations and apparatus. Electrician 130:197-9 F 19 '43

- Where to use electric heating in wartime. L. P. Hynes. *il* Heating-Piping 15:25 Ja '43

See also

- Boilers, Heating—Electric heating elements
 Electric heaters Poultry brooders, Electric

ELECTRIC heating, Industrial

- Application of heat increases production in Wyoming field. F. V. Eaton. Oil & Gas J 41:88+ Ap 22 '43

- Carbide tools tipped by induction brazing. P. Miller. *il* Am Mach 87:106-7 O 14 '43

- Electric arc hot topping on ingots and castings developed many years ago by International nickel co. G. F. Sullivan. *il* diag Iron Age 151:56-60 F 11 '43

- Electric glue heating. diag Electrician 131: 297-9 S 24 '43

- Electric heater aids fire hose drying. *il* Elec W 120:1040 S 18 '43

- Electric heater sets turbine bolts tight. E. F. Miller. *il* Elec W 118:1644 N 14 '42

- Electric prestressing of reinforcing steel. K. P. Billner and R. W. Carlson. *il* Am Concrete Inst J 14:585-92 Je '43; Discussion. 14: sup:592-593 N '43

- Electric prestressing of reinforcing steel used for small house construction; passage of low voltage current through rods coated with thermoplastic material. K. P. Billner. *il* Eng N 131:406-8 S 9 '43

- Electric soldering irons. H. C. Hoban. *il* Elec R (Lond) 132:681-3 My 21 '43

ELECTRIC heating, Industrial—Continued

Electrical developments of 1942; heating. G. Bartlett. *Il Gen Elec R* 46:26-7 Ja '43

Electricity in new food process; dehydration development. *Il Electrician* 131:151-3 Ag 13 '43

Electro-brazing with water-cooled tongs. G. E. Prussien. *Il diag Iron Age* 151:67 Mr 4 '43

Factory process heating; Moffatts, Ltd. *Il Elec R (Lond)* 132:603-6 My 7 '43

Heat tightens turbine bolts safely. E. F. Miller. *Il Power* 87:42-4 Ja '43

Heating metal parts by induction, to facilitate the insertion of freeze-fit parts and for other similar operations. *Il Iron Age* 150:55 D 17 '42

Induction heating comes of age. G. W. Penny and J. A. Hutcheson. *Il diags Electronics* 15:123-5 Mr '43

Induction heating equipment. K. Rose, comp. Metals & Alloys 13:75 Jl '43

Interior heating in metal work. Science 97: sup10 My 14 '43

Meat, air-conditioned; electric heat provides answer to problem at Haag brothers, inc. *Il Gen Elec R* 46:352 Je '43; Same. *Elec W* 119:2166-+ Je 26 '43; Same. Heat & Ven 40:57 Ag '43

Metal spraying now extended to all flat and irregular surfaces; Fuse-bond process. C. K. Wilson. *Il Steel* 112:93-+ My 10 '43

Operating rotary meters in unheated metering stations; use of soil heating cable. W. W. Gardner. *Il Gas Age* 92:11 S 23 '43

Preparation of hardened surfaces for metalizing; fuse-bond process. W. C. Reid. *Il diags Iron Age* 151:62-5 F 18 '43

Rapid heating for propeller forming. *Il Iron Age* 151:35 Ja 28 '43

Skin heater solves sheet metal wrinkle problem. *Sci Am* 167:253 D '42

Solderless wire jointing; Rakos process. *diag Elec R (Lond)* 132:646 My 14 '43

Spinning high explosive bomb casings; combination of automatically controlled spinner and Tocco induction heating; Wheeling steel corp. *Il Iron Age* 151:71 Je 17 '43

Spot welder converted for electro-brazing. *Il Iron Age* 151:65 My 13 '43

Tank from scrap salvages scrap poles. A. Carlson and V. Head. *Il diag Elec W* 118: 1976-+ D 12 '42

Van Norman induction heating units for surface hardening. *Il Mach* 49:226 Ap '43

Vulcanization or other heat treatment by electrical conduction; rubber and rubber-like materials. F. L. Yezley. *diags Rubber Age* 52:133-4 N '42

Where to use electric heating in wartime. L. P. Hynes. *Il Heating-Piping* 15:25 Ja '43

See also

Case hardening—	Electric ovens
Electric hardening	Electric water heaters
Chemical apparatus—	
Electric heating	Electric welding
Electric furnaces	Electric welding, Arc
Electric furnaces,	Infrared rays—Indus-
Heat treating	trial heating
Electric furnaces,	Kilns—Electric heat-
Heating	ing

High frequency

Better brazed and soldered joints made possible by induction heating. J. P. Jordan. *Il diags Product Eng* 14:102-5 F '43

Cold heat to expedite plywood fabrication; passing high frequency electric current through wood sections polymerizes glue. C. S. Ricker, flow diag *Il diags Aviation* 42: 116-20+ Mr '43

Dielectric heating; a potential method for the chemical industry. *diag Chem Age (Lond)* 49:210-12 Ag 28 '43

Electronic generators extend induction heating field; electrolytic process of coating sheet steel with tin. H. C. Humphrey. *Il diags Electronics* 16:56-9+ Ja '43

Electronic heat treatment. *Fortune* 27:48+ Ja '43

Electronic sewing machine. C. N. Hoyer. *Il diags Electronics* 16:90-3+ Ag '43

Electronics' brightest star. K. Henney. *Il diags Sci Am* 169:103-5 S '43

Electrostatic high-frequency heating makes possible many new designs. P. D. Zottu. *Il diags Product Eng* 14:40-3 Ja '43

Future of induction heating. F. W. Curtis. Automotive & Aviation Ind 88:90+ Ap 15 '43

Glue welding; spots are quickly set by radio-thermics. *Sci Am* 169:58-9 Ag '43

Heat therapy facilitates aluminum work on aircraft. *Il Mech Eng* 64:903 D '42

Heating electronically; new heaters introduced by General Electric. *Il Gen Elec R* 46:407 Jl '43

Heating wood with radio-frequency power. J. P. Taylor. biblog *Il diags A S M E Trans* 65:201-12 Ap '43

Heatronic molding. Chem & Eng N 21:765 My 25 '43; Same. *Il Iron Age* 151:67 Je 17 '43; Same cond. Chem Ind 52:611 My '43

Heatronic molding. V. E. Meharg. *Il Mod Plastics* 20:87-90 Mr '43

High-frequency current speeds plywood manufacture. H. W. Young. *Il Comp Air M* 48: 7031-2 My '43

High-frequency electric-field heating for non-metallic materials; Thermex process. T. R. Olive. *Il diags Chem & Met Eng* 50:102-4 Ap '43

High-frequency gluing of resins. W. Godfrey and P. H. Billhuber. *Il diags Mod Plastics* 21:89-93, 154, 156 S '43

High frequency heat treating; abstract. Metals & Alloys 18:865-6 O '43

High frequency heating conserves critical tin. G. E. Stoltz. *diags Blast F & Steel Pl* 30:1357-8 D '42; Same. Metal Finishing 40: 648-9 D '42; Excerpts. Power 87:73b-73c+ Ja '43

High-frequency heating in plywood manufacture. Engineering 156:115-17 Ag 6 '43

High-frequency heating of non-metallic materials. Engineer 176:134 Ag 13 '43

High-frequency heating speeds plastic molding. V. E. Meharg. Machine Design 15: 103+ Jl '43

Induction heat is I² R. F. T. Chesnut. *Steel* 113:74, 76 Ag 30 '43

Induction heater speeds tube forming; cooler for transformer. W. Scott. *Il Iron Age* 152: 58-9 S 23 '43

Induction heating; abstract. H. B. Osborn, Jr. *Il Iron Age* 152:44-5 O 21 '43

Induction heating conserves tin. G. E. Stoltz. *diags Elec W* 119:628 F 20 '43

Induction heating helps conserve critical tin. *Il diags Product Eng* 14:16-17 Ja '43

Magnetic induction field of air-core coils; its application to high-frequency heating in valve manufacture. C. E. Kirkpatrick. *diags Wireless Eng* 20:372-82 Ag '43

Molding with radio frequency. W. M. Witty. *Il diags Mod Plastics* 20:83-6+ My '43

New application of heatronic molding. *Il Mod Plastics* 21:106-7 N '43

Radio-frequency current welds thermoplastics in new electronic sealing machine. *Il diag Product Eng* 14:411 Jl '43

Radio-frequency electricity in power applications. J. P. Taylor. *Il Elec W* 120:1164-7 O 2 '43

Radio-frequency gun for spot-gluing wood; molded plywood parts. J. P. Taylor. *Il diags Electronics* 16:106-11+ N '43

Radio-frequency heating applied to wood gluing. R. A. Bierwirth and C. N. Hoyer. *diags Inst Radio Eng Proc* 31:529-37 O '43

R-F heating of plastics; symposium. *Il Electronics* 16:194+ Je '43

R-F heating speeds plastic molding. J. P. Taylor. biblog *Il diags Electronics* 16:102-7+ S '43

Radio sewing machine; high frequencies for fusing plastic parts. *Il Sci Am* 169:26 Jl '43; Rubber Age 53:269-70 Je '43

Radio tubes for heat treating by high-frequency induction; electrolytic tin plate. H. C. Humphrey. *Il diags Steel* 112:111-12 F 1 '43

Sealing by electronics; mechanism that resembles a sewing machine. *Il Mod Packaging* 16:78+ Jl '43

Shells annealed by r.f. induction heating machine. *Il Electronics* 16:110 Ja '43

Spark gap circuits used in induction heating units. *Il diag Electronics* 16:126+ Jl '43

Thermal insulation for electrostatic heating; manufacture of Pregwood propeller blocks. *Il Electronics* 16:180+ N '43

Thermex high-frequency drying equipment. *diag Textile World* 93:114 Ap '43

ELECTRIC heating, Industrial—High frequency*—Continued*

- Tool brazing speeded by electronic induction heating; new grinding system. *il* *diags* Steel 112:90, 92+ My 31 '43; Same abr. Iron Age 151:60 My 27 '43
- Westinghouse induction heating process for flowing tin plate makes continuous production possible. *il* plan Am Mach 86:1394 N 26 '42; Iron Age 150:59-60 N 19 '42
- What is the future of induction heating in heat treating, joining, forging, melting. F. W. Curtis. *il* *diags* Steel 112:76, 78 My 31; 117, 120+ Je 14 '43
- Work coils for high-frequency heating. *il* Electronics 16:112-13+ O '43

ELECTRIC heating elements**Testing**

- High temperature resistivity measurements on compressed granular refractory materials. G. H. Fetterley. *il* *diags* Electrochem Soc Trans 83 (preprint 2):5-18 Ap '43

ELECTRIC heating of clothing. See Clothing, Electrically heated**ELECTRIC hoists. See Hoisting machinery, Electric; Mine hoisting, Electric****ELECTRIC home and farm authority**

- RFC to liquidate EHFA. Comm & Fin Chr 156:1811 N 19 '42

ELECTRIC hotbeds. See Hotbeds, Electric**ELECTRIC ignition**

- Automatic ignition of gas appliances. R. M. Conner. *il* Am Gas Assn Mo 24:469-72 D '42
- Combustion hazards in heat-treating and other furnaces can be decreased by use of modern automatic safety equipment. T. A. Cohen. *diags* Steel 112:60, 62, 64 Ja 18 '43; Same abr. Metal Finishing 41:109-11 F '43; Same abr. Nat Safety N 47:24-5+ Ja '43

ELECTRIC inductance. See Inductance**ELECTRIC industries**

- Changing pattern of industry. Adv & Sell 35: 42, 44+ D '42

See also

- | | |
|---------------------------------------|--------------------------|
| Electric apparatus industry | Electrometallurgy |
| Electric contractors | Electroplating |
| Electric utilities | Radio apparatus industry |
| <i>also</i> General cable corporation | |

Advertising

- No merchandize? sell maintenance! Anaconda wire & cable co. E. F. Luna. *il* Ptr Ink 204:20, 24 Ag 6 '43
- Whet their appetites! National adequate wiring bureau public-service message on how to get along with present inadequacies. F. LaClave. *il* Ptr Ink 203:40+ Ap 16 '43

See also

- | | |
|---|--------------------------------|
| Electric apparatus industry—Advertising | Electric utilities—Advertising |
|---|--------------------------------|

Finance*See also*

- Electric utilities—Finance

Materials

- Aid to selecting plastics for electrical applications. *il* Product Eng 14:165-7 Mr '43
- Alternative materials; developments of electrical interest for panels and screening; metal-treated boards and fabrics, Metrelite; Nuprint panels. Electrician 130:270 Mr 12 '43
- Beryllium-copper. E. M. Foster. *il* Electrician 131:56-8 J 16 '43
- Critical materials in wire and cable. A. Dunham. *il* Elec West 91:60-3 Ag '43
- Design of electrical contacts for trouble-free service. J. D. Kleis. *il* Product Eng 14: 733-7 N '43
- Earnings in manufacture of carbon products for electrical industry, 1942. O. F. Brown. Monthly Labor R 56:329-35 F '43
- Effect of the war program on electrical contact materials. C. B. Gwyn, jr. Steel 113: 126 J 12 '43
- Electrical application of new thermoplastics. T. S. Carswell and T. Alfrey, jr. Elec W 119:1951-3 Je 12 '43

- Electrical materials; factors affecting supply during 1942. Elec R (Lond) 132:123-4 Ja 22 '43

- Electrical properties of fibers. J. W. Illingworth. Textile Col 65:269-73 Je '43
- Less critical materials in critical instruments. I. F. Kinnard and H. C. Dickinson. bibliog *il* *diags* Elec Eng 62:344-50 Ag '43
- More mica from the western hemisphere. Elec Eng 61:607-9 D '42
- Special metals in the electrical industry. F. R. Hensel and J. W. Wiggs. *il* Elec Eng 62:296-302 J 1 '43

- Tests of thermoplastics for electrical applications. E. K. Cliver. *il* Elec W 120:1342-4 O 16 '43

See also

- Electric conductors
Electric wire
Insulating materials

Statistics

- Annual statistical number. Elec W 119:245-75 Ja 23 '43
- Socio-economic conditions and intercity variations of electric use. H. G. Knaf. J Land & Pub Util Econ 18:431-46 N '42; Same. Edison Elec Inst Bul 11:36-44 F '43

California

- Electrical bureau backs plan to help war-hit dealers. Sales Management 51:45-6 D 15 '42
- Groups merge for wartime operation; merger of Pacific radio institute with electrical bureau. Elec West 90:76 Ap '43
- Northern California electrical bureau hurdles help shortage; repair and sales training program succeeds. Sales Management 51:64-5 D 1 '42

Canada

- Electrical affairs in Canada. W. C. Mainwaring. Edison Elec Inst Bul 11:219-20+ J 1 '43
- Meeting the needs of war on the Canadian production front. D. C. Durland. Roads & Bridges 81:44+ Ja '43

Great Britain

- British electrical development association annual meeting, London, March 19. Electrician 130:311-12+, 320 Mr 26 '43; Elec R (Lond) 132:409-13 Mr 26 '43
- Co-operation between the electrical and gas industries. G. Lloyd-George. Electrician 130:508 My 21 '43
- Electrical contractors; annual report; abstracts. W. Riggs. Electrician 131:71-2 J 16 '43; Elec R (Lond) 133:108-9 J 23 '43
- Electrical engineers and the post-war period. C. L. Fortescue. bibliog Inst E E J 90 pt 1:20-8 Ja '43; Same cond. Engineering 154:315-16, 338 O 16-23 '42; Same cond. Engineer 174:300-1, 312-14 O 9-16 '42; Abstracts. Elec R (Lond) 131:455-6 O 9 '42; Electrician 129:387-9 O 9 '42
- Future installation matters. Electrician 129: 497-8 N 6 '42
- Future of electricity supply; views on co-operation with gas industry. F. Newey. Electrician 130:638-9 Je 25 '43
- Incorporated municipal electrical association annual report. Electrician 130:617-19 Je 18 '43; Elec R (Lond) 132:809-10 Je 18 '43
- Organization of post-war electrical research. Inst E E J 90 pt 1:261-3 J 1 '43
- Post-war installations; recommendations of Ministry of works committees. Elec R (Lond) 132:551-2 Ap 23 '43
- Post-war prospects. Elec R (Lond) 132:783-4 Je 11 '43
- Practical planning; civil engineers stage an exhibition on reconstruction. *il* Electrician 131:385-6 O 15 '43
- Rational distribution. F. J. Elliott. Elec R (Lond) 132:7-9 Ja 1 '43
- Some immediate problems affecting electricity supply. R. H. Rawll. Inst E E J 90 pt 1: 91-3 F '43; Excerpt. Electrician 129:503-4 N 6 '42; Abstract. Elec R (Lond) 131:584 N 6 '42

ELECTRIC industries—Great Britain—Cont.

Work of the E.D.A.; interim report. Electrician 131:36-8 JI 9 '43

See also

Electric apparatus in-	Electric utilities—
dustry—Great Brit-	Great Britain
ain	Electricity supply—
	Great Britain

Ireland

News from Eire. Elec R (Lond) 131:814 D 25 '42

Latin America

Latin American ties urged on U.S. engineers. Elec W News ed 120:4 JI 3 '43

Manchuria

Development in Manchuria. Electrician 131: 131-2 Ag 6 '43

Pacific coast

Pacific coast electrical association launches postwar program. S. E. Gates. Elec West 90:57-9 Ap '43

Pacific Coast electrical leaders outline plan for post-war preparation. E. Gidlow. Sales Management 52:35, 38+ Mr 15 '43

South Africa

Electricity in South Africa. Elec R (Lond) 131:688 N 27 '42

Electricity in South Africa. Electrician 130: 292-3 Mr 19 '43

Electricity in South Africa. Electrician 131: 181-2 Ag 20 '43

South African developments. Electrician 130: 490 My 14 '43

South African electrical news. Electrician 130:567-8; 131:6 Je 4, JI 2 '43

Trinidad

Events in Trinidad. Elec R (Lond) 131:793 D 18 '42

United States

Annual statistical number. Elec W 119:245-75 Ja 23 '43

Guardians of the home front. Elec West 90: 85-8 Je '43

Planning to be done. H. C. Thuerk. Edison Elec Inst Bul 11:197-9 JI '43

Power markets through new applications. J. F. Gaskill. Edison Elec Inst Bul 11:179-81+ Je '43

Survey; some of the situations which developed in 1942. S. B. Williams. Elec W 119:277-9 Ja 23 '43

War-time research, and wartime experience, in the electrical manufacturing industry. G. Swope. Comm & Fin Chr 157:397 Ja 28 '43

See also

Edison electric in-	Electric utilities—
stitute	United States
Electric apparatus	Electricity supply—
industry—United	United States
States	

Western states

Electrical West annual review number. il Elec West 90:51-89 F '43

Serving the production line; Rocky Mountain electrical league. G. B. Buck. il Elec West 90:72-3 Je '43

ELECTRIC inspection

Electrical inspector in wartime. F. F. Sengstock. Weekly Underw 148:60-2 Ja 2 '43

Inspectors cogitate. Northwest section annual meeting. Seattle. Elec West 91:81+ O '43

Power circuit breaker upkeep and trouble shooting; data sheets. W. A. Holland. Factory Management 101:148+ Ja '43

Relay and switch upkeep and trouble shooting; data sheets. W. A. Holland. Factory Management 101:134+ F '43

ELECTRIC instruments

Airframe stress analysis by the electrical strain gage. W. T. Thomson. diags Aero Digest 42:259, 261, 263 My '43

Behavior of a balanced d.c. amplifier. R. C. Spencer and L. Schulz. bibliog diag R Sci Instr 14:10-14 Ja '43

Capacitance bridge for determining the ratio and phase angle of potential transformers. H. W. Bousman and R. L. Ten Broeck. bibliog il diags Elec Eng 62:Trans 541-5 Ag '43

Controlled atmosphere indicator; use of thermal-conductivity-type gas analyzer. C. A. Hansen, Jr. il Gen Elec R 46:221-2 Ap '43

Cooling, dehumidifying; measuring capacities of air-conditioning equipment by the electric-calorimeter method. H. A. Whitesel. diags Gen Elec R 45:653-6 N '42

Direct-current amplifier and its application to industrial measurements and control. D. C. Gall. il diags Inst E E J 89 pt 2:434-43; Discussion. 443-6 O '42; Abstract. Electrician 128:249-51 Mr 20 '42

Electric torque meters for aircraft engines. R. L. Findley. il diags Aero Digest 42:285, 291+ Je '43

Electrical aircraft instruments. R. W. Gilbert. Instruments 15:466+ N '42

Electrical developments of 1942; testing equipments. G. Bartlett. il diags Gen Elec R 46:44-5 Ja '43

Fisher conductivity bridge. il R Sci Instr 14:52-3 F '43

General Electric full load continuity tester. il Electrician 130:463 My 7 '43

Heat transfer problems solved by electrical analyzer. il diags Product Eng 14:442-6 JI '43

Improved design for relay test set. B. J. Bortell and J. E. Kozlowsky. il diags Elec W 118:2094-5 D 26 '42

Instrument to measure minute changes in specific inductive capacity of cardboard and hence to determine its water content. S. D. Gardiner. diag Soc Chem Ind J 62:75-6 My '43

Law of the moving-iron instrument. G. F. Tagg. Inst E E J 90 pt 2:73-7; Discussion. 77-8 F '43

Magnetism and electricity as utilized in aircraft instruments. R. J. Stephan. Instruments 16:495-6+ Ag '43

Oscillograph speeds up training of electrical instrument mechanics. M. D. Jackman. il Instruments 16:64-5 F '43

Portable Kelvin bridge. il Instruments 16: 580+ S '43

Power factor; dielectric power-factor measurements; improved methods and equipment. H. W. Bousman. il Gen Elec R 45: 625-7 N '42

Progress in engineering knowledge during 1942. P. L. Alger and J. Stokley. diags Gen Elec R 46:110-12 bibliog(p134) F '43

Rectifier instruments; their characteristics, possibilities and limitations. F. R. Axworthy. il Elec R (Lond) 131:791-3 D 18 '42

Soldering electrical aircraft instruments. J. J. Schiller. diags Instruments 16:491-4 Ag '43

Testing generator dielectric absorption under adverse humidity conditions of Brazilian plants. A. V. DeBeech. il diags Elec W 119: 1766-8 My 29 '43

Theory of the force or torque of soft-iron electrical instruments. C. V. Drysdale. Inst E E J 90 pt 2:79-83 F '43

Variable ratio-arm conductivity bridge. W. F. Luder. il diag R Sci Instr 14:1-3 Ja '43

Vibration testing; vibration meters and motors. R. O. Fehr. il Gen Elec R 45:695-9 D '42

See also

Ammeters	Hearing aids, Me-
Electric apparatus	chanical
and appliances	Klydonograph
Electric measure-	Oscillators
ments	Photoelectric cells
Electric meters	Radio instruments
Electric resistors	Radio measurements
Electric testing	Recording instru-
Electrotherapeutics—	ments, Electric
Apparatus and in-	Vacuum tubes—
struments	Measurement uses
Galvanometers	Voltmeters

Maintenance and repair

How to service telechron rotors. G. W. Villers. il Elec W 120:338 S 4 '43

Manufacture

Electrical instrument production soars; Westinghouse meter division. T. Turner. il Marine Eng 48:214 JI '43

Less critical materials in critical instruments. I. F. Kinnard and H. C. Dickinson. bibliog il diags Elec Eng 62:344-50 Ag '43

ELECTRIC Instruments—Continued**Standards**

First comprehensive American standard on electrical instruments is promulgated. M. F. Behar. *Instruments* 16:190, 216-18, 220, 222+ Ap '43

New war standard fills long-felt need; panel-type indicating instruments. R. B. Shepard. *Il Ind Stand* 14:41-3 F '43

Standardization as applied to industrial electrical instruments. K. Edgcombe. *diags Inst E E J* 90 pt 1:265-81 J1 '43; Abstracts. *Elec R (Lond)* 131:717-18 D 4 '42; *Electrician* 129:639 D 11 '42; Discussion. *Inst E E J* 90 pt 1:282-97 J1 '43; *Elec R (Lond)* 131:747-8 D 11 '42; *Electrician* 129:639-41 D 11 '42

Testing

Automatized inspection of aircraft electrical instruments triples testing speed. B. Conway, A. C. Emery and J. S. Gooch. *Il Instruments* 16:10-11, Ja '43

Differential electronic stabilizer for alternating voltages, and some applications. A. Glynn. *bibliog diags Inst E E J* 90 pt 2: 101-10 Ap '43; Abstract. *Electrician* 129: 586 N 27 '42; Discussion. *diags Inst E E J* 90 pt 2:110-15, 367-8 Ap, O '43; *Electrician* 129:586-8 N 27 '42

New standard to test instruments for resistance to shock. *Il Ind Stand* 14:187-8 Je '43

Trouble shooting on the flight line; procedure for electrical instruments. L. J. Fospil. *Instruments* 16:70+ F '43

Versatile table for calibration of electrical instruments. J. E. Warren. *bibliog il diags Instruments* 16:116-20+ Mr '43

ELECTRIC insulation. See *Insulation (electric)*

ELECTRIC inverters

Aircraft inverter construction. C. T. Button. *Il diags Elec Eng* 62:Trans 598-602 S '43

Oscillator or inverter circuit; hydraulic analog; electronic circuit; applications. *Il diags Product Eng* 14:650 O '43

Static conversion of direct current to alternating current with grid-controlled mercury-arc mutators. R. Feinberg. *diags Inst E E J* 89 pt 1:462-70 bibliog(p466, 468) O '43

ELECTRIC laboratories

High tension testing; new research laboratory at Zurich. *Il Electrician* 131:273-5 S 17 '43

Oerlikon laboratory for H.T. research. *Il diags plans Engineer* 176:269-72 O 1 '43

Specialised testing laboratory for classifying insulating materials. *Il Electrician* 131:347-9 O 8 '43; *Engineering* 156:307, 310 O 15 '43; *Elec R (Lond)* 133:469-70 O 8 '43

See also

Bell telephone laboratories

ELECTRIC lamps

Activating light sources for luminescent materials. E. W. Beggs. *Il diag Opt Soc Am J* 33:61-70 F '43

Electric lamps on the battle front; exhibition shows workers how their products are used. *Il Electrician* 131:119 J1 30 '43

Electrical developments of 1942; illumination. G. Bartlett. *Il Gen Elec R* 46:51-3 Ja '43

Essential war metals saved by the lighting industry. D. P. Caverly. *Il diag Illum Eng* 38:133-40 Mr '43

Illuminating engineering today and tomorrow. W. Harrison. *Illum Eng* 38:369-77 J1 '43

Maintenance of protective lighting. G. A. Eddy. *Il plan Power Pl Eng* 46:73-6 N '42; Same cond. *Ry Age* 113:998-9 D 19 '42

Peacetime lamps find many uses in military service. R. R. Brady. *Il Sci Am* 168:158 Ap '43

War lighting tools will find numerous peacetime applications. S. H. Hibben. *Sci Am* 169:27-8 J1 '43

War production order reduces variety in electric lamps. K. S. Geiges. *Il Ind Stand* 13: 282-3 N '42

War production rulings as they affect the industry. W. Harrison. *Illum Eng* 37:814-17 D '42

See also

Automobiles—Lighting
Electric flashlights

Electric lighting
Ultra-violet rays—Lamps

Advertising

Lamp publicity. *Il Elec R (Lond)* 133:349-51, 412 S 10, 24 '43

Lamp sales publicity. *Il Electrician* 131:233, 255-7, 305 S 3-10, 24 '43

What does your ad make people do? General Electric lamp campaign. T. M. Shepard. *Il Adv & Sell* 36:14-15 Ap '43

Heat radiation

Lighting and air conditioning. H. M. Sharp. *Il Heat & Ven* 39:36-46 N '42

History

Electronics; its start from the Edison effect sixty years ago. W. C. White. *Il diags Gen Elec R* 46:537-41 O '43

Maintenance and repair

Maintenance of electric lamps and motors; Chem & Met report. *Il diag Chem & Met Eng* 50:117-20 Mr '43

Manufacture

WPB order L-28 revised; text of amendments. *Illum Eng* 38:341-5 J1 '43

Merchandizing

Business guide for electrical dealers and salesmen. *Elec West* 89:55-7 N '42

ELECTRIC lamps, Arc

Illumination in motion picture production. R. G. Linderman, C. W. Handley and A. Rodgers. *bibliog il Soc Motion Picture Eng J* 40:333-67 Je '43

See also

Electric lamps, Fluorescent
Electric lamps, Mercury vapor
Moving picture machines—Light sources

ELECTRIC lamps, Blackout

Blackout lighting; how much light is permissible and how best to produce. L. C. Porter. *Il diags Gen Elec R* 46:679-81 D '42

ELECTRIC lamps, Fluorescent

Aircraft factory lighting. *Il Electrician* 131: 39-40 J1 9 '43

Alternate materials for luminaires. E. H. Robinson. *Il diags Illum Eng* 37:691-9 D '42

Ballasting requirements for fluorescent lamps. R. N. Thayer. *bibliog il diags Electrochem Soc Trans* 83 (preprint 26):297-307 Ap '43; Excerpts. *Steel* 113:289 O 11 '43

Boosters correct F lamp troubles. *diag Elec W* 119:94 Ja 9 '43

Car lighting without fixtures. *Il Ry Mech Eng* 117:337 J1 '43

Clothing factory lighting. *Il Electrician* 131: 198 Ag 27 '43

Colors and color-temperature of lighting. C. E. Weitz. *Rayon* 24:501-3 S '43

Design of plane-mirror reflectors for fluorescent lamps. D. P. Severance. *diags Illum Eng* 38:45-57 Ja '43

Design of reflectors for fluorescent lamps. R. D. Douglass and D. P. Adams. *diags Illum Eng* 38:141-7 Mr '43

Detroit Edison uncovers fluorescent auxiliary defects. D. W. Drury. *Elec W* 118:2100-1 D 26 '42

Economy of 277-volt industrial lighting. R. H. Kaufmann. *diags Elec W* 120:336+ J1 24 '43

Effect of voltage variation; motors, incandescent lamps and fluorescent tubes; data sheet. *Power* 87:279 Ap '43

Engineering works lighting; fluorescent scheme. *Il Electrician* 130:51-2 Ja 15 '43

Engineering works lighting; war-time change-over to Sieray fluorescent tube installation. *Il Electrician* 130:622 Je 18 '43; *Light & Lighting* 36:124 Ag '43

Factory lighting; fluorescent tube illumination. *Il Electrician* 130:590 Je 11 '43

Fifty foot candles on the working plane. *Il Light & Lighting* 36:85 Je '43

Five ways to save fluorescent lamps. E. W. Beggs. *Il Elec W* 119:1322+ Ap 17 '43

Fluorescent lamp market predicted big after war. S. G. Hibben. *Il Manuf Rec* 112:42-3+ N '43

Fluorescent lamp outlets in service. A. B. Oday. *Elec W* 119:1619 My 15 '43

Fluorescent lamp troubles, causes and remedies; data sheet. *Power* 87:779 N '43

ELECTRIC lamps, Fluorescent—Continued

- Fluorescent lamps. L. J. Davies, H. R. Ruff and W. J. Scott, bibliog diags Inst E E J 89 pt 2:447-65; Discussion, 465-72 O '42
- Fluorescent lamps show standing waves on lines. P. M. Honnell, diags Electronics 16: 112+ My '43
- Fluorescent lighting in a radio valve works. il Light & Lighting 36:94 Je '43
- Fluorescent lighting in engineering. il Mech Handling 30:166-8 Ap '43
- Fluorescent lighting in wartime Britain. R. O. Ackerley, il Elec Eng 62:203-5 My '43
- Fluorescent lighting maintenance. J. J. Neidhart, il Manuf Rec 112:32-3+ JI '43
- Fluorescent lighting moves on. Fortune 27: 76+ Je '43
- Group replacement of fluorescent lamps; with cost data. H. Reinhardt, Illum Eng 38:179-88 Ap '43
- Higher lighting voltages save copper; ten ways of making power available to light industrial plant with fluorescent lamps. F. C. Winkler and H. G. Barnett, diags Elec W 120:316-18 S '43
- Inspection of precious metals. il Light & Lighting 36:143 S '43
- Lighting a wartime airplane assembly plant. M. D. Darrah, il Gen Elec R 46:593-5 N '43
- Lighting an old plant for war work. V. C. Uldin, il Factory Management 101:127-8 F '43
- Lighting in the aircraft industry. il Light & Lighting 36:100-1 JI '43
- Mercury bombs save precious metal in fluorescent lamps. Sci Am 167:231-2 D '42
- New equipment; lighting and safety apparatus. il Iron Age 151:74-5 F 18 '43
- Night into day; portable fluorescent extension lamp illuminates interior installations in planes. E. F. Lougee, il Mod Plastics 21:83+ O '43
- 100-watt fluorescent lamps for passenger car lighting. Ry Mech Eng 117:139-40 Mr '43
- Production jigs fluorescent lighted; Douglas aircraft co. J. A. Murray, il Elec West 91: 49 S '43
- Progress interpretations; report of the I.E.S. committee, bibliog il diags Illum Eng 37: 655-90 D '42
- Remarks concerning wartime industrial lighting in connection with conference presentation of report of the committee on light in wartime. H. B. Dates, Illum Eng 37:700-5; Discussion, F. C. Eley, 705-6 D '42
- Siemens fluorescent lamp fittings. il Electrician 130:345-6 Ap 2 '43
- Spotting fluorescent lamp troubles. il diags Power 37:759-60 N '43
- Three sources used in wartime lighting; incandescent, fluorescent and mercury. D. P. Kohler, il Elec West 91:52-4 S '43
- U.S. sues to end fluorescent monopoly. Elec W News ed 118:2035 D 19 '42
- See also Sylvania electric products inc.

Cold cathode

- Cold-cathode fluorescent at war; I.T.E. circuit breaker company installation. J. C. Sabatini, il Illum Eng 38:171-8 Ap '43; Discussion, 38:279-80 Je '43
- Cold cathode produces light canopy; aircraft office. G. C. Greenlund and C. Miller, il Elec West 91:55 S '43
- Cold cathode tubes in industrial lighting. W. Phillips, il Elec W 119:1286-7 Ap 17 '43
- Some engineering aspects of lighting from cold-cathode fluorescent sources. H. J. Chanon and A. C. Barr, Illum Eng 37:769-83; Discussion, 783-8 D '42
- War advances cold cathode linear lighting in Northwest. il Elec West 90:54-5 Mr '43
- What's different about cold cathode? abstracts. A. C. Barr and C. M. Cutler, diags Elec W 119:1433-41 My 1 '43; Ry Mech Eng 117:284-6 Je '43

Testing

- Fluorescent fatigue. J. W. Marden and N. C. Beese, diags Illum Eng 37:807-12; Discussion, 812-13 D '42

ELECTRIC lamps, Incandescent

- Blackout spraying at low cost; spraying about 25,000 incandescent street-lighting bulbs. il Elec W 118:2118 D 26 '42

- Effect of voltage variation; motors, incandescent lamps and fluorescent tubes; data sheet. Power 37:279 Ap '43
- 460-volt series lighting saves copper. G. E. Shoemaker, il Elec W 119:594-5 F 20 '43
- Initiative in research. C. G. Fluk. Science 98:28-9 JI 9 '43
- Light for a factory and for a pharmacy. il Elec West 90:56 Mr '43
- Modified dimout for New York subways; silver-bowl lamps keep within army requirements. E. C. Giddings, il Transit J 86:402-4 N '42
- Three sources used in wartime lighting; incandescent, fluorescent and mercury. D. P. Kohler, il Elec West 91:52-4 S '43

See also

- Electric lamps, Tungsten

ELECTRIC lamps, Mercury vapor

- General Electric high speed flashlight. il R Sci Instr 14:278-9 S '43
- Mercury arc lamps; effect of electrode on energy distribution. W. T. Anderson, Jr, bibliog diags Opt Soc Am J 33:104-8 F '43
- Mercury lighting for television studios. H. A. Breeding, il diags Inst Radio Eng Proc 31:106-12 Mr '43
- Portable mercury flash lamp. Science 98: sup10 JI 23 '43
- Three sources used in wartime lighting; incandescent, fluorescent and mercury. D. P. Kohler, il Elec West 91:52-4 S '43

See also

- Ultraviolet rays—Lamps

ELECTRIC lamps, Neon

- Meter substitutes. R. P. Turner, il diags Radio N 30:38-9 O '43

ELECTRIC lamps, Photoflash

- Portable mercury flash lamp. Science 98: sup10 JI 23 '43

- What makes the midjet flash so mighty? D. Mohler, diags Am Phot 36:8-11 D '42

ELECTRIC lamps, Portable

- Industrial design at Caltech; lamp, which can be used as illuminated reading stand, il Arch Forum 77:4 D '42

- Night into day; portable fluorescent extension lamp illuminates interior installations in planes. E. F. Lougee, il Mod Plastics 21:83+ O '43

- Revised WPB order L-33; portable electric lamps and shades. Illum Eng 38:273-5 Jo '43

ELECTRIC lamps, Tungsten

- Illumination in motion picture production. R. G. Linderman, C. W. Handley and A. Rodgers, bibliog il Soc Motion Picture Eng J 40:333-67 Je '43

- Tungsten-in-quartz lamp and its applications in photoelectric radiometry. R. Stair and W. O. Smith, bibliog diags Nat Bur Stand 30:449-59 Je '43

ELECTRIC light fixtures. See Lighting fixtures; Reflectors**ELECTRIC lighting**

- Beveridge scheme for lighting. J. B. Harris, Electrician 130:645-7 Je 25 '43

- Design guide for interior electric lighting and wiring for wartime construction. Illum Eng 38:443-7 S '43

- Forced change uses less copper; incandescent and mercury lamps substituted for fluorescent. E. R. Bonds, Elec W 119:2155 Je 26 '43

- Igranic low-voltage lighting transformer unit. Engineering 154:407 N 20 '42

- Light for an auditorium; light without ceiling. il Elec West 91:64 Ap '43

- Maintenance of electric lamps and motors; lamps and fixtures; Chem & Met report. il diags Chem & Met Eng 50:117-20 Mr '43

- Progress in engineering knowledge during 1942; lighting. P. L. Alger and J. Stokley, il diags Gen Elec R 46:127-32 bibliog(p137) F '43

- Sight for victory; new program of the National better light-better sight bureau. H. P. J. Steinmetz, Edison Elec Inst Bul 11: 182+ Je '43

ELECTRIC lighting—Continued

What's ahead in lighting. S. B. Williams, ed.
Elec W 120:271-82 J1 24 '43

See also

Airports—Lighting
Automobiles—Lighting
Car lighting
Electric lamps
Electric plants
Electric wiring
Electricity on the farm

Factories—Lighting
Light projection
Lighting
Office lighting
Petroleum refineries—Lighting
Photometry
Roads—Lighting
Street lighting

Control

Airport runway lighting control switch. J. P. Houck. *il* diags Product Eng 14:268-9 My '43

Control series lights from several points. *diag* Elec W 119:478 F 6 '43

Simple and inexpensive methods for blackout control of small store lighting; illustrated instructions. Elec W 118:2142 D 26 '42

Rates

See Electric rates

ELECTRIC lines

Alternate materials, methods. H. H. Minor. *diags* Elec West 90:39-40 Ja '43
Current limits much higher in wires than formerly thought possible. Sci Am 168:173-4 Ap '43

Electric propagation on long lines terminated by lumped networks. M. G. Maltz and M. Golomb. *bibliog* Franklin Inst J 235:41-73, 101-13 Ja-F '43

Fluorescent lamps show standing waves on lines. P. M. Honnell. *diags* Electronics 16: 112+ My '43

Load shifts free line for war load. *diags* Elec W 120:1536 O 30 '43

Power lines can be made to carry increased power. Sci Am 169:36 J1 '43

Power lines to serve Big Inch pipe line. A. E. Knowlton. *il* diags Elec W 120:244-7 J1 24 '43

Substation control lines in fibre duct. *il* Elec W 120:462 Ag 7 '43

Transmission-line and system problems in supplying large electric-arc furnaces during wartime. B. M. Jones. *bibliog* *il* diags Elec Eng 62:Trans 197-202 Ap '43

Transmission line charts. R. F. Baum. *Electronics* 16:92-4+ J1 '43

Transmission line equation in terms of impedance. J. R. Pierce. *diag* Bell System Tech J 22:263-5 J1 '43

See also

Electric cables
Electric circuits
Electric conduits
Electric plants—Interconnection
Electric protective apparatus
Electric railroads
Electric service, Rural

Electric substations
Electric transmission
Electric utilities
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Hydroelectric plants
Radio lines
Telephone lines
Trolley buses

Construction**See also**

Anchor, Guy
Electric lines—Overhead construction

Electric lines—Underground lines

Crossarms

Moulded cross-arms. R. B. Matthews. *diags* Electrician 130:313-14 Mr 26 '43

Old crossarms make new secondary racks. *diags* Elec W 118:1812 N 28 '42

One method for specifying treated crossarms. Elec W 120:120 J1 10 '43

Salvaged fir crossarms for line material devices. *diag* Edison Elec Inst Bul 11:18 Ja '43

Damage from air raids

Suggestions for air raid wardens relating to emergency conditions in streets affecting electric service facilities. Edison Elec Inst Bul 11:82 Mr '43

Damage from airplanes

Army plane survives striking 66-kv. line. *il* Elec W 120:474 Ag 7 '43

Damage from storms

Floods, ice, tie up power lines in East. *il* Elec W 119:73-4 Ja 9 '43

Glaze storms and electrical service. E. J. Christie and H. S. Chartier. *il* *diag* map Elec Eng 62:431-5 O '43

Houston, Galveston hit in record hurricane. Elec W 120:471-2 Ag 7 '43

Design

Conductor redesign saves copper. A. A. Osipovich. *diags* Elec Eng 62:410-11 S '43
Constant-tension lines; modifications necessary in orthodox designs. *diag* Elec R (Lond) 132:774-5 Je 11 '43

110-kv. tie line uses progressive design. E. A. Church and E. G. Stebbins. *il* *diags* Elec W 120:1506-8 O 30 '43

Overhead line vertical loads. P. J. Ryle. *Electrician* 131:376-8 O 15 '43

Power-line transposition practices. V. Von Voigtlander. Elec Eng 62:17-18 Ja '43

Some problems in transmission-line design; with cost data. A. Burke. *diags* map Inst E E J 90 pt 2:158-71 Je '43; Excerpts. Elec R (Lond) 131:749 D 11 '42; Discussion. Inst E E J 90 pt 2:172-85 Je '43; *Electrician* 129: 663-5 D 18 '42

Ice problem

Glaze storms and electrical service. E. J. Christie and H. S. Chartier. *il* *diag* map Elec Eng 62:431-5 O '43

Thawing ice on distribution lines. C. G. Darrah. *diag* Elec W 119:974 Mr 20 '43

Inductive interference

Effect of radio frequencies of a power system on radio-receiving systems. C. V. Aggers. W. E. Pakula and W. A. Stickel. *il* *diag* Eng 62:Trans 169-72 Ap '43

Effects of mutual induction between parallel transmission lines on current flow to ground faults. J. I. Holbeck and M. J. Lantz. *diags* Elec Eng 62:Trans 712-15 N '43

Filter bans 25-cycle from ground relay. R. B. Squires. *il* *diags* Elec W 119:2164 Je 26 '43

Measurements pertaining to the co-ordination of radio reception with power apparatus and systems. C. M. Foust and C. W. Frick. *bibliog* *diags* Elec Eng 62:Trans 284-91 Je '43

Power-line transposition practices. V. Von Voigtlander. Elec Eng 62:17-18 Ja '43

Rectifier circuit power factors, harmonics and wave shapes. R. D. Evans. *diag* Elec W 120: 1345-8 O 16 '43

Review of the operation and inductive co-ordination of telegraph systems. A. L. St Cyr and J. R. North. Edison Elec Inst Bul 11:107-12 Ap '43

Sucker transformer reduces induction; inductive co-ordination problem. T. Seely. *diag* Elec W 120:1544 O 30 '43

Interconnection

See Electric plants—Interconnection

Maintenance and repair

Analysis of failures due to trouble control. E. W. Whitmer. Elec W 120:990-2 S 18 '43

Cleaning, greasing of wire connections. H. E. Jung. *il* Elec W 120:1388 O 16 '43

Devise wire gin to hoist conductors. *il* *diag* Elec W 120:338 J1 24 '43

How to clean up services to reduce short circuits. *diags* Elec W 120:1030 S 18 '43

Standard signals for linework. *il* Elec W 119:1984 Je 12 '43

Truck adapted to use of air-operated tools; Rockland light & power company. E. M. Bush. *il* Elec W 120:808-10 S 4 '43

Moving

Transmission towers raised under load. C. M. Allen. *il* *diags* Elec W 119:944-5 Mr 20 '43

Overhead construction

Adding conductors raises line capacity. C. M. Allen. *il* *diags* Elec W 119:763 Mr 6 '43
Capacitor racks of wood replace steel. E. H. Kendall. *il* Elec W 120:1368 O 16 '43

Conductor swivel; streamlined assembly aids in line stringing. A. A. Osipovich. *diags* Elec West 90:41 Ja '43

ELECTRIC lines—Overhead construction—*Cont.*
Construction of 26.4 kv transmission line on narrow right-of-way. Edison Elec Inst Bul 11:17 Ja '43
Current-carrying capacity of overhead conductors. H. A. Enos. Elec W 119:1612-14 My 15 '43
Guide for wire clearances. il Elec W 119:1990 Je 12 '43
How to attach open two-wire and three-wire services; diagrams. Elec W 119:1813 My 29 '43
How to construct wood racks for pole-mounted capacitors. E. H. Kendall. diags Elec W 120:1548 O 30 '43
How to make single-wire deadends on lines under 10 kv. diags Elec W 119:316 Ja 23 '43
How to turn angles on 35 and 33-kv. lines. diags Elec W 118:1640 N 14 '42
Installing iron wire for line conductors. il Elec W 118:1804+ N 28 '42
Interim report on emergency overloads on overhead conductors. bibliog Elec Eng 62:Trans 588:90 S '43
Line construction crew has but 8 regulars; steel tower line built in record time. Elec West 89:46 D '42
Line relayed to adjust local stations to local loads. J. F. Pennington and J. T. Logan. bibliog il diag Elec W 119:1295-7 Ap 17 '43
Make alley braces from fir crossarms. diags Elec W 120:104 JI 10 '43
Measure 25,000 lb. with 5,000-lb. scale; using dynamometer in pre-stretching conductors on river-span section of Omaha-Median line. diag Elec W 119:66 Ja 9 '43
Practical design for war-born 66-kv. line. il Elec W 120:122 JI 10 '43
Rig pulls slack in insulating string. il Elec W 119:102 Ja 9 '43
Rural distribution; reinforcement of an 11-kv overhead system. il diags Elec R (Lond) 132:675-9 My 21 '43
Sawing material in army camp. il Elec W 120:116 JI 10 '43
Standardization in Great Britain of single-circuit overhead lines up to 33kv. H. W. Taylor and K. L. May. bibliog diags Inst E E J 90 pt 2:233-45 Ag '43; Abstract. Elec R (Lond) 132:254-6 F 19 '43; Summary. Electrician 130:200-2 F 19 '43; Discussion. Inst E E J 90 pt 2:245-59 Ag '43
Steel-poor transformer platform. il diags Elec W 119:302 Ja 23 '43
Structural data for 138-Kv. H-frame lines. W. C. Schmidt. il diag Elec W 119:1108-10 Ap 3 '43
Thermal rating of overhead line wire. M. Zucker. bibliog il Elec Eng 62:Trans 501-7 JI '43
Tough going on this transmission job; construction of line in mountainous country under snow and other conditions. il Elec W 119:1658 My 15 '43
Tower-to-roof line terminal design. il diags Elec W 120:342+ JI 24 '43
Use wood spacer for mid-span service taps. diag Elec W 119:2123 Je 26 '43
Wayleave compensations. F. T. Billingsley. diags Elec R (Lond) 133:232-4 Ag 20 '43
See also
Electric lines—Cross-arms

Poles and towers
British wood poles; tests on larch and Scots pine. il diag Elec R (Lond) 132:377-9 Mr 19 '43
Distribution fundamentals; pole inspection and treatment. il Elec West 90:59 My '43
Ground-line treatment prolongs pole service life. P. B. Hull. il Elec W 120:638-40 Ag 21 '43
Handy pole data sheet. E. R. Bonds. Elec W 119:1999 Je 12 '43
How Chattanooga municipal selects wood poles for overhead distribution; chart. G. R. Parker. Elec W 119:978 Mr 20 '43
How one company makes a pole splice. A. MacDonald. diag Elec W 120:1204 O 2 '43
How to determine size of through-bolts for poles; tables. P. Morrill. Elec W 119:1818 My 29 '43
How to erect and take down high poles. H. E. Stafford. il diags Elec W 119:1806 My 29 '43
How to mount pole-type distribution capacitors. diags Elec W 119:86 Ja 9 '43

Larch and Scots pine poles. il diags Electrician 130:77-80 Ja 22 '43
Maintenance routine for steel towers. Elec W 119:2154 Je 26 '43
Pole selection for an unguyed angle. G. R. Parker. Elec W 120:1364-5 O 16 '43
Pole yard adapted to pentachlorophenol. il Elec W 118:1818 N 28 '42
Post units, no arms, narrow right-of-way. G. Morgan, jr. il Elec W 120:1214+ O 2 '43
Some features of wood H-frame design for high-voltage line structures. W. C. Schmidt. il diag Edison Elec Inst Bul 11:113-18+ Ap '43
Some problems in transmission-line design; with cost data. A. Burke. diags map Inst E E J 90 pt 2:158-71; Discussion. 172-85 Je '43
Steel poles, keep 'em standing; proper maintenance essential. L. W. Birch. il Transit J 86:414-16 N '42
Tank from scrap salvages scrap poles. A. Carlson and V. Head. il diag Elec W 118:1976+ D 12 '42
Transformer mounting on joint-use poles. diag Elec W 118:1800 N 28 '42
Transmission line supports. W. F. Bowling. diags Elec R (Lond) 133:302-3 S 3 '43
Transmission towers raised under load. C. M. Allen. il diags Elec W 119:944-5 Mr 20 '43
Treatment and stubbing extend pole life. J. G. Charest. il Elec W 120:72-4, 248-50 JI 10-24 '43
Wood for steel. il diags Elec West 90:42 Mr '43
Wood-pole 230-kv transmission lines. O. S. Clark. il diag Elec Eng 62:Trans 94-7 F '43
Wood structures for 230-kv. transmission. O. S. Clark. il diags Elec W 119:438-9 F 6 '43

See also

Electric lines—Cross-arms

Protection

Britisher develops pinless insulator for rural-line crossarms. il Elec W 120:1046 S 18 '43
Cleaning, waxing high-tension insulators. Elec W 118:2124+ D 26 '42
Counts Deion tube operations. diags Elec W 119:1986+ Je 12 '43
Distance relay protection for subtransmission lines made economical. L. J. Audlin and A. E. van C. Warrington. il diags Elec Eng 62:Trans 574-8 S '43
Effect of current-transformer residual magnetism on balanced-current or differential relays. H. T. Seeley. diags Elec Eng 62:Trans 164-9 Ap '43
Lightning protection of switchgear, unit substations, or a-c rotating machines closely connected to overhead lines. W. J. Rudge, jr., V. L. Cox and E. M. Hunter. il diags Gen Elec R 46:551-6 O '43
New line insulator. diag Elec R (Lond) 133:79 JI 16 '43
110-kv. tie line uses progressive design. E. A. Church and E. G. Stebbins. il diags Elec W 120:1506-8 O 30 '43
Performance requirements for relays on unusually long transmission lines. F. C. Poage and others. bibliog diags Elec Eng 62:Trans 275-83 Je '43
Pilot-wire circuits for protective relaying, experience and practice. Elec Eng 62:Trans 210-14 My '43
Pilot-wire relaying on a metropolitan system. T. G. LeClair and E. L. Michelson. bibliog diags Elec Eng 62:Trans 511-15 Ag '43
Protective relaying for long transmission lines. A. R. van C. Warrington. bibliog il diags Elec Eng 62:Trans 261-8 Je '43
Relay protection of tapped transmission lines. M. A. Bostwick and E. L. Harder. diags Elec Eng 62:Trans 645-50 O '43
Relaying lines added for Big Inch pumps. H. A. P. Langstaff. diags Elec W 120:1032+ S 18 '43
Rural system protection; abstracts of four papers. Elec R (Lond) 132:651-2 My 14 '43; Discussion. Electrician 130:523-5 My 21 '43
Switch and fuses replace circuit breaker on 60-kv. subs. C. E. Baugh. il Elec West 91:47-8 Ag '43

ELECTRIC lines—Protection—Continued

Switching overvoltage hazard eliminated in high-voltage oil circuit breakers. L. F. Hunt, E. W. Boehne and H. A. Peterson. bibliog *il diags Elec Eng* 62:Trans 98-106 F '43

Tubes lightning-proof existing 13.8-kv. line. *diags Elec W* 119:325-6 Ja 23 '43

River crossing

Low-pressure, gas-filled cables go on 34.5-kv. duty; Indiana service corporation. S. W. Winje and M. F. Schonefeld. *il diags Elec W* 120:1158-60 O 2 '43

96-ft. wood towers for channel crossing. *il diags Elec W* 119:637 F 20 '43

Parallel conductors at river crossing. *Elec W* 120:844 S 4 '43

Safety measures

Placement of danger signs and numbering on transmission towers; diagrams. *Elec W* 120:348 S 4 '43

Poster warns kids to fly kites safely. *il Elec W* 120:512 Ag 7 '43

Replace 33-kv. fuses from safety rack. B. J. Hungate. *il Elec W* 120:324 JI 24 '43

System procedures for hot line work. *il Elec W* 118:1802 N 28 '42

Sleet problem

Electrical heating of overhead conductors. C. P. Nachod. *Elec Eng* 61:637 D '42

Sleet effects given engineering study. *Elec W* 119:1802-3 My 29 '43

Tables, calculations, etc.

Abnormal overvoltages caused by transformer magnetizing currents in long transmission lines. H. A. Peterson and T. W. Schroeder. bibliog *diags Elec Eng* 62:Trans 32-40 Ja '43

Ampere load limits for copper in overhead lines. A. H. Kidder and C. B. Woodward. *Elec Eng* 62:Trans 148-52 Mr '43

Current-carrying capacity of overhead conductors. H. A. Enos. *Elec W* 119:1612-14 My 15 '43

Data and instructions on use of galvanized iron wire as line conductor material. *Elec W* 118:1637 N 14 '42

Equivalent spans; simplified method of calculation. E. C. Neate. *Elec R (Lond)* 133:18 JI 2 '43

How to determine single-phase secondary drop, copper and ACSR; chart. F. C. Rand. *Elec W* 118:847 Ag 22 '42; Correction. 119:1330 Ap 17 '43

How to determine three-phase secondary drop, copper and ACSR; chart. F. C. Rand. *Elec W* 118:1642 N 14 '42; Correction. 119:1330 Ap 17 '43

60-cycle universal transmission line chart for hard-drawn stranded copper conductors. J. M. Shepley and C. B. Walton. *Elec W* 119:472-3, 638 F 6-20 '43

Skin effect in bimetallic conductors; copper-covered steel conductor. B. R. Teare, Jr. and J. R. Webb. bibliog *il diags Elec Eng* 62:Trans 297-302 Je '43

Steady-state and transient-stability analysis of series capacitors in long transmission lines. J. W. Butler, J. E. Paul and T. W. Schroeder. bibliog *diags Elec Eng* 62:Trans 58-65 F '43

Treatment and stubbing extend pole life; tables, slide rule and nomogram assist inspection forces. J. G. Charest. *il Elec W* 120:243-50 JI 24 '43

Voltage drop for conductors carrying currents of maximum code rating; table. E. S. Oberndorf. *Elec W* 120:328 JI 24 '43

Testing

Line voltage in Middle West and South; use of recording voltmeter. C. H. Humes. *Electronics* 16:204+ N '43

Staged-fault tests on 154-kv. line. *il Elec W* News ed 118:1708 N 21 '42

Tree problem

Civilian aid sought to protect lines. *Elec W* 120:864 S 4 '43

How one company co-operates in eradication of Dutch elm disease. *Elec W* 119:626 F 20 '43

Installation, splicing of aerial-messenger cable. A. C. Fort and J. W. Carver. *il Elec W* 120:454-6 Ag 7 '43

Porcelain insulators for tree service. *diags Elec W* 119:2139 Je 26 '43

Underground lines

How to connect composition conduits for underground service; diagrams. I. C. Dietze. *Elec W* 120:114 JI 10 '43

How to record underground system facilities; diagrams. S. A. Olson. *Elec W* 118:2132 D 26 '42

One of four cables is three-phase spare; insuring continuity of supply of transmission lines laid underground. P. L. Dellis. *diag Elec W* 120:856 S 4 '43

California

Shasta line to go ahead despite Congress defeat. *Elec W* News ed 120:182 JI 17 '43

Western states

Power goes to war. *il Elec West* 90:54-71 F '43

ELECTRIC lines, Cooperative. See **Electric service, Rural—Cooperative lines**

ELECTRIC locomotives

Electrifying the railways. G. O. McLean. *il Elec R (Lond)* 132:103-6 Ja 22 '43

Factors involved in the selection of railroad motive power; with cost data. H. C. Wilcox and A. G. Oehler. *Elec Eng* 62:Trans 235-40 My '43; Same abr. *il Ry Age* 114:716-19 Ap 10 '43; Discussion. *Ry Age* 114:786-91 Ap 17 '43

Five more electric locomotives added to New Haven fleet. *il Ry Age* 115:654-6 O 23 '43

Keep them rolling; maintenance of electric equipment. J. W. Teker. *Elec Eng* 62:Trans 107-12 Mr '43; Same cond. *Ry Mech Eng* 117:94-7 F '43

New Haven receives five more a.c. electric locomotives. T. F. Perkins and R. Walsh. *il Ry Mech Eng* 117:449-52 O '43

Some main-line electric locomotive problems. G. R. Higgs. *Inst E E J* 89 pt 1: 471-2 O '42

See also

Locomotives, Diesel-electric

ELECTRIC locomotives, Industrial

Electric loco' in industry. *il Electrician* 130: 262-3 Mr 12 '43

English electric company industrial electric locomotives. *il Engineering* 154:387-8 N 13 '42

Industrial electric locomotives. *Engineering* 155:86 Ja 29 '43

ELECTRIC locomotives, Storage battery

Swiss battery locomotives. *il Electrician* 129: 616 D 4 '42

ELECTRIC logging. See **Petroleum—Well logging**

ELECTRIC losses

Absolute measurement of the energy loss in a single strip of sheet iron or steel under alternating magnetization. W. E. Shenk. bibliog *il diags Am Soc T M Proc* 42:595-618; Discussion. 619-21 '42

Eddy-current losses in single-conductor paper-insulated lead-covered unarmoured cables of a single-phase system. A. H. M. Arnold. *Inst E E J* 89 pt 2:636-45 D '42

Intrasystem transmission losses. E. E. George. *Elec Eng* 62:Trans 153-8 Mr '43

ELECTRIC machinery

Electrical engineering in 1942. *il Engineer* 175:19-20, 37-40, 57-9, 76-7 Ja 1-22 '43

Electrical power equipment loads aircraft engines under test. R. H. Wright. *il diags Power* 87:604-6 S '43

Regenerative engine testing. *il Elec R (Lond)* 132:35-9 Ja 8 '43

See also

Computators
Electric apparatus and appliances
Electric converters, Synchronous
Electric driving
Electric engineering
Electric generators
Electric locomotives
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Electric plants
Electric protective apparatus
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 Pumping machinery, Ship propulsion,
 Electric Electric
 Refrigerators, Elec- Voltage regulators
 tric Control

Automatic welding-machine starter and its relation to maximum utilization of power and facilities; with cost data. N. E. Porter. *Elec Eng* 62:Trans 728-30 N '43

Cooling

Forced air cooling, large turbo-exciter. E. H. Myers. *diag Elec W* 118:1972-3 D 12 '42

Design

Common error in the distribution factor of electric machines. R. Andriessen. *Elec Eng* 62:68-72 F '43

Development of technical literature. L. H. A. Carr. *Inst E E J* 90 pt 1:63-6 F '43

Efficiency; progress in design to improve it. C. A. Powel. *Elec W* 119:1116-17 Ap 3 '43

Drying

If fire or flood damages electrical equipment. W. W. McCullough. *il Factory Management* 101:125-7 My '43

Failures

Accidents to electrical equipment; cause and effect. J. B. Swering. *il Locomotive* 44:195-201 JI '43

Few examples of accidents to electrical equipment. *Locomotive* 44:208-9 JI '43

Not all accidents can be prevented. *Locomotive* 44:143-4 Ja '43

Noise

Distribution factors and pitch factors of the harmonics of a fractional-slot winding. M. M. Liwischitz. *Elec Eng* 62:Trans 664-6 O '43

Protection

Lightning protection of switchgear, unit substations, or a-c rotating machines closely connected to overhead lines. W. J. Rudge, Jr., V. L. Cox and E. M. Hunter. *il diags Gen Elec R* 46:551-6 O '43

Standards

American standard rotating machinery, approved March 29, 1943. 78p pa \$1.25 American standards assn, 29 West 39th st, New York 18 '43

Revised standard is completed for rotating electrical machinery. E. B. Paxton. *il Ind Stand* 14:183-5 Je '43

Rotating electrical machinery standard is revised. *Edison Elec Inst Bul* 11:264 S '43

Tables, calculations, etc.

Steady-state and hunting equivalent circuits of long-distance transmission systems. G. Kron. *diags Gen Elec R* 46:337-42 Je '43

Temperature

Overloading electric apparatus as a war measure; abstract. R. Treat. *Power PI Eng* 47:90 My '43

Windings

Common error in the distribution factor of electric machines. R. Andriessen. *Elec Eng* 62:68-72 F '43

Distribution factors and pitch factors of the harmonics of a fractional-slot winding. M. M. Liwischitz. *Elec Eng* 62:Trans 664-6 O '43

Insulation testing of electric windings. C. M. Foust and N. Rohats. *bibliog il diag Elec Eng* 62:Trans 203-6 Ap '43

New armature winding diagram. W. T. Taylor. *diags Power PI Eng* 47:78-81 Ap; 72-5 Je; 56-9 JI; 70-4+ Ag; 74-7 N '43

ELECTRIC measurements

Analysis of certain circuits in cathodic protection. G. N. Scott. *il diags Am Pet Inst Proc* 23(4):36-48 '42

Bridge controlled relay circuit. H. L. Andrews. *diag R Sci Instr* 14:276 S '43

Capacitance bridge for determining the ratio and phase angle of potential transformers. H. W. Bousman and R. L. Ten Broeck. *bibliog il diags Elec Eng* 62:Trans 541-5 Ag '43

Cathode-ray oscillograph applied to long-time switching transients. G. W. Dunlap and N. Rohats. *il diags Elec Eng* 62:Trans 231-4 My '43

Current density related to current distribution. H. Gear. *Pet Eng (Ref annual)* 14:182, 184-5, 187-8 JI 1 '43

Determination of the current required for cathodic protection. K. H. Logan and others. *bibliog il diags Pet Eng (Ref annual)* 14:168+ JI 1 '43

Direct-current amplifier and its application to industrial measurements and control. D. C. Gall. *il diags Inst E E J* 89 pt 2:434-43; Discussion, 443-6 O '42; Abstract. *Electrician* 128:249-51 Mr 20 '42

Dosimetry and local distribution of energy in the electric high frequency field. K. S. Lion. *il diags J Ap Phys* 14:545-51 O '43

Electrical circuit analysis of torsional oscillations. L. A. Pipes. *bibliog diags J Ap Phys* 14:352-62 JI '43

Electrical developments of 1942; meters and instruments. G. Bartlett. *il diags Gen Elec R* 46:47-50 Ja '43

Errors can be small in expedient metering; Metering error with C.T. on high side. W. A. Morgan. *diags Elec W* 120:1372, 1376 O 16 '43

Frequency variations; a chart recording instrument. *il Elec R (Lond)* 132:415-16 Mr 26 '43

Impedance bridge with d-c galvanometer. E. Mittelmann. *bibliog Instruments* 16:189 Ap '43

Measurements on impulse voltages with a ballistic galvanometer. G. W. Bowdler. *il diags Inst E E J* 89 pt 2:555-60; Discussion, 561-4 D '42

Measurements pertaining to the co-ordination of radio reception with power apparatus and systems. C. M. Foust and C. W. Frick. *bibliog diags Elec Eng* 62:Trans 284-91 Je '43

Metering power on the low-voltage side. A. J. Petzinger and E. E. Lenehan. *bibliog diags Elec Eng* 62:Trans 159-63 Ap '43

Method for measuring small electric charges. E. M. Showers. *bibliog diags R Sci Instr* 14:35-7 F '43

Power factor; dielectric power-factor measurements; improved methods and equipment. H. W. Bousman. *il Gen Elec R* 45: 625-7 N '42

Resistance measurements. G. W. Stubbings. *Electrician* 131:154-5 Ag 13 '43

Resistance study on a conduit-return system; wiring system at the University of Wisconsin. E. Bennett and R. Schuette. *Elec W* 119:939-40 Mr 20 '43

Simple method for checking motor load with volt-ammeter. J. A. Setter. *Elec W* 119: 802-3 Mr 6 '43

Standards of electrical measurement. L. Hartshorn. *bibliog Inst E E J* 89 pt 1:526-35 D '42

Versatile oil-testing cell of novel design. T. Hazen. *il diag R Sci Instr* 14:141-3 My '43

See also

Dielectric constants

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Electric instruments

Electric meters

Electric resistance

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Radio measurements

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urement uses

Voltmeters

Watt hour meters

Wattmeters

ELECTRIC metal makers guild

Annual meeting, 11th, Canton, Ohio, June 4-5. *Steel* 112:92 Je 14 '43

ELECTRIC meters

Electrical developments of 1942; meters and instruments. G. Bartlett. *il diags Gen Elec R* 46:47-50 Ja '43

How to connect controls, meters and relays for parallel 220-kv. transmission lines; diagram. *Elec W* 118:1980 D 12 '42

Insulation-resistance meter; electronic instrument. R. N. Bushman. *il diag Gen Elec R* 46:403-5 JI '43

ELECTRIC meters—Continued

Measurements section; chairman's address. E. H. Miller, *Inst E E J* 90 pt 1:43-6 Ja '43; Abstracts, *Electrician* 129:481-2 O 30 '42; *Elec R (Lond)* 131:554 O 30 '42
 Meter conversion saves town \$1400. *diags Diesel Power* 21:712+ Ag '43
 Meter substitutes. R. F. Turner. *il diags Radio N* 30:38-9+ O '43

Metering interchange and supply facilities; service to war production plant. H. M. Johnson. *diag Elec W* 119:1609-11 My 15 '43
 Metropolitan-Vickers outdoor metering equipment. *il Elec R (Lond)* 132:518 Ap 16 '43
 Minimum of graphic equipment yields maximum of data; graphic meters supplemented by transfer switches in load and voltage surveys; Indianapolis power & light company. G. H. Kelsay. *diags Elec W* 119:750-2 Mr 6 '43

Rural electrification; equipment designed for outdoor metering. *il Electrician* 130:341-2 Ap 2 '43

Switching scheme for off-peak meters. *diags Elec W* 119:307 Ja 23 '43

Temperature compensation of instruments with negative coefficient resistors; use of semi-conducting materials as series neutralizers. J. R. Pattee. *bibliog il Electronics* 16:102-5+ Ag '43

Transmission line voltage indication. L. F. Hunt. *diag Elec W* 119:2142 Je 26 '43

Two-rate meter for off-peak loads. P. MacGahan. *il Elec W* 118:2126 D 26 '42

See also

Ammeters	Frequency meters
Demand meters	Milliammeters
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	Wattmeters

Bearings

Restoring meter jewels to service. H. C. Rankin. *Elec W* 119:390+ Mr 20 '43

Installation

How to check a meter installation. *Elec W* 119:304 Ja 23 '43

Metering power on the low-voltage side. A. J. Petzinger and B. E. Lenehan. *bibliog diags Elec Eng* 62:Trans 159-63 Ap '43

Primary metering pre-assembled. *diag Elec W* 119:314 Ja 23 '43

Wood panel serves for wartime metering. E. E. Kline. *il Elec W* 119:796 Mr 6 '43

Prepayment meters

Psychology of pre-payment meters. *Electrician* 130:615-16 Je 18 '43

Protection

Protecting meters with fuses. *Electronics* 16:188+ J1 '43

Repair

Rewind meter coils with Formex wire. *Elec W* 119:605 F 20 '43

Standards

Meter certification; Electricity commissioners' instructions. *Electrician* 131:41 J1 '43

Meter standardisation. C. W. Bridgen. *Elec R (Lond)* 132:414 Mr 26 '43; Discussion. *Electrician* 130:325-7 Mr 26 '43

War time revision of code for electricity meters. Franklin *Inst J* 235:179-80 F '43

Testing

Board tests single- and polyphase meters. C. Iatonna. *diags Elec W* 119:1957 Je 12 '43

Clicks make register checking easier. *Elec W* 119:102 Ja 9 '43

Electronic load regulator for meter testing. B. E. Lenehan. *il diag Electronics* 16:116-17+ J1 '43

Meter testing in Argentina; new Buenos Aires building. *il Elec R (Lond)* 133:207-8 Ag 13 '43

Multipurpose forms for routine tests. H. F. Wagner. *il Elec W* 119:1980 Je 12 '43

Photo-electric test table facilitates meter checking. T. Oakley. *il diags Elec W* 118:2102-3 D 26 '42

Resistor used with rotating standards. *Elec W* 119:630 F 20 '43

Shock tester for meters. *il Electronics* 16:184+ N '43

War revision of meter code. F. B. Silsbee. *Ind Stand* 13:314 D '42

ELECTRIC mine hoisting. See Mine hoisting, Electric

ELECTRIC moment

Dipole moment of *ms*-tetraphenylporphine. W. D. Kumler. *bibliog Am Chem Soc J* 64:2993-4 D '42

Dipole theory and the characteristics of organic insulators. T. F. Wall. *Engineering* 156:81-3 J1 30 '43

Electric moments of ortho-substituted phenols and anisoles; halogen derivatives. W. F. Anzilotti and B. C. Curran. *bibliog Am Chem Soc J* 65:607-11 Ap '43

Electric moments of some substituted benzoic acids; the moments of *o*-, *m*- and *p*-fluorobenzoic acids, and of *o*-chloro and *o*-bromobenzoic acids. M. E. Hobbs and A. J. Weith, Jr. *bibliog Am Chem Soc J* 65:967-71 My '43

Hyperconjugation in methyl butadienes as shown by dipole moments. N. B. Hannay and C. P. Smyth. *Am Chem Soc J* 65:1931-4 O '43

Molar polarizations in extremely dilute solutions. R. Davis, H. S. Bridge and W. J. Svirbely. *bibliog Am Chem Soc J* 65:857-62 My '43

Solvent polarization error and its elimination in calculating dipole moments. I. F. Halverstadt and W. D. Kumler. *bibliog Am Chem Soc J* 64:2988-92 D '42

Structural effects of unsaturation and hyperconjugation in aldehydes, nitriles and chlorides as shown by their dipole moments in the vapor state. E. C. Hurdis and C. P. Smyth. *bibliog Am Chem Soc J* 65:83-96 Ja '43

ELECTRIC motor generators

Induction motor-generator finds many uses in refineries. W. H. Stueve. *il Oil & Gas J* 41:87-8 Ap 8 '43

Why use rectifiers for plating? L. W. Reinken. *il Metals & Alloys* 17:533-5 Mr '43

See also

Dynamotors

ELECTRIC motors

Adapting series motors to special jobs. R. F. Emerson. *il diags Factory Management* 101:142-4 S '43

Application of electricity in mine pumping. G. B. Alvey and N. Tetlow. *il Inst E E J* 90 pt 2:145-54; Discussion. 155-7 Je '43

Electric motors for the War emergency pipe line. W. G. Taylor. *il Oil & Gas J* 41:74, 77 Ja 7 '43

Electrical developments of 1942; motors. G. Bartlett. *il Gen Elec R* 46:20-2 Ja '43

Make copper work harder; select motors for maximum load, wiring distribution for maximum use, make controllers take more. L. F. Adams. *Elec West* 89:62-4 N '42

Make every horsepower work harder now. K. R. Collins. *Elec West* 91:59-60 O '43

Motor application check chart; data sheet. Power 87:63 Ja '43

Motors and controls; one-year summary. *il Factory Management* 101:129 Je '43

New equipment. *il Iron Age* 152:73-4 S 16 '43

Pipe-line problems from the electrical viewpoint. W. G. Taylor. *il Pet Eng* 14:41+ Je '43

Power shortcuts to meet wartime production goals; cooling transformers and motors; unusual transformer connections; off-standard transformers and motors. *il diags Coal Age* 48:64-5 S '43

Progress in engineering knowledge during 1942; industrial motors and control. P. L. Alger and J. Stokely. *diag Gen Elec R* 46:122-4 bibliog(p136) F '43

Selecting motors and controls for wartime conditions. *Machine Design* 15:161-3 Ap '43

Vibration testing; vibration meters and motors. R. O. Fehr. *il Gen Elec R* 45:695-9 D '42

ELECTRIC motors—Continued.

Work your motors harder, to save critical materials; recommended loading. R. W. Monroe. *Factory Management* 101:134-6 J '43

See also

Armatures	Electric trans-
Commutators	formers
Electric driving	Electricity in mining
Electric locomotives	Gearmotors
Electric machinery	Pumping machinery,
	Electric

Bearings

How to check motor air gaps for bearing wear. O. V. Anderson. *diags Elec West* 90:100 Je '43

How to remove anti-friction bearings; illustrated instructions. *Power* 87:54-5 Ja '43

Keep it clean! dirt and other things to watch when installing motor bearings. *diags Roads & Sts* 85:80, 82-4 Ag '43

Unfreezing bearings of register motors. *diag Elec W* 118:1806 N 28 '42

Care

Electric motor care is essential during war-times. Brick & Clay *Rec* 101:42 N; 40 D '42; 102:38 F; 44 Mr '43

Farm students learn to care for motors. H. G. Walt. *il Elec W* 120:130 JI 10 '43

15 electric motor maintenance hints. Bankers *Mo* 60:130 Mr '43

Guard industry's muscles. *Safety Eng* 85:38 My '43

How to get the most out of electric motors. *il Factory Management* 101:129-36 Mr '43

How to make electrical motors and controls last throughout the war. *il Inland Ptr* 111:37-41 Je '43

How to select, install and maintain electric motors. O. F. Vea. *il Gen Elec R* 45:335-42 Je '42; Same. *Min Cong J* 29:24-9 Mr '43; Same abr. *Rock Prod* 46:80, 82 Mr; 74+ Je '43; Same cond. *Power Pl Eng* 47:74-8 D '43

Keep your motors running by preventive maintenance. J. Z. Linsensmeyer and W. W. McCullough. *il Textile World* 93:64-71 Ag '43

Maintaining electric motors and generators. E. H. Lamberger and W. W. McCullough. *il Pet Eng* 14:190+ My; 82+ Je '43

Maintenance guide for electric motors. *Elec W* 119:1653 My 15 '43

Maintenance hints on your motors and generators. *Roads & Sts* 86:79-80 JI '43

Maintenance kinks prolong motor life. E. Sterrett. *il diags Pet Refiner* 22:87-92 F '43

Maintenance of electric motors. M. K. Bliss. *Elec West* 90:65 My '43

Motor is smoking. H. B. Phillips. *Power Pl Eng* 47:67+ Ja '43

Motor maintenance. *Power* 87:74b-74c Ja '43

Motor maintenance prevents breakdowns. W. R. Harris and W. W. McCullough. *il Paper Ind* 25:263-73 Je '43

Neglected motors lead to breakdowns and fire; Safety research institute commandments. *Weekly Underw* 147:1422+ D 19 '42; Same. *Steel* 112:131 F 1 '43; Same. *Nat Safety N* 47:29 Ap '43; Same. *Pub Works* 74:37 Ag '43

Operation and maintenance of motors in cement manufacture. P. McShane and W. W. McCullough. *il Concrete (mill sec)* 51:166-9+ My '43

Preventive maintenance keeps refrigeration motors running. B. M. Brown and W. W. McCullough. *il Refrig Eng* 45:313-22+ My '43; Same cond. *Heating-Piping* 15:505-9 O '43

Preventive maintenance of motors. J. T. Pringle and W. W. McCullough. *il Ry Mech Eng* 117:228-32 My '43

Production insured by proper maintenance of mine motors. P. McShane and W. W. McCullough. *il diags Coal Age* 48:66-72 Je '43

Take care of your electric motors, they're hard to replace. W. B. Dauberman and W. W. McCullough. *il Brick & Clay Rec* 102:14-16 Je '43

Take good care of electric motors. *il Mech Handling* 30:398-403 S '43

Trouble shooting with motors. G. L. Abell. *Eng & Min J* 144:81-3 Je '43

Cleaning

Care of splashproof motors installed outdoors. W. G. Taylor. *il Pet Eng* 14:67-8, 70 D '42

Control

Features of adjustable-speed electric drives to meet the requirements of the paper industry. R. R. Baker. *il diags Paper Tr J* 116:26-32 Mr 25 '43; Same cond. *Paper Ind* 25:80-2+ Ap '43

Liquid rheostat for continuous control; centrifugal pump and draft fan motors. G. R. Shaw. *diag Elec W* 119:788+ Mr 6 '43

Motor controls need short-circuit protection. R. M. Eichner. *il diag Factory Management* 101:135-8 Je '43

Motors and controls; one-year summary. *il Factory Management* 101:129 Je '43

Sequence control of motors. E. R. Bonds. *diags Elec W* 120:110 JI 10 '43

Simple control saves new line investment; current pulsation of two motors cause light flicker. R. M. Ryan. *Elec W* 119:465 F 6 '43

Simplified explosion-proof control; motor used in a grain elevator. *plan Ry Mech Eng* 117:432 S '43

Synchronizing wound-rotor motors. A. F. Metzger. *Elec W* 119:1798, 1986, 2152+ My 29-Je 26 '43

What the ampidyne has contributed to reversing mill drives. C. B. Huston. *il diags Blast F & Steel Pl* 31:654-8 Je '43

See also

Electric motors, Alternating current—Control	Electric motors, Induction—Control
Electric motors, Direct current—Control	Electric motors, Synchronous—Control

Design

Redesign of parts to conserve materials, machines and manpower; Fractional horsepower motor section, General electric company. J. H. Staak. *il Product Eng* 14:561-4 S '43

Drying

Near infra-red speeds drying of wet motors. *il Marine Eng* 48:131 Ja '43

Submerged salvaged; salt encrusted dredge motors dried out by infrared lamps. *il Elec West* 90:45 Ja '43

Fractional horsepower

New single-pole service restorer; application of Vibratorque motor. E. E. Tugby. *diags Elec Eng* 61:Trans 889-92 D '42

Proper oil quantity for register motors. *il Elec W* 119:622 F 20 '43

Redesign of parts to conserve materials, machines and manpower; Fractional horsepower motor section, General electric company. J. H. Staak. *il Product Eng* 14:561-4 S '43

Where shaded-pole motors fit. J. W. Greve. *il diag Machine Design* 14:79-81 N '42

Installation

100 rules for installing large motors. H. E. Keneipp. *il diags Power* 87:681-2+ O '43

Lubrication

Keep them rolling; maintenance of electric equipment. J. W. Teker. *Elec Eng* 62:Trans 107-9 Mr '43

Maintenance kinks prolong motor life. E. Sterrett. *il diags Pet Refiner* 22:90-2 F '43

Motor maintenance. O. F. Vea. *il Rock Prod* 46:74+ Je '43

Mounting

Tension control motor bases. F. A. Westbrook. *il Power Pl Eng* 47:72-3 F '43

Protection

Fire precautions with electric motors. *Gas Age* 90:15 D 31 '42

Lightning damage prevented by using proper apparatus. J. A. Civiletti. *diags Coal Age* 47:61-3 N '42

Motor controls need short-circuit protection. R. M. Eichner. *il diag Factory Management* 101:135-8 Je '43

Protective device for small motors; Electromotostat. *Comp Air M* 48:7092 JI '43

ELECTRIC motors—Protection—Continued

Reducing shut-down time for overheated motors; new circuit arrangement on tapping and drilling machine motors. F. J. Johns. *Il diag Mach* 49:156-7 Ja '43
 Selecting short-circuit protection for low-voltage motor circuits. W. G. Taylor. *Il Power Pl Eng* 47:79-81+ O '43

Rating

Analysis of rating methods for intermittent loads. R. E. Hellmund. *bibliog Elec Eng* 62:Trans 4-7 Ja '43
 Motor economies; avoiding too-liberal margins. Elec R (Lond) 133:234 Ag 20 '43
 Motor overload capacities should be utilized. C. P. Bernhart. *Elec W* 119:61-3 Ja 9 '43

Repair

How to repair water-damaged electrical apparatus. H. J. Chase. *Il Marine Eng* 48:226, 228+ S '43
 Maintenance of electric lamps and motors; Chem & Met report. *Il diag Chem & Met Eng* 50:117-24 Mr '43
 Motor shaft trued by spray metallizing. *diag Elec W* 118:1810+ N 28 '42
 Rewinding armatures; repairing universal motors for small machine tools. R. Newing. *diags Elec R (Lond)* 132:548-50 Ap 23 '43
 Shop motor maintenance. E. A. Palmer and W. W. McCullough. *Il Mass Transportation* 39:151-5 Ap '43

Schräge motor

See Electric motors, Induction

Standards

Dimensional standardisation of electric motors. H. Marryat. *Engineering* 155:432 My 28 '43
 Motor dimensions; advantages of standardisation. H. Marryat. *Elec R (Lond)* 132:650 My 14 '43; Discussion. *Electrician* 130:517-18 My 21 '43; *Elec R (Lond)* 132:685-6 My 21 '43

Starting

Defective motor starting; some causes of failures. *diags Elec R (Lond)* 133:199-201 Ag 13 '43
 Grading starter resistances. G. F. Freeman. *Electrician* 131:229-30 S 3 '43
 Line reactance for motor starting. E. R. Bonds. *Elec W* 119:1302 My 29 '43
 Locating starter troubles. L. E. Markle. *diags Factory Management* 101:155-7 O '43

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Electric motors, Induction—Starting

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Temperature

Motor is smoking. H. B. Phillips. *Power Pl Eng* 47:87+ Ja '43
 Motor overload capacities should be utilized. C. P. Bernhart. *Elec W* 119:61-3 Ja 9 '43
 60-cycle motors on 50-cycle circuits. J. W. Holt. *Gen Elec R* 46:513-14 S '43

Testing

Production testing; cathode-ray tubes and light-beam galvanometers to test electrical products. C. M. Summers. *Il diags Gen Elec R* 45:701-3 D '42

Vibration

Test stand permits checking motor vibration to close limits. *Il Sci Am* 169:220 N '43

Windings

How to remove armature or stator coils; illustrated instructions. *Power* 87:631 S '43

ELECTRIC motors, Alternating current

New type of adjustable-speed drive for a-c systems. A. G. Conrad. S. T. Smith and P. F. Ordnung. *diags Elec Eng* 62:Trans 7-10, 522-5 Ja, Ag '43
 Reversing electric motors. *diags Electrician* 131:280-2 S 17 '43
 60-cycle motors on 50-cycle circuits. J. W. Holt. *Gen Elec R* 46:513-14 S '43

Variable speed a.c. motors. *diags Electrician* 130:289-92 Mr 19 '43

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Electric motors, Induction Electric motors, Synchronous

Control

Speed control of a-c motors with thyristons. *Il, diag Electronics* 16:314 Je '43

Tables, calculations, etc.

Commutation in a-c motors. A. F. Puchstein. *diag Elec Eng* 62:325-6 Jl '43

ELECTRIC motors, Direct current

Direct-current rigs for deep-drilling operations. R. A. J. Dawson. *Pet Eng* 15:168, 170, 172 O '43
 General Electric direct-current vertical motors. *Il Mach* 49:214+ Ag '43

Control

Electronic control of d-c motors. E. E. Moyer. *Il diags Electronics* 16:98-103+ My; 118-25 Je; 118-22 Jl; 133-8+ S; 128-33+ O '43

Electronic motor control has excellent characteristics for new machine-tool drive. S. D. Fendley. *Il diags Steel* 112:100, 103-4+ My 24 '43

Electronic tubes power adjustable-speed drives. *Il diag Power* 87:462-3 Jl '43

Industrial control: dynamic braking of a d-c shunt motor and load. G. F. Leland and L. T. Rader. *diag Elec Eng* 62:Trans 472-6 Jl '43

Motor control; regulates speed through use of electronic tubes; Mot-O-Trol. *Sci Am* 169:82-3 Ag '43

Motors do a better job; by means of electron tubes, direct-current motors can be operated from alternating-current power lines. *diag Sci Am* 169:166-8 O '43

New electronic variable-speed drive; Thymotrol. S. D. Fendley. *Il diags Power Pl Eng* 47:64-8 F '43; Same. *Paper Tr J* 116:33-7 F 11 '43; Same. *Gen Elec R* 45:225-30 Ap '43; Same cond. *Iron Age* 151:58-61 Mr 13 '43; Same cond. *Radio N* 29:11-13+ My '43; Excerpts. *Concrete (mill sec)* 51:139-40 Mr '43; *Power* 87:178-9+ Mr '43; *Automotive & Aviation Ind* 88:32-3+ Mr 1 '43; Abstract. *Electronics* 16:138-9+ Mr '43

Speed control assumes added weight under wartime impetus. *Il diags Rayon* 24:149-51 Mr '43

Thyatron motor control. E. E. Moyer and H. L. Palmer. *diags Elec Eng* 62:Trans 706-12 N '43

Variable speed drive; Westinghouse Mot-O-Trol. *Il diag R Sci Instr* 14:189 Je '43

Wide motor speed range with alternating-current supply; Mot-O-Trol. T. R. Lawson. *Il diags Steel* 112:106, 108+ Je 21 '43; Same abr. *Concrete (mill sec)* 51:182-3 Je '43; Same abr. *Rayon* 24:311-13 Je '43; Excerpts. *Elec W* 119:1638+ My 15 '43; *Iron Age* 151:55, 56 Ap 15 '43

ELECTRIC motors, Induction

Arc-welded housing for open-type induction motors; with cost data. C. W. Gladson. *diags Oil & Gas J* 42:56 S 16 '43

Better maintenance for large synchronous and induction motors. H. E. Keneipp. *Il Power* 87:743-5+ N '43

Capacitor effects; generator action in motors. V. Mayer. *diags Elec R (Lond)* 133:479-81 O 8 '43

Critical-material conservation in induction-motor manufacture. H. M. Hobart. *Elec Eng* 62:Trans 549-52 Ag '43

Determining exact horsepower needed for a particular job may reveal important possible savings. J. A. Setter. *Il Steel* 112:84+ F 22 '43; Same. *Concrete (mill sec)* 51:104+ Ja '43; Same. *Power* 86:925b+ D '42; Same. *Gen Elec R* 46:183-4 Mr '43; Same. *Rock Prod* 46:44-5 Mr '43; Same. *Elec West* 90:81 Ap '43; Same. *Min Cong J* 29:41 Ap '43; Same abr. *Elec W* 119:802-3 Mr 6 '43; Same abr. *Textile World* 33:115-17 E '43; Same abr. *Eng & Min J* 144:92 Ag '43

Effect of voltage variation; motors, incandescent lamps and fluorescent tubes; data sheet. *Power* 87:279 Ap '43

ELECTRIC motors, Induction—Continued

Electric motor selection and servicing recommendations. J. A. Setter. *il Rayon* 24: 42-4 Ja '43

Installing power factor condensers. *diag Engineer* 174:462-3 D 4 '42

Mine hoist motor serves as generator and brake. *il Rock Prod* 46:30 F '43

Needs 180-cycle power supply; induction motor as frequency changer. *diag Power* 87:694-6 O '43

Schrage motor. O. E. Mainer. *diags Elec R (Lond)* 133:77-9 J 16 '43

What squirrel-cage motor? WBP's general conservation order L-221. R. S. Bennett and E. H. Fredrick. *il Factory Management* 101:137-40 My '43

Where shaded-pole motors fit. J. W. Greve. *il diag Machine Design* 14:79-81 N '42

Control

Theory of cascading of induction motors mechanically coupled to a.c. commutator motors. W. B. Coulthard. *bibliog diags Franklin Inst J* 236:167-90 Ag '43

Starting

Cushion starters on woolen cards; Peerless woolen mills. *il diags Textile World* 92:97-8 D '42

Pipe-line problems from the electrical viewpoint. W. G. Taylor. *il Pet Eng* 14:46+ Je '43

Single-phase motors; various methods of starting. S. F. Philpott. *il diags Elec R (Lond)* 132:41-4 Ja 3 '43

Tables, calculations, etc.

Calculation of unbalanced magnetic pull in synchronous and induction motors. R. C. Robinson. *diag Elec Eng* 62:Trans 620-4 O '43

Performance calculations on tapped-winding capacitor motors. P. H. Trickey. *bibliog diags Elec Eng* 62:Trans 1-3 Ja '43

Testing

Slip measurement. C. G. Crampton. *diag Elec R (Lond)* 131:549-50 O 30 '42

Windings

Poor starting torque developed by the squirrel-cage motor due to phase difference caused by inductance of rotor winding. *diag Electrician* 130:399-400 Ap 16 '43

ELECTRIC motors, Railway

Adequate electrical maintenance essential to transportation. W. J. Clardy. *il Elec Eng* 62:Trans 517-21 Ag '43

Advantages of high-speed traction motors. C. A. Atwell. *il Elec Eng* 62:Trans 508-10 J 1 '43

Maintenance of traction motor commutators. B. J. Barva. *il diag Mass Transportation* 39:117-19 Mr '43

Maintenance tips on electric traction equipment. J. C. Thirlwall. *il Mass Transportation* 39:73-5 F '43

Preventive maintenance of motors. J. T. Pringle and W. W. McCullough. *il Ry Mech Eng* 117:228-32 My '43

Shop motor maintenance. E. A. Palmer and W. W. McCullough. *il Mass Transportation* 39:151-5 Ap '43

See also

Electric locomotives

Lubrication

Lubrication fundamentals for traction motors. J. W. Teker. *il diag Mass Transportation* 39:213-15 Je '43; Same. *Diesel Power* 21:703-5 Ag '43

Standards

New requirements for railway rotating machinery. F. B. Powers. *il Ind Stand* 14: 112-14 Ap '43

ELECTRIC motors, Synchronous

Better maintenance for large synchronous and induction motors. H. E. Keneipp. *il Power* 87:743-5+ N '43

Import on application and operation of out-of-step protection. *bibliog diags Elec Eng* 62:Trans 567-73 S '43

Motor pinch-hits for ac generator. G. M. Hardy. *il diags Power* 87:603+ S '43

Power factor recorders have synchronous clocks. P. MacGahan. *il Elec W* 118:1816 N 28 '42

Three-phase synchronous motors. W. Putz. *Engineering* 156:94-5 J 30 '43

Unique d.c. supply. *il Elec R (Lond)* 131:641-5 N 20 '42

See also

Selsyn apparatus

Control

Matching synchronous motor excitation to a fluctuating load. W. K. Boice, B. H. Caldwell and M. N. Halberg. *il diag Gen Elec R* 46:283-7 My '43

Synchronous motors with controlled excitation for suddenly applied loads. W. K. Boice, B. H. Caldwell and M. N. Halberg. *bibliog il diags Elec Eng* 62:Trans 113-19 Mr '43

Tables, calculations, etc.

Calculation of unbalanced magnetic pull in synchronous and induction motors. R. C. Robinson. *diag Elec Eng* 62:Trans 620-4 O '43

How to determine WR² by running a simple test. L. H. Berkley. *diags Product Eng* 13: 704-6 D '42; Discussion. 14:181-2, 454-5 Mr, J 1 '43

Quadrature synchronous reactance of salient-pole synchronous machines. R. V. Shepherd and C. E. Kilbourne. *bibliog Elec Eng* 62: Trans 684-9 N '43

Synchronous machines; their vector relationships. G. F. Freeman. *diags Elec R (Lond)* 133:13-15 J 1 2 '43

Testing

Electronic circuit for studying hunting. M. J. DeLerno and R. T. Basnett. *il diags Elec Eng* 61:603-6 D '42

ELECTRIC organs in fishes**See also**

Electric eels

ELECTRIC oscillations. See Oscillations, Electric

ELECTRIC ovens

Heating arch ties for a concrete roof; electric ovens utilized in construction of wharf shed at St John harbor. F. E. Sterns. *il diags Civil Eng* 13:253-6 Je '43

ELECTRIC pasteurizers. See Pasteurizers, Electric

ELECTRIC plants

Small power plants join the war effort. C. E. Bennett. *Pub Util* 31:245-6 F 18 '43

See also

Boiler plants	Hydroelectric plants
Electric plants (central stations)	Power factor
Electric power	Power plants
Electric substations	Steam plants

Equipment

Unique d.c. supply. *il Elec R (Lond)* 131:641-5 N 20 '42

Interconnection

Bare-bones design for interconnecting transformer station. *il diags Elec W* 120:810-11 S 4 '43

Bus run avoided by paralleling current transformers. W. K. Holmes. *diag Elec W* 118: 1976 D 12 '42

Capacity released by load swing control; frequency indicator operated by frequency standard received by radio. J. E. McCormack. *diag Elec W* 118:1775-7 N 28 '42

Carrier current can provide more kwh; various applications to transmission line operation. G. S. Lunge. *il Elec West* 90:52-4 My '43

Elevated neutral protects generators. E. A. Crellin. *diag Elec W* 118:1947-8 D 12 '42

Extra register dial shows hourly flow. *Elec W* 120:1186+ O 2 '43

Intrasytem transmission losses. E. E. George. *Elec Eng* 62:Trans 153-8 Mr '43

Load distribution between interconnected power stations. P. G. Kaufmann. *bibliog diags Inst E E J* 90 pt 2:119-30 Ap '43

Load distribution on interconnections. P. G. Kaufmann. *diags Elec W* 120:844 S 4 '43

ELECTRIC plants—Interconnection—Continued

- Load shifts free line for war load. diags Elec W 120:1536 O 30 '43
- Meeting power demand during war. L. Elliott. Mech Eng 64:872-6 D '42
- Meeting Southwest war power demands. F. E. Lewis. Elec West 90:55-6 My '43
- Metering interchange and supply facilities; service to war production plant. H. M. Johnson. diag Elec W 119:1609-11 My 15 '43
- Northeast power pool quickly meets emergency; New England and upper New York systems hold frequency and load when machines at Hell Gate suffer mishap. il Elec W News ed 120:184 J1 17 '43
- Phase shifter regulates figure 8 interconnection; load division on three-utility system in Ohio. L. P. Ferri and H. R. Vaughan. il diags Elec W 120:75-7 J1 10 '43
- Pools for more power. Fortune 28:74+ Ag '43
- Power pool proves stand-by ability; picks up 66,000 kw. for aluminum plant when Ark-La line fails. Elec W 119:76-7 Ja 9 '43
- Power-system interconnection in Quebec. W. R. Way. diags Elec Eng 61:Trans 841-7 D '42
- Progress in engineering knowledge during 1942; power systems. P. L. Alger and J. Stokley. diag Gen Elec R 46:117-18 bibliog (p136) F '43
- Relay protection of tapped transmission lines. M. A. Eostwick and E. L. Harder. diags Elec Eng 62:Trans 645-50 O '43
- Secondary stations; their status and purpose in the grid system; abstracts. R. A. W. Connor. Elec R (Lond) 132:463 Ap 2 '43; Electrician 130:379 Ap 9 '43; Discussion. Elec R (Lond) 132:453-4 Ap 9 '43; Electrician 130:379-87 Ap 9 '43
- Southwest power pool rate hearing opens; electricity furnished the Lake Catherine aluminum plant. Elec W 118:2109-10; 119:288, 460-1 D 26 '42, Ja 23, F 6 '43; Elec W News ed 119:5, 383, 529-30 Ja 2, 30, F 13 '43
- System-voltage programs release capacity margins. diags Elec W 120:1170-2 O 2 '43
- Time sequence relay for system separation. C. L. Betts, jr. diags Elec W 118:2096-7 D 26 '42
- Transformer ties in Sweden's networks. Elec W 119:2002+ Je 12 '43
- Utilities quizzed; Federal power commission tackles southwestern power pool. Business Week p40+ D 19 '42
- See also
- Electricity supply—Great Britain

Industrial plants

- Private generation scheme; electricity as a by-product in meeting factory heating demands. il Elec R (Lond) 131:741-4 D 11 '42
- Utility power yoked to factory plant. il diag Elec W 119:1111-13 Ap 3 '43

Isolated plants vs. purchased power

- Capital costs are real. C. G. Weber. Power Pl Eng 47:102 Mr '43
- Industrial power supply; some arguments in support of private generation; abstracts. T. E. Houghton. Electrician 131:381-2 O 15 '43; Elec R (Lond) 133:508 O 15 '43

ELECTRIC plants (central stations)**See also**

- | | |
|---------------------------------|--------------------------|
| Boiler plants | Electric railroads—Power |
| Electric distribution | Electric service, Rural |
| Electric engineering | Electric transmission |
| Electric lighting | Electric utilities |
| Electric lines | Hydroelectric plants |
| Electric plants—Interconnection | Steam plants |
| Electric plants, Municipal | |

Auxiliaries

- Control for station auxiliary power; South-eastern Indiana power company's plant, Rushville, Ind. L. H. Henley. Elec W 120:1554 O 30 '43
- Rated voltage by taps for auxiliaries. L. H. Henley. diag Elec W 120:1391-2 O 16 '43

Design

- Conservation in power station design; summary of structural, mechanical and electrical design practices. F. H. Hollister. Elec W 120:77-9 J1 10 '43
- Harbor plant designed for economy, quick pick-up; with cost data; Los Angeles bureau of power and light. W. C. Rowse. il diag Elec W 119:54-6 Ja 9 '43
- Mechanical-electrical design of power plants co-ordinated. N. J. Walker and B. E. Hagy. Elec W 119:1615-17 My 15 '43
- Outdoor stations are simpler. R. L. Reynolds. il Power Pl Eng 47:76-7 My '43

Diesel engine stations

- Additional capacity for Hudson, Mass. Diesel plant. P. Ruskin. il Diesel Power 21:399-402 My '43
- Automatic Diesel control; abstract. J. S. Muir. Elec R (Lond) 131:826 D 25 '42
- Comments on use of Diesel engine power by REA-financed systems in the post-war period. F. P. Wood. Diesel Power 20:394+ D '42
- Diesels at Natchitoches. W. H. Gottlieb. il Power Pl Eng 47:58-60+ Ja '43
- Diesels show high economy using low-gravity fuels; Southeastern Indiana power company. G. C. Boyer. il diag Power 87:454-6+ J1 '43
- First year of Diesel operations at Osage, Iowa; with cost data. G. V. Yarger. il Diesel Power 21:597-8 J1 '43
- Free illumination for Main street; Preston, Minn. municipal plant. il Diesel Power 21:117-20 F '43
- McGregor, Iowa, model plant of the Middle West. L. J. Lamprecht. il Diesel Power 21:209-12 Mr '43
- Maintenance on schedule; Minnkota power cooperative at Grand Forks, N.D. A. L. Freeman. Power Pl Eng 47:80-3+ My '43
- Minnkota power cooperative, inc.; new electric generating station near Grand Forks. A. L. Freeman. il plans Power Pl Eng 46:56-60 D '42
- Neighbor to the great tides; Lubec, Maine. A. Michel. il Diesel Power 21:413-14 My '43
- New Diesel generating unit for Hudson, Mass. il diag plan Power Pl Eng 47:60-4 My '43
- New Diesel plant at Rushville, Ind. G. C. Boyer. il Power Pl Eng 47:52-5+ J1 '43
- 9,180 hp. of Diesel engines for Indiana utility. G. C. Boyer. il Diesel Power 21:806-10 S '43
- Operating data, Hominy, Okla. municipal plant. il Diesel Power 21:207-8 Mr '43
- Piston ring experiences at the Denton, Texas, municipal plant. il Diesel Power 21:803-5 S '43
- Rockville Centre, L.I. has new 3000-hp. Diesel. il Diesel Power 20:997-9 D '42
- REA Diesel plant meets problems of war; cooperative plant at Hampton, Iowa. W. H. Gottlieb. il Power Pl Eng 47:80-3 Mr '43

Efficiency

- How to calculate central station heat balance. G. B. Gregg. Power 87:174-7, 211b+ Mr '43

Employees

- Company statements on training of operators. Power Pl Eng 47:74-5+ S '43
- Employee training in the power industry; Philadelphia electric company. N. E. Funk. Power Pl Eng 47:60-3 S '43
- Women in power stations. il Electrician 130:509-10 My 21 '43

Equipment

- American institute of electrical engineers winter meeting; committee reports on power equipment. il Power 87:162-6+ Mr '43
- Averts bottleneck in coal handling; Public service company of Oklahoma. Elec W 120:1550 O 30 '43
- Bunker conveyor control relayed for flexibility; American Gas & Electric station. A. H. Beiler. il diags Elec W 120:254-6 J1 24 '43
- Capacitors improve generator service. il Elec W 118:1804 N 28 '42
- Chlorinated condensing water averts cleaning, saves fuel; Millers Ford station. R. D. Gillespie and L. P. Sudrabin. il Elec W 119:2112-14 Je 26 '43

ELECTRIC plants (central stations)—Equipment—Continued

- D. c. calculating board expanded. R. C. R. Schulze. *il Elec W* 120:1382 O 16 '43
- Electrical engineering in 1942. *il Engineer* 175:19-20, 37-40 Ja 1-8 '43
- Electronic circuits actuate automatic combustion control. K. D. Knoblock. *diags Elec W* 120:1168-70 O 2 '43
- Feeders fused for increased generation. J. C. Smith. *il diag Elec W* 119:1142+ Ap 3 '43
- Frank R. Phillips station simple, flexible, ingenious. F. S. Brown, R. B. Horner and W. H. Jones. *il diags Elec W* 120:1334-7 O 16 '43
- Harbor steam plant goes on the line. C. P. Garman and W. C. Rowse. *il diags Power Pl Eng* 47:64-9, 114, 116+ Je '43
- Mechanical equipment of the turbine house. F. Shakeshaft. *il diag Engineer* 175:325-7 Ap 23 '43; *Excerpts. Elec R (Lond)* 132:481-2 Ap 9 '43
- Natal's new power station; steam-raising plant. *diag Mech Handling* 30:117-19 Mr '43
- New Diesel plant at Rushville, Ind. G. C. Boyer. *il Power Pl Eng* 47:52-5+ Ji '43
- Oilstatic cables for 13.8-kv. generator leads. F. P. Fairchild. *il diags Elec W* 119:1284-6 Ap 17 '43
- Power station accessories. T. H. Carr. *Elec R (Lond)* 132:328-9 Mr 5 '43
- Quick pickup, economy at Harbor plant; underwrites Boulder Dam power supply to southern California. C. F. Garman. *il diag Elec West* 91:65-9 O '43
- Simplicity and versatility stressed in Akron addition. G. C. Daniels. *il diags plans Elec W* 120:984-7 S 18 '43
- Switchgear practice in Europe and America. J. B. MacNeill. *il diags Elec Eng* 61:609-13 D '42
- Topping program at Sherman Creek. R. T. Roberts; H. Knecht. *il diags plan Power Pl Eng* 47:76-81+ S; 66-70 O; 66-8 N '43
- Trends in the use of new equipment. H. R. Vaughan. *Power Pl Eng* 47:75, 118, 120 Je '43

See also**Boiler plants—Equipment****Extensions**

- Additional capacity for Hudson, Mass. Diesel plant. P. Ruskin. *il Diesel Power* 21:399-402 My '43
- Extension to Cape Fear station adds 60,000 kw. W. F. Friend. *il diag Power Pl Eng* 47:50-3 Ja '43
- Heavy foundations drilled into rock; deep caissons with H-beam cores for extension to a public service building. R. E. White. *il diags Civil Eng* 13:19-22 Ja '43
- New Diesel generating unit for Hudson, Mass. *il diag plan Power Pl Eng* 47:60-4 My '43
- Superheater changes extend capacity. E. J. Drowelow. *Elec W* 120:453 Ag 7 '43

Fires and fire protection

- Carbon dioxide test in Maine generating plant; fire equipment. A. A. Winters. *Elec W* 120:1374 O 16 '43
- Northeast power pool quickly meets emergency; New England and upper New York systems hold frequency and load when machines at Hell Gate suffer mishap. *il Elec W News* ed 120:184 Ji 17 '43
- Protection from fire. G. V. Harrap. *il Elec R (Lond)* 131:811-13 D 25 '42

Flood damage

- Minor damage to power plants in record flood. *il Elec W* 119:1785-6 My 29 '43

Fuel

- Coal and ash handling plant. J. F. R. Mitchell. *il diags Mech Handling* 30:200-4 My '43; Same cond. *Elec R (Lond)* 132:523-4 Ap 16 '43
- Coal and water for power supply, 1942. *Elec W* 119:260 Ja 23 '43
- Coal for steam raising. J. N. Waite. *Inst E E J* 90 pt 1:153-61 Ap '43; Same abr. *Engineering* 154:436-8 N 27 '42; *Abstract. Elec R (Lond)* 131:585-6 N 6 '42; *Discussion. Inst E E J* 90 pt 1:161-73, 397-416 Ap. S '43; *Engineering* 154:394, 414, 423 N 13-27 '42; *Electrician* 129:533-6 N 13 '42; *Elec R (Lond)* 131:617-18 N 13 '42

- Coal handling cost cut in two; Dubuque, Iowa, plant, Interstate power company. *il plan Elec W* 119:468 F 6 '43
- Coal stockpiles rise; average day's supply dips. *Elec W News* ed 120:1448 O 23 '43
- Combined firing of coal and natural gas on stoker-fired units; Kansas City power & light company. H. L. Crain. *diags A S M E Trans* 65:137-40; *Discussion. 140-1 Ap '43*
- Eugene, Oregon's new plant cashes in on old system's experience; using wood waste as fuel. R. B. Boals. *il diags Power* 87:434-6+ Ji '43
- Experience in the use of electrostatic fly-ash precipitators; Rochester gas & electric corporation. I. G. McChesney. *il diags A S M E Trans* 65:143-7; *Discussion. 147-8 Ap '43*
- Fuel clause in rate schedules of electric and gas utilities. E. I. Rudd. *Am Gas J* 159:14-18 S '43
- Fuel economy in collieries; abstract. H. E. Partridge. *Elec R (Lond)* 131:825 D 25 '41
- Gas for power stations; costs and thermal values. E. V. Evans. *Elec R (Lond)* 133:70-1 Ji 16 '43
- Power from turf; abstract. J. A. Kenny. *Elec R (Lond)* 131:721 D 4 '42
- Problems of conversion to coal; experience of typical companies. H. S. Knowlton. *il plans Elec W* 120:626-9 Ag 21 '43

Heating and ventilation

- Generator room heated by Diesel silencer. W. E. Van Deusen. *diag Elec W* 119:300 Ja 23 '43
- Ventilation of new Harbor steam plant. *Heat & Ven* 40:37 O '43

Interconnection**See Electric plants—Interconnection****Lighting**

- Light for load dispatching. *il Elec West* 91:54 Ji '43

Load

- After-diversity demand. P. Schiller. *Elec R (Lond)* 132:475-7 Ap 9 '43
- Estimating electric loads for military-training bases, federal housing, and other wartime projects. H. M. Potts. *Elec Eng* 62: Trans 246-54 My '43
- Evaluation of incompletely diversified loads. W. L. Tadlock. *il Elec Eng* 62:485-92 N '43
- Load distribution between interconnected power stations. P. G. Kaufmann. *bibliog diags Inst E E J* 90 pt 2:119-30 Ap '43
- Load distribution on interconnections. P. G. Kaufmann. *diags Elec W* 120:844 S 4 '43
- Load shifts free line for war load. *diags Elec W* 120:1536 O 30 '43
- Postwar loads from a sales viewpoint. J. F. Gaskill. *Edison Elec Inst Bul* 11:321-3+ N '43
- Some electrical supply aspects of ferro-alloy manufacture. H. A. Sieveking. *bibliog diags Inst E E J* 90 pt 2:65-72 F '43
- Water heater control releases peak kw.; Winnipeg hydro-electric system. J. G. Glasco. *il Elec W* 120:256-7 Ji 24 '43

See also**Electric service,****Rural****Load dispatching**

- Capacity released by load swing control; frequency indicator operated by frequency standard received by radio. J. E. McCormack. *diag Elec W* 118:1775-7 N 28 '42
- Dispatching board simple, perpetual. *il Elec W* 119:2142+ Je 26 '43
- Framing design for dispatchers' board. W. Noyes. *diags Elec W* 120:1206 O 2 '43

Maintenance and repair

- Conservation of material by welding. A. O. Anderson and W. L. Mitzenius. *il Welding J* 21:821-3 D '42
- Deterioration and maintenance of power plant structures. S. J. Pearson. *il diags Power Pl Eng* 47:60-6 Ag '43
- Maintenance on schedule; Minnkota power cooperative at Grand Forks, N.D. A. L. Freeman. *Power Pl Eng* 47:80-3+ My '43
- Plant maintenance geared to war loads. *Elec W* 118:1605-7 N 14 '42
- Streamlining power plant maintenance schedules. *Elec W* 119:758-62 Mr 6 '43

ELECTRIC plants (central stations)—Cont.**Management**

Increasing output of generating equipment.
il Elec Eng 62:285-90 J1 '43

Protection

Black-out curtains that really work; municipal power plant in Hudson, Mass. diags Diesel Power 21:619 J1 '43
Bomb-proof construction of utilities. B. Maddock. diags Power Pl Eng 47:69-70 J1 '43
Commonwealth Edison trains protection organization. il Power Pl Eng 47:74-5 Ja '43
Cost data from a plant guarding job. Elec W 118:1644 N 14 '42
Damage local and less with fault bus relaying. I. C. Eppley. il diags Elec W 120:633-4 Ag 21 '43
Insulation coordination protects power systems; abstract. H. N. Muller. Power Pl Eng 47:150-+ O '43
Plant protection; review of safeguards occasioned by war. G. A. Hunt. il Elec West 90:83-4 Je '43
Some modern dogs of war; canine guards help at plants of Puget Sound power & light co. J. H. Leach. il Elec West 90:51 My '43
Utility defense corps prepares for war threats; Commonwealth Edison company, Chicago. J. Weber. il Elec W 118:1608-9 N 14 '42
Wartime protection of electric power systems. D. M. Jones. Elec W 119:1114-16 Ap 3 '43

See also

Electric plants (central stations)—Fires
and fire protection

Rates

See Electric rates

Records

Streamlining power plant maintenance schedules. Elec W 119:758-62 Mr 6 '43

Safety measures

How to provide grounding systems for generating stations and large substations. W. W. Lewis. diags Elec W 119:1320 Ap 17 '43

See also

Electric distribution
—Grounding

Statistics

Annual statistical number. Elec W 119:245-75 Ja 23 '43
Kilowatt generator capacity of all plants contributing to the public supply, Dec. 31, 1941 and 1942; tabulated by states. Edison Elec Inst Bul 11:front cover Ap '43

See also

Electric power—Statistics
Electric utilities—Statistics

Steam distribution

Central station supplies steam to industrial plant for war use; piping arrangements for steam supply and metering. flow diag il Heating-Piping 15:1-4 Ja '43; Discussion. W. A. Hanley. 15:79 F '43
Flexible layout for dual service plant. diag Elec W 119:100 Ja 9 '43
Growth of district heating in Russia and Germany. A. E. Margolis. Engineering 156:283-4 O 8 '43

Telephone

Less noise, less clanging on despatching phones. M. C. Westrate. il diags Elec W 118:1934-5 D 12 '42

Akron, Ohio

Simplicity and versatility stressed in Akron addition. G. C. Daniels. il diags plans Elec W 120:984-7 S 18 '43

Arkansas

New electric plant brings Arkansas other industries. il Manuf Rec 111:33-+ D '42

Brazil

Testing generator dielectric absorption under adverse humidity conditions of Brazilian plants. A. V. DeBeech. il diags Elec W 119:1766-8 My 29 '43

Germany

Growth of district heating in Russia and Germany. A. E. Margolis. Engineering 156:283-4 O 8 '43

Los Angeles

Harbor plant designed for economy, quick pick-up; with cost data; Los Angeles bureau of power and light. W. C. Rowse. il diag Elec W 119:54-6 Ja 9 '43
Harbor steam plant goes on the line. C. P. Garmann and W. C. Rowse. il diags Power Pl Eng 47:64-9, 114, 116-+ Je '43

Russia

Growth of district heating in Russia and Germany. A. E. Margolis. Engineering 156:283-4 O 8 '43

Vermont

Wind-power plant continues operation; plant at Grandpa's Knob. J. W. Wilbur. diag Power Pl Eng 46:78-9 O '42; Same cond. il Locomotive 44:148-52 Ja '43

Western states

Power goes to war. il Elec West 90:54-71 F '43

ELECTRIC plants, Cooperative

Maintenance on schedule; Minnkota power cooperative at Grand Forks, N.D. A. L. Freeman. Power Pl Eng 47:80-3-+ My '43
Minnkota power cooperative, inc.; new electric generating station near Grand Forks. A. L. Freeman. il plans Power Pl Eng 46:56-60 D '42
REA Diesel plant meets problems of war; cooperative plant at Hampton, Iowa. W. H. Gottlieb. il Power Pl Eng 47:80-3 Mr '43
REA; headquarters buildings for a program of rural electrification. il map diags plans Arch Forum 78:79-88 F '43
Texas Solons probe river authority deals. Elec W 119:1127-8 Ap 3 '43

ELECTRIC plants, Municipal

Additional capacity for Hudson, Mass. Diesel plant. P. Ruskin. il Diesel Power 21:399-402 My '43
Diesels at Natchitoches. W. H. Gottlieb. il Power Pl Eng 47:58-60-+ Ja '43
Eugene, Oregon's new plant cashes in on old system's experience; using wood waste as fuel. R. B. Boals. il diags Power 87:434-6-+ J1 '43
First year of Diesel operations at Osage, Iowa; with cost data. G. V. Yarger. il Diesel Power 21:597-8 J1 '43
Harbor plant designed for economy, quick pick-up; with cost data; Los Angeles bureau of power and light. W. C. Rowse. il diag Elec W 119:54-6 Ja 9 '43
McGregor, Iowa, model plant of the Middle West. L. J. Lamprecht. il Diesel Power 21:209-12 Mr '43
New Diesel generating unit for Hudson, Mass. il diag plan Power Pl Eng 47:60-4 My '43
Operating data, Hominy, Okla. municipal plant. il Diesel Power 21:207-8 Mr '43
Rockville Centre, L.I., has new 3000-hp. Diesel. il Diesel Power 20:997-9 D '42
Water and oil still mix at Waverly, Iowa; combination of hydroelectric and Diesel plant; with cost data. R. E. Doonan. il Diesel Power 21:305-7 Ap '43
Winters, Texas, the WPB, and the freeze. W. H. Gray. Pub Util 31:288-92 Mr 4 '43

See also

Electric utilities—Municipal ownership

Finance

Free illumination for Main street; Preston, Minn. municipal plant. il Diesel Power 21:117-20 F '43

ELECTRIC potential. See Potential, Electric**ELECTRIC power**

Economising electrical energy. Engineering 155:450 Je 4 '43

Hands off power! naming of Krug as czar. Business Week p14 Ja 30 '43

Key to the apparent paradox in electric power supply for war. C. W. Kellogg. Edison Elec Inst Bul 11:147-50 My '43

ELECTRIC power—Continued

- Kilowatts, kilovars, and system investments. J. W. Butler. Elec Eng 62:Trans 133-7 Mr '43
 Plenty of power for war. Fortune 27:36 Ap '43
 Power markets through new applications. J. F. Gaskill. Edison Elec Inst Bul 11:179-81+ Je '43
 Power to win; what generation, fuel and manpower will be needed for the coming months of war? a factual survey. Power 87:575-90 S '43
 Study forecasts postwar power picture; business which will be done by ten operating subsidiaries of the Commonwealth & southern corporation system. Pub Util 32:304-3 S 2 '43
 Use of electricity in relation to fuel economy, abstracts. R. H. Rawll. Electrician 130:143-4 F 5 '43; Elec R (Lond) 132:213-14 F 12 '43; Discussion. Electrician 130:195-6 F 19 '43; Elec R (Lond) 132:253-4 F 19 '43
 War demands re-emphasize power supply fundamentals. D. M. Jones. Elec W 119:599-600 F 20 '43
 Washington power octopus feels a cold breeze. L. D. Farrar. Pub Util 32:154-9 Ag 5 '43

See also

- | | |
|---|----------------------------------|
| Coal mines and min-
ing—Power | Hydroelectric power |
| Electric distribution | Manitition factories—
Power |
| Electric driving | Paper mills—Power |
| Electric plants | Petroleum engineer-
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| Electric railroads—
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| Electric transmission | Power plants |
| Electric welding—
Power supply | Pumping stations—
Power |
| Electricity supply | Steel works—Power |
| | Textile mills—Power |

International aspects

- Postwar mass employment in public works. T. B. Spitzer. Pub Util 31:795-804 Je 24 '43

Interstate transfer

- Supreme court upholds FPC on Jersey Central. Elec W News ed 119:1537 My 8 '43

Rates

See Electric rates

Statistics

- American economy in 1942: electric power; with comparisons for earlier years. C. A. R. Wardwell and R. B. Bangs. Survey of Cur Business 23:14 Ja '43
 Domestic electric service in 1942. W. M. Carpenter. Edison Elec Inst Bul 11:73-4 Mr '43
 Electric light and power industry in 1942. C. W. Kellogg. Edison Elec Inst Bul 11:1-5 Ja '43; Excerpts. Manuf Rec 112:24-5+ Ja '43
 Electric light and power industry; weekly electric output in kilowatt hours, 1940, 1941 and 1942; tabulation. Edison Elec Inst Bul 11:front cover Mr '43
 Electric power and the war. Survey of Cur Business 23:7-11 S '43; Excerpts. Edison Elec Inst Bul 11:291 O '43
 Electricity a small item in industry's costs; analysis of the 1939 census figures. Elec W 118:1782-3 N 28 '42
 Energy sales, 1942. Elec W 119:262-3 Ja 23 '43
 Output, 1942. Elec W 119:248-59 Ja 23 '43
 Production and sales to ultimate customers, 1938-1941. Survey of Cur Business 1942 Sup p111-12 (supplemented in monthly numbers)
 Regional pattern of electric power output changing; Percentage increase first eleven months of 1942 from same period in 1941. Survey of Cur Business 23:2 Ja '43
 Weekly electric output. Published in weekly Thursday numbers of Commercial & financial chronicle

See also

- Electric plants (cen-
tral stations)—Sta-
tistics

ELECTRIC power and light corporation

- Descriptions of holding companies. O. Ely. Pub Util 32:101-3 J1 22 '43

- Exemption granted. Comm & Fin Chr 158:574-5 Ag 9 '43
 Files brief seeking review of SEC order seeking dissolution. Comm & Fin Chr 157:1556 Ap 26 '43
 Proposes to sell stock of Idaho power co. Comm & Fin Chr 158:189 J1 12 '43

ELECTRIC precipitation

- Electrostatic precipitators remove oil mist in machine shops. Electronics 16:141-2+ J1 '43
 Experience in the use of electrostatic fly-ash precipitators; Rochester gas & electric corporation. I. G. McChesney. Il diags A S M E Trans 65:143-7; Discussion. 147-8 Ap '43
 Extracting oil mist from air. E. H. R. Pegg. Il diags Sheet Metal Worker 34:21-3 My '43; Excerpts. Heating-Piping 15:242 My '43; Heat & Ven 40:60-1 J1 '43
 Portable electrostatic precipitator. W. L. Lea. Il diag J Ind Hygiene 25:152-6 Ap '43
 Reclaiming cutting oil from the air with a Precipitron. Il Iron Age 151:43 F 25 '43

See also

- Electrostatic separa-
tors

- ELECTRIC propulsion of ships.** See Ship propulsion, Electric

ELECTRIC protective apparatus

- A. generators; protective equipment in continental practice. W. Szvander. diags Electrician 130:543-6 My 28 '43
 Alternator protection; application of circulating current systems. A. Abbott. diags Elec R (Lond) 133:202-4 Ag 13 '43
 Electric power distribution for open-pit mines and quarries; protective devices. J. E. Borland. Il diags Min Cong J 29:42-9 Mr '43
 High-voltage high-rupturing-capacity cartridge fuse and its effect on protection technique. K. Dannenberg and W. J. John. bibliog Il diags Inst E E J 89 pt 2:565-76 D '42; Abstract. Electrician 128:363-4 Ap 17 '42; Discussion. Inst E E J 89 pt 2:576-84; 90 pt 2:269-72 D '42, Ag '43
 Interim report on application and operation of out-of-step protection, bibliog diags Elec Eng 62:Trans 567-73 S '43
 Interrupting capacity; what it means and how it is calculated. W. A. Holland. Il diags Power Pl Eng 47:68-71, 79 My '43
 New single-pole service restorer; application of Vibratorque motor. E. E. Tugby. diags Elec Eng 61:Trans 389-92 D '42
 Overvoltage protection of current-transformer secondary windings and associated circuits. R. H. Kaufmann and G. Camilli. Il diags Elec Eng 62:Trans 467-72 J1 '43
 Series capacitors; where place? how big? protection. S. Lubin. Elec W 120:346+ J1 24 '43
 Technical and economical design of electrical distribution in a large factory. J. S. Blacklock. Engineering 155:85-6 Ja 29 '43
 Three-winding transformer ring-bus characteristics. G. W. Bills and C. A. MacArthur. diags Elec 61:Trans 848-9 D '42
 Trends in the use of new equipment. H. R. Vaughan. Power Pl Eng 47:75, 118, 120 Je '43
 Use of interrupting devices in the clearing of electrical circuits. W. A. Holland. Il Pet Refiner 22:105-6 J1 '43

See also

- | | |
|-------------------------------------|---------------------------------|
| Electric circuit
breakers | Electric motors—Pro-
tection |
| Electric distribution
—Grounding | Electric switches |
| Electric fuses | Lightning arresters |
| Electric lines—Pro-
tection | Lightning protection
Relays |

ELECTRIC railroads

- Electricity and town planning; railways part in London reconstruction scheme. diags map Electrician 131:54-5 J1 16 '43

See also

- | | |
|--------------------------------|------------------|
| Electric locomotives | Street railroads |
| Railroads—Electrifi-
cation | Subways |
| Street cars | Trolley buses |

Cars

- See Cars, Electric railroad; Motor cars (railroad)—Diesel-electric; Street cars

ELECTRIC railroads—Continued

Finance

See also
Hudson and Manhattan railroad Rapid transit—Finance

Maintenance and repair

See also
Street railroads—Maintenance and repair

Overhead construction

Filter bans 25-cycle from ground relay. R. E. Squires. *Il* *diags* Elec W 119:2164 Je 26 '43

Steel poles, keep 'em standing; proper maintenance essential. L. W. Birch. *Il* *Transit* J 86:414-16 N '42

Power

Rectifiers replace converters in 25 to 60 cycle changeover. S. J. Fairbanks and P. B. Garrett. *Il* *map* Mass Transportation 39:245-9+ J1 '43

Wartime substation constructed by the Chicago surface lines. *Il* *Mass Transportation* 39:35-6 Ja '43

Receiverships

See also
Pittsburgh railways company

Rolling stock

See also
Cars, Electric railroad
Electric locomotives

Trolley shoes

Wheel to shoe conversion for electric cars and trolley buses. L. F. Brahmer. *Il* *Mass Transportation* 39:286-7 Ag '43

Switzerland

Electric train haulage on Swiss railways. *Il* *Electrician* 130:43 Ja 15 '43

New Swiss locomotives; electric motor coaches. Pilatus and Vitznau railways. *Il* *Electrician* 129:546 N 20 '42

ELECTRIC railroads, industrial

See also
Electric locomotives, industrial

ELECTRIC ranges. *See* Electric stoves**ELECTRIC** rates

Arkansas commission amends order on co-op power resale rate rise. Elec W News ed 120:729 Ag 28 '43

Arkansas utility ordered to make \$625,000 rebate. Elec W 118:1957 D 12 '42

Attempted utility blitz on Staten Island; New electric rate yardstick. E. R. Abrams. *Pub* *Util* 31:747-53 Je 10 '43

Bulk-supply charges; implications of the Scott report. N. Elliott. Elec R (Lond) 131:548-9 O 30 '42

Cost of living and electric rates. F. A. Newton. Edison Elec Inst Bul 10:398 N-D '42

Cost of living index misleading as to electricity situation to be remedied. Edison Elec Inst Bul 11:316 O '43

Costs and tariffs; analysis of relevant statistics. F. J. Elliott. Elec R (Lond) 132:845-7 Je 25 '43

Costs of electricity supply. A. C. Thirtle. Inst E E J 90 pt 1:129-30 Mr '43

Denies OPA authority on rate decrease petition; Wisconsin Public service commission. *Il* *Elec W* 120:267 J1 24 '43

Domestic tariffs. F. D. Parker. *Electrician* 129:607-8 D 4 '42

Domestic tariffs; what consumers require. H. Southall. Elec R (Lond) 132:777-8 Je 11 '43

Electric utilities and the cost of living. F. A. Newton. *Pub* *Util* 31:548-51 Ap 29 '43

Electricity and gas; price changes between June and September 1942. *Monthly Labor* R 55:1076 N '42

Electricity prices, December 1942. *Monthly Labor* R 56:378-90 F '43

Federal agencies appeal asks new Pepco rate cut. Elec W 120:93 J1 10 '43

FPC, Southwest power pool file rate probe briefs. Elec W News ed 120:179-80 J1 17 '43

Federal power commission trial examiner rules out rate comparisons as measure of reasonableness. Edison Elec Inst Bul 11:101 Ap '43

Framing electricity tariffs. G. A. T. Burdett. *Electrician* 130:437-9 Ap 30 '43

Fuel clause in rate schedules of electric and gas utilities. E. I. Rudd. *Am Gas* J 159:14-13 S '43

General factors affecting the unification of electricity supply tariffs. C. T. Melling. Inst E E J 90 pt 1:309-22 bibliog(p321) Ag '43; Summary. *Electrician* 130:174-5 F 12 '43; Summary. Elec R (Lond) 132:178 F 5 '43; Discussion. Inst E E J 90 pt 1:336-62 Ag '43; *Electrician* 130:175-6 F 12 '43; Elec R (Lond) 132:221-2 F 12 '43

Grant rate raise right on co-op power resale. Elec W 120:266 J1 24 '43

Incremental rate plan. A. V. Roberts. *Pub* *Util* 32:344-8 S 16 '43

Measurements section; chairman's address. E. H. Miller. Inst E E J 90 pt 1:43-6 Ja '43; Abstracts. *Electrician* 129:481-2 O 30 '42; Elec R (Lond) 131:554 O 30 '42

Power pool disclaims plan to make profit. Elec W News ed 119:5 Ja 2 '43

Power rates row; federal authorities face states' rights rumpus in trying to set electricity charges for aluminum plant in Arkansas. *Business Week* p26 Mr 6 '43

Price changes between December 1941 and December 1942. *Monthly Labor* R 56:380 F '43

Probe Arkansas co-op wholesale rates. Elec W News ed 119:1207 Ap 10 '43

Rate cut sought in Washington, D.C. *Business Week* p31 Mr 13 '43

Rationing rate structure. E. R. Melamerson-Vandenhaag. *J Land & Pub Util Econ* 19:243-5 My '43

Reply briefs filed in Southwest pool rate case. Elec W 120:647-8 Ag 21 '43

Ruling delayed on co-op rate decision. Elec W 119:1968-9 Je 12 '43

Southwest power pool rate hearing opens; electricity furnished the Lake Catherine aluminum plant. Elec W 118:2109-10 D 26 '42

States' rights in utility rate making; Arkansas commission's position in Federal power commission case against Southwest power pool. *Pub* *Util* 31:372-5 Mr 18 '43

Tariff considerations; abstract. J. I. Bernard. Elec R (Lond) 131:825-6 D 25 '42

Tariff design. W. Smith. *Electrician* 129:521-2 N 13 '42

Tariff standardisation. S. C. Harling. Elec R (Lond) 131:686 N 27 '42

Tariffs for war and peace. D. J. Bolton. Elec R (Lond) 132:79-82 Ja 15 '43

Towards the correct domestic multi-part tariff. P. Schiller. Inst E E J 90 pt 1:323-36 bibliog(p335) Ag '43; Summary. *Electrician* 130:174 F 12 '43; Elec R (Lond) 132:178-9 F 5 '43; Discussion. Inst E E J 90 pt 1:336-63 Ag '43; *Electrician* 130:175-6 F 12 '43; Elec R (Lond) 132:221-2 F 12 '43

Undue preference; power consumers unfairly treated. E. W. Dorey. Elec R (Lond) 133:402-4 S 24 '43

Zoned tariffs. F. S. Naylor. Elec R (Lond) 132:107-8 Ja 22 '43

ELECTRIC rectifiers

Application of copper-oxide rectifiers for resistance welding. R. L. Briggs. *Il* *diags* *Welding* J 22:252-6 Ap '43

Characteristics and applications of selenium-rectifier cells. E. A. Harty. *Il* *diags* *Elec Eng* 62:Trans 624-9 O '43

Characteristics which control selection of metal rectifiers. R. Smith. *Il* *diags* *Product Eng* 14:380-2 Je '43

Constant heating rate control by the thermocouple-rectifier bias principle. R. J. Smith. *diags* *Metal Prog* 44:613-16 O '43

Contact non-linearity, with reference to the metal rectifier and the carbonyl ceramic non-linear resistor. A. Fairweather. *Il* *diags* *Inst E E J* 89 pt 1:499-513 bibliog (p517-18) N '42

Controlled rectifier circuit; hydraulic analog; electronic circuit; applications. *Il* *diags* *Product Eng* 14:653 O '43

ELECTRIC rectifiers—Continued

- Copper-oxide rectifiers; Jack of many trades. J. L. Watts. diags Power 87:372+ Je '43
- Electrical engineering in 1942. *il* Engineer 175:37-8 Ja 8 '43
- Electronic control of industrial and power plants; abstract. S. G. King. Electrician 129:669-70 D 18 '42
- Flexibility of the cuprous oxide rectifier for automatic control equipment in electroplating. G. E. Huenerfauth. diags Electrochem Soc Trans 83 (preprint 7):97-103 Ap 43
- Harmonics and load balance of multiphase rectifiers; considerations in the selection of the number of rectifier phases. R. D. Evans. bibliog Elec Eng 62:Trans 182-7 Ap '43
- Operation of nonsalient-pole-type generators supplying a rectifier load. M. D. Ross and J. W. Batchelor. bibliog *il* diags Elec Eng 62:Trans 667-70 N '43
- Operation of vapor tube rectifier circuits with opposing direct voltages. J. M. Fluke. diags Electronics 16:100-3 Je '43
- Rectifier circuit; hydraulic analog; electronic circuit; applications. *il* diags Product Eng 14:843 O '43
- Rectifier circuit power factors, harmonics and wave shapes. R. D. Evans. diag Elec W 120:1345-8 O 16 '43
- Rectifier instruments; their characteristics, possibilities and limitations. F. R. Axworthy. *il* Elec R (Lond) 131:791-3 D 18 '42
- Rectifier milliammeters. T. A. Ledward. diag Electrician 130:239-40 Mr 5 '43
- Rectifier phases; requirements and methods. R. D. Evans. diags Elec W 120:1381 O 16 '43
- Rectifiers for steel mills; abstract. A. D. Howry. Metals & Alloys 18:836+ O '43
- Rectifiers replace converters in 25 to 60 cycle changeover. S. J. Fairbanks and P. B. Garrett. *il* map Mass Transportation 39:245-9+ J1 '43
- Selenium rectifiers for tin plating. Electronics 16:176+ O '43
- Static conversion of direct current to alternating current with grid-controlled mercury-arc mutators. R. Feinberg. diags Inst E E J 89 pt 1:462-70 bibliog(p466, 468) O '42
- Trails of progress in electronics and radio. E. F. W. Alexanderson. Gen Elec R 46:161-2 Mr '43
- Transformer acids and sludges trapped. T. W. Buttner and J. G. Martin. diag Elec W 119:1797 My 29 '43
- Why use rectifiers for plating? L. W. Reinken. *il* Metals & Alloys 17:533-5 Mr '43

See also

- | | |
|--------------------|------------------|
| Electric inverters | Radio rectifiers |
| Ignitron | Thyratron |

Testing

- Simple test set for mercury vapor rectifiers. M. J. Weiner. diags Electronics 16:112 Ap '43
- Testing of oxide film rectifiers. R. G. Cazanjan; V. W. White; W. Brewster. diag Ry Mech Eng 117:190-1 Ap '43
- ELECTRIC refrigeration association, Commercial.** See Commercial electric refrigeration association
- ELECTRIC refrigerators.** See Refrigerators, Electric
- ELECTRIC relays.** See Relays
- ELECTRIC research**
British electrical research board. Economist 144:798-9 Je 19 '43
- Electrical developments of 1942; research and laboratory investigations. G. Bartlett. *il* diag Gen Elec R 46:58-60 Ja '43
- E.R.A. in 1942. Elec R (Lond) 132:227-8 F 12 '43
- Electrical research; introduction to annual report, British electrical and allied industries research association. Electrician 130:167-9 F 12 '43
- Engineering research. W. R. Whitney. Elec Eng 62:153-4 Ap '43
- Organization of post-war electrical research. Inst E E J 90 pt 1:261-3 J1 '43; Same cond. Electrician 130:601-3 Je 11 '43; Abstract. Elec R (Lond) 132:779-80 Je 11 '43

Progress in electrical research; summary of annual report of the British electrical and allied industries research association. Engineering 155:156-7 F 10 '43

- Progress in engineering knowledge during 1942. P. L. Alger and J. Stokley. *il* diags Gen Elec R 46:90-137 bibliog(p133-7) F '43
- Properties and applications of phase-shifted rectified sine waves. J. T. Tykociner and L. R. Bloom. *il* diags Ill U Eng Exp Sta Bul 339:1-52 '42 (pa 60c)
- Reports of joint subcommittee on development and research. Edison Elec Inst Bul 11:46, 62, 64 F '43

ELECTRIC resistance

- Controller resistances. Electrician 130:87-9, 110 Ja 22-29 '43
- Effect of high electrostatic fields upon the vaporization and resistance of molybdenum filaments. W. P. Reid. bibliog Phys R 63:359-66 My 1 '43
- Effect of high electrostatic fields upon the vaporization of molybdenum. G. B. Estabrook. bibliog diags Phys R 63:352-8 My 1 '43
- Electrical method for studying oil film thickness; abstract. R. Poppinga. diag Automotive & Aviation Ind 59:44+ J1 1 '43
- Electrical resistance method for the determination of isothermal austenite transformations. F. B. Rote, W. C. Truckenmiller and W. P. Wood. bibliog *il* diags Am Soc for Metals Trans 30:1359-73; Discussion. 1373-6 D '42
- Grading starter resistances. G. F. Freeman. Electrician 131:229-30 S 3 '43
- High-frequency resistance of plated conductors. R. F. Proctor. diags Wireless Eng 20:56-65 F '43
- High temperature resistivity measurements on compressed granular refractory materials. G. H. Fetterley. *il* diags Electrochem Soc Trans 83 (preprint 2):5-18 Ap '43
- How to determine resistances of parallel circuits; chart. Elec W 120:1538 O 30 '43
- Insulation-resistance meter; electronic instrument. R. N. Bushman. *il* diag Gen Elec R 46:403-5 J1 '43
- Resistance measurements. G. W. Stubbings. Electrician 131:154-5 Ag 13 '43
- Resistance study on a conduit-return system; wiring system at the University of Wisconsin. E. Bennett and R. Schuette. Elec W 119:939-40 Mr 20 '43
- Some characteristics of a stable negative resistance. C. Brunetti and L. Greenough. bibliog diags Inst Radio Eng Proc 30:542-6 D '42
- Two new hot-flament resistances. C. C. Minter. diag J Ap Phys 14:49-50 Ja '43

See also

- | | |
|-----------------------|-----------------------|
| Dielectric constants | Insulation (electric) |
| Electric conductivity | Skin effect |
- ELECTRIC resistors**
Communications equipment puts enameled resistors to severe test. *il* Cer Ind 41:26+ J1 '43
- Contact non-linearity, with reference to the metal rectifier and the carbundum ceramic non-linear resistor. A. Fairweather. *il* diags Inst E E J 89 pt 1:499-518 bibliog(p517-18) N '42
- Modern electrical resistance alloys. A. G. Arend. diags Electrician 131:250-2 S 10 '43
- New war standard is first in series on resistors. *il* Ind Stand 14:213 J1 '43
- Parallel resistor chart. Power Pl Eng 47:108 S '43
- Resistors watch level in water system reservoir; automatic system controls operations of pumps; Kalamazoo water distribution system. E. E. Norman. *il* diag Elec W 120:635-7 Ag 21 '43
- Special metals in the electrical industry. F. R. Hensel and J. W. Wiggs. Elec Eng 62:296-7 J1 '43
- Switching overvoltage hazard eliminated in high-voltage oil circuit breakers. L. F. Hunt. E. W. Boehne and H. A. Peterson. bibliog *il* diags Elec Eng 62:Trans 98-106 F '43
- Temperature compensation of instruments with negative coefficient resistors; use of semi-conducting materials as series neutralizers. J. R. Pattee. bibliog *il* Electronics 16:102-5+ Ag '43

ELECTRIC saws. See Saws, Electric

ELECTRIC service, Rural

As our territory prospers so shall we; farming for better living program; Monongahela West Penn public service company. R. W. Godley. *Edison Elec Inst Bul* 11: 119 Ap '43

Carrier telephone saves distribution labor and travel; communicating with company's trucks serving rural area; Potomac Edison company, Hagerstown, Md. W. C. Feaster. *il diags map Elec W* 118:1602-5 N 14 '42

Discussion on Technical implications of the Scott report as applied to electricity supply. *Inst E E J* 90 pt 2:131-6 Ap '43

Electric power accelerates food for freedom program; rural electrification advisory service. A. M. Frost. *Elec W* 119:946-8 Mr 20 '43

Experience with oil circuit reclosers on REA systems. L. M. Moore and B. O. Watkins. *Elec Eng* 62:Trans 531-5 Ag '43

Implications of the Scott report; discussion. *Elec R (Lond)* 131:654-5 N 20 '42; Same. *Electrician* 129:551-2 N 20 '42

Improving electricity supply. *Elec R (Lond)* 132:607-9 My 7 '43

OWU stands by policy on rural line extensions. *Elec W News* ed 120:8 JI 3 '43

Questions and answers on (F-46-c). *Elec W* 119:607 F 20 '43

Rural development. *il map Elec R (Lond)* 133:227-30, 263-6 Ag 20-27 '43

Rural distribution; reinforcement of an 11-kV overhead system. *il diags Elec R (Lond)* 132:675-9 My 21 '43

Rural electrification; a plea for rational consideration. C. A. C. Brown. *Elec R (Lond)* 132:109-11 Ja 22 '43

Rural electrification; equipment designed for outdoor metering. *il Electrician* 130:341-2 Ap 2 '43

Rural extensions to be eased to provide more food. G. E. Doying, Jr. *Elec W* 119:72 Ja 9 '43

Rural system protection; abstracts of four papers. *Elec R (Lond)* 132:651-2 My 14 '43; Discussion. *Electrician* 130:523-5 My 21 '43

Some aspects of rural electrification in New York state. R. G. Harvey. *il Edison Elec Inst Bul* 11:341-2 N '43

Supply industry; discussion of Scott committee's proposals. H. Southall. *Elec R (Lond)* 131:779-80 D 18 '42

Telephone service over rural power lines studied. M. M. Samuels and R. G. McCurdy. *Elec W* 119:444 F 6 '43

Transmission section; chairman's address. P. E. Rycroft. *Inst E E J* 90 pt 1:39-42 Ja '43; Abstracts. *Elec R (Lond)* 131:520-1 O 23 '42; *Electrician* 129:443-5 O 23 '42

Utilization for pumping loads; utility can net dividends, help farmers increase production by engineering irrigation equipment; with cost data. E. G. Stahl. *Elec West* 90:56-8 Ja '43

Whisker extensions for farms seen as war aid; abstract. H. S. Marks. *Elec W News* ed 119:385 Ja 30 '43

See also

Electricity on the farm Rural electrification administration

Cooperative lines

Arkansas commission amends order on co-op power resale rate rise. *Elec W News* ed 120:729 Ag 28 '43

Co-op denies authority of Colorado commission. *Elec W News* ed 120:1090 S 25 '43

Cooperatives win; electric distributing bodies in Arkansas get decision in rate dispute. *Business Week* p40 O 30 '43

Co-ops go urban; rural electric distribution societies in Arkansas stir utilities. *Business Week* p49 Je 26 '43

Electricity cooperatives, 1941. *Monthly Labor R* 56:91-3 Ja '43

Grant rate raise right on co-op power resale. *Elec W* 120:266 JI 24 '43

New mutuals formed for REA cooperatives. *East Underw* 44:24 Ja 29 '43; *Nat Underw* 47:10 Ja 28 '43

Oppose Missouri Electric sale to cooperative. *Elec W* 118:2113 D 26 '42

Probe Arkansas co-op wholesale rates. *Elec W News* ed 119:1207 Ap 10 '43

Ruling delayed on co-op rate decision. *Elec W* 119:1968-9 Je 12 '43

REA experience with postcard readings. R. B. Craig. *Elec W* 119:2008 Je 12 '43

Transformer upkeep for REA cooperatives; *il filtering. L. C. Groat. il Elec W* 118:1781 N 23 '42

WPB rescinds ban on 32 co-op jobs. *Elec W* 119:1308 Ap 17 '43

Will refinanced co-ops be self-liquidating? E. R. Abrams. *Pub Util* 32:406-13 S 30 '43

See also National rural electric cooperative association

Buildings

REA; headquarters buildings for a program of rural electrification. *il map diags plans Arch Forum* 78:79-88 F '43

ELECTRIC ship propulsion. See Ship propulsion, Electric

ELECTRIC shock. See Electricity, Injuries from

ELECTRIC shock therapy. See Electrotherapeutics—Apparatus and instruments

ELECTRIC shops (repair)

Repair service is 75% detail. C. L. Chamblin. *il Elec West* 90:78-9 Ap '43

Tools for the electric shop add to convenience. *il Coal Age* 48:121-2 F '43

Women run appliance repair shop. R. M. Oliver. *il Ptr Ink* 205:22-3 O 1 '43

Directories

Authorized electrical appliance service stations in the eleven western states. *Elec West* 91:69-72 S '43

ELECTRIC shops (retail trade)

St Louis helps the specialty dealer. *Elec W* 120:366-7 S 4 '43

Transition to crockery; Salt Lake dealer replacing appliances with always-needed dishware. *il Elec West* 91:76 O '43

War stamps for old appliances; dealer co-operation plan put into operation by Duquesne light co. *il Elec W* 119:2120 Je 26 '43

ELECTRIC shovels

Electric power distribution for open-pit mines and quarries. J. E. Borland. *il diags Min Cong J* 29:23-34 Ja '43

33-yd. shovel uncovers 4,000 tons daily at Flamingo. *il Coal Age* 48:56-8 Mr '43

Control

Electrical controls on late model shovels; Amplidyne, Rototrol and Double Ward-Leonard control devices for electric shovels and draglines. L. E. Briscoe. *Min Cong J* 29:37-7 JI '43

Power factor control helps shovel voltage. D. Stoetzel. *Elec W* 120:844-5 S 4 '43

Shovel leveling done automatically by electronic units; equipment controls pairs of jacks. W. E. Gildersleeve and D. Stoetzel. *il diag Coal Age* 47:56-8 N '42

Versatile amplidyne control for electric shovels. D. Stoetzel. *il diag Eng & Min J* 143:53-5 N '42

ELECTRIC signals

Impulse transmission; system for sending up to six code signals over telephone lines. *il diags Elec R (Lond)* 133:210 Ag 13 '43

Our hero runs into a wiring problem; signal system for intercommunicating system. *Power Pl Eng* 47:93 My '43; *Solution. diags* 47:84-7 JI '43

Phantom circuit signals outages. L. E. Parkyn. *diags Elec W* 120:1186 O 2 '43

See also

Electric alarms
Light signals
Railroads—Signals

ELECTRIC spark gap. See Spark gap

ELECTRIC sparks

Channel of the spark discharge. J. W. Flowers. *bibliog diags Phys R* 64:225-35 O 1 '43

Electric spark in air. J. M. Meek. *Inst E E J* 89 pt 1:335-51 bibliog(p350-1) Ag '42; Discussion. 89 pt 1:352-6; 90 pt 1:197-202 Ag '42, My '43

New spectroscopic source unit. M. F. Hasler and H. W. Dietert. *il diag Opt Soc Am J* 33:218-28 Ap '43

ELECTRIC sparks—Continued

Spectrochemical light source errors and their compensation. H. H. Grossman, R. A. Sawyer and H. B. Vincent. *bibliog Opt Soc Am J* 33:185-93 Ap '43

ELECTRIC standards

History of a-c wave form, its determination and standardization. F. Bedell. *bibliog*(39 titles) *Elec Eng* 61:Trans 864-8 D '42

International standardization; historical review of two international standards-making bodies of concern to the electrical industry. L. F. Adams. *Elec Eng* 62:498-9 N '43

Short-circuit rating and testing of current-limiting reactors. J. G. Wellings and R. V. Wheeler. *diags Inst E E J* 89 pt2:473-9 O '42; Excerpts. *Electrician* 128:285 Mr 27 '42; Discussion. *Inst E E J* 89 pt2:479-84 O '42; *Electrician* 128:285-8 Mr 27 '42

Standardization in Great Britain of single-circuit overhead lines up to 33kV. H. W. Taylor and K. L. May. *bibliog diags Inst E E J* 90 pt 2:233-45 Ag '43; Abstract. *Elec R (Lond)* 132:254-6 F 19 '43; Summary. *Electrician* 130:200-2 F 19 '43; Discussion. *Inst E E J* 90 pt 2:245-59 Ag '43

Standards of electrical measurement. L. Hartshorn. *bibliog Inst E E J* 89 pt 1:526-35 D '42

See also

Electric equipment—
Standards
Electric instruments
—Standards
Electric meters—
Standards
Electric welding—
Standards

ELECTRIC storage battery company

Annual report. *Comm & Fin Chr* 157:1177 Mr 29 '43

Another look. *Mag of Wall St* 71:173 N 28 '42

ELECTRIC stoves

Care of commercial cooking equipment. *il diags Elec West* 90:74-6 Ap '43

Cooker hotplates. J. Allen. *Elec R (Lond)* 132:249-50 F 19 '43

Future of domestic appliances. F. D. Parker. *Electrician* 130:317-19 Mr 26 '43

See also

Electric heaters

Merchandizing

Cooker development; will simple hire methods be resumed; hire-purchase more satisfactory. G. A. T. Burdett. *Elec R (Lond)* 132:15-17 Ja 1 '43

Testing

Heating time and bottom temperatures of cooking utensils; gas and electric cooking compared. *diags Gas Age* 92:25-7 Ag 12 '43

ELECTRIC substations

Electrical developments of 1942; unit substations. G. Bartlett. *il Gen Elec R* 46:16-17 Ja '43

Electrical industrial installations. L. C. Grant. *diags Inst E E J* 89 pt 2:610-17; Discussion. 617-35 D '42

Ignitron substation closely knit with little field wiring; Vesta-Shannopin coal division, Jones & Laughlin steel corp. C. R. Drum. *il diag Coal Age* 48:74-6 Ag '43

Load-center substations. *Chem Ind* 53:366 S '43

Master-unit substations power distribution systems. D. L. Beeman. *il Rayon* 24:153 Mr '43

Power lines to serve Big Inch pipe line. A. E. Knowlton. *il diags Elec W* 120:244-7 JI 24 '43

Purchased electric power helps Bayou line fill war assignment. E. L. Robinson. *il Oil & Gas J* 42:209-10 S 23 '43

Tacoma's Tide Flats substation renovated. P. A. Brown and R. J. Pangborn. *il Elec W* 120:1198 O 2 '43

Wartime substation construction by the Chicago surface lines. *il Mass Transportation* 39:35-6 Ja '43

See also

Electric distribution
Electric rectifiers
Electric transformers
Electric transmission

Costs

Unit substation cost data. *Elec W* 120:112 JI 10 '43

Design

Bare-bones design for interconnecting transformer station. *il diags Elec W* 120:810-11 S 4 '43

Conservation of materials in substation design; use of wood structures; Jersey central power & light company. E. M. Adkins. *il diags Elec W* 119:765-7 Mr 6 '43

Cubicle layout aids regulator removal. *il diag Elec W* 119:967 Mr 20 '43

Modified design for industrial substations. *il diag Elec W* 118:2117 D 26 '42

Outdoor substation structure designed for welding; with cost data. R. W. DeVore. *il diags Welding J* 22:593-9 Ag '43

Switching station modified to save copper and steel; treated timbers for structures and galvanized conduit for buses. P. H. Adams. *il diag Elec W* 119:1946-9 Je 12 '43

Transformer buses on columns cut substation steelwork in two. *il diags Elec W* 119:1770-1 My 29 '43

War stringencies accelerate simplified substation design; illustrations of design changes, 1926-1942; Philadelphia electric company. *Elec W* 119:1448-9 My 1 '43

Equipment

Automatic air-breaks in lieu of oil breakers. A. M. McCabe. *il diag Elec W* 119:68-9 Ja 9 '43

Capacitor bank, 20,000 kva., on Longview substation. J. R. Curtin. *il diags Elec W* 119:64-6 Ja 9 '43

Capacitor of 5,000 kva. for substation regulation. W. W. Perry and D. M. Umphrey. *il diags Elec W* 119:1954-6 Je 12 '43

Capacitors installed at substations. *diags Elec W* 119:622+ F 20 '43

Device permits practice synchronizing. L. E. Ludekins and H. C. Austin. *il diag Elec West* 90:40 Mr '43

High-voltage fuses in place of oil circuit breakers. B. D. Dexter. *il diags Elec W* 120:1014+ S 18 '43

How to protect substation insulators during maintenance; illustrated instructions. *Elec W* 119:480 F 6 '43

Load center unit substation. W. H. Schiek. *il Elec West* 91:47-8 JI; 65-6 Ag '43

Modern distribution; heavy-supply substations. *il Elec R (Lond)* 133:493-7 O 15 '43

Rectifiers replace converters in 25 to 60 cycle changeover. S. J. Fairbanks and P. B. Garrett. *il map Mass Transportation* 39:245-9+ JI '43

Rural distribution; reinforcement of an 11-kV overhead system. *il diags Elec R (Lond)* 132:675-9 My 21 '43

Substation control lines in fibre duct. *il Elec W* 120:462 Ag 7 '43

Substation inspection, maintenance; schedule. *Elec W* 120:498 Ag 7 '43

Substation losses heat company office; Savannah electric & power company. *diag Elec W* 119:1496 My 1 '43

Substation-transformer emergency overload-practice. L. W. Clark. *Elec Eng* 62:Trans 126-32 Mr '43

Switch and fuses replace circuit breaker on 60-kv. subs. C. E. Baugh. *il Elec West* 91:47-8 Ag '43

Switchgear dispersal; modern primary distribution centre. *il diag Elec R (Lond)* 132:241-6 F 19 '43; Excerpts. *Elec West* 91:50 Ag '43

Switchgear practice in Europe and America. J. B. MacNeill. *il diags Elec Eng* 61:609-13 D '42

Transformers for wartime substations; single-phase vs 3-phase. E. M. Hunter. *il Power* 87:235+ Ap '43

Trends in the use of new equipment. H. R. Vaughan. *Power Pl Eng* 47:75, 118, 120 Je '43

Fires and fire protection

Fire fighting; experience gained in air-raids. G. V. Harrap. *il Elec R (Lond)* 131:647-9 N 20 '42

Protection from fire. G. V. Harrap. *il Elec R (Lond)* 131:811-13 D 25 '42

Heating and ventilation

Ventilation of substations; abstract. F. Favell and E. W. Connors. *Elec W* 120:656 Ag 21 '43

ELECTRIC substations—Heating and ventilation—Continued

Sub-station ventilation; discussion of paper by F. Favell and E. W. Connon. *Electrician* 130:321-3 Mr 26 '43

Protection

Damage local and less with fault bus relaying. I. C. Epley. *il diags Elec W* 120:633-4 Ag 21 '43

Lightning protection of switchgear, unit substations, or a-c rotating machines closely connected to overhead lines. W. J. Rudge, jr., V. L. Cox and E. M. Hunter. *il diags Gen Elec R* 46:551-6 O '43

Safety measures

Essential accident prevention measures in the design and maintenance of substations. H. S. Fitch. *Edison Elec Inst Bul* 11:327-8+ N '43

How to provide grounding systems for generating stations and large substations. W. W. Lewis. *diags Elec W* 119:1320 Ap 17 '43

Wire guard protects substation workmen. J. B. Kendall. *il Elec W* 120:480 Ag 7 '43

ELECTRIC substations, Automatic

Interim report on application and operation of automatic reclosing equipment on stub feeders. *Elec Eng* 62:Trans 536-40 Ag '43

ELECTRIC substations, Outdoor

Complex substation structure built of wood in place of steel. *il Elec West* 89:47 D '42

Conservation of materials in substation design; use of wood structures; Jersey central power & light company. E. M. Adkins. *il diags Elec W* 119:755-7 Mr 6 '43

Indoor breakers used for outdoor station. L. W. Moore. *il diags Elec W* 119:312 Ja 23 '43

Outdoor substation structure designed for welding; with cost data. R. W. DeVore. *il diags Welding J* 22:593-9 Ag '43

ELECTRIC substations, Portable

Completely portable a.c.-d.c. substation; Belridge oil company drilling equipment. L. D. Banderob and P. L. Salvage. *il Elec W* 119:297+ Ja 23 '43

Experience proves worth of mobile substation; Indianapolis power & light company. A. M. Cook. *il Elec W* 119:59-60 Ja 9 '43

Experience with portable substations. R. M. Byers. *il diags Elec W* 120:106, 330, 484, 656 J1 10-Ag 21 '43

Mobile substations for the L.N.E.R. *il Engineering* 156:208, 210 S 10 '43; *Elec R (Lond)* 133:315 S 3 '43; *Electrician* 131:246 S 10 '43

33-kv. mobile sub backed by 4-kv. unit. H. M. Wade. *il Elec W* 120:336 S 4 '43

ELECTRIC switches

Airport runway lighting control switch. J. P. Houck. *il diags Product Eng* 14:268-9 My '43

Automatic air-breaks in lieu of oil breakers. A. M. McCabe. *il diag Elec W* 119:68-9 Ja 9 '43

By-pass switches isolate regulators. *il diag Elec W* 119:1162 Ap 3 '43

Cause and control of some types of switching surges. T. W. Schroeder. *bibliog diags Elec Eng* 62:Trans 696-700 N '43

Disconnect inching averts accidents and outages. E. R. Paige. *il Elec W* 119:2124-5 Je 26 '43

Disconnecting switches. *Power* 87:480-1 J1 '43

Electrical developments of 1942; switchgear. G. Bartlett. *il Gen Elec R* 46:13-15 Ja '43

High-voltage switchgear; abstract. C. W. Marshall. *Elec R (Lond)* 132:482-3 Ap 9 '43

How to operate; disconnect switches, oil circuit breakers, air-break switches. *Elec W* 118:1974 D 12 '42

Industrial switchgear maintenance. P. R. Pierson. *il Blast F & Steel Pl* 31:1007-8+ S '43

Interim report on application and operation of circuit breakers and switchgear. *bibliog Elec Eng* 62:Trans 481-2 J1 '43

Lightning protection of switchgear, unit substations, or a-c rotating machines closely connected to overhead lines. W. J. Rudge, jr., V. L. Cox and E. M. Hunter. *il diags Gen Elec R* 46:551-6 O '43

Magnetic control switch. *il diags Electronics* 16:196+ J1 '43

Manual switches for aircraft. R. A. Miller-master. *il diag Elec Eng* 62:Trans 596-3 S '43

Metal-clad gear in Big Inch stations. J. H. Metz and J. C. Hoyt. *il diag Elec W* 120:326 J1 24 '43

Mine hoist skip spotting switch. J. Blenkiron. *diags Eng & Min J* 144:76 S '43

Mineral oils for transformers and switchgear. A. A. Pollitt. *bibliog Inst E E J* 90 pt 2: 15-22; *Discussion*, 53-64 F '43

Minimum of graphic equipment yields maximum of data; graphic meters supplemented by transfer switches in load and voltage surveys; Indianapolis power & light company. G. H. Kelsay. *diags Elec W* 119:750-2 Mr 6 '43

New 50,000-kva 5-kv oilless circuit-breaker and metal-clad switchgear unit. R. C. Dickinson and B. I. Hayford. *il diags Elec Eng* 62:Trans 302-6 Je '43

Relay and switch upkeep and trouble shooting; data sheets. W. A. Holland. *Factory Management* 101:134+ F '43

Siemens water-tight switchgear. *il Electrician* 131:258 S 10 '43

Subcenter switching systems for teleprinter tie lines. F. L. Currie. *il diags Elec Eng* 62:Trans 635-41 O '43

Switch and fuses replace circuit breaker on 60-kv. subs. C. E. Baugh. *il Elec West* 91:47-8 Ag '43

Switch scheme to by-pass regulators. *diag Elec W* 119:988 Mr 20 '43

Switchgear dispersal; modern primary distribution centre. *il diag Elec R (Lond)* 132:241-6 F 19 '43

Switchgear equipment transactions are streamlined. E. H. Beckert. *il Chem Ind* 51:736 N '42; *Same*. *Steel* 112:114+ F 15 '43

Switchgear installation; German economy measures. *Elec R (Lond)* 131:761 D 11 '42

Switchgear maintenance and trouble shooting. W. A. Holland. *Factory Management* 100:130, 132, 134 D '42

Switchgear practice in Europe and America. J. B. MacNeill. *il diags Elec Eng* 61:609-13 D '42

Switching scheme for off-peak meters. *diags Elec W* 119:307 Ja 23 '43

30,000-amp. switch has novel design. *il Elec W* 119:308 Ja 23 '43

Voltage control; on-load ratio changers using mercury switches. *il Electrician* 129:657-3 D 18 '42; *Abstract*. *Elec R (Lond)* 131:827-8 D 25 '42

See also
Electric circuit breakers
Electric contacts
Electric control

Control

Carrier control of sectionalizing air breaks; 33-kv. transmission system of the Philadelphia electric co. C. H. Faust. *il Elec W* 120:1504-5 O 30 '43

Manufacture

Steel in switchgear saves 75 to 80 per cent of copper formerly required. L. F. Dytrt. *il Steel* 112:56-7+ Ja 11 '43

Testing

Auto-blast interrupter switch. E. A. Williams jr. and W. G. Harlow. *bibliog il diags Elec Eng* 62:Trans 176-81 Ap '43

Primary injection set; inexpensive method of making tests on switchgear. C. C. Kirby. *il diags Elec R (Lond)* 132:507-9 Ap 16 '43

ELECTRIC symbols

ASA approves standard electrical symbols for use on communication drawings. W. L. Heard. *Ind Stand* 13:269-71 N '42

American standards for graphical symbols for power, control and measurement; for telephone, telegraph and radio use; for architectural plans. 40p pa 40c; 18p pa 30c; 4p pa 20c American institute of electrical engineers, 33 W. 39th st, New York '43

Graphical symbols; aid in interpreting schematic wiring diagrams. *Electronics* 16:34-7 Ap '43

Radio vs. industrial symbols; lack of uniformity. *diags Electronics* 16:94-5 S '43

Standard symbols for electrical power and control diagrams. J. W. Cooke. *il diags Ind Stand* 14:165-70 My '43

ELECTRIC symbols—Continued

Wiring diagram symbols recommended by National machine tool builders association; reference book sheet. diags Product Eng 14:537-8 Ag '43

ELECTRIC testing

Answers to technical questions. diag Electrician 130:653 Je 25 '43

Doble conferees record progress; improved techniques in testing presented at 10th annual conference. Elec W News ed 119:384-5 Ja 30 '43

Duplex meter set for load surveys. il diag Elec W 119:1337-8 Ap 17 '43

Electrical instrument test panel. H. L. Hamm. il diag Instruments 15:526 D '42

Ferranti high-voltage direct-current testing equipment. il diags Engineering 156:6-8 Jl 2 '43

General Electric full load continuity tester. il Electrician 130:463 My 7 '43

Grounding scheme for staged fault test. A. Chantry. diags Elec W 119:474-7 F 6 '43

Marked oscillograph tracings. R. W. Ahlquist. il diags Gen Elec R 46:179-82 Mr '43

Measurement of peak voltages in high-voltage testing, with particular reference to a modified diode peak voltmeter. R. N. Buttrely. bibliog diags Inst E E J 90 pt 2:186-91 Je '43

Surge testing. C. M. Foust. bibliog il Gen Elec R 45:629-32 N '42

Workshop impedance tests. G. W. Stubbings. diags Electrician 130:575-6 Je 4 '43

See also

Dynamometers Electric measure-
Electric instruments ments

also subdivision Testing under special headings; e.g. Electric cables; Electric transformers; Insulation (electric)

ELECTRIC testing of metals

Electronic sorting and testing; Cyclograph. il Iron Age 152:57-8 N 4 '43

Mechanical properties of metal foils. B. Chalmers and P. W. Seddon. Metal Prog 44: 424-4 S '43; Abstract. Elec R (Lond) 131: 816 D 25 '42

Testing the wall thickness of intricate castings. B. M. Thornton. il diags Engineering 155:361-2 My 7 '43

ELECTRIC tools, Portable

Handful of power; electric hand drill injection molded of cellulose acetate butyrate. il Mod Plastics 20:55-7 Jl '43

Life prolonged by proper care of electrical tools. P. C. Zienke. il Coal Age 48:66-8 S '43

Making a good tool better; plastic parts for Precise 35 electric hand tool. R. Schumann. Am Gas J 159:22 O '43

Plastic housing replaces aluminum in improved design; Thor universal electric drill. il diag Product Eng 14:408-9 Jl '43

Power tools that go to the job. il Factory Management 101:137-8 Mr '43

ELECTRIC traction

Adequate electrical maintenance essential to transportation. W. J. Clardy. il Elec Eng 62:Trans 517-21 Ag '43

Electrical developments of 1942; railroad and industrial. G. Bartlett. il Gen Elec R 46: 42-3 Ja '43

See also

Electric locomotives Railroads—Electrifi-

Electric railroads cation

Electric trucks Street railroads

Motor cars (rail- Subways

road)—Diesel-elec- Trolley buses

tric

ELECTRIC transducers

Electrical transducer circuit for use with capacity pick-up devices. E. V. Potter. diags U S Bur Mines Rep of Invest 3685:1-7 '43; Same. R Sci Instr 14:130-5 My '43; Abstract. Electronics 16:150-7 Jl '43

Quartz crystal applications. W. P. Mason; W. L. Bond. il diags Bell System Tech J 22:178-262 Jl '43

ELECTRIC transformers

Abnormal overvoltages caused by transformer magnetizing currents in long transmission lines. H. A. Peterson and T. W. Schroeder. bibliog diags Elec Eng 62:Trans 32-40 Ja '43

Advance constant voltage transformers. il Chem Age (Lond) 43:453 Ap 24 '43

Applying grounding transformers. H. Fahnoe. diags Elec W 119:984, 1160 Mr 20-AP 3 '43

Comprehensive record of power bank loads. Elec W 119:1988 Je 12 '43

Effect of current-transformer residual magnetism on balanced-current or differential relays. H. T. Seeley. diags Elec Eng 62: Trans 164-9 Ap '43

Electrical developments of 1942; transformers. G. Bartlett. il Gen Elec R 46:10-11 Ja '43

Electrical engineering in 1942. il Engineer 175:38-9 Ja 8 '43

Elevated neutral protects generators. E. A. Crellin. diag Elec W 118:1947-8 D 12 '42

Igranic low-voltage lighting transformer unit. Engineering 154:407 N 20 '42

Instrument transformers which conserve critical materials. il Electrician 131:127-9 Ag 6 '43

Interim report on overloading distribution transformers. bibliog Elec Eng 62:Trans 516-17 Ag '43

Metering power on the low-voltage side. A. J. Pezinger and B. E. Lenehan. bibliog diags Elec Eng 62:Trans 159-63 Ap '43

Mineral oils for transformers and switchgear. A. A. Pollitt. bibliog Inst E E J 90 pt 2: 15-22; Discussion. 53-64 F '43

New instrument transformers. W. K. Dickinson. il Gen Elec R 46:331-4 Je '43

Phase shifter regulates figure 8 interconnection. L. F. Ferri and H. R. Vaughan. il diags Elec W 120:75-7 Jl 10 '43

Phase transformation of single-phase load. W. R. Brownlee. diag Elec W 119:1476 My 1 '43

Power shortouts to meet wartime production goals; cooling transformers and motors; unusual transformer connections; off-standard transformers and motors. il diags Coal Age 48:64-5 S '43

Regimenting atoms in search for better transformer cores. Sci Am 168:60 F '43

Seeks better transformer cores; small hollow square sections cut from large crystals of various alloys. il diags Product Eng 14:230 Ap '43

Spring removes slack from equipment leads. diag Elec W 118:1968 D 12 '42

Substation-transformer emergency overload-practice. L. W. Clark. Elec Eng 62: Trans 126-32 Mr '43

Sucker transformer reduces induction; inductive co-ordination problem. T. Seely. diag Elec W 120:1544 O 30 '43

Transformer buses on columns cut substation steelwork in two. il diags Elec W 119:1170-1 My 29 '43

Transformer radiator drain device. E. H. Cox, jr. il diags Elec W 120:118 Jl 10 '43

Transformer restrictions; particulars of new order. Elec R (Lond) 133:464 O 8 '43

Transformer ties in Sweden's networks. Elec W 119:2002-3 Je 12 '43

Transformers for wartime substations: single-phase vs 3-phase. E. M. Hunter. il Power 87:235-4 Ap '43

See also

Electric rectifiers

Electric substations

Electric transmission

Autotransformers

Cost of adding auto-transformer. Elec W 120:1044 S 18 '43

Guide to use of auto-transformers in three-phase systems. Elec W 118:1970 D 12 '42

How to work out the size of core and copper for auto-transformer. Electrician 130:577-8 Je 4 '43

Cleaning

Housecleaning large power transformers; cleaning and painting operations. G. T. Twyford. il Elec W 120:671 Ag 21 '43

Connections

"A" 3-phase system has grounding merits. W. T. Taylor. diag Elec W 118:1628 N 14 '42

Errors can be small in expedient metering; Metering error with C.T. on high side. W. A. Morgan. diags Elec W 120:1372, 1376 O 16 '43

ELECTRIC transformers—Connections—Cont.

Guide to selection of connections for distribution transformers. F. M. Starr. Elec W 119:310 Ja 23 '43

How to cut out one transformer in a "Y" bank; diagrams. A. L. Williams. Elec W 120:342 S 4 '43

Open-delta transformer banks; analysis of circuit. J. E. Clem. diags Elec Eng 62: Trans 292-7 Je '43

Performance of delta-delta transformer banks. R. S. Sargent. Elec W 119:1315, 1492-4, 1650 Ap 17-May 15 '43

Practical discussion of problems in transformer differential protection. P. W. Shill. diags Elec Eng 61:Trans 854-3 D '42

3-position disconnect on 132-kv. transformer. A. Palmer. il Elec W 119:96 Ja 9 '43

Three-winding transformer ring-bus characteristics. G. W. Bills and C. A. MacArthur. diags Elec Eng 61:Trans 848-9 D '42

Control

Thermostat control for triple-rated transformers. H. A. Morgan. il diags Power Pl Eng 47:72-3 N '43

Cooling

Air-cooled transformers. il Electrician 131: 63-4 Jl 16 '43

Boost current transformer ratios on spray-cooled banks. Elec W 119:1318 Ap 17 '43

Cooling power transformers by forced circulation of cooling medium. K. K. Paluev and L. H. Burnham. bibliog il diags Elec Eng 62:Trans 215-21 My '43

Cooling systems jump power-transformer capacity. W. C. Sealey. il diags Power 87:728-30+ N '43

Dry-type transformers; natural-draft air-cooled units. P. A. Vance. il Gen Elec R 46:627-9 N '43

How much overload by spray-cooling transformers? V. M. Montsinger and P. M. Ketchum. Elec W 119:57-8 Ja 9 '43

Induction heater speeds tube forming; cooler for transformer. W. Scott. il Iron Age 152: 58-9 S 23 '43

Savings from increased capacity. J. V. Kresser. il Elec West 90:93-4 Je '43

Transformer cooling system maintenance. S. Bennon. Elec W 120:1534+ O 30 '43

Design

Better magnetic core steel aids transformer engineer; Hipersil steel. C. C. Horstman. il Product Eng 14:28-30 Ja '43

Current transformers. H. E. Forrest. il diag Elec R (Lond) 133:235-6 Ag 20 '43

Dry-type distribution transformers. H. C. Coleman and J. H. Chiles. il Marine Eng 48:192-4 Jl '43

Dry-type transformers; natural-draft air-cooled units. P. A. Vance. il Gen Elec R 46:627-9 N '43; Excerpt. Elec W 120:480+ Ag 7 '43

Efficiency; progress in design to improve it. C. A. Powel. Elec W 119:1116-17 Ap 3 '43

H-V load-ratio control; designing control equipment for connection directly in high-voltage circuit of a 45,000-kva transformer bank. L. F. Blume. il diags Gen Elec R 46:599-603 N '43

High-voltage power-transformer design. M. B. Mallett. il diags Elec Eng 62:Trans 526-31 Ag '43

New developments in potential-transformer design. G. Camilli. il diags Elec Eng 62: Trans 483-7 Jl '43

Redesign of transformer reduces resistance to air flow. il Product Eng 14:409 Jl '43

Three-phase transformers save copper and steel. E. W. Morris. il Elec West 91:44-5 Jl '43

Tuned transformers; design of these electronic units simplified by means of universal performance curves. J. E. Maynard. diags Gen Elec R 46:559-61, 606-9 O-N '43

Drying

Southern California Edison dehydrates transformers. il Elec W 120:649 Ag 21 '43

Failure

Analyze causes of transformer failures. Elec W 119:1646 My 15 '43

Fires and fire protection

How to safeguard against transformer fires. Elec W 119:798 Mr 6 '43

Installation

Bare-bones design for interconnecting transformer station. il diags Elec W 120:810-11 S 4 '43

Mounting transformers for outdoor metering. diags Elec W 118:1982-3 D 12 '42

Mounts power banks on vertical racks. il diags Elec W 120:1023 S 18 '43

Pole mounting of 3- to 25-kva. transformers. diags Elec W 118:2126+ D 26 '42

Primary metering pre-assembled. diag Elec W 119:314 Ja 23 '43

Steel-poor transformer platform. il diags Elec W 119:302 Ja 23 '43

Transformer housings superior to platforms; portable steel house set on a concrete mat. G. H. Landis. il diags Elec W 118:2092-4 D 26 '42

Transformer mounting on joint-use poles. diag Elec W 118:1800 N 23 '42

Losses

Core loss correction made by voltmeter. diag Elec W 118:1650+ N 14 '42

Watt-hour meter compensates power transformer losses. W. C. Woodson. il diags Elec W 120:452-4 Ag 7 '43

Maintenance and repair

Extra clamps stop oil leakage. N. J. Galuppo. il Elec W 120:330+ Jl 24 '43

Good maintenance keeps transformer on the job. M. H. Bates. il Power 87:33-6 Ja '43; Same. Blast F & Steel Pl 30:1361-3+ D '42; Same. Paper Tr J 115:11, 14, 16-17 D 10 '42; Same. Gen Elec R 46:393-6 Jl '43; Same. Textile World 93:106-8 Je '43

How to keep inertia effective. S. Bennon. Elec W 120:1040 S 18 '43

Transformer cooling system maintenance. S. Bennon. Elec W 120:1534+ O 30 '43

Transformer overhaul. il Eng & Min J 144:83 Ap '43; Same, with 2 additional il. Paper Ind 24:1042 Ja '43

Transformer shop practice summarized. Elec W 119:1335-6 Ap 17 '43

Manufacture

New plants of 1942; Westinghouse addition to transformer tank plant. il Factory Management 101:B83-B85 Ap '43

Parallel operation

Bus run avoided by paralleling current transformers. W. K. Holmes. diag Elec W 118: 1976 D 12 '42

New control system for automatic parallel operation of load-ratio-control transformers. S. Minnici and S. B. Farnham. bibliog diags Elec Eng 62:Trans 488-93 Jl '43

Protection

Carrier-current differential protection for transformer banks. T. A. Cramer. il diags Elec Eng 62:Trans 545-8 Ag '43

Compressed gas for transformers; nitrogen and Freon. R. T. Stafford. il Elec W 118: 1634 N 14 '42

Cut-folding paper insulation device. L. G. Walker. il Elec W 120:332 Jl 24 '43

Demand meters guide bank loading. il Elec W 119:1318 Ap 17 '43

Lightning protection schemes compared. H. O. Byers. Elec W 120:657 Ag 21 '43

Lightning protection survey of distribution transformers. W. H. Jones. Elec W 119: 341-4 Mr 20 '43

Loading of transformers. E. T. Norris. il Elec R (Lond) 132:175-7 F 5 '43

Mobile capacitor units for emergency loading of transformers in open delta. H. B. Wolf and G. G. Mattison. il diags Elec Eng 62: Trans 83-6 F '43

Oil-impregnated-paper high-voltage condenser bushings for circuit breakers and transformers. H. J. Lingal. H. L. Cole and T. R. Watts. bibliog diags Elec Eng 62:Trans 269-75 Je '43

Overvoltage protection of current-transformer secondary windings and associated circuits. R. H. Kaufmann and G. Camilli. il diags Elec Eng 62:Trans 467-72 Jl '43

ELECTRIC transformers—Protection—Cont.

- Practical discussion of problems in transformer differential protection. P. W. Shill. diags Elec Eng 61:Trans 854-8 D '42
- Self-clearing gaps reduce service calls. W. L. Manton. il Elec W 120:668 Ag 21 '43
- Shunt capacitors; report of AIEE committee on power transmission and distribution. bibliog (79 titles) diags Elec Eng 62:Trans 222-30 My '43
- Switch and fuses replace circuit breaker on 60-kv. subs. C. E. Baughn. il Elec West 91:47-8 Ag '43
- Temperature relay cuts power load. A. G. Johnson. diag Elec W 119:620 F 20 '43
- Transformer acids and sludges trapped. T. W. Buttner and J. G. Martin. diag Elec W 119:1797 My 29 '43
- Transformer fusing. H. L. Lowe. Elec W 118: 1968, 2128+; 119:100+, 308, 474, 632 D 12 '42-F 20 '43; Correction. 119:790 Mr 6 '43

Rating

- Rating of power transformers as determined by the war emergency. R. J. Salsbury and A. F. Phillips. Elec Eng 62:Trans 255-60 Je '43

Standards

- Important new standards cover transformers, regulators, reactors. V. M. Montsinger. il Ind Stand 14:55-7 F '43

Tables, calculations, etc.

- Current-transformer excitation under transient conditions; comment on article by D. E. Marshall and P. O. Langguth, published in AIEE Transactions, volume 48, 1929. Elec Eng 62:228 My '43
- Open-delta transformer banks; analysis of circuit. J. E. Clem. diags Elec Eng 62: Trans 292-7 Je '43
- Simple method for the determination of bushing-current-transformer characteristics. S. D. Moreton. bibliog Elec Eng 62: Trans 581-5 S '43

Tanks

- New transformer's form-fit tank saves space. il Power Pl Eng 47:106 Jl '43

Tap changing

- H-V load-ratio control; designing control equipment for connection directly in high-voltage circuit of a 45,000-kva transformer bank. L. F. Blume. il diags Gen Elec R 46:599-603 N '43
- Rated voltage by taps for auxiliaries. L. H. Henley. diag Elec W 120:1391-2 O 16 '43
- Voltage control; on-load ratio changers using mercury switches. il Electrician 129:657-8 D 18 '42; Abstract. Elec R (Lond) 131:827-8 D 25 '42

Temperature

- Equivalent ambient temperatures for loading transformers; calculations based on Weather bureau records. W. C. Sealey. Elec Eng 62:Trans 87-93 F '43
- How to determine copper winding temperature by resistance method. I. S. Campbell. chart Elec W 118:2122 D 26 '42
- How to determine hot-spot temperatures of power transformers at various loads; chart. R. O. Loomis. Elec W 119:2148 Je 26 '43
- How to play safe when overloading transformers. W. C. Sealey. il diag Factory Management 101:145-9 Jl '43
- Transformer loading; exploitation of thermal limits as a war measure. C. H. Pike. bibliog Elec R (Lond) 132:611-13 My 7 '43
- Use of equivalent annual ambient temperature in overloading transformers and voltage regulators. M. S. Oldacre. bibliog Elec Eng 62:Trans 477-80 Jl '43
- Wartime transformer loading. E. Baughn. bibliog Elec West 90:38-9 Mr '43

See also

- Electric transform-
ers—Cooling

Testing

- Average-voltage voltmeter. F. K. Dalton. Elec W 118:1650+, 1806 N 14-28 '42
- Capacitance bridge for determining the ratio and phase angle of potential transformers. H. W. Bousman and R. L. Ten Broeck. bibliog il diags Elec Eng 62:Trans 541-5 Ag '43

- Current transformer burdens. G. W. Stubblings. diags Electrician 131:302-3 S 24 '43
- Order of instrument transformer testing. Elec W 118:1655 N 14 '42

Windings

- Current doubled for Niagara transformers. F. H. Woods. Elec W 119:307-8 Ja 23 '43
- How to determine copper winding temperature by resistance method. I. S. Campbell. chart Elec W 118:2122 D 26 '42
- Overvoltage protection of current-transformer secondary windings and associated circuits. R. H. Kaufmann and G. Camilli. il diags Elec Eng 62:Trans 467-72 Jl '43
- Shielded concentric cylindrical windings in high-voltage power transformers. H. O. Stephens. il diags Gen Elec R 45:705-9 D '42
- Stress-control transformer windings. il Engineering 155:187 F 26 '43
- Useful equivalent circuit for a five-winding transformer. L. C. Aicher, jr. bibliog diags Elec Eng 62:Trans 66-70 F '43

ELECTRIC transformers, Portable

- Portable 37½-kva. transformer unit. C. J. Baker. Elec W 119:1328 Ap 17 '43

ELECTRIC transient phenomena

- Cathode-ray oscillograph applied to long-time switching transients. G. W. Dunlap and N. Rohats. il diags Elec Eng 62:Trans 231-4 My '43
- Cause and control of some types of switching surges. T. W. Schroeder. bibliog diags Elec Eng 62:Trans 696-700 N '43
- Comparison of the transform and classical methods. W. V. Lyon. diags Elec Eng 62: 198-203 My '43
- Current-transformer excitation under transient conditions; comment on article by D. E. Marshall and P. O. Langguth, published in AIEE Transactions, volume 48, 1929. Elec Eng 62:228 My '43
- Measurements on impulse voltages with a ballistic galvanometer. G. W. Bowdler. il diags Inst E E J 89 pt 2:555-60; Discussion. 561-4 D '42
- Practical calculation of electrical transients on power systems. R. D. Evans and R. L. Witzke. diags Elec Eng 62:Trans 690-6 N '43
- Steady-state and transient-stability analysis of series capacitors in long transmission lines. J. W. Butler, J. E. Paul and T. W. Schroeder. bibliog diags Elec Eng 62:Trans 58-65 F '43
- Study of voltage transients in arc-furnace circuits. J. B. Hodtum and J. B. Rice. bibliog il diags Elec Eng 62:Trans 556-62 Ag '43
- Surge testing. C. M. Foust. bibliog il Gen Elec R 45:629-32 N '42
- Theory of ideal filters; the relation of transient response to an ideally-limited frequency band. D. A. Bell. Wireless Eng 20: 323-6 Jl '43
- Travelling waves in high-voltage alternator windings. E. Friedländer. bibliog diags Inst E E J 89 pt 2:492-506 O '42; Discussion. 89 pt 2:506-8; 90 pt 2:83-8 O '42, F '43
- Voltage surges caused by contactor coils. J. R. Taylor and C. E. Randall. diags Inst E E J 90 pt 2:90-5 Ap '43; Abstracts. Electrician 129:557-8 N 20 '42; Engineering 155: 19 Ja 1 '43; Discussion. Inst E E J 90 pt 2: 95-100 Ap '43; Electrician 129:558-9 N 20 '42

See also

- Electric protective
apparatus Overvoltage (elec-
tronic lines)

Lightning**ELECTRIC transmission**

- Carrier current can provide more kwh; various applications to transmission line operation. G. S. Lunge. il Elec West 90:52-4 My '43
- How kvar losses can be minimized. R. M. Sensintaffar. diags Elec W 119:1810 My 29 '43
- How to connect controls, meters and relays for parallel 220-kv. transmission lines; diagram. Elec W 118:1980 D 12 '42
- Jubilee of three-phase transmission. Engineering 155:262 Mr 26 '43
- Mine power; old principle offers wartime benefits; three-wire d.c. transmission. G. C. Barnes, Jr. diag Coal Age 48:65-6 Jl '43

ELECTRIC transmission—Continued

Transmission and distribution of electricity, with special reference to war-time conditions, J. N. Robertson. *Inst E E J* 90 pt 1: 117-19 Mr '43

Transmission-line and system problems in supplying large electric-arc furnaces during wartime. B. M. Jones. *bibliog il diags Elec Eng* 62:Trans 197-202 Ap '43
Where a short is not a short. J. K. Masten. *diags Power Pl Eng* 47:112, 114+ Ap '43

See also

Electric cables Electric lines
Electric distribution Voltage regulation

Tables, calculations, etc.

Electric propagation on long lines terminated by lumped networks. M. G. Malti and M. Golomb. *bibliog Franklin Inst J* 235:41-73, 101-13 Ja-F '43

Intrasytem transmission losses. E. E. George. *Elec Eng* 62:Trans 153-8 Mr '43

Self-excited oscillations of capacitor-compensated long-distance transmission systems. R. B. Rodine, C. Concordia and G. Kron. *bibliog diags Elec Eng* 62:Trans 41-4 Ja '43

Steady-state and hunting equivalent circuits of long-distance transmission systems. G. Kron. *diags Gen Elec R* 46:337-42 Je '43

Transmission-line equations. V. J. Cissna. *diag Elec Eng* 61:587 N '42; Discussion. 62:138-9 Mr '43

ELECTRIC trucks

Battery electric. *diags Automobile Eng* 33: 155-9 Ap '43

Electric mail-vans. *il Elec R (Lond)* 132: 173-4 F 5 '43

Standard electrical vehicle. *diag Electrician* 130:562-3 Je 4 '43; *Elec R (Lond)* 132:742 Je 4 '43

ELECTRIC trucks, industrial

Baker lift truck. Type H-3. *il Chem Ind* 53: 528 O '43

Brush battery-operated industrial truck. *il Engineering* 155:446 Je 4 '43; *Elec R (Lond)* 132:788 Je 11 '43; *Mech Handling* 30:315-16 Jl '43

Brush industrial trucks. *il Elec R (Lond)* 133:435-6 O 1 '43

Clark Tractorator electric truck. *il Gen Elec R* 45:712 D '42

Electric vehicles for Russia. *il Electrician* 131:224-5 S '43; Same. *Mech Handling* 30:446-8 O '43; Same cond. *Elec R (Lond)* 133:311 S 3 '43

Girl truckers are quick to learn, and take excellent care of equipment. G. E. Stringfellow. *il Steel* 112:123+ Je 7 '43

Greenwood and Batley electric trucks. *il Mech Handling* 30:32-3 F '43

Handles billets and forgings by lift-truck-skid system; Wyman-Gordon co. G. E. Stringfellow. *il Steel* 111:83-4+ D 28 '42

How to learn to be a top notch industrial trucker; Elwell-Parker electric company's booklet for instructing women operators. *il Steel* 113:108, 110, 114+ Jl 5 '43

HydroElectric hand lift trucks. *Paper Tr J* 115:42 D 10 '43

Improved methods speed storing of materials at General Electric plant. *il Blast F & Steel Pl* 31:456-8 Ap '43

Mechanized handling for small loads; Automatic transporter. H. J. Franheim. *il Steel* 112:106, 108+ F 15 '43

Power trucks in an aircraft plant. *il Mach* 49:184-6 D '42

Ransomes, Sims and Jefferies battery-operated stacking truck. *il diag Engineering* 154:346-7 O 30 '42

Training women to run industrial trucks. *il Ry Age* 114:580-1 Mr 20 '43

Truck work period doubled by increased battery capacity. G. E. Stringfellow. *il Steel* 112:98+ F 22 '43

Using both ram and fork with one lift truck; Wire and cable division, General electric company. H. C. Ramsey. *il Factory Management* 101:90-1 My '43

Maintenance and repair

Electric and gas-electric truck maintenance report; form used by Corning Glass. *Factory Management* 101:183-4 Ag '43

Power trucks merit careful maintenance. F. L. Sahlmann. *il diags Food Ind* 14:55-6 D '42; Same. *Aviation* 42:155, 157-8+ Ja '43; Same. *Paper Ind* 25:41-3 Ap '43; Same. *Gen Elec R* 46:325-8 Je '43; Same. *Chem Ind* 53:534, 536 O '43

Statistics

Industrial electric trucks and tractors, shipments, 1938-1941. Survey of Cur Business 1942 Sup p173 [supplemented in monthly numbers]

ELECTRIC utilities

Electric utilities and the cost of living. F. A. Newton. *Pub Util* 31:548-51 Ap 29 '43

See also

Central Valley project, California	Electric plants (central stations)
Edison electric institute	Electric service, Rural Philadelphia electric company
Electric industries	United gas improvement company
Electric lines	

Accidents

Charting the course in accident prevention. W. T. Rogers. *Edison Elec Inst Bul* 11:33-5+ F '43

Reducing wartime accident hazards. H. Miller. *Elec West* 90:91-2 Je '43

Review and classification of 121 fatal accidents which occurred in 1941 in the electric light and power industry; table. D. C. Stewart. *Edison Elec Inst Bul* 11:136 My '43

Utility accident rates up 9 percent for year. *Elec W News* ed 119:7 Ja 2 '43

War-time safety operation of public utilities. J. Stillwell. *Pub Util* 31:152-5 F 4 '43

See also

Electricity, injuries from

Accounting

Accountants have their troubles, spite of rules. H. H. Frank. *Pub Util* 31:754-6 Je 10 '43

Accounting classification and write-up; Minnesota power & light company; Federal power commission opinion. J. L. Dohr. *J Account* 75:466 My '43

Accounting methods discussed by Northwest electric light and power assn. *Elec W News* ed 119:144 Ja 16 '43

Accounting principles and utility regulation. J. Account 75:261-4 Mr '43; Discussion. 75: 360-3, 451-2 Ap-Mr '43

Accounting procedures relating to war facilities covered by necessity certificates. R. B. Carpenter. *Edison Elec Inst Bul* 11:141-6 My '43

Allocating gross revenue to production, transmission and distribution facilities. N. F. Brown. *Edison Elec Inst Bul* 11:57-61 F '43

Confusion over original cost and write-offs. O. Ely. *Pub Util* 31:35-8 Ja 7 '43

Institute executives ask for adequate time to review NARUC depreciation committee report. *Edison Elec Inst Bul* 11:277-9 S '43

Kilowatts, kilovars, and system investments. J. W. Butler. *Elec Eng* 62:Trans 133-7 Mr '43

Moratorium on F.P.C. original cost proceedings. W. L. Grossman. *Comm & Fin Chr* 153:901, 914-15 S 2 '43

New depreciation fallacy; reserve requirement theory. L. R. Nash. *Pub Util* 30:761-74 D 3 '42

Office appliances in the electric industry. S. H. Withey. *Electrician* 131:299-301 S 24 '43

Pacific Power & Light, cited by FPC on write-ups. *Elec W* 118:1955 D 12 '42

Protracting costing; application to electricity undertakings. R. C. Golding. *Elec R (Lond)* 131:651-3 N 20 '42

Public utility accounting; Northwestern electric company and American power and light company v. Federal power commission. J. L. Dohr. *J Account* 75:559 Je '43

Some accounting suggestions; would reduce expenses and improve records. H. O. Letleq. *Pub Util* 32:287-91 S 2 '43

Test case showing computation of depreciation under the group plan by the asymptotic method. H. G. Avery. *Edison Elec Inst Bul* 11:75-8+ Mr '43

ELECTRIC utilities—Accounting—Continued
Things learned in accounting for installment sales of electrical appliances; Georgia power company, Atlanta. H. W. Boozer. N A C A Bul 25:147-62 O 15 '43

Two utilities' original cost studies approved; Virginia public service co. and Wheeling (W.Va.) electric co. Elec W News ed 120: 1266 O 9 '43

Utility accountants hold joint meeting. Edison Elec Inst Bul 11:183-4 Je '43

Utility accounting revised by SEC. Elec W News ed 119:20 Ja 2 '43

Advertising

Children's contest spreads appliance conservation story; Wisconsin electric power company. Elec W 119:1618-19 My 15 '43

Friendly liaison with war workers; General electric company. il Elec W 120:1399+ O 16 '43

Heat is on; WPB's power conservation program. Business Week p24+ Ag 7 '43

How should we advertise in 1943? K. L. Ede. Edison Elec Inst Bul 11:69-72+ Mr '43

Keep his America—American! advertisements of the Idaho power company. il Elec W 119: 949 Mr 20 '43

Links war effort to state economy. il Elec W 120:508 Ag 7 '43

Merchandising advertisements; Portland (Ore.) General electric company. il Elec W 119:1002 Mr 20 '43

Pacific gas & electric co. helps dealers step up repair services. il Sales Management 51:58-9 D 1 '42

Power companies push conservation program. il Elec W 120:1339-41 O 16 '43

Turn off the light; theme of plan sponsored by utilities. Business Week p38+ Jl 10 '43

Utilities see farmers vital to war program; New England gas & electric system advertising presentations. il Elec W 120:512+ Ag 7 '43

Utility advertising going on the air. Elec W 119:1967 Je 12 '43

Appliance selling

Cooker development; will simple hire methods be resumed; hire-purchase more satisfactory. G. A. T. Burdett. Elec R (Lond) 132:15-17 Ja 1 '43

Exchange plan puts appliances to work; Oklahoma gas & electric company. il Elec W 119:488+ F 6 '43

Problem of sales promotion. G. A. T. Burdett. Electrician 130:25-6 Ja 8 '43

Things learned in accounting for installment sales of electrical appliances; Georgia power company, Atlanta. H. W. Boozer. N A C A Bul 25:147-62 O 15 '43

Buildings

Light for utility offices. il Elec West 90:46 Ja '43

Meter testing in Argentina; new Buenos Aires building. il Elec R (Lond) 132:207-8 Ag 13 '43

New center for service crews; distribution service building for Electric power board, Chattanooga, Tenn. il plans Arch Rec 93: 66-7 Ap '43

See also Electric service, Rural—Cooperative lines—Buildings

Complaints

How one company checks and analyzes voltage complaints; forms. Elec W 119:1150 Ap 3 '43

Cooperative ownership

See Electric service, Rural—Cooperative lines

Costs

Costs and tariffs; analysis of relevant statistics. F. J. Elliott. Elec R (Lond) 132:845-7 Je 25 '43

Costs of electricity supply. A. C. Thirtle. diags Inst E J 90 pt 1:125-30 Mr '43

Expenses, 1942. Elec W 119:266-7 Ja 23 '43

Public utility construction cost index, 1917-1942. Eng N 130:580 Ap 22 '43

Customer relations

Holding customer good-will in the war emergency. R. B. Roberts, Jr. Edison Elec Inst Bul 11:233-4+ Ag '43

How not to make a customer opinion survey. K. I. Jack. Pub Util 32:142-8 Ag 5 '43

Howdy stranger; friendly greeting and help given war industry newcomers; Washington water power co. Elec West 91:56 Ag '43

Positive collection system; Washington water power company of Spokane. Elec W 120: 1220+ O 2 '43

Report shows both customer and company approval of meter reading and billing changes. Edison Elec Inst Bul 11:129-32 My '43

Skimping through on the home appliance front. Pub Util 31:708-9 My 27 '43

Utility commercial departments an anchor for private enterprise. C. E. Greenwood. Edison Elec Inst Bul 11:9-10+ Ja '43

War and customer service. P. S. Arkwright. Edison Elec Inst Bul 11:68 Mr '43

See also

Electric utilities—
Public relations

Development work

Put small business into war production; what Washington water power company and Idaho power company have accomplished. L. V. Ross; O. C. Mayer. Elec West 91:52-4 Ag '43

Utility sells customers' abilities to produce bits and pieces; machine shops in Oregon and Washington supplying parts for Liberty ships. D. B. Leonard. il Elec W 118: 2098-100 D 26 '42

Employees

Coöperation between utility management and labor. A. M. Cooper. Pub Util 31:15-22 Ja 7 '43

Employee participation in management. A. M. Cooper. Elec West 90:33-4 Mr '43

Fulham's women workers. W. C. Parker. il Elec R (Lond) 131:773-6 D 18 '42

Government revises system of drafting key workers; individual-plant manning tables. Elec W 118:1621 N 14 '42

How to tell Joe and get Joe to tell; mail annual report to employees. G. W. Kerr. Elec W 119:67 Ja 9 '43

Industrial relations and utility labor. J. C. McIntosh. Pub Util 32:477-81 O 14 '43

It's women's work now in many departments of Pacific gas and electric company. il Elec West 90:47-9 My '43

Lineman, patrolman training. C. T. Malloy. Elec W 119:1470, 1640, 1803 My 1-29 '43

Manpower board revises essential utility jobs. Elec W 119:457-8 F 6 '43

Merchandising methods net bond pledges; Los Angeles Dept. of water & power system. il Elec West 90:43-5 Mr '43

Motor-bikes from push-bikes for meter readers and servicemen. R. C. Fullerton. il diags Edison Elec Inst Bul 11:251-2 Ag '43

Never a dull moment with lengthened schedules and reduced manpower; solving accounting department problems; Dayton power & light company. K. E. Boyle. Edison Elec Inst Bul 11:297-9 O '43

Physical examination of new employees to meet war-time conditions. H. B. Bardwell. Edison Elec Inst Bul 11:225-6 Ag '43

Sales-service engineers. G. A. T. Burdett. Electrician 130:515-16 My 21 '43

Set industry war bond record; Wisconsin Power & Light employees. Elec W 119: 1949-50 Je 12 '43

Suggestion plan proves valuable to company and employee alike; Pacific gas and electric company. Elec W 120:632 Ag 21 '43

Suggestion system holds employee interest; Pennsylvania water and power company. H. B. Lankford. Elec W 118:1941-3 D 12 '42

Suggestions, instruments of progress; Pacific gas and electric co. Elec West 91:51 O '43

Third component; faith and understanding that must flow between management and worker and customer. H. A. Bedau. Elec West 89:39-41 D '42

Thrice armed; utility aids and encourages employees in armed services; families aided. Elec West 89:35-6 N '42

27 critical utility jobs listed by WMC. Elec W 120:645-6 Ag 21 '43

Vepco must refund company union dues. Elec W 119:1966 Je 12 '43

ELECTRIC utilities—Employees—Continued

Wartime personnel training program; Puget Sound power & light co. G. L. Rideout. Elec West 91:49-51 O '43
 Women electricians. Elec R (Lond) 132:280 F 26 '43; Electrician 130:212 F 26 '43
 Women take parts of men's jobs; regrouping of jobs makes it possible to retain experienced men; Gulf states utilities company. R. S. Nelson. il Elec W 120:822-3 S 4 '43

See also

Electric utilities—
 Salesmen

Equipment and supplies

Expedients to dodge shortages. L. J. Gill. Elec W 119:2000 Je 12 '43
 Guide to U-1. Elec W 119:[insert] 1-12 My 29 '43
 How eight Wisconsin utilities allocate cost of hand tools used by employees. Elec W 119:1153 Ap 3 '43
 Obsolete material reclassified for use. Elec W 120:1027 S 18 '43
 Power company uses of electronic equipment. W. H. Blankmeyer. il Electronics 16:134-5, 169-70+ Mr '43
 Priorities problems; excess inventory exchange. Elec W 119:950-1 Mr 20 '43
 Reclaim it or scrap it; Puget Sound Power & Light demonstrates efficient procedure. L. A. Williams. il Elec West 90:57-8 My '43
 Salvage wire, hardware, lamps, insulators; reclamation department of Puget Sound power & light company. il Elec W 119:1450-1 My 1 '43
 Salvaging and reconditioning on the Detroit Edison system; illustrations, with text. Elec W 118:1778-80 N 28 '42
 Survey use of bikes by utility companies. Elec W 118:1825 N 28 '42
 U-1 revisions ordered to comply with CMP rules. Elec W News ed 119:1381 Ap 24 '43
 Utilities are getting in the scrap; survey of the methods and results from 76 companies. il Elec W 118:1600-1 N 14 '42
 Wartime housekeeping; conservation of time, manpower and materials; Pacific gas and electric co. E. M. Seel. il Elec West 89:39-41 N '42

See also

Motor trucks in repair service

Bibliography

Ways of conserving critical material to aid wartime electrical industry. Elec Eng 62:181-5 Ap '43

Finance

Break for electric utility stockholders; depreciation funds accumulating rapidly. E. R. Abrams. Barron's 23:16 Ag 23 '43
 Budget, 1942; prospective for 1943. Elec W 119:268 Ja 23 '43
 Construction budgets for '43 at \$539,000,000. Elec W 119:1627 My 15 '43
 Effects of maturity on the electric industry. C. W. Kellogg. Edison Elec Inst Bul 11:293-4 O '43
 Electric operating revenues, revenue deductions, and net revenues, United States, 1942-Feb. 1943 and comparisons with averages for 1937-1941; graphs. O. Ely. Pub Util 31:699 My 27 '43
 Federal taxes and utility earnings. E. R. Abrams. Comm & Fin Chr 157:1657+ My 6 '43
 Power goes to war. il Elec West 90:54-71 F '43
 Revenue, 1942. Elec W 119:264-5 Ja 23 '43
 SEC analyzes utility finances. Elec W News ed 120:183 Jl 17 '43
 Some rifts in utility clouds. W. T. Hyde, jr. Barron's 23:42-3 Ja 11 '43
 Special reserves for post-war adjustments. Edison Elec Inst Bul 11:230-2+ Ag '43
 Utilities cut personnel, hold expenses down; produce 62 per cent more power on 2 per cent increase in capitalization. O. Ely. Pub Util 31:695-6 My 27 '43

Utility earnings improve. Nat City Bank p123 N '43

See also

Electric plants, Municipal—Finance

Electric utilities—Securities
 Holding companies

also Associated gas and electric system; Idaho power company; Penn central light and power company; Philadelphia electric power company; Portland General electric company; Puget Sound power and light company; Standard gas and electric company

Government ownership

Are the elephants coming? new device for socialization of electric utilities disclosed in specific situations in South Carolina, Puerto Rico, and Washington, D.C. E. R. Abrams. Pub Util 31:618-24 My 13 '43
 Distributing electric power the Nebraska way; major portion of state served by nonprofit organization. J. Hoge. map Power Pl Eng 47:86-8 O '43
 Do Nebraska consumers need more regulatory protection? W. M. Maupin. Pub Util 31:220-4 F 18 '43
 Federal war powers act and the utilities; seizure of property of private public service companies in Puerto Rico. H. Corey. Pub Util 31:414-19 Ap 1 '43
 Government handouts to publicly owned utility plants. T. N. Sandifer. Pub Util 31:135-42 F 4 '43
 Is there a pattern of precedent in the Puerto Rican utility seizures? Pub Util 31:173-5 F 4 '43
 Mr Rankin's recent tilt with private power windmills. L. D. Farrar. Pub Util 32:482-9 O 14 '43
 Public opposes utility take-over in Northwest. Elec W News ed 119:533 F 13 '43
 Public power and the war cloak. H. Corey. Pub Util 31:82-9 Ja 21 '43
 Quebec to take over big Montreal utility. Elec W 120:1355 O 16 '43
 Supply industry; no justification for nationalization. A. Gridley. Elec R (Lond) 133:9-10 Jl 2 '43
 Tax exemption threatens free enterprise. G. C. Neff. Edison Elec Inst Bul 11:324-5 N '43
 Utilities alarmed; Premier's threat to seize big power concern. Business Week p50+ O 23 '43
 Utility seizure in Porto Rico protested. Elec W 118:1622 N 14 '42

See also

Electric utilities—
 Municipal ownership
 Hydroelectric plants
 —Government ownership

Ontario—Hydroelectric power commission

Law

Corporate revision of Florida Power asked; first case involving recapitalization of operating electric utility. Elec W News ed 118:2038 D 19 '42

Management

Bi-monthly or quarterly meter reading and related billing plans to conserve rubber, automotive equipment and manpower. H. B. Hardwick. Edison Elec Inst Bul 10:393-5 N-D '42
 Case for bimonthly billing. R. B. Tulpin. Edison Elec Inst Bul 11:242-4 Ag '43
 Experience with longer meter-reading periods. Elec W 119:1288-90 Ap 17 '43
 List of bi-monthly and quarterly meter reading schemes. Edison Elec Inst Bul 10:396-7 N-D '42
 Never a dull moment with lengthened schedules and reduced manpower; solving accounting department problems; Dayton power & light company. K. E. Boyle. Edison Elec Inst Bul 11:297-9 O '43
 Permanence of commercial work. C. W. Kellogg. Edison Elec Inst Bul 11:157-8+ Je '43
 Postwar planning; abstract. H. C. Thuerk. Pub Util 31:834-7 Je 24 '43
 Power markets through new applications. J. F. Gaskill. Edison Elec Inst Bul 11:179-81+ Je '43
 Problem of sales promotion. G. A. T. Burdett. Electrician 130:25-6 Ja 8 '43

ELECTRIC utilities—Management—Continued

Same old challenge with a great opportunity; reorganization of utility systems under Holding company act. R. B. Cooney. Pub Util 31:156-62 F 4 '43
 Utilization succeeds sales; Puget Sound Power & Light 1943 program. Elec West 90:70 My '43
 Will bi-monthly billing help the utility manpower problem. D. Robertson. Elec W 119: 501-3 F 20 '43; Correction. 119:1771 My 29 '43

See also

Electric utilities—
 Employees
 Meter reading

Meter departments

Metering methods to save materials. A. L. Carvill. Elec W 118:1610-11 N 14 '42; Same. Edison Elec Inst Bul 11:25-6 Ja '43

Municipal ownership

After 150 years; firm founded by Alexander Hamilton will be sold to New Jersey city. Business Week p113-14 O 23 '43
 Attempted utility blitz on Staten Island; New York's mayor's effort to acquire a local electric rate yardstick. E. R. Abrams. Pub Util 31:747-53 Je 10 '43
 Kentucky accepts T.V.A. power. A. T. Edelmann. J Land & Pub Util Econ 18:481-4 N '42
 Martyr of Huntington; story of struggle of mayor who battled in vain for municipal ownership. J. Brooks. Pub Util 31:275-81 Mr 4 '43
 No enthusiasm shown for municipal ownership of Cleveland public utilities. Comm & Fin Chr 157:1574-5 Ap 29 '43
 Private ownership finds new friends in municipal ownership fight; Cleveland electric illuminating company. Elec W 120:251-3 Ji 24 '43
 Public utility efficiency and postwar full employment; operating efficiency of publicly and privately owned utilities. F. J. McDiarmid. Pub Util 32:547-56 O 28 '43
 Texas Solons probe river authority deals. Elec W 119:1127-8, 1306, 1382, 1460 Ap 3-My 1 '43
 See also Cleveland electric illuminating company

Public relations

Electrical renaissance at the grass roots. A. B. Collins. Edison Elec Inst Bul 11:265-8 S '43
 Friendly liaison with war workers; General electric company. il Elec W 120:1399+ O 16 '43
 It's hard to say "no"; Pacific gas and electric company employee training program to maintain public relations under wartime conditions. il Elec West 90:31-2 Ja '43
 Organizing a nutrition program. J. H. Keele. Elec W 119:328+ Ja 23 '43
 Third component; faith and understanding that must flow between management and worker and customer. H. A. Bedau. Elec West 89:39-41 D '42
 Well, folks, it's been a long hard winter; emergencies show communities' appreciation of utility service; excerpts from newspaper articles. Edison Elec Inst Bul 11: 151-2 My '43
 See also
 Electric utilities—
 Service

Purchasing

A.c. board saves critical materials; calculating board analysis prevents unnecessary purchasing; five specific cases. C. F. Wagner. diags Elec W 120:460-1 Ag 7 '43

Radio communication

Utility uses two-way FM dispatching; instantaneous communication with field crews by Department of water & power system, Los Angeles. il Elec West 91:64-5 S '43

Rates

See Electric rates

Records

Card records yield continuous inventory; Menasha electric and water utilities. Elec W 119:1800 My 29 '43
 Compilation of transformer failure data; three report forms. Elec W 119:786 Mr 6 '43
 Comprehensive record of power bank loads. Elec W 119:1988 Je 12 '43
 Consumers' records; a speedy and efficient system. P. D. A. Oliver. il Elec R (Lond) 132:811-12 Je 18 '43
 How to record underground system facilities; diagrams. S. A. Olson. Elec W 118:2132 D 26 '42
 Multipurpose forms for routine tests. H. F. Wagner. il Elec W 119:1980 Je 12 '43
 Proves value of customer plant data; power sales department record sheet used by the Cincinnati gas & electric company. F. E. Wiatt. Elec W 118:1662+ N 14 '42
 St Louis sets pattern for implementing L-94; Union electric company has detailed plans and records to smooth road to rationing. Elec W 120:1509-13 O 30 '43

Regulation

Divestments; electric utility properties severed from holding company systems since the effective date of the Holding company act, and properties subject to divestment orders; tabulation. Elec W 119:270-2 Ja 23 '43
 Do Nebraska consumers need more regulatory protection? W. M. Maupin. Pub Util 31:220-4 F 18 '43
 Federal power commission and state utility regulation. R. D. Baum. 30lp \$3.75; pa \$3 Ann. council on public affairs, Washington, D.C. '43; Review. Pub Util 31:112-14 Ja 21 '43
 New OWU order certifies unauthorized extensions. Elec W News ed 120:723-4 Ag 28 '43
 P-46 revision issued as basic utility regulation. Elec W 119:613-14 F 20 '43
 States' rights in utility rate making; Arkansas commission's position in Federal power commission case against Southwest power pool. Pub Util 31:372-5 Mr 18 '43
 Trends toward destruction of state regulation. J. W. Wolfe. Elec W 119:1772-4 My 29 '43
 Utilities need relief from unnecessary wartime regulations. L. R. Nash. Comm & Fin Chr 158:1085, 1096-7 S 16 '43
 See also
 Electric power—
 Interstate transfer
 Holding companies
 Public utilities—Regulation
 Public utilities commissions
 Securities and exchange commission

Safety measures

Accident prevention committee meeting. Edison Elec Inst Bul 11:185-6 Je '43
 Accident prevention in the Philadelphia electric company. R. M. Godwin. Edison Elec Inst Bul 11:313-14 O '43
 Charting the course in accident prevention. W. T. Rogers. Edison Elec Inst Bul 11:33-5+ F '43
 Experience points the way in accident prevention. D. C. Stewart. Edison Elec Inst Bul 11:137-8 My '43
 How to execute switching orders, use hold cards, place construction tags. Elec W 119: 92 Ja 9 '43
 Monthly safety suggestion system; Northwestern electric company. il Elec W 119: 1494+ My 1 '43
 Reducing accidents. W. F. Nimmo. Edison Elec Inst Bul 11:217-18 Ji '43
 Safety merit award inaugurated. Edison Elec Inst Bul 11:139-40 My '43
 Seven more companies win EEI safety merit award. Edison Elec Inst Bul 11:312 O '43
 War safety in the public utility industry. H. O. Sprinkle. Edison Elec Inst Bul 10: 399-401+ N-D '42

Salesmen

Salesmen become equipment specialists. Elec W 119:1820+ My 29 '43
 Service is keynote of wartime power sales. il Elec W 119:603-5 F 20 '43
 Training program for power salesmen. J. T. Kimball. Elec W 119:808+ Mr 6 '43

ELECTRIC utilities—Continued

Securities

Financial, 1942. Elec W 119:269 Ja 23 '43
 High yields on Utah Power & Light bonds. A. Jansen. Barron's 22:18-19 D 14 '42
 Operating company stocks selling at twelve times earnings. O. Ely. Pub Util 31:697-8 My 27 '43
 Operating utilities after the war; which in line for expansion? F. C. Fullerton. Mag of Wall St 72:634-5+ S 18 '43
 Post-war outlook for utility equities. W. Andrews. Barron's 23:4 Ag 30 '43
 Utility preferreds for income. W. Andrews. Barron's 23:7 My 31 '43

Service

As our territory prospers so shall we; farming for better living program; Monongahela West Penn public service company. R. W. Godley. Edison Elec Inst Bul 11:119 Ap '43
 Blackstone Valley gas & electric company plans stable war service. Elec W 120:130+ J1 10 '43
 Customer service plan shows results; Georgia power company. W. B. Farnsworth. Elec W 120:680 Ag 21 '43
 Electric utilities cooperating effectively in national nutrition program, report shows. Edison Elec Inst Bul 11:138+ My '43
 Home service aids the war; Puget Sound power & light co. Elec West 91:55-6 Ag '43
 Home service canvass gives customer service advice. El Elec W 120:998-9 S 18 '43
 How a utility operates a farm electric equipment exchange plan. M. H. Lloyd. Edison Elec Inst Bul 11:248 Ag '43
 How & why behind Pacific Light's Good neighbor program; practical assistance to little business, and agriculture. Sales Management 52:38-40 My 20 '43
 How Georgia power company is expanding service program to meet wartime needs. J. H. Stevens. Edison Elec Inst Bul 11:90+ Mr '43
 Nutrition popular with men's groups; Wisconsin public service corporation demonstration lecture. El Elec W 119:2012+ Je 12 '43
 Nutrition program builds good will; Wisconsin power & light company. Elec W 119:1662+ My 15 '43
 Pacific gas & electric co. offers appliance check-up. Elec W 119:1340+ Ap 17 '43
 Pacific Gas & Electric's plan to help western farmers lick the food shortage; 40 farm power advisors. Sales Management 52:64-6 Ap 1 '43
 Promoting appliance repair to dealers; Mississippi power & light company. L. M. Taylor. Elec W 119:998+ Mr 20 '43
 Proves value of repair clinics; Central Hudson gas & electric corporation. J. E. Briggs. El Elec W 120:864+ S 4 '43
 Quick servicing aided by repair index; Hartford electric light company. El Elec W 119:492 F 6 '43
 Saving small industry as future customers. H. M. Sawyer. Edison Elec Inst Bul 11:200-2+ J1 '43
 Service is keynote of wartime power sales. El Elec W 119:603-5 F 20 '43
 Streamlining service activities. diag Elec W 119:1820 My 29 '43
 Teach nutrition in Victory kitchen; Puget Sound power & light co. E. T. Rauch. Elec W 119:650+ F 20 '43
 Two-man crews maintain war plant supply circuits. W. S. Cronin. El Elec W 119:596-8 F 20 '43
 Utah P & L streamlines utilization plan; 1943 service and advisory objectives. W. A. Hucksins. El Elec West 90:73 Ap '43
 Utility helps farmers surmount critical equipment shortages; Eastern Oregon Light and Power farm equipment clearing house and information center. Sales Management 52:50+ J1 1 '43
 Utility sales floors become wartime service centers. El Edison Elec Inst Bul 11:310-11 O '43
 Utilization engineering for large agricultural customers; work of farm power adviser; Pacific gas and electric company. E. G. Stahl. El Edison Elec Inst Bul 11:20-2 Ja '43

Victorious health; meal planning courses given to war workers' wives in the West. El Elec West 89:59-60 N '42
 War service for farmers and small businessmen. J. Mappelbeck. Pub Util 32:540-6 O 28 '43
 War stamps for old appliances; dealer cooperation plan put into operation by Duquesne light co. El Elec W 119:2120 Je 26 '43
 War-time functions of commercial sales departments. H. G. Isley. Edison Elec Inst Bul 11:11-12 Ja '43
 Wartime service instructs customers; Los Angeles Bureau of power & light. El Elec West 91:74-5 O '43

Shops

Condenser fields re-insulated in utility's own shops; Southern California Edison co. El Elec West 91:49 Ag '43

Show windows

Answering questions with windows; Portland general electric company, Portland, Ore. El Elec W 119:1662 My 15 '43
 Diminutive windows cut display costs. El Elec W 119:1164 Ap 3 '43

Showrooms

Utility sales floors become wartime service centers. El Edison Elec Inst Bul 11:310-11 O '43

Statistics

Annual statistical number. Elec W 119:245-75 Ja 23 '43
 Electric light and power industry in 1942. C. W. Kellogg. Edison Elec Inst Bul 11:1-5 Ja '43; Excerpts. Manuf Rec 112:24-5+ Ja '43
 Electric output and earnings, 1926-1943. Pub Util 32:231-2, 233, 633 Ag 19, N 11 '43
 Socio-economic conditions and intercity variations of electric use. H. G. Knaif. J Land & Pub Util Econ 18:431-46 N '42; Same. Edison Elec Inst Bul 11:36-44 F '43

See also

Electric plants (central stations)—Statistics

Taxation

Effect of war taxes upon utility regulation. R. W. Peterson. Edison Elec Inst Bul 11:6-8 Ja '43
 Utilities' problem of taxes growing. T. P. Swift. Edison Elec Inst Bul 11:102 Ap '43

Telephone

Carrier telephone saves distribution labor and travel; communicating with company's trucks serving rural area; Potomac Edison company, Hagerstown, Md. W. C. Feaster. El diag map Elec W 118:1602-5 N 14 '42
 Power company uses of electronic equipment. W. H. Blankmeyer. El Electronics 16:134-5, 169-70+ Mr '43

Valuation

California commission sets value of Sacramento. Elec W News ed 118:1863 D 5 '42

War problems

Alternate materials, methods. H. H. Minor. diag Elec West 90:39-40 Ja '43
 Army and civilian utilities pool facilities for emergencies; maintenance of the army, naval and maritime establishments for duration of war. D. A. Sullivan. Elec W 120:630-2 Ag 21 '43
 Blackout problems of a utility serving 16 counties; West Penn power company. W. R. Hamilton. Elec W 119:753-4 Mr 6 '43
 Car pooling saves one mile in five. Elec W 119:1652 My 15 '43
 Darkness for victory. T. P. Walker. Pub Util 31:242-5 F 18 '43
 Economics of war power supply. C. W. Kellogg. map Edison Elec Inst Bul 11:65-7+ Mr '43
 Electric industry goes all-out in promoting conservation program. Edison Elec Inst Bul 11:289-91 O '43
 Facing our wartime responsibilities. S. E. Gates. Elec West 90:74-5 Je '43
 48-hour week compliance problems. Elec W 119:1122-3 Ap 3 '43

ELECTRIC utilities—War problems—*Continued*
 Generating plants in the blitz; Britain's utilities maintain service. J. Dalton. *il Elec R (Lond)* 131:609-13 N 13 '42
 Power 86:892-3 D '42
 Guide to U-1. *Elec W* 119:[insert] 1-12 My 29 '43
 Industrial load; wartime problems of Manchester's electricity undertaking. *il Elec R (Lond)* 131:609-13 N 13 '42
 Job that has been done and will be done. C. E. Michel. *Edison Elec Inst Bul* 11:165-8+ Je '43
 Key to the apparent paradox in electric power supply for war. C. W. Kellogg. *Edison Elec Inst Bul* 11:147-50 My '43
 Manpower, motive power, material conservation; engineering symposium by Northwest utility men. *il Elec West* 90:78-82 Je '43
 Meeting power demand during war. L. Elliott. *Mech Eng* 64:872-6 D '42
 Meetings held in Northwest; utilization and accounting divisions exchange ideas on wartime operation. *Elec West* 90:59-60 Ja '43
 New England utilities meeting war power needs. C. S. Herrmann. *Elec W News* ed 119:1042-3 Mr 27 '43
 OWU announces major amendments to order U-1. *Elec W* 120:1177-8 O 2 '43
 Personnel training in wartime. A. A. Straub. *il Elec West* 90:95-6 Je '43
 Plant protection; review of safeguards occasioned by war. G. A. Hunt. *il Elec West* 90:83-4 Je '43
 Power companies push conservation program. *il Elec W* 120:1339-41 O 16 '43
 Power's big role; by pooling resources and scheduling needs, utilities carry war load with no civilian hardships. *Business Week* p20+ F 27 '43
 President's annual report to the Institute. C. W. Kellogg. *Edison Elec Inst Bul* 11:190-2 Jl '43
 Priorities problems. *Elec W* 119:453 F 6 '43 [cont twice a month]
 Priorities problems; analysis of the new U-1. *Elec W* 119:764-5 Mr 6 '43
 Priorities problems; guides for war plant design. *Elec W* 119:453 F 6 '43
 Priorities problems (housing); questions and answers on extensions. *Elec W* 118:1784-5 N 28 '42
 Program adopted to spur conservation drive. *Elec W News* ed 120:1445 O 23 '43
 St Louis sets pattern for implementing L-94; Union electric company has detailed plans and records to smooth road to rationing. *Elec W* 120:1509-13 O 30 '43
 Substitutions of material and changes in practice to meet wartime conditions. L. M. Smith. *Edison Elec Inst Bul* 10:403-4 N-D '42
 System-voltage control in the war emergency. A. E. Silver. *Edison Elec Inst Bul* 11:260-4 S '43
 Utilities need relief from unnecessary wartime regulations. L. R. Nash. *Comm & Fin Chr* 158:1085, 1096-7 S 16 '43
 Utilities work for victory. C. E. Greenwood. *il Edison Elec Inst Bul* 11:103-6 Ap '43
 Utility defense corps prepares for war threats; Commonwealth Edison company, Chicago. J. Weber. *il Elec W* 118:1608-9 N 14 '42
 War problems occupy Northwest conference. *Elec W News* ed 119:10 Ja 2 '43
 War problems solved by ingenuity under spur of necessity; symposium by Transmission and distribution committee, Edison electric institute, diags Edison Elec Inst Bul 11:13-19+ Ja '43
 Wartime protection of electric power systems. D. M. Jones. *Elec W* 119:1114-16 Ap 3 '43
 What, why, how of the conservation program. *Elec W* 120:819-20 S 4 '43

Argentina

Meter testing in Argentina; new Buenos Aires building. *il Elec R (Lond)* 133:207-8 Ag 13 '43

Great Britain

Electric power profits; four leading holding companies. *Economist* 144:403 Mr 27 '43
 Generating plants in the blitz; Britain's utilities maintain service. J. Dalton. *il Power* 86:892-3 D '42

Manchester's jubilee; some extracts from early records. *il Elec R (Lond)* 133:137-9 Jl 30 '43; Same cont. *Electrician* 131:103-4 Jl 30 '43

Midland electric corporation for power distribution, limited; Midland counties electric supply company, limited; ordinary general meetings. *Economist* 144:374-5 Mr 20 '43

South Shields judgment; taxation of trading profits. *Elec R (Lond)* 133:216 Ag 13 '43; Discussion. H. R. Ralph. *133:237-8 Ag 20 '43*

Supply industry; no justification for nationalisation. A. Gridley. *Elec R (Lond)* 133:9-10 Jl 2 '43

Undue preference; power consumers unfairly treated. E. W. Dorey. *Elec R (Lond)* 133:402-4 S 24 '43

See also

Electric utilities—Electricity supply—War problems Great Britain

Hawaii

Fire fighting by scientific methods; Hawaiian electric co. H. Heinrich. *il Elec West* 91:70-2 O '43

Kentucky

Kentucky accepts T.V.A. power. A. T. Edelmann. *J Land & Pub Util Econ* 18:481-4 N '42

Nebraska

Distributing electric power the Nebraska way; major portion of state served by non-profit organization. J. Hoge. *map Power Pl Eng* 47:86-8 O '43

Do Nebraska consumers need more regulatory protection? W. M. Maupin. *Pub Util* 31:220-4 F 18 '43

New York (city)

Attempted utility blitz on Staten Island; New York's mayor's effort to acquire a local electric rate yardstick. E. R. Abrams. *Pub Util* 31:747-53 Je 10 '43

Northwestern states

Cooperation in the Pacific Northwest. G. T. Bragg. *Elec West* 90:69-71 Je '43

Manpower, motive power, material conservation; engineering symposium by Northwest utility men. *il Elec West* 90:78-82 Je '43
 War service for farmers and small businessmen. J. Mappelbeck. *Pub Util* 32:540-6 O 28 '43

Ontario

See also Ontario—Hydroelectric power commission

Paterson, New Jersey

After 150 years; firm founded by Alexander Hamilton will be sold to New Jersey city. *Business Week* p113-14 O 23 '43

Puerto Rico

Are the elephants coming? new device for socialization of electric utilities disclosed in specific situations in South Carolina, Puerto Rico, and Washington, D.C. E. R. Abrams. *Pub Util* 31:618-24 My 13 '43
 Court orders return of Puerto Rico revenues. *Elec W News* ed 120:387 Jl 31 '43

Federal war powers act and the utilities; seizure of property of private public service companies. H. Corey. *Pub Util* 31:414-19 Ap 1 '43

Is there a pattern of precedent in the Puerto Rican utility seizures? *Pub Util* 31:173-5 F 4 '43

Porto Rico power co.; U.S. seizure appealed. *Comm & Fin Chr* 158:1382 O 4 '43

Porto Rico utility seizure declared invalid. *Elec W News* ed 118:1859-60 D 5 '42
 Utility seizure in Porto Rico protested. *Elec W* 118:1622 N 14 '42

Quebec (province)

Utilities alarmed; Premier's threat to seize big power concern. *Business Week* p50+ O 23 '43

Russia

Mr Rankin's recent tilt with private power windmills. L. D. Farrar. *Pub Util* 32:482-9 O 14 '43

ELECTRIC utilities—Continued**South Carolina**

Are the elephants coming? new device for socialization of electric utilities disclosed in specific situations in South Carolina, Puerto Rico, and Washington, D.C. E. R. Abrams. Pub Util 31:618-24 My 13 '43

United States

Chronology of 1942. Elec W 119:276 Ja 23 '43

Postwar loads from a sales viewpoint. J. F. Gaskill. Edison Elec Inst Bul 11:321-3+N '43

Postwar planning and the electric industry. E. Vennard. Edison Elec Inst Bul 11:159-64 Je '43

Power industry stands on its production record. K. M. Robinson. Pub Util 31:704-5 My 27 '43

Power's plight. Business Week p364 S 18 '43

See also

Electricity supply—
United States

Washington (state)

See also
Puget Sound power
and light company

Western states

Electrical West annual review number. II Elec West 90:51-89 F '43

ELECTRIC vehicles

Electrician solves transportation problem; home made vehicle by A. H. Matthews. II Ry Mech Eng 117:141 Mr '43
Unifying road transport; post-war problems; fuel, etc. C. Ridley. Automobile Eng 33:113-14 Mr '43

See also

Electric trucks
Electric trucks, In-
dustrial
Trolley buses

ELECTRIC water heaters

Electric water heating. G. A. T. Burdett. Electrician 129:613-15; 131:10-12 D 4 '42, JI 2 '43

Electricity and coal conservation. F. D. Parker. Electrician 129:466-7 O 30 '42

Evaluation of incompletely diversified loads. W. L. Tadlock. II Elec Eng 62:485-92 N '43

Public baths scheme; electric conversion. II diag Elec R (Lond) 132:541-4 Ap 23 '43

Some problems in the application of electric heating to residential and commercial premises; with cost data. W. Gilchrist. diags Inst E E J 83 pt 2:377-90 O '42; Excerpts. Electrician 128:71-2 Ja 30 '42; Abstracts. Engineering 153:72 Ja 23 '42; Elec R (Lond) 130:78 Ja 16 '42; Discussion. Inst E E J 89 pt 2:390-9 O '42; Elec R (Lond) 130:115-16 Ja 23 '42

Space and water heating. F. D. Parker. Electrician 130:113-15 Ja 29 '43

Space and water heating; design of installations and apparatus. Electrician 130:197-9 F 19 '43

Control

Pilot wire controls 110-volt street lights and off-peak water heaters. II diags Elec W 119:1638 My 15 '43

Water heater control releases peak kw.; Winnipeg hydro-electric system. J. G. Glassco. II Elec W 120:256-7 JI 24 '43

ELECTRIC wave filters. See Electric filters**ELECTRIC waves**

Electric propagation on long lines terminated by lumped networks. M. G. Malti and M. Golomb. bibliog Franklin Inst J 235:41-73, 101-18 Ja-F '43

Fluorescent lamps show standing waves on lines. P. M. Honnell. diags Electronics 16:112+ My '43

History of a-c wave form, its determination and standardization. F. Bedell. bibliog(39 titles) Elec Eng 61:Trans 864-8 D '42

Properties and applications of phase-shifted rectified sine waves. J. T. Tykociner and L. R. Bloom. II diags III U Eng Exp Sta Bul 339:1-52 '42 (pa 60c)

Rectifier circuit power factors, harmonics and wave shapes. R. D. Evans. diag Elec W 120:1345-8 O 16 '43

Suggestions for a theory of the coastal refraction. G. Grünberg. Phys R 63:185-9 Mr 1 '43

See also

Electric currents, Radio measurements
Alternating, Radio waves
Harmonics (electric waves)

ELECTRIC welders**Training**

Advertises free course in arc welding in industrial papers; prospects register by means of coupon; Hobart brothers company. II Ptr Ink 205:21+ O 22 '43

Training welders for shipbuilding; Dravo corporation. M. Evanchio. II Marine Eng 48:164-6+ Mr '43

ELECTRIC welding

American welding society 24th annual meeting; abstracts of papers. Iron Age 152:59-65 O 28 '43

Application of flash welding in airplane construction. C. B. Smith. II Welding J 22:769-75 O '43

Cans butt-welded. Business Week p37-8 JI 10 '43

Development in welded fabrication for merchant shipbuilding; abstracts. R. B. Shephard, R. Boardman and C. J. Jensen. II Electrician 130:349-50 Ap 2 '43; Elec R (Lond) 132:452 Ap 2 '43

Electric resistance-welded steel tubing; its quality control and application. R. D. Malm. II diag Welding J 22:818-21 O '43

Electrical developments of 1942; welding. G. Bartlett. II Gen Elec R 46:24-6 Ja '43

Flash welding. L. A. Perney. II diags Welding J 22:sup362-71 Ag '43

Flash welding of nickel and high-nickel alloy rod. W. F. Hess and A. Muller. II Welding J 22:sup 532-44 O '43

Holden and Hunt compressed-air operated spot welding machines. II Engineering 155:407 My 21 '43; Engineer 175:414-15 My 21 '43

Homogenized; broken axles mended by flash welding. II Bus Transportation 22:54-5 O '43

How to spot weld aluminum. II Am Mach 86:1487-9; 87:82-4 D 24 '42-Ja 7 '43

How to use resistance welding. R. T. Gillette and J. F. Young. II diags Am Mach 87:91-3 O 14; 100-1 O 28 '43

Metallurgical aspects of spot-welds in aluminum alloys. J. R. Heising and E. H. Burkart. bibliog II diags Metal Prog 42:1027-34 D '42

Metallurgy of spot welding. H. Lawrence. diags Steel 112:100-1, 103+ Mr 29 '43

Modern methods in aircraft welding. N. F. Ward. II diags Mech Eng 65:732-6 O '43

New design of fuel oil heaters conserves material. H. S. Card. II Welding J 22:513-14 JI '43

New equipment. II diag Iron Age 151:71-4 Mr 4; 152:62-4 S 30; 74-7 O 7 '43

New welding plant. II diag Elec R (Lond) 132:359-60 Mr 12 '43

Oscillographic measurements in spot welding research. R. A. Wyant. bibliog II Instruments 16:473-94 Ag '43

Precautions in welder service. C. N. Clark. Elec W 120:1200 O 2 '43

Progress in engineering knowledge during 1942; arc and resistance welding. P. L. Alger and J. Stokley. II Gen Elec R 46:102-3 bibliog(p133) F '43

Progressive develops Temp-A-Trol forge welder which combines spot welding and heat-treating. II Am Mach 86:1320 N 12 '42; Sci Am 167:256 D '42

Properties affecting resistance welding; table. K. Rose, comp. Metals & Alloys 18:523 S '43

Resistance welding. K. Rose. II diags Metals & Alloys 18:518-24 S '43 (to be cont)

Resistance welding. 1942. R. T. Gillette. II Metals & Alloys 17:82-3 Ja '43

Resistance welding of tool steel. II diags Iron Age 152:78 JI 8 '43

Review of power and mechanical equipment; welding. II Power 86:960, 973 Mid-D '42

Shipbuilding in North America. H. Hunter and R. C. Thompson. Electrician 129:603 D 4 '42

Special resistance welders speed sheet metal fabrication. II Steel 112:108, 110+ Ap 12 '43

ELECTRIC welding—Continued

- Spot welding aluminum. H. Lawrence. biblog diags Steel 113:108, 110+ JI 12; 118, 121+ JI 19 '43
- Spot welding aluminum-clad steel. J. D. Rosenblatt. il Iron Age 151:72-4 Je 10 '43
- Spot welding in aircraft structures. E. S. Jenkins. il Welding J 21:839-43 D '42
- Surface treatment of aluminum-alloy assemblies prior to spot welding. H. O. Klink. Welding J 22:602-4 Ag '43
- Tack and plug welding simplified. O. Craft. diag Am Mach 87:108 Je 24 '43
- Tool tipping procedures for high speed steel. Iron Age 152:62-3 JI 15 '43; Same cond. Steel 113:106b JI 5 '43
- Transition from riveted to welded construction of light combat tanks. W. Osha and J. W. Sheffer. il diags Welding J 22:780-3 O '43
- Unusual resistance welding developments and operations. R. T. Gillette. il Welding J 22:116-19 F '43
- War plant for welding machines; factory for Sciaky brothers, Chicago. il Arch Rec 94: 74-6 O '43
- Welded steel tube for condensers and heat exchangers. A. F. Zoll. il diags Pet Eng 14:35-7, 40 F '43
- Welding, given tremendous impetus by war. F. J. Oliver. il diags Iron Age 151:126-35+ Ja 7 '43
- Welding in shipyards. F. R. Mansell. Electrician 130:365-6 Ap 9 '43
- Welding powder bag clips to cartridge cases. il Steel 112:96+ My 3 '43

Control

- Automatic voltage compensator for resistance welding control. E. M. Callender and R. S. Phair. il diags Elec Eng 62:Trans 701-5 N '43
- Automatically-controlled spot-welding machine. Temp-a-trol. il Engineering 156:66-7 JI 23 '43
- Contribution of resistance welding control to the war effort. H. L. Palmer. biblog il Welding J 22:347-9 My '43; Same. Gen Elec R 46:507-10 S '43
- Electronic circuit to control intensity and timing of power for spot welding. W. B. Nottingham. diags R Sci Instr 14:161-70 Je '43
- Electronic welding control. H. L. Palmer; M. E. Bivens and others. il diags Electronics 15:36-40+ Ag; 55-8+ S; 62-7 O; 65-9+ N; 63-7+ D '42; 16:78-81+ Ja '43
- General Electric electronic controls for welding. il Mach 49:182+ Mr '43
- Resistance welding speeded, improved by tube control. G. W. Garman. il diags Electronics 16:116-19+ Mr '43
- Why the weld recorder. J. R. Fletcher and J. Van Den Beemt. il diags Welding J 22: 815-18 O '43

See also

- Electric welding,
Arc—Control

Electrode cooling

- Automatically-controlled spot-welding machine. Temp-a-trol. il Engineering 156:66-7 JI 23 '43
- Fairbanks-Morse spot-welding tip cooler is built into a compact unit. il Am Mach 87: 137 F 18 '43
- Proper piping is important when cooling welding electrodes. A. L. Munson. il diags Heating-Piping 15:346-9 JI '43
- Refrigerant-cooled spot-welding electrodes. F. R. Hensel, E. I. Larsen and E. F. Holt. il diags Welding J 21:sup583-97 D '42; Discussion. W. G. Moehlenpach. 22:sup163-9 Ap '43
- Refrigeration of electrodes in welding. A. L. Munson. il Refrig Eng 45:413-15, 434+ Je '43; Same cond. Welding J 22:339-42 My '43
- Study of the application of refrigeration to the cooling of spot-welding electrodes. W. F. Hess and others. il diags Welding J 22: sup555-67 N '43
- Super-cooled spot welding electrodes. C. C. Titherington. diags Iron Age 152:94-8 O 14 '43
- Temprite's spot welder cooler. il Refrig Eng 45:36 Ja '43

Electrodes

- Recommended electrode materials; chart. Metal Prog 44:814 O '43
- Welder's helper. Business Week p77-8 Ap 10 '43

Inspection

- Radiography of aircraft spot-welds. R. Taylor. il diags Aero Digest 43:263, 265-6+ JI '43

Power supply

- Application of copper-oxide rectifiers for resistance welding. R. L. Briggs. il diags Welding J 22:252-6 Ap '43
- Application of series capacitors to resistance welding machines. R. M. Partington. il diags Welding J 22:26-31 Ja '43
- Electronic welding control. H. L. Palmer; M. E. Bivens and others. il diags Electronics 15:36-40+ Ag; 55-8+ S; 62-7 O; 65-9+ N; 63-7+ D '42; 16:78-81+ Ja '43
- Gun welding with 150 ft. leads; Thomson power pack. il Iron Age 151:34 Ja 14 '43
- Memory aid for welders; current settings for electrodes of different diameter. J. V. Kielb. Metal Prog 43:225 F '43
- Pre-empting relays limit welder load. L. H. Church. Elec W 119:2158 Je 26 '43
- Welder loads made non-coincident; making chains for Liberty ships. il Elec W 118: 1989 D 12 '42

Standards

- A.W.S. emergency standard; recommended practice for the spot welding and seam welding of low carbon steel. Welding J 22:431-2 Je '43; Same. Steel 113:117+ O 4 '43

Subaqueous welding

- Resistance welding underwater; stream of water cools work. J. A. Merryman. il Steel 112:56+ Ja 25 '43
- Underwater resistance welding; its use in fixing stranded cables to terminals. Electrician 130:597 Je 11 '43
- Underwater resistance welding of stranded wire. il Iron Age 151:60 Ap 22 '43; Same. Welding J 22:276 Ap '43
- See also* Electric welding, Arc—Subaqueous welding

Testing

- Behavior of spot welds under fatigue stress. A. M. Unger, H. A. Matis and E. P. Gruca. il diag Welding J 22:sup135-42 Mr '43
- Correlation of metallographic and radiographic examinations of spot welds in aluminum alloys. D. W. Smith and F. Keller. biblog il Welding J 21:sup573-83 D '42
- Rapid and accurate inspection of spot welds. L. L. Anderson. il diag Metal Prog 44:433-4+ S '43
- Spot-weld joint efficiency for aluminum alloys. C. W. Steward. il diags Welding J 22:sup528-32 O '43
- Spot welding of light alloys; comparison with riveted joints. G. H. Field, H. Sutton and H. E. Dixon. biblog il diags Welding J 22:sup 573-92 N '43
- Spot welding of N-A-X high-tensile steel. C. E. Schroder. Welding J 21:690-4 O '42; Same. Steel 112:98+ F 8 '43
- Spot welding of S.A.E. 1020, 1035 and 1045 steels in the 0.040 in. thickness; automatic tempering in welding machine. W. F. Hess and D. C. Herrschaft. il Welding J 22: sup451-61 O '43
- Stored energy welding of mild steel. J. M. Diebold. il Welding J 22:sup484-93 O '43; Abstract. Iron Age 152:62-3 O 28 '43
- Strength of welded T-joints for ships' bulkhead plates. H. E. Fergusson. il diags Welding J 22:sup57-62 F '43
- Variable waveform unit for testing aluminum welding. J. W. Dawson and H. Klemperer. il diags Electronics 16:62-6+ F '43

Unionmelt process

- Adapting automatic electric welding to routine production; Unionmelt process. J. M. Keir. il diags Welding J 22:173-9 Mr '43
- Anchor chains are now electric welded by Unionmelt method. H. W. Young. il Steel 112:84-6+ Ja 18 '43
- Unionmelt welding process. il diag Automotive & Aviation Ind 87:36-7, 84+ N 1 '42

ELECTRIC welding—Continued**Weibel process**

Flange welding of light metal sheets; Weibel process of joining aluminum and magnesium. W. Flatow. *diags Iron Age* 151:59 Ap 1 '43

ELECTRIC welding, Arc

Absorber fabricated from obsolete materials. L. L. Dresser. *il Pet Eng* 14:55 Mr '43

All steel emergency stretchers. F. W. Klay. *il diags Welding J* 21:757-8 N '42

All-welded 5400-hp. Diesel-electric freight locomotive. J. H. Hruska. *il diags Welding J* 22:605-18 Ag '43

Ammonia converter of welded 5% chromium steel. J. Schuyten. *il diags Metal Prog* 43: 218-23 F '43; Same cond. *Nat Pet N* 35 pt 2: R406, R408-9 S 1 '43

Application of arc-welding in the maintenance of heat-transfer equipment; with cost data. W. H. Parlette. *il diags Pet Refiner* 22:87-9 Ja '43

Arc stud welding speeds shipbuilding; Mare Island navy yard. J. C. Beckett. *il diags Marine Eng* 43:201-7 Je '43

Arc welded compressor suspension. J. F. Muller and G. C. Munoz. *il diags Ry Mech Eng* 117:50-2 Ja '43

Arc-welded design helps reduce weight of large Diesel engines; Nordberg manufacturing company. *il diags Product Eng* 14: 176-8 Mr '43

Arc welded die sets. I. V. Stovern. *diags Iron Age* 152:62-5 N 4 '43

Arc-welded housing for open-type induction motors; with cost data. C. W. Gladson. *diags Oil & Gas J* 42:56 S 16 '43

Arc-welded T-beams for use in residences. E. J. Slygh. *il diags W Soc E J* 43:59-67 Je '43

Arc welded trucks. *il Mech Handling* 30:433-40 O '43

Arc welded tubular jigs. R. H. Holmes. *il Aero Digest* 42:301+ Je; 43:327-9, 331 JI '43

Arc welding accelerates laying of pipe lines. C. M. Taylor. *il Oil & Gas J* 42:196 S 23 '43

Arc welding aircraft structures. W. S. Evans. *il diags Aero Digest* 42:200, 205-6, 209-10+ F; 177-8, 180-1, 183 Mr '43

Arc welding at Houston shipyard. G. W. Curry. *il Marine Eng* 47:136-8 N '42; Same. *Steel* 111:88, 90 N 16 '42; Same. *Welding J* 21:851-2 D '42

Arc welding brass and bronze castings. *diags Iron Age* 151:53 Ja 21 '43

Arc welding faults and corrections. C. H. Jennings. *il Am Mach* 87:129, 131 My 27; 121, 123 Je 10 '43

Arc welding in a copper smelter; with cost data. G. B. Forbes. *il Eng & Min J* 144: 66-7 Ja; 45-6 Mr '43

Arc welding in gas plant maintenance. E. W. P. Smith. *il Am Gas Assn Proc* 1942:401-14

Arc welding in the manufacture of aircraft propeller blades. E. K. Benedek. *diags Welding J* 22:335-8 My '43

Arc welding in wartime redesign; sheet steel replaces aluminum for can sealing machine. S. Birkland. *il diags Metals & Alloys* 17: 760-3 Ap '43

Arc welding. 1942. S. L. Hoyt. *il Metals & Alloys* 17:79-80 Ja '43

Arc welding stainless steel. C. Pettit. *diags Am Mach* 87:96-7 JI 22 '43

Arc welding used to rebuild oil circuit breaker castings; abstract. *diag Elec W* 119:1152 Ap 3 '43

Arc welding worn brake heads; with cost data. J. D. Seiwright. *il Metals & Alloys* 17:350 F '43

Armour-plate welding; jig construction. *il Elec R. (Lond)* 132:805-8 Je 18 '43

Automatic metallic arc welding. F. C. Neal, jr. *il Iron Age* 152:41-5 JI 29 '43

Big annual saving from all-welded tires for kilns, driers and coolers; with cost data. T. N. Haffner. *il diags Concrete (mill sec)* 51:118-21 F '43

Builds welded blast furnace in eight months; riveting and welding costs compared. R. F. Fey. *il diags Steel* 113:144-50+ S 20 '43; Same cond. *Iron Age* 151:48-55, 130 Je 24 '43

Can weld metal be conserved and better welds made by using root openings? S. I. Rosenthal. *diags Steel* 112:92-3, 133; Discussion. 133-5 Mr 1 '43

Carlton County's electric welder. N. C. Nickerson. *il Pub Works* 74:14 O '43

Cast iron motor block repair. J. H. Davis. *Roads & Sts* 86:85 F '43

Cathode drop and electron density of welding arcs. G. H. Fett. *Welding J* 22:sup223-4 My '43

Causes and cures of 14 common welding troubles; tabulation. C. H. Jennings. *il Chem Ind* 53:207-11 Ag '43; Same. *Steel* 113:128, 130+ S 20 '43; Same. *Welding J* 22: 712-15 S '43

Checking sheet metal welding procedure. G. G. Landis. *diags Marine Eng* 47:148, 150+ N '42

Clad steel sandwiches welded by the carbon arc; with cost data. T. S. Fitch and L. W. Townsend. *il diags Iron Age* 151:54-9 F 18 '43; Correction. 151:41 Ap 29 '43

Complicated assemblies welded easily with alternating-current machines; United welding co. L. T. Kennedy and E. Wenzel. *il Steel* 113:92+ O 18 '43

Construction of globe valves by arc welding. H. C. Elliott. *il diags Welding J* 21:755-6 N '42; Same. *Steel* 112:103-4 Mr 8 '43; Same. *Power Pl Eng* 47:93-4 Ap '43

Control of mass production arc welding. W. J. Brookings. *il diags Iron Age* 152:58-64 S 2; 54-60 S 9 '43

Corrosion control in refinery pressure vessels by arc welded stainless steel linings; with cost data. W. W. McClow. *il diags Nat Pet N* 35 pt 2:R10-14 Ja 6 '43

Cotton roving frame of all-welded design; abstract. W. Shaw. *diags Textile World* 93:95 Mr '43

Coupler reclamation by electric-arc welding; Erie welding shop at Meadville, Pa. *il diags Ry Mech Eng* 117:416-19 S '43

Cutting maintenance costs by arc welding chemical process equipment. J. E. Gurvin. *il diags Chem & Met Eng* 50:117-18 Ap '43

Description of welded construction used in a thread miller bed for milling propeller blades. P. W. Martin. *il Welding J* 22:323-6 My '43

Design and construction of a 35-ft diameter arc-welded vacuum fractionating tower. E. F. Brummerstedt. *il diags Nat Pet N* 35 pt 2:R74-6, R78-80, R82-3 F 3 '43

Design and construction of underframes for all-welded railroad passenger cars. J. E. Candlin, jr. and A. M. Unger. *il diags Welding J* 22:309-18 My '43

Design of batching scraper for crude-oil pipe lines; arc welding; with cost data. R. M. Carter. *diags Oil & Gas J* 41:30, 33-4 D 24 '42

Design of joints for arc and gas welding processes; joints which may be used in marine construction; diagrams. *Welding J* 21:758-66 N '42

Designing aircraft jigs and fixtures for arc welding to eliminate machining. H. V. Wenger, jr. *il diag Aeronautical Eng R* 2:40, 45, 47+ Mr '43

Developments in the design of storage water heaters; with cost data. S. A. Smith. *il diags Welding J* 22:327-34 My '43

Efficiently rigid arc-welded connections. R. P. V. Marquardsen. *diags Welding J* 22: 256-61 Ap '43

Electric arc unit speeds stud welding. *il Iron Age* 152:61 S 30 '43

Electric arc welding developments in 1942. R. F. Wyer. *Marine Eng* 48:162 F '43; Same. *il Sheet Metal Worker* 34:28-9 F '43

Electric welding; Philips three-operator oil-cooled set. *il Electrician* 131:88 JI 23 '43

Establishment of cooling curves of welds by means of electrical analogy. V. Paschkis. *bibliog diags Welding J* 22:462-83 O '43

Fabricating globe valves. H. C. Elliott. *diags Steel* 112:103-4 Mr 8 '43

Fabricating special machine tools by welding; equipment used in machining Transite pipe made from scrap materials. J. M. Wiley. *il Pet Eng* 14:86, 88 Ap '43

Fabricating steel coke oven doors; with cost data. H. A. Immisch. *il diags Steel* 113:113-14+ Ag 2 '43

Field welding of steel water pipe. H. A. Price and G. H. Garrett. *il diags Am Water Works Assn J* 35:1295-1302 O '43

ELECTRIC welding, Arc—Continued

- For refinery equipment; conserving critical items by electric welding. E. E. Kerns and others. *il* diags Nat Pet N 35 pt 2:R350, R352-4 Ag 4 '43
- Forging and welding 1000-lb. aerial bombs. J. B. Nealey. *il* Iron Age 151:52-3 F 11 '43
- 40-mm. anti-aircraft gun carriage redesigned for welding; with cost data. J. L. Miller. *il* diags Iron Age 150:51-9 D 3 '42; Same cond. Automotive & Aviation Ind 88:30-5 Ja 1 '43
- 400-hp Tournapull tractor. J. F. Dillon, jr. *il* diags Automotive & Aviation Ind 88:42-3+ Ap 15 '43
- Good dental work speeds clamshell digging; renewing teeth and cutting edges. A. Hooper. *il* diags Roads & Sts 36:72-3 Je '43
- Grand awards in \$200,000 industrial progress program of the James F. Lincoln arc welding foundation; with list of American welding society members who received awards. Welding J 21:798-800 N '42
- Home-made clamping table speeds welding operations. V. Wainscott. *il* Ry Mech Eng 117:45-6 Ja '43
- How heaters are made for American flagships. *il* Aviation 42:236-7+ My '43
- How to recondition worn pump shafts and rods. *il* Welding J 22:248 Ap '43
- How to utilize most effectively the flame cutting of parts for arc welding. W. J. Brookings. *il* diags Steel 112:96, 98+ Je 21; 102-3+ Je 28 '43
- Hydraulic turbine pitted surfaces repaired by electric welding. E. F. Bladholm. *il* diag Power Pl Eng 47:84, 110, 112+ N '43
- Improved welded joint saves time and materials; H. H. Robertson company. *diag* Marine Eng 48:218 Je '43
- Jigs and fixtures for arc welded mass production; R. G. Le Tourneau inc. W. J. Brookings. *il* diag Steel 113:80, 82+ O 25; 102, 104+ N 1; 119-20, 122 N 3 '43
- Latest methods of using arc welding to produce high-speed cutting tools. J. A. Neumann. *diags* Steel 113:249, 252-3 O 11 '43
- Liquefied-gas-storage containers; applications of arc welding; with cost data. J. O. Jackson. *bibliog il* diags Gas Age 91:37-42 Ap 22 '43
- Locomotive parts fabrication and welding of bronze bearing surfaces. J. W. Kenefic. *il* Welding J 22:799-805 O '43
- Maintaining mining machinery. *Mech Handl* 30:19-21 Ja '43
- Manual welding technique developed for thick steel plates. *il* diags Eng N 131:696-7 N 4 '43
- Mass production with a.c. welding. W. J. Brookings. *il* diag Iron Age 151:52-7 My 20 '43
- Mechanical load handling equipment. E. W. Weaver. *il* diags Welding J 22:619-23 Ag '43
- Metal-forming machine; electric-weld pipe mill. E. W. Allardt. *il* Welding J 22:319-21 My '43
- Murex deck welder. *diag* Engineer 175:179-80 F 26 '43; *Engineering* 155:136 Mr 5 '43
- New method for removal of broken tools from drilled holes; application of arc welding. H. J. Burnett and C. E. Hansling. *il* Automotive & Aviation Ind 87:30-1, 88, 90 N 1 '42
- 1942 developments in electric arc welding. R. F. Wyrer. *il* Oil & Gas J 41:43-4 F 4 '43; Same. *Welding J* 22:233+ Ap '43
- Office chair; welded design. E. T. Spencer. *il* diags Welding J 22:351-2 My '43
- Outdoor substation structure designed for welding; with cost data. E. W. DeVore. *il* diags Welding J 22:593-9 Ag '43
- Paper mill maintenance benefited by arc welding. R. Edman. *il* Paper Ind 25:387 Jl '43
- Physics of the arc and the transfer of metal in arc welding; review of the literature to February 1942. W. Spragen and E. A. Lengyel. *bibliog* (178 titles) *il* diags Welding J 22:sup2-42 Ja '43; *Discussion*. sup222-3 My '43
- Plant weldery; with cost data; Austin company. L. H. Burr. *Welding J* 22:421-3 Je '43
- Plug welding facilitates changeover from bolted to welded construction. D. B. Tschudy. *diags* Steel 112:96, 98+ My 24 '43
- Preparation of arc welded machinery for finishing. W. J. Brookings. *il* Metal Finishing 41:671-4 O '43
- Quick cheap way of making high-speed steel-tipped tools. C. B. Ericson. *il* Welding J 21:834-5 D '42; Same. *Steel* 112:94, 96 F 1 '43
- Quick repair of fans by arc welding; with cost data. Elec W 119:1803 My 29 '43
- Reclaiming alloy still tubes; with cost data. *il* diags Nat Pet N 35 pt 2:R210-12 My 5 '43
- Reclaiming worn tractor parts. *il* diags Roads & Bridges 81:42, 44+ Ap '43
- Reclamation of cracking still furnace tubes; with cost data. L. V. Hile. *il* diags Pet Refiner 22:111-15 Je '43
- Redesign speeds gun production; change from riveted to welded construction; Eofors automatic antiaircraft cannon; abstracts. J. L. Miller. *il* Machine Design 14:83-8+ D '42; Iron Age 150:51-9 D 3 '42; *Welding J* 22:99-107 F '43
- Reduce capital outlay and operating cost with welded-base jaw crushers. R. W. Heer and W. A. Eckley. *il* Concrete (mill sec) 51:171-3+ My '43
- Reduces machine downtime by welded repairs. G. L. Loughery. *il* Factory Management 101:111-12 F '43
- Reinforcement welded on smoke stacks. *il* Elec W 119:1661 My 15 '43
- Removing broken drills by arc welding. H. J. Burnett and C. E. Hansling. *il* Steel 112:76-8+ F 22 '43
- Repairing shovel dippers with the electric arc; with cost data. M. M. McElderry. Eng & Min J 144:73-4 S '43
- Salvaging worn tractor running gear parts; building up and hard surfacing by electric welding. A. D. Willisroft. *Pulp & Pa* of Can 43:962-4 D '42
- Saving steamboat propellers from the scrap heap. H. C. Elliott. *diag* Welding J 22:326 My '43
- Seam welding with a carbon arc. R. A. Tobler. *il* Metals & Alloys 17:968-9 My '43
- Ships welded on a production line; Dravo corp. G. F. Wolfe. *il* diag Metal Prog 43:550-4 Ap '43
- Simplified welding tool. *il* Mod Plastics 20:66+ My '43
- Skill and ingenuity of arc-welding job shops shown in production of numerous small items. C. M. Taylor. *il* Welding J 22:520-1 Jl '43
- Some observations on ship welding. D. Arnott. *il* diags Welding J 22:73-92 F '43; Same abstr. *Marine Eng* 48:132-41 Ja; 179-83 Mr; 203-5 Ap '43; *Discussion*. 48:160, 162+ Ja '43
- Speed of manual arc welding; charts. *Metal Prog* 44:830 O '43
- Splicing 18-in. beams by arc welding; with cost data. F. Horowitz. *diags* Sheet Metal Worker 34:31 S '43
- Stud welding. *il* diags Steel 113:84-6+ Ag 9 '43
- Survey of arc-welding practice in the aircraft industry. M. Nelles. *Welding J* 22:sup79-81 F '43
- Tentative system for preserving ductility in weldments. G. E. Doan. R. D. Stout, J. H. Frye, jr. and S. S. Tör. *bibliog il* diags Welding J 22:sup278-99, sup423-37 Jl '43; *Excerpts* (pt 1). *Steel* 113:136+ N 15 '43
- Truck body of arc-welded design; Norwalk electric department. *il* Elec W 119:2000 Je 12 '43
- Turbine blade base rebuilt by welding. *diag* Elec W 119:640 F 20 '43
- Turbine maintenance and repair work; abstracts. R. N. Tucker. *il* diags Power Pl Eng 47:68-71 Ap '43; *Power* 87:442-3 Jl '43
- Types of electric plant installed for arc welding in various shipyards and marine engine works. J. Hogg. *Electrician* 130:541-2 My 28 '43
- Valves repaired by electric welding. E. E. Kerns. *il* diags Metals & Alloys 18:48-9 Jl '43; *Abstract*. *Power* 87:181+ Mr '43
- Wartime trends in arc welding. G. C. Quinn. *il* Elec Eng 62:493-6 N '43
- Weldability of some low-alloy steels. J. S. Vatchagandhy and G. F. Contractor. *il* diags Welding J 21:sup561-72 N '42
- Welded armoured fighting vehicles. *il* Engineer 175:484-6 Je 18 '43

ELECTRIC welding, Arc—Continued

- Welded bayonet clips replace forgings. *Il* diag Iron Age 152:52 S 9 '43
- Welded caissons for naval dry docks; with cost data. C. A. Trexel and A. Amirikian. *Il* diags Welding J 22:157-64 Mr '43; Same cond. Steel 111:100-2+ D 14 '42
- Welded display holder for printed matter. V. P. Weidner. *Il* Welding J 22:322 My '43
- Welded forming dies made from steel plate replace castings; with cost data. W. E. Klauber. diags *Am Mach* 87:85-6 Ap 1 '43
- Welding armor plate for combat tanks; superiority of welded over riveted construction; abstracts. E. Brooker and L. L. Elliot. *Il* diags Iron Age 151:23-7 Ja 14 '43; Metal Prog 43:392-5+ Mr '43
- Welding cast iron axle-boxes. *Il* Engineer 175:118 F 5 '43
- Welding in sand and gravel plants. H. Barrett. *Il* Rock Prod 46:56-7+ O '43
- Welding innovations for high dams; arc welding as applied to penstocks. G. L. Yetter. *Il* Elec West 90:65-7 Ap '43
- Welding liners on worn driving-wheel centers. C. H. Easun. *Il* diags Ry Mech Eng 117:38-40 Ja '43; Same, without diags. Steel 112:108+ Je 14 '43
- Welding locomotive cylinders. C. R. Averitt. *Il* Ry Mech Eng 117:223-4 My '43
- Welding low-alloy high-strength steel; a review of the literature from January 1, 1938 to January 1, 1941. W. Spraragen and H. Chiswick. bibliog *Il* diags Welding J 22:sup 225-63, sup439-40 Je, S '43
- Welding main frame of gyratory crushers reduces cost and maintenance charges. G. D. Becker. *Il* diags Concrete (mill sec) 51:134-6 Mr '43
- Welding metal bed springs. E. H. Atkinson. diags Welding J 22:239-41 Ap '43
- Welding plays top role in anti-aircraft gun recoil; R. Hoe & company. *Il* Am Mach 86:1372-6 N 26 '42
- Welding pointers; rebuilding and hard-facing construction equipment. diags Roads & Sts 86:84-6 O '43
- Welding procedure in sheet metal. G. G. Landis. *Il* diags Sheet Metal Worker 33:25-7+ D '42
- Welding reclaims fractured Diesel cylinder. R. C. Wilson. Diesel Power 21:310 Ap '43
- Welding saves \$5300 a year; repairing and building new devices; Trenton potteries company. C. M. Rinck. diags Factory Management 101:139-40 Mr '43
- Welding shell and cover plate of feedwater heaters. *Il* Marine Eng 47:162 D '42
- Welding simplifies repair of economizer; abstract. R. C. Fitzgerald. *Il* Elec W 119:1488+ My 1 '43
- Welding technique for pipe-line construction and repair. C. M. Taylor. *Il* diags Pet Eng 14:162, 164, 166 Mr '43
- Welding the Big Inch. *Il* Steel 113:64-5, 96 Ag 30 '43
- Welding tubular structures with sphere type joints; towing carriages. F. Waldo. *Il* Steel 112:110, 112+ Je 7 '43
- Welding uses pounds to save tons. R. C. Fitzgerald. *Il* Power 87:746-7+ N '43
- Welding with aluminum bronze. C. E. Swift. *Il* Welding J 21:843-5 D '42
- Wheel mounting bracket for four-wheel drive racing automobile; arc welding solved difficult design problem; with cost data. E. W. Jacobson and F. F. Versaw. *Il* Welding J 22:493-503 Jl '43
- Working out techniques for welding armor plate. E. G. Biederman. diags Iron Age 151:46-50 Ja 21 '43; Same. Welding J 22:516-19 Jl '43

See also

- Bridges—Welding operations
also Lincoln, James F., arc welding foundation
- Shipbuilding—Welding operations

Accidents

- Safeguards for arc-welding operators in war production. W. E. Wilson. *Il* Welding J 21:772-5 N '42; Same cond. Nat Safety N 46:22-3+ D '42

Bibliography

- Physics of the arc and the transfer of metal in arc welding; review of the literature to February 1942. W. Spraragen and B. A. Lengyel. Welding J 22:sup41-2 Ja '43

Control

- Automatic welding-machine starter and its relation to maximum utilization of power and facilities; with cost data. N. E. Porter. Elec Eng 62:Trans 728-30 N '43
- Control stations on arc-welding generators. *Il* Ry Mech Eng 116:534 D '42
- Horseshoe magnet speeds up welding by eliminating arc blow. Sci Am 167:285-6 D '42

Cost

- Arc welding speed and cost figured graphically. H. A. Davies. chart Iron Age 151:58-9+ My 27 '43
- Cost of an arc welded pipe line. W. A. McGee. Heating-Piping 15:359 Jl '43

Electrodes

- Arc electrode usage to increase war effort; list of ingredients of welding rod coatings, and their possible functions. C. J. Holslag. Welding J 22:250-1 Ap '43
- Arc-welding electrode holder. *Il* Engineering 155:357 Ap 30 '43
- Arc welding electrodes. H. O. Westendarp, jr. *Il* Iron Age 151:39-41 Ap 29; 62-6 My 6 '43
- Arc welding tool steel with stainless electrodes. H. W. Rushmer. *Il* diags Iron Age 151:51-5 Mr 11 '43
- Comparable arc welding electrodes. Iron Age 151:72-8 My 13 '43
- Conserve welding electrode; data sheet. C. B. Herrick. Factory Management 101:150 Mr '43
- Do you save your electrode stub ends? G. G. Landis. diags Steel 112:80+ F 22 '43
- Electrode change cuts welding time by 2½ hours; with cost data. Steel 113:90 O 25 '43
- Electrode developed for Fleet-fillet welding technique. *Il* Marine Eng 47:174+ N '42
- Extruding coatings on welding electrodes. H. Chase. *Il* Iron Age 151:67-9 F 11 '43
- How to save welding rod. B. Wagner. Roads & Sts 86:80 Ja '43
- Larger electrodes cut welding costs as much as 60 per cent, increase output 200 per cent. A. F. Davis. *Il* Steel 112:74+ Mr 22 '43
- Larger electrodes more than double welding speed; Bryant heater co. G. Wood. *Il* diag Steel 113:104-5+ S 6 '43
- Making alloy steel by arc welding; coated electrodes used in reclaiming tools and dies; Agile process. J. A. Neumann. *Il* Steel 112:74-6, 78+ Ja 11 '43
- New arc-welding technique. Can Min J 64:14 Ja '43
- New electrodes expand uses of alternating-current arc welding. H. Lawrence. Steel 112:98+ Ap 19 '43
- Salvaging of tungsten electrodes. T. F. Flynn. *Il* Metals & Alloys 17:995 My '43
- Simple plan for electrode stub control. W. E. Begor and D. S. McLellan. *Il* Iron Age 151:46-9+ Ap 1 '43
- Utility characteristics of aircraft arc-welding electrodes. C. B. Woldrich and R. D. Williams. *Il* diags Welding J 21:sup450-53 N '42
- Welding electrode developed by Air reduction sales company. Blast F & Steel Pl 30:1294 N '42
- Welding electrodes. J. W. Miller. Welding J 22:718-20 S '43

Elin-Hafegut process

- Firecracker welding makes arc welds in inaccessible places; Elin-Hafegut process. P. Ritter. diags Steel 113:102+ Ag 23 '43

Fleet-fillet process

- Deep fillet welding applied to ship construction. M. H. MacKusick, J. B. Hiatt and R. V. Anderson. *Il* diags Iron Age 152:46-53 S 30 '43; Same. Welding J 22:998-1004 D '43
- Deep fillet welding technique and application. M. H. MacKusick, J. B. Hiatt and R. V. Anderson. *Il* diags Welding J 22:401-8 Je '43

ELECTRIC welding, Arc—Fleet-fillet process

—Continued

- Fleet-fillet welding. diags Engineering 155: 66-7 Ja 22 '43
 Good penetration at high welding rates. L. K. Stringham. *il* Metal Prog 44:106 Jl '43

Heliarc process

- Arc welding of magnesium aircraft structures; with cost data. V. H. Pavlecka and J. K. Northrop. *il* diag Metals & Alloys 18:302-7 Ag '43
 Arc welding of magnesium alloys. W. S. Loose and A. R. Orban. bibliog *il* diag Welding J 21:sup598-607 D '42
 Fabrication of magnesium structures is possible with new welding process. Product Eng 14:50 Ja '43
 Heliarc welding. *il* diags Mech Eng 64:901-2 D '42
 Heliarc welding. T. E. Piper. *il* diag Welding J 21:770-2 N '42; Abstract. Metal Prog 42: 404-1 S '42
 Helium aids in welding; advantages in welding magnesium. S. R. Winters. *il* diag Sci Am 168:252-4 Je '43
 Helium-shielded arc welding. *il* Chem Ind 53:361 S '43; Same. Electronics 16:146-1 O '43; Same, with additional *il*. Iron Age 152:61 O 7 '43; Same cond. Gen Elec R 46:575 O '43

Hydrogen process

- Atomic-hydrogen repairs aluminum castings. H. A. Beaudoin. *il* Metals & Alloys 18:321 Ag '43
 Atomic-hydrogen welding plant; deck welder; electrode holder. *il* Electrician 130:215-16 F 26 '43
 Metropolitan-Vickers atomic-hydrogen welding equipment. *il* Engineer 175:160 F 19 '43
 Repair of broken drills by the Metrovick atomic hydrogen arc. *il* Engineer 175:293 Ap 9 '43; Engineering 155:327 Ap 23 '43
 Saving tungsten electrodes in atomic hydrogen welding; abstract. L. G. Pickhaver. Metals & Alloys 17:396 F '43

Safety measures

- Is d.c. welding less hazardous? W. R. Stewart. *il* Safety Eng 85:6-8 Ja '43
 Protection from eye flash; abstract. P. Drinker. Science 98:sup10 O 29 '43

Speed

- Arc welding speed and cost figured graphically. H. A. Davies. chart Iron Age 151:58-9-1 My 27 '43
 Weld quality vs. welding speed. A. B. White. Metal Prog 43:70-1 Ja '43

Standards

- Standards for welded plate eyebars. J. Jones. *il* Eng N 131:546-7 O 7 '43

Study and teaching

- Let's streamline our welding schools. C. B. Herrick. Welding J 22:921-2 N '43
 Training welders for industry; plea for closer cooperation between schools and industry. J. V. Kielb. *il* diags Iron Age 151:58-63 Ap 8 '43
 Wartime training of shipbuilders. G. G. Via. *il* Marine Eng 48:165-6 F '43; Same. Welding J 22:408 Je '43
 Welding monitor for training students in judging correct arc length. *il* diags Electronics 16:142, 146-1 S '43

See also

- Electric welders—
 Training

Subaqueous welding

- Under-water arc welding. A. J. Hipperson. *il* diag Welding J 22:sup329-32 Ag '43

Testing

- Common mechanical properties of carbon-steel weld metal in electric arc welding. O. T. Barnett. diags Welding J 22:108-13 F '43
 Effect of normalizing on the properties of welds in carbon-molybdenum steel pipe. I. A. Rohrig, D. H. Corey and S. Crocker. *il* Welding J 22:sup521-7 O '43
 Effect of peening temperature on weld metal. R. E. Somers. diags Welding J 22:sup 570-2 N '43

- Effect on the endurance limit of submerging fatigue specimens in a cold chamber. O. H. Henry and A. Stirba, Jr. Welding J 22: sup372-3 Ag '43

- Effects of cooling rate on the properties of arc-welded joints in carbon-moly 0.50 plate. W. F. Hess. *il* Welding J 21:sup608-19 D '42

- Fatigue strength of butt welds in ordinary bridge steel. diags Welding J 22:sup189-211 My '43

- Fatigue strength of welded aircraft joints. T. V. Buckwalter and O. J. Horger. bibliog *il* diags Welding J 21:sup525-39 N '42

- Measurement of cooling rates associated with arc welding and their application to the selection of optimum welding conditions. W. F. Hess and others. *il* diags tables Welding J 22:sup377-422 S '43

- Mechanical properties of arc-welded chromium-nickel steel at low temperatures. V. S. Chernyak, Z. I. Golubeva and I. A. Steinberg. *il* diags Welding J 22:sup437-8 S '43

- Proposed tentative tests for metal arc weldability of steels. diags Welding J 22:433-8 Je '43

- Study of the effects caused by arc welding upon axially loaded structural steel bars. J. Neustadt, G. D. Lodvick and D. P. Schultz. *il* diags Welding J 22:sup353-61 Ag '43

- Tensile tests of arc-welded nickel and monel metal at low temperatures. O. H. Henry and J. Martinez. diags Welding J 22:sup 270-1 Je '43

- Weld-bead hardness tests on some carbon, nickel and nickel-chromium War department steels. O. E. Harder and C. B. Voldrich. *il* diags Welding J 22:sup411-50 O '43

- Weldability of NE 1330 and NE 1335; laboratory tests. O. E. Harder and C. B. Voldrich. Metal Prog 43:409-10 Mr '43

- Weldability tests of aircraft structural steels. C. B. Voldrich and R. D. Williams. diags Welding J 22:sup545-54 N '43

- Welding of 4 to 6% chromium molybdenum titanium steel; resultant hardness. E. H. Wyche. diags Welding J 22:sup142-4 Mr '43

- X-ray method vs. guided bend method of testing electric arc welders. C. G. Lutts, S. D. Herbein and L. W. Pote. *il* diags Welding J 22:31-4 Ja '43

- ELECTRIC welding, Subaqueous.** See Electric welding—Subaqueous welding; Electric welding, Arc—Subaqueous welding

ELECTRIC wire

- Bicolor covered wires; material based on nylon. *il* Electrician 131:134 Ag 6 '43

- Critical materials in wire and cable. A. Dunham. *il* Elec West 91:60-3 Ag '43

- Effect of high electrostatic fields upon the vaporization and resistance of molybdenum filaments. W. P. Reid. bibliog Phys R 63: 359-66 My 1 '43

- Effect of high electrostatic fields upon the vaporization of molybdenum. G. B. Estabrook. bibliog diags Phys R 63:352-8 My 1 '43

- Enamelled wire; toughness of Thermex (Formex). *il* Elec R (Lond) 132:290 F 26 '43

- How to get the most out of wire, cable, cord. Factory Management 101:137-44 Jl '43

- Resurfacing old weatherproof wire. *il* diag Elec W 119:794 Mr 6 '43

- Rewind meter coils with Formex wire. Elec W 119:605 F 20 '43

- Salvaging insulation from wire and cable. A. C. Mathews. *il* Factory Management 101: 72-5 Ap '43

See also

- | | |
|---------------------|--------------------|
| Electric cables | General cable cor- |
| Electric conductors | poration |
| Electric lines | Telephone wire |
| Electric wiring | Trolley wire |

Standards

- New edition of standard recognizes wide use of URC weatherproof wire. C. T. Sinclair. *il* Ind Stand 14:146-8 My '43

ELECTRIC wire—Continued**Testing**

- Concentricity; testing concentricity of enamel film on round wire; special tester utilizing electronic circuits. E. F. Hansen. *Il diag Gen Elec R* 45:615-16 N '42; Same. *Electrician* 130:105-6 Ja 29 '43; Abstract. *Electronics* 16:170-1 Ap '43
- Influence of measurements on development of magnet wire. F. P. Wilson, Jr. and J. A. Weg. *Il Gen Elec R* 45:612-14 N '42
- Winding-wire covering; various tests on modified nylon. H. C. Gee and J. F. Cowen. *Il Elec R (Lond)* 133:134-6 JI 30 '43

ELECTRIC wiring

- Adequate wiring for post-war farm electrification. H. J. Gallagher. *Edison Elec Inst Bul* 11:309 O '43
- Cleat wiring. *Electrician* 130:135-6 F 5 '43
- Compulsory code of wiring. *Electrician* 129:609-10 D 4 '42
- Electrical industrial installations. L. C. Grant. *diags Inst E E J* 89 pt2:610-17; Discussion. 617-35 D '42
- Electrical installation problems in war factories; discussion. *Inst E E J* 89 pt2:521-7 D '42
- Electrical installations committee; recommendations in first draft report. *Electrician* 130:413-14 Ap 23 '43
- Future wiring procedure. *Electrician* 130:459-60 My 7 '43
- How to get the most out of wire, cable, cord. *Factory Management* 101:137-44 JI '43
- Installation matters. *Electrician* 130:13-14 Ja 1 '43
- Make copper work harder; select motors for maximum load, wiring distribution for maximum use, make controllers take more. L. F. Adams. *Elec West* 89:62-4 N '42
- One-wire electrical system. *diag Ry Mech Eng* 117:486 O '43
- Solderless wire jointing; Rakos process. *diag Elec R (Lond)* 132:646 My 14 '43
- Wiring economies under wartime code; higher temperature capabilities of wires insulated with oil base rubber compounds. L. C. Peterman. *Elec W* 119:2119-20 Je 26 '43

See also

- | | |
|-----------------------|-----------------------|
| Electric cables | Electric transmission |
| Electric conduits | Insulation (electric) |
| Electric distribution | Radio apparatus— |
| Electric fuses | Wiring |
| Electric inspection | Telegraph |
| Electric lighting | Telephone |
| Electric lines | Telephone cables |
| Electric transformers | Telephone lines |
| —Connections | |

Diagrams

- Drawing economy; use of skeleton working sketches. J. L. Gaved. *Elec R (Lond)* 131:734 D 18 '42
- Standard symbols for electrical power and control diagrams. J. W. Cooke. *Il diags Ind Stand* 14:165-70 My '43
- Wiring diagram symbols recommended by National machine tool builders association; reference book sheet. *diags Product Eng* 14:537-8 Ag '43

Safety measures

- Bare neutral saves critical material. J. C. Runyon. *diags Elec W* 119:440-2 F 6 '43
- Fuses and plugs. *Electrician* 131:349-51 O 8 '43
- Wiring problems. *Electrician* 130:595-6 Je 11 '43

Symbols

See Electric symbols

Tables, calculations, etc.

- For checking wiring drawings; table. E. R. Bonds. *Elec W* 120:672 Ag 21 '43

ELECTRIC wiring, interior

- Design guide for interior electric lighting and wiring for wartime construction. *Illum Eng* 38:443-7 S '43
- Diversity factors; estimating the capacity of rising mains. E. E. Jolly. *Il diags Elec R (Lond)* 133:330-4 S 10 '43
- Domestic electrification. G. A. T. Burdett. *Electrician* 130:217-18 F 26 '43
- Domestic wiring. F. D. Parker. *Electrician* 129:631-2 D 11 '42

Factory distribution. J. G. Craven and J. Collins. *Il Elec R (Lond)* 133:363-6 S 17 '43

Factory-made houses; electrical fittings as part of mass produced units. *diag Electrician* 131:231-2 S 3 '43

Forced change uses less copper; incandescent and mercury lamps substituted for fluorescent. E. R. Bonds. *Elec W* 119:2158 Je 26 '43

460-volt series lighting saves copper. G. E. Shoemaker. *Il Elec W* 119:594-5 F 20 '43

Higher lighting voltages save copper; ten ways of making power available to light industrial plant with fluorescent lamps. F. C. Winkler and H. G. Barnett. *diags Elec W* 120:816-18 S 4 '43

House wiring. F. Jackson and others. *Elec R (Lond)* 132:351-2 Mr 12 '43; Discussion. *Electrician* 130:297-9 Mr 19 '43; *Elec R (Lond)* 132:353-4 Mr 19 '43

How fibre duct can save conduit in industrial wiring. H. E. Stafford. *diags Elec W* 119:1642 My 15 '43

Insulating tubing system for wiring; Plasduct. *Il Electrician* 129:499 N 6 '42

Our hero runs into a wiring problem; signal system for intercommunicating system. *diag Power Pl Eng* 47:93 My '43; Solution. *diags* 47:84-7 JI '43

Planned motor drives save steel and copper. R. H. Smith. *Il diags Steel* 113:108-9+ JI 19 '43

Post-war domestic wiring. F. D. Parker. *Electrician* 131:177-8 Ag 20 '43

Post-war installations; recommendations of Ministry of works committees. *Elec R (Lond)* 132:551-2 Ap 23 '43

Post-war wiring systems. *Electrician* 131:247-8 S 10 '43

Prefabricated wiring for prefabricated houses. *Il Elec West* 90:42-3 Ja '43

Resistance study on a conduit-return system; wiring system at the University of Wisconsin. E. Bennett and R. Schuette. *Elec W* 119:339-40 Mr 20 '43

Rewiring for commercial and industrial buildings. *diags plan Power Pl Eng* 46:90-1 D '42; 47:89-91 F; 89-90 Mr '43

Simple wiring system; Plasduct tubing. *diags Electrician* 130:571 Je 4 '43

Victory wiring; Detroit Edison, saves copper and makes later additions easier. *Business Week* p58 Mr 13 '43

Victory wiring layout saves copper; provides adequate service. *Il plans Am Bld* 65:60+ S '43

Wire post-war homes for service. *Il diag plans Am Bld* 65:44-5+ JI '43

Wiring large buildings; abstract. J. Flood. *Elec R (Lond)* 132:261 F 19 '43

Wiring methods; television and radio interference elimination. *Electrician* 131:9-10 JI 2 '43

ELECTRIC workers

- Appliance repairing offers useful career. *Elec W* 119:1164+ Ap 3 '43
- Brush-craft selection school. *Engineer* 176:273 O 1 '43; Same. *Electrician* 131:335 O 1 '43

Demobilisation problems in the electric industry. G. A. T. Burdett. *Electrician* 131:357-8 O 8 '43

Draft deferment of appliance repairmen; how to set up group replacement schedules. *Elec W* 120:820-1 S 4 '43

Earnings in manufacture of electrical appliances, 1942. O. C. Clark. *Monthly Labor R* 56:526-33 Mr '43

Marine electrical training streamlined; home study course for men and women at Moore shipyards, Oakland. H. S. Dusenbery. *Elec West* 91:52-3 JI '43

Northern California electrical bureau hurdles help shortage; repair and sales training program succeeds. *Sales Management* 51:64-5 D 1 '42

Practical education; Brush-craft selection school. *Il Elec R (Lond)* 133:550 O 22 '43

Serious shortages in manpower for appliance maintenance disturbing to dealers. *Edison Elec Inst Bul* 10:413-14+ N-D '42

Service school summarized; joint training program in southern California. *Il Elec West* 90:69 My '43

Training for industry; courses in electrical practice; government training centre at Hounslow. *Electrician* 130:210 F 26 '43

ELECTRIC workers—Continued

Training of engineers; recommendations of I.E.E. sub-committee on education. Electrician 130:491-3 My 14 '43; Elec R (Lond) 132:652-3 My 14 '43; Engineer 175:389 My 14 '43; Automobile Eng 33:235-7 Je '43; Discussion. Elec R (Lond) 132:674 My 21 '43

Utah repair school; educational course sponsored by the Electrical league of Utah. Elec West 90:53 Ja '43

See also

Electric engineers	Linemen
Electric utilities—	Telephone companies
Employees	—Employees
Electrical insurance trustees	
also International brotherhood of electrical workers	

ELECTRICAL association for women

Annual meeting, 18th, London, May 27. Electrician 130:563-5 Je 4 '43; Elec R (Lond) 132:746-7 Je 4 '43

ELECTRICAL insurance trustees

Guaranteed work; Chicago electrical group campaigns for maintenance men of other trades. Business Week p82 F 13 '43

ELECTRICITY

Benjamin Franklin and the mysterious Dr. Spence; the date and source of Franklin's interest in electricity. I. B. Cohen. bibliog il Franklin Inst J 235:1-25 Ja '43

See also

Armatures	Magnetism
Corona (electricity)	Photoelectric cells
Dielectrics	Piezoelectricity
Electric currents	Potential, Electric
Electric generators	Radio communication
Electrons	Radioactivity
Insulation (electric)	Telegraph
Ionization, Electrolytic	X-rays
Lightning	
also headings beginning Electric and Electro	

Dictionaries

Dictionary of electrical terms, including electrical communication. S. R. Roget. 4th ed rev & enl 432p \$4 Pitman pub. corp. 2 W. 46th st, New York '43

Electrical and radio dictionary, including symbols, formulas, diagrams, and tables. C. H. Dunlap and E. R. Hahn. rev & enl ed 110p \$1 American technical society, 850 E. 58th st, Chicago '43

ELECTRICITY, Accidents from

Baby lightning; dangers of static electricity. P. W. Kearney. il Nat Safety N 47:12-13+ Ja '43

See also

Electric fires
Electricity, Injuries from

ELECTRICITY, Injuries from

Accidents in factories; annual report of the Chief inspector of factories for the year 1942. Electrician 131:379-80, 411-12 O 15-22 '43

Comparison of direct and alternating current supply in aircraft on the basis of danger of electrocution; abstract. H. H. Viehmann. Roy Aeronautical Soc J 47:sup346-7 Jl '43

Electrical fires; danger from fire hose jets. S. F. Barclay. Elec R (Lond) 133:539-40 O 22 '43

Industrial accidents; annual report of the Chief inspector of factories for 1942. Elec R (Lond) 133:503-4 O 15 '43

Pole-top resuscitation. il Nat Safety N 48: 26-7+ Jl '43

Pole top resuscitation instruction manual ready for publication. W. R. Smith. il Edison Elec Inst Bul 11:300-6+ O '43

Reducing hazards of electric appliances. il Consumers' Research Bul 11:15-17 N '42

Review and classification of 121 fatal accidents which occurred in 1941 in the electric light and power industry; table. D. C. Stewart. Edison Elec Inst Bul 11:136 My '43

Safeguards for arc-welding operators in war production. W. E. Wilson. il Welding J 21: 772-5 N '42; Same cond. Nat Safety N 46:22-3+ D '42

Safety sermonettes; electricity. W. B. Paton. Can Min J 64:366-8 Je '43

Wiring on the farm; animals susceptible to leakage voltages. Electrician 131:159-60 Ag 13 '43

See also

Electric lines—Safety measures

ELECTRICITY, Static

Baby lightning; dangers of static electricity. P. W. Kearney. il Nat Safety N 47:12-13+ Ja '43

Nullifying static electricity in rugs and carpets; conductive yarn runs into rubber composition-treated backing. Rubber Age 52: 223 D '42

Static eliminators at loading docks. il diag Oil & Gas J 41:43 Ap 1 '43

ELECTRICITY in air conditioning

Air conditioning insures nut quality; electrically air conditioned storeroom for California walnut growers assn. il Elec West 39:63 D '42

See also

Electric fans, Ventilating

ELECTRICITY in dentistry

Electricity in dentistry; improved appliances and lighting. il Electrician 131:319-21 O 1 '43

ELECTRICITY in mining

Electric power distribution for open-pit mines and quarries. J. E. Borland. il diags Min Cong J 29:28-34 Ja; 42-9 Mr '43

Electrical developments of 1942; mining. G. Bartlett. il Gen Elec R 46:34-5 Ja '43

Electrical practice in American zinc co.'s mines. J. H. Edwards. il Eng & Min J 143: 62-5 N '42

Motor drive for eight-mile aerial tramway. R. F. Emerson. il Min Cong J 29:41-2 Je '43

Plan your wartime power distribution system to conserve copper; electric haulage. L. W. Birch. il Min Cong J 29:33-6 Ag '43

See also

Coal mines and mining—Electric equipment	Mine hoisting, Electric
Coal mines and mining—Power	Mine pumping, Electric

Safety measures

Color coding of distribution power cables for polarity identification. Min Cong J 29: 45-6 S '43

Fires and explosions; what causes them, how to prevent them. il Coal Age 48:71-3 O '43

Flameproof mining control; gate-end box of automatic contactor type. il Electrician 130: 189 F 19 '43

Mine trolley wire guard. P. C. Ziemke. Can Min J 64:80 F '43

Mining research; flameproof enclosure investigations. Elec R (Lond) 132:125 Ja 22 '43

Safety in mines; annual report of the Research board. Electrician 130:85-6 Ja 22 '43

Safety sermonettes; electricity. W. B. Paton. Can Min J 64:366-8 Je '43

ELECTRICITY in refrigeration

Commercial refrigeration; reconstitution of the Commercial electric refrigeration assn. Elec R (Lond) 132:112 Ja 22 '43

See also

Electricity in air conditioning Refrigerators, Electric

Standards

Commercial electric refrigeration condensing units; commercial standard (emergency) CS(E)107-43. Refrig Eng 45:251-6 Ap '43

ELECTRICITY in the home

All-electric estate. il Elec R (Lond) 133: 67-70 Jl 16 '43

Domestic development; heating and other applications. Elec R (Lond) 132:813-14 Je 18 '43

Domestic electric service in 1942. W. M. Carpenter. Edison Elec Inst Bul 11:73-4 Mr '43

Domestic electrification. G. A. T. Burdett. Electrician 130:217-18 F 26 '43

Domestic tariffs; what consumers require. H. Southall. Elec R (Lond) 132:777-8 Je 11 '43

ELECTRICITY in the home—Continued

- Domestic wiring, F. D. Parker. Electrician 129:631-2 D 11 '42
- Electricity and post-war houses. F. D. Parker. Electrician 131:81-3 JI 23 '43
- Fuel economy; the domestic consumer's response. G. O. McLean. Elec R (Lond) 132: 517-18 Ap '43
- Fuel saving report; consumers' reasons for using more or less fuel; campaign of the London and home counties joint electricity authority. Electrician 131:174 Ag 20 '43
- Gas and electricity in the home of tomorrow. R. E. Ginna. Gas Ag 91:17-19 Je 17 '43
- Homes of the future; E.A.W. report on post-war facilities. Elec R (Lond) 132:350 Mr 12 '43
- House-to-house feeds on defense projects. plan Elec W 119:1121 Ap 3 '43
- Inter-industry cooperation in electrifying post-war housing. I. W. Clark. Edison Elec Inst Bul 11:245-8 Ag '43
- Omaha surveys its residential market. Elec W 119:652+ F 20 '43
- Post-war domestic development. F. D. Parker. Electrician 129:583-5, 607-8 N 27-D 4 '42
- Post-war domestic wiring. F. D. Parker. Electrician 131:177-8 Ag 20 '43
- Post-war houses. Elec R (Lond) 132:318 Mr 5 '43
- Socio-economic conditions and intercity variations of electric use. H. G. Knaf. J Land & Pub Util Econ 18:431-46 N '42; Same. Edison Elec Inst Bul 11:36-44 F '43
- Wire post-war homes for service. il diag plans Am Bid 65:44-5+ JI '43

See also

- | | |
|---|---------------------------|
| Electric apparatus and appliances, Domestic | Electric wiring, Interior |
| Electric cooking | Refrigerators, Electric |
| Electric water heaters | |

ELECTRICITY in the petroleum industry

- Application of direct motor drive with use of electric motor. N. Williams. il diag Oil & Gas J 41:31-4 F 4 '43
- Completely portable a.c.-d.c. substation; Belridge oil company drilling equipment. L. D. Banderob and P. L. Salvage. il Elec W 119: 297+ Ja 23 '43
- Direct-current rigs for deep drilling operations. R. A. J. Dawson. Oil & Gas J 41: 129, 131, 133-5 My 6 '43; Same. Pet Eng (Ref annual) 14:62+ JI 1 '43
- Direct-current rigs for deep-drilling operations. R. A. J. Dawson. diag Pet Eng 14:33-6 Ag; 165-6, 169-70, 172 S; 15:168, 170, 172 O '43
- Electrical developments of 1942; petroleum. G. Bartlett. il Gen Elec R 46:34 Ja '43
- Electrical logging through thick salt zones; replacing salt-laden drilling fluid with fresh-water mud. J. A. Kornfeld. map diag Pet Eng 14:90, 92, 94 Ag '43
- Electrical logging to determine character of formations. L. C. Uren. bibliog Pet Eng 14:46+ D '42
- Layout for a-c drilling rig. E. H. Lamberger. plan Oil & Gas J 42:48-9 N 4 '43
- Power factor correction increases output of electrical equipment. E. H. Lamberger. diag Pet Eng 14:72+ Ag '43
- Power lines to serve Big Inch pipe line. A. E. Knowlton. il diag Elec W 120:244-7 JI 24 '43
- Victory twins, electricity and oil. H. E. Dralle. il diag Elec Eng 62:393-400 S '43
- See also*
- | | |
|-----------------------------|---|
| Petroleum—Pumping, Electric | Petroleum pipe lines—Pumping stations, Electric |
| Petroleum engineering—Power | Petroleum refineries—Power |

ELECTRICITY in war

- Power for war. C. M. Ripley. Power 87:62+ Ja '43
- Power to win; what generation, fuel and manpower will be needed for the coming months of war? a factual survey. Power 87:575-90 S '43
- See also*
- Electric utilities—War problems

- ELECTRICITY on ships.** See Ship propulsion, Electric; Ships—Electric equipment

ELECTRICITY on the farm

- Adequate wiring for post-war farm electrification. H. J. Gallagher. Edison Elec Inst Bul 11:309 O '43
- Agricultural electrification. G. A. T. Burdett. Electrician 131:79-80, 105-6 JI 23-30 '43
- Application engineering; a key to farm production! G. W. Kabie. Edison Elec Inst Bul 11:269-72 S '43
- Comparisons of rank, percentage, and number of electrified farms, 1935, 1940, and 1942, by states and for the United States; tabulation. Pub Util 32:50 JI 8 '43
- Dehydrator uses radiant heat principle. il diag Elec West 91:68-9 Ag '43
- Electric service aids celery farms. F. Vos. il Elec W 120:1222+ O 2 '43
- Electricity on the farm and its relation to the national food production program. C. L. Osterberger. Edison Elec Inst Bul 11:23-44 Ja '43
- Electro-agricultural definitions needed. M. M. Samuels. Elec W 120:1508 O 30 '43
- Farm appliance repair clinic; Watmobile, traveling demonstration project of Cornell university extension service. M. H. Lloyd. il Elec W 120:1048 S 18 '43
- Farm dehydrator uses electric heat. diag Elec W 119:1498 My 1 '43
- Farm electrification data by states; 1942 compared with 1940; table. Edison Elec Inst Bul 11:11 front cover My '43
- Farm grinding equipment. il Elec R (Lond) 133:247 Ag 20 '43
- Farm institutes; sectional meetings stress care of equipment. Elec West 90:83 Ap '43
- Farm program subject of utility conference; Commonwealth & southern corp. meeting on Planning for greater food production. Elec W 119:1461 My 1 '43
- Farm students learn to care for motors. H. G. Walt. il Elec W 120:130 JI 10 '43
- Farm test proves electricity is cheap. Elec W 119:2168 Je 28 '43
- Farmer and his electricity. G. C. Neff. Edison Elec Inst Bul 11:227-9+ Ag '43; Abstract. Pub Util 32:302-4 S 2 '43
- Farmers swap electrical equipment. Elec W 119:2010 Je 12 '43
- Future of electricity in agriculture; with cost data. F. E. Watts. il Elec Eng 62:480-4 N '43
- How a utility operates a farm electric equipment exchange plan. M. H. Lloyd. Edison Elec Inst Bul 11:248 Ag '43
- How & why behind Pacific Light's Good neighbor program; practical assistance to little business, and agriculture. Sales Management 52:38-40 My 20 '43
- Pacific Gas & Electric's plan to help western farmers lick the food shortage; 40 farm power advisors. Sales Management 52:64-6 Ap 1 '43
- Poultry equipment and kwh. use; California committee on relation of electricity to agriculture makes survey. J. R. Tavernetti. il Elec West 89:70-1 N '42
- Rural electrification engineering and electro-agricultural engineering. M. M. Samuels. Elec Eng 62:Trans 193-7 Ap '43
- Utilities introduce farm grain elevator. il Elec W 120:1048+ S 18 '43
- Utilization engineering for large agricultural customers; work of farm power adviser; Pacific gas and electric company. E. G. Stahl. il Edison Elec Inst Bul 11:20-2 Ja '43
- War service for farmers and small businessmen; campaigns of Pacific Northwest electrical companies. J. Mappelbeck. Pub Util 32:540-6 O 28 '43
- What builders should know about the farm electric. il plan Am Bid 65:47-8+ Ag '43
- Wiring on the farm; animals susceptible to leakage voltages. Electrician 131:159-60 Ag 13 '43

See also

- Electric service, Rural

ELECTRICITY supply

- Power balance is with united nations. Power 87:576-81 S '43

See also

- | | |
|-------------------|-----------------|
| Electric lighting | Electric plants |
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ELECTRICITY supply—Continued**War measures**

See also
Daylight saving
Electric utilities—
War problems

Lighting—War meas-
ures

Argentina

Increased production of electricity in Argentina; statistics for 1940 and 1941. For Comm W 11:25 Ap 24 '43

Arkansas

Commission seeks data on post-war production; contracts for private survey on conversion of war plants to production of civilian goods. Elec W News ed 120:556 Ag 14 '43

Auckland, New Zealand

Electricity in Auckland. Electrician 130:273 Mr 12 '43

Australia

Victoria electricity commission 23d annual report. Electrician 130:213, F 26 '43

Brazil

Supply in Brazil. Elec R (Lond) 133:160 JI 30 '43

Bristol, England

Bristol jubilee; Electricity department's progress. il Elec R (Lond) 133:339-40 S 10 '43

Canada

Canada's power expansion. D. C. Howe. Elec W News ed 120:555 Ag 14 '43

Canadian consumption of electric power, 1941 and 1942. For Comm W 10:23 Mr 27 '43

Canadian power supplies. Engineering 154: 492 D 18 '42

See also
Hydroelectric plants
—Canada

Capetown, South Africa

Electricity in Cape Town. Electrician 130: 465 My 7 '43

Electricity in Capetown. Electrician 131:5-6 JI 2 '43

Cleveland, Ohio

Private ownership finds new friends in municipal ownership fight; Cleveland electric illuminating company. Elec W 120:251-3 JI 24 '43

Derby, England

Electricity at Derby. il Electrician 131:370-1 O 15 '43; Elec R (Lond) 133:501-2 O 15 '43

Germany

German fuel conservation; abstract. Schreib-er. Elec R (Lond) 132:24 Ja 1 '43

Great Britain

British grid system proves great war aid. Elec W 120:1357 O 16 '43

Bulk-supply charges; implications of the Scott report. N. Elliott. Elec R (Lond) 131: 548-9 O 30 '42

Discussion on Technical implications of the Scott report as applied to electricity supply. Inst E E J 90 pt 2:131-6 Ap '43

Electrical consumption survey. J. Dalton. Electrician 129:604 D 4 '42

Electrical development; public utility boards proposed. S. E. Britton. Elec R (Lond) 132:643-4 My 14 '43

Electricity and the fuel campaign. G. Lloyd George. Electrician 130:310-11 Mr 26 '43

Electricity supply industry; discussion of basic economic features. J. I. Bernard. Electrician 129:672 D 18 '42

Electricity supply industry; its past, present and future control. C. C. Hodges. Inst E E J 90 pt 1:75-7 F '43; Abstract. Elec R (Lond) 131:521-2 O 23 '42

Electricity supply planning; some recent schemes. Elec R (Lond) 133:407-10 S 24 '43

Electricity supply plans; further views on reorganisation. Elec R (Lond) 132:843-4 Je 25 '43

Fuel economy; the domestic consumer's response. G. O. McLean. Elec R (Lond) 132: 517-18 Ap 16 '43

Fuel, power, and transport, a national programme. W. W. Adam. diags Inst Mech Eng J & Proc 149:Proc 113-17 Je '43

Fuel target. E. S. Stredwick. Gas J (Lond) 240:257+, 293 N 25-D 2 '42; Discussion. 240:293 D 2 '42

Implications of the Scott report; discussion. Elec R (Lond) 131:654-5 N 20 '42; Same.

Electrician 129:551-2 N 20 '42

Improving electricity supply. Elec R (Lond) 132:511-13, 545-7, 575-6, 607-9 Ap 16-May 7 '43

Measurements section; chairman's address. E. H. Miller. Inst E E J 90 pt 1:43-6 Ja '43;

Abstracts. Electrician 129:481-2 O 30 '42; Elec R (Lond) 131:554 O 30 '42

National planning; the place of electricity in the general scheme. Elec R (Lond) 133:113-14 JI 23 '43

Plan for electricity supply. Electrician 131: 200-2 Ag 27 '43; Elec R (Lond) 133:274-5 Ag 27 '43

Provincial electric supply; views on the work of post-war planning committees. S. S. Grant. Electrician 130:287 Mr 19 '43

Reorganisation of supply. A. M. F. Palmer. Elec R (Lond) 132:645-6 My 14 '43

Rural development. il map Elec R (Lond) 133:227-30, 263-6 Ag 20-27 '43

Rural electrification; a plea for rational consideration. C. A. C. Brown. Elec R (Lond) 132:109-11 Ja 22 '43

Secondary stations; their status and purpose in the grid system; abstracts. R. A. W. Connor. Elec R (Lond) 132:463 Ap 2 '43;

Electrician 130:379 Ap 9 '43; Discussion. Elec R (Lond) 132:483-4 Ap 9 '43; Electrician 130:379-87 Ap 9 '43

Small electricity supply undertakings; historical note. A. E. Baker. Inst E E J 90 pt 1:107-8 Mr '43

Statistics in the fuel and power industries. O. W. Roskill. Engineering 155:404, 425-6, 444 My 21-Je 4 '43; Excerpts. Gas J (Lond) 241:651 My 26 '43; Abstract. Electrician 130:522 My 21 '43; Discussion. Gas J (Lond) 241:672-3 Je 2 '43

Supply industry; discussion of Scott committee's proposals. H. Southall. Elec R (Lond) 131:779-80 D 18 '42

Transmission section; chairman's address. P. E. Rycroft. Inst E E J 90 pt 1:39-42 Ja '43;

Abstracts. Elec R (Lond) 131:520-1 O 23 '42; Electrician 129:443-5 O 23 '42

Use of electricity in relation to fuel economy. R. H. Rawlin. Inst E E J 89 pt 2:262-3 Ag '43; Abstracts. Electrician 130:143-4 F 5 '43;

Elec R (Lond) 132:213-14 F 12 '43; Discussion. Inst E E J 89 pt 2:263-6 Ag '43;

Electrician 130:195-6 F 19 '43; Elec R (Lond) 132:253-4 F 19 '43

Zoned tariffs. F. S. Naylor. Elec R (Lond) 132:107-8 Ja 22 '43

See also
Electricity supply—
London, England

Huddersfield, England

Huddersfield retrospect; fifty years of electricity supply. Elec R (Lond) 133:217 Ag 13 '43

Ireland

Electricity in Eire. Electrician 131:126 Ag 6 '43

Irish output declines. Elec R (Lond) 133:174 Ag 6 '43

Irish power production; abstract. P. G. Murphy. Elec R (Lond) 132:229 F 12 '43

Post-war electrical development in Ireland. J. A. Kenny. Inst E E J 90 pt 1:89-90 F '43

Progress of supply of the Electricity board for Northern Ireland. T. G. Christie. maps Inst E E J 90 pt 1:131-5 Mr '43

Latin America

Power facilities in Central and South America. R. P. Crippen. il Elec Eng 62:3-9 Ja '43

London, England

Economy and excess; survey of consumers' reasons; London and home counties J.E.A. Elec R (Lond) 132:329 Mr 5 '43

London J.E.A.; Authority's reply to conference resolution. Elec R (Lond) 133:184-5 Ag '43

London's electricity; unification proposals. Elec R (Lond) 132:349 Mr 12 '43

ELECTRICITY supply—London, England—*Continued*

New electricity board; London J.E.A. proposals for post-war development. Electrician 130:263-4 Mr 12 '43
Plan for London; suggested grouping of electricity supply areas. E. H. Jesty. map Elec R (Lond) 133:230-1 Ag 20 '43

Manchester, England

Industrial load; wartime problems of Manchester's electricity undertaking. il Elec R (Lond) 131:609-13 N 13 '42
Manchester's jubilee; some extracts from early records. il Elec R (Lond) 133:137-9 J1 30 '43; Same cond. Electrician 131:103-4 J1 30 '43

Morocco

Consumption of electricity in French Morocco, 1940-1941. For Comm W 9:26 D 12 '42

New England

New England energy interchange defended; Boston Edison-New England Power agreement. Elec W 119:772 Mr 6 '43
New England utilities meeting war power needs. C. S. Herrmann. Elec W News ed 119:1042-3 Mr 27 '43

New York (state)

New York commission reports. Pub Util 31:707-8 My 27 '43
Some aspects of rural electrification in New York state. R. G. Harvey. il Edison Elec Inst Bul 11:341-2 N '43

New Zealand

Prospects in New Zealand; abstract. A. O. Glasse. Elec R (Lond) 132:815 Je 18 '43

Northwestern states

Power sparks district's industry. il Steel 112:100 Je 7 '43
Public opposes utility take-over in Northwest. Elec W News ed 119:533 F 13 '43

Pacific coast

Electric power sparks industry growth in Northwest. A. H. Allen. il Steel 113:58-61 Ag 30 '43

Puerto Rico

Increased production of electricity in Puerto Rico; yearly output of two companies, 1935-1942. For Comm W 12:33 Ag 21 '43

Quebec

Power-system interconnection. W. R. Way. diags Elec Eng 61:Trans 841-7 D '42

Rumania

Electricity supply in Roumania. Electrician 131:346 O 8 '43

Russia

Soviet electric-power developments. For Comm W 11:27 Je 12 '43

St Louis

St Louis sets pattern for implementing L-94; Union electric company has detailed plans and records to smooth road to rationing. Elec W 120:1509-13 O 30 '43

South Africa

Electricity in South Africa. Electrician 130:186 F 19 '43

Electricity in South Africa. Electrician 130:412 Ap 23 '43

Hex River Valley scheme. Engineer 174:448 N 27 '42

South African commission; chairman's report for 1942. H. J. van der Bijl. Elec R (Lond) 133:262 Ag 27 '43

South African sales of electricity, 1942. For Comm W 13:25 O 30 '43

South America

Electrification for the American republics. C. A. Howard. il map For Comm W 13:3-5+ N 13 '43; Same abr. Manuf Rec 112:38-9+ N '43

Southwestern states

Meeting Southwest war power demands. F. B. Lewis. Elec West 90:55-6 My '43

New power administration established for the Southwest; will sell power from War department's Denison and Norfolk dams and from Grand river in Oklahoma. Eng N 131:563 O 14 '43

Sweden

Sweden increases use of electricity. A. Rusck. il Elec Eng 62:440-1 O '43
Transformer ties in Sweden's networks. Elec W 119:2002+ Je 12 '43

Switzerland

Fuel shortage in Switzerland. Economist 143:670 N 28 '42

Sydney, New South Wales

Sydney council's system. R. Vine-Hall. Elec R (Lond) 133:548-9 O 22 '43

Tasmania

Electricity in Tasmania; report for 1941-42. Electrician 130:240 Mr 5 '43
Tariffs in Tasmania; annual report of the Hydro-electric commission. Elec R (Lond) 132:266 F 19 '43

Tennessee valley

Design of recent TVA projects. G. R. Rich and others. il diags plans Civil Eng 13:144-7, 165-7, 205-8, 257-60, 305-8, 373-6, 413-16, 465-8 Mr-O '43

United States

Economics of war power supply. C. W. Kellogg. map Edison Elec Inst Bul 11:65-74 Mr '43; Excerpts. Elec W News ed 119:690-1 F 27 '43

Electric light and power industry in 1942. C. W. Kellogg. Edison Elec Inst Bul 11:1-5 Ja '43; Excerpts. Manuf Rec 112:24-5+ Ja '43; Pub Util 31:370-2 Mr 18 '43

Electric power and the war. Survey of Cur Business 23:7-11 S '43

Electric power records in World wars I and II. Pub Util 31:107-11 Ja 21 '43
Electric power supply. C. W. Kellogg. Power Pl Eng 47:57 My '43

How short will be the power shortage? Pub Util 30:861-3 D 17 '42

Key to the apparent paradox in electric power supply for war. C. W. Kellogg. Edison Elec Inst Bul 11:147-50 My '43

Meeting power demand during war. L. Elliott. Mech Eng 64:872-6 D '42

OCS demands sharp cut in non-vital electricity use. il Elec W 119:769 Mr 6 '43

Output, 1942. Elec W 119:248-59 Ja 23 '43

Post-war demand for power. M. L. Sindeland. Edison Elec Inst Bul 11:295-6+ O '43

Power conservation program agreed upon. il Elec W 120:263-4 J1 24 '43

Power program to meet war needs outlined by head of the WPB. D. Nelson. Eng N 130:737 My 20 '43

Power teamwork for victory. P. W. Swain. Paper Tr J 115:29-32 N 12 '42

Power up again; calls for another 500,000 kilowatts. Business Week p17-18 J1 24 '43

Power's big role; by pooling resources and scheduling needs, utilities carry war load with no civilian hardships. Business Week p20+ F 27 '43

Sees no power shortage for war or civil needs; abstracts. J. A. Krug. Elec W 119:611-12 F 20 '43; Pub Util 31:310-12 Mr 4 '43

Washington (state)

Hearing on FPC order requiring utility to act as common carrier for Bonneville power. Elec W 119:1305-6 Ap 17 '43

Western states

Second year of the war; statistical data. Elec West 90:51-3 F '43

Yugoslavia

Electrification program. Yugoslavia. For Comm W 10:25-6 Mr 6 '43

ELECTROACOUSTICS*See also*

Amplifiers, Vacuum tube
Microphones
Phonograph
Radio engineering
Sound—Recording and reproducing

ELECTROCARDIOGRAPH. See Cardiograph

ELECTROCHEMICAL analysis

Electrochemical analysis; instruments for metallurgists. *il Chem Age (Lond)* 48:445-7 Ap 24 '43

Electrographic methods of surface analysis. M. S. Hunter, J. R. Churchill and R. B. Mears. *bibliog il diags Metal Prog* 42:1071-6 D '42

Electrolytic determination of zinc in aluminium alloys. G. H. Osborn. *Soc Chem Ind J* 62:53-60 Ap '43

External indicators; a modified technique in their use; abstract. A. C. Holler. *Am Water Works Assn J* 35:512 Ap '43

pH value of boiler feed water. R. L. Rees and J. Jackson. *il diag Engineer* 176:247-9 S 24 '43

See also

Electrographic analysis

ELECTROCHEMICAL industries

See also

Electrochemistry
Electrometallurgy
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Great Britain

Great Britain plans to expand electrochemical industries in post-war period. *Chem & Met Eng* 50:180-4 Mr '43

ELECTROCHEMICAL society

Meeting, New York, Oct. 13-16. *Iron Age* 152:52-6+ O 21 '43; *Steel* 113:66-7 O 25 '43

ELECTROCHEMISTRY

Alessandro Volta (1745-1827). K. R. Webb. *bibliog Chem & Ind* 62:269-71 J 17 '43

Clays as colloidal electrolytes. C. E. Marshall and C. A. Krinbill. *bibliog J Phys Chem* 46:1077-90 D '42

Electrochemist adopts automatic recording devices used in medical research. J. Gorell. *il Electrochem Soc Trans* 83 (preprint 22):253-8 Ap '43

Electrochemistry of corrosion. C. L. Bulow. *diag Metal Finishing* 41:553-5, 631-3+ S-O '43

Improved production of sodium. A. G. Arend. *diag Electrician* 130:4-6 Ja 1 '43

Mannitol and sorbitol; the development of a new electrochemical industry. H. J. Creighton. *il plan Can Chem & Process Ind* 26:690-6 D '42

Theory of galvanic cells subject to fields of force; the electric and magnetic field. F. O. Koenig and S. W. Grinnell. *bibliog J Phys Chem* 46:980-1005 N '42

See also

Electric batteries
Electric precipitation
Electrochemical analysis
Electrodeposition of metals
Electrodes
Electrolysis
Electrolytes

Electrolytic cells
Electrometallurgy
Electroplating
Ionization, Electrolytic
Metal cleaning, Electrolytic
Storage batteries

Experiments

Simple apparatus for experiments in electrochemistry. O. F. Steinbach. *diag J Chem Educ* 20:303-4 Je '43

Patents

Electro-organic chemistry in the patent office. J. Rossman. *Electrochem Soc Trans* 84 (preprint 11):87-99 O '43

ELECTROCUTION of animals

Electricity in painless killing. E. Hardy. *Electrician* 130:614 Je 18 '43

ELECTRODEPOSITION of metals

Electro-plating on non-conducting materials; use of graphite. *Engineer* 175:160 F 19 '43; Same. *Electrician* 130:109 Ja 29 '43; Abstract. *Elec R (Lond)* 132:316 Mr 5 '43

Industrial salvage by electrodeposition; abstract. O. G. Hogaboom. *Iron Age* 152:57-8 J 22 '43

Iron deposition. C. T. Thomas. *bibliog Electrochem Soc Trans* 80 (preprint 15):155-62 O '41; Abstract. *Metal Prog* 43:438+ Mr '43

Make patterns by electrolytic process. A. K. Laukel. *Foundry* 70:146-9 D '42

Methods of depositing metallic films. S. Wein. *bibliog il diags Electronics* 16:110-13+ S '43

Old parts made new; cold casting for building up worn parts; fescollizing. *Eng & Min J* 144:83 Ap '43

Sulfate-chloride solution for iron electroplating and electroforming; abstract. R. M. Schaffert and B. W. Gonser. *Iron Age* 152:55-6 O 21 '43

See also

Electrometallurgy
Electroplating

ELECTRODES

Application of guard electrodes in dielectric measurements. E. W. Greenfield. *il diags R Sci Instr* 13:489-92 N '42

Briquetting press and electrode loader for spectrochemical analysis. H. C. Harrison and C. C. Ralph. *bibliog il diag Ind & Eng Chem Anal* ed 15:466-7 J 15 '43

Cerium amalgam electrode and the thermodynamics of aqueous cerium(III) sulfate solutions. G. C. Walters and T. De Vries. *bibliog Am Chem Soc J* 65:119-22 Ja '43

Change in potential of silver-silver chloride electrodes with time. E. R. Smith and J. K. Taylor. *Am Chem Soc J* 64:3053 D '42

Electromotive force of the mercurous bromide electrode. W. R. Crowell, R. W. Mertes and S. S. Burke. *bibliog diag Am Chem Soc J* 64:3021-3 D '42

Hydrogen electrode half-cell in polarography. J. P. Baumberger and K. Bardwell. *bibliog Ind & Eng Chem Anal* ed 15:639-41 O 15 '43

Improved electrode holder for spectrographic analysis. B. F. Scribner and C. H. Corliss. *bibliog diags pls J Research Nat Bur Stand* 30:41-5 Ja '43; Same. *Opt Soc Am J* 33:515-18 S '43

Mercury arc lamps; effect of electrode on energy distribution. W. T. Anderson, jr. *bibliog diag Opt Soc Am J* 33:104-8 F '43

Microelectrodes for measuring local oxygen tension in animal tissues. P. W. Davies and F. Brink, jr. *bibliog il diag R Sci Instr* 13:524-33 D '42

Polarization at oxidation-reduction electrodes; the ferrocyanide-ferricyanide electrode. W. R. Carnody and J. J. Rohan. *Electrochem Soc Trans* 83 (preprint 11):137-45 Ap '43

Reversible oxygen electrode. W. G. Berl. *bibliog Electrochem Soc Trans* 83 (preprint 19):231-48 Ap '43

Silver chloride electrode. O. Redlich and L. F. Maranville. *bibliog J Chem Educ* 20:10 Ja '43

Simple and efficient calomel half cell. F. L. Hahn. *diag Science* 98:140 Ag 6 '43

Studies on overvoltage; a study of decomposition potentials; cathodic and anodic polarization of a platinized platinum cathode near the reversible value in hydrogen saturated acid solutions. A. L. Ferguson and M. B. Towns. *Electrochem Soc Trans* 83 (preprint 8):105-17 Ap '43

Studies on overvoltage; cathodic and anodic polarization of a platinized platinum cathode near the reversible value in nitrogen saturated acid solutions. A. L. Ferguson and M. B. Towns. *Electrochem Soc Trans* 83 (preprint 9):119-28 Ap '43

See also

Cathodes	Electrolysis
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Electric welding, Arc	Potential, Electric
Electrodes	Vacuum tubes
Electrographic analysis	X ray tubes

ELECTRODES, Glass

Guard for glass electrodes. *diags Chem Ind* 53:376 S '43

Thermostatically controlled glass electrode apparatus for pH measurements. L. F. Le Brocq. *diag Chem & Ind* 62:350-1 S 11 '43

ELECTRODYNAMICS

See also

Electric conductivity	Electricity
Electric currents	Inductance

ELECTROGALVANIZING. See Electroplating;

Zinc plating

ELECTROGRAPHIC analysis

Analytical patterns in the study of mineral and biological materials; autoradiograph, contact print, electrographic print, etc. H. Yagoda. *bibliog(70 references) il diags Ind & Eng Chem Anal* ed 15:135-41 F 15 '43

ELECTROGRAPHIC analysis—Continued

- Detection of gold in plating. M. Lerner. *Ind & Eng Chem Anal* 15:416 Jc 15 '43
- Electrographic detection of molybdenum in steel alloys. J. A. Calamari, R. Hubata and P. B. Roth. *bibliog Ind & Eng Chem Anal* 15:71 Ja 15 '43
- Electrographic methods of surface analysis. M. S. Hunter, J. R. Churchill and R. B. Mears. *Chem Soc J* 1943-6 F '43
- Metal Prog 42:1071-6 D '42

ELECTROLYSIS

- Automatic processing plant; descaling of metals; oxidation from atmosphere. *diags Chem Age (Lond)* 47:533-4 D 12 '42
- Copper gets in its pores; electrolytic process protects wood from insects. *il Elec West* 91:61 O '43
- Determination of tin coating weights on tin plate. G. H. Bendix, W. C. Stammer and A. H. Carle. *il diag Ind & Eng Chem Anal* 15:501-4 Ag 15 '43
- Electrolysis of water; plant for the production of pure hydrogen and oxygen. *il Chem Age (Lond)* 47:535-6 D 12 '42
- Electrolytic gases in steam. D. Roberts. *Pulp & Pa of Can* 44:737-8+ S '43
- Electrolytic preparation of quinhidrone. R. E. Ely. *Ind & Eng Chem Anal* 15:284-5 Ap 15 '43
- Electrolytic treatment averts pile infestation. *il diag Elec W* 119:2117-19 Je 26 '43
- Gallium; the separation of gallium and germanium from alkaline extracts of germanite by electrolysis. D. J. Lloyd and W. Pugh. *Chem Soc J* 1943-6 F '43
- Ionic nature of the Grignard reagents. W. V. Evans and R. Pearson. *bibliog Am Chem Soc J* 64:2865-71 D '42
- Simplified cell unit for internal electrolysis. R. P. Yeck and O. C. Zischkau. *il diags Ind & Eng Chem Anal* 15:221-2 Mr 15 '43

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- | | |
|-----------------------------|------------------------------|
| Electrochemical analysis | Electrolytes |
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| Electrodes | Electrometallurgy |
| | Metal cleaning, Electrolytic |

ELECTROLYTES

- Clays as colloidal electrolytes. C. E. Marshall and C. A. Krinbill. *bibliog J Phys Chem* 46:1077-90 D '42
- Differential moving boundary method for transference numbers. L. G. Longworth. *bibliog il diag Am Chem Soc J* 65:1755-65 S '43
- Effects of inorganic electrolytes on the liberation of -SH in proteins. N. F. Burk. *bibliog J Phys Chem* 47:104-18 F '43
- Electrolytic properties of aqueous solutions of octyltrimethylammonium octanesulfonate and decyltrimethylammonium decanesulfonate. A. B. Scott, H. V. Tartar and E. C. Lingafelter. *bibliog Am Chem Soc J* 65:698-701 Ap '43
- Electrolytic properties of solutions of paraffin-chain quaternary ammonium salts. A. B. Scott and H. V. Tartar. *bibliog diag Am Chem Soc J* 65:692-8 Ap '43
- Fluidity of electrolytes. E. C. Bingham and R. T. Foley. *bibliog J Phys Chem* 47:511-27 O '43
- Ionization of strong electrolytes: general remarks, nitric acid. O. Redlich and J. Bigeleisen. *bibliog Am Chem Soc J* 65:1383-7 O '43
- Isoelectric measurements in dilute solutions; the system potassium chloride-sodium chloride at 25° at concentrations from 0.03 to 0.10 molar. A. R. Gordon. *bibliog diag Am Chem Soc J* 65:221-4 F '43
- Migration data in solutions of a colloidal electrolyte; laurylsulfonic acid. M. E. L. McBain. *bibliog J Phys Chem* 47:196-204 Mr '43
- Osmotic properties of solutions of some typical colloidal electrolytes. J. W. McBain and O. E. A. Bolduan. *bibliog J Phys Chem* 47:94-103 F '43
- Studies of sulfonates; conductances and densities of sodium ethyl-, *n*-butyl-, *n*-octyl-, and *n*-dodecylbenzene-*p*-sulfonate solutions. R. G. Paquette, E. C. Lingafelter and H. V. Tartar. *bibliog diags Am Chem Soc J* 65:686-92 Ap '43

- Studies on high molecular weight aliphatic amines and their salts; transference numbers of some primary amine hydrochlorides in aqueous solution and their significance in the interpretation of the micelle theory. C. W. Hoerr and A. W. Ralston. *bibliog Am Chem Soc J* 65:976-83 My '43
- Surface tension of solutions of electrolytes as a function of the concentration; magnesium, sulfate. G. Jones and W. A. Ray. *Am Chem Soc J* 64:2744-5 D '42
- Systematic polarographic metal analysis; characteristics of arsenic, antimony, bismuth, tin, lead, cadmium, zinc, and copper, in various supporting electrolytes. J. J. Lingane. *bibliog Ind & Eng Chem Anal* 15:583-90 S 15 '43
- Theory of the isoelectric point; applications to weak acids and bases and to their intermediate salts; the relative isoelectric point. T. L. Hill. *J Phys Chem* 47:70-83 Ja '43
- Thermodynamics of aqueous solutions of sodium chloride at temperatures from 15-45° from e.m.f. measurements on cells with transference. G. J. Janz and A. R. Gordon. *bibliog Am Chem Soc J* 65:218-21 F '43
- Use of electrolytes in manufacturing heavy clay products. R. H. E. Anwyl. *Brick & Clay Rec* 101:28, 30+ D '42
- Vapor pressure of aqueous solutions of sodium chloride at 20, 25 and 30° for concentrations from 2 molar to saturation. P. Olynik and A. R. Gordon. *bibliog Am Chem Soc J* 65:224-6 F '43
- Variation in the structure of water in ionic solutions. G. W. Stewart. *bibliog J Chem Phys* 11:72-4 F '43

See also

- | | |
|-----------------------|--------------------------|
| Electric batteries | Electrolysis |
| Electric double layer | Ionization, Electrolytic |
| Electrochemistry | Solution (chemistry) |
| Electrodes | |

Conductivity

- Conductance of aqueous solutions of potassium bromide at temperatures from 15° to 45° C and the limiting mobility of bromide ion. H. E. Gunning and A. R. Gordon. *bibliog J Chem Phys* 11:18-20 Ja '43
- Conductivity of sulfuric acid in methanol at 25°. E. W. Kanning, E. G. Bobalek and J. B. Byrne. *bibliog Am Chem Soc J* 65:1111-16 Je '43
- Limiting equivalent conductance of electrolytes. P. Van Rysselberghe. *J Chem Educ* 20:131 Mr '43
- New absolute method for the determination of the [ultra-] high-frequency conductivity of aqueous electrolytes, and some results on NaCl solutions; abstract. A. Pracher. *Wireless Eng* 19:582 D '42
- Potential of silver concentration cells with liquids of low dielectric constant. A. Gemant. *bibliog diag J Chem Phys* 10:723-30 D '42

ELECTROLYTIC cells

- Carbon, a refractory material; lining of aluminum pots. F. J. Vosburgh. *il diags Steel* 112:108+ Ap 5 '43
- Electrolytic chlorine; modern production plant. D. D. Howat. *diags Chem Age (Lond)* 49:379-84, 405-8 O 16-23 '43 (to be cont)
- Simplified cell unit for internal electrolysis. R. F. Yeck and O. C. Zischkau. *il diags Ind & Eng Chem Anal* 15:221-2 Mr 15 '43

See also

- Polarographs

Power supply

- Load regulating system for synchronous converters. L. H. Flettemeyer. *il diags Electrochem Soc Trans* 83 (preprint 12):147-57 Ap '43; Abstract. *Elec W* 119:1994 Je 12 '43

ELECTROLYTIC condensers. See Condensers (electricity)**ELECTROLYTIC corrosion**

- Corrosive effect of alternating currents on pipe lines. S. Thayer. *Pet Eng* 14:82 JI '43

See also

- Corrosion and anti-corrosives

- ELECTROLYTIC** ionization. See Ionization, Electrolytic
- ELECTROLYTIC** metal cleaning. See Metal cleaning, Electrolytic
- ELECTROLYTIC** oxidation. See Oxidation, Electrolytic
- ELECTROLYTIC** polarization. See Polarization, Electrolytic
- ELECTROLYTIC** polishing. See Polishing, Electrolytic
- ELECTROLYTIC** reduction. See Reduction, Electrolytic
- ELECTROLYTIC** zinc. See Zinc metallurgy—Electrometallurgy
- ELECTROMAGNETIC** field
Attenuation of electromagnetic fields in pipes smaller than the critical size. E. G. Linder. *bibliog Inst Radio Eng Proc* 30:554-6 D '42
Equivalent circuits to represent the electromagnetic field equations. G. Kron. *diags Phys R* 64:126-8 Ag 1 '43
- ELECTROMAGNETIC** theory
Cylindrical cavity resonators containing several dielectric media. *J Ap Phys* 14:363 JI '43
Suggestions for a theory of the coastal refraction. G. Grünberg. *Phys R* 63:185-9 Mr 1 '43
Ultra-high frequency oscillations of cylindrical cavity resonators containing two and three dielectric media. D. Middleton. *bibliog diag Phys R* 63:343-51 My 1 '43
Ultrasort electromagnetic waves; electromagnetic theory. E. Weber. *bibliog diags Elec Eng* 62:103-12 Mr '43
- ELECTROMAGNETIC** waves. See Electric waves; Radio waves
- ELECTROMAGNETISM**
Engineering fundamentals. *diags Diesel Power* 20:1003+ D '42
Fundamental electromagnetic concepts and their dimensions. G. W. O. Howe. *diags Wireless Eng* 20:105-9 Mr '43
- ELECTROMAGNETS**
Corrosion and remedies in fine wire magnet coils. B. W. Erikson. *il Product Eng* 14:158-60 Mr '43
Factors affecting the design of d-c magnets. L. T. Rader. *diags Elec Eng* 62:Trans 307-10 Je '43
Magnet coil life as affected by higher operating temperatures. G. L. Moses. *Product Eng* 14:22-3 Ja '43
Magnetic-base frame holds air drill on work. *il Comp Air M* 48:6967 F '43; Same abr. *Ry Mech Eng* 117:140 Mr '43; Same cond. *Marine Eng* 48:174 Mr '43
Magnetic rail pickers go to war; metal removed from airfields and roads around camps and industrial plants in Texas. *il Eng N* 130:479-80 Ap 8 '43
Miller pipe locating magnet. B. Miller. *il diag Water Works & Sewerage* 90:335-6 S '43
- See also
Armatures Lifting magnets
Chucks, Magnetic Solenoids
Inductance coils
- ELECTROMETALLURGY**
Advances in electrometallurgical industry. *Can Chem & Process Ind* 27:440 Ag '43
Aluminum developments. A. G. Arend. *diags Electrician* 130:441-3 Ap 30 '43
Cobalt electrolytically refined. C. S. Oldach and R. Landau. *Metals & Alloys* 17:967-8 My '43
Electrical developments of 1942; electrochemical. G. Bartlett. *Gen Elec R* 46:32-3 Ja '43
Electro-metallurgical prospects; effects of Scottish hydro-electric development. H. A. Skevking. *il Elec R (Lond)* 133:459-63 O 8 '43
Electrometallurgy, 1942. A. A. Center. *Eng & Min J* 144:106-8+ F '43
Load pickup by a group of ignitron rectifiers; application to large electrochemical loads, such as aluminum cell lines. L. W. Morton and D. I. Bohn. *bibliog diags Elec Eng* 62:Trans 679-84 N '43
Magnesium; its properties and production. W. B. Spellmire. *flow diags il Gen Elec R* 46:372-5 JI '43
- Plastic pipe and power; Saran pipe is being utilized in rectifying and heat exchange installations in electrolytic mass production of magnesium. *il Chem & Eng N* 21:1052-3 JI 10 '43
Recent advances in the electrometallurgical industry. J. W. Cuthbertson. *Engineer* 175: 451 Je 4 '43; Same. *Chem Age (Lond)* 48: 609 Je 5 '43
- See also
Electric furnaces, Magnetic separation of ores
Metallurgical Steel metallurgy—
Electrodeposition of Electrometallurgy
metals Zinc metallurgy—
Electroplating Electrometallurgy
Iron metallurgy—
Electrometallurgy
- ELECTROMETERS**
Behavior of a balanced d.c. amplifier. R. C. Spencer and L. Schulz. *bibliog diag R Sci Instr* 14:10-14 Ja '43
Dual alternating current titrometer. C. J. Penner and F. B. Rolison. *bibliog il diag Ind & Eng Chem Anal ed* 15:337-40 My 15 '43
- ELECTROMETRIC** apparatus. See Volumetric analysis—Apparatus
- ELECTROMOTIVE** force. See Potential, Electric
- ELECTRON** accelerator
Betatron; abstract. D. W. Kerst. *Science* 96:sup 10 D 4 '42
Betatron, world's most powerful X-ray machine holds vast possibilities for medicine, industry, research. A. R. Wildhagen. *il diag Sci Am* 168:207-9 My '43
Earth-filled walls for X-ray building; research building at Ohio state university to house betatron and electrostatic generator. *il diag plan Eng N* 131:636-7 O 21 '43
Industrial X-rays of greatly increased voltage; induction electron accelerator designed by E. E. Charlton and W. F. Westendorp. *il Comp Air M* 48:6947 Ja '43
100,000,000-volt X-rays and electrons. *il Instruments* 15:538-9 D '42
Shape of betatron pole faces. J. H. Bartlett. *Phys R* 64:185 S 1 '43
24,000-kva. capacitor speeds electrons. W. F. Westendorp. *il Elec W* 119:644+ F 20 '43
- ELECTRON** affinity
Direct experimental determination of the electron affinity of chlorine. K. J. McCallum and J. E. Mayer. *bibliog diags J Chem Phys* 11:56-63 F '43
- ELECTRON** bombardment
Ionization and dissociation by electron impact; butene-1. D. P. Stevenson. *Am Chem Soc J* 65:209-12 F '43
- ELECTRON** counters. See Counters (electrons, ions, etc.); Geiger-Müller counters
- ELECTRON** diffraction cameras. See Cameras, Electron diffraction
- ELECTRON** microscope
Applications of the electron microscope in colloid chemistry. L. Marton. *bibliog il J Phys Chem* 46:1023-32 D '42
Crystals from Portland cement hydration; electron microscope study. C. M. Slepceovich, L. Gildart and D. L. Katz. *bibliog il Ind & Eng Chem* 35:1178-87 N '43
Dry stripped replicas for the electron microscope. V. J. Schaefer. *Science* 97:188 F 19 '43
Early history of the electron microscope. R. Rüdenberg. *diags J Ap Phys* 14:434-6 Ag '43
Electron microscope and cellulose. R. E. Barnes and C. J. Burton. *bibliog il Ind & Eng Chem* 35:120-5 Ja '43
Electron microscope; calibration and use at low magnifications. C. J. Burton. R. E. Barnes and T. G. Rochow. *il diags Ind & Eng Chem* 34:1429-36 D '42
Electron microscope improved. *diag Iron Age* 151:47 My 27 '43
Electron microscope, most recent research tool. V. K. Zworykin. *il diags Electronics* 16:145-7+ Mr '43
Electron microscope study of some structural colors of insects. T. F. Anderson and A. G. Richards, Jr. *bibliog il diags J Ap Phys* 13: 748-58 D '42
Electron microscope; will molecules become visible? *il Chem Age (Lond)* 49:5-8 JI 3 '43

ELECTRON microscope—Continued

Electron microscopy in chemistry. V. K. Zworykin. bibliog il diags Electronics 16: 64-8+ Ja '43; Same cond. Ind & Eng Chem 35:450-8 Ap '43

Electrostatic electron microscope. C. H. Bachman and S. Ramo. bibliog il diags J Ap Phys 14:8-13, 69-77, 155-60 Ja-F, Ap '43

Fine structure of metallic surfaces with the electron microscope; two-step replica process utilizes molded polystyrene and evaporated silica. R. D. Heidenreich and V. G. Peck. bibliog il diag J Ap Phys 14:23-9 Ja '43

Interpretation of electron micrographs of silica surface replicas. R. D. Heidenreich. bibliog il J Ap Phys 14:312-20 Jl '43

Metallography by electron microscope. D. Harker and V. J. Schaefer. il Metal Prog 43:68-9 Ja '43

Mobile electron microscope. Chem Ind 52: 213 F '43

Nature of colloidal clay as revealed by the electron microscope. B. T. Shaw. bibliog il J Phys Chem 46:1032-43 D '42

New methods for preparing surface replicas for microscopic observation. V. J. Schaefer. il Phys R 62:495-6 N 1 '42

Particle shape and the behavior of clay as revealed by the electron microscope. R. P. Humbert. il Am Cer Soc Bul 21:260-8 N 15 '42

Portable electron microscope widens its field of usefulness. V. K. Zworykin. Sci Am 168: 74 F '43

Seeing metals at high magnification. C. S. Barrett. il Machine Design 15:138-40 N '43

Simplified electron microscope. C. H. Bachman and S. Ramo. il Phys R 62:494 N 1 '42

Simplified electron microscopy. C. H. Bachman. il diags Electronics 16:78-81+ F '43

Some applications of the high resolving power of the electron microscope. H. Green and E. F. Fullam. il J Ap Phys 14:332-40 Jl '43

Structure of the wool fiber, as revealed by the electron microscope. C. W. Hock and H. F. McMurdie. bibliog il Am Dyestuff Res 32:433-6, 451-4 O 11 '43; Same. J Research Nat Bur Stand 31:229-36, pl 1-10 O '43

Studies on the structure of thin metallic films by means of the electron microscope. R. G. Picard and O. S. Duffendack. il J Ap Phys 14:291-305 Je '43

Bibliography

Bibliography of electron microscopy. C. Marton and S. Sass, comps. J Ap Phys 14:522-31 O '43

ELECTRON multipliers

Calculations on the use of static secondary-electron multipliers; abstract. G. Maurer. Wireless Eng 20:507 O '43

ELECTRON optics

Effect of a phase-focusing of higher order on the Fourier components of the ray-current density; abstract. F. Borgnis and E. Ledinegg. Wireless Eng 20:395 Ag '43

See also

Electron microscope
Television
Vacuum tubes

ELECTRON tubes. See Vacuum tubes

ELECTRONIC research supply agency

New agency will supply labs with hard-to-find parts. C. E. Wilson. Electronics 16: 284+ Je '43

ELECTRONIC sewing machine. See Plastic materials—Joining

ELECTRONIC switch. See Vacuum tubes—Control uses

ELECTRONICS

Advertisers! meet the electron! il Ptr Ink 202:11-13, 60 Ja 22 '43

Definition of electronics; abstract. J. Slepian. Electronics 16:158+ My '43

Electronic magic; science of harnessing electrons has gone to war. Business Week p77-8 N 21 '42

Electronics. Comm & Fin Chr 157:1954+ My 27 '43

Electronics: a lever on industry; rocketing a \$4 billion war business toward a postwar industrial revolution. il Fortune 28:132-5+ Jl '43

Electronics and research. R. R. Beal. Comm & Fin Chr 157:2262, 2274-5 Je 17 '43

Electronics, promise of tomorrow. W. C. White. il Electronics 16:152-5+ Mr '43

Engineer's place in the post-war picture. S. S. Egert. Electronics 16:86-7+ Jl '43

How to determine reactance for electronic circuits; chart. Elec W 118:1814 N 28 '42

How will electronics affect industrial marketing? J. S. Smith. il Ind Marketing 28: 19-21+ Ag; 40, 44+ S '43

Industrial electronics; conference, Schenectady, N.Y., Sept. 14. Mech Eng 65:819-23 N '43

Maintenance of electronic controls. W. D. Cockrell. il Chem Ind 53:53-61 Jl '43; Same. Pet Refiner 22:119-22 Ag '43; Same. Gen Elec R 46:489-92 S '43; Same. Paper Ind 25:503-6 Ag '43; Same. Rock Prod 46:102, 104+ Ag '43; Same cond. Power 87:446-8+ Jl '43; Same cond. Aero Digest 43:211, 213+ S '43

New electronic consulting group. il Electronics 16:216+ Ag '43

New world of electronics; special section. L. W. Chubb and others. il diags maps Electronics 16:83-156 Mr '43

Post-war planning problems; electronics industries. W. MacDonald. Electronics 16: 72-3+ My '43

Pvt Enterprise gets more work from electronics. B. Kirkpatrick and J. McCann. il Banking 35:30-1 Je '43

Progress in engineering knowledge during 1942; electronic equipment. P. L. Alger and J. Stokley. Gen Elec R 46:108-9 F '43

Radio-and-electronic field; abstract. C. J. Madsen. Inst Radio Eng Proc 31:644 N '43

Radio progress during 1942; electronics. bibliog Inst Radio Eng Proc 31:129-30 Ap '43

Scientific farming; advent of radionic devices has made possible increases in quantity and quality of food production. S. K. Winters. il Radio N 30:30-1+ Ag '43

Some comments on postwar electronics. P. S. Billings. Inst Radio Eng Proc 31:592-3 N '43

Wall St. watches electronics; reports by financial firms, articles in magazines and presentation of lecture series in governing room of New York stock exchange. Electronics 16:223-5 Jl '43

Wartime progress in electronics. R. Eichberg. il diags Radio N 28:20-1, 70-3 D '42; 29:14-16, 73-5 Ja; 24-5, 62-5 F; 24+ Mr '43

See also

Cloud chambers
Counters (electrons, ions, etc.)
Electron microscope
Electron optics
Electrons

Oscillographs, Cathode ray
Photoelectric cells
Radio engineering
Radionics (term)
Television
Vacuum tubes

Bibliography

Electronics bibliography for war training. Electronics 16:109-11 My; 128-30 Je '43

Definition

Electronics and Ionics. J. Slepian. Instruments 16:136-7+ Ap '43

History

Electronics; its start from the Edison effect sixty years ago. W. C. White. il diags Gen Elec R 46:537-41 O '43

Study and teaching

Electronic applications, a new curriculum in electrical engineering. T. S. Gray and R. H. Frazier. il diag Electronics 16:122-4+ O '43

Movies and slidefilms speed wartime training of technicians. L. S. Metcalfe. il Electronics 16:98-9 Jl '43

New laboratory techniques expedite training in electronics. il diags Electronics 16:90-3 Je '43

ELECTRONS

Calculations on classical field theory. A. C. Menius, Jr. and N. Rosen. Phys R 62:436-7 N 1 '42

ELECTRONS—Continued

- Direct experimental determination of the electron affinity of chlorine. K. J. McCallum and J. E. Mayer. bibliog diags J Chem Phys 11:56-63 F '43
- Electron configuration as the basis of the periodic table. W. F. Luder. bibliog charts J Chem Educ 20:21-6 Ja '43
- Electron mass in relation to the energy of formation of the atoms; calculation of isotopic and atomic weights. H. D. K. Drew. Chem & Ind 62:390-3 O 16 '43
- Electron-shell theory of planet genesis. H. P. Gillette. Roads & Sts 86:50-1 Ap '43
- Electron transfer spectra and their photochemical effects. E. Rabinowitch. bibliog (84 references) diags Rs Mod Phys 14:112-13 Ap-Jl '42
- Electronic energy bands in body-centered iron. M. F. Manning. bibliog Phys R 63:190-202 Mr 1 '43
- Electronic energy bands in face-centered iron. J. B. Greene and M. F. Manning. bibliog Phys R 63:203-10 Mr 1 '43
- Electronic pump bends electrons. S. Summers. diags Radio N 29:22-3+ Ja '43
- Electronics; science of today. L. W. Chubb. il diags Electronics 16:84-7 Mr '43
- Electrons in equilibrium with the penetrating component of cosmic rays in lead at 10,000 feet and at sea level. W. E. Hazen. bibliog il Phys R 64:7-10 Jl 1 '43
- Electrostatic focusing of high speed ion and electron beams. J. D. Craggs. il diags J Ap Phys 13:772-80 D '42
- Fundamental equations of electron motion (dynamics of high speed particles). L. A. MacColl. bibliog Bell System Tech J 22:153-77 Jl '43
- Ionization and dissociation by electron impact: isobutylene, propane, and propylene. D. P. Stevenson and J. A. Hipple. bibliog Am Chem Soc J 64:2769-72 D '42
- Ionization and dissociation by electron impact: normal propyl chloride and tertiary butyl chloride. D. P. Stevenson and J. A. Hipple. bibliog Am Chem Soc J 64:2766-8 D '42
- Tables of Planck's radiation functions, and electronic functions. Franklin Inst J 236:196-7 Ag '43
- Velocity-modulation currents. D. L. Webster. J Ap Phys 13:786-7 D '42

See also

- | | |
|----------------------|---------------------|
| Atoms | Ionization, Gaseous |
| Beta rays | Ions |
| Electric discharges | Mesotrons |
| Electron accelerator | Neutrons |
| and other headings | |
| beginning Electron | |

Beams

- Electron beam control. S. R. Winters. il diags Radio N 29:18-19+ Ja '43
- Electrostatic focusing of high speed ion and electron beams. J. D. Craggs. il diags J Ap Phys 13:772-80 D '42
- Spatial asymmetry of Cerenkov radiation as a function of electron energy. H. O. Wyckoff and J. E. Henderson. bibliog diags Phys R 64:1-6 Jl 1 '43

Counters

- See* Counters (electrons, ions, etc.); Geiger-Müller counters

Diffraction

- Donor-acceptor bonding; an electron diffraction investigation of the structure of dimethyl ether-boron trifluoride. S. H. Bauer, G. R. Finlay and A. W. Laubengayer. bibliog Am Chem Soc J 65:889-95 My '43
- Electron diffraction. G. P. Thomson. Engineering 155:436, 444-5 My 28-Je 4 '43; Same abr. Engineer 175:409 My 21 '43
- Electron diffraction investigation of biphenylene. J. Waser and V. Schomaker. bibliog Am Chem Soc J 65:1451-5 Ag '43
- Electron diffraction study of hydrogen peroxide and hydrazine. P. A. Giguère and V. Schomaker. bibliog diag Am Chem Soc J 65:2025-9 O '43
- Voltage stabilizer for electron diffraction power supply. S. H. Bauer, J. M. Hastings and D. V. MacMillan. diag R Sci Instr 14:30-2 F '43

- Zinc oxide smoke as a reference standard in electron wave-length calibration. C. Lu and E. W. Malmberg. bibliog R Sci Instr 14:271-3 S '43

Emission from metals

- Electronics mystery solved, may lead to improved vacuum tubes; discovery that gas dissolves in certain metals. H. C. Rentschler. Sci Am 169:17 Jl '43

See also

- Electrons—Secondary emission
Electrons—Thermionic emission

Reflection, scattering, etc.

- Effect of oblique incidence on the conditions for single scattering of electrons by thin foils. G. Goertzel and R. T. Cox. diags Phys R 63:37-40 Ja 1 '43
- Electron polarization. bibliog il J Ap Phys 14:271-2 Je '43
- Electron polarization. C. G. Shull, C. T. Chase and F. E. Myers. bibliog diag Phys R 63:29-37 Ja 1 '43
- Polarization of electrons. E. Tröunson and J. A. Simpson, jr. Phys R 63:55 Ja 1 '43
- Small angle scattering of electrons by aluminum. B. C. Dees and B. Hamermesh. bibliog Phys R 63:297-303 Ap 1 '43

Secondary emission

- Contribution to our knowledge of the fundamental process of secondary-electron emission; abstract. K. H. Geyer. Wireless Eng 20:454 S '43
- Observations on the secondary-electron radiation from non-conductors; abstract. K. H. Geyer. Wireless Eng 20:201 Ap '43
- Simple method for the investigation of secondary electrons excited by γ -rays and the interference of these electrons with measurements of primary β -ray spectra. L. Meitner. Phys R 63:73-6 F 1 '43

See also

- Electron multipliers

Thermionic emission

- Emissive power of typical grid and plate surfaces; test of graphite coatings. R. Szymanowicz. Electronics 16:93+ My '43
- Surface area of oxide coated cathodes by adsorption of gas at low pressures. L. A. Wooten and C. Brown. diag Am Chem Soc J 65:113-18 Ja '43
- Thermionic emission from an oxide-coated cathode. H. Y. Fan. bibliog diags J Ap Phys 14:552-60 O '43

Velocity*See also*

- Electron accelerator

ELECTRO-OSMOSIS. *See* Osmosis**ELECTROPHILIC** reagents. *See* Chemical reagents**ELECTROPHORESIS**

- Construction of Tiselius electrophoresis cells. G. G. Wright and S. M. Swingle. Science 97:564 Je 18 '43
- Electrophoresis of colloids under wartime conditions. K. G. Stern. bibliog R Sci Instr 14:187 Je '43
- Electrophoretic study of the proteins in rubber latex serum. C. P. Roe and R. H. Ewart. bibliog Am Chem Soc J 64:2628-32 N '42
- General electrophoretic pattern in extracts of pollens causing hay fever. H. A. Abramson, D. H. Moore and H. H. Gettner. il J Phys Chem 46:1129-39 D '42
- Origin and the complications of electric double refraction and of electric dichroism in dilute dispersed systems. W. Heller. Rs Mod Phys 14:390-409 bibliog (82 references, p408-9) O '42
- Solubility and electrophoretic studies of serum globulins; gamma globulin. E. Jameson and C. Alvarez-Tostado. il Am Chem Soc J 65:459-65 Mr '43
- Theory and application of a two-path rectangular microelectrophoresis cell. H. Beniam and R. G. Gustavson. bibliog diags J Phys Chem 46:1015-23 D '42
- Ultracentrifugal and electrophoretic investigation of an ascitic fluid from a cancer patient. E. B. Sanigar, L. E. Krejci and E. O. Kraemer. bibliog Franklin Inst J 235:293-313 Mr '43

ELECTROPHYSIOLOGY

Amplifying and recording technique in electro-biology, with special reference to the electrical activity of the human brain. G. Parr and W. G. Walter. *Il diags Inst E E J* 90 pt 3:129-42 S '43; Abstract. *Electrician* 130:245 Mr 5 '43; Discussion. *Inst E E J* 90 pt 3:142-4 S '43

Electro-biology; recording e.m.f.'s of living cells. *Elec R (Lond)* 132:315 Mr 5 '43

See also

Electricity, Injuries from

Apparatus

Electroencephalograph design. P. Traugott. *Il diags Electronics* 16:132+ Ag '43

Encephalophone converts brain potentials into sounds. *diags Electronics* 16:144+ My '43

ELECTROPLATING

Abstracts of educational program of A.E.S. convention, June 7-9. *Metal Finishing* 41:340-1 Je '43

Aircraft electroplating. R. R. Janssen. *diags Metal Finishing* 40:247-9+ My '42; Same. *Steel* 111:120+ D 7 '42; Abstract. *Metals & Alloys* 16:942+ N '42

American electroplaters' society 31st annual meeting, Buffalo, June 7-9. *Iron Age* 152:58-62+ J1 1; 63-73 J1 8; 55-9+ J1 22 '43

Automatic plating; application of materials handling. *Il Elec R (Lond)* 133:3-8 J1 2 '43

Automatic processing plant; descaling of metals; oxidation from atmosphere. *diags Chem Age (Lond)* 47:533-4 D 12 '42

Buick improves plating practices. H. Chase. *Il Am Mach* 87:97-8 My 27 '43

Conserve tin stocks by electrolytic plating; abstract. J. H. Hopper. *Power* 86:921c+ D '42

Drag-in during plating; abstract. J. B. Kushner. *Metals & Alloys* 17:170+ Ja '43

Electrodeposition of cobalt-tungsten alloys from an acid plating bath. M. L. Holt, R. E. Black and F. E. Hoglund. *Electrochem Soc Trans* 84 (preprint 15):139-47 O '43

Electrodeposition of silver on magnesium. F. J. Bowen and L. I. Gilbertson. *Electrochem Soc Trans* 83 (preprint 1):1-4 Ap '43; Same. *Metal Finishing* 41:271+ My '43; Same. *Steel* 112:100 Ap 19 '43

Electro-galvanizing; abstract. G. G. J. Adey. *Metals & Alloys* 17:398+ F '43

Electrolytic tinning; abstract. S. Baier. *Metals & Alloys* 16:1132+ D '42

Electronic generators extend induction heating field; electrolytic process of coating sheet steel with tin. H. C. Humphrey. *Il diags Electronics* 16:56-9+ Ja '43

Electroplating and its new position. F. A. Lowenheim. *bibliog Il diags Metals & Alloys* 18:795-801 O '43

Electroplating masks. R. R. Bradshaw. *Il Mod Plastics* 20:78-9+ Mr '43

Electroplating metals; table. F. R. Morral. *comp. Metal Prog* 43:741; 44:88A My, J1 '43

Electroplating on aluminum. *Chem Age (Lond)* 48:483-4 My 1 '43

Electroplating on aluminum; abstract. *Metals & Alloys* 16:938+ N '42

50,000,000 plated rivets a day; Chicago rivet & machine company. H. Chase. *Il Am Mach* 87:87-8 F 4 '43

Fundamentals of science relating to electroplating (cont). *Metal Finishing* 41:215-16 Ap '43

Glycerine usage in metal treatment. G. Leflingwell and M. A. Lesser. *bibliog Metal Finishing* 41:272-4 My '43

High-speed analysis and control of plating solutions. G. Jernstedt. *Il Electrochem Soc Trans* 82 (preprint 17):177-93 O '42; Same abr. *bibliog Can Chem & Process Ind* 27:155-7 Mr '43

How to choose electroplating equipment. A. Bregman. *Il diags Iron Age* 150:50-5 D 17; 40-4 D 24 '42

Interpretation of the mechanism of bright electroplating. J. A. Henricks. *bibliog Electrochem Soc Trans* 82 (preprint 22):237-56 O '42; Same. *Metal Finishing* 41:134-7, 202-6 Mr-Apr '43

Lead plating. M. B. Diggins. *bibliog Il Metal Finishing* 41:418-22 J1 '43

Modern design in electroplating; N. A. Woodworth company. G. E. Stedman. *Il Metal Finishing* 41:199-201+ Ap '43

New applications of electric equipment for electro-tinning lines. J. H. Hopper. *Il diags Blast F & Steel Pl* 31:423-7, 449-50 Ap '43

Novelties in electroplating. O. P. Watts. *Electrochem Soc Trans* 84 (preprint 9):75-8 O '43; Abstract. *Iron Age* 152:56+ O 21 '43

Palladium and its plating baths. G. C. Lambros. *Il Metal Finishing* 41:73-6 F '43

Plating on aluminum; Krome-alume process. R. F. Yates. *Il Metals & Alloys* 16:1084-8 D '42

Powder metallurgy and its relation to the electroplating industry; abstract. J. F. Kuzmick. *Iron Age* 152:70-1 J1 8 '43

Processing lines for electrolytic tinning. J. R. Erbe. *Il diags Steel* 111:128-30+ D 7 '42; Same. *Metal Finishing* 40:645-8 D '42

Recent developments in zinc plating. M. B. Diggins. *Metal Finishing* 41:277-81 My '43

Reclaiming precision gages by accurate control of chromium plated deposits. W. Irby, A. T. Clarke and F. R. Grover. *Il diags Steel* 112:86-8, 90+ Ap 26 '43

Résumé on the electrodeposition of aluminum. B. D. Ostrow. *bibliog Metal Finishing* 41:70-2 F '43

Rustproof coatings; electro-deposited finishes on iron and steel components. H. Silman. *Automobile Eng* 33:195-8 My '43

Stainless steel and the metal finishing foreman. S. J. Ophie. *Metal Finishing* 41:266-7 My '43

Study of the deposition potentials and microstructures of electrodeposited nickel-zinc alloys. B. Lustman. *Il Electrochem Soc Trans* 84 (preprint 6):47-59 O '43

Sulfate-chloride solution for iron electroplating and electroforming; abstract. R. M. Schaffert and B. W. Gonser. *Iron Age* 152:55-6 O 21 '43

Technical developments of 1942. N. Hall and G. B. Hogaboom, Jr. *Metal Finishing* 41:3-9 bibliog (204 references, p8-9) Ja '43

Throwing power of plating solutions. C. B. E. Young and A. Zminkoski. *bibliog Il Metal Finishing* 41:10-14 Ja '43

Tin plating from the potassium stannate bath. M. M. Sternfels and F. A. Lowenheim. *bibliog Il Electrochem Soc Trans* 82 (preprint 24):255-83 O '42; 84 (preprint 13):111-25 O '43

Tin shortage spurs electrolytic plating; 26 lines under way. *Steel* 112:420-5 Ja 4 '43

Trend of electroplating development. S. Wernick. *Metal Finishing* 40:650-2 D '42

Zinc plating instead of cadmium; composite of abstracts. *Metals & Alloys* 17:1040+ My '43

See also

Electrodeposition of metals	Nickel plating
	Zinc plating

Bibliography

Electroplating library. G. B. Hogaboom, comp. *Metal Finishing* 41:426-7 J1 '43

Brush plating

Brush plating outfits. *Il Consumers' Research Bul* 11:17-18 Ja '43

Rapid plating possible with new high-amperage brush unit. *Il Sci Am* 168:86 F '43

Control

Installing equipment to obtain the greatest amount of automatic control and handling; abstract. G. E. Heunerfauth. *Iron Age* 152:57 J1 22 '43

Plating test control of plating baths, use of the Hull cell; abstract. F. MacIntyre and R. O. Hull. *Iron Age* 152:56-7 J1 22 '43

Power

Flexibility of the cuprous oxide rectifier for automatic control equipment in electroplating. G. E. Heunerfauth. *diags Electrochem Soc Trans* 83 (preprint 7):97-103 Ap '43

Seven profitable years from Diesel operation; with cost data; Grand Rapids plating co. H. J. Barbour. *Il Diesel Power* 21:31-3 Ja '43

Why use rectifiers for plating? L. W. Reinken. *Il Metals & Alloys* 17:533-5 Mr '43

ELECTROPLATING—Continued**Study and teaching**

Courses in electroplating by Institute of electrochemistry and metallurgy. Metal Finishing 41:32-3 Ja '43

Testing

Salt spray vs. seawater testing; abstract. C. E. Heussner. Metals & Alloys 17:1062+ My '43

ELECTROSMOSIS process. See Water purification—Electrosmosis process

ELECTROSTATIC analyzer

Theory of the electrostatic beta-particle energy spectrograph. F. T. Rogers, Jr. and C. W. Horton. Bibliog R Sci Instr 14:216-20 Ji '43

ELECTROSTATIC field. See Electric field

ELECTROSTATIC separation of ores

Applied electrostatic separation; efficient ore-dressing technique. H. B. Johnson. diags Chem Age (Lond) 49:235-9 S 4 '43
Electrostatic ore concentrator. Il Steel 111:71 D 28 '42

ELECTROSTATIC separators

Contact potential in electrostatic separation. F. Fraas and O. C. Ralston. bibliog diag U S Bur Mines Rep of Invest 3667:1-17 '42

Electrostatic separator for fine powders. F. Fraas and O. C. Ralston. diags U S Bur Mines Rep of Invest 3677:1-7 '42

ELECTROSTATICS

Electrostatic focusing of high speed ion and electron beams. J. D. Craggs. Il diags J Ap Phys 13:772-80 D '42

Electrostatic high-frequency heating makes possible many new designs. P. D. Zottu. Il diags Product Eng 14:40-3 Ja '43
Generation of electric charges by moving rubber-tired vehicles. S. S. Mackeown and V. Wouk. diags Elec Eng 62:Trans 207-10 My '43

ELECTROTHERAPEUTICS**Apparatus and Instruments**

Dosimetry and local distribution of energy in the electric high frequency field. K. S. Lion. Il diags J Ap Phys 14:545-51 O '43
Medical shock machine used in the treatment of certain mental disorders. P. Traugott. Il diag Electronics 16:166+ N '43

ELECTROTHERMETER

Efficiencies, for particle determination, of the Electrotor meter, the ultramicroscope, and the settlement counter. S. C. Blacktin. Soc Chem Ind J 61:161-2 O '42

ELECTROTYPING

Electrotypers find new methods; use of iron in shells and plastic in molding. G. C. Meston. Il Inland Ptr 111:37-8 S '43
Half-tone engraving on copper electrotypes shells. Il Inland Ptr 111:69 S '43

New plastic-mold electros may change post-war copy handling. Ptr Ink 205:93 O 29 '43

ELEMENTS, Chemical. See Chemical elements

ELEVATED roads. See Roads, Elevated

ELEVATOR operators

Women in public-housekeeping occupations in California; housekeeping occupations in office buildings and department stores. Monthly Labor R 56:918-21 My '43

ELEVATORS**Accidents**

Working around elevators? don't take any chances. T. Trail. Il Power 87:400+ Je '43

Maintenance and repair

Elevator wire rope maintenance. U S Nat Bur Stand Circ C441:1-7; pa 5c Supt. of doc. '42

Maintenance of elevator hoistway and car enclosures and equipment. U S Nat Bur Stand Circ C443:1-8; pa 5c Supt. of doc. '43; Same abr. Mech Eng 65:433-4+ Je '43

Safety measures

Down the hatch. R. C. Lydon. Il Nat Safety N 47:26-7 F '43
Elevator wire-rope maintenance. Mech Eng 65:110-12 F '43

It pays to oil your elevator ropes. F. L. Spangler. Il Power Pl Eng 47:63+ F '43
Maintenance of elevator hoisting machines and brakes. U S Nat Bur Stand Circ C444:1-6; pa 5c Supt. of doc. '43; Same abr. Mech Eng 65:519-20 Ji '43
Maintenance of elevator mechanical safety appliances. U S Nat Bur Stand Circ C442:1-10; pa 5c Supt. of doc. '43; Same abr. Mech Eng 65:350-2+ My '43

ELEVATORS, Electric**Standards**

Electric lift practice; points for standardisation. L. W. Honey. Elec R (Lond) 133:73-4 Ji 16 '43

ELGIN, Illinois

Water supply

How the meter division met wartime emergency conditions. L. Trentlage. Am Water Works Assn J 35:1002-4 Ag '43

ELGIN botanic garden

Who established the Elgin botanic garden? C. S. Gager. Science 96:439-41 N 13 '42

ELK HILLS contract. See Oil reserves (United States navy)

ELKHART, Indiana

Water supply

Installation of a new gallery in Elkhart; installing porous concrete pipe. C. L. Link. Il diag Pub Works 73:14-15+ D '42

ELKHART & Santa Fe railway
Abandonment. Comm & Fin Chr 157:131 Ja 11 '43

ELLEN, Herbert Frederick, 1891-Career of Yorkshire's U.S. manager. C. Axman. por East Underw 44:17-18 F 5 '43

ELLETT, Walter Beal, 1874-1943
Sketch. H. H. Hill. Science 97:546 Je 18 '43

ELLIOTT, William Yandell, 1896-Teacher of government to allot rail freight priorities. por Ry Age 113:790-1 N 14 '42

ELLIPTONE

Active principles of leguminous fish-poison plants; the reduction of elliptone. S. H. Harper. Chem Soc J p587-93 O '42

Active principles of leguminous fish-poison plants; the synthesis of dehydrotetrahydro-elliptone and of dehydrotetrahydromalaccol. S. H. Harper. Chem Soc J p593-5 O '42

ELM**Diseases and pests**

How one company co-operates in eradication of Dutch elm disease. Elec W 119:626 F 20 '43

EL ORO. See Oro, Ecuador

ELVEHJEM, Conrad Arnold, 1901-Award of the Willard Gibbs medal. Science 97:180 F 19 '43; Same abr. por Chem & Eng N 21:239 F 25 '43

Citation for Willard Gibbs medal award. por(p853) Chem & Eng N 21:857 Je 10 '43
Elvehjem receives Willard Gibbs medal. por Oil Paint & Drug Rep 143:3+ My 24 '43

EMANUEL, Victor, 1898-

Bouncing baby; Consolidated-Vultee merger. Business Week p103-5 Mr 20 '43

EMBANKMENTS

Alabama highway specifications for settling embankments by jetting. Pub Works 74:38-9 Ji '43

Evaluating soils for specific road uses; methods developed in Kansas. D. L. Lacey. Eng N 130:312-15 F 25 '43

Retirement of old viaduct speeds traffic on two railroads; bridge near Lakeview, N.Y. replaced by embankment over concrete culvert. Il diag Ry Age 114:316-18+ F 6 '43

See also

Dams Earthwork
Dikes (engineering) Levees

EMBEZZLEMENT

Bank not liable for defalcations of agent acting under power of attorney of depositor. J. A. Noble. Banking Law J 60:731-40 S '43

Honesty insurance as an aid to credit; examples of heavy losses. W. J. Purcell. Credit & Fin Management 45:44 Je '43

EMBEZZLEMENT—Continued

Liability of bank to depositor for misappropriations of cashier. Banking Law J 60:515-22 J1 '43

Liability of co-executor and surety for embezzlement by executor. Trusts & Estates 76:479 My '43

Postmaster's endorsements on checks. R. W. Haworth. J Account 75:68 Ja '43

Reduce the shock of economic loss; fidelity losses of special importance in war period. J. D. Hall. Credit & Fin Management 45:7-8+ My '43

EMBROIDERY

Compressed air helps the needleworker; trapunto work. A. Wolff. il Comp Air M 43:7012-13 Ap '43

EMBROIDERY workers

40-cent minimum for home workers in embroidery industry. Monthly Labor R 57:791 O '43

EMERGENCY plant facilities. See Contracts, Government—Finance

EMERSON electric manufacturing company

Yaleman and communist worked things out together for the good of Emerson Electric—and the war. il Fortune 28:146-9+ N '43

EMERSON radio and phonograph corporation

Stock offered. Comm & Fin Chr 158:1033 S 13 '43

EMINENT domain

Supreme court bars land award on profit basis; rules in favor of TVA on land condemned for Hiwassee dam. Elec W News ed 119:1711 My 22 '43

Wayleave compensations. F. T. Billingsley. diags Elec R (Lond) 133:232-4 Ag 20 '43

EMPIRE gas and fuel company

Listing of 3½% sinking fund debentures. Comm & Fin Chr 157:2448 Je 28 '43

EMPLOYEE identification. See Employees, Identification of

EMPLOYEE recreation. See Recreation

EMPLOYEES

Accident costs; industrial losses due to non-industrial accidents; abstract. A. B. Metzger. Safety Eng 84:17 N '42

Company policies affecting employees in service. H. F. Browne. Ann Am Acad 227:22-7 My '43

Industry's next big problem; off-the-job accidents. C. C. Carlton. il Nat Safety N 48:10-11+ S '43

Keeping-in-touch printing is a new market! printing which helps our boys adjust themselves to military life and arranges for their return to civilian life. C. V. Morris. il Inland Ptr 110:31-4 F '43

Missing from the job; why 109 Syracuse workers lost 2253 days in after-work accidents. W. L. Fox. il Nat Safety N 46:21+ D '42

P. W. Pillsbury writes to employees in service. Ptr Ink 203:65 Ap 23 '43

Poll of employees reveals confidence in management; General aircraft company, Astoria, N.Y. Factory Management 101:262+ O '43

Postwar planning of Carrier employees. Adv & Sell 36:96 N '43

270 million lost man-days; off-the-job accidents. il Nat Safety N 47:40+ Ap '43

See also

Ability tests

Absenteeism (labor)

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Military service—Labor problems

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Length of service

Over 4000 years service by 176 employees; Tennessee coal, iron and railroad company. Manuf Rec 112:29+ O '43

Urges protection of union seniority rights. Comm & Fin Chr 156:2253 D 24 '42

Physical examinations

See Physical examinations

Promotion

Employee testing for upgrading present labor supply; tests by skilled administrators. il Am Business 13:22+ O '43

Supervisory problems; what would you do in a case like this? R. J. Greenly and E. B. Mapel. Factory Management 101:128 S '43

See also

Employees—Rating

Rating

Employee ratings. N. Locke. Personnel J 21:232-8 F '43

Man and job evaluation. D. Pollard. Personnel J 21:344-8 Ap '43

Ten years' progress in management; job evaluation and merit rating. A. S. Knowles. A S M E Trans 65:233-5 Ap '43

See also

Ability tests

Executives—Rating

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See Ability tests

Training

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EMPLOYEES, Age of. See Age and employment

EMPLOYEES, Disabled. See Disabled—Rehabilitation; Handicapped

EMPLOYEES, Dismissal of
Mine foreman and the discharge. J. J. Rutledge. il Explosives Eng 21:139+ J1 '43

See also

Employment systems

Wages—Dismissal wage

EMPLOYEES, Identification of
Identification of employees. Nat Safety N 47:149 Mr '43

Injection-molded tag holders. il Mod Plastics 20:67+ Ap '43

EMPLOYEES, New. See Employment management—New employees

EMPLOYEES, Purchasing for. See Employees, Selling to

EMPLOYEES, Reports to

How to tell Joe and get Joe to tell; mail annual report to employees. G. W. Kerr. Elec W 119:67 Ja 9 '43

EMPLOYEES, Selection of. See Employment systems

EMPLOYEES, Selling to

Black market in peacetime; a review of legislation affecting sale of goods by employers to employees. Il Ptr Ink 204:16-17 Ag 6 '43

EMPLOYEES, Training of

Adel's training system for manufacture of aircraft hydraulic equipment. G. Tharratt. Il diags Automotive & Aviation Ind 88:30-1+ Ja 15 '43

Adopt tested training systems. Il Factory Management 101:106-15 Ag '43

All out for agent training; Ohio, Cincinnati & Lake Erie transportation co. R. A. Sheap. Il Bus Transportation 22:49-51 Mr '43

Bottle plant institutes wartime employee training program; Buck glass company, Baltimore. R. A. Blunt. Il Glass Ind 24: 470-1+ N '43

British progress in training; upgrading, supervision. Il Steel 112:90-1+ My 3 '43

Case history in on-the-job training; maintenance department of rubber factory. Factory Management 101:93+ Mr '43

Educating the women: International harvester co., Stewart-Warner corp., Crane co. M. R. Putman. Il Steel 113:98-9+ Jl 5 '43

Employee training helps solve problem of manpower shortage; Lone star gas company. A. W. Breeland. Pet Eng 14:134, 136 Ap '43

Employee training program for chemical manufacturers; Agfa Ansco division of General Aniline. W. von Pechmann. Il diags Chem Ind 52:318-21 Mr '43

Employee training; Southern division, Illinois Iowa power company. M. J. Westenhaver. Il Am Gas J 158:32-3 Je '43

Engineering job and training opportunities in the aircraft industry. C. T. Reid. J Eng Educ 33:691-5 My '43

Engineers made to order; Vega's training. E. V. Gustavson. Il Aviation 42:167, 169+ N '43

Evaluating the recent graduate; selecting and training new staff members of the Dorr co. G. M. Darby. Il Eng & Min J 144: 60-1 Ja '43

Experiment in meeting personnel losses in government agencies. F. H. Morgan. Advanced Management 8:56-9 Ap '43

FSA employee training. J. J. King. Personnel J 22:186-9 N '43

Fifteen points in science of human relations. R. H. Haywood. Inland Ptr 110:29-32 Ja '43

Four-point training for women; Lodge & Shipley machine tool company. R. S. Schultz and T. Applegate. Il diags Am Mach 87:82-4 Ap 29 '43

Gas service manual; questions and answers for employee tests. W. L. Riehl. Gas Age 90:27-8, 36 D 31 '42

General Motors training program. Iron Age 150:50, 52 D 31 '42

Help on training operators. W. T. Mullen. Power Pl Eng 47:104 Ap '43

Help the green worker; advertising man should assist personnel department. H. G. Sawyer. Ind Marketing 28:80+ Ag '43

How Cadillac's Aircraft division prevents bottlenecks in men and machines. F. M. Reck. Il Aero Digest 41:110, 113-14+ N '42

How Continental oil co. trains women laboratory workers. Il Oil & Gas J 42:36-7 Je 17 '43

How to figure learning time. R. C. Smyth. Il Factory Management 101:94-6 Mr '43

How to learn to be a top notch industrial trucker; Elwell-Parker electric company's booklet for instructing women operators. Il Steel 113:108, 110, 114+ Jl 5 '43

How to teach an employee; training supervisors to teach their subordinates. M. Banks. J Retailing 19:93-5 O '43

Instructing women workers in press feeding. E. St John. Inland Ptr 111:25-7 Ap '43

It's hard to say "no"; Pacific gas and electric company employee training program to maintain public relations under wartime conditions. Il Elec West 90:31-2 Ja '43

It's war work or else! employee training; General fireproofing co. Il Steel 112:84-5 My 10 '43

Job training; an educational program to improve gas appliance servicing. K. Wood and C. F. Turner. Il Am Gas Assn Mo 25:102-4+ Mr '43

Job training in the shop; Westinghouse electric & mfg. co. J. G. Leach. Il Steel 112:104-5+ Ap 5 '43

Keeping a power plant force on the job to win the war. J. A. Krug and others. Il Power Pl Eng 47:56-75+ S '43

Lineman, patrolman training. C. T. Malloy. Elec W 119:1470, 1640, 1803 My 1-29 '43

Listed skills, then trained; Hudson motor car company. R. J. Megargle. Il Factory Management 101:116-20 O '43

Lowered employment standards and post-employment training. Management R 32: 114-15 Mr '43

Making opportunity knock; Pasadena city lines taps source of potential Diesel mechanics. Bus Transportation 22:49 Je '43

Manpower pool, established by gas utility to meet wartime emergencies; Hartford gas company. R. B. Barger. Am Gas Assn Mo 25:8-9 Ja '43

Marine electrical training streamlined; home study course for men and women at Moore shipyards, Oakland. H. S. Dusenbery. Elec West 91:52-3 Jl '43

Mechanic problem; outline of training program. Il Bus Transportation 22:34-6 F '43

Movies and slidefilms speed wartime training of technicians. L. S. Metcalfe. Il Electronics 16:98-9 Jl '43

New employees trained quickly; WMC training within industry program. T. O. Ott, Jr. Il Textile World 92:72-3 D '42

New hands; Lymcoming division, Aviation corp. Il Safety Eng 84:11-12 N '42

One-day course for new employees. Ptr Ink 204:76 Jl 16 '43

Operator tests aid Lymcoming training program. Il diags Steel 112:111-12 F 15 '43

Orienting the new worker. J. H. Fry. Il Factory Management 101:99-104 My '43

Personnel training in wartime. A. A. Straub. Il Elec West 90:95-6 Je '43

Plane films work; airplane production group pools training movies. Business Week p109 D 12 '42

Plus training system; Canton ordnance plant of Westinghouse electric and manufacturing co. F. D. Newbury and P. N. Love. Il Am Mach 86:1349-51 N 26 '42

Postwar training. Business Week p107 Jl 3 '43

Putting over the know how; War manpower commission course for twenty key men of the Bee line. E. C. Giddings. Il Bus Transportation 21:514-15 N '42

Railway Express opens training program for 60,000 employees. Sales Management 52:74+ S 15 '43

Recruiting and training of inspectors; National metal congress report. L. L. Wyman. Metal Prog 42:893-4 N '42

Recruiting skilled workers; American bantam car company. E. R. Prosser. Am Mach 87:86 Ap 1 '43

Round-the-clock inspection; men and women new to industry can be trained in short order; Warner and Swasey company. Il Am Mach 86:1424-5 D 10 '42

Shortage of skilled workers demands new training methods; three sources available with which to replace experienced men. R. R. Karch. Inland Ptr 110:33-6 D '42

Simple technics speed training of green help. J. F. Hale. Il Food Ind 15:74+ Je '43

Simplified training is best. F. C. Hudson. Am Mach 87:96 F 18 '43

Simplified training speeds shell production; Holfast rubber company. H. L. Samuel. Am Mach 87:78-9 S 30 '43

Slidefilm fundamentals. L. S. Metcalfe. Il Paper Ind 25:722-3 O '43

Special training for Venezuelan workers. W. A. Sawdon. Il Pet Eng 15:192, 194 O '43

EMPLOYEES, Training of—Continued

- Speeding war production by encouraging employees to improve their own operations; work simplification plan; Walter Kilde & co. *il Steel* 111:88-90 D 21 '42; Abstract. *Am Mach* 86:1495-7 D 24 '42
- Streamlined training; WMC's job instructor training program. *Textile World* 93:63 J1 '43
- Supplementary instruction for upgrading. *Management R* 32:140-1 Ap '43
- Synchrophone method of audio-visual instruction. *il Engineering* 155:157-8 F 19 '43
- Tailored training program; Wright aeronautical corporation. B. H. Salter. *il Am Mach* 87:98-9 Je 24 '43
- Testing the new operator's knowledge of his machine. *diag Factory Management* 100:84-5 D '42
- Three-ply plan keeps G-E appliances in shape for duration service; a huge training and re-training program for service men. *Sales Management* 52:36, 40-2 Je 1 '43
- To simplify is to save; Glenn L. Martin company, Baltimore. O. H. P. Champlin. *il Factory Management* 101:98-104 Je '43
- Training apprentices for war and post-war work. A. Goodwin. *Factory Management* 100:100-1+ D '42
- Training dye plant workers in the present emergency; presented for the A.A.T.C.C. mid-west section by W. A. Stringfellow. *Am Dyestuff Rep* 31:332-3 D 7 '42
- Training employees for the war and after; International harvester company. R. O. Johnson. *Mech Eng* 65:661-3 S '43
- Training girls to make tubes; General electric co. L. A. Yoder. *il Electronics* 16:106-7+ Ap '43
- Training, key to the skilled help shortage; Apprentice and training service of the War manpower commission. C. W. Stapleton. *il Bus Transportation* 22:24-6 F; 38-40 Mr; 36-8 Ap; 42-3 Je '43
- Training miners for greater copper production. O. A. Dingman. *il Min Cong J* 29:20-7 Je '43
- Training new employees quickly. *Textile World* 93:59-62 J1 '43
- Training new knitting employees. H. E. Reed. *il Textile World* 93:108-9 Ap '43
- Training new men speeded by TWI instruction methods. C. R. Dooley and G. M. Kirk. *il Coal Age* 48:49-51 Mr '43
- Training nontechnical personnel to replace service-enlisted engineers. E. H. Short, Jr. *Oil & Gas J* 42:51-2+ O 7 '43
- Training personnel for new positions aided by Training within industry methods. *Iron Age* 151:74 Ja 21 '43
- Training program aid for industry. J. H. Greenland. *il Iron Age* 151:66 Mr 4 '43
- Training programs touch all phases of operations; Standard oil company of New Jersey gives scholarships and training to South American employees. *il Oil & Gas J* 41:79+ D 31 '42
- Training traffic manpower; National bus traffic association. L. Markel and B. Ethridge. *il Bus Transportation* 22:65-7 Ja '43
- Training women operators; abstract. H. Frommelt. *Iron Age* 151:58 Ap 15 '43
- Training workers for machine tool operation; Briggs manufacturing co. J. W. Busman. *il diags Aero Digest* 42:116, 119-20, 125+ Ja '43
- Training workers within industry. J. H. Greenland. *Foundry* 71:137-8 Ja '43
- Tremco shows inside employees how their jobs help build sales; training course for factory and office workers. *Sales Management* 52:45-6 Ap 1 '43
- Union-management administration of employee training; the experience of TVA. W. J. McGlothlin. *Advanced Management* 8:38-44 Ap '43
- Up-grading coal miners in Indiana; vocational instruction to prepare foreman to do better job. W. S. Harris. *Min Cong J* 29:39-40 Mr '43
- Using color to train women; Jacobs aircraft engine company. F. W. Rohde. *Factory Management* 101:298+ S '43
- Vocational classes at Cooper-Bessemer. *il Marine Eng* 48:212-13 J1 '43
- Wartime personnel training program; Puget Sound power & light co. G. L. Rideout. *Elec West* 91:49-51 O '43
- Wartime training of shipbuilders. G. G. Via. *il Marine Eng* 48:163-6 F; 188+ Mr '43; Discussion. 48:169-60 Ja '43
- Westinghouse emphasizes repetition in training service men. E. J. Hegarty. *il Ptr Ink* 204:24-5 S 10 '43
- What to teach new employees. *il Am Business* 12:14-15 D '42
- Why untrained job instructors fail. *Paper Ind* 25:273 Je '43
- Women and warplanes will help win this war; training program. Curtiss-Wright corp. H. C. Herrick. *il Steel* 112:101-2+ Ap 26 '43
- Women learn fast; apprenticeship training. General electric company. C. N. Brown. *il Am Mach* 86:1492-4 D 24 '42
- Woods launch labor training; six papers prepared for the Canadian international paper company. M. G. Linekin and others. *Pulp & Pa. of Can* 44:325-32 Mr '43
- Workers for new jobs quickly; vocational school and plant executives cooperate. *il Textile World* 93:57-8 Mr '43
- Workers trained in refinery crafts while in full-time plant jobs; Mid-continent petroleum corp. *il Nat Pet N* 35 pt 2:R159-60 Ap 7 '43

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| Foremen—Training | Salesmen—Retail—Training |
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| —Cooperative plan | Welders—Training |
| Instructions | |
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| Agents—Training | |
| Motor bus drivers—Training | |

EMPLOYEES, Transportation of

- All aboard! all aboard! but where are the passengers? rail line to get shipworkers to Terminal island, California. J. H. Collins. *Pub Util* 31:815-21 Je 24 '43
- Application of the wartime industrial transit plan; Goodyear tire and rubber co. of Canada, ltd. *Roads & Bridges* 81:46, 48 Ja '43
- Bus transports men to work; Montgomery gravel co. and Roquemore gravel and slag co. B. Nordberg. *il Rock Prod* 45:59 D '42
- Car-sharing plan conserves cars, tires, and gas; American car & foundry company. M. L. Keyser. *map Factory Management* 101:105-7+ Mr '43
- Conservation bureau co-sponsors war session on transportation shortages. *East Underw* 44:36 Mr 5 '43
- Converts food trailer to bus for workers; will carry 80 volunteer farm laborers to Seabrook farms. *il plans Food Ind* 15:64-5 Mr '43
- Employee held passenger being transported while standing on safety isle awaiting employer's passenger car. *Weekly Underw* 148:927 Ap 24 '43
- 47 buses carry employees of Aluminum company at Massena, N.Y. *il Bus Transportation* 22:52-3 S '43
- How Carnegie-Illinois organized to conserve manpower resources; employee transportation survey. *Steel* 112:16-17+ Ja 25 '43
- M-day still has a place on the drawing board; California war worker transportation. J. H. Collins. *Pub Util* 31:267-74 Mr 4 '43
- Making a transportation survey to assist employees in securing rides. L. S. Flint. *il Textile World* 93:75 Mr '43
- Off to war work they go; gaps in war transportation bridged by share-the-ride and bus service. P. M. Whelan. *il Bus Transportation* 22:34-7 Mr '43
- Only 11% use buses; war-worker transportation; conference sponsored by National association of manufacturers. *Bus Transportation* 22:33 Mr '43
- Plant parking and public loading points; hazards and precautions. *Nat Safety N* 46:56+ D '42
- Ride-sharing plan; abstract. G. Devenport. *Iron Age* 151:64 My 27 '43
- Rides for the asking; Carrier share-a-ride plan. E. J. Lush. *il Factory Management* 101:92-3 Je '43

EMPLOYEES, Transportation of—Continued

- Share-the-ride; Briggs plan puts program on voluntary basis. *il Business Week* p68 D 12 '42
- Share-the-ride plans; Boeing aircraft company, Seattle. *Am Business* 12:12 N '42
- This plan gets more people to work in fewer cars. O. J. Greenway and S. Paluch. *il Factory Management* 100:98-9+ D '42
- Turnstiles and tokens; modern methods of fare collection; Army directs bus facilities for civilian employees at Picatinny arsenal, New Jersey. W. L. Cook. *il plan Bus Transportation* 22:38-40 O '43
- You can't work unless you can get there; solving employee transportation problem; Westinghouse electric and manufacturing co. *il Mach* 49:168-72 Ja '43

EMPLOYEES as stockholders

- Common trusts, the door to employee investment? *Trusts & Estates* 76:429-30 My '43

EMPLOYEES' associations

- See also
Women ordinance workers

- EMPLOYEES' automobiles.** See *Automobiles, Employees'*

- EMPLOYEES' benefit societies.** See *Benefit societies*

EMPLOYEES' booklets

- Inspirational booklets heighten morale of Allis-Chalmers' workers. G. J. Callos. *il Ind Marketing* 28:25-7 Mr '43

EMPLOYEES' buildings

- Beaumont opens personnel building. *il Textile World* 93:99 Ja '43
- Mather mine; comfort facilities for miners. *il Heat & Ven* 40:54-5 Ap '43

EMPLOYEES' bulletins

- Daily letter for employees; Alabama gas company. *Gas Age* 92:15 S 23 '43
- Do workers like posters? Carboly questionnaire. *il Factory Management* 100:97 D '42
- How to teach your newspaper staff to write news. W. R. Mason. *il Ind Marketing* 28:32-3+ Mr '43

- EMPLOYEES' clothing.** See *Clothing, Protective*

EMPLOYEES' counselors

- Employee counseling; a new personnel assignment, its status and its standards. O. Tead. *Advanced Management* 8:97-103 J1 '43
- Employee counseling is human engineering. A. C. Galbraith. *Automotive & Aviation Ind* 89:19+ O 1 '43
- Personnel counseling; abstract. W. Bishop. *Management R* 32:371-3 O '43
- We like women counselors for women workers; Briggs manufacturing company. W. E. Landis. *il Factory Management* 101:102-3 O '43

- EMPLOYEES' debt.** See *Debt, Employees'*

- EMPLOYEES' errors.** See *Errors, Employees'*

- EMPLOYEES' gardens.** See *Gardens, Employees'*

- EMPLOYEES' lunches.** See *Lunches, Employees'*

- EMPLOYEES' lunchrooms and cafeterias.** See *Lunchrooms and cafeterias, Employees'*

EMPLOYEES' magazines

- Convention highlights importance of employee house publications. *Ptr Ink* 203:48+ My 28 '43
- Dealing with absenteeism through the employee newspaper. W. R. Mason. *il Ind Marketing* 28:60+ My '43
- Employee magazine asks how'm I doin'? by means of questionnaire; Felt & Tarrant mfg. co. R. F. Drake. *il Ptr Ink* 201:92 D 4 '42
- Employee magazine swap ads solve workers' problems, stem absenteeism. *Ptr Ink* 205:32 O 22 '43
- Employee magazines go to war. *il Ry Age* 114:1180-2 Je 12 '43
- Employee publication as a morale-builder. G. Bentley. *Advanced Management* 8:79-85+ J1 '43
- House magazine a mouthpiece not merely a reporter; *Fleetwings' News* "pick up the pieces" and "clean sweep" drives. P. F. Biklen. *il Ptr Ink* 202:20, 22+ Ja 1 '43

- House paper helps educate employees; Hart Schaffner & Marx teach selling to new salesmen. *Ptr Ink* 202:23 Ja 8 '43

- How employee publications aid the battle of production; Western electric company uses six of them. M. Jackson. *il Ptr Ink* 202:20, 24+ F 26 '43

- Keeping the employee newspaper on the beam; Independent pneumatic tool co., Chicago. C. N. Kirchner. *il Ind Marketing* 28:19-22+ S '43

- Lists eight check points for employee magazines. F. P. Spalding. *Ptr Ink* 201:68 N 20 '42

- Look at labor-management activities in the Butte copper mines. R. Newcomb. *Min Cong* J 29:15-16 Ag '43

- Magazine acquaints company and employees; Revere copper & brass. *Factory Management* 101:276+ S '43

- Morale builders; fifty million dollars this year in house magazines considered a good investment. F. B. Dezenford. *Inland Ptr* 111:43 J1 '43; *Abstract. Management R* 32:244 J1 '43

- One ingredient of Henry J. Kaiser's formula: employee morale. B. Durkee. *il Ptr Ink* 201:20-2 N 13 '42

- Post-war role for house publications, survey shows. *Ptr Ink* 205:88 N 12 '43

- Revival of house organs. *Trusts & Estates* 76:446-7 My '43

- Safety goes to press; ND safety letter distributed to employees of New departure division, General motors corporation. F. Stafford. *il Nat Safety N* 48:24+ Ag '43

Directories

- 222 more employee house magazines. *Ptr Ink* 203:66+ My 21 '43

EMPLOYEES' manuals

- Books telling company policies, operations used widely in employee relations. *il Ind Marketing* 28:58, 62+ Ja '43

- Employee handbook of the Pennsylvania company. Philadelphia. *Personnel J* 22:97-108, 147-52 S-O '43

- Employee handbooks: management tools to build better industrial relations. E. M. Kelley. *il Sales Management* 52:25-6, 28, 30 Ap 15 '43

- Guidebook makes workers feel they belong. R. Saltonstall. *il Factory Management* 101:124-5 S '43

- Handbook for employees. *il Textile World* 93:91-102 F '43

- Preparation and use of office manuals. E. H. Conarroe. *N A C A Bul* 24:1193-1206 Je 1 '43; *Abstract. Management R* 32:406-7 N '43

- Selling the foundry worker on his job. W. G. Gude. *Foundry* 71:105+ O '43

- EMPLOYEES' opinions.** See *Industrial relations*

EMPLOYEES' representation in management

- Accomplishments of Junior advisory board, Equitable trust co., Wilmington, Del. M. F. Connor. *Trusts & Estates* 77:157 Ag '43
- Benefit from labor management cooperation. *il Factory Management* 101:124-33 Ag '43
- British production committees. M. E. Murphy. *Personnel J* 22:114-22 O '43
- Democracy in the factories. *Economist* 144:85 Ja 16 '43

- Does labor want maximum production? A. Ramond. *Advanced Management* 7:157-60 O-D '42

- Donald Nelson's proposal for joint management-union war production committees. O. Tead. *Advanced Management* 8:1+ Ja '43

- Employee-management co-operation in public work. C. S. Golden. *Advanced Management* 7:161-4 O-D '42

- Employee participation in management. A. M. Cooper. *Barron's* 23:3 Ap 5 '43; *Reply. W. Loeb*. 23:16 My 3 '43

- Employee participation in management. A. M. Cooper. *Elec West* 90:33-4 Mr '43

- Employee's part in bank management. J. G. Renshaw. *Trusts & Estates* 75:494-7 N '42

- End of a dream; Hagood brothers' idea of taking workers into partnership winds up in court. *Business Week* p18-19 J1 81 '43

- First milestone; labor-management groups hailed by Nelson. *Business Week* p116-16 My 22 '43

EMPLOYEES' representation in management—*Continued*

- Fortune survey; labor on the board of directors. Fortune 27:9-10 F '43
- Getting the company started on a war production program; advertising manager can become focal point of war production promotion. D. C. Miner. *Ind Marketing* 27:24-5+ D '42
- Getting up steam; labor-management groups in war plants revived under Quinn regime. *Business Week* p70-1 Ag 7 '43
- Government-employer-worker collaboration in Australia. *Int Labour R* 47:225-8 F '43
- How Britain inspires war workers to improve output. F. B. Barton. *Ind Factory Management* 101:118-21 S '43
- I saw a labor-management committee in action. S. Chase. *Factory Management* 101:89+ My '43
- Implementing war production with labor-management committees. W. F. Todd. *Ind Marketing* 28:41-2+ Ag '43
- Industrial democracy at work; labor-management committees prove their worth. *Eng & Min J* 144:60-1 Ag '43
- Joint production committees in United States war plants. W. E. Chalmers. *Int Labour R* 47:22-45 Ja '43
- Labor and management unite for war; abstract. *Management R* 32:65-7 F '43
- Labor-management committees speed production. W. G. Marshall. *Trusts & Estates* 76:27 Ja '43
- Labor-management, joint development and joint application of job evaluation in a single unit motor bodies plant. N. O. Paquette and C. Fraser. *Advanced Management* 8:92-6 Jl '43
- Look at labor-management activities in the Butte copper mines. R. Newcomb. *Int Min Cong J* 25:14-19 Ag '43
- Management-labor cooperation. E. C. Robbins. *Harvard Business R* 21 no4:415-24 [Jl] '43
- Production committees. *Economist* 144:501-2, 507 Ap 17 '43; Excerpts. *Monthly Labor R* 56:1110-12 Je '43
- Staff committees. B. Wood and G. T. Basedon. *Gas J (Lond)* 241:243 F 24 '43
- Too cooperative; labor-management committee bred a company-dominated union; J. G. Greer co, Cambridge. *Business Week* p96-+ O 30 '43
- Training; key to the skilled help shortage. C. W. Stapleton. *Int Bus Transportation* 22:36-8 Ap '43
- 2,000 labor-management committees help their concerns wage the war. E. Johns. *Int Ptr Ink* 205:24-6+ O 1 '43
- Union-management administration of employment training; the experience of TVA. W. J. McGlothlin. *Advanced Management* 8:38-44 Ap '43
- Value of British joint production committees. *Monthly Labor R* 56:900-3 My '43

See also

Collective bargaining
Corporations—Directors, Junior

EMPLOYEES' saving plans. See Saving**EMPLOYEES' suggestions.** See Suggestion systems**EMPLOYEES' trusts**

- Cautions in accepting employee trusts. H. Henretta. *Trusts & Estates* 76:519-20 Je '43
- Profit sharing-stock purchase plan. H. S. Koster. *Trusts & Estates* 77:35-6 Jl '43
- Profit-sharing trusts for employees. *Trusts & Estates* 76:521-2 Je '43
- Scans employees trusts in talk to bar group. P. F. Millett. *Nat Underw (Life ed)* 47:9-10 Ag 27 '43; Same abr. *Trusts & Estates* 77:399-403 O '43
- Treasury income tax ruling for employees' pension, stock bonus and profit-sharing trusts. *Comm & Fin Chr* 158:229 Jl 15 '43
- War profits for post-war pay-rolls. H. S. Koster. *Trusts & Estates* 77:271 S '43

See also

Pension trusts

EMPLOYERS*See also*

Collective bargaining
Industrial relations

EMPLOYERS' associations

Employers should form unions. W. B. Stevenson. *Factory Management* 101:89+ F '43

EMPLOYERS' liability

- Broadened compensation cover in New York. L. S. McCombs. *Spectator (Property ed)* 9:30 S 9 '43
- Employee held passenger being transported while standing on safety aisle awaiting employer's passenger car. *Weekly Underw* 148:327 Ap 24 '43
- Ice tender found violation of law; roads' liability under Boiler inspection act; Lilly versus Grand Trunk Western. *Ry Age* 114:220 Ja 16 '43; Same. *Ry Mech Eng* 117:108-9 F '43
- Liability for injuries affected and sustained by salesmen; analysis of higher court decisions distinguishing when salesmen operate as independent contractors. L. T. Parker. *Ind Marketing* 28:39-40+ Jl '43
- Liability, for injuries, of barge owner, charterer and sub-charterer. *East Underw* 44:31 S 10 '43
- Typhus fever; contraction by bakery employee, liability of employer. *Pub Health Rep* 58:1426-7 S 17 '43

See also

Accidents, Industrial Workmen's compensation
Insurance, Workmen's compensation

EMPLOYERS' liability insurance. See Insurance, Employers' liability**EMPLOYERS' selling.** See Employees, Selling to**EMPLOYMENT**

- Banks can make more postwar jobs. J. F. Ebersole. *Harvard Business R* 22 no 1:1-9 [O] '43
- British plans for post-war full employment. D. F. Heatherington. *For Comm W* 13:3-4+ O 9 '43
- Chemical manpower for postwar industries. S. D. Kirkpatrick. *Chem & Eng N* 21:1714-15+ O 25 '43
- CED calls productive employment outstanding need of country after war; first report on post-war planning. *Comm & Fin Chr* 158:1512 O 14 '43
- Community plans peacetime jobs; lessons from Peoria's experience. *Int Dun's R* 51:11-15+ Ag '43
- Dayton labor control plan. *Factory Management* 101:276+ O '43
- Dewey says private enterprise must provide post-war jobs; offers seven-point program for New York. *Comm & Fin Chr* 158:1221+ S 23 '43
- Employment in the post-war switchback period. M. T. Copeland. *Trusts & Estates* 75:462 N '42
- Employment policy. *Economist* 145:36-7, 68-9 Jl 10-17 '43
- From uniforms to what? H. J. Taylor. *India Rubber W* 109:147-9 N '43
- From war to work; urban employment patterns. H. S. Swan. *Int Tech R* 45:75-6+ D '42
- Full employment. *Economist* 143:662-4; 144:5-6, 101 N 28 '42, Ja 2, 23 '43
- Full employment impossible. L. Fertig. *Trusts & Estates* 77:344-5 O '43
- Industry has every chance to meet successfully, challenge of post-war production, employment. P. G. Hoffman. *Comm & Fin Chr* 157:1968 My 27 '43
- Industry must assume initiative in creating jobs after the war to preserve free enterprise. *Comm & Fin Chr* 157:1785 My 13 '43
- Industry's post-war problem is providing greater economic security. E. A. Johnston. *Comm & Fin Chr* 158:1599 O 14 '43
- Jobs after the war; the Factory Management 101:88-92 Jl; 82-8 O '43
- Labor has program to maintain full employment during period of demobilization. B. Shishkin. *Comm & Fin Chr* 158:1716 O 28 '43
- Memphis tackles its postwar development program. *Am Business* 13:13, 33 O '43
- New deal postwar plan; production for employment, with a minimum job quota for each industry. *Business Week* p 15 Ja 16 '43
- Plan postwar jobs—now. 32p Committee for economic development, Dept. of Commerce building, Washington, D.C. '43

EMPLOYMENT—Continued

- Planning for the postwar period. *Am Concrete Inst J* 15:1-4 S '43
- Postwar employment through private enterprise. P. G. Hoffman. *Concrete* 51:6, 8 S '43
- Post-war industrial problems and prospects; Packard's outlook. W. Von Tresckow. *Barron's* 23:9 Je 14 '43
- Postwar; National industrial conference board address. P. G. Hoffman. *Mech Eng* 65:594-6 Ag '43; Same abstr. *Machine Design* 15:114-15 S '43
- Post-war outlook for jobs. J. Hirsch. *Barron's* 23:3+ J1 19; 1+ J1 26 '43; Same cond. *Management R* 32:278-80 Ag '43; Same cond. *Trusts & Estates* 77:122-3 Ag '43
- Preparation for peace by CED; abstracts. P. G. Hoffman. *Ins Field (Pittsburgh Conv Daily ed)* 72:1+ S 17 '43; *Nat Underw (Life ed)* Daily ed 47:5+ S 17 '43
- Present savings and postwar markets; trends in the volume and distribution of employment. S. H. Silcher. *Harvard Business R* 22 no 1:6-9 pt 2 [O] '43
- Price of efficiency; disparities in movement of production and employment. *Business Week* p116 Ap 24 '43; Discussion. O. Tead. *Advanced Management* 8:37 Ap '43
- Principles of employment. *Engineer* 176:73-4 J1 23 '43
- Private industry accepts President's nomination as job provider. F. C. Crawford. *Comm & Fin Chr* 153:517+ Ag 5 '43
- Problems of employment and of the relations between government and industry after the war. *Engineer* 176:35-7, 56-8 J1 9-16 '43
- Public utility efficiency and postwar full employment; operating efficiency of publicly and privately owned utilities. F. J. McDiarmid. *Pub Util* 32:547-56 O 28 '43
- Public utility efficiency and postwar full employment; three types of utilities in operation, comparison of their methods of financing, and differences in tax burdens. F. J. McDiarmid. *Pub Util* 32:465-76 O 14 '43
- Sir William Beveridge working on new program to provide maximum post-war employment. *Comm & Fin Chr* 157:1833 My 20 '43
- Small town as base for post-war economic security; Commerce department working plan for community action. G. A. Nichols. *Ptr Ink* 204:23-4, 98+ S 17 '43
- U.S. business sticks neck out on post-war job challenge; Peoria test campaign. G. A. Nichols. *Ptr Ink* 203:50, 52+ Ap 23 '43
- What can the government do to promote postwar re-employment? B. M. Anderson. *Comm & Fin Chr* 153:1589, 1599-1600, 1602 O 21 '43; Discussion. 153:1793, 1792-3, 1872+, 2103+, 2105+, 2206+ N 4-11, 25-D 2 '43
- Which way to post-war jobs? why private investing is more effective and less dangerous than government spending. J. W. Hanes. *Barron's* 23:1+ My 31 '43
- Winning the peace; wider dissemination of benefits of industrial production the problem. W. Von Tresckow. *Barron's* 23:3 Ag 9 '43
- Work-pile plan; abstract. E. Gidlow. *Management R* 32:400-2 N '43
- See also*
- | | |
|----------------------|--------------------|
| Age and employment | Labor and laboring |
| Child labor | classes |
| College students— | Labor requirements |
| Employment | for production |
| Employees | Negroes—Employ- |
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| ments | Part time employ- |
| Epileptics—Employ- | ment |
| ment | Payrolls |
| Handicapped | Prisoners of war— |
| High school students | Employment |
| —Employment | Unemployment |
| Houses of labor | Woman—Employ- |
| | ment |
- Job choosing**
- Choosing between jobs. L. W. Donaldson. *Chem & Eng N* 21:1333-4 Ag 25 '43
- Stability**
- Freedom from want; who will secure it? R. J. Watt. *Trusts & Estates* 76:498-9 Je '43
- Freeze pattern; Detroit offers a study in stabilization. *Business Week* p93-4 D 19 '42

- Guaranteed work; Chicago electrical group campaigns for maintenance men of other trades. *Business Week* p82 F 13 '43
- Job freeze helps, stabilization formula slashes work turnover 80%. *Business Week* p82+ Ja 30 '43
- President tells CIO new demands to stabilize employment to be made. *Comm & Fin Chr* 158:1921 N 11 '43
- WMC curbs transfer of millions of workers in essential industries. *Comm & Fin Chr* 157:1497, 1501+ Ap 22 '43
- See also*
- Employment systems
- Labor turnover
- Unemployment

Statistics

- Changes in injury frequency rates and employment in manufacturing, 1936-41. M. D. Kossoris. *Monthly Labor R* 56:949-54 My '43
- Detailed reports for industrial and business employment, October 1942. *Monthly Labor R* 56:183-95 Ja '43 [cont monthly]
- Effect of the war on employment in the iron and steel industry. R. H. Lewis. *Monthly Labor R* 56:258-67 F '43
- Employment and labor conditions. Published in *Monthly labor review*
- Employment in Eire. *Economist* 145:464-5 O 2 '43
- Employment in federal executive service, December 1940-December 1942. F. L. Christman. *Monthly Labor R* 56:478-83 Mr '43
- Employment of professional and technical personnel in contract construction. *Monthly Labor R* 55:932-5 N '42
- Employment outlook in the full-fashioned hosiery industry. F. L. Schoenberg. *Monthly Labor R* 56:429-41 Mr '43
- Employment statistics, 1938-1941. Survey of Cur Business 1942 Sup p38-59 [supplemented in monthly numbers]
- Estimated employment in nonagricultural establishments by industry division, monthly Nov. 1941-Nov. 1942. *Fed Res Bul* 29:81 Ja '43 [cont monthly]
- Estimated employment in nonagricultural establishments by industry division, seasonally adjusted and unadjusted; monthly, March 1942-March 1943. *Fed Res Bul* 29:465 My '43
- Estimated employment in nonagricultural establishments by industry divisions, adjusted for seasonal variation, monthly, Jan. 1939-Aug. 1942. *Fed Res Bul* 28:1156 N '42
- Estimated employment of factory wage earners, by sex, April 1941 and April 1942. A. H. Ayeroff. *Monthly Labor R* 55:913-16 N '42
- Estimated labor force, employment, and unemployment, monthly, April 1940-Dec. 1941. *Survey of Cur Business* 23:30 Je '43
- Estimated wage earners in manufacturing and service industries, 1939-April 1943; chart. *Survey of Cur Business* 23:2 Je '43
- Factory employment and payrolls, by industries (without seasonal adjustment) monthly, Aug. and Sept. 1941 and May-Sept. 1942. *Fed Res Bul* 29:32-3 Ja '43 [cont monthly]
- Governmental employment, January 1939 to July 1942; federal and state and local. F. L. Christman. *Monthly Labor R* 55:935-40 N '42
- Increase in woman factory workers in New York state in 1942. *Monthly Labor R* 56:921-3 My '43
- Indexes of employment and pay rolls in non-manufacturing industries; revised and new series, monthly, 1939-Jan. 1942. *Survey of Cur Business* 23:31 Je '43
- Indexes of wage-earner employment and of weekly wages in manufacturing industries, monthly, 1941; revised series. *Survey of Cur Business* 23:28 Mr '43
- Indexes of wage-earner employment and of weekly wages in manufacturing industries; revised series, monthly, 1939-1941. *Survey of Cur Business* 22:23-4 D '42
- Municipal employment and pay rolls in large cities, 1929-38. M. F. Thurston. *Monthly Labor R* 56:1097-1108 Je '43
- New indexes of factory employment and payrolls; with monthly figures, 1939-1942. *Fed Res Bul* 29:13-14 Ja '43

EMPLOYMENT—Statistics—Continued

Post-war manpower and its capacity to produce. S. M. Livingston. Survey of Cur Business 23:10-16 Ap '43

Regional distortions resulting from the war. E. C. Bratt and D. S. Wilson. maps Survey of Cur Business 23:9-15+ O '43

Statistics of unemployment in general and industrial in various countries, yearly 1929-1941 and monthly 1942. Int Labour R 47:401-7 Mr '43 [cont quarterly]

Trend of employment and unemployment. Published in Monthly labor review

See also

Occupations—Statistics

EMPLOYMENT agencies

Getting the right job. F. A. Anderson. Chem & Eng N 21:1331-3 Ag 25 '43

Manpower control in Canada, March 1942 to January 1943. Monthly Labor R 56:896-900 My '43

See also

United States—Employment service

EMPLOYMENT contracts. See Labor contracts

EMPLOYMENT departments

Company personnel research division. B. K. Schwartz. Personnel J 21:255-7 Ja '43

Have plenty personnel people. R. A. Sutermeister. Personnel J 22:62-7 Je '43

Personnel welfare; detailed description of a large scale organization. Automobile Eng 33:39-41 Ja '43

Three ways to lay out a personnel department. C. T. Tucker. plans Factory Management 101:153-5 S '43

EMPLOYMENT management

Absent workers help Hitler; keeping workers consistently on the job. Il Am Mach 87:90-2 My 27 '43

Absenteeism under control at Vultee. A. R. Baish. Il Automotive & Aviation Ind 88:22-4+ Je 15 '43

Adjust jobs to men. E. Bengel. Personnel J 22:24-31 My '43

Assign your labor relations to a sales-minded executive. A. M. Fisher. Il Ptr Ink 202:15-17 Mr 26 '43

Bigger share in management for every worker; Woodward governor company employs unusual management methods. E. Whitmore. Il Am Business 12:16-18, 20-3 N '42

Bill Jack tells all; reveals philosophy of labor-management relations. Ind Marketing 23:60, 64 Je '43

British progress in training, upgrading, supervision. Il Steel 12:90-1+ My 3 '43

Building winning spirit into Grumman Aircraft. E. H. Forbes. Il Aviation 42:100-1+ Mr '43

Curtiss-Wright airplane division's year-round war production drive. Il Aero Digest 42:237, 239-40+ Je '43

Efficiency of women employees; eleven helpful tips. L. H. Sanders. Il Mass Transportation 39:244+ Jl '43

Employee counseling; a new personnel assignment, its status and its standards. O. Tead. Advanced Management 8:97-103 Jl '43

Employee counseling is human engineering. A. C. Galbraith. Automotive & Aviation Ind 89:19+ O 1 '43

Exit interviews minimize quits for petty causes. Il Steel 12:56-7 Mr 1 '43

Factory council makes foremen managers; Huffman manufacturing company, Dayton. H. M. Huffman, Jr. Il Factory Management 101:111-13 Je '43

Fifteen points in science of human relations. E. H. Haywood. Inland Ptr 110:29-32 Ja '43

Foreman and the manpower problem; Pratt & Whitney division of United aircraft; motion picture used to supplement program of education in foremanship. Il Aero Digest 43:154, 157+ S '43

Foreman and youth; abstract. W. S. Watkins. Management R 32:370-1 O '43

14 tips on getting more efficiency out of women employees. L. S. Flint. Inland Ptr 110:23 Ja '43

Good personnel relations help increase production. A. R. Cook. Factory Management 101:122-6 O '43

Handbook of industrial relations. J. C. Aspley and E. Whitmore, eds. 1058p bibliog(p1011-24) \$10 Dartnell corp, 4660 Ravenswood av, Chicago '43

Heading off labour trouble. G. Christian. Pulp & Pa of Can 44:515 Je '43

Help workers to the right jobs. C. F. McPeak. Personnel J 21:289-94 F '43

House that Jack built; generosity of Jack & Heintz toward associates produces results. Il Business Week p108-10 My 22 '43

How local companies shared production drive experiences. Factory Management 101:114-15 Ja '43

How one big industrial plant avoids labor trouble; Lincoln electric company; abstract. J. F. Lincoln. Concrete (mill sec) 51:204 Jl '43

How our discipline board dispenses justice; Allis-Chalmers manufacturing company. A. K. Brintnall. Il Factory Management 101:104-5 O '43

How the advertising manager can help with employee relations. C. E. Gischel. Ind Marketing 23:23-4+ Je '43; Abstract. Ptr Ink 203:64+ Je 11 '43

How to cut absenteeism. Personnel J 22:74-9 S '43

How to enlist the worker's co-operation in extra pay plans. J. W. Roberts. Steel 112:116+ Je 7 '43

How to make the most effective use of manpower. Il Factory Management 101:87-144 Ag '43

How to woo the war worker; seventeen basic ways in which advertising departments are stimulating production. Il Ptr Ink 203:21-2 Ap 2 '43; Same cond. Management R 32:172-3 My '43

Industrial relations; role of industrial relations executive in company management. B. M. Stewart. Pulp & Pa of Can 44:491-6+ Je '43

Is your employee relations program integrated? C. Norton. Il Ptr Ink 203:14-16+ Je 18 '43

Jobs, labor's first postwar aim; manpower stabilization in U.S. steel co. plants. J. A. Stephens. Il Steel 113:158-9+ O 11 '43

Labor relations in municipally owned plants; abstract. J. W. Irwin. Water Works & Sewerage 90:297-8 Ag '43

Making women like their jobs. W. C. Van Cleaf. Il Factory Management 101:104-5 Ja '43

Management check list for manpower utilization. W. H. Kushnick. Mech Eng 65:410-11+ Je '43

Manpower in construction. L. E. Brigham. Civil Eng 13:485-7, 541-3 O-N '43

Manpower problems in the engineering department. Il Product Eng 14:704-7 N '43

Manpower utilization theme of AMA conference. Factory Management 101:260+ Mr '43

Morals; production problem. Management R 32:286-8 Ag '43

1943 personnel job. A. H. Young. Personnel J 21:207-16 D '42

Personnel counseling obviously needed; supervision in government agencies faulty. H. E. Eisler. Personnel J 22:140-6 O '43

Personnel management in industry; a synthesis of the viewpoint of the psychologist and the engineer. T. A. Ryan. J Eng Educ 33:239-50 N '42

Personnel practices; railways' problem and some suggestions for improvement. L. W. Horning. Ry Age 115:724-8 N 6 '43

Personnel tips from the navy. K. McLaren. Banking 35:88-90 F '43

Physically handicapped workers get their chance; Caterpillar tractor company. Il Am Mach 87:86-7 Mr 18 '43

Planned conservation of manpower in the Equipment department of the New York Central. F. K. Mitchell. Mech Eng 65:191-6 Mr '43; Same cond. Ry Mech Eng 117:25-8 Ja '43; Same cond. Ry Age 113:995-8 D 19 '42

Planned employee relations program; Peoples-Pittsburgh trust company. G. A. Price. Il Burroughs Clearing House 27:16-18+ My '43

Plant tribunal: Douglas Aircraft pays counselors to prosecute complaints of employees. Business Week p85+ F 20 '43

EMPLOYMENT management—Continued

Posters introduce workers within aircraft plant; show work being done by each group. B. K. Platt. *Il Ptr Ink* 205:23 N 12 '43

Pre-war personnel practices in Illinois. H. F. Underhill. *bibliog J Business* 16:14-27 Ja '43

Problems with female help. D. A. Laird. *Factory Management* 101:88+ Ja '43

Psychiatry in personnel work. L. G. Giberson. *Ind Med* 12:164+ Mr '43

Public relations manager looks at the labor relations program. V. Burnett. *Advanced Management* 8:74-8 Jl '43

Review of current conditions; business and government and personnel problems. L. R. Frazier. *Personnel J* 21:338-43 Ap '43

Sales executive slant helps boost Stromberg-Carlson war production. *Sales Management* 52:52-5 My 1 '43

Shortage of supervision holds back production. G. S. Goodrich. *Mach* 49:186 My '43

Should each company grow and train its own president? policies of American felt company's president. J. A. Murphy. *Sales Management* 51:18-21 N 15 '42

Some tips for those who handle men. E. H. Helliwell. *Il Textile World* 93:60-1 Mr '43

Sound system is important factor in Fellows Gear production promotion plan. *Il Ind Marketing* 28:50 Je '43

Specific know-why builds morale of Towmotor employees; simple folders mailed to workers at home show why materials handling equipment is important in wartime. E. Southworth. *Il Ind Marketing* 28:28-9 O '43

This employer pays service fees for employee checking accounts; DeLux check printers, inc. G. W. McSweeney. *Bankers Mo* 60:398-9+ S '43

Using the case method in supervisory training. R. J. Greenly and E. B. Mapel. *Factory Management* 101:112-13 Mr '43 Ap; 117 My; 117 Je; 119 Jl; 128 S; 121 O '43

WPB Management consultant division formed. *Oil Paint & Drug Rep* 144:3+ Ag 9 '43

Wartime problems of personnel administration. W. L. Wilson. *Il Aero Digest* 41:86, 88A, 89+ N '42

When the busy signal holds up business; Standard register company reduces number of personal calls. *Am Business* 13:13+ Jl '43

Woman power in the plastics industry. *Il Mod Plastics* 20:61-5+ Ja '43

Women on production at Monarch. W. E. Whipp. *Il Iron Age* 150:59-63 N 5 '42; Same. *Steel* 112:58-9+ Ja 11 '43; Same cond. *Am Mach* 96:1213-15 O 29 '42; Same cond. *Mach* 49:222-5 N '42

Women run this shop, and do it well; Republic drill & tool co. H. E. Fleming. *Il Steel* 111:68-9+ D 21 '42

Workers air gripes, discuss production in questionnaire, North American aviation, inc. *Ptr Ink* 204:68 Jl 30 '43

See also

Ability tests

Absenteeism (labor)

Apprentices

Automobile factories—Employees

Bank employees

Bonus system

Building trades—Labor conditions

Collective bargaining

Debt, Employees'

Dental service, Industrial

Employees

Employees, Reports to

Employees, Training of

Employees' booklets

Employees' magazines

Employees' manuals

Employees' representation in management

Employment departments

Employment systems

Executives

Factory management

Foremen

Government employees

Industrial management

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Instructions

Job analysis

Lunches, Employees'

Lunchrooms and cafeterias, Employees'

Medical service, Industrial

Mine foremen

Music in industry

Night work

Organization in industry

Paper mills—Employees

Part time employment

Psychology, Industrial

Recreation

Rest periods

Sabotage

Safety devices and measures

Sales management

Saving

Suggestion systems

Supervisory workers

Tardiness (employees)

also National association of personnel directors

Time study

Unemployment—Relief measures

Vacations

Wage payment plans

Welfare work in industry

Woman—Employment

Bibliography

Personnel management for wartime production; a selected list of references to significant data. pts 1-3. *Cleveland Pub Lib Business Information Bur v* 14, no 2:5-16 Mr-May '43

Incentives

Launching provides contest promoting employee morale; Bausch & Lomb optical company. *Il Ptr Ink* 205:86 N 12 '43

Speeding war production by encouraging employees to improve their own operations; work simplification plan; Walter Kidde & co. *Il Steel* 111:88-90 D 21 '42; Abstract. *Am Mach* 86:1495-7 D 24 '42

What makes people work? J. Garth. *Am Business* 13:28-30 Je '43

Will plants be stripped of employee relations activities after the war? let's hope not! W. C. McKeehan. *Il Ptr Ink* 204:13-15, 74+ Jl 16 '43

See also

Incentives in industry

Wage payment plans

New employees

Orienting the new worker. J. H. Fry. *Il Factory Management* 101:99-104 My '43

Training dye plant workers in the present emergency; presented for the A.A.T.C.C. mid-west section by W. A. Stringfellow. *Am Dyestuff Rep* 81:632-3+ D 7 '42

What is employee orientation? *Am Business* 13:20 My '43

See also

Employees, Training of

Records

Retention of personnel records. *Management R* 32:80-2 F '43

See also

Errors, Employees'

Study and teaching

See also

Employment managers—Training

EMPLOYMENT managers

Assign your labor relations to a sales-minded executive. A. M. Fisher. *Il Ptr Ink* 202:15-17 Mr 26 '43

Industrial relations; role of industrial relations executive in company management. B. M. Stewart. *Pulp & Pa of Can* 44:491-5+ Je '43

You have to be tough; getting a job. E. M. Jennings. *Personnel J* 22:123-9 O '43

Training

Survey of personnel workers. R. M. Dorcus and R. D. Loken. *Personnel J* 21:251-4 Ja '43

Training trainers; Fenn college adds new courses in personnel directing. *Il Business Week* p96 N 6 '43

EMPLOYMENT service. *See* United States—Employment service

EMPLOYMENT systems

Accident-prone employee can be weeded out by simple tests. A. W. Williams. *Il Textile World* 93:68-9 My '43

Adjust jobs to men. E. Benge. *Personnel J* 22:24-31 My '43

Bank personnel work under wartime conditions; personnel policies; selection, promotion, dismissal. E. N. Hay. *Bankers Mo* 60:61-2 F '43

Community action gets results; Dayton-Springfield and Buffalo plans. *Il Steel* 113:69-70 S 6 '43

EMPLOYMENT systems—Continued

- Company discovers new skilled labor available within its plants; York ice machinery corporation pooled skill of men now employed. *Ptr Ink* 204:72 J1 2 '43
- Conference on war work discrimination. *Comm & Fin Chr* 157:580 F 11 '43
- Conversion of non-essential skills fills essential jobs. *il Am Mach* 87:87-9 J1 22 '43
- Employee specifications, how to develop them; standards for corporation executives. E. H. Shanks. *il Am Business* 13:24-6 My '43
- Employment rules for labor-shortage areas. *Monthly Labor R* 56:470-1 Mr '43
- Evaluating the recent graduate; selecting and training new staff members of the Dorr co. G. M. Darby. *il Eng & Min J* 144: 60-1 Ja '43
- Find and develop human values in business: methods of Union central life insurance company. R. H. Stuebing. *Am Business* 13: 16-17+ Mr '43
- Handicapped workers meet the need. *il Am Mach* 87:94-6 Je 10 '43
- Help workers to the right jobs. C. F. McPeak. *Personnel J* 21:289-94 F '43
- Hiring of personnel; insistence on quality. L. S. Flint. *Am Gas J* 158:16-18 Mr '43
- How industry is solving its manpower problems; Monsanto chemical co. F. J. Curtis. *Chem & Eng N* 21:1712-14 O 25 '43
- How to keep your employees on the job. R. McCord. *Brick & Clay Rec* 101:52+ N '42
- Industry points way to selection of college trained men; recruiting programs of various industries. *il Ry Age* 115:313-18 Ag 21 '43
- Job training in the shop; Westinghouse electric & mfg. co. J. G. Leach. *il Steel* 112: 104-5+ Ap 5 '43
- Labor lending; Cleveland automatic machine co. *Business Week* p109 O 23 '43
- Meeting the labor squeeze, by War manpower commission. *Personnel J* 22:172-85 N '43
- Physical placement program for a large industrial plant; handicapped or physically limited workers. A. C. Dick, J. L. Barritt and T. W. Willis. *Ind Med* 12:303-5 My '43
- Placement of the cardiac in industry. R. B. Crain. *bibliog Ind Med* 12:368-71 Je '43
- Reducing employee turnover in banks. J. S. Brown. *il Burroughs Clearing House* 27:16-18+ Je '43
- Selection of wartime supervisors; abstract. R. O. Beckman. *Management R* 32:245-7 J1 '43
- Shortage of skilled workers demands new training methods; three sources available with which to replace experienced men. R. R. Karch. *Inland Ptr* 110:33-6 D '42
- Skill, intelligence and temperament. D. G. Humm. *Personnel J* 22:80-90 S '43
- Their handicaps don't interfere; Westinghouse electric elevator company. L. J. Keller. *il Am Mach* 87:93-6 Ag 19 '43
- Twelve ideas to help find new employees. *Am Business* 12:7-9+ N '42
- Use the right selection and testing methods. *il Factory Management* 101:96-105 Ag '43
- Wartime personnel problems in department stores; survey of over 50 leading department stores. J. W. Wingate. *J Retailing* 19:2-9+ F '43
- See also*
- Ability tests
 - Age and employment
 - Civil service
 - Disabled—Rehabilitation
 - Employees—Rating
 - Epileptics—Employment
 - Fair employment practices committee
 - Handicapped
 - Insurance. Life—
 - Agents—Selection
 - Job analysis
 - Labor recruiting
 - Part time employment
 - Personality tests
 - Physical examinations
 - Salesmen—Selection
- Advertising aids**
- Advertising breaks manpower shortage; story of a help wanted campaign with a mail-order touch. W. Weintz. *il Ptr Ink* 202:22 Mr 12 '43
- Advertising guns moved up in battle for new employees. P. H. Erbes, jr. *il Ptr Ink* 204: 20-2+ S 17 '43

- Advertising helps sell women on their ability to fill men's jobs. *il Ptr Ink* 202:46-7 Ja 15 '43
- Armstrong's manpower problem eased with promotion techniques. *il Ind Marketing* 28: 25-7 O '43
- Can advertising solve the manpower problem? J. A. Wales. *Adv & Sell* 36:23+ Ja '43
- Captivation in the classified or war warms up the want ads. P. H. Erbes, jr. *il Ptr Ink* 203:18-20+ Je 18 '43
- Controlled hiring; contrary to fears, Buffalo employers are using help wanted columns. *Business Week* p76 Ag 14 '43
- Dayton solves its labor problem by halting in-migration, using local folk. *Ptr Ink* 204: 39-40 Ag 27 '43
- 43 Rochester manufacturers tackle labor shortage in cooperative drive. *il Ptr Ink* 204:74 J1 2 '43
- Help wanted, female. *il Bus Transportation* 22:58-9 S '43
- How New Britain war plants recruited women workers. W. J. Cashman. *il Factory Management* 101:66-8+ Ap '43
- How Newark super-sells to win 50,000 women to war work. *il Sales Management* 52:96+ O 15 '43
- Labor recruited in Rhode Island through cooperative advertising. *Ptr Ink* 204:80 J1 9 '43
- Law of morale program met by effective campaign; Chicopee teaches personnel importance of their jobs with newspaper and other advertising. E. Housman. *il Ptr Ink* 204:23-4 J1 23 '43
- Nation's cannery launch drive for volunteer food workers. *il Sales Management* 52:58-9 Ap 1 '43
- New Britain found 2,341 new war workers within its boundaries. *il Ptr Ink* 202:26+ Mr 26 '43
- Newspaper-radio-billboard ads solve harvest problem. *il Ptr Ink* 205:102 N 5 '43
- Psychology in display ad solves labor problems; the Western gear works. *il Ptr Ink* 203:33 My 21 '43
- Recruiting by air; Seattle tries radio appeal for women workers. *Business Week* p115 J1 10 '43
- Story want-ad copy pulls for National Union. *Sales Management* 52:26 F 15 '43
- Uses spot radio to get war workers; A. W. Hecker, Cleveland. F. Kammann. *Ind Marketing* 28:41+ My '43
- War ad council releases womanpower campaign. *il Ptr Ink* 203:78 Je 11 '43
- Women pick the safe plants. *il Nat Safety N* 48:16-17+ S '43
- Women wanted. *il Sales Management* 52:25-6 Je 15 '43

Interviews

- How to conduct an exit interview; abstract. R. N. McMurry. *Management R* 32:249-51 J1 '43
- You have to be tough; getting a job. E. M. Jennings. *Personnel J* 22:123-9 O '43

Regulation

- Control of employment in Great Britain. *Int Labour R* 48:643-7 N '43
- Controls stiffened; employers in Louisville asked to replace male workers in easy jobs with women. *Business Week* p86 S 25 '43
- Hiring controlled; Buffalo plan of job referral. *Business Week* p16-17 S 4 '43
- Principles of employment supervision in war and peace. E. M. Johnstone. *Int Labour R* 48:277-307 S '43
- Stricter control of workers on war-useful jobs made effective by WMC. *Comm & Fin Chr* 158:1622 O 21 '43
- Total job-freeze; WMC minimum standards for hiring. *Business Week* p108 O 23 '43
- Tri-state controls; Pennsylvania, Delaware, and New Jersey lumped together in administration of regulations over hiring and firing. *Business Week* p20+ O 2 '43

EMULSIFICATION*See also***Dispersion****EMULSIFIERS**

- Aminoalcohol derivatives; some industrial applications. *Chem Age (Lond)* 49:333-4 O 2 '43

*See also***Dispersing agents**

EMULSIONS

Analysis of commercial oil emulsions and wax dispersions. F. M. Biffen and F. D. Snell. *il Ind & Eng Chem Anal ed* 15:517-19 Ag 15 '43

Foam and emulsion stabilities. S. Ross. *bibliog J Phys Chem* 47:266-77 Mr '43

Nature of emulsions; abstract. *Soap & San Chem* 19:69 Mr '43

Soap's role in the plastics industry. G. Leffingwell. *bibliog Mod Plastics* 21:87-8+ O '43

See also

Emulsifiers

EMULSIONS, Photographic. See Photographic emulsions

ENAMEL and enameling

American ceramic society 45th annual convention, Pittsburgh; abstracts of papers of interest to enamellers. *Cer Ind* 40:35 My '43
Communications equipment puts enameled resistors to severe test. *il Cer Ind* 41:26+ J1 '43

Controlled oxidation firing in automatic enameling furnace. W. G. Martin. *il diags Steel* 112:92, 95-6+ My 10 '43

Effects of lithia substitution for soda in vitreous enamel. M. O. Lewis. *bibliog Am Cer Soc J* 26:77-83 Mr 1 '43

Enamel industry answers the question about its post-war future. *il Cer Ind* 40:22-4 F '43

Enamel linings for chemical plant. *Chem Age (Lond)* 47:554 D 19 '42

Enameled iron; abstract. W. Montgomery. *Metals & Alloys* 18:126+ J1 '43

Future of enameling. B. T. Sweely. *Am Cer Soc Bul* 22:230-2 Ag 15 '43

George D. Roper corporation presents its postwar plan. E. L. Hollingsworth. *Cer Ind* 41:35-6 O '43

Government agencies using enamel on war goods. *Cer Ind* 40:44 Je '43

How one enamel plant adjusted production to war-times; Century vitreous enamel co., Chicago. *il Cer Ind* 40:42-4 Je '43

Mechanics of enamel adherence; influence of cobalt and nickel oxides on metal precipitation at ground coat-iron interface. R. M. King. *bibliog diags Am Cer Soc J* 26:358-60 O 1 '43

Mechanics of enamel adherence; role of cobalt oxide in metal and oxide precipitation during ground-coat firing cycle and determination of temperature and time intervals of precipitation. R. M. King. *bibliog diags Am Cer Soc J* 26:41-8 F 1 '43

Modernization of plant equipment is vital to post-war plans; trend toward continuous processes. *il diags Cer Ind* 40:34-7 Je '43

Our peacetime industry. C. S. Pearce. *Am Cer Soc Bul* 22:279-80 Ag 15 '43

Porcelain enameling of aircraft exhausts. *il Iron Age* 151:66-7 F 18 '43

Post-war enamel market will depend on what the industry does today. R. A. Dadisman. *Cer Ind* 40:45-6 My '43

Postwar plan, Westinghouse electric & mfg. co. *il Cer Ind* 41:42, 44-5 N '43

Relation of hydrogen to adherence of sheet-steel enamels. W. A. Deringer. *bibliog il Am Cer Soc J* 26:151-9 My 1 '43

Relation of specific gravity, viscosity to dipping consistency of enamel. M. Reiss. *diags Cer Ind* 41:34-6 S '43

Summer is time to plug fuel leaks in enamel plants. *Cer Ind* 41:39 Ag '43

Technical men in the enameling industry. A. I. Andrews. *Am Cer Soc Bul* 22:278-9 Ag 15 '43

Tennessee enamel manufacturing co.'s immediate plans for postwar program. W. B. Evans. *Cer Ind* 41:40-2 Ag '43

See also

Enameled ware

Color

Fundamental study of factors influencing color of porcelain enamels. R. L. Cook and A. I. Andrews. *il Am Cer Soc J* 26:73-6 Mr 1 '43

Defects

Sources of hydrogen in steel and means for its elimination. C. A. Zapffe. *il Metal Prog* 43:397-401 Mr '43

Testing

Experiments with an accelerated weathering test for porcelain enamels. G. H. Spencer-Strong and W. G. Cooper. *Am Cer Soc J* 26:249-51 Ag 1 '43

Gauge resistance of porcelain enamels. G. H. Spencer-Strong and W. G. Cooper. *Am Cer Soc J* 26:1-4 Ja 1 '43

Relation of thickness to impact resistance of porcelain enamel. R. L. Fellows. *diags Am Cer Soc J* 26:160-2 My 1 '43

ENAMEL and enameling (paints, etc.). See Lacquer and lacquering; Paint; Painting, Industrial

ENAMELED ware

Enameled utensils. A. I. Andrews. *Am Cer Soc Bul* 22:232-3 Ag 15 '43

Post-war home appliances challenge designer and manufacturer alike; kitchen units and laundry equipment of future. *il Cer Ind* 40:45, 47 Je '43

Statistics

Porcelain enameled products, shipments, 1938-1941. Survey of *Cer Business* 1942 Sup p141 [supplemented in monthly numbers]

Testing

Enameled utensil manufacturers' council tentative standard impact test for porcelain enameled cooking utensils. G. H. Zink and A. I. Andrews. *il diags Am Cer Soc Bul* 22:233-6 Ag 15 '43

ENANTIOMORPHS. See Optical rotation

ENCEPHALITIS

Intra-ocular virus infections. C. A. Evans, H. Y. Yanamura and R. G. Green. *bibliog Science* 98:45-6 J1 9 '43

ENCEPHALITIS, Epidemic

Close relation between Russian spring-summer encephalitis and louping-ill viruses. J. Casals and L. T. Webster. *bibliog Science* 97:246-8 Mr 12 '43

Ornithodoros ticks as a medium for the transportation of disease agents. R. R. Parker. *bibliog Pub Health Rep* 57:1963-6 D 25 '42

ENCYCLOPEDIA Britannica

Britannica's atlas; Sears, Roebuck brings out \$20 volume of maps and special features. *Business Week* p24+ N 21 '42

Encyclopedia Britannica to University of Chicago. *Comm & Fin Chr* 157:495 F 4 '43

ENDOWMENTS

See also
Colleges and universities—Gifts, legacies, etc.

ENEDIOLS. See Hydroxy compounds

ENEMY aliens

Italians may carry war damage cover, other rule changes. *Nat Underw* 46:1+ N 26 '42

Termination of employment of Axis nationals in Brazil, 1942. *Monthly Labor R* 55:1155-6 D '42

WDC outlines attitude toward nationals of Germany and Japan. *East Underw* 44:20 Ja 15 '43

Work in evacuees' interests by Federal reserve bank of San Francisco. *Fed Res Bul* 25:295 Ap '43

ENEMY property

Alien properties now aid U.S. in production of chemicals and other war materials. *il Chem Ind* 52:734-7 Je '43

Alien properties to be sold on bids. *Oil Paint & Drug Rep* 143:5+ Je 14 '43

Alien property custodian offers enemy patents to American industry. *Heating-Piping* 15:sup103-4+ F '43

APC to lease vested patents. *Oil Paint & Drug Rep* 142:3+ D 14 '42

APC vests I.G. iron chloride patent. *Oil Paint & Drug Rep* 143:3+ Mr 15 '43

Alien property man. O. McKee. *il Banking* 35:30-1+ D '42

American property claims against Germany and the coming peace treaty. H. G. Aron and F. W. Eisner. *Bankers M* 146:471-94 Je '43

Blacklisting task grows; liberated territories pose problems in control of Axis nationals' funds and those of collaborationists. *Business Week* p50+ Ag 21 '43

ENEMY property—Continued

- Chemical patents control lifted on 8 processes. Oil Paint & Drug Rep 144:3+ O 25 '43
- Cross-licensing eliminated by A.P.C. for seized patents use. Oil Paint & Drug Rep 143:3 Ap 26 '43
- Effect of war legislation on trusts and estates; treatment of funds payable to aliens of enemy or enemy-occupied countries. F. W. Hill, Jr. Trusts & Estates 77:265-6 S '43
- Enemy interests in estates and trusts and actions or proceedings; functions of Alien property custodian. F. J. McNamara. Trusts & Estates 77:209-14 S '43
- Enemy-owned patents; description of some electronic patents, available to American industry. diags Electronics 16:182+ S '43
- Enemy owned patents made available to U.S. glass industry. diags Glass Ind 24:101-3+, 211-15+ Mr, My '43
- Enemy patents made available to small war plant operators. Comm & Fin Chr 158: 612 Ag 12 '43
- 50,000 enemy patents at work for us. Banking 35:17-18 Ap '43
- Foreign patents offered to U.S. industry. Elec Eng 62:277 Je '43
- Fortunes go begging; business has practically disregarded millions of dollars' worth of alien patents and copyrights. K. E. Ettinger. Ptr Ink 204:17-19 Ag 13 '43
- 41,000 enemy patents seized; how to get license. Iron Age 151:101 My 13 '43
- Free patents; enemy inventive rights, seized by government thrown open to industry. Business Week p 19-20 D 19 '42
- Help yourself to patents seized from foreign nations; representative lists of some applications of value to metal and metalworking industries. Iron Age 152:115-16+ J 8 '43
- More assets iced; Treasury's control over enemy aliens' funds now covers \$8,500,000, -000. Business Week p95-6+ F 27 '43
- More patent reform. Product Eng 14:64 F '43
- Patents at work. Water Works & Sewerage 90:219-20 Je '43
- Patents of enemy and enemy-occupied countries are available to American industry. Dom Eng 161:48+ F '43
- Patents pending; relatively few licenses asked under enemy patents. Business Week p44+ Ag 21 '43
- Patents seized; Alien property custodian gives procedure for license of enemy-controlled patents. Nat Pat N 34:8 D 16 '42
- Patents seized from enemy countries will be made available to industry. Comm & Fin Chr 156:2163 D 17 '42
- Patents vested by APC include more chemicals. Oil Paint & Drug Rep 144:3+ O 18 '43
- Regulations relating to safe deposit boxes leased to nationals of blocked countries or containing property in which nationals of blocked countries have an interest. Fed Res Bul 29:923-4 O '43
- Synthetic chemicals group discusses alien patents. Oil Paint & Drug Rep 142:3+ D 21 '42
- Treasury tightens regulations on safe deposit boxes leased to aliens. Comm & Fin Chr 158:930 S 2 '43
- U.S. to auction 285 alien concerns. Chem Ind 62:761 Je '43
- Want new ideas? try patents seized by U.S. government; with list. Iron Age 152:95-6+ N 4; 97+ N 11 '43
- Who should get Nazi-held property? Fortune 27:supp 21 Ap '43

ENGINEERING

- Airplane's increasing complexity calls for wide variety of engineering talent. H. Woodhead. Aero Digest 42:376+ Mr '43
- Engineering fundamentals (cont). diags Diesel Power 19:1003+; 21:137+, 412, 721-2 D '42, F, My, Ag '43 (to be cont)
- Engineering in a department store. J. C. Prather. flow diag il Civil Eng 13:483-4 O '43
- Engineering News events of 1942; chronological summary. Eng N 130:180-1 F 11 '43
- Engineering the future; joint meeting of E.I.C. and A.S.M.E. in Toronto. Can Chem & Process Ind 27:587-90 O '43

Modern liquid state theory in relation to engineering. R. S. Silver. Engineering 156: 64-5, 114-15 J 23, Ag 6 '43

Status and work of engineers. C. E. Inglis. Engineer 174:361-2 O 30 '42

Time and the production of mechanisms. Engineer 175:342-4 Ap 30 '43

See also

- | | |
|---------------------------------------|---|
| Aeronautic engineering | Mechanical handling |
| Aeronautics | Military engineering |
| Air conditioning | Mining engineering |
| Airports | Municipal engineering |
| Aqueducts | Pavements |
| Architecture | Petroleum engineering |
| Blasting | Pipe laying |
| Breakwaters | Public works |
| Bridges | Pumping |
| Building | Radio engineering |
| Building materials | Railroad engineering |
| Canals | Railroads—Construction |
| Chemical engineering | Refrigerating engineering |
| City planning | Refrigeration and refrigerating machinery |
| Civil engineering | Reservoirs |
| Concrete construction | Rivers |
| Construction equipment | Roads |
| Culverts | Sanitary engineering |
| Dams | Sewerage |
| Dikes (engineering) | Standards, Engineering |
| Drainage | Steam engines |
| Dredging | Steel construction |
| Drilling and boring (earth and rocks) | Strains and stresses |
| Earthwork | Streets |
| Efficiency, Industrial | Strength of materials |
| Electric engineering | Structural engineering |
| Engineers | Subways |
| Foundations | Surveying |
| Girders | Technology |
| Heating | Tunnels and tunneling |
| Highway engineering | Ventilation |
| Hydraulic engineering | Water supply engineering |
| Industrial engineering | |
| Irrigation | |
| Lighting | |
| Machinery | |
| Marine engineering | |
| Mechanical engineering | |

Bibliography

- Additions to the library. Inst Mech Eng J & Proc 148:112-14 D '42 [cont monthly]
- Book notes and reviews; the month's additions to the engineer's reading and reference list. Eng N 130:150+ Ja 28 '43 [cont monthly]
- Reviews of books and notes on books received in the Engineering societies library. Published in monthly numbers of Mechanical engineering

See also

Technology—Bibliography

Examinations

- Examination for professional engineers, the University of the state of New York. June 25-26. Am Inst Chem Eng Trans 39:B122-B130 Ag '43
- Professional licensing examinations, the University of the state of New York. Am Inst Chem Eng Trans 39:B20-B29 Ap '43

Social aspects

- Engineer and social development. G. Swope. Elec Eng 62:157-8 Ap '43
- Engineer and society. F. C. Stewart. Engineering 154:376 N 6 '42; Same cond. Engineer 174:406-7 N 13 '42
- Planning for things to come. H. S. Osborne. Elec Eng 62:333-7 Ag '43

Study and teaching

- Engineering cadetship training in Great Britain. Monthly Labor R 56:722-3 Ap '43
- Limitations of visual education. H. J. Gilkey. J Eng Educ 33:426-31 Ja '43
- Teaching methods and course content of Introduction to engineering at Rutgers university. G. A. Olsen. J Eng Educ 33: 438-45 Ja '43
- Technique of instructing. G. A. T. Burdett. Electrician 130:569-70, 594 Je 4-11 '43
- Training of women in engineering. C. W. Cole. J Eng Educ 34:167-84 O '43

ENGINEERING—Study and teaching—Cont.

What can be done to train women for jobs in engineering. R. H. Baker and M. L. Reimold. *il Mech Eng* 64:853-5 D '42

See also

Engineering colleges
Engineering education

Tables, calculations, etc.

Application of the theory of measurements to certain engineering problems. L. E. Woodman. *Mo U Sch Mines & Met Bul tech ser v 15 no 1:1-41 Je '42*
Mathematical shortcuts for engineers. D. B. Steinman. *Eng N* 130:747-9 My 20 '43

Textbooks

How can we improve engineering books? J. S. Thompson. *J Eng Educ* 34:193-203 O '43
Training program hampered by lack of suitable textbooks; abstract. O. W. Winter. *Marine Eng* 47:138 N '42

Australia

Engineers and the British empire; engineering developments in Australia. M. Smith. *il map Engineer* 176:180-2, 200-2, 218-21, 240-2, 259-61, 278-80, 298-300 S 3-O 15 '43

China

Engineering developments in China. *Engineer* 175:449-51 Je 4 '43

Colombia

Letter from Latin America. E. P. Cleary. *map Eng N* 131:501 S 30 '43

Great Britain

Engineers and the British empire. M. Smith. *il maps Engineer* 176:2-3, 22-4, 42-5, 82-4, 102-4, 122-4, 140-3, 160-1, 180-2, 200-2, 218-21, 240-2, 259-61, 278-80, 298-300, 329-32, 348-50, 359-62, 380-3, 400-2, 420-3 J1 2-16, 30-N 26 '43 (to be cont)

New Zealand

Engineers and the British empire. M. Smith. *il maps Engineer* 176:329-32, 348-50, 359-62 O 22-N 5 '43

Persia

Dock construction in Iran. D. B. McKinley. *il diag Civil Eng* 13:522-4 N '43

South Africa

First steam engines in South Africa. *diags Engineer* 176:112-13 Ag 6 '43

ENGINEERING college research association
Organization. *Science* 96:510-11 D 4 '42;
Same. *Mech Eng* 65:92 Ja '43

ENGINEERING colleges
Co-operative relations with universities; A.R.E.A. committee report. *Ry Age* 114:564-5 Mr 20 '43

Effect of the ESMWT program upon established evening engineering curricula. H. P. Dutton. *J Eng Educ* 33:423-5 Ja '43

Engineering colleges' contribution to ESMWT. G. W. Case. *J Eng Educ* 33:479-81 Mr '43

Engineering education, the present; war service of engineering colleges. A. A. Potter. *J Eng Educ* 34:34-40 S '43

Engineering schools in the war. J. K. Finch. *Eng N* 130:133-4 Ja 28 '43

Experience in the operation of an A.S.T.P. unit; Georgia school of technology. R. L. Schweigert. *J Eng Educ* 34:164-6 O '43

Manpower problem and its effect upon engineering college students and staff. R. E. Doherty; E. A. Fitzpatrick. *J Eng Educ* 33:302-11; Discussion. 311-17+ D '42

National survey of engineering drawing conducted by the Drawing division of the Society for the promotion of engineering education. *J Eng Educ* 33:818-52 Je '43

Relationships between War manpower commission and the engineering colleges. W. W. Charters. *J Eng Educ* 34:158-63 O '43

Utilization of facilities of engineering colleges for specific programs of war training. A. A. Potter; B. R. Van Leer; K. T. Compton. *J Eng Educ* 23:285-302 D '42

What more can engineering colleges do through ESMWT? G. W. Case. *Science* 97:79-82 Ja 22 '43

See also

Degrees, Engineering
Engineering education
Engineering graduates

Engineering students
Mining schools and education
Society for the promotion of engineering education
also names of colleges, e.g.
Illinois institute of technology
Northwestern university—Institute of technology
Massachusetts institute of technology

Administration

Minutes of the meeting of administrative officers of engineering colleges. *J Eng Educ* 33:285-317+ D '42

Curriculum

Army specialized training program. A. L. H. Rubin. *J Eng Educ* 33:588-629 Ap '43

Army specialized training program; basic curricula with specialization. H. Beukema. *J Eng Educ* 34:80-111 S '43

Foreign languages in a school of engineering. D. P. Krynnine. *J Eng Educ* 33:681-6 My '43

Heating and air conditioning curriculum. J. James. *J Eng Educ* 33:251-9 N '42

Humanistic-social studies in engineering education; factors and influences at work. E. S. Burdell. *J Eng Educ* 33:770-4 Je '43

Junior college courses in the light of war experience. J. A. Prior. *J Eng Educ* 33:235-8 N '42

Navy college training program. I. C. Crawford. *J Eng Educ* 33:630-8 Ap '43

Safety engineering in the technical college; Oklahoma agricultural and mechanical college. A. Naeter. *Elec Eng* 62:499-501 N '43

Survey of type and content of course material in mechanical engineering laboratory instruction. F. L. Schwartz. *J Eng Educ* 33:446-53 Ja '43

Teaching methods and course content of Introduction to engineering at Rutgers university. G. A. Olsen. *J Eng Educ* 33:438-45 Ja '43

Graduate work

Report for 1942-43 committee on graduate study. S.P.E.E. *J Eng Educ* 33:646-9 Ap '43

Professors and instructors

Engineering pedagogy; college professor from the point of view of the practicing engineer. J. M. Hayes. *Civil Eng* 13:199-200 My '43

Student selection

Recruiting engineers. R. L. Sackett. *J Eng Educ* 33:531-4 Mr '43

ENGINEERING contracts
Construction under war controls. 1942. R. B. Colborn. *Eng N* 130:194-5 F 11 '43

Organizational set-up of an architect-engineer. D. H. McCreery. *il Civil Eng* 13:477-9 O '43

ENGINEERING degrees. See Degrees, Engineering

ENGINEERING departments

Growth of wartime aircraft organization. E. W. Walker. *Aero Digest* 42:247, 249, 251+ Je '43

Manpower problems in the engineering department. *il Product Eng* 14:704-7 N '43

Selecting engineering department papers. H. A. Perkins and D. H. Hunter. *il Machine Design* 15:69-71 Ja '43

ENGINEERING drawing

Developing graphic illustrators; commercial artists trained in creating isometric drawings for production and service line workers; Fleetwings, Inc. R. R. Wiese. *diags Aviation* 41:113+ N '42

Imprinted sheets for engineering drawings. F. P. Kuhl. *il diag Gas Age* 91:21+ F 11 '43; Same. *Power Pl Eng* 47:91-2 S '43

ENGINEERING drawing—Continued

Uses for three-dimension pictorial drawings in engineering department of I-T-E circuit breaker co. J. A. C. Krips and W. S. Miller. *Diags Power Pl Eng* 47:69-71 N '43

See also

Airplanes—Manufacture—Drafting room practice **Drafting room practice**

Study and teaching

National survey of engineering drawing conducted by the Drawing division of the Society for the promotion of engineering education. *J Eng Educ* 33:818-52 Je '43

ENGINEERING economics

Curious plight of engineering economy. E. D. Ayres. *J Eng Educ* 33:735-6 My '43

Study and teaching

Engineering economics. F. Gill. *Engineer* 175: 267-8 Ap 2 '43; Abstracts. *Engineering* 155: 274 Ap 2 '43; *Elec R (Lond)* 132:424-5 Mr 26 '43; *Electrician* 130:352 Ap 2 '43; Discussion. *Engineer* 175:268-9, 283-4 Ap 2-9 '43; *Elec R (Lond)* 132:457-8 Ap 2 '43; *Electrician* 130:352-4 Ap 2 '43; *Engineering* 155:271-2 Ap 2 '43

Engineering economics. F. Gill. *Inst E E J* 90 pt 1:373-86 bibliog(p384); Discussion. 387-56 S '43

Engineering economics. R. O. Kapp. *Elec R (Lond)* 132:743-50 Je 4 '43

Engineers and economics; abstract. T. H. Burnham. *Elec R (Lond)* 132:714 My 28 '43

ENGINEERING education

American engineer and the war effort. A. A. Potter. *Mech Eng* 65:251-2+ Ap '43; Same. *W Soc E J* 48:55-9 Je '43; Excerpts. *Power Pl Eng* 47:57 Ap '43

Critical review of education and training for engineers. A. P. M. Fleming. *Inst E E J* 89 pt 1:376-88 S '42; Discussion. 89 pt 1: 388-435; 90 pt 1:417-24 S '42, S '43

Development of engineering education and technical training. T. R. Cave-Browne-Cave. *Inst Mech Eng J & Proc* 148:101-3 D '42; Same. *Engineering* 154:516 D 25 '42

Economics and engineering education. J. K. Finch. *J Eng Educ* 33:416-21 Ja '43

Education and training of engineers; summaries of four papers. *Engineer* 175:190-1 Mr 5 '43; Discussion. 175:191, 206-8 Mr 5-12 '43

Education for democracy. M. E. Cooley. *J Eng Educ* 33:742-7 Je '43; Same cond. *Civil Eng* 13:163-4 Ap '43

Educational reconstruction and its impact on training for mechanical engineering. *Engineering* 156:195-8 S 3 '43; Same. *Engineer* 176:136-7, 212-13 S 3-10 '43; Same. *Inst Mech Eng J & Proc* 149:Proc 186-92 O '43; Abstracts. *Electrician* 131:279 S 17 '43; *Elec R (Lond)* 133:367-8 S 17 '43

Engineering education, the future. K. T. Compton. *J Eng Educ* 34:41-6 S '43

Engineering education, the present. A. A. Potter. *J Eng Educ* 34:34-40 S '43

Engineering education, yesterday, today, and tomorrow. W. C. White. *Boston Soc C E J* 30:40-50 Ap '43

Maginot line of engineering education. R. G. Freeman. *Mech Eng* 65:202-4+ Mr '43; Discussion. 65:597-9 Ag '43

Past and future education of engineers. C. E. MacQuigg. *Mech Eng* 64:657-8 S '42; Same cond. *Min & Met* 24:353-4 Ag '43

Professional aspects of engineering. H. H. Allen. *Elec Eng* 62:442-5 O '43

Recent developments in army and navy college training programs. H. T. Heald. *J Eng Educ* 33:496-501 Mr '43

Relationships between War manpower commission and the engineering colleges. W. W. Charters. *J Eng Educ* 34:158-63 O '43

Report of the education and training and personnel sub-committee (no. 1) to the post-war planning committee of the Institution of electrical engineers. *Engineering* 155:476-7, 484-5, 504-5 Je 11-25 '43; Same. *Inst E E J* 90 pt 1:223-33 Je '43

Supply of technical officers; new scheme for engineering cadetships. *Engineering* 154: 372 N 6 '42

Thoughts on engineering training. B. M. Woods. *J Eng Educ* 33:377 Ja '43

University education and industrial training of engineers, with particular reference to telecommunications. W. Jackson. *Inst E E J* 90 pt 3:53-60 Je '43; Abstracts. *Electrician* 130:194 F 19 '43; *Elec R (Lond)* 132:179 F 5 '43; Discussion. *Inst E E J* 90 pt 3:61-72 Je '43

Vocational courses in engineering; abstract. A. A. Potter. *Science* 97:sup8 Je 25 '43

Wanted: a plan for industrial training. H. T. Heald. *J Eng Educ* 33:477-8 Mr '43

War-training programs take spotlight at engineering educators meeting. *Eng N* 131: 41-2 J 1 '43

What mathematical college training industry expects from young engineers. A. R. Stevenson, Jr. *J Eng Educ* 33:670-5 My '43

Why are you going to school? R. M. Green. *Civil Eng* 13:1-2 Ja '43

See also

Aeronautic engineering—Study and teaching	Lammie, Benjamin G., medals
Apprentices	Massachusetts institute of technology
Chemical engineering—Study and teaching	Mechanical engineering—Study and teaching
Degrees, Engineering	Military engineering—Study and teaching
Electric engineering—Study and teaching	Mining schools and education
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Engineering colleges—Curriculum	Society for the promotion of engineering education
Engineering drawing—Study and teaching	Technical education
Engineering students	Technical writing
Engineers' council for professional development	

Cooperative plan

Genesis of the cooperative idea. C. W. Park. *J Eng Educ* 33:410-15+ Ja '43

See also Northwestern university—Institute of technology

History

Engineering education, the past. H. P. Hammond. *J Eng Educ* 34:26-33 S '43

Russia

Engineering education in the Soviet Union. J. G. Tolpin. *J Eng Educ* 34:133-49 O '43

ENGINEERING ethics

Forum on professional relations. D. W. Mead. *Civil Eng* 12:628-691; 13:37, 108, 143, 186, 231, 297, 329, 392-3, 438, 498, 551 N '42-N '43

ENGINEERING foundation

Annual report. *Mech Eng* 65:83-5 Ja '43

Officers for the year 1942-43; research projects. *Elec Eng* 62:44-6 Ja '43

Welding research council

Personnel. *Welding J* 22:sup213 My '43

ENGINEERING graduates

College graduate looks at the foundry industry. C. J. Freund. *Foundry* 70:74+ D '42

Evaluating the recent graduate; selecting and training new staff members of the Dorr co. G. M. Darby. *Il Eng & Min J* 144:60-1 Ja '43

ENGINEERING institute of Canada

Annual meeting. 57th, Toronto, Feb. 11-12. *Can Chem & Process Ind* 27:71-3 F '43; *Eng N* 130:323+ Mr 4 '43; *Roads & Bridges* 81: 39-40+ Mr '43

Joint meeting with American society of mechanical engineers, Toronto, Sept. 30-Oct. 2. *Mech Eng* 65:828-31 N '43

ENGINEERING instruments

See also

Aeronautic instruments	Radio instruments
Electric instruments	Scientific apparatus and instruments
Instruments	

ENGINEERING laboratories

Air conditioning and heating laboratory supplements classroom instruction at Syracuse university. J. H. Carpenter. *Il diag Heating-Piping* 15:592-5 N '43

ENGINEERING laboratories—Continued

Our research laboratories; Rensselaer polytechnic institute. bibliog *il* Welding J 22: sup145-9 Ap '43
 Plant engineering and the consulting laboratory. E. L. Cady. *il* Metals & Alloys 18:66-9 Jl '43

See also
 Marine engineering laboratories

Equipment

Stroboscope unmarks fuel injection; Diesel laboratory of Pennsylvania state college. P. H. Schweitzer. *il* diag Automotive & Aviation Ind 89:32-4 S 1 '43

ENGINEERING law

See also
 Building laws and regulations
 Engineering contracts

ENGINEERING libraries

See also
 Aeronautic libraries
 Engineering societies library, New York
 Technical libraries

ENGINEERING literature

Development of technical literature. L. H. A. Carr. *Inst E E J* 90 pt 1:63-6 F '43;
 Abstracts. Electrician 129:391-2 O 9 '42;
 Elec R (Lond) 131:459 O 9 '42
 Standard letter symbols help clarify engineering literature. S. A. Moss. *Ind Stand* 14:256-9 S '43

ENGINEERING material. *See* Materials**ENGINEERING mathematics.** *See* Mathematics**ENGINEERING models.** *See* Hydraulic models; Mechanical models**ENGINEERING reports**

Writing the engineering report. E. H. Short, Jr. *Oil & Gas J* 42:97-8+ Je 24 '43

ENGINEERING research

Departmental and inter-departmental research in heat-power engineering. F. O. Ellenwood. *J Eng Educ* 33:707-12 My '43
 Looking at the future through the eyes of research. C. F. Kettering. *S A E J* 51:sup 33-5 Jl '43
 Progress in engineering knowledge during 1942. P. L. Alger and J. Stokley. *il* diag Gen Elec R 46:90-137 bibliog(p133-7) F '43
 Report of the research and extension activities of the engineering schools and departments for the sessions of 1941-1942. A. A. Potter and W. A. Knapp. *Purdue Univ Eng Exp Sta, Research Ser* 85:1-67 '42
 Research and the war effort. V. Bush. *Elec Eng* 62:96-102 Mr '43

See also
 Aeronautic research
 Electric research
 Engineering college
 research association
 Gas research
 Highway research
 Hydraulic research
 Industrial research
 Petroleum research
 Railroad research
 Scientific research

ENGINEERING societies

Co-ordinating committees; teamwork in engineering; abstract. R. O. Kapp. *Elec R (Lond)* 132:353 Mr 12 '43

Fuels division of the Cleveland engineering society. J. H. Herron. *Mech Eng* 65:518+ Jl '43

Superorganizing professional engineers. A. B. Parsons. *Min & Met* 24:392-4 S '43

See also names of societies, e.g.
 Acoustical society of America
 American institute of electrical engineers
 American society of civil engineers
 American society of mechanical engineers
 Engineering institute of Canada
 Engineers' council for professional development
 Illuminating engineering society
 Society for the promotion of engineering education

ENGINEERING societies library, New York

Annual report. H. W. Craver. *Mech Eng* 65: 83 Ja '43
 Board and officers of library elected; annual report. *Elec Eng* 62:46-7 Ja '43

ENGINEERING standards. *See* Standards, Engineering**ENGINEERING students**

Engineer in the making—and afterwards. W. Sutcliffe. *Inst E E J* 90 pt 1:78-82 F '43; *Abstract. Elec R (Lond)* 131:593 N 6 '42

Engineering students in Canada urged to finish courses; abstract. L. A. Wright. *Eng N* 130:681 My 6 '43

Ethical standards; how best developed? A. C. Ingersoll. *Civil Eng* 13:125-6 Mr '43

Guidance and placement of engineering students. R. S. Bartlett. *J Eng Educ* 33:535-51 Mr '43

Measurement and guidance project in engineering education. R. L. Sackett. *J Eng Educ* 34:191-2 O '43

New award program for engineering students announced by Lincoln foundation. *Mech Eng* 65:90 Ja '43

Personnel situation in engineering. *J Eng Educ* 33:748-69 Je '43

Plight of mining, metallurgical, and petroleum engineering education; effect of selective service system. E. A. Holbrook. *Min & Met* 24:275-6 Je '43

Recommendations to the War manpower commission; freshmen should be deferred. *J Eng Educ* 33:475-6 Ja '43

What the student thinks about a job on the railroad. *Ky Age* 115:376-8 S 4 '43

See also
 Engineering colleges
 —Student selection

ENGINEERS

American engineer and the war effort. A. A. Potter. *Mech Eng* 65:251-2+ Ap '43; *Soc E J* 48:55-9 Je '43

Beauty plus utility; both architects and engineers are necessary. J. R. Todd. *il Arch Rec* 94:52-3 O '43

Collective bargaining and salaries for professional engineering employees; bargaining units organized in local sections of American society of civil engineers. E. B. Whitman. *Civil Eng* 13:513-14 N '43

Collective bargaining for professional engineers; report of American society of civil engineers committee on employment conditions. *Civil Eng* 13:552-3 N '43

Committee of engineers and scientists appointed for WPB. *Roads & Sts* 85:40 N '42

Engineer and the war. H. S. Osborne. *Elec Eng* 62:233-4 Je '43

Engineer or physicist? place in industry. P. Dunsheath. *Engineering* 154:474 D 11 '42
 Engineering mind. P. R. Eilfstrom. *W Soc E J* 48:91-7 Je '43

Engineers against time; A.S.M.E. and national defense. J. L. Walsh. *Mech Eng* 65: 406-7 Je '43

Engineers in civilian defense work; the Indiana plan for mobilization of public works and public utility agencies. E. W. Cassidy. *Roads & Sts* 86:74-6 F '43

Engineers in wartime. C. D. Howe. *Tech R* 45:233-4+ Mr '43

Engineer's position in the manpower program. T. K. Miles. *Inst Radio Eng Proc* 31:514-17 S '43

Engineers protest affiliation with subprofessionals; professional group intervenes in WLB case. *Civil Eng* 13:337-8 Jl '43

Labor unions and the engineer. H. F. Peckworth. *Min & Met* 24:20-1 Ja '43

Managerial engineers exempt from Detroit job-freeze plan. *S A E J* 51:sup51 Ja '43

Meaning of professional. N. W. Dougherty. *Civil Eng* 13:251-2 Je '43

National roster and the engineer. K. Miles. *Am Cer Soc Bul* 22:174-7 Je 15 '43

Personal development, ten years after; with charts showing status of Purdue alumni. J. E. Walters. *J Eng Educ* 33:552-7 Mr '43

Personnel situation in engineering. *J Eng Educ* 33:748-69 Je '43

Place of the engineer. C. R. Young. *Civil Eng* 12:657-8 D '42

Profession of engineering; Committee on personal development. I. C. Crawford. *J Eng Educ* 33:382-3 Ja '43

Professional aspects of engineering. H. H. Allen. *Elec Eng* 62:442-5 O '43

ENGINEERS—Continued

Record demand for engineers; situation as reviewed by War manpower commission in April, 1943. *Refrig Eng* 46:13-16, 93-4+ J1-Ag '43

Set of commandments to end the adman-engineer feud. J. C. Schneider. *Ind Marketing* 27:50+ D '42

Slums in engineering; problem of subprofessional worker. R. M. Green. *Civil Eng* 13: 299-300 J1 '43

Status and work of engineers. C. E. Inglis. *Engineer* 174:361-2 O 30 '42

Supply of technical men to the armed forces and to industry. R. L. Sackett. *Science* 96:553-4 D 18 '42

See also

Architects—Architect-engineer groups

Civil engineers

Degrees, Engineering

Electric engineers

Engineering education

also names of engineers, e.g. Montresor, John

Directories

Society for the promotion of engineering education year book; list of members. *J Eng Educ* 33:1-227 F '43

Western society of engineers year book, containing the constitution, by-laws, membership roster, and the administrative and operating organization. *W Soc E J* 48:1-72 pt 2 S '43

Public relations

Community endocrines; harmony among controlling groups essential to strength. J. W. M. Bunker. *Tech R* 45:491-2+ J1 '43

Engineer as planner. R. E. Flanders. *Mech Eng* 65:789-91 N '43

Engineer's attitude towards the post-war economic situation. W. F. Forbes-Sempill (Lord Sempill). *Engineer* 174:474-5 D 11 '42

Engineers' responsibility in civic affairs. D. R. Yarnall. *Mech Eng* 65:521-2+ J1 '43

See also

Washington award

Salaries

Federal pay of engineers vs. union wage scales. G. M. Colvocoresses. *Min & Met* 24:21-2 Ja '43

Great Britain

Engineer in the British commonwealth. *Engineer* 175:155-7 F 19 '43

Registration of engineers. *Engineer* 175:230-1 Mr 19 '43

Technical men and the forces. G. A. T. Burdett. *Electrician* 130:389-90 Ap 16 '43

Latin America

Visit of Latin-American engineers to the United States. *Science* 97:325-6 Ap 9 '43

ENGINEERS' council for professional development

Annual meeting, 10th, New York, Oct. 18. *Mech Eng* 64:894-8 D '42; *Elec Eng* 61:626-30 D '42; *Min & Met* 23:608 D '42

Annual meeting, New York, Oct. 22-23. *Eng N* 131:644 O 28 '43

ENGINEERS public service company

Descriptions of holding companies. O. Ely. *Pub Util* 32:431-2 S 30 '43

Divestment plan. *Comm & Fin Chr* 158:289 J1 19 '43

News and views of investments. *Barron's* 23:9 N 1 '43

Public utility securities. *Comm & Fin Chr* 158:1007 S 9 '43

Refused right to buy own shares by SEC. *Comm & Fin Chr* 157:692 F 22 '43

Sells Key West electric co. to city. *Comm & Fin Chr* 157:155-6 Ap 26 '43

Severs all connections with Puget Sound power & light co.; plan on El Paso Gas approved. *Comm & Fin Chr* 158:1131, 1177 S 20 '43

Values in Engineers public service co. W. Andrews. *Barron's* 23:15 O 4 '43

ENGINES*See also*

Airplane engines

Automobile engines

Crankshafts

Diesel engines

Fuel

Gas and oil engines

Gas turbines

Governors (machinery)

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Marine engines

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Pistons

Pumping machinery

Steam engines

Steam turbines

Turbines

ENGLAND*See also*

Great Britain

ENGLEWOOD, New Jersey**Sewerage**

Englewood's sewage pumping station. R. Hartley. *il Pub Works* 74:11-13 S '43

ENGLISH language

Abstracts and annotations. E. H. McClelland. *Special Lib* 34:363-72 S '43

Arbitrary editorial changes in scientific papers; nouns used as adjectives. W. C. Boyd. *Science* 98:197-8 Ag 27 '43

Englishes, colloquial and formal; comments on Writer's guide and index to English, by Porter G. Perrin. E. N. Teall. *Inland Ptr* 111:44-5 Ag '43

How not to say it; examples from print of the day. E. N. Teall. *Inland Ptr* 111:48 J1 '43

See also

Basic English

Business English*See also*

Commercial correspondence

Errors

Slips that pass in the night; a plea for accuracy in printed material. E. H. McClelland. *J Chem Educ* 20:546-53 N '43

Grammar

Why not take the double talk out of our grammar books? E. N. Teall. *Inland Ptr* 111:28-9 Ap '43

Study and teaching

How can we improve engineering books? J. S. Thompson. *J Eng Educ* 34:193-203 O '43

Relating writing to the engineering curriculum. C. A. Brown and J. P. Riebel. *J Eng Educ* 33:687-90 My '43

ENGRAVING (metal work)

Engraving for the aircraft industry: John Meerloo & sons. *il Iron Age* 152:58-60 O 7 '43

ENGRAVINGS**Printing**

Check engraving art to cut costs; careful consideration of reproduction values when ordering. W. L. Benz. *Inland Ptr* 111:40-1 My '43

Proper scaling of copies essential. O. Barnhart. *Inland Ptr* 110:22-3 N '42

ENOLIZATION, See Isomerization**ENOLS**

Reaction between quinones and metallic enolates; dibromo-*p*-xyloquinone and sodium malonic ester. L. I. Smith and J. Nichols. *bibliog Am Chem Soc J* 65:1739-47 S '43

ENTHALPY, See Thermodynamics**ENTOMOLOGISTS***See also*

Doane, Rennie Wilbur

ENTROPY

Basic entropy problems; illustrative calculations for Otto, Diesel, and Carnot cycles. O. Adams. *Pet Eng* 14:136, 138 S '43

Differences in the vapor pressures and entropies of the liquid nitrogens. I. Kirshenbaum. *bibliog J Chem Phys* 10:717-22 D '42

Heat capacities and entropies of molybdenum and tungsten trioxides. H. Seltz, F. J. Dunkerley and B. J. DeWitt. *bibliog Am Chem Soc J* 65:600-2 Ap '43

ENTROPY—Continued

Heat capacity and entropy, heats of transition, fusion and vaporization and the vapor pressures of cyclopentane; evidence for a non-planar structure. J. G. Aston, H. L. Fink and S. C. Schumann. *Am Chem Soc J* 65:341-6 Mr '43

Thermal data; the heat capacity and entropy of isopentane; the absence of a reported anomaly. G. B. Guthrie, Jr. and H. M. Huffman. *Am Chem Soc J* 65:1139-43 Je '43

Use of entropy in practical Diesel engine applications. O. Adams. *Pet Eng* 14:43, 46, 48 Ag '43

See also

Thermodynamics

ENVELOPES

Salesmen's corner; printing salesmen and envelope houses should pull together. F. Rundell. *Inland Ptr* 111:27-8 Ag '43

War time government specifications for paper and envelopes. M. S. Kantrowitz and R. H. Simmons. *Paper Tr J* 116:36-8 Mr 4 '43; Same. *Paper Ind* 24:1296+ Mr '43

ENVIRONMENT

Influence of the environment on the expression of hereditary factors in relation to plant breeding. S. H. Yarnell. *Science* 96:505-8 D 4 '42

ENZYMES

Action of macerans enzyme on a component of corn starch. R. W. Kerr. *Am Chem Soc J* 64:3044-5 D '42

Classification of carbohydrases. W. W. Pigman. *bibliog J Research Nat Bur Stand* 30:257-65 Ap '43

Destruction of hypertensin and pepsitensin by an aminopeptidase obtained from yeast. R. Croxatto and H. Croxatto. *bibliog il Science* 96:519-20 D 4 '42

Determination of thiamine in bread by the thiochrome method; a comparison of phosphate-containing enzyme preparations. D. F. Clausen and R. E. Brown. *bibliog Ind & Eng Chem Anal* ed 15:100-1 F 15 '43

Digestion of living tissues by proteolytic enzymes. C. A. Dragstedt. *Science* 98:131-2 Ag 6 '43

Enzyme systems containing active sulfhydryl groups; role of glutathione. E. S. G. Barron and T. P. Singer. *Science* 97:356-8 Ap 16 '43

Enzymic degradation of cell wall substances. D. H. F. Clayson. *bibliog Chem & Ind* 61:516-18; 62:49-51, 298-300; Discussion. 300-1 D 19 '42, F 6, Ag 7 '43

Invertase activity in identical mixtures in the liquid and frozen state. Z. I. Kertesz. *bibliog Am Chem Soc J* 64:2577-8 N '42

Large-scale production of azotobacter. S. B. Lee and R. H. Burris. *bibliog il Ind & Eng Chem* 35:354-7 Mr '43

Occurrence of sucrose and inulin-hydrolyzing enzymes in commercial enzyme preparations. W. W. Pigman. *bibliog J Research Nat Bur Stand* 30:159-75 Mr '43

Significance of enzyme reaction to dehydration of vegetables; abstract. W. V. Cruess and M. A. Joslyn. *Food Ind* 15:120 F '43

Significance of the degradation of starch by macerans amylase. R. W. Kerr. *bibliog Am Chem Soc J* 65:188-93 F '43

Some enzymes present in highly purified invertase preparations; a contribution to the study of fructofuranosidases, galactosidases, glucosidases and mannosidases. M. Adams, N. K. Richtmyer and C. S. Hudson. *bibliog Am Chem Soc J* 65:1369-80 JI '43

See also

Amino acid oxidase

Amylases

Cholinesterase

Fermentation

Invertase

Lipoxidase

Maltase

Oxidases

Peroxidases

Phosphorylase

EOSIN

Giemsa stain of quite constant composition and performance, made in the laboratory from eosin and methylene blue. R. D. Lillie. *Pub Health Rep* 58:449-52 Mr 12 '43

Optical sensitizing of silver halides by dyes; the optical sensitizing properties of fluorescein dyes in relation to their spectral absorption and constitution. S. E. Sheppard, R. H. Lambert and R. D. Walker. *bibliog J Chem Phys* 11:263-75 Je '43

EPHEDRINE

Nethacetin in the management of primary dysmenorrhea. C. J. Fairro. *Ind Med* 12:201-2 Ap '43

EPICHLOROHYDRIN

Reaction of epichlorohydrin with the Grignard reagent; some derivatives of cyclopropanol. G. W. Stahl and D. L. Cottle. *Am Chem Soc J* 65:1782-3 S '43

EPIDEMIC encephalitis. See Encephalitis, Epidemic

EPIDEMICS

Paratyphoid fever; an epidemiological study; abstract. W. Savage. *Am Water Works Assn J* 35:631-2 My '43

See also

Encephalitis, Epidemic

Infectious diseases

Influenza

Malaria

Typhoid fever

EPIIDYMITIS

Industrial epididymitis and epididymo-orchitis. M. L. Amdur. *Ind Med* 12:371-3 Je '43

EPILEPTICS

Employment

Employment of epileptics. W. G. Lennox and S. Cobb. *bibliog Ind Med* 11:571-5 D '42

EPSOM salts. See Magnesium sulfate

EQUATION of state

Equations of state for natural and synthetic rubber-like materials; unaccelerated natural soft rubber. R. L. Anthony, E. H. Caston and E. Guth. *bibliog J Phys Chem* 46:326-40 O '42

See also

Virial coefficients

EQUATIONS

Fundamental equations of electron motion (dynamics of high speed particles). L. A. MacColl. *bibliog Bell System Tech J* 22:153-77 JI '43

Higher degree equations solved by recurrent methods. W. A. Douglas, 2d. *diag Product Eng* 14:451-2 JI '43; Discussion. E. A. Richardson. 14:672-3 O '43

Higher degree equations solved by trial and error. H. A. Bolz. *diag Product Eng* 14:217 Ap '43; Discussion. 14:384-5 Je '43

Practical solution for equations of higher powers. C. A. Didden. *Civil Eng* 13:327 JI '43

Slide rule applications to algebraic equations. A. R. Weber. *J Eng Educ* 33:775-80 Je '43

Use of mechanical synthesizer to solve trigonometric and certain types of transcendental equations, and for the double summations involved in Patterson contours. S. L. Brown and L. L. Wheeler. *bibliog il diags J Ap Phys* 14:30-6 Ja '43

See also

Difference equations

Differential equations

EQUATIONS, Simultaneous

Use of the mechanical multiharmonograph for graphing types of functions and for solution of pairs of non-linear simultaneous equations. S. L. Brown and L. L. Wheeler. *il diags R Sci Instr* 13:493-5 N '42

EQUILIBRIUM

See also

Chemical equilibrium

Phase rule and equilibrium

EQUIPMENT corporation of America

Business where buying is as much a job for advertising as is selling; Equipment corporation of America uses advertising to buy, rent, and sell used construction equipment. R. E. Appel. *il Ind Marketing* 28:28-30+ Ap '43

EQUIPMENT industries

Components coming up; what to do about scarce items is WPB's most urgent problem; production men meeting it. *il Fortune* 27:94-7+ My '43

Industry expands by solving its customers' problems. J. A. Murphy. *Adv & Sell* 36:50+ Ag '43

Making the parts to win; Wilson's emphasis on scheduling and early orders. *Business Week* p15-16 Ap 24 '43

EQUIPMENT industries—Continued

Marine activity during 1942, J. W. Belanger. *il* Marine Eng 48:166+ Ja '43
 Price deflators for consumer commodities and capital equipment, 1929-42, H. Shavell. *Survey of Cur Business* 23:13-21 My '43
 Price flexibility and the level of income, A. Bergson. *R Econ Stat* 25:2-5 F '43
 Trading Post for jobbers does three-way job for Imperial Brass, E. F. Todd. *il* Ind Marketing 27:32-3+ D '42

See also

Airplane accessories industry	Office equipment industry
Automobile accessories industry	Petroleum equipment industries
Construction equipment	Plumbing supplies industry
Industrial market	Railroad supplies industry
Machine tool industry	Tractor industry and trade
Machinery industry	

also Container corporation of America

Advertising

Advertising to customers, once well defined, now scattered by the war; teamed sponsorship radio plan, Minneapolis-Honeywell regulator company, C. B. Sweatt. *Ptr Ink* 202:56, 58+ Ja 1 '43
 Army likes "how-to" advertising, too; instructing service men in proper use of equipment and tools; R. G. LeTourneau, inc. G. C. McNutt. *Ptr Ink* 204:23+ Ag 27 '43
 Business where buying is as much a job for advertising as is selling; Equipment corporation of America uses advertising to buy, rent, and sell used construction equipment, R. E. Appel. *il* Ind Marketing 28:28-30+ Ap '43
 Help 'em proves profitable industrial theme, C. S. Wilkinson. *il* *Ptr Ink* 202:17-19 Mr 19 '43
 Link-Belt replaces big catalog with streamlined edition. *il* Ind Marketing 28:22-4 Ag '43
 Next job for industrial advertising, W. Chevalier. *Ptr Ink* 203:80+ Je 4 '43
 Portfolio copy varied by ingenious pocket device; Cuno engineering corp., Meriden, Conn. *Ptr Ink* 204:19 Ag 13 '43
 Weatherhead launches newspaper campaign to extend public recognition; human interest copy signed by president, G. P. Roberts. *il* Ind Marketing 28:74, 78 S '43

See also

Advertising, Industrial	Machinery industry—Advertising
-------------------------	--------------------------------

Directories

Buyers guide of refinery equipment. *Oil & Gas J* 41:E1-B91 Mr 25 '43
 Directory of equipment for handling parts and materials. *Aero Digest* 43:281, 283-4 Ag '43
 Equipment and container buying section; an alphabetical list of apparatus, containers, equipment, laboratory supplies and packaging and labeling machinery, with a buyer's guide of manufacturers. *Chem Ind* 51:591-700 pt 2 (Buyer's guidebook) O '42
 Equipment and container company directory; an alphabetical listing of equipment and container manufacturers and dealers. *Chem Ind* 51:585-9 pt 2 (Buyer's guidebook) O '42
 30th buyers reference number. *il* *diags Am Mach* 87:99-428 Ja 21 '43

Securities*See also*

Electric apparatus industry—Securities

Statistics

Manufacturers' shipments for selected industry groups, first quarter 1943; chart. *Survey of Cur Business* 23:2 My '43

EQUITABLE life assurance society of the United States

Parkinson center of April campaign; president recites achievements and aims of company. *Nat Underw (Life ed)* 47:1+ My 14 '43

ERGOSTATETRAENE-B

Formation of ergostatetraene-B during the acetylation of ergosterol. H. A. Stansbury, *Jr. Am Chem Soc J* 65:1243 Je '43

ERGOSTENYL acetate

Steroids with double bonds between quaternary carbon atoms; the oxidation of a-ergostenyl acetate. H. E. Stavely and G. N. Bollenback. *bibliog Am Chem Soc J* 65: 1285-9 JI '43

ERGOSTEROL

Formation of ergostatetraene-B during the acetylation of ergosterol. H. A. Stansbury, *Jr. Am Chem Soc J* 65:1243 Je '43
 Steroids with double bonds between quaternary carbon atoms; the structure of a-dihydroergosterol. H. E. Stavely and G. N. Bollenback. *bibliog Am Chem Soc J* 65: 1290-4 JI '43
 Therapeutic value of electrically activated ergosterol when administered intramuscularly. R. G. Snyder and others. *bibliog Ind Med* 12:663-8 O '43

ERIE railroad

Airing Erie's deal. *Business Week* p105-6 F 27 '43
 Authority to issue proposed bonds denied. *Comm & Fin Chr* 157:1080-1 Mr 22 '43
 Chesapeake and Ohio railway; position in Erie bond sale described. *Comm & Fin Chr* 157:862 Mr 8 '43
 Erie railroad exemplifies fundamental change in financial policies of railroads. *Comm & Fin Chr* 158:301 JI 22 '43
 \$14,000,000 bonds offered. *Comm & Fin Chr* 157:520 F 8 '43
 Hearing on \$14,000,000 bond issue. *Comm & Fin Chr* 157:864 Mr 8 '43
 ICC hearing on financing up to C. & O. *Comm & Fin Chr* 157:602 F 15 '43
 I.C.C. rejects Erie bond sale proposal. *Ry Age* 114:525+ Mr 13 '43
 Investment audit. P. R. Bretey. *il* *map Mag of Wall St* 72:29-32+ Ap 17 '43
 Lessons in Erie: ICC sidestepped a decision on competitive bidding. *Business Week* p102-3 Mr 27 '43
 President Woodruff defends bond sale as best for company. *Comm & Fin Chr* 157: 692 F 22 '43
 Private bond sale defended by Erie. *Ry Age* 114:478-9 Mr 6 '43
 Rumpus in Erie; Robert R. Young renews old battle with Wall Streeters over road's bonds. *Business Week* p101-2 F 13 '43
 Securities authorized. *Comm & Fin Chr* 157: 1424 Ap 19 '43
 \$10,000,000 serial notes offered; annual report. *Comm & Fin Chr* 157:1177-8 Mr 29 '43

EROSION

Flotation of peaty alluvial soils. S. C. Happ. *pl Am J Sci* 241:629-39 O '43
 Permeable dikes built of wire fencing to halt erosion by the Little Miami river. *il* *diags map Eng N* 131:674-5 N 4 '43
 Soil loss on Georgia farms; rainfall, runoff, and other factors are correlated at government experiment station. J. R. Carreker. *il* *Civil Eng* 12:670-2 D '42

See also

Coast changes	Sedimentation and
Landslides	deposition
Roads—Protection	

EROSION of metals*See also*

Hydraulic machinery
 —Cavitation

ERREN engine

Electrolytic hydrogen engine; its use in German submarines; abstract. *Chem Age (Lond)* 48:559 My 22 '43

ERRORS*See also*

English language—
 Errors

ERRORS, Employees'

What to teach new employees. *il* *Am Business* 12:14-15 D '42

ERRORS, Measurement of

Errors in card punching. W. E. Deming, B. J. Tepping and L. Geoffrey. *Am Stat Assn J* 37:525-36 D '42

Condensation of vapors; film coefficients for alcohols, esters, and ketones. D. F. Othmer and S. Berman. bibliog. il diagrs Ind & Eng Chem 35:1068-77 O '43

ESTERS—Continued

- Condensations; the acylation of the anions of certain esters with ethyl carbonate. C. R. Hauser, B. Abramovitch and J. T. Adams. *Am Chem Soc J* 64:2714-15 N '42
- Condensations; the alkylation of β -keto esters with alcohols and ethers in the presence of boron trifluoride. J. T. Adams, B. Abramovitch and C. R. Hauser. *ibid* *Am Chem Soc J* 65:552-4 Ap '43
- Electrostatic influence of substituents on reaction rates; saponification of ethyl benzoate, ethyl toluate, ethyl anisate, ethyl *p*-chlorobenzoate, and ethyl *p*-nitrobenzoate. D. Price and F. H. Westheimer. *J Chem Phys* 11:150-3 Mr '43
- Grignard reactions; the reactions of esters and acid chlorides with Grignard reagents. F. C. Whitmore and W. S. Forster. *ibid* *Am Chem Soc J* 64:2966-8 D '42
- Halogenation of certain esters in the biphenyl series; the chlorination of 4-phenylphenyl benzoate and 4-phenylphenyl benzenesulfonate. C. M. S. Savoy and J. L. Abernethy. *Am Chem Soc J* 64:2719-20 N '42
- Iodinated organic compounds as contrast media for radiographic diagnoses; ethyl esters of iodinated straight and branched chain phenyl fatty acids. J. T. Platt, W. H. Strain and S. L. Warren. *ibid* *Am Chem Soc J* 65:1273-6 JI '43
- Ketene acetals; the pyrolysis of ketene acetals and orthoesters. S. M. McElvain, H. I. Anthes and S. H. Shapiro. *ibid* *Am Chem Soc J* 64:2525-31 N '42
- Lignin esters of mono- and dibasic aliphatic acids. H. F. Lewis and others. *ibid* *Ind & Eng Chem* 35:1113-17 O '43
- Long wave-length spectra of saturated carboxylic acids, esters, and salts. H. L. McMurry. *ibid* *J Chem Phys* 10:655-60 N '42
- Mechanism of the reaction between hindered carbonyl compounds and the Grignard reagent. R. T. Arnold and R. W. Liggett. *ibid* *Am Chem Soc J* 64:2875-7 D '42
- Natural α -, β - and γ -tocopherols and certain esters of physiological interest. J. G. Baxter and others. *ibid* *pl Am Chem Soc J* 65:918-24 My '43
- New derivatives of lignin; esters of mono- and dibasic aliphatic acids, from Meadl prepared from soda black liquor. E. B. Brookbank and others. *Paper Tr J* 116:27-8 Ap '43; Same. *Pulp & Pa of Can* 44:805-6 O '43
- Petroleum acids; aliphatic acids from California petroleum. W. A. Quebedeaux and others. *ibid* *Am Chem Soc J* 65:767-70 My '43
- Petroleum acids; naphthenic acids from California petroleum. W. O. Ney and others. *ibid* *diag Am Chem Soc J* 65:770-7 My '43
- Preparation of aminobenzoic acid esters of substituted monoalkyl amino alcohols. W. F. Ringk and E. Epstein. *ibid* *Am Chem Soc J* 65:1222-6 Je '43
- Properties of lignin esters. J. J. McNair and E. C. Jahn. *ibid* *Paper Tr J* 117:29-33 Ag '43
- Rearrangement of allyl-type esters of β -keto acids. W. Kimel and A. C. Cope. *Am Chem Soc J* 65:1992-8 O '43
- Some esters of normal aliphatic alcohols and acids. J. H. Hoback, D. O. Parsons and J. F. Bartlett. *Am Chem Soc J* 65:1606-7 Aug '43
- Starch studies; possible industrial utilization of starch esters. J. W. Mullen, 2d and E. Pacsu. *ibid* *flow sheets II Ind & Eng Chem* 35:331-4 Mr '43
- Synthetic mydriatics. F. F. Blicke, C. E. Maxwell and H. M. Kaplan. *ibid* *Am Chem Soc J* 64:428-33; 65:1967-70 F '42, O '43
- Viscosities of polyester solutions; application of the melt viscosity-molecular weight relationship to solutions. P. J. Flory. *ibid* *J Phys Chem* 46:370-7 N '42

See also
Cellulose esters

Analysis

- Analysis of ethanol for minor amounts of esters and aldehydes. F. M. Biffen and F. D. Snell. *Ind & Eng Chem Anal ed* 15: 577 S 15 '43

Determination of aliphatic nitrate esters; colorimetric method. H. Yagoda. *ibid* *diag Ind & Eng Chem Anal ed* 15:27-9 Ja 15 '43

ESTIMATES

See also
Building—Estimates Printing, Practical—
Painting, Industrial Estimates
—Estimates

ESTROGENIC activity

- Cafesterol; supposed estrogenic activity of cafesterol. H. Hauptmann, J. Franca and L. Bruck-Lacerda. *ibid* *Am Chem Soc J* 65:993-4 My '43
- Hormone profits; pregnant mares yield estrogenic hormone. *Business Week* p70-1 S 11 '43
- Perfusion of rat livers with estrogen in vitro. J. Schiller and G. Pincus. *ibid* *Science* 98:410-12 N 5 '43
- Synthetic estrogenic compounds; monosubstituted derivatives of 1,3-di-(*p*-hydroxyphenyl)-propane. A. H. Stuart and R. C. Tallman. *ibid* *Am Chem Soc J* 65:1579-81 Ag '43

See also
Diethylstilbestrol

ETCHING (metals)

- Etching characteristics of constituents in aluminum alloys; tabulation. *Metal Prog* 44:712 O '43
- Microstructure of lead-bearing steels; etching method. A. von Vegesack. *Engineering* 155:388 My 14 '43
- New method of etching on metals developed by Deloro smelting and refining co. *diag Engineer* 175:217 Mr 12 '43; *Chem Age (Lond)* 48:298 Mr 13 '43; *Electrician* 130:294-5 Mr 19 '43

ETCHING, Electrolytic

- New metal etching method. *diag Iron Age* 152:92 Ag 12 '43

ETHANE

- Dissociation of hexaarylethanes; equilibria involving mixed ethanes. C. M. Himel and M. B. Mueller. *Am Chem Soc J* 65:1654-5 Ag '43
- Empirical equation for thermodynamic properties of light hydrocarbons and their mixtures; mixtures of methane, ethane, propane, and *n*-butane. M. Benedict, G. B. Webb and L. C. Rubin. *ibid* *J Chem Phys* 10:747-58 D '42
- Heat capacities at higher temperatures of ethane and propane. B. P. Dailey and W. A. Felsing. *ibid* *Am Chem Soc J* 65:42-4 Ja '43
- Phase equilibria in hydrocarbon systems; composition of dew-point gas in ethane-water system. H. H. Reamer and others. *ibid* *Ind & Eng Chem* 35:790-3 JI '43
- Phase equilibria in hydrocarbon systems; heat of solution of ethane and propane. R. A. Budenholzer, E. H. Sage and W. N. Lacey. *ibid* *diag Ind & Eng Chem* 35:1214-20 N '43

ETHANOL. See Alcohol

ETHANOLAMINE

- Determination of fumigants; determination of chlorohydrocarbons in air by reaction in monoethanolamine. F. P. W. Winteringham. *diags Soc Chem Ind J* 61:186-7 D '42
- Raman spectra of amino acids and related compounds; sarcosine, ethanolamine, choline, betaine and betaine derivatives. J. T. Edsall. *ibid* *Am Chem Soc J* 65:1767-70 S '43

ETHANOLYSIS. See Alcoholysis

ETHENE. See Ethylene

ETHER (anesthetic). See Ethyl ether

ETHERS

- Acetylenic ethers; halogen derivatives of phenoxycetylene. T. L. Jacobs and W. J. Whitaker. *ibid* *Am Chem Soc J* 64:2635-8 N '42
- Cinchona alkaloids in pneumonia; some ethers of apocrepine. R. S. Tipson, M. A. Clapp and L. H. Cretcher. *ibid* *Am Chem Soc J* 65:1092-4 Je '43
- Condensations; the alkylation of β -keto esters with alcohols and ethers in the presence of boron trifluoride. J. T. Adams, B. Abramovitch and C. R. Hauser. *ibid* *Am Chem Soc J* 65:552-4 Ap '43

ETHERS—Continued

- Effects of repeated exposures of rats to vapors of monoalkyl ethylene glycol ethers. H. W. Werner and others. *bibliog J Ind Hygiene* 25:374-9 O '43
- Halogeneration of phenolic ethers and anilides; Arrhenius activation energies for di- and poly-substituted aromatic ethers. B. Jones. *Chem Soc J* p676-8 N '42
- Keto ethers; 1-methoxyethyl alkyl ketones. W. P. Wallace and H. R. Henze. *bibliog Am Chem Soc J* 64:2882 D '42
- Rearrangement of phenyl allyl ethers; ethyl *p*-(γ,γ -dimethylallyloxy)-benzoate. W. M. Lauer and O. Moe. *bibliog Am Chem Soc J* 65:289-93 F '43
- Rearrangement of phenyl allyl ethers; the isomeric ethyl *p*-(α - and γ -methylallyloxy)-benzoates. W. M. Lauer and P. A. Sanders. *Am Chem Soc J* 65:198-201 F '43
- Studies in stereochemistry; steric strains as a factor in the relative stability of some etherates of boron fluoride. H. C. Brown and R. M. Adams. *bibliog diag Am Chem Soc J* 64:2557-63 N '42
- Studies on lignin and related compounds; synthesis and properties of 1-ethoxy-1-(4-hydroxy-3-methoxyphenyl)-2-propanone, 3-ethoxy-1-(4-hydroxy-3-methoxyphenyl)-2-propanone and their methyl ethers. M. Kulka and H. Hibbert. *bibliog Am Chem Soc J* 65:1185-7 Je '43

ETHICS

- Biologist looks at man. J. Huxley. *il Fortune* 26:138-41+ D '42
- Ethical standards; how best developed? A. C. Ingersoll. *Civil Eng* 13:125-6 Mr '43
- Where angels fear to tread: a contribution from general sociology to human ethics. W. C. Allee. *bibliog Science* 97:517-25 Je 11 '43
- See also*
- | | |
|----------------------|--------------------|
| Advertising ethics | Engineering ethics |
| Architectural ethics | Responsibility |
| Business ethics | Social ethics |

ETHNOLOGICAL society, American. *See American ethnological society*

ETHNOLOGY

- See also*
- Anthropology
- Skull

ETHNOPSYCHOLOGY

Recognition of cultural diversities in the post-war world. R. Benedict. *Ann Am Acad* 228: 101-7 Jl '43

ETHOXY group

Quantitative determination of methoxyl and ethoxyl groups. L. M. Cooke and H. Hibbert. *bibliog Ind & Eng Chem Anal* ed 15:24-5 Ja 15 '43

ETHOXYL group. *See Ethoxy group*

ETHOXYPROPIONITRILE

Tertiary alkyl primary amines, RR'R''CNH₂. E. H. Henze and T. R. Thompson. *bibliog Am Chem Soc J* 65:1422-5 Jl '43

ETHYL (free radical)

Ionization and dissociation by electron impact; the methyl and ethyl radicals. J. A. Hipple and D. P. Stevenson. *bibliog diag Phys R* 63:121-6 F 1 '43

ETHYL acetate

Condensation of acyloins with ethyl acetate. R. B. Woodward and E. R. Blout. *bibliog Am Chem Soc J* 65:562-5 Ap '43

ETHYL acetylpropionate

Condensation of ethyl α -acetylpropionate with ethyl chlorofumarate. R. B. Woodward and W. A. Reed. *bibliog Am Chem Soc J* 65:1569-72 Ag '43

ETHYL alcohol. *See Alcohol*

ETHYL benzene

Solvent properties of C₈ aromatic hydrocarbons. P. D. Hammond and E. H. McArdle. *bibliog Ind & Eng Chem* 35:809-10 Jl '43

ETHYL butyrate

Acylation of acetonitrile with ethyl *n*-butyrate and the alcoholysis of the resulting ketonitrile to ethyl *n*-butyrylacetate. B. Abramovitch and C. R. Hauser. *Am Chem Soc J* 64:2720-1 N '42

ETHYL carbonate. *See Diethyl carbonate*

ETHYL cellulose

- Advances in plastics during 1942; ethyl cellulose; with patent list. A. E. Young. *il Mod Plastics* 20:95-6 Ja '43
- Birth of an army canteen. *il Mod Plastics* 20:71-3 Mr '43
- Ethyl cellulose production doubled to meet war needs. *il Manuf Rec* 112:69+ S '43
- Importance of ethyl cellulose. M. Demarest. W. P. Moeller and B. E. Cash. *il Mod Plastics* 21:101-3, 162+ N '43
- Plastic coatings in the post-war era. J. B. Cleaveland. *il Textile World* 93:60-1 My '43
- Properties and characteristics of ethyl cellulose. W. Koch. *il Product Eng* 14:506-9 Ag '43

ETHYL chloride

Heat of adsorption of ethyl chloride and of sulphur dioxide on sugar charcoal. S. J. Gregg. *Chem Soc J* p361-5 Ag '43

ETHYL chlorofumarate

Condensation of ethyl α -acetylpropionate with ethyl chlorofumarate. R. B. Woodward and W. A. Reed. *bibliog Am Chem Soc J* 65: 1569-72 Ag '43

ETHYLEPHEDRINE hydrochloride

Nethacetin in the management of primary dysmenorrhea. C. J. Fair. *Ind Med* 12: 201-2 Ap '43

ETHYL ether

- Donor-acceptor bonding; etherates of boron trifluoride. A. W. Laubengayer and C. R. Finlay. *bibliog Am Chem Soc J* 65:884-9 My '43
- Ether and metabolism in the cerebral cortex. F. N. Craig. *bibliog Science* 98:68-9 Jl 16 '43
- Film formation by pure liquids. C. W. Foulk and J. E. Barkley. *bibliog diag Ind & Eng Chem* 35:1013-16 S '43
- Identification of organic acids by partition between ethyl ether and water. O. C. Dermer and V. H. Dermer. *bibliog Am Chem Soc J* 65:1653-4 Ag '43

ETHYL ionylidene acetate

Studies on ionone; cleavage of ethyl ionylidene acetate. H. Sobotka, E. Bloch and D. Glick. *Am Chem Soc J* 65:1961-3 O '43

ETHYL succinate

Condensation of some aromatic ketones with ethyl succinate. C. L. Hewett. *Chem Soc J* p585-7 O '42

ETHYL vanillin**Analysis**

Detecting adulteration of ethylvanillin with vanillin. H. Nechamkin. *Ind & Eng Chem Anal* ed 15:268-9 Ap 15 '43

ETHYLAL. *See Acetaldehyde*

ETHYLATION

Catalytic ethylation of phenol; abstract. Z. P. Alexandrova. *Chem & Met Eng* 50:227-8 My '43

ETHYLENE

- Acetylene polymer produced in electric discharge. G. Glocker and C. A. Hollingsworth. *diag Electrochem Soc Trans* 84(preprint 16):149-58 O '43
- Cadmium (²¹⁰Pb) photosensitized reactions of the lower olefins. D. J. LeRoy and E. W. R. Steacie. *bibliog J Chem Phys* 10:683-5 N '42
- Catalytic alkylation of benzene with ethylene. W. A. Pardee and B. F. Dodge. *bibliog flow diag Ind & Eng Chem* 35:273-8 Mr '43; Same. *il Nat Pet N* 35 pt 2:R180-4 Ap 7 '43
- Cleavage of the ethylene linkage by the action of thionyl chloride. A. Schöenberg and W. Asker. *Chem Soc J* p725 N '42
- Decomposition of ethylene and carbon monoxide on metallic catalysts. A. R. McKinney. *J Phys Chem* 47:152-63 *bibliog*(p163) F '43
- Enediols; vinyls of ethylene and acetylene glycols. R. C. Fuson, D. J. Evers and A. I. Rachlin. *bibliog Am Chem Soc J* 64:2891-3 D '42
- Ethylene, a major raw stock for chemicals. W. L. Nelson. *Oil & Gas J* 41:56 N 19 '42
- Industrial applications of chemicals and related materials. *Oil Paint & Drug Rep* 143: 38 Mr 22; 49 Ap 12 '43

ETHYLENE—Continued

Mercury photosensitized reactions of ethylene at high temperatures. D. J. LeRoy and E. W. R. Steacie. *bibliog* J Chem Phys 10: 676-82 N '42

Reaction between ethylene derivatives and the halogens. S. V. Anantkrishnan and R. Venkataraman. *bibliog*(122 references) Chem R 33:27-55 Ag '43

Structure and ultraviolet spectra of ethylene, butadiene, and their alkyl derivatives. R. S. Mulliken. *bibliog* Rs Mod Phys 14:265-74 Ap-Jl '42

Styrene for rubber made from benzene, alcohol or ethylene. *il* Oil & Gas J 41:43 N 26 '42

Surface area of oxide coated cathodes by adsorption of gas at low pressures. L. A. Wooten and C. Brown. *diag* Am Chem Soc J 65:113-18 Ja '43

Ultraviolet absorption spectra of arylethyl-enes. R. N. Jones. *Am Chem Soc J* 65:1818-24 O '43

Analysis

Analysis of ethylene in presence of butane. J. J. Eberl. *Ind & Eng Chem Anal ed* 14: 853 N 15 '42

ETHYLENE chloride

Chlorinated solvents in common wartime use. D. H. Byers. *bibliog* Ind Med 12:440-3 Jl '43

Equilibrium still for miscible liquids; data on ethylene dichloride-toluene and ethanol-water. C. A. Jones, E. M. Schoenborn and A. P. Colburn. *bibliog* *il* *diag* Ind & Eng Chem 35:666-72 Je '43

Analysis

Determination of fumigants; determination of ethylene dichloride and dichloroethylene; analysis of mixtures. F. P. W. Winteringham. *Soc Chem Ind J* 61:187-90 D '42

ETHYLENE chlorohydrin

Binary systems involving ethylene chlorohydrin; vapor-liquid equilibria. H. B. Snyder and E. C. Gilbert. *bibliog* Ind & Eng Chem 34:1519-21 D '42

ETHYLENE compounds

Derivatives of pyridine acids; N-(2-acylaminoethyl)-nicotinamides. E. M. Hodnett and V. E. Stewart. *bibliog* Am Chem Soc J 65:254-5 F '43

ETHYLENE dichloride. See Ethylene chloride**ETHYLENE glycol.** See Glycol**ETHYLENE oxide**

Heats of combustion; the heats of combustion of ethyl methyl ketone and ethylene oxide. R. S. Crog and H. Hunt. *J Phys Chem* 46:1162-3 D '42

ETHYLENE thiourea

Complex formations between iodine and μ -mercapto-dihydroglyoxalines. T. B. Johnson and C. O. Edens. *Am Chem Soc J* 64:2706-8 N '42

ETS, Harold Norris, 1898-1943

Sketch. H. A. McGuigan. *Science* 98:191 Ag 27 '43

EULER'S number. See Hydraulics—Terminology**EUPALINOS**

Eupalinos, first civil engineer; builder of water conduits in ancient Greece. F. R. Bichowsky. *Comp Air M* 48:7086-90 Jl '43

EUREKA-MARYLAND assurance corporation

Control changes. *Nat Underw* 47:26 Ag 26 '43; Same. *Nat Underw* (Life ed) 47:1 Ag 27 '43

EUROPE

East central Europe in postwar organization. O. Halecki. *Ann Am Acad* 228:52-9 Jl '43

Fortress Europe. *map* Business Week p16-17 Ag 21 '43

Northern European countries after this war. E. Hambro. *Ann Am Acad* 228:60-4 Jl '43

Relations with Europe; three or four Europeans. *Fortune* 27:supp 5-8 Ap '43

Commerce

Foreign trade on the Continent. *Economist* 145:14-15 Jl 3 '43

German occupation

German capital in Europe; more facts about Nazi economic penetration. *Chem Age* (Lond) 48:130 Ja 23 '43

Germany and European industry; Axis establishing controlling interest. *Electrician* 130: 29-30 Ja 8 '43

Inside the fortress. *Economist* 145:163-4 Ag 7 '43

Invasion to nip civilians; allied armies will have to replace rail, power, farm, and many other types of equipment. *Business Week* p62+ Je 12 '43

Nazi integration; Herrenvolk's economic puzzles. *maps* Business Week p68+ F 20 '43

Nazis' unparalleled skill in bleeding conquered countries white. F. Munk. *For Comm W* 12:13 Ag 14 '43

See also subdivision German occupation under names of countries, e.g. Belgium; Czechoslovakia; Denmark; France; Norway

Industries and resources

Germany and European industry; Axis establishing controlling interest. *Electrician* 130:29-30 Ja 8 '43

Politics and government

Common united nations policy—now! F. Czernin. *Ann Am Acad* 228:11-15 Jl '43

EUROPEAN war, 1914-1918**Claims**

American property claims against Germany and the coming peace treaty. H. G. Aron and F. W. Eisner. *Bankers M* 146:471-94 Je '43

United States

Signal corps in World war I. M. B. Herr. *il* Radio N 28:34-7+ N '42

EUROPEAN war, 1939-. See World war, 1939-

EVANS, Cadwallader, Jr. 1880-Chairman, Coal division, A.I.M.E. *por* Min & Met 24:395 S '43

EVANS, George Edward, 1876-Portrait. *Arch Forum* 79:110 S '43

EVAPORATED films. See Films, Metallic**EVAPORATION**

Determining the coefficient of evaporation of humidifiers. E. Ledoux. *diags* Chem & Met Eng 50:124-6 Je '43

Factors of evaporation calculated from Keenan and Keyes tables; chart. *Power Pl Eng* 47:108 N '43

Multiple-effect evaporation. *Chem Age* (Lond) 48:639-40 Je 19 '43

Rates of evaporation of water through compressed monolayers on water. I. Langmuir and V. J. Schaefer. *bibliog* *il* Franklin Inst J 235:119-62 F '43

Vacuum evaporated films on glass; their theory, production and applications. S. Bateson. *il* Can Chem & Process Ind 27: 438-40 Ag '43

See also

Crystallization

Dehydration

Distillation

Drying

Drying apparatus

Evaporators

Sublimation

EVAPORATORS

How evaporator hookup affects heat rate. M. G. J. Boissevain and A. H. Shapiro. *diags* Power 87:82-3 F '43

Long life for evaporators and condensers in air-conditioned cars. *Ry Mech Eng* 117: 189-90 Ap '43

Performance of evaporators. J. P. Rubush and G. E. Seavoy. *il* *diags* Paper Tr J 116: 25-30 Je 17 '43; Same cond. *Paper Ind* 25: 544, 546-8 Ag '43

Recent developments in refrigeration. D. Gordon. *il* *Engineer* 174:414-15 N 20 '42

EVENING and continuation schools

Evening training classes for refrigeration service mechanics; Washington vocational high school, Pittsburgh. K. W. Krummell. *Refrig Eng* 45:171+ Mr '43

EVERGREEN mines company

Growth of an independent iron ore operator. *flow sheets* *il* Eng & Min J 144:74-7 Jl '43

EVIDENCE (law)

Canned testimony speeds case. O. Ely. Pub
Util 32:235 Ag 19 '43

See also

Lie detectors
Photography, Legal

EXAMINATIONS

Examinations. R. H. Frazier. J Eng Educ
33:639-42 Ap '43

See also

Chemistry—Exami-
nations

EXAMINATIONS, Physical. See Physical ex-
aminations

EXCAVATING machinery

Electricity applied to single-bucket exca-
vators. P. H. R. Durand. il diags plans
Inst E E J 89 pt 2:585-604 D '42; Excerpts.
Mech Handling 29:110-12 Je '42; Abstract.
Electrician 128:507-8 My 22 '42; Discussion.
Inst E E J 89 pt 2:604-9 D '42

Fox strip mine gets high tonnage with mod-
ern units. il Coal Age 48:73-5 Je '43

Machinery for land drainage. Engineering
155:356-7 Ap 30 '43

Marion 25-cub. yd. walking dragline excava-
tor. il diags Engineering 156:166-7 Ag 27
'43

Mud area stripped by installing Chambers
Bridge at Enos. G. H. Utterback. il diags
Coal Age 48:62-3 S '43

Positive jacket-water temperature control by
variable-pitch fans; road and dirt-moving
machinery. K. W. Anderson. il Diesel Power
21:944-6 O '43

Stripping with three- to nine-yard drag lines.
H. Eiteljorg. il Min Cong J 29:46-7 Jl '43

Walking dragline reclaims coal left in Civil
War work; St Clair coal co. il Coal Age 48:
64-6 Mr '43

See also

Cable laying	Shoveling machines
Dredges	Subways—Construc- tion
Electric shovels	Trenching machinery
Mining machinery	
Rock drills	

Lubrication

Lubrication of excavators. il Pub Works 74:
23, 30 Ag '43

EXCAVATION

Airport drainage on a rocky site. il plan diag
Eng N 130:28-30 Ja 14 '43

Deep footings built without forms; factory
for the Westinghouse electric & manufac-
turing co. H. A. Saurbrey. il Eng N 131:
142-3 Jl 15 '43

Removing large overburden tonnage; lime-
stone bed in Hillsville district, Ohio. il Rock
Prod 46:51-2+ Ap '43

Youghiogheny dam nears completion. il diags
Explosives Eng 21:43-7 Mr '43

See also

Aqueducts	Excavating machin- ery
Blasting	Shoveling machines
Dredging	Subways—Construc- tion
Drilling and boring (earth and rocks)	Tunnels and tunnel- ing
Earthwork	

Safety measures

Hazards in trench excavation. Pub Works
74:38-9 Ag '43

EXCAVATION, Subaqueous

Emergency scraper-hoist operation; clears
stream bed and prevents flood. il Comp Air
M 48:7068 Je '43

See also

Blasting, Subaqueous Petroleum—Well
drilling, Sub-
aqueous

EX-CELL-O corporation

War stocks with good peace prospects. Mag
of Wall St 72:420 Jl 24 '43

EXCESS profits of utilities. See Public utili-
ties—Finance

EXCESS profits tax

Case of 722; recovery provision. Business
Week p22+ Jl 31 '43

Corporation excess profits tax at 90 percent.
Survey of Cur Business 22:5-6 N '42

Current problems in income tax procedure;
excess profits tax relief provisions. T. G.
Thurston. J Account 75:233-41 Mr '43

Effect of excess profits tax law on current
reorganizations. M. Austin. J Account 75:
106-23 F '43

Effects of the 1942 federal tax law on cor-
porations. J. K. Lasser. il Dun's R 51:11-17
F '43

Fair administration of relief provisions of
excess-profits tax urged. R. E. Paul. Comm
& Fin Chr 157:1886 My 20 '43

General relief; constructive average base
period net income. J Account 75:280 Mr
'43

General relief provisions of the excess profits
tax. T. M. Wilkins. J Account 75:306-
29 Ap '43

Many corporate tax cuts likely; Section 722
provides relief for companies whose burden
is abnormal. J. P. Reeves. Barron's 23:
3+ Ap 5 '43

Many railroads liable for excess profits taxes.
A. Jansen. Barron's 23:9 S 13 '43

Postwar taxes, will excess profits tax be
revealed? effect on utilities. O. Ely. Pub
Util 32:494-6 O 14 '43

Yohn formula. J. K. Lasser. J Account 76:
66 Jl '43

Accounting

Accounting for post-war refund of excess
profits tax. H. B. Heiby. Am Gas Assn
Mo 25:213-14+ My '43

Accounting procedures relating to war facili-
ties covered by necessity certificates. R. B.
Carpenter. Edison Elec Inst Bul 11:141-6
My '43

Capital gain and loss treatment on excess
profits tax return. J. K. Lasser. J Account
76:70-1 Jl '43

Computation of earnings and profits included
in invested capital. V. H. Maloney. J Ac-
count 75:414-25 My '43

Excess profits tax relief claims under section
722. P. D. Seghers. J Account 76:96-112 Ag
'43

Postwar refund of excess profits tax. J Ac-
count 75:27-9 Ja '43

Postwar refund of excess profits tax. J Ac-
count 75:185-6 F '43

Where to look for 722 information; abstract.
J. A. Phillips. J Account 76:69-70 Jl '43

Canada

Canadian securities; excess profits tax. B.
Williams. Comm & Fin Chr 157:1961 My
27 '43

Great Britain

EPT and prepayments. Economist 145:22 Jl 3
'43

EXCHANGE

See also

Balance of payments Foreign exchange
Commerce Money

EXCHANGE, Foreign. See Foreign exchange

EXCHANGE stabilization fund. See Foreign
exchange

EXCHANGES

Caught in butter; traders failed to heed
storm signals. Business Week p89-90 Ja 9
'43

Commodity markets; volume of trading in
grain futures, 1938-1941. Survey of Cur
Business 1942 Sup p81 [supplemented in
monthly numbers]

See also

Stock exchange
also names of exchanges, e.g. New York
cotton exchange; New York curb exchange

EXCITATION equipment

Arc-furnace control by Regulex exciters. T.
B. Montgomery and T. H. Bloodworth. il
diags Elec Eng 62:Trans 650-4 O '43

Automatic change-over for exciter drive. il
Elec W 119:624 F 20 '43

Battery stabilizer excitation system. C. O.
von Dannenberg. Elec W 120:1212 O 2 '43

Battery used in starting exciters. H. W.
Yeaton. diags Elec W 120:323 Jl 24 '43

Bearings pitted by ground alarm surges. T.
M. Blakeslee. diags Elec W 119:81-2 Ja 9
'43

EXCITATION equipment—Continued

Electronic exciter for a-c generators; combination voltage regulator and exciter. A. Benson and K. Heidbrak. *diags Electronics* 16:112-14+ Ag '43

Forced air cooling, large turbo-exciter. E. H. Myers. *diag Elec W* 113:1972-3 D 12 '42

Matching synchronous motor excitation to a fluctuating load. W. K. Boice, B. H. Caldwell and M. N. Halberg. *il diag Gen Elec R* 46:283-7 My '43

Synchronous motors with controlled excitation for suddenly applied loads. W. K. Boice, B. H. Caldwell and M. N. Halberg. *bibliog il diags Elec Eng* 62:Trans 113-19 Mr '43

EXECUTIVES

Advertising will need youth's counsel. B. Smith. *2d. Ptr Ink* 205:112 N 5 '43

Does age add to executive's stature? M. L. Heacox. *Ptr Ink* 205:112 O 8 '43

Employee specifications, how to develop them; standards for corporation executives. E. H. Shanks. *il Am Business* 13:24-6 My '43

Executive responsibility, war and post-war. G. L. Wood. *Personnel J* 21:302-13 Mr '43

Exit the big shot. J. Truscott. *Adv & Sell* 36:92+ Je '43

Fortune management poll; executives consider postwar prospects. *Fortune* 28:12, 18+ O '43; *Abstract. Management R* 32:442-4 D '43

Fortune management poll; manpower shortage, its causes and effects, intensity and distribution, cures and palliatives. *Fortune* 27:138+ F '43

Know any presidents who came up through sales? *Ptr Ink* 202:39 F 12; 76-7 Mr 5 '43

Leaders of American industry. *Mag of Wall St* 71:345+, 485 Ja 9, F 6 '43

Morale function of the executive. L. H. Kurtz. *J Eng Educ* 33:260-79 N '42

Our overworked executives. *Management R* 32:122-4 Ap '43

What did we do last year? executive. E. Whitmore. *Am Business* 13:16-17 Jl '43

See also

Bonus system (for executives)	Factory management
Business conferences	Foremen
Business management	Industrial management
Corporations—Directors	Office management
Credit managers	Organization in industry
Efficiency, Industrial	Sales managers
Employment management	Supervisory workers

Rating

Rating plan helps to make better supervisors. D. D. Decker. *Factory Management* 101:108-10 Je '43

Salaries

Just gauge for executive compensation. J. C. Baker. *Harvard Business R* 22 no 1:75-87 [O] '43

Relation of officers' remuneration to company dividends. *Mag of Wall St* 71:701+ Ap 3 '43

Training

Shou'd each company grow and train its own president? policies of American felt company's president. J. A. Murphy. *Sales Management* 51:18-21 N 15 '42

See also

Employment managers—Training	Supervisory workers
Foremen—Training	—Training

EXECUTORS and administrators

Effect upon duties of fiduciaries in administering estates where beneficiaries are in military service. F. W. Hill, jr. *Trusts & Estates* 77:266-8 S '43

Liability of co-executor and surety for embezzlement by executor. *Trusts & Estates* 76:479 My '43

Perfecting payment procedure. J. J. Curtin. *Trusts & Estates* 76:59-65 Ja '43

Substitute fiduciaries for fiduciaries in war service. F. D. Stone. *Trusts & Estates* 77:269-70 S '43

Suspension of soldier from office of executor. *Trusts & Estates* 76:206-7 F '43

See also

Probate law
Trusts and trustees
Wills.

EXHAUST steam

Heating exhaust steam. W. F. Schaphorst. *Am Dyestuff Rep* 32:148 Mr 29 '43; Same. *Am Gas J* 159:14 Jl '43

How should this exhaust steam water heater be piped? *diags Heating-Piping* 15:76-7 F '43; *Discussion*. 15:185-8 Ap '43

Power needs met by equipment for using exhaust steam; Dering coal co. *il diags Coal Age* 48:63-4 Jl '43

Simple pipe arrangement for utilizing exhaust steam. W. F. Schaphorst. *diag Am Gas J* 159:14 Jl '43

Turbines lend versatility to auxiliary drive. F. K. Fischer. *diags Power* 87:467-9 Jl '43

Utilizing exhaust steam at Cast armor plant; plant supplies steam for compressed air requirements, low-pressure process and heating. F. Preuthun and P. N. Choporis. *il diag Power Pl Eng* 47:62-5 N '43

EXHAUST systems

Air exhaust of welding fumes aids war production. *il Safety Eng* 85:19 Mr '43

Centerline velocity characteristics of round openings under suction. L. Silverman. *bibliog il J Ind Hygiene* 24:259-66 N '42

Conserving heat in exhaust system; cutting quartz rock, and returning cleaned air without wasting heat. *diag Sheet Metal Worker* 34:23+ Ap '43

Control that dust. H. M. Nichols. *il Safety Eng* 86:13-14+ Ag '43

Disappearing dust; pattern shop and foundry of R. K. LeBlond machine tool company. *il Safety Eng* 86:24-5 O '43

Disk fans solve troublesome ventilating problems in a chemical plant. W. J. Shore. *il diag Chem & Met Eng* 50:116 Mr '43

Exhaust appliances. *Chem Age (Lond)* 49:59 Jl 17 '43

Exhaust from picker machines. R. L. Grayford. *diags Sheet Metal Worker* 34:27-9 S '43

Finishing warplanes; Glenn L. Martin company. F. V. Faulhaber. *il Metal Finishing* 40:681-4, 686 D '42

Handling fumes from an acid tank. R. L. Grayford. *diags Sheet Metal Worker* 34:22-3 Mr '43

How to design exhaust hoods. J. M. Dalla Valle. *diags Heat & Ven* 40:40-2 Mr; 44-52 Ap; 83-6 My; 91-5 Je; 65-9 Jl; 63-6 Ag; 79-82 S; 71-4 O; 80-3 N '43 (to be cont)

How to meet war time restrictions in heating and air conditioning design; ventilation. T. W. Reynolds. *Heat & Ven* 40:60H-60J F '43

Industrial ventilation. *Nat Safety N* 47:91-2+ Mr '43

Keeping dust under control. J. M. Kane. *il diags Metal Finishing* 41:566-9 S '43; Same, without diags. *Nat Safety N* 47:18-19+ Ja '43; Same cond. *Sheet Metal Worker* 34:32-4 Ag '43

Metal fume hazards. J. W. Fehnel. *il Safety Eng* 86:45-6, 48-9 Ag '43

New methods in exhaust ventilation; abstract. T. F. Hatch and R. H. Walpole, jr. *Heating-Piping* 15:191+ Ja '43; Same. *Ind Med* 12:19-20 Ja '43

New York daily news; rotogravure printing plant recovers ink-solvent, employing activated carbon adsorption method. T. F. Moffett. *flow diag il Heat & Ven* 40:33-6 Ap '43

Spray painting without booths; International Diesel electric co. *il diags Sheet Metal Worker* 34:21-2 Je '43

Symington-Gould corp. installs simple but effective system in tank castings foundry. A. S. Crockier. *il plans Heat & Ven* 40:84-7 Je '43

EXHAUST systems—Continued

- Two hooding experiences. P. R. Jordan. *diags* Sheet Metal Worker 34:27+ My '43
- Velocity characteristics of narrow exhaust slots. L. Silverman. *bibliog* *diags* J Ind Hygiene 24:267-76 N '42
- Ventilation for ships under construction; exhaust of fumes, compartment ventilation, and ventilating closed spaces during painting. H. E. Packard. *il diag* Heating-Piping 14:711-14 D '42
- Ventilation for steel mill buildings. G. E. Wallin. *il diags* Steel 112:102+ My 10; 120-2+ My 17; 91-2, 94 My 24 '43
- War engineering; heating, ventilation, and air conditioning of war plants. S. R. Lewis. *il Heating-Piping* 15:5-9 Ja '43
- Willow Run, its heating and plumbing. *il Dom Eng* 162:55-7 JI '43
- Wright aeronautical corporation; Cyclone engine plant in New Jersey equipped with blackout ventilation. R. N. Hosey. *il Heat & Ven* 40:36-40 Ja '43

See also

- Dust removal
Tanks—Ventilation

EXHIBITIONS

- Barcelona's international sample fair reported successful. *For Comm* W 12:15 Ag 14 '43
- 1943 expositions, Mexico. *For Comm* W 11:40 Ap 17 '43
- Noteworthy exposition planned in Brazil. *For Comm* W 12:17 Ag 7 '43
- Swiss industries fair at Basel in May 1943. *For Comm* W 10:24 Ja 23 '43

See also

- Chemical industries
—Exhibitions
—also National exposition of power and mechanical engineering

EXHIBITS

- Display screens. *il diags* Arch Forum 78:54-5 F '43
- How to plan a trade exhibit. G. B. Cloran. *il Ptr Ink* 203:36+ My 28 '43

See also

- Building materials—
Exhibits

EXHIBITS, Traveling

- Canadian advertisers discourage current demand by showing what peace dollars will buy. L. L. Knott. *il Ptr Ink* 205:20-1 N 12 '43
- Canning caravan; an adventure in war-time education through showmanship; Binghamton (N.Y.) gas works. R. E. Williams. *il Gas Age* 92:17-18 JI 29 '43
- How the children's wear industry is pooling showings for dealers. J. C. Cumming. *Sales Management* 52:39 Je 15 '43
- Production spur; navy's road shows of battle-scarred fighters and materiel. *il Business Week* p92+ S 11 '43
- Treasury, SEP and 40 department stores collaborate in bond show; traveling show will tour country. *Ptr Ink* 203:35-6 Ap 16 '43
- EXITS**
- Building exits code protects against loss of life in fire; Coconut Grove fire. R. S. Moulton. *il Ind Stand* 13:309-10 D '42
- EXPANDED** clay products. *See* Clay products, Expanded
- EXPANDED** joints. *See* Boiler tubes—Expanded joints
- EXPANDED** metal. *See* Sheet metal, Expanded
- EXPANSION** (heat)
- Linear expansion of pipe; reference data. *Heat & Ven* 40:84a-84b Ja '43
- Premelting anomalies of some long chain normal paraffin hydrocarbons. A. Van Hook and L. Silver. *bibliog* J Chem Phys 10:686-90 N '42
- Simplified thermal-expansion rings for production control in terra cotta manufacture. T. E. Nicholson and F. L. Goin. *bibliog* *il diags* Am Cer Soc J 26:163-7 My 1 '43
- Thermal and moisture expansion of ball clays and bodies fired to different temperatures. H. Thiemecke. *Am Cer Soc J* 26:173-9 Je 1 '43

Thermal expansion of some bronzes. P. Hidnert. *bibliog* J Research Nat Bur Stand 30:75-88 Ja '43

Thermal expansion of some industrial copper alloys. P. Hidnert and G. Dickson. *bibliog* J Research Nat Bur Stand 31:77-82 Ag '43

Thermal expansion of titanium. P. Hidnert. *bibliog* J Research Nat Bur Stand 30:101-5 F '43

Thermal expansivity and density of indium. P. Hidnert and M. G. Blair. *bibliog* J Research Nat Bur Stand 30:427-33 Je '43

Vitrified cordierite bodies. L. E. Thiess. *bibliog* *il Am Cer Soc J* 26:99-102 Mr 1 '43

See also

- Cement—Expansion and contraction
Concrete—Expansion and contraction

EXPECTED numbers (statistical methods)

Overestimation of mean squares by the method of expected numbers; analysis of sex differences in growth rate of swine. R. E. Comstock. *Am Stat Assn J* 38:335-40 S '43

EXPEDITERS. *See* Factory management; Munition factories—Management

EXPLOSION insurance. *See* Insurance, Explosion

EXPLOSIONS

Combustion explosions in pressure vessels. O. W. Malarkey. *Power* Pl Eng 47:100 Ap '43

Combustion hazards in heat-treating and other furnaces can be decreased by use of modern automatic safety equipment. T. A. Cohen. *diags* Steel 112:60, 62, 64 Ja 18 '43; Same. *Chem & Eng* N 21:302-3 Mr 10 '43; Same *abr.* Metal Finishing 41:109-11 F '43; Same *abr.* Nat Safety N 47:24-5+ Ja '43

Explosion hazards of combustible anesthetics. G. W. Jones, R. E. Kennedy and G. J. Thomas. *pls diags* U S Bur Mines Tech Pa 653:1-47; pa 15c Supt. of doc. '43

Explosion hazards of gases, vapors and dusts. *Nat Safety* N 47:149 Mr '43

Explosion of rotary bleacher takes heavy toll. *il Locomotive* 44:236-9 O '43

Explosions and their effects. A. F. Macconochie. *il diags* Steel 112:66-70+ My 31 '43

Fires and explosion; hazards of flammable gases, vapors, liquids and dusts. W. J. Burke. *Safety Eng* 85:27-31+ Mr '43

How gas companies may avoid liability for explosion injuries. L. T. Parker. *Am Gas J* 159:57-60 O '43

Inflammability and explosibility of metal powders. I. Hartmann, J. Nagy and H. R. Brown. *pls U S Bur Mines Rep of Invest* 3722:1-44 '43

Protection against compressed-air explosions. E. MacDermid. *Power* 87:493c+ JI '43

Reports on Albarmar explosion. *Paper Tr J* 116:11 Je 17 '43

Temperature in shock waves and the possible connection with the luminosity of meteors; abstract. H. Muraour. *Roy Aeronautical Soc J* 47:sup209-10 My '43

See also

- Boiler explosions
Bombs, Aerial
Coal dust
Coal mines and mining—Accidents and explosions
Dust explosions
Explosives
Hot water tanks—
Explosions
Inflammable mixtures

EXPLOSIONS, Photography of. *See* Photography of explosions

EXPLOSIVE rivets. *See* Rivets

EXPLOSIVES

Active list of permissible explosives and blasting devices approved prior to June 30, 1942. J. E. Tiffany and Z. C. Gauger. *U S Bur Mines Rep of Invest* 3665:1-25 '42

Annual report of the Explosives division, fiscal year 1942. W. J. Huff. *bibliog* *diags* *pls U S Bur Mines Rep of Invest* 3669:1-43 '42

Breaking of multiple bonds and the primary detonating explosives. L. R. Carl. *bibliog* Franklin Inst J 235:553-75 Je '43

Brief course in chemistry and warfare. S. J. French. *bibliog* J Chem Educ 20:33-7 Ja '43

Chemical and explosives programme in Canada. J. R. Donald. *Can Chem & Process Ind* 27:316-18 Je '43

EXPLOSIVES—Continued

Explosives; chapter from Truck trail handbook of United States Forest service. *il* diags Roads & Sts 85:37+ D '42; 86:53-7+ F; 52-6+ Ap; 58-60+ J1 '43
Some aspects of the chemistry of explosives. A. F. Thompson, jr. *J Chem Educ* 20:151-4 Mr '43

See also

Ammunition	Nitrocellulose
Blasting	Smokeless powder
Bombs, Aerial	Tetryl
Cordite	Torpedoes
Inflammable liquids	Trinitrotoluene

Laws and regulations

Government regulations for the control of explosives and their ingredients in time of war or national emergency. *Explosives Eng* 21:41-2, 51-63 Mr '43

Questions answered about the Federal explosives act. *Explosives Eng* 21:188-9+ S '43

Summary of state laws pertaining to explosives. *Engs U S Bur Mines Information Circ* 7251:1-118; 7252:1-73; 7253:1-91; 7254:1-75; 7255:1-106 '43

Manufacture

Canada builds chemical and explosives industries. J. Montagnes. *il Chem & Met Eng* 50:93-101 S '43

Hexamine for blockbusters. *il Chem & Met Eng* 50:117 J1 '43

Specific heats of mixed acids at higher temperatures. J. J. Morgan, D. A. Bender and B. G. Capell. *bibliog diags Chem & Met Eng* 50:122-4 Je '43

Unique installation; special features pertaining to explosives factory conditions. *il Elec R (Lond)* 132:309-12 Mr 5 '43

War products from natural gas and natural gasoline. P. M. Raigorodsky and F. H. Dotterweber. *Oil & Gas J* 41:104+ Ap 15 '43; *Same. Gas Age* 92:22-3 J1 29 '43

Safety measures

Destroying explosives; proper procedure. *Explosives Eng* 21:137+ J1 '43; *Same. Concrete (mail sec)* 51:222-3 S '43

Explosives; chapter from Truck trail handbook of United States Forest service. *diags Roads & Sts* 86:58-60+ J1 '43

Handling explosives. E. L. Thayer. *Rock Prod* 45:86+ D '42

Loading gun powder to fight the Nazis. R. E. Hardy. *il Chem & Met Eng* 50:98-100 Ap '43

Picatinny arsenal uses air conditioning to improve powder and shell performance. H. W. Macdonald, jr. *il diags Heat & Ven* 46:74-83 Je '43

Safety in army ordnance establishments. C. Field. *Mech Eng* 65:353-9 My '43; *Refriger* Eng 46:96-101+ Ag '43

Safety in handling aluminum powders. G. M. Babcock and F. B. Rethwisch. *il Chem & Met Eng* 50:82-4 Ja '43

T.N.T.; excerpts from Afternoon with a T.N.T. man, by F. C. Painton, in February issue of *Esquire*. *Nat Safety N* 47:46+ My '43

Unique installation; special features pertaining to explosives factory conditions. *il Elec R (Lond)* 132:309-12 Mr 5 '43

Statistics

Explosives; shipments, 1933-1941. Survey of *Cur Business* 1942 Sup p102 [supplemented in monthly numbers]

Production of industrial explosives in the United States during the calendar year 1941. W. W. Adams and V. E. Wrenn. *U S Bur Mines Tech Pa* 647:1-30; pa 10c Supt. of doc. '42

Storage

Magazine separation determines plan of ordnance depot. A. C. Polk. *il Civil Eng* 13: 26-8 Ja '43

Simplified design for munitions igloos. *il diags Eng N* 131:676-81 N 4 '43

Transportation

Plywood treasure chest for Uncle Sam; for shipping smokeless gunpowder. *il Mod Packaging* 16:69 Ag '43

EXPORT advertising. See Advertising, Foreign

EXPORT associations

New export association formed for exporting wire rope, strand and rope fittings. *For Comm W* 10:31 Ja 16 '43

New rice-exporting association formed. *For Comm W* 9:17 N 14 '42

EXPORT-import bank of Washington

Domestic markets are not enough; what the Export-import bank accomplished. W. L. Pierson. *Barron's* 23:3 Je 21 '43

Export-import bank and American business. W. L. Pierson. *il For Comm W* 11:4-5+ My 15 '43

Export-import bank commitments in other Americas total over billion dollars. *For Comm W* 13:14 N 6 '43

EXPORT trade

Adjusting lend-lease to prevent dislocation of export trade. P. Young. *Comm & Fin Chr* 157:668 F 18 '43

Allocation of textiles for export. *For Comm W* 13:22 O 2 '43

Battle for foreign trade has begun. G. B. Collingwood. *Mag of Wall St* 72:451-3+ Ag 7 '43

Directory of export organizations. *Oil & Gas J* 41:136, 139-40, 245 D 31 '42

Export situation improves. *Business Week* p62+ J1 31 '43

Export trade; organisation to meet altered conditions. H. W. Bosworth. *Elec R (Lond)* 132:57-8 Ja 3 '43

Foreign trade clinics teach Californians ABC's of export. *Sales Management* 52:106+ S 15 '43

Future challenges the foreign trader. E. E. Schnellbacher. *il For Comm W* 11:3-4+ Je 5 '43

Latin-America: land of present, and future, sales opportunity. J. D. Cathcart. *il Sales Management* 52:18-19 Ja 1; 34+ F 1; 32, 34 Mr 1; 68+ Ap 1; 28, 30 My 1; 22-3 Je 1 '43

Maintaining foreign trade contacts for after the war. E. E. Schnellbacher. *Ind Marketing* 28:48+ Mr '43

Packaging goods for export. *il For Comm W* 11:12-13+ My 29 '43

Post-war export outlook is enough to floor you! G. A. Nichols. *il Ptr Ink* 202:15-17+ F 19 '43

Post-war foreign trade; exports may play a major role. A. N. Gentes. *Credit & Fin Management* 45:8-10+ S '43

Post-war good neighbor market beckons U.S. advertisers. J. C. Rovensky. *il Ptr Ink* 202:15-17 F 26 '43

Postwar trade looks up. *Business Week* p86+ Ap 3 '43

Soldiers on world fronts act as sampling crew for U.S. goods; post-war air transport. H. Crary. *Ptr Ink* 203:56 My 14 '43

Southeastern Asia and the Philippines as a market. A. R. Upgren. *Ann Am Acad* 226: 9-21 Mr '43

These labels on exported items are selling friendship for U.S.; OWI fostering their use. M. Beulick. *Ptr Ink* 204:26+ S 3 '43

20 more questions about selling and advertising in Latin-America. *Sales Management* 52:36+ O 15 '43

21 questions about selling and advertising in Latin-America. *Sales Management* 52: 80+ Ag 15 '43

Wise daring and progressiveness can raise post-war export levels. G. Katona. *For Comm W* 10:11 Ja 23 '43

See also

Balance of payments	Latin America—Commerce
Foreign exchange	Packing for shipment
Free ports and zones	Tariff

Advertising

See Advertising, Foreign

Finance

See also

Export-import bank of Washington

Government aid

Bureau of foreign and domestic commerce, how it can help you; Division of international economy. A. R. Hahn. *Sales Management* 52:92+ N 1 '43

EXPORT trade—Government aid—Continued

Services available to small exporters. For
Comm W 10:3+ Mr 6 '43

Marketing

Diplomacy problems Coca Cola met in opening the Mexican market. F. D. Gonda. *il*
Sales Management 52:56+ Mr 15 '43
Expanding Latin-American market challenges American exporters. J. F. Des Reis.
Sales Management 52:84+ S 1 '43
Export business shot. U.S. Rubber takes on other lines abroad. L. C. Boos. *il* *Ptr*
Ink 202:20-1 Mr 5 '43

Regulation

BEW rules for exports to South America revised. Oil Paint & Drug Rep 143:7+ Mr 15 '43
Decentralization plan of export procedure. For Comm W 10:38-40 Mr 13 '43
Export controls eased on goods in free supply. Oil Paint & Drug Rep 144:7+ S 6 '43
Export license rules eased for Latin-American shipments. Oil Paint & Drug Rep 144:3+ O 11 '43
Export licenses for Britain revised. Oil Paint & Drug Rep 143:5 Ap 19 '43
Export price regulation by OPA is revised. Oil Paint & Drug Rep 143:3+ Ap 5 '43
Export restrictions to South America clarified. Oil Paint & Drug Rep 143:5+ Je 14 '43
Office of exports; purpose and organization. For Comm W 9:38-40 D 19 '42
Price control, hemisphere problem. S. E. Harris. For Comm W 11:12-13 My 15 '43
Prices and foreign trade. S. E. Harris. For Comm W 10:11 F 6 '43
Programs established for licensing exports. W. Alderson. For Comm W 11:3+ Ap 3 '43
Questions and answers on OEIW's decentralization. Iron Age 152:138+ S 2 '43
Shipment of equipment to foreign mines affected by new WPB ruling. For Comm W 11:41-2 Ap 10 '43
South American shipping licenses halted. Oil Paint & Drug Rep 143:5+ Ja 18 '43
Text of 2d revised maximum export price regulation effective April 5. For Comm W 11:38-41 Ap 10 '43
U.S. and Canada agree on joint export plan. Comm & Fin Chr 157:2065 Je 3 '43
U.S. export control and related announcements. Published in Foreign commerce weekly
Wartime controls and stimuli upon the foreign trade of Latin America. H. Chalmers. For Comm W 11:3-5+ Ap 24; 14-17+ My 1 '43

Sales management

It's still sales promotion, but it's spiced the Latin-American way. J. D. Cathcart. *il*
Sales Management 52:22-3 Je 1 '43

Statistics

Foreign trade; value of exports by geographic divisions and countries and economic classes. Survey of Cur Business 1942 Sup p89-90, 93-4
Not all exports are lend-lease; pictograph. Sales Management 52:48 F 15 '43
Value of exports, including reexports, and general imports, 1939-May 1943; chart. Survey of Cur Business 23:2 Ag '43

EXPOSURE meter. See Photography—Exposure

EXPRESS highways. See Roads, Automobile

EXPRESS service

Terminals

Conveyor system installed in New York express terminal. *il* plan Ry Age 115:602-5 O 16 '43

EXTENSOMETERS

Electrical extensometers. Automobile Eng 33:88 F '43

Methods of stress determination in engine parts. C. Lipson. *il* diags S A E J 51:105-24 Ap '43

EXTRITERRITORIALITY

See also

China—Exterritoriality

EXTRACTION apparatus

Continuous liquid-liquid extractor. R. Kieselbach. diags Ind & Eng Chem Anal ed 15:223 Mr 15 '43

Extraction of furfural-water solutions with toluene in a packed column. O. S. Knight. bibliog *il* diag Am Inst Chem Eng Trans 39:439-56 Ag '43

Large-scale laboratory extractor of the Soxhlet type. K. E. Rapp. C. W. Woodmansee and J. S. McHargue. diags Ind & Eng Chem Anal ed 15:351 My 15 '43

Liquid extraction in perforated-plate and packed towers. J. Allerton, B. O. Strom and R. E. Treybal. bibliog diags Am Inst Chem Eng Trans 39:361-83 Je '43; Abstract. Chem & Eng N 21:754 My 25 '43; Discussion. Am Inst Chem Eng Trans 39:383-4 Je '43

Micro-scale extractions by organic solvents. P. F. Holt and H. J. Callow. diag Soc Chem Ind J 62:32 F '43

Moderately large extractor-percolator assembly. F. A. Gunther. diag Ind & Eng Chem Anal ed 15:562 S 15 '43

Multiple-extraction rack for chemical analysis of rubber products. *il* Ind & Eng Chem Anal ed 15:537-8 Ag 15 '43

New methods for the resolution of enantiomorphs; liquid-liquid extraction. E. Shapiro and R. F. Newton. diags Am Chem Soc J 65:777-9 My '43

Simple large-capacity extraction apparatus. E. Smallwood. diag Ind & Eng Chem Anal ed 14:903 N 15 '42

Thimble supports for faster Soxhlet extraction. W. C. Tobie. Ind & Eng Chem Anal ed 15:122 F 15 '43

EXTRACTION processes

Alcohol and acetone by solvent extraction; heat requirements of distillation and of combined distillation and extraction processes. D. F. Othmer and R. L. Ratcliffe, Jr. *il* diags Ind & Eng Chem 35:798-805 JI '43

Drying oils from liquid fats; fractionation by solvent extractions. A. W. Kleinsmith and H. R. Kraybill. bibliog Ind & Eng Chem 35:674-6 Je '43

Extraction of furfural-water solutions with toluene in a packed column. O. S. Knight. bibliog *il* diag Am Inst Chem Eng Trans 39:439-56 Ag '43

Liquid-liquid extraction. O. Bergelin, F. J. Lockhart and G. G. Brown. bibliog flow sheet *il* Am Inst Chem Eng Trans 39:173-200 Ap '43

Methylene chloride: in the extraction and determination of vitamin A and oil in soup/shark livers. P. C. Tompkins and R. A. Bolomey. bibliog Ind & Eng Chem Anal ed 15:437-9 JI 15 '43

Mixed solvent extraction; analytical method; application of analytical geometry. J. H. Wiegand. bibliog Ind & Eng Chem Anal ed 15:380-3 Je 15 '43

New uses for solvent processes. G. F. Fitzgerald. bibliog Pet Refiner 22:93-4 O '43

Refining of high melting-point waxes. V. N. Jenkins. flow chart *il* Oil & Gas J 41:98-9, 101+ Mr 25 '43

Solvent extraction of lubricating oils. H. ter Meulen. diags Inst Pet J 29:237-43; Discussion. 240-52 S '43

Solvent extraction; removing undesirable constituents from oils; abstract. H. ter Meulen. diag Chem Age (Lond) 48:131-2 Ja 23 '43

Solvent extraction with special reference to drug and fine chemical manufacture; abstract. G. C. Green. Chem & Ind 62:85 F 27 '43

Solvent refining of wood rosin. I. W. Humphrey. bibliog(patents) *il* diag Ind & Eng Chem 35:1062-7 O '43

Solvents in extraction of tung oil. A. F. Freeman, F. C. Pack and R. S. McKinney. bibliog *il* Ind & Eng Chem 35:1156-9 N '43

Studies in compounding guayule rubber; deresinification. E. A. Hauser and D. S. le Beau. India Rubber W 108:37-9+ Ap '43

EXTRACTION processes—Continued

Study of literature on separation of magnesite from lime in dolomite and similar materials, 1817 to 1943. G. E. Seil and others, comps. bibliog (461 titles) Am Cer Soc J 26:218-38 J1 1 '43

See also

Leaching
Solvents

Tables, calculations, etc.

Ternary liquid and binary vapor-liquid systems; a method of the line interpolation for phase equilibrium relations. C. E. Dryden. bibliog Ind & Eng Chem 35:492-4 Ap '43

EXTRUSION process

Effect of high pressure extrusion on the adsorption capacity of floridin. R. C. Amero and R. G. Capell. bibliog J Pet Refiner 22: 82-6 Ja '43

Extruding coatings on welding electrodes. H. Chase. Il Iron Age 151:67-9 F 11 '43

Extrusion brasses from fired cartridge cases. J. Rae, Jr. Engineering 155:145, 155-6, 185, 205 F 19-Mr 12 '43; Excerpt. Metal Prog 44:74+ J1 '43

Extrusion of light alloys; preheating and hydraulic operations. Il Elec R (Lond) 133: 297-301 S 3 '43

Forming aircraft extrusions. Il Iron Age 151: 66 Mr 11 '43

Heat treatment; processes connected with the extrusion and drawing of light alloys. Il Elec R (Lond) 133:397-401 S 24 '43

Impact extrusion and cold pressing of airplane parts; with punch and die diagrams. P. Koenig. Il S A E J 51:415-19 N '43; Same cond. Automotive & Aviation Ind 89: 38-40 O 15 '43

Pouring pit refractories manufactured by extrusion process. G. E. Mercer. Il Blast F & Steel Pl 30:1408, 1410-11 D '42

Shell forging on bulldozers. W. Trinks. diags Mech Eng 65:641-2 S '43

EYE

Eyes to see with; excursion from crayfish to Carlyle. H. B. Kane. Il Tech R 46:24-5 N '43

See also

Color blindness
Color sense
Cornea
Mydriatics

Ophthalmological research
Sight
Visual purple

Accommodation and refraction

Black light for night flight; fluorescent treated plastics and near-ultraviolet rays make it possible to read without destroying night vision. Il Aviation 41:243 D '42

Some aspects of the eye as an image-forming mechanism. K. N. Ogle. diags Opt Soc Am J 33:506-12 S '43

Specification of foveal adaptation. P. Moon and D. E. Spencer. bibliog diags Opt Soc Am J 33:444-56 Ag '43

Summary of researches in seeing at low brightness-levels. M. Luckiesh and A. H. Taylor. Illum Eng 38:189-207 Ap '43

Diseases and defects

Epidemic keratoconjunctivitis. Nat Safety N 47:25-6 My '43

Epidemic kerato-conjunctivitis. C. Kuh. Ind Med 12:184-5 Mr '43

Eyes begin to dim in early twenties. Nat Safety N 46:79 N '42

Industrial worker, his eyes. A. Ebling. Ind Med 12:178+ Mr '43

Infectious hepatitis and infectious keratoconjunctivitis provisionally added to manual "Control of communicable diseases." Pub Health Rep 58:405-6 Mr 5 '43

Is textile work a strain on the eyes? W. Schweisheimer. Rayon 24:549 O '43

Kerato-conjunctivitis held compensable under workmen's compensation act; California Supreme court. Pub Health Rep 58:854-5 My 28 '43

Natural occurrence of riboflavin deficiency in the eyes of dogs. T. D. Spies. bibliog Science 98:369-70 O 22 '43

Shippard eye. J. Stafford. Science 97:sup12 F 19 '43

Shippard eye improved by convalescent serum. Science 97:sup12 Ap 2 '43

Suggests control in eye disease; virus keratoconjunctivitis. M. Heiman. Foundry 71:184-5 N '43

See also

Color blindness
Myopia

Examination

New methods for photographing the anterior eye. W. E. Poel and K. M. Hayden. (Public health rep supp 167) 4p 3pl U.S. Public health service, Washington; pa 10c Supt. of doc. '42

See also

Color sense—Testing

Injuries

Eyes have it! J. R. Wittekind. Il Safety Eng 85:25-8 Ja '43

Industrial ophthalmology and otolaryngology. G. F. Harkness. bibliog Il Ind Med 12:658-62 O '43

Seeing through an air raid; directions for eye protection. Nat Safety N 46:84 D '42

Movements

Specification of foveal adaptation. P. Moon and D. E. Spencer. Opt Soc Am J 33:453-5 Ag '43

Protection

Eye protection, an important contribution to warpower. Il Nat Safety N 47:16-17 Mr '43
Eye-protective glasses go to war; abstract. E. L. Hettlinger. Glass Ind 24:207-8 My '43

Eyes at work; protecting eyesight of workers. Il Safety Eng 85:39-40 Je '43

Eyes have it! J. R. Wittekind. Il Safety Eng 85:25-8 Ja; 29-32 F '43

Eyes of industrial workers must be guarded; report on industrial eye efficiency in the war program. Concrete (mill sec) 51:176 My '43

Protection from eye flash; abstract. P. Drinker. Science 98:sup10 O 29 '43

Protection of eyesight a war-industry must. Factory Management 101:170 Ap '43

See also

Goggles
EYEBARS

Standards for welded plate eyebars. J. Jones. diags Eng N 131:546-7 O 7 '43

Welded heads for plate eyebars. J. Jones. Il diags Civil Eng 13:178-80 Ap '43

F

FABRIC permeameter. See Textile fabrics—Permeability

FABRICS

Linen-like finishes on cotton fabrics. A. J. Hall. Textile Col 65:432-3 O '43

FABRICS. Cotton. See Cotton fabrics

FABRICS, Military. See Military fabrics

FABRICS, Textile. See Textile fabrics

FACE**Protection**

Plastics fight for safety; face shields and machine guards. Il Safety Eng 86:14 J1 '43

FACSIMILE, Radio. See Radio facsimile

FACSIMILE transmission. See Radio facsimile

FACTOR of safety

Balanced design for reinforced concrete. A. J. Boase and C. E. Morgan. diags Am Concrete Inst J 14:277-96 F '43

FACTORIES

Amounts of steel required for steel mill buildings; study made by the Specifications branch, Conservation division. War production board. diags Eng N 129:722-8 N 19 '42

Big concrete pipe ducts speed war project; heating, power, water and other services; General electric company. Il Eng N 129: 926-7 D 31 '42

Building for war production. G. H. Miehl. Illum Eng 37:758-67; Discussion. L. C. Twichell. 767-8 D '42

FACTORIES—Continued

Building foundations on compacted fill; with cost data. W. E. King. *diag Eng N 131:403-5 S 9 '43*

Buildings of 1942 were for war. A. N. Carter. *il plan Eng N 130:188-9 F 11 '43*

Centralized organization speeds industrial plant building program; Westinghouse electric & mfg. co. G. Parkman. *Eng N 129:794-5 D 3 '42*

Concrete and timber aid fast war plant construction. *il Eng N 130:666-70 My 6 '43*

Construction after the war. G. A. Bryant; L. Kahn; M. C. Tuttle. *il Eng N 131:616-19 O 21 '43*

Deep footings built without forms; factory for the Westinghouse electric & manufacturing co. H. A. Saurbrey. *il Eng N 131:142-3 J 15 '43*

Designing efficiency into a war plant; Nassau plant of the Sperry gyroscope co. *il diags Eng N 130:121-3 Ja 28 '43*

Industrial building for today and tomorrow. *il Factory Management 101:B51-B90+ Ap '43*

Industrial buildings back the attack; building types study. *il Arch Rec 94:61-76 O '43*

Industrial buildings of precast concrete. *il diags Eng N 130:302-5 F 25 '43*

Lightweight concrete slabs form exterior of big industrial building; Haydite concrete used; Worthington pump and machinery company. *il Concrete 51:10+ Ap '43*

Multiple-arch concrete roof saves steel; plant built for Chrysler corp. *il diags Eng N 130:31-4 Ja 14 '43*

New buildings for 194X: house factory for production of prefabricated houses. flow chart *il plans Arch Forum 72:134-7 My '43*

New plants of 1942. *il Factory Management 101:B54-B89 Ap '43*

Plant for precision instruments. *il diags plan Arch Rec 94:62-4 J 1 '43*

Precast columns and timber bents combined for rigid frames. *il diags Eng N 131:535-7 O 7 '43*

Progressive ideas born of war pressure will change commercial and industrial building. *il Am Bld 65:48-51+ N '43*

Reinforced concrete barrel-roof design saves big tonnage of steel; new Westinghouse plant. *il Concrete 51:2-3 Ap '43*

Rigid-frame concrete industrial plant; magnesium-alloying plant; fireproofing secured by eliminating windows. A. F. Plant and S. J. Detrick. *il diags Eng N 131:334-8 Ag 28 '43*

Styled for war; saving in critical metals; new Douglas plant. *Business Week p81-2 F 27 '43*

Today's trends in design. H. K. Ferguson; S. Marston; G. A. Bryant. *Factory Management 101:B53, B63, B75 Ap '43*

Wartime construction of factory buildings; building-types study; with time-saver standards. *il diags Arch Rec 92:51-66 D '42*

Welded frames cut cost and save steel; one-story industrial plant. F. W. Mettler. *il Eng N 129:700-1 N 19 '42*

See also

Airplane factories
Automobile factories
Brick works
Chemical plants
Clay products plants
Concrete products plants
Cotton mills
Day nurseries, Factory
Drug factories
Factory management
Fertilizer factories
Food factories
Foundries
Furniture factories
Glass factories
Ice cream factories

Iron works
Loft buildings
Machine shops
Metallurgical plants
Munition factories
Paper mills
Rayon mills
Rock products plants
Rolling mills
Rubber factories
Steel works
Sugar factories
Textile mills
Tire factories
Water supply for factories
Woolen and worsted mills

Accounting

Accounting for wartime expenditures; abstract. *Management R 32:309-11 Ag '43*

Do standard costs aid war production? H. J. Myers. *N A C A Bul 25:3-16 S 1 '43*

Establishing control of factory overhead. R. W. Herr. *N A C A Bul 24:1399-1415 Ag 15 '43*

Foremen's budgets save 20 percent; Toledo scale company. G. M. Richard. *Factory Management 101:90-1 S '43*

Keeping track of labor costs. D. A. Dearle. *Factory Management 101:116+ Mr '43*

Practice in accounting for continuing expenditures arising from wartime production, compiled by the Research and technical service department, National association of cost accountants. *N A C A Bul 24:925-49 sec 3 Ap 1 '43*

Practice in depreciating and amortizing investment in machinery and equipment. *N A C A Bul 24:1109-22 sec 3 My 1 '43*

Production and cost control in a small war plant. W. Flatow. *Iron Age 152:70-2+ S 16 '43*

Some problems of wartime industrial accounting control. C. W. Bennett. *N A C A Bul 24:1261-80 J 1 '43*

Ten years' progress in management; cost accounting and budgetary control. J. A. Willard. *A S M E Trans 65:228-30 Ap '43*

See also

Airplane factories—	Labor cost—Accounting
Accounting	Overhead expense
Budget, Business	Payrolls—Accounting
Cost accounting	Rubber factories—
Depreciation	Accounting
Inventories	

Air conditioning

Air conditioning for a blackout plant; General electric co. *il Power Pl Eng 47:114, 116 O '43*

Air conditioning makes 24 hour a day war production possible. C. G. Lauckner, 3d. *il Heating-Piping 15:510-12 O '43*

Central air conditioning vs. unit system under war conditions. T. W. Reynolds. *Heat & Ven 40:33+ O '43*

Connor's carbon canisters. *Fortune 27:50+ Mr '43*

Curtiss-Wright electric propellers are made and assembled in windowless controlled atmosphere plant. R. A. Rotz. *il Heat & Ven 40:75-3 S '43*

Heating and air conditioning a windowless factory. R. U. Berry. *il Gen Elec R 46:545-8 O '43*

How to meet war time restrictions in heating and air conditioning design; ventilation. T. W. Reynolds. *Heat & Ven 40:60H-60J F '43*

Jack & Heintz solves fume problem by installing air recovery equipment. *il diags Heat & Ven 40:54-5 Ag '43*

War industries number; heating, ventilating and air conditioning in America's war plants. *il diags Heat & Ven 40:29-70 Ja '43*

War plant with glass walls; required maximum daylighting and 85 percent of the building at constant temperature and humidity. *il Eng N 130:288-91 F 25 '43*

Water spray versus sun heat; roof spray systems for supplementing air conditioning. *Dom Eng 160:56+ D '42*

Windowless plant features special air filters; Cleveland graphite bronze company. *il Comp Air M 48:6988 Mr '43*

See also

Air conditioning, Industrial	Munition factories—
Airplane factories—	Air conditioning
Air conditioning	Textile mills—Air conditioning

Cleaning

Cleaning house in a paperboard mill. W. Dahl. *Paper Ind 25:611 S '43*

Industrial housekeeping. *il Nat Safety N 47:168+ Mr '43*

Cleanliness

To check fire hazards, watch the housekeeping. *il Nat Safety N 47:148 Mr '43*

Conversion

Alliance clay product co. adapts plants to essential war industries; crating and shipping aircraft, etc. *il Brick & Clay Rec 103:18 J 1 '43*

Binoculars in mass; Universal camera corp., New York city. *il Fortune 27:134-5 Je '43*

Chevrolet's unique setup for airplane engine production. J. Geschelin. *il Automotive & Aviation Ind 88:24-8, 42 Je 1 '43*

FACTORIES—Conversion—Continued

Converting to steel castings; Saginaw malleable iron division, General motors corporation. J. H. Smith. *il* *diags* *Iron Age* 151:45-50 Ap 22 '43

Diversification of war products at Minneapolis-Moline plant. J. Geschelin. *il* *Automotive & Aviation Ind* 89:18-24+ N 1 '43

Furniture city joins the air war; Grand Rapids factories make airplane parts and materials. *il* *Aero Digest* 42:145-8, 153-4+ Ap '43

History of an amazing conversion, from stoves to liferafts; Globe American corp. *il* *Cer Ind* 41:37, 39-40 O '43

It's war work or else! employee training; General fireproofing co. *il* *Steel* 112:84-5 My 10 '43

Machines turn out weapons. *il* *Mod Packaging* 16:49-50 Ja '43

Materials handling facilities aid in plant conversion; American central mfg. corp. *il* *Steel* 112:112-14+ Ap 26 '43

Plane parts replace silk hosiery; Se-Ling hosiery company; war conversion. *il* *Textile World* 92:71 N '42

Refrigerators to Thunderbolt wings; Servel's wing fabricating methods. G. E. Stedman. *il* *Aviation* 42:142-7+ O '43

Roll their own; Cincinnati machine tool builders, convert their product to making of direct war goods. *Business Week* p17-18 J 10 '43

Sears, Ward and Penney stores quiz airplane industry on post-war goods. S. Bangs. *Aviation* N 1:8 Ag 30 '43

Special automotive production machine converted to war work; gun mount parts, Midland steel products co. *il* *Iron Age* 150:49 D 17 '42

Stamping plant converts to machine tool output; plant of Fisher Body division. S. H. Brams. *il* *Iron Age* 151:52-5 Mr 18 '43

These food plants converted to do special war job; cereal, confectionery, dairy and sugar-grinding plants converted packaging lines to supply cartons of dried eggs. T. F. Cass, jr. *il* *Food Ind* 14:43-6 D '42

They made stoves before, now they're making bombs; Wrought iron range co. *il* *Cer Ind* 39:23-30 D '42; Same. *Am Gas Assn* Mo 25:66-8 F '43

Transition to war production entailed great mass movement of machine tools in and out of Chevrolet's Buffalo plant. A. H. Allen. *il* *Steel* 113:59-60 J 1 26 '43

Truth about cutbacks. D. M. Nelson. *il* *Factory Management* 101:82-7 J 1 '43

Wartime guides for your business; conversion and adaptation of existing facilities. W. H. Hillyer. *Barron's* 22:20 D 14 '42

Widespread conversions to help the United States meet 1943 quotas. L. V. Spencer. *il* *Aero Digest* 42:82-3+ Ja '43

Your kilns can be used to make charcoal for the steel and iron industry. Brick & Clay Rec 102:34 My '43

See also Automobile industry and trade—Munitions manufacture

Electric equipment

Busway plant distribution. L. Siebert. *il* *diags* *Elec West* 89:64-5 D '42; 90:44-5 Ja '43

Cables, how to make them last. R. B. McKinley and L. D. Madsen. *il* *diags* *Elec W* 119:1606-9, 1776-9 My 15-29 '43

Economy and production. H. Greaves. *Electrician* 130:49-50 Ja 15 '43

Electrical distribution. V. C. Wagner. *il* *Arch Rec* 93:60-1 F '43

Electrical industrial installations. L. C. Grant. *diags* *Inst E E J* 89 pt 2:610-17; Discussion. 617-35 D '42

Electrical installation problems in war factories; discussion. *Inst E E J* 89 pt 2:521-7 D '42

Factory distribution. J. G. Craven and J. Collins. *il* *Elec R (Lond)* 133:363-6 S 17 '43

Factory distribution; special safety provisions. *il* *Elec R (Lond)* 132:169-73 F 5 '43

Fuses v. oil circuit-breakers; their spheres in medium-voltage AC industrial installations. G. Cluley. *Elec R (Lond)* 132:143-6 Ja 29 '43

How to apply capacitors. C. V. Fields. *il* *Factory Management* 101:135-6 Ja '43

Industrial production's electrical aids. L. F. Stone. *il* *Elec W* 118:1944-6 D 12 '42

Locate static condensers at strategic points; with cost data. L. M. Duryee. *Power Pt Eng* 47:87-8 Ja '43

Maintenance problems. H. Yeomans. *Elec R (Lond)* 132:76-7 Ja 15 '43

Make every horsepower work harder now. K. R. Collins. *Elec West* 91:59-60 O '43

New equipment; motors and controllers. *il* *Iron Age* 151:59-62 Ap 15 '43

Operation troubles; experiences with factory electrical plant. *diags* *Elec R (Lond)* 133:267-70 Ag 27 '43

Problems in factories; wartime difficulties of the maintenance engineer. C. J. Bennett. *Elec R (Lond)* 132:781-2 Je 11 '43

Progress in engineering knowledge during 1942; industrial power supply. P. L. Alger and J. Stokley. *il* *diag* *Gen Elec R* 46:120-2 bibliog(p136) F '43

Relay and switch upkeep and trouble shooting; data sheets. W. A. Holland. *Factory Management* 101:134+ F '43

Replacement of equipment; accounting problems. S. H. Withey. *Electrician* 129:582-3 N 27 '42

Role of capacitors in war work. R. E. Marbury. *il* *Power Pt Eng* 47:82-4+ S '43

Safe capacitor selection for power-factor improvement. J. E. Barkle. *il* *diag* *Power* 87:230-2+ Ap '43

Save copper in war plant power distribution systems. D. L. Beeman and W. J. McLachlan. *il* *diags* *Power Pt Eng* 46:64-7 D '42

Seven ways to keep voltage up. J. E. Hobson and O. W. Freeborn. *il* *Factory Management* 101:142, 144 Mr '43

Technical and economical design of electrical distribution in a large factory. J. S. Blacklock. *Engineering* 155:65-6, 85-6 Ja 22-29 '43; Abstract. *Electrician* 130:61-3 Ja 15 '43

30th buyers reference number; parts and materials. *il* *diag* *Am Mach* 87:413-20 Ja 21 '43

Transformers for wartime substations: single-phase vs 3-phase. E. M. Hunter. *il* *Power* 87:235+ Ap '43

Two-man crews maintain war plant supply circuits. W. S. Cronin. *il* *Elec W* 119:596-8 F 20 '43

Unique installation; special features pertaining to explosives factory conditions. *il* *Elec R (Lond)* 132:309-12 Mr 5 '43

Waste in electrical construction in war plants. C. H. Shaw. *diags* *Elec W* 120:995-7 S 13 '43

See also

Electric driving	Paper mills—Electric equipment
Electric motors	Rolling mills—Electric equipment
Electric wiring—	Textile mills—Electric equipment
Safety measures	
Factories—Lighting	

Equipment

Features for worker health and comfort; illustrations. *Factory Management* 101:B86-B69 Ap '43

How to make the most effective use of equipment. *il* *Factory Management* 101:145-84 Ag '43

Mechanical equipment for factories as reported by technical specialists of Albert Kahn associated architects & engineers. *il* *diags* plans *Arch Rec* 93:53-66 F '43

New equipment; material handling. *il* *Iron Age* 150:62-9 D 17 '42

New equipment; plant service and safety apparatus. *il* *diags* *Iron Age* 151:40-2 Ja 14; 53-6 Ja 28; 71-4 My 20; 65-8 Je 3 '43

Production insurance; preventive maintenance prolongs life of equipment. E. W. Bender, jr. *il* *Nat Safety N* 47:12-13+ F '43

Shifts in installed horsepower in manufacturing. K. C. Stokes. *Survey of Cur Business* 23:24-32 Ja '43

30th buyers reference number; plant service equipment; parts and materials. *il* *diag* *Am Mach* 87:361-428 Ja 21 '43

Wood and fiber furniture and equipment. *il* *Factory Management* 101:128 My '43

See also

Chemical plants—	Machinery, Replacement of
Equipment	Mechanical handling
Conveying machinery	Power plants

FACTORIES—Continued

Expansion

- Expansion in CO₂, Walter Kidde & co., Belleville, N.J. *il* Fortune 27:130-1 Je '43
Ninety per cent cuts; D. W. Onan & sons, Minneapolis. *il* Fortune 27:136-7 Je '43
Nobody's war baby; N. A. Woodworth co., Detroit turns out two million high-precision Wright aircraft motor parts a month. *il* Fortune 27:138-9 Je '43
Plant financing in a war economy; problem of new facility financing. M. D. Ketchum. *J* Business 16:23-50 Ja '43
Secondhand plant; Rohm & Haas equips plant with used materials. Business Week p57 Jl 31 '43
Subcontracting; a device for expansion. A. J. Schwiager. Harvard Business R 22 no 1: 83-92 [O] '43

Fire protection

See Factory fire brigades; Fire protection

Flood protection

- How we beat the flood. E. E. Isgren. *il* Factory Management 101:133-7 S '43

Floors

- Clean floor is a safe floor; cleaning compounds for textile mills. R. W. Mitchell. Textile World 93:86 O '43
Factory flooring. *il* Nat Safety N 47:100+ Mr '43
Floor hazards; cleaning as safety measure. *il* Safety Eng 85:12-13 Ja '43
How to lay a floating floor. *il* Am Bid 64:40-2 N '42
Increasing plant illumination by the use of white cement floors. *il* Aero Digest 41:234+ D '42
Long-span flat slabs in bomber plant call for unusual floor design. *il* diag Concrete 51:2-3 Je '43
Safety from the ground up; oil absorbing floor cleaner prevents fires and slipping accidents in Bendix plant. *il* Safety Eng 86:16 Jl '43
What to do when floors leak. F. W. Daniels. *il* diag Factory Management 101:132-4 Ja '43
White cement floors speed war production. *il* Am Bid 64:43-4+ N '42
White floors light those under-wing shadows. F. L. Mabie. *il* Aviation 41:166-7, 301-2 D '42

See also

Chemical plants—
Floors

Food factories—
Floors

Heating and ventilation

- American propeller corporation; heating, air conditioning. *il* Heat & Ven 40:64-6 Ja '43
Analysis of heating industrial buildings with gas; report of industrial space heating committee. *il* diags Am Gas Assn Proc 1942:220-49
Armor plate building, Ford motor company, Rouge plant. R. W. Tuer. *il* Heat & Ven 40:62-7 Je '43
Behr-Manning corporation; high pressure hot water heating system; drying system to facilitate production of abrasives and war materials. J. O. Amstutz and J. F. Gschwind. *il* diag Heat & Ven 40:41-5 Ja '43
Development and performance of a coal-fired unit heater. R. M. Rush. *il* diags A S M E Trans 65:279-86 My '43; Abstract. Engineering 155:277-8 Ap '43
Experience of Sweet-Orr points to post-war gas heating. J. E. Bullard. *il* Gas Age 92: 67-9 O 21 '43
Factory employees like radiant heat; Murray corp. Heating-Piping 15:512 O '43
Firestone barrage balloon plant; heating and ventilating system. H. Maag and L. G. Griebling. *il* Heat & Ven 40:72-4 S '43
Fuel conservation plan developed; heating of factories. Power Pl Eng 47:120 Ap '43
General electric company; plant for aircraft part gear assemblies; air conditioned gauge room; ventilation and heating. D. Adams. *il* diags Heat & Ven 40:46-50 S '43
General steel castings corp. applies direct-fired oil heaters in plant manufacturing tank castings. E. F. Hyde. *il* diag Heat & Ven 40:88-90 Je '43

- Heating and ventilating. C. S. Whittaker. *il* diags plans Arch Rec 93:54-7 F '43
Heating industrial building with direct fired air system; corrugated sheet iron building. D. Henderson. *il* diags Heating-Piping 15: 537-9 N '43
High temperature of condensate causes trouble in factory heating. S. R. Lewis. Heating-Piping 15:465-6 S '43
How to determine cost of overtime heat in industrial buildings when tenants operate long wartime hours. P. B. Jameson. Heating-Piping 15:67-8 F '43
How to meet war time restrictions in heating and air conditioning design. T. W. Reynolds. Heat & Ven 40:60B-60L F '43
Industrial degree days for 10 cities; calculated on both 55F and 45F basis, for inside temperatures of 60F and 50F. Heat & Ven 39:62-3 N '42
Industrial lockers ventilated to dry workers' clothes; scheme uses glass block room. *il* diag Heat & Ven 40:61 Jl '43
Industrial ventilation. Nat Safety N 47:91-2+ Mr '43
Profits in air (cont). *il* Heat & Ven 39:47-53 N; 30-4 D '42; 40:31-4 Mr; 53-6 Ap; 59-61 Jl; 53-7 Ag '43
Radiant heating for a war building. E. L. Blair. *il* flow diag *il* Eng N 131:620-2 O 21 '43
Radiant heating; Murray corporation. *il* diag Dom Eng 162:72-3 O '43
Radiant heating serves war plant. E. L. Blair. *il* diags Power 87:672-3 O '43
Ventilation (natural and artificial) in relation to the black-out. E. W. Murray. Inst Chem Eng Trans 19:25-9; Discussion. 29-32 '41
Ventilation; solving the black-out problem. *il* diag Chem Age (Lond) 47:381 O 31 '42
War engineering; heating, ventilation, and air conditioning of war plants. S. R. Lewis. *il* Heating-Piping 15:5-9 Ja '43

See also

Air conditioning
Air conditioning, Industrial
Airplane factories—
Heating and ventilation
Exhaust systems
Factories—Air conditioning

Foundries—Heating and ventilation
Munition factories—
Heating and ventilation
Paper board mills—
Heating and ventilation
Rolling mills—Heating and ventilation

Layout

- Check these points when making a new layout. J. S. Heal. Factory Management 101:105+ F '43
Equipment records supply facts for layout. *il* Factory Management 101:89 Je '43
Have to change layouts often, here's how we do it; Spicer manufacturing company. M. Kallaher. *il* Factory Management 101:117-18 Mr '43
How change-over to product layout cut unit costs; oil measure department, Huffman manufacturing company, Dayton. E. Finsley. *il* plan Factory Management 101:87-9 S '43
Industrial health units; considerations and designs for the smaller installations. W. L. Ritter and J. W. Dugger. plans Ind Med 12:650-4 O '43
Laid out for non-stop war production; Fedders fabrication of machine-gun metallic links. *il* Factory Management 101:93-6 Jl '43
Organization and control of mass production; developing a plant layout. E. A. Boyan. Factory Management 101:111-12 S '43
Processing layouts for metal cleaning. C. W. Smith. *il* flow diags Am Mach 87:101-4 Jl 22; 97-8 Ag 5; 97-3 Ag 19 '43
Quick lessons in layout; Paraffine companies. W. L. Maffey. *il* diag plans Factory Management 101:82-7 Ja '43
Sectional layout board permits quick changes. G. S. Rowley. *il* Factory Management 101:89 O '43
Select layout and handling that suit your product. *il* Factory Management 101:146-53 Ag '43
Three ways to lay out a personnel department. C. T. Tucker. plans Factory Management 101:153-5 S '43

FACTORIES—Continued

Lighting

Accidents in factories; annual report of the Chief inspector of factories for the year 1942. *Electrician* 131:379-80 O 15 '43

Blackout lighting using the principle of mutual exclusion by color; tests using variety of window coatings, filters, and light sources. R. A. Wank and E. H. Wakefield. *diag Illum Eng* 38:41-4 Ja '43

Bouncing light rays; colors with high reflection improve lighting. A. Perry. *il Safety Eng* 85:9-10+ F '43

Cold-cathode fluorescent lamp at war; I.T.E. circuit breaker company installation. J. C. Sabatini. *il Illum Eng* 38:171-8 Ap '43; Discussion. 38:279-80 Je '43

Cold cathode tubes in industrial lighting. W. Phillips. *il Elec W* 119:1286-7 Ap 17 '43

Co-ordinates paint and light to improve working conditions, increase production. M. Denning, A. A. Brainerd and R. A. Massey. *il Steel* 111:74+ D 21 '42

Critical seeing on critical materials. H. J. Chanon. *il diags Elec West* 91:46-8 S '43

Dangerous dimouts. R. J. Swackhamer. *il Nat Safety N* 47:10-11+ F '43

Design guide for interior electric lighting and wiring for wartime construction. *Illum Eng* 38:443-7 S '43

Design of plane-mirror reflectors for fluorescent lamps. D. P. Severance. *diags Illum Eng* 38:45-57 Ja '43

Economy of 277-volt industrial lighting. R. H. Kaufmann. *diags Elec W* 120:336+ J1 24 '43

Elements of lighting maintenance. H. R. Heitzman and R. L. Knapp. *Illum Eng* 38:391-4 J1 '43

Emergency light turns on automatically when power fails; Exide Lightguard. *il Sci Am* 169:33-4 J1 '43

Engineering twenty-four hour daylight to master manpower problems. C. F. Prideaux. *il diags Illum Eng* 38:227-50 My '43

Engineering works lighting; fluorescent scheme. *il Electrician* 130:51-2 Ja 15 '43

Factory illumination kept at high levels by new servicing equipment. *il Sci Am* 169:201 N '43

Factory lighting. *il Elec R (Lond)* 132:137-41 Ja 29 '43

Factory lighting; fluorescent tube illumination. *il Electrician* 130:590 Je 11 '43

Fifty foot-candles on the working plane. *il Light & Lighting* 36:85 Je '43

Fluorescent lighting in engineering. *il Mech Handling* 30:166-8 Ap '43

Fluorescent lighting in wartime Britain. R. O. Ackerley. *il Elec Eng* 62:208-5 My '43

Fluorescent lighting maintenance. J. J. Neidhart. *il Manuf Rec* 112:32-3+ J1 '43; Same. *Paper Ind* 25:608-10 S '43

460-volt series lighting saves copper. G. E. Shoemaker. *il Elec W* 119:594-5 F 20 '43

Give light a chance. A. K. Gaetjens. *il Nat Safety N* 48:22-3+ N '43; Excerpts. *Safety Eng* 86:30-2 N '43

Good light, a social necessity; the cultivation and dissemination of lighting consciousness in Germany. W. Köhler. *Illum Eng* 38:148-51 Mr '43

Group replacement of fluorescent lamps; with cost data. H. Reinhardt. *Illum Eng* 38:179-88 Ap '43

Higher lighting voltages save copper; ten ways of making power available to light industrial plant with fluorescent lamps. F. C. Winkler and H. G. Barnett. *diags Elec W* 120:816-18 S 4 '43

How to break lighting bottlenecks in war production. L. Smith. *Elec W* 119:1144 Ap 3 '43

How to get the most out of lighting equipment. *il Factory Management* 101:137-44 O '43

In war, see more, do more. C. W. Macy. *il diags Elec West* 90:60-3 My; 97-9 Je '43

Light for safety. S. J. Brown. *il Safety Eng* 85:11 Mr '43

Light the way to safety. H. L. Logan. *il Safety Eng* 86:10-12+ J1 '43

Light to win the war. A. C. Carruthers. *il Safety Eng* 85:24+ F '43

Lighting an old plant for war work. V. C. Uldin. *il Factory Management* 101:127-8 F '43

Lighting and labour. E. B. Sawyer. *il Elec R (Lond)* 133:465-8 O 8 '43

Lighting and war production. W. G. Darley. *bibliog il Illum Eng* 38:307-25 Je '43

Lighting as a factor in production. *Engineering* 156:12 J1 2 '43

Lighting as a factor in production. W. E. Swale. *Light & Lighting* 36:132+ S '43

Lighting design check chart. R. L. Dearborn. *Elec West* 91:50 S '43

Lighting in industry; comments on English, American and Australian industrial codes. L. D. Wright. *Illum Eng* 38:407-9 S '43

Maintain machines and services for continuous operation; fluorescent lighting; Allis-Chalmers. *Factory Management* 101:179-80 Ag '43

Maintain plant lighting efficiency; soap and water restores original output. *il Elec West* 91:58 S '43

Maintenance of electric lamps and motors; lamps and fixtures; Chem & Met report. *il diag Chem & Met Eng* 50:117-20 Mr '43

Make lighting fit war workers' needs. W. H. Kahler. *il diags Factory Management* 100:116-18 D '42

New equipment; lighting and safety apparatus. *il Iron Age* 151:74-6 F 18 '43

No wasted watts; light absorbed by dirty lamps and reflectors isn't helping to win the war. *il Nat Safety N* 46:27+ N '42

Oxford ophthalmological congress, 1943; discussion on illumination in industry. D. Wilson; H. C. Weston; E. R. Merewether. *Light & Lighting* 36:113-16 Ag '43

Plant lighting. *diags Nat Safety N* 47:111-12+ Mr '43

Regular servicing keeps lighting fixtures fit. F. Clayton. *il diag Factory Management* 101:132-4 Je '43

Remarks concerning wartime industrial lighting in connection with conference presentation of report of the committee on light in wartime. H. B. Dates. *Illum Eng* 37:700-5; Discussion. F. C. Eley. 705-6 D '42

Role of lighting in accident prevention. H. L. Logan. *bibliog Elec Eng* 62:143-7 Ap '43

Salvaging light; how more light may be supplied to industrial workers without increasing current consumed. A. P. Peck. *il Sci Am* 168:58-60 F '43

Seeing engineering, a profession. C. A. Atherton. *Illum Eng* 38:125-8 Mr '43

Sight for victory; new program of the National better light-better sight bureau. H. P. J. Steinmetz. *Edison Elec Inst Bul* 11:182+ Je '43

Three sources used in wartime lighting; incandescent, fluorescent and mercury. D. P. Kohler. *il Elec West* 91:52-4 S '43

Tip-up light fixture needs no catwalk. E. R. Bonds. *diags Elec W* 120:344+ J1 24 '43

Value of good lighting in war production; survey of opinion from a cross-section of American industry. *bibliog Illum Eng* 38:13-23 Ja '43; Same. *Edison Elec Inst Bul* 11:49-51+ F '43

Ventilated design for windowless walls; Douglas Aircraft plant. *il diag Eng N* 130:500-1 Ap 8 '43

Wartime lighting and industrial hygiene. P. A. Lawrence. *Illum Eng* 38:448-9 S '43

Why not use color? F. Birren. *il Nat Safety N* 47:12-13+ Je '43

See also

Airplane assembly plants—Lighting	Factories—Yards—Lighting
Cotton mills—Lighting	Garment factories—Lighting

Location

Feeder plants tap new sources of manpower; Consolidated Vultee aircraft corporation. *il Am Mach* 87:88-9 My 27 '43

Industrial location. *Economist* 144:276 F 27 '43

Location of industry. *Chem Age (Lond)* 48:517-18 My 15 '43

Manufacturing in metropolitan districts. C. E. Haring. *map Adv & Sell* 36:38+ Ja '43

Pioneering the Middle West; today and tomorrow. C. C. Davis. *Chem & Met Eng* 49:101-2 N '42

Sees post-war shifts of people and industry; National resources planning board study, industrial location and national resources. *Comm & Fin Chr* 158:1020 S 9 '43

Factories—Continued

Lockers

See Lockers

Lunchrooms

See Lunchrooms and cafeterias, Employees'

Maintenance and repair

Decentralized maintenance for continuous output; Douglas aircraft company, A. T. Kuehner, *il* Factory Management 101:123-8 Mr '43

Funding depreciation and maintenance reserves under war conditions, W. A. Hosmer, *Harvard Business R* 21 no 3:369-84 [Ap] '43

Here's preventive upkeep; Link-belt company, Chicago, F. L. Pyle, *il* Factory Management 101:142, 144 My '43

How to organize a maintenance department, E. Mauldin, *Textile World* 92:84-5 N '42

Industrial safety gleanings; good maintenance, *Chem Age (Lond)* 48:421 Ap 17 '43

Keeping plant buildings in condition, *Factory Management* 101:B90+ Ap '43

Maintain machines and services for continuous operation, *il* Factory Management 101:174-84 Ag '43

Maintenance expedients for wartime operation, J. M. Schulenburg, *il* Factory Management 101:123-8 Je '43

Maintenance in wartime and after, J. L. Bowman, *Chem & Met Eng* 50:100+ Mr '43

Maintenance services. Published in monthly numbers of *Factory Management*

Maintenance that cuts out production stoppages; Belmont radio corporation, H. J. Tendick, *Factory Management* 101:78, 80 Ap '43

Organised maintenance, H. Greaves, *Elec R (Lond)* 132:579-80 Ap 30 '43

Our maintenance is geared to wartimes; Aluminum company of America, W. S. Rearick, *il* Factory Management 101:123-5 Ja '43

Our wartime upkeep policy; Atlas-boxmakers, G. E. Pirman, *il* Factory Management 101:145 S '43

Production insurance; preventive maintenance prolongs life of equipment, E. W. Bender, Jr, *il* Nat Safety N 47:12-13+ F '43

Scheduled lubrication keeps bearings rolling along, A. J. Strohmaier and C. L. Lovell, *il* Power 87:307-9 My '43

With us every day is building-inspection day; Gardner-Denver co., Quincy, Ill., H. Theis, *il* Factory Management 101:139-40 Je '43

Works maintenance problems, G. A. T. Burdett, *Electrician* 131:276-7 S 17 '43

See also

Lubrication and lubricants

Moving

Plant is exported; Ford's tire factory knocked down and shipped to Russia, *Business Week* p28 Ap 17 '43

Problems involved in moving a plant; Productora de Artisela, Obregon, Mexico, D.F., E. C. Dunham, *il* Chem & Met Eng 50:101+ Ap '43

Noise

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Painting

Bouncing light rays; colors with high reflection improve lighting, A. Perry, *il* Safety Eng 85:9-10+ F '43

Co-ordinates paint and light to improve working conditions, increase production, M. Denning, A. A. Brainerd and R. A. Massey, *il* Steel 111:74+ D 21 '42

Dynamic color; painting of machinery and shop as safety measure, R. A. Massey, *il* Nat Safety N 48:12-13+ Ag '43

How color can aid seeing, F. Birren, *il* Factory Management 101:140-1 Ja '43

How to obtain optimum lighting efficiency, J. J. Neidhart, *il* Paper Ind 26:608-10 S '43; Same, *Manuf Rec* 112:32-3+ JI '43

Industrial safety and lighting improved by bright paint colors; expansion of the three-dimensional seeing idea, *il* Rayon 24:551-2 O '43

Painting building surfaces; maintenance services; data sheet, *Factory Management* 101:164, 166 S '43

Salvaging light; how more light may be supplied to industrial workers without increasing current consumed, A. P. Peck, *il* Sci Am 168:58-60 F '43

Three-dimensional seeing now, *il* Textile World 93:70-3 My '43

Protection

Camouflaging industrial plants, F. G. Beury, *il* Manuf Rec 111:28-9+ N '42

Defense against sabotage, espionage is vital to war production effort; photoelectric equipment, R. E. Appel, *il* Steel 112:90, 92+ F 1 '43

Firearms for plant protection; safe handling, *Nat Safety N* 48:31+ S '43

Hints on effective camouflage, J. D. Campbell, *il* Aero Digest 42:116-17, 224+ Je '43

How and why of camouflage, H. Goff, *il* Aviation 41:104-5+ O '42; Same cond, *Aero Digest* 42:119-21+ My '43

How to organize your plant protection system, *il* Steel 112:116, 118+; My 17 '43

Intrusion alarms, C. E. Jackson, *il* diags Radio N 29:14-16+ My '43

Passive plant protection; maintenance services; data sheet, *Factory Management* 101:166 JI '43

Plant protection and safety; training courses, *Safety Eng* 85:33+ F '43

Problems of plant protection, W. E. George, *il* Foundry 71:134-5+ Je '43

Proneness to damage of plant through enemy action, H. Gutteridge, *Ins Mech Eng J & Proc* 147:Proc 99-104 '42; Discussion, 147:Proc 104-9; 148:Proc 120-8 Je '42, Ja '43

Protection of property by electronic methods, P. M. Farmer, *il* Electronics 16:120-2+ Mr '43

Ready for a raid; Westinghouse electric & manufacturing company, P. E. Rousseau, *il* Am Mach 86:1419-22 D 10 '42

See also

Employees, Identification of
Factory fire brigades
Sabotage

Reconstruction

Bomber noses now made in Knoxville; transformation from abandoned warehouse to model Plexiglas plant, *il* Manuf Rec 112:62-4 S '43

From auto bodies to bomber noses, S. D. Kirkpatrick, flow sheet *il* Chem & Met Eng 50:98-101 JI '43

Revamping an old plant for a war job; Woonsocket plant of United States rubber company turning out barrage balloons and inflatable boats, G. A. Van Brunt, *il* Factory Management 101:121-4 My '43

Reconversion

Bank financing of post-war reconversion, C. S. Dewey, *Trusts & Estates* 77:201 S '43

Britain plans reconversion; business men start with government agency on survey, *Business Week* p15-16 JI 10 '43

Congress and business reserves, B. W. Gearheart and others, *Banking* 36:10+ O '43

How Packard plans to tackle reconversion, G. T. Christopher, *il* Am Business 13:10-12 Ag '43

If Germany falls this year, what about industry? business? your investments? L. Stern, *il* Mag of Wall St 72:280-4+ Je 26 '43

Impact of war on advertising; who will pay for reconversion? *Adv & Sell* 36:35-6 N 43

Industry must prepare to shoulder tremendous task, J. C. Sullivan, *il* Steel 113:86-7+ Ag 2 '43

Industry's post-war conversion assets, V. Catozella, *Barron's* 23:3, 8 Ag 16 '43

Magnitude of reconversion job, *Trusts & Estates* 77:322-4 O '43

Needed, a plant re-conversion cost policy, H. L. Federman, *Aviation* 42:127+ Ag '43

Offers plan for establishing post-war reconversion and working capital reserves now, D. Emery, *Comm & Fin Chr* 157:2389 Je 24 '43

Post-war industrial problems and prospects; Packard's outlook, W. Von Tresckow, *Barron's* 23:9 Je 14 '43

FACTORIES—Reconversion—Continued

Reconversion reserves, they're postwar worry no. 1. R. L. Hoadley. *Aviation* 42:179+ S '43
 Sees ways to speed transition for post-war economy; re-conversion in advance to hasten production. G. T. Christopher. *Comm & Fin Chr* 157:2161+ Je 10 '43
 Use idle labor during retooling; plan provides work for employees during changeover; Cleveland automatic machine co. *Steel* 113: 157 O 11 '43

Records

Combined forms to save writing and improve control; Sheffield corporation, Dayton, Ohio. *il Am Business* 13:23-6 Ap '43
 Equipment records supply facts for layout. *il Factory Management* 101:89 Je '43
 How Graham-Paige controls materials; flexible card system furnishes factory and CMP records. R. G. French. *il Am Business* 13:14-15+ O '43
 Plant procedure for expediting war production; Alden products company. *diags Electronics* 16:60-3+ Ja '43
 Production and cost control in a small war plant. W. Flatow. *Iron Age* 152:70-2+ S 16 '43
 Sixteen forms replaced by three in order system. *il Am Business* 13:32-3 Ap '43

Roofs

Air-supported roofs for factories. H. H. Stevens, jr. *il diags Arch Rec* 92:45-6 D '42
 Arched concrete shell for industrial roof; extension to Westinghouse plant. H. C. Schwerin. *il Civil Eng* 13:213-14 My '43
 Bowstring trusses provide sawtooth roof. *il diag Eng N* 130:384-5 Je 17 '43
 Building an 82-acre concrete roof with traveling retractable forms; Dodge-Chicago plant, Division of Chrysler corp. *il diags Eng N* 130:374-7 Je 17 '43
 Concrete arch roof for Kansas City factory; movable forms speed construction of Pratt and Whitney plant. T. Wood. *il Civil Eng* 13:363-5 Ag '43
 Heavy timber trusses carry timber arches. A. Zweig. *il diags Eng N* 131:190-3 Jl 29 '43
 Water spray versus sun heat; roof spray systems for supplementing air conditioning. *Dom Eng* 160:56+ D '42

Safety measures

See Accidents, Industrial; Safety devices and measures and other headings beginning Safety

Yards**Lighting**

Correct lighting protects against sabotage; new American war standard. C. Ainsworth. *il Ind Stand* 14:36-9 F '43
 Industry's first line of defense, protective lighting. C. L. Amick. *il diags Power Pl Eng* 47:54-7 Ja '43
 Protection against sabotage. J. A. Summers. *Edison Elec Inst Bul* 10:110-12+ N-D '42; Same. *il Illum Eng* 37:727-37 D '42; Same. *Sci Am* 168:154-7 Ap '43

FACTORY accounting. See **Factories—Accounting**

FACTORY communication

Air mail shortens plant distances, speeds output. *il Factory Management* 101:114-15 Je '43
 Centralized sound in an ordnance plant. S. Harman and H. A. Blair. *il plan Radio N* 28:30-1+ O '42
 Commercial sound enlists; the microphone and the loudspeaker join in war effort to increase efficiency of operations. G. R. Ewald. *il Sci Am* 168:70-2 F '43
 Entertainment plus safety talks broadcast over plant public address system; Mengel company. W. Murphy. *il Nat Safety N* 48: 24-5+ N '43
 Industrial music and morale. D. D. Halpin. *il Acoustical Soc Am J* 15:116-23 O '43
 Industrial sound for war production. S. Harman and H. A. Blair. *il diag Radio N* 28: 42-3+ D '42
 Sound, and its place in the sun. F. D. Wilson. *il Electronics* 16:108-10 Mr '43

FACTORY costs**See also**

Factories—Accounting **Labor cost**
 Power cost

FACTORY fire brigades

Fire away! fire brigades and protection system. Kearney and Trecker corp. J. L. Trecker. *il Safety Eng* 86:33-8 Ag '43
 Industry on guard. L. F. Maar. *il Safety Eng* 86:12, 14+ O '43
 School for plant firemen; Milwaukee fire department. *il Factory Management* 101:146-52 S '43

FACTORY floors. See **Factories—Floors**

FACTORY guards

Army's internal security program. H. G. Reynolds. *Oil & Gas J* 41:79+ N 12 '42; Same. *Am Pet Inst Proc* 23(1):55-7 '42; Same abr. *Nat Pet N* 34 pt 2:R395-6 N 25 '42
 Industry's minute men. J. S. Myers. *il Safety Eng* 86:63+ O '43

FACTORY hospitals. See **Hospitals, Industrial**

FACTORY inspection

Work of the Factory department in Great Britain; report of chief inspector for 1941. E. Bevin. *Int Labour R* 47:466-78 Ap '43; Abstract. *J Ind Hygiene* 26:sup96-7 My '43

FACTORY insurance associations

Before we go any further; potentials of nationwide Factory insurance association. C. G. Hale. *Spectator (Property ed)* 3:10-12 N 4 '43
 Factory insurance association; examination report, made by New York Insurance department. W. E. Roesch. *Spectator (Property ed)* 3:10-14, 26 Mr 4 '43
 F.I.A. reports gain in premiums of 70%; officers elected. *East Underw* 44:16 Mr 12 '43

Factory insurance groups merged into one national unit. *East Underw* 44:1+ Je 25 '43; Same abr. *Nat Underw* 47:1+ Je 24 '43; Same. *Weekly Underw* 148:1365-6 Je 26 '42
 Firemen's may join new F.I.A. *Nat Underw* 47:1 My 6 '43

N. Y. report on F.I.A. hits competitive rating methods. *Nat Underw* 47:1+ F 18 '43; *East Underw* 44:23 F 19 '43

Service new FIA furnishes American industry; abstracts. C. W. Pierce. *East Underw* 44:1+ Jl 23 '43; *Nat Underw* 47:2 Jl 22 '43
 Uniformity is object of factory syndicate move. C. W. Pierce. *Nat Underw* 47:3 F 18 '43; Same. *Weekly Underw* 148:424 F 20 '43

FACTORY laws and legislation

Fencing machinery; precautions against breaches of regulations. F. E. Sugden. *Elec R (Lond)* 133:176 Ag 6 '43

FACTORY lunchrooms. See **Lunchrooms and cafeterias, Employees'**

FACTORY management

Coordinating standards work with design and production. B. C. Boulton. *Product Eng* 14:565-7 S '43

Expediting in wartime. S. Y. Johnson. *Harvard Business R* 21 no 3:344-57 [Ap] '43

Factory council makes foremen managers; Huffman manufacturing company, Dayton. H. M. Huffman, jr. *il Factory Management* 101:111-13 Je '43

Find the one best way of manufacture. *il Factory Management* 101:154-63 Ag '43

Foreman as manager. W. Puckey. *Electrician* 131:135 Ag 6 '43

How to organize your plant protection system. *il Steel* 112:116, 118+ My 17 '43

Management aspects of safety engineering. F. E. Faast. *il Mech Eng* 65:802-4 N '43

Management check list for manpower utilization. W. H. Kushnick. *Mech Eng* 65: 410-11+ Je '43

Maximum works production. J. J. Gracie. *Engineer* 176:13; Discussion. 13:14 Jl 2 '43

Nobody's war baby; N. A. Woodworth co., Detroit turns out two million high-precision Wright aircraft motor parts a month. *il Fortune* 27:138-9 Je '43

Operating a modern salvage department; Westinghouse electric and manufacturing co. K. A. Fowler. *il Metals & Alloys* 18: 282-6 Ag '43

Organization and control of mass production. E. A. Boyan. *diags Factory Management* 101:97-112 S '43

FACTORY management—Continued

Organization as a project in human engineering; review of Dynamic administration: the collected papers of Mary Parker Follett. P. Pigors. Mech Eng 65:40-1 Ja '43

Plant procedure for expediting war production; Alden products company. diags Electronics 15:60-3+ Ja '43

Rubber mountings for vibration control; Lord manufacturing co. J. Geschel. il Automotive & Aviation Ind 89:20-4+ O 1 '43

Scientific management applied to subcontracting; helps step up war production at Link-belt ordnance co. R. Trauttschold. il Steel 112:74-5 F 22 '43

Staff organization for control. J. K. Loudon. Advanced Management 8:17-22+ Ja '43

Three incentive plans, so better efficiency; Walter Kidde & company, Belleville, N.J. V. J. Hill. il Factory Management 101:90-2 O '43

Volume production of auto pilots; AC spark plug division of General Motors. il Aero Digest 42:195, 197 My '43

What executives should know about purchasing control; using Gant charts. E. Caldwell. Iron Age 152:59-61 S 16 '43

See also

Airplane factories—
Management
Assembling methods
Bonus system
Budget, Business
Chemical plants—
Management
Contracts, Government—
Subcontracting
Control boards
Conveying machinery
Cost accounting
Cotton mills—Man-
agement
Dental service, Industrial
Efficiency, Industrial
Employees
Employees' representation in management
Employment departments
Employment management
Employment systems
Executives
Factories—Accounting
Factories—Equipment
Factories—Maintenance and repair
Foremen
Foundry management
Hours of labor—
Shift schedules
Hygiene, Industrial
Idleness, Industrial
Industrial management
Inspection
Instructions

Inventories
Job analysis
Knitting mills—Management
Machine shop management
Mechanical handling
Medical service, Industrial
Motion study
Munition factories—
Management
Music in industry
Noise
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Packing for shipment
Paper mills—Management
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Purchasing
Quality of products
Rubber factories—
Management
Safety devices and measures
Salvage (waste, etc.)
Schedules
Shipment of goods
Stores systems
Subcontracting
Suggestion systems
Textile mills—Management
Time study
Wage payment plans
Welfare work in industry

Quality control

Bonus on quality. A. S. Wharton. Elec R (Lond) 133:536-8 O 22 '43

Development of research and quality control in a modern steel mill. L. F. Reinartz. il diags Blast F & Steel Pl 31:409-18, 522-8+ Ap-My '43

Electronics at work on quality control. V. B. Baker. il diags Mod Packaging 17:91-4+ N '43

Management problems in judging quality conformance in the inspection function. J. M. Juran. Mech Eng 65:805-8 N '43

Opportunities in mathematical statistics, with special reference to sampling and quality control. W. E. Deming. Science 97:209-14 Mr 5 '43

Performance quality control in the manufacture of hydraulic parts. H. A. Zimmerman. il diags Aero Digest 41:261-2+ D '42

Putting quality into quantity; quality control, based on rules of probability. L. T. Rader. Am Mach 87:92-3 O 28 '43

Quality assurance through sampling inspection. H. Rissik. Engineer 175:334-5, 346-7 Ap 23-30 '43

Quality control. F. W. Preston. Glass Ind 24:474 N '43

Quality control; its application to production engineering. H. Rissik. Elec R (Lond) 132:283-5 F 26 '43

Quality control; its demands grow tighter as war gets together. il Fortune 28:126-7 O '43

Quality control keeps product standards high; Ryan aeronautical co. B. Holland. il Aviation 42:160-2+ Je '43

Quality control of munitions; abstracts. G. D. Edwards. Metals & Alloys 17:206+ Ja '43; Metal Prog 43:426+ Mr '43

Quality control plays a major role at Bendix. J. Geschel. il Automotive & Aviation Ind 88:18-23, 44 Ja 1 '43

Quality control will reduce costs; manufacturing operations at Westinghouse. J. Manuele. il diags Am Mach 87:78-81 Ap 29 '43

Quality inspection of beryllium copper. W. Martin. il Metals & Alloys 17:1203-7 Je '43

Refined quality control. J. Gaillard. il Am Mach 86:1430-2, 1498-1500 D 10-24 '42; Same cond. Ind Stand 14:123-7, 155-8 Ap-My '43

Statistical methods; practical application in the factory. A. S. Wharton. Elec R (Lond) 132:743-5 Je 4 '43

Statistical quality control in the aircraft industry. E. A. Pinto. Aero Digest 43:313-15, 317-1 J1 '43

Ten years' progress in management; statistical control in applied science. W. A. Shewhart. A S M E Trans 65:222-5 Ap '43

To one-millionth of an inch; at SKF as much as 40 per cent of the man-hours go into quality control. il Fortune 28:128-9+ O '43

*See also***Inspection**

FACTORY nurseries. See Day nurseries, Factory

FACTORY sanitation

Cleanliness fights, too. H. J. Tendick. il Safety Eng 84:39-40 D '42

Liquid sabotage; Lukens plant disinfected after flood. H. Armand. il Safety Eng 85:20-2 Ja '43

Low-cost sewage treatment facilities for a war plant. il plan Eng N 131:350-2 Ag 26 '43

Mechanical equipment for factories; plumbing and sanitation. C. T. Roe. il Arch Rec 93:61-2 F '43

Neglected sector. il Nat Safety N 47:26-7+ Ja '43

Washrooms and lockers, aids to health and morale. il Nat Safety N 47:169+ Mr '43

See also

Drinking fountains	Food factories—Sanitation
Dust	Milk plants—Sanitation
Factories—Cleaning	Factories—Painting
Factories—Inspection	Trade waste

FACTORY transportation

Industrial taxi service; Allis-Chalmers plant. G. E. Stringfellow. il Steel 111:84, 86 D 14; 76, 78 D 21 '42

Intrplant transportation systems; Diesel-powered track-type tractor. B. W. Reynolds. Diesel Power 20:1010+ D '42

Special delivery service by pneumatic tube; Cleveland graphite bronze co. il Factory Management 100:82-3+ D '42

Traffic within the plant; safety measures. Nat Safety N 47:96+ Mr '43

What you should know about principles of materials handling; transportation techniques. A. S. Knowles. Steel 113:79-80 Ag 30; 99 S 27 '43

See also

Conveying machinery	Motor trucks, Industrial
Electric trucks, Industrial	Tractors, Industrial
Mechanical handling	Trucks
Monorail conveyors	

FACTORY waste. See Trade waste

FACTORY yards. See Factories—Yards

FADE-OMETER

Calibration of fade-ometers; presented for the A.A.T.C.C. New York section by P. J. Wood. il Am Dyestuff Rep 31:595-9+ D 7 '42

FADING. See Dyes, Fastness of

- FAGAN, Patrick T.**
Fall of Fagan. *por Business Week* p92-3 D 19 '42
- FAGARA coco**
Alkoxy interchange by γ -alkoxyquinoline derivatives in alcoholic alkali. B. Berinzaghi and others. *Am Chem Soc J* 65:1357-9 JI '43
- FAGOPYRUM.** See Buckwheat
- FAIR employment practices committee**
New committee on fair employment practice created by President. *Comm & Fin Chr* 157: 2112 Je 7 '43
President appoints six to Fair Employment group. *Comm & Fin Chr* 158:142 JI 8 '43
Ross succeeds Haas as Fair Employment head. *Comm & Fin Chr* 158:1720 O 28 '43
Social reform strengthens its antidiscrimination salient. L. D. Farrar. *Pub Util* 32:619-25 N 11 '43
Tough assignment. *Business Week* p100 My 29 '43
Walking on eggs. *Business Week* p100+ O 16 '43
- FAIR labor standards act.** See Labor laws and legislation—United States
- FAIRBANKS, Morse and company**
Companies with record high earnings. J. C. Harrington. *Mag of Wall St* 71:526-7 F 20 '43
- FAIRCHILD aviation corporation**
Stocks in a strategic position. G. L. Merton. *Mag of Wall St* 71:488 F 6 '43
- FAIRCHILD engine and airplane corporation**
Fairchild contributes to aviation progress. C. H. Gale. *il Aeronautical Eng R* 1:57 N '42
- FAIRPORT, New York**
Sanitary affairs
Incinerator and sewage plant operated jointly. F. A. Cary. *il plan Pub Works* 74:28-9+ Ja '43
- FALKOMER.** See Rubber, Artificial
- FALLING bodies**
Falling bar problem. R. T. Liddicoat. *J Eng Educ* 33:508-13 Mr '43
- FALLS**
Causes and prevention of injuries from falls in shipyards. F. S. McElroy and A. L. Svenson. *Monthly Labor R* 57:766-72 O '43
Stairway accidents. *Nat Safety N* 47:21-2+ My '43
- FALMOUTH, Massachusetts**
Water supply
Measures taken at Falmouth to control red water and tuberculation of mains. E. S. Chase. *map N E Water Works Assn J* 57: 173-85 S '43
- FAMILY**
American family in World war II. R. H. Abrams. *ed. Ann Am Acad* 229:1-175 S '43
See also
Budget, Household Husband and wife
Home labor Standard of living
- FAMILY allowances**
Allowances to dependents of servicemen in the United States. D. C. Cline. *Ann Am Acad* 227:1-8 My '43
Family allowances: an Anglo-American contrast. H. Tarasov. *Ann Am Acad* 227:9-21 My '43
Family allowances in various countries. M. T. Waggaman. *Monthly Labor R* 57:265-76 Ag '43
From eight to five; children's allowances. *Economist* 144:233 F 20 '43
Increased dependents' allowances for Canadian service men. *Int Labour R* 47:391-3 Mr '43; Same. *Monthly Labor R* 56:1114-16 Je '43
Wage stopgap? McTague scheme would provide government allowances for dependent children in lieu of bigger pay. *Business Week* p60 S 25 '43
- FAMILY budget.** See Budget, Household
- FAMILY group policies.** See Insurance, Life—Family group policies
- FAMILY income.** See Income
- FAMILY of products**
See also
Advertising—Family of products
- FAMILY partnership.** See Partnership—Taxation
- FANS, Mechanical**
Determination of the lowest natural bending frequency of axial flow compressor blades; abstract. M. Schilhansl. *Roy Aeronautical Soc J* 47:sup351-2 JI '43
Fans; their types, characteristics, and application. C. G. Ferguson. *diags Inst Mech Eng J & Proc* 148:Proc 1-19, pl 1-10 N '42; Same cond. *Engineer* 173:274-6, 294-6 Mr 27- Ap 3 '42; Discussion. *Inst Mech Eng J & Proc* 148:Proc 20-5; 149:Proc 146-60 N '42, S '43
Fundamentals of wind tunnel control. R. R. Longwell. *il diag Aviation* 42:162-3+ O '43
Industrial fans. M. S. Kice. *il Steel* 112:110-12 Mr 15; 86-8 Mr 22 '43
Kestner axial flow fans. *il Chem & Ind* 62: 24 Ja 16 '43
Positive jacket-water temperature control by variable-pitch fans; road and dirt-moving machinery. K. W. Anderson. *il Diesel Power* 21:944-6 O '43
Quick repair of fans by arc welding; with cost data. *Elec W* 119:1803 My 29 '43
Trebling air supply with 20% power rise; fan and heat exchanger installation. J. Cassie. *diags Elec W* 119:782+ Mr 6 '43
Why do fans act thus if discharge is obstructed? *diags Power Pl Eng* 47:96, 98 JI '43
See also
Blowers Fans, Mine
Electric fans, Ven- Mechanical draft
tilating
Control
Automatic fan speed control for unit coolers. S. C. Segal. *diags Refrig Eng* 46:177-9 S '43
- FANS, Mine**
Balancing air flow to get the benefits of split currents; using a booster fan; making new openings or sinking new shafts. J. H. Dickerson. *diags Coal Age* 48:92-4 My '43
Fan started and doors closed to warm shaft bottom; Federal No. 1 mine, Koppers Coal division. *plans Coal Age* 48:100 O '43
Fans; their types, characteristics, and application. C. G. Ferguson. *diags Inst Mech Eng J & Proc* 148:Proc 15-19, pl 6-9 N '42; Same cond. *Engineer* 173:295-6 Ap 3 '42; Discussion. *Inst Mech Eng J & Proc* 148:Proc 20-5 N '42
Right fan location can save money and help ventilation. J. H. Dickerson. *plans Coal Age* 47:58-60 N '42
See also
Mine ventilation
- FANSTEEL, metallurgical corporation**
Common stock offered. *Comm & Fin Chr* 158: 770 Ag 23 '43
Companies favored by research. *Mag of Wall St* 73:32 O 16 '43
Market leaders for 1943. *Mag of Wall St* 71: 344 Ja 9 '43
Stocks in a strategic position. G. L. Merton. *Mag of Wall St* 71:488 F 6 '43
- FAR EAST**
See also
China World war, 1939-
Indo-China, French —China
Japan World war, 1939-
—Japan
- Commerce**
Financing Far Eastern exports. *Economist* 144:594 My 8 '43
- Economic conditions**
Changing economic status of the Far East. V. L. Horoth. *il Mag of Wall St* 71:339-41+ Ja 9 '43
- FARE collection.** See Motor bus lines—Fare collection
- FARE registers**
Fare box hopper for Atlanta buses and cars. *il Mass Transportation* 39:149 Ap '43
- FARES.** See Air lines—Fares; Railroads—Fares

FARGO, North Dakota**Water supply**

Waterworks distribution systems in wartime. W. P. Tarbell. Water & Sewage 81: 24+ Ag '43

FARINA

Flour and farina standards set. Food Ind 15: 116 J1 '43

FARISH, William Stamps, 1881-1942

Sketch. por Nat Pet N 34:9-10 D 2 '42; Oil & Gas J 41:20 D 3 '42; Oil Paint & Drug Rep 142:71 D 7 '42

FARLEY, James Aloysius, 1888-

Sketch. pors Spectator (Life ed) 151:66, cover S '43

FARM accidents

Farm safety review. Published bi-monthly by the National safety council, 20 North Wacker drive, Chicago

FARM buildings

Action expected on the farm front; additional buildings and labor-saving improvements needed. il diags plans Am Bld 65:42-3+ Ag '43

Concrete boards for farm buildings; Dodson manufacturing co. il Rock Prod 46:84+ S '43

Contractors find farrowing houses easy to promote. il diags Concrete 51:14+ J1 '43

Farm construction declared best outlet for concrete contractors. plan Concrete 51:16+ My '43

Forecast: bumper crop of farm building. K. J. T. Ekblaw. il Am Bld 65:49-51+ Ja '43

How this concrete contractor restores old farm buildings. il Concrete 51:14+ Je '43

Join the farm fix-up and build-up brigade. il diags Am Bld 65:52-5 Ag '43

Junior prefabs; lumber yard transformed into factory for brooder houses, feed bunks, etc. il Business Week p34+ My 1 '43

Not post-war, but right now; more adequate farm structures must be permitted. il Am Bld 65:114+ O '43

Plans and construction procedure for concrete masonry farm buildings. il diags plan Concrete 51:10+ Je '43

Selling the farm market; Kissell concrete block co. W. B. Lenhart. il Rock Prod 46: 83, 86+ Ap '43

Small jobs to be done on farms. il Am Bld 65:54 Ap '43

Still in a slump. Business Week p31-2+ S 25 '43

Wanted, thousands of farm builders; how to get farm jobs. J. L. Strahan. il Am Bld 65: 28-9+ Ag '43

See also

Farmhouses Rabbit houses

Live stock sheds Smokehouses

Milk houses Swine houses

FARM credit. See Agricultural credit

FARM equipment

Build and sell these farm aids: baby pig warmer, chicken roosts, milk can rack. il diags Am Bld 65:66 Mr '43

Farm aids you can build and sell; cattle stanchions, box for mixing concrete, hay racks. il diags Am Bld 65:88-9 Ap '43

FARM houses. See Farmhouses

FARM income

Cash farm income; annual monthly average 1913-1934, monthly 1935-1941. Survey of Cur Business 23:28 My '43

Cash income from farm marketings, 1938-1941. Survey of Cur Business 1942 Sup p7 [supplemented in monthly numbers]

Farm cash income ahead of year ago; first half of 1943. Comm & Fin Chr 158:612 Ag 12 '43

Farmers in clover. Business Week p38+ Je 26 '43

Farmers planting swollen incomes in life insurance. K. Hager. Ptr Ink 204:96+ S 24 '43

Implement builders turn to war goods to utilize plants; farm cash income and buying power. Steel 112:417-20 Ja 4 '43

Improvement in farmer's position. Trusts & Estates 76:320 Ap '43

Rise in farm income; chart. Business Week p 13 Je 12 '43

State income payments in 1942; net income of farm operators. D. Creamer and C. F. Schwartz. Survey of Cur Business 23:17-20 Je '43

FARM labor

Admission of alien farm workers into United States. Monthly Labor R 57:124-5 J1 '43

Belladonna, digitalis, aconite, peppermint held essential war crops. Oil Paint & Drug Rep 143:3+ My 3 '43

Central control of farm wages in England and Wales. E. M. Hodgkinson. Monthly Labor R 56:592 Mr '43

Changes in wages and hours in agriculture in England and Wales. Monthly Labor R 57: 583-4 S '43

Converts food trailer to bus for workers; will carry 80 volunteer farm laborers to Seabrook farms. il plans Food Ind 15:64-5 Mr '43

Earnings of small farmers in Puerto Rico. Monthly Labor R 55:1280-3 D '42

Emergency farm employment of nonfarm youth, 1942. Monthly Labor R 56:697-701 Ap '43

Farm employers liability program adopted for New York. Nat Underw 47:16+ J1 8 '43; Weekly Underw 149:78 J1 10 '43; East Underw 44:24 J1 9 '43

Farm labor force far below normal. Comm & Fin Chr 157:1395 Ap 15 '43

FSA program for migratory group. Nat Underw 47:19 Je 24 '43; Same. Nat Underw (Life ed) 47:4 Je 25 '43

Guides for wartime use of women on farms. U S Women's Bur Special Bul 8:1-11; pa 10c Supt. of doc. '42

Hired farm workers and average farm wage rates, 1940-Feb. 1943; chart. Survey of Cur Business 23:2 Ap '43

Insurance of agricultural workers, self-employed, and domestic servants; discussion at Inter-American conference on social security. Int Labour R 46:668-73 D '42

Medical care for farm workers in California and Arizona. W. Goldner. Monthly Labor R 55:957-9 N '42

Millions for land army. Comm & Fin Chr 157: 1784 My 13 '43

More farm labor. Business Week p20 Je 19 '43

Nation's cannery launch drive for volunteer food workers. il Sales Management 52:58-9 Ap 1 '43

Plan set up for Mexican laborers. Nat Underw 47:32-3 Ag 26 '43

Senate votes military deferment for farmers. Comm & Fin Chr 157:1220 Ap 1 '43

To release men over 38 from army to supply farms with needed manpower. Comm & Fin Chr 157:1403 Ap 15 '43

Wartime wages and manpower in farming. W. Bowden. bibliog Monthly Labor R 55: 1111-24 D '42

Wheat rolls in. Business Week p14-15 J1 3 '43

Where the farm labor pinch is felt; map. Business Week p44 My 1 '43

Women's land army. Economist 144:537 Ap 24 '43

See also

Agricultural educa- Rubber workers

tion Tobacco workers

Fruit pickers

FARM loans. See Agricultural credit; Mortgages, Farm

FARM management

Farm production in wartime. H. B. Walker. Elec West 89:61-3 D '42

Farm work simplification; application of motion study; Purdue farm work simplification laboratory. M. E. Mundel. Mech Eng 65:565-6 Ag '43

Plan to safeguard farm loans; survey of feeding and farming conditions by Purina mills of St Louis. Bankers Mo 60:368 Ag '43

See also

Farm labor

FARM market

Consider the new farm market. I. Benney. il Adv & Sell 36:25, 108 O '43

Farmer as a buyer of equipment and supplies; tabulation. Sales Management 51:70 D 15 '42

FARM market—Continued

How the farm market is reached through clinics; Johns-Manville company. M. Beuck. *il* *Pr* *ink* 205:25-6 O 29 '43

Iowa farm delivery; methods and costs. W. T. Maakestad and F. Robotka. *diags* *Nat* *Pet* N 34:18, 20, 34, 36-9 D 16; 27-9 D 23; 32-4 D 30 '42

Oil helps farmer produce more food; need tanks to store gasoline and tractor fuel. *il* *Nat* *Pet* N 35:34+ *Je* 23 '43

Petroleum requirements of farms. W. J. Heggen. *il* *Nat* *Pet* N 35:22+ *Mr* 24 '43

Ready-mixed concrete finds new market in farm construction work. *Concrete* 51:11 *Je* '43

Rural America, market for postwar appliances. H. Slattery. *il* *Adv* & *Sell* 36:22+ S '43

Selling the farm market; Kissell concrete block co. W. B. Lenhart. *il* *Rock* *Prod* 46: 83, 86+ *Ap* '43

Serving the farmer in war. *il* *Nat* *Pet* N 35:34, 36-7 *Ap* 7 '43

Sinclair's Farming for victory program: what it is, how it works. W. J. Andree. *il* *Sales* *Management* 52:18-21 *Ja* 15 '43

Utility helps farmers surmount critical equipment shortages; Eastern Oregon Light and Power farm equipment clearing house and information center. *Sales* *Management* 52: 50+ *jl* 1 '43

Wartime farmer is big consumer of oil. *il* *Nat* *Pet* N 35:26-7 *Je* 2; 26, 28+ *Je* 9 '43

Where do farmers buy? *Sales* *Management* 52:50 *My* 10 '43

See also

Advertising—Farm- Insurance, Life—
ers, Appeal to Farmers as pros-
Electricity on the pects
farm Plumbing trade—
Farm income Farm market

FARM mortgages. See **Mortgages, Farm**

FARM ownership

Effect of land purchase by FSA standard loan borrowers on agricultural production in Northern Great Plains. M. Solem. *J* *Land* & *Pub* *Util* *Econ* 19:231-3 *My* '43

So you are buying a farm! city people may get pleasure from owning land, but they have to be smart to make a profit. R. P. Crawford. *Barron's* 23:6 *jl* 5 '43

FARM papers*See also*

Advertising mediums
—Farm papers

FARM population

Approach to the measurement of farm population pressure in Wisconsin. T. C. McCormick. *Am* *Stat* *Assn* *J* 38:165-77 *Je* '43

FARM produce

End of a surplus? *Business* *Week* p117-18 *Ap* 17 '43

Food plan: 1944; WFA launches series of farm meetings. *Business* *Week* p14 S 25 '43

See also

Beets and beet sugar	Live stock
Butter	Rice
Corn	Sage
Cotton	Soybeans
Crops	Straw
Dairy products	Sugar
Drying (crops)	Tobacco
Flax	Vegetables
Fruit	Wheat

By-products*See also*

Cornstalks
Cotton stalks

Industrial uses

Industrial corncoobs. *Sci* *Am* 169:224-5 N '43

See also

Chemurgy

Marketing

Spud compromise; WFA and OPA agree on combined system of loans and support prices. *Business* *Week* p24+ S 4 '43

World granary; British delegates would set up an international Joseph plan for marketing all agricultural products. *Business* *Week* p22+ *Je* 5 '43

Prices

Another farmer speaks up. *Business* *Week* p107 *My* 15 '43

Farm bloc gets its revenge. *Business* *Week* p15-18 *Mr* 6 '43

Farm parity bill fails of action in Senate. *Comm* & *Fin* *Chr* 157:71 *Ja* 7 '43

Farm prices and the food situation. *Nat* *City* *Bank* p38-9 *Ap* '43

Food plan falters; WFA, OPA at loggerheads over U. S. purchase and resale of crops. *Business* *Week* p20+ *Ag* 21 '43

Parity question with us again. *Barron's* 22:6 D 14 '42

President vetoes Bankhead farm parity bill. *Comm* & *Fin* *Chr* 157:1308 *Ap* 8 '43

Prices received by farmers, 1938-1941. Survey of *Cur* *Business* 1942 *Sup* p17 [supplemented in monthly numbers]

Prices received by farmers, 1939-March 1943; chart. Survey of *Cur* *Business* 1942 *Sup* p7 '43

Protest to the farm bloc. E. W. Lowe. *Business* *Week* p107 *Ap* 10 '43; *Repl*. M. R. Stone. p107 *My* 1 '43

Wage rates and living costs in a war economy; factors affecting the trend of living costs. M. S. Brody. *J* *Business* 16 pt 2:22-4 *jl* '43

Statistics

AMA purchases in 1942. *Oil* *Paint* & *Drug* *Rep* 143:50+ *Ja* 11 '43

Prices received from farm marketings, 1938-1941. Survey of *Cur* *Business* 1942 *Sup* p7 [supplemented in monthly numbers]

Physical volume of farm marketings, 1929-42. L. J. Paradiso, M. Kaufman and C. M. Purves. Survey of *Cur* *Business* 23:23-22 *Ap* '43

Storage

Farm freezer; its future and its place in the war effort. R. Markley, jr. *il* *Refrig* *Eng* 44:381-2 D '42

Preliminary results from the use of freezing plates for locker plant freezing and farm freezing and storage cabinets; with observations on farm operated cabinets. C. W. DuBois and D. K. Tressler. *diags* *Refrig* *Eng* 46:25-30+ *jl* '43

Refrigeration as an aid in winning the war on the farm. D. Comin. *Refrig* *Eng* 45:82+ F '43

FARM security administration

Effect of land purchase by FSA standard loan borrowers on agricultural production in Northern Great Plains. M. Solem. *J* *Land* & *Pub* *Util* *Econ* 19:231-3 *My* '43

Experiment in meeting personnel losses in government agencies. F. H. Morgan. *Advanced* *Management* 3:56-9 *Ap* '43

FSA comes back. *Business* *Week* p42+ *Je* 19 '43

FSA employee training. J. J. King. *Personnel* *J* 22:186-9 N '43

FARM tenancy

Land tenure policy goals. J. F. Timmons. *liblog* *J* *Land* & *Pub* *Util* *Econ* 19:165-79 *My* '43

FARM underwriters association

Farm association reflects officers. *Nat* *Underw* 47:1 *Ja* 14 '43

FARM volunteer policies. See **Insurance, Accident—Farm volunteer policies**

FARMERS

Another tax accounting plan for farmers. *il* *Burroughs* *Clearing* *House* 28:8-9 N '43

Bank accounting plan for farmers; Farmers state bank of Lstant, Illinois. C. A. Whitney. *Burroughs* *Clearing* *House* 27:26-7+ N '42

Earnings of small farmers in Puerto Rico. *Monthly* *Labor* *R* 55:1280-3 D '42

Farmers to stay on farms. V. L. Bushnell. *East* *Underw* 44:3-4 S 10 '43

Fortune survey; are farmers making about the right amount of money, or too much or too little? *Fortune* 27:10 F '43

Fortune survey; farmers tell what they think of farming as a way of life, attitudes toward the war and problems. *Fortune* 27:3-10+ *Mr*; 8-10, 14+ *Ap* '43

Pacific Gas & Electric's plan to help western farmers lick the food shortage; 40 farm power advisors. *Sales* *Management* 52:64-6 *Ap* 1 '43

FARMERS—Continued

Production for farm home use. D. W. Watkins. *Ann Am Acad* 225:162-8 Ja '43
Wallace warns of fascism in western world if labor, agriculture and industry fail to hold economic balance. *Comm & Fin Chr* 158:1920 N 11 '43

See also

Advertising—Farm-	Farm income
ers, Appeal to	Farm labor
Agricultural credit	Farm market
Agriculture—Eco-	
nomical aspects	

FARMERS' associations. *See* Agricultural associations

FARMERS' cooperative associations

See also Electric service, Rural—Cooperative lines

FARMERS' cooperative oil associations

Cooperative refining movement aided by tax position. C. O. Willson. *Oil & Gas J* 41:28-9 Ap 29 '43

FARMERS union grain terminal association

Big grain co-op; Farmers Union's concern grows into largest handler of wheat in country and officials gain prestige in Washington. *Business Week* p48+ Je 12 '43

FARMERS' unions

National farm organizations. *Barron's* 23:14 F 22 '43

FARMHOUSES

Connecticut farmhouse; modern version; residence for Mr and Mrs Eric Hodgins, New Milford. *il plans Arch Rec* 94:58-61 Ag '43

Low cost farm homes in the South said to milk output for lend-lease. *il diags plans Am Bid* 64:46-7 N '42

FARMS

Farm land boom? E. B. Reid. *Burroughs Clearing House* 27:25+ Je '43

15,000-acre victory garden; Deerfield packing corp., Seabrook farms, Bridgeton, N.J. *il Business Week* p20+ My 22 '43

Land sells fast. map *Business Week* p24+ Je 12 '43

MBA concerned with rise in farm real estate prices. *Comm & Fin Chr* 158:840 Ag 26 '43

Soil loss on Georgia farms; rainfall, runoff, and other factors are correlated at government experiment station. J. R. Carreker. *il Civil Eng* 12:670-2 D '42

Wisconsin contractor promotes contracts on large farms; concrete watering tanks and troughs. *diags Concrete* 50:16+ D '42

See also

Agriculture	Insurance, Life—
Cotton growing	Farm property
Electricity on the	Land utilization
farm	Subsistence home-
Farm ownership	steads

*Insurance requirements**See also*

Insurance, Fire—	Insurance, Liability—
Farm policies	Farm policies

FARNSWORTH television and radio corporation

Stock listed. *Comm & Fin Chr* 158:1824+ N 8 '43

FARRAGUT, David Glasgow, 1801-1870

Damn the torpedoes! courage and quick decision lay back of Admiral Farragut's historic phrase. *pers Fortune* 26:130-1 D '42

FASCISM

Fortune survey; what is a native fascist? *Fortune* 28:10+ N '43

Scorza's ten points; effort to strengthen and popularize the Party machine. *Economist* 145:40-1 J1 10 '43

FASHION

Zebras of retailing; mail-order catalogs can't change their stripes; nevertheless, are meeting the war's challenge to selling fashions by mail. H. F. Keane. *il Ptr Ink* 201:18-20 D 4 '42

See also

Clothing and dress

FASTENINGS

Automatic fastener for ship assembly. H. F. Lowe. *il Marine Eng* 48:212-13 Ap '43

Fasteners for army insignia. *il diags Mod Plastics* 21:86 O '43

Sheet-spring fasteners speed aircraft assembly. H. White. *il Aviation* 42:183, 185+ Ag '43

Stitch in time, modern version; metal stitching machines. R. J. Niederhauser. *il diags Machine Design* 15:87-90+ My '43

Stitching wire. Blast F & Steel Pl 31:357 Mr '43

Typical bolts, screws, nuts and other fastening devices; illustrations; data sheet. E. J. Tangerman. *Power* 87:349, 421 My-Je '43

See also

Bolts and nuts

Rivets

Screws

FASTENINGS, Wire rope. *See* Wire rope fastenings

FASTNESS of dyes. *See* Dyes, Fastness of

FAT

Dietary need for fat. G. O. Burr. *Ann Am Acad* 225:40-2 Ja '43

See also

Oils and fats

FATIGUE

Accident-prone employee can be weeded out by simple tests. A. W. Williams. *il Textile World* 93:68-9 My '43

Better workplace, so more output, less fatigue; new chair and other changes aid sock inspector. E. J. Fitzgerald. *il Factory Management* 101:114-15 Mr '43

Fatigue, a misnomer. H. Bartle. *Ind Med* 12:436-8 J1 '43

Fatigue and working conditions. *Ind Med* 11:550+ N '42

Fatigue in wartime industry. W. H. Forbes. *Concrete (mill sec)* 51:112 Ja '43

Fatigue problem in industry. S. D. Platek. *Foundry* 71:133+ Je '43

Findings from major studies of fatigue. R. R. Sayers. *U S Bur Mines Information Circ* 7209:1-46 bibliog(p43-6) '42; Excerpts. *il Concrete (mill sec)* 50:271-2, 286-7; 51:129-30 N-D '42, F '43

Types of fatigue causing accidents. W. H. Forbes. *Weekly Underw* 148:19 Ja 2 '43

What causes industrial fatigue? A. Gray. *bibliog Iron Age* 151:42-3 Ap 29 '43

See also

Motion study

Recreation

Rest periods

FATIGUE in metals

Accelerated fatigue tests on NE steels. J. G. Wood and R. F. Sanders. *Iron Age* 151:68-70 Mr 4 '43

Behavior of spot welds under fatigue stress. A. M. Unger, H. A. Matis and E. P. Gruca. *il diag Welding J* 22:sup135-42 Mr '43

Code for working stresses facilitates design; fatigue stresses. J. Marin. *bibliog il Machine Design* 14:99-103 D '42

Early detection of fatigue cracks; use of fuller's earth. G. H. Boss. *Metal Prog* 44:96 J1 '43

Effect of screw threads on fatigue; a review of the literature. S. M. Arnold. *diags Mech Eng* 65:497-505 bibliog(167 titles, p503-5) J1 '43; Same cond. *Automobile Eng* 33:541-6 D '43

Effects of residual stress on the fatigue of metals. J. O. Almen. *il diags Product Eng* 14:348-52 Je '43; Abstract. *Iron Age* 151:63-4 My 27 '43

Evaluation of fatigue damage of steel by supplementary tension-impact tests. J. A. Kies and W. L. Holshouser. *bibliog il Am Soc T M Proc* 42:556-64; Discussion. 565-7 '43

Fatigue of metals as influenced by design and internal stresses. J. O. Almen. *il diags Metal Prog* 43:209-15+, 737-40; 44:254-61, 435-40 F, My, Ag-S '43; Same cond. *Automotive & Aviation Ind* 88:28-32+ F 1; 28-31+ F 15 '43; Same cond. *Steel* 112:88-9+ Mr 8; 112, 146-9 Ap 5 '43; Excerpt. *Machine Design* 15:133-4 Ag '43

Fatigue strength of aluminum and its alloys; abstract. R. Irrmann. *Chem & Met Eng* 49:132 N '42

Fatigue strength of butt welds in ordinary bridge steel. *diags Welding J* 22:sup189-211 My '43

Fatigue strength of copper alloys; abstract. A. R. Anderson and C. S. Smith. *Metals & Alloys* 17:628 Mr '43

FATIGUE in metals—Continued

- Fatigue strength of normalized and tempered versus as-forged full size railroad car axles. O. J. Horger and T. V. Buckwalter. bibliog il diag Am Soc for Metals Trans 31:559-76; Discussion. 576-81 S '43
- Fatigue strength of welded aircraft joints. T. V. Buckwalter and O. J. Horger. bibliog il diag Welding J 21:sup525-39 N '42
- Fatigue testing of zinc-base alloy die castings. E. H. Kelton. il diag Am Soc T M Proc 42:692-705; Discussion. 706-7 '42
- Fatigue tests as a means of evaluating corrosion damage of sheet metals. W. H. Mutchler and J. A. Kies. il diag Am Soc T M Proc 42:568-72; Discussion. 573-5 '42
- Influence of the combination of principal stresses in fatigue of metals. D. J. McAdams, Jr. Am Soc T M Proc 42:576-90 bibliog(p591-2); Discussion. 593-4 '42
- Oil-well pumping practices; fatigue of sucker rods. J. Zaba. Oil & Gas J 42:229-30+ J1 29 '43
- Progress report on the effect of size of specimen on fatigue strength of three types of steel. H. F. Moore and D. Morkovin. diag Am Soc T M Proc 42:145-53 '42
- Progressive changes in fatigue failure. J. B. Konners. Machine Design 15:108-10+ S '43
- Pulsator fatigue testing machine. il diag Engineer 174:517-18 D 25 '42
- Shot blasting to increase fatigue resistance. J. O. Almen. bibliog il diag S A E J 51: 248-63 J1 '43; Same cond. Iron Age 151: 65-9+ Je 10 '43; Same cond. Machine Design 15:124-9+ Je '43; Same cond. Mech Eng 65:553-63 Ag '43; Excerpts. Aero Digest 42:217-18, 223+ Je '43
- Strength of steel subjected to biaxial fatigue stresses. J. Marin. il diag Welding J 21:sup554-9 N '42

FATS. See Fat; Oils and fats

FATTY acids. See Acids, Fatty

FAUCETS

- Fountain fixtures in the front lines; now furnishes water for U.S. troops in the field. C. J. Groos. il Mod Plastics 20:58+ D '42

Repair

- New repair gadget for leaky water faucets. diag Consumers' Research Bul 12:20 Ag '43

FAULTS (electric distribution). See Electric distribution—Grounds and faults

FAULTS (geology)

- Classification of faults. S. K. Clark. diag Am Assn Pet Geologists Bul 27:1245-65 S '43
- Earthquakes and structure in southern California. B. Gutenberg. bibliog diag maps Geol Soc Bul 54:499-526, pl 1 Ap '43
- Late paleozoic faulting in western Newfoundland. F. Ertz. Jr. bibliog diag maps Geol Soc Bul 54:687-706 My '43
- Reconnaissance survey of the Roberts mountains, Nevada. C. W. Merriam and C. A. Anderson. diag maps Geol Soc Bul 53: 1675-1727 bibliog(p 1725-7), pl 1-4 D '42
- Reverse faulting north of Harrisburg, Pennsylvania. E. Cloos and C. H. Broedel. diag map Geol Soc Bul 54:1375-97 bibliog(p 1396-7), pl 1-3 S '43

FAUST, Walter Livingston, 1895-
Case, Faust new Socony directors. por Oil & Gas J 42:14 Je 3 '43

FEAR

- Antidote for panic. Nat Safety N 47:64 F '43

FEATHERBEDDING. See Railroads—Employees

FEATHERS

- Feathers for war. il Business Week p26 My 8 '43

FECES**Analysis**

- Measurement of industrial lead exposure by analyses of blood and excreta of workmen. J. Cholak and K. Bambach. bibliog J Ind Hygiene 25:47-54 F '43

FEDERAL agencies. See United States—Executive departments

FEDERAL architects, Association of. See Association of federal architects

FEDERAL bureau of investigation. See United States—Federal bureau of investigation

FEDERAL commissions. See United States—Executive departments; also names of commissions, e.g. Federal communications commission; Federal trade commission; Interstate commerce commission

FEDERAL communications commission

- CBS issues bulletin for agencies and advertisers on new FCC rules. Ptr Ink 203:79-80+ Je 18 '43

Congressional subcommittee hearings in New York city. Pub Util 32:292-4 S 2 '43

FCC controversy. L. D. Farrar. Pub Util 32:216-23 Ag 19 '43

FCC fireworks; attack against Cox as investigator. Business Week p34+ My 22 '43

FCC rules to become effective June 15; station contracts revised. Ptr Ink 203:76 Je 11 '43

Government by commission; FCC and its radio rules, case study of bureaucracy in action. il Fortune 27:86-9+ My '43

How cooperation works in communications regulation; cooperation between regulatory authorities has grown. P. A. Walker. Pub Util 32:267-74 S 2 '43

Noble lays Blue; RCA sells network, as required by FCC. Business Week p78+ Ag 7 '43

Radio chains lose; FCC rules regulating dealings of networks with affiliated stations upheld by U.S. Supreme court. Business Week p90+ My 15 '43

Rebellion against investigating authority of the House of representatives. Pub Util 31: 625-6 My 13 '43

Supreme court upholds FCC radio rules. Ptr Ink 203:19 My 14 '43

Tolls under fire; FCC studying income and cost figures of Press Wireless. Business Week p24+ O 16 '43

FEDERAL crop insurance corporation

- Staff is being reduced. J. C. Wright. Nat Underw 47:3 S 2 '43

Swinging the ax; farm bloc in House votes crop insurance out. Business Week p42+ My 1 '43

FEDERAL deposit insurance corporation**See also**

Banks and banking—

Guaranty of deposits

Library

Federal deposit insurance corporation library. A. D. Early. Special Lib 34:281-3 J1-Ag '43

FEDERAL home loan banks. See Home loan banks

FEDERAL housing administration

- Builders demand vigorous, independent FHA. il Am Bld 65:92-4+ O '43

FHA head says no new housing financing plans are needed in post-war period. Comm & Fin Chr 155:1431 O 7 '43

FHA meeting operating expenses and increasing insurance reserves. Comm & Fin Chr 158:609 Ag 12 '43

FHA studies possible market for postwar house building. Eng N 131:427 S 16 '43

FHA to guarantee loans for fuel-savings. Bankers Mo 60:278 Je '43

\$400,000,000 FHA bill signed by President. Am Bld 65:29+ N '43

Insured dwellings available for 100,000 more family dwellings. Concrete 51:4-5 N '43

Loans insured (gross) and insured home mortgages (Title II) held in portfolio, by classes of institutions. Fed Res Bul 29:84 Ja '43 [cont monthly]

Spotlight on FHA: poll by the Architectural forum. Arch Forum 79:67-70, 112+ J1 '43

Who controls the purse strings, controls building; two points of view on home financing. W. H. Upson, Jr.; F. Hardinge, Jr. Am Bld 65:32-3+ Ag '43

Insured mortgage plan

- Approves raising FHA insurance authorization. Comm & Fin Chr 157:1502 Ap 22 '43

Housing speeded; Congress authorizes use of big FHA fund for mortgages. Business Week p24+ Ap 3 '43

Modernization credit plan

Maintenance and repairs; questions and answers prepared by FHA, relating to heating systems. Sheet Metal Worker 33:38 D '42

FEDERAL housing administration—Modernization credit plan—Continued

Remodeling houses for war workers. II plan
Dom Eng 160:44-6+ D '42

FEDERAL intermediate credit banks. See Intermediate credit banks**FEDERAL land banks. See Land banks****FEDERAL loans and grants. See Government loans and grants****FEDERAL power commission**

Attacks the FPC. H. S. Bridges. Pub Util
32:44-6 J1 8 '43

Federal and Canadian power arrangements
receive criticism. Pub Util 31:568-72 Ap 29
'43

FPC, Southwest power pool file rate probe
briefs. Elec W News ed 120:179-80 J1 17
'43

Fight on FPC voted by utilities commission-
ers. Elec W News ed 120:1037-8 S 25 '43

Hearing on order requiring utility to act as
common carrier for Bonneville power. Elec
W News ed 119:1205 Ap 10 '43; Elec W
119:1305-6 Ap 17 '43

Moratorium on F.P.C. original cost proceed-
ings. W. L. Grossman. Comm & Fin Chr
158:901, 914-15 S 2 '43

N. L. Smith made a power regulator. Ry
Age 115:464 S 18 '43; Elec W 120:1004 S 18
'43

NARUC takes FPC to task on states' rights;
Arkansas rate investigation. Elec W News
ed 119:1379 Ap 24 '43

NARUC's proposed changes in power act as-
sailed. Elec W 120:1353 O 16 '43

Power rates row; federal authorities face
states' rights rumpus in trying to get elec-
tricity charges for aluminum plant in
Arkansas. Business Week p26 Mr 6 '43

Southwest power pool rate hearing opens;
electricity furnished the Lake Catherine
aluminum plant. Elec W 118:2109-10 D 26
'42

Supreme court upholds FPC on Jersey Cen-
tral. Elec W News ed 119:1537 My 8 '43

Utilities quizzed; Federal power commission
tackles southwestern power pool. Busi-
ness Week p40+ D 19 '42

WPB and FPC define their natural gas agree-
ment. Gas Age 92:25-6 O 7 '43

FEDERAL power projects. See Hydroelectric plants—Government ownership**FEDERAL reserve act**

Amendment to Regulation K; investments in
the stock of other corporations. Fed Res
Bul 29:923 O '43

Amendments to Federal reserve act. Fed Res
Bul 29:378-9 My '43

FEDERAL reserve bank notes

Issuance of Federal reserve notes held un-
authorized; Treasury defends legality.
Comm & Fin Chr 157:367 Ja 28 '43

Issuance of \$660,000,000 Reserve notes called
dangerous inflationary action. R. A. Taft.
Comm & Fin Chr 157:669 F 18 '43

FEDERAL reserve bank of Cleveland

Cleveland Reserve on Eastern war time; time
zones vary. Comm & Fin Chr 157:856 Mr
4 '43

FEDERAL reserve bank of New York

N.Y. reserve bank 1942 earnings higher.
Comm & Fin Chr 157:381 Ja 28 '43

FEDERAL reserve bank of San Francisco

Work in evacuees' interests. Fed Res Bul
29:295 Ap '43

FEDERAL reserve banks

Federal reserve banks expand economic
stuffs. Burroughs Clearing House 28:41-2 O
'43

Federal Reserve government security opera-
tions. Fed Res Bul 29:375-7 My '43

Federal Reserve open-market operations. Fed
Res Bul 29:590-1 J1 '43

Gold exportable without commercial liquida-
tion. W. E. Hickernell. For Comm W 11:
3-6+ My 8 '43

Reserve banks and the money market. Nat
City Bank p 101-2 S '43

War loan financing; guarantee agreement.
Fed Res Bul 29:379-90 My '43

Credit policy

See also

Installment plan—
Regulation

Directors

Directors of Federal reserve banks and
branches. Fed Res Bul 29:129-39 F '43
Federal reserve bank announces appointees.
Comm & Fin Chr 157:208 Ja 14 '43

Loans to industry

Industrial advances, annual figures, 1934 to
1941, and monthly, 1943 (last Wednesday of
each month). Fed Res Bul 29:55 Ja '43 [cont
monthly]

Member banks

All member banks, assets and liabilities on
December 31, 1942 by classes of banks. Fed
Res Bul 29:350 Ap '43

All member banks; assets and liabilities on
June 30, 1943 by classes of banks. Fed Res
Bul 29:1030 O '43

All member banks, classification of loans and
United States government direct obliga-
tions. Fed Res Bul 29:351 Ap '43

Condition of Federal reserve weekly report-
ing member banks, 1938-1941. Survey of
Cnr Business 1942 Sup p63-4 [supplemented
in monthly numbers]

Earnings and expenses, 1942. Fed Res Bul 29:
188-9 F '43

Expansion of Federal Reserve branch activi-
ties. Fed Res Bul 29:397-8 My '43

Member bank earnings first half of 1942;
with comparisons for other half years. Fed
Res Bul 28:1098, 1150 N '42

Member bank earnings in 1942. Fed Res Bul
29:500 Je '43

Member bank earnings, 1942, and compari-
sons, 1939-1941. Fed Res Bul 29:672-80 J1
'43

Member bank operating ratios, 1942. Fed Res
Bul 29:896-8 S '43

Weekly reporting member banks, by Federal
reserve districts; loans and investments, re-
serves and liabilities. Published in monthly
numbers of Federal reserve bulletin

Weekly reporting member banks, New York
city and outside; loans and investments, re-
serves and liabilities. Published in monthly
numbers of Federal reserve bulletin

Statistics

Condition of Federal reserve banks, end of
month, 1938-1941. Survey of Cnr Business
1942 Sup p62 [supplemented in monthly
numbers]

Earnings and expenses, 1942. Fed Res Bul
29:188-9 F '43

Earnings and expenses of Federal reserve
banks for the six-month period ended June
30, 1943. Fed Res Bul 29:790 Ag '43

Federal reserve notes; Federal reserve agents'
accounts, by weeks, Dec. 2-Dec. 23, 1941. Fed
Res Bul 29:55 Ja '43 [cont monthly]

Member bank earnings, 1942, and compari-
sons, 1939-1941. Fed Res Bul 29:672-80 J1
'43

Member bank reserves. Reserve bank credit
and related items; monthly figures Sept.-
Nov. 1941 and 1942, and weekly figures,
Feb.-Dec. 1942. Fed Res Bul 29:49 Ja '43
[cont monthly]

Principal assets and liabilities of all Federal
reserve banks; also maturity distribution of
bills and U.S. government securities held
by Federal reserve banks. Fed Res Bul 29:
51 Ja '43 [cont monthly]

Statement of condition of the Federal reserve
banks by weeks, Dec. 2-Dec. 23, 1941. Fed
Res Bul 29:52-4 Ja '43 [cont monthly]

Stock

Federal reserve bank stock tax on dividends.
Fed Res Bul 28:1085-6 N '42

FEDERAL savings and loan associations

Getting the facts about federal savings and
loan shares. Trusts & Estates 77:299-300 S
'43

Growth in ten years. J. Twohy. Comm &
Fin Chr 157:2371 Je 24 '43

**FEDERAL savings and loan insurance corpora-
tion**

Resources of Federal savings-loan associa-
tions up; report for year ended June 30,
1943. Comm & Fin Chr 158:524 Ag 5 '43

Savings-loan units' investment in govern-
ment securities increased. Comm & Fin Chr
157:746 F 25 '43

FEDERAL trade commission

Advertiser, fighting stipulation, sues F. T. C.; Miles laboratories, inc. asks U.S. court for declaratory judgment. *Ptr Ink* 201:20-1 D 25 '42

Carter on the pan; Federal trade commission says Little Liver Pills don't benefit the liver. *Business Week* p90 Je 12 '43

F.T.C. asks dismissal of drug label test case; Miles laboratories, inc. Oil Paint & Drug Rep 143:5+ F 15 '43

F.T.C. authority on labels tested by Miles laboratories. Oil Paint & Drug Rep 142:5 D 21 '42

FTC on the pan; proprietary drug trade, takes labeling woes to Congress and to courts. *Business Week* p90+ My 29 '43

FTC sustained; U.S. court refuses to halt complaint against ads and labels of Miles laboratory. *Business Week* p93 JI 3 '43

FTC turns coat; new tough policy may foreshadow drastic changes in advertising. *Business Week* p95-6 N 21 '42

How trade bodies may keep within letter of federal law. J. M. F. Donovan, jr. *Ptr Ink* 200:78, 82 S 25; 201:64+ N 20 '42

Is the F.T.C. covering too much territory? H. Mock. *Ptr Ink* 205:28, 32+ O 29 '43

Miles laboratories label suit dismissed by District court. Oil Paint & Drug Rep 143:3+ Je 28 '43

Pricing systems through the years; chronology of FTC's major sorties. *Business Week* p92 JI 31 '43

What the *Reader's digest* forgot to report on the dentifrice cases. L. C. Stone. *Sales Management* 52:48+ O 1 '43

Work during 1942. Oil Paint & Drug Rep 143:58+ Ja 11 '43

FEDERAL water and gas corporation

Annual report. *Comm & Fin Chr* 157:2143-9 Je 7 '43

Files program with SEC to comply with death sentence. *Comm & Fin Chr* 157:131 Ja 11 '43

Plan approved in part by SEC. *Comm & Fin Chr* 157:727-8 F 22 '43

FEDERAL water service corporation

U.S. Supreme court rejects SEC's ban on conversion of stock bought by officials during a reorganization. *Comm & Fin Chr* 157:552 F 8 '43

FEDERAL wholesale druggists association

Annual meeting. New York, Sept. 30-Oct. 1. Oil Paint & Drug Rep 144:7+ O 11 '43

FEDERATION of paint and varnish production clubs

Mid-year technical symposium, Cincinnati, May 15. Oil Paint & Drug Rep 143:7, 40+ My 17 '43

Paint technicians hang up convention; advisory committee meeting; committee chairmen for 1942-43. Oil Paint & Drug Rep 143:5+ Mr 8 '43

Technical symposium, 3d, Cleveland, Oct. 22-23. Oil Paint & Drug Rep 144:49-50+ N 1 '43; Paint Oil & Chem R 106:10-12+ N 4 '43

FEDERATION of sewage works associations

Annual meeting, 3d, Cleveland, Oct. 22-24. Water Works & Sewerage 89:474-87 N '42;

Water & Sewage 80:44, 46+ N '42

Annual meeting, 4th, Chicago, Oct. 21-23. Concrete 51:36+ N '43; Eng N 131:643, 648 O 28 '43; Water & Sewage 81:22+ O; 21+ D '43; Water Works & Sewerage 90:389-94, 452-8 N-D '43

Sewage works federation; things you should know about it. W. H. Wisely. Water Works & Sewerage 90:239 Je '43

FEDRALITE. See Plastic materials**FEED mechanism**

Four tables feed aircraft press. S. H. Brams. *Il Iron Age* 152:61 S 9 '43

Mechanism for automatic picking-up and feeding thin sheets. W. M. Halliday. *diags Mech Handling* 29:231-3 D '42

Parts fed by slide bar into drill jig. E. H. Girardot. *diag Am Mach* 87:109 Je 10 '43

Power feed with electronic control developed for Reed-Prentice machine. *Il Mach* 50:204 O '43

FEED water

Caustic embrittlement. E. W. Colbeck, S. H. Smith and L. Powell. *bibliog diags Inst Mech Eng J & Proc* 149:Proc 63-73, pl 1-4 My '43; Same cond. *Engineering* 154:455, 478-80, 517-19 D 4-11, 25 '42; Discussion. 154:454, 463 D 4-11 '42

Caustic embrittlement research brings results; work conducted at the United States Bureau of mines. J. H. Walker. *bibliog Mech Eng* 64:891-3 D '42

Crystalline compounds observed in water treatment. C. E. Imhoff and L. A. Burkhardt. *bibliog* (40 references) *Il Ind & Eng Chem* 35:373-82 Ag '43

Elimination of carry-over under steel-mill operating conditions. H. M. Rivers and W. P. Hill. *diags A S M E Trans* 65:149-54 Ap '43; Same cond. *Blast F & Steel Pl* 30:1151-4 O '42; Discussion. A S M E Trans 65:154-8 Ap '43

Fixing and determining oil in feed water and boiler water. C. A. Noll and W. J. Tomlinson. *bibliog Ind & Eng Chem Anal ed* 15:629-32 O 15 '43

pH value of boiler feed water. R. L. Rees and J. Jackson. *Il diag Engineer* 176:247-9 S 24 '43

Oil in textile plant boiler feed. W. F. Schap-horst. *Am Dyestuff Rep* 32:454 O 11 '43

Scales still plague boiler operators; discussion at meeting of American society of mechanical engineers. *Power* 86:969 Mid-D '42

Solubility of solids in water vapor. G. W. Morey. *Am Soc T M Proc* 42:980-8 '42

Turbine blade deposits. F. G. Straub. *Blast F & Steel Pl* 31:1166, 1168-9 O '43

Why the difference in pH in these two boilers? *Power Pl Eng* 47:102+ N '43

See also

Feed water purification

Testing

Practical way to prevent embrittlement cracking; use of sodium nitrate, quebracho extract, waste sulphite liquor and elimination of caustic alkalinity. A. A. Berk and W. C. Schroeder. *diag A S M E Trans* 65:701-4; Discussion. 704-11 Ag '43

Protection against caustic embrittlement by coordinated phosphate-pH control. T. E. Purcell and S. F. Whirl. *bibliog Il diag Electrochem Soc Trans* 83 (preprint 25):279-95 Ap '43

FEED water heaters

Make deaerating heaters suit plant cycle. W. P. Spining. *diags Power* 86:717-19, 786-8; 87:29-31 O-N '42, Ja '43

Scale removal by acid at high temperatures. F. Gibadlo. *diag Power Pl Eng* 47:97-8 O '43

Seals heater overflow with ball float. E. MacDermod. *diags Power* 87:53 Ja '43

Valves can make or break smooth heater operation. W. P. Spining. *diags Power* 87:510-11+ Ag '43

Welding shell and cover plate of feedwater heaters. *Il Marine Eng* 47:162 D '42

FEED water heating

How to calculate central station heat balance. G. B. Gregg. *Power* 87:174-7, 211b+ Mr '43

Mechanical equipment of the turbine house. F. Shakeshaft. *Il diag Engineer* 175:325-7 Ap 23 '43

Short cut to turbine cycle heat rates. J. K. Salisbury. *Power* 87:734-6 N '43

FEED water pumps. See Pumps, Feed water**FEED water purification**

Boiler-water treatment. D. D. Howat. *bibliog diags Chem Age (Lond)* 48:365-70, 387-92, 413-18 Ap 3-17 '43

Boiler water treatment. K. Steiner. *Il diags Heating-Piping* 15:471-5 S '43

Boiler water treatment; abstract. L. R. Nelson. *Am Water Works Assn J* 35:249-50 F '43

Can oxygen be removed; condensate from radiators returned to feedwater tank. *diags Power* 87:196-7+ Mr '43

FEED water purification—Continued

- Caustic embrittlement; abstracts of Inter-crystalline cracking of boiler steel and its prevention, by W. C. Schroeder and A. A. Berk, and Symposium on caustic embrittlement, by the Joint research committee on boiler feedwater studies. *Metal Prog* 42: 1134+ D '42
- Chemical treatment of boiler water. J. D. Betz. *il diag Oil & Gas J* 41:223-4, 226, 228+ Mr 25 '43
- Condenser deaerates Trenton Channel feed. R. Briscoe. *plan Elec W* 119:1775 My 29 '43
- Corrosion of boiler tubes. T. H. Turner. *Engineer* 174:466-3 D 4 '42; Same. *Engineering* 154:503-5 D 25 '42; Same. *Inst Mech Eng J & Proc* 149:Proc 79-34 My '43
- Dearborn anti-foam stabilizer treatment. *Ry Age* 114:579 Mr 20 '43
- Doing all you can with the feedwater system? L. D. Johnson. *il diag Power* 87:401-3 Je '43
- Industrial water conditioning processes. W. W. Cerna. *bibliog il J Chem Educ* 20:195-7 Ap '43
- Internal treatment of boiler feed water. A. J. Mills. *Gas J (Lond)* 240:353 D 16 '42
- Ion-exchange resins; abstract. R. J. Myers. *Chem & Met Eng* 50:148-50 Ja '43
- Making a phosphate control system work. J. W. Odium. *diags Power Pl Eng* 46:70-2+ '42; Discussion. R. C. Baker. 47:98 My '43
- Methods of systematic treatment of feed-water. *il Ry Mech Eng* 116:519-20+ D '42
- Mono-sodium phosphate for silica scale. *Elec W* 118:1644 N 14 '42
- New Nalco anti-foam treatment. *Ry Age* 114: 582-3 Mr 20 '43
- Predictable results from use of carbonaceous acid-regenerated zeolites F. Kemmer and J. Thompson. *il diag Power Pl Eng* 47:82-5 Je '43
- Protection against caustic embrittlement by coordinated phosphate-pH control. T. E. Purcell and S. F. Whirl. *bibliog il diag Electrochem Soc Trans* 83 (preprint 25): 279-95 Ap '43
- Removal of silica from water with alkaline earth compounds; abstract. W. Ufer. *Am Water Works Assn J* 35:1129 Ag '43
- Save critical materials by softening water. C. R. Knowles. *il Ry Age* 114:820-3 Ap 24 '43
- Treatment of boiler feed water by carbonaceous zeolite softener; abstract. N. Fodor. *Am Water Works Assn J* 35:251 F '43
- Water problems in high-pressure boilers. D. B. Jones. *il diag Elec W* 119:1118-20 Ap 3 '43
- Water treating. C. E. Erb. *bibliog il Oil & Gas J* 41:198+ Mr 25 '43

See also

Water softening

Electric treatment

- Boiler scale prevention; electrical treatment of feed water; Kirkaldy and Agill systems of metal protection. H. Seymour. *Electrician* 129:525-7 N 13 '42
- FEED water regulators**
- Automatic control of feed water to boiler. J. A. Campbell. *il diags Pet Eng* 14:51-4 Mr; 113-15 Ap '43
- Boiler feedwater control and its effect on boiler capacity. R. C. Baker. *Power Pl Eng* 47:90-1 Ag '43
- FEEDERS**
- Electronic-control feeding for pulverizers and crushers. *il Rock Prod* 46:77 Mr '43
- FEEDING and feeding stuffs**
- Diets to suffer? feed shortage threatens. *Business Week* p 17 Je 12 '43
- Feed crisis nears. *Business Week* p14-15 O 2 '43
- Feed wheat program. *Comm & Fin Chr* 157: 293 Ja 21 '43
- Fluid cattle feed; steers flourish on liquid stilage left from alcohol process. *Business Week* p70+ J1 24 '43
- Forage goals rise. *Business Week* p40+ O 23 '43
- Industrial effects of feed shortage. *Barron's* 23:7 Ag 9 '43
- Is hay short? beef-pork problem. *Business Week* p65-6 J1 24 '43

- Livestock vs. grain production. *Nat City Bank* p75-8 J1 '43
- More animals than meat. *Business Week* p15-16 Je 19 '43
- Phosphate fertilizers as possible source of phosphorus for animals. H. F. Fraser and others. *bibliog il Ind & Eng Chem* 35:1087-90 O '43
- Protein concentrates from grasses. J. T. Sullivan. *Science* 98:363-4 O 22 '43
- Protein recovery necessary to meet feed demands. *Chem & Met Eng* 50:139 Ag '43
- Stillage improved; addition of shark liver oil to distilling byproduct. *Business Week* p99 Ag 7 '43
- Utilisation of seaweed; food and fodder values. T. Dillon. *bibliog Chem Age (Lond)* 49:305-8 S 25 '43

See also

Corn
Grasses**Advertising**

- This promotion to farmers has showmanship; Allied mills, inc. J. L. Richardson. *il Ptr Ink* 203:18-19 Je 11 '43

Analysis

- See also
Carotene—Analysis

Conservation

- Feed firm shows farmers how to conserve stock feed; Ralston Purina dealers and salesmen help stock raisers. *Ptr Ink* 204: 80 S 3 '43

Prices

- Fast one by CCC? purchase of oil meals at old ceiling and resale at new tops. *Business Week* p32+ S 4 '43

FEES

See also

Trust fees

FELDSPAR

- Feldspar as fire extinguisher for magnesium incendiary bombs. *Can Min J* 64:577 S '43
- Feldspar-grinding plant in North Carolina. *il Eng & Min J* 144:73-5 Ag '43
- Feldspar grinding plant in Tennessee. A. H. Hubbell. *il Eng & Min J* 143:67-8 D '42
- Plagioclase twinning. R. C. Emmons and R. M. Gates. *bibliog Geol Soc Bul* 54:287-303, pl 1-4 Mr '43
- Vitrified cordierite bodies. L. E. Thiess. *bibliog il Am Cer Soc J* 26:99-102 Mr 1 '43
- FELLOWS, Roger Lee, 1902-**
Sketch, bibliography. *por Am Cer Soc Bul* 22:115 Ap 15 '43
- FELLOWSHIPS.** See Scholarships and fellowships

FELT

- Felt hats. J. Kotsiakos. *Textile Col* 65:177-9 Ap '43
- Felt hats for men. *il Consumers' Research Bul* 12:13-15 N '43
- Felt is solving war problems; has many military and industrial uses. *il Textile World* 93:88-9 Mr '43
- Felt mounting for machines and in air conditioning units. *Sheet Metal Worker* 34:55 Ag '43
- Rubber mouldings; developments in the technique for producing felt components. *il Automobile Eng* 33:154 Ap '43
- Wool felt a vital ingredient in airplane construction. *il Aero Digest* 43:271, 273+ J1 '43
- Wool felt as a substitute for rubber. W. Colwell. *il Rubber Age* 53:136-8 My '43
- Wool felt responds to proper reconditioning. *Textile Col* 65:314-15 J1 '43
- FELTING of wool.** See Wool—Felting
- FELTS (paper making)**
- Dryer felt seams simplified by modern methods. *il Pulp & Pa of Can* 44:509-12 Je '43
- Felt saving hints. *Paper Ind* 24:940 D '42

Cleaning

- Scouring cylinder machine felts. L. E. Rossiter and W. B. Morehouse. *il Paper Ind* 24:931-5 D '42

FENCES

- How to build fences and gates with a minimum of metals. *diags Am Bld* 65:56 Je; 59 J1; 74 Ag '43

FENCES, Electrified

Electric fences; greater use would save critical materials. Elec West 89:72 N '42

FENCES, Snow. See Snow fences**FENN college, Cleveland**

Fenn college sponsors post-war course for Cleveland executives. Sales Management 52:60-1 Ap 1 '43

FENNELLY, John F.

Portrait. Business Week p22 Je 19 '43

FERGUSON, Homer Lenoir, 1873-

Ferguson heads shipbuilders' drive to support United seamen's service. por Marine Eng 47:137 D '42

FERMENTATION

Bacteriological changes in cucumber fermentation. J. L. Etchells and I. D. Jones. bibliog II Food Ind 15:54-6 F '43

Bacteriological studies on the natural fermentation process of preparing egg white for drying; abstract. L. S. Stuart and H. E. Goresline. Food Ind 15:122 F '43

Fungal amylases as saccharifying agents in the alcoholic fermentation of corn. Lu Cheng Hao, E. I. Fulmer and L. A. Underkoffler. bibliog diag Ind & Eng Chem 35: 814-18 JI '43; Same abr. Chem Age (Lond) 49:261-4 S 11 '43

Laboratory cooking, mashing, and fermentation procedures. W. H. Stark and others. II diag Ind & Eng Chem Anal ed 15:443-6 JI 15 '43

d-Lactic acid fermentation of Jerusalem artichokes. A. A. Andersen and J. E. Greaves. bibliog Ind & Eng Chem 34:1522-6 D '42

Physical and chemical changes in cucumber fermentation. I. D. Jones and J. L. Etchells. Food Ind 15:62-4 Ja '43

Production of 2, 3 butylene glycol by fermentation. G. A. Adams. Can Chem & Process Ind 27:390-1 JI '43

Sugar determination in starch hydrolyzates by yeast fermentation and chemical means. A. S. Schultz and others. bibliog Ind & Eng Chem Anal ed 15:496-8 Ag 15 '43

See also

Alcohol—Manufacture Wine
Enzymes

FERMENTS. See Enzymes**FERMI, Enrico, 1901-**

Hughes medal award. H. Dale. Science 97:32 Ja 8 '43

FERRACUTE machine company

Marks eightieth anniversary. G. Hubbard. Steel 113:84 N 1 '43

FERRIC sulfates. See Iron sulfates**FERRIDIPYRIDYL sulfate**

Chromogenic reagent for vitamin C determinations. R. A. Koenig, T. L. Schiefelbusch and C. R. Johnson. Ind & Eng Chem Anal ed 15:181-2 Mr 15 '43

FERRIPOTASSIUM sulfate

Adiabatic demagnetization of iron alum. J. A. Sauer. bibliog diag Phys R 64:94-112 Ag 1 '43

FERRISUL

Application of ferric salts in water and sewage treatment; with especial reference to ferrisul. F. K. Burr. bibliog II Water Works & Sewerage 90:347-51 S '43

FERRO enamel corporation

Low-priced stocks for large percentage gains. Mag of Wall St 71:672 Mr 20 '43

FERROALLOYS

Saving alloys in steel by using addition agents. F. M. Washburn and others. II Metal Prog 42:1061-9+ D '42

Some electrical supply aspects of ferro-alloy manufacture. H. A. Sieveking. bibliog diags Inst EEJ 90 pt 2:65-72 F '43

Special addition agent steels. R. B. Schenck. S A E J 51:385-93 N '43; Same abr. Steel 113:96-8, 100+ O 4 '43; Excerpts. Elec W 120:1706+ N 13 '43; Machine Design 15:204+ N '43

Supplying metals for alloy steels; Ferroalloys branch, Steel division, War production board. M. K. Smith. Min Cong J 28: 35+ D '42

See also

Iron alloys

Prices

Ferroalloys. Published in weekly numbers of Iron Age

Prices by months, 1929-1942; tabulation. Iron Age 151:203 Ja 7 '43

Statistics

Ferro-alloy metals, 1942. Eng & Min J 144: 72-3 F '43

World production of pig iron and ferroalloys by countries, 1929-1942; tabulation. Steel 112:357 Ja 4 '43

FERROCHROMIUM

Formula revised for computing ferrochromium requirements. Steel 112:36 Mr 29 '43

FERROCYANIDES**Analysis**

Sugar analysis by alkaline ferricyanide method; determination of ferrocyanide by iodometric and other procedures. D. T. Englis and H. C. Becker. bibliog Ind & Eng Chem Anal ed 15:262-4 Ap 15 '43

FERROMAGNETISM. See Magnetism**FERROMANGANESE**

Manufacture of ferro-manganese from low-manganese ores; abstract. H. Löfquist. Engineering 155:86 Ja 29 '43

Monthly price averages for twelve years, 1929-1942; tabulation. Steel 112:367 Ja 4 '43

FERROSILICON

Monthly price averages for twelve years, 1929-1942; tabulation. Steel 112:366 Ja 4 '43

Analysis

Perchloric acid method for determination of silicon in ferrosilicon. L. Waldbauer and S. O. Rue. bibliog Ind & Eng Chem Anal ed 15:131 F 15 '43

FERRUM reductum. See Iron by hydrogen (ferrum reductum)

FERRYBOATS

Diesel electric ferry. II Electrician 130:466-7 My 7 '43

FERTILITY of soils. See Soil fertility**FERTILIZER factories****Electric equipment**

Fertilizer manufacture; how calcium superphosphate is produced. II Elec R (Lond) 132:277-9 F 26 '43

Employees

Hours and earnings in the fertilizer industry, January 1943. E. B. Morris. Monthly Labor R 57:337-47 Ag '43

FERTILIZER industry

See also

Lime as fertilizer	Potash industry and trade
Nitrates	Sodium nitrate
Phosphates	

Advertising

For victory gardens; what producers are using as promotional literature. II Rock Prod 46:55-8+ My '43

Statistics

Fertilizer tag sales in 1942. Oil Paint & Drug Rep 143:51 Ja 18 '43

Fertilizers and materials, 1942. Chem & Met Eng 50:106-7 F '43

Fertilizers, 1938-1941. Survey of Cur Business 1942 Sup p103-4 [supplemented in monthly numbers]

Fertilizers output estimated for 1943-44 season. Oil Paint & Drug Rep 144:3 O 11 '43

Great Britain

Increased acreage brings new demands for British fertilizer and insecticides. Chem & Met Eng 50:220-2 My '43

Italy

Italian fertilizer situation appears favorable. For Comm W 13:25 N 6 '43

United States

Chemical fertilizer control set for 1943-44. Oil Paint & Drug Rep 144:7+ JI 12 '43

Chemical fertilizer to war crops first. Oil Paint & Drug Rep 143:7+ Ja 25 '43

Chemical fertilizers in wartime. C. J. Brand. Manuf Rec 112:38-9+ JI '43

FERTILIZER industry—United States—Cont.

Fertilizer association discusses supplies, prices, transportation at southern meeting. Oil Paint & Drug Rep 142:7+ N 23 '42
 Fertilizer materials, 1942. Oil Paint & Drug Rep 143:97-8 Ja 11 '43
 National fertilizer association 19th annual meeting, Hot Springs, Va. June 21-23. Chem & Eng N 21:1060-1 J 10 '43; Chem Ind 53:78-9 J1 '43
 Nitrogen outlook is favorable; abstract. E. Rowland. Oil Paint & Drug Rep 143:4+ Je 7 '43
 Phosphate fertilizing boosted as food production aid. Oil Paint & Drug Rep 144:7, 65 J 12 '43

See also
 National fertilizer association

FERTILIZERS

Analysing plant leaves; a method of determining fertilizer requirements. W. Thomas, W. B. Mack and R. H. Cotton. Chem Age (Lond) 48:600-2 Je 5 '43
 Britain's food possibilities; chemical fertilizers aid towards self-sufficiency. Chem Age (Lond) 47:532 D 12 '42
 Fertilizer ammoniating equipment plea denied. Oil Paint & Drug Rep 144:7+ J1 5 '43
 Fertilizer bill covering U.S. agencies vetoed. Oil Paint & Drug Rep 144:5 J1 26 '43
 Fertilizer fees invalid on government shipments. Oil Paint & Drug Rep 143:5+ Je 7 '43
 Fertilizer for your victory garden. Consumers' Research Bul 11:18 Ap '43
 Fertilizer is richer; greater nitrogen content allowed. Business Week p32-3 O 16 '43
 Fertilizer manufacturers told of materials supplies. Oil Paint & Drug Rep 143:3+ Je 28 '43
 Fertilizer materials distribution probe started by Senate group. Oil Paint & Drug Rep 144:3+ N 8 '43
 Fertilizer materials redefined by A.O.A.C. Oil Paint & Drug Rep 144:7+ N 1 '43
 Fertilizer; war should assure ample nitrogen supply. Sci Am 167:279+ D '42
 Fluorine content of plants fertilized with phosphates and slags carrying fluorides. W. H. MacIntire and others. bibliog il Ind & Eng Chem 34:1469-79 D '42
 Formulating fertilizers for 1943-44. F. W. Parker and W. H. Ross. Chem & Met Eng 50:109-10 S '43
 New horizons in nitrogen. A. M. Smith. il Chem & Eng N 21:216-17+ F 25 '43
 Phosphate fertilizers as possible source of phosphorus for animals. H. F. Fraser and others. bibliog il Ind & Eng Chem 35:1087-90 O '43
 Potash, plant food and chemical tool box. F. Kutniewsky. il diag Comp Air M 48:7033-8 My '43
 Potassic flue dust; fertiliser from ferromanganese furnaces. M. Lerner. Chem Age (Lond) 48:644-5 Je 19 '43
 Utilisation of phosphatic open-hearth slag. F. E. Lathe and others. bibliog Soc Chem Ind J 62:24-31 F '43

See also
 Ammonium sulfate Potash
 Lime as fertilizer Sewage sludge as
 Manures fertilizer
 Nitrates Slag as fertilizer
 Phosphates Sodium nitrate

Analysis

Determination of potash in fertilizers or base goods in the absence of ammonium salts and organic matter. P. M. Shuey. Ind & Eng Chem Anal ed 15:633-4 O 15 '43
 Effect of ethanol concentration on purity of potassium chloroplatinate in determination of potash in fertilizers. H. L. Mitchell and O. W. Ford. Ind & Eng Chem Anal ed 15:56 Ja 15 '43

Manufacture

Fertilizer by fusion of rock phosphate with olive. J. H. Walthall and G. L. Bridger. bibliog Ind & Eng Chem 35:774-7 J1 '43

Prices

Fertilizer prices are established. Oil Paint & Drug Rep 143:3+ Ja 4 '43

OPA adds more fertilizers to no. 108. Oil Paint & Drug Rep 143:5+ Mr 15 '43
 Price regulation; abstract. C. G. Gran. Oil Paint & Drug Rep 143:58 Je 28 '43

FESCOL process

Old parts made new; cold casting for building up worn parts; fescollizing. Eng & Min J 144:83 Ap '43

FEVER

Influence of fever upon the action of 3,3'-methylene-bis-(4-hydroxycoumarin) (dicumarol). R. K. Richards. Science 97:313 Ap 2 '43

See also
 Dengue fever Rocky Mountain
 Malaria spotted fever
 Paratyphoid fever Typhoid fever
 Pretibial fever Typhus fever
 Q fever Yellow fever
 Rheumatic fever

FIBER board

Cotton stalks for synthetic lumber; with cost data. F. W. zur Burg. bibliog diags Paper Ind 25:612-15 S '43

Dry-wall construction; time-saver standards. H. R. Sleeper. diags Arch Rec 94:83-8 S '43

See also
 Wall board

Standards

Revised standards for fiber insulating board. Sheet Metal Worker 34:40 J1 '43

FIBER board, Corrugated. See Paper board, Corrugated

FIBER board, Paper. See Paper board

FIBER pipes. See Pipes, Fiber

FIBERGLAS. See Glass fibers

FIBERGLAS fabrics. See Glass fabrics

FIBERS

Dielectric properties of animal fibers. J. Errera and H. S. Sack. bibliog diags Ind & Eng Chem 35:712-16 Je '43

Measurement and influence of bonding between paper fibers. J. d'A. Clark. bibliog diags Paper Tr J 116:29-35 F 4 '43

Measurement and influence of fiber length. J. d'A. Clark. bibliog diags Paper Tr J 115:36-42 D 24 '42

Microchemistry of pulp fibers; the significance of fiber ballooning in the pulping process. W. M. Harlow. bibliog il Paper Tr J 117:27-9 J1 8 '43

Nature of fiber staining by iodine stains. H. W. Rowe. Paper Ind 24:873-7 N '42

Nature of hydration and fiber bonding. J. d'A. Clark. il diags Paper Ind 25:382-6, 507-10 bibliog(p510) J1-Ag '43

Number of fibers per gram of pulp and its relation to fiber dimensions. J. H. Graff. diags Paper Tr J 117:25-31 O 21 '43

Oil bearing and fibre crops in Canada, 1943. E. S. Archibald. Can Chem & Process Ind 27:387-9 J1 '43

Optical characteristics of paper as a function of fiber classification. S. R. Parsons. bibliog Paper Tr J 115:34-42 D 17 '42

Swelling-staining reagent for studying fiber structure. W. M. Harlow. il Paper Tr J 116:52 Ap 15 '43

Ten years of fundamental research in the pulp, paper, and paperboard industry. H. F. Lewis. Paper Tr J 115:32-6 D 31 '42

Ultimate strength of pulp fibers and the zero-span tensile test. J. d'A. Clark. diags Paper Ind 25:73-4+ Ap '43

See also
 Agave fiber Nettle fiber
 Asbestos Paper
 Cotton fibers Ramie
 Flax Rayon fibers
 Glass fibers Saw palmetto
 Hair Silk
 Hemp Textile fibers
 Jute Wool

Identification

New reactions of sulfanilamide. W. T. Somerville. bibliog J Chem Educ 20:238 My '43

Testing

Apparatus for determining the tensile strength and elongation of single fibers. L. B. Shires. il Instruments 16:612+ O '43

FIBRINOGEN

Normal variation in the concentration of fibrinogen, albumin, and globulin in blood plasma. R. M. Hill and V. Trevorow. *bibliog J Phys Chem* 46:1117-29 D '42

FIBROFIX. See Dyes and dyeing—Rayon**FIBROGRAPH.** See Cotton fibers**FIBROIN**

Structure of fibrous proteins. M. L. Huggins. *bibliog* (60 references) *Chem R* 32:195-218 Ap '43

FIDELITY and guaranty fire corporation

1942 reviewed. *Comm & Fin Chr* 157:552 F 8 '43

FIDELITY assurance association

Fidelity concern to be liquidated. *Nat Underw* (Life ed) 47:2 Ag 6 '43
States win Fidelity decision; U.S. high court holds against federal bankruptcy. *Nat Underw* (Life ed) 47:2 Ap 9 '43
To wind-up affairs. *Comm & Fin Chr* 158:575 Ag 9 '43

FIEDLER, Albert

Appointed Milburn research director. *por Safety Eng* 86:60 O '43

FIELD, Marshall, 1893-

Wraps are off; Marshall Field, III, to step into full control of vast fortune. *por Business Week* p16-17 S 18 '43

FIELD glasses

Watches, field glasses, cameras; all are becoming scarce. *Consumers' Research Bul* 11:23 D '42

Manufacture

Automatics speed binocular production; Westinghouse electric & manufacturing company. J. Witchey. *il Am Mach* 87:92-3 Ag 5 '43

Binoculars in mass; Universal camera corp., New York city. *il Fortune* 27:134-5 Je '43

FIELD museum of natural history (now Chicago museum of natural history)

Chicago museum of natural history. *Science* 98:276 S 24 '43

Fiftieth anniversary. *Science* 98:237-8 S 10 '43

Official summary of events of importance in history of the museum. *Science* 98:256 S 17 '43

Value of the museum. R. M. Hutchins. *Science* 98:331-4 O 15 '43

FIELD warehousing. See Warehousing**FIELDNER, Arno Carl, 1881-**

Presentation of the Melchett medal. *Science* 97:85 Ja 22 '43

FILAMENTS

List of new man made fibers, filaments and yarns, their trade-names, producers and fabricators. *Rayon* 24:320 Je '43

Two new hot-filament resistances. C. C. Minter. *diag J Ap Phys* 14:49-50 Ja '43

FILES and filing (documents, etc.)

How to get more room in your correspondence files. L. W. Bishop and others. *il Bankers Mo* 59:496+ N '42

Proper cut-filing system obviates press delays. H. Mann. *il Inland Ptr* 110:62-4 D '42

Toward filing efficiency; abstract. F. W. Fischer. *Management R* 32:366-7 O '43

See also

Banks and banking—Card system in business Records

FILES and rasps

Better service from files. J. E. Hyler. *Am Mach* 86:1417-18 N 26 '42

File reconditioning to save 600 tons of steel. *Blast F & Steel Pl* 31:sup62 Ap '43

Files and filing. J. E. Hyler. *Power Pl Eng* 47:94 Ag '43

Filing flash and fins. *il Mod Plastics* 20:88 My '43

Finishing metals by band filing. H. J. Chamberland. *il Iron Age* 151:54-6 Mr 4 '43

Reclaiming worn files. *Iron Age* 151:63 F 11 '43

FILING machines

Filing machines and methods. J. E. Hyler. *Am Mach* 87:134+ F 4 '43

FILLING

Belt delivers fill for Youghiogheny earth dam. *il diags Eng N* 129:777-80 D 3 '42

Building foundations on compacted fill; with cost data. W. E. King. *diag Eng N* 131:403-5 S 9 '43

Landfill disposal wins army favor. *il diags Eng N* 129:851-3 D 17 '42

Resistance of soft fill to static wheel loads. W. W. Pagon. *il map Am Soc C E Proc* 68:237-54 F '42; Discussion. 69:151-2 Ja '43

Sanitary fill experience at San Francisco. *il Eng N* 130:554-7 Ap 22 '43

Submerged shipways with steel sheeting walls; use of marl for filling. C. B. Jansen. *il diags Civil Eng* 13:310-14 J1 '43

Willow mattress for protecting road fills. *Pub Works* 74:39 J1 '43

FILLING materials**See also**

Paper making—Fillers Plastic materials—Fillers

FILM slides. See Slide films**FILM speeds.** See Photography—Exposure**FILMS**

Absolute method for the determination of the area of a fine crystalline powder; New adsorption isotherm; Adsorption method for the determination of the area of a solid without the assumption of a molecular area. W. D. Harkins and G. Jura. *J Chem Phys* 11:430-2 S '43

Adsorption of ions by leached surface films on glass. H. C. Hafner and F. L. Jones. *Am Cer Soc J* 26:55-6 F 1 '43

Concentricity; testing concentricity of enamel film on round wire; special tester utilizing electronic circuits. E. F. Hansen. *il diag Gen Elec R* 45:615-16 N '42

Condensation of vapors; film coefficients for alcohols, esters, and ketones. D. F. Othmer and S. Berman. *bibliog il diags Ind & Eng Chem* 35:1068-77 O '43

Derivatives of starch; plasticizing studies of starch triacetate films. C. A. Burkhard and E. F. Degering. *Rayon* 23:876-8 N '42

Dip coater; an instrument for making uniform films by the dip method. H. F. Payne. *bibliog il diags Ind & Eng Chem Anal ed* 15:48-56 Ja 15 '43

Dry stripped replicas for the electron microscope. V. J. Schaefer. *Science* 97:188 F 19 '43

Effect of chemically formed surface films on glass solubility. F. L. Jones and H. C. Hafner. *Am Cer Soc J* 26:56-8 F 1 '43

Energy relations in film penetration. J. Schubert and G. E. Boyd. *bibliog J Chem Phys* 11:215 Ap '43

Film formation by pure liquids. C. W. Foulk and J. E. Barkley. *bibliog diag Ind & Eng Chem* 35:1013-16 S '43

Fine structure of metallic surfaces with the electron microscope; two-step replica process utilizes molded polystyrene and evaporated silica. R. D. Heidenreich and V. G. Peck. *bibliog il diag J Ap Phys* 14:23-9 Ja '43

Laws governing the growth of films on metals. U. R. Evans. *bibliog Electrochem Soc Trans* 93 (preprint 10):129-36 Ap '43

Mechanical properties of cellulose acetate as related to molecular chain length. A. M. Sookne and M. Harris. *bibliog J Research Nat Bur Stand* 30:1-14 Ja '43

Orientation in stretched films of amylose triacetate. R. L. Whistler and N. C. Schieltz. *il Am Chem Soc J* 65:1436-7 J1 '43

Production of a macrofilm on sodium borosilicate glasses and its properties; abstract. I. V. Grebenshchikov and O. C. Molchanov. *Chem & Met Eng* 50:196-7 S '43

Progress report on a study of the adhesion of lacquer films on metals. R. L. Savage, W. von Fischer and C. F. Prutton. *bibliog il diags Paint Oil & Chem R* 104:8-14, 16, 36-8 N 19 '42

Properties of low reflection films produced by the action of hydrofluoric acid vapor. F. H. Nicoll and F. E. Williams. *il Opt Soc Am J* 33:434-5 Ag '43

Rates of evaporation of water through compressed monolayers on water. I. Langmuir and V. J. Schaefer. *bibliog il Franklin Inst J* 235:119-62 F '43

Resemblance between surface films on solids and on water. S. J. Gregg. *Chem Soc J* p696-708 N '42

FILMS—Continued

- Ripple at the edge of a spreading monomolecular film. B. Vonnegut. diags J Chem Educ 20:292 Je '43
- Thickness of paint films applied with a straight edge spreader. il diags Metal Finishing 41:677-80 O '43
- Vacuum evaporated films on glass; their theory, production and applications. S. Bateson. il Can Chem & Process Ind 27:438-40 Ag '43
- Veratrine alkaloids; surface film studies. A. Rothen and L. C. Craig. bibliog il Am Chem Soc J 65:1102-6 Je '43

See also

- Lubrication and lubricants
- Surface phenomena

FILMS, Metallic

- Electrical conduction and recrystallization in thin Pb films deposited at low temperatures. E. L. Armi. bibliog diag Phys R 63:451-4 Je 1 '43
- Lubrication by thin metallic films and the action of bearing metals. F. P. Bowden and D. Tabor. il J Ap Phys 14:141-51 Mr '43
- Method of thin films for the study of intermetallic diffusion and chemical reactions at metallic surfaces. H. S. Coleman and H. L. Yeagley. il diags Am Soc for Metals Trans 81:105-21, Discussion, 121-4 Mr '43
- Methods of depositing metallic films. S. Wein. bibliog il diags Electronics 16:110-13+ S '43
- Sputtered metal films; abstract. Metals & Alloys 17:1030+ My '43
- Studies on the structure of thin metallic films by means of the electron microscope. R. G. Picard and O. S. Duffendack. il J Ap Phys 14:291-305 Je '43
- Surface protection; light metals; German data on the electrolytic oxidation of aluminum alloys. il Iron Age 150:64-8 D 3 '42
- Transition state theory of the formation of thin oxide films on metals. E. A. Gulbransen. diags Electrochem Soc Trans 83 (preprint 4):53-65 Ap '43
- Vacuum evaporated films on glass; their theory, production and applications. S. Bateson. il Can Chem & Process Ind 27:438-9 Ag '43
- Warmth without weight achieved by applying heat-reflecting metallic coatings to various fabrics. C. Kirkpatrick. Textile World 93:78 My '43

See also

- Silvering

FILMS, Paint. See Paint**FILMS, Photographic. See Microfilms; Moving picture films; Oscillographs—Films; Photography—Films; Slide films****FILTER cloth**

- Control and collection of industrial dust. E. D. Powers. il diags Rock Prod 46:66-8 Mr '43

FILTER paper

- Filter paper method for lead fume collection. L. Silverman and J. F. Ege, jr. bibliog il diags J Ind Hygiene 25:185-8 My '43
- Manufacture and use of filter paper; abstract. Paper Ind 24:1176 F '43
- Spot reaction experiments; reactions on filter paper. F. Feigl. J Chem Educ 20:174-8 Ag '43

FILTER presses

- Filter blotter press reconditions pyranol. L. J. Gill. Elec W 119:1138+ Ap 3 '43

See also

- Oil filters

FILTERS, Air. See Air filters**FILTERS, Electric. See Electric filters****FILTERS and filtration**

- Filter-run difficulties at Belleville, Ont. O. H. Scott. il Water & Sewage 81:37+ Ap '43
- How presedimentation worked at Forsyth. F. F. Palmer. plan Pub Works 74:25-6 Ji '43
- Operating results at the Windsor filtration plant. G. H. Strickland. il Water & Sewage 81:39+ Ap '43
- Overcoming plankton difficulties at the Hamilton filtration plant. D. H. Matheson. il Water & Sewage 81:38+ Ap '43

- Pennsylvania anthracite as a filter medium. H. G. Turner. bibliog ind & Eng Chem 35:145-7 F '43

- Practical aspects of porous plate filter bottoms based on experiences at Larchmont, N.Y. H. T. Hotchkiss. il Water Works & Sewerage 90:sup159-61 Je '43

- Pressure filtration practice; abstract. Am Water Works Assn J 35:813-14 Je '43

- Shofu cylinder; a Japanese method of water filtration in the field; abstract. R. D. Kirkpatrick. diags Am Water Works Assn J 35:626-7 My '43

- Water supplies and iron removal plant, Provincetown, Mass.; filtering through marble, coke and sand. P. F. Howard. diags plans N E Water Works Assn J 57:63-72 Mr '43

See also

- Filtration plants
- Water purification
- Sewage disposal—Fil-
- tration
- Waterworks

Cleaning

- Cleaning filter sand in place with sulphur dioxide; abstract. H. E. Channon. Water Works & Sewerage 89:523-4 D '42

- Deflector surface wash system; Two Rivers, Wis. E. A. Bartz. diags Pub Works 74:23-4 Ap '43

- Filter bed maintenance; experience with the Palmer filter-bed agitator. W. C. Goehring. il Water Works & Sewerage 90:sup155-7 Je '43

- Surface washing of filters at Orrville, Ohio. J. E. Specht. Am Water Works Assn J 35:568-70 My '43

- Velocity in filter washing. Pub Works 74:36 Mr '43

- Why dirty filters? H. E. Hudson, jr. il Water Works & Sewerage 90:148-50 Ap '43

Standards

- Tentative standard specifications for filtering material. Am Water Works Assn J 35:455-70 Ap '43

Vacuum filters

- Efficient reuse of process water. H. A. Morrison. Paper Tr J 117:33-6 Ag 19 '43

- Vacuum filters used in primary sludge dewatering; with cost data. R. E. Fuhrman. Am Soc C E Proc 69:50-5 Ja '43

FILTERS and filtration (biological products)

- Enzymatic cleaning of Berkefeld candles used in the filtration of human blood plasma. B. Witlin. Science 98:160 Ag 13 '43

- Inexpensive disposable filter for blood and plasma transfusions. M. Novak. il Science 97:248 Mr 12 '43

- Nylon blood and plasma filter. S. B. Rose. diags Science 98:92 Ji 23 '43

FILTERS and filtration (technical chemistry)

- Analysis of constant-pressure filtration data. D. J. Porter. ind & Eng Chem Anal ed 15:269 Ap 15 '43

- Contact filtration as an aid to wartime production. R. C. Davidson. diags Oil & Gas J 41:116, 120, 123-4+ Mr 25 '43

- Correlation of rate data. C. C. DeWitt. bibliog ind & Eng Chem 35:695-7 Je '43

- Filtration and beer clarification, some technical aspects; abstract. F. L. Horine. Food Ind 15:120-1 Ap '43

- Filtration cylinder. R. J. DeGray and E. P. Rittershausen. il ind & Eng Chem Anal ed 15:392 Je 15 '43

- Finishing of filters. C. Cleveland. il Metal Finishing 40:687 D '42

- Phenolic filter parts. il Mod Plastics 20:72-3 My '43

- Problems in filter operation. Textile Col 65:127-8 Mr '43

- Radial fin sump type filter. il Blast F & Steel Pl 31:924 Ag '43

- Straw filters remove oil waste from locomotive wash water. E. Sunergren. diags Eng N 131:413 S 9 '43

See also

- Air filters
- Filter presses
- Filter paper
- Oil filters

Cleaning

- Combination acid-alkaline treatment speeds cleaning of clogged filter screens. J. H. Dittmar and F. L. Harvey. il Chem & Met Eng 60:117-18 S '43

FILTRATION plants

Design and operation data on large rapid sand filtration plants in the U.S. and Canada; with tabulated statistical data. E. A. Hardin. bibliog(56 references) Am Water Works Assn J 34:1847-79 D '42
 Operating experiences at the Calgary water-filtration plant. W. E. Robinson. Il Water & Sewage 81:41-2, 54, 56+ Ap '43
 Quarter century of development in Cleveland's water supply. A. G. Levy; S. C. Simmermacher; L. A. Marshall. Il diags plan map Am Water Works Assn J 35:869-99 Jl '43

See also

Filters and filtration Water purification
 Sewage disposal—Fil- Waterworks
 tration

Equipment

Filter bed maintenance; experience with the Palmer filter-bed agitator. E. C. Goehring. Il Water Works & Sewerage 90:sup165-7 Je '43
 How critical war materials were saved at Atlanta; renovation and rustproofing applied to two filter plants. P. Weir. Il Water Works & Sewerage 90:189-95 Je '43
 Improved filter-plant operation as a result of prechlorination. A. J. Deslauriers. Il Water & Sewage 81:40+ Ap '43
 New filtration plant of Newport News, Va. R. Newsom. Il plans Water Works & Sewerage 89:501-10 D '42
 Quarter century of development in Cleveland's water supply; Baldwin filtration plant. L. A. Marshall. Il plan Am Water Works Assn J 35:887-99 Jl '43
 Some aspects of filtration plant design and operation; abstract. E. R. Stapley. Water Works & Sewerage 89:468-9 N '42

FINANCE

Functional finance, friend or foe of private capital? debate at New school for social research. M. V. Guardiola and others. Comm & Fin Chr 157:2057, 2066 Je 3 '43

See also

Auditing
 Automobile industry and trade—Finance
 Bankruptcy
 Banks and banking
 Banks and banking—Finance
 Bonds
 Budget
 Building—Finance
 Capital
 Collecting of accounts
 Colleges and universities—Finance
 Commerce
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 Credit
 Debts, Public
 Electric utilities—Finance
 Finance companies
 Financial statements
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 Gold as money
 Holding companies
 Housing finance
 Income
 Income tax
 Inflation (finance)
 Insurance
 Interest
 Investment trusts
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 Local government—Finance
 Mining industry and finance
 Money
 Motor bus lines—Finance
 Municipal finance
 Petroleum industry and trade—Finance
 Prices
 Profit
 Public utilities—Finance
 Railroads—Finance
 Rapid transit—Finance
 Roads—Finance
 Securities
 Speculation
 State finance
 Stock exchange
 Stocks
 Tariff
 Taxation
 Trusts, Industrial
 War finance
 Warehousing

Argentina

What's happening to the Argentine peso. Business Week p36 My 8 '43

Belgium

Towards inflation in Belgium. Economist 144:590-2 My 8 '43

Bolivia

See also
 Budget—Bolivia

Canada

Financing war without inflation. Trusts & Estates 77:5 Jl '43

Half of Canada's wartime budget provided by taxes. Comm & Fin Chr 156:2153 D 17 '42

Ceylon

National loan launched. For Comm W 13:10-11 N 6 '43

Chicago

Chicago area debtors cut 1942 debts by \$24,500,000. Comm & Fin Chr 157:1774 My 13 '43

Chile

Government finances in 1942. For Comm W 11:19 Ap 10 '43

China

Stabilization pact with China extended. Comm & Fin Chr 157:208 Ja 14 '43

Colombia

Colombian tax and fiscal legislation for 1943. H. P. Crawford. Il For Comm W 11:8-9+ Ap 10 '43

Cuba

Government finances. For Comm W 9:22-3 D 5 '42; 10:14 Ja 16 '43

Finland

Finnish government expenditures in 1943. For Comm W 12:19 Ag 7 '43

Florida

See also

Debts, Public—Florida

France

French financial unification. Economist 145:215 Ag 14 '43

Inflation in France. Economist 144:74-5 Ja 16 '43

Germany

Germany at war; war finance. Economist 144:427 Ap 3 '43

Reich receipts from taxation and borrowing, August 1939-March 1942; tabulation. Fed Res Bul 29:32 Ja '43

What German stock market control means for us. B. Ravits. Barron's 23:11 Ja 4 '43

Great Britain

Another vesting order. Economist 143:805-6 D 26 '42

Britain's financial victory. D. Tyerman. Comm & Fin Chr 158:925+ S 2 '43

British banking and finance; significant recent developments and trends. D. F. Heatherington. For Comm W 12:5-7+ Jl 24 '43

British war finance and the banks. C. Muller. J Business 16:77-99 Ap '43

British white paper on war finance. Fed Res Bul 29:729-40 Ag '43

Financial instrument. Economist 143:754-6 D 19 '42

Financial situation abroad; banking, credit and trade in 1942. Bankers M 146:431-4 My '43

Letter from London; British finance. A. V. Barber. Trusts & Estates 76:515-16 Je '43

National finances. Economist 144:487-8 Ap 17 '43

Paying and saving in Great Britain. N. Crump. Comm & Fin Chr 157:1778 My 13 '43

Priorities and possibilities, claims on post-war resources of the Exchequer. Economist 144:816 Je 26 '43

Revenue; figures for quarter and year ending March 31, 1942 and 1943. Economist 144:445 Ap 3 '43

Revenue; quarter and year ending June 30, 1942 and 1943. Economist 145:30 Jl 3 '43

Sees London money market disintegrating as war curtails foreign exchange business. J. T. Madden. Comm & Fin Chr 157:1390 Ap 15 '43

Where Britain gets her revenue. N. Crump. Comm & Fin Chr 157:754 F 25 '43

White paper statistics. Economist 144:497-500 Ap 17 '43

See also

Bonds, Government—Income—Great Brit-
 Great Britain ain
 Budget—Great Brit-
 ain

FINANCE—Continued

India

- India fights inflation. Economist 145:117-18 J1 24 '43
 India's war gains. Economist 144:302-3 Mr 6 '43
 Inflation in India. Economist 145:468-9 O 2 '43
 Loans raised by provincial governments. For Comm W 9:21 N 28 '42
 Watch the world go by; sterling balances create a problem for India. V. L. Horoth. Mag of Wall St 72:75+ My 1 '43

Ireland

- Eire's financial position. Economist 144:180 F 6 '43
 1942-1943 receipts and expenditures. For Comm W 11:25 My 1 '43

Italy

- Italy's finances. Economist 145:209-10 Ag 14 '43

Japan

- Facts about Japanese war finance. For Comm W 11:24 Je 12 '43

Mexico

- Form group to further sound finances for Mexican business. Comm & Fin Chr 157:2280 Je 17 '43

Netherlands

- Financial occupation of Holland. Economist 144:496-7 Ap 17 '43

North Carolina

- North Carolina, a story of great achievement; finance. Manuf Rec 112:73-8 O '43
 North Carolina's fiscal policy; a summary. Comm & Fin Chr 156:2240 D 24 '42

Palestine

- Government's financial position improves. For Comm W 11:23 My 29 '43
 Inflation in Palestine. Economist 144:146-7 Ja 30 '43

Peru

- Government finances, 1941. For Comm W 9:22 D 19 '42

Philadelphia

- Pennsylvania municipal bonds; Philadelphia's voluntary refunding. Comm & Fin Chr 157:1200-1 Ap 1 '43
 Philadelphia financial story. R. M. Ergood, Jr. Comm & Fin Chr 158:1402-3 O 7 '43

Salvador

See also

Budget—Salvador

South Africa

- South Africa's capital autarky. Economist 145:146 J1 31 '43

Spain

- Report of the Bank of Spain, 1936-1941. Fed Res Bul 29:399-414 My '43

Tanganyika Territory

- Fiscal year 1942 results in surplus. For Comm W 13:12 O 9 '43

Tennessee

- Tennessee to retire bonds in 1943-44; revenue status summarized. Comm & Fin Chr 157:272 Ja 21 '43

United States

- American economy in 1942: finance. C. A. R. Wardwell and R. B. Bangs. Survey of Cur Business 23:20-3 Ja '43
 Annual report of the Secretary of the Treasury. Bankers M 146:190-1 Mr '43
 Bankers must lend wise counsel; government war financing and its effect on our economy discussed. R. Strickland. Comm & Fin Chr 158:1190+ S 23 '43; Excerpts. Trusts & Estates 77:332-3 O '43
 Challenge of post-war deficit financing. Comm & Fin Chr 157:2059+ Je 3 '43

- Challenge of post-war deficit financing discussed by First national bank of Boston. Comm & Fin Chr 157:2283 Je 17 '43
 Current monetary situation. W. E. Spahr. Comm & Fin Chr 158:1589, 1597-8+ O 21 '43
 Effect of war on currency and deposits. C. R. Whittlesey. Comm & Fin Chr 158:1488+ O 14 '43
 Federal finance since the start of the defense program. Survey of Cur Business 23:9-11 J1 '43
 Fighting money; new trends in government finance. il Business Week p110-11+ Ap 24 '43
 Government finance and money rates. J. A. Howe. Comm & Fin Chr 158:1400, 1418-19 O 7 '43
 How to save the United States from national bankruptcy. W. E. Spahr. Comm & Fin Chr 157:2359, 2372-3 Je 24 '43
 Inflationary finance. Trusts & Estates 76:491-2 Je '43
 Inflationary pressure slackens; government at present obtaining funds from the public rather than banks. W. Von Tresckow. Barron's 23:3 Ag 2 '43
 Managed money, debt and rates; controls implied by deficit financing by banks and public. J. H. Wood. Trusts & Estates 77:166-7 Ag '43
 Nation must turn back to thrift to meet war debt. H. H. Heimann. Comm & Fin Chr 158:1712 O 23 '43
 National income and national product in 1942. M. Gilbert and G. Jaszi. tables Survey of Cur Business 23:10-26 Mr '43
 National product and income in the first half of 1943. G. Jaszi. Survey of Cur Business 23:9-14 Ag '43
 Old-age security and the war; pension fund deficit. G. B. Robinson. J Account 76:318-30 O '43
 Prices, taxes, and inflation. D. B. Woodward. Trusts & Estates 76:231 Mr '43
 Program to salvage fiscal and monetary solvency. W. E. Spahr. Comm & Fin Chr 157:825+ Mr 4 '43; Discussion. 157:905+, 1001+, 1097+, 1193+, 1281+, 1375 Mr 11, 18, 25, Ap 1, 8, 15 '43
 Proposes 30% withholding tax; taxes, savings should equal half expenditure. M. S. Eccles. Comm & Fin Chr 157:1021 Mr 18 '43
 Public finance (federal), 1938-1941. Survey of Cur Business 1942 Sup p74-8 [summarized in monthly numbers]
 Question of national fiscal and monetary policy in relation to business and employment vital. B. Ruml. Comm & Fin Chr 157:1975 My 27 '43
 Relation of government financing to gross income flow. C. Warburton. Survey of Cur Business 23:17-22 Ap '43
 Summary of Treasury receipts, expenditures, and related items; with details of trust accounts and general fund balance, monthly. Nov. 1941-Nov. 1942. Fed Res Bul 29:73 Ja '43
 Survival of private enterprise requires sound fiscal policies. Comm & Fin Chr 158:1421+ O 7 '43
 Tax and debt outlook. H. H. Heimann. Bankers M 145:548-9 D '42
 Treasury finance and the money market. Fed Res Bul 29:587-93 J1 '43
 Treasury finance and the new budget. Fed Res Bul 29:111-15 F '43
 Urges Congressional control of revenue and appropriation of public funds. T. I. Parkin. Comm & Fin Chr 157:1670 My 6 '43
 Victory money; behind the figures. W. A. Irwin. Banking 35:24-5 F '43
 War financing and banking developments. Fed Res Bul 28:1173-81 D '42
 War wealth, a delusion. Trusts & Estates 77:189-91 S '43
 What will it take to pay for this war? W. Gates. Mag of Wall St 71:219-21+ D 12 '42

See also

- | | |
|---------------------------------|-----------------------------|
| Banks and banking | Debts, Public—United States |
| —United States | Gold as money—United States |
| Bonds, Government—United States | Government accounting |
| Budget—United States | |

FINANCE—United States—See also—*Continued*
 Government expendi- Reconstruction fi-
 tures nance corporation
 Income tax—United Taxation—United
 States States
 Inflation (finance) United States—
 Money—United States Treasury depart-
 ment

Venezuela

See also
 Income tax—Vene-
 zuela

FINANCE, International

Address analyzing Keynes and Morgenthau
 stabilization plans. B. M. Anderson. Comm
 & Fin Chr 157:1884-5, 1984-5 My 20, 27 '43;
 Same. Bankers M 146:388-419 My '43; Ex-
 cerpts. Trusts & Estates 76:501-2 Je '43;
 Discussion. Comm & Fin Chr 157:1886,
 2065 My 20, Je 3 '43

Allies shape world recovery; Keynes and
 White plans for currency stabilization com-
 pared. G. B. Collingwood. Mag of Wall St
 72:21+ Ap 17 '43

Bank of international cooperation: a world
 RFC. C. S. Dewey. Comm & Fin Chr
 157:2357+ Je 24 '43; Discussion. 158:97+,
 201+, 314 J1 8, 15, 22 '43

Basis for determining quotas for nations
 under White currency plan made public.
 Comm & Fin Chr 158:1919 N 11 '43

Canada proposes plan for international ex-
 change union; substitute for British and
 U.S. currency stabilization programs. Comm
 & Fin Chr 158:201+ J1 15 '43

Currency plans; proposals of British and
 American governments. Economist 144:556-
 8 My 1 '43

Denies stabilization plan drawn to favor
 British at expense of United States. J. M.
 Keynes. Comm & Fin Chr 157:1874 My 20
 '43

Do we need a stabilization plan? W. Ward.
 Credit & Fin Management 45:14-15+ N '43

Economic equipoise; British and American
 plans for stability of the exchanges. Econo-
 mist 144:452-3 Ap 10 '43

Effective currency control of utmost im-
 portance in post-war reconstruction. J. T.
 Madden. Comm & Fin Chr 158:834 Ag 26 '43

For world's economic health; Treasury plans
 for international bank and stabilization
 funds. Business Week p74+ N 6 '43

Free dollar urged as alternative to Treasury
 and Keynes proposals. W. W. Aldrich.
 Comm & Fin Chr 157:1657, 1678 My 6 '43

Gold and stabilization of world currencies.
 V. L. Hooroth. il Mag of Wall St 72:615-17+
 S 18 '43

International bank for postwar reconstruc-
 tion. H. D. Ralph. Burroughs Clearing
 House 28:19 N '43

International money agreement should not in-
 terfere with credit control policies. E. E.
 Agger. Comm & Fin Chr 158:1508 O 14 '43

Jobs at stake in world trade plans; differ-
 ences between American and British pro-
 posals. W. Von Tresckow. Barron's 23:3+
 My 3 '43

Keynes proposes international currency
 union, based on bancor. Comm & Fin Chr
 157:1388-9 Ap 15 '43

Monetary stabilization; the British and Amer-
 ican plans. I. Wright. Comm & Fin Chr
 157:2357+ Je 24 '43

Morgenthau and Keynes stabilization plans.
 C. W. Phelps. Comm & Fin Chr 157:2173
 Je 10 '43

Morgenthau outlines proposed post-war in-
 ternational currency stabilization plan.
 Comm & Fin Chr 157:1305+ Ap 8 '43

Peace bank: five billion dollar fund to ma-
 nipulate all trade balances. Business Week
 p100+ Ap 10 '43

Plans for world currency stabilization called
 dangerous by Guaranty trust co. Comm
 & Fin Chr 157:2072 Je 3 '43

Political security, internal stability essential
 in solving post-war problems. R. H. Brand.
 Comm & Fin Chr 158:1486, 1493-5 O 14 '43

Post-war currency. Economist 145:261-2 Ag
 28 '43

Post-war exchange stabilization reviewed.
 F. Cist. Comm & Fin Chr 158:685, 695-6, 700
 Ag 19 '43

Post-war international finance and invest-
 ment. J. B. Condliffe. Trusts & Estates 76:
 229 Mr '43

Postwar international monetary stabilization;
 general observations of Canadian experts.
 Fed Res Bul 29:718-28 Ag '43

Postwar international monetary stabilization;
 plans submitted by United States and Brit-
 ish experts. Fed Res Bul 29:501-21 Je '43

Postwar international monetary stabilization;
 Treasury department revised draft of pre-
 liminary plan for international stabiliza-
 tion fund of the United and associated na-
 tions. Fed Res Bul 29:827-40 S '43

Post-war problems; supports idea of inter-
 national monetary plan to stabilize cur-
 rencies; abstracts. R. H. Brand. East
 Underw 44:1+ S 17 '43; Trusts & Estates
 77:335-3 O '43

Proposals for post-war currency stabilization.
 Nat City Bank p55-9 My '43; Excerpts.
 Trusts & Estates 76:425 My '43

Proposes coupling world currency plan with
 credit machinery for post-war rehabilita-
 tion. C. S. Dewey. Comm & Fin Chr 158:
 1227 S 23 '43

Real currencies in a real world. G. C. Cox.
 Barron's 23:6 My 17 '43

Road to currency stabilization proposed by
 Guaranty trust company. Comm & Fin Chr
 158:1313 S 30 '43

Tentative international monetary stabiliza-
 tion plan. M. Palyi. Comm & Fin Chr 158:
 589, 602-3 Ag 12 '43

Treasury plan for stabilizing currency of
 United nations outlined by Morgenthau;
 text. Comm & Fin Chr 157:1300, 1303 Ap 8
 '43

Treasury's plan for the stabilization of cur-
 rencies. R. Léon. Comm & Fin Chr 157:
 1756+ My 13 '43

Treasury's revised currency program holds
 to gold basis. Comm & Fin Chr 158:829+
 Ag 26 '43

Two new financial terms: unitas and bancor.
 H. D. Ralph. Burroughs Clearing House
 27:19-20 My '43

United States as a power house of peace. D.
 Tyerman. Barron's 23:1 S 27 '43

Ways to Latin-American approach; question
 of international commerce and exchange.
 L. G. Legorreta. Comm & Fin Chr 158:
 1710 O 28 '43

World bank proposals; bancor or unitas?
 is the international gold standard out-
 dated? Fortune 28:138-9+ Ag '43

World capital bank. Economist 145:527-3 O
 16 '43

World trade must flow freely again; ex-
 cerpts from address to Mexican bankers
 association. W. L. Hemingway. Banking
 35:40 Je '43

See also
 Balance of payments Debts, Public
 Bank for interna- Foreign exchange
 tional settlement Investments, Foreign
 Banks and banking, International

FINANCE, Municipal. See Municipal finance

FINANCE, Personal

See also
 Debt, Employees'
 Estate planning
 Loans, Small

FINANCE, State. See State finance

FINANCE companies

Finance companies move into manufacturing
 fields. S. H. Brams. Iron Age 151:62, 64
 Ap 22 '43

Lenders fan out; instalment loan concerns
 acquire manufacturing firms. Business
 Week p105-6 Je 5 '43

Planes for all; finance company bought by
 Lockheed to provide postwar credit. Busi-
 ness Week p 105-6 Je 12 '43

Post-war outlook of finance companies. M.
 Pescatello. Barron's 23:1+ Mr 15 '43

Rate regulation in the field of consumer
 credit. W. P. Mors. bibliog J Business 16:
 51-63, 124-37 Ja-Apr '43

See also
 Commercial credit Household finance
 company corporation
 Commercial invest-
 ment trust corpora-
 tion

FINANCIAL advertisers association

Elect advisory council. Comm & Fin Chr 156:2060 D 10 '42
 Elect officers at unique convention-by-mail. Comm & Fin Chr 156:1797 N 19 '42; Trusts & Estates 75:491-3 N '42

FINANCIAL advertising. See Bank advertising**FINANCIAL libraries**

Wartime problems of Washington financial librarians. E. Rackstraw. Special Lib 34: 276-9 JI-Ag '43

See also

Federal deposit insurance corporation—Library	United States—Treasury department—Library
United States—Budget, Bureau of—Library	

FINANCIAL news. See Newspapers—Financial news**FINANCIAL ratios**

Benchmarks of wholesale health, 1941; financial ratios for 24 lines. R. A. Foulke. II Dun's R 50:9-11 N '42

14 important financial ratios, 36 industries. 1941; tabulation. R. A. Foulke. Dun's R 50:8. 10-11 D '42

Ratio analysis as a sales aid; some danger alarms to be found in financial statements. A. T. Woodward. Credit & Fin Management 45:4-6+ F '43

Ratio analysis will show signs of impending danger. C. L. Merwin. Credit & Fin Management 45:29-30 Ap '43

FINANCIAL research

Post-war financial problems under study at Harvard school. Comm & Fin Chr 157:1883 My 20 '43

FINANCIAL statements

Accounting for amortization of war facilities. G. N. Farrand. J Account 76:419-20 N '43

Accounting problems in presentation of cost-plus-fixed-fee contracts in financial statements. G. D. Bailey. J Account 74:503-10 D '42

Analysis of financial statements; observations from a credit man's viewpoint. D. H. Hotchkiss. Credit & Fin Management 45:4-6+ Ja '43

Credit men seeking more information from financial statements. II Credit & Fin Management 45:9-11 My '43

Disclosure of the effect of wartime uncertainties on financial statements; statement on auditing procedure no. 15. J Account 75:153-5 F '43

Do we need a balance-sheet? C. Martin. J Account 75:343-7 Ap '43

Financial statements in annual reports to stockholders; Securities and exchange commission opinion. J Account 75:188-9 F '43

Financial statements in wartime. C. O. Wellington. J Account 76:54-65 JI '43

Investment company accounts. J. F. Lynch. J Account 76:240-9 S '43

Perfect fraud is solved after eight years; with suggestions by C. J. Scully on checking of financial statements. Credit & Fin Management 45:7-9 Ja '43

Postwar refund of excess profits tax. J Account 75:27-9 Ja '43

Ratio analysis as a sales aid; some danger alarms to be found in financial statements. A. T. Woodward. Credit & Fin Management 45:4-6+ F '43

War effect on statements. J Account 74:544-6 D '42

Wartime problems of financial statements. G. N. Farrand. J Account 75:36-41 Ja '43

See also

Balance sheets	Income statements
Consolidated statements	Profit-and-loss statements
Employees, Reports to	

FINANCIAL statistics

Current statistics for Federal reserve chart book on bank credit, money rates, and business. Fed Res Bul 29:91-3 Ja '43 [cont monthly]

International financial statistics. Published in monthly numbers of Federal reserve bulletin

See also

Banks and banking—Statistics
 Income—Statistics

FINENESS. See Cement—Fineness; Particles**FINGERS**

Finger surgery; analysis of 1000 cases. L. G. Simon. bibliog Ind Med 11:517-18 N '42

FINISHING. See Metal finishing; Plastic materials—Finishing; Rayon finishing; Textile finishing; Wood finishing**FINISHING machines**

Standardized finishing fixtures. R. F. Maxwell. II Mod Plastics 20:73+ F '43

FINISHING materials

Agitation of finishing materials. J. E. Hyler. II Metal Finishing 41:323-5 My '43

Development of the hot spraying of powdered materials. W. E. Ballard. II diags Chem & Ind 62:190-4 My 22 '43

Dip coater; an instrument for making uniform films by the dip method. H. F. Payne. bibliog II diags Ind & Eng Chem Anal ed 15:48-56 Ja 15 '43

Engineering fundamentals of aircraft finishing. A. L. Johnson and J. J. Oudhoff. II Aero Digest 43:159-60+ S '43

Fatty acids; preparation, physical and chemical properties used in soaps and protective coatings. A. G. H. Reimold. II Can Chem & Process Ind 26:632-8 N '42; Same abr. Chem Age (Lond) 48:123-7 Ja 23 '43

Fire defense in finishing rooms. L. F. Maar. II Metal Finishing 41:609-10 S '43

New finish for metal; Chicago vitreous enamel product co. develops Armor-Vit. II Cer Ind 40:77-8 Ap '43; Steel 112:150-1 Ap 12 '43

Oils for finishing materials. S. T. Dingman. II Metal Finishing 41:597-600+ S '43

Organic finishes in the war. C. A. Lankau. II Metal Finishing 41:397-8+ Je '43

Possible substitutes for metal finishing materials; list. Metal Finishing 41:354-5, 432-3 Je-JI '43

Protein coatings to extend supply of scarce lacquers; abstract. C. S. Young. Chem Ind 53:358+ S '43

Reference table of new materials and finishes of 1942. F. F. Peters, comp. Metals & Alloys 17:110-14 Ja '43

Review of industrial finishing progress for 1942. G. Klinkenstein. Metal Finishing 41:60 Ja '43

Starch studies; possible industrial utilization of starch esters in coating, sizing, and adhesive industries. J. W. Mullen, 2d and E. Pacsu. bibliog flow sheets II Ind & Eng Chem 35:381-4 Mr '43

Surface coatings specifications and requirements for war. A. I. Totten, jr. Paint Oil & Chem R 105:9+ F 25 '43; Same. II Chem & Eng N 21:370-2 Mr 25 '43; Same. Metal Finishing 41:403-5 Je '43

Temporary transparent coating to protect finished surfaces; Protektol. Mach 49:204-5 D '42

See also

Lacquer and lacquering	Textile finishing
Paint	Varnish and varnishing
Pearl essence	Waxes
Resinous products—Finishing materials	

Testing

Modern finish testing laboratories; Servel, inc. G. E. Stedman. II Metal Finishing 41: 391-4 Je '43

FINITE differences. See Difference equations**FINLAND***See also*

Debts, Public—Finland	World war, 1939—Finland
-----------------------	-------------------------

Commerce

Finland's trade dilemma. Economist 144:238+ F 20 '43

FINLAND—Continued

Economic conditions

Finland's economic difficulties. *Economist* 145:208 Ag 14 '43
News by countries. *For Comm W* 9:18-19 D 19 '42

Foreign relations

United States

U.S. diplomatic staff in Finland withdrawn. *Comm & Fin Chr* 157:1585 Ap 29 '43

Politics and government

Finlandia. *Economist* 144:227-8 F 20 '43

FINNEY-HOWELL research foundation
Fellowships. *Science* 97:372 Ap 23 '43

FIRE

Chemistry of fire. F. Zsoldes and F. Brako. *J Chem Educ* 20:305-7 Je '43

See also

Combustion Heating
Fires Smoke

FIRE apparatus

High pressure steps up efficiency of water. R. G. Fulver. *il Nat Underw* 47:6 S 2 '43
War-time fire protection. *il Nat Safety N* 47:136-7+ Mr '43

See also

Fire extinguishers
Fire protection

FIRE apparatus, Motor

Airport fire truck. *il Machine Design* 15:100-1 J '43

Fire-fighting apparatus fills war need. *il diags Product Eng* 14:12-15 Ja '43

Refinery fire-fighting equipment wooden-wheeled. *il diags Oil & Gas J* 41:40-1 Ja 7 '43

Trailer fire unit; Dennis no. 3 two-stage centrifugal pump. *il diags Automobile Eng* 32:511-17 D '42

FIRE brick

Dry-pressed grogged-clay insulating bricks; abstract. L. R. Barrett, J. F. Clements and A. T. Green. *Blast F & Steel Pl* 31:248+ F '43

General requirements of fire brick. L. J. Franz. *Blast F & Steel Pl* 31:364+ Mr '43
Use of aluminum metal in the ceramic industry; effect of coating insulating firebrick with aluminum-fire-clay mixtures. H. G. Schurecht and J. F. McMahon. *il diags Am Cer Soc J* 26:212-17 J 1 '43

See also

Silica brick

Manufacture

Automatic controls on periodic dryer speed production of hand-made refractory shapes; Malvern (Ark.) brick & tile co. R. F. Grady, jr. *il Brick & Clay Rec* 102:41-3 Je '43

Drying-cracks in firebrick. C. E. Moore. *Brick & Clay Rec* 102:50 Mr '43

Efficiency-plus speeds up manufacture of essential wartime refractories; Harbison-Walker refractories co. *il Brick & Clay Rec* 103:42-6 J 1 '43

Insulating refractory brick. *il Brick & Clay Rec* 102:41-4 F '43

Testing

Measurement of the thermal conductivity of fire-clay refractories. T. C. Patton and C. L. Norton, jr. *il diags Am Cer Soc J* 26:350-8 O 1 '43

Testing cupola furnace linings. J. M. Robit-schek. *diags Brick & Clay Rec* 102:51-2, 54+ Ap; 47-50 My '43

FIRE brigades, Factory. See Factory fire brigades

FIRE clay

Fire clay now used in electric heaters to save copper and steel. *il Brick & Clay Rec* 102:47 F '43

Ohio clay fields are source of fire clay and coal. *Brick & Clay Rec* 101:46 D '42

Study of fire clays in Szechuan province; abstract. F. Ko, Taung-shou Hsu and Ting-chuan Hsu. *Am Cer Soc Bul* 22 (Cer A22):86 My 15 '43

Use of aluminum metal in the ceramic industry; effect of coating insulating fire-brick with aluminum-fire-clay mixtures. H. G. Schurecht and J. F. McMahon. *il diags Am Cer Soc J* 26:212-17 J 1 '43

See also

Fire brick

FIRE departments

Great Britain

Phoenix of the blitz; Britain's national fire defense system. S. Hornblow. *il Nat Safety N* 48:62-3+ O '43

FIRE departments, Industrial. See Factory fire brigades

FIRE engines

Trailer fire unit; Dennis no. 3 two-stage centrifugal pump. *il diags Automobile Eng* 32:511-17 D '42

FIRE extinction

C&E.I. tests Foamite equipment in putting out oil fire. *il Ry Age* 114:1219-20 Je 19 '43
Electrical fires; danger from fire hose jets. S. F. Barclay. *Elec R (Lond)* 133:539-40 O 22 '43

Extinguishing magnesium fires with hard pitch derived from coal tar. H. R. Brown, I. Hartmann and J. Nagy. *pls U S Bur Mines Rep of Invest* 3672:1-17 '42

Feldspar as fire extinguisher for magnesium incendiary bombs. *Can Min J* 64:577 S '43

Fighting fires in confined spaces. W. H. Easton. *bibliog il Nat Safety N* 48:72-3+ O '43

Fire fighting; experience gained in air-raids. G. V. Harrap. *il Elec R (Lond)* 131:647-9 N 20 '42

Fire school teaches latest oil fire technique. *il Nat Pet N* 35:34-7 Je 9 '43

Flaming tanker is salvaged by firemen of the fleet after fierce 37-hour battle. *il Nat Pet N* 35:17+ Ag 25 '43

Gob fires put out by nozzle system and plenty of water; Lorain coal & dock co. *il Coal Age* 48:78-9 Je '43

Incendiary bomb protection with packaged sand. L. S. Flint. *il Rock Prod* 45:34-6+ N '42

Incendiary bombs; hazards, control methods. *diags Nat Safety N* 47:23-4+ My '43

Irrigation quenches coal pile fire. L. Jones. *Elec W* 119:1336-7 Ap 17 '43

Methods of combating fires in oil-storage tanks. J. D. McCamey. *il Oil & Gas J* 41:33-6+ D 3 '42

PIWVC fire school gives vital wartime protective training. *il Oil & Gas J* 42:67-60+ Ag 26 '43

Plant firemen; Milwaukee trains industrial personnel. *Business Week* p87-8 F 27 '43

Preventing and extinguishing magnesium fires. H. A. Knight. *il Metals & Alloys* 17:960-6 My '43

Putting out gas-main fires. W. W. Gardner. *il Gas Age* 91:24 Je 3 '43

Revised OGD instructions for dealing with fire bombs. *Safety Eng* 34:31 N '42

Safeguarding water in electrical fires. *Elec W* 119:620+ F 20 '43

Smoke eaters of the navy; how selected crews are trained to fight fires at sea. A. D. Rathbone. *4th. il Sci Am* 168:150-3 Ap '43

There are two parts to a fire-bomb blaze. W. H. Easton. *il Food Ind* 14:59+ D '42

See also

Coal mines and min- Fire extinguishers
ing—Fires and fire Fire service (water
protection supply)

Fire departments

FIRE extinguishers

Air foam cars for fighting fires. *il Ry Age* 115:687-9 O 30 '43

Application of carbon tetrachloride-type fire-extinguisher liquid to burning magnesium chips and magnesium incendiary bombs. S. J. Pearce and others. *pls U S Bur Mines Rep of Invest* 3686:1-18 '43

Army and navy take over extinguisher output. *Weekly Underw* 147:1174+ N 21 '42

Civilian incendiary bomb extinguisher. *il diags Mod Plastics* 20:73-6 D '42

Dry chemical gas-pressure type fire extinguishers. H. G. Hastert. *il Oil & Gas J* 41:38 Ja 14 '43

FIRE extinguishers—Continued

Emergency specification for fire extinguishers. Power 87:717a-717b O '43
 Expansion in CO₂. Walter Kidde & co., Belleville, N.J. il Fortune 27:130-1 Jé '43
 Extinguishers for O.C.D. Safety Eng 85:29 Ja '43; Same. Nat Safety N 47:32+ F '43; Same cond. il Sci Am 168:24+ Ja '43
 Fire fighting by scientific methods; Hawaiian electric co. H. Heinrich. il Elec West 91:70-2 O '43
 Gas for protection. M. A. Laswell. il Safety Eng 86:15-16, 20 Ag '43
 Points to observe in recharging fire extinguishers. Nat Underw 47:13 S 2 '43
 Portable fire extinguisher types; data sheet. Power 87:707 O '43
 Save extinguishers. il Safety Eng 84:16 D '42; Same. Nat Safety N 46:60 D '42
 Victory extinguisher of non-critical material. Safety Eng 85:41 Ap '43; East Underw 44:26 Mr 26 '43
 War-time fire protection. il Nat Safety N 47:136-7+ Mr '43

Corrosion

Corrosion of fire extinguisher. Safety Eng 86:32 Ag '43

Manufacture

Freezeproofing fire barrels. Nat Safety N 46:92-3 D '42
 Speeding war production by encouraging employees to improve their own operations; work simplification plan; Walter Kidde & co. il Steel 111:88-90 D 21 '42

Protection

Safeguarding fire fighting equipment from the work of the saboteur. P. W. Eberhardt; C. H. Lindsay; G. Blair. il diag Nat Pet N 35 pt 2:R117-18 Mr 3 '43

Testing

Carbon dioxide test in Maine generating plant; fire equipment. A. A. Winters. Elec W 120:1374 O 16 '43

FIRE hose

Electric heater aids fire hose drying. il Elec W 120:1040 S 18 '43
 Give your fire hose proper care. Textile World 93:116+ Ap '43

Standards

OCD uses standard hose couplings to assure interchangeability. il Ind Stand 13:277-8 N '42

FIRE inspection. See Insurance, Fire—Inspection

FIRE insurance. See Insurance, Fire

FIRE losses

Amend WPB regulations on repair, rebuilding. Nat Underw 47:1 F 25 '43

Authoritative word on rebuilding after fire. R. B. Mitchell. Nat Underw 46:3+ N 26 '42

Chart showing fire losses, 1875-1942. Weekly Underw 149:496 S 11 '43

Do you know these facts about fire? Credit & Fin Management 46:11 O '43

Effect of restrictions; tax position of firm whose property burns. J. T. W. Babcock. Nat Underw 47:4 S 16 '43

Fire losses, 1938-1941. Survey of Cur Business 1942 Sup p28 [supplemented in monthly numbers]

Fires losses in 1943 greater in amount, less in number. Nat Underw 47:6-7 S 2 '43

Fur loss may reach \$2,000,000; New Haven cold storage warehouse fire. il Nat Underw 47:3+ O 7 '43

Holds fire repairs not barred by government. F. Crystal. East Underw 44:32 F 26 '43; Same. Weekly Underw 148:370 F 13 '43

Life, personal accident losses heavy in Boston; Coconut Grove holocaust. Nat Underw 46:17+ D 3; 18 D 17 '42; Nat Underw (Life ed) 46:3+ D 4; 3 D 18 '42
 1942 fire record for chemical plants. L. F. Maar. il Chem & Eng N 21:484-5+ Ap 10 '43

One grain fire loss consumed bread that would feed 700,000 entire year; fire losses for 1942. D. J. Price. Weekly Underw 148:1038 My 15 '43

Rule on rebuilding is amended. Nat Underw 46:1 N 12 '42

FIRE marks. See Firemarks

FIRE patrols

Fire patrols having hard time to survive; New York committee empowered to discontinue service. Weekly Underw 147:1417+ D 19 '42

May disband N.Y. fire patrol; union charges unfair labor practices. Nat Underw 46:3 D 24 '42; Excerpt. East Underw 43:22 D 25 '42

New York fire patrol pay scale agreement. Nat Underw 47:4 F 18 '43

FIRE protection

Accidents must be prevented. C. R. Welborn. Ins Field (Fire ed) 72:6-7 Mr 11 '43

All set for any emergency; Goodyear aircraft corporation, Akron. E. T. Hier and W. C. Wright. il Factory Management 100:107-12 D '42

Always on guard; automatic devices supplement human vigilance. Nat Safety N 47:138+ Mr '43

Defense against bombing. S. H. Ingeberg. il Safety Eng 84:24-6 N '42

Factories and fire hazard. R. Twelvetrees. Electrician 131:226 S 3 '43

Fire away! fire brigades and protection system. Kearney and Trecker corp. J. L. Trecker. il Safety Eng 86:33-8 Ag '43

Fire defense in finishing rooms. L. F. Maar. il Metal Finishing 41:609-10 S '43

Fire fights for fascists. E. Gallagher. il Safety Eng 85:10-12 My '43

Fire guard program; abstract. L. W. Hutchins. Safety Eng 86:28-9 Ag '43

Fire hazards in dehydration of food. F. R. Kroener. Nat Underw 47:6+ Ag 5 '43

Fire hazards of welding equipment. Engineering 156:230 S 17 '43

Fire; industrial plant protection. P. Bugbee. il Safety Eng 86:10+ S '43

Fire prevention requirements for electric radios revised: 1942 edition of the Standard for power-operated radio receiving appliances of Underwriters' laboratories, inc. H. B. Smith. il diag Ind Stand 14:17-19 Ja '43

Fire prevention week carries a warning; prevention of fires in course of construction. R. S. Moulton. il Civil Eng 13:506-7 O '43

Fire protection. Economist 143:546 O 31 '42

Fire protection at airplane bases. H. Schlosser. il Nat Safety N 48:14-15+ Ag '43

Fire stops for timber deck roofs. J. McCawley. il diag Sheet Metal Worker 34:18-20 F '43

Fires and explosion; hazards of flammable gases, vapors, liquids and dusts. W. J. Burke. Safety Eng 85:27-31+ Mr '43

Fires in surface mining and milling structures. D. Harrington and J. H. East, Jr. U S Bur Mines Information Circ 7250:1-9 '43

Flammable metal, magnesium; techniques developed to safeguard processing. R. I. Thurne. diag Nat Safety N 46:22-3+ N '42

Guarding war production against fire. L. F. Maar. Credit & Fin Management 45:14+ O '43

Hazards of new materials. J. A. Neale. Safety Eng 86:18 Ag '43

How Hartford works to control fire risks in wartime; abstracts. J. Ashmead. East Underw 44:31 Ap 9 '43; Weekly Underw 148:793+ Ap 10 '43

Irreplaceable values; fire menace to records and historic documents. P. W. Eberhardt. il Nat Safety N 48:66-7+ O '43

Keeping fire protection up-to-date. D. Johnson. il Mod Packaging 16:50-1 Mr '43

Lessons learned from fires in food and war plants. H. L. Miner. East Underw 44:22-3 Jl 30 '43

National board battles night club fires. Weekly Underw 148:137+ Ja 9 '43

President calls for intensified effort to prevent fire destruction. Comm & Fin Chr 158:1015 S 9 '43

Safety in handling aluminum powders. G. M. Babcock and F. B. Rethwisch. il Chem & Met Eng 50:82-4 Ja '43

Salamanders; hazards and precautions. il Nat Safety N 48:79+ O '43

Sets fire protection burden on management. C. R. Welborn. Weekly Underw 147:1368-9 D 12 '42

FIRE protection—Continued

Small precast concrete storage tanks provide first aid fire protection. *diags Concrete* 50:20+ D '42
 Storage and protection of flammable liquids. H. E. Newell. *il Metal Finishing* 41:681-3 O '43
 To prevent fire keep your plant shipshape. *il Power* 87:665-9+ O '43
 WPB to assure fire inflammation for vital plants. *Nat Underw* 47:1+ Ag 26 '43
 Who's responsible for fire? C. R. Welborn. *Safety Eng* 86:39-40 JI '43

See also

Fire departments	Forest fires
Fire extinction	Inflammable mixtures
Fire extinguishers	Insurance, Fire—Pre-
Fire resisting materials	ventive work
Fire service (water supply)	National fire waste council
Fire walls	Records, Preservation of
Fireproof construction	Rubber dust
Fireproofing	Spark arresters
Fireproofing of textiles	Underwriters' laboratories
Forest fire patrol	Watchmen
also subdivision Fires and fire protection under special subjects, e.g.	
Airplanes	Power plants
Chemical plants	Railroads
Electric plants (central stations)	Refrigerating plants
Gas works	Ships
also National fire protection association	Theaters

Bibliography

Safety literature available; National board of fire underwriters. *Safety Eng* 84:18-19 N '42

Contests and awards

Fire prevention week awards announced. *East Underw* 44:19 Ja 1 '43
 Milwaukee wins fire waste contest grand award. *Nat Underw* 47:1+ Ap 8 '43
 National board gold medal winners named. *East Underw* 44:16 My 21 '43

FIRE protection, Rural

OCF fire fighting equipment could go to rural areas. D. J. Price. *Nat Underw* 47:2 Ag 19 '43
 Outline nation-wide program to reduce farm fire losses to conserve food. *Comm & Fin Chr* 156:2168 D 17 '42
 Report 10 million cut in farm losses; fire prevention men and state marshals view war problems. *Nat Underw* 46:4+ D 3 '42; *East Underw* 43:26 D 4 '42

FIRE protection association, National. See National fire protection association**FIRE resisting materials**

Dr. W. Juda has new chemical fire retardant. *Pulp & Pa of Can* 44:64 Ja '43
 Fire resistance classification of building construction. *Franklin Inst J* 235:182-4 F '43
 Fire-retardant paints for steel surfaces, by New York club. *Oil Paint & Drug Rep* 144:52+ N 1 '43
 Flame-resistant resins; formation of inorganic crust. *Chem Age (Lond)* 48:563 My 22 '43
 Substitutes for metal in heating ducts. *Franklin Inst J* 235:79-81 Ja '43
 Sweden's new fire-resistant paint. *For Comm W* 11:36 My 29 '43

See also

Asbestos

FIRE service (water supply)

Can American water systems provide for civilian defense. H. J. Carl. *Am Water Works Assn J* 35:19-26 Ja '43
 Co-operation between water and fire departments. A. C. Renner. *Am Water Works Assn J* 35:694-9 Je '43
 Eliminating dead ends for fire protection. C. E. Harrison. *il Pub Works* 73:21 D '42
 Emergency 60,000-gal. reservoir made of wood and four-ply roofing. *diags Eng* N 130:34 Ja 14 '43
 Fire flows required for towns of various sizes, by National board of underwriters; commercial pipe sizes for fire streams. *Water Works & Sewerage* 90:sup90 Je '43

Story of the fire-line meter. R. E. Ferguson. *il diag Water Works & Sewerage* 90:341-4 S '43

See also

Water distribution—
 Cross connections

FIRE underwriters, National board of. See National board of fire underwriters

FIRE underwriters association of the Pacific
 Annual meeting, 87th, San Francisco, March 3-4. *Ins Field (Fire ed)* 72:5-6+ Mr 4 '43; *East Underw* 44:16 Mr 5 '43; *Weekly Underw* 148:521+ Mr 6 '43; *Nat Underw* 47:1+ Mr 11 '43

FIRE walls

Resistance of brick walls to wind; firewall that failed because of 32-mph. wind; restrictions on firewalls in city building codes. H. A. Sweet. *diag Eng* N 131:630-1 O 21 '43

FIRE waste council, National. See National fire waste council**FIREARMS**

Firearms for plant protection; safe handling. *Nat Safety* N 48:31+ S '43

See also

Ordinance
 Pistols
 Rifles

Sights

Bazooka sight designed in Tunisia rushed here, made, shipped in 20 days. *Iron Age* 151:116C Je 10 '43
 Optical device checks sighting of Garand rifle. *il Product Eng* 14:410 JI '43
 Rifle sighting done with mirrors, saves time and ammunition. *il Sci Am* 169:30-1 JI '43

See also

Bomb sights
 Guns, Aircraft—
 Sights
 Telescopic sights

FIREBRICK. See Fire brick**FIRECRACKER welding. See Electric welding, Arc—Ellin-Hafergut process****FIRELESS locomotives. See Locomotives, Fireless****FIREMAN'S fund insurance company**

Fireman's Fund plan acquires two affiliates. *Weekly Underw* 147:1176 N 21 '42

FIREMARKS

Fire mark collection of North America is reproduced in color. *Nat Underw* 47:17 O 28 '43
 North America sends agents color engravings of fire marks. *East Underw* 44:26 S 24 '43

FIREMEN**Training**

Plant firemen; Milwaukee trains industrial personnel. *Business Week* p87-8 F 27 '43
 School for plant firemen; Milwaukee fire department. *il Factory Management* 101:146-52 S '43

FIREPLACES

Auxiliary heating for fuel-oil users; stove in open fireplace. *il Consumers' Research Bul* 11:16-17 F '43
 Ceramics invade the fireplace market; fireplace grates. *il Cer Ind* 39:73 D '42
 Expect to use one million clay fire baskets this winter. *diags Brick & Clay Rec* 102:15 Ja '43
 Fireplace grates for use with coal. *Consumers' Research Bul* 11:26 Ja '43
 Fireplaces, and the heating contractor; advice on efficient design and operation. *il Dom Eng* 160:52-3+ D '42
 Jobs you can sell today, and ideas for your post-war portfolio. *il Am Bld* 65:38-9 N '43
 New ceramic grates attract wide attention. *il Brick & Clay Rec* 101:13 D '42
 Ways to obtain additional heat this winter. *diags Consumers' Research Bul* 11:8-10 N '42

FIREPLACES, Outdoor

How to build grilles and fireplaces for stay-at-home vacationers. *il diags plan Am Bld* 65:52-3 JI '43

FIREPLACES, Outdoor—Continued

Now is the time to start promoting spring and summer brick gardening. *il Brick & Clay Rec 102:24-5 Mr '43*

Vertical barbecue enhances beauty of brick; illustrations with text. *Brick & Clay Rec 103:38 Ag '43*

FIREPROOF construction

Develop low-cost fireproof construction system. *il diags Am Bld 65:51+ S '43*

Fire resistance classification of building construction. *Franklin Inst J 235:182-4 F '43*

Fireproof shop buildings on Union Pacific. *il plan Ry Age 114:666-9 Ap 3 '43*

Rigid-frame concrete industrial plant; magnesium-alloying plant; fireproofing secured by eliminating windows. A. F. Plant and S. J. Deitrick. *il diags Eng N 131:334-8 Ag 26 '43*

See also

Concrete houses
Fire resisting materials

Fire walls
Steel houses

FIREPROOFING

Chemically treated wood in war and industry. W. P. Arnold. *il Chem & Eng N 21: 1163-71 JI 25 '43; Same cond. Chem Age (Lond) 49:359-61 O 9 '43*

Fire fighting chemicals; abstract. H. L. Miner. *Chem Ind 53:522 O '43*

Fire-retardant treatment for wood. *Nat Safety N 48:27+ N '43*

No fires in these towers; fireproofing of structures on Norfolk & Western. *il Ry Age 113:992-3+ D 19 '42*

Story of Albi-Fireproof S is saga of protection. *Spectator (Proprietary ed) 9:28-9+ Ag 5 '43*

Wood treatment makes it resistant to all three of its enemies. *Sci Am 168:221-2 My '43*

FIREPROOFING of paper

Flammability of treated paper and paperboard; TAPPI suggested method T 461 sm-43. *Paper Tr J 117:28 S 16 '43*

FIREPROOFING of textiles

Deterioration of flameproofed cotton fabric. A. S. Tweedie and C. H. Bayley. *Am Dyestuff Rep 32:427-8 S 27 '43*

Fire resistant duck. J. R. Redmond. *Am Dyestuff Rep 32:375-8 Ag 30 '43*

Fireproofing cotton and woolen fabrics. R. Van Tuyle. *il Am Dyestuff Rep 32:297-301 JI 5 '43*

Flame-proofed fabric used in protective garments. *Nat Safety N 46:80+ N '42*

Flameproofing military fabrics; processes which afford protection against fire, water, mildew. W. W. Chase. *Textile World 93: 90 Ap '43*

Impact of war-time requirements on post-war finishes; presented for the A.A.T.C.C. Rhode Island section by H. S. Travis. *Am Dyestuff Rep 31:634-7+ D 7 '42*

Modern fireproofing. *Textile Col 65:57-62 F '43*

FIRES

Analyze night club fire hazards. *il Nat Underw 46:3 D 10 '42*

Building exits code protects against loss of life in fire; Cocoanut Grove fire. R. S. Moulton. *il Ind Stand 13:309-10 D '42*

Case histories. *Safety Eng 85:32-3 My '43*

Cocoanut Grove holocaust; life personal accident losses heavy. *Nat Underw 46:17+ D 3 '42; Nat Underw (Life ed) 46:3+ D 4 '42*

Cocoanut Grove violated fire safety principles. *Weekly Underw 147:1286+ D 5 '42; East Underw 43:24 D 4 '42*

Fighting fires in confined spaces. W. H. Easton. *bibliog il Nat Safety N 48:72-3+ O '43*

15,000 lessons in fire protection. O. W. Stewart. *il Nat Safety N 47:22-3+ Ja '43*

Fire reduces rubber stockpile. L. F. Maar. *il India Rubber W 108:257-8 Je '43*

\$585,000 tire warehouse fire. *Nat Underw 47: 10 F 25 '43*

Gas and appliances low among fire causes. *Gas Age 90:12 D 31 '42*

Industrial fires. *Chem Age (Lond) 49:59 JI 17 '43*

National fire protection assn. issues valuable report on Cocoanut Grove fire in Boston. R. S. Moulton. *East Underw 44:22 F 5 '43*

National tragedy; economic consequences of fire. *Nat Safety N 48:138+ O '43*

Night club fire reveals glaring hazards; Cocoanut Grove fire. *Nat Safety N 47:72-3 Ja '43*

Organic industrial solvents; in terms of their fire hazards. W. H. Easton. *bibliog Ind Med 12:647-9 O '43*

Returns from Cocoanut Grove survey. G. W. Booth. *Weekly Underw 147:1368+ D 12 '42*

Some big fires of 1942. *East Underw 44:22+ F 12 '43*

Sprinkler system efficiency holds down fire loss in Dayton warehouse. H. E. Stokes. *East Underw 44:16+ JI 9 '43*

Sprinklers shut off; fire rekindled; Rock Island fire loss. *Nat Underw 47:1 Ja 28 '43*

Sulphur fires. *Safety Eng 85:24 Ap '43*

Syracuse loss is set at \$500,000. *Nat Underw 47:5+ Ja 7 '43*

Wartime fire losses. D. J. Price. *Safety Eng 85:35 Je '43*

See also

Arson
Bombs, Incendiary
Electric fires
Electric plants (central stations)—
Fires and fire protection
Fire extinction
Fire losses
Fire protection
Forest fires
Inflammable mixtures

Insurance, Use and occupancy
Oil fires
Piers—Fires and fire protection
Railroads—Fires and fire protection
Ships—Fires and fire protection
Theaters—Fires and fire protection

Photographs and photography

See Photography of fires

FIRES at sea. See Ships—Fires and fire protection

FIRESTONE tire and rubber company

Annual report. *Comm & Fin Chr 157:40-1 Ja 4 '43*

Firestone pushes multiple lines to insure survival of retail stores. D. Martin. *il Sales Management 51:24-5 D 15 '42*

Investment audit. J. D. Northrup and S. Devlin. *il Mag of Wall St 71:523-5+ F 20 '43*

Thumbnail stock appraisal. *Mag of Wall St 71:241 D 12 '42*

FIREWOOD. See Wood as fuel

FIREWORKS, Military. See Military fireworks

FIRING**See also**

Boilers—Firing
Combustion
Fuel
Furnaces
Glass furnaces—
Firing
Kilns—Firing
Stokers, Mechanical

FIRST aid in illness and injury

Army of first aiders; Bell system. E. S. Miner. *il Nat Safety N 47:14-15+ Ap '43*

Fire blanket. *Pet Eng 14:151 D '42*

First aid carrier. *il diags Mod Plastics 20: 53+ Ja '43*

First aid corps; Consolidated Vultee aircraft corporation. C. Harrison. *il Ind Med 12: 390-3 Je '43*

First aid first! slide film instruction outfit. L. S. Metcalfe. *il Safety Eng 85:37 F '43*

First aid motion picture. *Safety Eng 85: 57 Ap '43*

First aid taught with slidefilm. L. S. Metcalfe. *il Gas Age 90:25-6 D 17 '42; Textile World 93:124, 126 F '43*

First aid treatment reduces lost man-hours. *il Nat Safety N 47:152-3+ Mr '43*

Fractures in peace and war. R. H. Kennedy. *Nat Safety N 46:34+ N '42*

How to handle anhydrous hydrofluoric acid with safety. C. M. Fehr. *Oil & Gas J 42:42 JI 22 '43; Same. Pet Refiner 22:93-4 Ag '43*

Infection on the production line. *il Safety Eng 84:39-40 N '42*

Medical first aid in common types of accidents. J. M. Carlisle. *Ind Med 12:73-7 F '43*

Origin of first-aid training at Jermyn colliery, Hudson coal co. *Coal Age 47:145-7 D '43*

Outline of first aid for nurses in industry. F. W. Slobe. *il Ind Med 12:350-5 My '43*

Ready for the emergency; first-aid workers, Nashville division of Vultee aircraft. *il Nat Safety N 47:38+ Ja '43*

Safety in the operation of HF alkylation plants. R. Benson. *Nat Pet N 35 pt 2:R534 N 3 '43; Same. Pet Refiner 22:119-20 D '43*

FIRST aid in illness and injury—Continued
 Safety sermonettes. W. B. Paton. *Can Min J* 64:156-8 Mr '43
 Slidefilms teach first aid. L. S. Metcalfe. *Il Am Mach* 87:108-9 My 13 '43
 Sound slide films help safety training. L. S. Metcalfe. *Il Elec W* 119:1334-5 Ap 17 '43
 Use of mobile units in the first aid and medical treatment of gas casualties. J. T. Cassaday. *Il diags J Chem Educ* 20:276-8 Je '43

See also

Burns and scalds Respiration, Artificial
 Electricity, injuries Respiratory apparatus
 Motor trucks in first aid work

FIRST aid kits
 Unit principles for Medical corps packs. *Il Mod Packaging* 17:84-5+ O '43

FIRST Boston corporation
 Annual report. *Comm & Fin Chr* 157:677 F 18 '43

FIRST national stores, Inc.
 Audit; business lacks dynamic earnings growth, but is shrewdly administered. H. J. Nelson. *Barron's* 23:16 My 31 '43

FISCAL fund, Inc.
 Liquidation ordered by court. *Comm & Fin Chr* 157:219 Ja 18 '43
 SEC moves to protect assets. *Comm & Fin Chr* 156:2305 D 28 '42

FISCHER reagent
 Improved electrometric apparatus for use with the Karl Fischer method for determination of water. C. D. McKinney, Jr. and R. T. Hall. *bibliog il diags Ind & Eng Chem Anal ed* 15:460-2 Jl 15 '43

FISCHER-TROPSCH process
 Composition of paraffin waxes from the Fischer-Tropsch water-gas synthesis. H. Koch and G. Ibing. *bibliog il diags Pet Refiner* 22:89-96 S '43

Costs and requirements in materials for making gasoline from coal. R. P. Russell. *Nat Pet N* 35 pt 2:R421-2, R424-6 S 1 '43

FISH as food
 Nation's food; fish as food; the biology of the sea fisheries. R. S. Wimpenny. *bibliog Chem & Ind* 62:230-3 Je 19 '43

Nation's food; fish as food; the chemical composition of fish. G. A. Reay, C. L. Cutting and J. M. Shewan. *bibliog (78 references) Soc. Chem Ind J* 62:77-85 Je '43

Nation's food; fish as food; the cooking of fish. L. C. Baker. *bibliog Chem & Ind* 62:356-9 S 18 '43

Nation's food; fish as food; vitamin and mineral content of fish. J. A. Lovern. *bibliog Chem & Ind* 62:328-30 Ag 28 '43

Thiamine inactivation by the fresh-fish or Chastek-paralysis factor. R. R. Sealock, A. H. Livermore and C. A. Evans. *bibliog Am Chem Soc J* 65:935-40 My '43

Salting

Brine-salted mullet has unrealized possibilities. C. F. Lee and L. Young. *Il Food Ind* 15:70-1+ N '43

Transportation

Fish packers like fibre containers. *Il Mod Packaging* 16:44-6+ Jl '43

FISH culture

See also

Fish hatcheries

FISH hatcheries

Preserving Columbia River salmon fisheries; controlled migration creates new spawning grounds. D. A. Dedel. *Il map Civil Eng* 13:181-4 Ap '43

FISH nets. See Fishing nets

FISH oil

Cod liver oil and other fish oils may prove to be a source of a high blood pressure remedy; abstract. A. Grollman and T. R. Harrison. *Science* 97:sup12 My 28 '43

Course of autoxidation reactions in polyisoprenes and allied compounds; observations on fish-oil acids. E. H. Farmer and D. A. Sutton. *Chem Soc J* p122-5 Mr '43

Effect of carbon treatment on fish liver oils; vitamin A destruction and peroxide formation. L. O. Buxton. *bibliog Ind & Eng Chem* 34:1486-9 D '42

Explosive fish; sardines furnish glycerin for explosives. *Sci Am* 168:77-8 F '43

Fish oil limitation order is amended. *Oil Paint & Drug Rep* 144:4+ N 8 '43

Fish oils utilization in paint curtailed. *Oil Paint & Drug Rep* 144:3+ Jl 5 '43

Physical-chemical method for determination of vitamins D in fish liver oils. D. T. Ewing and others. *bibliog Ind & Eng Chem Anal ed* 15:301-5 My 15 '43

South Africa's fish-liver-oil industry. *For Comm W* 12:27-8 Ag 7 '43

Spain develops new industry; extraction of oil from bonito-fish livers. *For Comm W* 10:24 F 6 '43

See also

Sardine oil
 Shark liver oil

Analysis

Spectrophotometric and biological assay of vitamin A in oils. N. H. Coy, H. L. Sassaman and A. Black. *bibliog Ind & Eng Chem Anal ed* 15:441-3 Jl 15 '43

Statistics

Fish oils, 1938-1941. Survey of Cur Business 1942 Sup p105 [supplemented in monthly numbers]

FISH poisons

Active principles of leguminous fish-poison plants; the reduction of elliptone. S. H. Harper. *Chem Soc J* p587-93 O '42

Active principles of leguminous fish-poison plants; the synthesis of dehydrotetrahydroelliptone and of dehydrotetrahydromalacol. S. H. Harper. *Chem Soc J* p593-5 O '42

Active principles of leguminous fish-poison plants; the synthesis of furanocoumarones related to rotenone. S. H. Harper. *Chem Soc J* p595-8 O '42

Effect of sulphate mill wastes on fish life. J. A. Extrom and D. S. Farner. *Il Paper Tr J* 117:27-32 Jl 29 '43

FISH protection

Electric fish screen saves steel; Farad hydroelectric plant on the Truckee river. Calif. T. J. Welsh. *Il Elec West* 90:37-8 Ja '43

FISH trade

Few fish to fry; Ickes sees big shortage. *Business Week* p18 Mr 13 '43

Fish are fewer and prices are stiffer. *Business Week* p38+ Ag 14 '43

See also

Salmon

Statistics

Landings, fresh fish, principal ports, stocks, cold storage, total, 15th of month, 1938-1941. Survey of Cur Business 1942 Sup p126 [supplemented in monthly numbers]

Problem in fish; OPA ceilings are essential to get supply for canners, freezers. *Business Week* p44+ Jl 10 '43

Chile

Chilean fish-canning activities. *For Comm W* 11:26 Ap 24 '43

Chile's 1941 exports and imports. *For Comm W* 9:23 N 21 '42

Great Britain

Summer fish. *Economist* 144:435+ Ap 3 '43

Newfoundland

Newfoundland's fishing industry. *For Comm W* 10:25 Mr 20 '43

South Africa

Crawfish industry, Union of South Africa. *For Comm W* 11:24-5 My 15 '43

Uruguay

Uruguay's fishing industry. *For Comm W* 11:25 My 15 '43

FISHERIES

Application of the control chart method to the analysis of fisheries data. W. H. Rich. *bibliog Science* 97:269-70 Mr 19 '43

Conference on fisheries, Feb. 15-16. *Science* 97:281 Mr 26 '43

FISHERIES—Continued

Fish mystery; smelts disappear from Lake Michigan. *Il Business Week* p42+ Mr 20 '43
 Nation's food; fish as food; the biology of the sea fisheries. R. S. Wimpenny. bibliog Chem & Ind 62:230-3 Je 19 '43
See also
 Salmon

Alaska

Quest for crab; king crab fishing in Alaskan waters. *Il Business Week* p68 Je 19 '43

Barbados

Government gives financial aid to Barbados fishing industry. *For Comm W* 12:21 Jl 17 '43

California

California pilchard industry under U.S. control. Oil Paint & Drug Rep 144:55 Jl 12 '43

Canada

Fisheries research in Canada. A. G. Huntsman. Science 98:117-22 Ag 6 '43

Canary Islands

Fishing industry, Canary Islands. *For Comm W* 12:21 Jl 17 '43

Great Lakes

Fishery advisory committee, Canada-United States. *For Comm W* 10:17 Ja 16 '43

Iceland

Iceland's fish production. *Il For Comm W* 12:10-11+ Ag 14 '43

Mediterranean sea

Mediterranean fishing industry. Science 98: sup12 Ag 13 '43

Palestine

Palestine's fishing resources. *For Comm W* 12:25 Ag 14 '43

Peru

Fish for the rivers of Peru. J. L. Bennett. *Il For Comm W* 11:10-11+ Ap 10 '43

Puerto Rico

Fishing at home. Business Week p58 My 1 '43

FISHERMEN

Operating methods and earnings of Puerto Rican fishermen. S. Diaz Pacheco and others. Monthly Labor R 57:145-6 Jl '43

WSA permits owners blanket crew policies. Weekly Underw 147:1185-6 N 21 '42; Same. Nat Underw 46:35 N 19 '42

FISHERY research

Fisheries research in Canada. A. G. Huntsman. Science 98:117-22 Ag 6 '43

FISHES

See also
 Electric eels Salmon
 Fish as food Smelts

FISHES, Fossil

Miocene fishes of southern California. L. R. David. *Il diags maps Geol Soc Special Pa* no 43:1-193. pl 1-16 bibliog(pl83-5) '43

FISHING boats

Pre-war Diesels help meet demand for fish. *Il Marine Eng* 48:216+ Ag '43

FISHING nets

Plastics go a-fishing; polystyrene applied to fishing net floats and needles. *Il Am Gas J* 159:26 O '43

FISHING tackle

Fishing kit for lifeboats. *Il Mod Packaging* 16:164 Ap '43

FITCH, John, 1743-1798

Bicentenary of John Fitch. Engineer 175:71 Ja 22 '43

John Fitch. E. C. Smith. Engineering 155:44 Ja 15 '43

FITS (machinery)

Automotive council asks for war standard on cylindrical fits. *Il Ind Stand* 14:72-4 Mr '43

Cold treatment of metals; refrigerating apparatus used in producing shrink fits, in hardening processes and in retarding aging in aluminum rivets. W. A. Phair. flow sheet *Il Iron Age* 151:37-40 F 25 '43

Heating metal parts by induction, to facilitate the insertion of freeze-fit parts and for other similar operations. *Il Iron Age* 150:55 D 17 '42

Refrigerants used for expansion fits. H. Smith. Elec W 118:1798+ N 28 '42

Shrink fit tolerances for various metals and needs. *Il Product Eng* 14:214-16 Ap '43

Shrink fits. R. S. Burpo, Jr., comp. Metals & Alloys 17:783 Ap '43

Shrinking a steel cylinder onto a cast iron cylinder. diag Power Pl Eng 47:108+ Je '43

Sub-zero temperatures for shrink fits. H. A. Knight. *Il Metals & Alloys* 18:50-4 Jl '43

FIVE- and ten-cent stores

Profit in variety. Business Week p100-1 Ag 14 '43

See also

Murphy, G. C., com- Woolworth, F. W., pany company

FIXTURES, Lighting. *See* Lighting fixtures

FIXTURES, Machine tool. *See* Machine tools—Fixtures

FLAGG, Howard, 1888-

Retiring Employers Reinsurance chief. Weekly Underw 148:382 F 13 '43

FLAGS

House magazine had best flag cover. *Il Ptr Ink* 204:45 Jl 16 '43

Our flag in advertising; how it may, and may not be used. E. Austin. *Il Ptr Ink* 202: 17-19 F 5 '43

U.S. Supreme court rules against compulsory salute of flag where religious scruples exist. Comm & Fin Chr 158:52 Jl 5 '43

What foreign flags can be displayed in ads? Adv & Sell 36:62+ N '43

FLAME cultivators. *See* Cultivators

FLAME hardening. *See* Case hardening

FLAME propagation

Instrumentation in the study of Diesel combustion. E. W. Landen and L. A. Blanc. *Il diags A S M E Trans* 65:121-5 F '43

FLAMEPROOFING. *See* Fireproofing of paper

FLAMES

Gas-air premixing and combustion for modern flame-hardening. R. F. Apter and H. W. Smith, Jr. diags Am Gas J 158:11-14 Mr '43

Stability and structure of burner flames. B. Lewis and G. von Elbe. bibliog *Il diags J Chem Phys* 11:75-97 F '43

See also

Combustion Inflammable mixtures
 Gas burners Oxyacetylene flame
 Inflammable liquids

FLANGES

Control of flange wrinkles in hydro-press forming. W. H. Snow. *Il diags Iron Age* 152:40-2 S 30 '43

FLANGES, Pipe. *See* Pipe flanges

FLASH welding. *See* Electric welding

FLASHERS

Two-cycle flasher. S. A. Talbot. *Il diags R Sci Instr* 14:181-4 Je '43

FLASHLIGHT photography. *See* Photography, Flashlight

FLASHLIGHTS, Electric. *See* Electric flashlights

FLAVANONE

Gallaldehyde tribenzyl ether. R. O. Clinton and T. A. Geissman. bibliog Am Chem Soc J 65:85-7 Ja '43

FLAVOR

Food group discuss flavor. Chem & Ind 61: 520-1 D 19 '42

Natural flavours of foodstuffs. W. A. Waygood. bibliog diags Chem & Ind 62:59-61 F 13 '43

FLAVORING extract manufacturers association

Annual meeting, New York, May 24-25. Oil Paint & Drug Rep 143:7+ My 31 '43

FLAVORING materials

Aspects of chemistry of flavouring materials.
T. F. West. bibliog Chem & Ind 62:46-9 F 6 '43

Flavor makers discuss raw material supplies.
Oil Paint & Drug Rep 143:7+ My 31 '43
Thank synthetics; chemical flavorings and aromatics have averted wartime squeeze on food and perfume industries. Business Week p60+ Ag 21 '43

See also

Chicory
Essential oils
Sage

Spices
Vanilla

Advertising

Cookies for rookies catches on; Burnett sponsors nationally. il Sales Management 52: 31-2 Ja 1 '43

FLAX

America's most valuable agricultural waste; flax straw. Textile Col 65:331-4+ Ag '43
Bagging from domestic flax. J. B. Hosmer. il Textile World 93:104-5 Je '43
Bast fibers. H. D. Salins. Rayon 24:427-8, 494-5, 547-8 Ag-O '43 (to be cont)
Britain's flourishing flax industry. M. Benedicta. il Rayon 24:425-6 Ag '43
Flax fiber. D. B. Gibb. Rayon 24:100 F '43
Flax milling. il Elec R (Lond) 133:427-30 O 1 '43

Flax production report; England and Scotland. Economist 144:472 Ap 10 '43
Home flax. Economist 144:508 Ap 17 '43

Linen flax industry and its introduction to New Zealand. S. B. Barltrop. diags plan Inst Mech Eng J & Proc 143:Proc 162-9, pl 1-2 F '43

Oil bearing and fibre crops in Canada, 1943. E. S. Archibald. Can Chem & Process Ind 27:387-9 J '43

Peru grows a \$5,000,000 flax crop for U.S. market. For Comm W 11:35 My 22 '43
Tech-flax system of processing flax. G. A. Rosset. il Rayon 24:301-2, 357-8 Je-Jl '43

See also

Linen

FLAXSEED

Argentina's linseed exports; production, 1942-3. For Comm W 10:30 Mr 13 '43
Argentine flaxseed floor price suspended; use of flaxseed for fuel. Oil Paint & Drug Rep 144:7+ Ag 9 '43

Canada's flaxseed crops increased. For Comm W 13:29 O 16 '43
Canadian flaxseed crop at all-time record. Paint Oil & Chem R 106:9 O 7 '43

Flaxseed crop observers expect record yield; imports increase expected. Oil Paint & Drug Rep 143:7+ Je 14 '43
Flaxseed to eat? linseed oil substitute for edible vegetable fats. Business Week p48+ F 20 '43

See also

Linseed oil

Prices

Linseed oil, flax prices ceiling. Oil Paint & Drug Rep 143:4 My 24 '43

Statistics

Flaxseed, 1938-1941. Survey of Cur Business 1942 Sup p107-8 [supplemented in monthly numbers]

Linseed production in Uruguay, 1928-1942. For Comm W 10:24 Ja 2 '43

FLAXSEED oil. See Linseed oil**FLEAS**

Use of creosote in mounting fleas and other arthropods on slides. I. Fox. Science 96: 478 N 20 '42

FLEAS as carriers of infection

Report on the fleas *opisocrostitis bruneri* (Baker) and *thraassis bacchi* (Roths.) as vectors of plague. F. M. Prince. bibliog map Pub Health Rep 58:1013-16 Jl 2 '43

Species of fleas on rats collected in states west of the 102d meridian and their relation to the dissemination of plague. F. M. Prince. bibliog Pub Health Rep 58:700-8 Ap 30 '43

FLEETWINGS, inc.

Ten years' progress. F. de Ganahl. il Aeronautical Eng R 1:59 N '42

FLEISCHMANN, Martin

Timken metallurgist creates a new steel. por Blast F & Steel Pl 31:1048 S '43

FLEMING, Robert, 1856-1942

Sketch. por Eng N 129:672 N 12 '42

FLETCHER, Henry E.

TAPPI medal presented to Harry Fletcher. R. B. Wolf. por Paper Tr J 116:123-4 F 18 '43

FLETT, Lawrence H. 1896-

Sketch. por Chem & Eng N 21:1717 O 25 '43

FLEXIBLE pipes. See Pipes, Flexible**FLEXNER, Simon**

Recollections of a street corner pump and the progress of sixty years; some boys of Louisville. Y. Henderson. Science 98:25-8 Jl 9 '43

FLEXOMETERS

Heat generation in flexed rubber. S. D. Goshman, P. J. Jones and D. E. Woodford. bibliog il diags Ind & Eng Chem 35:964-71 S '43

Role of zinc oxide in compounding government synthetic rubber; flexometer tests simulating road tests on tires. R. S. Havenhill and J. J. Rankin. il India Rubber W 107:365-8+ Ja '43

FLEXURE

See also

Elasticity
Strains and stresses
Strength of materials

FLICKER

Simple control saves new line investment; current pulsation of two motors cause light flicker. R. M. Ryan. Elec W 119:465 F 6 '43

FLIES

Livestock insect control. E. G. Thomssen and M. H. Doner. bibliog il Soap & San Chem 19:96-7+ N '43

Small chamber method for testing effectiveness of insecticides against houseflies. C. W. Kearns and R. B. March. il diags Soap & San Chem 19:101, 103-4+ F '43

Testing aerosols against houseflies. E. R. McGovern, J. H. Fales and L. D. Goodhue. bibliog diag Soap & San Chem 19:99+ S '43

See also

Horse flies

FLIGHT

See also

Aerodynamics
Aeronautics
Aviation

FLIGHT strips. See Aviation landing stations**FLINTKOTE company**

Annual report. Comm & Fin Chr 157:816 Mr 3 '43

Debentures offered. Comm & Fin Chr 157:1942 My 24 '43

Low-priced stocks for large percentage gains. Mag of Wall St 71:671 Mr 20 '43

Thumbnail stock appraisal. Mag of Wall St 72:687 O 2 '43

FLOATING soap. See Soap, Floating**FLOCCULATION**

See also

Deflocculation
Sewage disposal—
Coagulation

Water purification—
Coagulation

FLOCK

See also

Rayon flock

FLOOD control

Anthraxite flood suggests need for better stream control. R. D. Hall. map Coal Age 47:66-7, 70-1 N '42

Charge use of Grand River dam for power helped floods. Elec W 119:1789-90, 1969 My 29-Je 12 '43

Complete flood control system for the Missouri river is proposed. Eng N 131:447 S 23 '43

Complicated municipal drainage problem in Sudbury, Ont.; flooding remedial measures; with cost data. N. B. MacRostie. il Water & Sewage 81:20-2+ Mr '43

Federal funds for flood control asked by Mississippi Valley association. Eng N 131: 125 Jl 15 '43

FLOOD control—Continued

Flood-plain zoning, by R. B. Wertheimer. Review, by J. M. Alberts. J Land & Pub Util Econ 19:122-3 F '43

Pumping plant for flood protection. il diags Engineer 175:432-3, 452-3 My 28-Je 4 '43
Pumping station for flood protection; Huntington, W. Va. il diag Eng N 130:886-9 Je 17 '43

Statistical analysis in hydrology. L. R. Beard. Am Soc C E Proc 68:1077-88 S '42; Discussion. 68:1458-64, 1661-9, 1847-9; 69:299-305, 995-1005 O-D '42, F, Je '43

Testing theoretical losses in open channel flow. J. G. Jobs and J. H. Douma. il Civil Eng 12:613-15, 667-9 N-D '42

Walnut Bottom Run improvement at Beaver Falls; flood-prevention channel. D. F. Harvey. il Pub Works 74:23 O '43

Youghiogheny dam nears completion. il diags Explosives Eng 21:43-7 Mr '43

See also

Dams Levees
Dikes (engineering) Reservoirs
Factories—Flood protection

Economic aspects

Some aspects of the evaluation of watershed flood control projects. B. Frank. bibliog J Land & Pub Util Econ 18:391-411 N '42

FLOOD insurance. See Insurance, Flood

FLOOD prevention. See Flood control

FLOODLIGHTS. See Light projection

FLOODS

Floods. Science 97:sup12 My 28 '43

How we beat the flood. E. E. Isgren. il Factory Management 101:133-7 S '43

Huge concrete trestle assures continuous rail traffic in flood emergency; with cost data. il Concrete 51:10-11, 16+ JI '43

Hydrological factors in the design of culverts and small bridges. F. W. Grove. Roads & Bridges 81:32, 66+ Ap '43

Medical program at the time of a devastating flood; Caterpillar tractor co. H. A. Vonachen. il Ind Med 12:438-40 JI '43

Mobilizing to fight flood. il Factory Management 101:150-1 JI '43

Primary rôle of meteorology in flood flow estimating. M. Bernard. maps Am Soc C E Proc 69:105-44 bibliog(p141-2) Je '43; Discussion. bibliog 69:443-5, 587-608, 1006-12 1309-6, 1480-2 Mr-Apr, Je, O-N '43

Rôle of the land during flood periods. W. W. Horner. map Am Soc C E Proc 69:665-90 My '43; Discussion. 69:911-14, 1138-43, 1321-3, 1611-19 bibliog(p1615-16) Je, S-O, D '43

Statistical analysis in hydrology. L. R. Beard. Am Soc C E Proc 68:1077-88 S '42; Discussion. 68:1458-64, 1661-9, 1847-9; 69:299-305, 995-1005 O-D '42, F, Je '43

See also

Coal mines and mining—Flood damage
Flood control
Rain and rainfall
Railroads—Damage from floods, storms, etc.

Forecasting

Simple method of estimating flood frequency. R. W. Powell. Civil Eng 13:105-7 F '43

California

Floods of March 1938 in southern California. H. C. Troxell and others. U S Geol S Water-supply Pa 844:1-399, pl 1-26 '43; pa \$1.25 Supt. of doc. '42

Middle Western states

Charge use of Grand River dam for power helped floods. Elec W 119:1789-90, 1969 My 29-Je 12 '43

Engineer troops tackle flood emergency. il Eng N 130:770-1 My 27 '43

Floods cut oil flow to East. Nat Pet N 35:36 My 26 '43

Floods delay traffic on mid-western roads. il Ry Age 114:1100-2 My 29 '43

Floods disrupt gas supply. Nat Pet N 35:3-4 My 26 '43

Gen. Reynold directs fight on floods in six states. il Eng N 130:767-8+ My 27 '43

Heavy rains cause high floods over large area in the Mid-western states. il Eng N 130:720 My 20 '43

Minor damage to power plants in record flood. il Elec W 119:1785-6 My 29 '43

New England**See also**

Rain and rainfall—
New England

New Hampshire

New Hampshire flood on June 14-15, 1942. C. C. McDonald. maps Boston Soc C E J 30:1-22 Ja '43

Olean, New York

Review of the Olean flood in relation to the mutual aid and civilian protection programs. A. D. Drake and F. O. E. Nehin. Am Water Works Assn J 34:1743-54 D '42

Omaha, Nebraska

Missouri River flood engulfs Omaha's airport. il Eng N 130:535 Ap 22 '43

Pennsylvania

Anthraccite flood suggests need for better stream control. R. D. Hall. map Coal Age 47:66-7, 70-1 N '42

Emergency experiences during flash floods. B. S. Bush and M. J. Barrick. Am Water Works Assn J 35:81-7 Ja '42; Abstract. Water Works & Sewerage 89:491 N '42; Discussion. Am Water Works Assn J 35:87-92 Ja '43

Liquid sabotage; Lukens plant disinfected after flood. H. Armand. il Safety Eng 85:20-2 Ja '43

Sudbury, Ontario

Complicated municipal drainage problem; flooding remedial measures; with cost data. N. B. MacRostie. il Water & Sewerage 81:20-2+ Mr '43

FLOOR cleaning

Clean floor is a safe floor; cleaning compounds for textile mills. R. W. Mitchell. Textile World 93:86 O '43

Floor hazards; cleaning as safety measure. il Safety Eng 85:12-13 Ja '43

Floors dry-cleaned. F. D. Keller. Safety Eng 85:22 Ap '43

Safety from the ground up; oil absorbing floor cleaner prevents fires and slipping accidents in Bendix plant. il Safety Eng 86:16 JI '43

Safety underfoot; floor maintenance as an aid to safety. il Safety Eng 86:31-2+ O '43

See also

Rubber mats
FLOOR coverings

See also

Carpets
Rugs

FLOOR wax

Floor wax specifications. Oil Paint & Drug Rep 143:32C Je 14 '43; Same. Soap & San Chem 18:131 D '42

Testing

Floor wax; N.A.I.D.M. committee discusses specification and standard method of test. Soap & San Chem 19:113, 115+ Je '43

FLOORING

Choose floors that withstand conditions of processing. R. Kanegsberg. il Food Ind 15:58-61 Mr; 54-5+ Ap '43

Statistics

Flooring, 1938-1941. Survey of Cur Business 1942 Sup p133 [supplemented in monthly numbers]

FLOORS

How to lay a floating floor. il Am Bld 64:40-2 N '42

Nomographic chart for the design of floor beams. Pet Refiner 22:106 My '43

See also

Bridges—Floors Food factories—
Chemical plants— Floors
Floors Pavements
Factories—Floors

Anti-slip surfaces

Factory flooring. il Nat Safety N 47:100+ Mr '43

Floor slipperiness. il Soap & San Chem 19:113+ Ag '43

FLOORS—Anti-slip surfaces—Continued

- Greenstone as a safety appliance. O. Bowles. Rock Prod 46:40 Ap '43
 Safety from the ground up; oil absorbing floor cleaner prevents fires and slipping accidents in Bendix plant. Il Safety Eng 86:16 Jl '43
 Safety underfoot; floor maintenance as an aid to safety. Il Safety Eng 86:31-2+ O '43

Cleaning

See Floor cleaning

FLOORS, Asphalt

- Choose floors that withstand conditions of processing. R. Kanegsberg. Food Ind 15: 54 Ap '43
 War increases use of asphalt flooring. H. K. Sharp. Il Pet Eng 14:132 Ag '43

FLOORS, Brick

- Aluminum co. of America finds clay products simplify industrial construction. Brick & Clay Rec 103:32 Ag '43
 Choose floors that withstand conditions of processing. R. Kanegsberg. Il Food Ind 15: 54-5+ Ap '43

FLOORS, Cement. See Floors, Concrete**FLOORS, Concrete**

- Chart for determining the area of reinforcing steel required in concrete floor slabs. Pet Refiner 22:88 Jl '43
 Choose floors that withstand conditions of processing. R. Kanegsberg. Il Food Ind 15: 59-61 Mr '43
 Concrete pavements in wartime. D. O. Robinson. Il Roads & Bridges 81:27+ Ap '43
 Factors influencing the reflectivity of white portland cement concretes. C. W. Muehlenbruch and E. H. Miller. diag Am Soc T M Proc 42:775-85; Discussion. 786 '42
 How to lay a warm concrete floor, insulated. diag Am Bld 65:80 Ag '43
 How to select a concrete floor treatment. C. S. Glickman. Il Chem Ind 52:740-1 Je '43
 Increasing plant illumination by the use of white cement floors. Il Aero Digest 41:234+ D '42
 Inspection of concrete floor finish construction. A. J. Boase. Am Concrete Inst J 14: 97-101 N '42; Discussion. 14:sup104-104³ Je '43
 Light-reflecting concrete for factory floors. M. A. Berns. Il Civil Eng 12:556-8 O '42; Discussion. C. W. Muehlenbruch. 12:690-1 D '42
 Long-span flat slabs in bomber plant call for unusual floor design. Il diag Concrete 51: 2-3 Je '43
 Precast concrete joists form basis for beam and girder floor system; Indiana state prison. L. C. Bernard. Il diag Concrete 51:10-11+ O '43
 Slab floors for basementless house. diag Am Bld 65:70+ Ja '43
 Softwood lumber shortage opens field for concrete floors in war housing. Concrete 50: 28 D '42
 What to do when floors leak. F. W. Daniels. Il diag Factory Management 101:132-4 Ja '43
 White cement floors speed war production. Il Am Bld 64:43-4+ N '42
 White floors light those under-wing shadows. F. L. Mabie. Il Aviation 41:166-7, 301-2 D '42

FLOORS, Steel

- Square-tread floor plate rolled on 4-high mill; Jones & Laughlin steel corp. Il Steel 113: 79 S 27 '43

FLOORS, Terrazzo. See Terrazzo**FLOORS, Tile**

- Precast tile slabs save time and money. Il Brick & Clay Rec 103:30-1 Ag '43

FLOORS, Wood

- How to lay a wood floor over a dampproofed concrete base. diag Am Bld 65:54 Mr '43

FLORIDA

See also

Phosphate rock—
 Florida

Sanitary affairs

- Wartime activities of the Bureau of sanitary engineering of the Florida state board of health. J. B. Miller. Am Water Works Assn J 35:196-8 F '43

Social conditions

- Case studies of nutrition. O. D. Abbott; V. Walker. Ann Am Acad 225:57-8 Ja '43

FLORIDA power and light company

- Corporate revision of Florida Power asked; first case involving recapitalization of operating electric utility. Elec W News ed 118:2033 D 19 '42

- Revision of capital structure sought by SEC division. Comm & Fin Chr 156:2305-6 D 28 '42

FLORIDA' power corporation

- Merger approved. Comm & Fin Chr 158:1033 S 13 '43

- Merger proposal filed with SEC. Comm & Fin Chr 156:2305 D 28 '42

FLORIDIN. See Fuller's earth**FLORISTS**

- Florists convert; turn to vegetables and seedlings. Business Week p29-30 Ag 14 '43
 Promotion finesse builds roses into big-time business for Jackson & Perkins. C. H. Perkins. Il Sales Management 52:22-4 Jl 15 '43

FLORITE

- New data on activated bauxite desiccants. R. G. Capell, R. C. Amero and J. W. Moore. bibliog diag Chem & Met Eng 50:107-10 Jl '43

FLOTATION agents

- Mechanism of the action of collecting agents in flotation; abstract. M. E. Lipetz. Chem & Met Eng 50:195 Ap '43

FLOTATION process

- Floating chalcocopyrite from galena and sphalerite. flow sheet Min Cong J 29:30 S '43

- Flotation kinetics; effect of size on the behavior of galena particles. A. M. Gaudin, R. Schuhmann, jr. and A. W. Schlechten. bibliog diag J Phys Chem 46:902-10 N '42
 Flotation kinetics; methods for steady-state study of flotation problems. R. Schuhmann, jr. bibliog il diag J Phys Chem 46:891-902 N '42

- Flotation of bismuthinite. J. G. Hart. Can Min J 64:355 Je '43

- Flotation of tungsten ores. D. C. McLaren. Il Can Min J 64:8-13 Ja '43

- Improved flotation test cell. J. B. Clemmer and B. H. Clemmons. il diag Eng & Min J 144:72-3 Mr '43

FLOTATION process (cement)

- Controlling cement manufacture. Chem Age (Lond) 47:471-2 N 28 '42

- Froth flotation mechanics and functions of various reagents. flow diag Il Concrete (mill sec) 50:278-80; 51:102-3 D '42-Ja '43

FLOTATION process (non-metals)

- Beneficiation of domestic talcs. S. Gottlieb. bibliog flow sheets Am Cer Soc Bul 22: 223-5 Jl 15 '43

- Elementary principles of flotation. J. Dasher. il diag Rock Prod 46:72, 74, 76+ S '43

- Elements of flotation process. W. E. Lenhart. Il Rock Prod 46:55+ Je '43

- New vacuum flotation process aids liquid waste disposal. A. J. Fisher. il diag Food Ind 15:87-9+ Jl '43

- Phosphate washer reject successfully concentrated on moving conveyor belts; flotation equipment used in Coronet company's re-treatment plant. A. H. Hubbell. flowsheet il diag Eng & Min J 143:51-4 D '42

FLOUR

- Alcohol from granular wheat flour. P. A. Singleton. flow sheet Il Chem Ind 52:594-6 My '43

- Bulk storage and blending aid price, quality control. E. S. Miller. Food Ind 15:78-9 F; 70-1+ Mr '43

- Decrease in pellagra and beriberi; enriched white bread and flour. J. Stafford. Science 98:sup8-9 Jl 30 '43

- Enrichment of flour and bakery products. W. H. Cathcart. bibliog il Ind & Eng Chem 35:66-70 Ja '43

- Enrichment of white flour. Science 98:32-3 Jl 9 '43

- Estimation of rope spores in wheat flour and other products. E. Barton-Wright. Soc Chem Ind J 62:33-7 Mr '43

- Flour shortage. Business Week p62+ My 15 '43

FLOUR—Continued

- Flour use rises. *Business Week* p42+ Ap 17 '43
- Fortification of oil, fat, and flour; stability of added carotene and effect of antioxidants. P. W. Morgal, L. W. Byers and E. J. Miller. *bibliog Ind & Eng Chem* 35: 794-7 Jl '43
- Granular wheat flour increases alcohol yields; Park & Tilford distillery. R. T. Handren. *il Chem Ind* 53:350-2 S '43
- How distribution of vitamins in wheat affects flour. J. S. Andrews. *bibliog Food Ind* 15:78-9 Ag '43
- Improvement of flour. A. L. Davidson. *Can Chem & Process Ind* 27:181-2+ Ap '43
- Mechanical treatment destroys insects in foods. E. S. Steteler. *il Food Ind* 15:82-3+ Jl '43
- Milling industry and national nutrition; abstract. R. S. Herman. *Chem & Met Eng* 50: 173-5 Mr '43
- Nutritional hedge; no bar to extension of flour enrichment. *Business Week* p40 My 29 '43
- Vitamin and mineral enrichment defined. *Oil Paint & Drug Rep* 143:46 Je 14 '43
- War and postwar problems analyzed by Millers national federation. *Food Ind* 15:86-7 Je '43

See also

Cottonseed flour
Peanut flour
Soybean flour

Analysis

- Occurrence of lead, tin, and silver in wheat and its milling products. N. L. Kent. *bibliog il Soc Chem Ind J* 61:183-6 D '42

Standards

- Flour and farina standards set. *Food Ind* 15:116 Jl '43
- Flour gets richer; FDA preparing to make higher standards mandatory. *Business Week* p19-20 Jl 17 '43
- New flour standards require more vitamins and minerals. *Ind Stand* 14:253 S '43

FLOUR mills**Equipment**

- Bulk storage and blending aid price, quality control. E. S. Miller. *flow diag diags Food Ind* 15:70-1+ Mr '43

Power

- 600 miles and 10,000 pounds; boiler gains efficiency by added waterwalls and new stoker; Russell-Miller milling co. F. S. Rieder. *il diags Power* 87:594-6 S '43
- Three-year-old Diesel takes 20,000 hr. of trouble-free operation in its stride; F. W. Stock & sons' flour mill. *il Power* 87:541-2 Ag '43

FLOUR mills, Kitchen

- Grind your own; miniature flour mills. *il Business Week* p48 Ap 17 '43

FLOUR trade

- Decision on flour due soon. *Barron's* 22:6 D 21 '42
- Flour mill margins again under pressure. *Barron's* 23:6 S 27 '43
- Outlook for grain products. *Barron's* 23:6-7 Je '43

See also

General mills, inc.

Statistics

- Wheat flour, 1938-1941. Survey of Cur Business 1942 Sup p121 [supplemented in monthly numbers]

Canada

- Flour production in Canada. *For Comm W* 11:32 Je 12 '43

FLOW. See Fluids**FLOW meters**

- Cochrane low pressure flow transmitter, diag Blast F & Steel Pl 30:1405+ D '42; *Pet Eng* 14:151 D '42
- Consistency control and metering systems. *Pulp & Pa of Can* 43:974-5 D '42

Developments in the measuring of pulsating flows with inferential-head meters. S. R. Beitler, E. J. Lindahl and H. B. Nichols. *diag A S M E Trans* 65:353-6 My '43

Flowmeters measure rapidly fluctuating flow. J. B. McMahon. *il diags Power* 87:670-1+ O '43

How to keep flowmeters accurate. W. C. Bennett. *diags Power* 87:527-34 Ag '43

Improved meter for the measurement of gas flow rates. W. G. Appleby and W. H. Avery. *diags Ind & Eng Chem Anal* ed 15: 349-50 My 15 '43

Installing the primary flow meter element; diagrams. *Power Pl Eng* 47:108 Ja '43

Instrument application progress in process industries. *il diags Chem & Met Eng* 50: 140-3 My '43

Instruments for measuring and controlling process variables. *diags Chem & Met Eng* 50:112-14 My '43

Pneumatic transmitter announced by Republic flow meters co. *il Chem & Met Eng* 50: 128 Ag '43

Reading pulsating flows on an orifice meter chart. H. H. Beeson. *Pet Eng* 14:151+ My '43

Rotameter for accurate rate of flow measurement. *il Pub Works* 74:50 Ap '43

Speeding up measurements of air flow to aircraft engines and carburetors; adjustable orifices. J. P. Green. *il diags Instruments* 16:54-8+ F '43

Technical aspects of rotameters; remote reading fuel rate metering device. W. J. Diamant. *il Aero Digest* 42:133, 142 F '43

Why, when, what, where and how of flow meter installation. W. C. Bennett. *il charts Power Pl Eng* 46:88-9, 110 O; 97-3 N; 92-5 D '42; 47:91-2 Ja; 93 F '43

See also

Current meters	Parshall flume
Gas meters	Steam meters
Orifices	Water meters

FLOW of air. See Air flow

FLOW of fluids. See Fluids

FLOW of gas. See Gas flow

FLOW of oil. See Oil flow

FLOW of water. See Hydraulics; Water flow

FLOW regulators

Automatic valve control governs flow in war plant piping system. B. M. Mills. *il Heating-Piping* 15:304 Je '43

Constant pressure and flow ratio regulator for continuously mixing two gases. N. L. Heikes. *diags Ind & Eng Chem Anal* ed 15: 133-4 F 15 '43

Constant-velocity drip feed; a simple device for maintaining regularity. H. B. Rayner. *diags plan Elec W* 120:986-7 S 18 '43

Delivery of liquids at low and constant rates. E. C. Page, Jr. and J. C. Whitwell. *diags Ind & Eng Chem Anal* ed 15:435-7 Jl 15 '43

Fundamental principles of automatic control. J. C. Peters and T. R. Olive. *bibliog diags Chem & Met Eng* 50:98-107 My '43

Liquid flow at small constant rates; Rideal Microdoser. R. O. King and R. R. Davidson. *diags Can Min J* 64:573-4 S '43

Valves can make or break smooth heater operation. W. P. Spining. *diags Power* 87: 510-11+ Ag '43

FLOW sheets

Modern distillery; pictured flow sheet. *Chem & Met Eng* 49:126-9 N '42

FLOWERS**Transportation**

Packaging and handling of air cargo; wet pack method of transporting cut flowers. C. G. Peterson. *S A E J* 51:216-17 Je '43

FLU. See Influenza**FLUE dust**

Experience in the use of electrostatic fly-ash precipitators; Rochester gas & electric corporation. I. G. McChesney. *il diags A S M E Trans* 65:143-7; Discussion. 147-8 Ap '43

Flyash blast cleans metal surfaces. S. H. Coleman. *il Power* 87:50 Ja '43

Fly ash from domestic stoker fires; abstract. T. S. Spicer, R. G. Bowman and C. C. Wright. *diag Coal Age* 48:98+ Mr '43

FLUE dust—Continued

- Modern sintering plant handles fine ores and flue dust; Youngstown sheet & tube co. il Steel 112:102, 105+ Mr 1 '43
 Potassic flue dust; fertiliser from ferromanganese furnaces. M. Lerner. Chem Age (Lond) 48:644-5 Je 19 '43
 Simplicity and versatility stressed in Akron addition; fly ash disposal. G. C. Daniels. diags plan Elec W 120:936-7 S 13 '43
 Study of the reducibility of ores and blast furnace sinter. W. O. Philbrook. bibliog il diags table (insert) Blast F & Steel Pl 31: 890-7+, 1019-24, 1141-7 Ag-O '43

See also

- Blast furnace gas Sintering
 Blast furnaces Smoke
 Flue gas

FLUE gas

- Charging induced draft kilns. V. J. Azbe. Rock Prod 45:72-3+ D '42
 Chimney loss measurements without CO₂ meters; nomogram for determining losses by temperature measurements. R. H. Parsons. Engineer 175:165-6 F 26 '43
 Corrosion by phosphorus compounds in boiler gases. H. J. Bush. Inst Chem Eng Trans 19:45-7 '41
 Corrosion of metals and alloys by flue gases. L. Shnidman and J. S. Yeaw. bibliog il diags Ind & Eng Chem 34:1436-44 D '42
 Dew point of flue gases; abstract. A. A. Taylor. Chem & Met Eng 50:163-4 Ja '43
 Dew point of flue gases of fuels containing sulfur. J. S. Yeaw and L. Shnidman. bibliog Power Pl Eng 47:68-71 Ja; 69-71 F; 73-5 Mr '43
 Factors affecting open hearth design. A. H. Leckie. bibliog Steel 113:84, 87+ J1 26 '43
 Loss in temperature of stack gases. W. L. Nelson. Oil & Gas J 42:56+ S 30 '43
 Modern applications of overfire air. H. C. Carroll. il diags A S M E Trans 65:73-7; Discussion. 77-86 F '43
 Overcoming difficulties in feeding ore into a quicksilver furnace. W. Bradley. il diags Min Cong J 29:28-30 Je '43
 Predicting spillage characteristics of water heater draft hoods; formulae for calculating minimum vertical stack and maximum horizontal flue run. M. Zare. il Am Gas Assn Mo 25:170-5 Ap '43
 Specific heats of gases. G. M. Stearns. Oil & Gas J 41:129 Ja 7 '43

See also

Flue dust

Analysis

- Flue-gas analysis; the Orsat apparatus; its value in fuel economy. il diag Chem Age (Lond) 47:530-2 D 12 '42

FLUES

- Erie modernizes Hornell flue repair shop. il Ry Mech Eng 116:531-4 D '42
 Flue cleaning deluxe. il Power Pl Eng 47: 94-6 Je '43
 Predicting spillage characteristics of water heater draft hoods; formulae for calculating minimum vertical stack and maximum horizontal flue run. M. Zare. il Am Gas Assn Mo 25:170-5 Ap '43
 Temporary flue erected in 20 hours. il Elec W 118:2128 D 26 '42
 Tile flue detail calls for lead flashing. diag Am Bld 64:66 D '42

See also

Chimneys

- FLUID meters.** See Flow meters

FLUIDITY

- Fluidity of electrolytes. E. C. Bingham and R. T. Foley. bibliog J Phys Chem 47:511-27 O '43
 Fluidity of mixtures which obey Bachinskii's law. F. Kotler. bibliog J Phys Chem 47: 277-93 Mr '43
 Fluidity of nylon solutions in *m*-cresol: measurement of chemical damage in nylon textiles. J. Boulton and D. L. C. Jackson. diag Soc Dyers & Col J 69:21-6 F '43
 Hydraulic efficiency of rubber pads. W. Tucker. il diags Aviation 42:167, 169+ My '43

See also

Viscosity

FLUIDITY funnel

- Starch viscosity or strength. W. L. Morgan and N. L. Vaughn. bibliog il diags Ind & Eng Chem 35:233-8 F '43

FLUIDS

- Contamination by successive flow in pipe lines. F. C. Fowler and G. G. Brown. bibliog diags Am Inst Chem Eng Trans 39:491-516 Ag '43; Same. Nat Pet N 35 pt 2:R478+ O 6 '43
 Damping of large amplitude vibrations of a fluid in a pipe. R. C. Binder. Acoustical Soc Am J 15:41-3 J1 '43
 Fundamental problem of the theory of viscous fluids. H. Putman. J Ap Phys 14:244-5 My '43
 Heat transfer to a fluid flowing periodically at low frequencies in a vertical tube. R. C. Martinelli and others. bibliog diags A S M E Trans 65:789-96; Discussion. 796-8 O '43
 Introduction to high vacuum in chemical industries. T. R. Olive. il diag Chem & Met Eng 50:102-5+ O '43
 Measurement of velocity and pressure in three-dimensional flow. by F. F. Kramis; tr. and abstr. by E. F. Wiley. diags Am Soc C E Proc 69:sup22-30 S '43
 Measuring the flow of fluids; use of orifices and manometers. W. Goodman. diags Heating-Piping 15:413-18, 461-4, 525-8, 596-8 Ag-N '43
 Nomograph for pressure drop in isothermal flow of compressible fluids. G. W. Thomson. Ind & Eng Chem 34:1485 D '42
 Permeability of porous solids to gases and liquids. L. Grunberg and A. H. Nissan. bibliog diags Inst Pet J 29:193-225 Ag '43
 Polarized light used to study fluid flow. Heating-Piping 15:531 O '43
 Regions of infinite acceleration and flow realms in a compressible fluid. M. G. Scherberg. J Aeronautical Sci 10:223-6+ J1 '43
 Theoretical flooding velocities in packed columns. J. W. Bertetti. Am Inst Chem Eng Trans 38:1023-35 D '42

See also

- | | |
|-----------------------|----------------------|
| Aerodynamics | Hydraulics |
| Air flow | Hydrodynamics |
| Equation of state | Liquids |
| Flow meters | Oil flow |
| Flow regulators | Osmosis |
| Gas flow | Solution (chemistry) |
| Gases | Vapors |
| Hydraulic engineering | Viscosity |
| | Water flow |

FLUMES

- Penstock, tunnel, flow line maintenance; hydro plants, Southern California Edison co. T. C. Stavert. il Elec West 91:66-7 S '43
 Rig cleans moss from hydro flumes. A. F. Frontz. diag Elec W 119:320+ Ja 23 '43

See also

Parshall flume

FLUOBORATES

- Diazonium borofluorides; the preparation of arylcopper compounds. F. A. Bolth, W. M. Whaley and E. B. Starkey. bibliog Am Chem Soc J 65:1456-7 Ag '43

FLUORENE

- New modification of the Ullmann synthesis of fluorene derivatives. W. C. Lothrop and P. A. Goodwin. bibliog Am Chem Soc J 65:363-7 Mr '43

FLUORENONE

- Fluorenones and diphenic acids; establishment of authentic 1-bromo- and 4-bromo-fluorenones. E. H. Huntress, K. Pfister, 3d and K. H. T. Pfister. bibliog Am Chem Soc J 64:2845-9 D '42

FLUORENENECARBOXYLIC acids

- Alkamine esters of fluorenenecarboxylic acids. F. E. Ray and G. Rieveschl, Jr. bibliog Am Chem Soc J 65:836-9 My '43

FLUORESCIN

- Life jacket dye markers; fluorescein dye spreads out on and down in the water. il Mod Packaging 16:70+ Ag '43

- Optical sensitizing of silver halides by dyes; the optical sensitizing properties of fluorescein dyes in relation to their spectral absorption and constitution. S. E. Sheppard, R. H. Lambert and R. D. Walker. bibliog J Chem Phys 11:263-75 Je '43

FLUORESCENCE

- Benzoin as fluorescent qualitative reagent for zinc. C. E. White and M. H. Neustadt. *bibliog Ind & Eng Chem Anal* ed 15:599-600 S 15 '43
- Black light for night flight; fluorescent treated plastics and near-ultraviolet rays make it possible to read without destroying night vision. *il Aviation* 41:243 D '42
- Bloom of petroleum oils. J. De Ment. *flow diag Pet Refiner* 22:83-5 Ag '43
- Chlorophyll fluorescence and energy transfer in the diatom *nitzschia closterium*. H. J. Dutton, W. M. Manning and B. M. Duggar. *bibliog J Phys Chem* 47:308-13 Ap '43
- Colour group discusses fluorescence. *Light & Lighting* 35:160, 162 D '42
- Crack detector uses ultra-violet, also detects contamination. *Sci Am* 168:200 My '43
- Detecting cracks with black light. *Iron Age* 150:69 N 26 '42
- Detecting surface flaws in non-ferrous and non-magnetic materials; Zyglo fluorescent penetrant method. G. Ellis. *il Iron Age* 150:56-9 D 17 '42
- Detection of scheelite by ultraviolet radiation. D. C. McLaren. *il Can Min J* 64:494-500 Ag '43
- Dimeric and other forms of methylene blue: absorption and fluorescence of the pure monomer. G. N. Lewis and others. *Am Chem Soc J* 65:1150-4 Je '43
- Effect of chemical impurities on scheelite fluorescence. R. Greenwood. *bibliog Econ Geol* 38:56-64 Ja '43
- Effect of oxygen on the fluorescence of certain hydrocarbons. J. A. Miller and C. A. Baumann. *bibliog il Am Chem Soc J* 65:1540-6 Ag '43
- Elementary data on fluorescence. M. V. Kirk. *Instruments* 16:618, 620, 622, 624 O '43
- Fluorescence; abstract. E. J. Bowen. *Chem & Ind* 62:205-6 My 29 '43
- Fluorescence and phosphorescence of thallium-activated potassium-halide phosphors. P. Pringsheim. *bibliog il Rs Mod Phys* 14:132-8 Ap-Jl '42
- Fluorescence of the extractives of wood. W. W. Marteny. *bibliog diags Paper Tr J* 116:27-32 F 11 '42; Same cond. *Paper Ind* 24:377-9 N '42
- Fluorescence of vitamin A. H. Sobotka, S. Kann and E. Loewenstein. *Am Chem Soc J* 65:1959-61 O '43
- Fluorescent and phosphorescent paints. G. F. A. Stutz. *il Illum Eng* 37:798-806 D '42
- Fluorescent inspection of tungsten; cracks in leads passing through glass are major cause of gassy electronic tubes; Zyglo inspection method. S. A. Kulin. *il Electronics* 16:95+ Jl '43
- Fluorescent magnetic inspection; magnetic particle test called Magnaglo. W. E. Thomas. *il Metals & Alloys* 16:886-90 N '42
- Fluorescent method detects leaks in process vessels; Zyglo. F. Catlin. *il Chem & Met Eng* 50:116 Ag '43
- Fluorescent penetrant method of detecting discontinuities. T. de Forest. *il Am Soc for Metals Trans* 31:739-48 S '43; Abstract. *Automotive & Aviation Ind* 88:80 Ap 15 '43; Discussion. *Am Soc for Metals Trans* 31:748-52 S '43
- Fluorometric determination of riboflavin in pork products. W. J. Peterson, D. E. Brady and A. O. Shaw. *bibliog Ind & Eng Chem Anal* ed 15:634-6 O 15 '43
- Glass standards for fluorometric determinations. E. Loewenstein. *Ind & Eng Chem Anal* ed 15:658 O 15 '43
- Hyglo crack-detection process. *Engineering* 155:357 Ap 30 '43
- Invisible rays make war maps, charts, instruments visible. E. W. Beggs. *Sci Am* 168:28-9 Ja '43
- Observations on the nature and properties of the fluorescent factor F₂. V. A. Najjar, D. E. M. Scott and L. E. Holt, Jr. *Science* 97:537-8 Je 11 '43
- Partial list of fluorescent rocks and minerals from the Rocky Mountain region of the United States. *Can Min J* 63:712 N '42
- Phosphors and the periodic system of the elements; abstract. H. W. Leverenz. *il diags Electronics* 16:282+ Mr '43
- Probable identity of Najjar and Holt's fluorescent substance. F. J. W. Huff and W. A. Perlzweig. *Science* 97:538-9 Je 11 '43

- Quantum yield of diacetyl fluorescence. G. M. Almy and P. R. Gillette. *bibliog diags J Chem Phys* 11:188-95 Ap '43
- Some applications of fluorescent chemicals. J. A. Radley. *bibliog Soc Dyers & Col J* 59:137-40 Jl '43; Same. *Can Chem & Process Ind* 27:504-5+ S '43; Discussion. *Soc Dyers & Col J* 59:140 Jl '43
- Study of photoluminescence in glass. A. R. Rodriguez, C. W. Parmelee and A. E. Badger. *bibliog il Am Cer Soc J* 26:137-50 My 1 '43

See also

- Dyes and dyeing—
Fluorescence Fluorometers
 Luminescence

FLUORESCENT lamps. See Electric lamps, Fluorescent

FLUORIDE poisoning

- Caries-fluorine hypothesis and a suggested study to test its application; toxicology of fluoride. D. B. Ast. *Pub Health Rep* 58:869-73 Je 4 '43

FLUORIDES

- Absorption and excretion of fluoride; the metabolism at high levels of intake. W. Machle and E. J. Largent. *bibliog J Ind Hygiene* 25:112-23 Mr '43
- Atmospheric contamination from the casting of magnesium. C. R. Williams. *bibliog J Ind Hygiene* 24:277-80 N '42
- Elimination of fluoride interference in the molybdenum blue reaction. L. T. Kurtz. *bibliog Ind & Eng Chem Anal* ed 14:855 N 15 '42

See also

Fluorspar

Analysis

- Colorimetric determination of fluoride in natural waters with thorium and alizarin. N. A. Talvitie. *bibliog Ind & Eng Chem Anal* ed 15:620-1 O 15 '43

FLUORIDES in the body

- Absorption and excretion of fluoride; the metabolism at high levels of intake. W. Machle and E. J. Largent. *bibliog J Ind Hygiene* 25:112-23 Mr '43

FLUORIMETERS. See Fluorometers

FLUORINATION

- Fluorination of boron trichloride. H. S. Booth and S. G. Frary. *bibliog Am Chem Soc J* 65:1836-7 O '43
- Fluorination of thiophosphoryl bromide; the thiophosphoryl bromofluorides. H. S. Booth and C. A. Seabright. *bibliog Am Chem Soc J* 65:1834-5 O '43

FLUORINE

- Fluorine content of plants fertilized with phosphates and slags carrying fluorides. W. H. Macintyre and others. *bibliog il Ind & Eng Chem* 34:1469-79 D '42

See also

- Water supply—
Fluorine content

Analysis

- Determination of fluorine in organic compounds with cerous nitrate. M. L. Nichols and J. S. Olsen. *bibliog(61 references) diags Ind & Eng Chem Anal* ed 15:342-6 My 15 '43

Physiological effect

- Caries-fluorine hypothesis and a suggested study to test its application. D. B. Ast. *Pub Health Rep* 58:857-79 *bibliog(91 titles) p877-9* Je 4 '43
- Program of treatment of public water supply to correct fluoride deficiency. D. B. Ast. *bibliog Am Water Works Assn J* 35:1191-7 S '43

FLUORINE compounds

- Fluorine insecticides. R. H. Carter and E. L. Gooden. *bibliog il Soap & San Chem* 19:99, 101+ Mr '43
- Preparation and properties of some new trifluoromethyl compounds. J. H. Simons and E. O. Ramler. *Am Chem Soc J* 65:389-92 Mr '43
- Some fluorinated compounds of possible chemotherapeutic interest. E. Bograchov. *Am Chem Soc J* 65:1652-3 Ag '43
- 2,2,2-Trifluoroethyl iodide. H. Gilman and R. G. Jones. *Am Chem Soc J* 65:2037-8 O '43

FLUORINE compounds—Continued

2,2,2-Trifluoroethylamine and 2,2,2-trifluoro-diazoethane. H. Gilman and R. G. Jones. *bibliog* Am Chem Soc J 65:1458-60 Ag '43

FLUORITE. See Fluorspar**FLUOROBENZOIC acid**

Electric moments of some substituted benzoic acids; the moments of *o*-, *m*- and *p*-fluorobenzoic acids, and of *o*-chloro and *o*-bromobenzoic acids. M. E. Hobbs and A. J. Weith, Jr. *bibliog* Am Chem Soc J 65: 967-71 My '43

FLUOROCHLOROBROMOMETHANE.

Chlorofluorobromomethane

FLUOROMETERS

Photoelectric fluorimeter. R. P. Krebs and H. J. Kersten. *il diag* Ind & Eng Chem Anal ed 15:132-3 F 15 '43

FLUORONITROSOPHENOL

Tautomerism of benzoquinone-*p*-nitrosophenol systems; 3-fluoro-4-nitrosophenol. H. H. Hodgson. *Chem Soc J* p89-90 Mr '43

FLUORSPAR

Between the lines; wartime requirements of fluorspar. *Chem Ind* 52:339 Ja '43

British non-ferrous minerals. W. H. Reynolds. *Chem Age* (Lond) 48:343-5 Mr 27 '43

Fluorspar helps wage war; Kramer mines, inc. R. Fleming. *il Comp Air M* 48:7160-3 O '43

Fluorspar in Derbyshire; modern development of available resources. W. Braithwaite. *Chem Age* (Lond) 48:673-4 Je 26 '43

Fluorspar pinch. *Business Week* p77-8 Ja 23 '43

Fluorspar; recent production in South Africa. *Chem Age* (Lond) 48:185-6 F 6 '43

Illinois fluorspar output reached new high in 1942. *il Min Cong J* 29:78+ My '43

Analysis

Analysis of fluorspar; comparison of three alternative methods; abstracts. G. L. Frayser. *il Chem Age* (Lond) 48:613-14 Je 5 '43; *Chem Ind* 53:376+ S '43

Prices

Fluorspar ores freed from price control. *Oil Paint & Drug Rep* 142:38 D 28 '42

Fluorspar prices. Published in weekly numbers of Iron Age

FLUX

Alcho-re fluxes. *Automobile Eng* 33:420 O '43

Functions of a welding flux. H. H. Griffith. *il Welding J* 22:423-30 Je '43

How to conserve rods and flux. *diags Sheet Metal Worker* 33:23+ N '42

Limestone production around the clock; flux stone for steel furnaces; Hillsville district near Youngstown, Ohio. W. B. Lenhart. *il Rock Prod* 46:50 Ap '43

Nitric-hydrofluoric bath for removing welding flux from aluminum alloy parts. P. M. Craig. *il Automotive & Aviation Ind* 88:19+ Mr 1 '43

Researches for improved solder fluxes. H. Peters and B. Gonser. *il Welding J* 22: sup373-4 Ag '43

FLUX navigator. See Nautical instruments**FLY ash.** See Flue dust**FLY sprays and repellents**

Fly repellent; abstract. A. O. Shaw and others. *Soap & San Chem* 19:117 S '43

Fly spray kill; study of the synergistic action of *N*-substituted piperonylamides when incorporated in pyrethrum fly sprays. S. I. Gertler, J. H. Fales and H. L. Haller. *Soap & San Chem* 19:105+ Ap '43

New insecticide material; study of toxicity of alpha beta dibromo-beta-nitroethylbenzene in oil sprays against houseflies. E. R. McGovran, M. S. Schechter and J. H. Fales. *Soap & San Chem* 19:107+ Mr '43

Pyrethrin activators; abstract. E. R. McGovran and W. N. Sullivan. *Soap & San Chem* 19:107 My '43

Rapid insecticide testing; settling mist method. T. C. Allen, R. J. Dicke and J. W. Brooks. *il diags Soap & San Chem* 19:34-6+ Ap '43

Sesame in insecticides. C. Eagleson. *Soap & San Chem* 18:125+ D '42

Small camber method for testing effectiveness of insecticides against houseflies. C. W. Kearns and R. B. March. *il diags Soap & San Chem* 19:101, 103-4+ F '43

Study new synergists. S. I. Gertler, J. H. Fales and H. L. Haller. *Soap & San Chem* 19:111 My '43

FLYING. See Aviation**FLYING boats**

British court holding in flying boat action.

Weekly Underw 148:1151 Fy 29 '43

Continuous overhaul on PAA clippers. D. Baker. *Aviation* 42:211-12+ S '43

Convair patrol; flying boat for anti-submarine duty. *il diags Automotive & Aviation Ind* 89:26-7+ Ag 1 '43

Design approach for long range aircraft. R. V. Boname. *il Aviation* 42:139-43+ S; 153-5+ O '43

Holds flying boat is not legally a vessel. Weekly Underw 148:190 Ja 16 '43

How Consolidated builds the Coronado. *il Aero Digest* 43:182-4, 186, 189+ S '43

Opposite propeller rotation; shall it be in-board or outboard? J. H. Hamelet. *diags Aviation* 42:156, 161+ My '43

Pan American Airways system; ten years' progress. W. L. Van Dusen. *il Aeronautical Eng R* 1:99 N '42

Production problems of the Coronado flying boat. E. P. Meyers. *il diags Automotive & Aviation Ind* 89:35-41+ S 1 '43

Work in an experimental seaplane tank. L. Smith. *il diags Roy Aeronautical Soc J* 47: 290-314 S '43

FLYING machines

Henson's aerial steam carriage, 1843. J. E. Hodgson. *Roy Aeronautical Soc J* 47:118-28 Ap '43

See also

Airplanes

Glider

Helicopters

FLYNN, Edward Joseph. 1892-
Flynn's mission; retained by the railroad brotherhoods. *Business Week* p114 Mr 20 '43

President withdraws nomination of Flynn. *Comm & Fin Chr* 157:579 F 11 '43

FLYNN, Walter Henry. 1877-
Sketch. *pors Ry Mech Eng* 117:12-17 Ja '43

FLYWHEELS
Converts flywheel into larger pulley. *il diags Power* 87:109 F '43

FOAM
Current methods of measuring foam. S. Ross. *bibliog il diags Ind & Eng Chem Anal ed* 15:329-34 My 15 '43

Foam and emulsion stabilities. S. Ross. *bibliog J Phys Chem* 47:266-77 Mr '43

FOAM glass. See Glass, Cellular

FOAMITE
C.&E.I. tests Foamite equipment in putting out oil fire. *il Ry Age* 114:1219-20 Je 19 '43

FODDER. See Feeding and feeding stuffs

FOG
Seeing through fog. J. G. Holmes. *Light & Lighting* 36:23-6, 28+ F '43

FOIL, Metal. See Metal foil

FOLDERS. See Advertising, Mail—Folders

FOLDING doors. See Doors, Folding

FOLDING paper box association of America
Annual meeting, Chicago, March 3-5. *Mod Packaging* 16:184+ Ap '43

FOLDS (geology)
Calculating the true thickness of a folded bed. G. D. Hobson. *Am Assn Pet Geologists Bul* 26:1827-32 D '42

See also

Synclines

FOLIC acid. Biological specificity of folic acid. H. K. Mitchell. *Science* 97:442 My 14 '43

Isolation of the antianemia factor (vitamin B₁₂) in crystalline form from liver. J. J. Paffner and others. *Science* 97:404-5 Ap 30 '43

Production of folic acid by rat liver in vitro. L. D. Wright and A. D. Welch. *bibliog* (20 references) *Science* 98:179-82 Ag 20 '43

FOLIC acid—Continued

- Role of folic acid and biotin in the utilization of pantothenic acid by the rat. L. D. Wright and A. D. Welch. *biblog Science* 97:426-7 My 7 '43
- Successful treatment of granulocytopenia and leukopenia in rats with crystalline folic acid. F. S. Daft and W. H. Sebrell. *biblog Pub Health Rep* 58:1542-5 O 15 '43

FOLLOW-up systems

See also

- Advertising, Mail
- Commercial correspondence
- Sales letters

FOLSOM man. See Man, Prehistoric

FONTANA dam. See Dams, Concrete

FOOD

- Agricultural chemist's part in the food production campaign; abstract. B. Thomas. *Chem & Ind* 61:462 N 7 '42
- Alternates of the baking industry; abstract. T. J. Otterbacher. *Can Chem & Process Ind* 27:235 Ap '43
- Chemists adapt pectins to new industrial uses. C. W. Kaufman, E. R. Fehlberg and A. G. Olsen. *il diag Food Ind* 14:57-8+ D '42; 15:58-60 Ja '43
- Diets in flux; habits changed by war. *Adv & Sell* 36:50+ S '43
- Factor of food habits. M. Mead. *Ann Am Acad* 225:136-41 Ja '43
- Food and nutrition as related to the war. C. G. King. *Science* 97:129-31 F '43; Same. *il Chem & Eng N* 21:150-1 F 10 '43
- Food and physique. T. D. Stewart. *biblog Ann Am Acad* 225:22-8 Ja '43
- Food for young children in group care. M. E. Lowenberg. *U S Children's Bur Pub* 285: 1-34 *biblog*(p32-4); *pa* 10c *Supt. of doc.* '42
- Food rations for miners. E. H. Robie. *Min & Met* 24:446-7 O '43
- Food: war and postwar. J. D. Black. *Ann Am Acad* 225:1-5 Ja '43
- Methods of controlling food consumption. C. A. Anderson and M. J. Bowman. *Ann Am Acad* 225:123-35 Ja '43
- Nation's food; fish as food; the biology of the sea fisheries. R. S. Wimpenny. *biblog Chem & Ind* 62:230-3 Je 19 '43
- Nation's food; fish as food; the chemical composition of fish. G. A. Reay, C. L. Cutting and J. M. Shewan. *biblog*(78 references) *Soc Chem Ind J* 62:77-85 Je '43
- Nation's food; fish as food; the cooking of fish. L. C. Baker. *biblog Chem & Ind* 62:356-9 S 18 '43
- Nation's food; fish as food; the vitamin and mineral content of fish. J. A. Lovren. *biblog Chem & Ind* 62:328-30 Ag 28 '43
- Nation's food; meat as food. J. Hammond and others. *biblog Chem & Ind* 61:334-5, 373-7, 381-2, 404-6, 458-60 Ag 1, S 5-12, O 3, N 7 '42
- Natural flavours of foodstuffs. W. A. Waygood. *biblog diags Chem & Ind* 62:59-61 F 13 '43
- Peacetime values from a war technology. G. Eklof. *Science* 97:103-4 Ja 29 '43; Same. *Chem & Eng N* 21:144 F 10 '43; Same. *Inst Pet J* 29:139-40 My '43
- Soils and nutrition. C. E. Kellogg. *Ann Am Acad* 225:17-21 Ja '43
- Some obstacles in the path towards an optimum diet. A. J. Carlson. *Science* 97: 385-90, 412-16 Ap 30-My 7 '43
- Specific heats; tables; reference data. *Heat & Ven* 40:36a-86b S '43
- See also
- Bakers and bakeries
- Baking
- Beverages
- Bread
- Butter
- Cake
- Canned food
- Cereals, Prepared
- Cheese
- Coloring matter in food
- Cookery
- Cost of living
- Dairy products
- Diet
- Eggs
- Farm produce
- Fish as food
- Flavor
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- Food poisoning
- Food supply
- Fruit
- Grasses as food
- Hospitals—Food service
- Ice cream, ices, etc.
- Infants' foods
- Meat
- Milk

- Nutrition
- Oleomargarine
- Potatoes
- Poultry
- Proteins
- Restaurants
- Spices
- Sugar
- Sweetening agents
- United States—Army—Commis-sariat
- Vegetables
- Vitamins

Analysis

- Nation's food; fish as food; the chemical composition of fish. G. A. Reay, C. L. Cutting and J. M. Shewan. *biblog*(78 references) *Soc Chem Ind J* 62:77-85 Je '43
- Rapid determination of sodium chloride in the presence of protein; application to salt-cured food products. W. J. Dyer. *biblog Ind & Eng Chem Anal* ed 15:439-40 JI 15 '43

Bacteriology

- Control of thermophilic bacteria in canned meat mixtures. L. E. Jensen and W. R. He. *il Food Ind* 15:66-7 Mr '43
- Modern sanitation pays dividends; use of new solution (Roccal) on fresh produce reduces bacteria and retards dehydration. J. R. Adams. *il Refrig Eng* 44:383-4 D '42

Chemistry

- Food chemists in a nutrition programme. L. B. Pett. *Can Chem & Process Ind* 27: 321-2 Je '43

Color

See Coloring matter in food

Gas contamination

- Protection of food against chemical attack. M. B. Jacobs. *biblog J Chem Educ* 20: 282-6 Je '43
- Protection of foodstuffs against war gases. S. H. Katz. *biblog il Ind & Eng Chem* 35: 20-3 Ja '43; Same, without *biblog*. *Mod Packaging* 16:80-3 F '43

Insect infestation

- Insect control in food production. E. G. Thomssen and M. H. Doner. *il Soap & San Chem* 19:94-7 F; 90-2+ Mr '43
- Mechanical treatment destroys insects in foods. E. S. Stateier. *il Food Ind* 15:82-3+ JI '43
- Simple method of protecting cereals and other stored foodstuffs against insect pests; new type of inert dust. J. A. Kitchener, P. Alexander and H. V. A. Kiscoe. *Chem & Ind* 62:32-3 Ja 23 '43

Manufacture

- Methods for vitamin control of processed foods; abstract. B. L. Oser. *Food Ind* 15: 109 Ja '43
- Nutritional aspects of food processing. P. E. Howe. *Ind & Eng Chem* 35:24-5 Ja '43
- Production, processing and uses of chicory; used by manufacturers of sauces, chocolate, baked foods, and other products. L. Stouffer. *il Food Ind* 15:63-5 O '43
- War forces progress in food processing. E. Hardy. *il Food Ind* 14:39+ D '42

See also

Blanching

Preservation

See Food preservation

Prices

- Around the map with retail food costs; per cent increase between Jan. 1941 and July, 1943 in 56 U.S. cities; graph. *Business Week* p82 S 4 '43
- Behind the CCC; battle to prolong life of lending agency. *Business Week* p22+ O 9 '43
- British food subsidies; weapon against inflation. J. Backman. *il Dun's R* 51:12-16, 36-7 Mr '43
- British view; world food problem held to be that of reasonable, steady prices. D. Tyerman. *Barron's* 23:6+ My 24 '43
- Buy-sell arrives; proposed subsidy to roll back food prices. *Business Week* p17-13 S 18 '43
- Ceilings approved. *Business Week* p77 O 23 '43
- Changes in Bureau of labor statistics food-cost index. *Monthly Labor R* 56:1214-15 Je '43

FOOD—Prices—Continued

Criticizes food control system. H. Hoover. Comm & Fin Chr 156:2257 D 24 '42

Defends use of subsidies in new plan for food price control. P. M. Brown. Comm & Fin Chr 157:2386 Je 24 '43

Dun & Bradstreet weekly wholesale food price index, 1940 to date. Published in monthly numbers of Dun's statistical review; summary in Dun's review

Food subsidy program. Nat City Bank p62-5 Je '43; Excerpts. Comm & Fin Chr 157:2172 Je 10 '43

Food subsidy programs called unsound by Grocery manufacturers association. Comm & Fin Chr 158:1919 N 11 '43

House group votes to bar food subsidies. Comm & Fin Chr 158:1615 O 21 '43

House sustains President's veto of bill banning subsidy payments; Senate again rejects plan. Comm & Fin Chr 158:129, 132-3 J1 8 '43

Increased food subsidy funds are needed to get all-out 1944 production. M. Jones. Comm & Fin Chr 158:1513 O 14 '43

Index numbers of cost of living and food prices in various countries. Int Labour R 47:126-31 Ja '43 [cont quarterly]

Labor leaders urge President to correct OPA food policies and easing of wages. Comm & Fin Chr 157:2186 Je 10 '43

National grange opposes price rollback. Comm & Fin Chr 158:523 Ag 5 '43

New subsidy proposals. Nat City Bank p111-12 O '43

OPA orders food price rollback to reduce living costs 2%. Comm & Fin Chr 158:1123 S 16 '43

Percent changes in retail prices of food items included in cost-of-living indexes, Feb. 1943 from Feb. 1942; tabulation. Survey of Cur Business 23:7 My '43

President favors food subsidies but rejects plan for food czar. Comm & Fin Chr 158:28 J1 1 '43

President seeks subsidies, defends program as anti-inflation measure; message to Congress. Comm & Fin Chr 158:1805, 1810-11 N 4 '43

Prices received by farmers, 1938-1941. Survey of Cur Business 1942 Sup p17 [supplemented in monthly numbers]

Problems of food price-fixing. Nat City Bank p20-3 F '43

Retail cost of foods in large cities; 1941-July 1943; chart. Survey of Cur Business 23:2 S '43

Retail food costs; what the consumer has been paying, as measured by government price investigators. charts Business Week p30 Je 5 '43

Retail food prices, United States, Canada, United Kingdom, Germany, Netherlands, Switzerland, 1932-1941 and monthly, Nov. 1941-Nov. 1942. Fed Res Bul 29:107 Ja '43 [cont monthly]

Retail prices of food. Published in Monthly labor review

Retail prices of food and coal, 1941. In U S Bur Labor Statistics Bul 707:1-16 '42

Subsidy plan for food under consideration by administration; congressmen protest action. Comm & Fin Chr 157:1983 My 27 '43

Tough fight ahead on subsidies. Business Week p15-16 N 6 '43

Up to housewives; OPA's community ceilings may lop 1% off food prices if shoppers help. Business Week p97-8 My 15 '43

Vote to end food subsidy payments. Comm & Fin Chr 158:22 J1 1 '43

Why no run-away food prices. L. Stern. Il Mag of Wall St 72:406-7- J1 24 '43

See also

Canned food—Prices

Rationing

Accent on points; food ration gives civilian barely 4 lb. per month. Business Week p18-19 F 27 '43

As food habits change; processors and distributors must reckon with effects of rationing. Barron's 23:7 Ap 12 '43

Beating the ration; factory workers gorge at plant cafeterias. Business Week p56- Mr 20 '43

Begin point rationing of processed foods. Comm & Fin Chr 157:917 Mr 11 '43

British food rationing. J. Backman. Il Dun's R 50:12-16+ D '42

Canned, dried, frozen fruits, vegetables to be rationed under point system. Comm & Fin Chr 157:72 Ja 7 '43

Changes announced in British food rationing. For Comm W 10:19 F 13 '43

Food firms rally to Uncle Sam's call: rationing ads blanket Nation. Il Sales Management 52:20-3 Mr 15 '43

Food merchants confident after month of rationing. Ptr Ink 203:67+ Ap 2 '43

Food quiz; how is war affecting the supermarket, the cooperative grocery and the independent? Il Adv & Sell 36:15-16+ Je '43

Food rationing descends upon the mining industry. R. S. Goodhart. Il Min Cong J 29:48-50 My '43

Food rationing in Britain. F. B. Makin. Il Banking 35:37 Ap '43

Food rationing speeds trend toward advertised brands; a study of super markets. Il Sales Management 52:21-3 J1 1 '43

Food rationing; the time is now. Fortune 26:124-5+ D '42

Food rations in Axis and occupied countries, 1943. Monthly Labor R 57:37-9 J1 '43

Food shortage and ration policy. Trusts & Estates 76:9 Ja '43

Food supplies for our civilian population. J. M. Cassels and F. L. Hall. Ann Am Acad 225:106-15 Ja '43

Food's big jolt; point rationing restores buyer's market. Il Business Week p17-19 Mr 27 '43

Grocers say city folk eat most of canned goods, deserve more points. Ptr Ink 202:29 F 26 '43

How British rationing charts ours. Barron's 23:6 Ja 4 '43

How will rationing and grading of canned goods affect brands? Il Sales Management 52:50-1 F 1 '43

Juggling points; OPA slide-rule wizards. Business Week p19-20 Ap 10 '43

Little things that make big black markets. L. Burnett. Adv & Sell 36:22+ Je '43

Nation must eat. F. LaClave. Ptr Ink 202:17-19+ Ja 15 '43

OPA eyes cafes. Business Week p90-1 Ap 24 '43

OPA issues list of foods to be rationed. Comm & Fin Chr 157:68 Ja 7 '43

Point-rationing plan for restaurants. Comm & Fin Chr 157:936 Mr 11 '43

Point system of rationing. Science 98:379 O 29 '43

Points foods distribution. Economist 144:799 Je 19 '43

Ration dilemma; OPA has to stall on its canned food program. Il Business Week p 16-17 Ja 9 '43

Rationing, an opportunity for brand manufacturers; after the war, battle of brands will begin again. L. A. Johnson. Ptr Ink 204:26 J1 9 '43

Rationing and experimental laboratories. Science 97:548 Je 18 '43

Rationing changes. Economist 144:84 Ja 16 '43

Rationing in 1942. Economist 144:sup18 Mr 13 '43

Rationing is unnecessarily complex. Trusts & Estates 76:312 Ap '43

Rationing of canned foods begins March 1. Comm & Fin Chr 157:584 F 11 '43

Rationing of meats, fats, butter, cheese and canned fish begins under point system. Comm & Fin Chr 157:1213 Ap 1 '43

Rations for pregnancy. Economist 145:42 J1 10 '43

Sign food pledge! is OPA advertised plea to U.S. women. Il Ptr Ink 204:41+ J1 16 '43

Wartime feeding of industrial workers; British and American programs. R. Goodhart. Ann Am Acad 225:116-21 Ja '43

Standards

Brief summaries of grade standards; digests of standards issued by the Agricultural marketing administration. Published in monthly numbers of Food industries

See also

Canned food—Standards

Food, Dried—Standards

FOOD—Continued

Statistics

WFA deliveries to June 30 for export to United nations. Oil Paint & Drug Rep. 144: 3 Ag 16 '43
WFA purchases to June 30. Oil Paint & Drug Rep 144:7 Ag 9 '43

Storage

Cold storage of food. H. C. Lythgoe. bibliog il Ind & Eng Chem 35:29-38 Ja '43
How to build a food storage room. diags Am Bld 65:49 F '43

See also

Cold storage Food, Frozen—
Food—Insect in- Storage
festation Vegetables—Storage

Transportation

Wartime refrigeration of foods for transport at sea; emergency method of transporting Canadian bacon over the North Atlantic route. W. H. Cook and T. A. Steeves. diags Refrig Eng 44:373-9 D '42

See also

Food, Frozen—Trans- Refrigeration on
portation cars, trucks, etc.
Food containers

FOOD, Canned. See Canned food

FOOD, Compressed

Compressed cold; compression of dehydrated food for preserving structure of fat globules. Business Week p60+ O 30 '43

Compressed food wrapped in cellophane, saves cargo space. Sci Am 168:265-6 Je '43
Compressing dehydrated foods; space saved by new process which removes air. il Manuf Rec 112:28-9 Ja '43

Compression of dehydrated foods will save shipping space. il Food Ind 15:74-5 F '43
Debulking. I. C. Miller. il Ptr Ink 201:15-17, D 11 '42

Dehydration: now the air must go, too. A. Gray. Adv & Sell 36:61 S '43
Foods in miniature. il Mod Packaging 16:46-7 Mr '43

How to compress foods; United States Department of agriculture guide to fruit and vegetable dehydrators. il Food Ind 15:64-5+ Ag '43

See also

Milk, Dried—Com-
pression

FOOD, Dried

Appliance field hustles to meet demand for home dehydrators. R. C. Fyne. il Sales Management 52:66, 68+ Ag 1 '43

Army food. P. P. Logan. il Chem & Eng N 21:1606-9 O 10 '43

Cans go out. Business Week p58+ D 19 '42
Debulking. I. C. Miller. il Ptr Ink 201:15-17 D 11 '42

Dehydrated foods. L. C. Lockley. Harvard Business R 21 no2:253-8 [Ja] '43

Dehydrated foods; abstract. A. F. Morgan. Science 96:sup 12 D 18 '42

Dehydrated foods aid war effort and offer promising market for gas fuel. H. W. Heisterkamp. il Am Gas Assn Mo 25:55-7+ F '43

Dehydration in natural gas saves vitamin C. Food Ind 15:92-3 Ag '43

Dehydration is old stuff; practices of New Mexico and Arizona Indians. C. Holbrook. il Comp Air M 48:7006-9 Ap '43

Dried apples, 1943 model; dehydration of increasing importance in preparing wartime foods. S. C. Prescott. il Tech R 45:127-9+ Ja '43

Drying of foods. W. R. Marshall, jr. bibliog il Heating-Piping 14:527-31, 588-91+, 671-3, 724-8; 15:10-12 S '42-Ja '43

Exports possible; Brazilians attack malnutrition problem with aid of food dehydrators. Business Week p79-80 N 6 '43

Fire hazards in dehydration of food. F. R. Kroener. Nat Underw 47:6+ Ag 5 '43

Food dehydration. J. C. Patterson. il diags Refrig Eng 45:401-4+ Je '43

Food dehydration and air conditioning; reference section. il diags Heat & Ven 39:36-50 D '42; Discussion. J. J. Woolfenden. 40:80 F '43

Food dehydration; potential use of metals. il Steel 112:76, 78-9 Ap 5; 72-3, 76 Ap 12 '43

Food in Britain. E. Murphy. Am Gas Assn Mo 25:91-2 Mr '43

Foods in miniature. il Mod Packaging 16:46-7 Mr '43

Forum on the drying of foods. M. Carveth; D. A. Forberg; S. Van Deest. Heating-Piping 15:438-41 Ag '43

Hottest news on the food front: the boom in commercial dehydration. R. C. Fyne. il Sales Management 52:54+ Ag 15 '43

Light cargo. Management R 32:218-20 Je '43
Major firms to introduce dehydrated foods in 1943. Ptr Ink 202:60 Ja 15 '43

Packaging dehydrated foods; abstract. W. W. Black. Mod Packaging 16:74-5 My '43
Present status of dehydration. M. E. Highlands. bibliog Refrig Eng 45:12-14; Discussion. 14-15, 44, 59 Ja '43

Wartime problems and progress discussed by IPT; progress in dehydration. Food Ind 15: 67-3 J1 '43

See also

Eggs, Dried Milk, Dried
Fruit, Dried Soup, Dried
Meat, Dried Vegetables, Dried

Standards

Army standards for dehydrated foods. Food Ind 15:56+ Ja; 71+ F; 52-3+ Mr; 58+ My; 52, 122-4 Je '43

Transportation

Compression of dehydrated foods will save shipping space. il Food Ind 15:74-5 F '43

FOOD, Frozen

Conservation of perishables by refrigeration. M. E. Pennington. bibliog il Ind & Eng Chem 35:62-6 Ja '43; Same. Refrig Eng 45: 89-92 F '43

Development of the quick-freezing process. L. W. Waters. il Chem & Eng N 20:1559-61 D 10 '42

Food processing by home freezing subject of Cornell conference. N. K. Masterman. Refrig Eng 46:21 J1 '43

Freezing food at home; freezer-storage unit. B. W. Gardner, jr. il diags Consumers' Research Bul 1:18-10 Je '43

Freezing foods. D. DeFelice. bibliog il Ind & Eng Chem 35:26-8 Ja '43

Frosted boon. Business Week p94+ Ap 24 '43
Frozen foods containers and container materials. J. G. Woodroof and W. DuPree. bibliog il Refrig Eng 45:75-81+ F '43

Frozen orphan; high ration point values and heavy cost competition. Business Week p19 Ap 3 '43

High spot report on frozen foods, hundred-million-dollar war baby. R. C. Fyne. il Sales Management 52:18-23 N 1 '43

Ice cream doubts; shortage of corn sugar and scheme for conversion to frozen foods. Business Week p37-8 Je 19 '43

More on home freezing units; what users say. N. K. Masterman. Refrig Eng 46:92+ Ag '43

Package problems confronting quick-frozen food industry. A. B. Brackett. Paper Tr J 116:36-9 Mr 18 '43; Same. il Mod Packaging 16:74-6, 100 Mr '43; Same cond. Paper Ind 25:300+ Je '43

Packaging of frozen foods under war conditions; abstract. H. C. Diehl and W. Kabak. Food Ind 15:120-1 Mr '43

Quick frozen cooked foods now in demand. C. Bowes. il Food Ind 15:52-3 F '43

Specific heats of foodstuffs. E. E. Short, W. R. Woolrich and L. H. Bartlett. Refrig Eng 44:385-8 D '42

TVA sponsored plant employs immersion and spot freezing; Dixie frosted foods company. G. H. Watson. il Refrig Eng 46:240-1 O '43

See also

Eggs, Frozen Peas, Frozen
Fruit, Frozen Vegetables, Frozen
Ice cream, Ices, etc.

Advertising

News story at point of sale. il Mod Packaging 16:82-3+ Ja '43

FOOD, Frozen—Continued

Directories

Frozen foods directory, 1943. Food Ind 15: 79-98 N '43

Storage

Cold storage plant modernized for frozen food; asphalt-enclosed Fiberglas board used for insulation. il Refrig Eng 45:416+ Je '43
Effect of locker storage on the quality of pork. E. J. Young and J. A. McIntosh. bibliog Refrig Eng 45:100-3 F '43

Farm freezer: its future and its place in the war effort. R. Markley, jr. il Refrig Eng 44: 381-2 D '42

Home locker. W. Carver. il Refrig Eng 46: 157-61+, 237-9+ S-O '43

More locker plants coming; industry sees huge post-war expansion. il Sales Management 52:30, 32, 34 J1 15 '43

Post-war problems of the locker industry. S. Bull. Refrig Eng 46:310-11, 364 N '43

Preliminary results from the use of freezing plates for locker plant freezing and farm freezing and storage cabinets; with observations on farm operated cabinets. C. W. DuBois and D. K. Tressler. diags Refrig Eng 46:25-30+ J1 '43

Refrigeration as an aid in winning the war on the farm. D. Comin. Refrig Eng 45:82+ F '43

Storing fruits, vegetables, and meat in a freezer-locker. B. W. Gardner, jr. bibliog Consumers' Research Bul 12:14-18 J1 '43

Transportation

Transporting frozen goods. il Manuf Rec 111: 37+ D '42

FOOD administration

Another subsidy row in prospect; analysis of our food program. J. S. Davis. Barron's 23:6 O 4 '43

C. C. Davis resigns as food administrator; Marvin Jones is appointed successor. Comm & Fin Chr 158:27 J1 1 '43

Chester C. Davis appointed to control food production and distribution. Comm & Fin Chr 157:1215 Ap 1 '43

Conference urges single food agency to unify program. Comm & Fin Chr 158:1339 S 30 '43

Davis' tough job; farmer-banker returns to Washington as food czar. Business Week p14 Ap 3 '43

Food crisis, need for centralized authority. Trusts & Estates 77:10-11 J1 '43

Food distribution plans announced. Comm & Fin Chr 158:1627 O 21 '43

Food distribution programs of the Agricultural marketing administration. F. V. Waugh. Ann Am Acad 225:169-76 Ja '43

Food insurance; FDA plan for relieving flash shortages in the basic foodstuffs. Business Week p44+ Ja 16 '43

Food output pattern changing; away from a meat war and towards a wheat war. Barron's 23:8 O 11 '43

Food plan: 1944; WFA launches series of farm meetings. Business Week p14 S 25 '43

Increased food subsidy funds are needed to get all-out 1944 production. M. Jones. Comm & Fin Chr 158:1513 O 14 '43

Maximum food production, price stabilization, and fair returns require centralized authority. Comm & Fin Chr 158:525 Ag 5 '43

President seeks subsidies, defends program as anti-inflation measure; message to Congress. Comm & Fin Chr 158:1805, 1810-11 N 4 '43

Report assails food program; federal study. Food Ind 15:99 S '43

Text of order appointing Wickard food administrator. Food Ind 15:45-6+ Ja '43

Time for teamwork. C. R. Wickard. il Food Ind 15:43-4+ Ja '43

Urges reorganization of food system. H. Hoover. Comm & Fin Chr 157:2162, 2176-7 Je 10 '43

Urges state governors to solve food problem. T. E. Dewey. Comm & Fin Chr 157:2381+ Je 24 '43

WFA deliveries to June 30 for export to United nations. Oil Paint & Drug Rep 144: 3 Ag 16 '43

WFA labor office created. Comm & Fin Chr 158:26 J1 1 '43

WFA purchases to June 30. Oil Paint & Drug Rep 144:7 Ag 9 '43

War food boss; Hendrickson will be head man in agriculture. Business Week p19-20 Ja 23 '43

WPB gives Wickard oils, fats, and fertilizer control. Oil Paint & Drug Rep 143:3 Ja 18 '43

Wartime food administration—U.S.A. C. F. Clayton and J. D. Black. Ann Am Acad 225:96-105 Ja '43

What is relation of WFA to WPB containers branch? il Mod Packaging 17:96-7+ O '43

See also

Food—Prices World war, 1939—
Food—Rationing Food question

FOOD adulteration and inspection

See-through inspection with the fluoroscope. il Mod Packaging 17:66-7 S '43

FOOD brokers

Helps brokers survive until post-war period; Hawaiian pineapple company. F. LaClave. il Ptr Ink 203:26+ Je 25 '43

FOOD conference, United nations. See United nations food conference

FOOD containers

Award winners, 12th annual all-America package competition. il Mod Packaging 16: 84-6, 91-3+ Ap '43

Britain turns to whitewares for food containers. Cer Ind 40:52 F '43

Canning technology. E. J. Cameron. bibliog il Ind & Eng Chem 35:38-42 Ja '43

Conservation of metal and rubber by cellulose sheetings. A. F. Wendler. Paper Tr J 115:34-6 D 3 '42

Dehydrated vegetables high in vitamins, call for proper packaging; optimum vitamin contents of eight vegetables. Sci Am 167:284 D '42

Developments and trends in new paper products. R. J. Zaumeyer. Paper Tr J 117:26-7 J1 1 '43

Food packages keep pace with wartime restrictions. E. Shaw. il Food Ind 15:64-7 Ap '43

Frozen foods containers and container materials. J. G. Woodroof and W. DuPree. bibliog il Refrig Eng 45:75-81+ F '43

Materials are available to meet packaging problems. G. Hightower. il Food Ind 15: 68-71 Ap '43

Merfenelopes; a new reagent for controlling slime in the manufacture of food papers; nontoxicity of phenyl mercuric compounds. H. R. Murdock. bibliog Paper Ind 25:634+ S '43; Same. Pulp & Pa of Can 44:877-8 N '43

New foods for U.S. and Canadian fighters. il Mod Packaging 17:60-3+ S '43

Packaging institute discussion; packaging and the problem of feeding America. il Mod Packaging 16:92-6 D '42

Performance of nailed and wirebound wooden cases for luncheon meat. V. Wright. il Mod Packaging 16:176, 178+ Ap '43

WPB issues specifications on closures for glass. Food Ind 15:77+ F '43

Wartime problems and progress discussed by IFT; packaging and containers. Food Ind 15:63+ J1 '43

See also

Bottles / Milk containers
Canned food / Tin cans
Glass containers

FOOD cutters

Foolproof guards for food choppers. il Nat Safety N 46:30 D '42

FOOD distribution administration. See Food administration

FOOD factories

Dual-process quick freezing plant built in South; Dixie Frosted Foods uses immersion unit and air-blast freezer. G. H. Watson. il diags Food Ind 15:66-8+ O '43

FOOD factories—Continued

These food plants converted to do special war job; cereal, confectionery, dairy and sugar-grinding plants converted packaging lines to supply cartons of dried eggs. T. F. Cass, Jr. *il Food Ind* 14:43-6 D '42

See also

Bakers and bakeries Packing houses
Canneries Sugar factories
Flour mills

Air conditioning

Romanoff caviar company finds packaging of bouillon cubes easy in air conditioned room. A. A. Giannini. *il plan Heat & Ven* 40:62-3 Ja '43

Electric equipment

Food dehydration; severe operating conditions for electric motors. *il Elec R (Lond)* 133: 195-8 Ag 13 '43

See also

Bakers and bakeries
—Electric equipment

Equipment

Food dehydration; potential use of metals. *il Steel* 112:76, 78-9 Ap 5; 72-3, 76 Ap 12 '43

Materials made available for more food equipment. *il Food Ind* 15:89-90 O '43

Small-tube heat exchangers offer many advantages. J. W. Courtis. *bibliog il Food Ind* 15:58-60+ S '43

Spray drying system for food products. *diag Food Ind* 14:87 D '42

Floors

Choose floors that withstand conditions of processing. R. Kanegsberg. *il Food Ind* 15: 58-61 Mr; 54-5+ Ap '43

Layout

Model food plant designed; hog cutting plant as part of course in sanitation. A. E. Abrahamson. *plans Food Ind* 15:57-9+ O '43

This is what it costs to dehydrate vegetables. W. D. Ramage and C. L. Rasmussen. *diags plans Food Ind* 15:64-71+ JI '43

Location

Where to locate that dehydration plant. L. V. Burton. *il Food Ind* 15:72-3+ F '43

Management

Salvage, a duty as well as good business. *il Food Ind* 15:62-3 Mr '43

Yield tests show six ways to save materials. J. G. Brown. *diags Food Ind* 15:55-7+ S '43

Quality control

Simple multiple-loop method speeds bacterial counts. A. Moldavan. *il diags Food Ind* 15: 56-7 Je '43

Safety measures

Meeting the safety problem. R. J. Crosby. *il Food Ind* 15:70-1 O '43

Sanitation

Acid detergents in food sanitation. M. E. Parker. *il Ind & Eng Chem* 35:100-5 Ja '43

Sanitation in food plants, a must in wartime. *il diags plans Food Ind* 15:77-96 JI '43

See also

Milk plants—Sanitation

Waste

How to meet the demand for better waste disposal. E. S. Fenelon. *il plans Food Ind* 15:84-6 JI '43

Three years' treatment of sewage at Celina, Ohio; activated sludge preceded by chemical treatment. P. A. Uhlmann. *il Pub Works* 74:13-17 Mr '43

FOOD industry and trade

Big butter-and-egg man; saga of Carl A. Swanson. *il Fortune* 28:122-5+ O '43

Debulking. I. C. Miller. *il Ptr Ink* 201:15-17 D 11 '42

FSA states government's policy on enrichment. *Food Ind* 15:91 Ag '43

Farmers' and retailers' problems. J. A. Hart-

ford. *Comm & Fin Chr* 157:390-1 Ja 28 '43

Food can't be taken for granted. M. Sayre. *il Food Ind* 15:47-8 Ja '43

Food industry developments; industry study. *il Trusts & Estates* 77:291-2, 294-8 S '43

Food processing requires oil, too; estimated fuel requirements of food processing industries (1943). *Nat Pet N* 35:30 Je 9 '43

Food retailers point finger at wholesalers and consumers in hoarding muddle. *Ptr Ink* 201:68 D 11 '42

Food subsidy program. *Nat City Bank* p62-5 Je '43; *Excerpts. Comm & Fin Chr* 157: 212 Je 10 '43

Gasoline rationing forces women to change food shopping habits. *Sales Management* 51:42-3 N 15 '42

General Foods quiz shows women want more facts on nutrition. *Sales Management* 52: 25-7 F 1 '43

How 1943 food shoppers are behaving under shortages and rationing; SM and Ross Federal visit 1,000 typical housewives in Providence, Denver, St Paul and Atlanta. P. Salisbury. *il Sales Management* 52:18-20 Mr 1 '43

Methods of controlling food consumption. C. A. Anderson and M. J. Bowman. *Ann Am Acad* 225:128-35 Ja '43

New food products planned for 1943; industry's preparations for next year and post war. *Barron's* 22:5 D 21 '42

Post-war markets for food products. J. H. Stehman. *Credit & Fin Management* 45: 15-17+ Je '43

Remote factors that affect food plant policies; interlocking of food industries makes local difficulties of national consequences; wheat, molasses, yeast, sodium glutamate. R. S. McBride. *il Food Ind* 15:62-3 S '43

Research work in the food industry. F. H. Banfield. *bibliog Chem Age (Lond)* 48:51-4 Ja 9 '43

Vanishing duties; agreement on production and distribution of agricultural commodities may signal end of U.S.-Dominion barriers. *Business Week* p40+ Ja 16 '43

Wagon jobbers cut mileage, but most of them are selling more; survey by National food distributors association. E. J. Martin. *Sales Management* 52:40, 42 Ja 1 '43

What Hot Spring conference means to food processors. P. H. Appleby. *il Food Ind* 15: 59-61+ Ag '43

See also

Bakers and bakeries Grocery trade
Bread Infants' foods
Candy trade Market stores
Canned food Meat industry and
Cheese trade
Coffee trade Milk trade
Dairy products Packing houses
Food, Dried Poultry
Food, Frozen Spices
Food mixes Sugar industry and
Grain trade trade

Advertising

Breakfast Cup spurns appeal as substitute, but sales quadruple; sold through standard grocery outlets on the West coast. *Sales Management* 52:90-2 Je 15 '43

Don't apologize for substitutes, brag about them! A. P. Ames. *il Ptr Ink* 204:18-19+ JI 16 '43

Food firms rally to Uncle Sam's call; rationing ads blanket Nation. *il Sales Management* 52:20-3 Mr 15 '43

Food industry plans great ad campaign to push OWI program. *Ptr Ink* 202:58 F 12 '43

Food industry to survey public opinion, launch ad program. *Ptr Ink* 204:45+ Ag 20 '43

Food packers reveal how advertising helps solve their wartime problems; Printers' Ink survey. *Ptr Ink* 204:26, 28+ Ag 13 '43

Government and food industry team up in huge 5-way national food drive. *il Sales Management* 52:30-1 Mr 1 '43

Ladies like kisses, and recipes. P. Murray. *il Ptr Ink* 203:20-1+ Ap 23 '43

Let food take a tip from the durables; change price-appeal. J. Mack. *il Ptr Ink* 204:23-4 JI 30 '43

FOOD industry and trade—Advertising—Cont.

Meat, fat and cheese firms compete for red point stamps; Armour, Crisco, Kraft and other firms publish menus, etc. *Il* *Ptr Ink* 203:23-4 *Ap* 2 '43
 Modern design and typography does a job; Libby, McNeill & Libby Kitchen chatter. *L. Barfuss. Il Inland Ptr* 111:34-5 *My* '43
 Nation must eat. *F. LaClave. Ptr Ink* 202:17-19+ *Ja* 15 '43

No cinch getting rationed foods to pose for advertising pictures. *Ptr Ink* 203:70 *Ap* 9 '43

Nutrition campaign is launched; many advertisers to tie in. *Sales Management* 52:62 *Ap* 15 '43

Posters help balance nation's market basket; Del Monte Buy-for-a-week plan. *Il Mod Packaging* 16:77-8+ *Ja* '43

Posters teach food saving. *Il Mod Packaging* 16:63 *Ja* '43

Rationing, an opportunity for bread manufacturers; after the war, battle of brands will begin again. *L. A. Johnson. Ptr Ink* 204:26 *Ja* 9 '43

Remember us when you bake your own; B & M advertises to maintain name and quality identity of baked beans. *C. S. Morrill. Il Mod Packaging* 16:61+ *F* '43

War dumps host of food puzzles into GF experimental kitchens. *Sales Management* 52:30+ *Ap* 1 '43

See also

Advertisements—	Flavoring materials—
Cookbooks and recipes	Advertising
Canned food—Advertising	Meat industry and trade—Advertising
Cereals, Prepared—Advertising	Milk trade—Advertising
	Oleomargarine—Advertising

Directories

Frozen foods directory, 1943. *Food Ind* 15:79-98 *N* '43

Finance

Crisis on the home front; effects of new OPA price regulations and subsidies on retailing profits. *L. Stern. Mag of Wall St* 72:173-5+ *My* 29 '43

Food wholesalers' profits about 3% of sales. *Barron's* 23:6 *S* 6 '43

Key factors in food processors' outlook. *Barron's* 23:8 *Mr* 8 '43

Middlemen and subsidies. *Barron's* 23:8 *My* 24 '43

More uncertainties for food companies. *Barron's* 23:7 *Ja* 5 '43

See also

Libby, McNeill and Libby Standard brands, inc.

Securities

Diverse effects of rationing on food securities and related issues. *L. O. Hooper. Il Mag of Wall St* 72:15-17+ *Ap* 17 '43

Food company prospects; position of leading stocks. *S. Devlin. Il Mag of Wall St* 72:408-13+ *Ja* 24 '43

Lower earnings for most food companies; position of leading stocks. *Il Mag of Wall St* 71:476-9+ *F* 6 '43

Service

War dumps host of food puzzles into GF experimental kitchens. *Sales Management* 52:30+ *Ap* 1 '43

Statistics

Foodstuffs, 1938-1941. Survey of Cur Business 1942 Sup p115-27 [supplemented in monthly numbers]

Algeria

Algerian food exports, 1938 and 1941. *Economist* 143:661 *N* 28 '42

Argentina

Food preservation in Argentina, 1941-42 and 1942-43. *For Comm W* 13:25 *O* 16 '43

British Columbia

Fruit products and canned foods; technical and business problems of industry. *Can Chem & Process Ind* 27:129 *Mr* '43

Great Britain

British food industry geared to war economy. *Il Food Ind* 15:51+ *F* '43

British food subsidies; weapon against inflation. *J. Backman. Il Dun's R* 51:12-16, 36-7 *Mr* '43

British food technologists improvise to meet shortages; manufacturers of frozen desserts kept on making products acceptable to consumers without "essential" ingredients. *H. B. Cronshaw. Food Ind* 15:57+ *F* '43

See also

Food supply—Great Britain

South Africa

Canning industry, Union of South Africa. *For Comm W* 11:31-2 *Je* 12 '43

Sweden

Sweden's international foodstuff business. *G. Olson. Il For Comm W* 12:8-9+ *Ag* 7 '43

United States

Food in 1942 and 1943. *C. Francis. Comm & Fin Chr* 157:378 *Ja* 28 '43

Food men urge a unified control to gear operations to war tempo. *Sales Management* 51:44, 46 *D* 1 '42

Food merchants confident after month of rationing. *Ptr Ink* 203:67+ *Ap* 2 '43

Grocery manufacturers adopt 8-point program. *Ptr Ink* 203:67 *Je* 18 '43

If you want that army order, here's the right procedure. *Il Food Ind* 15:55-6 *O* '43
 Outlook brighter for some processors. *Barron's* 23:6 *My* 31 '43

Wanted: one czar. *Business Week* p29-30 *N* 28 '42

WPB issues L-103 program standardizing glass pack; closures and packing quotas. *Food Ind* 15:83-4+ *My* '43

What subsidies' rollback on food items hangs fire; box score on wartime subsidies. *Business Week* p16-17 *My* 22 '43

See also

Food administration	United States—
Food supply—United States	Food and drug administration
General mills, inc.	

FOOD inspection. See Food adulteration and inspection

FOOD laboratories

Food requirements for overseas use. *V. O. Wodicka. Il Ind & Eng Chem* 35:12-15 *Ja* '43

Rationing and experimental laboratories. *Science* 97:548 *Je* 18 '43

FOOD laws and legislation

Cold storage of food. *H. C. Lythgoe. bibliog Il Ind & Eng Chem* 35:29-38 *Ja* '43

See also

Grade marks	Milk supply—Laws and regulations
Labels	

FOOD machinery

Materials made available for more food equipment. *Il Food Ind* 15:89-90 *O* '43

Why not standardize food machinery? *J. C. Haas. diags Food Ind* 15:61+ *S* '43

FOOD mixes

Food mix products are kicked upstairs by sugar shortage. *Il Sales Management* 51:46+ *N* 15 '42

FOOD packages

Food dehydration and air conditioning; packaging; reference section. *Heat & Ven* 39:49-50 *D* '42

Food packages keep pace with wartime restrictions. *E. Shaw. Il Food Ind* 15:64-7 *Ap* '43

Food packaging for overseas use. *R. R. Melson. Il Ind & Eng Chem* 35:16-19 *Ja* '43

Permeability of flexible materials. *L. W. Elder. Il Mod Packaging* 16:69-71 *Ja* '43

Permeability of transparent wrappings. *C. R. Oswin. bibliog Soc Chem Ind J* 62:45-8 *Ap* '43

Pliofilm; its properties and future possibilities. *Il Mod Packaging* 17:103-7 *O* '43

Protection against moisture vapor, a must for army packages. *J. d'A. Clark. Il Food Ind* 15:75-8 *Ap* '43

FOOD packages—Continued

Protection of foodstuffs against war gases. S. H. Katz, bibliog *il Ind & Eng Chem* 35: 20-3 Ja '43; Same, without bibliog. *Mod Packaging* 16:80-3 F '43
See-through inspection with the fluoroscope. *il Mod Packaging* 17:66-7 S '43

See also
Food containers

Testing

Improvement needed in technic for testing food packages. T. A. Schwarz. *Food Ind* 15: 68-9+ S '43

FOOD poisoning

Study of an outbreak of food poisoning in a hospital in Galveston, Tex. L. L. Lumsden, C. A. Nau and F. M. Stead. *Pub Health Rep* 58:1497-1507 O 8 '43

FOOD preservation

Modern sanitation pays dividends; use of new solution (Roccal) on fresh produce reduces bacteria and retards dehydration. J. R. Adams. *il Refrig Eng* 44:383-4 D '42
1942 report of technical committee no.9; food processing and refrigeration. bibliog *Refrig Eng* 44:390-1 D '42
Preservation of food; abstract. L. H. Lampitt. *Chem & Ind* 61:461-2 N 7 '42
Preservation of foodstuffs; symposium. *il Ind & Eng Chem* 35:12-105 Ja '43

See also
Canned food
Canning and pre-serving
Cold storage
Drying (fruits and vegetables)
Food, Dried
Food, Frozen
Milk—Preservation
Vegetables, Frozen

Bibliography

1942 report of technical committee no.10; agricultural products refrigeration. *Refrig Eng* 44:391-2 D '42

FOOD preservatives

Stabilization of fats and fatty foods. H. S. Mitchell and H. C. Black. bibliog *Ind & Eng Chem* 35:50-2 Ja '43

FOOD research

Present-day demands on the library of the research department of a food processing organization; General mills, inc, Minneapolis. M. J. Voight. *Special Lib* 34:272-3 Jl-Ag '43
Research work in the food industry. F. H. Banfield. bibliog *Chem Age (Lond)* 48:51-4 Ja 9 '43
Specific heats of foodstuffs. B. E. Short, W. R. Woolrich and L. H. Bartlett. *Refrig Eng* 44:385-8 D '42
War forces progress in food processing. E. Hardy. *il Food Ind* 14:39+ D '42

See also
Nutrition foundation

FOOD stabilizers

Research discovers new stabilizer; extract of quince seed. G. Hadary. *il Food Ind* 15:76-7 F '43

FOOD stamp plan

Food stamp plan; termination. S. Herman. *J Business* 16:173-94 Jl '43

FOOD stores

See also
Candy stores
Grocery stores
Market stores

FOOD supply

Food for victory, the 1943 goals. *Business Week* p90 D 5 '42
Food situation, May, 1943. J. D. Black. *Harvard Business Rev* 21 no4:397-414 [Jl] '43
Food stamp plan; termination. S. Herman. *J Business* 16:173-94 Jl '43
International food bank urged by British at food conference; favor greater production. *Comm & Fin Chr* 157:1976 My 27 '43
Latin America grows its own, but little more. *Business Week* p36+ Ap 10 '43
Lend-lease shipments of point-rationed goods. *For Comm W* 10:37 Mr 13 '43
More food without speculative expansion. E. B. Powell. *Bankers Mo* 60:310+ Jl '43
Nation's food; fish as food; the biology of the sea fisheries. R. S. Wimpenny. bibliog *Chem & Ind* 62:230-3 Je 19 '43

Nutrition and food supply: the war and after.

J. D. Black, ed. *Ann Am Acad* 225:1-221 Ja '43
Post-war food supplies. *Science* 97:215 Mr 5 '43

Production of the meat, milk and eggs to win the war and the peace. H. W. Jakeman. *Science* 97:244-5 Mr 12 '43

Role of food in post-war reconstruction. J. B. Orr. *Int Labour R* 47:279-96 Mr '43

Sees 50% increase in army, lend-lease food. *Comm & Fin Chr* 156:1807 N 19 '42

Trends in agriculture in relation to nutrition. E. J. Russell. *Chem & Ind* 62:210-14 Je 5 '43

Two stages of conversion to peace will require differing approaches. D. Tyerman. *Barron's* 23:8 Ag 2 '43

Utilization of aquatic food resources; fresh water plankton. C. Juday. *Science* 97:456-8 My 21 '43

Wartime problems and progress discussed by IFT. *Food Ind* 15:61-3+ Jl '43

World food plans. *il Fortune* 28:158-61+ N '43

See also
Milk supply
United nations food conference, 1943
World war, 1939—
Food question

Africa, North

Food production in French North Africa. *Science* 97:sup10 Mr 12 '43

North Africa's food. *Economist* 144:179-80 F 6 '43

North Africa's food-supply problems. *il For Comm W* 10:10-11+ Mr 27 '43

Asia

Food situation in Asia. W. I. Ladejinsky. *Ann Am Acad* 225:91-3 Ja '43

Australia

Australia campaigns to increase food production. *For Comm W* 10:24 Ja 30 '43

Australian government takes measures to increase food production. *For Comm W* 12: 33 Ag 21 '43

Brazil

Exports possible; Brazilians attack malnutrition problem with aid of food dehydrators. *Business Week* p79-80 N 6 '43

New agency charged with supervision of supplies of foodstuffs and articles of prime necessity in the Amazon valley. *For Comm W* 10:12-13 Ja 30 '43

China

China's food. *Economist* 145:205-6, 208 Ag 14 '43

Food control in China. *Int Labour R* 47:486-9 Ap '43

Food situation in China. *Monthly Labor R* 56:1184-7 Je '43

Europe

Europe food supplies 3% below last year. *Comm & Fin Chr* 157:1025 Mr 18 '43

Europe's food dilemmas. *il For Comm W* 10: 3+ Mr 20 '43

Food rations in Axis and occupied countries, 1943. *Monthly Labor R* 57:37-9 Jl '43

Food situation in a world at war; symposium. *Ann Am Acad* 225:83-91 Ja '43

Hunger spreads over Europe. *Fortune* 27:84-5+ Ja '43

Finland

Situation in Finland. *For Comm W* 12:21-2 Jl 31 '43

Germany

German practice; system of food rationing. *Economist* 143:552 O 31 '42; Correction. 143: 585 N 7 '42

German supplies of edible fats. R. Crone. *For Comm W* 13:8-9+ N 6 '43

Germany at war; food changes. *Economist* 144:728 Je 5 '43

Winter in Germany; test of self-sufficiency. *Economist* 143:657-8 N 28 '42

Great Britain

Britain eats to fight; Lord Woolton, Food minister, has turned potential disaster into nutritional triumph. *il Fortune* 27:82-7+ Ap '43

FOOD supply—Great Britain—Continued

Britain is feeding her workers well, and all for a shilling. *F. B. Barton, il Factory Management* 101:112-15 O '43
 Britain's food possibilities: chemical fertilisers aid towards self-sufficiency. *Chem Age (Lond)* 47:532 D 12 '42
 British food rationing. *J. Backman, il Dun's R* 50:12-16+ D '42
 Cabbages and greens. *Economist* 143:646-7 N 21 '42
 Differential food rationing. *Economist* 143:552 O 31 '42
 Food in Britain: dehydration major wartime achievement. *E. Murphy, Am Gas Assn Mo* 25:91-2 Mr '43
 Food situation in the United Kingdom. *E. M. H. Lloyd, Ann Am Acad* 225:83-5 Ja '43
 Food situation in United Kingdom. *For Comm W* 11:30-1 My 22 '43
 Food strategy. *Economist* 144:8 Ja 2 '43
 Foodstuffs, 1942; imports, home production, rationing. *Economist* 144:sup16, sup18-19 Mr 13 '43
 How British rationing charts ours. *Barron's* 23:6 Ja 4 '43
 Wartime feeding of industrial workers; British and American programs. *R. Goodhart, Ann Am Acad* 225:116-21 Ja '43

See also
Agriculture—Great Britain

India

Food control in India. *Int Labour R* 47:360-4 Mr '43
 Food for the masses. *Economist* 145:460 O 2 '43
 Indian food. *Economist* 145:338-9 S 4 '43
 India's food position. *Economist* 144:145-6 Ja 30 '43
 Trial in India. *Economist* 145:42 JI 10 '43

Italy

Food for Italy. *Science* 98:sup10 O 8 '43
 Italy's food, in war and peace. *P. M. Copp, For Comm W* 12:3-5+ Ag 28 '43

Latin America

Food for the Americas; hemisphere view of problems, readjustments, and objectives. *J. C. McClintock, il For Comm W* 10:3-5+ F 20 '43
 Food situation in a world at war; the other Americas. *P. N. Almonacid, Ann Am Acad* 225:93-5 Ja '43
 Latin America grows its own, but little more. *Business Week* p36+ Ap 10 '43

Near East

Middle East. *Economist* 144:230-1, 319-21 F 20, Mr 13 '43

Nigeria

Situation in Nigeria. *For Comm W* 9:27-8 D 5 '42

Norway

What Norway's foodstuffs mean to the Nazis. *For Comm W* 12:27 JI 3 '43

Palestine

Shortages in Palestine. *Economist* 144:240 F 20 '43

Philippine Islands

Philippines aim at self-sufficiency in foodstuffs, say Japs. *For Comm W* 12:33 S 4 '43

Russia

Russia at war; agriculture and food. *Economist* 144:729 Je 5 '43
 Russian food situation. *L. Volin, Ann Am Acad* 225:89-91 Ja '43
 Ukraine fighting affects food problem. *Barron's* 23:6 S 6 '43

Sweden

Bread grain rationed in Sweden. *For Comm W* 9:24 N 21 '42

Switzerland

Food situation in Switzerland. *For Comm W* 10:19 Ja 2 '43
 Switzerland's food. *Economist* 143:606 N 14 '42

United States**Africa rewrites food program. Business Week**

p15-16 N 21 '42
 Army's nest egg. *Business Week* p19-20 Mr 20 '43
 Bread or bacon? it's up to Davis. *Business Week* p14-15 Je 5 '43
 Committee to advise on war food program. *Comm & Fin Chr* 157:74 Ja 7 '43
 Diets to suffer? feed shortage threatens. *Business Week* p 17 Je 12 '43
 Diverse effects of rationing on food securities and related issues; causes for the shortage of food. *L. O. Hooper, il Mag of Wall St* 72:15-17+ Ap 17 '43
 Electricity on the farm and its relation to the national food production program. *C. L. Osterberger, Edison Elec Inst Bul* 11:23-4+ Ja '43
 Farm prices and the food situation. *Nat City Bank* p38-9 Ap '43
 Food crisis comes this year; shortages of men and materials threaten crop and livestock production. *il Business Week* p15, 17 F 27 '43
 Food for all, but not too much. *Business Week* p15-17 Mr 27 '43
 Food production outlook shapes up further. *Barron's* 23:9 Ap 26 '43
 Food production programs of the United States Department of agriculture. *C. M. Hardin, Ann Am Acad* 225:191-200 Ja '43
 Food prospects better than forecast. *Nat City Bank* p111 O '43
 Food prospects grow worse. *Business Week* p15-16 My 29 '43
 Food shortage in America; abstract. *L. Bromfield, Science* 98:sup10 JI 2 '43
 Food supplies. *Survey of Cur Business* 23:12 My '43
 Food supplies for our civilian population. *J. M. Cassels and F. L. Hall, Ann Am Acad* 225:106-15 Ja '43
 Food supply of the United States. *J. D. Black, Ann Am Acad* 225:80-2 Ja '43
 Food, war weapon! *E. B. Wright, Am Inst Banking Bul* 24:5-6+ O '42
 Food; what we shall get in '43. *il Fortune* 26:120-3+ D '42
 For 1944's food; Jones calls for increase in acreage. *Business Week* p104 JI 17 '43
 For the civilian, 6% less to eat. *Business Week* p15 Ap 24 '43
 Further shift in eating habits looms. *Barron's* 23:7 Je 14 '43
 How much food for civilians. *Barron's* 23:6 Ja 25 '43
 How much food? production and civilian consumption of major foods as a percentage of 1935-1939; graph. *Business Week* p16 N 6 '43
 How we stand on canned goods supplies. *Business Week* p 16 Ja 9 '43
 Hunger ahead? farm manpower and machinery shortages. *il Nat Pet N* 35:36, 38-40 Mr 3 '43
 Industrial companies urged to aid workers avert food shortage. *il Steel* 112:54-5 Mr 22 '43
 Meat 'extenders. *Business Week* p36+ N 21 '42
 1943 food supplies: a preview. *Business Week* p18 F 27 '43
 1945 to mark turn in food program. *Business Week* p19 O 16 '43
 Oil marketers must help farmers meet food production goals. *il Nat Pet N* 35:34-6 Ja 20 '43
 Our food industry's new status; full fledged war enterprise. *Barron's* 22:6 D 14 '42
 So food will win the war, eh? *il Fortune* 27:116-19+ Je '43
 Stocks of selected foodstuffs, end of month, Feb. 1942 and 1943; chart. *Survey of Cur Business* 23:2 Ap '43
 Supply and price situation, 1942. *Fed Res Bul* 29:7-12 Ja '43
 Uncle Sam sells farmers on value of maintenance; Food for freedom campaign. *il Nat Pet N* 35:31-2 F 17 '43
 Victory push means belt tightening. *Barron's* 22:6 N 30 '42
 Volume outlook of food industries varies. *Barron's* 23:6 S 13 '43
 Wartime eating; with chart showing per capita consumption of various foods in 1942. *Barron's* 22:1 D 21 '42

FOOD supply—United States—Continued

- Wartime feeding of industrial workers; British and American programs. R. Goodhart. *Ann Am Acad* 225:116-21 Ja '43
 Where our food goes; graphs. *For Comm W* 13:25 O 23 '43
 Why the food crisis? *Trusts & Estates* 77:191-2 S '43
 Wickard given full control over nation's food; Agriculture department units reorganized. *Comm & Fin Chr* 156:2070 D 10 '42
 You can't eat indexes. L. V. Burton. *Food Ind* 15:47-8 Je '43

See also
 Agricultural administration Food administration
 Food—Rationing Milk supply

FOOD warmers, Gas. *See* Gas food warmers

FOOT

Foot symptoms; instruction and exercises for their relief. P. C. Rizzo. *Ind Med* 12:80-1 F '43

What's wrong with your feet? minor foot ailments and how to deal with them. M. B. Howorth. *il Consumers' Research Bul* 11:18-20 Je '43

See also
 Shoes, Safety

FOOT bridges. *See* Bridges, Foot

FOOT socks. *See* Hosiery

FOOT tubs

Army foot tubs. L. T. Bordner. *il diag Mod* *Plastics* 20:82-3+ Je '43

FOOTINGS, Concrete

Bond in isolated footings; question; answer. T. D. Mylrea. *diags Am Concrete Inst J* 15:65-8 S '43

Deep footings built without forms; factory for the Westinghouse electric & manufacturing co. H. A. Saurbrey. *il Eng N* 131:142-3 Ji 15 '43

How to specify for well built poured concrete basement walls, footings. *il diags Am Bld* 65:56+ S '43

Practical design of foundations for vertical and horizontal vessels. J. A. Shjarback. *diags Nat Pet N* 35 pt 2:R459-60, R462-3+ O 6 '43

FORAGE. *See* Feeding and feeding stuffs

FORAGE plants

Fluorine content of plants fertilized with phosphates and slags carrying fluorides. W. H. Macintire and others. *bibliog il Ind & Eng Chem* 34:1469-79 D '42

See also
 Feeding and feeding stuffs
 Grasses

FORAMINIFERA, Fossil

Bearing of foraminifera and ostracoda on lower cretaceous Fredericksburg-Washita boundary of north Texas. F. E. Lozo, Jr. *bibliog il diags maps Am Assn Pet Geol-*
ogists Bul 27:1060-80 Ag '43

FORCE and energy

See also
 Power (mechanics) Quantum theory
 Pressure Strains and stresses

FORCEPS

Forceps with platinum-covered tips. E. W. Balis and H. A. Liebhafsky. *Ind & Eng Chem Anal* ed 16:350 My 15 '43

FORD, Edsel, 1893-1943

Edsel Ford death strikes hard at top administrative ranks in company. S. H. Brams. *Iron Age* 151:70, 72 Je 3 '43

Edsel Ford leaves most of estate to foundation. *Comm & Fin Chr* 157:2189 Je 10 '43
 Portrait. *Mach* 49:122 F '43

FORD, Henry, 1863-

'43 Ford; proprietor of the Rouge submerges his pacifism for the second time and goes back to work. *por Fortune* 27:112-13+ F '43

More industry needed to build basis of good society; statement on his 80th birthday. *Comm & Fin Chr* 158:497+ Ag 5 '43

FORD, J. B. company. *See* Wyandotte chemicals corporation

FORD motor company

Edsel Ford death strikes hard at top administrative ranks in company. S. H. Brams. *Iron Age* 151:70, 72 Je 3 '43
 Ford applies mass production to big bombers. *il diags Am Mach* 87:93-108 F 4 '43
 Ford gives cars away; makes profits on spare parts; pictograph. *Sales Management* 52:52 Ag 15 '43
 Ford holds on; still controls company through issue of voting stock. *Business Week* p 19-20 Je 12 '43

Ford saws wood; expanding lumber output. *Business Week* p42+ O 30 '43

Ford sets pace; signs with labor for the duration. *Business Week* p 101 N 14 '42

Ford war plant facilitates straight-line production. J. Geschelin. *il Automotive & Aviation Ind* 87:18-24+ D 1 '42

Foremen rebel; Ford supervisors' walkouts. *Business Week* p99-100 Je 26 '43

Henry Ford at 80 reassumes presidency of motor company after son's death. *Steel* 112:85-6 Je 7 '43

More industry needed to build basis of good society. H. Ford. *Comm & Fin Chr* 158:497+ Ag 5 '43

Supervisory employees stage first foremen's strike at Ford. *Automotive & Aviation Ind* 88:50+ Ji 15 '43

Unions move up; two independents seek to organize Ford's plant guards. *Business Week* p98-9 Ap 10 '43

Vacations ordered. *Comm & Fin Chr* 156:2038 D 7 '42

When Ford introduced the Model A. G. W. Cecil. *Adv & Sell* 36:45-6 S '43

Willow Run; Ford's bomber plant. C. O. Herb. *il Mach* 49:121-43 F '43

Willow Run production up to schedule but not up to capacity. *Automotive & Aviation Ind* 88:39+ Mr 1 '43

Willow Run set-to; union officials attack bomber plant's output record. *Business Week* p17-18 O 9 '43

FORD motor company, England

1942 accounts. *Economist* 144:765 Je 12 '43

Ordinary general meeting, 14th, London. *Economist* 144:802 Je 19 '43

FOREIGN advertising. *See* Advertising, Foreign; Radio advertising, Foreign**FOREIGN economic coordination, Office of.** *See* United States—Foreign economic coordination, Office of**FOREIGN exchange**

Allies shape world recovery; Keynes and White plans for currency stabilization compared. G. B. Collingwood. *Mag of Wall St* 72:21+ Ap 17 '43

Canadian delegation confers in Washington on post-war currency plan. *Comm & Fin Chr* 157:1589 Ap 29 '43

Dependable foreign exchange system necessary to post war functioning of private enterprise. J. S. Smith. *Comm & Fin Chr* 157:1597 Ap 24 '43

Dollar as the index of victory. G. Riviere. *Mag of Wall St* 72:288-9+ Je 26 '43

Foreign exchange rates. Published in weekly Monday numbers of Commercial & financial chronicle

Foreign exchange rates, 1934-1941, and monthly Dec. 1941-Nov. 1942. *Fed Res Bul* 29:105 Ja '43 [cont monthly]

Foreign exchange rates, 1938-1941. Survey of Cur Business 1942 Sup p71 [supplemented in monthly numbers]

Future of the exchanges. *Economist* 144:3-5 Ja 2 '43

Keynes proposes international currency union, based on bancor. *Comm & Fin Chr* 157:1388-9 Ap 15 '43

Merchanting under exchange control. *Economist* 145:330+ S 4 '43

Monetary stability and clearing arrangements in the western hemisphere. *For Comm W* 11:15 My 15 '43

Money and the exchanges. *Economist* 144:172-3 F 6 '43

Morgenthau drops request for extension of power to devalue dollar further; extension of the stabilization fund. *Comm & Fin Chr* 157:1497+ Ap 22 '43

Morgenthau outlines proposed post-war international currency stabilization plan. *Comm & Fin Chr* 157:1305+ Ap 8 '43

FOREIGN exchange—Continued

- New Netherlands-Belgian monetary agreement looks to post-war. For *Comm W* 13:20 O 23 '43
- Potential security profits from currency stabilization; Canadian and British stocks. G. Collingwood. *il Mag of Wall St* 72:123-5+ My 15 '43
- Proposals for international exchange stabilization; analysis of British, Canadian, French and United States plans. L. B. Jack. *Int Labour R* 48:157-73 Ag '43
- Stabilization fund bill signed by President. *Comm & Fin Chr* 157:1780 My 13 '43
- Stabilization fund bill with restricting amendment is approved by Congress. *Comm & Fin Chr* 157:1588 Ap 29 '43
- Stabilization fund legislation. *Fed Res Bul* 29:493 Je '43
- Treasury plan for stabilizing currency of United nations outlined by Morgenthau; text. *Comm & Fin Chr* 157:1300, 1303 Ap 8 '43
- Treasury sticks to unitas. *Business Week* p106 Ag 21 '43
- U.S. and Mexico extend stabilization agreement. *Comm & Fin Chr* 158:134 JI 8 '43
- Uniting the francs; fixing the lira rate. *Economist* 145:54 JI 10 '43
- World bank publishes foreign exchange rules of various countries. *Comm & Fin Chr* 158:927 S 2 '43

See also

- Balance of payments Money—International aspects
- Bank for international settlements World war, 1939—Freezing of assets

FOREIGN insurance association. American. See American foreign insurance association

FOREIGN investments. See Investments, Foreign

FOREIGN language editions. See Periodicals—Foreign language editions

FOREIGN ministers conference, Moscow, 1943. See World war, 1939—Diplomatic history

FOREIGN owned property. See Investments, Foreign (in United States)

FOREIGN trade. See Commerce; Export trade; Imports; United States—Commerce

FOREIGN trade zones. See Free ports and zones

FOREIGNERS. See Aliens

FOREMAN'S association of America

- Foremen rebel; Ford supervisors' walkouts. *Business Week* p99-100 Je 26 '43
- Foremen triumph. *Business Week* p90+ Mr 6 '43
- Foremen voting; scheduling five strike ballots in Detroit and Cleveland. *Business Week* p96 O 30 '43
- Foremen's test; seeks vote for strike in NLRB ballot at Murray. *Business Week* p68-9 Ag 7 '43
- G.M. seeks help. *Business Week* p98-9 Mr 27 '43
- Sleeping giant comes to life. *il Business Week* p102+ Ap 17 '43

FOREMEN

- Additional compensation for supervisors. *Management R* 32:273-5 JI '43
- Boss showdown; NLRB to weigh petition of Boeing foremen. *Business Week* p70 Ap 3 '43
- Factory council makes foremen managers; Huffman manufacturing company, Dayton. H. M. Huffman, Jr. *il Factory Management* 101:111-13 Je '43
- Finding a new foreman for the metal finishing department. F. V. Faulhaber. *Metal Finishing* 41:491-2 Ag '43
- Foreman as manager. W. Puckey. *Electrician* 131:135 Ag 6 '43
- Foremen freed; Shell's supervisors finally withdrawn from workers' bargaining unit. *Business Week* p84+ S 18 '43
- Foremen; go all out! H. Heyman. *Textile World* 93:98-9 Ja '43
- Foremen's budgets save 20 percent; Toledo scale company. G. M. Richard. *Factory Management* 101:90-1 S '43
- How Britain develops forewomen; abstract. J. Cunliffe. *Management R* 32:176-7 My '43

Management analyzes problems in ranks of foremen. T. C. Campbell. *Iron Age* 151:83-5 Ap 15 '43

Personnel helps for foremen. L. Marion. *Factory Management* 101:115 My; 107 Je; 116 JI; 96 S; 131 O; 118 N '43

Sleeping giant comes to life; Foreman's assn. of America. *Business Week* p102+ Ap 17 '43

Some tips for those who handle men. E. H. Helliwell. *il Textile World* 93:60-1 Mr '43

Supervisory employees stage first foremen's strike at Ford. *Automotive & Aviation Ind* 89:50+ JI 15 '43

Two pledges for foremen. A. L. Kress. *Factory Management* 101:110-11 My '43

Union membership and collective bargaining by foremen. *Monthly Labor R* 56:1049-53 Je '43

Unionization of foremen. H. R. Northrup. *Harvard Business R* 21 no4:496-504 [JI] '43

See also

- Mine foremen
- Supervisory workers
- also Foreman's association of America

Bibliography

Foremanship for war production. Cleveland Pub Lib *Business Information Bur Bul v* 13, no 5:1-4 N '42

Training

Demonstrating to foremen how management helps. *il Factory Management* 101:113-16 S '43

Foreman and the manpower problem; Pratt & Whitney division of United aircraft; motion picture used to supplement program of education in foremanship. *il Aero Digest* 43:154, 157+ S '43

Foreman training sound slidefilm made available to glass industry. L. S. Metcalfe. *il Class Ind* 24:166-7 Ap '43

Foremen first! safety training. F. E. Bedale. *Safety Eng* 85:24-7+ My '43

Job methods training course proves beneficial; Allegheny Ludlum steel corporation. *Marine Eng* 48:190 Je '43

Quick course for foremen. M. F. Stigers. *Factory Management* 101:114-15+ My '43

Remington Arms: the rise of the foreman; he is sergeant of production on industry's battlefield. *il Fortune* 27:93-6+ Ap '43

Slidefilms for foreman training. L. S. Metcalfe. *il Paper Ind* 25:274-5 Je '43

Supervisory conferences as a wartime training aid. O. Tead. *Advanced Management* 7:185-9 O-D '42

Supervisory training is given new foremen; General electric company's Bridgeport plant. *il Am Mach* 87:104-6 S 16 '43

Training of welding foremen. F. H. Achard. *Welding J* 22:113-15 F '43

Using the case method in supervisory training. R. J. Greenly and E. B. Mapel. *Factory Management* 101:112-13 Mr; 69 Ap; 117 My; 117 Je; 119 JI; 128 S; 121 O '43

See also

- Supervisory workers
- Training

FOREMEN'S conferences

Supervisory conferences as a wartime training aid. O. Tead. *Advanced Management* 7:185-9 O-D '42

FORENSIC chemistry. See Chemistry, Legal

FOREST conservation

Liquidating the capital of our forests. P. D. Kelleter. *Ry Age* 114:950 My 15 '43

Plan to ensure the foundation; statement of forest policy by the Canadian society of forest engineers. *Pulp & Pa of Can* 44:519-22 Je '43

Quebec forestry association issues plan for conservation of forests. *Paper Tr J* 116:10 Mr 25 '43

FOREST fire patrol

Fire-fighting amplitude modulation network. L. Winner. *il Radio N* 29:11-13+ Ap '43

1942 fire season in Quebec. *Pulp & Pa of Can* 44:383-5, 387+ Ap '43

FOREST fires

Fire in the forest. C. H. Rice. *il Pulp & Pa of Can* 44:381-2+ Ap '43

Forest fire prevention in New Brunswick. *Pulp & Pa of Can* 44:389 Ap '43

FOREST fires—Continued

Forest fires; how they start and how they are fought. E. E. Shaw. *il Pulp & Pa of Can* 44:591-4 J1 '43

Progress in fire control and fire research. H. T. Gisborne. *Pulp & Pa of Can* 44:454-6, 524, 595, 676-7, 749-52 My-S '43; Discussion. R. Headley. 44:752, 754 S '43

FOREST management

Need for new policy of forest management. E. Wilson. *il Pulp & Pa of Can* 44:741-2 S '43

Science enters the woods; good forestry practice can provide permanent pulp and paper supply. C. E. Randall. *il Sci Am* 169:64-6 Ag '43

FOREST products

Swedish forest products. O. Cyren. *Science* 97:394-5 Ap 30 '43

See also

Acetic acid	Rubber
Gums and resins	Turpentine
Lumber	Wood
Naval stores	Wood pulp
Pine	Wood waste

FOREST roads

29-mile streamlined logging road. *il Roads & S* 86:58, 60-2+ S '43

FOREST service. See United States—Forest service**FOREST surveys**

Aerial photography and its use in timber inventories. A. A. Smith. *Pulp & Pa of Can* 44:457-8 My '43

Transect method of estimating forests area from aerial photograph index sheets. P. R. Kramer and E. E. Sturgeon. *Pulp & Pa of Can* 44:34-6 Ja '43

FOREST tree seed. See Seeds**FORESTS and forestry**

How cutting affects forest growth. A. B. Recknagel and M. Westveld. *Pulp & Pa of Can* 43:966, 968 D '42

Nazis in the woodpile; how Germany seeks control of world's forests (condensed from Saturday evening post, Sept. 5, 1942, p19). E. Glesinger. *Pulp & Pa of Can* (Convention no) 44:189+ [F] '43

Science in the forest. G. H. Collingwood. *il Sci Am* 167:270-3 D '42

See also

Lumber trade	Rubber plants and
Lumbering	planting
Pine	Wood

Alaska

North for spruce; Alaskan forest wood needed for airplanes. *il Business Week* p58+ J1 17 '43

Australia

Engineers and the British empire; timber and wood pulp. M. Smith. *il Engineer* 176: 259 O 1 '43

Brazil

Commercial possibilities in Brazil's forest wealth. C. W. Shifko. *il map For Comm W* 11:10-11+ Ap 3 '43

British Columbia

Pulpwood operations in British Columbia. D. G. Stenstrom. *diags Pulp & Pa of Can* 44:270-3 F '43

Timber conditions changed in B.C. C. D. Orchard. *Pulp & Pa of Can* 44:746 S '43

Canada

European spruce sawly in 1942. R. E. Balch. *il Pulp & Pa of Can* 44:279+ F '43

Forestry mixes with farming. H. Kennedy. *Pulp & Pa of Can* 44:748 S '43

Our forest in war and in peace. T. A. Crerar. *Pulp & Pa of Can* 44:379-80 Ap '43

Plan to ensure the foundation; statement of forest policy by the Canadian society of forest engineers. *Pulp & Pa of Can* 44:519-22 Je '43

Plan to perpetuate Canada's forests. *Pulp & Pa of Can* 44:670+ Ag '43

See also Canadian pulp and paper association—Woodlands section

Great Britain

50-year plan for forestry. *Economist* 144:766 Je 12 '43

Latin America

New director of tropical forestry named. *For Comm W* 11:18 My 15 '43

New Brunswick

Forest fire prevention. *Pulp & Pa of Can* 44: 389 Ap '43
Forests and people of New Brunswick. F. W. Pirie. *il Pulp & Pa of Can* 44:691, 693 Ag '43

Nova Scotia

Forests basis of industry in Nova Scotia. *Pulp & Pa of Can* 44:694 Ag '43

Ontario

Ontario forest department activities and plans. *Pulp & Pa of Can* 43:958-60 D '42
Ontario forest industry seeks better utilization. *Pulp & Pa of Can* 44:743 S '43

Persia

Iran's forest products. *For Comm W* 11:39 My 1 '43

Quebec

Estimation of forest insect damage; with particular reference to dendroctonus piceaperda Hopk. R. E. Balch. *bibliog Pulp & Pa of Can* 43:900-6; Comments. S. A. Graham. 906 N '42

Forest management in Quebec. *Pulp & Pa of Can* 44:748 S '43

1942 fire season. *Pulp & Pa of Can* 44:383-5, 387+ Ap '43

Quebec forestry association issues plan for conservation of forests. *Paper Tr J* 116: 10 Mr 25 '43

Some observations on a tour of the Montmorency forests. W. M. Robertson. *il Pulp & Pa of Can* 44:664-6 Ag '43

Southern states

Forest resources of South hold amazing potentialities for industry. W. T. White. *il Paper Tr J* 115:49-50, 53-4, 56-7 N 26 '42
Promoting forestry for freight revenue; Seaboard air line railway. C. A. Gillett. *il Paper Ind* 25:373-4 J1 '43
South as the Nation's source of timber. Q. T. Hardtner. *il Manuf Rec* 112:40-1+ Ag '43

United States

Community forests for revenue and recreation. *Pub Works* 74:49 S '43

Virginia

Virginia's pulpwood supply. S. G. Hobart. *il Paper Ind* 25:259-62 Je '43

Wisconsin

Wisconsin commission reports on survey. *Paper Tr J* 116:8 Mr 11 '43

FORGE shops**Equipment**

Automatic heat treating in a jobbing forge shop; General drop forge co. R. R. LaPelle. *il Iron Age* 151:52-3 Je 17 '43
Latest type of equipment at Chevrolet's new forge plant. J. Gescheim. *il Automotive & Aviation Ind* 89:20-3+ J1 15 '43

Power

Forge shop finds Diesels to be economical and dependable; with cost data. *il Diesel Power* 21:599-600 J1 '43

FORGERY*See also*

Bankers' blanket bond

FORGING

Advantages and limitations of die-forged machine parts. C. L. Tutt, jr. *il diags Product Eng* 14:521-5 Ag '43

Aluminum alloy forging dies; considerations in their design and use. R. F. Duff. *il S A E J* 51:sup23-4 N '43

Aluminum forging technique advanced. *S A E J* 51:sup24+ N '43

Buick forges aircraft engine parts. R. R. Darnton. *il diags Am Mach* 87:98-100 J1 22 '43

FORGING—Continued

- Cast dies for forging shells. P. Attenborough. *diags Metals & Alloys* 18:287-91 Ag '43
- Design of cold headed parts. H. Chase. *il diags Metals & Alloys* 18:292-7 Ag '43
- Forging aluminum alloys; abstract. *Metals & Alloys* 17:380+ F '43
- Forging, 1942. R. D. Moore. *Metals & Alloys* 17:71-2 Ja '43
- Forging of the 7.2 in. shell; Canadian car and foundry company. *Mech Handling* 29:222 N '42
- Forging operations and equipment; tabulation. K. Rose, comp. *Metals & Alloys* 18:319 Ag '43
- Forging 75mm. and 90mm. shell bodies. *il diags Am Mach* 87:94-106 Ja 7 '43
- Hammers of war; drop forges; the bottleneck. *il Fortune* 27:98-103+ Mr '43
- Increase of performance of hot work tools. W. Hauffer. *Iron Age* 152:44-8 S 2 '43
- Pressed pistons; technique employed by Specialoid limited in forging light wrought alloys. *il Automobile Eng* 33:349-59, 397-404 S-O '43
- Rules for die-forging show limits in design. C. L. Tutt, jr. *diags Product Eng* 14:576-80 S '43
- Shell forging. J. B. Nealey. *il diag Am Mach* 86:1383-6 N 26 '42
- War accelerates technical progress. *Steel* 112:348+ Ja 4 '43

See also

Hammers, Drop
Steel forgings
Welding

FORGING furnaces. See Furnaces, Forging

FORGING machinery

- Air hammers for forging; abstract. J. M. Weil and P. Hoffman. *Metals & Alloys* 17:172+ Ja '43
- All-hydraulic press is now adapted successfully to forging operations. A. F. Macconochie. *il diag Steel* 112:100-1+ My 17 '43
- Automatic forging of 90-mm. shells; General American transportation corporation. *il Mach* 49:181-3 Ap '43
- Bliss 1100-ton hydraulic forging press. *il Am Mach* 87:121 O 28 '43
- Forging shell at Ambridge. A. F. Macconochie. *il diags Steel* 113:82-4, 86, 95 Ag 30 '43
- How army ordnance forges 105-mm. high-explosive shell at Gadsden ordnance plant. A. F. Macconochie. *il diags Steel* 113:72-6+ JI 26 '43
- Shell forging and bulldozers. W. Trinks. *il diags Mech Eng* 65:639-42 S '43

See also

Hammers, Drop

FORGINGS

- Applying forgings in design. C. Carmichael. *il Machine Design* 15:97-9 F; 105-8 Mr '43
- Design of aluminum hammer forgings. *il diags Iron Age* 151:58-63 Je 17 '43
- Forgings producers, directory. *Machine Design* 15:207-10 O '43
- Roundtable: stop abuse of forged parts. *Ry Mech Eng* 117:363 Ag '43
- Standard tolerances for forgings up to 100 lb. *Metal Prog* 44:804 O '43

See also

Steel forgings

FORM letters. See Commercial correspondence—Form letters

FORMALDEHYDE

- Acrolein determination in the presence of formaldehyde and acetaldehyde by the polarographic method. R. W. Mosher. *bibliog Ind & Eng Chem Anal ed* 15:107-9 F 15 '43
- Dermatitis due to the formaldehyde resins; prevention and methods of control. K. E. Markuson, T. F. Mancuso and J. S. Soet. *Ind Med* 12:383-6 Je '43
- Oil company's chemicals-from-natural gas refinery makes formaldehyde, methanol and related compounds. flow chart *il Nat Pet N* 35 pt 2:R72-3 F 3 '43
- Optimum conditions for cross-linking animal fibres with formaldehyde and quinone. J. B. Speakman and P. L. D. Pellil. *bibliog Textile Inst J* 34:T70-6 S '43

Quantitative investigations of amino acids and peptides. E. H. Frieden, M. S. Dunn and C. D. Coryell. *J Phys Chem* 47:10-24 Ja '43

Quantitative investigations of amino acids and peptides; equilibria between amino acids and formaldehyde: arginine and lysine. E. H. Frieden, M. S. Dunn and C. D. Coryell. *J Phys Chem* 47:118-33 F '43

Quantitative investigations of amino acids and peptides; equilibria between histidine and formaldehyde. E. H. Frieden, M. S. Dunn and C. D. Coryell. *J Phys Chem* 47:85-94 F '43

Reaction of formaldehyde with 1(-)-asparagine. D. C. Carpenter and F. E. Lovelace. *bibliog Am Chem Soc J* 64:2899-902 D '42

Reaction of formaldehyde with l (+)-aspartic and l (+)-glutamic acids. D. C. Carpenter and F. E. Lovelace. *bibliog Am Chem Soc J* 65:1161-5 Je '43

Some formaldehyde derivatives of acetylenic hydrocarbons. G. F. Hennion and E. P. Bell. *bibliog Am Chem Soc J* 65:1847-8 O '43

Structure of the polymer from urea and formaldehyde; abstract. C. S. Marvel, J. R. Elliott and H. Yuska. *Mod Plastics* 21:112+ O '43

Studies in electrolytic oxidation; the electrolytic oxidation of formaldehyde. A. Hickling and F. Rodwell. *diag Chem Soc J* p90-9 Mr '43

Analysis

Collection and estimation of traces of formaldehyde in air. F. H. Goldman and H. Yasoda. *bibliog Ind & Eng Chem Anal ed* 15:377-8 Je 15 '43

Determination of combined formaldehyde in organic compounds and in cellulose formals. C. L. Hoffpaur, G. W. Buckaloo and J. D. Guthrie. *Ind & Eng Chem Anal ed* 15:605-6 S 15 '43

Polarographic determination of formaldehyde in biological material; application to the determination of serine. M. J. Boyd and K. Bambach. *bibliog Ind & Eng Chem Anal ed* 15:314-15 My 15 '43

FORMALIN. See Formaldehyde

FORMATES

Kinetics of the thermal decomposition of n-propyl and isopropyl formates. R. B. Anderson and H. H. Rowley. *bibliog J Phys Chem* 47:454-63 Je '43

FORMIC acid

Catalytic reduction by formic acid under pressure; a comparison of copper and nickel as catalysts. R. R. Davies and H. H. Hodgson. *Chem Soc J* p281-2 Je '43

Catalytic reduction by formic acid under pressure; the preparation of aldehydes from carboxylic acids with titanium dioxide as catalyst. R. R. Davies and H. H. Hodgson. *Chem Soc J* p84-6 Mr '43

Dissociation constants and pH-titration curves at constant ionic strength from electrometric titrations in cells without liquid junction; titrations of formic acid and acetic acid. R. G. Bates, G. L. Siegel and S. F. Acree. *bibliog diag J Research Nat Bur Stand* 30:347-59 My '43

Oxidation of amino acids by hydrogen peroxide in formic acid. G. Toennies and R. P. Homiller. *bibliog Am Chem Soc J* 64:3054-6 D '42

FORMS (law)

Legal forms; dangers to banks. *Banking* 36:89-90 S; 58+ O; 57 N '43

FORMS and blanks, Business

Check your forms against this list. *Management R* 32:368-9 O '43

Combined forms to save writing and improve control; Sheffield corporation, Dayton, Ohio. *il Am Business* 13:23-6 Ap '43

Making an office record survey; abstract. C. O. Libbey. *Management R* 32:129-30 Ap '43

Sixteen forms replaced by three in order system. *il Am Business* 13:32-3 Ap '43

Types of office forms and their design. W. C. Hunn. *N A C A Bul* 24:645-58 F 1 '43; Excerpt. *Management R* 32:167-8 My '43

See also

Banks and banking— Railroads—Forms
Forms, blanks, etc. and blanks

FORMYL fluorene

Alkylation and other reactions of 9-formyl-fluorene. W. G. Brown and B. A. Bluestein. bibliog Am Chem Soc J 65:1082-4 Je '43

FORSHAY, Royce Whitney, 1902-1943

Sketch. por Weekly Underw 148:739 Ap 3 '43
Sketch. L. Cartwright. por Nat Underw 47:3+ Ap 8 '43

Sketch. J. S. Daniel. por East Underw 44:33 Ap 9 '43

FORSYTH, Montana**Water supply**

How presedimentation worked. F. F. Palmer. plan Pub Works 74:25-6 Jl '43

FORT DODGE, Des Moines and southern railroad

Reorganization completed. Comm & Fin Chr 157:219-20 Ja 18 '43

FORT PITT bridge works

Fort Pitt bridge works. Comm & Fin Chr 157:179+ Ja 14 '43

FORT WAYNE, Indiana**Rapid transit**

War stops in Fort Wayne. Il Transit J 86:408-9 N '42

FORTESCUE, Cecil Lewis, 1881-

Portrait. Inst E E J 90 pt 1:front Ja '43

FORTESCUE, Charles Le Geyt

Silver anniversary of symmetrical components. por Elec Eng 62:294-5 Jl '43

FORTESQUE-FLANNERY, Sir James, 1851-1943

Sketch. por Engineer 176:307-8 O 15 '43

FORTIFICATIONS

With blood, sweat, and TNT; Europe is ringed with thick belts of forts that defy planes and tanks. Il Fortune 27:120-4 F '43

FORTISAN yarn. See Rayon yarn**FORWARDING companies**

Commission defines forwarders' rights. Ry Age 114:686 Ap 3 '43

Insurance requirements

Freight forwarder cover examined. Nat Underw 47:4 O 21 '43

FORWARDING stations

L.c.l. for army; Army-navy consolidating station. Business Week p34+ Ag 14 '43

FOSSIL. See Paleobotany; Paleontology**FOSSIL soils. See Soils, Fossil****FOSTER-WHEELER corporation**

Dividend possibilities. Barron's 23:13 O 25 '43

FOULING of ships. See Ships—Fouling**FOUNDATION for the study of cycles**

Study of cycles. Am Stat Assn J 38:248-9 Je '43

FOUNDATION garments. See Corsets**FOUNDATION industrial engineering company**

Plea approved by SEC. Comm & Fin Chr 158:670-1 Ag 16 '43

Trusts to foods; Public utility holding co. now canning Stokely's fruits and vegetables. Business Week p105-6 S 18 '43

FOUNDATION soils

Soil classification for airfields reported to Am. Soc. C.E. meeting; airfield drainage and soil sampling also discussed. Eng N 130:110-11 Ja 28 '43

See also

Dams—Foundations

Marshes

Roads—Subgrades

Sand

Soil mechanics

Wellpoint system

Testing

Pendleton levee failure. K. E. Fields and W. L. Wells. Il diags Am Soc C E Proc 68:1763-76 D '42; Discussion. 68:1797-1800; 69:949-59 D '42, Je '43

Soil penetration tests with a loaded auger. A. R. Lamm. diag Civil Eng 12:685 D '42

FOUNDATIONS

Application of soil mechanics in designing building foundations. A. Casagrande and R. E. Fadum. bibliog Il diags Am Soc C E

Proc 68:1487-1520 N '42; Discussion. 69:449-55 bibliog(p450-1), 927-41, 1065-93 Mr, Je, S '43

Building foundations on compacted fill; with cost data. W. E. King. diag Eng N 131:403-5 S 9 '43

Design of foundations for stacks and towers. V. O. Marshall. Il diags Pet Refiner 22:101-18 Ag '43; Discussion. S. Garnett. 22:128 O '43

Heavy foundations drilled into rock; deep caissons with H-beam cores for extension to a public service building. R. E. White. Il diags Civil Eng 13:19-22 Ja '43

Importance of soil mechanics in design of compressor foundations. H. R. Marsh. diags Nat Pet N 35 pt 2:R544-9 N 3 '43

Influence charts for computation of stresses in elastic foundations. N. M. Newmark. diags fold charts III U Eng Exp Sta Bul 338:1-25 '42 (pa 35c)

Method of design of steel stacks and foundation. S. Levine. diags Pet Refiner 22:104-5 Ap '43

New foundations provided for a nineteenth century cathedral; St Joseph's cathedral, in Hartford, Conn. G. F. Flay, jr. and D. B. McKinley. Il diags Civil Eng 13:85-7 F '43

Practical design of foundations for vertical and horizontal vessels. J. A. Shjarback. diags Nat Pet N 35 pt 2:R469-60, R462-3+ O 6 '43

Stresses and displacements from loads over rectangular areas. H. Gray. Civil Eng 13:227-9 My '43

Symmetrically loaded base slab on an elastic foundation. S. U. Benscoter. diags Am Soc C E Proc 69:691-704 My '43; Discussion. 69:1125-32, 1503-4 S, N '43

See also

Bridges—Foundations and piers

Building

Caissons

Dams—Foundations

Earthwork

Excavation

Footings, Concrete

Foundation soils

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Roads—Foundations

Settlement

Pressure and consolidation measurements at a western earth-fill dam. E. L. Armstrong. Il diags plan Civil Eng 12:682-4 D '42

Problem of foundation settlement solved by cement grouting; Cities service gas company gas compressor station. Il Concrete 51:8+ Jl '43

Sao Paulo tower is righted with jacks. Il Eng N 131:623 O 21 '43

FOUNDATIONS, Charitable and educational**See also**

American foundation for tropical medicine

Buhl foundation

Carnegie corporation

Nuffield foundation

Purdue research foundation

FOUNDATIONS, Subaqueous**See also**

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FOUNDING. See Aluminum founding; Brass founding; Bronze founding; Foundry practice; Iron founding**FOUNDRIES**

Army-Navy Awards in foundry industry. Il Foundry 71:166, 168, 170, 182 Je '43

Birdsboro will operate new foundry. Il Blast F & Steel Pl 31:796 Jl '43

Foundries make major contributions to war production. Il Foundry 71:70-1+ Ja '43

Large steel foundry completed on West coast; Columbia steel co. Il Foundry 71:140 O '43

Makes patterns and nonferrous castings; Progress pattern & foundry co. St. Paul. P. Dwyer. Il Foundry 71:108-9+ Ag '43

New pattern for a steel foundry; plant group for American steel foundries company. Il Arch Rec 94:62-7 O '43

Price situation, manpower shortages are twin problems facing foundries. W. W. Rose. Iron Age 152:108-9 Jl 8 '43

FOUNDRIES—Continued

Winning the war, then what? A. J. Tuscany.

Foundry 71:94+ My '43

See also

Foundry management Iron works
Foundry practice Steel works

Accounting

See Foundry accounting

Electric equipment

Foundry change-over; electricity replaces steam for power. *il Elec R (Lond)* 132:771-3 Je 11 '43

Mechanised foundry. *il Elec R (Lond)* 132:205-9 F 12 '43

Employees

College graduate looks at the foundry industry. C. J. Freund. Foundry 70:74+ D '42

Fifth regional war labor board issues foundry wage schedule. Steel 113:62 Ag 16 '43

Foundry comment; newspaper articles on foundry labor. Foundry 71:156+ S '43

Foundry operations hampered. Steel 112:53 Je 28 '43

Placing of women in foundries. Foundry 71:155 Mr '43

Selling the foundry worker on his job. W. G. Gude. Foundry 71:105+ O '43

Training workers within industry. J. H. Greenland. Foundry 71:137-8 Ja '43

Women at work in the foundry; Bendix aviation corp. J. H. Caldwell. *il Foundry* 71:128-9+ Ap '43

Equipment and supplies

American steel foundries casts armor for tanks. F. G. Steinebach. *il Foundry* 71:78-82+ JI '43

Buick aluminum foundry embodies best practices for mass production of aircraft engine cylinder heads. *il Automotive & Aviation Ind* 88:26-9+ Mr 1 '43

Buick speeds production of aluminum alloy aircraft cylinder heads. A. H. Allen. *il Foundry* 70:66-71, 150-3 D '42

Buick's cylinder head foundry. *il Aero Digest* 42:192-3, 195-6, 199 F '43

Builds West coast foundry in record time; Joshua Hendy iron works. *il Foundry* 71:104-6+ Ag '43

Campbell, Wyant & Cannon foundry co. installs million volt X-ray unit. E. Bremer. *il Foundry* 71:108-10+ O '43

Canadian foundry specializes in nonferrous castings; Robert Mitchell co. P. Dwyer. *il Foundry* 71:98-100+ My '43

Casting nonferrous parts for ordnance; Northern pump co. P. Dwyer. *il Foundry* 71:106-9+ N '43

Centrifugally cast steel; American cast iron pipe co. C. K. Donoho. *il Iron Age* 151:52-8 Ap 1 '43; Same. Foundry 71:130-4+ Ap '43

Collapsible collar saves molding time. *il Iron Age* 152:70 O 14 '43

Constructing boxes for blowing cores. R. F. Lincoln and E. J. Swink. *il Foundry* 71:106-7+ O '43

Delco-Remy aluminum foundry. J. Geschelin. *il Automotive & Aviation Ind* 87:18-23+ N 1 '42

Handles foundry material by new method; truck and pallet system in foundry of Pontiac motor division. *il Foundry* 70:113 D '42

Huge castings for naval vessels from Birdsboro's new foundry. C. O. Herb. *il Mach* 50:164-71 N '43

Make piston rings for war machines; Perfect circle co. P. Dwyer. *il Foundry* 71:88-91+ Mr '43

Malleable foundry keeps 'em rolling. P. Dwyer. *il plan Foundry* 70:84-6+ S '42; Same. *Mech Handling* 30:54-8 F '43

Modern methods in casting magnesium. F. A. Foxall. *il Foundry* 71:110-11+ N '43 (to be cont)

New steel foundry makes navy castings; Birdsboro steel foundry and machine co. P. Dwyer. *il plan Foundry* 71:114-17+ N '43 (to be cont)

Packard converts to aluminum castings production. A. H. Allen. *il Foundry* 71:136-9+ Ap '43

Plant stretcher; castings cooled on flat cars to save floor space; Cooper-Bessemer corp. R. S. Warren. *il Steel* 112:71-2 Ja 11 '43

Private enterprise?—and how! plant was built from scrap to produce for war; Thys and Miller electric steel foundry. R. O. McGougan. *il Elec West* 91:52-4 O '43

Seek to ease cereal binder pinch. Steel 113:66 JI 5 '43

Using equipment parts you formerly threw away. E. W. Zick. Foundry 71:138+ JI '43

X-ray technique aids development work at the Campbell-Wyant-Cannon foundry. *il Automotive & Aviation Ind* 87:46+ D 15 '42

See also

Casting machines Molding machines
Converters Molds (for casting)
Cupola furnaces Sand, Foundry

Heating and ventilation

American magnesium corporation; heating and ventilating system. Heat & Ven 40:55 Ap '43

Symington-Gould corp. installs simple but effective system in tank castings foundry. A. S. Crocker. *il plans Heat & Ven* 40:84-7 Je '43

Safety measures

Atmospheric contamination from the casting of magnesium. C. R. Williams. bibliog J Ind Hygiene 24:277-80 N '42

Disappearing dust; pattern shop and foundry of R. K. LeBlond machine tool company. *il Safety Eng* 86:24-5 O '43

Plant safety and foundry manpower. T. Drever. Foundry 71:135+ Ap '43

Statistics

United States has 4802 foundries; foundry distribution—United States, Canada. Foundry 71:93+ JI '43; Same cond. Steel 113:94 JI 12 '43

Great Britain

British foundry concentration program unsatisfactory. Foundry 71:101+ My '43

Pacific coast

Among the West Coast foundries. A. H. Allen. Foundry 71:154+ Je '43

FOUNDRY accounting

Allocate core costs to individual castings. A. E. Grover. Foundry 71:130-2+ Je '43

Cost service provided for gray iron foundries by Gray iron founders society. Foundry 71:171 My '43; Same. Steel 112:75 My 10 '43

Metal and melting cost in a gray iron foundry. A. E. Grover. *il Foundry* 71:72-4, 159-62 Ja '43

FOUNDRY chemistry

See also

Alloys

FOUNDRY costs

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Foundry accounting

FOUNDRY equipment manufacturers' association

Annual meeting, Cleveland, Oct. 30-31. Foundry 70:80-1+ D '42

Annual meeting, 25th, Hot Springs, Oct. 22-23. Steel 113:61 N 1 '43; Foundry 71:136+ D '43

FOUNDRY ladles

Ladle inoculation improves gray iron properties and structure. H. W. Lownie, Jr. bibliog *il Foundry* 71:126-7+ N '43 (to be cont)

Ladle metallurgy; discussion. Iron Age 151:46-9 Ap 15 '43

Ladle practice for the steel foundry. E. Vance. Foundry 71:185-8 O '43

Portable furnace and ladle for light alloys. *il Iron Age* 151:49 Ap 15 '43; Same. Foundry 71:142 JI '43

Ramming mix as refractory for desulfurizing ladles. C. E. Bales and D. R. Smith. diags Brick & Clay Rec 103:41-3 Ag '43

Recent production improvements in magnesium melting and aluminum ladle preheating through direct radiant gas firing. J. Kniveton. *il diag Am Gas J* 159:10-13 JI '43

FOUNDRY ladies—Continued

- Sleevebrick and nozzle problems. F. F. Franklin. *il Steel* 112:94, 96+ Ap 26 '43
 Welded ladies help increase steel output. G. R. Reiss. *il Steel* 112:112, 115 My 17 '43

FOUNDRY machinery

- Core blowing in a semi-production foundry. Z. J. Madacey. *il Foundry* 71:136-8+ Je; 86-8+ J1 '43
 Foundry plant & machinery sandslingers. *il Mech Handling* 30:27-8 Ja '43
 Robins portable foundry shakeout. *il Blast F & Steel P* 31:804 J1 '43
 Snagging castings. G. S. Eisaman. *il Foundry* 71:119-20+ N '43
 Time saving core breaker. *il Iron Age* 152:68 O 7 '43
 Using abrasive cut-off wheels. F. A. Upper. *il Foundry* 71:115+ O '43

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- Casting machines
 Foundries—Equipment and supplies
 Molding machines

Statistics

- Foundry equipment, 1938-1941. Survey of Cur Business 1942 Sup p145 [supplemented in monthly numbers]

FOUNDRY management

- Competition ticks absenteeism; American brake shoe company. B. K. Price. *il Foundry* 71:89+ J1 '43
 Floor space released by using flat cars. *il Factory Management* 101:130 F '43
 Ordnance inspection of castings. A. C. Richmond. *il Iron Age* 151:41-4 Ap 22 '43
 Selling the foundry worker on his job. W. G. Gude. *Foundry* 71:105+ O '43

See also

- Foundries—Employees
 Foundry accounting

FOUNDRY practice

- Avoiding extremes in use of mold weights. J. A. Murphy. *Foundry* 71:169-70 Ag '43
 Birmingham holds eleventh annual conference. Feb. 19. *Foundry* 71:164+ Ap '43
 Cast zinc-base dies produce aircraft stampings. *il Foundry* 71:144+ J1 '43
 Centrifuging after filling the mold. W. F. Wright and J. B. Caine. *bibliog il diags Iron Age* 151:64-8 My 20 '43
 Centrifuging during pouring. A. Johnson. *il Iron Age* 151:62-4 My 20 '43
 Converting to steel castings; Saginaw malleable iron division, General Motors corporation. J. H. Smith. *il diags Iron Age* 151:45-50 Ap 22 '43
 Core blowing in a semi-production foundry. Z. J. Madacey. *il Foundry* 71:136-8+ Je; 86-8+ J1 '43
 Design of sand castings for quantity production. N. F. Hindle. *il diags Metals & Alloys* 17:770-5, 970-7, 1196-1202 *bibliog(p 1202) Ap-Je '43*
 Electric arc hot topping on ingots and castings developed many years ago by International nickel co. G. F. Sullivan. *il diags Iron Age* 151:56-60 F 11 '43
 Ford triplexing installation. W. A. Phair. *il diags Iron Age* 151:63-5 Mr 11 '43
 Foundry metallurgy in the castings industry. J. W. Bolton. *bibliog il Foundry* 71:84-5, 180-4 J1; 100-1 Ag; 101+ S '43
 Foundry practice and quality in light-alloy castings. H. C. Warrington. *il Engineering* 156:90, 97-100 J1 30 '43
 Gating and risering of steel castings; round table discussion. *Foundry* 71:122 J1 '43
 Impression-cast chuck jaws made by casting Kirkite "A" alloy about a sample forging. H. F. Lenz. *il diags Iron Age* 152:54-7 Ag 5 '43
 Impression-cast jaws for aircraft fittings. H. F. Lenz. *il Aero Digest* 42:269-70+ My '43; Same. *Automotive & Aviation Ind* 89:34-6 J1 '43
 Institute of British foundrymen 40th annual meeting, London, June 26. *Foundry* 71:100, 179-82 S '43
 Ladle metallurgy; discussion. *Iron Age* 151:46-9 Ap 15 '43
 Liquid pressure in casting; abstract. E. Longden. *Metals & Alloys* 18:342+ Ag '43

- Magnesium castings impregnated by new method; tung oil forced through castings by direct pressure. S. H. Brams. *il Iron Age* 152:57-9 N 11 '43
 National metal congress; foundry exhibits and discussions. *Foundry* 70:72-3+ D '42
 Plastics and plasticity. E. V. Crane. *il diags Iron Age* 152:80-5 Ag 12 '43
 Producing magnesium castings; American magnesium corp. E. Bremer. *il Foundry* 71:76-81+ F; 82-5+ Mr '43
 Production of uniform steel for a light castings foundry. G. H. Kain and L. W. Sanders. *Engineer* 174:38-40 J1 10 '42; Same. *Foundry* 71:82, 141-7 F '43; Same cond. *Iron Age* 150:101-2+ O 1 '42
 Radiography in the foundry; abstract. W. Montgomery. *Metals & Alloys* 17:642 Mr
 Reclaiming porous castings with bakelite V.1845 and N.2106. W. Bowman. *Iron Age* 151:52-3 Ap 8 '43
 Relative characteristics of non-ferrous casting techniques. *Iron Age* 151:70-2 F 11 '43

- Steel castings for present and post-war products. *il Product Eng* 14:[717-32] insert 1-16 N '43

- Steel founders study progress of industry; abstracts of papers, A.F.A. annual meeting. *Foundry* 71:180+ Je '43
 Stern frames cast in cores; Penn steel castings co. P. Dwyer. *il Foundry* 71:98-101+ O '43

- Trench mortar bombs pass critical inspection. P. Dwyer. *il Foundry* 71:66-9, 151-2 Ja '43

- War accelerates technical progress. *Steel* 112:324-6+ Ja 4 '43

- War spurs foundry research. *il diags Iron Age* 151:148-53, 246 Ja 7 '43
 Wisconsin holds sixth conference, Milwaukee, Feb. 18-19. *Foundry* 71:169+ Ap '43

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- | | |
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| Aluminum founding | Foundry management |
| Annealing | Iron founding |
| Brass founding | Iron metallurgy |
| Bronze founding | Magnesium founding |
| Cast iron | Molding machines |
| Casting, Centrifugal | Molds (for casting) |
| Castings | Pattern making |
| Chilled iron | Pickling (metals) |
| Cores | Sand, Foundry |
| Cupola furnaces | Steel castings |
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Study and teaching

- Chesapeake chapter furthers training of foundry workers. D. F. Lane. *Foundry* 71:86, 152-5 F '43

- Designs molding cabinet for school. H. J. McCaslin. *il diags Foundry* 70:114+ D '42

FOUNDRY research

- American foundrymen's association establishes research foundation. *Foundry* 71:94 Ja '43; *Steel* 112:398 Ja 4 '43

- War spurs foundry research. *il diags Iron Age* 151:148-53, 246+ Ja 7 '43

FOUNDRY sand. See Sand, Foundry**FOUNDRYMEN**

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- Foundries—Employees
 Harrison, Joseph W.

FOUNTAINS, Drinking. See Drinking fountains**FOURDRINER machines. See Paper making machinery****FOURIER'S series**

- Steady state currents of electrical networks. D. L. Waidelich. *J Ap Phys* 13:706-12 N '42

- Use of a mechanical synthesizer to solve trigonometric and certain types of transcendental equations, and for the double summations involved in Patterson contours. S. L. Brown and L. L. Wheeler. *bibliog il diags J Ap Phys* 14:30-6 Ja '43

FOVEAL adaptation. See Eye—Accommodation and refraction**FWOLE, Edwin D.**

- Becomes editor of Textile world. *por Textile World* 93:64 O '43

FOX, Manuel Abraham, 1889-1942

- Sketch. E. D. Durand. *Am Stat Assn J* 38:105-6 Mr '43

FOXES

Diseases

Thiamine inactivation by the fresh-fish or Chastek-paralysis factor. R. R. Sealock, A. H. Livermore and C. A. Evans, bibliog. Am Chem Soc J 65:935-40 My '43

FRACTIONATING columns. See Distillation apparatus

FRACTIONS, Decimal. See Decimals

FRACTURES (surgery)

Burns and compound fractures; a review of their closed treatment. H. H. Alexander, Jr. Ind Med 12:434-6 JI '43

Fractures about the ankle. E. P. Gillette. Ind Med 12:160-1 Mr '43

Fractures in peace and war. R. H. Kennedy. Nat Safety N 46:34- N '42

Intracapsular fractures; a new method of nailing the neck of the femur. R. W. Poborsky, diags Ind Med 12:211-12 Ap '43

FRAMED structures

Moment balance; a self-checking analysis of rigidly jointed frames. R. J. Cornish, diags Am Soc C E Proc 68:683-90 My '42; Discussion. 68:775-80, 1067-70, 1239-43, 1449-51, 1649-54, 1826-30; 69:705-14 My-Je, S-D '42, My '43

Sloping chord open panel frames by moment distribution method. F. N. Weaver, diags Boston Soc C E J 30:51-65 Ap '43

Study in modern methods of rigid frame analysis. G. A. Maney. W Soc E J 47:259-73 D '42

Timber rigid frames and trussed columns; navy shop buildings. C. G. Jennings and M. N. Salgo. Il Eng N 131:139-41 JI 15 '43

See also

Bridge design

FRAMING (building)

Cost-cutting methods by precutting framing. T. C. Combs. Il diags Am Bld 65:101- O; 40-1 N '43 (to be cont)

Designing efficiency into a war plant; Nassau plant of the Sperry gyroscope co. Il diags Eng N 130:121-3 Ja 28 '43

Designing rigid frames of timber. J. J. Polivka. Il diags Eng N 129:790-3 D 8 '42

Glover three-pin reinforced-concrete frame buildings. Il diags Engineering 155:506-7, 510 Je 25 '43

How to frame 30' x 24' house and stay within WPB 5 board ft. rule. Il plans Am Bld 65: 38- Je '43

Modulok; compound sheet-insulation in interlocking frames forms single-thickness wall panels. Il diags plans Arch Forum 79: 65-8 S '43

Precast building frames now being used in England. Eng N 131:164 JI 15 '43

Precast columns and timber bents combined for rigid frames. Il diags Eng N 131:535-7 O 7 '43

Rigid-frame concrete industrial plant; magnesium-alloying plant; fireproofing secured by eliminating windows. A. F. Plant and S. J. Deitrick. Il diags Eng N 131:334-8 Ag 26 '43

Welded frames cut cost and save steel; one-story industrial plant. F. W. Mettler. Il Eng N 129:700-1 N 19 '42

See also

Roofs

FRANCE

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Cooperation—France

Finance—France

Labor and laboring

classes—France

Labor laws and legis-

lation—France

World war, 1939—

France

Colonies

See also

Indo-China, French

Morocco

Economic conditions

France impoverished. Economist 145:46-7 JI 10 '43

France in 1942. Economist 144:sup15 Mr 13 '43

Economic policy

Economic rehabilitation of prisoners of war in France. Int Labour R 48:434-46 O '43

Foreign relations

United States

Our Africa policy; future American-French collaboration. J. Dana. Mag of Wall St 72: 117-4 My 15 '43

President's message to Petain rejected; Vichy breaks diplomatic relations with U.S. Comm & Fin Chr 156:1803 N 19 '42

German occupation

Inside France. Economist 143:627 N 21 '42

Industries and resources

Decay of French industries. Economist 144: 464-5 Ap 10 '43

Politics and government

France must remain the bastion of democracy. C. Benedict and J. Dana. Il Mag of Wall St 72:389- JI 24 '43

French national committee. Economist 144: 753 Je 12 '43

FRANCISCAN formation

Franciscan-Knoxville problem. N. L. Taliaferro. bibliog diags maps Am Assn Pet Geologists Bul 27:109-219, pl 1-7 F '43

FRANKFORD arsenal laboratories. See Arsenal laboratories

FRANKFURTERS. See Sausages

FRANKLIN, Benjamin, 1706-1790

Benjamin Franklin and advertising. Adv & Sell 36:42 Ja '43

Benjamin Franklin and the mysterious Dr. Spence; the date and source of Franklin's interest in electricity. I. B. Cohen, bibliog Il Franklin Inst J 235:1-25 Ja '43

Concluding paper at Meet Dr Franklin conference. C. Van Doren. Franklin Inst J 234:415-29 N '42

Four on war; from the writings of earlier scientists. M. F. Ashley-Montagu. por(p316) Tech R 45:336- Ap '43

Patriot and patron saint of printers. J. H. Smythe, Jr. Inland Ptr 110:46 Ja '43

FRANKLIN, Sir John, 1786-1847

Captain Franklin's expedition; extracts from letters for J. Richardson. Can Min J 64: 351-2 Je '43

FRANKLIN institute, Philadelphia

Medal day; list of medalists. Science 97:350 Ap 16 '43

Medal day proceedings. Franklin Inst J 236: 199-214 Ag '43

Tenth anniversary of the planetarium and museum. Science 98:403-4 N 5 '43

Biochemical research foundation

Report of the work of the Biochemical research foundation of the Franklin institute. E. McDonald. Il Franklin Inst J 235:27-39 Ja '43

FRANKLIN medal

George Washington Pierce awarded the Franklin medal. Inst Radio Eng Proc 31: 308-9 Je '43

FRATERNAL congress of America, National.

See National fraternal congress of America

FRATERNAL societies. See Benefit societies

FRAUD

Creditors get proceeds due to constructive fraud. Nat Underw (Life ed) 47:6 Ag 27 '43

Perfect fraud is solved after eight years; Fraud prevention department scores conviction. Credit & Fin Management 45:7-9 Ja '43

Twenty New York physicians charged with compensation fraud on City fund. Weekly Underw 147:1194 N 21 '42

See also

Contracts, Govern-

ment—Fraud

Counterfeits and

counterfeiting

Embezzlement

Insurance—Fraudu-

lent claims

Insurance, Life—

Fraudulent state-

ments

Misbranding

FRAZER, Joseph W. 1892-

Leaders of American industry. por Mag of Wall St 71:485 F 6 '43

FREDERICK, Donald Sherwood, 1910-

Dr Frederick wins first Hyatt award, por Chem & Met Eng 49:136 N '42

FREDERICKSBURG, Virginia**Water supply**

Bacteriological results of break-point chlorination. A. E. Wilson, jr. *Water Works & Sewerage* 89:494-5 N '42

FREE energy

Thermal data; heats of combustion and free energies of some compounds containing the peptide bond. H. M. Huffman, bibliog *J Phys Chem* 46:885-91 N '42

FREE enterprise. See Capitalism**FREE harbors. See Free ports and zones****FREE ports and zones**

Foreign-trade zones versus bonded warehouses. T. E. Lyons. *For Comm W* 11:18-20 My 8 '43

Free trade zone established in port of Santos. *For Comm W* 9:8 N 14 '42

N.Y. free port publicized by the Department of commerce. *Ptr Ink* 205:102-3 O 15 '43

Noteworthy accomplishments prove value of foreign-trade zones. *il For Comm W* 11:18-20 My 1 '43

Portals to international commerce of the future. T. E. Lyons. *il For Comm W* 12:12-13+ JI 10 '43

Santos, free port for Paraguayan trade. M. B. MacKrell. *il For Comm W* 10:10-11 F 20 '43

Vital stepping stone to U.S. world-trade advance. T. E. Lyons. *il For Comm W* 10:3-6+ Ja 23 '43

FREE radicals. See Radicals (chemistry)**FREE trade and protection**

Fortune survey; farmer. *Fortune* 27:16 Ap '43

See also

Free ports and zones
Tariff

Protection

Economic cliché and economic nonsense; business, free trade and collective bargaining. E. B. Benjamin. *Manuf Rec* 112:38+ Ag '43

FREE will and determinism

Determinism and responsibility. H. N. Russell. *Science* 97:249-53 Mr 19 '43

FREE zones. See Free ports and zones**FREEDMAN-BURNHAM engineering corporation**

Ten years' progress in wooden propellers. W. E. Burnham. *Aeronautical Eng R* 1:111 N '42

FREEDOM. See Liberty**FREEDOM of the air**

Canada's postwar air policy. map *Fortune* 27:90-2 My '43

Logic of the air; to get out into postwar international air we must let others into our own. maps *Fortune* 27:70-4+ Ap '43

FREEDOM of the press

Government and the press. *Economist* 145:355-6 S 11 '43

Urges newspapers to foster crusade for free press for world. K. Cooper. *Comm & Fin Chr* 157:1595 Ap 29 '43

FREEPORT sulphur company

News from the chemists' front. *Barron's* 23:24 S 20 '43

FREEZERS

Farm freezer; its future and its place in the war effort. R. Markley, jr. *il Refrig Eng* 44:381-2 D '42

Food processing by home freezing subject of Cornell conference. N. K. Masterman. *Refrig Eng* 46:21 JI '43

Freezing food at home; freezer-storage unit. B. W. Gardner, jr. *il diag Consumers' Research Bul* 11:8-10 Je '43

Home locker. W. Carver. *il Refrig Eng* 46:157-61+, 237-9+ S-O '43

More on home freezing units; what users say. N. K. Masterman. *Refrig Eng* 46:92+ Ag '43

FREEZING

Accumulator batteries; the results of freezing the electrolyte. *Automobile Eng* 33:337 Ag '43

Development of the quick-freezing process. L. W. Waters. *il Chem & Eng N* 20:1559-61 D 10 '42

Dual-process quick freezing plant built in South; Dixie Frosted Foods uses immersion unit and air-blast freezer. G. H. Watson. *il diags Food Ind* 15:66-8+ O '43

Food processing by home freezing subject of Cornell conference. N. K. Masterman.

Refrig Eng 46:21 JI '43

How to prevent water systems freeze-ups. *il Dom Eng* 160:62 D '42

Methods for quick freezing and dehydrating mushrooms. H. J. Brunell, W. B. Esselen, jr. and F. P. Griffiths. bibliog *il Food Ind* 15:74-5+ N '43

Packaging of frozen foods under war conditions; abstract. H. C. Diehl and W. Rabak. *Food Ind* 15:120-1 Mr '43

Preliminary results from the use of freezing plates for locker plant freezing and farm freezing and storage cabinets; with observations on farm operated cabinets. C. W. DuBois and D. K. Tressler. *diags Refrig Eng* 46:25-30+ JI '43

Quick freezing of meats in South America. M. T. Zarotschneff. *il plan Refrig Eng* 46:88-91 Ag '43

Rate of ice formation. A. L. London and R. A. Seban. bibliog *diags A S M E Trans* 65:771-8 O '43

Storing fruits, vegetables, and meat in a freezer-locker. B. W. Gardner, jr. bibliog *Consumers' Research Bul* 12:14-18 JI '43

TVA sponsored plant employs immersion and spot freezing; Dixie frosted foods company. G. H. Watson. *il Refrig Eng* 46:240-1 O '43

See also

Bricks—Freezing
Concrete—Freezing
Food, Frozen
Ice

Refrigeration and refrigerating machinery
Soils—Freezing
Water tanks—Freezing

FREEZING of assets. See World war, 1939—Freezing of assets

FREEZING points

Cryoscopic analysis of styrene, indene, and dicyclopentadiene. E. H. Smoker and P. E. Burchfield. *Ind & Eng Chem Anal ed* 15:128-9 F 15 '43

Freezing points, densities, and refractive indexes of the system glycerol-ethylene glycol-water. J. A. Spangler and E. C. H. Davies. bibliog *Ind & Eng Chem Anal ed* 15:136-9 F 15 '43

Molar depression constant for camphor. W. B. Meldrum, L. P. Saxer and T. O. Jones. bibliog *Am Chem Soc J* 65:2023-5 O '43

Molecular weights of high polymers. M. L. Huggins. bibliog *diags Ind & Eng Chem* 35:980-6 S '43

Thermal analysis of liquefied gases. H. S. Booth and D. R. Martin. *diags Chem R* 33:57-58 bibliog(p87-8) O '43

Thermocouples; calibrating thermocouples at fixed points with tin, lead, and aluminum freezing-point furnaces. H. B. Lancaster and A. W. Brunot. *il diags Gen Elec R* 45:649-52 N '42

FREIGHT, Perishable**See also**

Refrigerator cars

FREIGHT airplanes. See Airplanes, Freight

FREIGHT and freightage

Inland freight hit. *il Business Week* p20+ Mr 27 '43

See also

Airplanes, Freight
Forwarding companies

Railroads—Freight
Railroads—Rates
Railway express agency
River traffic
Shipment of goods
Shipping
Transportation

Freight cars

Freight handling

Freight ships

Motor trucks in

freight service

Packing for shipment

FREIGHT car service

AAR directors in car supply canvass. *Ry Age* 115:246 Ag 7 '43

A.A.R. gives data on transport cost; memorandum as to capacities of freight cars and trucks. *Ry Age* 114:796 Ap 17 '43

Car delays result in service orders. *Ry Age* 114:728 Ap 10 '43

Car shortage this year feared. H. F. McCarthy. *Ry Age* 114:591-2 Mr 20 '43

FREIGHT car service—Continued

Car supply. W. Kendall. Ry Age 115:685-6 O 30 '43
 Central western shippers consider wheat problems. Ry Age 115:7-8 J1 3 '43
 Crosshauls cut; return empty freight cars by shortest possible route. Business Week p64+ Mr 13 '43
 Eastman would ban freight expeditors. Ry Age 115:737 N 6 '43
 Freight car conditions are tight and cause some concern. il Ry Age 114:1017-21 My 22 '43
 Getting increased car-miles per car day. R. L. Wink. Ry Age 114:623 Mr 27 '43
 Give steel to railroads or face desperate situation, WPB is warned; freight cars lacking for transportation of steel. Iron Age 151:85-6 Ap 15 '43
 Indexes of freight-car utilization, 1940-August 1942; chart. Survey of Cur Business 22:7 N '42
 Kendall calls for still better car utilization. Ry Age 115:499-500 S 25 '43
 Location sheet to reduce car detention. R. C. Munnholland. Ry Age 113:783-4 N 14 '42
 No cars for food? California farmers on spot. Business Week p88 Mr 13 '43
 ODT seeks cars. Business Week p26 Ap 24 '43
 Record car performance in 1942. C. B. Peck. Ry Age 114:15-17 Ja 2 '43
 Too little, but not yet too late; outstanding railway performance of 1942-43. il Ry Age 114:994-1000 My 22 '43

See also

Grain cars

Car load

L.c.l. for army; Army-navy consolidating station. Business Week p34+ Ag 14 '43
 Maximum loading. R. W. Lahey. Chem Ind 51:733-4 N '42
 ODT revises carloading rules. Oil Paint & Drug Rep 143:3+ Ja 11 '43
 War lesson; heavier loading teaches railroads size of economies that can be effected. Business Week p36+ O 16 '43

FREIGHT cars

Freight car conditions are tight and cause some concern. il Ry Age 114:1017-21 My 22 '43
 High-speed freight-car trucks. J. A. Shafer. il diag Ry Mech Eng 116:539-41 D '42
 Improvements in freight-car construction. J. D. Rezner. Ry Age 114:621-3 Mr 27 '43
 Increased payloads, decreased shipping damage; use of loader-equipped freight cars. E. S. Evans. il Steel 112:125-6+ Ap 5; 114, 117 Ap 12; 110, 112+ Ap 19 '43
 Influence on railway freight equipment of postwar materials and machinery. M. P. Taylor. Mech Eng 65:708-10 O '43; Same cond. Ry Age 115:242-4 Ag 7 '43
 Material situation and its effect on freight cars. D. W. Odiome. Ry Age 114:1132-4+ Je 5 '43
 Need to conserve class A box cars. W. C. Kendall. Ry Age 114:684-5 Ap 3 '43
 Reefers must be used as box cars. Ry Age 115:349-50 Ag 28 '43
 Riding quality improved by snubbers on freight-car trucks. G. A. Lewis. Ry Mech Eng 117:210-12 My '43
 Rush boxed oil; tank-fitted gondolas for Louisiana-Massachusetts haul. Nat Pet N 35:22 Ap 14 '43
 Western Maryland receives 50-ton flat cars of emergency design. il Ry Age 115:17 J1 3 '43

See also

Air brakes	Loading and unloading—Cars
Car wheels	Refrigerator cars
Draft gears	Tank cars
Freight car service	
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Design

Pullman-Standard now building 4,000 hopper cars. il Ry Age 115:341-3 Ag 28 '43; Same, with diags. Ry Mech Eng 117:403-6 S '43

Inspection**See Car inspection****Interchange**

Improved home routing. W. M. Foster. Ry Age 114:873-4 My 1 '43
 Interchange rules 70 and 98. Ry Mech Eng 117:277 Je '43

Painting**See also**

Freight cars—Stenciling

Private ownership

ODT approves plan for pooling carbon black cars. Rubber Age 54:59 O '43

Repair

Boring car decking for rivet head clearance. il Ry Mech Eng 116:542 D '42
 Hopper cars repaired with new and old materials. il Ry Mech Eng 116:537-8 D '42
 Katy's most prosperous year; rehabilitation of freight cars at Denison, Texas. M. S. Sloan. il Manuf Rec 112:24-5+ F '43
 Ladder device for applying side sheets. il Ry Mech Eng 117:222 My '43
 Speed up repair-track work. F. G. Moody. Ry Age 114:624-5 Mr 27 '43
 Top-rail straightening device. il Ry Mech Eng 117:277-8 Je '43

Statistics

Freight car orders were curtailed by deliveries in 1942; U.S. and Canada. A. J. McGinnis. Ry Age 114:111-16 Ja 2 '43
 Freight cars, end of month, owned and on order, 1938-1941. Survey of Cur Business 1942 Sup p172 [supplemented in monthly numbers]
 Record car performance in 1942. C. B. Peck. Ry Age 114:15-17 Ja 2 '43

Stenciling

Self-locating stencils. il Ry Mech Eng 117:89 F '43

FREIGHT claims. See Railroads—Claims**FREIGHT handling**

Delivered without dismantling; electric machine handled by the Chicago outer belt line. il Ry Age 115:97 J1 17 '43
 Packaging and handling of air cargo. C. G. Peterson. S A E J 51:210-19 Je '43
 Perfect shipping. J. B. Eastman and others. il Manuf Rec 112:29-39+ Ap '43
 Terminal handling of air cargo. K. O. Larson. S A E J 51:285-8+ Ag '43; Abstract. Automotive & Aviation Ind 88:37+ Ja 1 '43

See also

Coal handling	Hoisting machinery
Containers (for shipping)	Loading and unloading—Cars
Cranes, derricks, etc.	Loading and unloading—Ships
Electric trucks,	Merchant marine
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Express service—Terminals	Railroads—Freight
Freight ships	
Grain handling	

FREIGHT rates

Arnold loose; to probe rail rate bureaus. Business Week p32+ N 28 '42
 Freight rates in wartime. G. L. Wilson. Harvard Business R 21 no2:230-7 [Ja] '43

See also

Motor trucks in freight service—Rates	Railroads—Rates
	Shipping—Rates

FREIGHT ships

Critical cargoes carried on inland waters; water transportation system of the Ontario paper company. il map Pulp & Pa of Can 43:944-8+ D '42
 Diesel ships circle globe; Maritime commission C-1B standardized cargo vessels; marine engineers wanted. S. A. Tucker. il Power 87:2-4 Ja '43
 Fast or less fast ships. J. R. Gebbie. Engineering 155:196 Mr 5 '43; Same. Engineer 175:196-7 Mr 5 '43; Same. Marine Eng 48:199-200 J1 '43
 Fugitive fleet; Great Lakes vessels shifted to salt-water ports. Business Week p22 D 26 '42
 Liberty ships named after American bureau of shipping officials. Marine Eng 48:220 Je '43
 Standardization and the Liberty ship. H. C. E. Meyer. Machine Design 14:142+ N '42

FREIGHT ships—Continued

- Still kicking; Sea Otter, rechristened Sea-mobile, Diesel-powered light cargo ship. Business Week p30 My 8 '43
- Streamlining the ore carrier. K. C. Thornton, il diags plans Marine Eng 48:180-97 S '43
- Ventilation and heating of Maritime commission ships. J. W. Markert, il diags plans Heat & Ven 40:32-57 F '43
- Victory ship emerges! il Marine Eng 48:216 Ag '43
- War-time British merchant ships. il Engineering 155:267-8, 270 Ap 2 '43
- Welded cargo ships. W. S. Burn. Elec R (Lond) 131:729-30 D 4 '42

See also

- Barges
Merchant marine
Tank ships

FRENCH, Herbert James, 1893-
Sketch. por Metal Prog 43:216-17+ F '43

FRENCH, Myrtle (Meritt) (Mrs Beals E. L. French) 1886-

Work with hospitalized soldiers and sailors. por Am Cer Soc Bul 22:275-6 Ag 15 '43

FRENCH, Thomas Ewing, 1871-
Lamme award. por J Eng Educ 34:4-6 S '43

FRENCH GUIANA**Economic conditions**

War economy of the Guianas. W. R. Scott. il For Comm W 11:5-10 Ap 17 '43

FRENCH INDO-CHINA. See Indo-China, French

FRENCH WEST AFRICA

Economic life. Economist 143:764-5 D 19 '42

FRENCH WEST INDIES. See West Indies, French

FREON. See Chlorofluoromethanes

FREON 12. See Dichlorodifluoromethane

FREQUENCY changers

Diode as a frequency-changer. F. M. Colebrook and G. H. Aston. Wireless Eng 20:6-14 Ja '43

Diode frequency changers. E. G. James and J. E. Houldin. Wireless Eng 20:15-26 Ja '43

Needs 180-cycle power supply; induction motor as frequency changer. diag Power 87:694-6 O '43

Power-tube performance in class C amplifiers and frequency multipliers as influenced by harmonic voltage. R. I. Sarbacher, il diags Inst Radio Eng Proc 31:607-25 N '43

260- to 350-megacycle converter unit for General Electric frequency-modulation station monitor. H. R. Summerhayes, jr. il diags Inst Radio Eng Proc 31:249-53 Je '43

FREQUENCY control

Capacity released by load swing control; frequency indicator operated by frequency standard received by radio. J. E. McCormack. diag Elec W 118:1775-7 N 28 '42

FREQUENCY distribution (statistics)

Correction formulas for moments of a grouped-distribution of discrete variates. J. A. Pierce. Am Stat Assn J 38:57-62 Mr '43

Frequency functions fitted by moments. E. B. Wilson and J. Worcester. R Econ Stat 25:97-100 F '43

Measures of dispersion for a finite distribution. A. O. Hirschman. Am Stat Assn J 38:346-52 S '43

Second moment correction for grouping; Sheppard's correction in estimating population variance of grouped sample data. G. R. Davies and N. Bruner. Am Stat Assn J 38:63-8 Mr '43

Time series significance tests based on signs of differences. G. H. Moore and W. A. Wallis. Am Stat Assn J 38:153-64 Jq '43

FREQUENCY dividers

New and stable frequency divider; abstract. F. R. Stansel. diag Electronics 16:126+ F '43

Use of counter circuits in frequency dividers. E. L. Kent. diags Acoustical Soc Am J 14:175-8 Ja '43

FREQUENCY inverters

Speech scrambling methods. W. W. Roberts. il diags Electronics 16:108-11+ O '43

FREQUENCY meters

Measurement of audio frequencies. R. P. Turner. il diags Radio N 28:17-19+ D '42

New method of frequency measurement. H. L. Clark and J. E. Hancock. il diags Instruments 16:60-2 F '43; Abstract. Electronics 16:148+ My '43

Precision stroboscopic frequency meter. E. L. Kent. il diags Electronics 16:120-1 S '43

Radionic frequency meter produced by Fred E. Garner co. il J Ap Phys 14:409 Ag '43

Reed frequency meter with laminated core. D. E. Andersen. diags Elec W 119:790 Mr 6 '43

Use of counter circuits in frequency dividers. E. L. Kent. diags Acoustical Soc Am J 14:175-8 Ja '43

Vibrating-reed frequency meter. il diag Instruments 16:577-8 S '43

FREQUENCY modulation. See Radio frequency modulation

FREQUENCY modulation pickup. See Phonograph—Pickup

FREQUENCY modulation receivers. See Radio receiving apparatus—Frequency modulation receivers

FRESH water flora

See also

Plankton

FREUNDLICH, Herbert Max Finlay, 1880-1941
Sketch. F. G. Donnan. por(pl) Chem Soc J p646-54 O '42

FRIBERG, August

Chief engineer receives distinguished service medal for heroism. Marine Eng 48:160-1 F '43

FRICTION

Frictional phenomena. A. Gemant. bibliog diags J Ap Phys 12:530-7, 526-33, 718-34, 827-36; 13:22-9, 90-6, 210-21, 290-9, 355-60, 688-96, 732-44; 14:204-16, 258-70, 456-64, 510-21 JI-Ag, O, D '41-F, Ap-Je, N-D '42, My-Je, S-O '43

Heat transfer and friction in the turbulent boundary layer of a compressible gas at high speeds; abstract. F. Frankl and V. Voishel. Roy Aeronautical Soc J 47:sup207-9, My '43

Locomotive machine friction. L. H. Fry. Ry Mech Eng 117:201-3 My '43

Lubricants; investigation of the conditions of boundary friction. Automobile Eng 32:532 D '42

Measuring the Coulomb and viscous components of friction. C. Kennedy. Instruments 15:404-6, 408-10 O '42

Pipe friction chart, fairly rough and rough pipe; reference data. Heat & Ven 39:46a-46b N '42

Ploughing and adhesion of sliding metals. F. P. Bowden, A. J. W. Moore and D. Tabor. il diags J Ap Phys 14:80-91 F '43

Static friction; machine for measuring friction between contacting surfaces separated by thin lubricating films. W. Claypoole. il diags A S M E Trans 65:317-22; Discussion. 322-4 My '43

See also

- Bearings
Lubrication and lubricants

FRICION, Internal

Frictional phenomena; internal friction in solids. A. Gemant. bibliog diags J Ap Phys 14:204-16 My '43

Frictional phenomena; technical applications of the internal friction of solids. A. Gemant. bibliog diags J Ap Phys 14:258-70 Je '43

See also

Viscosity

FRICION meter

Friction meter for determining the coefficient of kinetic friction of fabrics. E. C. Dreby. bibliog diag J Research Nat Bur Stand 31:237-46 O '43

FRICION tape. See Insulating tape

FRIEDEL-CRAFTS reaction

Chemistry of o-terphenyl; derivatives prepared from the hydrocarbon. C. F. H. Allen and F. P. Pingert. bibliog Am Chem Soc J 64:2639-43 N '42

FRIEDEL-CRAFTS reaction—Continued

- Friedel-Crafts reaction with cinnamic, crotonic, and β -chlorocrotonic acids. C. F. Koelsch, H. Hochmann and C. D. Le Claire. *Am Chem Soc J* 65:59-60 Ja '43
- Friedel-Crafts reactions of 9-phenyl-dodecahydronaphthalene-10-carboxylic acid. H. E. Eschinazi and F. Bergmann. *Am Chem Soc J* 65:1411-12 Ji '43
- Indanone ring closure of unsymmetrical β , β -diarylpropionic acids. C. F. H. Allen and J. W. Gates, Jr. *bibliog Am Chem Soc J* 65:422-4 Mr '43
- Polymethylbenzoylnaphthoic acids. R. H. Martin. *Chem Soc J* p239-41 My '43
- Some Friedel-Crafts type alkylations with boron trifluoride. G. F. Hennion and R. A. Kurtz. *bibliog Am Chem Soc J* 65:1001-3 Je '43
- Vinyl alcohols; isomeric bromo-1,2-dimesityl-1-propen-1-ols. R. C. Fuson, R. V. Lindsey, Jr. and P. B. Welldon. *bibliog Am Chem Soc J* 64:2888-91 D '42

FRIES reaction

- Action of phosphoric oxide on phenyl esters; the mechanism of the Fries reaction. A. Schönberg and A. Mustafa. *Chem Soc J* p79-80 F '43

FRIES rearrangement. See Molecular rearrangements

FRIJOLES. See Beans

FRITS

- See also
Enamel and enameling

FRITZ, John, medal

- Fritz medal awarded to Willis Whitney. *Power* 86:923c+ D '42
- Willis Whitney, John Fritz medalist; address by D. C. Prince, with response by W. R. Whitney. *Elec Eng* 62:151-4 Ap '43

FRITZSCHE, Carl Julius, 1808-1871

- Carl Julius Fritzsche and the discovery of anthranilic acid, 1841. F. E. Sheibley. *bibliog J Chem Educ* 20:115-17 Mr '43

FROEDTERT grain and malting company

- Debentures offered. *Comm & Fin Chr* 158:983 S 6 '43

FROLICH, Per Keyser, 1899-

- A.C.S. president, 1943. *Chem & Eng N* 20:1620 D 25 '42

- Sketch. *Nat Pet N* 35 pt 2:R2 Ja 6 '43

FROST

- See also
Roads—Frost damage

FROST heaving

- See also
Roads—Frost damage

FROZEN eggs. See Eggs, Frozen

FROZEN food. See Food, Frozen

FROZEN fruit. See Fruit, Frozen

FROZEN ground. See Soils—Freezing

FROZEN peas. See Peas, Frozen

FROZEN vegetables. See Vegetables, Frozen

FRUCTOSE

- Preparation of *d*-fructose-1,6-diphosphate by means of baker's yeasts. C. Neuberg and H. Lustig. *Am Chem Soc J* 64:2722-3 N '42

FRUCTOSIDES

- Photolysis of the *d*-glycosides: a benzylfructofuranoside, β benzylfructopyranoside, and α and β phenyl, benzyl and β phenylethyl glucosides; and the bearing of the data upon the transfer of energy within molecules. L. J. Heidt. *Franklin Inst J* 234:473-85 N '42

FRUIT

- Ascorbic acid values of fruits and vegetables for dietary surveys. M. Olliver. *Chem & Ind* 62:146-8 Ap 17 '43

Fruit products and canned foods; technical and business problems of industry in British Columbia. *Can Chem & Process Ind* 27:129 Mr '43

Less fresh fruit; smaller harvests of peaches, cherries, pears, and plums. *Business Week* p66+ Ji 24 '43

Thiosulphate solutions used to prevent discolorization of the cut surfaces of fruit and vegetables; patent. *Food Ind* 15:108 Ja '43

Vitamin-P activity of some British fruits and vegetables. A. L. Bacharach and M. E. Coates. *Soc Chem Ind J* 62:85-7 Je '43

See also

- Apples Citrus fruit
Avocados Oranges
Canning and preserving

Cleaning

- Wetting agents speed washing. R. W. Mitchell. *il Food Ind* 15:81 Ji '43

Preservation

Preserving fruits with SO_2 to aid lend-lease program. J. G. Woodroof and S. R. Cecil. *il Food Ind* 15:59-61 My; 87-71+ Je '43

Refrigeration important in avocado production. E. Hickman. *il Refrig Eng* 46:102+ Ag '43

See also

- Canning and preserving Fruit, Dried
Fruit, Frozen

Storage

Controlled atmosphere storage helps to keep fruits fresh. D. V. Fisher. *bibliog il Food Ind* 15:70-2+ My '43

Transportation

All-America package competition award; Ohio boxboard company wood reinforced shipping container for fruit and vegetables. *il Mod Packaging* 16:84+ Ap '43

Cross-haul critics long on theory. J. B. Eastman. *Ry Age* 114:215 Ja 16 '43

FRUIT, Dried

Army specifications for dehydrated foods; dehydrated prune powder, cranberries, apple nuggets. *Food Ind* 15:52, 122-4 Je '43

Dehydrating fruits, vegetables in community canning plants. J. A. Schaller. *il diags Food Ind* 15:56-8 Ap '43

Dehydration of fruits offers important wartime advantages. E. M. Mrak and others. *bibliog il Food Ind* 15:59-62 Ap '43

Dried-fruit industry in Argentina and Chile. A. J. Mullen. *il For Comm W* 11:10-12+ My 22 '43

Edible wetting agent; washing of dried fruit. *Food Ind* 15:129 Ag '43

How to compress foods; United States Department of agriculture guide to fruit and vegetable dehydrators. *il Food Ind* 15:64-5+ Ag '43

Idle machines put to work wrapping ration bars. *il Mod Packaging* 16:180 Ap '43

See also

- Apples, Dried
Bananas, Dried
Pears, Dried

FRUIT, Frozen

Dual-process quick freezing plant built in South; Dixie Frosted Foods uses immersion unit and air-blast freezer. G. H. Watson. *il diags Food Ind* 15:66-8+ O '43

Frozen fruits, 1938-1941. Survey of Cur Business 1942 Sup p117 [supplemented in monthly numbers]

Varieties of fruits rated with respect to their adaptability to satisfactory freezing-storage; table. B. W. Gardner, Jr. *Consumers' Research Bul* 12:16 Ji '43

See also

- Raspberries, Frozen
Strawberries, Frozen

FRUIT jar rings

Sealing jars, modern style. *il Mod Plastics* 20:71-2+ D '42

FRUIT juices

Better ways to make nonsettling juices. R. H. Lueck. *Food Ind* 15:122 S '43

Fruit and vegetable juice preparation and preservation. D. K. Tressler, C. S. Pederson and H. G. Beattie. *bibliog il diags Ind & Eng Chem* 35:96-100 Ja '43

Small-tube heat exchangers offer many advantages. J. W. Curtis. *bibliog il Food Ind* 15:58-60+ S '43

See also

- Orange juice

FRUIT Juices, Dried

Two methods for dehydrating citrus juices; spray drying and sublimation of moisture from frozen state. R. Holzcker. *il diags Food Ind* 15:62-3 Ag '43

FRUIT pickers

Across the border; southern California citrus growers see 100% harvest with Mexican workers. *Business Week* p85+ JI 31 '43
Victory picking; California citrus growers find part-time students helpful. *Business Week* p106 Ap 24 '43

FRUIT trade

Eat your prunes! other crops are down; military take is up. *Business Week* p22+ S 11 '43
How much fruit for canning companies? *Baron's* 23:8 My 24 '43
Production and marketing of fruits and vegetables. H. R. Wellman. *Ann Am Acad* 225:201-5 Ja '43

See also

Citrus fruit United fruit company
Fruit juices

Advertising.

Sunkist to carry on advertising; seek to convert non-users. *il Sales Management* 52:25 My 20 '43

Argentina

Dried-fruit industry in Argentina and Chile. A. J. Mullen. *il For Comm W* 11:10-12+ My 22 '43

Brazil

Dehydrated-banana factories, Brazil. *For Comm W* 10:25 Mr 27 '43
Executive commission established for control, production, trade, and exportation. *For Comm W* 13:16 O 2 '43

Bulgaria

Fruit production in Bulgaria. *For Comm W* 12:22 JI 31 '43

Chile

Dried-fruit industry in Argentina and Chile. A. J. Mullen. *il For Comm W* 11:10-12+ My 22 '43
Fruit-crop prospects for 1942-43. *For Comm W* 11:24 Je 5 '43

Egypt

Citrus-fruit situation. *For Comm W* 12:35-6 Ag 21 '43

Ontario

Fruit production in Ontario, 1941 and 1942. *For Comm W* 11:24-5 Ap 3 '43

Palestine

Palestine's citrus. *Economist* 145:238 Ag 21 '43

South Africa

Fruit canning expands in South Africa. A. R. Griffith. *il For Comm W* 12:5-7+ S 25 '43

FRY, Lawford Howard, 1873-

Lawford Fry made research director of Locomotive institute. *por Ry Age* 114:1236-7 Je 19 '43

FRYING

Conservation of fat; patent. *Food Ind* 15:127 O '43

FUEL

Acute fuel shortage in Denmark. *For Comm W* 11:29 My 29 '43
Army fuel consumption studies of 1941-42. L. C. McCabe, S. Konzo and R. E. Biller. *il map Heating-Piping* 15:38-45 Ja '43
Bureau of mines studies multiplicity of fuel problems. *Heat & Ven* 40:40 Ag '43
Coal: 98.8% of U.S. fuel resources; chart. *Coal Age* 48:57 Ap '43
Fuel and heating program at army cantonments. L. C. McCabe. *il Heating-Piping* 15:228-30 My '43
Fuel efficiency conference. *Chem Age (Lond)* 48:553-4 My 22 '43
Fuel movement better, supplies short. *Power* 87:582-5 S '43
Fuel, power, and transport, a national programme. W. W. Adam. *diags Inst Mech Eng J & Proc* 149:Proc 113-17 Je '43

Fuels conference held by the American institute of mining and metallurgical engineers, Coal division, and the American society of mechanical engineers, Fuels division, *diags Coal Age* 47:96+ N '42
Fuels division of the Cleveland engineering society. J. H. Herron. *Mech Eng* 65:518+ JI '43

Housing census: heating fuel and equipment. *Gas Age* 30:28-9 N 19 '42
Inter-fuel competition; a postwar certainty. *Chem & Met Eng* 50:120 F '43

Let's compare compressed-air fuel costs. *il Power* 87:740-2 N '43

Nation, the consumer, and the fuel industries. D. Milne-Watson. *Gas J (Lond)* 240: 158 N 4 '42; *Abstracts. Elec R (Lond)* 131: 591 N 6 '42; *Electrician* 129:495 N 6 '42
National fuel policy. R. M. Weidenhammer. *maps J Land & Pub Util Econ* 19:127-40 My '43

Natural gas versus coal in postwar era; abstract. W. M. Jablonski. *Pub Util* 32:442-4 S 30 '43

Operation of limitation order L-31 in the Ordnance department. R. B. Harris. *Am Gas Assn Mo* 25:136 Ap '43

Recent developments in fuels supply and demand. A. C. Fieldner. *bibliog W Soc E J* 48:127-47 S '43; Same. *U S Bur Mines Information Circ* 7261:1-27 '43; *Abstract. Chem & Eng N* 21:1067 JI 10 '43; *Abstract. Gas Age* 31:40+ My 20 '43; Same. *Am Gas Assn Mo* 25:253 Je '43

Short-cut procedures for evaluating some fuels. J. E. Brewer. *Am Gas Assn Mo* 25: 169 Ap '43

Supplementing anthracite with other fuels for home heating. W. T. Reid. *diags U S Bur Mines Information Circ* 7260:1-22 '43

Thermal dissolving of solid fuels; abstract. *Chem Ind* 52:628 My '43

Trends in the use of energy in the western states, with particular reference to coal. V. F. Parry. *diag map U S Bur Mines Rep of Invest* 3680:1-44 '43

World's fuel resources. J. G. Bennett. *Engineer* 176:63-9 JI 23 '43

See also

Alcohol as fuel	Gas, Natural
Automobile engines—	Gas and oil engines—
Fuel	Fuel
Automotive fuel	Gas as fuel
Benzol (commercial benzene)	Gasoline
Blast furnace gas	Heating
Boilers—Firing	Kerosene
Butane	Lignite
Chemical plants—	Liquid fuel
Fuel	Locomotives—Fuel
Coal	Motor bus engines—
Coal, Pulverized	Fuel
Coal waste	Motor truck engines
Coke	—Fuel
Coke breeze	Oil fuel
Coke-oven gas	Peat
Combustion	Petroleum coke
Diesel engines—	Pitch as fuel
Fuel	Power plants—Fuel
Fuel, Colloidal	Waste fuel
Furnaces	Wood as fuel

Bibliography

Survey of literature on the manufacture and properties of iron and steel, and kindred subjects. *Iron & Steel Inst J* 145:1A-258A no 1; 146:1A-233A no 2 '42

Conservation

See Fuel economy

Rationing

Fuel target. E. S. Stredwick. *Gas J (Lond)* 240:257+, 293 N 25-D 2 '42; *Discussion. 240:293 D 2 '42*

What can we learn from Britain's fuel and power rationing? R. Walker. *il Power* 87: 299-300+ My '43

Smokeless fuel

Smokeless fuel and post-war reconstruction; abstracts. G. E. Foxwell. *Gas J (Lond)* 240: 251-2 N 25 '42; *Electrician* 129:523 N 13 '42; *Discussion. Gas J (Lond)* 240:252 N 25 '42

FUEL—Continued**Statistics**

Gas cooking, a 10 to 1 favorite over electricity in urban and suburban homes; with tabulated data on cooking fuel in United States, 1940. T. J. Shanley. *Am Gas Assn Mo* 24:451-4 D '42

Statistics in the fuel and power industries. O. W. Roskill. *Engineering* 155:404, 425-6, 444 My 21-Je 4 '43; Excerpts. *Gas J (Lond)* 241:651 My 26 '43; Abstract. *Electrician* 130:522 My 21 '43; Discussion. *Gas J (Lond)* 241:672-3 Je 2 '43

Tables, calculations, etc.

Comparative fuel costs shown by new chart. W. J. Shore. *Chem & Met Eng* 50:116 O '43

Testing

Significance of ignition temperature test of fuels. A. W. Trusty. *Pet Eng* 14:78, 80+ Ja '43

FUEL, Colloidal

Coal-oil fuel; will it take hold as an oil stretcher? *Coal Age* 48:49-50 JI '43

Coal's new horizons; colloidal fuel, fluid coal, coking, marked for increase. *Coal Age* 48:62-3 Ap '43

Emergency use of oil-coal suspensions as colloidal fuel. W. L. Faith and H. W. Zabel. *bibliog flow sheet Pet Refiner* 22:69-71 Ja '43

Laminar flow of oil-coal suspensions. F. J. Gradishar, W. L. Faith and J. E. Hedrick. *bibliog diags Am Inst Chem Eng Trans* 39:201-22 Ap '43; Abstract. *Chem & Met Eng* 50:147-8 Ja '43

Liquid coal for oil conversions. T. W. Reynolds. *il diag Heat & Ven* 40:70-2+ JI '43

Mixing oil and coal for industrial burners. *Power* 86:922b+ D '42

Oil-coal fuel. J. M. Crowe. *Chem Ind* 52:611 My '43

Oil-coal mixture proposed for industrial boiler use by Bureau of mines to offset oil shortage. *Heat & Ven* 39:61 N '42

Stretching the oil; colloidal fuel tried for boilers. *Business Week* p86 My 1 '43

Use of mixtures of oil and coal in boiler furnaces. W. C. Schroeder. *bibliog Mech Eng* 64:793-8+ N '42; Abstract. *Nat Pet N* 34 pt 2:R363-4+ O 28 '42; Summary. *Power* 86:838a-838b N '42; Discussion. *Mech Eng* 65:278-84 Ap '43

Will colloidal fuel stretch next winter's fuel-oil supply? *diag Power* 87:374-5+ Je '43

Testing

Colloidal fuel substituted for oil fuel. J. F. Barkley, L. R. Burdick and A. B. Hersberger. *il Nat Pet N* 35 pt 2:R304-6 JI 7 '43; Same. *Coal Age* 48:51-3 JI '43; Same. *Power* 87:512-13+ Ag '43; Same. *Steel* 113:98-9+ JI 12 '43; Same. *Pet Refiner* 22:113-16 S '43

FUEL economizers

Chimney loss measurements without CO₂ meters; nomogram for determining losses by temperature measurements. R. H. Parsons. *Engineer* 175:165-6 F 26 '43

Welding simplifies repair of economizer; abstract. R. C. Fitzgerald. *il Elec W* 119:1488+ My 1 '43

FUEL economy

Automatic heat for a hospital. *il Dom Eng* 160:70-1 N '42

Coal is vital war material; review of Manual of instructions on proper firing methods. J. Howatt. *Heating-Piping* 16:582-4 N '43

Conservation chief points opportunity. H. Coonley. *Dom Eng* 161:53+ Je '43

Conservation program; industry-government campaign to save fuels, materials. *il Am Gas Assn Mo* 25:397-9 O '43

Controls, another wartime sales necessity. *il diags Dom Eng* 161:44-8 My '43

Controls versus fuel conservation. *Sheet Metal Worker* 34:45-6 Je '43

Does the 65 deg. ruling save fuel? problem. *Power Pl Eng* 47:94 Ja '43; Solutions. 47:91, 94, 96 Mr; 95-8 Ap '43

Domestic heating; balanced system proposed; abstracts. J. Dalton. *Elec R (Lond)* 132:479-80 Ap 9 '43; *Electrician* 130:370-1 Ap 9 '43

Economical operation of heating systems. *Heating-Piping* 14:720-1 D '42

Efficient use of fuel; committee's suggestions for economies in plant. *Chem Age (Lond)* 48:154-6 Ja 30 '43

Electricity and coal conservation. F. D. Parker. *Electrician* 129:466-7 O 30 '42

57 fuel conservation reminders. *Heating-Piping* 15:557 O '43

Firebox design is important to quality of coal used. D. L. Wilson. *diags Brick & Clay Rec* 103:37-43 O '43

Fuel conservation. H. Coonley. *Heating-Piping* 15:374-6 JI '43

Fuel conservation for coal, oil and gas, will increasingly be necessary. *Dom Eng* 161:42-3+ Ja '43

Fuel conservation opportunity. *il Dom Eng* 162:60-3 O '43

Fuel conservation plan developed; heating of factories. *Power Pl Eng* 47:120 Ap '43

Fuel conservation possibilities shown by survey or present status of heating facilities. K. C. Richmond. *Heating-Piping* 15:495-8 S '43

Fuel economy and import difficulties increase British interest in substitution problems. *Chem & Met Eng* 50:188-9 Je '43

Fuel economy campaign. *Chem Age (Lond)* 48:353-4 Mr 27 '43

Fuel economy conference. *Electrician* 130:511-12 Mv 21 '43; *Elec R (Lond)* 132:689-90 My 21 '43

Fuel economy in gas works. G. M. Gill. *Gas J (Lond)* 241:121-2, 152, 157, 216, 219, 247-8, 311-12, 377-8, 522-3, 714, 719; 242:173 Ja 27-F 3, 17-24, Mr 10, 24, Ap 28, Je 9, Ag 11 '43

Fuel economy in 1942, and after. *Chem Age (Lond)* 48:60-2 Ja 9 '43

Fuel economy in the gas industry. E. W. Smith. *Gas J (Lond)* 241:148, 151; Discussion. 151-2 F 3 '43

Fuel economy progress. *Electrician* 130:24 Ja 8 '43

Fuel economy; reducing losses in industry. J. N. Waite. *Elec R (Lond)* 132:23-4 Ja 1 '43

Fuel economy; the domestic consumer's response. G. O. McLean. *Elec R (Lond)* 132:517-18 Ap 16 '43

Fuel efficiency campaign. *Economist* 144:766-7 Je 12 '43

Fuel efficiency committee. *Engineer* 176:251-3 S 24 '43

Fuel problems in war time. E. F. Burns. *diags Paper Tr J* 115:102-8 N 26 '42

Fuel rationing and the A. B. C and D's of insulation; with cost data. *Dom Eng* 160:50+ D '42

Fuel requirements of carbonizing plant. S. D. Pexton. *Gas J (Lond)* 241:20, 23-4, 55-6, 61, 63 *bibliog*(p56), 83-6 Ja 6-20 '43; Discussion. 241:116-13, 157+ Ja 27-F 3 '43

Fuel saving methods. C. W. Kimball. *Heating-Piping* 15:287-8 Je '43

Fuel saving report; consumers' reasons for using more or less fuel; campaign of the London and home counties joint electricity authority. *Electrician* 131:174 Ag 20 '43

Gas industry and coal conservation. E. V. Evans. *Gas J (Lond)* 240:373-4 D 23 '42

Gas industry's part in Britain's battle for fuel. B. Hill. *Gas Age* 92:12-13+ S 23 '43

Gas; its place in the national fuel economy. D. Milne-Watson. *Engineer* 175:110 Ja 1 '43

Heat economy in large hotels. P. L. Geiringer. *Power Pl Eng* 47:67-9 Ag '43

Heating economy; distributing the ration equitably over the season. R. Grierson. *Elec R (Lond)* 132:381-2 Mr 19 '43

Heat's off but it's warm! shutting off bedroom radiators to conserve fuel. *Dom Eng* 161:60+ Ja '43

Here are the products and methods for fuel saving! *il Dom Eng* 161:54-7+ Je '43

Here are ways to save fuel. *Consumers' Research Bul* 11:23-6 Ja '43

How to be a local expert on fuel conservation. *il Am Bld* 65:36-7+ N '43

How to save fuel and keep comfortable. *Heating-Piping* 15:552-6 O '43

How to save fuel at home. J. F. Barkley. *U S Bur Mines Information Circ* 7229:1-5 '42

FUEL economy—Continued

- If winter comes; fuel conservation is the campaign keynote of insulation, weather-stripping, and sash and door industries. *Business Week* p64+ Ag 14 '43
- Industry's biggest job; fuel conservation; government publicity; FHA loans. *Dom Eng* 161:48-50, 52 Je '43
- It starts in the boiler house. F. D. Mosher. *il Textile World* 93:112-13 F '43
- Less fuel vs. comfort. M. F. Blankin. *il Heating-Piping* 15:547-50 O '43
- Let's consider industrial gas conservation. D. W. Frye. *il Gas Age* 92:19-20 Jl 15 '43
- National fuel policy; abstract. E. W. Smith. *Elec R (Lond)* 133:541 O 22 '43
- Need for fuel conservation. *Sheet Metal Worker* 34:52-4 Jl '43
- Officials call for fuel conservation; distribution measures taken. *Coal Age* 43:114 Ag '43
- Our industry speaks; heating equipment and fuel conservation. *il Dom Eng* 162:47-53, 63 Jl 53-4+ Ag '43
- Prevent fuel waste for war. J. F. Barkley. *Power Pl Eng* 47:75 Ap '43; Same. *Heat & Ven* 40:40 My '43
- Prevent fuel waste; maintenance services; data sheet. J. F. Barkley. *Factory Management* 101:164 Jl '43
- Proper steam trap maintenance aids fuel conservation. *Heat & Ven* 40:56-8 Jl '43
- Rationing spurs winterizing drive; advice to home owners for making their own repairs leads to increased business for heating contractors. *il Sheet Metal Worker* 34:46+ O '43
- Save fuel for victory. diags III U *Eng Exp Sta Circ* 47:1-35 '42 (pa 25c)
- Steam, heat and power utilisation conference. *Engineering* 155:475-6, 499-500 Je 11-18 '43
- Thrifty warmth. J. Holt. *Tech R* 45:77-8+ D '42
- Use of electricity in relation to fuel economy. R. H. Rawll. *Inst E E J* 89 pt 2: 262-3 Ag '43; Abstracts. *Electrician* 130: 143-4 F 5 '43; *Elec R (Lond)* 132:213-14 F 12 '43; Discussion. *Inst E E J* 89 pt 2: 263-6 Ag '43; *Electrician* 130:195-6 F 19 '43; *Elec R (Lond)* 132:253-4 F 19 '43
- Voluntary fuel-saving campaign; typical British advertisement. D. M. DeBard. *il Gas Age* 90:14-15 D 17 '42
- Washington takes the lead on conversion; U.S. senators make special statements. *il Dom Eng* 160:40-1+ O; 44+ N; 42+ D '42
- See also*
- | | |
|-------------------------|-----------------------|
| Boilers—Gas firing | Insulation (heat) |
| Coal—Chemical treatment | Locomotives—Fuel |
| Coal distillation | Oil fuel—Conservation |
| Coal waste | Oil fuel—Rationing |
| Combustion | Temperature— |
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| Feed water heaters | Waste fuel |
| Fuel economizers | Waste heat |
| Furnaces | |
- FUEL oil.** See Oil fuel
- FUEL pumps.** See Pumps, Fuel
- FUEL research**
- See also*
- Coal research
- Gas research
- FUEL tanks.** See Airplanes—Fuel tanks
- FUELING stations.** See Locomotives, Diesel—Fueling stations
- FULLER'S earth**
- Early detection of fatigue cracks; use of fuller's earth. G. H. Boss. *Metal Prog* 44: 96 Jl '43
- Effect of high pressure extrusion on the adsorption capacity of floridin. R. C. Amero and R. G. Capell. *bibliog il Pet Refiner* 22:82-6 Ja '43
- How a fuller's earth filter purifies oil. H. E. Rowe. *Elec W* 120:1034 S 18 '43
- FULTON iron works company**
- Financial analysis. E. Williams. *Comm & Fin Chr* 157:482 F 4 '43
- FUMARIC acid**
- Disappearance of thiosulfate in solutions of maleic acid; catalysis of *cis-trans* isomerization. H. Taube. *bibliog Am Chem Soc J* 65:526-31 Ap '43

FUMES

- Encephalopathy from inhaling fumes from burning storage battery boxes. W. D. McNally. *J Ind Hygiene* 25:29-30 Ja '43
- Filter paper method for lead fume collection. L. Silverman and J. F. Ege, jr. *bibliog il diags J Ind Hygiene* 25:185-8 My '43
- Flame shrinking galvanized plates without generating obnoxious fumes. A. Lake. *il Steel* 112:108-9+ Ap 19 '43
- Jack & Heintz solves fume problem by installing air recovery equipment. *il diag Heat & Ven* 40:54-5 Ag '43
- Metal fume hazards. J. W. Fehnel. *il Safety Eng* 86:45-6, 48-9 Ag; 48-9 S '43
- See also*
- Flue gas
- Smoke
- FUMES, Acid**
- Handling fumes from an acid tank. R. L. Grayford. *diags Sheet Metal Worker* 34: 22-3 Mr '43
- Influence of acid fumes upon the teeth of workers in pickle, accumulator and acid works in Westphalia; abstract. W. Ludewig. *J Ind Hygiene* 25:sup35-6 F '43
- FUMIGANTS**
- Determination of fumigants; determination of chlorohydrocarbons by thermal decomposition. F. P. W. Winteringham. *diag Soc Chem Ind J* 61:190-2 D '42
- Determination of fumigants; determination of chlorohydrocarbons in air by reaction in monoethanolamine. F. P. W. Winteringham. *diags Soc Chem Ind J* 61:186-7 D '42
- Determination of fumigants; determination of ethylene dichloride and dichloroethylene; analysis of mixtures. F. P. W. Winteringham. *Soc Chem Ind J* 61:187-90 D '42
- See also*
- Methyl bromide
- FUMIGATION**
- See also*
- Disinfection and disinfectants
- Insecticides
- FUNCTIONS**
- Inverse functions of complex quantities. H. B. Dwight. *bibliog Elec Eng* 61:Trans 850-3 D '42
- Mathematical shortcuts for engineers. D. B. Steinman. *Eng N* 130:747-9 My 20 '43
- FUNCTIONS, Orthogonal**
- Punched card technique to obtain coefficients of orthogonal polynomials. L. F. Knudsen. *bibliog Am Stat Assn J* 37:496-506 D '42
- FUNERAL directors.** See Undertakers
- FUNERALS, Cost of**
- Burial business; cost of dying fluctuates; wartime regulations. *il Business Week* p38+ S 25 '43
- FUNGI**
- Determining the deterioration of cellulose caused by fungi. G. A. Greathouse, D. E. Klemme and H. D. Barker. *bibliog il Textile Col* 65:168-75 Ap '43
- Mycoflora of Bermuda. F. J. Seaver. *Science* 96:462-3 N 20 '42
- See also*
- | | |
|--------------|----------------|
| Bacteriology | Mildew |
| Dry rot | Molds (botany) |
- FUNGI, Pathogenic**
- Isolation of haplosporangium parvum n. sp. and coccidioides immitis from wild rodents; their relationship to coccidioidomycosis. C. W. Emmons and L. L. Ashburn. *bibliog diags Pub Health Rep* 57:1715-27, pl 1-4 N 13 '42
- Practical plan for the treatment of superficial fungus infections. S. M. Peck and L. Schwartz. *Pub Health Rep* 58:337-45 F 26 '43
- See also*
- Coccidioides
- Sporotrichosis
- FUNGICIDES**
- Conference on attaining maximum effectiveness of insecticides and fungicides. C. I. Bliss. *Science* 97:216 Mr 5 '43
- Copper fungicide advisory group named. *Oil Paint & Drug Rep* 142:5 D 28 '42

FUNGICIDES—Continued

Evaluation of fungicides: a study in quantitative toxicology; bio-assay and the physico-chemical methods. H. Martin, bibliog Soc Chem Ind J 62:67-70, 112 My, JI '43; Abstract. Discussion. Soc Chem Ind J 62:70-1 My '43

Forecast of insecticide and fungicide raw material supplies for 1943 and 1944. *il Chem Ind* 53:71-2 JI '43

Fungicides and germicides in the pulp and paper industry. D. K. Ballman and F. B. Smith. *il Paper Ind* 25:143-8 My '43

Guarding cotton from mildew, dry rot, and termites. *il Business Week* p48 My 8 '43

Mildewproofed cotton fabrics. J. E. Goodavage. *Am Dyestuff Rep* 32:265-70 Je 7 '43; Abstract. *Textile World* 93:92-3 Je '43

Some factors influencing the toxicity of ozone to fungi in cold storage. R. D. Watson. bibliog *diag Refrig Eng* 46:103-6 Ag '43

Toxicity studies with the fungicide tetra-chloro-para-benzoquinone (spergon). T. H. McGavack and others. bibliog *il J Ind Hygiene* 25:98-111 Mr '43

FUNNELS

Funnels and strainers of plastic. *il Consumers' Research Bul* 11:22 My '43

FUR

Principles of fur bleaching. W. E. Austin. *Textile Col* 65:407-11, 429-30+ S-O '43 (to be cont)

To buy or not to buy a fur coat. *Consumers' Research Bul* 12:5-7 O '43

See also

Dyes and dyeing—

Fur

Sealskin

FUR trade

Fur sales hit. *Business Week* p38+ N 14 '42

Furs are big business. D. R. Crone. *il For Comm W* 9:3-7+ D 19 '42

See also

Hudson's Bay company

Afghanistan

Furs and textiles in Afghanistan. M. E. Wambsganss. *il For Comm W* 12:10-11 S 18 '43

Canada

Canada's raw-fur production, 1939-40 and 1940-41. *For Comm W* 9:29 D 19 '42

FUR workers

Health hazards in the fur industry. H. Heilmann. bibliog (34 titles) *J Ind Hygiene* 24:322-31 D '42

FURAN

Acylation of β -hydroxyfurans. R. E. Lutz, C. E. McGinn and P. S. Bailey. *Am Chem Soc J* 65:843-9 My '43

Condensations by sodium; furylene disodium; comments on the aromatic properties of furan. A. A. Morton and G. H. Patterson. bibliog *Am Chem Soc J* 65:1346-8 JI '43

Conversion of unsaturated 1,4-diketones into furans and hydroxyfuranones. R. E. Lutz and C. E. McGinn. bibliog *Am Chem Soc J* 64:2585-8 N '42

Halogen compounds derived from 4-methyl-2,5-diphenylfuran. R. E. Lutz and C. E. McGinn. *Am Chem Soc J* 64:2583-5 N '42

3-Hydroxy-2,5-dimesitylfuran and related compounds. R. E. Lutz and C. E. McGinn. *Am Chem Soc J* 65:849-53 My '43

Infra-red spectrum of furan. L. W. Pickett. bibliog *J Chem Phys* 10:660-3 N '42

FURANACETIC acid

Condensation of 2-furanacetic acid with o-nitrobenzaldehyde. E. D. Amstutz and E. R. Spitzmiller. *Am Chem Soc J* 65:367-9 Mr '43

FURFURAL

Coal oxidation. W. Fuchs, T. S. Polansky and A. G. Sandhoff. bibliog *il Ind & Eng Chem* 35:343-5 Mr '43

Determination of furfural. I. J. Duncan. bibliog *Ind & Eng Chem Anal ed* 15:162-4 Mr 15 '43

Effect of temperature on liquid-liquid equilibrium; benzene-acetone-water system and dicosane-1,6-diphenylhexane-furfural system. S. W. Briggs and E. W. Comings. *il diags Ind & Eng Chem* 35:411-17 Ap '43

Extraction of furfural-water solutions with toluene in a packed column. O. S. Knight. bibliog *il diag Am Inst Chem Eng Trans* 39:439-56 Ag '43

Production of furfural from D-lyxose and D-ribose. R. C. Hockett, A. Guttig and M. E. Smith. bibliog *diag Am Chem Soc J* 65:1-3 Ja '43

FURFURAN. See Furan**FURNACE black. See Carbon black****FURNACE industry and trade**

Beware of new sales tricks in the heating business. *Consumers' Research Bul* 12:8 S '43

Furnace limitation order amended. *Sheet Metal Worker* 34:36 Ag '43

Statistics

Furnace sales in 194X estimated at \$93,300,000. *Sheet Metal Worker* 34:53 My '43

FURNACES

Analyzing heat flow in cyclic furnace operation; electric method simplifies determination of economic insulation thickness. C. B. Bradley and C. E. Ernst. *diags Mech Eng* 65:125-9 F '43; Discussion. 65:527-30 JI '43

Automatic timing on furnace loads; General Electric type TSA-10 timer; use to measure elapsed distance in travel of conveyor. *Blast F & Steel Pl* 31:sup49 Ap '43

Burning of sawdust. *diags Engineering* 155:247 Mr 26 '43

Converting furnaces from oil to coal firing; boiler and metallurgical furnaces. R. M. Hardgrove. *diags plans Mech Eng* 65:573-80 Ag '43

Cooperative investigation of the effect of furnace type and atmosphere on fusibility of coal ash. H. M. Cooper and R. F. Abernethy. *U S Bur Mines Rept of Invest* 3724:1-43 '43

Present-day furnace design. H. O. Johanson. *Pet Eng (Ref annual)* 14:243 JI 1 '43

Smokeless heat; Fellows new down-draft furnace. *il diag Business Week* p94+ Ap 17 '43

See also

Blast furnaces

Cement kilns

Coke ovens

Cupola furnaces

Electric furnaces

Fire brick

Fuel

Glass furnaces

Glass manufacture

Glass tanks

Heating

Kilns

Lime kilns

Oil burners

Open hearth furnaces

Refractory materials

Refuse incinerators

Atmosphere control

Handling of liquid ammonia for nitrating and other atmospheres. C. V. Snell. *il diags Metal Prog* 43:245-8 F '43

See also Furnaces, Heat treating—Atmosphere control

Lining

See also

Furnaces, Steel making—Lining

FURNACES, Annealing

Relieving strains in castings; Landis tool co. *Mach* 49:167 My '43

See also

Glass furnaces

Atmosphere control

Controlled atmosphere indicator; use of thermal-conductivity-type gas analyzer. C. A. Hansen Jr. *il Gen Elec R* 46:221-2 Ap '43

Manufacture

Conserving critical alloys in heat-treating equipment; steel annealing covers sprayed with molten aluminum. H. S. Ingham. *il Steel* 112:94, 96 F 15 '43

FURNACES, Boiler

Boiler firebox maintenance; refractories and the importance of their proper use. K. Steiner. *il Heating-Piping* 15:174-5 Ap '43

FURNACES, Boiler—Continued

Conversion from oil firing to coal firing. O. Craig, diags Power Pl Eng 47:66-8 JI '43
 Converting furnaces from oil to coal firing; boiler and metallurgical furnaces. R. M. Hardgrove, diags Mech Eng 65:573-7 Ag '43; Same cond. Power Pl Eng 47:78-81 Ag '43

Double furnace volume gives double boiler capacity. O. Rantanen, diags Power 87:259-60 Ap '43

Furnace walls are temperamental; right and wrong ways of doing a job; illustrations with text. G. P. Reintjes, Power 87:329-30 My '43

New kinks for boiler rooms; brickwork and refractories. G. P. Reintjes, il diags Power 87:395+ Je '43

600 miles and 10,000 pounds; boiler gains efficiency by added waterwalls and new stoker; Russell-Miller milling co. E. S. Rieder, il diags Power 87:594-6 S '43

Tube corrosion of furnace walls. G. S. Gethen, il diags Power Pl Eng 47:74-8 O '43

See also

Boilers

Boilers—Firing

Slag (in boilers)

Explosions

See Boiler explosions

Lining

Refractory selection and maintenance problems. D. W. Wuerthele, Paper Tr J 116: 48-50 My 13 '43; Same cond. Paper Ind 25: 433-4+ JI '43

FURNACES, Carburizing

Developments in continuous gas carburizing. R. J. Cowan, il diags Steel 113:96+ S 13; 104-5+ S 27 '43

FURNACES, Cupola. See Cupola furnaces**FURNACES, Electric. See Electric furnaces****FURNACES, Enameling**

Firing

Controlled oxidation firing in automatic enameling furnace. W. G. Martin, il diags Steel 112:92, 95-6+ My 10 '43

FURNACES, Forging

Forging and welding 1000-lb. aerial bombs. J. B. Nealey, il Iron Age 151:50-2 F 11 '43
 Furnace has all-door front wall. L. S. Longenecker, diags Blast F & Steel Pl 31: 220-2 F '43

Pulverized coal for forge furnaces. R. B. Engdahl and F. E. Graves, bibliog il diags A S M E Trans 65:31-41; Discussion. 41-5 Ja '43

FURNACES, Foundry

See also

Cupola furnaces

Furnaces, Non-ferrous melting

Furnaces, Steel making

FURNACES, Heat treating

Automatic heat treating in a jobbing forge shop; General drop forge co. R. R. LaPelle, il Iron Age 151:52-3 Je 17 '43

Automatic units for heat treating high explosive shells. D. H. Gardner and J. Wallerius, il diags Metal Prog 42:361-6 N '42

Continuous treating furnace for shells, il diag Iron Age 150:61 N 19 '42

Converting semi-muffle furnace to full muffle type. R. F. Schaffer, diags Metal Prog 43: 571-2 Ap '43

Equipment progress; twenty years of industrial gas research and development. E. G. de Corioliis, il Am Gas Assn Mo 25:137-41+ Ap '43

Forced convection heating to 1750 degrees Fahr. is practical in new furnace design. L. H. Reniker, il Steel 111:31-2 N 30 '42

Heat-treating aircraft engine parts, il Aviation 41:171, 173 D '42

Heat treatment of solid armor-piercing (A.P.) and semi-armor-piercing (S.A.P.) shot, il Steel 112:90-1+ Je 21 '43

Heating furnaces and refractories, 1942. M. H. Mawhinney, Metals & Alloys 17:78-9 Ja '43

High-speed loading and quenching system for heat-treating furnace for aluminum casting, il Comp Air M 48:6992-3 Mr '43

Lindberg heat treating furnace uses forced convection, il Foundry 71:118 Ja '43; Mach 49:132 Ja '43

Metal treating and melting. R. C. LeMay, il Gas Age 90:24-6+ N 19 '42; Same, Am Gas Assn Proc 1942:184-7

New equipment, il Iron Age 152:60-2 S 23 '43
 New equipment; heat treating and process control, il diag Iron Age 151:87-9 Mr 11 '43

Nitriding furnaces, diags Automobile Eng 33:277-82 JI '43

Renewable tip carrier blades, diags Blast F & Steel Pl 31:140 Ja '43

Selection of recirculating furnaces. J. Wallerius and J. Ade, il diags Am Mach 87: 101-4 O 14 '43

Wartime metallurgy conserves strategic materials; heat-treating equipment. R. E. Orton and W. F. Carter, bibliog il diags Machine Design 15:111-15 F '43

See also

Electric furnaces,

Heat treating

Furnaces, Annealing

Atmosphere control

Avoiding decarburization. C. G. Segeler, Am Gas Assn Mo 25:78-80 F '43

Controlled atmospheres in England; abstract. S. V. Williams, Metals & Alloys 18:572+ S '43

Controlled heat-treating atmospheres; reference book sheet. C. E. Peck, Am Mach 86:1315, 1317, 1387 N 12-26 '42

Dew-point indicator guards heat treatment of war production components, il diag Instruments 15:545-6 D '42

Electrical weatherman guards war production; electronic dew point recorder for furnace atmospheres, Power Pl Eng 47:79 Je '43

Control

Wheelco temperature control used for furnace or salt bath, diag Am Mach 87:126 F 4 '43; Steel 111:60 D 28 '42; Metal Finishing 41: 154 Mr '43

FURNACES, Heating

Furnace has all-door front wall. L. S. Longenecker, diags Blast F & Steel Pl 31: 220-2 F '43

See also

Furnaces, Forging

Furnaces, Heat

treating

Atmosphere control

Desirability of removing sulphur from gaseous fuels for heating ferrous metal. A. Preece, Engineering 155:405-6 My 21 '43; Abstract, Metals & Alloys 18:870+ O '43

Lining

Burned out furnace can be replaced in 30 minutes with castable refractories; furnaces used in Penrate process, Brick & Clay Rec 103:58 S '43

FURNACES, Iron founding

Symposium on melting of malleable iron; A.F.A. annual meeting, Foundry 71:174+ Je '43

See also

Cupola furnaces

FURNACES, Laboratory

Control of atmosphere in laboratory kilns. C. L. Thompson, il Am Cer Soc Bul 22: 302-4 S 15 '43

FURNACES, Metallurgical

Equipment progress; twenty years of industrial gas research and development. E. G. de Corioliis, il Am Gas Assn Mo 25:137-41+ Ap '43; Abstract, Metal Prog 44:647-8+ O '43

Melting of bushy steel turnings; abstract. F. Kohler, Iron Age 151:50 Ap 22 '43

Overcoming difficulties in feeding ore into a quicksilver furnace. W. Bradley, il diags Min Cong J 29:28-30 Je '43

Progress in antimony recovery; types of furnace recommended. A. G. Arend, il diags Chem Age (Lond) 49:337-40 O 2 '43

See also

Blast furnaces

Cupola furnaces

Electric furnaces,

Metallurgical

Furnaces, Steel

making

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FURNACES, Metallurgical—Continued**Control**

Avoiding heat losses in multiple-burner furnaces. *diag* Steel 111:76 D 28 '42

Firing

Pulverized coal for metallurgical furnaces. R. B. Engdahl. *bibliog* *il* *diags* Iron Age 150:27-31 D 31 '42
Utilizing pulverized coal in the metallurgical industries. C. F. Herington. *il* *diags* plan A S M E Trans 65:393-400 J1 '43

Lining

Carbon, a refractory material. F. J. Vosburgh. *il* *diags* Steel 112:106-8, 110+ Ap 5; 118, 120, 125+ *bibliog*(p147) Ap 12 '43
Factors insuring satisfactory industrial furnace refractory construction. J. Wallerius and F. Ericson. *il* Metal Prog 44:632-4 O '43
Practical furnace insulation; abstract. J. W. Dawson. Metals & Alloys 17:1252+ Je '43

FURNACES, Non-ferrous melting

Crucibles need care because of shortage of graphite. F. L. Wolf. Foundry 71:105+ S '43

Melting, alloying, heating aluminum and alloy ingot; reverberatory furnace design. R. R. LaPelle. *diags* Metal Prog 44:276-7 Ag '43

Metal treating and melting. R. C. LeMay. *il* Gas Age 90:24-6+ N 19 '42; Same. Am Gas Assn Proc 1942:184-7

Portable furnace and ladle for light alloys. *il* Iron Age 151:49 Ap 15 '43; Same. Foundry 71:142 J1 '43

Radiant heat for magnesium melting. *il* Iron Age 151:55 Mr 11 '43

Selas furnace for magnesium. *il* Steel 112:122+ Mr 8 '43

See also

Electric furnaces,
Non-ferrous melting

FURNACES, Reverberatory

Melting, alloying, heating aluminum and alloy ingot; reverberatory furnace design. R. R. LaPelle. *diags* Metal Prog 44:276-7 Ag '43

Trends in reverberatory smelting of copper. R. W. Chambers. *diags* plan Can Min J 64:210-18, 296-300 *bibliog*(p300) Ap-May '43

FURNACES, Steel making

Control of multi-fuel furnaces; abstract. J. C. Vaaler. Metals & Alloys 16:922+ N '42
Ford triplexing installation. W. A. Phair. *il* *diag* plan Iron Age 151:63-5 Mr 11 '43
Limestone production around the clock; flux stone for steel furnaces; Hillsville district near Youngstown, Ohio. W. B. Lenhart. *il* Rock Prod 46:50 Ap '43

Production in rotary furnaces of steel for castings. F. A. Lemon and H. O'Neill. *bibliog* Iron & Steel Inst J 146:53-71, pl 3-4 no 2 '42; Same cond. Engineering 155:257-60, 279-80 Mr 26-Ap 2 '43; Abstracts. Metals & Alloys 17:576+ Mr '43; Iron Age 151:32 Je 14 '43; Discussion. Iron & Steel Inst J 146:71-2 no 2 '42

Production in rotary furnaces of steel for castings; patching process for Sesci furnace linings; tests on refractory lining materials. T. Fletcher; J. N. Bradley. Iron & Steel Inst J 146:66-70 no 2 '42; Same cond. Engineering 155:279-80 Ap 2 '43

See also

Converters
Electric furnaces,
Steel making

Furnaces, Heat treating
Furnaces, Heating
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Lining

Chrome ore and chrome magnesite; steel plant refractories. J. H. Chesters. *il* Iron Age 152:68-71 N 11 '43 (to be cont)

Dolomite refractories. J. H. Chesters. *il* Iron Age 152:48-53 Ag 5; 86-9+ *bibliog*(p89+) Ag 12 '43

Harbison-Walker ramming mix features economy of time and labor. *il* Brick & Clay Rec 103:55-6 S '43

Ramming mixture for basic furnace bottoms; H-W Magnamix. Blast F & Steel Pl 31:700+ Je '43

Refractories in review, 1942. L. A. Smith. *il* Blast F & Steel Pl 31:81-3 Ja '43

Second report on refractory materials; summary. Iron & Steel Inst J 145:303-5 no 1 '42

Silica and semi-silica refractories. J. H. Chesters. *il* *diags* Iron Age 151:36-41 Ja 21; 44-9 *bibliog*(p47-9) Ja 28 '43

FURNACES, Warm air

Continued decline in furnace production; orders booked for the first quarter of 1943. Sheet Metal Worker 34:47 Je '43

Furnace limitation order amended. Sheet Metal Worker 34:36 Ag '43

Furnace production higher in third quarter. Sheet Metal Worker 33:42-3 D '42

Furnace production increased; orders booked for warm-air furnaces and complete winter air-conditioning units. Sheet Metal Worker 34:48 S '43

Furnace sales in 194X estimated at \$93,300,000. Sheet Metal Worker 34:53 My '43

Now is furnace cleaning time. Sheet Metal Worker 34:44 Je '43

Performance characteristics of a downdraft coking furnace. J. R. Fellows. *il* *diag* Mech Eng 65:321-4 My '43

Problem for furnace makers; prevention of leakage of carbon monoxide. J. C. Miles. Sheet Metal Worker 34:44 O '43

Summer care of heating systems. Sheet Metal Worker 34:38, 40+ Ap '43

Use of the down-draft coking method for smokeless combustion. J. R. Fellows and J. C. Miles. *il* *diags* Heating-Piping 15:431-5 Ag '43; Abstract. Sheet Metal Worker 34:38, 40 S '43; Discussion. Heating-Piping 15:435-7 Ag '43

Lining

Emergency furnace repairs. Sheet Metal Worker 34:36 Ap '43

Standards

Standard for coal-burning units. *diags* Sheet Metal Worker 34:52+ S '43

Warm-air furnaces equipped with vaporizing pot-type oil burners. *pl* *diags* U S Nat Bur Stand Commercial Standard (Emergency) CS(E)104-43:1-27; pa 10c Supt. of doc. '43

FURNITURE

British plan for furniture; possibilities of plastics. G. Fejér. *il* Mod Plastics 20:70-2+ Ap '43

Drexel flouts furniture tradition; offers demountable Pakto line. *il* Sales Management 52:62-3 Ap 1 '43

New demountable furniture saves shipping space, eliminates metal. *il* *diags* Arch Forum 79:100+ J1 '43

New kinds of furniture. Barron's 22:5 D 7 '42

Uneasy seat; Federal public housing authority lease of furniture to tenants in Authority projects. Arch Forum 79:104+ S '43

Wood and fiber furniture and equipment. *il* Factory Management 101:128 My '43

FURNITURE, Built-in

Jobs you can sell; clever built-ins. *il* Am Bld 65:44-5 F; 50-1 Mr; 50-1 Ap '43

FURNITURE, Garden. See Garden ornaments and furniture**FURNITURE, Steel**

Steel furniture and shelving, 1938-1941. Survey of Cur Business 1942 Sp p140 [supplemented in monthly numbers]

FURNITURE factories**Accidents**

Causes and prevention of injuries in the manufacture of lumber products, 1941. F. S. McElroy and G. R. McCormack. Monthly Labor R 55:960-77 N '42

FURNITURE industry and trade

Furniture fizzle; SWPC's contract with Michigan furniture manufacturers. Business Week p28+ Je 12 '43

Furniture for sale; former Stevens hotel. Business Week p70 F 27 '43

Furniture swaps; dealers' informal trading among themselves. Business Week p88-9 F 13 '43

FURNITURE industry and trade—Continued

Goodbye Mr Chippendale; home furnishings industry; P.I. industry story. P. H. Erbes, Jr. *Il Ptr Ink* 202:13-14, 44+ F 26 '43
 Show goes on; furniture people gather in Chicago. *Il Business Week* p90+ JI 3 '43
 Things to come; dealers will flock to June furniture show. *Business Week* p40+ Ap 24 '43
 Who didn't come? buyers throng furniture market in Chicago. *Business Week* p 14 Ja 9 '43

Advertising

Conservation theme successful for retail furniture chain store. *Il Ptr Ink* 204:78 JI 30 '43
 Prize contest produces furniture industry ad; manufacturer runs contest among dealers for copy and layout for national magazine advertisement. *Il Ptr Ink* 205:22-3+ O 15 '43

Statistics

Furniture, 1938-1941. Survey of Cur Business 1942 Sup p135 [supplemented in monthly numbers]

Great Britain

Design for living; distribution of furniture. *Economist* 144:41 Ja 9 '43
 Furniture trade. *Economist* 145:86-7 JI 17 '43

FURNITURE springs. See Springs (furniture)

FUOIC acid

Reaction of fuoic acid with tetralin. C. C. Price and N. C. Deno. bibliog *Am Chem Soc J* 64:2601-2 N '42

FURRIERS' customers insurance. See Insurance, Furriers' customers

FUSED silica. See Silica, Fused

FUSES

Fuze adaptors made by forging. J. H. Frye. *Il Iron Age* 151:50-2 Ap 15 '43
 Redesigned fuse adaptor saves time and metal. J. B. Nealey. *Il diags Iron Age* 151:40-3 Ja 28 '43
 Wind tunnel test specifications for quality control of bomb fuzes. A. L. Atherton. *Il Product Eng* 14:95-8 F '43

Manufacture

Cuts time for machining fuze bodies. D. Mallett. *diags Am Mach* 86:1505 D 24 '42
 Dies for stirrup springs for 40-mm. percussion fuze. *Il diags Am Mach* 86:1522-4 D 24 '42
 Drilling and tapping fuze bodies; operations performed on Kingsbury machines. *Il diags Mach* 49:127-40 Mr '43
 Producing trench mortar shell fuzes molded of cotton-flock-filled phenolic compound. W. S. Larson. *Il Mod Plastics* 20:71-3+ Ja '43

FUSES, Electric. See Electric fuses

FUSIBLE alloys. See Alloys, Low melting

FUSIBLE plugs

Questions and answers for power engineers; safety valves, water-level alarms, fusible plugs. *diags Power* 87:771-2 N '43

FUTURES

See also
 Exchanges
 Speculation

G**GABARDINE**

Color fastness and physical properties of wool and rayon gabardines. H. M. Fletcher and H. M. S. Sherwood. bibliog *Am Dye-stuff Rep* 32:280, 291-6 Je 21 '43

GADOLINIUM formate

Crystal structure of gadolinium formate, Gd(OOCH)₃. A. Pabst. bibliog *diags J Chem Phys* 11:145-9 Mr '43

GAGER, Charles Stuart, 1872-1943

Sketch. W. J. Robbins. *Science* 98:234-5 S 10 '43

GAGES

Air-O-Limit bearing gage checks inside diameters for errors in straightness, roundness and size. *Il Am Mach* 87:145 O 14 '43; *Mach* 50:207+ N '43
 And now, glass gages! *Il Mach* 49:141-2 Mr '43
 Automatic shell gaging. J. F. Maher. *diags Instruments* 16:34-5 Ja '43
 Beale & Arnold gage for depth measuring. *diag Steel* 112:136 Ap 5 '43
 Bearing inspection without contact; silver plated and lead-indium plated bearings checked by Air-O-Limit and Electrolimit gages. *Il diags Am Mach* 87:86-9 Ag 19 '43
 Carl Edvard Johansson, grand master of industrial measurement; inventor and manufacturer of the famous gageblocks. J. Gailiard. *Ind Stand* 14:293 O '43
 Chromium plate, its thickness and finish requirements. T. G. Coyle. *Steel* 113:118+ S 6 '43; *Excerpts. Iron Age* 152:72-3 Ag 5 '43
 Electric thickness gages speed production. H. P. Kuehni. *Il Instruments* 16:15 Ja '43; *Same cond. Metals & Alloys* 17:226 Ja '43
 Electrical tube gauge. E. Fawcett. *Il diags Engineering* 156:301-2 O 15 '43
 Exemplary inspection system is foolproof and time-conserving. Nash-Kelvinator corp. *Il Aero Digest* 42:193+ My '43
 Gage cut in two, remounted. E. Komuves. *diags Metals & Alloys* 17:788 Ap '43
 Gage gives weight factor of holes. F. Speke and C. Reynolds. *Il diags Am Mach* 87:131-2 F 18 '43; *Metals & Alloys* 18:81 JI '43
 Gage that weighs shell forgings. R. J. Fittness. *Il diags Instruments* 16:406 JI '43
 Gages give us mass quality. L. Polk. *Am Mach* 87:98 JI 8 '43
 Gages harassed; reporting plan for keeping all available gage-making tools busy. *Business Week* p73-4 N 28 '42
 Gages in war production. H. B. Hambleton and D. A. Lenk. *Il Mach* 49:125-8 Ja '43
 Gaging fixture checks bolt recess. F. Scriber. *diags Am Mach* 87:87-8 S 30 '43
 Glass for inspection gages. H. B. Hambleton. *Il Steel* 112:70-1+ Mr 29 '43
 Glass for precision gages. J. A. Stone. *Il diags Am Mach* 87:75-9 F 4 '43
 Glass for precision gages; developments of Ordnance department and glass manufacturers introduce new material to replace steel. H. B. Hambleton. *Il Mech Eng* 65:274-6 Ap '43
 Glass for precision gauges; Hysil glass. *Engineering* 156:188 S 3 '43
 Glass for precision gaging. H. B. Hambleton. *Mech Eng* 65:435-7 Je '43
 Glass for steel; Army's precision gages. *Business Week* p64+ Ja 9 '43
 Glass gage development. T. Lewis. *Iron Age* 150:114 D 10 '42
 Glass gages; abstract. T. J. Thompson. *Iron Age* 151:64-5 Ap 1 '43
 Glass gages sponsored by Ordnance department. F. J. Oliver. *Il diags Iron Age* 151:35-9+ F 4 '43; *Same cond. Engineer* 175:273, 275 Ap 2 '43
 Glass precision gages; a war baby destined for civilian use. H. B. Hambleton. *Il Glass Ind* 24:69+ F '43; *Same. Metals & Alloys* 17:548-52 Mr '43
 Hair-splitting is no job here; measurement at Joshua Hendy iron works. *Il Steel* 113:182 O 11 '43
 Height gage for layout operations. A. Elsner and C. H. Welcome. *Il diags Am Mach* 87:89 F 4 '43
 Indicating or recording gage for bore diameters. *Il Instruments* 16:80-1 F '43
 Inspection innovations; Nash-Kelvinator corp. *Il Steel* 113:174-5+ O 11 '43
 Length and centrality gage for trunnions. F. Hartley. *diags Am Mach* 87:104-5 Ag 19 '43
 Licking the gaging job; production of Rolls Royce aircraft engines at Packard motor car co. G. E. Stedman. *Il Steel* 112:68-70, 72+ Mr 22 '43
 Machine gages small cartridges automatically. *Il Iron Age* 151:49 Ja 28 '43
 McKee metal wear gage. *Il Instruments* 16:83 F '43
 Modified indicating gage. R. E. Hulse. *Il Metals & Alloys* 17:1222 Je '43

GAGES—Continued

- Nash-Kelvinator shops use advanced gaging practices. S. H. Brams. *Iron Age* 151:76 My 20 '43
- New equipment. *il Iron Age* 152:79-80 Jl 15 '43
- Newest developments in glass gages. H. B. Hambleton. *il Instruments* 16:254-6+ My '43
- One multiple gage practically equals 63 fixed gages. I. A. Hunt. *il Instruments* 16:32 Ja '43
- Ordnance production gaging. R. A. Bowman. *diags Instruments* 15:514-16; 16:94-102, 130-6, 192-5+, 343-51, 668-9+ D '42, F-Ap, Je, N '43
- Reactance-type gages. *il diag Electronics* 16: 158+ N '43
- Reclaiming precision gages by accurate control of chromium plated deposits. W. Irby, A. T. Clarke and F. R. Grover. *il diags Steel* 112:86-8, 90+ Ap 26 '43
- Screw thread gages and gaging; reference book sheet. *diags Am Mach* 86:1457, 1459, 1525, 1527; 87:109, 111, 114a D 10 '42-Ja 21 '43
- Some pot shots at this relative thing called precision. I. A. Hunt. *il diags Instruments* 15:506-9+ D '42
- Speedy pneumatic method of bore gaging. A. Polk. *il Instruments* 16:22+ Ja '43
- Ten years' progress in management; gaging and inspection in interchangeable manufacture. C. deZafra. *A S M E Trans* 65:221-2 Ap '43
- Transparent gage checks part for blind assembly. A. S. Arnott. *diags Mach* 49:194 F '43
- Wear allowances and gagemakers tolerances; reference book sheet. A. Sprung. *Am Mach* 86:1359 N 26 '42
- Wickman universal dial gauges. *il Engineer-ing* 155:67 Ja 22 '43; *Engineer* 174:527 D 25 '42
- See also*
Pressure gages
Water gages

Manufacture

- Air-conditioned room insures quality gages for war work; Axelsson manufacturing co. C. O. Herb. *il Mach* 49:192-6 D '42; *Excerpt Heat & Ven* 40:32-4 Mr '43
- Producing a precision product; Michigan gage plant. G. E. Steedman. *il Steel* 111:56-8, 60+ N 30 '42

Standards

- Automotive council asks for war standard on cylindrical fits. *il Ind Stand* 14:72-4 Mr '43

Testing

- Truck system of gage checking inaugurated. E. F. Keller. *Instruments* 16:188 Ap '43

GAGG, Rudolph Farwell, 1902-Sketch. *por(p609) Mech Eng* 65:610 Ag '43

GAGING

See also

Oil measurement

GAINESVILLE community circus. *See Circus*

GALACTOSE

- Complex mutarotation of *d*-galactose. R. E. Rundle and B. C. Hendricks. *bibliog J Phys Chem* 47:364-9 Ap '43

Polysaccharides of carrageen moss (*chondrus crispus*); the linkage of the *d*-galactose residues and the ethereal sulphate. J. Eucharan, E. E. Percival and E. G. V. Percival. *Chem Soc J* p51-4 F '43

Studies on agar-agar; isolation of hepta-acetyl *dl*-galactose from 3:6-anhydro- β -methyl-*d*-galactoside. T. L. Cottrell and E. G. V. Percival. *Chem Soc J* p749-50 D '42

Studies on agar-agar; mode of attachment and configuration of the *l*-galactose residues isolated as 2:4-dimethyl 3:6-anhydro- β -methyl-*l*-galactoside by methylation of the hydrolysis products of methylated agar. E. G. V. Percival and T. G. H. Thomson. *Chem Soc J* p750-5 D '42

GALACTURONIC acid

- Enzymic degradation of cell wall substances. D. H. F. Clayton. *bibliog Chem & Ind* 61: 516-18 D 19 '42

Preparation of *D*-galacturonic acid from pectin. E. Rietz and W. D. MacLay. *Am Chem Soc J* 65:1242-3 Je '43

Ring structures and mutarotations of the modification of *D*-galacturonic acid. H. S. Isbell and H. L. Frush. *bibliog J Research Nat Bur Stand* 31:33-44 Jl '43

GALAEPTULOSE

Action of diazomethane upon acyclic sugar derivatives; ketose synthesis. M. L. Wolf-rom, R. L. Brown and E. F. Evans. *bibliog il Am Chem Soc J* 65:1021-7 Je '43

GALENA

Floating chalcopyrite from galena and sphalerite. flow sheet *Min Cong J* 29:30 S '43

Flotation process; effect of size on the behavior of galena particles. A. M. Gaudin, R. Schuhmann, Jr. and A. W. Schlechten. *bibliog diags J Phys Chem* 46:902-10 N '42

Post-mine leaching of galena and marmatite at Broken Hill. M. D. Garretty and R. Blanchard. *il map Econ Geol* 37:365-407 Ag '42; *Discussion*. F. L. Stillwell and A. E. Edwards. 38:253-4 My '43

Studies of subscreen sizing; grinding and grinding efficiencies. I. M. Six. *bibliog il Can Min J* 64:147-55 Mr '43

GALESBURG, Illinois**Railroads**

Burlington expands largest yard to meet wartime demands. *il plans Ry Age* 114:459-65 Mr 6 '43

Yard control towers have new features; Chicago, Burlington & Quincy switch and car retarder control towers. *il plans Ry Age* 114:1130-1 Je 5 '43

GALEX

Galex as a plasticizer for GR-S (Buna S) stocks. J. Panek. *Rubber Age* 53:35-6 Ap '43

GALL bladder

Follow-up on cholecystectomy. R. R. Best. *bibliog Ind Med* 12:393-6 Je '43

GALLAGHER, Ralph W.

Jersey Standard's new president. *por Nat Pet N* 35:2 Ja 13 '43

GALLALDEHYDE

Gallaldehyde tribenzyl ether. R. O. Clinton and T. A. Geissman. *bibliog Am Chem Soc J* 65:85-7 Ja '43

GALLIUM

Energies of the γ -rays from radioactive scandium, gallium, tungsten, and lanthanum. C. E. Mandeville. *bibliog Phys R* 64:147-50 S 1 '43

Gallium; Boisbaudran sought missing link between indium and aluminum. L. Sanderson. *Can Min J* 64:355-7 Je '43

Gallium; gallium perchlorate hydrates and a gallium perchlorate-urea complex. D. J. Lloyd and W. Pugh. *Chem Soc J* p76-7 F '43

Gallium; the separation of gallium and germanium from alkaline extracts of germanite by electrolysis. D. J. Lloyd and W. Pugh. *Chem Soc J* p74-6 F '43

Toxicity of gallium; an exploratory investigation. S. F. Meek, G. C. Harrold and C. P. McCord. *Ind Med* 12:7-9 Ja '43

GALLIUM compounds

Borohydrides of gallium. H. I. Schlesinger, H. C. Brown and G. W. Schaeffer. *Am Chem Soc J* 65:1786-7 S '43

GALLIUM nitrate

Toxicity of gallium; an exploratory investigation. S. F. Meek, G. C. Harrold and C. P. McCord. *Ind Med* 12:7-9 Ja '43

GALLS (botany)

Differential inhibition between normal and tumor (crown gall) tissue in beet roots. M. Michaels, I. Levi and H. Hibbert. *Science* 98:89-90 Jl 23 '43

Insect galls. L. W. Brownell. *il Am Phot* 37:46-8 N '43

Plant tumor bacteria. *Science* 98:sup10 Ag 13 '43; *Correction*. P. R. White. 98:199 Ag 27 '43

GALOSHES. *See Shoes, Rubber*

GALVANIZING

Effect of copper on hot-dip zinc coatings. W. G. Imhoff. *bibliog Metal Finishing* 40: 636-40+ D '42

GALVANIZING—Continued

- Galvanized iron and steel wire; restrictions on use of zinc. Mech Handling 29:219 N '42
 Hot dip galvanizing; hazards. Nat Safety-N 47:60 Ja '43
 Rolls for sheet galvanizing. W. G. Imhoff. bibliog. *il* Steel 112:72-3, 76, 78 Ja 25; 88, 90+ F 8 '43
 Temperature control of galvanizing; abstract. H. Halstead. Metals & Alloys 17:420+ F '43

See also
 Zinc plating

GALVANOMETERS

- Measurements on impulse voltages with a ballistic galvanometer. G. W. Bowdler. *il* diags Inst E E J 89 pt 2:555-60; Discussion. 561-4 D '42
 Production testing; cathode-ray tubes and light-beam galvanometers to test electrical products. C. M. Summers. *il* diags Gen Elec R 45:701-3 D '42

GAME

- Auxiliary meat; ammunition, travel, and time problems of 1943 sportsman cut civilian meat supply. Business Week p46+ F 27 '43

GAME protection

See also
 Birds—Protection

GAMES

- Bookshelf games hit jackpot; sell to service men and home folks. *il* Sales Management 52:53 Ja 1 '43
 Playing in your own back yard. *il* Consumers' Research Bul 12:11-13 Jl '43

GAMMA rays

- Angular correlation of successive gamma-rays. R. Beringer. bibliog diags Phys R 63: 23-8 Ja 1 '43
 Conduction of electricity in highly insulating liquids. C. Pao. bibliog diags Phys R 64: 60-74 Ag 1 '43
 Disintegration scheme of Na²⁴. L. G. Elliott, M. Deutsch and A. Roberts. Phys R 63:386-7 My 1 '43
 Energies of the γ -rays from radioactive scandium, gallium, tungsten, and lanthanum. C. E. Mandeville. bibliog Phys R 64:147-50 S 1 '43
 Gamma-ray radiography of welded high pressure power plant piping. R. W. Emerson. bibliog *il* diags Am Soc T M Proc 42:1111-29; Discussion. 1130-3 '42
 Gamma-rays from As⁶⁰. C. E. Mandeville. bibliog Phys R 63:91-3 F 1 '43
 Gamma-rays from Na²⁴ and La¹⁴⁰. C. E. Mandeville. bibliog Phys R 63:387-8 My 1 '43
 Gamma-rays from Sc⁴⁶. C. E. Mandeville. bibliog Phys R 62:555-6 D 1 '42
 Investigation of the apparatus used in radium radiography. L. W. Ball and D. R. Draper. bibliog diags Am Soc T M Proc 42:1134-43; Discussion. 1144 '42
 Nuclear energy levels in Fe⁵⁸ from the decay of Mn⁵⁶ and Co⁵⁸. L. G. Elliott and M. Deutsch. bibliog Phys R 63:321-2 Ap 1 '43
 Rapid gamma-ray inspection technique; use of calcium tungstate screens. R. C. Woods. *il* diags Metals & Alloys 17:764-6 Ap '43
 Simple method for the investigation of secondary electrons excited by γ -rays and the interference of these electrons with measurements of primary β -ray spectra. L. Meitner. Phys R 63:73-6 F 1 '43

See also
 Geiger-Müller counters

GANTT charts

- What executives should know about purchasing control; using Gantt charts. E. Caldwell. Iron Age 152:59-61 S 16 '43

GAR WOOD industries, incorporated

- Stock offered. Comm & Fin Chr 153:86 Jl 5 '43

To redeem 16,000 shares of preferred stock. Comm & Fin Chr 157:553 F 8 '43

GARAGE keepers' legal liability insurance.

See Insurance, Automobile—Garage owners' and dealers' liability policies

GARAGES

- How abandoned garage was made into duplex for war workers. *il* plans Am Bid 65:64 Ja '43

Modern equipment and garage set-up of Winnebago county, Wis. *il* Roads & Sts 85:27-9 N '42

See also
 Gasoline service stations Motor bus lines—Garages

Heating and ventilation

- Draining and ventilating an underground garage. *il* plan Dom Eng 160:48-9 N '42
 Milwaukee Journal modernizes its fleet garage with boiler-burner units and unit heaters. *il* Heat & Ven 39:33 D '42

Safety measures

- Hazards in garages. H. P. Heyne. Nat Safety N 46:100-1 D '42

GARAGES, Private

- Oregon bungalow demonstrates that the basement garage can be a design asset. *il* diags plans Arch Forum 78:84-5 Je '43

GARAGES, Underground

- Draining and ventilating an underground garage. *il* plan Dom Eng 160:48-9 N '42

GARBAGE cans. See Refuse receptacles**GARBANZO.** See Chick peas**GARCEAU** velograph. See Oscillographs**GARDEN apartments.** See Apartment houses—Garden apartments**GARDEN hose.** See Hose**GARDEN ornaments and furniture**

- Playing in your own back yard. *il* Consumers' Research Bul 12:11-13 Jl '43

Vacation at home; furniture for back-yard holiday scarce. *il* Business Week p86+ My 22 '43

GARDENING**Safety measures**

- Victory gardeners. C. Fish. *il* Nat Safety N 47:24+ Ap '43

GARDENS

- Photographing the garden. V. McGarrett. Am Phot 37:4, 48+ Ag '43

See also
 Back yards

GARDENS, Employees'

- Industrial companies urged to aid workers avert food shortage. *il* Steel 112:54-5 Mr 22 '43

GARFINKEL, Julius, and company

- Preferred stock offered. Comm & Fin Chr 153:1440 O 11 '43

GARLAND, Charles Samuel, 1887-

- Sketch. por(front) Inst Chem Eng Trans 19:sup20 '41

GARMENT factories**Lighting**

- Clothing factory lighting. *il* Electrician 131: 193 Ag 27 '43

GARMENT workers

See also
 Clothing trade—

- Labor conditions
 also International ladies' garment workers' union

GARMENTS

See also
 Clothing and dress

- Dress industry Underwear
 Work clothes

GARNETS

- Isomorphism and isotypism among silicates and phosphates. D. McConnell. bibliog Science 97:98-9 Ja 22 '43

Mineral dressing of Oregon beach sands. J. Dasher, F. Fraas and A. Gabriel. diags U S Bur Mines Rep of Invest 3668:1-19 '42

GARNISHMENT. See Attachment and garnishment**GARTERS**

- New design quirks ease rubber headache on garters and braces. *il* Sales Management 52:50-1 My 1 '43

GAS

See also
 Acetylene

- Blast furnace gas Coal distillation
 Butane Coke-oven gas
 Distillation

GAS—See also—*Continued*

Flue gas
Gas, Natural
Gas, Producer
Gas, Water
Gas analysis
Gas appliances
Gas as fuel
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Gas manufacture
Gas producers
Gases
Liquefied petroleum gas
Propane
Sewage sludge—
Gas production

Analysis

See Gas analysis

Apparatus

See Gases—Apparatus

Calorific value

Gas characteristics, A. J. Leather. Gas J (Lond) 241:312, 317 Mr 10 '43; Discussion. 241:402 Mr 31 '43
Problem of calorific value, J. E. Davis. Gas J (Lond) 242:46, 49-50 Jl 14 '43; Discussion. 242:50; 55, 239 Jl 14, Ag 25 '43
Standards of technical performance, A. J. Leather. Gas J (Lond) 242:233 Ag 25 '43

Compression

See Gas, Natural—Compression

Dehydration

See also

Gas, Natural—Dehydration

Gum formation

Gum protective devices for gas appliances. F. E. Vandavey and M. Zare. bibliog il Am Gas Assn Mo 25:291-4, 330-2 Jl-Ag '43
Nitric oxide control. L. Shnidman. bibliog diag Am Gas Assn Proc 1942:272-7; Same. Am Gas Assn Mo 25:40-3 Ja '43

Laws and regulations

See also

Gas, Natural—Laws and regulations
Gas companies—Law

Manufacture

See Gas, Water—Manufacture; Gas manufacture; Gas works

Sulfur content

Association's program of research on organic sulfur. E. W. Guernsey. bibliog Am Gas Assn Mo 25:118-21 Mr '43
Desirability of removing sulphur from gaseous fuels for heating ferrous metal. A. Preece. Engineering 155:405-6 My 21 '43
Hydrogen sulphide removal; the recovery of sulphur from commercial gases. D. D. Howat. bibliog flow diag Chem Age (Lond) 49:75-8, 99-105 Jl 24-31 '43
Organic sulfur compounds in water gas and coke oven gas. W. A. Kemper and E. W. Guernsey. Am Gas Assn Proc 1942:364-74
Rapid determination of water in by-product sulfur. L. Shnidman. bibliog il Ind & Eng Chem Anal ed 15:430-3 Jl 15 '43
Research on organic sulphur. E. W. Guernsey. Am Gas Assn Proc 1942:293-5; Discussion. 295-6

See also

Gas, Natural—Sulfur content

GAS, Bottled

See also

Liquefied petroleum gas

GAS, Natural

Balance method of determining specific gravity of natural gas. G. M. Stearns. diag Oil & Gas J 41:47 D 24 '42

Chemical utilization of natural gas and natural gasoline hydrocarbons by oxidation. H. Linford. bibliog il Nat Pet N 35 pt 2:R15-19 Ja 6 '43; Same. Pet Eng 14:89, 91-2, 94-4 Ja '43; Same cond. Oil & Gas J 41:71, 73-4 N 12 '42

Chemicals, solvents by natural-gas oxidation. R. J. Daugherty. il Oil & Gas J 41:36 Ja 21 '43

Determining the specific gravity of gas by the effusion method. G. M. Stearns. diag Oil & Gas J 41:51 D 17 '42

Full use of naturals urged; abstract. R. E. Miller. Nat Pet N 35:16 Ap 14 '43
Natural gas industry advisory committee. Chem & Eng N 21:979 Je 25 '43

Oil company's chemicals-from-natural gas refinery makes formaldehyde, methanol and related compounds. flow chart il Nat Pet N 35 pt 2:R72-3 F 3 '43

Problems of the natural gas industry under war conditions; chemical products, fuel, etc. K. S. Adams. Oil & Gas J 41:66, 68, 71-2 My 6 '43; Same. Am Gas Assn Mo 25: 201-5+ My '43; Same. il Chem & Eng N 21: 964-8 Je 25 '43

War products from natural gas and natural gasoline. P. M. Raigorodsky and F. H. Dotterweich. bibliog diag Oil & Gas J 41:94, 97-8+ Ap 15 '43; Same. Gas Age 32:19-23 Jl 23 '43; Same. Pet Eng (Ref annual) 14:198-200, 202-3 Jl 1 '43; Same, with additional diag. Pet Refiner 22:83-9 My '43; Abstract. Nat Pet N 35:14-16 Ap 14 '43

Wartime chemicals from natural gas. G. Egloff. Pet Eng 14:33-8 N '42; Same. Science 96:502-5, 527-30 D 4-11 '42; Same. Inst Pet J 29:124-34 Ap '43; Same cond. Am Gas Assn Mo 25:21-2+, 71-2+ Ja-F '43; Same cond. Gas Age 90:22+ N 19 '42; Same. Am Gas J 157:21-2 D '42

See also

Carbon black
Ethane
Gas as fuel—Natural gas
Liquefied petroleum gas
Methane
Petroleum

Gasoline, Natural
also American gas association—Natural gas section; Columbia gas and electric corporation

Accounting

Hope natural gas company case. J. L. Dohr. J Account 75:190-2 F '43

Analysis

Analysis of natural gas by slow combustion method. diag Oil & Gas J 41:59 Ja 14 '43
Calculations based on natural gas analysis. G. M. Stearns. Oil & Gas J 41:57 D 10 '42; 51 Ja 21 '43
Computing results of analysis. G. M. Stearns. Oil & Gas J 41:49-50 F 4 '43
Determination of hydrogen sulfide content of natural gas. G. M. Stearns. diag Oil & Gas J 41:71-2 F 11 '43
Gas analysis by means of the mass spectrometer. O. L. Roberts. il diag Pet Refiner 22:107-9 My '43

Natural gas analysis by fractional distillation. G. M. Stearns. diag Oil & Gas J 41: 195 Ja 28 '43

Small quantities of H₂S in gas. diag Oil & Gas J 41:69 F 18 '43

Bibliography

List of publications, September, 1942. 22p
California department of natural resources, Division of oil and gas, Ferry bldg, San Francisco '42

Chemical treatment of wells

High-pressure corrosion controlled by chemicals. H. F. Simons. il diag Oil & Gas J 42:29-30, 33-4 S 2 '43

Compression

Comparison of one-stage and two-stage compression. G. M. Stearns. Oil & Gas J 41:77-8 Ap 22 '43

Compression combined with close fractionation; Warren petroleum corporation. il Pet Refiner 22:77-81 F '43

Cylinder sizes for two-stage compression. G. M. Stearns. Oil & Gas J 41:85-6 Ap 29 '43

Exponent of compression. Oil & Gas J 41:102 Ap 8 '43

Features of new Lone Star compressor station. F. H. Love. il Pet Eng 14:101-2 F '43
Improved practices employed at gas-line compressor station. P. Reed. il Oil & Gas J 41:44-5 Mr 11 '43

Indicated and brake horsepower of compression. G. M. Stearns. Oil & Gas J 41:139-40 Ap 15 '43

Modern compressor stations. B. C. Thiel. il Oil & Gas J 42:27-30+ N 4 '43

New compressor station of Lone star gas company. il Gas Age 90:29 N 19 '42

GAS, Natural—Compression—Continued

- Operating features of the Katy gas-cycling plant. F. G. Noble. flow diag Oil & Gas J 41:101-2+ My 6 '43; Same. Pet Eng (Ref annual) 14:313-16, 318-20 Jl 1 '43
- Principle of the safety cylinder as an explosion preventer in air-gas compression. F. Squires. il diags Oil & Gas J 41:83-4+ Ap 8 '43
- Variable compressor clearance. Oil & Gas J 41:101 Ap 8 '43
- Viscosity characteristics of lubricating oils saturated with natural gases at high pressures. J. S. Swearingen and E. D. Kedding. bibliog il diag Ind & Eng Chem 34:1496-8 D '42
- Warren's gasoline plant-pressure maintenance project. L. A. Boyd. flow diag il Pet Eng 14:118-20, 122, 124+ N '42
- Water conditioning for compressor and pipeline stations. C. E. Erb. bibliog Pet Eng 14:190g-190h, 191-4 Mr '43

Conditioning

- Columbia treating plant converts waste gas to useful fuel product. il plan Oil & Gas J 42:20-2 Jl 22 '43
- Dust scrubbing and liquid separator installation. F. A. Herr. il Am Gas J 158:35-6+ Ap '43
- Gas purification and hydrocarbon extraction plant. F. H. Love. flow diag il Pet Eng 14:121-3, 125 Ag '43
- Jal plant processes two grades of field gases. il Pet Refiner 22:99-102 Ap '43
- Sweetens sour gas; Arkansas fuel oil co. plant at Magnolia. il Nat Pet N 35:16 Jl 21 '43

See also

- Gas, Natural—Dehydration Gas, Natural—Dust problem

Conservation

- California court rejects plea for control of gas production. Oil & Gas J 41:24-5 F 11 '43
- Conservation and use of Louisiana's natural gas. R. Coreham. il Manuf Rec 112:37+ My '43
- Conservation and utilization of natural gas. Gas Age 91:16 Ja 23 '43
- Conservation of gas reserves in Los Angeles Calif. district. Am Gas J 159:36+ S '43
- Coordination of conservation practices in the various states; activities of the Interstate oil compact commission. E. H. Dahlgren. Oil & Gas J 41:118+ N 12 '42
- Fuel conservation, topic of joint meeting of glass manufacturers and WPB. Glass Ind 24:383 S '43
- Intelligent utilization of natural resources. R. E. Miller. Oil & Gas J 41:65-7 Ap 15 '43; Same. Pet Refiner 22:114, 116 My '43
- Little gas to burn; industrial demand is taxing transmission facilities. Business Week p24+ Je 19 '43
- Southern California surplus gas schedules frozen. Gas Age 92:36+ S 23 '43
- Statutes pertaining to oil and gas conservation in the state of Arkansas and orders having special reference to the Magnolia field. A. B. Cook. In U S Bur Mines Rep of Invest 3720:99-115 '43
- Wanted: a national fuel-gas policy. F. X. Welch. Pub Util 32:531-9 O 28 '43

See also

- Gas, Natural—Recycling

Dehydration

- Dehydration of natural gas. R. W. Parker. flow diags il Pet Eng 14:110+ Ja '43
- High-pressure natural gas gathering system. E. J. McConnell. il diags Oil & Gas J 42: 138, 141-2 S '43
- Natural gas pipe line dehydration. H. N. Wade. bibliog diags Pet Eng 14:184, 186+ Mr 100, 102, 104 Ap '43
- Purification of sour gas in south Arkansas; Girbotol process. D. C. Christian. il diags Gas Age 92:59-61 O 21 '43

Distillate wells

- Condensate-recovery operations continue expansion under handicaps. Oil & Gas J 41: 120 Ap 15 '43
- Corrosion in distillate wells. T. S. Bacon and E. A. Brown. il Oil & Gas J 41:91-2 Ap 15 '43

- Distillate well production problems studied with testing equipment. E. Sterrett. il Pet Refiner 22:126 S '43
- Extension Tri-Cities distillate pool, Henderson county, Texas; log and drilling data. Oil & Gas J 42:49-51 S 2 '43
- Field study of high-pressure gas sampling. C. C. Pryor. flow diag il Pet Eng 14:51-4 S '43
- Field tests made on gas condensate wells. il Pet Eng 14:38 N '42
- Gas from Chapel Hill used for lifting east Texas oil. diag Oil & Gas J 41:48-9 N 19 '42
- High-pressure corrosion controlled by chemicals. H. F. Simons. il diag Oil & Gas J 42:29-30, 33-4 S 2 '43
- Operating features of the Katy gas-cycling plant. F. G. Noble. flow diags Oil & Gas J 41:101-2+ My 6 '43; Same. Pet Eng (Ref annual) 14:313-16, 318-20 Jl 1 '43
- Problems of condensate production studied by Gulf Coast operators. E. H. Short, jr. il Oil & Gas J 42:40, 42 S 9 '43

Dust problem

- Apparatus eliminates dust from gas transmission line. J. B. Reddick. il Oil & Gas J 42:45 My 13 '43

Fuel use

- See Gas as fuel—Natural gas

Geology

- Regional geologic studies for oil and natural gas. H. D. Miser. Am Assn Pet Geologists Bul 27:1387-8 O '43
- Structural conditions of oil and gas accumulation in Rocky Mountain region, United States. C. E. Dobbin. bibliog diags maps Am Assn Pet Geologists Bul 27:417-78 Ap '43

Hydrates

- Design of a large-capacity steam-gas line heater. M. K. Watson and B. E. Morgan. il diag Oil & Gas J 42:213-14 S 23 '43
- Heaters on natural-gas transmission line; preventing of hydrate formation. F. Wills. il diags Oil & Gas J 42:203-4 S 23 '43
- Portable heater for preventing hydrate formation. J. C. Albright. il Pet Eng 14:52 N '42

See also

- Gas, Natural—Dehydration

Interstate transfer

- Can a state prevent the export of its natural gas? Pub Util 32:570-2 O 28 '43

Laws and regulations

- Can a state prevent the export of its natural gas? Pub Util 32:570-2 O 28 '43
- Daily minimum contract to buy natural gas construed. Gas Age 92:19 O 7 '43
- Free gas for dwellings clause. Gas Age 91: 27 My 6 '43
- Natural-gas jurisdiction stipulated by WPB and FPC. Oil & Gas J 42:89 S 23 '43
- Relationship of the Petroleum administration for war to the natural-gas industry. E. H. Poe. Oil & Gas J 41:82+ My 6 '43
- Remedy for failure to take gas; elements of damage. Gas Age 92:16 O 7 '43
- Validity of delegated powers. L. T. Parker. Am Gas J 158:35-7 My '43

See also

- Gas, Natural—Rates

Liquefaction

- Liquefaction, storage and regasification of natural gas for peak loads. W. E. Steinwedell. il Am Gas J 158:9-11 Ja '43; Same. flow diag W Soc E J 47:274-8 D '42
- Liquefied-gas-storage containers; applications of arc welding; with cost data. J. O. Jackson. bibliog il diags Gas Age 91:37-42 Ap 22 '43

See also

- Gasoline, Natural—Manufacture

Measurement

- Calculation of orifice meter coefficients. J. W. J. Bercher. Pet Eng 14:105-6, 109 F '43

GAS, Natural—Measurement—Continued

Direct-reading flow chart; determining rates of flow through orifice meters. R. H. Jenney. *Gas Age* 91:59+ Ap 22 '43

Fundamental principles of orifice meters. L. K. Spink. *il diag Gas Age* 91:11-15+ Mr 25 '43

Measurement and control in the natural gas-oline plant. C. G. Cortelyou. *il diag Pet Eng (Ref annual)* 14:321-4, 326-8 Jl 1 '43

Reading pulsating flows on an orifice meter chart. H. H. Beeson. *Pet Eng* 14:151+ My '43

Merchandizing

How did that insulation campaign work out? experiences of Pittsburgh natural gas companies. H. Stanley. *il Gas Age* 91:57-8+ Ap 22 '43

Observations on developments in natural gas industry during the war and post-war periods. P. B. Coffman. *Gas Age* 91:44-51+ My 20 '43

Moisture content

Determination of humidity. G. M. Stearns. *diag Oil & Gas J* 41:93 F 25 '43

Moisture content of air and gas. G. M. Stearns. *Oil & Gas J* 41:70 F 18 '43

Problems involving humidity. G. M. Stearns. *Oil & Gas J* 41:59 Mr 4 '43

Peak load

Liquefaction, storage and regasification of natural gas for peak loads. W. E. Steinwedell. *il Am Gas J* 158:9-11 Ja '43; Same. *flow diag W Soc E J* 47:274-8 D '42

Propane plant helps meet peak load demands; Dominion natural gas company. F. D. Howell. *flow chart il Gas Age* 92:13-16 O 7 '43

Pipe lines

Apparatus eliminates dust from gas transmission line. J. B. Reddick. *il Oil & Gas J* 42:45 My 13 '43

Bright future for natural gas industry predicted. P. B. Coffman. *Pub Util* 32:109-14 Jl 22 '43

Chart for calculation of pressure drop in gas lines. E. N. Kemler. *Pet Refiner* 22:107-12 S '43

Constructing the Lirette-Mobile natural-gas transmission line. W. B. Poor. *il Mech Eng* 65:9-13 Ja '43

Constructing world's longest pipe-line suspension bridge; illustrations. *Gas Age* 91:44-5 Ap 22 '43

Construction of pipe-line bridges over Canadian river, Oklahoma. G. R. Lunt. *il Pet Eng* 14:196, 198, 200 Mr '43

Design of a large-capacity steam-gas line heater. M. K. Watson and B. B. Morgan. *il diag Oil & Gas J* 42:213-14+ S 23 '43

Details of Hugoton-Blackwell pipe line depend on negotiations now under way. P. Reed. *map Oil & Gas J* 42:34-5 Je 10 '43

Difficulties the transmission man sees in relation to PAW and WPB. R. H. Ulrich. *Oil & Gas J* 41:74+ My 6 '43

East Ohio builds a new pipe line. H. B. Moomaw. *il Am Gas Assn Mo* 25:352-4 S '43

East Ohio completes 120-mile line. A. Silverman. *il Gas Age* 92:52-3+ O 21 '43

Elimination of leaks in submerged pipe lines; shellac forced through pipes. L. E. Palmer. *Gas Age* 90:16 D 17 '42

Emergency communication by radiotelephone; Southern counties gas co. of California. H. J. Keeling. *il diag Am Gas Assn Mo* 25:130-4 Ap '43

Employee training helps solve problem of manpower shortage; Lone star gas company. A. W. Breeland. *Pet Eng* 14:134, 136 Ap '43

Gas lines laid of salvaged pipe. F. H. Love. *il Pet Eng* 14:37-8 D '42

Gas pipe-line crossings under the Sacramento and Joaquin rivers. J. A. Love. *il Oil & Gas J* 42:152-3+ S 23 '43

Graphic solution of natural gas pipe line flow. G. H. McKay and P. M. Biddison. *Pet Eng* 15:182+ O '43

Heaters on natural-gas transmission line; preventing of hydrate formation. F. Wills. *il diag Oil & Gas J* 42:203-4 S 23 '43

High-pressure natural gas gathering system. E. J. McConnell. *il diag Oil & Gas J* 42:138, 141-2 S 23 '43

Hugoton line apparently favored over proposed Tennessee system. *Oil & Gas J* 42:27 S 16 '43

Improved practices employed at gas-line compressor station. P. Reed. *il Oil & Gas J* 41:44-5 Mr 11 '43

Meeting peak natural gas demands; Pacific gas and electric company. R. O. McGougan. *il Gas Age* 92:62-3 O 21 '43

Natural gas crosses the Maumee river. R. S. Siegrist. *il Explosives Eng* 21:174-5 S '43

Natural gas pipe line dehydration. H. N. Wade. *bibliog diag Pet Eng* 14:184, 186+ Mr; 100, 102, 104 Ap '43

Natural-gas pipe lines have prospect of rapid expansion. P. Reed. *map Oil & Gas J* 41:63-4 My 6 '43

New type casing protects pipe line at road crossings. *il diag Pet Eng* 14:40 D '42

Observations on developments in natural gas industry during the war and post-war periods. P. B. Coffman. *Gas Age* 91:44-51+ My 20 '43

Oklahoma Natural's high-pressure pipe line. M. J. Peterson. *il Gas Age* 92:25-6 Jl 15 '43

Pipeline opposed; WPB's plan to pipe natural gas to the East fought by Texas and Louisiana. *Business Week* p30 O 9 '43

Pipe line supplies fuel to war industries. F. H. Love. *il Pet Eng* 14:110, 112, 114 Ag '43

Pressure welding of pipe lines. A. L. Forbes, jr. *il Oil & Gas J* 42:186, 189 S 23 '43

Pressure welding of pipe lines; El Paso natural gas company. A. L. Forbes. *il Pet Eng* 14:190a-190b+ Mr '43

Risks still attach to gas lines. P. B. Coffman. *Oil & Gas J* 41:92+ My 6 '43

Seeing-eye for gas main interiors; locating suspected dirt deposits. D. J. Miller. *il diag Am Gas J* 159:17-18+ Jl '43

17-year-old Dresser-coupled line reclaimed. *il Gas Age* 91:14-15 Ja 28 '43

Solution of flow equations for natural gas lines. P. M. Biddison and G. H. McKay. *Pet Eng* 14:63-4, 66 Je '43

Tennessee company's 1,228-mile gas line given FPC approval. H. D. Ralph. *Oil & Gas J* 42:30-1 S 30 '43

United makes annual pipe-line tests. *il Gas Age* 91:17-18 Mr 11 '43

Costs

Analysis of gas-pipe-line economics. H. C. Lehn. *A S M E Trans* 65:445-55; Discussion. 455-60 Jl '43

Cost factors of gas line repair. *Oil & Gas J* 42:49 Jl 22 '43

Production estimates

Calculating production decline curves for natural gas wells. A. R. Greer. *Pet Eng* 14:47-50 My; 90, 92 Je '43

Production methods**See also**

Gas, Natural—Recycling

Rates

Determination of natural gas rates; Hope natural gas company, petitioner v. Federal power commission, et al. respondents. J. L. Dohr. *J Account* 75:380-1 Ap '43

Federal power commission order in Hope natural gas co. case, reversed. *Am Gas J* 158:38-9 My '43

FPC releases data on Memphis rate reductions. *Gas Age* 92:88 O 21 '43

Hope natural gas company case. J. L. Dohr. *J Account* 75:190-2 F '43

Recovery from coal mines

Degasification of coal seams at a profit; developments in horizontal drilling offer means of obtaining large quantities of gas. L. Ranney. *diag Min & Met* 24:13-15 Ja '43; Excerpts. *Oil & Gas J* 41:28 Ja 14 '43

Recycling

Absorption oil in the cycling plant. J. A. Grimshaw. *il Pet Eng* 14:80, 82 D '42

GAS, Natural—Recycling—Continued

- First integrated refinery-cycling plant unit: four cycling plants, pipe line station, and refinery in south Texas coordinate operations. C. C. Pryor. *il Pet Eng* 15:122+ O '43
- New Paloma recycling plant will have daily capacity of 50,000,000 cu. ft. L. P. Stockman. *map Oil & Gas J* 42:48-9 Ag 26 '43
- Operating features of the Katy gas-cycling plant. F. G. Noble. *flow diag Oil & Gas J* 41:101-2+ My 6 '43; Same. *Pet Eng (Ref annual)* 14:313-16, 318-20 JI 1 '43; Same *abr. Pet Refiner* 22:90-6 My '43
- Some factors affecting the economics of gas cycling plant design. R. L. Huntington. *il diag Pet Refiner* 22:88-91 Ap '43
- Tetepate, six years later. E. O. Bennett and F. B. Haverfield. *diag Oil & Gas J* 41:68-9, 71, 75 Ap 15 '43; Same. *Pet Eng (Ref annual)* 14:337-40 JI 1 '43

Safety measures

- Good safety records aren't accidents; United gas pipe line co., Houston Gulf gas co., Union producing co., and United oil pipe line co. C. L. Hightower. *il Nat Safety N* 47:12-13+ Ap '43

Sampling

- Field study of high-pressure gas sampling. C. C. Pryor. *flow diag il Pet Eng* 14:51-4 S '43

Statistics

- Little gas to burn; industrial demand is taxing transmission facilities. *Business Week* p24+ Je 19 '43
- Natural gas consumption sets new record in 1941. *Am Gas Assn Mo* 25:74 F '43; Same. *Gas Age* 91:24+ F 11 '43
- Natural gas customers, sales, and revenue from sales to consumers. *Survey of Cur Business* 1942 Sup p113 [supplemented in monthly numbers]
- Natural gas in 1941. F. S. Lott and G. R. Hopkins. *Gas Age* 90:22-6 D 31 '42

Storage

- Gas engineer's dream comes true; 2,000,000,000-foot underground storage at the edge of Los Angeles. J. H. Collins. *Pub Util* 30: 835-41 D 17 '42
- Liquefaction, storage and regasification of natural gas for peak loads. W. E. Steinwedell. *il Am Gas J* 158:9-11 Ja '43; Same. *flow diag W Soc E J* 47:274-8 D '42
- Liquefied-gas-storage containers; applications of arc welding; with cost data. J. O. Jackson. *bibliog il diag Gas Age* 91:37-42 Ap 22 '43
- Underground gas storage project in California. W. A. Sawdon. *diag Pet Eng* 14:138, 140-2 D '42
- Unique underground storage reservoir solves acute gas shortage problem in Los Angeles. L. S. Flint. *Am Gas J* 158:29-30 My '43

Sulfur content

- Determination of hydrogen sulfide content of natural gas. G. M. Stearns. *diag Oil & Gas J* 41:71-2 F 11 '43
- Purification of sour gas in south Arkansas; Girtbott process. D. C. Christain. *il diag Gas Age* 92:59-61 O 21 '43
- Sour gas purification problem solved in Dorcheat-Macedonia field. *il Gas Age* 92: 17-18 S 9 '43

Testing

- Standardization of gas testing. N. Williams. *il diag Oil & Gas J* 42:41-2 Je 10 '43

See also

- Gas, Natural—Sam-
pling

Well drilling, Subaqueous

- Oil and gas in the Great Lakes and how they may be developed; abstract. H. E. Gross. *Oil & Gas J* 42:57 O 28 '43
- World's deepest producer completed in Louisiana. C. C. Pryor. *il Pet Eng* 14:61, 64, 66 S '43

Well logging

- Interpretation of cable-tool drilling logs. J. F. Swain. *Am Assn Pet Geologists Bul* 27:997-1000 JI '43

Well testing

- Distillate well production problems studied with testing equipment. E. Sterrett. *il Pet Refiner* 22:126 S '43

Arkansas

- Purification of sour gas in south Arkansas; Girtbott process. D. C. Christain. *il diag Gas Age* 92:59-61 O 21 '43
- Sour gas purification problem solved in Dorcheat-Macedonia field. *il Gas Age* 92:17-18 S 9 '43
- Sweetens sour gas; Arkansas fuel oil co. plant at Magnolia. *il Nat Pet N* 35:16 JI 21 '43

California

- California court rejects plea for control of gas production. *Oil & Gas J* 41:24-5 F 11 '43
- Conservation of gas reserves in Los Angeles Calif. district. *Am Gas J* 159:36+ S '43
- Gas engineer's dream comes true; 2,000,000,000-foot underground storage at the edge of Los Angeles. J. H. Collins. *Pub Util* 30: 835-41 D 17 '42
- Meeting peak natural gas demands; Pacific gas and electric company. R. O. McGougan. *il Gas Age* 92:62-3 O 21 '43
- New Paloma recycling plant will have daily capacity of 50,000,000 cu. ft. L. P. Stockman. *map Oil & Gas J* 42:48-9 Ag 26 '43
- Southern California surplus gas schedules frozen. *Gas Age* 92:36+ S 23 '43
- Underground gas storage project in California. W. A. Sawdon. *diag Pet Eng* 14:138, 140-2 D '42

Colorado

- Oil and gas industry of Colorado. C. F. Barb. *il fold map Colorado School of Mines (Golden) Quarterly* 37:1-129 bibliog(p72-3, 90, 120-3) Ap '42 (pa 22)

Europe

- Natural gas in Europe. *Chem Age (Lond)* 49:292 S 18 '43

Los Angeles, Supply to

- Unique underground storage reservoir solves acute gas shortage problem in Los Angeles. L. S. Flint. *Am Gas J* 158:29-30 My '43

Louisiana

- Conservation and use of Louisiana's natural gas. R. Coreham. *il Manuf Rec* 112:37+ My '43
- Tetepate, six years later. E. O. Bennett and F. B. Haverfield. *diag Oil & Gas J* 41:68-9, 71, 75 Ap 15 '43; Same. *Pet Eng (Ref annual)* 14:337-40 JI 1 '43
- World's deepest producer completed in Louisiana. C. C. Pryor. *il Pet Eng* 14:61, 64, 66 S '43

Oklahoma

- Consolidation of gasoline plants in Seminole a conservation step. A. L. Foster. *flow diag il Oil & Gas J* 42:35-6 S 2 '43
- Subsurface geology and oil and gas resources of Osage county, Oklahoma; Burbank and South Burbank oil fields, townships 26 and 27 north, range 5 east, and townships 25 to 27 north, range 6 east. N. W. Bass, H. B. Goodrich and W. R. Dillard. *bibliog fold maps in pocket U S Geol S Bul* 900-J:321-42; pa 60c Supt. of doc. '42
- Subsurface geology and oil and gas resources of Osage county; summary of subsurface geology with special reference to oil and gas. N. W. Bass. *bibliog U S Geol S Bul* 900-K:343-93, pl 13-20 [7 in pocket] pa 45c Supt. of doc. '42

Bibliography

- Bibliography of Oklahoma oil and gas pools. A. G. Skelton and M. E. Skelton, comps. (*Bul* 63) 230p Oklahoma geological survey, Norman '42

Pittsburgh, Supply to

- Effect of WPB orders on the distribution of natural gas. D. P. Hartson. *il Am Gas Assn Mo* 25:245-7+ Je '43

GAS, Natural—Continued

Rocky Mountain region

Structural conditions of oil and gas accumulation. C. E. Dobbin. bibliog diag maps Am Assn Pet Geologists Bul 27:417-78 Ap '43

Texas

Extension Tri-Cities distillate pool, Henderson county, Texas; log and drilling data. Oil & Gas J 42:49-51 S 2 '43

Gas from Chapel Hill used for lifting east Texas oil. diag Oil & Gas J 41:48-9 N 19 '42

United States

Bright future for natural gas industry predicted. P. B. Coffman. Pub Util 32:109-14 JI 22 '43

Demand and supply of natural gas after the war. J. F. Robinson. Gas Age 90:33-6+ O 22 '42; Same. Am Gas Assn Proc 1942:29-33

Economic position of natural gas. V. C. Smith. Oil & Gas J 41:52-3 F 25 '43

Gas supply in Appalachian area. H. J. Wagner. Oil & Gas J 41:35 F 18 '43

It's distribution, not reserves that causes wartime natural gas shortages. Am Gas Assn Mo 25:61-2 P '43

Natural gas in 1941. F. S. Lott and G. R. Hopkins. Gas Age 90:22-6+ D 31 '42

Natural gas industry and the war. B. R. Bay. Gas Age 91:39-40 Ja 14 '43

Natural gas industry supply problems under war conditions. B. R. Bay. Am Gas Assn Mo 25:179-82, 230-1 My '43; Same abr. Oil & Gas J 41:61-2+ My 6 '43; Same cond. Gas Age 91:32-5 My 20 '43; Same cond. Am Gas J 158:17-18, 21 Je '43

Natural gas management conference. Cincinnati, April 28. Gas Age 91:23-5 My 20 '43; Am Gas J 158:15-16 Je '43; Am Gas Assn Mo 25:235-7 Je '43

Natural gas setting record. J. P. O'Donnell. Oil & Gas J 42:128 JI 29 '43

Observations on developments in natural gas industry during the war and post-war periods. P. B. Coffman. Gas Age 91:44-51+ My 20 '43

Oil and gas field development in United States, 1942; year book 1943 (review of 1942). v 13 E. C. Harmon and E. J. Raisch, eds. 789p National oil scouts & landmen's assn, P.O. box 425, Austin 3, Texas '43

Our industry's war outlook. B. R. Bay. Am Gas Assn Mo 25:11 Ja '43

Our joint war job. E. H. Poe. Am Gas Assn Proc 1942:60-2; Discussion. 62-3

Our record in war; recent national contributions of the natural gas industry. E. R. Acker. Am Gas Assn Mo 25:241-3 Je '43

PAW reports to the industry; war hastens new concept on value of Nation's natural gas. E. H. Poe. Oil & Gas J 42:106-7 JI 29 '43

Quarter of gas output goes to war industries. A. F. Bridge. Oil & Gas J 41:92 Ja 28 '43

Relationship of PAW and WPB to production activities of the natural gas industry. L. T. Potter. Am Gas Assn Mo 25:247-8+ Je '43

Relationship of PAW to the natural gas industry. E. H. Poe. Gas Age 91:20-2+ Je 3 '43

Symposium: war requirements of the natural gas and natural gasoline districts. J. F. Robinson and others. Am Gas Assn Proc 1942:47-56

War contributions of natural gas in the national fuel coordinating program. E. H. Poe. Am Gas Assn Mo 25:10-12+ Ja '43; Same. Am Pet Inst Proc 23(4):20-3 '42; Same abr. Oil & Gas J 41:77-8 N 12 '42

WPB and FPC define their natural gas agreement. Gas Age 92:25-6 O 7 '43; Same. Pub Util 32:512-13 O 14 '43

GAS, Oil

Underlying a coke-oven battery with refinery oil gas. E. E. Witham and J. H. Long. diag Gas Age 91:27-30, 32 Je 17 '43; Same. Am Gas J 159:27-31 JI '43

See also

Liquefied petroleum gas

GAS, Producer

Air-gas mixing valves; Enness-Cura and Swain designs for producer gas plants. il diag Automobile Eng 33:377-9 S '43

Alternative fuels. diag Automobile Eng Extra no 32:423-32 N 5 '42

Alternative fuels; survey of methods adopted in Switzerland. il diag Automobile Eng 33:343-8 S '43

Application of producer gas to Canadian automotive transport. G. Godwin. bibliog diag Pulp & Pa of Can 44:273-8+ F '43

Ersatz gasoline; charcoal-burning unit replacing gas in Brazil's motor vehicles. il Business Week p54, 56+ Ja 9 '43

Fuel requirements of carbonizing plant. S. Pexton. diag Gas J (Lond) 241:55-6, 61, 63 bibliog(p56) Ja 13 '43; Discussion. 241:116-18, 157+ Ja 27-F 3 '43

Gas conditioning; some notes on cleaning and cooling equipment. W. F. Enever. diag Automobile Eng 33:199-200 My '43

Gas shortage met in Brazil by use of producer gas. Sci Am 169:225-6 N '43

Gasogenios' coup; charcoal-burning producer-gas engines to drive vehicles may stay. Business Week p84+ Ap 17 '43

Grain wheat fuel combined with charcoal in gas producer. Automobile Eng 33:83 F '43

Leeds Transport's producer gas program; producer gas units for Diesel engine buses. W. V. Morland. Mass Transportation 39:256 JI '43

Motor vehicles propelled by producer gas. G. Egloff and P. Van Arsdell. il diag Nat Pet N 35 pt 2:R455-3 O 6 '43

Natural gasoline enrichment of producer gas for use in underfiring coke ovens. W. O. Keeling. diag Gas Age 92:27-3+ JI 15 '43; Same. Am Gas Assn Mo 25:375-7 S '43

Operating experiences with gas producers. K. W. Willans. il Inst Mech Eng J & Proc 147:Proc 205-13 O '42

Performance of a converted petrol engine with different producer fuels. E. Giffen and J. Spiers. Engineering 155:465 Je 11 '43

Producer gas as a substitute for motor fuel. G. Egloff and P. Truesdell. Pet Refiner 22:146+ O '43

Producer gas for motor transport. E. A. Allcut. diag Automotive & Aviation Ind 89:38-41 Ag 1; 38-40, 42, 44+ Ag 15 '43

Producer gas sets and gas containers for traction. G. W. L. Day. il Am Gas Assn Mo 25:81-3 F '43

Producer gas; the effect of compression-ratio on performance. J. Spiers and E. Giffen. diag Automobile Eng 32:523-7 D '42

United Kingdom initiates new producer-gas scheme. For Comm W 9:24 D 12 '42

Wood and charcoal as fuel for vehicles. R. Ruedy. Pulp & Pa of Can 43:906 N '42

See also

Gas producers

Cost

Gas producers can help solve natural gas shortage. R. F. Ferguson. Glass Ind 24:424+ O '43

GAS, Sewage sludge. See Sewage sludge—Gas production

GAS, Water

Mechanism of the steam-carbon reaction. B. R. Warner. bibliog Am Chem Soc J 65:1447-51 Ag '43

Organic sulfur compounds in water gas and coke oven gas. W. A. Kemper and E. W. Guernsey. Am Gas Assn Proc 1942:364-74

See also

Fischer-Tropsch process

Manufacture

Anthracite as generator fuel for water-gas operations. L. L. Newman, C. C. Wright and A. W. Gauger. Gas Age 90:22-5 D 3 '42

Carbonization of Bevier-bed coal from Kansas and production of blue water gas from the resulting coke. W. W. Odell. U S Bur Mines Rep of Invest 3671:1-21 '42

Cracking oil in a water-gas machine. L. J. Willien. Gas Age 91:21-3 My 6 '43

GAS, Water—Manufacture—Continued

Efficient operation of small water gas machines. S. F. McCallister. *Am Gas J* 159: 43-6, 76 O '43 (to be cont)

Gas companies and government study oil shortage on eastern seaboard. *Am Gas Assn Mo* 25:52 F '43

Gasoline for carburetting water gas; with cost data. R. J. Horn. *il diag Am Gas Assn Mo* 25:15-20 Ja '43; Same. *Am Gas J* 158:10-14, 42 F '43

Operating study of the value of gasoline for gas-making purposes. W. H. Ganley and R. W. Stafford. *Gas Age* 90:25-7 N 5 '42; Same. *Am Gas Assn Mo* 24:466-8 D '42; Same. *Am Gas J* 157:29-31+ D '42; Same. *Pet Eng* 14:94, 96, 98 D '42; Same. *Am Gas Assn Proc* 1942:257-60; Discussion. 260-2

Outlook for gas manufacture; with particular attention to use of fuel oil and gasoline for enrichment. P. T. Dashiell. *Am Gas Assn Mo* 25:387-8 O '43

Silicon carbide linings in water gas generators. T. E. Papen. *il diags Am Gas J* 159: 37-9 O '43

Silicon carbide solid linings for water-gas generators. A. S. Hall. *diags Gas Age* 91: 24-6 Je 17 '43

Two shell water gas sets in Boston. D. S. Reynolds. *diag Am Gas J* 158:26-8 Je '43; Same. *Gas Age* 91:22-3 Je 17 '43

GAS absorption. See Absorption**GAS analysis**

Bubbler for detection of war gases. C. Bovee. *il Water Works & Sewerage* 89:529-31 D '42

Bubbler set for war gas detection. *il Eng N* 130:736-7 My 20 '43

Chemical identification of war gases. A. W. Clafin and F. C. Hickey. *bibliog diags J Chem Educ* 20:351-7 Jl '43

Controlled atmosphere indicator; use of thermal-conductivity-type gas analyzer. C. A. Hansen, jr. *il Gen Elec R* 46:221-2 Ap '43

Determination of low concentrations of oxygen in gas. J. A. Shaw. *Ind & Eng Chem Anal ed* 14:891-2 N 15 '42

Determination of unsaturates in hydrocarbon gases; the hydrogenation method. R. F. Robey and C. E. Morrell. *Ind & Eng Chem Anal ed* 14:880-3 N 15 '42

Factors determining the course and mechanism of Grignard reactions; analysis of gases formed during the reaction of phenylmagnesium bromide with organic halides in the presence of cobaltous halides. M. S. Kharasch, D. W. Lewis and W. B. Reynolds. *diag. Am Chem Soc J* 65:493-5 Ap '43

Gas analysis; method and apparatus for quantitative analysis; patent. *Gas J (Lond)* 241:520 Ap 28 '43

Installing and operating the gas analyzer. B. Kredervage. *Instruments* 15:463+ N '42

Method of demonstrating the identification of war gases. H. W. Keenan and R. S. Law. *il diag Chem & Ind* 62:182-4 My 15 '43

Organic sulfur compounds in water gas and coke oven gas. W. A. Kemper and E. W. Guernsey. *Am Gas Assn Proc* 1942:364-74

Quantitative determination of nitric oxide in manufactured gases. L. Shnidman and J. S. Yeaw. *bibliog il diags Am Gas Assn Proc* 1942:277-91; Discussion. 291-2

Recent developments in laboratory apparatus; soap film gas analysis. R. H. Powell. *il Chem Age (Lond)* 48:443-5 Ap 24 '43

Sargent butadiene gas analyzer. *il Rubber Age* 53:78-9 Ap '43

Simple device for detecting small concentrations of organic halide gases in the atmosphere. G. W. Jones and R. E. Kennedy. *pl U S Bur Mines Rep of Invest* 3697:1-10 '43

Vapor detector tubes and detector kit for some chemical agents used in gas warfare. P. F. Fenton. *J Chem Educ* 20:564-5 N '43

Versatile apparatus for photolysis studies in the gas phase; acetone and iodine mixtures. S. W. Benson and G. S. Forbes. *bibliog diags Am Chem Soc J* 65:1399-1405 Jl '43

See also
Air—Analysis
Flue gas—Analysis
Gas, Natural—Analysis
Gases—Apparatus

also names of gases, subdivision Analysis e.g. Nitrogen—Analysis; Oxygen—Analysis

GAS and oil engines

Additional engine equipment eliminates down time. *Oil & Gas J* 41:61 N 19 '42

Annual American gas association gas engine power census. G. B. Walton. *table Gas Age* 90:26-7 N 19 '42; Same. *Am Gas Assn Proc* 1942:183

Autobiography. H. R. Ricardo. *Mech Eng* 65:765-9 N '43

Cylinder and ring life with porous chromium-plated rings. T. C. Jarrett. *il Mech Eng* 65: 633-5 S '43

Position and development of the gas engine. J. Jones. *diags Engineer* 175:256-8, 276-7 Mr 26-Ap 2 '43; Discussion. *Engineer* 175:254-5 Mr 26 '43; *Engineering* 155:254, 263-4 Mr 26-Ap 2 '43

Power for tanks. J. R. Custer. *il Automotive & Aviation Ind* 89:17-19 S 1 '43

Special military type of engine is proposed; abstract. C. E. Cummings. *S A E J* 51:sup62 Jl '43

V-8 for victory; Ford engine for medium tanks is army's choice. *Business Week* p 14 D 19 '42

See also

Airplane engines	Motor bus engines
Automobile engines	Motor cars (rail-road)
Carbureters	Motor ships
Cylinders (engines, etc.)	Motor truck engines
Diesel engines	Power plants—Gas engine plants
Gas turbines	Tractors
Indicators (for gas and oil engines)	

Air supply.

Excess air and brake mean effective pressure. F. H. Schweitzer. *diag A S M E Trans* 65:159-60 Ap '43; Same. *Automotive & Aviation Ind* 87:26-7 Jl 1 '42; Discussion. *A S M E Trans* 65:161-3 Ap '43

Bearings

Corrosion of bearing alloys. L. M. Tichvinsky. *bibliog il diags S A E J* 51:69-76 Mr '43; Abstract. *Automotive & Aviation Ind* 88:24 Ap 1 '43

Carbon deposits

Influence of Diesel fuel properties on engine deposits and wear. G. H. Cloud and A. J. Blackwood. *il S A E J* 51:408-14, 419-20 N '43; Same cond. *Diesel Power* 21:1032-6+ N '43

Car

Equipment maker's general recommendations for engine care. *Roads & Sts* 85:56-7 N '42
Word on tightening engine nuts and bolts. *diag Roads & Sts* 85:60 N '42

Combustion research

Glass windows for iron engines. E. W. Landen. *bibliog diag Glass Ind* 24:21-3, 33 Ja '43

Instrumentation in the study of Diesel combustion. E. W. Landen and L. A. Blanc. *il diags A S M E Trans* 65:121-5 F '43

Researches on preliminary chemical reactions in spark ignition engines; abstract. E. Mähler. *Roy Aeronautical Soc J* 46:sup 409-10 N '42

See also

Airplane engines—
Ignition

Control

Synchronizes speeds of multiple engines; patent assigned to Woodward governor co. *diag Machine Design* 15:278+ O '43

GAS and oil engines—Continued**Cooling**

Engines for tanks. R. J. Icks. S A E J 51:sup39-41, 56-7 J1 '43; Excerpts. Machine Design 15:208+ Ag '43

Cost of operation

Analysis of engine-repair costs. Oil & Gas J 42:75 Ag 12 '43

Design

Engines for tanks. R. J. Icks. S A E J 51: sup39-41, 56-7 J1 '43

Trailer fire unit; Dennis no.3 two-stage centrifugal pump. II diags Automobile Eng 32:511-15 D '42

Efficiency

Basic entropy problems; illustrative calculations for Otto, Diesel, and Carnot cycles. O. Adams. Pet Eng 14:136, 138 S '43

Excess air and brake mean effective pressure. P. H. Schweitzer. diag A S M E Trans 65:159-60 Ap '43; Same. Automotive & Aviation Ind 87:26-7 J1 '42; Discussion. A S M E Trans 65:161-3 Ap '43

Extending camshaft operating life for increased engine power output. F. Noltimer. diags Pet Refiner 22:100-4 J1 '43

Exhaust

Changes horizontal to vertical exhaust lines. J. C. Albright. II Power 87:690 O '43

Fuel

Gas from upper sand used while drilling well; supplying fuel for engines. II diag Oil & Gas J 41:42 Mr 4 '43

Performance of a converted petrol engine with different producer fuels. E. Giffen and J. Spiers. Engineering 155:465 Je 11 '43

See also

Airplane engines—	Gas and oil engines—
Fuel	Combustion re-
Automobile engines—	search
Fuel	Motor bus engines—
Automotive fuel	Fuel
Diesel engines—Fuel	Motor truck engines
—Fuel	—Fuel

Fuel feeding

Carburetor service on kerosene and distillate engines. diag Roads & Sts 85:55 N '42

Electromagnetic system of fuel injection. Automotive & Aviation Ind 89:69 J1 15 '43

Injection pump test stand. P. H. Schweitzer. II diags Automobile & Aviation Ind 89:32-3 O 15 '43

See also

Airplane engines—	Diesel engines—Fuel
Fuel feeding	feeding
Automobile engines—	
Fuel feeding	

History

Origin of the internal combustion engine. A. K. Bruce. Engineer 174:383-5 N 6 '42

Ignition

Significance of ignition temperature test of fuels. A. W. Trusty. Pet Eng 14:78, 80+ Ja '43

Spark ignition engines; a research on preliminary chemical reactions. E. Mähliner. Automobile Eng 33:85 F '43

Ignition devices

Automobile ignition parts revamped for gas powered compressor. W. W. McClow. II diags Power 86:886-7 D '42

Knock testing engine

Modification of the C.F.R. bouncing pin spring-tension balance and instructions for use. P. Draper. diags Inst Pet J 29:253-7 O '43

Spring tension balance for C.F.R. bouncing pin. P. Draper. II diag plan Inst Pet J 28: 209-13 S '42

Lubrication

Armour institute is clearing house for heavy-duty oil test data. Nat Pet N 35 pt 2:R472 O 6 '43

Base oil evaluation for heavy-duty service. A. O. Willey. II Nat Pet N 35 pt 2:R503-4, R506-8 N 3 '43

Engine wear and its measurement in the study of lubrication; abstract. A. G. Cattaneo, W. Gasser and W. N. Malott. Oil & Gas J 42:132+ Je 24 '43

Importance of compression rings in controlling oil consumption. M. O. Teeter. II S A E J 51:20-2 Ja '43; Same. Diesel Power 21:47-9 Ja '43; Same. Automobile Eng 33: 185-6 My '43

Lubricating oil detergency. S. K. Talley and R. G. Larsen. II Ind & Eng Chem Anal ed 15:91-5 F 15 '43

Oil engine lubrication; problem of adequate control in the cylinder. Automobile Eng 32:505 N '42

Oil filters; how they save engine wear; pointers in their selection and use. W. G. Burhans. Roads & Sts 86:76-7 Ja '43

Redesign improves splash-type lubricating system. II Pet Refiner 22:103 Ap '43

Maintenance and repair

Cold welding; report of subcommittee, maintenance methods coordinating committee; SAE transportation and maintenance activity. II diags S A E J 51:sup25-31 Ag '43

Cost analysis; engine repair expense. Oil & Gas J 42:69 O 28 '43

Diesel- and gas-engine maintenance; special section. L. N. Rowley. II diags Power 87: 379-94 Je '43

Engine block and head repairs by cold welding. II diags Diesel Power 21:818-19 S '43

Manufacture

Broaching and hobbing engine-starter parts having dual lead angles. II Mach 49:196-7 F '43

Earnings in manufacture of internal-combustion engines, 1942. G. E. Votava. Monthly Labor R 55:1042-7 N '42

Pressed pistons; technique employed by Specialoid limited in forging light wrought alloys. II Automobile Eng 33:349-59, 397-404 S-O '43

See also

Airplane engines—	Diesel engines—
Manufacture	Manufacture

Patents

John Henry Hamilton and the positive scavenging engine. A. K. Bruce. II Engineer 176:281-2, 301-3, 320-2 O 8-22 '43

Scavenging

John Henry Hamilton and the positive scavenging engine. A. K. Bruce. II Engineer 176:281-2, 301-3, 320-2 O 8-22 '43

Specifications

American gasoline engines; tabulation. Automotive & Aviation Ind 88:112-21 Mr 15 '43

Automotive Diesel and other heavy oil engines; specifications tabulated. Automotive & Aviation Ind 88:122-5 Mr 15 '43

Small gasoline power units (10 hp. or less) tabulation. Automotive & Aviation Ind 88: 126 Mr 15 '43

Starting

How to start a gas engine without breaking your arm. C. C. Lynde. II Power Pl Eng 47:94-5 F '43

Superchargers

Blower design utilizes screw principle. J. E. Whitfield. II Machine Design 15:147+ Ap '43

Elliott-Lysholm supercharger. A. Lysholm, R. B. Smith and W. A. Wilson. II diags S A E J 51:193-7 Je '43; Same. Diesel Power 21:601-4 J1 '43; Same. Automobile Eng 33:483-6 N '43; Abstract. Automotive & Aviation Ind 88:38 F 1 '43

Hamilton-Whitefield blower. II diag Automotive & Aviation Ind 88:44+ Ja 15 '43

Inlet-air-temperature correction in a Roots supercharger. F. A. Hiersch. A S M E Trans 65:697-9; Discussion. 699-700 Ag '43

GAS and oil engines—Superchargers—Continued
 Insures positive drive with fluid coupling; engine employing a gear-driven supercharger; patent assigned to Twin disc clutch company. *diags* Machine Design 15: 190+ N '43

Origin of supercharging. *Automotive & Aviation Ind* 88:78 My 15 '43

See also
Airplane engines— Diesel engines—
Superchargers Superchargers

Testing

Engine test cells designed for sound reduction. *il plans Eng N* 130:812-13 Je 3 '43
 Regenerative engine testing. *il Elec R (Lond)* 132:35-9 Ja 8 '43

Valves

Hydraulic valve lifter on the M-M tractor engine. *diag Automotive & Aviation Ind* 89:50-1 S 15 '43

Valves and valve seat material; tabulation. S. D. Heron, O. E. Harder and M. R. Nestor. *Metal Prog* 44:680 O '43

GAS and oil engines, Marine

Engineering advances which benefit the aviation industry; Packard airplane and PT boat engines. J. G. Vincent. *Aeronautical Eng R* 1:86 N '42

World-wide field service maintained by Packard for PT boat engines. E. L. Warner, Jr. *il Automotive & Aviation Ind* 88:25+ Mr 1 '43

See also
 Diesel engines,
 Marine
 Motor ships

Manufacture

Oil engines for landing craft. *il Engineer* 176:171-2 Ag 27 '43; *Engineering* 156:174-5 Ag 27 '43

Packard converts to aluminum castings production. A. H. Allen. *il Foundry* 71:136-9+ Ap '43

Specifications

American gasoline engines; tabulation. *Automotive & Aviation Ind* 88:112-21 Mr 15 '43

GAS appliance industry

Association of gas appliance and equipment manufacturers annual meeting, New York, June 29. *Gas Age* 92:32-4 Jl 15 '43

Equipment and appliance manufacturers at war. *il Am Gas J* 157:15-17 D '42

Gas appliance and equipment industry, today and tomorrow. W. F. Rockwell. *Gas Age* 91:22 Ja 14 '43

Gas eyes future; questionnaire on utilities. *Business Week* p44-6 S 11 '43

Plan for equipment development. A. W. Lundstrum. *Gas Age* 91:17-18 My 6 '43

Post-war planning; effect on manufacturers. H. M. Henry. *Gas Age* 92:17-19 Ag 26 '43

Post-war planning from the manufacturers' standpoint. W. F. Rockwell. *Gas Age* 91: 25-6 Ap 8 '43; *Excerpts. Am Gas J* 158: 17-18 Ap '43

Thoughts on post-war planning. W. F. Roberts. *Am Gas J* 159:15-17 O '43

Advertising

Analysis of industrial and commercial equipment manufacturers advertising in national business magazines. *Am Gas Assn Proc* 1942:211-15

Great Britain

Design and supply of domestic gas appliances. J. E. White. *diags Gas J (Lond)* 242:136, 139-40, 169, 171 Ag 4-11 '43; *Discussion. 242: 171+*, 263-4 Ag 11, S 1 '43

GAS appliances

Care, maintenance and efficient use of deep-fat fryers. S. E. Tappan. *il Gas Age* 91: 25 Mr 11 '43

Gas and appliances low among fire causes. *Gas Age* 90:12 D 31 '42

Substitute materials for distribution purposes. W. M. Little. *Gas Age* 92:17-18+ Ag 12 '43

See also
 Gas burners Gas stoves
 Gas cooking Gas water heaters
 Gas heaters Refrigerators, Gas
 Gas industry

Ignition devices

Automatic ignition of gas appliances. R. M. Conner. *il Am Gas Assn Mo* 24:469-72 D '42

Merchandizing

See also
 Gas appliances,
 Domestic—Merchandizing

Pilot lights

Gum protective devices for gas appliances. F. E. Vandaveer and M. Zare. *bibliog il Am Gas Assn Mo* 25:291-4, 330-2 Jl-Ag '43

Repair

Appliance maintenance during the emergency. C. R. Lawrence. *il Gas Age* 92:14-15 S 23 '43

Citizens gas utility starts free appliance repair plan. *Gas Age* 91:15 My 6 '43

Colorado Public Service appliance salesmen merchandise service for duration. J. Kearns. *Am Gas J* 157:13 D '42

Job training; an educational program to improve gas appliance servicing. K. Wood and C. F. Turner. *il Am Gas Assn Mo* 25:102-4+ Mr '43

Wartime maintenance of customer appliances. F. M. Rosenkrans. *Am Gas J* 157:32-4 D '42

Safety measures

Vents for gas appliances. *Safety Eng* 86:26-7 Ag '43

Standards

Standardization of appliances. *Gas J (Lond)* 240:128, 133, 161 O 28-N 4 '42

GAS appliances, Domestic

Care and use of gas equipment in the kitchen. *Am Gas Assn Proc* 1942:145-54

Design and supply of domestic gas appliances. J. E. White. *diags Gas J (Lond)* 242:136, 139-40, 169, 171 Ag 4-11 '43; *Discussion. 242:171+*, 263-4 Ag 11, S 1 '43

Domestic gas research; a fundamental industry activity. E. J. Boothby. *il Gas Age* 91:32+ Ja 14 '43

Gas and electricity in the home of tomorrow. R. E. Ginna. *Gas Age* 91:17-19 Je 17 '43

Gas and the design of dwellings; British gas federation report. *Gas J (Lond)* 240:374 D 23 '42

Gas cooking, a 10 to 1 favorite over electricity in urban and suburban homes; with tabulated data on cooking fuel in United States, 1940. T. J. Shanley. *Am Gas Assn Mo* 24:451-4 D '42

Housing census; heating fuel and equipment. *Gas Age* 90:23-9 N 19 '42

How Brooklyn Union is planning for post war; projects for appliance developments. *Gas Age* 91:17-20+ Ja 28; 17-19 F 11; 17-23 F 25 '43; *Excerpt (pt.1). Am Gas J* 158: 7-9+ F '43

New gas range clothes drier developed at Brooklyn Union. *il Am Gas Assn Mo* 25: 238 Je '43

P.C.G.A. announces winners in post-war appliance contest. *Gas Age* 92:28 Jl 29 '43; *Same. Am Gas J* 159:35 Ag '43

P.C.G.A. summarizes appliance design ideas; contest among women employees of gas companies. *Gas Age* 92:19-20+ Ag 26 '43

Program for domestic gas research. R. L. Fletcher. *Am Gas Assn Proc* 1942:39-41

Utility services for war housing; proposals for minimum use of materials of a critical character. *il diags Am Gas Assn Mo* 25:97-101+ Mr '43

What of the future in the domestic field? H. Hartley. *Gas J (Lond)* 241:583-4, 589 My 12 '43; *Discussion. 241:615-16, 621 My 19 '43*

See also
 Gas burners Gas stoves
 Gas cooking Gas water heaters
 Gas heaters Refrigerators, Gas

Merchandizing

Deferred delivery freedom purchase plan. J. Bogan. *Gas Age* 91:20 F 11 '43

People, homes and post-war appliance market. A. Hirose. *Gas Age* 91:25-30 Je 8 '43

GAS appliances, Domestic—Merchandizing—*Continued*

Residential business; an opportunity and a challenge. B. A. Seiple. *Gas Age* 91:41-2+ *Ja* 14 '43

Selling the post-war market. A. P. Hirose. *Am Gas Assn Mo* 25:321-2 *Jl*-*Ag* '43

Repair

Trouble -ize; an answer to dealers' war-time problems campaign launched under leadership of Pacific gas and electric company. J. S. Frickleton. *il Gas Age* 90:19-20+ *D* 31 '42

GAS as fuel

Alternative fuels. *diags Automobile Eng Extra* no 32:423-32 *N* 5 '42

Conversion of glass furnaces from oil to gas and from gas to oil. G. Fitzgerald. *Am Cer Soc Bul* 22:65 *Mr* 15 '43

Dehydrated foods aid war effort and offer promising market for gas fuel. H. W. Heisterkamp. *il Am Gas Assn Mo* 25:55-7+ *F* '43

Drying operations are speeded up at Progressive silk finishing co. by use of gas-fired radiant heaters. *il Textile World* 92:73 *N* '42

Efficient burning of refinery fuels. R. Reed. *Pet Eng (Ref annual)* 14:345-6, 348-50 *Jl* 1 '43; Same cond. *Oil & Gas J* 41:39-43 *Mr* 11 '43

Equipment progress; twenty years of industrial gas research and development. E. G. de Coriolis. *il Am Gas Assn Mo* 25:137-41+ *Ap* '43; *Abstract. Metal Prog* 44:647-8+ *O* '43

Gas and appliances low among fire causes. *Gas Age* 90:12 *D* 31 '42

Gas at the new Kaiser company steel plant at Fontana, California. F. A. Herr. *il Am Gas J* 159:11-13+ *S* '43

Gas characteristics. A. J. Leather. *Gas J (Lond)* 241:312, 317 *Mr* 10 '43; *Discussion. 241:402* *Mr* 31 '43

Gas for power stations; costs and thermal values. E. V. Evans. *Elec R (Lond)* 133:70-1 *Jl* 16 '43

Gas fuel in post-war planning. T. A. Tomlinson. *Gas J (Lond)* 241:277-9 *Mr* 3 '43

Gas pressure regulation for industrial service. C. C. Abbott. *diags Am Gas J* 158:11-15, 56+ *My* '43

Gas stoves take wing; Hardwick stove company producing aircraft wing sections and fuel tanks. H. H. Granger. *il Am Gas Assn Mo* 25:205 *My* '43

Gas war research; a program of industrial and commercial development. J. W. Batten. *il Am Gas Assn Mo* 24:447-50 *D* '42; Same. *Gas Age* 91:34-5+ *Ja* 14 '43; Same. *Am Gas Assn Proc* 1942:33-7

Heat treatment of aluminum and magnesium and their alloys. tables *Am Gas Assn Proc* 1942:187-204 *bibliog*(p 193)

Industrial and commercial conference, Detroit, March 11-12. *Gas Age* 91:21-3+ *Mr* 25 '43; *Am Gas Assn Mo* 25:161-2 *Ap* '43; *Am Gas J* 158:27 *Ap* '43

Industrial gas completes conversion to war production. E. H. Gardner. *il Gas Age* 91:37-8 *Ja* 14 '43

Industrial gas conversions. E. Bates. *Gas J (Lond)* 242:85, 337 *Jl* 21, *S* 15 '43

Industrial gas economy. E. Bates. *Gas J (Lond)* 240:199, 259 *N* 11, 25 '42

Interpretation of efficiency. E. V. Evans. *Gas J (Lond)* 241:643-4 *My* 26 '43

Let's consider industrial gas conservation. D. W. Frye. *il Gas Age* 92:19-20 *Jl* 15 '43

Metal treating and melting. R. C. LeMay. *il Gas Age* 90:24-6+ *N* 19 '42; Same. *Am Gas Assn Proc* 1942:184-7

More gas than ever used in war plant; L. J. Mueller furnace co. F. J. Nunlist. *il Am Gas Assn Mo* 25:206-7 *My* '43

Ore reduction; use of gas in Republic Steel's new sponge iron plant. J. J. Craig. *Am Gas Assn Mo* 25:147-8 *Ap* '43

Radiant gas heat in baking, curing and drying operations. C. P. Mann. *il diag Gas Age* 92:21-3+ *S* 9 '43; *Excerpts. Iron Age* 152:58-9 *Jl* 22 '43

Radiant heat; the application of gas-generated infra-red rays. L. W. Andrew and E. A. C. Chamberlain. *Automobile Eng* 33:326-9 *Ag* '43; Same. *Gas J (Lond)* 242:110,

115, 140, 145+ *Jl* 28-*Ag* 4 '43; Same. *Engineering* 156:245-6, 298-300 *S* 24, *O* 8 '43; *Discussion. Gas J (Lond)* 242:201-2+ *Ag* 18 '43

Recent production improvements in magnesium melting and aluminum ladle pre-heating through direct radiant gas firing. J. Kniveton. *il diag Am Gas J* 159:10-13 *Jl* '43

Trouble with oil supply turns Britain to alternate fuels. G. W. L. Day. *il Oil & Gas J* 41:113-14, 116 *D* 31 '42

Universal fuel; suggested statutory supply for transport, industry and homes; potentialities of methane. C. Ridley. *Automobile Eng* 33:187-90 *My* '43

Wanted: a national fuel-gas policy. F. X. Welch. *Pub Util* 32:531-9 *O* 28 '43

War industries make wide use of gas-fired dehumidifiers; subcommittee report to annual convention of American gas association. *il Heat & Ven* 39:50-1 *N* '42

WPB inaugurates national program to conserve residential gas. *Gas Age* 90:13-14+ *N* 19 '42

We'll always need gas. C. G. Segeler. *Pub Util* 31:597-609 *My* 13 '43

What the war period is doing to metal treating with gas. J. P. Brosius. *Gas Age* 91:29-36+ *Mr* 25 '43; Same. *Am Gas Assn Mo* 25:162-4 *Ap* '43

See also

Blast furnace gas	Gas heating
Boilers—Gas firing	Gas in air conditioning
Butane	Gas producers
Coke-oven gas	Gas stoves
Gas, Producer	Liquefied petroleum gas
Gas and oil engines	Propane
Gas appliances	Sewage sludge—Gas production
Gas burners	
Gas cooking	
Gas heaters	

Natural gas

Combined firing of coal and natural gas on stoker-fired units; Kansas City power & light company. H. L. Crain. *diags A S M E Trans* 65:137-40; *Discussion. 140-1* *Ap* '43

Combustion of natural gas. G. M. Stearns. *Oil & Gas J* 41:48 *D* 24; 229 *D* 31 '42

Gas from upper sand used while drilling well; supplying fuel for engines. *il diag Oil & Gas J* 41:42 *Mr* 4 '43

Natural gas plays dual role in Kaiser magnesium plants. J. H. Gunz. *il Am Gas Assn Mo* 25:400-1+ *O* '43

Natural gas power for creamery refrigeration cuts operating costs by 50%; Knudsen creamery. J. Kearns. *il Am Gas J* 158:25-6 *My* '43

Natural gas solves the problems of a gelatin producer; air dryer. C. Culbertson. *il diag Gas Age* 92:15-16+ *Ag* 12 '43

Problems of the natural gas industry under war conditions; chemical products, fuel, etc. K. S. Adams. *Oil & Gas J* 41:66, 68, 71-2 *My* 6 '43; Same. *Am Gas Assn Mo* 25:201-5+ *My* '43; Same. *il Chem & Eng N* 21:964-8 *Je* 25 '43

Quarter of gas output goes to war industries. A. F. Bridge. *Oil & Gas J* 41:92 *Ja* 23 '43

Supply of gas to war industries. W. B. Byron. *Am Gas J* 158:33+ *My* '43

Underfiring with natural gas-air mixture at Chicago. G. A. Scott. *diags Blast F & Steel* 31:898-901 *Ag* '43

GAS black. See Carbon black

GAS burners

Combined firing of coal and natural gas on stoker-fired units; Kansas City power & light company. H. L. Crain. *diags A S M E Trans* 65:137-40; *Discussion. 140-1* *Ap* '43

Direct radiant kiln firing in the ceramic industry. H. W. Smith, Jr. and J. A. Ehlinger. *il diag Am Cer Soc J* 26:132-6 *Ap* 1 '43

Efficient burning of refinery fuels. R. Reed. *Pet Eng (Ref annual)* 14:345-6, 348-50 *Jl* 1 '43; Same cond. *Oil & Gas J* 41:39-43 *Mr* 11 '43

Gas-air premixing and combustion for modern flame-hardening. R. F. Apter and H. W. Smith, Jr. *diags Am Gas J* 158:11-14 *Mr* '43

High-speed heat treatments now possible with newly modified burner designs. F. O. Hess. *il diags Steel* 113:114, 116+ *N* 8 '43

GAS burners—Continued

- Silver alloy brazing with high-speed localized gas heating. J. I. Butzner. *il Iron Age* 152: 38-44 S 23 '43
- Stability and structure of burner flames. B. Lewis and G. von Elbe, bibliog *il diags J Chem Phys* 11:75-97 F '43
- Submerged combustion; gas burners for heating pickling tanks. F. E. Lane. *Gas J (Lond)* 242:229-30 Ag 25 '43
- Submerged combustion takes its place in the war industries. W. G. See. *Metal Finishing* 40:653-6 D '42
- Use of non-aerated flames in gas appliances. J. S. G. Thomas. *Gas J (Lond)* 241:492+ Ap 21 '43

Control

- Control taps; patent. *Gas J (Lond)* 241:501 Ap 21 '43
- Safe method of stopping large chimney-heat losses from gas-fired central-heating systems. *il diags Gas Age* 91:21-3 F 25 '43

GAS burning equipment

- Equipment progress; twenty years of industrial gas research and development. E. G. de Coriolis. *il Am Gas Assn Mo* 25:137-41+ Ap '43; Abstract. *Metal Prog* 44:647-8+ O '43
- Gas pressures and gas flow; notes for manufacturers and designers of gas-burning equipment. C. G. Segeler. bibliog *Am Gas Assn Mo* 25:219-20 My '43; Same. *Gas Age* 91:13-14+ My 6 '43
- New developments and data on immersion tube heating. F. E. Vandaveer. *il Am Gas Assn Mo* 25:269-71+ Je '43
- Use of gas-fired infra-red units in textile drying. *il Textile World* 93:60-1 Ja '43

See also

- Gas food warmers
Gas water heaters

Safety measures

- Combustion hazards in heat-treating and other furnaces can be decreased by use of modern automatic safety equipment. T. A. Cohen. *diags Steel* 112:60, 62, 64 Ja 18 '43; Same. *Chem & Eng N* 21:302-3 Mr 10 '43; Same abr. *Metal Finishing* 41:109-11 F '43; Same abr. *Nat Safety N* 47:24-5+ Ja '43
- Safety device for gas burners; patent. *Gas J (Lond)* 241:383 Mr 24 '43

GAS carburizing. See Case hardening—Gas carburizing**GAS cleaning**

- British gazogenes producer; development from Gohin-Poulenc type. *diags Automobile Eng Extra* no 32:444-6 N 5 '42
- Gas conditioning; some notes on cleaning and cooling equipment. W. F. Enever. *diags Automobile Eng* 33:199-200 My '43
- Scrubbing sewage gas; experiences with dry and wet methods at Peru, Indiana. H. E. Norris. *il diags Water Works & Sewerage* 90:61-4 F '43

See also

- Electric precipitation

GAS companies**See also**

- | | |
|---------------------------------------|--------------------------------|
| American gas association | Milwaukee gas light company |
| Columbia gas and electric corporation | United gas improvement company |
| Gas, Natural—Pipe lines | |

Accidents

- Accident experience; gas industry trends in 1942 reflect wartime factors. E. R. Martin. *Am Gas Assn Mo* 25:307-9 Jl-Ag '43

Accounting

- Accountant's war problems. L. A. Mayo. *Gas Age* 91:36+ Ja 14 '43
- Accounting for post-war refund of excess profits tax. H. B. Heiby. *Am Gas Assn Mo* 25:213-14+ My '43
- Block rate computations. W. J. Root. *Am Gas Assn Mo* 25:75-7 F '43
- Customer accounting problems today. L. A. Mayo. *Gas Age* 92:19-20 Ag 12 '43
- Customer accounting; wartime survey of meter reading and billing changes. J. J. Natale. *Am Gas Assn Mo* 25:311-13 Jl-Ag '43

- Depreciation in perspective. H. C. Hasbrouck. *Am Gas Assn Mo* 25:156-7 Ap '43
- Stub plan accounting used in connection with material issues. H. E. Buffington. *il Am Gas Assn Mo* 24:459-60 D '42
- Summary of developments in depreciation accounting. H. L. Gruehn. *Am Gas Assn Proc* 1942:68-70
- Wartime accounting practice reviewed at gas and electric industry conference. *il Am Gas Assn Mo* 25:263-6 Je '43

See also

- Gas, Natural—Ac-counting

Accounting departments

- Occupational deferment for accountants. O. H. Ritenour. *Am Gas Assn Mo* 25:94-5 Mr '43
- Wartime accounting personnel problems; discussion. *Am Gas Assn Proc* 1942:74-85

Advertising**See also**

- Gas industry—Ad-vertising

Appliance selling

- How Chattanooga is preparing for V-day. G. E. Stedman. *il Gas Age* 92:17-20 Jl 1 '43

Customer relations

- Battle Creek successfully combats gas shortage. *Gas Age* 90:7-8 D 31 '42
- Centralized telephone system expedites handling of customer calls; Laclede gas light company. R. D. Lewis. *il Am Gas Assn Mo* 25:369-70 S '43
- Maintaining customer contact during the war. R. J. Vandagriff. *Am Gas Assn Proc* 1942:129-31
- Portland gas and coke company builds good will by explaining to private customers the low-down on gas heating situation. A. J. Larson. *Am Gas J* 158:25-6 F '43
- Publicity sent to customers advising them of changes in meter-reading plans. O. Ul-lery. *il Gas Age* 90:27-9+ D 17 '42
- You know the answers, how about helping us out? Peoples Gas of Chicago surveys consumer opinions to guide post-war plans. F. X. Mettenet. *il Gas Age* 92:65-6 O 21 '43

Development work

- Santa Cruz solves the hegira problem; advertising campaign of Santa Cruz gas and electric co. under direction of Chamber of commerce. W. B. Stoddard. *Am Gas J* 159: 28 Ag '43

Electric utility competition

- Gas and electricity in the home of tomorrow. R. E. Ginna. *Gas Age* 91:17-19 Je 17 '43
- How Chattanooga is preparing for V-day. G. E. Stedman. *il Gas Age* 92:17-20 Jl 1 '43

Employees

- Bicycle operation during the war. J. H. Motz. *il Am Gas Assn Mo* 24:443 D '42
- Daily letter for employees; Alabama gas company. *Gas Age* 92:15 S 23 '43
- Does Fair labor standards act affect you? L. T. Parker. *Am Gas J* 159:32-4 Jl '43
- Employee rotation, an executive development program for supervisory personnel; Consolidated Edison company of New York. *Am Gas Assn Mo* 25:349-50 S '43
- Employee training helps solve problem of manpower shortage; Lone star gas company. A. W. Breeland. *Pet Eng* 14:134, 136 Ap '43
- Employee training; Southern division, Illinois Iowa power company. M. J. Westenhaver. *il Am Gas J* 158:32-3 Je '43
- Gas service manual; questions and answers for employee tests. W. L. Riehl. *Gas Age* 90:27-8, 36 D 31 '42
- Hiring of personnel; insistence on quality. L. S. Flint. *Am Gas J* 158:16-18 Mr '43
- How girl meter readers are helping in the war effort. C. E. Johansen. *il Am Gas Assn Mo* 25:31-2 Ja '43
- How to train women for gas company jobs. L. S. Flint. *Am Gas J* 158:22-4 F '43

GAS companies—Employees—Continued

Job training; an educational program to improve gas appliance servicing. K. Wood and C. F. Turner. *Il Am Gas-Assn Mo* 25: 102-4+ Mr '43

Lengthened work schedule; Consolidated gas electric light & power co. of Baltimore. W. A. Kelly. *Am Gas Assn Mo* 25:319-20 *Il-Ag* '43

Manpower; cross-section of gas industry experience. K. R. Boyes. *Il Am Gas Assn Mo* 24:427-30+ D '42

Manpower pool, established by gas utility to meet wartime emergencies; Hartford gas company. R. B. Barger. *Am Gas Assn Mo* 25:8-9 Ja '43

Manpower utilization in the gas industry. *Am Gas Assn Mo* 25:409-10 O '43

Occupational deferment for accountants. O. H. Ritenour. *Am Gas Assn Mo* 25:94-5 Mr '43

P.C.G.A. announces winners in post-war appliance contest. *Gas Age* 92:28 *JI* 29 '43; Same. *Am Gas J* 159:35 *Ag* '43

P.C.G.A. summarizes appliance design ideas; contest among women employees of gas companies. *Gas Age* 92:19-20+ *Ag* 26 '43

Selectees' club keeps up spirits of those left behind; Michigan consolidated gas company. N. E. Loomis. *Am Gas Assn Mo* 25:24 Ja '43

Selective service system issues bulletin on critical occupations in gas industry; complete text; subject: heating, power, water supply and illuminating services, and repair and hand trade services. *Gas Age* 91: 27-30 F 25 '43

Sound-film training program for supervisors. L. S. Metcalfe. *Il Gas Age* 92:11-12 *JI* 1 '43

Wartime accounting personnel problems; discussion. *Am Gas Assn Proc* 1942:74-85

Women replacements in stores accounting, purchasing and stores operation; discussion. *Am Gas Assn Proc* 1942:86-8

See also

Gas companies—
Salesmen

Equipment and supplies

Ersatz in the gas business. G. Wehrle. *Am Gas J* 158:9-10 Mr '43

Motor vehicle operations at the present time; Cincinnati gas and electric co. F. Heinlein. *Il Gas Age* 91:41-3+ My 20 '43; Same cond. *Am Gas J* 158:34-5+ Je '43

ODT orders clarified; A.G.A. committee reviews regulations for operators. *Am Gas Assn Mo* 25:53-4 F '43

Problems the transmission man sees in relation to PAW and WPB. R. H. Ulrich. *Gas Age* 91:33-4+ Je 3 '43; Same. *Am Gas Assn Mo* 25:244-5+ Je '43

Report of committee on operation of public utility motor vehicles. *Am Gas Assn Proc* 1942:417-33

Salvage and reclamation; discussion. *Am Gas Assn Proc* 1942:88-92

Substitute materials for distribution purposes. W. M. Little. *Gas Age* 92:17-18+ *Ag* 12 '43

Utility fleet operators analyze wartime transportation problems. *Am Gas Assn Mo* 25: 275-6 Je '43

Utility transportation, yesterday, today and tomorrow. C. S. Worley. *Gas Age* 90:14-16, 30 D 3 '42

War transportation; O.D.T. order 21 and its effect on public utility fleets. L. Edsall. *Am Gas Assn Mo* 24:401-3 N '42; Same. *Am Gas Assn Proc* 1942:269-71

See also

Gas pipes
Gas works—Equip-
ment

Finance

See also
Associated gas and electric system
Eastern gas and fuel associates
Jacksonville gas company
Standard gas and electric company

Law

Avoid liability for injuries to pedestrians. L. T. Parker. *Am Gas J* 157:26-8 D '42

How gas companies may avoid liability for explosion injuries. L. T. Parker. *Am Gas J* 159:57-60 O '43

How to determine validity of gas corporation's contract. L. T. Parker. *Am Gas J* 158:28-30+ Ja '43

Legal obligations of foreign gas corporations. L. T. Parker. *Am Gas J* 158:32-4 Ap '43

New laws affect sales' validity. L. T. Parker. *Am Gas J* 158:28-30 Mr '43

Review of gas rate litigations. L. T. Parker. *Am Gas J* 159:21-3 *Ag* '43

Review of 1942 important gas company court decisions. L. T. Parker. *Am Gas J* 158:27-9 F '43

Management

Accomplishments of a collection department operating without collectors; Ohio fuel gas company. H. S. Hahn. *Am Gas Assn Proc* 1942:117-20; Discussion. 120-3

Accountant looks at post-war problems. E. N. Keller. *Am Gas Assn Mo* 25:415-16 O '43

A.G.A. distribution conference, 20th, Cincinnati, April 29-30. *Am Gas J* 158:22+ Je '43; *Gas Age* 91:26-9 My 20 '43; *Am Gas Assn Mo* 25:272-4+ Je '43

Case for bi-monthly billing. R. B. Tulpin. *Gas Age* 92:22-3+ *JI* 1 '43

Georgia gas company conducts market survey. W. O. Croft. *Il Gas Age* 92:21-2+ O 7 '43

How Brooklyn Union is planning for post war; projects for appliance developments. *Gas Age* 91:17-20+ Ja 28; 17-19 F 11; 17-23 F 25 '43; Excerpt (pt.1). *Am Gas J* 158: 7-9+ F '43

How Kansas City is preparing for post-war. C. Porter. *Il Gas Age* 92:27-8+ S 9 '43

Mail sorting and delivery system; Southern California gas co. F. A. Herr. *Il Am Gas J* 159:9-11 *Ag* '43

Meter reading and billing; practices under war conditions. H. J. Johnson and others. *Il Am Gas Assn Proc* 1942:93-117

New plan of bi-monthly meter reading with monthly billing. R. C. Gordon. *Am Gas Assn Mo* 25:111-12 Mr '43

Peoples Gas keeps personnel ready for V-day. G. E. Stedman. *Il Gas Age* 91:21-4 Mr 11 '43

Staff committees. B. Wood and G. T. Basedon. *Gas J (Lond)* 241:243 F 24 '43

See also

Gas industry—War
measures

Public relations

See also

Gas companies—
Customer relations

Radio communication

Emergency communication by radiotelephone; Southern counties gas co. of California. H. J. Keeling. *Il diag Am Gas Assn Mo* 25:130-4 Ap '43

Records

Distribution maps and records; past, present and future. W. C. Bomhoff. *maps Gas Age* 92:73-5+ O 21 '43

Main-maintenance record. W. L. Kindred. *Il Gas Age* 91:35-6 Je 3 '43

Meter accuracy records and their analysis. H. A. Faull. *Il Am Gas J* 159:12-17 *Ag* '43

Regulation

Earnings during the war; two recent commission decisions. *Gas Age* 92:24 *JI* 29 '43

Manufactured gas industry under war conditions. M. E. Shea. *Am Gas J* 157:11-12+ D '42

WPB revises L-174 and L-31 limitation orders. *Gas Age* 90:25-8+ D 3 '42

Safety measures

Accident prevention; national committee streamlines for wartime service. C. L. Hightower. *Am Gas Assn Mo* 25:25-7 Ja '43

Bicycling with safety. A. J. Naquin. *Gas Age* 91:26-7 My 6 '43

War problems for the public utilities safety engineer. J. B. Davies. *Am Gas J* 158:21-3 Mr '43

Salesmen

Colorado Public Service appliance salesmen merchandise service for duration. J. Kearns. *Am Gas J* 157:13 D '42

GAS companies—Salesmen—Continued

Gas salesman doubles as calliope player; J. B. Carlisle, member of Gainesville community circus. K. Ford. *il Gas Age* 90:16+ D 31 '42

Securities

Gas shares. Economist 144:183-4 F 6 '43

Service

All-out war effort places the gas business in a new role. J. E. Humphreys. *il Gas Age* 91:21-4+ Ja 28 '43; Same. *Am Gas J* 158: 23-6+ Ja '43

Almost overnight we built a new war program; home service activities. Manufacturers light and heat co. F. G. Dowler. *il Gas Age* 92:27-8+ O 7 '43

Appliance maintenance during the emergency. C. R. Lawrence. *il Gas Age* 92:14-15 S 23 '43

Before and after; test of utility Home service as a tangible asset. Am Gas Assn Mo 25:59-61 F '43

Canning caravan; an adventure in war-time education through showmanship; Binghamton (N.Y.) gas works. R. E. Williams. *il Gas Age* 92:17-18 JI 29 '43

Canning clinics click in Fall River, Mass. H. V. Potter. *il Gas Age* 92:13-14 Ag 26 '43

Citizens gas utility starts free appliance repair plan. *Gas Age* 91:15 My 6 '43

Dig for victory; gas utility plays leading role in garden program; Fall River gas works co. H. V. Potter. *il Am Gas Assn Mo* 25: 138-200 My '43

Home service in war: a bill of particulars. G. S. Jones, Jr. *Gas Age* 91:28-9 My 6 '43

Home volunteer program extended. *il Am Gas Assn Mo* 25:216 My '43

Houston Natural to offer free home canners. C. N. Tunnell. *Gas Age* 92:16+ JI 1 '43

How New Orleans Public Service promotes nutrition conservation. D. Markstein. *il Gas Age* 92:76, 78 O 21 '43

Laclede gas light co. speeds customer service. J. E. Kearns. *il Am Gas J* 159:35-6 JI '43

Minneapolis home-service activities. J. Campbell. *Gas Age* 91:32-3+ Mr 11 '43

Pressure cookers for the asking; Natural gas corporation, Houston. K. Fellows. *il Am Gas Assn Mo* 25:299-300 JI-Ag '43

Subcommittee on servicing gas food service equipment. Am Gas Assn Proc 1942:159-60

Teaching customers to do things for themselves as an aid to the war effort; Washington gas light company. D. S. Bittinger. Am Gas Assn Mo 25:183-6 My '43

Teaching customers to light their furnaces; Dayton (Ohio) power and light company. *il Gas Age* 92:32 S 9 '43

Testing pressure cookers gains goodwill; West Texas gas company. *il Gas Age* 92:29 S 9 '43

War service for home service. J. Campbell. Am Gas Assn Proc 1942:139-41

Wartime maintenance of customer appliances. F. M. Rosenkrans. Am Gas J 157: 32-4 D '42

Wartime nutrition program; southern California gas utilities home service departments. F. A. Herr. *il Am Gas J* 158:16-18 My '43

Stores systems

Women replacements in stores accounting, purchasing and stores operation; discussion. Am Gas Assn Proc 1942:86-8

Taxation

Federal tax law places heavy burden on gas industry. A. F. Bridge. Pub Util 32:640-4 N 11 '43

Telephone

Centralized telephone system expedites handling of customer calls; Laclede gas light company. R. D. Lewis. *il Am Gas Assn Mo* 25:369-70 S '43

GAS compressors

Cylinder sizes for two-stage compression. G. M. Stearns. Oil & Gas J 41:85-6, Ap 29 '43

Displacement and capacity of gas compressors. G. M. Stearns. Oil & Gas J 41:53-4 Ap 1 '43

Gas compressor. diags Oil & Gas J 41:61 Mr 4 '43

Importance of soil mechanics in design of compressor foundations. H. R. Marsh. diags Nat Pet N 35 pt 2:R544-9 N 3 '43

Improved practices employed at gas-line compressor station. P. Reed. *il Oil & Gas J* 41:44-5 Mr 11 '43

Indicated and brake horsepower of compression. G. M. Stearns. Oil & Gas J 41:139-40 Ap 15 '43

Isothermal compression horsepower; Poly-tropic and adiabatic compression horsepower. G. M. Stearns. Oil & Gas J 41:79-80 Mr 18 '43

Questions on operation; capacity of gas compressor. Oil & Gas J 41:44 F 4 '43

Variable compressor clearance. Oil & Gas J 41:101 Ap 8 '43

Viscosity characteristics of lubricating oils saturated with natural gases at high pressures. J. S. Swearingen and E. D. Redding. bibliog *il diag Ind & Eng Chem* 34:1496-8 D '42

Volumetric efficiency of gas compressors. G. M. Stearns. Oil & Gas J 41:335 Mr 25 '43

See also
Air compressors Gas, Natural—Com-
Ammonia compres- pression
sors

Safety measures

Principle of the safety cylinder as an explosion preventer in air-gas compression. F. Squires. *il diags Oil & Gas J* 41:83-4+ Ap 8 '43

GAS conservation. *See* Gas, Natural—Conser-vation

GAS containers
American national standard gas-cylinder valve-outlet threads; data sheet. Mach 49: 167 Mr '43; Same. Instruments 16:65 F '43

Explosions of gas cylinders containing automobile fuel. A. M. Portevin. Metal Prog 43:242 F '43

Testing

Spherical containers for transporting gas under high pressure; transportation of helium under 2000 lb. pressure in multiple-sphere tank cars, reprinted from Mechanical engineering, Dec. 1929. *il Welding J* 22: sup304-7 JI '43

Tests of thin hemispherical shells subjected to internal hydrostatic pressure; reprint of University of Illinois Engineering experiment station bulletin 295. W. M. Wilson and J. Marin. *il diags Welding J* 22:sup214-20 My '43

GAS contamination of food. *See* Food—Gas contamination

GAS cooking
All-out war effort places the gas business in a new role. J. E. Humphreys. *il Gas Age* 91:21-4+ Ja 28 '43; Same. Am Gas J 158: 23-6+ Ja '43

Care and use of gas equipment in the kitchen. Am Gas Assn Proc 1942:146-51

Care, maintenance and efficient use of deep-fat fryers. S. E. Tappan. *il Gas Age* 91:25 Mr 11 '43

Determination of coincident peak hour demand for combined cooking and water heating service. Am Gas Assn Mo 24:438-42 D '42

Future of the gas deep-fat fryer. S. E. Tappan. *il Am Gas Assn Mo* 25:115-16 Mr '43

Gas cooking, a 10 to 1 favorite over electricity in urban and suburban homes; with tabulated data on cooking fuel in United States, 1940. T. J. Shanley. Am Gas Assn Mo 24:451-4 D '42

Gas kitchens chosen for Washington's newest and largest hotel. T. M. Offutt. *il Am Gas Assn Mo* 25:373-4 S '43

New developments and data on immersion tube heating; deep fat fryers. F. E. Vandavey. *il Am Gas Assn Mo* 25:269-70 Je '43

Report of food service equipment committee. Am Gas Assn Proc 1942:157-8

See also
Gas stoves

GAS cutting*See also*

Oxyacetylene cutting

GAS detectorsChlorine detector protects workers against poisoned air. T. A. H. Jeffery. *il* diags Power 87:514-15 Ag '43**GAS-DIESEL engines.** *See* Diesel engines—Fuel**GAS distribution**

A.G.A. distribution conference, 20th, Cincinnati, April 29-30. Am Gas J 158:22+ Je '43; Gas Age 91:26-9 My 20 '43; Am Gas Assn Mo 25:272-4+ Je '43

Emergency winter operating problems. E. S. Umstead. Am Gas J 159:63-5+ O '43
Gas pressure regulation for industrial service. C. C. Abbott. diags Am Gas J 158:11-15, 56+ My '43

It's distribution, not reserves that causes wartime natural gas shortages. Am Gas Assn Mo 25:51-2 F '43

Substitute materials for distribution purposes. W. M. Little. Gas Age 92:17-18+ Ag 12 '43

West Yorkshire gas grid; a modern scheme of great possibilities. Gas J (Lond) 242:194-6 Ag 18 '43

*See also*Gas, Natural—Pipe lines
Gas holders
Gas pipes
Gas flow**Cost**

Design of distribution systems to supply post-war development. H. J. Escreet. Gas J (Lond) 242:73-4, 77-8, 83, 104-5 Jl 21-28 '43; Gas Age 92:17-24+ S 23 '43; Discussion. Gas J (Lond) 242:106, 109-10, 263, 269 Jl 28, S 1 '43

Long distance lines*See also*

Gas, Natural—Pipe lines

Maps

Distribution maps and records; past, present and future. W. C. Bomhoff. maps Gas Age 92:73-5+ O 21 '43

Safety measures*See also*

Gas, Natural—Safety measures

GAS engine plants. *See* Power plants—Gas engine plants**GAS engineering**

Design and performance of gas works plant. A. G. Grant. Gas J (Lond) 242:197-8, 201, 230, 233 Ag 18-25 '43

Design of distribution systems to supply post-war development. H. J. Escreet. Gas J (Lond) 242:73-4, 77-8, 83, 104-5 Jl 21-28 '43; Discussion. 242:106, 109-10, 263, 269 Jl 28, S 1 '43

New developments. V. J. Altieri. bibliog Am Gas Assn Proc 1942:301-8

Regional gas engineering advisory boards. C. F. W. Rendle. Gas J (Lond) 242:17-18, 21 Jl 7 '43; Discussion. 242:21, 25, 233-4, 239 Jl 7, Ag 25 '43

Standards of technical performance. G. Dixon. Gas J (Lond) 241:766-8; Discussion. 768, 771-2 Je 23 '43

*See also*Gas and oil engines
Gas distribution
Gas heating
Gas manufacture
Gas works**Examinations**

Institution of gas engineers examination results. Gas J (Lond) 242:207, 209 Ag 18 '43

Tables, calculations, etc.

Fuel requirements of carbonizing plant. S. Pexton. Gas J (Lond) 241:20, 23-4, 55-6, 61, 63 bibliog(p56), 83-6 Ja 6-20 '43; Discussion. 241:116-18, 157+ Ja 27-F 3 '43

GAS engineers

With our A.G.A. laboratories' men in the armed forces. R. M. Conner. Am Gas Assn Mo 25:62-4 F '43

GAS engines. *See* Gas and oil engines; Gas turbines**GAS explosions.** *See* Explosions**GAS fitting**

Installing big valve in gas main without interrupting service; illustrations. Heating-Piping 15:578-9 N '43

GAS flow

Chart for calculation of pressure drop in gas lines. E. N. Kemler. Pet Refiner 22:107-12 S '43

Constant pressure and flow ratio regulator for continuously mixing two gases. N. L. Heikes. diags Ind & Eng Chem Anal ed 15:133-4 F 15 '43

Differential equations of an adiabatic gas flow and the shock curve; abstract. F. Ringleb. Roy Aeronautical Soc J 46:sup402-3 N '42

Diffusion of vapors into an air stream flowing viscously and vertically. L. M. K. Boelter. bibliog diag Am Inst Chem Eng Trans 39:557-64 Ag '43

Direct calculation of gas pressure drop in pipes. A. S. Hall, jr. and R. C. Binder. Power 87:537-8+ Ag '43

Effect of the kinetic energy term in gas flow calculations. B. Miller. Chem & Met Eng 50:90-1 Ja '43

Gas pressures and gas flow; notes for manufacturers and designers of gas-burning equipment. C. G. Segeler. bibliog Am Gas Assn Mo 25:219-20 My '43; Same. Gas Age 91:13-14+ My 6 '43

Graphic solution of natural gas pipe line flow. G. H. McKay and P. M. Biddison. Pet Eng 15:182+ O '43

Heat, mass, and momentum transfer in the flow of gases through granular solids. B. W. Gamson, G. Thomas and O. A. Hougen. bibliog diag Am Inst Chem Eng Trans 39:1-32 F '43; Abstract. Chem & Met Eng 50:170+ Mr '43; Discussion. Am Inst Chem Eng Trans 39:32-5, 583-4 F, O '43

How to size piping for steam, gases and vapors. E. N. Kemler. 14 charts Heat & Ven 40:52-4+ O '43

Improved meter for the measurement of gas flow rates. W. G. Appleby and W. H. Avery. diags Ind & Eng Chem Anal ed 15:349-50 My 15 '43

Isothermal and adiabatic flow of compressible fluids. C. E. Lapple. Am Inst Chem Eng Trans 39:385-427; Discussion. 427-32 Je '43

Measurement of high temperatures in high-velocity gas streams. W. J. King. bibliog diags A S M E Trans 65:421-8; Discussion. 428-31 Jl '43

Permeability of porous solids to gases and liquids. L. Grunberg and A. H. Nissan. bibliog diags Inst Pet J 29:193-225 Ag '43

Rapid determination of very small gas flows; soap-bubble method. L. Silverman and R. M. Thomson. diags Ind & Eng Chem Anal ed 14:928 D 15 '42

Reading pulsating flows on an orifice meter chart. H. H. Beeson. Pet Eng 14:151+ My '43

Relation of harmonic and logarithmic means. J. D. Parent. Chem & Met Eng 50:128 Je '43

Solution of flow equations for natural gas lines. P. M. Biddison and G. H. McKay. Pet Eng 14:63-4, 66 Je '43

Stability and structure of burner flames. B. Lewis and G. von Elbe. bibliog il diags J Chem Phys 11:75-97 F '43

Use of inwall temperatures in determining improper gas flow. L. Tofft. Blast F & Steel Pt 31:759-66 Jl '43

*See also*Air flow
Gas meters**GAS food warmers**What's become of the steam in steam tables? gas-heated food warmers. M. P. Duke. *il* Am Gas Assn Mo 25:323-4 Jl-Ag '43**GAS furnaces.** *See* Gas as fuel**GAS governors**

Operating district gas regulators under water. E. Dutch. diags Am Gas J 157:13 D '42; Same. Gas Age 91:12-13 F 11 '43

GAS heaters

Analysis of heating industrial buildings with gas; report of industrial space heating committee; various industrial space heating equipment. *il diags Am Gas Assn Proc* 1942:229-37

See also

Gas water heaters**GAS heating**

Analysis of heating industrial buildings with gas; report of industrial space heating committee. *il diags Am Gas Assn Proc* 1942:220-49

District heating; possible effect upon development of gas supply; comparative efficiency of steam district heating and gas heating. *J. E. Davis. Gas J (Lond)* 242:135 Ag 4 '43

Experience of Sweet-Orr points to post-war gas heating. *J. E. Bullard. il Gas Age* 92: 67-9 O 21 '43

Heating and ventilating a Rochester museum. *D. K. Smith. il plan Gas Age* 92:55-8 O 21 '43

Housing census: heating fuel and equipment. *Gas Age* 90:28-9 N 19 '42

How did that insulation campaign work out? experiences of Pittsburgh natural gas companies. *H. Stanley. il Gas Age* 91:57-8+ Ap 22 '43

It's the weather; value of the degree day and long-range statistics. *R. Little. Am Gas Assn Mo* 25:355-60+ S '43

Looking forward, a new view of the industrial and commercial space-heating load. *H. O. Loebell. Gas Age* 91:49-54 Ap 22 '43

New baking tests, less heat loss for gas ranges; standards for stoves and heating equipment. *R. M. Conner. il Ind Stand* 14: 85-8 Mr '43

Rochester museum of arts and sciences air conditioning equipment and heating plant on roof. *A. S. Crocker. il plan Heat & Ven* 40:83-7 Ag 43

Safe method of stopping large chimney-heat losses from gas-fired central-heating systems. *il diags Gas Age* 91:21-3 F 25 '43

Service to the consumer. *E. V. Evans. Gas J (Lond)* 241:674, 677 Je 2 '43

See also

Gas—Calorific value**Gas heaters****Gas water heaters****Cost**

Analysis of heating industrial buildings with gas; report of industrial space heating committee; study of competitive conditions that affect sales. *Am Gas Assn Proc* 1942: 224-7

Tables, calculations, etc.

Analysis of heating industrial buildings with gas; report of industrial space heating committee; sizing and locating equipment and estimating gas consumption. *diags Am Gas Assn Proc* 1942:238-46

Simplified heat calculation method for gravity and forced air gas furnaces. *F. A. Herr. Am Gas J* 153:16-21+ Ja '43

GAS heating, Industrial. See Gas as fuel**GAS holders**

Bomber crash destroys Chicago gas holder. *il Gas Age* 91:40 Je 3 '43

Chicago gas holder fire. *J. Plant. Gas Age* 92:19+ S 9 '43

Dismantling gas holder. *diag Eng N* 130:763 My 20 '43

Liquefied-gas-storage containers; applications of arc welding; with cost data. *J. O. Jackson. bibliog il diags Gas Age* 91:37-42 Ap 22 '43

Protection

Fire protection on gas holders. *W. W. Gardner. il Gas Age* 92:19 S 9 '43

Repair

Bomb-damaged gasholder quickly repaired. *il Gas J (Lond)* 240:21 O 7 '42; *Same. Am Gas J* 157:14 D '42

Holder canvas repaired in record time. *Gas Age* 92:27 Ag 12 '43

GAS in air conditioning

All-year gas air conditioning for postwar. *J. H. Gill. il Gas Age* 92:25-6+ S 9 '43

Comfort in business; air conditioning small commercial establishments with gas; New Orleans public service inc. *G. E. May. il Am Gas Assn Mo* 25:143-6 Ap '43; *Same. Am Gas J* 153:46-8 My '43

Cooling by gas; Servel has tested new gas air conditioner. *Business Week* p84 JI 10 '43

Cooling with heat; Servel gas-fired air conditioner. *il diags Arch Forum* 78:6-7 Je '43

Facts about gas summer air conditioning. *F. E. Vandaveer and W. B. Kirk. il diags Am Gas Assn Mo* 25:389-93+ O '43

Gas air conditioning attains acceptance in 1942 and stands ready to expand. *il diags Am Gas Assn Proc* 1942:161-82; *Excerpt. Heating-Piping* 15:196+ Ja '43

Gas air conditioning ready for post-war era; with cost data. *T. H. Bean, jr. Gas Age* 92:23-4+ O 7 '43

Gas summer air conditioning; with cost data. *H. P. Morehouse. diags Am Gas Assn Mo* 25:189-95 My '43

Natural gas solves the problems of a gelatin producer; air dryer. *C. Culbertson. il diags Gas Age* 92:15-16+ Ag 12 '43

New product, 3000 new jobs; Servel gas-operated air-conditioning unit. *Ruthenburg. Ptr Ink* 204:21+ S 3 '43

Novel comfort features in world's largest air-conditioning system; bomber plant of Consolidated aircraft corp. *R. Latimer. il Gas Age* 92:29-30+ JI 15 '43

Plant temperature adjusted to meet outdoor conditions; gas-fired comfort air conditioning; Consolidated aircraft corporation. *J. Kearns. Am Gas J* 159:31 Ag '43

Servel announces gas-air conditioning. *il Chem & Eng N* 21:1578 S 25 '43

Servel announces operating data for cooling. *map Gas Age* 92:69 O 21 '43

Servel sponsors post-war series on air conditioning. *Gas Age* 92:34, 36, 38 Ag 12 '43; *Excerpt. Am Gas Assn Mo* 25:362 S '43

Summer air conditioning committee looks to post-war period. *Am Gas Assn Mo* 25: 298 JI-Ag '43

What gas air conditioning means to the gas industry. *Am Gas J* 159:34-5 S '43

GAS in refrigeration

Natural gas power for creamery refrigeration cuts operating costs by 50%; Knudsen creamery. *J. Kearns. il Am Gas J* 158:25-6 My '43

See also

Refrigerators, Gas**GAS industry**

Gas industry and coal conservation. *E. V. Evans. Gas J (Lond)* 240:373-4 D 23 '42

We'll always need gas. *C. G. Segeler. Pub Util* 31:597-603 My 13 '43

See also

Refrigerators, Gas

Gas industry and coal conservation. *E. V. Evans. Gas J (Lond)* 240:373-4 D 23 '42

We'll always need gas. *C. G. Segeler. Pub Util* 31:597-603 My 13 '43

See also

Gas, Natural**Gas appliance industry****Gas appliances****Gas as fuel****Gas companies****Gas distribution****Gas heating****Gas manufacture****Gas rates****Gas research****Gas stoves****Gas works****Advertising**

Advertising that boos the old home town; Michigan Consolidated gas co. *A. G. Schroeder. il Am Gas Assn Mo* 25:404 O '43

A.G.A. campaign supports conservation program. *il Am Gas Assn Mo* 24:435-7 D '42

Gas industry's Thanks Mom ad wins national citation. *Am Gas Assn Mo* 25:238 Je '43

Getting the best out of a small budget. *C. J. Allen. Gas Age* 90:15-18+ N 19 '42

It paid these firms to sell what they haven't got! three natural gas companies of Pittsburgh promote insulation. *H. Stanley. il Ptr Ink* 201:78-9 D 11 '42

Lone Star broadcasts nutrition programs. *il Gas Age* 91:15 Mr 11 '43

Mystery chef returns on nationwide network with gas company sponsors. *J. Cortada. Am Gas Assn Mo* 25:93 Mr '43

National advertising and post-war planning. *F. E. Drake. il Gas Age* 91:17-18 Mr 25 '43

National advertising; new gas campaign keyed to challenge of the future. *H. C. Wolf. il Am Gas Assn Mo* 25:339-42 S '43; *Excerpt. Gas Age* 92:30-2 S 9 '43

GAS industry—Advertising—Continued

Nutrition in industry has plenty rice bowl; Serval plan; interview with G. S. Jones. G. E. Stedman. *il Gas Age* 90:22-4+ D 17 '42
 Pittsburgh promotes canning. *il Gas Age* 92:29+ S 9 '43
 P.U.A.A. honors better copy winners; annual meeting, Chicago, June 24-25. *Gas Age* 92:11-13+ JI 29 '43
 Report on industrial and commercial gas national advertising. *il Am Gas Assn Proc* 1942:205-16
 Suggestions on pre-post-war advertising. H. Stanley. *il Gas Age* 92:70-1 O 21 '43
 Wartime nutrition program; southern California gas utilities home service departments. F. A. Herr. *il Am Gas J* 158:16-18 My '43
 Women commandos; a radio program building good-will for Oklahoma natural gas co. J. H. Warden. *Am Gas Assn Mo* 25:249-50 Je '43

Laws and regulations

See Gas companies—Law; Gas companies—Regulation

Merchandizing

Analysis of heating industrial buildings with gas; report of industrial space heating committee. *il diags Am Gas Assn Proc* 1942:220-49
 Before and after; test of utility Home service as a tangible asset. *Am Gas Assn Mo* 25:59-61 F '43
 Blueprint for gas in post-war era is aim of farsighted planning committee. A. M. Beebee. *il Am Gas Assn Mo* 25:287-90 JI-Ag '43
 During the war, and after? H. K. Wrench. *Gas Age* 91:19+ My 6 '43
 Gas promotion and sales during and after the war. B. A. Seiple. *Gas Age* 91:31-2 Je 3 '43; Same. *Am Gas Assn Mo* 25:267-8 Je '43
 Georgia gas company conducts market survey. W. O. Croft. *il Gas Age* 92:21-2+ O 7 '43
 Improving the outlook for industrial and commercial gas in the post-war period. C. V. Sorenson. *Am Gas Assn Mo* 25:164-6 Ap '43; Same. *Am Gas J* 158:29-31 Ap '43
 Industrial and commercial conference, Detroit, March 11-12. *Gas Age* 91:21-3+ Mr 25 '43; *Am Gas Assn Mo* 25:161-2 Ap '43; *Am Gas J* 158:27 Ap '43
 Industry leaders comment on post-war plans; views of gas men and appliance and equipment manufacturers. *Gas Age* 91:19-20 Mr 25; 72-8+ Ap 8; 54-6 Ap 22; 20+ My 6 '43
 Plan for equipment development. A. W. Lundstrum. *Gas Age* 91:17-18 My 6 '43
 Planning and preparing for post-war sales. C. V. Sorenson. *Am Gas Assn Proc* 1942:131-3
 Post-war planning; effect on manufacturers. H. M. Henry. *Gas Age* 92:17-19 Ag 26 '43
 Problems of the gas industry in post-war era. C. V. Sorenson. *Gas Age* 92:21-2 JI 15 '43

What and when? B. B. Geyer. *Gas Age* 91:37-9 My 20 '43

See also

Gas appliance industry	Gas companies—Salesmen
Gas appliances, Domestic—Merchandizing	Gas in air conditioning

Statistics

Manufactured gas and natural gas, 1933-1941. Survey of Cur Business 1942 Sup p112-13 [supplemented in monthly numbers]
 War year sees momentous developments in gas industry. A. F. Bridge. tables *Am Gas Assn Mo* 25:3-6 Ja '43; Same. *Gas Age* 91:19-21+ Ja 14 '43; Same, without tables. *Am Gas J* 158:12-14+ Ja '43

War measures

Britain conserves gas to win the war. R. Walker. *il Gas Age* 91:26-8 Mr 25 '43
 British gas salesmanship goes into reverse. B. Hill. *il Gas Age* 91:22-3+ F 11 '43
 Effect of WPB orders on the distribution of natural gas. D. P. Hartson. *il Am Gas Assn Mo* 25:245-7+ Je '43

Gas conservation program saves large quantity of oil. *Am Gas Assn Mo* 25:239-40 Je '43

Gas industry from the national standpoint. E. R. Acker. *Am Gas J* 158:37-40 Je '43

Gas industry urged to support share-theat program. *Am Gas Assn Mo* 24:434 D '42

Gas utilities in war-time Britain. *Pub Util* 32:567-9 O 28 '43

History repeats; war and taxes have always produced problems; reprint from the March 1st, 1864, issue of American gas light journal. *Am Gas J* 158:15 Mr '43

Home service in war; a bill of particulars. G. S. Jones, jr. *Gas Age* 91:28-9 My 6 '43

Manufactured gas industry under war conditions. M. E. Shea. *Am Gas J* 157:11-12+ D '42

Manufactured gas operations in war time. M. T. Bennett. *Gas Age* 91:9-12+ Ja 28 '43; Same. *Am Gas J* 158:16-20 F '43

Nutrition in industry program. G. S. Jones, jr. *Am Gas Assn Proc* 1942:133-6

Operation of limitation order L-31 in the Ordnance department. R. B. Harris. *Am Gas J* 158:32 My '43

Our joint war job. E. H. Poe. *Am Gas Assn Proc* 1942:60-2; Discussion. 62-3

Our record in war; recent national contributions of the natural gas industry. E. R. Acker. *Am Gas Assn Mo* 25:241-3 Je '43

Outline of Southern counties gas co. war game procedure. E. A. Devine. *il Gas Age* 92:13-15 JI 1 '43

Problems the transmission man sees in relation to PAW and WPB. R. H. Ulrich. *Gas Age* 91:33-4+ Je 3 '43; Same. *Am Gas Assn Mo* 25:244-5+ Je '43

Questions and answers under limitation order L-31, as amended. F. T. Rainey. *Gas Age* 91:24-5+ Mr 25 '43; Same. *Am Gas J* 158:37-9 Ap '43

Relationship of PAW and WPB to production activities of the natural gas industry. L. T. Potter. *Am Gas Assn Mo* 25:247-8+ Je '43

Sales executives report on war work in nutrition and conservation. *Am Gas Assn Mo* 25:33-4 Ja '43

Southern counties gas company stages unique war games to test efficiency of its preparations against air attack. L. S. Flint. *il Am Gas J* 157:7-10 D '42

Supply of gas to war industries. W. B. Pyron. *Am Gas Assn Mo* 25:135-6+ Ap '43

Technical section's place in the war effort; report of committee. *Am Gas Assn Proc* 1942:252-6

War activities; gas industry meets the challenge of the times. E. R. Acker. *Am Gas Assn Mo* 25:127-9+ Ap '43; Same abr. *Gas Age* 91:16-17+ Ap 8 '43

War production problems as they effect the gas industry. J. A. Krug. *Am Gas Assn Proc* 1942:24-8

Great Britain

Britain conserves gas to win the war. R. Walker. *il Gas Age* 91:26-8 Mr 25 '43

British gas salesmanship goes into reverse. B. Hill. *il Gas Age* 91:22-3+ F 11 '43

Civil defense for gas undertakings in England. R. N. LeFevre. *il Gas Age* 90:11-13 D 3 '42

Co-operation between the electrical and gas industries. G. Lloyd-George. *Electrician* 130:508 My 21 '43

Domestic block rate tariff. J. Corrigan. *Gas J (Lond)* 240:162, 167, 190, 193-4 N 4-11 '42; Discussion. 240:194, 198 N 11 '42

Effects of war on the British gas industry. S. J. Beale. *Gas Age* 92:24-6+ JI 1 '43; Same. *Am Gas J* 159:20-3+ JI '43; Same cond. *il Am Gas Assn Mo* 25:301-4 JI-Ag '43

Future gas-works policy. D. L. Dickson. *Gas J (Lond)* 241:122, 127 Ja 27 '43; Discussion. 241:159 F 3 '43

Future of electricity supply; views on co-operation with gas industry. F. Newey. *Electrician* 130:638-9 Je 25 '43

Gas industry's part in Britain's battle for fuel. B. Hill. *Gas Age* 92:12-13+ S 23 '43

Gas; its place in the national fuel economy. D. Milne-Watson. *Engineer* 175:10 Ja 1 '43

Gas service, past and future. A. E. Pask. *Gas J (Lond)* 241:677-8 Je 2 '43

GAS industry—Great Britain—Continued

- Gas utilities in war-time Britain. Pub Util 32:567-9 O 28 '43
- Justification for development. E. V. Evans. Gas J (Lond) 240:285-6 D 2 '42; Discussion. 241:29, 31 Ja 6 '43
- Nation, the consumer, and the fuel industries. D. Milne-Watson. Gas J (Lond) 240:158 N 4 '42; Abstract. Electrician 129:495 N 6 '42
- National gas council annual general meeting, London, June 8; with address by D. Milne-Watson. Gas J (Lond) 241:744, 747 Je 16 '43
- Needs of today and tomorrow. G. E. Stevenson. Gas J (Lond) 241:712+ Je 9 '43
- 1942; general review. Gas J (Lond) 240:401-14 D 30 '42
- Post-war industrial gas in Britain. Am Gas Assn Mo 25:419 O '43
- Presidential address before Eastern counties gas engineers' and managers' association. L. C. B. Williams. Gas J (Lond) 241:640, 643 My 26 '43
- Presidential address before Institution of gas engineers; gas industry in the national economy. E. V. Evans. Gas J (Lond) 241:702-11 Je 9 '43; Same cond. Engineering 156:5, 24-5, 45-7 Jl 2-16 '43
- Presidential address before Manchester district association of gas engineers. W. Fletcher. Gas J (Lond) 241:430-2 Ap 7 '43
- Presidential address before Southern association of gas engineers and managers. F. J. Bywater. Gas J (Lond) 241:405-6, 411 Mr 31 '43
- Presidential address before Waverley association of gas managers. W. M. Henderson. Gas J (Lond) 242:57 Jl 14 '43
- Problems of to-day and to-morrow. A. H. Cranmer. Gas J (Lond) 240:127 O 28 '42
- Regional gas engineering advisory boards. C. F. W. Rendle. Gas J (Lond) 242:17-18, 21; Discussion. 21, 25 Jl 7 '43
- Smokeless fuel and post-war reconstruction. G. E. Foxwell. Gas J (Lond) 240:251-2; Discussion. 252 N 25 '42
- Society of British gas industries; report of the Council for 1942-1943. Gas J (Lond) 241:644, 649 My 26 '43
- Some of our problems. Gas J (Lond) 241:491-2 Ap 21 '43
- Thought trend in the gas industry. G. L. Braidwood. Gas J (Lond) 240:286, 291+, 314 D 2-9 '42; Discussion. 240:314-16, 383 D 9, 23 '42
- United industry. E. V. Evans. Gas J (Lond) 241:563-4 My 5 '43
- We must study organization; suggested co-ordination of gas and electric industries. H. W. Healy. Gas J (Lond) 241:374 Mr 24 '43
- Where do we stand? Gas J (Lond) 241:554, 557-8 My 5 '43
- See also*
- Gas supply—Great Britain

New England

- Address; program for future development of New England gas industry. J. West. Am Gas J 158:11-14 Ap '43; Same. Gas Age 91:13-15+ Ap 8 '43
- New England manufactured gas industry. H. M. Henry. Am Gas J 158:15-16 Ap '43; Same cond. Gas Age 91:17 Ap 8 '43

New Jersey

- Development of the gas business in New Jersey. Il Am Gas Assn Mo 25:361 S '43

United States

- During the war, and after? H. K. Wrench. Gas Age 91:19+ My 6 '43
- Gas industry after the war. A. M. Beebee. Am Gas Assn Proc 1942:18-19
- Gas industry from the national standpoint. E. R. Acker. Am Gas J 158:37-40 Je '43
- Gas industry's post-war planning committee. A. M. Beebee. Gas Age 91:25+ Ja 14 '43
- Gas industry's post-war planning program. A. M. Beebee. Am Gas Assn Mo 25:158-9 Ap '43
- Post-war planning; gas industry launches far-reaching preparedness program. Am Gas Assn Mo 25:7 Ja '43

- War year sees momentous developments in gas industry. A. F. Bridge. tables Am Gas Assn Mo 25:3-6 Ja '43; Same. Gas Age 91:19-21+ Ja 14 '43; Same, without tables. Am Gas J 158:12-14+ Ja '43
- We can, we will, we must plan now. F. H. Adams. Gas Age 91:26-8+ Ja 14 '43

See also

- American gas association—United States
- Gas, Natural—United States

GAS industry and the plumbing trade

- Plumber-utility relations in post-war era. C. J. Allen. Gas Age 92:22-3 Jl 15 '43

GAS laboratories

- Safety. T. A. Mighill. Am Gas Assn Proc 1942:316-17

- See also* American gas association—Appliance testing laboratory

GAS leakage

- Leakage survey practices using pneumatic drills and leakage indicators. R. N. Townsend and R. E. Haun. bibliog Il Gas Age 92:49-51+ O 21 '43

See also

- Gas pipes—Repair

GAS lifts

- Application of subsurface pressure data in gas-lift work. G. M. Stearns. Oil & Gas J 42:55 Jl 1 '43
- Combination gas-lift and repressuring plant used in Payton, Texas, pool. H. F. Simons. Il Oil & Gas J 42:32-4 Jl 1 '43
- Correct spacing increases gas-lift efficiency. H. F. Simons. diag Oil & Gas J 42:78 O 7 '43
- Determination of productive capacities of flow pipes on gas lift. S. F. Shaw. diags Oil & Gas J 42:47-8, 50, 53-4 Je 17 '43
- Formation gas used to lift oil in west Texas. H. F. Simons. diag Oil & Gas J 41:65 Ap 29 '43
- Gas from Chapel Hill used for lifting east Texas oil. diag Oil & Gas J 41:48-9 N 19 '42
- Gas-lift technique employed in Trinidad wells. S. P. King. diags Pet Eng 14:84, 86, 88+ D '42
- Wells in west Texas pool carried to depletion by gas lift. H. F. Simons. Il diag Oil & Gas J 41:56-7+ Ap 22 '43

Costs

- Determining cost of gas lift. Oil & Gas J 42:51 Jl 8 '43

GAS liquor. See Gas works—Waste**GAS manufacture**

- Design and performance of gas works plant. A. G. Grant. Gas J (Lond) 242:197-8, 201, 230, 233 Ag 18-25 '43
- Fuel economy in gas works. G. M. Gill. Gas J (Lond) 241:121-2, 152, 157, 216, 219, 247-8, 311-12, 522-3, 714, 719; 242:173 Ja 27-F 3, 17-24, Mr 10, Ap 28, Je 9, Ag 11 '43
- Future gas-works policy. D. L. Dickson. Gas J (Lond) 241:122, 127 Ja 27 '43; Discussion. 241:159 F 3 '43
- Increasing plant capacity to meet wartime demands. L. J. Willien. diags Am Gas Assn Proc 1942:389-400
- Joint production and chemical conference of American gas association. New York, May 24-25. Am Gas J 158:42-4 Je '43; Gas Age 91:13-15+ Je 17 '43
- Manufactured gas operations in war time. M. T. Bennett. Gas Age 91:9-12+ Ja 28 '43; Same. Am Gas J 158:16-20 F '43
- 1942; review—technical. Gas J (Lond) 240:408+ D 30 '42
- Nitric oxide control. L. Shnidman. bibliog diag Am Gas Assn Proc 1942:272-7; Same. Am Gas Assn Mo 25:40-3 Ja '43
- Presidential address before Institution of gas engineers; gas industry in the national economy. E. V. Evans. Gas J (Lond) 241:705-6 Je 9 '43; Same. Engineering 156:25 Jl 9 '43; Excerpts. Chem Age (Lond) 49:55-8 Jl 17 '43
- Production and chemical conference rivets attention on new operating methods. Am Gas Assn Mo 25:326-9 Jl-Ag '43
- Production of gases rich in hydrogen; patent. Gas J (Lond) 241:501 Ap 21 '43

GAS manufacture—Continued

- Report of advisory committee on survey of gas, coke and by-product making properties of American coals. J. S. Haug. *Am Gas Assn Proc* 1942:382-7
- Research and the gas industry. J. G. King. *Gas J (Lond)* 241:796, 799-800, 805; Discussion. 805+ Je 30 '43
- Retort house economy. C. A. Poulson. *Gas J (Lond)* 242:327-8; Discussion. 328, 333+ S 15 '43
- Standards of technical performance. G. Dixon. *Gas J (Lond)* 241:766-8; Discussion. 768, 771-2 Je 23 '43
- Working of the Westvertical system; with cost data. diags *Gas J (Lond)* 240:218, 221-2; Discussion. 222, 227+ N 18 '42

See also

- | | |
|-----------------------------|---------------------------------|
| Coal distillation | Gas producers |
| Coke manufacture | Gas purification |
| Coke-oven gas | Gas retorts |
| Gas, Water—Manu-
facture | Gas works |
| Gas companies | Sewage sludge—Gas
production |

By-products

- Benzole recovery by active carbon. A. K. Howell. *Gas J (Lond)* 242:337 S 15 '43
- Benzole recovery by gas oil. B. Richardson. *Gas J (Lond)* 240:248 N 25 '42; Same. *Chem Age (Lond)* 47:561-2 D 19 '42
- Coke and by-products from coal gas retorts. '42. *Gas Age* 91:36+ Je 3 '43
- Design and operation of a gas liquor concentration plant. S. C. Bentley. *Gas J (Lond)* 242:259-60 S 1 '43
- Gas industry products today. *Gas J (Lond)* 240:346+ D 16 '42
- Gas; its place in the national fuel economy. D. Milne-Watson. *Engineer* 175:10 Ja 1 '43
- Modern concentrated liquor plant. L. Bidulph-Smith. diags *Chem Age (Lond)* 48:521-4 My 15 '43
- 1942; review—tar and tar products. *Gas J (Lond)* 240:413 D 30 '42
- Processing of gas liquor; a technical and economic survey. W. N. Baird and P. Parrish. diags *Gas J (Lond)* 242:296-8, 301+ S 8 '43

See also

- Ammonia
- Benzol (commercial benzene)
- Coke

Coal mine gasification

- Underground gasification of coal. H. Rose. *Gas J (Lond)* 241:720 Je 9 '43

Complete gasification process

- Complete gasification by Tully plant. A. E. Yeo. *Gas J (Lond)* 241:225 F 17 '43
- High B.t.u. gas from coal sought at Purdue. *Coal Age* 47:113 D '42
- Interpretation of efficiency. E. V. Evans. *Gas J (Lond)* 241:643-4 My 26 '43
- Research and the gas industry; Lurgi process. J. G. King. *Gas J (Lond)* 241:799-800 Je 30 '43

GAS masks

- Gas masks today. W. E. McCormick. *il Nat Safety N* 47:32+ Ja '43
- Poison gases; the action of the respirator canister. W. J. G. Davey. *Chem Age (Lond)* 49:31-3 Jl 10 '43
- Two lecture demonstrations; functioning of gas mask filters. T. G. Thompson. diags *J Chem Educ* 20:377 Ag '43

See also

- Oxygen apparatus

Manufacture

- Acushnet process company's role in the production of gas masks. *il Rubber Age* 53:435-6 Ag '43
- Allied plastics company manufactures plastic lenses for gas masks in room kept free from dust. *il Heat & Ven* 40:51-3 Ja '43
- Molded parts for civilian gas mask; Tenite and Lumarith. *il diags Mod Plastics* 20:63-7+ F '43

GAS measurement

- Cochrane low-pressure transmitter. diags *Blast F & Steel Pl* 30:1405+ D '42; *Pet Eng* 14:151 D '42

- Southern California meter association conducting educational campaign. F. A. Herr. *Am Gas J* 159:67 O '43

See also

- | | |
|-------------------------------|------------------------|
| Gas, Natural—Meas-
urement | Gas flow
Gas meters |
|-------------------------------|------------------------|

GAS meters

- Calculation of orifice meter coefficients. J. W. J. Bercher. *Pet Eng* 14:105-6, 109 F '43
- Desoldering gas meters with hot oil. G. E. Griffin, jr. *il Am Gas Assn Mo* 25:403-4+ O '43
- Direct-reading flow chart; determining rates of flow through orifice meters. R. H. Jenney. *Gas Age* 91:59+ Ap 22 '43
- Fundamental principles of orifice meters. L. K. Spink. *il diag Gas Age* 91:11-15+ Mr 25 '43
- Luncheon conference on meters. *Am Gas Assn Proc* 1942:319-21
- Meters and metering; report of activities of subcommittee for 1942; meter shop practice. *Am Gas Assn Proc* 1942:330-4
- Operating rotary meters in unheated metering stations; use of soil heating cable. W. W. Gardner. *il Gas Age* 92:11 S 23 '43
- Shortages of materials used for meters. L. M. Van der Pyl. *Am Gas Assn Proc* 1942:308-9

Repair

- Meter shop practice. C. Fee. *Gas Age* 92:29-31 O 7 '43
- Meter soldering; experiments point to new method of conserving tin. J. E. Godsoe. *Am Gas Assn Mo* 24:431-2 D '42
- Use of salvaged solder for the repair of gas meters. G. E. Hitz. *Gas Age* 91:17-19 Je 3 '43

Standards

- Gas-meter standardization; meter and pressure regulator committee of the Wisconsin utilities assn.; discussion. *Gas Age* 90:16+ D 17 '42

Testing

- Meter accuracy records and their analysis. H. A. Faull. *il Am Gas J* 159:12-17 Ag '43

GAS mixing

- Additional research on mixed gases authorized. R. M. Conner. *il diag Gas Age* 91:46-8+ Ap 22 '43

GAS oil

- Absorption oil in the cycling plant. J. A. Grimshaw. *il Pet Eng* 14:80, 82 D '42
- Benzole recovery by gas oil. B. Richardson. *Gas J (Lond)* 240:248 N 25 '42; Same. *Chem Age (Lond)* 47:561-2 D 19 '42
- Cracking oil in a water-gas machine. L. J. Willien. *Gas Age* 91:21-3 My 6 '43
- Cracking technology. C. R. Wagner. *il Oil & Gas J* 42:73-4 O 7 '43
- Gas companies and government study oil shortage on eastern seaboard. *Am Gas Assn Mo* 25:52 F '43
- Gas conservation program saves large quantity of oil. *Am Gas Assn Mo* 25:239-40 Je '43

See also

- Gas, Water

GAS ovens

- Patent for oven in which heating efficiency is increased. *Gas J (Lond)* 241:378 Mr 24 '43

GAS ovens, Baking

- Future of the portable gas-fired baking and roasting oven. D. C. Brogan. *il Am Gas Assn Mo* 25:217-18+ My '43
- Gas cooker ovens; patent. *diag Gas J (Lond)* 241:591 My 12 '43

GAS pipe lines*See also*

- | | |
|----------------------------|-------------------------------|
| Gas, Natural—Pipe
lines | Gas distribution
Gas pipes |
|----------------------------|-------------------------------|

GAS pipes

- Method of installing tee in large low pressure main. W. W. Gardner. diags *Gas Age* 92:14+ Jl 29 '43
- Relocation of compressor station calls for engineering ingenuity. *il Gas Age* 90:11+ D 17 '42

GAS pipes—Continued

Substitute materials for distribution purposes.
W. M. Little. Gas Age 92:17-18+ Ag 12 '43

See also

Gas, Natural—Pipe Gas distribution
lines Gas flow

Cleaning

Cleaning gas distribution mains with hot oil circulation. F. O. Crawford. *il* Am Gas J 159:24 J1 '43

Clogged gas lines cleared with portable steamer units. F. O. Crawford. Franklin Inst J 235:324 Mr '43

Corrosion

Progress report on iron corrosion research fellowship. R. L. Starkey. Am Gas Assn Proc 1942:329-30

Damage from air raids

Civil defense for gas undertakings in England. R. N. LeFevre. *il* Gas Age 90:11-13 D 3 '42

Deposits

Seeing-eye for gas main interiors; locating suspected dust deposits. D. J. Miller. *il* diag Am Gas J 159:17-18+ J1 '43

Detection

Distribution maps and records; past, present and future. W. C. Bomhoff. maps Gas Age 92:73-5+ O 21 '43

Failure

Plugging gas mains with bentonite. *il* Gas Age 90:15 D 31 '42

Putting out gas-main fires. W. W. Gardner. *il* Gas Age 91:24 Je 3 '43

Flood damage

East Ohio gas meets emergency of line break. Gas Age 91:18 Ja 14 '43

Protection

Corrosion and cathodic protection simplified. G. R. Olson. diags Gas Age 92:25-30, 32 S 23 '43

Repair

Elimination of leaks in submerged pipe lines; shellac forced through pipes. L. E. Palmer. Gas Age 90:16 D 17 '42

Emergency repair of gas mains. C. S. Goldsmith. *il* diags Mech Eng 64:863-6 D '42; Same. Chem & Met Eng 49:82-4+ D '42

Gas main conditioning; Carbosol. M. N. Jensen. Am Gas J 158:33-4 Ja '43

Main-maintenance record. W. L. Kindred. *il* Gas Age 91:35-6 Je 3 '43

Reconditioning inside stem gate valves in the distribution system. H. W. Nielson. diag Am Gas J 157:24 D '42

Repairing and extending high-pressure mains without shutdown. E. Niederer, jr. *il* diags Gas Age 91:11-16+ F 25 '43

Testing

Leakage survey practices using pneumatic drills and leakage indicators. R. N. Townsend and R. E. Haun. bibliog *il* Gas Age 92:49-61+ O 21 '43

United makes annual pipe-line tests. *il* Gas Age 91:17-18 Mr 11 '43

GAS poisoning. See Carbon monoxide poisoning; Gases, Asphyxiating and poisonous

GAS producers

Charco gas engines in operation. Pulp & Pa of Can 44:745-6 S '43

Gas producers can help solve natural gas shortage. R. F. Ferguson. Glass Ind 24: 424+ O '43

Gas producers; P.S.V. type used by Eastern national omnibus co. and producers developed by British coal utilisation research assn., Bellay, British gasogenes, ltd., British vehicle producer gas, ltd., Cowan, Enness-Sentinel, ltd., Hamilton motors, ltd., High speed gas, ltd.; Government unit, Mark VI and Cheswick & Wright. *il* diags Automobile Eng Extra no 32:433-64 N 5 '42

German portable gas-producer practice. Engineering 155:423-5 My 28 '43; Excerptps. Mech Eng 65:596 Ag '43

Manufacture of gasogenes in Brazil; gasogene construction in Chile. For Comm W 10:18 F 6 '43

Mobile gas producers. J. R. Denoon. Gas J (Lond) 241:749 Je 16 '43; Discussion. 242: 16+ J1 '43

Portable producers; underlying theory and its practical application. E. R. Slattery. Automobile Eng 33:69-72 F '43

Practical road transport operation with producer gas. J. E. Birchall. Engineer 174: 392-4 N 13 '42

Pressure-charged producers; methods of retaining the normal power of converted vehicles. F. C. Sheffield. *il* diags Automobile Eng 33:31-6 Ja '43

Water gas plant and producers, with carbon lining; patent. Gas J (Lond) 241:436 Ap 7 '43

Woman who fled Nazis makes gas producers in Michigan plant for export to China. *il* Nat Pet N 35:17-18 O 20 '43

Testing

Tests on transport producer-gas units. H. Heywood. *il* diags Inst Mech Eng J & Proc 149:Proc 34-47 bibliog(p46-7) Ap '43

GAS purification

Association's program of research on organic sulfur. E. W. Guernsey. bibliog Am Gas Assn Mo 25:118-21 Mr '43

Desirability of removing sulphur from gaseous fuels for heating ferrous metal. A. Preece. Engineering 155:405-6 My 21 '43

Estimation of colloidal properties of ferric oxide and iron oxide purifying material. F. Gibadlo. Gas Age 91:24-5+ My 6 '43

Hydrogen sulphide removal; the recovery of sulphur from commercial gases. D. D. Howat. bibliog flow diags Chem Age (Lond) 49:75-8, 99-105 J1 24-31 '43

Nitric oxide control. L. Shnidman. bibliog diag Am Gas Assn Mo 25:40-3 Ja '43

Purification of sour gas in south Arkansas; Girbotol process. D. C. Christian. *il* diags Gas Age 92:59-61 O 21 '43

Rapid determination of water in by-product sulfur. L. Shnidman. *il* Ind & Eng Chem Anal ed 15:430-3 J1 15 '43

Reforming refinery still gases for market consumption. R. L. Bevan. flow diags *il* Oil & Gas J 42:52, 55-6, 59 Ag 19 '43

Removal of organic sulphur compounds from gases. N. Booth and L. J. Jolley. Soc Chem Ind J 62:87-8 Je '43

Sour gas purification problem solved in Dorchest-Macedonia field. *il* Gas Age 92:17-18 S 9 '43

Success of burnt oxide as purifying material; abstract. G. Dougill. Chem & Met Eng 49:180 N '42

See also

Electric precipitation

GAS purifiers

Electric-gas treater for nitric-oxide removal. W. Churchill. *il* Gas Age 90:19-20 N 19 '42; Same cond. Gas J (Lond) 241:622 My 19 '43

Gunite linings for purifiers. J. H. Erwin. *il* diags Am Gas J 158:21-3 My '43

GAS ranges. See Gas stoves

GAS rates

Block rate computations. W. J. Root. Am Gas Assn Mo 25:75-7 F '43

Domestic block rate tariff. J. Corrigan. Gas J (Lond) 240:162, 167, 190, 193-4 N 4-11 '42; Discussion. 240:194, 198 N 11 '42

Electricity and gas; price changes between June and September 1942. Monthly Labor R 55:1076-7 N '42

Fuel clause in rate schedules of electric and gas utilities. E. I. Rudd. Am Gas J 159: 14-18 S '43

Gas prices, December 1942. Monthly Labor R 56:380-2 F '43

Gas rate increase under automatic adjustment clause not inflationary or illegal. Pub Util 32:60-1 J1 8 '43

Gross charge for collecting overdue bills upheld. J. N. Greene. Am Gas J 158:23 My '43

Increased gas rates allowed under sliding-scale arrangement; Washington gas light company. Pub Util 30:751-2 N 19 '42

Presidential address before Institution of gas engineers. E. V. Evans. Gas J (Lond) 241: 707-8 Je 9 '43

GAS rates—Continued

Price changes between December 1941 and December 1942. Monthly Labor R 56:381-2 F '43

Price changes between December 1942 and March 1943. Monthly Labor R 56:998 My '43

Regulation does its job; chart showing trend, 1913-1943, of regulated gas service costs, compared with unregulated living costs. Pub Util 32:570-1 O 28 '43

Review of gas rate litigations. L. T. Parker. Am Gas J 159:21-3 Ag '43

What it costs to cut gas prices. W. F. Schaphorst. Am Gas J 159:22 S '43

See also

Gas, Natural—Rates

GAS refrigerators. See Refrigerators, Gas**GAS research**

Additional research on mixed gases authorized. R. M. Conner. Il diag Gas Age 91:46-8+ Ap 22 '43

All the lights have not gone out; lamp of research. E. D. Milener. Il Am Gas Assn Mo 25:282-6 J1-Ag '43

Association's program of research on organic sulfur. E. W. Guernsey. bibliog Am Gas Assn Mo 25:118-21 Mr '43

Domestic gas research; a fundamental industry activity. E. J. Boothby. Il Gas Age 91:32+ Ja 14 '43

Domestic gas research program being revamped. Am Gas Assn Mo 25:215 My '43

Equipment progress; twenty years of industrial gas research and development. E. G. de Coriolls. Il Am Gas Assn Mo 25:137-41+ Ap '43

Gas industry coordinates research under unique new institute. A. L. Foster. Il Oil & Gas J 41:37-9 Mr 18 '43

Gas research board; statement at 2d annual general meeting. E. V. Evans. Gas J (Lond) 241:772 Je 23 '43

Gas war research; a program of industrial and commercial development. J. W. Batten. Il Am Gas Assn Mo 24:447-50 D '42: Same. Gas Age 91:34-5+ Ja 14 '43; Same. Am Gas Assn Proc 1942:33-7

Program for domestic gas research. R. L. Fletcher. Am Gas Assn Proc 1942:39-41

Research and the gas industry. J. G. King. Gas J (Lond) 241:796, 799-800, 805; Discussion. 805+ Je 30 '43

Research on organic sulphur. E. W. Guernsey. Am Gas Assn Proc 1942:293-5; Discussion. 295-6

War activities supplement laboratories operations. R. M. Conner. Il Gas Age 91:23-4+ Ja 14 '43

War and post-war research at the Institute of gas technology. F. W. Sullivan, jr. Am Gas Assn Proc 1942:37-8

Work of the Gas research board. E. V. Evans. Gas J (Lond) 241:460, 463 Ap 14 '43

Work of the Gas research board; extracts from third annual report of the Council. Gas J (Lond) 240:379+ D 23 '42

See also

Institute of gas technology

GAS retorts

Coke discharge seals for vertical retorts; patent. Gas J (Lond) 241:558 My 5 '43

Fuel economy in gas works; continuous vertical retorts. G. M. Gill. diags Gas J (Lond) 242:173 Ag 11 '43

Fuel requirements of carbonizing plant. S. Pexton. Gas J (Lond) 241:20, 23-4, 55-6, 61, 63 bibliog(p56), 83-6 Ja 6-20 '43; Discussion. 241:116-18, 157+ Ja 27-F 3 '43

Working of the Westvertical system; with cost data. diags Gas J (Lond) 240:218, 221-2; Discussion. 222, 227+ N 18 '42

GAS sampling

See also

Gas, Natural—Sampling

GAS storage

See also

Gas, Natural—Storage
Storage
Gas holders

GAS stoves

Care and use of gas equipment in the kitchen. Am Gas Assn Proc 1942:145-51

Dehydration of vegetables in domestic gas range ovens. F. E. Vandaveer. Il Am Gas Assn Mo 25:343-8 S '43

Domestic gas range oven dehydration. W. H. Colwell. diag Am Gas J 158:44-5 Ap '43

P.C.G.A. summarizes appliance design ideas; contest among women employees of gas companies. Gas Age 92:19-20+ Ag 26 '43

Post-war appliance committee analyzes Pacific Coast contest results. Am Gas Assn Mo 25:371-2 S '43

Preserving food by dehydration in gas-range oven. C. P. Monaghan. Il diag Gas Age 91:21-4 Ap 8 '43

Preserving foods by drying with gas. Il diags Am Gas Assn Mo 25:187-8 My '43

See also

Gas cooking
Gas heaters

Standards

New baking tests, less heat loss for gas ranges; standards for stoves and heating equipment. R. M. Conner. Il Ind Stand 14: 85-8 Mr '43

Standardization of appliances. Gas J (Lond) 240:128, 133, 161 O 28-N 4 '42

Testing

Heating time and bottom temperatures of cooking utensils; gas and electric cooking compared. diags Gas Age 92:25-7 Ag 12 '43

GAS supply**Battle Creek, Michigan**

Battle Creek successfully combats gas shortage. Gas Age 90:7-8 D 31 '42

Brazil

Gas supply rationing in Brazil. Gas Age 92: 88+ O 21 '43

California

What if California should have to ration utilities? J. H. Collins. Pub Util 31:683-6 My 27 '43

Cincinnati

Cincinnati welcomes gas men; Cincinnati gas supply. H. C. Blackwell. Il Gas Age 91:34-6+ Ap 22 '43

Dallas, Texas

Relocation of compressor station calls for engineering ingenuity. Il Gas Age 90:11+ D 17 '42

Great Britain

Fuel battle problems; abstract and discussion. E. W. Smith. Gas J (Lond) 240:282 D 2 '42

Fuel target. E. S. Stredwick. Gas J (Lond) 240:257+, 293 N 25-D 2 '42; Discussion. 240: 293 D 2 '42

Gas fuel in post-war planning. T. A. Tomlinson. Gas J (Lond) 241:277-9 Mr 3 '43

West Yorkshire gas grid; a modern scheme of great possibilities. Gas J (Lond) 242:194-6 Ag 18 '43

Seattle

How Seattle met worst winter demands. K. Matthews. Gas Age 91:31 Mr 25 '43

United States

Conservation program; industry-government campaign to save fuels, materials. Il Am Gas Assn Mo 25:397-9 O '43

Supply of gas to war industries. W. B. Pyron. Am Gas Assn Mo 25:135-6+ Ap '43

WPB inaugurates national program to conserve residential gas. Gas Age 90:13-14+ N 19 '42

GAS tanks

See also

Gas holders

GAS turbine locomotives. See Locomotives, Gas turbine

GAS turbines

Diesel makes exhaust gas, turbine supplies kilowatts; Sulzer brothers, Switzerland, report experience with supercharged 2-cycle oil engines. diags Power 86:888-9 D '42

GAS turbines—Continued

Future power? Business Week p59-60 JI 3 '43

New development in two-stroke Diesels; system developed by Sulzer brothers. *il* diag Automotive & Aviation Ind 88:30-1+ Mr 1 '43

New gas turbine projects; abstract. Aeronautical Eng R 2:93 Ag '43

Progress in engineering knowledge during 1942: flue-gas turbine. P. L. Alger and J. Stokley. *diags* Gen Elec R 46:105-6, 107 F '43

2200-hp gas turbine: compact power plant. *il* diag Power 87:318 My '43

See also

Locomotives, Gas turbine

GAS warfare. *See* Chemical warfare; Gases, Asphyxiating and poisonous

GAS washing. *See* Gas purification

GAS water heaters

Determination of coincident peak hour demand for combined cooking and water heating service. *Am Gas Assn Mo* 24:438-42 D '42

Gas water heater ordinance requires A.S.A. approval in Los Angeles. *Am Gas J* 159:18 Ag '43

L-185 and L-199, rulings on water heaters. *Gas Age* 91:44-5 Ja 14 '43

Of things to come. L. Friedman. *Gas J* (Lond) 241:469 Ap 14 '43; Discussion. 241:523-4 Ap 28 '43

Predicting spillage characteristics of water heater draft hoods: formulae for calculating minimum vertical stack and maximum horizontal flue run. M. Zare. *il* *Am Gas Assn Mo* 25:170-5 Ap '43

Report of volume water heating committee. *diag* *Am Gas Assn Proc* 1942:217-19

Water heaters; patent. *Gas J* (Lond) 241:558 My 5 '43

GAS welding

See also

Oxyacetylene welding

GAS works

Some of our problems. *Gas J* (Lond) 241:491 Ap 21 '43

See also

Gas, Water—Manu- Gas holders
facture Gas manufacture

Accounting

See Gas companies—Accounting

Costs

Presidential address before Institution of gas engineers; gas industry in the national economy. E. V. Evans. *Gas J* (Lond) 241:706-7 Je 9 '43; Same cond. *Engineering* 156:25, 45 JI 9-16 '43

Problem of calorific value. J. E. Davis. *Gas J* (Lond) 242:46, 49-50; Discussion. 50+ JI 14 '43

Public utility construction cost index, 1917-1942. *Eng N* 130:580 Ap 22 '43

Electric equipment

Electric-gas treater for nitric oxide removal. W. Churchill. *il* *Gas Age* 90:19-20 N 19 '42; Same cond. *Gas J* (Lond) 241:622 My 19 '43

Emergency problems

Crisis averted; public responds to gas emergency program; decreased consumption during cold spell; Blackstone Valley gas and electric co. M. H. North. *Am Gas Assn Mo* 25:47-50 F '43

How Seattle met worst winter demands. K. Matthews. *Gas Age* 91:31 Mr 25 '43

Equipment

Carbonizing plant problems. *Gas J* (Lond) 242:175, 177 Ag 11 '43

Chemical engineering in the gas industry. *Chem Age* (Lond) 49:47-9 JI 17 '43

Report of the Gas machinery company, and other equipment companies. W. E. Steinwedell. *il* *Am Gas Assn Proc* 1942:377-81

Silicon carbide solid linings for water-gas generators. A. S. Hall. *diags* *Gas Age* 91:24-6 Je 17 '43

Two shell water gas sets in Boston. D. S. Reynolds. *diag* *Am Gas J* 158:26-8 Je '43; Same. *Gas Age* 91:22-3 Je 17 '43

See also

Coal handling Gas purification
Gas holders Gas retorts

Fires and fire protection

Fire protection on gas holders. W. W. Gardner. *il* *Gas Age* 92:19 S 9 '43

Fuel

Anthracite as generator fuel for water-gas operations. L. L. Newman, C. C. Wright and A. W. Gauger. *Gas Age* 90:22-5 D 3 '42

Fuel clause in rate schedules of electric and gas utilities. E. I. Rudd. *Am Gas J* 159:14-18 S '43

Fuel economy in gas works. G. M. Gill. *Gas J* (Lond) 241:121-2, 152, 157, 216, 219, 247-8, 311-12, 377-8, 522-3, 714, 719; 242:173 Ja 27- F 3, 17-24, Mr 10, 24, Ap 28, Je 9, Ag 11 '43

Fuel economy in the gas industry. E. W. Smith. *Gas J* (Lond) 241:148, 151; Discussion. 151-2 F 3 '43

Fuel requirements of carbonizing plant. S. Pexton. *Gas J* (Lond) 241:20, 23-4, 55-6, 61, 68 bibliog(p56), 83-6 Ja 6-20 '43; Discussion. 241:116-18, 157+ Ja 27-F 3 '43

Underfiring a coke-oven battery with refinery oil gas. E. E. Witham and J. H. Long. *diags* *Gas Age* 91:27-30, 32 Je 17 '43; Same. *Am Gas J* 159:27-31 JI '43

Underfiring with natural gas-air mixture at Chicago. G. A. Scott. *diags* *Blast F & Steel* Pl 31:898-901 Ag '43

Load

Determination of coincident peak hour demand for combined cooking and water heating service. *Am Gas Assn Mo* 24:438-42 D '42

Maintenance and repair

Arc welding in gas plant maintenance. E. W. P. Smith. *il* *Am Gas Assn Proc* 1942:401-14

Conservation of material by welding. A. O. Andersen and W. L. Mitzenius. *il* *Welding J* 21:321-3 D '42

Welding and cutting in gas-plant maintenance. V. Forgett and F. Waldo. *il* *Gas Age* 91:9-11+ F 11 '43

Management

Effect of the war on manufactured gas plant operations. R. L. McCuen. *Gas Age* 90:9-12 D 31 '42

Retort house economy. C. A. Poulson. *Gas J* (Lond) 242:327-8; Discussion. 328, 333 S 15 '43

Standards of technical performance. G. Dixon. *Gas J* (Lond) 241:766-8; Discussion. 768, 771-2 Je 23 '43

Protection

Outline of Southern counties gas co. war games procedure. B. A. Devine. *il* *Gas Age* 92:13-15 JI 1 '43

Southern counties gas company stages unique war games to test efficiency of its preparations against air attack. L. S. Flint. *il* *Am Gas J* 157:7-10 D '42

Safety measures

Scheme of precautions against frost on a gas-works; reprinted from Communication no.253 of Institution of gas engineers. *Gas J* (Lond) 240:342, 345 D 16 '42

Work of the gas-works safety rules committee. F. M. Birks. *Gas J* (Lond) 241:213-15; Discussion. 215 F 17 '43

Waste

Design and operation of a gas liquor concentration plant. S. C. Bentley. *Gas J* (Lond) 242:259-60 S 1 '43

Processing of gas liquor; a technical and economic survey. W. N. Baird and P. Parrish. *diags* *Gas J* (Lond) 242:296-8, 301+ S 8 '43

Winter operation

Emergency winter operating problems. E. S. Umstead. *Am Gas J* 159:63-5+ O '43

GASES

- Accommodation coefficients of He, Ne, A. He, *Zeits. für Phys.* and lig on platinum as a function of temperature, L. E. Thomas and E. Smith, *Trans. Faraday Soc.* 39:100-103 43
- Adsorption of gases at low temperature and pressure on smooth silver, M. H. Armbruster, *Publ. Am. Chem. Soc.* 64:2845-50 43
- Atomic beam apparatus for studying the atomic spectra of gases, especially hydrogen, J. E. Mark and E. C. Barakat, *Phys. Rev.* 61:1-10 43
- Discrete correlations and Bose-Einstein condensation, F. London, *bibliog. J. Chem. Phys.* 11:100-103 43
- Effect of sun gases in the glow of stars, J. H. Keesom, *Am. Gas J.* 133:41-5 43
- Electrofluorescence and luminescence phenomena accompanying desorption of gases from metals, J. W. McBain and C. I. Garsbrook, *bibliog. Am. Chem. Soc.* 64:1009-10 43
- Electrolytic gases in steam, D. Roberts, *Phil. Mag.* 34:1-10 43
- Electronic theory of gases, may lead to improved vacuum tubes, chemistry and gas laws, in various states, H. C. Kestel, *Sci. Am.* 127:1-10 43
- Extreme properties of matter, C. G. Darwin, *Engineering* 157:100-101 43
- Molecular state of static and vapor: an experiment in gaseous equilibrium, R. H. Wright, *Ind. Eng. Chem. Anal. Ed.* 15:100-101 43
- Nature of the gas mixture in self-quenching laser-laser tubes, P. Weiss, *Phys. Rev.* 61:1-10 43
- Non-ideal gases, same cond. Franklin Inst. 3:100-103 43
- Non-graphic for P-T relations of gases below the critical point, G. W. Thomson, *Ind. Eng. Chem. Anal. Ed.* 15:100-101 43
- Non-idealities in refrigerating systems, L. Buehler, *J. diags. Refrig. Eng.* 45:100-101 43
- Prediction of reaction rates, F. Daniels, *bibliog. diags. Ind. & Eng. Chem.* 35:100-101 43
- Quenching of cadmium resonance radiation, J. H. E. Smith and E. J. Lepore, *bibliog. J. Chem. Phys.* 11:100-101 43
- Reaction of gases on the surface of a single crystal of copper, A. T. Gwathmey and A. F. Bampton, *bibliog. J. J. Phys. Chem.* 45:100-101 43
- Removal of organic sulphur compounds from gas, N. Smith and L. J. Smith, *Sci. Chem.* 11:100-101 43
- Second virial coefficients of gaseous mixtures, A. E. Edwards and W. E. Ross, *bibliog. J. Chem. Phys.* 11:100-101 43
- Separation of gas mixtures by thermal diffusion, E. Lof and F. T. Van, *Science J. Phys. Chem.* 45:100-101 43
- Specific heats of gases and vapors, table, reference cond., *Heat & Van.* 45:100-101 43
- Specific heats of gases, G. M. Stearns, *Oil & Gas J.* 45:100-101 43
- Specific heats of gases, abstract, F. O. Edwards, N. Smith and N. R. Gay, *Mech. Eng.* 63:100-101 43
- Thermal analysis of liquefied gases, H. S. Smith and L. E. Martin, *diags. Chem. R.* 33:100-101 43
- Use of the Michelson interferometer for measuring the absorption of sound in gases, H. C. Hardy, *bibliog. diags. Acoustical Soc. Am. J.* 11:100-101 43
- Viscosity of carbon monoxide, helium, neon, and argon between 10° and 100°K, coefficients of viscosity, H. L. Johnston and E. R. Gault, *bibliog. J. Phys. Chem.* 45:100-101 43
- See also
Aerodynamics
Aerodynamics
Air
Aspen
Bain furnace gas
Brownian movements
Bubbles
Carbon dioxide

Flue gas

- Flue gas
Foam
Food-Gas contami-
nation
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Gas, Natural
Gas analysis
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Heating
Hydrogen

- Inflammable mixtures
Ionization, Gaseous
Mine gases
Noble
Nitrogen
Oxygen
Smoke
Vapor pressure
Vapors
Water vapor

Apparatus

- Absorption tube for the investigation of gases at low pressures, P. A. Leighton and D. H. Wagner, *diags. Opt. Soc. Am. J.* 23:100-101 43
- Constant pressure and flow ratio regulator for continuously mixing two gases, N. L. Haines, *diags. Ind. & Eng. Chem. Anal. Ed.* 15:100-101 43
- Improved automatic gas effluometer, L. C. Drake, *diags. Ind. & Eng. Chem. Anal. Ed.* 15:100-101 43
- Microvalve apparatus for measuring small volumes of gas, R. T. Sanderson, *diags. Ind. & Eng. Chem. Anal. Ed.* 15:100-101 43
- New gas generator, S. Hatz, *diags. Ind. & Eng. Chem. Anal. Ed.* 15:100-101 43
- Portable gas generator, R. Sutcliffe, *J. Chem. & Ind.* 1943:100-101 43
- Recent developments in laboratory apparatus, soap film gas analysis, R. H. Powell, *J. Chem. Age* 1943:100-101 43
- Versatile apparatus for pyrolysis studies in the gas phase: acetone and iodine mixtures, S. W. Benson and G. S. Forbes, *bibliog. diags. Am. Chem. Soc. J.* 65:1393-1405 43
- See also
Absorption apparatus
Condensers

Liquefaction

- Heavy chemicals in Russia: low-temperature research, M. Rukemann, *Chem. Age* (Lond) 45:100-101 43
- Liquid oxygen systems, W. H. Mase, *plan. Chem. & Met. Eng.* 34:100-101 43
- Separation of gases: partial liquefaction by refrigeration, M. Rukemann, *bibliog. diags. Inst. Phys.* 28:100-101 43

- See also
Gas, Natural-Lique-
faction
Liquid air

GASES, Asphyxiating and poisonous

- Canada identifies war gases, A. W. Canada and F. C. Hines, *bibliog. diags. J. Chem. Educ.* 20:100-101 43
- Diaphragm gasometer that tests compartments to keep afterdamp from trapped men, J. A. Smith, *diags. Coal. Age* 45:100-101 43
- Effects of inerts on gaseous products from permeable electrodes, E. J. Murphy and J. S. Bur, *Mines Rep. of In-vent.* 37:100-101 43
- Flammable gases in confined spaces, W. H. Smith, *bibliog. J. Nat. Safety* 11:100-101 43
- Gases in machine shops: compressed dis-charge and stored gases used in shops, W. R. Stewart, *J. Safety Eng.* 11:100-101 43
- Method of demonstrating the identification of war gases, H. W. Kahan and R. S. Law, *J. diags. Chem. & Ind.* 45:100-101 43
- Power gases: toxic properties, W. J. G. Bury, *Chem. Age* 1943:100-101 43
- Power gases: the action of the respirator, W. J. G. Bury, *Chem. Age* (Lond) 1943:100-101 43
- Protection of civilians from war gases, T. F. Bradley and others, *J. diags. Chem. & Eng.* 21:100-101 43
- Public education on war gases, O. Eisen-stein, *J. Chem. Educ.* 20:100-101 43
- Safety measures against lethal gases: war gases and refrigerants, tests and treat-ments, W. D. McNam, *Refrig. Eng.* 45:100-101 43
- Safety of gas: hazards and precautions, J. Nat. Safety 11:100-101 43
- Screens for a proper gas mixture, with practical training, G. Eisenstein, *J. Chem. & Eng.* 21:100-101 43
- Testing toxic atmospheres, N. R. Bantz, *J. Heating-Pring* 15:100-101 43

Chemistry

- Chemistry
Chemical
Chemical gas
Chemical states
Law of
Dilution law
Law of
Dilution law
Dilution law
Equation of state

GASES, Asphyxiating and poisonous—Continued
Toxic gas in industry; American health service recommendations. Chem Age (Lond) 48: 219-20 F 20 '43

Treatment for gas poisoning. J. Creevey. Chem Age (Lond) 49:287-8 S 18 '43

Two lecture demonstrations; functioning of gas mask filters; two characteristics of chemical warfare gases. T. G. Thompson. diags J Chem Educ 20:377+ Ag '43

Use of mobile units in the first aid and medical treatment of gas casualties. J. T. Cassaday. il diags J Chem Educ 20:276-8 Je '43

See also

Carbon monoxide	Flue gas
Carbon monoxide poisoning	Gas masks
Chemical warfare	Hydrogen sulfide
Chlorine	Lewisite
Chloroacetophenone	Mustard gas
Decontamination (from gases, chemicals, etc.)	Nitrogen oxides
	Smoke
	Sulfur dioxide

GASES, Compressed

Canadian manufacture of compressed gas, 1940-1941. For Comm W 9:24 N 28 '42

Gas compression and expansion. G. M. Stearns. Oil & Gas J 41:69 Mr 11 '43

Standard markings identify contents of cylinders for compressed gas. H. G. Lamb. il Ind Stand 14:45-6 F '43

GASES, Diffusion of. See Diffusion

GASES, Kinetic theory of

Separation of gas mixtures by thermal diffusion. B. Leaf and F. T. Wall. bibliog J Phys Chem 46:820-6 O '42

GASES, Liquefied

See also

Carbon dioxide, Liquid	Liquefied petroleum gas
Chlorine, Liquid	

GASES, Rare

Spectra of the rare gases and their Zeeman effects. J. B. Green. bibliog Phys R 64: 151-5 S 1 '43

See also

Argon
Helium
Neon

GASES in warfare. See Chemical warfare; Gases, Asphyxiating and poisonous

GASHOLDERS. See Gas holders

GASKETS

Compressibility of composition cork; used as gasket material on liquid-filled electrical equipment. L. P. Hart, jr. Elec W 118:1640, 1812 N 14-28 '42

Gasket cutting idea for circular parts. il diags Elec W 119:1646 My 15 '43

Gasket-loading constants; review of those suggested in table UA-7 of the A.S.M.E. unfired pressure vessel code. D. B. Rosheim and A. R. C. Markl. tables Mech Eng 65:647-8 S '43

Gasket material cut from high tensile fibrous sheet material impregnated with phenolic plastic. il Mod Plastics 20:78-9+ My '43
How to measure for a gasket. W. F. Schap-horst. diags Am Dyestuff Rep 32:408 S 13 '43

Reclamation of locomotive staybolt gaskets. O. Heuer. diags Am Mach 87:90 F 4 '43

Synthetic rubber-coated gaskets. Iron Age 152:77 J1 8 '43

Tailoring methods practiced in industry; avoiding waste in cutting metal parts and gaskets. A. M. Hoffmann. il Comp Air M 48:6985-6 Mr '43

GASOLINE

Cooperative fuel-research motor-gasoline survey, winter 1942-43. A. J. Kraemer and O. C. Blade. U S Bur Mines Rep of Invest 7716:1-28 '43

Effect of petroleum products on Buna S vulcanizates. R. E. Morris and others. bibliog il Ind & Eng Chem 35:646-9 Je '43

Effect of petroleum products on neoprene vulcanizates; effect of gasolines. D. F. Fraser. il Ind & Eng Chem 35:947-8 S '43

Effect of petroleum solvents on the cold resistance of synthetic vulcanizates. R. E. Morris and others. il India Rubber W 108: 553-5+ S '43

Evaluating aviation-gasoline content of crude oil. W. L. Nelson. Oil & Gas J 42:52-3 My 13 '43

Gasoline for carburetting water gas; with cost data. R. J. Horn. il diags Am Gas Assn Mo 25:15-20 Ja '43; Same. Am Gas J 158:10-14, 42 F '43

Gasoline; past, present and future. G. Edgar. Am Soc T M Proc 42:499-512 '42

Ketone synthesis; the condensation of acid anhydrides with olefins. A. C. Byrns and T. F. Doumani. bibliog il diags Ind & Eng Chem 35:349-53 Mr '43

Military-gasoline requirements 150 per cent above 1942 average. Oil & Gas J 42:36 S 9 '43

Operating study of the value of gasoline for gas-making purposes. W. H. Ganley and R. W. Stafford. Gas Age 90:25-7 N 5 '42; Same. Am Gas Assn Mo 24:466-8 D '42; Same. Am Gas J 157:29-31+ D '42; Same. Pet Eng 14:94, 96, 98 D '42; Same. Am Gas Assn Proc 1942:257-60; Discussion. 260-2

Outlook for water gas manufacture; with particular attention to use of fuel oil and gasoline for enrichment. P. T. Dashiell. Am Gas Assn Mo 25:387-8 O '43

Petroleum goes to war. B. K. Brown. Pet Refiner 22:134, 138 O '43

Post-war fuels and lubricants; abstract. C. M. Larson. S A E J 51:sup29+ N '43

See also

Airplane engines—Fuel	Gasoline service stations
Automobile engines—Fuel	Motor bus engines—Fuel
Automotive fuel	Motor truck engines
Gas and oil engines—Fuel	Petroleum refining

Alcohol mixtures

Examination of ethyl alcohol and alcohol blends for use as motor fuel. S. J. W. Pleeth. bibliog diags Inst Pet J 28:245-55 O '42

Road tests of automobiles using alcohol-gasoline fuels. R. G. Paustian. il diags Iowa Eng Exp Sta (Ames) Bul 158:1-56 bibliog(p56) '42

Analysis

Determination of tetraethyllead in gasoline. L. Schwartz. Ind & Eng Chem Anal ed 15:499-501 Ag 15 '43; Same. Pet Refiner 22: 123-5 O '43

Mass spectrometer analysis of gasoline. il Pet Eng 14:44 Ap '43

Self-recording, semi-automatic mechanized electrometric titrations; with special reference to control of gasoline refining. D. J. Pompeo, C. J. Penner and K. E. Hallikainen. bibliog diags Instruments 16:402-3+ J1 '43

Anti-knock and anti-knock mixtures

Calibration of C.F.R. reference fuels; report of sub-committee no.5, engine tests; aviation fuel knock-rating panel. Inst Pet J 29:235-6 Ag '43

District 5 civilian gas quality cut. Nat Pet N 35:20+ O 6 '43

Empirical relation between octane number and molecular structure. A. Mibashan. Pet Refiner 22:89-90 J1 '43

High-octane drive. Business Week p19-20 My 1 '43

High octane; tomorrow's power. il Fortune 27:154-7+ Je '43

Influence of engine adjustment and octane number on performance of commercial engines. D. P. Brenz, H. H. Maxfield and A. B. Culbertson. S A E J 51:198-209 Je '43; Same cond. Oil & Gas J 41:55, 57, 59-60+ F 18 '43; Excerpt. Nat Pet N 35: 18 Ja 20 '43; Abstract. Automotive & Aviation Ind 88:108+ Ap 1 '43

New name for octanes? A. L. Foster. Oil & Gas J 42:77 Je 17 '43

Octane number nomographs. R. B. Cox and D. S. Davis. Pet Refiner 22:126-7 O '43

100-octane cuts Diesel supply. C. M. Larson. Nat Pet N 35:16 Je 2 '43

Refiner's viewpoint on motor fuel quality. W. M. Holaday and J. Hoppel. flow chart diags S A E J 51:1-11 Ja '43; Same. bibliog Pet Eng (Ref annual) 14:251-5, 258-60 J1 '43; Excerpt. Nat Pet N 34:R46-7 F 4 '42; Automobile Eng 33:365 S '43

GASOLINE—Anti-knock and anti-knock mixtures—Continued

Relation of octane number and base of crude oil. W. L. Nelson. *Oil & Gas J* 41:56 Ap 29 '43

See also

Gasoline—Ethyl mixtures

Conservation

Half-engined car. Consumers' Research Bul 11:9-12 Mr '43

Modified automobile engines to save gas; half-engined car. Consumers' Research Bul 11:19 N; 14 D '42

Wartime rackets—gas-savers. Consumers' Research Bul 11:25-6 F '43

Desulfurization

See Gasoline—Sulfur content

Ethyl mixtures

Response ability of gasoline to various concentrations of tetraethyl lead. R. G. Lovell. *il diags Pet Refiner* 22:97-104 O '43

78 octane ethyl. *Nat Pet N* 35:19 Ja 20 '43

Evaporation losses

Study of gasoline evaporation losses. J. Hoppel and D. P. Heath. *bibliog Oil & Gas J* 41:160, 163+ Mr 25 '43

Gum formation

Pilot-plant study of the Gray clay treating process. A. W. Cobb and L. Carlson. *flow diag Oil & Gas J* 41:33-6 N 19 '42

Proposed method of test for potential gum in aviation gasoline. *diags Am Soc T M Proc* 42:321-5 '42

Manufacture

Alkylation and isomerization combined in aviation-gasoline plant. Cities service oil co. F. M. Simpson. *il Oil & Gas J* 42:89+ Je 24 '43

All resources pooled to produce aviation gasoline, toluene, and other war necessities. W. Miller. *il Min & Met* 24:97-9 F '43

Aviation gasoline by polymerization and alkylation of cracking gases. V. N. Ipatieff. *il Chem & Eng N* 20:1367-8 N 10 '42

Bead catalyst; Socony-Vacuum develops synthetic catalyst which will increase yield of high-octane gasoline. *Nat Pet N* 35:18 Mr 17 '43

Catalysts of the activated montmorillonite type. R. C. Davidson, F. J. Ewing and R. S. Shute. *bibliog flow diags il diags Nat Pet N* 35 pt 2:R318-21 Jl 7 '43

Catalytic reforming of straightrun gasoline increases aromatics content. V. I. Komarevsky and C. H. Riesz. *bibliog diag Oil & Gas J* 42:90-3+ Je 24 '43

Codimer for aviation gasoline produced in revamped catalytic poly plant. *il Nat Pet N* 35 pt 2:R150+ Ap 7 '43

Cracking technology. C. R. Wagner. *diag Oil & Gas J* 42:27-8+ S 2; 66, 68-9 S 9; 53-5 S 16; 45, 47-5 S 30; 73-4 O 7; 67-9 O 14; 62, 64+ O 28; 40, 42-3 N 4 '43

Critical analysis of sweetening processes and mercaptan removal. J. Hoppel, S. P. Caley and H. S. Kelly. *bibliog Oil & Gas J* 41:136, 139-40+ N 12 '42; Same. *Am Pet Inst Proc* 23(3):67-77; Discussion. 77 '42

Effect of catalysts in vapor phase cracking. P. P. Borisov and M. V. Gaverdovskaya. *bibliog Nat Pet N* 35 pt 2:R322-3 Jl 7 '43

Effect of vapor load on plate efficiency in fractionating columns. G. G. Brown and F. J. Lockhart. *bibliog Am Inst Chem Eng Trans* 39:63-73 F '43; Same. *Nat Pet N* 35 pt 2:R140-3 Mr 3 '43; Same. *Pet Eng (Ref annual)* 14:229-30, 232, 234 Jl 1 '43; Discussion. *Am Inst Chem Eng Trans* 39:73-5 F '43

Effective treating for a small plant. *il Pet Refiner* 22:106-7 Ap '43

Expansion of catalytic processing, year's feature in refining. J. P. O'Donnell. *il Oil & Gas J* 41:66-8 Mr 25 '43

Facts about and possibilities of alkylation and isomerization processes. A. L. Foster. *il Oil & Gas J* 41:77, 81+ Ap 15 '43

First commercial TCC unit goes on stream, adding new aviation-gasoline capacity. J. P. O'Donnell. *flow chart il Oil & Gas J* 42: 30-1+ O 14 '43

Fluid catalyst process; catalytic cracking of petroleum. E. V. Murphree and others. *il diags Ind & Eng Chem* 35:768-73 Jl '43; Abstract. *Chem & Met Eng* 50:202-3 My '43

Fluid catalytic cracking plant begins operations at Bayway. *il Chem & Met Eng* 50: 132-3 F '43

High-octane aviation gasoline program continues to expand, flow sheets *il Chem & Met Eng* 50:129-32 Je '43

Improved yields from Thermoform catalytic cracking process. J. P. O'Donnell. *Oil & Gas J* 41:36 Mr 18 '43

Improving products from sour crudes, bibliog flow sheets. *Nat Pet N* 35 pt 2:R339-45 Ag 4 '43

Isomerization, a useful but as yet a little used tool for the refiner. A. L. Foster. *il Oil & Gas J* 41:66, 69, 71-2 F 25; 51-2 Mr 4 '42

Lower end points, reform more to reduce gasoline yield. A. L. Foster. *il Oil & Gas J* 41:25-6, 29 D 24 '42

Molecular magic at Baton Rouge. F. J. Van Antwerpen. *flow sheets il diag Chem & Eng N* 21:950-9 Je 25 '43

New catalyst yields more and improved gasoline. *Oil & Gas J* 41:38 Mr 11 '43

Newest techniques; text in English and Spanish. *il Oil & Gas J* 41:193-4+ D 31 '42

Octane number of catalytic gasoline varied by operating methods. E. V. Murphree and others. *diags Oil & Gas J* 42:51, 53-5 Je 3 '43

Oil shale and shale oil. B. H. Well and W. Weinrich. *bibliog il Oil & Gas J* 41:73, 75-6, 79 Ap 29 '43

100-octane aviation gasoline processes show rapid advance. C. C. Pryor. *il Pet Eng* 14:61, 64 Mr; 79, 82, 84 Ap '43

Petroleum in the war, by-product production with special reference to 100 octane gasoline. B. K. Brown. *Am Gas J* 159:31-2+ S '43; Same. *Nat Pet N* 35:15-16 My 19 '43

Petroleum-refining methods available for wartime demands. J. F. Thornton and W. C. Dickerman, jr. *Pet Eng (Ref annual)* 14: 205-6 Jl 1 '43

Phillips' Cycloversion process. *il Oil & Gas J* 41:41-2 Mr 4 '43; Same. *Pet Eng* 14:98 Ap 43

Pilot-plant study of the Gray clay treating process. A. W. Cobb and L. Carlson. *flow diag Oil & Gas J* 41:33-6 N 19 '42

Plant modifications to make aviation gasoline. W. L. Nelson. *Oil & Gas J* 42:50 Jl 1 '43

Polymerization unit converted to depropanizing column. *il Pet Refiner* 22:112 Ap '43

Problems involved in conventional refining of sour crudes. R. B. Waite and R. H. Aitken. *flow diags Oil & Gas J* 42:27-32, 35+ Ag 5 '43

Producing aviation gasoline by fluid catalytic cracking, flow diag *il diag Nat Pet N* 35 pt 2:R251-2, R254-5 Je 2 '43

Producing wartime aviation gasoline by improved Houdry catalytic process. *bibliog il Nat Pet N* 35 pt 2:R204-6, R208 My 5 '43

Production of hydrocarbons for aviation motor fuels. M. Van Winkle. *bibliog il Pet Refiner* 22:83-8 S '43

Refiner's viewpoint on motor fuel quality. W. M. Holaday and J. Hoppel. *flow chart diags S E J* 51:1-11 Je '43; Same. *bibliog Pet Eng (Ref annual)* 14:251-5, 258-60 Jl 1 '43

Refining west Texas crude. H. H. Wenzke. *Oil & Gas J* 42:43-4, 47, 73-5 O 14 '43

Retreating unit made integral part of new East coast aviation-gasoline plant. J. P. O'Donnell. *il Oil & Gas J* 42:35 O 28 '43

Sabine district's enduring industrial development. J. C. Watkins. *il Manuf Rec* 112: 42+ Jl '43

Special catalyst-handling equipment provided in HF alkylation plant. *bibliog flow diag il Nat Pet N* 35 pt 2:R243-4 Je 2 '43

Sulfur removal from sour crudes reduces corrosion, improves product quality. A. L. Foster. *bibliog il Oil & Gas J* 42:111-12, 115-16, 119 Je 24 '43

Sunray makes codimer and polymer gasoline in tandem units. *flow chart il Oil & Gas J* 42:32, 34+ N 4 '43

GASOLINE—Manufacture—Continued

Switch to catalytic cracking; abstract. W. W. Gary. Nat Pet N 35:16 Mr 3 '43

Thermofor catalytic cracking process. T. P. Simpson and others, flow diag Oil & Gas J 41:96+ N 12 '42; Same. Nat Pet N 34 pt 2:R47-31 N 25 '42; Same. Am Pet Inst Proc 23(5):59-66 '42; Same. Pet Eng (Ref annual) 14:209-11, 213-14 Jl 1 '43; Abstract. Chem & Met Eng 49:156-9 D '42

Towers required in superfractionating for 100-octane gasoline. W. L. Nelson. Oil & Gas J 42:31+ Jl 1 '43

Treatment of liquid-phase cracked gasolines with zinc chloride. M. M. Gerasimov and others. Pet Eng 14:151-2, 154 Ag '43

20-story cracking plant makes aviation gasoline by fluid catalytic method. il Nat Pet N 35 pt 2:R56-9 F 3 '43

Two improvements in the TCC process help its yield of aviation gasoline. il Nat Pet N 35 pt 2:R445 O 6 '43

Use of chlorates in refining high sulphur gasolines. N. E. Vishnevskii. Pet Eng 14:157+ My '43

War developments of the petroleum industry. E. V. Murphree, il diag Ind & Eng Chem 35:623-31 Je '43; Same. Can Chem & Process Ind 27:326-32 Je '43; Same. Pet Eng (Ref annual) 14:216-18, 220-3 Jl 1 '43; Same. Pet Refiner 22:90-8, 116 Je '43; Same. Chem Age (Lond) 49:127-33 Ag 7 '43; Abstract. Oil & Gas J 41:55 Ap 15 '43

War needs bring many changes in processing. C. R. Wagner, il diag Oil & Gas J 41:82-6, 133 Mr 25 '43

Wartime refining to bring changes in 1943. B. K. Brown. il Nat Pet N 34:18, 20-3 D 30 '42

Where we stand on aviation gasoline; PAW issues statement. Nat Pet N 35:18, 20 Ag 4 '43

Whither are we bound? refining processes of the future and how change in utilization of petroleum products will influence future manufacturing procedures. R. G. Lovell. il Pet Eng 14:37-40 Je '43

See also

Gasoline, Natural—
Manufacture
Petroleum refining

Hydrogenation process (coal)

Coal's new horizons; will be source of future gasoline and oil fuel supply. H. L. Ickes. map Coal Age 48:54-6, 60-1 Ap '43

Costs and requirements in materials for making gasoline from coal. R. P. Russell. Nat Pet N 35 pt 2:R421-2, R424-6 S 1 '43

Measurement

Results of tests on volumeters for liquid hydrocarbons. R. J. S. Pigott, E. E. Ambrosius and E. W. Jacobson. A S M E Trans 65:350-2 My '43

Volumeter practice in the petroleum industry. E. E. Ambrosius and E. W. Jacobson. Am Pet Inst Proc 23(4):49-53 '42; Same. Oil & Gas J 41:209-10+ N 12 '42

Prices

Ceillings hold most petroleum prices static despite pleas for relief. H. S. Norman. Oil & Gas J 41:101, 103 Ja 28 '43

Consumer prices for oil cling to flat curve. Oil & Gas J 42:212 Jl 29 '43

Dealer and service station gasoline prices in 50 representative U.S. cities, June 1, 1943; tabulation. Nat Pet N 35:39 Je 23 '43

Dealer and service station gasoline prices in 50 representative U.S. cities July 1, 1943; tabulation. Nat Pet N 35:42 Ag 18 '43

Margin survey launched by PAW; with texts of questionnaires. Nat Pet N 35:3+ 34, 36, 38-9 Jl 14 '43

Oil jobber's floor nears ceiling. H. L. Thatcher. Nat Pet N 35:4-5 Mr 31 '43

Refining efficiency threatened by static weight of frozen product prices. H. S. Norman. Oil & Gas J 42:214-15 Jl 29 '43

Rating

See also Gasoline—Anti-knock and anti-knock mixtures

Rationing

A card holders allowed one vacation trip. Comm & Fin Chr 158:137 Jl 8 '43

Ask rewriting of Directive 59; plan presented by the Empire State jobbers. Nat Pet N 35:6 J 28 '43

B and C gas coupons worth 3 gallons only. Comm & Fin Chr 157:73 Ja 7 '43

B and C gasoline coupons again cut. Comm & Fin Chr 157:2293 Je 17 '43

Ban in East lifts Sept. 1. Nat Pet N 35:3+ Ag 18 '43

Breakdown in eastern supply may result in policy changes. H. D. Ralph. Oil & Gas J 41:15 D 24 '42

Challenge to OPA courts; attorneys for Milwaukee company appeal suspension ruling. Nat Pet N 35:14 Ag 25 '43

Changes in consumer buying practices resulting from tire and gas rationing. P. D. Converse. (Bur. of economic and business research special bul. 2) 8p Univ. of Illinois, Urbana '43

Civilian share of gas defended. B. K. Brown. Nat Pet N 35:30+ S 29 '43

Coupon inflation hits East. Nat Pet N 35:5 My 19 '43

Critical oil shortage on East coast brings redoubled curb on users. H. D. Ralph. il Oil & Gas J 42:28-9 My 27 '43

Easier East Coast supply situation predicted after March by PIWC. Oil & Gas J 41:14-15+ F 4 '43

East faces long gas famine. Nat Pet N 35: 3-4 Je 2 '43

Eastman protests quota of gas allotted to East coast area. Nat Pet N 35:3-4 Jl 7 '43

Farmers get 1st call on gas. Nat Pet N 35: 6 Jl 14 '43

Floods disrupt gas supply. Nat Pet N 35:3-4 My 26 '43

Gas coupon value cut in Middle west and Southwest—may lift non-essential ban. Comm & Fin Chr 158:717 Ag 19 '43

Gas pinch ahead. Business Week p19-20+ S 25 '43

Gas rations cut in half, pleasure driving ban off. Comm & Fin Chr 157:1307 Ap 8 '43

Gas' squeeze just a prelude to greater curtailments. Nat Pet N 35:12-13 O 6 '43

Gasoline preferences for industries revised. Oil Paint & Drug Rep 143:7+ Je 14 '43

Gasoline-ration system revised for commercial-vehicle operators. Oil & Gas J 42:46 Je 17 '43

Ickes denied rationing powers. Nat Pet N 35:3 Jl 7 '43

Instructions to industry on gasoline cut; text of gasoline rationing bulletin no. 17. Nat Pet N 35:13-14 Ag 18 '43

Less gas for all. il Business Week p30+ My 29 '43

Lots of gas, but—commercial vehicles in East ordered to reduce mileage further. Business Week p26-7 Je 5 '43

Marketers meet with District 2 PAW officials in Indianapolis for airing of grievances. W. W. Weston. Nat Pet N 35:8+ Ag 25 '43

Naphtha or gasoline, which? Wisconsin dealer, hit by OPA, says it isn't gas he sells. Nat Pet N 35:7 Ag 18 '43

National Dixie distributors ask rationing halt in districts 2, 3, 4 & 5. Nat Pet N 35:10+ Ap 28 '43

Need for reducing gasoline use in Midwest and Southwest. H. Ickes. Oil & Gas J 42: 36+ Ag 12 '43

New York's black market in gasoline. I. S. Mattingly. Nat Pet N 35:35-7 Ja 13 '43

Nine years is top penalty in 2268 oil cases on OPA's trial list. Nat Pet N 35:11 S 15 '43

Non-essential driving banned by OPA. Comm & Fin Chr 157:1979 My 27 '43

Occupational driving permitted under new OPA driving rules. East Underw 44:1+ My 28 '43

ODT 39; its effect on the passenger and the operator. il Bus Transportation 22:44-9 Ag '43

OPA defends enforcement policy. Nat Pet N 35:9 S 1 '43

OPA enforcement not secretive. S. Polier. Nat Pet N 35:11+ S 15 '43

OPA issues its regulations on tire-gas rationing. Nat Pet N 34:11 N 18 '42

GASOLINE—Rationing—Continued

Opponents lose first round in fight against rationing. H. D. Ralph. Oil & Gas J 41: 21-2 D 3 '42

PAW statistical charts give background in equalization plan. charts Nat Pet N 35:35-6 Ag 25 '43

Salesmen out of preferred class in new gas and tire rationing rules. P. L. Hardesty. East Underw 43:28+ N 13 '42

Suppressed military data prevent accurate analysis of motor-fuel shortage. H. D. Ralph. Oil & Gas J 42:28-9 S 9 '43

Thinner spread of gasoline supplies result of inadequate development. H. D. Ralph. Oil & Gas J 42:10-11 J 22 '43

Value of B and C gas coupons cut; A coupons lifted to two gallons in East. Comm & Fin Chr 158:1423 O 7 '43

See also
Insurance, Life— Insurance agents—
Agents—Auto- Automobile problem
mobile problem

Specifications

Army is studying new specifications for 80-octane gasoline; abstract. W. B. Pyron. Nat Pet N 35:18 Ja 20 '43

Octane rating and volatility of gasoline limited by PAW directive. Oil & Gas J 42: 10 N 4 '43

Standards

Fuels simplified; oils, gasolines, and greases standardized. Business Week p59-60 Ja 23 '43

Storage

See Gasoline storage

Sulfur content

Catalytic desulfurization of gasolines by cobalt molybdate process. A. C. Byrns, W. E. Bradley and M. W. Lee. bibliog diag Ind & Eng Chem 35:1160-7 N '43

Critical analysis of sweetening processes and mercaptan removal. J. Happel, S. P. Cauley and H. S. Kelly. bibliog Oil & Gas J 41:136, 139-40+ N 12 '42; Same. Am Pet Inst Proc 23(3):67-77; Discussion. 77 '42

Improving products from sour crudes. bibliog flow sheets Nat Pet N 35 pt 2:R339-45 Ag 4 '43

Refining west Texas crude. H. H. Wenzke. Oil & Gas J 42:43-4, 47, 73-5 O 14 '43

Self-recording, semi-automatic mechanized electrometric titrations; with special reference to control of gasoline refining. D. J. Pompeo, C. J. Penner and K. E. Hallikainen. bibliog diags Instruments 16: 402-3+ J 1 '43

Sulphur compounds from Panuco gasoline. W. Friedmann and C. Canseco. bibliog Pet Refiner 22:61-5 Ja '43

Sulphur products from the aluminum-chloride complex obtained in refining high-sulphur gasolines. I. I. Tsyganok and L. A. Vanyukova. Pet Eng 14:75-6 J 1 '43

Use of chlorates in refining high sulphur gasolines. N. E. Vishnevskii. Pet Eng 14: 157+ My '43

Taxation

Disposition of state motor-fuel tax receipts, 1941; tabulated by states. Pub Roads 23: 137 O '42

Experts say gas tax may take back seat in revenue of states. Nat Pet N 35:7 Ag 4 '43

Federal and state automotive taxes; tables and charts. Automotive & Aviation Ind 85:92-3 Mr 15 '43

N. Y. state units gas tax income down. Comm & Fin Chr 157:360 Ja 28 '43

State's gas tax collections in December and January; effect of rationing. Comm & Fin Chr 157:912 Mr 11 '43

Testing

Behavior of gasoline at high temperatures. F. E. Mock. Oil & Gas J 42:204+ Ag '43

Transportation

How Tide Water obtains maximum efficiency from truck fleet. R. D. Rogers. Oil & Gas J 42:30-2+ S 1 '43

Wartime transition of petroleum transport; chart showing daily deliveries into 17 Atlantic Seaboard states, 1941-1943. Automotive & Aviation Ind 88:46 Ap 1 '43

See also
Gasoline pipe lines Tank ships
Tank cars Tank trucks

GASOLINE, Natural

Chemical utilization of natural gas and natural gasoline hydrocarbons by oxidation. H. Linford. bibliog Nat Pet N 35 pt 2:R15-19 Ja 6 '43; Same. Pet Eng 14:89, 91-2, 94+ Ja '43; Same cond. Oil & Gas J 41:71, 73+ N 12 '42

Full use of naturals urged; abstract. R. E. Miller. Nat Pet N 35:16 Ap 14 '43

Importance of natural gasoline and derivatives to synthetic rubber and aviation gas programs. P. M. Raigorodsky and F. H. Dotterweich. bibliog Nat Pet N 34 pt 2: R420+ N 25 '42

Lone Star's central fractionator concentrates special products from natural gasoline. A. L. Foster. flow chart Oil & Gas J 42:74, 76, 78+ Ag 26 '43

Natural gasoline enrichment of producer gas for use in underfiring coke ovens. W. O. Keeling. diag Gas Age 92:27-8+ J 15 '43; Same. Am Gas Assn Mo 25:375-7 S '43

Natural gasoline's part in war is discussed at annual California natural gasoline association meeting. Oil & Gas J 41:69 N 12 '42

Preparation of cyclopentane from an Oklahoma natural gasoline. J. W. Tooke. Ind & Eng Chem 35:992-3 S '43

Role of natural gasoline industry in the 100-octane gasoline program. B. K. Brown. Pet Refiner 22:110-12 My '43; Abstract. Nat Pet N 35:16+ Ap 21 '43

Symposium: war requirements of the natural gas and natural gasoline districts. J. F. Robinson and others. Am Gas Assn Proc 1942:47-56

War products from natural gas and natural gasoline. P. M. Raigorodsky and F. H. Dotterweich. bibliog diags Oil & Gas J 41: 94, 97-8+ Ap 15 '43; Same. Gas Age 92:19-23 J 29 '43; Same. Pet Eng (Ref annual) 14:198-200, 202-3 J 1 '43; Same, with additional diags. Pet Refiner 22:83-9 My '43; Abstract. Nat Pet N 35:14-16 Ap 14 '43

See also
Liquefied petroleum gas

Directories

Survey of natural-gasoline plants; listed by states. Oil & Gas J 41:113-14, 117-18 Ap 15 '43

Manufacture

Absorption oil in the cycling plant. J. A. Grimshaw. Oil & Gas J 41:80, 82 D '42

Caustic in vapor stream halts corrosion; West Coast natural gasoline plant. Oil & Gas J 41:111 Ap '43

Central fractionating plant. F. H. Love. flow diag Oil & Gas J 41:174, 176, 178 S '43

Compression combined with close fractionation; Warren petroleum corporation. Oil & Gas J 41:171 S '43

Consolidation of gasoline plants in Seminole a conservation step. A. L. Foster. flow diag Oil & Gas J 42:35-6 S 2 '43

Continuous blowdown in gasoline plant boilers reduces scale formation. N. Williams. Oil & Gas J 42:50+ My 27 '43

Design for hydrocarbon absorption and stripping. W. C. Edminster. flow diag Ind & Eng Chem 35:337-9 Ag '43

First integrated refinery-cycling plant unit; four cycling plants, pipe line station, and refinery in south Texas coordinate operations. C. C. Pryor. Oil & Gas J 41:122+ O '43

Hot reflux to still improves plant operation. flow diag Oil & Gas J 42:68-9 Ag 19 '43

Increasing isobutane production in natural gasoline plants. G. N. Hile. diag Pet Eng (Ref annual) 14:275, 277-8 J 1 '43

Maximum liquefied petroleum gas yields sought by wartime gasoline plants. Oil & Gas J 42:30-2+ S 1 '43

Measurement and control in the natural gasoline plant. C. G. Cortelyou. Oil & Gas J 41:321-4, 326-8 J 1 '43

Natural gasoline association of America; technical papers presented at annual meeting. Oil & Gas J 41:65-113 Ap 15 '43

GASOLINE, Natural—Manufacture—Continued

Natural gasoline plant layouts in 1942. D. E. McFaddin. *il* Pet Eng (Ref annual) 14:298-300 J 1 '43

Newest techniques; text in English and Spanish. *il* Oil & Gas J 41:216+ D 31 '42
 Normal butane conversion. R. C. Alden. *il* diags Nat Pet N 35 pt 2:R222, R224 My 5 '43; Same. *il* Pet Refiner 22:103-5 My '43;
 Same. *il* Pet Eng (Ref annual) 14:271-2, 274 J 1 '43; Same *abr.* Oil & Gas J 41:59, 62 Ap 29 '43

Operating features of the Katy gas-cycling plant. F. G. Noble. *flow diags* Oil & Gas J 41:101-2+ My 6 '43; Same. *il* Pet Eng (Ref annual) 14:313-16, 318-20 J 1 '43; Same *abr.* *il* Pet Refiner 22:90-6 My '43

Outposts of safety; natural gasoline plant safety program. R. A. Schuster. *il* Nat Safety N 48:16-17+ Ag '43; Same. *il* Oil & Gas J 42:55, 56 O 7 '43

Practical methods for improving plant cooling water systems. *il* Nat Pet N 35 pt 2: R148-50 Ap 7 '43

Reciprocating steam pump in the natural gasoline plant. H. P. Henderson. *diags* Pet Eng (Ref annual) 14:309-12 J 1 '43

Some factors affecting the economics of gas cycling plant design. R. L. Huntington. *il* *diag* Pet Refiner 22:88-91 Ap '43

Trend toward more precise fractionation accelerated in natural-gasoline plants. H. S. Norman. *il* Oil & Gas J 41:109-10+ Ap 15 '43

Warren's gasoline plant—pressure maintenance project. L. A. Boyd. *flow diag* *il* Pet Eng 14:118-20, 122, 124+ N '42

See also

Petroleum storage—
 Vapor recovery

GASOLINE, Substitutes for

Alternative fuels; survey of methods adopted in Switzerland. *il* diags Automobile Eng 33:299-307, 343-8 Ag-S '43

Petroleum substitutes study by government argued. *Oil Paint & Drug Rep* 144:3+ Ag 9 '43

Shale oil, other substitutes and the petroleum shortage. B. H. Weil. *il* Nat Pet N 35 pt 2: R348-9 Ag 4 '43

Trouble with oil supply turns Britain to alternate fuels. G. W. L. Day. *il* Oil & Gas J 41:113-14, 116 D 31 '42

GASOLINE delivery

See also

Tank trucks

GASOLINE handling

See also

Gasoline service stations

Tank trucks

Safety measures

Revise tank car loading rules; API accident-prevention manual no. 12. *il* Nat Pet N 35:40-2 Ag 25 '43

GASOLINE industry

How Sohio applies the new share-alike order for District 2 to its managers and outlets. A. A. Stambaugh. *Nat Pet N* 35:6+ S 29 '43

What now of the oil jobber's future? W. C. Burns. *Nat Pet N* 35:36-8 S 22 '43

See also

Gasoline—Prices
 Gasoline pipe lines

Gasoline service stations
 Petroleum refining

Advertising

Pooling threatens brands. C. J. Swan. *il* Ptr Ink 201:16-18+ N 13 '42
 Union Oil advertising interprets big business to the public. *il* Sales Management 52:41 Ag 15 '43

See also

Airplane engines—
 Fuel

Finance

See also
 Atlantic refining company

Joint use of marketing facilities

District 2 joint use report; bureaucratic direction would add confusion. *Nat Pet N* 35:32-40, 42-3 Mr 17 '43

East backs exchanges, hits consolidations; report of the District 1 joint use of marketing facilities committee. *Nat Pet N* 35: 43-4 Ag 18 '43

Joint use progress. A. C. Bedford. *Nat Pet N* 35:6, 44 Mr 17 '43

Report declares joint use of bulk plants would save little in District 4. *Nat Pet N* 35:38-9 Ag 4 '43

Studies show efficiency of metropolitan distribution in District 2; supplementary surveys by joint use group. *Nat Pet N* 35: 42-4 N 3 '43

Laws and regulations

Directive 67 establishes rule over district 3 distribution; complete text. *Oil & Gas J* 42:22-3 Je 3 '43

Industry fares well with legislatures; survey trends in 44 states. *Nat Pet N* 35:18+ S 8; 19-20 S 15 '43

OPA kangaroo courts lack legal parentage. U.S. Judge Atwell rules in sweeping decision. *Nat Pet N* 35:38-40 O 20 '43

War orders for the oil industry; official text of important orders. *Nat Pet N* 34:13-15 D 30 '42; 35:10-11 Ja 6; 10-11 Ja 20; 9-10 F 10; 9-11 Ap 7; 12 My 6; 14+ My 12; 11-12 Je 2; 14-16 Je 9; 11-12 Je 23; 11-12+ Je 30 '43

See also

Gasoline—Rationing
 Gasoline—Taxation

Service

New maintenance plan helps truck operators; Ethyl Corporation system. *il* Food Ind 15:74-5 Ag '43

Sinclair's Farming for victory program; what it is, how it works. W. J. Andree. *il* Sales Management 52:18-21 Ja 15 '43

Statistics

Gasoline consumption, by states, 1938-1942; tabulation. *Automotive & Aviation Ind* 88: 79 Mr 15 '43

How oil jobbers sales decline; Oct. 1942 compared with Oct. 1941; tabulation. *Nat Pet N* 34:6-7 N 18; 9-10 N 25; 14 D 2 '42

Motor fuel, 1938-1941. *Survey of Cur Business* 1942 Sup p158 [supplemented in monthly numbers]

Public used 17% less gasoline in 1942. *Nat Pet N* 35:42-3 S 22 '43

War hits gasoline; consumption in 31 states, first nine months, 1943. *Business Week* p24 N 6 '43

Why District 2 is suffering an oil shortage. S. A. Swensrud. *Nat Pet N* 35:5-6 S 29 '43

See also

Gasoline service stations—Statistics

Surveys

What efficiency surveying committees will find in oil marketing. I. S. Mattingly. *Nat Pet N* 34:33-4 N 25; 31-3 D 9; 30-1 D 23 '42; 35:35-7 Ja 13 '43

Detroit

Oil men battle acute manpower problem in the labor paradise of Detroit. H. Taylor. *Nat Pet N* 35:19-20+ O 13 '43

Eastern states

May overhaul Directive 59; allocation of supplies by zones; month of March. map *Nat Pet N* 35:12, 14-15 Mr 17 '43

Hartford, Connecticut

Hartford has scoured its manpower supply for years; what efficiency surveying committees will find in oil marketing. I. S. Mattingly. *Nat Pet N* 34:31-3 D 9 '42

New York (city)

New York's black market in gasoline. I. S. Mattingly. *Nat Pet N* 35:35-7 Ja 13 '43

Pennsylvania

What efficiency surveying committees will find in oil marketing; Allentown and Lancaster. I. S. Mattingly. *Nat Pet N* 34:30-1 D 23 '42

GASOLINE industry—Continued**Springfield, Massachusetts**

What can they do for war, when neither army nor shop want them? is question before OPC surveying committee at Springfield, Mass. I. S. Mattingly. Nat Pet N 34: 33-4 N 25 '42

United States

Competition to be tougher, more scientific in postwar era; abstract. W. Hochuli. Nat Pet N 35:48 O 20 '43

Course for jobber in postwar competition. Nat Pet N 35:30 Je 16 '43

Davies tells Lea inquiry oil pinch is here. Nat Pet N 35:8-9 O 27 '43

In defense of oil marketing. C. S. Beesemyer. Nat Pet N 35:5-6 Mr 10 '43

Socony-Vacuum; fights the war from Kokomo (Ind.) to Kirkuk (Iraq). Il map Fortune 26: 110-15+ N '42; 27:114-19+ F '43

Wartime changes depreciate value of gasoline. J. P. O'Donnell. Oil & Gas J 41:60 N 12 '42

See also
Atlantic refining company

GASOLINE pipe lines

Greensboro to Richmond pipeline completed. Il Manuf Rec 112:43+ My '43

Portable pipeline hits Axis; invention carrying gasoline and water to battle fronts. Il Nat Pet N 35:6-7 Ag 4 '43

Texas pipeline transplanted in Florida. Il map Eng N 130:759-61 My 20 '43

Corrosion

Preventing internal corrosion of pipe lines; sodium nitrite treatment for gasoline lines. A. Wachter and S. S. Smith. bibliog Il diags Ind & Eng Chem 35:358-67 Mr '43

Products pipe-line developments; removing and preventing corrosion scale; sodium nitrite inhibitor-injection. S. S. Smith. diags Am Pet Inst Proc 23(4):54-60; Discussion. 60-3 '42

Maintenance and repair

Practices employed in reconditioning Phillips' gasoline pipe line. L. A. Hugo and G. P. Jennings. Oil & Gas J 42:167-8+ S 23 '43

Pumping stations

Positive-displacement variable-capacity pumps in butane-gasoline pipe-line service. E. A. Koenig. diags Oil & Gas J 42:129-30, 133-4+ S 23 '43

Tables, calculations, etc.

Application of pipe-line efficiency concept to gasoline pipe-line calculations. B. Miller. bibliog Oil & Gas J 41:122-3 Ja 7 '43

GASOLINE poisoning

Threshold toxicity of gasoline vapor. P. Drinker, C. P. Yagiou and M. F. Warren. bibliog diag J Ind Hygiene 25:225-32 Je '43

GASOLINE pumps

Charts for suction lift of pump. W. L. Nelson. Oil & Gas J 42:68 Ag 12 '43

New pumps for old; liberalized WPB order. Nat Pet N 35:10 Je 30 '43

Prediction of suction limitation when pumping volatile liquids. C. D. Bower and P. H. Brown. diag Pet Eng (Ref annual) 14:239-40+ Jl 1 '43

Relief from harassment asked by makers of computer pumps. Nat Pet N 35:6 Mr 3 '43

See also
Gasoline pipe lines—
Pumping stations

Advertising

Wayne pump co. boasts war-time services rendered by its customers. Ptr Ink 202:68 Mr 19 '43

GASOLINE research

Calibration of C.P.R. reference fuels; report of sub-committee no.5, engine tests; aviation fuel knock-rating panel. Inst Pet J 29:235-6 Ag '43

Catalytic reforming of straightrun gasoline increases aromatics content. V. I. Komarewsky and C. H. Riesz. bibliog diag Oil & Gas J 42:90-3+ Je 24 '43

Constants of some hydrocarbons in the gasoline boiling range. C. E. Boord. bibliog Oil & Gas J 41:188+ N 12 '42

Cooperative research comes of age. C. B. Veal. S A E J 51:45-61+ F '43; Same cond.

Nat Pet N 35 pt. 2:R136-9 Mr 3 '43

Method for analyzing gasoline fraction of petroleum; with preliminary results on east Texas and Oklahoma crudes. F. D. Rossini and others. bibliog Oil & Gas J 41:106, 108, 111+ N 12 '42; Same. Am Pet Inst Proc 23(3):7-14 '42

100-octane aviation gasoline processes show rapid advance. C. C. Pryor. Il Pet Eng 14:61, 64 Mr; 79, 82, 84 Ap '43

Response ability of gasoline to various concentrations of tetraethyl lead. R. G. Lovell. Il diags Pet Refiner 22:97-104 O '43

GASOLINE service stations

Stations go on auction block; Sinclair disposes of unwanted outlets. Il Nat Pet N 35:36-7 Ag 4 '43

Wartime servicing and merchandising. Nat Pet N 35:38 N 3 '43

Advertising

Spot radio, movies, are basis of Carter Carburetor local dealer help program. Il Sales Management 52:50+ Ap 15 '43

Construction and design

New buildings for 194X: service station, including roadside stand and small restaurant. Il plan Arch Forum 72:132-3 My '43

Conversion

Builders busy with home conversions; apartment building remodeled from gas station. Il plans Am Bld 65:34-5 Ag '43

Gasteria to cafeteria; wartime uses of closed stations. Il Nat Pet N 35:37-8+ S 29 '43

Employees

Gasoline gals peacetime casualties? Il Nat Pet N 35:40-1 S 8 '43

Survey shows station manpower loss to draft. Nat Pet N 35:9-10 Mr 31 '43

Women make good as service station attendants for Shell. Il Sales Management 52:32-3 F 15 '43

Finance

Questionnaire shows how war cut station profits. Nat Pet N 35:10 Mr 31 '43

RFC offers loans on stations. Nat Pet N 35:3+ My 19 '43

Station loan machinery set up by RFC mortgage co. Nat Pet N 35:8 Je 23 '43

Hours of business

Hours: answers to PAO 4 given. Nat Pet N 35:12 F 17 '43

Limitation on hours favored in East. Nat Pet N 35:44 S 15 '43

Management

Appointment system lets service stations do more work with less help. M. Beuick. Il Ptr Ink 205:26+ O 22 '43

How Wisconsin jobber licks war problems; R. E. King of Diamond oil co. E. Lamm. Il Nat Pet N 35:30, 32 Jl 14 '43

Service

Production line inspection! Nat Pet N 35:38-9 Ja 13 '43

Side line selling

Postwar changes in primary outlets. R. M. Hixson. Il Adv & Sell 36:23+ N '43

Statistics

Retail, bulk station mortality; districts 2 and 5 report on closings. Nat Pet N 35:11 My 26 '43

GASOLINE storage

Effect of water on the stability of gasoline motor fuels in storage; abstract. H. H. Fowler and F. H. Allen. Oil & Gas J 42:73 My 20 '43

GASOLINE storage—Continued

New type rustproof lining for drums; Nidex. A. Wachter and N. Stillman. flow plan il Oil & Gas J 41:214, 219, 221 Mr 25 '43

See also

Gasoline tanks
Oil tanks

GASOLINE stoves

Assembly by silver brazing; William R. Bootz manufacturing company; assembling army field range fire units. H. Chase. il Am Mach 86:1426-8 D 10 '42

GASOLINE tanks

Lining fuel storage tanks with synthetic rubber sheet. J. W. Crosby. il Rubber Age 53:240-1 Je '43

Study of gasoline evaporation losses. J. Hapfel and D. P. Heath. bibliog Oil & Gas J 41:160, 163-4 Mr 25 '43

Synthetic rubber fuel storage tanks, collapsible and portable for advanced bases. il Aero Digest 43:212-4 Jl '43

Cleaning

This saboteur can make welding repairs risky; explosive vapors linger in gasoline and oil containers; three cleaning methods. diags Power 87:399 Je '43

GASOLINE tanks, Concrete

Concrete tanks leak-proofed for gasoline storage with synthetic rubber latex. F. R. Stoner, Jr. il Nat Pet N 35 pt 2:R446-7 O 6 '43

Sheet linings of synthetic rubber for concrete gasoline tanks. il Nat Pet N 35 pt 2:R200, R202 My 5 '43; Same. Aero Digest 42:266, 269 Je '43; Same, with additional il. Chem & Eng N 21:580, 582-3 Ap 25 '43

GATES, Robert McFarland, 1883-

Sketch. por(p608) Mech Eng 65:609 Ag '43

Sketch. por Mach 50:173 O '43

GATES

How to build fences and gates with a minimum of metals. diags Am Bld 65:56 Je; 59 Jl; 74 Ag '43

GATES, Hydraulic

Design of recent TVA projects; Kentucky dam, power house, and lock. E. H. Weileman. il diags Civil Eng 13:257-60 Je '43

Design of Shasta dam; spillway control by drum gates. K. B. Keener. il diags plan Civil Eng 13:427-30 S '43

Protective painting of submerged steel; hydraulic turbine headgates, Gatineau power company. Engineering 156:167-8 Ag 27 '43

River diversion at Shasta dam. D. C. May. il diags Eng N 131:397-9 S 9 '43

GATLING, Richard Jordan, 1818-1903

Dr Gatling and his humanitarian gun; a case history from 1860's contrasts sharply with today's attitude toward wartime inventors. G. F. Milton. Tech R 45:425-6-+ Je '43

GATTERMANN synthesis

Gattermann reaction in the mono-methoxydiphenyl ethers. H. E. Ungnade and E. F. Orwoll. bibliog Am Chem Soc J 65:1736-9 S '43

GAUMONT-BRITISH picture corporation

Annual general meeting, 15th, London. Economist 143:647 N 21 '42

Annual general meeting, 16th, London. Economist 145:477 O 2 '43

GAZANIAXANTHIN

cis-trans Isomerization and spectral characteristics of gazaniaxanthin; further evidence of its structure. L. Zechmeister and W. A. Schroeder. bibliog diags Am Chem Soc J 65:1535-40 Ag '43

GEAR cutting

Cutting worm gear for telescope drive. R. Clark. il Sci Am 167:298-301 D '42

Hobbing marine gearing. M. Kennedy. il Marine Eng 43:214-20 Ap '43

Machinability of national emergency alloy steels. O. W. Boston. il Metal Prog 43:543-7 Ap '43

Marine propulsion gears are hobbled in rooms using air conditioning units. L. W. Clifford. Heat & Ven 40:60 F '43

Multiple cut hobbing of ring gears. H. Byng and E. Erickson. il Iron Age 152:60-1 Ag 19 '43

Multiple milling fixture for cutting special bevel-gear pinion. G. F. Groschke. il Mach 50:168-9 O '43

Roughing and finishing operations combined; marine-engine gear extension. J. Wolfe. diags Am Mach 87:110 S 16 '43

Sir Charles Parsons and mechanical gearing; creep system of gear cutting. A. Meldahl. il Engineering 155:216-17 Mr 12 '43; Discussion. 155:275 Ap 2 '43

Standardization of hobs; abstract. G. P. Maurer. Iron Age 152:68-9 N 4 '43

Standby power speeds machining. il Factory Management 101:130-4 F '43

GEAR cutting machines

Checking fixture decreases hob set-up time. M. J. Vorgitch. diags Am Mach 87:103-4 My 27 '43

Fellows fine-pitch gear-shaving machine. il Mach 50:186-4 O '43

Fellows gear finishing machines. il Engineering 155:246-7 Mr 26 '43

Gear finisher design provides for subassembly. H. Pelphrey. il diags Machine Design 15:87-90 F '43

National broach & machine co. builds gear shaver. il Am Mach 87:122 O 28 '43; Automotive & Aviation Ind 89:41-4 N 1 '43; Mach 50:206-7 N '43

National gear shaving machine. il Steel 111:153-4 D 7 '42

Precision gears made on standard equipment; Mack mfg. co. il Steel 113:121 Jl 5 '43

Robey-Smith automatic bevel-gear generators. il Automobile Eng 33:118-19 Mr '43

Shaving machine for small toothed gears. il Engineering 156:96 Jl 30 '43

Special set-up cuts internal gear. H. D. Burbine. il Am Mach 87:91 Mr 13 '43

GEAR testing machines

Fellows cone-point and circular-pitch gear-testing fixtures. il Mach 49:228 Ap '43

Scherr gear tester. il Steel 113:112-4 N 1 '43

GEARING

Communication on mechanical movements and their design; use of elliptical gears. P. Grodzinski. il diags Inst Mech Eng J & Proc 148:Proc 33-4 N '42

Comparison of API Std. 11-E and AGMA practice on steel helical and herringbone geared speed reducers. E. N. Kemler. Am Pet Inst Proc 23(4):213-19 '42

Correct selection prevents gear speed-reducer headaches. W. F. Plume. diags Power 87:169-72 Mr '43

Do you want your gear speed reducers to run better longer? W. F. Plume. il Power 87:615-17 S '43

Mavor and Coulson driving gear from belt conveyors. il diags Engineering 155:87-8, 90 Ja 29 '43

Number of teeth in contact as a vibration factor in involute cut gears. S. R. Tymstra. (Eng. exp. sta. bul. 109) 10p pa 25c Univ. of Washington, Seattle '42

Provides intermittent drive; patent assigned to the Sheridan iron works. diags Machine Design 14:138-4 N '42

Selection and maintenance of speed reducers. F. A. Westbrook. il Power Pl Eng 47:73-4 Jl '43

Shot blasting to increase fatigue resistance. J. O. Almen. bibliog il diags S A E J 51:258-9 Jl '43; Same cond. Iron Age 151:68-9-+ Je 10 '43; Same cond. Machine Design 15:192-4 Je '43; Same cond. Mech Eng 65:561-2 Ag '43

See also

Airplane engines—
Gearing
Chain gear
Clutches
Couplings

Gear cutting machines
Hydraulic transmission
Power transmission

Design

Accuracy of alignment in the gear assembly. diags Machine Design 15:89 Mr '43

Backlash in gears; standard practice of the American gear manufacturers association. diags Am Mach 87:121, 123 Ag 5 '43

Dimensional value of lubricants in gear design. J. O. Almen. il diags S A E J 50:373-80 S '42; Same. Automobile Eng 33:147-53 Ap '43

Eliminates backlash in gear drive; patent assigned to Cincinnati milling machine co. diags Machine Design 15:156 Mr '43

GEARING—Design—Continued

- Factors to be considered when designing die-castings. H. Chase. *il* *diags* *Product Eng* 14:376-9 *Je* '43
- Involute profiles; method of modifying these on generator-type gear grinders. H. Walker. *diags* *Automobile Eng* 33:181-4 *My* '43
- Redesigned gears cut production costs. T. Addison. *diags* *Am Mach* 87:96 *Ap* 15 '43
- Successful applications of NE (national emergency) alloy steels in gear making. E. J. Wellauer. *diags* *Steel* 111:106-7+ *N* 16 '42; Same *abr.* [with some additions]. *Machine Design* 14:66-9+ *N* '42

Failures

- Fatigue failures in common machine parts. J. O. Almen. *il* *Metal Prog* 43:739-40 *My* '43

Manufacture

- Carburizing gears in the electric salt bath furnace. W. F. Sorenson. *il* *Metal Prog* 43:237-40 *F* '43
- Cashardening large gears with high frequency current. G. C. Riegel. *il* *Metal Prog* 44:78-83 *Jl* '43
- Centrifuging after filling the mold. W. F. Wright and J. B. Caine. *bibliog* *il* *diags* *Iron Age* 151:64-8 *My* 20 '43
- Experience with NE (national emergency) alloy steels for industrial gearing. E. J. Wellauer. *il* *Steel* 113:106-8, 110+ *S* 6 '43
- Experience with NE (national emergency) alloy steels; gears for heavy duty automotive transmissions. S. L. Widrig. *il* *Steel* 112:60-2 *Ja* 11 '43
- Gear production reaches high precision on standardized equipment; Mack manufacturing company. *il* *Sci Am* 168:199 *My* '43
- Gear sets for medium tanks on the production line; Buick motor car division, General motors corp. J. Geschelin. *il* *Automotive & Aviation Ind* 89:22-7+ *Jl* 1 '43
- General electric company; plant for aircraft part gear assemblies; air conditioned gauge room; ventilation and heating. D. Adams. *il* *diags* *Heat & Ven* 40:46-50 *S* '43
- Heating gears for hardening by high-frequency induction. F. W. Curtis. *il* *diags* *Mach* 49:199-204 *Jl* '43; *Abstract. Iron Age* 151:63 *My* 27 '43
- Heavy duty gears design and manufacture; abstract. W. F. Schmitter. *Iron Age* 152:46 *O* 21 '43
- Involute profiles; method of modifying these on generator-type gear grinders. H. Walker. *diags* *Automobile Eng* 33:181-4 *My* '43
- Laminated chuck used for grinding gears. R. C. Ormarod. *diag* *Am Mach* 87:111 *Jl* 22 '43
- Machining vital parts of the 90-mm. anti-aircraft gun mount; Worthington pump & machinery corporation. H. L. Horton. *il* *diags* *Mach* 50:159-63 *O* '43
- Manufacture of aircraft gears; abstracts. P. W. Brown and E. V. Farrar. *il* *Iron Age* 150:29-34 *D* 24 '42; *Steel* 112:90-1+ *Mr* 1 '43
- NE (national emergency) alloy steels; steel castings vs. forgings. A. Zwald. *il* *Steel* 113:94-5+ *Ag* 2 '43; Same. *Foundry* 71:175-7 *S* '43
- Precision gears made on standard equipment; Mack mfg. co. *il* *Steel* 113:121 *Jl* 5 '43
- Production of high-speed helical gears. S. A. Couling. *il* *diags* *Engineer* 175:98-100, 119-20 *Ja* 29-F 5 '43; Same *cond. Engineering* 155:197-200 *Mr* 5 '43; *Discussion. Engineer* 175:88-90 *Ja* 29 '43; *Engineering* 155:113-15 *F* 5 '43
- Quenching dies minimize gear grinding. F. A. Paquin. *diags* *Am Mach* 87:98-100 *O* 14 '43
- Shaved gears for aircraft engines. A. W. Harris. *il* *diags* *S A E J* 51:329-33+ *S* '43; Same *cond. Iron Age* 152:58-63 *Ag* 5 '43; *Abstract. Automotive & Aviation Ind* 88:34+ *My* 1 '43
- Sixty-three parts and assemblies from Studebaker to Cyclones. J. Geschelin. *il* *Automotive & Aviation Ind* 88:32-5+ *Je* 15 '43
- Spicer's new transmission plant. J. Geschelin. *il* *Automotive & Aviation Ind* 88:20-3+ *My* 1 '43

Successful applications of NE (national emergency) alloy steels in gear making. E. J. Wellauer. *diags* *Steel* 111:106-7+ *N* 16 '42; Same *abr.* [with some additions]. *Machine Design* 14:66-9+ *N* '42

See also
Gear cutting
Gear cutting machines

Measurement

- Fixture speeds wire measurement of gears. B. Berlinger. *diag* *Am Mach* 87:107 *S* 16 '43

Standards

- Gear makers adopt new standards. *Iron Age* 152:66-9 *N* 4 '43
- Tolerances for bevel and hypoid gears; reference book sheets. *Am Mach* 87:125, 127 *Jl* 22 '43

Tables, calculations, etc.

- Change-gear calculations. H. E. Merritt. *Engineer* 176:282-4 *O* 8 '43

Testing

- Balancing 50-ton marine gears; G-E Thy-motor type electronic control for driving motor. *il* *diag* *Electronics* 16:132 *Jl* '43
- Bullet footprints in lacquer aid search for better weapons; use of Stresscoat. *il* *Metal Finishing* 41:539 *Ag* '43
- Checking fixture for a differential unit. G. J. Straub. *diag* *Mach* 50:188 *N* '43
- Footprints in lacquer reveal secrets of strains in metal. M. Hetenyi. *il* *Sci Am* 169:133 *S* '43
- Gauge for meter change gears. D. C. Calderwood. *il* *Water Works & Sewerage* 90:196 *Je* '43
- Gear inspection increased 500 percent, eliminates wire method. J. Lob. *Am Mach* 87:123-4 *Ap* 15 '43
- Michigan checking recorder. *il* *Steel* 112:132+ *My* 17 '43
- Testing for victory; motor control system, and operating sequence applied to dynamic-balancing machine, testing marine turbine-propulsion gear. *il* *Gen Elec R* 46:408 *Jl* '43

See also
Gear testing machines

GEARING, Bevel

- Angle drive employs multiple pinion; patent assigned to Wright aeronautical corp. permits installation of radical engine in a slender fuselage. *diags* *Machine Design* 15:192+ *N* '43
- Bevel gears in aircraft. A. H. Candee. *il* *diags* *A S M E Trans* 65:267-77 *My* '43; Same. *Aero Digest* 42:167+ *Ap*; 314, 317-18, 323 *My* '43
- Multiple milling fixture for cutting special bevel-gear pinion. G. F. Groschke. *il* *Mach* 50:168-9 *O* '43
- Tolerances for bevel and hypoid gears; reference book sheets. *Am Mach* 87:125, 127 *Jl* 22 '43

GEARING, Helical. See Gearing, Spiral

GEARING, Hypoid

- Tolerances for bevel and hypoid gears; reference book sheets. *Am Mach* 87:125, 127 *Jl* 22 '43

GEARING, Non-metallic

- Strength of gear wheels in laminated plastics; abstract. *Automobile Eng* 33:413 *O* '43

GEARING, Planetary

- Bevel gears in aircraft. A. H. Candee. *il* *diags* *A S M E Trans* 65:267-73 *My* '43; Same. *Aero Digest* 42:167+ *Ap* '43
- Epicyclic gear trains; reference book sheet. M. F. Spotts. *diags* *Product Eng* 14:609-10 *S* '43
- Natural frequencies of torsional systems, including elastically mounted epicyclic gearing; abstract. W. Benz. *Roy Aeronautical Soc J* 47:sup289 *Je* '43

GEARING, Spiral

- Production of high-speed helical gears. S. A. Couling. *il* *diags* *Engineer* 175:98-100, 119-20 *Ja* 29-F 5 '43; Same *cond. Engineering* 155:197-200 *Mr* 5 '43; *Discussion. Engineer* 175:88-90 *Ja* 29 '43; *Engineering* 155:113-15 *F* 5 '43

GEARING, Spiral—Continued

Selecting helical and worm gearing; with alignment charts. R. D. Douglass and J. M. Dunford. Machine Design 14:119-21 D '42

GEARING, Worm

Accurate inspection of worm gears. V. F. St. Louis. Il diags Am Mach 87:97-8 F 18 '43

Cuts new teeth in worm gear wheel. S. M. Elonka. Il Power 87:691-2 O '43

Cutting worm gear for telescope drive. R. Clark. Il Sci Am 167:298-301 D '42

New tin-free gear bronze; copper-antimony-nickel alloy, development by Hamilton gear & machine co. Mach 49:205 N '42; Can Min J 63:724 N '42; Mech Eng 64:905 D '42

Selecting helical and worm gearing; with alignment charts. R. D. Douglass and J. M. Dunford. Machine Design 14:119-21 D '42

Small worm gear with one-piece casings. Blast F & Steel P 31:244-5 F '43

Tin-free bronze; copper-nickel-antimony for worm gears. C. B. Hamilton, jr. Steel 112: 86 F 22 '43

Tolerances for worms and worm gears; reference book sheet. Am Mach 87:121, 128 Je 24; 129, 131 Jl 8 '43

GEARMOTORS

Gearmotor standards; abstract. C. B. Connell. Iron Age 152:68 N 4 '43

GEIGER-MÜLLER counters

Combined voltage regulating and quenching circuit for the Geiger-Müller counter. W. F. Bale and J. F. Bonner, jr. diags R Sci Instr 14:222-3 Jl '43

Electron polarization. C. G. Shull, C. T. Chase and F. E. Myers. bibliog diag Phys R 63:29-37 Ja 1 '43

Experimental determination of the disintegration curve of mesotrons. B. Rossi and N. Nereson. Phys R 62:417-22 N 1 '42

Factors influencing the plateau characteristics of self-quenching Geiger-Mueller counters; argon-alcohol type. W. D. B. Spatz. bibliog Phys R 64:236-40 O 1 '43

Geiger-Mueller counter pulse size. C. W. Miller. diag R Sci Instr 14:63-76 Mr '43

Localization of the discharge in G-M counters. M. H. Wilkening and W. R. Kanne. diags Phys R 62:534-7 D 1 '42

Mica window Geiger counter tube for measuring soft radiations. D. H. Copp and D. M. Greenberg. diag R Sci Instr 14:205-6 Jl '43; Same cond. Electronics 16:190+ O '43

Miniature Geiger-Müller counter. L. F. Curtiss. pl J Research Nat Bur Stand 30:157-8 F '43

Nature of the gas mixture in self-quenching Geiger-Mueller tubes. P. Weisz. Phys R 62: 477-8 N 1 '42; Same cond. Franklin Inst J 236:96-8 Jl '43

Preparation and efficiency of the fast Geiger-Müller counter. G. D. Rochester and L. Jánosy. bibliog Phys R 63:52-4 Ja 1 '43

Soft radiation Geiger counter. H. Weltin. R Sci Instr 14:278 S '43

Stable self-quenching Geiger-Müller counters containing organo-metallic compounds. A. S. Keston. R Sci Instr 14:293-5 O '43

Testing with X-ray counting tubes. diags Iron Age 151:70-1+ Je 10 '43

X-ray and Geiger-Mueller tubes. C. D. Prater. Il diags Radio N 30:32-4+ O '43

X-ray study of the A point of pure iron using the Geiger-Müller counter. A. P. Wangsgard. bibliog diags Am Soc for Metals Trans 30:1303-22; Discussion. 1322-7 D '42

Testing

Interval selector for random pulses. F. J. Davis and L. F. Curtiss. diags J Research Nat Bur Stand 29:405-15 D '42

GELATIN

Dehydrating effect of disinfectants on egg-albumin solutions. A. Steigmann. Soc Chem Ind J 61:178-80 N '42

Effect of gelatin on the solubility of thalium salts at 40° C. W. G. Eversole and F. S. Thomas. J Phys Chem 47:421-4 Je '43

Experimental burns; the influence of a gelatin-glucose-salts solution on the hemocoagulation of burns. J. O. Ely and A. W. Angulo. Franklin Inst J 235:197-204 F '43

Nature of the soluble and insoluble forms of gelatin. S. C. Goddard. Soc Chem Ind J 61:176-8 N '42

Present situation in gelatine warp sizes. Rayon 24:486 S '43

Reactions of gelatin impurities which are important photographically. A. Steigmann. Soc Chem Ind J 61:162-4 O '42

Warp sizing of man-made yarns; defoamed gelatin; effect of different types of softeners. Il Rayon 24:590-2 N '43

Manufacture

Natural gas solves the problems of a gelatin producer; air dryer. C. Culbertson. Il diag Gas Age 92:15-16+ Ag 12 '43

Statistics

Edible gelatin, production, shipments, stocks, 1938-1941. Survey of Cur Business 1942 Sup p127 [supplemented in monthly numbers]

GELATIN capsules. See Capsules, Gelatin

GELATINIZATION. See Gelation

GELATION

Gel formation in vinyl-divinyl copolymers. W. H. Stockmayer and H. Jacobson. J Chem Phys 11:393 Ag '43

Production of a structural board by gelatinization of wood wastes. S. Coppick and E. C. Jahn. bibliog Paper Tr J 117:23-5 Jl 15 '43

Stabilizing zein dispersions against gelation. C. D. Evans and R. H. Manley. Ind & Eng Chem 35:230-2 F '43

GELS. See Colloids

GEMS

See also

Diamonds Sapphires, Artificial

Garnets

GENERAL American investors company, inc. Annual report. Comm & Fin Chr 157:220 Ja 18 '43

GENERAL American transportation corporation

Rail equipment firm re-enters aviation with new gliders; launching of Airborne transport, inc. R. Wilco. Aviation N 1:33 O 25 '43

GENERAL aniline and film corporation

First annual report as Americanized alien property. Comm & Fin Chr 157:1557 Ap 26 '43

New board of directors. Comm & Fin Chr 158:290 Jl 19 '43

GENERAL baking company

Low-priced stocks for large percentage gains. Mag of Wall St 71:634 Mr 20 '43

Thumbnail stock appraisal. Mag of Wall St 72:684 O 2 '43

GENERAL cable corporation

Another look. Mag of Wall St 72:480 Ag 7 '43
Thumbnail stock appraisal. Mag of Wall St 71:178 N 28 '42

GENERAL cigar company

Another look. Mag of Wall St 72:480 Ag 7 '43
Thumbnail stock appraisal. Mag of Wall St 72:90 My 1 '43

GENERAL electric company

Annual report. Comm & Fin Chr 157:1270 Ap 5 '43

Forms credit unit. Comm & Fin Chr 158: 1857 N 8 '43

General Electric activities for the aviation industry. D. R. Shoults. Il Aeronautical Eng R 1:113 N '42

Independent lamp manufacturers file appeal. Comm & Fin Chr 157:603 F 15 '43

Investment appraisal. Barron's 23:1+ Je 7 '43

Postwar planning. A. R. Stevenson, jr. Am Cer Soc Bul 21:314-17 D 15 '42

GENERAL electric X-ray corporation

Vast market for industrial X-ray apparatus developed by war. G. D. Crain, jr. Il Ind Marketing 28:34-6+ Ja '43

GENERAL foods corporation

Comparative consolidated balance sheet Dec. 31, 1942 and Dec. 31, 1941, and annual report. Comm & Fin Chr 157:1109, 1178-9 Mr 25, 29 '43

Contracts to buy foods packer on West coast. Comm & Fin Chr 158:190 Jl 12 '43

GENERAL foods corporation—Continued

- Joins Lever bros. in development of Birds Eye foods abroad. Comm & Fin Chr 157:1270 Ap 5 '43
 Listing of additional stock. Comm & Fin Chr 157:2249 Je 14 '43
 To acquire business of Bireley's inc. Comm & Fin Chr 157:778 Mr 1 '43
 To acquire Snider packing corporation. Comm & Fin Chr 157:1943 My 24 '43

GENERAL gas and electric corporation

- Files simplification data with SEC. Comm & Fin Chr 156:2130 D 14 '42
 General Gas & Electric A. Comm & Fin Chr 158:1913 N 11 '43
 Liquidation plan. Comm & Fin Chr 157:1943 My 24 '43
 SEC indorses dividend. Comm & Fin Chr 157:41 Ja 4 '43
 To merge subsidiary. Comm & Fin Chr 156:2306 D 28 '42

GENERAL mills, inc.

- Acquires Purity oats co., Bryson grain co. Comm & Fin Chr 156:2038 D 7 '42
 And now soy oil; diversification program. Business Week p30—O 30 '43
 Record sales. Barron's 23:9 Ag 9 '43

GENERAL motors acceptance corporation

- Discontinues sales of short term notes. Comm & Fin Chr 157:344 Ja 25 '43

GENERAL motors corporation

- Allison division. R. M. Hazen. il Aeronautical Eng R 1:81 N '42
 Annual report, 1942. Comm & Fin Chr 157:1270, 1361-2 Ap 5, 12 '43
 Listing of additional common stock; acquisition of Yellow truck & coach manufacturing co. Comm & Fin Chr 158:671 Ag 16 '43
 Management know-how improves military equipment. il Steel 111:93, 124-6 N 16 '42
 Medical conference, Detroit, April 9. H. W. Anderson and others. Ind Med 12:265-80 My '43
 New departure division; ball bearings for aircraft. T. C. Delaval-Crow. il Aeronautical Eng R 1:129 N '42
 Offers to acquire assets of Yellow truck & coach mfg. co. Comm & Fin Chr 157:473 F 1 '43
 Physical conversion from production of autos to aircraft. Comm & Fin Chr 157:41 Ja 4 '43
 Purchases from subcontractors approximated \$900,000,000 in 1942. Comm & Fin Chr 157:1179 Mr 29 '43
 Training program. Iron Age 150:50, 52 D 31 '42

GENERAL tire and rubber company

- Buys network. Comm & Fin Chr 156:2223 D 21 '42
 Transfer of network. Comm & Fin Chr 157:132 Ja 11 '43

GENERATORS, Electric. See Electric generators**GENERATORS, Radio. See Radio generators****GENETICS**

- Genetics in the U.S.S.R. S. Gershenson. Science 96:509 D 4 '42
See also
 Heredity of disease
 Plant breeding
 Sex

GENEVA stop

- Clutch operates with geneva mechanism; patent assigned to International business machines corp. diags Machine Design 15:194+ Ag '43

- Designed for varying requirements; machine for removing cutting or rust-preventive oils and metal chips from shells. W. Nekola. il Machine Design 15:118 Ap '43

- Mechanical movements and their design; geneva intermittent motion. F. Grover. diags Inst Mech Eng J & Proc 147:Proc 203-4 O '42

- Velocity and acceleration of geneva mechanisms. J. H. Billings. diags Machine Design 15:157-8 Ag '43

GENOA**Harbor**

- Air force targets; Port of Genoa. il plan Engineer 174:434-7 N 27 '42

GENTIOTRIOTOL

- Sorbityl glycosides and 2,3,4,5,6-O-penta-methyl sorbitol. M. L. Wolfson and T. S. Gardner. bibliog Am Chem Soc J 65:750-2 My '43

GEOCHEMISTRY

- Causes of variations in radioactivity data. N. B. Keevil and others. pl Am J Sci 241:345-65 Je '43

- Chemistry of lake sediments from Indian Tibet. G. E. Hutchinson, A. Wollack and J. K. Setlow. bibliog pl Am J Sci 241:533-42 S '43

- Geochemistry of the atmosphere and the constitution of the terrestrial planets. R. Wildt. bibliog Rs Mod Phys 14:151-9 Ap-Jl '42

- Geophysics, geochemistry, and the practical oil man. L. W. Blau. Min & Met 24:396-7 S '43

- Radioactivity and geochemical well logging. L. C. Uren. bibliog Pet Eng 14:50+ Ja '43

- Role of microorganisms in the transformation of organic material into petroleum. bibliog Am Pet Inst Proc 23(4):123-6 '42

See also

- | | |
|------------|----------------|
| Geology | Rocks, Igneous |
| Geophysics | Sea water |
| Mineralogy | Soil analysis |
| Rocks | Soils |

GEODESY

- Interior of the earth viewed in relation to earthquake causes; what geodesy can tell us about immediate and ultimate causes of earthquake. N. H. Heck. bibliog il diags J Ap Phys 14:104-14; Discussion. M. K. Hubbert. 115 Mr '43

See also

- Gravity
 Surveying

GEODYNAMICS

- Recrystallization and flowage in Appalachian quartzite. R. E. Fellows. bibliog fold map Geol Soc Bul 54:1399-1431, pl 1-12 S '43

See also

- Earthquakes

GEOGRAPHERS*See also*

- Platt, Elizabeth
 Towar

GEOGRAPHY*See also*

- Continents
 Physical geography

GEOGRAPHY, Economic

- Geography of the southeast tropics. F. M. Earle. Ann Am Acad 226:1-8 Mr '43

- New geography of American business. W. H. Hillier. map Barron's 23:3 My 31; 8+ Je 7; 4 Je 28; 6+ Jl 19; 9 Ag 23; 7 S 6; 7 S 27 '43

GEOGRAPHY, Military. See Military geography**GEOGRAPHY, Physical. See Physical geography****GEOLOGICAL maps**

- History of the development of geologic maps. H. A. Ireland. Geol Soc Bul 54:1227-80 bibliog (p 1272-80) S '43

- Maps of the U.S. Geological survey. Science 98:sup10 O 1 '43

GEOLOGICAL research*See also*

- Geological surveys

GEOLOGICAL societies

- Proposed geological union. F. L. Aurin. Science 97:280-1 Mr 26 '43

GEOLOGICAL society of America

- Proceedings volume for 1942. Geol Soc Proc 1942:1-296, pl 1-12 Ap '43

GEOLOGICAL surveys

- War rôle of a geological survey. A. Bevan. Science 97:478-80 My 28 '43

See also

- Geological maps

GEOLOGICAL time

- Distribution of helium and radioactivity in rocks; helium age investigations of diabase and granodiorites from Yellowknife, Northwest Territories, Canada. N. B. Keevil, A. W. Jolliffe and E. S. Larsen. map Am J Sci 240:831-46 D '42

GEOLOGICAL time—Continued

Distribution of helium and radioactivity in rocks; rocks and associated minerals from Quebec, Ontario, Manitoba, New Jersey, New England, New Brunswick, Newfoundland, Tanganyika, Finland, and Russia. N. E. Keevil. *Am J Sci* 241:277-306 My '43

Helium age measurement; preliminary magnetite index. P. M. Hurley and C. Goodman. *bibliog Geol Soc Bul* 54:306-23 Mr '43
Possible age of allanite from Whiteface mountain, Essex county, New York. J. P. Marble. *Am J Sci* 241:32-42, pl 1-3 Ja '43

See also

Correlation (geology)

GEOLOGISTS

Geologists in war service. K. Bryan. *Science* 98:300 O 1 '43

Personnel problems in geology. *Science* 98:402 N 5 '43

Rhyming letters for victory. K. C. Heald. *Am Assn Pet Geologists Bul* 26:1838-42 D '42

Work of geologists on water supplies for war purposes. O. E. Meinzer. *Econ Geol* 38:323-4 Je '43

See also

Adams, Frank Dawson

Schuchert, Charles

GEOLOGISTS, Petroleum

Petroleum geologist in the war. F. L. Aurin. *Am Assn Pet Geologists Bul* 27:929-37 Jl '43; Excerpt. *Oil & Gas J* 41:37+ Ap 8 '43

Directories

American association of petroleum geologists; membership list. *Am Assn Pet Geologists Bul* 27:323-402 Mr '43

GEOLOGY

Abstracts of Section E, American association for the advancement of science, December meeting at New York (canceled). *Geol Soc Bul* 53:1845-52 D '42

Abstracts of the Geological society of America, December meeting at Ottawa (canceled); Cordilleran section meeting at California Institute of technology in April. *Geol Soc Bul* 53:1795-1825 pt 2 D '42

Deformation of rock strata by explosions. L. L. Nettleton. *Science* 96:515 D 4 '42; Discussion. J. D. Boon. 97:42-3 Ja 8 '43

Geology and biology of North Atlantic deep-sea cores between Newfoundland and Ireland; mollusca; echinodermata; miscellaneous fossils and significance of faunal distribution. H. A. Rehder; A. H. Clark; L. G. Henbest. *U S Geol S Professional Pa* 196-D:107-33, pl 20-3; pa 30c Supt. of doc. '42

Geology and biology of North Atlantic deep-sea cores between Newfoundland and Ireland; organic matter content. P. D. Trask and others. *U S Geol S Professional Pa* 196-E:135-49, pl 1-2; pa 20c Supt. of doc. '42

Geology and biology of North Atlantic deep-sea cores between Newfoundland and Ireland; selenium content and chemical analyses. G. Edgington and H. G. Byers. *U S Geol S Professional Pa* 196-F:151-5, pl 1-2; pa 15c Supt. of doc. '42

Mining geology, 1942. C. H. Behre, jr. *Eng & Min J* 144:94-5 F '43

Packing in ionic minerals; geologic aspects of ion packing. *diag Geol Soc Bul* 54:1353-74 S '43

See also

Asbestos

Asphalt

Conglomerate

Correlation (geology)

Dip and strike, Determination of

Drift

Earth

Earthquakes

Erosion

Eskers

Faults (geology)

Folds (geology)

Geochemistry

Geological surveys

Geophysics

Glacial geology

Glaciers

Gypsum

Landslides

Limestone

Metamorphism

Mines and mineral resources

Moraines

Ore deposits

Paleobotany

Paleoclimatology

Paleontology

Peat

Petroleum—Geology

Phosphate rock

Physical geography

Quarries and quarrying

Rocks

Rocks, Igneous

Salt domes

Sand

Sedimentation and

deposition

Shale

Soils

Volcanoes

Water, Underground

Bibliography

Bibliography of North American geology for 1940 and 1941. E. M. Thom. *U S Geol S Bul* 938:1-479; pa 50c Supt. of doc. '42

Terminology

Some common geological terms for engineers. D. G. Runner. *Roads & Sts* 85:51-2+ My '43

Textbooks

Geology texts for Latin America. H. E. Stocking. *Science* 98:198-9 Ag 27 '43

Alaska

Geology and ore deposits of the Chichagof mining district. J. C. Reed and R. R. Coats. *pl diags maps U S Geol S Bul* 929:1-148, pl 1-33 [13 pls in separate pocket]; pa \$3.25 Supt. of doc. '41

Geology of the Portage Pass area, Alaska. F. F. Barnes. *U S Geol S Bul* 926-D:211-35, pl 17-21; pa 20c Supt. of doc. '43

Alberta

Keewatin end moraines in Alberta, Canada. J. H. Bretz. *bibliog fold map Geol Soc Bul* 54:31-52, pl 1-2 Ja '43

Stratigraphy and structure of Moose Mountain area. D. H. MacNeill. *maps Am Assn Pet Geologists Bul* 27:38-50, pl 1 Ja '43

Appalachian region

Recrystallization and flowage in Appalachian quartzite. R. E. Fellows. *bibliog fold map Geol Soc Bul* 54:1399-1431, pl 1-12 S '43

Arizona

Some stratigraphic principles illustrated by paleozoic deposits of northern Arizona. E. D. McKee. *diags Am J Sci* 241:101-8 F '43

Arkansas

Quartz veins in the Ouachita mountains of Arkansas and Oklahoma (their relations to structure, metamorphism, and metaliferous deposits). H. D. Miser. *bibliog maps Econ Geol* 38:91-118 Mr '43

Australia

Devonian of Western Australia. C. Teichert. *map Am J Sci* 241:69-94, 167-84 *bibliog* (p181-4) F-Mr '43

Brazil

Layered or banded chromite at Campo Formoso, Bahia. W. D. Johnston, jr. and H. Capper. *A. de Souza. bibliog 11 maps Econ Geol* 38:287-97 Je '43

California

Basin and Range province in Utah, Nevada, and California. T. B. Nolan. *maps U S Geol S Professional Pa* 197-D:141-96, pl 40-1 *bibliog* (264 titles, p 183-93); pa 15c Supt. of doc. '43

Cretaceous; east side Sacramento valley, Shasta and Butte counties. W. P. Popenoe. *diag map Am Assn Pet Geologists Bul* 27:306-12 Mr '43

Earthquakes and structure in southern California. B. Gutenberg. *bibliog diags maps Geol Soc Bul* 54:499-526, pl 1 Ap '43

Eocene stratigraphy of Chico Martinez Creek area; Kern county. J. F. Curran. *maps Am Assn Pet Geologists Bul* 27:1361-86 *bibliog* (p1385-6) O '43

Franciscan-Knoxville problem. N. L. Taliaferro. *bibliog diags maps Am Assn Pet Geologists Bul* 27:109-219, pl 1-7 F '43

Geology of Northwest Wilmington and Torrance fields, California. W. R. Cabene and A. L. Hunter. *map Oil & Gas J* 41:70, 72, 74 Ja 14 '43

Introduction to cretaceous of California. O. P. Jenkins. *maps Am Assn Pet Geologists Bul* 27:249-61 Mr '43

Petroleum geology of the Del Valle field, Los Angeles county. L. P. Stockman. *diags Oil & Gas J* 41:96-7 Ap 29 '43

GEOLOGY—California—Continued

Stratigraphy and paleontology of Santa Maria district. W. P. Woodring, M. N. Bramlette and K. E. Lohman. bibliog diags map Am Assn Pet Geologists Bul 27:1335-60 O '43

Tertiary sediments northeast of Morgan Hill. C. M. Gilbert. maps diag Am Assn Pet Geologists Bul 27:640-6 My '43

Upper cretaceous stratigraphy of west side of Sacramento valley south of Willows. Glenn county. J. M. Kirby. diags maps Am Assn Pet Geologists Bul 27:279-305 Mr '43

See also
Water, Underground
—California

China

Weathering of igneous rocks near Hong Kong. R. W. Brock. Geol Soc Bul 54:717-38 Je '43

Colombia

Phosphatization at Malpelo Island. D. McConnell. bibliog Geol Soc Bul 54:707-15, pl 1-2 My '43

Pre-cretaceous of Colombia. D. Trumpy. bibliog diags pl map Geol Soc Bul 54:1281-1304 S '43

Colorado

Cretaceous-tertiary boundary in the Denver basin. Colorado. R. W. Brown. map Geol Soc Bul 54:65-86, pl 1-2 bibliog(p84-6) Ja '43

Stratigraphy, structure, and mineralization in the Beaver-Tarryall area, Park county, Colorado. Q. D. Singewald. maps U S Geol S Bul 928-A:1-44, pl 1-5; pa 15c Supt. of doc. '42

Connecticut

Origin of sulphides in the nickel deposits of Mount Prospect. E. N. Cameron. diags Geol Soc Bul 54:651-86, pl 1-7 bibliog(p679-80) My '43

Great Plains region

Big Snowy group; lithology and correlation in the Northern Great Plains. E. S. Perry and L. L. Sloss. bibliog il diags maps Am Assn Pet Geologists Bul 27:1287-1304 O '43

Gulf Coast region

Subsurface stratigraphy and lithology of Tuscaloosa formation in southeastern Gulf Coastal Plain. A. C. Munyan. bibliog diags map Am Assn Pet Geologists Bul 27:596-607 My '43

See also
Geology—Texas

Hawaiian Islands

Quantitative study of isobaric equilibrium and gravity anomalies in the Hawaiian Islands. R. Gunn. Franklin Inst J 236:373-90 O '43

Idaho

Structure and stratigraphy of part of the Bannock range. J. C. Ludlum. bibliog diags maps Geol Soc Bul 54:973-86 Ji '43

Thaynes formation, Bear Lake valley. B. Kummel, jr. bibliog diags map Am J Sci 241:316-32 My '43

Illinois basin

Geologic background of oil production in the Illinois basin. B. F. Hake. Oil & Gas J 41: 82, 84, 86 Mr 11 '43

Kansas

Additional studies of the Sanborn formation, pleistocene, in northwestern Kansas. A. B. Leonard and J. C. Frye. bibliog map Am J Sci 241:453-62, pl 1 Ji '43

Upper Des Moinesian and lower Missourian rocks in northeastern Oklahoma and southeastern Kansas. M. C. Oakes and J. M. Jewett. bibliog diags Am Assn Pet Geologists Bul 27:632-40 My '43

Louisiana

Anse la Butte dome, St Martin Parish. F. W. Bates and J. B. Wharton, jr. bibliog diags maps Am Assn Pet Geologists Bul 27:1123-56 Ag '43

Subsurface study of Jennings field, Acadia Parish. C. B. Roach. diags maps Am Assn Pet Geologists Bul 27:1102-22 Ag '43

Massachusetts

Nickel deposit near Dracut, Massachusetts. W. H. Dennen. bibliog il maps Econ Geol 38:25-55 Ja '43

Mexico

Evidence for upper Jurassic landmass in eastern Mexico. R. W. Inlay. bibliog map Am Assn Pet Geologists Bul 27:524-9 Ap '43

Geology and mineralization of the San Antonio mine, Santa Eulalia district, Chihuahua. W. P. Hewitt. bibliog maps Geol Soc Bul 54:173-204, pl 1-2 F '43

Michigan

Traverse rocks of Thunder Bay region. A. S. Warthin, jr. and G. A. Cooper. bibliog 2pl maps Am Assn Pet Geologists Bul 27:571-95 My '43

Minnesota

Metamorphism of extrusives by basic intrusives in the Keweenaw of Minnesota. G. M. Schwartz. bibliog Geol Soc Bul 54: 1211-25, pl 1-2 Ag '43

Montana

Stratigraphy and structure at Three Forks. G. W. Berry. diags map Geol Soc Bul 54: 1-29, pl 1 bibliog(p27-9) Ja '43

Stratigraphy and structure of southwest Saypo quadrangle, Montana. C. Deiss. bibliog diags maps Geol Soc Bul 54:205-62, pl 1-5 F '43

Structure of central part of Sawtooth range. C. Deiss. diags maps Geol Soc Bul 54:1123-67, pl 1-9 bibliog(p1155-7) Ag '43

Unusual currents in Glacial Lake Missoula. J. T. Pardee. bibliog maps Geol Soc Bul 53:1569-99, pl 1-8 N '42

Wallowa batholith. K. B. Krauskopf. maps Am J Sci 241:607-28 O '43

Nevada

Basin and Range province in Utah, Nevada, and California. T. B. Nolan. maps U S Geol S Professional Pa 197-D:141-96, pl 40-1 bibliog(264 titles, p188-93); pa 15c Supt. of doc. '43

Reconnaissance survey of the Roberts mountains, Nevada. C. W. Merriam and C. A. Anderson. diags maps Geol Soc Bul 53:1675-1727 bibliog(p 1725-7), pl 1-4 D '42

Wild Horse quicksilver district, Lander county. C. H. Dane and C. P. Ross. maps U S Geol S Bul 931-K:259-78, pl 45-7; pa 25c Supt. of doc. '42

New England

Geologic interpretation of gravity anomalies in the southern New England-Hudson Valley region. C. R. Longwell. diags map Geol Soc Bul 54:555-90, pl 1-3 bibliog(p590) Ap '43

New Guinea

Present knowledge of the tertiary sequence in Papua and the mandated Territory of New Guinea, by I. Crespin. Review, by E. W. Collins. Am Assn Pet Geologists Bul 27:1266-8 bibliog(p 1267-8) S '43

New Mexico

Cerro Colorado, an isolated non-basaltic volcano in central New Mexico. H. E. Wright. diags maps Am J Sci 241:43-56, pl 1 Ja '43

Geology and ore deposits of the Magdalena mining district. G. F. Loughlin and A. H. Koschmann. bibliog diags fold maps U S Geol S Professional Pa 200:1-168, pl 1-38; pa 2 Supt. of doc. '42

Geology of the Cimarron range. J. F. Smith, jr. and L. L. Ray. bibliog diags map Geol Soc Bul 54:891-924, pl 1-6 Ji '43

New York (state)

Black River stratigraphy and faunas. F. P. Young, jr. fold maps Am J Sci 241:141-66, pl 1-2, 209-40 Mr-Apr '43

Geologic interpretation of gravity anomalies in the southern New England-Hudson Valley region. C. R. Longwell. diags map Geol Soc Bul 54:555-90, pl 1-3 bibliog(p590) Ap '43

GEOLOGY—New York (state)—Continued

Mohawkian series on West Canada creek, New York. G. M. Kay. biblog il map Am J Sci 241:597-606 O '43

Possible age of allanite from Whiteface mountain, Essex county, New York. J. P. Marble. Am J Sci 241:32-42, pl 1-3 Ja '43

Newfoundland

Late paleozoic faulting in western Newfoundland. F. Betz, Jr. biblog diag maps Geol Soc Bul 54:687-706 My '43

North America

Transcontinental gravitational and magnetic profile of North America and its relation to geologic structure. G. P. Woollard. biblog diag Geol Soc Bul 54:747-89, pl 1-9 Je '43

Northwest Territories, Canada

Distribution of helium and radioactivity in rocks; helium age investigations of diabase and granodiorites from Yellowknife. N. B. Keevil, A. W. Jolliffe and E. S. Larsen. map Am J Sci 240:831-46 D '42

Structure and metamorphism of early Precambrian rocks between Gordon and Great Slave lakes, Northwest Territories. J. F. Henderson. biblog maps Am J Sci 241:430-46 Jl '43

Nova Scotia

Goldfields of Nova Scotia. T. A. Rickard. biblog il diag Can Min J 63:713-18 N '42

Oklahoma

Subsurface geology and oil and gas resources of Osage county, Oklahoma; Burbank and South Burbank oil fields, townships 26 and 27 north, range 5 east, and townships 25 to 27 north, range 6 east. N. W. Bass, H. B. Goodrich and W. R. Dillard. biblog fold maps in pocket U S Geol S Bul 900-J:321-42; pa 60c Supt. of doc. '42

Subsurface geology and oil and gas resources of Osage county; summary of subsurface geology with special reference to oil and gas. N. W. Bass. biblog U S Geol S Bul 900-K:343-93, pl 13-20 [7 in pocket] pa 45c Supt. of doc. '42

Upper Desmoinesian and lower Missourian rocks in northeastern Oklahoma and southeastern Kansas. M. C. Oakes and J. M. Jewett. biblog diag maps Am Assn Pet Geologists Bul 27:632-40 My '43

Ontario

Black River stratigraphy and faunas. F. P. Young, Jr. fold maps Am J Sci 241:141-66, pl 1-2, 209-40 Mr-Apr '43

Engineering study of glacial drift for an earth dam, near Fergus. R. F. Legget. il plan map Econ Geol 37:531-56 N '42

Geology of the Garnet-Cunningham area. V. B. Meen. Can Min J 63:723-4 N '42

Nephelinized paragneisses of the Bancroft region, Ontario. W. K. Gummer and S. V. Burr. Science 97:286-7 Mr 26 '43

Older rocks of Sudbury district. H. C. Cooke. diag maps Am J Sci 241:553-78 S '43

Oregon

Franciscan-Knoxville problem. N. L. Tallaferró. biblog diag maps Am Assn Pet Geologists Bul 27:109-219, pl 1-7 F '43

Late paleozoic formations of central Oregon. C. W. Merriam and S. A. Berthlaume. map Geol Soc Bul 54:145-71, pl 1 biblog(p167-8) F '43

Paragenesis of some gold and copper ores of southwestern Oregon. W. R. Lowell. biblog il map Econ Geol 37:557-95 N '42

Pennsylvania

Chemical lime in central Pennsylvania. G. M. Kay. biblog il diag maps Econ Geol 38:188-203 My '43

Ordovician clastic sedimentary rocks in Pennsylvania. B. Willard. diag maps Geol Soc Bul 54:1067-1121, pl 1-11 biblog(p1118-21) Ag '43

Reverse faulting north of Harrisburg. E. Cloos and C. H. Broedel. diag map Geol Soc Bul 54:1375-97 biblog (p 1396-7), pl 1-3 S '43

Quebec

Paragenesis of the ore of the Normetal mine, Abitibi county. H. M. Putman. il Econ Geol 38:313-22 Je '43

Rocky Mountain region

Structural conditions of oil and gas accumulation in Rocky Mountain region. C. E. Dobbin. biblog diag maps Am Assn Pet Geologists Bul 27:417-78 Ap '43

South America

Stratigraphy of northern South America, Trinidad, and Barbados, by H. H. Renz; review by H. G. Schenck. Am Assn Pet Geologists Bul 27:92-5 Ja '43

Bibliography

Bibliography of economic geology of South America. J. T. Singewald, Jr. Geol Soc Special Pa no 50:1-159 Ag '43

South Dakota

Two deep water wells near Rapid City. J. P. Gries. Am Assn Pet Geologists Bul 27:646-50 My '43

Tennessee

Structure of central Tennessee. C. W. Wilson, Jr. and K. E. Born. biblog diag maps Am Assn Pet Geologists Bul 27:1039-59 Ag '43

Texas

Geology of the northern Quitman mountain, Trans-Pecos. R. M. Huffington. diag map Geol Soc Bul 54:987-1047, pl 1-3 biblog(p1046-7) Jl '43

Geology of Wason field, Yoakum and Gaines counties. W. T. Schneider. diag maps Am Assn Pet Geologists Bul 27:479-523 Ap '43

Ground water and relation of geology to its occurrence in Houston district. N. A. Rose. diag maps Am Assn Pet Geologists Bul 27:1081-1101 Ag '43

Origin of siliceous Dockum conglomerates. R. Roth. biblog il maps Am Assn Pet Geologists Bul 27:622-31 My '43

Problem of pre-Trinity deposits in south Texas. F. M. Getzenadner. maps Am Assn Pet Geologists Bul 27:1228-44 S '43

Stratigraphy and age of Seguin formation of central Texas. M. W. Beckman and F. E. Turner. biblog diag maps Am Assn Pet Geologists Bul 27:608-21 My '43

West Texas barred basin. R. I. Roth. biblog diag map Geol Soc Bul 53:1659-74, pl 1-2 N '42

See also

Petroleum—Texas

United States

Proceedings volume of the Geological society of America for 1942. Geol Soc Proc 1942:1-296, pl 1-12 Ap '43

Utah

Basin and Range province in Utah, Nevada, and California. T. B. Nolan. maps U S Geol S Professional Pa 197-D:141-96, pl 40-1 biblog(284 titles, p189-93); pa 15c Supt. of doc. '43

Carboniferous formations of the Uinta and northern Wasatch mountains. J. S. Williams. diag map Geol Soc Bul 54:591-624, pl 1-3 biblog(p623-4) Ap '43

Virginia

Stratigraphy of the lower middle Ordovician of Tazewell county. B. N. Cooper and C. E. Prouty. biblog map Geol Soc Bul 54:819-86, pl 1-5 Je '43

Washington (state)

Discovery in eastern Washington of a new lobe of the pleistocene continental glacier. W. H. Hobbs. maps Science 98:227-30 S 10 '43

Geology and ore deposits of the Metaline quadrangle, Washington. C. F. Park, Jr. and R. S. Cannon, Jr. biblog fold maps U S Geol S Professional Pa 202:1-81, pl 1-34; pa \$1.50 Supt. of doc. '43

West Virginia

Regional metamorphism of coal in southeastern West Virginia. E. T. Heck. maps Am Assn Pet Geologists Bul 27:1194-1227 biblog (p 1223-5) S '43

GEOLOGY—Continued

Wisconsin

- Correlation of the glacial border drift of north central Wisconsin. F. D. Hole. bibliog diags maps Am J Sci 241:498-516, pl 1 Ag '43
- Pleistocene of part of northeastern Wisconsin. F. T. Thwaites. diags maps Geol Soc Bul 54:87-144, pl 1-10 bibliog(p142-4) Ja '43

Yukon

- Geology of the Wolf Creek area, St Elias range, Yukon territory, Canada. R. P. Sharp. Geol Soc Bul 54:625-49, pl 1-5 bibliog(p647-9) My '43

GEOLOGY, Military

- Application of geology to the principles of war. C. E. Erdmann. Geol Soc Bul 54:1169-94 bibliog(p191-4) Ag '43
- Geology and war. P. H. Price and H. P. Woodward. Am Assn Pet Geologists Bul 26:1832-8 D '42
- Military geology. J. D. Bateman. bibliog Can Min J 64:426-30 Jl '43

Bibliography

- Bibliography of military geology and geography; first supplement. M. Siegrist; E. T. Platt, comps. 11p Geological soc. of America, 419 W. 117th st, New York '43

GEOLOGY, Stratigraphic

- Geology of the Wolf Creek area, St Elias range, Yukon territory, Canada. R. P. Sharp. Geol Soc Bul 54:625-49, pl 1-5 bibliog(p647-9) My '43
- New technique for measurement of stratigraphic units. B. Kummel, jr. diags Am Assn Pet Geologists Bul 27:220-2 F '43
- Some stratigraphic principles illustrated by paleozoic deposits of northern Arizona. E. D. McKee. diags Am J Sci 241:101-8 F '43
- Stratigraphic type oil fields and proposed new classification of reservoir traps. C. W. Sanders. diags Am Assn Pet Geologists Bul 27:529-50 Ap '43
- Stratigraphical analysis and environmental reconstruction. T. G. Payne. flow diag bibliog diags map Am Assn Pet Geologists Bul 26:1697-1770, pl 1 N '42
- Stratigraphy and paleontology of Santa Maria district, California. W. P. Woodring, M. N. Bramlette and K. S. Lohman. bibliog diags map Am Assn Pet Geologists Bul 27:1335-60 O '43
- Stratigraphy and structure at Three Forks, Montana. G. W. Berry. diags map Geol Soc Bul 54:1-29, pl 1 bibliog(p27-9) Ja '43
- Stratigraphy and structure of Moose Mountain area, Alberta. D. J. MacNeill. maps Am Assn Pet Geologists Bul 27:38-50, pl 1 Ja '43
- Stratigraphy and structure of southwest Saypo quadrangle, Montana. C. Deiss. bibliog diags maps Geol Soc Bul 54:205-62, pl 1-5 P '43
- Stratigraphy of northern South America, Trinidad, and Barbados, by H. H. Renz; review by H. G. Schenck. Am Assn Pet Geologists Bul 27:92-5 Ja '43
- Structure and stratigraphy of part of the Bannock range, Idaho. J. C. Ludlum. bibliog diags maps Geol Soc Bul 54:373-86 Jl '43

See also

- Correlation (geology) Paleobotany
Glacial geology Paleontology

Archean

- Archean sedimentation. F. J. Pettijohn. Geol Soc Bul 54:925-72, pl 1-12 bibliog(p969-72) Jl '43

Carboniferous

- Carboniferous formations of the Uinta and northern Wasatch mountains, Utah. J. S. Williams. diag map Geol Soc Bul 54:591-624, pl 1-3 bibliog(p623-4) Ap '43
- Upper Desmoinesian and lower Missourian rocks in northeastern Oklahoma and southeastern Kansas. M. C. Oakes and J. M. Jewett. bibliog diag Am Assn Pet Geologists Bul 27:632-40 My '43

Cretaceous

- Cretaceous; east side Sacramento valley, Shasta and Butte counties, California. W. P. Popenoe. diag map Am Assn Pet Geologists Bul 27:306-12 Mr '43

- Cretaceous-tertiary boundary in the Denver basin, Colorado. R. W. Brown. map Geol Soc Bul 54:65-86, pl 1-2 bibliog(p84-6) Ja '43
- Introduction to cretaceous of California. O. P. Jenkins. maps Am Assn Pet Geologists Bul 27:249-61 Mr '43
- Standard of cretaceous system. S. W. Muller and H. G. Schenck. 11 map Am Assn Pet Geologists Bul 27:262-78 bibliog(p277-8) Mr '43
- Subsurface stratigraphy and lithology of Tuscaloosa formation in southeastern Gulf Coastal Plain. A. C. Munyan. bibliog diags map Am Assn Pet Geologists Bul 27:596-607 My '43
- Upper cretaceous stratigraphy of west side of Sacramento valley south of Willows, Glenn county, California. J. M. Kirby. diags maps Am Assn Pet Geologists Bul 27:279-305 Mr '43

Devonian

- Correlation of the Devonian sedimentary formations of North America, with correlation chart (folding). G. A. Cooper and others. Geol Soc Bul 53:1729-93 bibliog(p 1789-93) D '42
- Devonian of Western Australia. C. Teichert. map Am J Sci 241:69-94, 167-84 bibliog(p181-4) F-Mr '43
- Traverse rocks of Thunder Bay region, Michigan. A. S. Warthin, jr. and G. A. Cooper. bibliog 2pl maps Am Assn Pet Geologists Bul 27:571-95 My '43

Eocene

- Eocene stratigraphy in western Santa Ynez mountains, Santa Barbara county. F. R. Kelley. bibliog diag maps Am Assn Pet Geologists Bul 27:1-19, pl 1 Ja '43
- Eocene stratigraphy of Chico Martinez Creek area, Kern county, California. J. F. Curran. maps Am Assn Pet Geologists Bul 27:1361-86 bibliog(p1385-6) O '43
- Stratigraphy and age of Seguin formation of central Texas. M. W. Beckman and F. E. Turner. bibliog diags map Am Assn Pet Geologists Bul 27:608-21 My '43

Huronian

- Older rocks of Sudbury district, Ontario. H. C. Cooke. diags maps Am J Sci 241:553-78 S '43

Jurassic

- Evidence for upper Jurassic landmass in eastern Mexico. R. W. Imlay. bibliog map Am Assn Pet Geologists Bul 27:524-9 Ap '43
- Franciscan-Knoxville problem. N. L. Taliaferro. bibliog diags maps Am Assn Pet Geologists Bul 27:109-219, pl 1-7 F '43
- Problem of pre-Trinity deposits in south Texas. F. M. Getzendaner. maps Am Assn Pet Geologists Bul 27:1228-44 S '43

Ordovician

- Black River stratigraphy and faunas. F. P. Young, jr. fold maps Am J Sci 241:141-66, pl 1-2, 209-40 Mr-Apr '43
- Chemical lime in central Pennsylvania. G. M. Kay. bibliog 11 diags maps Econ Geol 38:188-203 My '43
- Mohawkian series on West Canada creek, New York. G. M. Kay. bibliog 11 map Am J Sci 241:597-606 O '43
- Ordovician clastic sedimentary rocks in Pennsylvania. B. Willard. diags maps Geol Soc Bul 54:1067-1121, pl 1-11 bibliog(p1118-21) Ag '43
- Stratigraphy of the lower middle Ordovician of Tazewell county, Virginia. E. N. Cooper and C. E. Prouty. bibliog map Geol Soc Bul 54:819-86, pl 1-5 Je '43

Paleozoic

- Development of the northern Allegheny synclinorium and adjoining regions. G. M. Kay. maps Geol Soc Bul 53:1601-57, pl 1-3 bibliog(p1651-7) N '42
- Late paleozoic faulting in western Newfoundland. F. Betz, jr. bibliog diags maps Geol Soc Bul 54:687-706 My '43
- Late paleozoic formations of central Oregon. C. W. Merriam and S. A. Berthlaume. map Geol Soc Bul 54:145-71, pl 1 bibliog(p167-8) F '43

GEOLOGY, Stratigraphic—Paleozoic—Cont.

Reconnaissance survey of the Roberts mountains, Nevada. C. W. Merriam and C. A. Anderson. diag maps Geol Soc Bul 53:1675-1727 bibliog (p 1725-7), pl 1-4 D '42
 Some stratigraphic principles illustrated by paleozoic deposits of northern Arizona. E. D. McKee. diags Am J Sci 241:101-8 F '43
 Structure of central Tennessee. C. W. Wilson, Jr. and K. E. Born. bibliog diag maps Am Assn Pet Geologists Bul 27:1039-59 Ag '43

Permian

Problem of pre-Trinity deposits in south Texas. F. M. Getzendaner. maps Am Assn Pet Geologists Bul 27:1228-44 S '43
 West Texas barred basin. R. I. Roth. bibliog diag map Geol Soc Bul 53:1659-74, pl 1-2 N '42

Pleistocene

Additional studies of the Sanborn formation, pleistocene, in northwestern Kansas. A. B. Leonard and J. C. Frye. bibliog map Am J Sci 241:453-62, pl 1 J '43
 Pleistocene of part of northeastern Wisconsin. F. T. Thwaites. diags maps Geol Soc Bul 54:87-144, pl 1-10 bibliog (p142-4) Ja '43

Pre-Cambrian

Structure and metamorphism of early Precambrian rocks between Gordon and Great Slave lakes, Northwest Territories. J. F. Henderson. bibliog maps Am J Sci 241:430-46 J '43

See also

Geology, Stratigraphic—Archean

Tertiary

Cretaceous-tertiary boundary in the Denver basin, Colorado. R. W. Brown. map Geol Soc Bul 54:65-86, pl 1-2 bibliog (p84-6) Ja '43
 Tertiary sediments northeast of Morgan Hill, California. C. M. Gilbert. maps diag Am Assn Pet Geologists Bul 27:640-6 My '43

Triassic

Thaynes formation, Bear Lake valley, Idaho. B. Kummel, Jr. bibliog diags map Am J Sci 241:316-32 My '43

GEOMAGNETISM. See Magnetism, Terrestrial GEOMETRICAL drawing

See also

Circles Graphic methods
 Design Mechanical drawing

GEOMETRICAL optics. See Optics, Geometrical**GEOMETRY**

See also

Topology

GEOMORPHOLOGY. See Physical geography**GEOPHYSICAL union, American. See American geophysical union****GEOPHYSICS**

Causes of variations in radioactivity data. N. B. Keevil and others. pl Am J Sci 241:345-65 Je '43

Geophysics, geochemistry, and the practical oil man. L. W. Blau. Min & Met 24:396-7 S '43

Geophysics in war. C. A. Helland. II diags Colorado School of Mines (Golden) Quarterly 37:1-85 Ja '42 (pa \$1)

Interior of the earth viewed in relation to earthquake causes; tectonophysics or the physics of earth deformation. J. B. Macelwane. bibliog J Ap Phys 14:131-3 Mr '43

New developments in ground water exploration; geological and geophysical methods. Illinois. C. A. Bays. diags Am Water Works Assn J 35:911-20 J '43

Oil exploration methods adopted for war purposes. Sci Am 168:33-4 Ja '43

Porosity limit with depth. H. W. Bell. Oil & Gas J 42:66; Discussion. W. V. Howard. 66-7 J '43

Recent experimental and geophysical evidence of mechanics of salt-dome formation. L. L. Nettleton. bibliog II diags Am Assn Pet Geologists Bul 27:51-63 Ja '43

See also

Auroras Earth pressure

Earthquakes
 Geodynamics

Gravity
 Magnetism, Terrestrial
 Meteorology

also American geophysical union

Prospecting—Geophysical methods
 Rocks, Igneous
 Sedimentation and deposition

Bibliography

Geophysical abstracts 107, October-December 1941. W. Ayvazoglou, comp. U S Geol S Bul 932-D:123-66; pa 10c Supt. of doc. '42

Geophysical abstracts 108, January-March 1942. W. Ayvazoglou, comp. U S Geol S Bul 933-A:1-38; pa 10c Supt. of doc. '42

Geophysical abstracts 109, April-June 1942. W. Ayvazoglou, comp. U S Geol S Bul 933-B:39-66; pa 10c Supt. of doc. '42

Geophysical abstracts 110, July-September 1942. W. Ayvazoglou, comp. U S Geol S Bul 933-C:67-98; pa 10c Supt. of doc. '43

Geophysical abstracts 111, October-December 1942. W. Ayvazoglou, comp. U S Geol S Bul 933-D:99-138; pa 10c Supt. of doc. '43

Geophysical abstracts 112, January-March 1943. W. Ayvazoglou, comp. U S Bur Mines Information Circ 7256:1-45 '43

Geophysical abstracts 113, April-June 1943. W. Ayvazoglou and V. Skitsky, comps. U S Bur Mines Information Circ 7257:1-53 '43

GEOPOLITICS

School for statesmen. H. Beukema. Fortune 27:108-9+ Ja '43

GEORGE, Harold Lee, 1893-
 Portrait. Air Transport 1:22 S '43

GEORGE-DEEN act. See Vocational education—Federal aid

GEORGIA

See also

Clay—Georgia
 Mines and mineral resources—Georgia

GEORGIA power and light company

Simplification proceedings. Comm & Fin Chr 157:728 F 22 '43

GEOSYNCLINES. See Synclines**GEOTECHNOLOGY (term)**

New general term for mineral industries studies. R. E. Dengler. Science 97:16 Ja 1 '43

GERANIAL. See Citral**GERANIUM oil**

From caravan to corner drug store; geranium oil from Algeria. E. M. Schwarztrauber. II (p16) For Comm W 10:15 F 27 '43

GERIATRICS. See Old age**GERMAN language****Study and teaching**

Foreign languages in a school of engineering. D. P. Krynine. J Eng Educ 33:681-6 My '43

GERMAN measles. See Rubella

GERMAN occupation of Europe. See Europe—German occupation; also names of occupied countries

GERMANITE

Gallium; the separation of gallium and germanium from alkaline extracts of germanite by electrolysis. D. J. Lloyd and W. Pugh. Chem Soc J p74-6 F '43

GERMANIUM

Gallium; the separation of gallium and germanium from alkaline extracts of germanite by electrolysis. D. J. Lloyd and W. Pugh. Chem Soc J p74-6 F '43

Isotopes

Cyclotron targets; preparation and radiochemical separations; arsenic and germanium. J. W. Irvine, Jr. bibliog II J Phys Chem 46:910-14 N '42

GERMANIUM tetrachloride

Preparation of germanium tetrachloride, GeCl₄. L. S. Foster, J. W. Drenan and A. F. Williston. Am Chem Soc J 64:3042 D '42

GERMANY

Relations with Europe; Germany: a specific problem. *Fortune* 27:supp 16-19. Ap '43

See also

Chemical industries— Labor and laboring
Germany classes—Germany
Cooperation—Ger- Retail trade—Ger-
many many
Electric plants (cen- Transportation—
tral stations)— Germany
Germany Trusts, Industrial—
Finance—Germany Germany
Food supply— Vital statistics—
Germany Germany
Insurance, Life— Wages—Germany
Germany World war, 1939—
Insurance, Social— Germany
Germany

Army

Curtailment of military psychology in Ger-
many. H. L. Ansbacher. *biblog Science* 98:
218 S 3 '43

Equipment

Captured enemy equipment; photographs of
German guns and army vehicles. *S A E J*
51:sup29-32 J1 '43

Boundaries

Germany's frontiers. *Economist* 145:33-4 J1 10
'43

Commercial policy

Germany's new trade war; collapse of Nazi
economic order may be hastened. P. Wohl.
Barron's 23:10 Ag 16 '43
Tariffs and trade controls. *For Comm W* 13:
19 O 16 '43

Total war in South America; struggle for
markets there still finds Germany a for-
midable foe. S. Ross. *Barron's* 23:3 J1 12;
7-8 J1 19 '43

Defenses

Festung Europa; Germany's interior lines
have become her long-stretched roads to
defeat. *Fortune* 28:109-11+ Ag '43

Diplomatic and consular service

German diplomacy, New Year's day changes.
Economist 144:41 Ja 9 '43

Economic conditions

German Europe in 1942. *Economist* 144:sup
14-15 Mr 13 '43

Germans resort increasingly to barter. *For*
Comm W 12:18 S 25 '43

Germany's little man. *Economist* 143:574-5
N 7 '42

Economic history

Home front leadership; excerpt from My war
memories. E. von Ludendorff. *Business*
Week p107 J1 31 '43

Economic policy

Axis economics. *Economist* 144:622 My 15
'43

Fundamental nature of Nazi economic sys-
tem; abstract. L. L. Lorwin. *For Comm*
W 9:15 D 19 '42

German capital in Europe; more facts about
Nazi economic penetration. *Chem Age*
(Lond) 43:130 Ja 23 '43

German cartels; their evolution under war
conditions. L. Domeratzky. *For Comm W*
11:9-11+ Je 19 '43

German economic war purpose holds world
chemical control. W. Alwyn-Schmidt. *Oil*
Paint & Drug Rep 143:7+ Mr 1 '43

German retail trade and handicrafts today.
H. K. Ladenburg. *For Comm W* 11:3-4+
Je 12 '43

Germany at war; economic attrition. *Econ-*
omist 145:241 Ag 21 '43

Germany's CMP; trade associations in charge
of allotments. *Business Week* p44+ My 15
'43

Nazi integration; Herrenvolk's economic puz-
zles. maps *Business Week* p68+ F 20 '43

Industries and resources

Aggressors minus N and H; disarmament of
our enemies by restrictions on nitrate and
hydrogenation plants. M. G. Harris. *Fortune*
28:58+ N '43

Bombing the Ruhr. *Economist* 144:784 Je 19
'43; Abstract. *Business Week* p50+ J1 24 '43

Germany at war; apotheosis of planning.

Economist 144:16 Ja 2 '43

What Hitler missed; German production com-
pared with United States and Great Brit-
ain. *Business Week* p111 Ag 14 '43

Winter in Germany; industrial pinch. *Econ-*
omist 143:693-4 D 5 '42

Navy

German navy. *Economist* 144:357 Mr 20 '43

Nazi movement

Economic character and true goals of the
Garrison state. F. Munk. *For Comm W* 12:
11 J1 31 '43

Lessons from Germany's failure. C. Bene-
dict. *Mag of Wall St* 72:501+ Ag 21 '43

Ten Nazi years. *Economist* 144:137-8 Ja 30 '43

GERMICIDES. See Disinfection and disinfect-
ants

GERMINATION

Growth of orchid seeds after dehydration
from the frozen state. R. D. Svihla and
E. Osterman. *Science* 98:23-4 J1 2 '43

GERONTOLOGY. See Old age

GEYER, Patrick

Gallery; standing Pat. A. Cole. *por Adv &*
Sell 36:54, 56 O '43

GIANNINI, Amadeo Peter, 1870-

Sketch. *Bankers M* 146:545-8 Je '43

GIBBS, Willard, medal.

Award to Dr Conrad Arnold Elvehjem. *Sci-*
ence 97:180 F 19 '43; Same abr. *Chem &*
Eng N 21:239 F 25 '43

GIEMSA stain. See Stains and staining (mi-
croscopy)

GIFT packages. See Package goods—Gift pack-
ages

GIFT tax

Annuity decision by U.S. tax court; those
used as added pay for services rendered not
gifts. *Nat Underw (Life ed)* 47:4 J1 23 '43

Coordination or integration? E. N. Gris-
wold's plan for coordination of our in-
come-tax structure with gift and estate
tax provisions. E. N. Cahn. *J Account* 75:

530-1 Je '43; Discussion. 76:256-7 S '43

Powers of appointment under the Revenue
act of 1942. J. H. Alexander. *J Account* 76:

14-18 J1 '43

State and federal taxation; year's develop-
ments affecting estates and trusts. W. L.
Nossaman. *Trusts & Estates* 77:228-36 S
'43

Tax correlation to the fore. *Trusts & Estates*
77:319-20 O '43

Taxes on powers of appointment. M. N.
Fisher. *Trusts & Estates* 75:483-7 N '42

Your new taxes; estate and gift tax pro-
visions altered. L. J. Freeman. *Barron's*
22:7+ D 7 '42

GIFTS

Holds gift-show-in-print via buyers' direc-
tory. *Ptr Ink* 204:28 S 3 '43

Service women's gift quiz. *Ptr Ink* 203:37 Ap
2 '43

See also

Charities	Colleges and univer-
Christmas gifts	sities—Gifts,
	logies, etc.
	Soldiers, Gifts for

GIFTS (in business)

When the corporation gives to charity. *Man-*
agement R 32:73-4 F '43

GIFTS (law)

Evidence sufficient to establish completed
gift of joint interest in bank account.
Banking Law J 60:902-8 O '43

Evidence to overcome presumption of gift of
joint account must be convincing. *Banking*
Law J 60:554-6 J1 '43

Gift of bank account held invalid where
mistake of fact shown by donor. *Banking*
Law J 60:884-902 O '43

Gifts of U.S. bonds valid notwithstanding
possible refusal of transfer by Treasury de-
partment. *Banking Law J* 60:563-7 J1 '43

Mere acceptance of custody of bank book
insufficient to establish gift. *Banking Law*
J 60:684-8 Ag '43

See also

Gift tax

GIFTS for soldiers. See Soldiers, Gifts for

GILDING metal

Gilding metal-clad steel scrap; recovery process. Mech Eng 64:904-5 D '42
Steel clad with gilding metal for bullet jackets. T. C. Campbell. *Il Iron Age* 151: 33-4 Ja 14 '43

GILL, J. K., company, Portland, Oregon

Move, fast, change rapidly, seek new lines to sell; merchandising philosophy. *Il Am Business* 13:16-18 S '43

GILLIES, William B., 1893-1943

Sketch. *por Blast F & Steel Pl* 31:783 JI '43

GILSONITE

Electrical and mechanical properties of the system Buna S-gilsonite. A. H. Selker, A. H. Scott and A. T. McPherson. *bibliog J Research Nat Bur Stand* 31:141-61 S '43
Mastic used to seal leaky brick walls; made from gilsonite asphaltic mixtures and slate granules, Pennsylvania railroad's harbor-side terminal warehouse. J. E. Nicholson *il Eng N* 129:716-17 N 19 '42

GIN

Killing in gin; imports from Mexico and Cuba. *Business Week* p20+ Ag 14 '43

GIRBOTOL process. See Gas purification**GIRDERS**

Analysis of stresses in simple and continuous beams and girders. H. L. Wagner. *il diags Roads & Bridges* 81:19-23+ Je '43
Curved box girders for highway overpass. *il diags Eng N* 129:698-9 N 19 '42

Long plate girders in Hartford bridge. C. H. Gronquist. *il diags map Eng N* 130:344-7 Mr 11 '43

Plywood plate girders for buildings. *il diags Eng N* 131:690-2 N 4 '43

See also

Airplane wings	Roofs
Beams	Steel construction
Bridges	Strains and stresses
Building	Trusses

GIRDLER, Tom Mercer, 1877-

Bouncing baby; Consolidated-Vultee merger. *por Business Week* p103-5 Mr 20 '43

GIRDLES. See Corsets**GIRLS***See also*

Young women

GIULII, Nicola

Portrait. *Arch Forum* 79:108 S '43

GLACIAL drift. See Drift**GLACIAL geology**

Discovery in eastern Washington of a new lobe of the pleistocene continental glacier. W. H. Hobbs. *maps Science* 98:227-30 S 10 '43

Glacial anticyclone and the European continental glacier. W. H. Hobbs. *diags map Am J Sci* 241:333-6 My '43

Growth of an ice sheet; a review of Professor Flint's theory. W. H. Hobbs. *Science* 98:217 S 3 '43

Growth of North American ice sheet during the Wisconsin age. R. F. Flint. *diags maps Geol Soc Bul* 54:325-62, pl 1 *bibliog*(p359-62) Mr '43

Loess and the farm lands of the United States. W. H. Hobbs. *Science* 97:sup8 Ja 22 '43

See also

Drift	Glaciers
Eskers	Moraines
Glacial lakes	

GLACIAL lakes

Unusual currents in Glacial Lake Missoula, Montana. J. T. Pardee. *bibliog maps Geol Soc Bul* 53:1569-99, pl 1-8 N '42

GLACIER national park

Cirques, hanging valleys and high-level benches in Glacier national park. W. C. Alden. *Science* 98:82-3 JI 23 '43

GLACIERS

Buried stagnant ice as a normal product of a progressively retreating glacier in a hilly region. J. L. Rich. *diags Am J Sci* 241: 95-100 F '43

Cirques, hanging valleys and high-level benches in Glacier national park. W. C. Alden. *Science* 98:82-3 JI 23 '43

Glacial anticyclone and the European continental glacier. W. H. Hobbs. *diags map Am J Sci* 241:333-6 My '43

Growth of North American ice sheet during the Wisconsin age. R. F. Flint. *diags maps Geol Soc Bul* 54:325-62, pl 1 *bibliog*(p359-62) Mr '43

Ice sheets. M. Demorest. *bibliog diags plans map Geol Soc Bul* 54:363-99, pl 1 Mr '43

Max Harrison Demorest; glaciologic research. F. E. Matthes. *Science* 97:131-2 F 5 '43

See also

Drift	Glacial lakes
Eskers	Moraines

GLADIOLUS

Bulb imports into Mexico. *For Comm W* 10: 32 Mr 13 '43

GLANDS, Ductless*See also*

Pituitary body

GLASS

Adsorption of ions by leached surface films on glass. H. C. Hafner and F. L. Jones. *Am Cer Soc J* 26:56-6 F 1 '43

Anomalies of elasticity and flow and their interpretation. R. Simha. *bibliog J Phys Chem* 47:348-63 Ap '43

Anomalous flow in glasses. N. W. Taylor. *bibliog J Phys Chem* 47:235-53 Mr '43

Calculation of surface tension of glasses; abstract. K. C. Lyon. *Cer Ind* 41:44 O '43
Concerning the future of glass. *Glass Ind* 24: 335 Ag '43

Glass after the war. A. Silverman. *il Am Cer Soc Bul* 22:217-22 JI 15 '43

Glass division holds 24th annual meeting during A.C.S. convention; with summaries of papers. *il Glass Ind* 24:203-8+ My '43
Glass foundation. A. Silverman. *Am Cer Soc Bul* 22:299-300 Ag 15 '43

Glass: now and tomorrow. *il Fortune* 27:122-5+ Mr '43

Glass windows for iron engines. E. W. Landen. *bibliog diag Glass Ind* 24:21-3, 33 Ja '43

Production of a macrofilm on sodium borosilicate glasses and its properties; abstract. I. V. Grebenshchikov and O. C. Molchanov. *Chem & Met Eng* 50:196-7 S '43

Properties of low reflection films produced by the action of hydrofluoric acid vapor. F. H. Nicoll and F. E. Williams. *il Opt Soc Am J* 33:434-5 Ag '43

Some physical procedures used in ceramic research; sonic properties of glass. G. A. Bole and G. A. Loomis. *il J Ap Phys* 14: 446-8 S '43

Structural homogeneity of glass. A. Winter. *diags Am Cer Soc J* 26:277-84 Ag 1 '43

Study of diffusion in glass. J. A. Pask and C. W. Parmelee. *bibliog il Am Cer Soc J* 26:267-77 Ag 1 '43

Study of photoluminescence in glass. A. R. Rodriguez, C. W. Parmelee and A. E. Badger. *bibliog il Am Cer Soc J* 26:137-50 My 1 '43

Transformation region of glass. A. Winter. *bibliog diags Am Cer Soc J* 26:189-200 Je 1 '43

Vacuum evaporated films on glass; their theory, production and applications. S. Bateson. *il Can Chem & Process Ind* 27:438-40 Ag '43

See also

Enamel and enamel- ing	Mirrors
Glass manufacture	Plate glass
Glassware	Pyrex
Insurance, Plate glass	Windows

Analysis

Centrifuge technique in research of glass cords; Preston laboratories new density measurement technique uses fine powder. L. G. Ghering. *Cer Ind* 40:58-9 Je '43

Determination of alkalis in glass; denatured alcohols as substitutes for U.S.P. grain alcohol. F. A. Webster and R. M. Crane. *Ind & Eng Chem Anal ed* 15:36 Ja 15 '43

Identification of lead in glass; abstract. F. Feigl and Braile. *Glass Ind* 24:475+ N '43

Bibliography

Ceramic abstracts. Published in monthly numbers of American ceramic society
Ceramic abstracts and Bulletin

GLASS—Bibliography—Continued

Publications of N. J. Kreidl. Am Cer Soc
Bul 22:77 Mr 15 '43

Color

Spectrophotometric investigations on iron
oxide-containing soda-lime-silica glasses;
abstract. Wang and Turner. Glass Ind 24:
387+ S '43

What makes glass change color and what to
do about it. A. Ottoson. bibliog Cer Ind 41:
45-7 S; 50, 52-4+ O '43

Zinc oxide in glass. N. J. Kreidl. Glass Ind
24:112-15+ Mr '43

See also

Glass—Decoloriza-
tion
Glass, Colored

Decolorization

Decolorization and fining in the absence of
arsenic. Glass Ind 24:107+ Mr '43

Influence of sodium chloride on the iron
oxide content of molten soda-lime-silica
glasses; abstract. Glass Ind 24:429+ O '43

Spectrophotometric investigations on iron-
containing soda-lime-silica glasses; the
effect of arsenic and antimony oxides; ab-
stract. Wang and W. E. S. Turner. Glass
Ind 24:475 N '43

What makes glass change color and what to
do about it. A. Ottoson. bibliog Cer Ind 41:
45-7 S; 50, 52-4+ O '43

Defects

Centrifuge technique in research of glass
cords. L. G. Ghering. Cer Ind 40:58-9 Je '43

Letters bring cords down to earth. Il Cer
Ind 41:50-1 N '43

Problems of cords in glass; abstract. W. E.
S. Turner. Glass Ind 24:475 N '43

Durability

Alignment diagram based on the Lyle equa-
tion for the chemical durability of glasses.
D. G. Merrill. Glass Ind 24:468-9 N '43

Effect of chemically formed surface films on
glass solubility. F. L. Jones and H. C.
Hafner. Am Cer Soc J 26:56-8 F 1 '43

Effect of polishing on chemical durability of
glass surfaces. A. E. Badger and L. G.
Farber. Il Cer Ind 40:34 F '43

Theoretical aspects of chemical attack of
glasses by water. A. K. Lyle. bibliog diag
Am Cer Soc J 26:201-4 Je 1 '43

Electric properties

Electroconductivity of glass; abstract. R. L.
Myuller. Am Cer Soc Bul 22 (Cer A 22):6
Ja 15 '43

Multiform glass for insulation developed by
Corning. Il Glass Ind 24:168 Ap '43; Sci
Am 168:255 Je '43

Fluorescence

Glass standards for fluorometric determina-
tions. E. Loewenstein. Ind & Eng Chem
Anal ed 15:658 O 15 '43

Fracture

Resistance of glass to thermal shock; break-
age of reflectors, condensers, and occa-
sionally projection lenses from heat. C. D.
Oughton. Il Soc Motion Picture Eng J 41:
351-7 O '43

Iron content

Influence of sodium chloride on the iron
oxide content of molten soda-lime-silica
glasses; abstract. Glass Ind 24:429+ O '43

Joining to metal

Glass strain; method for determining and
analyzing strains in electronic tubes and
other glass forms. H. J. Nolte. diag Gen
Elec R 46:275-80 My '43

Sealed glass bushings. W. W. Grigorieff and
C. M. Lampman, Jr. bibliog Il diag Am
Cer Soc J 26:33-7 Mr 1 '43

Light transmission

Blackout lighting using the principle of mu-
tual exclusion by color; tests using variety
of window coatings, filters, and light
sources. R. A. Wank and E. H. Wake-
field. diag Illum Eng 38:41-4 Ja '43

Manufacture

See Glass manufacture; Glassware—Man-
ufacture

Protection

Textiles in glass protection. Textile Col 65:
122 Mr '43

Treatment of roof glazing by fabric attached
with bituminous adhesive. C. M. Watkins
and T. A. Baker. Soc Chem Ind J 62:132-5
S '43

Stones

Influence of silica stones on the strength of
glass containers. W. R. Lester. Il Glass Ind
23:461-2+ D '42

Strength

Behavior of glazing material subjected to
explosion. Glass Ind 24:301 JI '43

Influence of silica stones on the strength of
glass containers. W. R. Lester. Il Glass Ind
23:461-2+ D '42

Temperature effect

Resistance of glass to thermal shock; break-
age of reflectors, condensers, and occa-
sionally projection lenses from heat. C. D.
Oughton. Il Soc Motion Picture Eng J 41:
351-7 O '43

Transformation region of glass. A. Winter.
bibliog diag Am Cer Soc J 26:189-200 Je
1 '43

Testing

Alignment diagram based on the Lyle equa-
tion for the chemical durability of glasses.
D. G. Merrill. Glass Ind 24:468-9 N '43

Calculation of density and optical constants
of a glass from its composition in weight
percentage. M. L. Huggins and K. Sun.
bibliog Am Cer Soc J 26:4-11 Ja 1 '43; Ex-
cerpt. Glass Ind 24:298+ JI '43; Discussion.
Glass Ind 24:472-3+ N '43

Centrifuge technique in research of glass
cords; Preston laboratories new density
measurement technique uses fine powder.
L. G. Ghering. Cer Ind 40:58-9 Je '43

Glass strain; method for determining and
analyzing strains in electronic tubes and
other glass forms. H. J. Nolte. diag Gen
Elec R 46:275-80 My '43; Abstract. Electrician
131:31-3 JI 9 '43

Theoretical aspects of chemical attack of
glasses by water. A. K. Lyle. bibliog diag
Am Cer Soc J 26:201-4 Je 1 '43

Uses

And now, glass gages! Il Mach 49:141-2 Mr
'43

Glass as a substitute material; translated
from Der Vierjahresplan, May, 1940. Il Cer
Ind 40:90+ Ap '43

Glass-beaded paint for blackout traffic con-
trol. R. A. Mitchell. Il Eng N 129:720-1 N
19 '42

Glass for inspection gages. H. B. Hambleton.
Il Steel 112:70-1+ Mr 29 '43

Glass for precision gages. J. A. Stone. Il
diag Am Mach 87:75-9 F 4 '43

Glass for precision gages; developments of
Ordnance department and glass manufac-
turers introduce new material to replace
steel. H. B. Hambleton. Il Mech Eng 65:
274-6 Ap '43

Glass for precision gauges; Hysil glass. Engi-
neering 156:188 S 3 '43

Glass for precision gaging. H. B. Hamble-
ton. Mech Eng 65:435-7 Je '43

Glass for steel; Army's precision gages.
Business Week p64+ Ja 9 '43

Glass gage development. T. Lewis. Iron Age
150:114 D 10 '42

Glass gages; abstract. T. J. Thompson. Iron
Age 151:64-5 Ap 1 '43

Glass gages sponsored by Ordnance depart-
ment. F. J. Oliver. Il diag Iron Age 151:
35-9+ F 4 '43; Same cond. Engineer 175:
273+ 275 Ap 2 '43

GLASS—Uses—Continued

- Glass jewels speed instrument manufacture; abstract. R. H. Oppermann. *Franklin Inst J* 235:436-7 Ap '43
- Glass precision gages; a war baby destined for civilian use. H. B. Hambleton. *Il Glass Ind* 24:69+ F '43; Same. *Metals & Alloys* 17:548-52 Mr '43
- Glass, present and future; applications to unusual purposes. R. A. Miller. *Il Sci Am* 168:22-4 Ja '43
- Glass used in core tips helps save critical steel. *Il Brick & Clay Rec* 102:44 Ja '43
- Ground glass for spot testing in solvent extractions. A. Edeler. *Ind & Eng Chem Anal* 15:282 Ap 15 '43
- Light-beam modulation by photoelastic effect in glass. W. E. LeClair. *diag Electronics* 16:122+ My '43
- New uses for glass; abstract. W. E. S. Turner. *Chem Age (Lond)* 48:128 Ja 23 '43
- Newest developments in glass gages. H. B. Hambleton. *Il Instruments* 16:254-6+ My '43

GLASS, Cellular

- Floating glass made by new process, has many potential uses. *Sci Am* 167:274 D '42
- Low temperature adsorption of nitrogen, oxygen, argon, hydrogen, *n*-butane and carbon dioxide on porous glass and on partially dehydrated chabazite. P. H. Emmett and T. W. DeWitt. *bibliog Am Chem Soc J* 65:1253-62 Jl '43

Manufacture

- Glass cellulation produces lightweight insulation; Pittsburgh-Corning's cellular glass plant. N. G. Farquhar. *Il Chem & Met Eng* 50:98-101 Ag '43

GLASS, Colored

- Amber glass and the role of carbon. H. Moore and S. R. Scholes. *bibliog Am Cer Soc J* 26:58-60 F 1 '43

GLASS, Heat resisting*See also***Pyrex****GLASS, Laminated**

- Design methods and details for transparent aircraft inclosures. A. C. Foster. *Il diags Product Eng* 14:260-3, 354-7 My-Je '43

GLASS, Opal

- Zinc oxide in glass. N. J. Kreidl. *Glass Ind* 24:158-61 Ap '43

GLASS, Optical

- Annealing of glass. W. A. Weyl and A. G. Pincus. *J Ap Phys* 14:37-9 Ja '43
- Australian optical glass; abstract. E. J. Hartung. *Chem Age (Lond)* 49:33 Jl 10 '43
- Calculation of density and optical constants of a glass from its composition in weight percentage. M. L. Huggins and K. Sun. *bibliog Am Cer Soc J* 25:4-11 Ja 1 '43
- Dispersion of silicate glasses as a function of composition. M. L. Huggins, K. H. Sun and D. O. Davis. *bibliog Opt Soc Am J* 32:635-50 N '42
- Effect of chemically formed surface films on glass solubility. F. L. Jones and H. C. Hafner. *Am Cer Soc J* 26:56-8 F 1 '43
- New type glass. *Chem Ind* 52:745 Je '43
- Resistance of glass to thermal shock; breakage of reflectors, condensers, and occasionally projection lenses from heat. C. D. Oughton. *Il Soc Motion Picture Eng J* 41:351-7 O '43
- Sandless glass; new optical glass omits the familiar silica; abstracts. E. D. Tillyer. *Il Sci Am* 169:59 Ag '43; *Science* 97:sup12 Je 11 '43
- Transformation region of glass. A. Winter. *bibliog diags Am Cer Soc J* 26:189-200 Je 1 '43
- Welding glasses permit better view of the operation. E. D. Tillyer. *Il Sci Am* 168:273-4 Je '43

*See also***Goggles****Lenses****Optical instruments****Manufacture**

- Corning's new optical plant; a model of efficiency in layout and construction. *Il Glass Ind* 24:162-3 Ap '43
- Hayward optical glass plant, largest of its kind on the Pacific coast. R. E. Swain. *Il Glass Ind* 24:258-9+ Je '43

GLASS, Porous. See Glass, Cellular**GLASS, Safety***See also***Glass, Laminated****GLASS, Sponge. See Glass, Cellular****GLASS, Spun. See Glass fibers****GLASS, Structural**

- Glass after the war. A. Silverman. *Il Am Cer Soc Bul* 22:217-19 Jl 15 '43

- Glass, present and future; applications to unusual purposes. R. A. Miller. *Il Sci Am* 168:22-4 Ja '43

*See also***Glass, Cellular****Glass blocks****Glass construction****GLASS, Substitutes for***See also***Plastic materials,****Transparent****GLASS blocks**

- Conservation of critical materials by use of glass block units. T. W. Reynolds. *Il Heat & Ven* 40:45-6 Ag '43
- Demountable glass block partitions for stores, offices, homes. *Il Am Bld* 64:44 N '42
- Glass block barn. *Il Sheet Metal Worker* 34:44 Jl '43
- New glass block is molded in single piece. *diags Cer Ind* 39:40 D '42
- War plant with glass walls; required maximum daylighting and 85 percent of the building at constant temperature and humidity. *Il Eng N* 130:288-91 F 25 '43

GLASS blowing and working*See also***Bottle making ma-****chinery****GLASS bottles. See Bottles****GLASS construction**

- Glass walls in homes of the future; abstract. A. Silverman. *Science* 97:sup8 My 21 '43
- Sun-exposed glass walls provide test for solar heating. *Il Glass Ind* 24:384-5 S '43

*See also***Glass, Structural****Glass blocks****GLASS container association**

- Annual meeting, 24th, New York, May 25-26. *Cer Ind* 40:56 Je '43; *Glass Ind* 24:253-5 Je '43
- Semi-annual fall meeting, New York, Oct. 26. *Glass Ind* 24:464, 479+ N '43

GLASS container industry

- Competitive position of Owens-Illinois Glass. C. Macdonald. *Barron's* 22:20 N 30 '42
- Glass container quota system set up. *Oil Paint & Drug Rep* 144:5+ Jl 5 '43
- High tribunal to hear appeals of all glass defendants. *Glass Ind* 24:13-14 Ja '43
- Law and custom; Toledo court decision. F. W. Preston. *Glass Ind* 23:463-4 D '42
- Quota system for glass containers set up. *Chem Ind* 53:91-2 Jl '43

GLASS containers

- Glass containers at the front; indispensable for blood transfusion. *Il Chem Age (Lond)* 48:670 Je 26 '43
- Handling glass in stores. *Il Mod Packaging* 16:104-6 D '42
- Important note for home canners. *Il Consumers' Research Bul* 12:23 S '43
- Influence of silica stones on the strength of glass containers. W. R. Lester. *Il Glass Ind* 23:461-2+ D '42
- Jar sales soar; WPB assures supplies for home canning. *Business Week* p68 Ap 17 '43
- 93 million gross of glass containers to be made in 1943. *Cer Ind* 41:52-5 N '43
- Non-critical materials basis of Hartford-Empire's new glass package. *Il diags Glass Ind* 24:293-4 Jl '43
- Paper lug cap on glass tobacco jar. *Il Mod Packaging* 16:53+ F '43
- Pinch in bottles. *Business Week* p84+ Jl 24 '43
- Puerto Rico to have modern container plant; two continuous tanks will furnish 100 tons of glass daily. *Glass Ind* 24:338 Ag '43

GLASS containers—Continued

Substitute container closures will increase use of glass in 1943. *il Cer Ind* 40:23-9+ F '43

Syrup in glass. *il Mod Packaging* 16:64+ D '42

WPB issues L-103 program standardizing glass pack; closures and packing quotas. *Food Ind* 15:83-4+ My '43

WPB issues specifications on closures for glass. *Food Ind* 15:77+ F '43

WPB member explains glass order amendments. T. E. Manwarring. *Mod Packaging* 17:95+ O '43

See also
Bottles

Manufacture

Effect of arsenic on the melting and refining rate in a tank furnace of soda-lime-silican glass for colorless containers; abstract. F. Winks. *Glass Ind* 24:429 O '43

Testing

Alignment diagram based on the Lyle equation for the chemical durability of glasses. D. G. Merrill. *Glass Ind* 24:468-9 N '43

GLASS cords. *See* Glass—Defects

GLASS cutting

Cutting wide-bore glass tubing and glass bottles. J. E. Still. *Chem & Ind* 62:271 JI 17 '43; Same. *Chem Ind* 53:376 S '43

GLASS fabrics

Fiberglass; some properties and new applications. F. V. Tooley. *il Am Cer Soc Bul* 22: 60-4 Mr 15 '43

Symposium of man-made fibers; Fiberglass textiles. W. H. Page. *Textile Col* 65:13-14+ Ja '43

See also

Glass fibers

GLASS factories

Corning's new optical plant; a model of efficiency in layout and construction. *il Glass Ind* 24:162-3 Ap '43

Glass cellulation produces lightweight insulation; Pittsburgh-Corning's cellular glass plant. N. G. Farquhar. *il Chem & Met Eng* 50:98-101 Ag '43

Glass works, Corning optical glass plant; views, plans, and construction outline. *Arch Forum* 79:87-90 JI '43

New plants of 1942; Corning Glass. *il Factory Management* 101:B71-B74 Ap '43

Pittsburgh, the glass center. F. W. Adams. *il Chem & Eng N* 21:1264-7 Ag 10 '43

Puerto Rico to have modern container plant; two continuous tanks will furnish 100 tons of glass daily. *Glass Ind* 24:338 Ag '43

See also

Bottle factories

Glass manufacture

Accidents

Glass industry enlists in war on accidents. R. L. Clause. *Glass Ind* 23:468 D '42

Employees

Bottle plant institutes wartime employee training program; Buck glass company, Baltimore. R. A. Blunt. *il Glass Ind* 24: 470-1+ N '43

Concerning the people who make glass. *Glass Ind* 24:377 S '43

Skin hazards in the manufacture of glass wool and thread. L. Schwartz and I. Botvinick. *Ind Med* 12:142-4 Mr '43

Equipment

Installs screw conveyor to handle cullet; Armstrong cork co. *il Cer Ind* 41:56 O '43

Modernization of plant equipment is vital to post-war plans; trend toward continuous processes. *il diag Cer Ind* 40:34-7 Je '43

See also

Bottle making

machinery

Glass furnaces

Glass machinery

Glass tanks

Fuel

Gas producers can help solve natural gas shortage. R. F. Ferguson. *Glass Ind* 24: 424+ O '43

Safety measures

37 wartime hints for accident prevention in glass plants. E. W. Fair. *Glass Ind* 24:340+ Ag '43

GLASS fibers

Cold storage plant modernized for frozen food; asphalt-enclosed Fiberglass board used for insulation. *il Refrig Eng* 45:416+ Je '43

Fiberglass reinforced plastics. T. S. Rogers. *il Mod Plastics* 21:88, 140, 142 S '43

Fiberglass; some properties and new applications. F. V. Tooley. *il Am Cer Soc Bul* 22: 60-4 Mr 15 '43

Fibrous glass for electrical purposes. A. M. Robertson. *Elec R (Lond)* 132:515 Ap 16 '43

Fibrous-glass insulation. A. M. Robertson. *Elec R (Lond)* 132:247-8 F 19 '43

Glass fabric for electrical insulation; abstract. A. M. Robertson. *Engineering* 155: 452 Je 4 '43

Glass fiber column packing. *Chem Ind* 52: 745 Je '43

Glass fibers; a new engineering material. *il Iron Age* 152:60-1 N 4 '43; Abstract. *Chem Ind* 53:501 O '43

Glass filters. *Engineering* 155:266-7 O 1 '43

Physical properties of Fiberglass laminated plastics. C. W. Armstrong. *il diags Iron Age* 152:51-4 JI 22 '43; Abstract. *Machine Design* 15:133-4 N '43

Rectifying columns packed with glass fibers speed up production of ethyl alcohol. *Franklin Inst J* 236:234 Ag '43

Symposium of man-made fibers; Fiberglass textiles. W. H. Page. *Textile Col* 65:13-14+ Ja '43

See also

Glass wool

Manufacture

Fibrous glass production completely mechanical from start to finish; Owens-Corning fiberglass corp., wool process and textile fiber process. H. D. Keiser. *il flowsheets Cer Ind* 40:53-5 Je '43

Skin hazards in the manufacture of glass wool and thread. L. Schwartz and I. Botvinick. *Ind Med* 12:142-4 Mr '43

GLASS furnaces

Possible use of suspended roofs and walls in glass furnaces. L. S. Longenecker. *il diags Am Cer Soc J* 26:167-72 My 1 '43

See also

Glass tanks

Firing

Conversion of glass furnaces from oil to gas and from gas to oil. G. Fitzgerald. *Am Cer Soc Bul* 22:65 Mr 15 '43

Lining

Use of lead oxide in glassmaking refractories; abstract. A. E. Badger, C. J. Uhrmann and A. C. Ottosen. *Cer Ind* 41:44+ O '43

Oil firing

Refractories and furnaces; patents on oil burner invented by Vergil Mulholland. *diag Glass Ind* 24:169 Ap '43

GLASS gages. *See* Gages**GLASS machinery**

Irving Wightman Colburn; inventor of continuous flat-drawing window-glass machine. W. P. Clarke. *Am Cer Soc Bul* 22:52-4 F 15 '43

See also

Bottle making machinery

Patents

Continuous machine for making tumblers and other hollow glassware. *diags Glass Ind* 24: 427-8 O '43

Inventions and inventors; summary of U.S. patents of interest to the glass industry. Published in monthly numbers of *Glass industry*

Mayers machine for forming and welding together two halves of hollow glass block. *diag Glass Ind* 24:263-4 Je '43

GLASS making materials

Additional notes on use of cullet. *Cer Ind* 41: 56 Ag '43

GLASS making materials—Continued

American ceramic society 45th annual convention, Pittsburgh; symposium, critical and substitute materials. *Cer Ind* 40:38-40 My '43

Cerium-logical arsenic substitute in glass batches. *Cer Ind* 40:37-8 Mr '43

Current situation on glassmaking chemicals and supplies. *Glass Ind* 24:426 O '43

Decolorization and fining in the absence of arsenic. *Glass Ind* 24:107+ Mr '43

Effect of grain sizes of raw materials; abstract. O. G. Burch. *Cer Ind* 41:49 O '43

Price of cullet affects its use, substitution in batch necessary. *il Cer Ind* 41:35-6 JI '43

Raw materials; functions of Glass unit of the War production board. J. R. Hostetter. *Am Cer Soc Bul* 22:290-2 Ag 15 '43

See also

Feldspar
Sand

GLASS manufacture

American ceramic society 45th annual convention, Pittsburgh; abstracts of papers of interest to glass manufacturers. *Cer Ind* 40:36-8 My '43

American ceramic society, Glass division, autumn meeting, Uniontown, Pa. Sept. 15-16. *Cer Ind* 42:44, 46, 49 O '43

Annealing of glass. W. A. Weyl and A. G. Pincus. *J Ap Phys* 14:37-9 Ja '43

Beryllium in glass. K. Sun. bibliog *Glass Ind* 24:155-6, 172, 217-20+ Ap-May '43

Cerium-logical arsenic substitute in glass batches. *Cer Ind* 40:37-8 Mr '43

Glass: now and tomorrow. *il Fortune* 27:122-5+ Mr '43

Glass tank problems are common, but are difficult to solve. *Cer Ind* 41:37 JI '43

Glass works, Corning optical glass plant; views, plans, and construction outline. *Arch Forum* 79:87-90 JI '43

Glasshouse gremlins. *il Glass Ind* 24:105-6+ Mr '43

Letters bring cords down to earth. *il Cer Ind* 41:50-1 N '43

Nitrates in glass batches. S. R. Scholes. *Glass Ind* 24:256+ Je '43

Role of sodium sulphate in glass manufacture. W. A. Weyl. bibliog *Glass Ind* 24:17-20+, 65-8, 108-11 Ja-Mr '43

Use of lead oxide in glassmaking refractories. A. E. Badger, C. J. Uhlmann and A. C. Ottoson. *il Glass Ind* 24:465-7, 478+ N '43

Zinc oxide in glass. N. J. Kreidl. bibliog *Glass Ind* 24:59-62+, 112-15+, 158-61+ F-Ap '43

See also

Glass, Optical—Man-
ufacture
Glass factories
Glass furnaces
Glass making ma-
terials

Glassware—Manu-
facture
Owens-Illinois glass
company
Plate glass—Manu-
facture

Patents

Enemy owned patents made available to U.S. glass industry. diags *Glass Ind* 24:101-3+, 211-15+ Mr, My '43

Hood-Nordberg process for highly siliceous glass articles. diags *Glass Ind* 24:74-5 F '43

Inventions and inventors; summary of U.S. patents of interest to the glass industry. Published in monthly numbers of *Glass industry*

GLASS melting

Accelerated melting of glass batch. A. E. Badger and L. G. Farber. *il diag Glass Ind* 24:63-4 F '43

Melting performance of tank furnaces. *Glass Ind* 24:291-2, 312-13 JI '43

GLASS partitions. See Partitions**GLASS patents. See Glass machinery—Patents; Glass manufacture—Patents****GLASS products**

Glass articles molded by new multiform process. *il Electronics* 16:180+ F '43

GLASS research

Centrifuge technique in research of glass cords; Preston laboratories new density measurement technique uses fine powder. L. G. Ghering. *Cer Ind* 40:58-9 Je '43

Report of committee on research, American ceramic society. *Am Cer Soc Bul* 22:236-8 JI 15 '43

Study of photoluminescence in glass. A. R. Rodriguez, C. W. Parmelee and A. E. Badger. bibliog *il Am Cer Soc J* 26:137-50 My 1 '43

Transformation region of glass. A. Winter. bibliog diags *Am Cer Soc J* 26:189-200 Je 1 '43

Viscosity and working characteristics of glasses; abstract. Boow and Turner. *Glass Ind* 24:261 Je '43

What makes glass change color and what to do about it. A. Ottoson. bibliog *Cer Ind* 41:45-7 S; 50, 52-4+ O '43

Zinc oxide in glass. N. J. Kreidl. bibliog *Glass Ind* 24:59-62+, 112-15+, 158-61+ F-Ap '43

GLASS sand. See Sand

GLASS stones. See Glass—Stones

GLASS tanks

Behavior of tuckstones in a glass tank furnace; abstract. Partridge. *Glass Ind* 24:71 F '43

Glass tank problems are common, but are difficult to solve. *Cer Ind* 41:37 JI '43

Glass tank regenerator refractories; abstract. C. A. Brashares. *Cer Ind* 41:46+ O '43

Melting performance of tank furnaces. *Glass Ind* 24:291-2, 312-13 JI '43

Performance of tank-blocks in glass furnaces. *Glass Ind* 24:387 S '43

Tank design and processing comes in for engineers' scrutiny. *Cer Ind* 41:56-7 N '43

Control

More uniform glass with better control of atmosphere and temperature. diags *Cer Ind* 41:48, 51+ S '43

Cooling

\$6,000 saved by reducing tank cooling wind. *il diag Cer Ind* 41:51-3 Ag '43

GLASS trade

Concerning the international glass situation. *Glass Ind* 24:421 O '43

Future of glass. *il Cer Ind* 40:42, 44-5 Ap '43

What about pottery and glassware after the war? E. J. Detgen. *Glass Ind* 24:378-9+ S '43; Same. *Cer Ind* 41:25-7 S '43

See also

Owens-Illinois glass
company

Advertising

Smart news reporting features Owens-Illinois radio program. G. A. Nichols. *Ptr Ink* 203:76 Je 25 '43

Finance

New age in the glass industry. P. Dobbs. *il Mag of Wall St* 72:76-8, 106 My 1 '43

Statistics

Glass products, 1938-1941. Survey of *Cur Business* 1942 Sup p162-4 [supplemented in monthly numbers]

Germany

Glass as a substitute material; translated from *Der Vierjahresplan*, May, 1940. *il Cer Ind* 40:90+ Ap '43

Great Britain

See also United glass bottle manufacturers, limited

United States

New age in the glass industry. P. Dobbs. *il Mag of Wall St* 72:76-8, 106 My 1 '43

GLASS tubing

Forming glass tubing; patent. *diag Glass Ind* 24:212 My '43

GLASS wool**Manufacture**

Fibrous glass production completely mechanical from start to finish; Owens-Corning fiberglass corp., wool process and textile fiber process. H. D. Keiser. flow sheets *il Cer Ind* 40:53-5 Je '43

Skin hazards in the manufacture of glass wool and thread. L. Schwartz and I. Botwinick. *Ind Med* 12:142-4 Mr '43

GLIDERS—Continued

Three-place Piper TG-8 training glider; drawings, Aero Digest 41:224-5 N '42
Troop carrier command; the common carrier of death and destruction; destination: the enemy's rear. *il* Fortune 28:130-5+ O '43
Wood techniques developed in glider construction. *il* Aviation 41:108-12 N '42

Specifications

Aviation's American glider specifications; tabulation. Aviation 42:259 F '43

GLOCLADIUM fimbriatum

Glilotoxin, the antibiotic principle of glocladium fimbriatum; production, physical and biological properties. J. R. Johnson, F. W. Bruce and J. D. Dutcher. *bibliog diag* Am Chem Soc J 65:2005-9 O '43

GLIOTOXIN

Glilotoxin, the antibiotic principle of glocladium fimbriatum; production, physical and biological properties. J. R. Johnson, W. F. Bruce and J. D. Dutcher. *bibliog diag* Am Chem Soc J 65:2005-9 O '43

GLOBE indemnity company

Offers to acquire control of Virginia concern. *Comm & Fin Chr* 157:2250 Je 14 '43

GLOBES

Globe sales soar. *il* Business Week p38+ My 15 '43

GLOBULINS

Heats of organic reactions; the digestion of β -lactoglobulin by pepsin. G. Haugaard and R. M. Roberts. *Am Chem Soc J* 64:2664-71 N '42

Normal variation in the concentration of fibrinogen, albumin, and globulin in blood plasma. R. M. Hill and V. Trevorow. *bibliog J Phys Chem* 46:1117-29 D '42

Solubility and electrophoretic studies of serum globulins; gamma globulin. E. Jameson and C. Alvarez-Tostado. *il* Am Chem Soc J 65:459-65 Mr '43

See also

Glycinin

GLOSS meters

Aminco-Scott glossmeter. *il* R Sci Instr 14: 256 Ag '43; Same. *J Ap Phys* 14:408 Ag '43

Mar resistance of plastics. L. Boor. *bibliog il* Am Soc T M Proc 42:927-41 '42; Same cond. *Mod Plastics* 20:79-83 S '42; Discussion. *Am Soc T M Proc* 42:942-3 '42

Photoelectric glossmeter. *diag Chem Ind* 52: 748 Je '43

Photoelectric glossmeter. *il* R Sci Instr 14: 119 Ap '43

GLOVES

Knit goods for military purposes. *il* Textile World 93:102-3 Ap '43

Cleaning

Dry cleaning gloves. *Soap & San Chem* 18: 65 D '42

Statistics

Production of gloves and mittens, 1938-1941. Survey of Cur Business 1942 Sup p130 [supplemented in monthly numbers]

GLOVES, Rubber

How to care for rubber gloves; illustrated instructions. *Power* 86:905 D '42; *Factory Management* 100:114-15 D '42

Stretching rubber supplies; the care and treatment of rubber gloves. *il* Metal Finishing 41:268-70 My '43

Manufacture

Hands up! porcelain proves best material for rubber glove forms. W. O. Young. *il* Cer Ind 40:72, 74 My '43

Testing

Glove test routine safeguards linemen. *il* Elec W 119:1644+ My 15 '43

Rubber gloves tested with d.c. equipment. *il* diag Elec W 120:496 Ag 7 '43

GLUCINUM. See Beryllium**GLUCOGULOHEPTOSIDE**

Alkaline degradation of phenyl- β -lactoside, phenyl- β -cellobioside, and phenyl-D-glucoside. R. K. Richtmyer and C. S. Hudson. *bibliog* Am Chem Soc J 65:1848-54 O '43

GLUCOHEPTOSE

Calcium chloride compounds of D- α -glucoheptose (D-glycero-D-gulo-aldoheptose). H. S. Isbell and H. L. Frush. *bibliog J Research Nat Bur Stand* 31:163-8 S '43

GLUCOSE

Chemical constitution and the tanning effect; pentagalactates of glucose and mannose. A. Russell, W. G. Tebbens and W. F. Arey. *Am Chem Soc J* 65:1472-4 Ag '43

Experimental burns; the influence of a gelatin-glucose-salts solution on the hemocoagulation of burns. J. O. Ely and A. W. Angulo. *Franklin Inst J* 235:197-204 F '43

Mechanism of insulin action; observations with radioactive phosphorus. J. Sacks. *Science* 98:388-9 O 29 '43

Protective action of glucose in bovine plasma against heat coagulation. C. R. Hardt, I. F. Huddleson and C. D. Ball. *bibliog Science* 98:309-10 O 1 '43

See also

Dextrose

GLUCOSIDES

Alkaline degradation of phenylglycosides; a new method for determining the configuration of glycosides and sugars. E. M. Montgomery, N. K. Richtmyer and C. S. Hudson. *bibliog Am Chem Soc J* 65:3-7 Ja '43
Digitalis and some of its derivatives. H. Gold. *bibliog Science* 97:125-9, 150-3 F 5-12 '43

Photolysis of the *d*-glycosides: a benzylfructofuranoside, β benzylfructopyranoside, and α and β phenyl, benzyl and β phenylethyl glycosides; and the bearing of the data upon the transfer of energy within molecules. L. J. Heidt. *Franklin Inst J* 234:473-85 N '42

Solanine; glycoside of the potato, its distribution in the potato plant. L. H. Lampitt and others. *bibliog Soc Chem Ind J* 62:48-51 Ap '43

Solanine, glycoside of the potato; its isolation and determination. H. S. Rooke and others. *bibliog Soc Chem Ind J* 62:20-4 F '43

Sorbitol glycosides and 2,3,4,5,6-O-pentamethyl sorbitol. M. L. Wolfrom and T. S. Gardner. *bibliog Am Chem Soc J* 65:750-2 My '43

GLUCOSIDO arabinose

Synthesis of 5-D-glucosido-D-arabinose. N. S. MacDonald and W. L. Evans. *bibliog Am Chem Soc J* 64:2731-3 D '42

GLUCURONIC acid

Glucuronic acid in the urine as a measure of the absorption of certain organic compounds. W. Deichmann and G. Thomas. *bibliog diag J Ind Hygiene* 25:286-92 S '43

GLUE

Cold heat to expedite plywood fabrication; passing high frequency electric current through wood sections polymerizes glue. C. S. Ricker. *flow diag il diag Aviation* 42:118-20+ Mr '43

Dermatitis from resin glue in war industries. L. Schwartz, S. M. Peck and J. E. Dunn. *Pub Health Rep* 58:899-904, pl 1-2 Je 11 '43

Glue welding; spots are quickly set by radiothermics. *Sci Am* 169:58-9 Ag '43

Glue works waste recovery system. *Pub Works* 74:55 My '43

Heat-conduction problems in presses used for gluing of wood. G. H. Brown. *diag Inst Radio Eng Proc* 31:537-48 O '43

Identification of plywood glues. B. J. Rendle and G. L. Franklin. *Soc Chem Ind J* 62: 11-14 Ja '43

Lamination of weatherproof solid fiberboard with starch and resin adhesives. J. E. Killinger. *Paper Tr J* 117:25-30 N 4 '43

Polishing with glue-abrasive mixtures. J. F. Siefen. *il* Iron Age 151:56-7 Mr 18 '43

Radio-frequency heating applied to wood gluing. R. A. Bierwirth and C. N. Hoyer. *diag Inst Radio Eng Proc* 31:529-37 O '43

Recent progress in timber research. L. J. Markwardt. *W Soc E J* 48:113-14 S '43

Sweden uses new type of glue in plywood manufacture. *For Comm W* 9:30 N 28 '42

Use of glue in aircraft construction. J. T. Stephan. *bibliog il Aviation* 42:132-3+ Mr '43

GLUE—Continued

Water adsorption by animal glue. C. M. Mason and H. E. Silcox. *bibliog Ind & Eng Chem* 35:726-9 Je '43

See also

Adhesives

GLUSIDE. See Saccharin**GLUTAMIC acid**

Glutamic acid content of Steffen's waste. D. W. O'Day and E. Bartow. *bibliog Ind & Eng Chem* 35:1152-5 N '43

Quantitative investigations of amino acids and peptides; equilibria between amino acids and formaldehyde; glutamic acid. E. H. Frieden, M. S. Dunn and C. D. Coryell. *J Phys Chem* 47:20-4 Ja '43

Reaction of formaldehyde with *l*(+)-aspartic and *l*(+)-glutamic acids. D. C. Carpenter and F. E. Lovelace. *bibliog Am Chem Soc J* 65:1161-5 Je '43

GLUTAMINE

Studies regarding a glutamine-like substance in blood and spinal fluid. M. M. Harris. *bibliog Science* 97:332-3 Ap 23 '43

GLUTARIMIDES

Reaction of glutarimides with phosphorus pentachloride; a new pyridine synthesis. W. W. Crouch and H. L. Locht. *bibliog Am Chem Soc J* 65:270-2 F '43

GLUTATHIONE

Absorption of oxygen by glutathione in alkaline solutions; kinetics of the reaction at pH 13. M. B. Young and H. A. Young. *Am Chem Soc J* 65:1681-7 S '43

Enzyme systems containing active sulphydryl groups; role of glutathione. E. S. G. Barron and T. F. Singer. *Science* 97:356-8 Ap 16 '43

GLUTEN

Gluten and its relation to flour constituents in bread making; abstract. J. C. Baker. *Can Chem & Process Ind* 27:44 Ja '43

Gluten in doughs; recent patent. *Food Ind* 15:120+ F '43

GLYCERIDES

Aliphatic beta monoglycerides. B. F. Dautbert, H. H. Fricke and H. E. Longenecker. *bibliog Am Chem Soc J* 65:1718-20 S '43

Component glycerides of linseed oil; segregation by chromatography; the thiocyanogen value of linolenic acid. F. T. Walker and M. R. Mills. *bibliog Soc Chem Ind J* 62:106-9 JI '43

Mixed unsaturated glycerides of liquid fats; low-temperature crystallisation of whale oil. T. P. Hilditch and L. Maddison. *Soc Chem Ind J* 61:169-73 N '42

Oil constituent separation; patent. S. E. Freeman. *Soap & San Chem* 19:67 Ap '43

GLYCERIN

Expanded post-war market for glycerine in food field. *Soap & San Chem* 19:43 Ag '43

Explosive fish; sardines furnish glycerin for explosives. *Sci Am* 168:77-8 F '43

Freezing points, densities, and refractive indexes of the system glycerol-ethylene glycol-water. J. A. Spangler and E. C. H. Davies. *bibliog Ind & Eng Chem Anal ed* 15:96-9 F 15 '43

Glycerine breakdown; abstract. M. Mattikow and B. Cohen. *Soap & San Chem* 19:65 S '43

Glycerin civilian allocations for April curtailed sharply; glycerin content cut in National formulary preparations. *Oil Paint & Drug Rep* 143:3+ Mr 29 '43

Glycerine in newer dyeing and finishing processes. G. Leffingwell and M. A. Lesser. *bibliog Textile Col* 65:393, 400-2 S '43

Glycerin is back; WFA lifts ban on use in drugs and toilet preparations. *Business Week* p34+ O 2 '43

Glycerin is out; use in cosmetics and in cigarettes banned. *Business Week* p85-6 Mr 27 '43

Glycerine keeps pace with paper progress. G. Leffingwell and M. A. Lesser. *bibliog Paper Ind* 25:44-5 Ap '43

Glycerin overall survey by the War production board. *Oil Paint & Drug Rep* 143:3+ My 3 '43

Glycerine paces textile progress. G. Leffingwell and M. A. Lesser. *bibliog Rayon* 24:493, 513-4 S-O '43

Glycerin shortage made severe by waste fats salvage failure. *Oil Paint & Drug Rep* 143:3+ Mr 1 '43

Glycerine usage in metal treatment. G. Leffingwell and M. A. Lesser. *bibliog Metal Finishing* 41:272-4 My '43

Historical notes on glycerine and its uses in textiles. G. Leffingwell and M. A. Lesser. *bibliog Textile Col* 65:5-6 Ja '43

Making apple syrup, glycerine, and sugar substitute. *flow sheet Chem & Met Eng* 50:104+ Ag '43

Military requirements for glycerine demand high percentage of total output. *Chem & Met Eng* 50:168-9 My '43

System ethyl alcohol-glycerol-carbon tetrachloride at 25°C. H. J. McDonald, A. F. Kluender and R. W. Lane. *J Phys Chem* 46:946-8 N '42

Why glycerin is scarce. *il Chem Ind* 52:609-10 My '43

Analysis

Determining glycerol in crude glycerin and in soap lyes. W. J. Govan, Jr. *bibliog Ind & Eng Chem Anal ed* 15:260-1 Ap 15 '43

Manufacture

Crude glycerine recovery; abstract. J. H. Trebitz. *Soap & San Chem* 19:59 Ja '43

Glycerine by fat splitting; abstract. J. L. Boyle. *Soap & San Chem* 19:61-2 Je '43

Glycerine recovery from lye; abstract. J. L. Boyle. *Soap & San Chem* 19:61-2 N '43

Glycerin recovery process. *Chem & Eng N* 21:307 Mr 10 '43

Glycerine recovery rules. *Soap & San Chem* 18:41 D '42

Glycerin recovery standards set up. *Oil Paint & Drug Rep* 142:5+ N 16 '42

Small plant glycerine recovery. N. G. Weir. *Soap & San Chem* 19:57-8 My '43

Stearic acid, red oil and glycerine. *flow sheet il Chem & Met Eng* 50:132-5 S '43

Prices

Glycerin price ceiling order is amended. *Oil Paint & Drug Rep* 143:4+ Ja 4 '43

Glycerin price ceiling revised. *Oil Paint & Drug Rep* 143:5+ My 17 '43

GLYCERIN, Substitutes for

Corpolin. *Am Dyestuff Rep* 32:25-6 Ja 4 '43

Glycerin replacements; from OPD department of substitutes and replacements. *Oil Paint & Drug Rep* 143:3+ Mr 29 '43

Glycerin substitutes warning issued. *Oil Paint & Drug Rep* 143:7 Ap 19 '43

GLYCEROL. See Glycerin**GLYCINE**

Acidic ionization constant of glycine in dioxane-water solutions. H. S. Harned and C. M. Birdsall. *bibliog Am Chem Soc J* 65:54-7 Ja '43

Amino acids; glycine. J. H. Billman and E. E. Parker. *Am Chem Soc J* 65:761-2 My '43

Basic ionization constant of glycine in dioxane-water solutions. H. S. Harned and C. M. Birdsall. *bibliog Am Chem Soc J* 65:1117-19 Je '43

Chromatography as a means of separating amino acids. J. L. Wachtel and H. G. Cassidy. *bibliog Am Chem Soc J* 65:665-8 Ap '43

Heats of dilution of aqueous solutions of glycine at 25°. W. E. Wallace, W. F. Offutt and A. L. Robinson. *bibliog Am Chem Soc J* 65:347-50 Mr '43

Resolution and rates of hydrolysis of *d*, *l*-α-bromopropionic acid and its glycine derivatives. A. F. Chadwick and E. Pascu. *bibliog Am Chem Soc J* 65:392-402 Mr '43

Role of glycine in protein structure. H. Neurath. *bibliog Am Chem Soc J* 65:2039-41 O '43

See also

Alanylglycine

Glycylglycine

GLYCININ

Soybean protein dispersions as printing ink vehicles. A. F. Schmutzler and D. F. Othmer. *bibliog il Ind & Eng Chem* 35:1196-1202 N '43

GLYCOL

Activity coefficients of lead chloride determined from e. m. f. and solubility data at 25° in ethylene glycol-water solutions, A. B. Garrett, R. Bryant and G. F. Kiefer. *Am Chem Soc J* 65:1905-7 O '43

Activity coefficients of thallous chloride in ethylene glycol-water solutions determined by e.m.f. and solubility data at 25°. O. D. Black and A. B. Garrett. *bibliog Am Chem Soc J* 65:362-5 My '43

Acute toxicity of vapors of several monoalkyl ethers of ethylene glycol, H. W. Werner and others. *bibliog diag J Ind Hygiene* 25:157-63 Ap '43

Determination of monoalkyl ethers of ethylene glycol. H. W. Werner and J. L. Mitchell. *bibliog Ind & Eng Chem Anal ed* 15:375-6 Je 15 '43

Effects of repeated exposures of rats to vapors of monoalkyl ethylene glycol ethers. H. W. Werner and others. *bibliog J Ind Hygiene* 25:374-9 O '43

Electrolytic oxidation of thiosulfate in ethylene glycol solution. S. Glasstone, V. V. Barr, and B. O. Heston. *bibliog Electrochem Soc Trans* 84 (preprint 10):79-86 O '43

Freezing points, densities, and refractive indexes of the system glycerol-ethylene glycol-water. J. A. Spangler and E. C. H. Davies. *bibliog Ind & Eng Chem Anal ed* 15:96-9 F 15 '43

Lead chloride-ethylene glycol-water system at 25°. A. B. Garrett and others. *Am Chem Soc J* 65:293-4 F '43

GLYCOLS

Enediols; vinyls of ethylene and acetylene glycols. R. C. Fuson, D. J. Byers and A. J. Rachlin. *bibliog Am Chem Soc J* 64:2891-3 D '42

Glycols in cosmetics may be hazardous. *Oil Paint & Drug Rep* 143:5+ My 31 '43

Investigations on the stereoisomerism of unsaturated compounds; the composition of divinyl glycol from acrolein; the system *meso*-*dl*-diethyl glycol. W. G. Young, S. J. Cristol and F. T. Weiss. *bibliog Am Chem Soc J* 65:1245-6 Je '43

Oxidoketones in the indene series. C. F. H. Allen and J. W. Gates, jr. *bibliog Am Chem Soc J* 65:1230-5 Je '43

Some pharmacological properties of polyethylene glycols of high molecular weight (carboxylic compounds). H. F. Smyth, jr. and others. *J Ind Hygiene* 24:281-4 N '42

Sterilization of air by certain glycols employed as aerosols. O. H. Robertson and others. *bibliog Science* 93:213-14 F 28 '41; *Abstract. Heat & Ven* 39:63 D '42

Studies in the polyene series; the anionotropic rearrangement of the acetylenic glycol from crotonaldehyde. I. M. Heilbron, E. R. H. Jones and R. A. Raphael. *Chem Soc J* p263-70 Je '43

Synthesis and rearrangement of some decahydro- and tetrahydro-naphthalenediols. J. English, jr. and G. Cavaglieri. *bibliog Am Chem Soc J* 65:1085-9 Je '43

Volatile borates of polyhydric alcohols and the activation of boric acid. R. E. Rippere and V. K. La Mer. *bibliog diag J Phys Chem* 47:204-34 Mr '43

See also

Triethylene glycol

GLUCOSIDES. See Glucosides**GLYCYLGLYCINE**

Thermal data; heats of combustion and free energies of some compounds containing the peptide bond. H. M. Huffman. *bibliog J Phys Chem* 46:885-91 N '42

GLYCYRRHETIC acid

Sapogenins; the position of the carboxyl group in oleanolic and glycyrrhetic acids. G. A. R. Kon and W. C. J. Ross. *Chem Soc J* p741-4 D '42

GLYOXAL

Glyoxal, a non-irritating aldehyde suggested as substitute for formalin in histological fixations. L. F. Wicks and V. Sontzeff. *Science* 98:204 Ag 27 '43

Quinoxaline formation and the ortho effect. R. C. Fuson and others. *bibliog Am Chem Soc J* 65:1028-9 Je '43

GNEISS

Nephelized paragneisses of the Bancroft region, Ontario. W. K. Gummer and S. V. Burr. *Science* 97:286-7 Mr 26 '43

GOATS

Mohair and cashmere fibers. A. C. Whitford. *Textile Col* 65:1-4 Ja '43

GOGGLES

Care for your goggles. *il Safety Eng* 86:26+ O '43

Eye protection, an important contribution to warpower. *il Nat Safety N* 47:16-17 Mr '43

Let's talk goggles again. *il Safety Eng* 86:12, 16 S '43

GOITER

New method of treating goiter; abstract. E. B. Astwood. *Science* 97:sup12 My 28 '43

GOLD

Gold discovered in the sun. R. S. Richardson. *Science* 97:sup10 Ap 23 '43

Studies on the structure of thin metallic films by means of the electron microscope. R. G. Picard and O. S. Duffendack. *il J Ap Phys* 14:291-305 Je '43

See also

Gold as money	Gold mines and min-
Gold dredging	ing
Gold metallurgy	Gold ores

Analysis

Detection of gold in plating. M. Lerner. *Ind & Eng Chem Anal ed* 15:416 Je 15 '43

Statistics

Gold movements to and from the United States, yearly 1934-1941, monthly Nov. 1940-Dec. 1941. *Fed Res Bul* 29:97 Ja '43 [cont monthly]

Gold, 1942. *Eng & Min J* 144:77-9 F '43

Gold production, outside U.S.S.R. 1934-1941 and monthly Nov. 1941-Oct. 1942. *Fed Res Bul* 29:97 Ja '43 [cont monthly]

Monetary statistics, 1938-1941. Survey of *Cur Business* 1942 Sup p72 [supplemented in monthly numbers]

GOLD alloys

Physical characteristics of gold-indium alloys. *Iron Age* 152:49 S 2 '43

GOLD as money

Accounting control for peace; the future of international prosperity. A. Grey. *J Account* 75:397-407 My '43

Future of gold. *Economist* 143:655-6 N 28 '42

Future of the gold standard. E. W. Kemmerer. *Comm & Fin Chr* 157:1193+ Ap 1 '43; *Discussion* 157:1281+, 1369+, 1475+, 1569+, 1774+, 1871 Ap 8, 15, 22, 29, My 13, 20 '43

Gold and stabilization of world currencies. V. L. Horoth. *il Mag of Wall St* 72:615-17+ S 18 '43

Gold at the peace table. J. T. Holdsworth. *Comm & Fin Chr* 158:901, 910-11 S 2 '43

Gold reserves of central banks and governments, monthly, Dec. 1941-Nov. 1942. *Fed Res Bul* 29:36 Ja '43 [cont monthly]

Gold standard based upon gold bullion. W. T. Skinner. *Comm & Fin Chr* 157:1967 My 27 '43

Gold the ultimate refuge. C. Benedict. *Mag of Wall St* 72:277+ Je 26 '43

Gold to be less important in post-war era? *Abstract. S. E. Harris. For Comm W* 10:13 F 13 '43

Gold will be money. S. Leacock. *map Barron's* 22:3 D 28 '42

Keynes proposes international currency union, based on bancor. *Comm & Fin Chr* 157:1358-9 Ap 15 '43

Our golden ghost. E. H. Collins. *il Banking* 35:26-7+ Je '43

Redundant currency vs gold measurements as builders of workable wages. E. S. Pillsbury. *Comm & Fin Chr* 157:2358+ Je 24 '43

Return to gold standard after war advocated. W. L. Hemingway. *Comm & Fin Chr* 157:2285 Je 17 '43

Road to currency stabilization proposed by Guaranty trust company. *Comm & Fin Chr* 153:1313 S 30 '43

Wartime gold output and demand. *Nat City Bank* p137-40 D '42; *Excerpts. Trusts & Estates* 76:29 Ja '43

Will gold be money, post-war? G. C. Cox. *Barron's* 22:3 N 16 '42

GOLD as money—Continued

World bank proposals; banco or unitas? is the international gold standard outmoded? Fortune 28:138-9+ Ag '43

See also

Bimetallism
Money

Brazil

Brazil allowed to buy more U.S. gold. Comm & Fin Chr 158:606 Ag 12 '43

Switzerland

Swiss gold market. Economist 143:773-4 D 19 '42

United States

Analysis of changes in gold stock of United States, 1934-41 and monthly Oct. 1941-Nov. 1942. Fed Res Bul 29:58 Ja '43 [cont monthly]

Are we giving away our gold? W. W. Phillips. Comm & Fin Chr 157:1859+ My 20 '43
Gold exportable without commercial liquidation. W. F. Hickernell. For Comm W 11: 3-6+ My 8 '43

GOLD chloride

Volatilisation of gold; experimental work in Australia. Chem Age (Lond) 49:16 JI 3 '43

GOLD coating

Measurement of thickness of fired-on gold coatings on ceramic base materials. K. H. Ballard. diag Ind & Eng Chem Anal ed 14: 868-9 N 15 '42

GOLD dredging

Deep gravels dredged successfully; Yuba consolidated gold fields. H. Sawin. il Eng & Min J 144:69-71 JI '43

Dredge bucket renewal conserves manganese steel. C. H. Thurman. il Eng & Min J 144: 68 Ap '43

Gold hunting house-boat. G. Y. Schierboltz. il Can Min J 64:358 Je '43

Maintaining mining machinery. Mech Hand- ling 30:19-21 Ja '43

GOLD foil

Zinc oxide smoke as a reference standard in electron wave-length calibration. C. Lu and E. W. Malmberg. bibliog R Sci Instr 14:271-3 S '43

GOLD metallurgy

Basic theory of the cyanide process. D. C. McLaren. flow sheets il diag Can Min J 63: 570-7, 767-78; 64:565-72 S, D '42, S '43

Chemicals for gold mining; latest plant and treatment methods in South Africa. il Chem Age (Lond) 47:465-7 N 28 '42

Future of gold metallurgy. H. A. White. Can Min J 64:647-53 O '43

Visit to the Aguacate district in Costa Rica. J. B. Huttli. flow sheet Eng & Min J 143: 60-1 N '42

Volatilisation of gold; experimental work in Australia. Chem Age (Lond) 49:16 JI 3 '43

GOLD mines and mining

Buffalo Ankerite gold mines; engineering problems. E. C. Keeley. diag plans Can Min J 63:697-712 N '42

Gold, 1942. Eng & Min J 144:77-9 F '43

Wartime gold output and demand. Nat City Bank p137-8 D '42

See also

Gold dredging

Costs

Gold mine maintenance costs. Barron's 22:12 N 30 '42

History

Klondike rush. T. A. Rickard. bibliog il map Can Min J 64:219-27 Ap '43

Placer mining

See also

Gold dredging

Africa, British West

Sand leaching at Nangodi; small-scale cyanidation enterprise in West Africa. W. H. Dennis. diag Eng & Min J 144:65-7 Mr '43

Alaska

Geology and ore deposits of the Chichagof mining district. J. C. Reed and R. R. Coats. il diag maps U S Geol S Bul 929:1-148, pl 1-33 [13 pls in separate pocket]; pa \$3.25 Supt. of doc. '41

California

Deep gravels dredged successfully; Yuba consolidated gold fields. H. Sawin. il Eng & Min J 144:69-71 JI '43

Canada

Canada, 1942. J. B. DeMille. Eng & Min J 144:85-7 F '43

Gold mining and shipbuilding; program of Wartime merchant shipping limited in eastern Canada's gold mine machine shops. R. C. Rowe. il Can Min J 64:627-40 O '43

Gold will be money; critical condition of the gold mining industry in Canada. S. Leacock. map Barron's 22:3 D 28 '42

It isn't gold's day. Business Week p54+ O 30 '43

Central America

Central America, 1942. Eng & Min J 144:90-1 F '43

Colorado

Stratigraphy, structure, and mineralization in the Beaver-Tarryall area, Park county, Colorado. Q. D. Singewald. maps U S Geol S Bul 928-A:1-44, pl 1-5; pa 15c Supt. of doc. '42

Costa Rica

Visit to the Aguacate district in Costa Rica. J. B. Huttli. flow sheet Eng & Min J 143: 60-1 N '42

Ecuador

Andean gold; fifty years of successful operation by South American development company. E. I. LaBeaume. il maps Explosives Eng 21:169-71, 196-7 S '43

Gold Coast, Africa

West African gold mines; Ashanti and Bihiani, annual general meetings. Economist 144:599, 603 My 8 '43

Idaho

Yellow Pine mine, producing combination of tungsten, antimony, and gold. J. D. Bradley, J. A. Mecia and R. E. Baker. il diag Eng & Min J 144:60-6 Ap '43

India

Gold mining in India. Can Min J 64:572 S '43

Manitoba

Rock alteration at the San Antonio mine. J. G. Bragg. il Can Min J 64:553-6 S '43

Nevada

Notable mine closes; Belmont mine. Comp Air M 48:7069 Je '43

Nicaragua

Tropical mine shaft; La Luz mines limited, Nicaragua. W. J. Roberts. il diag Comp Air M 48:6943-5 Ja '43

Nova Scotia

Goldfields of Nova Scotia. T. A. Rickard. bibliog il diag Can Min J 63:713-18 N '42

Ontario

Engineering practice at Cochenour Willans. R. W. Richardson. diag maps Can Min J 64:417-25 JI '43

Gold ores of the Little Long Lac area, Ontario. H. S. Armstrong. bibliog il Econ Geol 38:204-52 My '43

Oregon

Paragenesis of some gold and copper ores of southwestern Oregon. W. R. Lowell. bibliog il map Econ Geol 37:557-95 N '42

Quebec

Gold and copper of Quebec; history. T. A. Rickard. bibliog il map Can Min J 64:501-6 Ag '43

South Africa

See also

Gold mines and mining—Transvaal

Transvaal

Central Mining-Rand mines; annual reports Economist 144:598 My 8 '43

GOLD mines and mining—Transvaal—Cont.

- Chemicals for gold mining; latest plant and treatment methods in South Africa. *il Chem Age (Lond)* 47:465-7 N 28 '42
- Kaffir results; Anglo American group. *Economist* 144:697 My 29 '43
- Kaffir shares. *Economist* 145:50-1 JI 10 '43
- Rand mines limited; Crown mines limited, City Deep limited; annual meetings, Johannesburg. *Economist* 144:702-4 My 29 '43
- Union corporation group; results 1940 and 1941. *Economist* 144:664 My 22 '43
- Utilising gold residues; South African waste ferric oxide. A. H. White. *Chem Age (Lond)* 49:14 JI 3 '43

United States

- 1942 a hectic year for gold mining. H. A. Sawin. *il Min Cong J* 29:46-7 F '43
- WPB continues order closing gold mines. *Comm & Fin Chr* 158:35 JI 1 '43

Venezuela

- Some gold lodes of Bolivar. P. A. Bundy. *il Eng & Min J* 144:43-5 Ja '43

Yukon territory

- Klondike rush. T. A. Rickard, bibliog *il map Can Min J* 64:219-27 Ap '43

GOLD ores

- Gold ores of the Little Long Lac area, Ontario. H. S. Armstrong, bibliog *il Econ Geol* 38:204-52 My '43
- Goldfields of Nova Scotia. T. A. Rickard, bibliog *il diag Can Min J* 63:713-18 N '42
- Mechanism and environment of gold deposition in veins. W. H. White. *il map Econ Geol* 38:512-32 S '43
- Paragenesis of some gold and copper ores of southwestern Oregon. W. R. Lowell, bibliog *il map Econ Geol* 37:557-95 N '42
- Rock alteration at the San Antonio mine. J. G. Bragg. *il Can Min J* 64:553-6 S '43
- Some gold lodes of Bolivar, Venezuela. P. A. Bundy. *il Eng & Min J* 144:43-5 Ja '43
- Stratigraphy, structure, and mineralization in the Beaver-Tarryall area, Park county, Colorado. Q. D. Singewald, maps *U S Geol S Bul* 928-A:1-44, pl 1-5; pa 15c Supt. of doc. '42
- Studies of subscreen sizing; grinding and grinding efficiencies. I. M. Six, bibliog *il Can Min J* 64:147-55 Mr '43

GOLD standard. See Gold as money**GOLD toning. See Photography—Developing and developers****GOLDEN cycle corporation**

- Converting a gold mining enterprise for the war program; Golden cycle corporation supplying zinc, lead and other essential products. M. E. Shoup. *il Min Cong J* 29:38-40 Ap '43

GOLDENROD

- Goldenrod planting for rubber. *India Rubber W* 108:370 JI '43; Same. *Rubber Age* 53:250 Je '43

GOLF balls

- Wooden golf balls in Rhodesia. *For Comm W* 11:22 Je 5 '43

GOMPERTZ equation

- Correlation of rate data. C. C. DeWitt, bibliog *Ind & Eng Chem* 35:695-700 Je '43

GNIOREFLECTOMETER. See Reflectometers**GNORRHEA**

- Penicillin and gonorrhea. *Science* 97:sup10 Je 4 '43

GOOD will (in business)

- Asset of good will. J. C. Behan. *East Underw* 43:16 D 11 '42
- Good will in war time. G. E. Wilson. *Credit & Fin Management* 45:14, 16-19+ Ag '43

See also

- Advertising, Educational, Institutional

GOODRICH, B. F., company

- Brilliant report. Barron's 23:1 Ag 23 '43
- Companies favored by research. *Mag of Wall St* 73:34 O 16 '43

- Consolidated income account, 1940-1942; Cuban factory completed. *Comm & Fin Chr* 157:1179 Mr 29 '43

- President predicts synthetic tires on sale in 1944. *Comm & Fin Chr* 157:1558 Ap 26 '43
- Ten years' progress in rubber goods for aircraft. R. S. Colley. *il Aeronautical Eng R* 1:117 N '42
- Thumbnail stock appraisal. *Mag of Wall St* 71:290 D 26 '42

GOODRICH, Charles Francis, 1881-

- Sketch. *por Civil Eng* 12:695 D '42

GOODSPEED, Arthur Willis, 1860-1943

- Sketch. O. Glasser. *Science* 98:219 S 3 '43
- Sketch. H. C. Richards. *Science* 98:125-6 Ag 6 '43

GOODWIN, George

- Deputy commissioner, Connecticut insurance department. *por East Underw* 44:26+ Je 25 '43

GOODWIN, John, 1816-1875

- Story of John Goodwin, pioneer potter. L. T. Cox. *por Am Cer Soc Bul* 21:241-7 N 15 '42

GOODWIN plan

- Adolph Goodwin, promoter of plan to sell through churches, dies. *Ptr Ink* 203:50 Je 18 '43

GOODYEAR, Charles, 1800-1860

- Cradle of the rubber industry, Naugatuck, Conn. L. Smith. *por India Rubber W* 108:565-9 S '43

GOODYEAR aircraft corporation

- Training for women in aeronautical engineering at the University of Cincinnati. *Science* 97:548-9 Je 18 '43

GOODYEAR tire and rubber company

- Annual report. *Comm & Fin Chr* 157:1081 Mr 22 '43

- Another look. *Mag of Wall St* 72:638 S 18 '43
- Goodyear dedicates research laboratory. F. J. Van Antwerpen. *il Chem & Eng N* 21:1056-9 JI 10 '43

- Goodyear tire and rubber company; ten years' engineering progress in development of airships, airplane materials and rubber goods. P. W. Litchfield. *Aeronautical Eng R* 1:61 N '42

- Goodyear's new research laboratory. *il Mod Packaging* 16:102 JI '43

- Goodyear's new research laboratory in Akron. *il Rubber Age* 53:328-30 JI '43

- New pastures; Goodyear's researches in electronics, aviation, plastics. *il Business Week* p24+ Je 26 '43

GORE, John Kinsey, 1864-1943

- Sketch. *por East Underw* 44:7+ Je 25 '43; *Weekly Underw* 148:1383 Je 26 '43

GORILLAS

- Gorilla round-up; concerning each of the sixteen living gorillas in the United States. R. Conant. *il Sci Am* 168:246-8 Je '43

GORRELL, Edgar Staley

- Personalities in industry. *por Sci Am* 167:245 D '42

GOSSYPOL**Analysis**

- Determination of free gossypol in cottonseed meal; a colorimetric method. C. M. Lyman, E. R. Holland and F. Hale. *Ind & Eng Chem Anal ed* 15:489-91 Ag 15 '43

GOUPIL, Alexandre, d 1909

- Duck; how Alexandre Goupil's airplane control theories of 1884 were proved in 1917. S. P. Johnston. *il diags Tech R* 45:130-2+ Ja '43

GOURDS

- Loofas ahoy! tale of the dish-rag gourd. E. F. Sylvester. *il For Comm W* 10:4-5, 23 Mr 6 '43

GOVERNMENT, Reports to. See Business—Reports to government**GOVERNMENT accounting**

- Cease special relief accounting agency. *Comm & Fin Chr* 157:432 Ja 28 '43

- Financial department of the United States government. E. E. Naylor. *J Account* 76:421-32 N '43

- Functions of the governmental accountant in renegotiation. M. C. Troper. *J Account* 75:213-18 Mr '43

See also

- Public welfare departments—Accounting
- United States—Navy department—Accounting

GOVERNMENT advertising

Advertising and the postwar world; advertising as means of communication between all peoples will make for peace. H. A. Batten. Adv & Sell 36:13-14, 62+ J1 '43
 Bankhead government advertising bill; text. Ptr Ink 203:80+ My 14 '43
 Bill would authorize advertising program. Comm & Fin Chr 157:1869 My 20 '43
 British Columbia continues tourist advertising to protect past investment. Il Ptr Ink 205:96 O 22 '43
 British government ads fight venereal disease. R. Walker. Il Adv & Sell 36:23+ Ag '43
 Letter from London: Britain's biggest advertiser; Ministry of information's work in home-front publicity. J. P. McNulty. Adv & Sell 35:56+ D '42
 National sales force to back up government advertising projects. Ptr Ink 201:19-20 D 11 '42
 Publishers must maintain eternal vigilance against government restrictions and control; government financed advertising smacks of subsidy. W. M. Dear. Comm & Fin Chr 157:1683 My 6 '43
 Radio sells war bonds. Ptr Ink 202:50 Mr 12 '43
 To stop to debate paid government advertising now would be ill-advised. C. J. La Roche. Ptr Ink 201:26, 28+ N 27 '42
 U.S. war advertising sells workers, industry by industry. G. A. Nichols. Il Ptr Ink 202:16-18+ F 12 '43

See also

Advertising—Government cooperation	State advertising War advertising council
------------------------------------	---

GOVERNMENT aid to business

Ancestry of insured credit. Il Banking 35: 23-4 Je '43
 Budget slashes are hamstringing commerce services to business. Sales Management 52: 18, 20-2 Ag 15 '43
 Bureau of foreign and domestic commerce, how it can help you. A. R. Hahn. Sales Management 52:43+ S 1; 32, 34+ S 15; 94+ O 1; 66+ O 15; 92+ N 1; 70+ N 20 '43
 How Washington can aid in your postwar planning. Adv & Sell 36:64, 66 Ag '43
 Wartime guides for your business; financing war production; liquidating frozen inventories. W. H. Hillyer. Barron's 22:8 N 23 '42

See also

Contracts, Government—Finance	Government publications
Economic policy	Loans, Bank—Guaranty
Export trade—Government aid	Reconstruction finance corporation
Government loans and grants	Smaller war plants corporation
Government loans to industry	Transportation—Federal aid

GOVERNMENT banking. See Government loans and grants

GOVERNMENT boards and commissions*See also*

Federal communications commission	Federal trade commission
Federal power commission	Interstate commerce commission

GOVERNMENT bonds. See Bonds, Government
GOVERNMENT buildings. See Public buildings

GOVERNMENT bureaus. See United States—Executive departments

GOVERNMENT competition with business*See also*

Government loans and grants	Government loans to industry
-----------------------------	------------------------------

GOVERNMENT contracts. See Contracts, Government; Purchasing, Government

GOVERNMENT corporations

Government corporations and credit agencies in 1942. Fed Res Bul 29:296-7 Ap '43
 Government corporations and credit agencies, principal assets and liabilities; loans, other than interagency loans; and selected asset items, other than interagency items. June 1941 and monthly Oct. 1941-1942. Fed Res Bul 29:74 Ja '43 [cont monthly]

Governmental corporations and credit agencies, finance, 1938-1941. Survey of Cur Business 1942 Sup p76-8 [supplemented in monthly numbers]

See also

Commodity credit corporation	Metals reserve company
Defense plant corporation	Reconstruction finance corporation
Federal deposit insurance corporation	Smaller war plants corporation
Home owners' loan corporation	War materials, inc.

GOVERNMENT credit agencies. See Government loans and grants

GOVERNMENT employees

Bill would establish federal fidelity fund. East Underw 44:48 Ap 30 '43
 Byrd committee urges federal government to reduce civilian personnel by 300,000. Comm & Fin Chr 153:34 J1 '43
 Cancels draft deferments for federal employees. Comm & Fin Chr 156:1894 N 26 '42
 Changes in living costs of federal employees in Washington, D.C. from December 1940 to December 1941. In U S Bur Labor Statistics Bul 710:29-33 '42
 Collective bargaining in Canadian government plants. Monthly Labor R 56:474-5 Mr '43
 840,578 government workers are of draft age. Comm & Fin Chr 157:1685 My 6 '43
 Employee-management co-operation in public work. C. S. Golden. Advanced Management 7:161-4 O-D '42
 Employment in federal executive service, December 1940-December 1942. F. L. Christman. Monthly Labor R 56:478-83 Mr '43
 Employment of Negroes by federal government. E. W. Henderson. Monthly Labor R 56:889-91 My '43
 Experiment in meeting personnel losses in government agencies. F. H. Morgan. Advanced Management 8:56-9 Ap '43
 Federal manpower muddle. H. F. Byrd. Manuf Rec 111:25+ D '42
 Federal personnel headaches. M. M. Mandell. Personnel J 21:359-62 Ap '43
 FSA employee training. J. J. King. Personnel J 22:186-9 N '43
 Government payrolls in 1942 exceed those in manufacturing in 1939. Comm & Fin Chr 157:1599 Ap 29 '43
 Government personnel in foreign service under group cover. East Underw 44:1+ Ag 6 '43; Weekly Underw 149:241+ Ag 7 '43
 Governmental employment, January 1939 to July 1942; federal and state and local. F. L. Christman. Monthly Labor R 55:935-40 N '42
 Lawyers fight McCarran bill; surety committee solicits aid in defeating U.S. bonding fund. Nat Underw 47:30 Ag 26 '43
 Number on government payroll increased 73% in 1942. Comm & Fin Chr 157:1401 Ap 15 '43
 Personnel counselling obviously needed; supervision in government agencies faulty. H. E. Eisler. Personnel J 22:140-6 O '43
 President denies government is haven for draft dodgers, presents figures on deferments. Comm & Fin Chr 158:1820 N 4 '43.
 President opposes bill requiring Senate approval of federal employees in \$4,500 jobs. Comm & Fin Chr 157:347 Mr 4 '43
 President orders WMC to control deferments for federal workers. Comm & Fin Chr 157: 1217 Ap 1 '43
 Remington Rand runs typewriter clinics for government employees. S. L. Hooper. Sales Management 52:72+ S 1 '43
 60% government employees in war production. Comm & Fin Chr 156:2341 D 31 '42

See also

Civil service	Patent laws and legislation—Government employees' inventions
Municipal employees	State employees

Salaries

Overtime pay for government employees. Monthly Labor R 56:359-61 F '43
 Overtime pay of government employees. Monthly Labor R 56:1203-4 Je '43

GOVERNMENT employees—Salaries—Cont.

President asks pay equalization for government employees. Comm & Fin Chr 156:2333 D 31 '42
 President signs federal overtime pay bill; 48-hour week and elimination of non-vital work. Comm & Fin Chr 157:72 Ja 7 '43
 Salaries of federal employees, October 1942. F. L. Christman. Monthly Labor R 57:566-77 S '43

GOVERNMENT expenditures

Business man's doubts on government spending; with editorial comment. B. Barton. Fortune 27:136+ F '43
 Economy. Economist 144:550-1 My 1 '43
 Expenditures of the federal government for war activities on the basis of checks paid by the United States Treasury, 1940-August 1942; chart. Survey of Cur Business 22:2 N '42
 Federal expenditures per family, 1910-1943; chart. Barron's 23:1 Ja 11 '43
 Financial basis for victory; wasteful expenditures and their effect on war debt. H. F. Byrd. Trusts & Estates 76:107-10 F '43
 Government receipts, expenses covered in bulletin of League of nations. Comm & Fin Chr 157:2187 Je 10 '43
 Rich Uncle Sam. F. I. Kent. Banking 36:24-5+ N '43
 Wasteful policies of government procurement agencies assailed. Steel 113:80-1 N 8 '43
 Which way to post-war jobs? why private investing is more effective and less dangerous than government spending. J. W. Hanes. Barron's 23:1+ My 31 '43

See also

Budget	State finance
Finance	Taxation
Government loans and grants	United States—Appropriations and expenditures
Municipal finance	War finance
Public works—Economic aspects	

GOVERNMENT housing. See Housing projects, Government

GOVERNMENT investigations

Dies committee continued. Comm & Fin Chr 157:927 Mr 11 '43
 They can take it to Truman; Senate committee investigating the war program. il Business Week p19-20+ Je 26 '43

See also

Federal trade commission

Monopoly investigation

Fact and fancy in the T.N.E.C. monographs. J. Scoville and N. Sargent. comps. 812p \$3 for sale by Wilson, H.W. '42; Review. Nat Underw (Life ed) 47:1+ Ja 1 '43

See also

Insurance, Life—Government investigation

GOVERNMENT laboratories

Research at a government arsenal in cooperation with universities. L. S. Fletcher. J Eng Educ 33:781-6; Discussion. L. M. K. Boelter; A. W. Hixson. 786-93 Je '43

GOVERNMENT liability

Crash of army glider raises legal points; personal injury damages. East Underw 44:31 Ag 13 '43

See also

Municipal liability
 State liability

GOVERNMENT libraries

Organization and personnel in federal libraries. F. E. Fitzgerald. Special Lib 34:3-3 Ja '43
 Special library for telecommunications; Postmaster-General's department, Melbourne, Australia. B. Robertson. Special Lib 34:89-93 Mr '43
 Wartime problems of Washington financial librarians. E. Rackstraw. Special Lib 34:276-9 Jl-Ag '43

See also

Social security board	United States—Treasury department—Library
—Libraries	
United States—Budget, Bureau of—Library	

GOVERNMENT loans and grants

ABA declares opposition to socialized credit; calls for ultimate elimination of government subsidy. Comm & Fin Chr 157:497+ F 4 '43

Bankers object to more government loans to farmers. Bankers Mo 60:131 Mr '43
 Bankers urged to continue efforts to curb government lending. A. L. M. Wiggins. Comm & Fin Chr 158:1197 S 23 '43

Government corporations and credit agencies in 1942. Fed Res Bul 29:296-7 Ap '43

Government corporations and credit agencies, principal assets and liabilities, loans, other than interagency loans; and selected asset items other than interagency items, June 1941 and monthly Oct. 1941-1942. Fed Res Bul 23:74 Ja '43 [cont monthly]

Governmental corporations and credit agencies, finance, 1938-1941. Survey of Cur Business 1942 Sup p76-8 [supplemented in monthly numbers]

Return to gold standard after war advocated; government farm lending agencies. W. L. Hemingway. Comm & Fin Chr 157:2285 Je 17 '43

Revival of Regional agricultural credit corp. held inflationary, step to socialized credit. W. L. Hemingway. Comm & Fin Chr 157:672 F 18 '43

Sees socialized credit in loan plan of Regional agricultural credit corporation; A.B.A. president also terms revival inflationary. Banking 35:33+ Mr '43

Those federal lending agencies, what they are and what they do. Business Week p40-1 Ja 2 '43

U.S. lends more to farmers than insured banks do. Bankers Mo 60:178-80 Ap '43
 Violation of credit principles; American bankers association position. Banking 35:96 F '43

See also

Government corporations	Rural electrification administration
Reconstruction finance corporation	Work projects administration
Roads—Federal aid	

GOVERNMENT loans to industry

Industrial credit system established. For Comm W 13:16 O 30 '43

Plant financing in a war economy; problem of new facility financing. M. D. Ketchum. J Business 16:28-50 Ja '43

V loan financing plan gains favor in industry. R. Wilco. Aviation N 1:32 Ag 30 '43

Wartime guides for your business; how Document N, Plan DPC, Plan EPF, or Regulation V can help you finance contracts. W. H. Hillyer. Barron's 22:7 N 30 '42

Accounting

Balance sheet classification of V loans; a statement by the Research department of the American institute of accountants. J Account 75:164 F '43

GOVERNMENT news. See Newspapers—Government news

GOVERNMENT officials. See Public officials

GOVERNMENT ownership

America's new industrial empire; construction of war plants; problems of peacetime conversion. Index 23 no 3:45-58 [S] '43

Basis for postwar planning; one-fifth of a nation, government-owned. Business Week p52-8 Je 19 '43

Current status of Mexico's petroleum industry. J. J. March. il Pet Eng 15:198, 200+ O '43

Fiction of public ownership. I. Paterson. Edison Elec Inst Bul 11:235-41 Ag '43

Fortune survey; labor asked how about state capitalism? Fortune 27:8-9 F '43

Government mine operation fails Britain in wartime crisis; argument for the continuation of the American system. Coal Age 48:54-8 O '43

Industry ponders postwar disposition of facilities. Steel 113:141-3 O 11 '43

Jones opposes operation by U.S. Steel 113:68-9 O 4 '43

Plant financing in a war economy; problem of new facility financing. M. D. Ketchum. J Business 16:28-50 Ja '43

GOVERNMENT ownership—Continued

Post-war disposal of government plants called major problem. J. Jones. *Comm & Fin Chr* 158:432 J1 29 '43

\$25 billion federal investment in American industry; what should be done with it? E. A. Krauss. *Mag of Wall St* 72:618-19+ S 18 '43

Vast investment in plants gives government great power, but Jones predicts a fair deal. *Iron Age* 152:79-80 J1 29 '43

Washington power octopus feels a cold breeze. L. D. Farrar. *Pub Util* 32:154-9 Ag 5 '43

Who'll give me a bid? disposal of surplus goods as a partial means of lessening tax burden. H. Corey. *Pub Util* 32:201-9 Ag 19 '43

Will holding company integration be made the handmaiden of public ownership? *Pub Util* 31:439-42 Ap 1 '43

See also

Air lines—Government ownership	Government regulation of industry
Electric utilities—Government ownership	Hydroelectric plants—Government ownership
Government corporations	Industry and state Insurance, State Railroads and state

GOVERNMENT paper. See Paper, Government

GOVERNMENT printing office. See United States—Government printing office

GOVERNMENT property. See United States—Government property

GOVERNMENT publications

Cuts government publicity for duration of war. *Comm & Fin Chr* 156:1805 N 19 '42

Essential distribution of government publications; document distribution manual. *Special Lib* 34:171-2 My '43

Government publications, availability and use from the special librarian's point of view. R. L. Vormelker. *Special Lib* 34:212-18 J1-Ag '43

Scientific publications of the government. A. Seidell and others. *Science* 97:339-46 Ap 16 '43

United States government as publisher. L. C. Merritt. 179p bibliog(p175-6) \$2 Univ. of Chicago press '43

Bibliography

Official war publications; guide to state, federal, and Canadian publications. J. K. Wilcox. v4 195p pa \$1.50 Bur. of public administration, Univ. of California, Berkeley '42

Official war publications; guide to state, federal, and Canadian publications. J. K. Wilcox. v5 252p \$1.75 Univ. of Calif. Bur. of public administration, Berkeley '43

Official war publications; guide to state, federal, and Canadian publications. J. K. Wilcox. v6 274p Bur. of public administration, Univ. of California, Berkeley '43

Publications of the Department of state; a list cumulative from October 1, 1929. 32p U.S. Dept. of state, Washington '43

GOVERNMENT publicity

Cuts government publicity for duration of war. *Comm & Fin Chr* 156:1805 N 19 '42

Trade groups get behind victory campaigns. *Inland Ptr* 110:23-4 N '42

GOVERNMENT purchasing. See Purchasing, Government

GOVERNMENT receivables. See Accounts receivable

GOVERNMENT regulation of industry

Accounting problems of the small business. M. H. Stans. *J Account* 76:230-9 S '43

Chemists and industrial control; concentration plans in allied industries; paint and gas industries. *Chem Age (Lond)* 47:555-6 D 19 '42

Fifth freedom. G. S. Olive. *J Account* 75:490-5 Je '43

Government control after war seen desirable. R. Opie. *Ptr Ink* 203:32-3 My 21 '43

How much industry control is best? D. Tyerman. *Barron's* 23:1 N 1 '43

Living with the bureaucrats; private business is learning how to adapt to increasing regulation. S. A. Weart. *Barron's* 23:7 F 15 '43

Post-war industry and quality control. B. H. Wildson. *Soc Dyers & Col J* 59:161-4 Ag '43

Restoring freedom. *Fortune* 26:supp9-13 D '42

Some wartime revelations. W. C. Mullendore. *Edison Elec Inst Bul* 11:193-6 J1 '43

Straws pointing to a change in the wind. H. Corey. *Pub Util* 32:25-33 J1 8 '43

Technology and political organization. H. C. Havighurst. *Advanced Management* 8:49-55 Ap '43

Toward a mixed economy; abstract. S. Chase. *Management R* 32:238-40 J1 '43

See also

Coal trade—Regulation	Moving picture industry—Regulation
Economic planning	National war labor board
Electric utilities—Regulation	Petroleum industry and trade—Regulation
Federal trade commission	Price fixing, Government
Food laws and legislation	Prices—Regulation
Government ownership	Priorities and allocations, Industrial
Industry and state	Public utilities—Regulation
Insurance companies—Regulation	Railroads—Rates
Interstate commerce	Railroads and state
Interstate commerce commission	Trade associations
Labor laws and legislation	Trade marks
Milk supply—Laws and regulations	Trusts, Industrial

GOVERNMENT research

Discussion of some aspects in the publication of government research. R. R. Shaw. *Science* 97:345-6 Ap 16 '43

National research. S. Cripps. *Engineer* 176:17 J1 '43

Research at a government arsenal in co-operation with universities. L. S. Fletcher. *J Eng Educ* 33:781-6. Discussion. L. M. K. Boelter; A. W. Hixson. 786-93 Je '43

See also United States—Scientific research and development, Office of

GOVERNMENT statistics

Rationalization of government questionnaires. S. A. Rice and H. Venneman. *N A C A Bul* 24:1225-35 Je 15 '43

GOVERNORS (machinery)

Aeroproducts constant-speed propeller. J. F. Haines. *Il Aero Digest* 42:219-20+ Ap '43

Governor maintenance improves stability. *Elec W* 120:1376 O 16 '43

Governor to argue about. E. MacDermid. *diags Power* 87:472 J1 '43

Governors for Diesel engines. *il diags Diesel Power* 21:927-32 O '43

Instrument analyzes governor performance. A. F. Schwendner. *il Elec W* 119:1814+ My 29 '43

Recommended specification for prime-mover speed governing; joint A.I.E.E.-A.S.M.E. committee. *Mech Eng* 65:664-8 S '43

Synchronizers speeds of multiple engines; patent assigned to Woodward governor co. *diag Machine Design* 15:278+ O '43

Through trouble to improvement; oil pumps and governors. H. L. Guy. *diags Inst Mech Eng J & Proc* 147:Proc 216-20, pl 1 O '42

Wicket gates eliminated in low-cost water-wheel governor. *il diags Elec W* 119:1958-9 Je 12 '43

GRABAU. Amadeus William, 1870-
Dr A. W. Grabau in China. M. A. Grabau. *Science* 97:555-6 Je 18 '43

GRABS. See Buckets

GRACE, Eugene Gifford, 1876-
Portrait. *Iron & Steel Inst J* 145:front b no 1 '42

GRADE crossing accidents

1942 grade crossing accidents. *Ry Age* 115:35 J1 3 '43

Report of the Grade crossing committee, Association of railway claim agents. *Ry Age* 114:1255 Je 26 '43

Wrecks retard war effort; abstract. C. S. Hill. *Safety Eng* 86:81 O '43

GRADE crossing elimination

Cincinnati eliminates dangerous crossings. *il map Eng N* 130:156-7 F 4 '43

GRADE crossing elimination—Continued

Concrete grade separation at South Charleston, W. Va. L. L. Jemison. *il* diag plans Civil Eng 13:356-8 Ag '43

Grade separation speeds up traffic at California defense plant. *il* plan Eng N 130: 95 Ja 21 '43

Cost

Grade crossing elimination, Franklin county, Ohio; unit prices. Eng N 130:384+ Mr 11 '43

GRADE crossings

Grade crossings, 1938-1941. Survey of Cur Business 1942 Sup p25 [supplemented in monthly numbers]

Relative merits of protective devices at highway-railway crossings. R. L. Morrison. Roads & Bridges 81:80, 82 O '43

Signals for safety at railroad-highway crossings. L. C. Heilman. *il* Ind Stand 14:214-16 J1 '43

GRADE marks

A B C grading is a backward step. G. B. Hotchkiss. J Retailing 19:80-5 O '43

Brown's retreat; hold-the-line order ends OPA vacillation. Business Week p17-18 My 22 '43

Brown's surprise; blessing canners for grade labeling. Business Week p71 Mr 6 '43

Coup de grace for grade labels. Business Week p16 J1 17 '43

Do housewives want grade labels? P. Salisbury. Sales Management 52:30-2, 34 Ag 15 '43

Grade A gain; canners who use U.S. standards on labels are staying out of grading fight. Business Week p94+ My 15 '43

Grade labeling as it now stands. Ptr Ink 204: 26+ Ag 6 '43

Grade labeling required for canned products. Food Ind 15:80 Ja '43

Grade labeling should spur, not kill, food advertising. Ptr Ink 201:16-17 D 25 '42

Grade labels wilt; OPA has had to cut heart out of most of its program. Business Week p94+ Ag 14 '43

Havoc of grade labeling. *il* Sales Management 52:23 J1 1 '43

Something for all; grade-labeling order on rayon hosiery. Business Week p18 My 22 '43

Standardization and grade-labeling in World war II. Adv & Sell 36:15-16+ J1 '43

What quality grading of consumer goods means to business. C. C. Bayard. J Retailing 19:74-9 O '43

See also

Labels

Quality of products

GRADING (earthwork)

Establishing grades on airfields; method for preparing an isometric grade chart. B. J. Lambert. diag Eng N 129:786-9 D 3 '42

See also

Railroads—Earth-

work

GRADUATE school of banking. See Rutgers university—Graduate school of banking**GRADUATING**

Universal graduating machine. *il* Engineering 156:186 S 3 '43

See also

Indexing (machine

work)

GRAF, Samuel Herman, 1887-

Sketch. por Mech Eng 65:611 Ag '43

GRAHAM, Ed

Cackle manufacturer digs foxholes in ad field; S. Jones. por Adv & Sell 36:28+ Ap '43

GRAHAM, Herbert W. 1891-

Chairman, Iron and steel division, A.I.M.E. por Min & Met 24:318 J1 '43

GRAIN

Butadiene from grain in pilot plant stage; Schenley distillers corp. at Lawrenceburg, Ind. *il* Chem Ind 53:198-9 Ag '43

Seed disinfection; the determination of the adhesiveness of seed dressings to cereal seeds. M. Fitzgibbon. *il* Soc Chem Ind J 62:8-11 Ja '43

Separating wet from dry grain. Science 97: sup12 Je 11 '43

Some data on synthetic rubber from grain; abstract. P. Kolachov. Rubber Age 53:48 Ap '43

See also

Barley

Cereals, Prepared

Corn

Flour

Kafr

Oats

Rice

Rye

Wheat

Analysis

Microbiological and chemical assay of nicotinic acid in B complex products. R. D. Greene, A. Black and F. O. Howland. *ibid* Ind & Eng Chem Anal ed 15:77-8 Ja 15 '43

Storage

Two types of buildings for grain storage. *il* diags plan Am Bld 65:81 Ag '43

Transportation

I.C.C. upheld in barge grain case. Ry Age 114:1235 Je 19 '43

See also

Grain cars

GRAIN bins

Circular clay tile grain bins solve farm storage problem. diags Brick & Clay Rec 103: 26 J1 '43

GRAIN bins, Concrete

Grain-drying silos. *il* diag plan Engineer 176: 291-2 O 8 '43

Grain storing and drying silos. *il* Engineering 156:287, 290 O 8 '43

GRAIN cars

Grain car fight. Business Week p52-3 N 6 '43

GRAIN elevator insurance. See Insurance, Grain elevator**GRAIN elevators****Electric equipment**

Simplified explosion-proof control; motor used in a grain elevator. plan Ry Mech Eng 117:432 S '43

GRAIN elevators, Portable

Utilities introduce farm grain elevator. *il* Elec W 120:1048+ S 18 '43

GRAIN handling

Granary and pneumatic grain discharging plant. *il* diags Mech Handling 30:48-51 F '43

GRAIN mills. See Flour mills**GRAIN size. See Powders****GRAIN trade**

Big grain co-op; Farmers Union's concern grows into largest handler of wheat in country and officials gain prestige in Washington. Business Week p48+ Je 12 '43

More volume in sight for cereal processors. Barron's 23:6 Mr 1 '43

See also

Wheat

Finance

SEC issues report on grain-mill producers. Comm & Fin Chr 157:378 Ja 28 '43

Statistics

Grains and grain products, 1938-1941. Survey of Cur Business 1942 Sup p11-21 [supplemented in monthly numbers]

Denmark

Denmark's cereal crops, 1938-1942. For Comm W 11:32 My 29 '43

Iraq

Iraq's cereal-crop situation. For Comm W 11: 26 My 8 '43

Turkey

Decrease in Turkey's cereal crops; figures for 1941 and 1942. For Comm W 9:29 D 5 '42

1942 cereal crop and estimates of the 1943 crop. For Comm W 12:22 J1 24 '43

Uruguay

Cereal production, Uruguay; 5-year average and 1942-43 estimate. For Comm W 11:27 Ap 24 '43

GRAIN weevils

Simple method of protecting cereals and other stored foodstuffs against insect pests; new type of inert dust. J. A. Kitchener, P. Alexander and H. V. A. Briscoe. *Chem & Ind* 62:32-3 Ja 23 '43

GRAINAL

Intensifying of NE 9422 steel; addition of Grainal. *Iron Age* 152:50-1 Ag 19 '43

GRAMMAR

See also
English language
Grammar

GRAND Coulee dam. See Columbia river—
Grand Coulee dam

GRAND RAPIDS, Michigan**Industries**

Furniture city joins the air war; Grand Rapids factories make airplane parts and materials. *il Aero Digest* 42:145-8, 153-4+ Ap '43

Futile conversion; unemployment mounts. *Business Week* p46 D 19 '42
Here to stay; Grand Rapids experiment in industrial cooperation. *Business Week* p34 S 4 '43

GRAND river, Arkansas**Power utilization**

Charge use of Grand River dam for power helped floods. *Elec W* 119:1789-90, 1969 My 29-Je 12 '43

GRAND TETON national park

Alpine mudflows in Grand Teton national park, Wyoming. F. M. Fryxell and L. Horberg. *il map Geol Soc Bul* 54:457-72, pl 1-2 Mr '43

GRANITE

Grinding media from Salisbury granite. *Eng & Min J* 143:61 N '42

Spectrographic analysis of New England granites and pegmatites. J. A. Shimer. *bibliog maps Geol Soc Bul* 54:1049-66 Ag '43

GRANITE cutting

How to design exhaust hoods. J. M. Dalla Valle. *diags Heat & Ven* 40:79-80 S '43

GRANODIORITE

Distribution of helium and radioactivity in rocks; helium age investigations of diabase and granodiorites from Yellowknife, Northwest Territories, Canada. N. B. Keevil, A. W. Jolliffe and E. S. Larsen. *map Am J Sci* 240:831-46 D '42

GRANULAR materials

Heat, mass and momentum transfer in the flow of gases through granular solids. B. W. Gamson, G. Thodos and O. A. Hougen. *bibliog diag Am Inst Chem Eng Trans* 39:1-32 F '43; Abstract. *Chem & Met Eng* 50:170+ Mr '43; Discussion. *Am Inst Chem Eng Trans* 39:32-5, 583-4 F. O '43

High temperature resistivity measurements on compressed granular refractory materials. G. H. Fetterley. *il diags Electrochem Soc Trans* 83 (preprint 2):5-18 Ap '43

Studies of subscreen sizing; grinding and grinding efficiencies. I. M. Six. *bibliog il Can Min J* 64:147-55 Mr '43

See also

Flour
Particles
Powders

GRANULOCYTOPENIA

Production and treatment of granulocytopenia and anemia in rats fed sulfonamides in purified diets. A. Kornberg, F. S. Daft and W. H. Sebrell. *Science* 98:20-2 Jl 2 '43

Successful treatment of granulocytopenia and leukopenia in rats with crystalline folic acid. F. S. Daft and W. H. Sebrell. *bibliog Pub Health Rep* 58:1542-5 O 15 '43

GRANULOMA inguinale

Cultivation from granuloma inguinale of a microorganism having the characteristics of Donovan bodies in the yolk sac of chick embryos. K. Anderson. *Science* 97:560-1 Je 18 '43

GRAPEFRUIT

Canned grapefruit; standard issued by the Agricultural marketing administration. *Food Ind* 15:72 Mr '43

GRAPES

More grape jam; federal control stirred a row among Concord growers. *Business Week* p80+ O 16 '43

Prices

Grape men resent OPA's cut in price of table grapes. *Business Week* p 108+ Ag 28 '43

GRAPHIC arts

Developments in the graphic arts, 1942. M. S. Kantrowitz. *bibliog* (60 titles) *Paper Tr J* 116:35-42 My 27 '43

See also

Engravings
Printing

GRAPHIC arts victory committee

Essential war printing guide issued by Victory campaigns committee. *Inland Ptr* 110:36-7 Mr '43

Graphic arts rally to the needs of government and advertisers. H. Kaufman. *il Ind Marketing* 28:72, 74+ My '43

G.A.V.C. meets with officials to discuss essential printing. *il Inland Ptr* 111:36-7 Ap '43

GRAPHIC methods

Calculating mixed acids to achieve acid equilibrium; Gibbs trilinear system. E. Berl and G. A. Sterbutzel. *Chem & Met Eng* 50:106-8 O '43

Calibrating pressure-actuated instruments by means of graphs. E. Keith, jr. *diags Instruments* 15:424, 426 O '42

Car performance; method of graphic analysis. H. Cousins. *Automobile Eng* 33:249-50 Je '43

Circuit calculations; examples of graphical methods. G. W. Stubbings. *diags Elec R (Lond)* 132:449-50 Ap 2 '43

Design for dissymmetrical T pads. E. Y. Webb, jr. *charts Electronics* 16:123-4 Jl '43

Distribution graphs of suspended-matter concentration. J. W. Johnson. *bibliog Am Soc C E Proc* 68:1333-98 O '42; Discussion. 69:321-2, 571-4 F, Ap '43

Distribution of boiler load. P. G. Kaufmann. *Inst Mech Eng J & Proc* 148:Proc 42-52 D '42

Excess profits tax relief claims under section 722. P. D. Seghers. *J Account* 76:107-12 Ag '43

Graphic determination of distance in accelerated airplane motion. G. A. Mokrzycki. *J Aeronautical Sci* 10:36-7 Ja '43

Graphic performance analyzer for distribution voltage regulators. E. D. Hartzell and R. C. Thompson. *diag Edison Elec Inst Bul* 11:15-17 Ja '43

Graphic representation of the qualitative scheme of analysis for the more common anions; method of Dobbins and Ljung. *J Chem Educ* 20:502-5 O '43

Graphic solution of design problems involving sensitive relays. R. T. Fisher. *il diag Electronics* 16:125-7+ O '43

Graphic solution of natural gas pipe line flow. G. H. McKay and P. M. Biddison. *Pet Eng* 15:182+ O '43

Graphic solutions of Ohm's law for a.c. networks. R. C. Paine. *diags Electronics* 16:232+ Je '43

Graphical analysis of delay of response in air-speed indicators. K. J. DeJuhasz. *bibliog diags J Aeronautical Sci* 10:91-7 Mr '43

Graphical analysis of stresses in three-dimensional loading. C. R. Freberg and E. N. Kemler. *il diags Product Eng* 13:714-17 D '42

Graphical analysis of transient phenomena in industrial processes. K. J. DeJuhasz. *diags Instruments* 16:466-72, 508 *bibliog* (p472, 508) Ag '43

Graphical and mechanical determination of the true dip from magnetically orientable cores taken in crooked holes. G. D. Hobson. *diags Inst Pet J* 28:274-80 N '42

Graphical approach to leaching problems. C. A. Lee. *diags Chem & Met Eng* 50:126-8 Je '43

Graphical determination of cable ratings. H. Waddicor. *diags Inst E E J* 90 pt 2:192-200 Je '43

Graphical determination of power amplifier performance. R. I. Sarbacher. *Electronics* 15:52-6+ D '42

GRAPHIC methods—Continued

- Graphical interconversions for multicomponent systems. J. D. Leslie. *Ind & Eng Chem* 35:495-6 Ap '43
- Graphical method of calculating heat losses. P. D. Close. *charts Heating-Piping* 15:305-10 Je '43; *Discussion* 15:379-80 Jl '43
- Graphical method to find the optimal operating conditions of triodes as class C telegraph transmitters. J. C. Frommer. *Inst Radio Eng Proc* 30:519-25 N '42
- Importance of graphical solution of problems in mechanics. L. M. Sahag. *diags J Eng Educ* 33:502-7 Mr '43
- Interconversions of polycomponent compositions by graphical methods. K. Sun and A. Silverman. *Ind & Eng Chem* 35:497-8 Ap '43
- New standard aids legibility in engineering graphs. C. D. Hanscom. *Ind Stand* 14:245-6 S '43
- Retro charts. K. Karsten and E. Brooks. *Am Stat Assn J* 38:302-10 S '43
- Some graphic solutions of parallel circuits. R. C. Paine. *diags Electronics* 15:90+ D '42
- Ternary liquid and binary vapor-liquid systems; a method of the line interpolation for phase equilibrium relations. C. E. Dryden. *bibliog Ind & Eng Chem* 35:492-4 Ap '43
- Thermodynamic properties of air at low temperatures. V. C. Williams. *bibliog Am Inst Chem Eng Trans* 39:93-111 F '43
- Use of the mechanical multitharmonograph for graphing types of functions and for solution of pairs of non-linear simultaneous equations. S. L. Brown and L. L. Wheeler. *il diags R Sci Instr* 13:493-5 N '42
- Value of graphs in waterworks records. A. Reichstein. *Pub Works* 74:32 Ap '43
- Viscosity function; non-ideal systems. E. P. Irany. *bibliog Am Chem Soc J* 65:1392-8 Jl '43
- Well histories aid in estimating oil reserves. F. K. Beach. *Pet Eng* 14:69-70+ S '43

See also

Charts (calculating)

Curve plotting

GRAPHIC records

See also

Gantt charts

GRAPHITE

- Amorphous graphite in the open-hearth. R. J. Zemanek. *il Steel* 111:98-9, 101 N 16; 86-7, 89 N 23 '42
- Burning rate of natural graphite. G. D. Coe. *U S Bur Mines Rep of Invest* 3692:1-9 '43
- Carbon, a refractory material. F. J. Vosburgh. *il diags Steel* 112:106-8, 110+ Ap 5; 118, 120, 125+ *bibliog (p 147)* Ap 12 '43
- Colloidal graphite, a modern lubricant. R. K. Carleton. *bibliog il diags Chem Ind* 52:50-2 Ja '43
- Crucibles need care because of shortage of graphite. F. L. Wolf. *Foundry* 71:105+ S '43
- Dry lubrication method; dispersion of dag colloidal graphite in acetone. *Electrician* 131:89-90 Jl 23 '43
- Electro-plating on non-conducting materials; use of graphite. *Engineer* 175:160 F 19 '43; *Same*. *Electrician* 130:109 Ja 29 '43; *Abstract*. *Elec R (Lond)* 132:316 Mr 5 '43
- Emissive power of typical grid and plate surfaces; test of graphite coatings. R. Szymanowitz. *Electronics* 16:93+ My '43
- Forms and uses of graphite. B. H. Porter. *Can Chem & Process Ind* 27:132-3 Mr '43
- Graphite easing; opening of three domestic flake mines. *Business Week* p16 Ja 30 '43
- Graphite has many uses from pencils to crucibles. L. Sanderson. *Can Min J* 64:283-4 My '43
- Problem of broken joints; method of sealing which prevents sticking. *Electrician* 131:156 Ag 13 '43
- Punch and die life increased by colloidal graphite lubricant. *Iron Age* 151:58 My 13 '43
- Supposed graphite in carburized NE and S.A.E. steels; effect of calcium and barium. J. Welchner and R. W. Roush. *il Metal Prog* 43:889-96 Je '43
- See also*
- Cast iron—Graphitization*

Advertising

- Using a contest to spread product information in wartime; Acheson colloids corporation. J. M. Lupton. *il Ind Marketing* 28:28-9+ Jl '43
- GRAPHITIZATION** of iron. *See* *Cast iron—Graphitization*
- GRAPHITIZATION** of piping. *See* *Piping (power plants)—Graphitization*
- GRAPTOLITES**
- Three more graptolites from Simpson of Oklahoma. C. E. Decker. *bibliog pl Am Assn Pet Geologists Bul* 27:1388-92 O '43
- Two more Ordovician well-core graptolites, Crane county, Texas. C. E. Decker. *bibliog il Am Assn Pet Geologists Bul* 26:1771-5 N '42
- GRASSES**
- Design of drying machines for agricultural products; abstract. W. H. Cashmore. *Chem & Ind* 62:141-2 Ap 10 '43
- General electrophoretic pattern in extracts of pollens causing hay fever. H. A. Abramson, D. H. Moore and H. H. Gettner. *il J Phys Chem* 46:122-39 D '42
- No snakes in this grass; Venezuelan gordura has property of repelling insects. *For Comm W* 12:18 S 18 '43
- Protein concentrates from grasses. J. T. Sullivan. *Science* 98:363-4 O 22 '43
- Unique system under clock control used in research on pasture grass. T. Mitchell. *Heating-Piping* 15:32 Ja '43
- GRASSES, Fossil**
- Tertiary prairie grasses and other herbs from the high plains. M. K. Elias. *Geol Soc Special Pa* no 41:1-176, pl 1-17 *bibliog (p147-52)* '42
- GRASSES as food**
- Vitagrass. *Sci Am* 168:16 Ja '43
- GRATE** fires. *See* *Fireplaces*
- GRATES**
- Continuous-cleaning grate extends spreader applications. R. L. Beers. *diag Power* 86:972 Mid-D '42
- GRATES, Fireplace.** *See* *Fireplaces*
- GRAVEL**
- Record sand and gravel production in 1942. *Rock Prod* 46:55 Ag '43
- See also*
- Concrete—Aggregate*
- Roads, Gravel*
- GRAVEL handling**
- Aggregates for an earth-fill dam; excavating, transporting and screening gravel for Santa Fe dam, California. *il Rock Prod* 45:46-9 N '42
- Efficient long booms. W. C. Torbett, jr. *diags Rock Prod* 46:40-1 My '43
- Elimination of stock pile segregation. T. R. Freyhof. *il diags Rock Prod* 46:53-4 Ja '43
- Processing 250,000 tons of aggregates; Union sand and gravel co. R. S. Torgerson. *il diag Rock Prod* 45:44-5+ N '42
- See also*
- Sand and gravel plants*
- GRAVEL plants.** *See* *Sand and gravel plants*
- GRAVIMETRIC analysis**
- Coprecipitation of chromate with barium sulfate. W. B. Meldrum, W. E. Cadbury, jr. and C. E. Bricker. *bibliog Ind & Eng Chem Anal* 15:560-2 S 15 '43
- Determination of chloride in the presence of hydrosulfide or sulfide ion. M. M. Maglio and F. Fazio. *Ind & Eng Chem Anal* 15:255-6 Ap 15 '43
- Determination of rotenone improvements in the gravimetric method. S. I. Gertler. *Ind & Eng Chem Anal* 14:897-8 N 15 '42
- Determination of sulfur residues from sulfur application on citrus foliage. F. A. Gunther, R. L. Beier and J. P. Ladue. *bibliog Ind & Eng Chem Anal* 15:574-5 S 15 '43
- Determination of tin with mercuric chloride. J. G. Fairchild. *bibliog Ind & Eng Chem Anal* 15:625-6 O 15 '43
- Semimicrodetermination of chlorine, bromine, and iodine in organic compounds. E. W. Peck, R. H. Clark and E. C. Wagner. *bibliog Ind & Eng Chem Anal* 15:149-51 F 15 '43

GRAVIMETRIC analysis—Continued

Spectrophotometric determination of magnesium by titan yellow; comparison with gravimetric methods. E. E. Ludwig and C. R. Johnson. *bibliog Ind & Eng Chem Anal ed* 14:895-7 N 15 '42
 Sulphite acid testing; the Palmrose iodate and the Winkler tests. D. R. McMasters. *bibliog Paper Tr J* 117:30-5 J 18 '43

GRAVITY docks. See Dry docks**GRAVITATION**

Einstein's theory of gravitation; abstract. G. D. Birkhoff. *Science* 97:sup10 Mr 12 '43
 Theory of galvanic cells subject to fields of force; the electric and magnetic field. F. O. Koenig and S. W. Grinnell. *bibliog J Phys Chem* 46:980-1005 N '42
 Theory of gravitation that makes it a push instead of a pull. M. Mott-Smith. *Science* 97:sup10 My 7 '43

GRAVITY

Geologic correlation of areal gravitational and magnetic studies in New Jersey and vicinity. G. P. Woollard. *bibliog Geol Soc Bul* 54:791-818, pl 1-5 Je '43

Geologic interpretation of gravity anomalies in the southern New England-Hudson Valley region. C. R. Longwell. *diags map Geol Soc Bul* 54:555-90, pl 1-3 *bibliog*(p590) Ap '43

Quantitative evaluation of the influence of the lithosphere on the anomalies of gravity. R. Gunn. *Franklin Inst J* 236:47-65 J 1 '43
 Quantitative study of isobaric equilibrium and gravity anomalies in the Hawaiian Islands. R. Gunn. *Franklin Inst J* 236:373-90 O '43
 Reexamination of the Potsdam absolute determination of gravity. H. L. Dryden. *J Research Nat Bur Stand* 29:303-14 N '42
 Transcontinental gravitational and magnetic profile of North America and its relation to geologic structure. G. P. Woollard. *bibliog diags Geol Soc Bul* 54:747-89, pl 1-9 Je '43

GRAY

Evaluation of light fastness by means of a spectrophotometer; presented for the A.A.T.C.C. Northern New England section by E. S. Chapin. *Am Dyestuff Rep* 31:600-2 D 7 '42

GRAY iron. See Cast iron**GRAY iron founders' society**

Annual meeting, 15th, Cincinnati, Oct. 5-6. *Steel* 113:144 O 11 '43; *Foundry* 71:112-13+ N '43

Gray iron society inaugurates nation-wide accounting service. *Steel* 112:75 My 10 '43

GRAYWACKE (term)

Archean sedimentation. F. J. Pettijohn. *Geol Soc Bul* 54:941-3 J 1 '43

GRAZING

Grazing versus maple syrup. P. B. Sears. *Science* 98:83 J 23 '43

GRAZING associations

Operating a grazing association; Crow Valley grazing association, Colorado. A. F. Furman and E. P. Ball. *J Land & Pub Util Econ* 19:94-8 F '43

GREASE*See also*

Lubricating greases
 Sewage disposal—
 Grease and oil removal

Prices

Tallows, greases ceiling now uniform. *Oil Paint & Drug Rep* 143:3+ F 1 '43

GREAT Atlantic and Pacific tea company

Acquitted in potato price case. *Comm & Fin Chr* 157:893 Mr 8 '43

A & P accused of being food monopoly. *Ptr Ink* 201:73 D 4 '42

A & P indictment sticks. *Business Week* p81-2 Ag 7 '43

A.&P.: monopoly; legal duel over Dallas indictment. *Business Week* p69-70 D 5 '42

Court quashes trust charges. *Comm & Fin Chr* 157:728 F 22 '43

Court remands monopoly indictment. *Comm & Fin Chr* 158:671 Ag 16 '43

Indicted under trust laws. *Comm & Fin Chr* 156:2131 D 14 '42

GREAT BRITAIN*See also*

Banks and banking—
 Great Britain
 Bonds, Government—
 Great Britain
 Coal trade—Great
 Britain
 Electricity supply—
 Great Britain
 Finance—Great Brit-
 ain
 Food supply—Great
 Britain
 Labor and laboring
 classes—Great
 Britain
 Labor supply—Great
 Britain
 Printers—Great Brit-
 ain
 Railroads—Great
 Britain
 Securities—Great
 Britain
 Trade unions—Great
 Britain
 Unemployment—
 Great Britain
 Workmen's compen-
 sation—Great Brit-
 ain
 World war, 1939—
 Great Britain

Air force

Air estimates. A. Sinclair. *Engineer* 175:234-5 237 Mr 19 '43

Maintaining RAF combat craft at peak efficiency. J. I. Waddington. *il Aero Digest* 42:101-2, 104+ F '43

Training RAF radiomen. A. C. H. Purthrey. *il Radio N* 29:21+ My '43

Army

Maintenance in the army; Corps of royal electrical and mechanical engineers. *il Elec R (Lond)* 131:613-14 N 13 '42

New army. *Economist* 144:291 Mr 6 '43

Royal corps of electrical and mechanical engineers at work. *il Elec R (Lond)* 131:781-2 D 18 '42

Royal electrical and mechanical engineers corps established by British army. *il Elec Eng* 62:80-1 F '43

Pay, allowances, etc.

Every 6d. in the kitty counts; thrift in Britain's services. C. Deverell. *il Banking* 35:23-4 Ja '43

Family allowances; an Anglo-American contrast. H. Tarasov. *Ann Am Acad* 227:9-21 My '43

Small mercies. *Economist* 143:698-9 D 5 '42

Colonies

Britain's economic stake in India. T. A. Raman. *Barron's* 23:9 S 6 '43

British colonial products research. *Science* 97:196 F 26 '43

British commonwealth in the world order. N. Angel. *Ann Am Acad* 228:65-70 N '42

Colonial development. *Economist* 145:99-100 J 12 '43

Commonwealth counsels. *Economist* 145:226-8 Ag 21 '43

Commonwealth or empire? *Economist* 145:318, 321 S 4 '43

Engineers and the British empire. M. Smith. *il diags maps Engineer* 176:2-3, 22-4, 42-5, 82-4, 102-4, 122-4, 140-3, 160-1, 180-2, 200-2, 218-21, 240-2, 259-61, 278-80, 298-300, 329-32, 348-50, 359-62, 380-3, 400-2, 420-3 J 12-16, '30-N 26 '43 (to be cont)

Far Eastern compensation. *Economist* 143:739-40 D 12 '42

Independent dominions. *Economist* 145:4-5 J 13 '43

New imperialism. *Economist* 144:66 Ja 16 '43

Peaceful ocean; British policy in the Indian ocean after the war. *map Economist* 144:779-80 Je 19 '43

Statement of policy. *Economist* 145:70 J 17 '43

Third colonial system. *Economist* 144:35-6 Ja 9 '43

Trusteeship. *Economist* 144:322-3 Mr 13 '43

See also

Jamaica
 Labor and laboring
 classes—Great Brit-
 ain (Colonies)
 West Indies, British

Commerce

Importance of exports. *Economist* 143:724-5 D 12 '42

See also

Shipping—Great Brit-
 ain

GREAT BRITAIN—Continued

Commercial policy

- England must sell in order to buy. D. Tyerman. *Barron's* 23:8 J1 5 '43
 Export merchants' policy. *Economist* 144:421 Ap 3 '43
 Merchanting under exchange control. *Economist* 145:330+ S 4 '43
 Plan for exports by Sir Raymond Streat. *Economist* 144:434-5 Ap 3 '43
 Post-war export policy. *Economist* 144:780-2 Je 19 '43

Diplomatic and consular service

- Foreign service. *Economist* 144:140 Ja 30 '43
 Foreign service. *Economist* 144:388 Mr 27 '43

Economic conditions

- Opinion on post-war outlook brightens. D. Tyerman. *Barron's* 23:15 Je 28 '43

Economic policy

- Britain today. T. North. *Harvard Business R* 21 no 3:291-7 [Ap] '43
 Britain's balance sheet; four-year credits and debits of war. *il Fortune* 28:122-6+ N '43
 Britain's smoother ration process. F. B. Makin. *Banking* 36:109-10 S '43
 British plans for post-war full employment. D. F. Heatherington. *For Comm W* 13:3-4+ O 9 '43
 Forward look. *Economist* 143:789-90 D 26 '42
 Opportunity knocks; answer to the Beveridge report. *Economist* 143:721-2 D 12 '42
 Peace can bring prosperity. K. Wood. *Trusts & Estates* 76:326-7 Ap '43
 Pointer to progress. *Economist* 144:449-50 Ap 10 '43
 Postwar program outlined by leading British industrialists. V. Delport. *Steel* 111:34-6 D 21 '42
 Problems of employment and the relations between government and industry after the war. *Engineer* 176:35-7, 56-8 J1 9-16 '43
 Shift from class to national legislation; role of state and private enterprise in post-war works and security. W. Churchill. *Trusts & Estates* 76:315-17 Ap '43

Economic warfare, Ministry of

- Why a Ministry of economic warfare is essential for victory. D. Tyerman. *Barron's* 23:4 J1 19 '43

Foreign relations

- Britain in the world. *Economist* 145:300-2 S 4 '43
 Policy abroad. *Economist* 144:63-4 Ja 16 '43
See also
 World war, 1939—
 Great Britain

United States

- Effects of economic-military alliance with Great Britain. V. L. Horoth. *il Mag of Wall St* 73:8-10+ O 16 '43
 Keystone of the arch. *Economist* 144:414-15 Ap 3 '43
 Urges post-war alliance between U.S. and Britain for world peace. W. Churchill. *Comm & Fin Chr* 158:1015 S 9 '43
See also
 British information services

Industries and resources

- Britain plans reconversion; business men start with government agency on survey. *Business Week* p15-16 J1 10 '43
 Britain's shrunken industries. W. Hill. *il Banking* 36:26-7 Ag '43
 Britain's wartime cosmetic industry. *For Comm W* 12:4+ J1 10 '43
 National policy for industry. *Engineering* 154: 415-16, 439-40 N 20-27 '42
 New phase in British concentration. A. W. Williams. *Textile World* 93:70 Ja '43
 Structure of post-war industry; the need for immediate planning. E. H. Gilpin. *Chem Age (Lond)* 48:201-3 F 13 '43

United Kingdom's industry concentration now nears completion. K. O. Horton. *il For Comm W* 11:3-6+ My 1 '43

See also

- | | |
|--|--|
| Agriculture—Great Britain | Gas industry—Great Britain |
| Building trades—Great Britain | Iron industry and trade—Great Britain |
| Chemical industries—Great Britain | Labor and laboring classes—Great Britain |
| Coal trade—Great Britain | Plastic industries—Great Britain |
| Cotton trade—Great Britain | Steel industry and trade—Great Britain |
| Electric industries—Great Britain | |
| Electrochemical industries—Great Britain | |

Labor and national service, Ministry of

- British welfare work outside the factories. *Monthly Labor R* 56:677-80 Ap '43

Parliament

- Lighting of the House of commons; historical review. *Light & Lighting* 36:8+ Ja '43

Politics and government

- My dear Mr Laski; reply to Who are the real rulers of Britain? P. F. Cadman. *il Banking* 35:24-5+ Mr '43

See also

- | | |
|-----------------------------|---------------------------------|
| Labor party (Great Britain) | Political parties—Great Britain |
|-----------------------------|---------------------------------|

Post office department

- See* Postal service—Great Britain

Social conditions

- Spotlight on poverty; Our towns: a close-up. *Economist* 144:545-6 My 1 '43

Statistics

- Commercial history and review of 1942. *Economist* 144:sup3-27 Mr 13 '43

GREAT FALLS gas company

- Simplification approved. *Comm & Fin Chr* 158:1858 N 8 '43

GREAT LAKES

- More power water flows into the Great Lakes; projects will divert water from Hudson bay. *maps Power* 87:14-15 Ja '43

- Oil and gas in the Great Lakes and how they may be developed; abstract. H. E. Gross. *Oil & Gas J* 42:57 O 28 '43

See also

- Shipping—Great Lakes

GREAT LAKES paper company

- Industry of national importance. R. A. Wheatley. *flow sheet il diags map Pulp & Pa of Can* 44:559-78 J1 '43

GREAT LAKES states

Area

- Area figures for United States and Great Lakes states. C. S. Osborn and S. Osborn. *Science* 97:533-4 Je 11 '43
 Census areas for the United States, 1940. C. E. Batschelet and M. J. Proudfoot. *Science* 98:107-9 J1 30 '43; *Replv.* C. S. Osborn and S. Osborn. 98:323-4 O 8 '43

GREAT men

See also

- Leadership

GREAT northern railway

- Annual report. *Comm & Fin Chr* 157:2150 Je 7 '43

- Great Northern's improving credit. M. Howe. *Barron's* 23:15 Ap 19 '43

- Note issue approved. *Comm & Fin Chr* 157: 1943 My 24 '43

- Notes. *Comm & Fin Chr* 156:2306 D 28 '42

- Purchase of road. *Comm & Fin Chr* 157:2042 My 31 '43

- Railroad securities. *Comm & Fin Chr* 156: 2317; 157:1573+ D 31 '42, Ap 29 '43

GREAT PLAINS region

Regional patterns of dietary deficiency. R. M. Leverton. *Ann Am Acad* 225:47-9 Ja '43

See also

Agriculture—Great Plains region Geology—Great Plains region

GREBE, John Josef, 1900-
Wins S.C.I. medal, por Oil Paint & Drug
Rep 144:7+ J1 12 '43

GREECE

See also

Labor and laboring
classes—Greece

Antiquities

Eupalinos, first civil engineer; builder of
water conduits in ancient Greece. F. R.
Bichowsky. *il diags map Comp Air M* 48:
7086-90 Je '43

Economic conditions

Greece's plight. *Economist* 144:75 Ja 16 '43

GREEN, Jacob, 1790-1841

Jacob Green, chemist. E. F. Smith. por
(front) *J Chem Educ* 20:418-27 S '43

GREEN

Single judgment test for red-green discrimi-
nation. L. H. Hardy. *il Opt Soc Am J* 33:
512-14 S '43

See also

Bindschedler's green

GREENE, Nathanael, 1742-1786

Washington's general without an army; by
improvisation and shrewd planning, Nathan-
ael Greene turned a long series of defeats
into final victory. por *Fortune* 27:102-3 Ja '43

GREENHOUSES

Low-cost greenhouse. *il diags plan Am Bld*
65:52 S '43

Ohio's hothouses. *il Business Week* p22 J1 3
'43

Air conditioning

Better orchids by air conditioning of green-
house. *il diags Sheet Metal Worker* 34:42,
44, 46 S '43

Electric equipment

Greenhouse equipped to dial weather; arti-
ficial sunlight and air conditioning; plant
growth research; California institute of
technology. *il Elec West* 89:72 N '42

GREENLEE automatic transfer machine

In-line machining of aircraft cylinder heads;
Greenlee transfer type machine built for
Studebaker. W. A. Phair. *il diags Iron Age*
152:66-73 Ag 12 '43

GREETING cards

For the beginner; photographic greeting
cards. V. McGarrett. *Am Phot* 36:46-7+
D '42

Greetings to all war boom for card industry.
Business Week p92+ N 21 '42

GREISS-ILOSVAY reagent

Nitrite field method for the determination of
oxides of nitrogen except N₂O and N₂O₅. F.
A. Patty and G. M. Petty. *bibliog J Ind*
Hygiene 25:361-5 O '43

GRENADES

69+247=e-x. L. J. Falkenhagen. *il Mod*
Plastics 20:66-7 Je '43

X-ray checks hand grenade fuses. *il Elec-*
tronics 16:152 N '43; *Steel* 113:149 N 8 '43

GREY. See Gray**GREYHOUND corporation**

Helicopter air bus service planned by Grey-
hound corporation. *Comm & Fin Chr* 157:
2262+ Je 17 '43

Plans air bus service. *Comm & Fin Chr* 157:
2348 Je 21 '43

Stocks in a strategic position. G. L. Merton.
Mag of Wall St 71:489 F 6 '43

GRID system. See Electricity supply—Great
Britain

GRIFFITHS, Robert, 1805-1883

Robert Griffiths. *Engineering* 155:492 Je 18 '43

GRIGNARD reagents

Attempted asymmetric syntheses involving
the Grignard reagent in optically active
solvents. D. S. Tarbell and M. C. Paulson.
bibliog Am Chem Soc J 64:2342-4 D '42

Barbier-Wieland degradation of 3-hydroxy-12-
ketocholanic acid. B. Riegel and R. B.
Moffett. *bibliog Am Chem Soc J* 65:1971-3 O
'43

Diallylmethylcarbiny acetate. W. G. Young,
L. J. Andrews and S. J. Cristol. *Am Chem*
Soc J 65:1657 Ag '43

Factors determining the course and mechan-
ism of Grignard reactions. M. S. Kharasch
and others. *Am Chem Soc J* 65:491-507 Ap
'43

Factors determining the course and mechan-
ism of Grignard reactions; the effect of
metallic halides on the reaction of Grignard
reagents with benzalacetophenone and with
benzophenone. M. S. Kharasch and D. C.
Sayles. *bibliog Am Chem Soc J* 64:2972-5 D
'42

Grignard reactions; enolization of aliphatic
hindered carbonyl compounds. F. C. Whit-
more and C. E. Lewis. *Am Chem Soc J* 64:
2964-6 D '42

Grignard reactions; reactions of benzylmagne-
sium chloride. F. C. Whitmore and T. K.
Sloat. *bibliog Am Chem Soc J* 64:2968-70 D
'42

Grignard reactions; the reactions of esters
and acid chlorides with Grignard reagents.
F. C. Whitmore and W. S. Forster. *bibliog*
Am Chem Soc J 64:2966-8 D '42

3-Hydroxy-2,5-dimethylfuran and related
compounds. R. E. Lutz and C. E. McGlenn.
Am Chem Soc J 65:349-53 My '43

Ionic nature of the Grignard reagent. W. V.
Evans and R. Pearson. *bibliog Am Chem*
Soc J 64:2865-71 D '42

Mechanism of the reaction between hindered
carbonyl compounds and the Grignard re-
agent. R. T. Arnold and R. W. Liggett.
bibliog Am Chem Soc J 64:2875-7 D '42

Para acylation of polyalkylbenzophenones by
aryl 2,4,6-trialkylbenzoates. R. C. Fuson
and others. *bibliog Am Chem Soc J* 64:
2573-6 N '42

para-Alkylation of benzoidurene by the
Grignard reagent. R. C. Fuson and B. C.
McKusick. *bibliog Am Chem Soc J* 65:60-4
Ja '43

Reaction of *n*-butylmagnesium bromide with
some aromatic ketones. H. M. Crawford, M.
E. Saeger and F. E. Warneke. *Am Chem*
Soc J 64:2862-4 D '42

Reaction of epichlorohydrin with the Gri-
gnard reagent; some derivatives of cyclo-
propanol. G. W. Stahl and D. L. Cottle. *Am*
Chem Soc J 65:1782-3 S '43

Some formaldehyde derivatives of acetylenic
hydrocarbons. G. F. Hennion and E. P.
Bell. *bibliog Am Chem Soc J* 65:1847-8 O
'43

Studies in the polyene series; carbinols
from propargyl acetal. I. M. Heilbron, E. R.
H. Jones and H. P. Koch. *Chem Soc J*
p735-7 D '42

Synthetic estrogenic compounds; monosub-
stituted derivatives of 1,3-di-(*p*-hydroxy-
phenyl)-propane. A. H. Stuart and R. C.
Tallman. *bibliog Am Chem Soc J* 65:1579-81
Ag '43

Tertiary alkyl primary amines, RR'R'CNH₂.
H. R. Henze, B. B. Allen and W. B. Leslie.
Am Chem Soc J 65:37-9 Ja '43

Tertiary alkyl primary amines, RR'R'CNH₂.
H. R. Henze and T. R. Thompson. *bibliog*
Am Chem Soc J 65:1422-5 J1 '43

1,2,9,10-Tetramethylanthracene. R. B. Sandin,
R. Kitchen and L. F. Pleser. *bibliog Am*
Chem Soc J 65:2018-20 O '43

Thermal decomposition of certain polyarylated
carbinols. C. F. H. Allen and J. A.
VanAllan. *bibliog Am Chem Soc J* 65:1384-9
J1 '43

GRILLES

Facing register and grille facts; War pro-
duction board restrictions on production.
C. J. Pearson. *Sheet Metal Worker* 34:40+
Je '43

GRINDERS, Wood. See Wood grinders

GRINDING

Bearing and tool damage by galling. E. L.
Hemingway. *il Iron Age* 152:54-60 J1 15
'43

Cam sleeves hold drills for grinding sub-
lands. G. R. Allgrunn. *diag Am Mach* 87:
108-9 S 16 '43

Carbide tipped tools automatically ground.
il Iron Age 151:69-70 My 20 '43

GRINDING—Continued

- Centralized grinding for single-point tools. W. E. Ainsworth. *il* Iron Age 152:51-3 S 23 '43
- Control that dust. H. M. Nichols. *il* Safety Eng 86:13-14+ Ag '43
- Cylindrical grinding with a flat belt; development of special fixture. E. A. Hepner and H. J. Moskow. *il* diags Am Mach 87:86-7 O 28 '43
- Dust-free grinding and blast cleaning; Lodge & Shipley machine tool company. F. Schoeffler. *il* Nat Safety N 47:18-19+ My '43
- Getting the most out of die chasers. C. A. Reimschuessel. *il* diags Am Mach 87:83-5 Mr 18 '43
- Glasspeed diamond-charged lens grinding tools for precision optics. *il* Sci Am 168: 159 Ap '43
- Grind deep-hole drills properly. F. O. Hoagland. *il* diags Am Mach 87:91-3 F 18 '43
- Grinding a ball-bearing race on an aircraft engine part. *il* Mach 49:124 Ja '43
- Grinding carbide tools. W. L. Kennicott. *il* Steel 114+ S 6 '43
- Grinding fixtures for grooving tools. *il* diags Am Mach 87:90-1 S 16 '43
- Grinding methods that aid in aircraft production; illustrations with text. Mach 49: 174-7 F '43
- Grinding process reconitions rubber rollers and platens. *il* Rubber Age 53:243 Je '43
- Grinding thin-walled cylinders; Pratt & Whitney aircraft engine. *il* Iron Age 151:51 Mr 18 '43
- How to design exhaust hoods; hoods for dust control; partial enclosures for grinding. J. M. Dalla Valle. diags Heat & Ven 40: 63-6 Ag '43
- How to secure fine surfaces by grinding. H. J. Wills. Mach 49:202-4 Ap; 169-72 My; 171-3 Je; 201-3 Ag; 50:172-4 S; 164-7 O '43
- Machining of magnesium; fire hazard with grinding and polishing work. A. M. Lennie. diags Am Mach 87:82-4 Ap 1 '43
- Method for hand grinding drills. N. Hall. diags Am Mach 87:94 Ap 1 '43
- Precision grinding. *il* Automobile Eng 33: 191-4 My '43
- Precision grinding; developments in machines and production methods; products of the Churchill machine tool company. *il* diags Automobile Eng 33:229-34, 267-72 Je-Jl '43
- Production surface grinding to micro-inch finish; machine requirements; magnetic chuck usage; proper selection of coolant. H. J. Chamberland. *il* Iron Age 152:54-6 N 11 '43
- Proper grinding and inspection of tool steels. J. E. Erb. *il* Iron Age 151:28-32 Ja 14 '43
- Radii grinder for draw punches. F. Iacobelli. *il* diags Am Mach 87:119 My 13 '43
- Radius-grinding fixture for forming ends of milling cutter teeth. diags Mach 49:159-60 Ja '43
- Reducing dust and din; new booths provide improved ventilation for grinding; Curtiss-Wright corporation. *il* Nat Safety N 48:23+ Jl '43
- Shuttles cut prop-grinding time; American propeller corporation. *il* Am Mach 87:95-6 S 30 '43
- Simplifies taper elimination when grinding; alignment of swivel table on grinding machines. R. Waech. Am Mach 87:103-4 Ag 19 '43
- Six shafts ground instead of one. J. Gibson. diags Am Mach 87:88-9 Ja 7 '43
- Spring-loaded centers position shafts for grinding. W. Carps and H. Nelson. diags Am Mach 87:104 S 2 '43
- Super grinding prolongs tool life. R. Traut-schold. Steel 112:112 Je 21 '43
- Surface grinding worm thread cutters. R. J. Thimineur. *il* Iron Age 152:76 O 28 '43
- Tool brazing speeded by electronic induction heating; new grinding system. *il* Steel 112: 92+ My 31 '43
- Two coolant streams improve grinding; Ford aircraft engine plant. *il* diags Am Mach 87: 107-8 Ja 7 '43
- Wet grinding improved by wetting-action compound. R. W. Mitchell. Mach 49:204 Je '43

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- | | |
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| Grinding machines | tice |
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| bricants (cutting | |
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GRINDING and crushing. See Crushing**GRINDING coolants. See Lubrication and lubricants (cutting and grinding)****GRINDING machines**

- B.S.A. no. 8 centreless grinding machine. *il* Automobile Eng 33:288-9 Jl '43
- Broadway tool and cutter grinder. *il* Engineer 176:194-5 S 3 '43
- Broadway tool and cutter grinder for tool-room use. *il* Engineering 156:267-8 O 1 '43; Automobile Eng 33:412 O '43
- Churchill plain grinder with swivel wheel-head. *il* Automobile Eng 33:119-20 Mr '43
- Elliott surface grinder. *il* Automobile Eng 33: 117 Mr '43
- Ex-Cell-O style 39-L precision thread grinder. *il* Am Mach 86:1529 D 24 '42
- Farrel type TT roller grinder. *il* Rubber Age 52:264 D '42
- Grinding steel crankcases for aircraft engines; Bryant internal chucking grinders. P. C. Durland. *il* diags Mach 49:129-39 My '43
- Hammond carbide tool grinder. *il* Steel 112: 119-21 Ap 19 '43
- Hammond tool and cutter grinding machine. *il* Engineering 154:430 N 27 '42
- Hilco universal cutter-grinder with special index dividing head. *il* Mach 49:181 Ja '43
- How to run a grinding machine. *il* Am Mach 87:105-20 S 2 '43
- How to secure fine surfaces by grinding. H. J. Wills. *il* Mach 49:169-72 My '43
- Jones hand-feed surface grinding machine. *il* Engineering 156:26 Jl 9 '43; Automobile Eng 33:331-2 Ag '43
- LM tool and cutter grinder. *il* Automobile Eng 32:528 D '42
- Landis hydraulic crankpin grinders. *il* Mach 50:185-6 O '43
- Lumsden pipe flange grinding machine. *il* Engineer 175:217 Mr 12 '43; Engineering 155: 207 Mr 12 '43
- More efficient grinder for carbide tools. *il* diags Aviation 42:178 Ag '43
- New equipment. *il* Iron Age 152:63-5 Jl 1; 58-60 O 21 '43
- New grinding machine for carbide tools. *il* Mach 49:163 Je '43; Business Week p68-9 My 15 '43
- Newall plain grinding machine. *il* Engineering 155:426-7, 430 My 28 '43; Engineer 175: 426-7 My 28 '43; Automobile Eng 33:242-3 Je '43
- Pallas universal tool and cutter grinder. *il* Automobile Eng 33:289-90 Jl '43
- Precision grinders; Wickman-Horstmann thread-grinding machines. *il* Automobile Eng 33:317-20 Ag '43
- Precision grinding; developments in machines and production methods; products of the Churchill machine tool company. *il* diags Automobile Eng 33:229-34, 267-72 Je-Jl '43
- Production machine no. 4 tool and cutter grinder. *il* Am Mach 87:120 F 4 '43
- Rotorex cutter grinder. *il* Am Mach 87:129-30 Ap 15 '43
- Sheffield micro-form profile grinder. *il* Mach 49:211 Ag '43; Am Mach 87:125 Ag 5 '43
- Sheffield two-purpose precision thread grinder. *il* Am Mach 87:125 S 2 '43
- Simplified grinder aids production. S. L. Huffman. *il* Am Mach 87:87 Je 24 '43
- Snagging castings. G. S. Elsaman. *il* Foundry 71:119-20+ N 43
- Synthetic rubber pads isolate table in internal grinder. *il* diags Product Eng 14: 693-5 N '43
- Taylor, Taylor and Hobson profile grinding machine. *il* Automobile Eng 33:37-8 Ja '43
- Unusual grinding operations in making war equipment; grinders built by the Landis tool co. *il* Mach 49:154-5 Ja '43
- Victoria cylindrical grinder. *il* Automobile Eng 33:411-12 O '43

GRINDING machines—Continued

Vonnegut GRC type armor plate grinder. *Il* Am Mach 87:140 My 27 '43; Automotive & Aviation Ind 88:42+ My 15 '43
 Wickman-Neven bench grinding and lapping machine. *Il* Engineering 155:266 Ap 2 '43

See also

Grinding wheels	Machine shop practice
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GRINDING machines (crushing). *See* Crushing machinery

GRINDING mills*See also*

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GRINDING wheels

Grinding milling cutters with resinoid bonded wheels. *J. E. Rogers. Il* Iron Age 152:34-9 O 21 '43

How to run a grinding machine. *Il* Am Mach 87:115-20 S 2 '43

How to secure fine surfaces by grinding. *H. J. Wills. Il* diags Mach 49:171-3 Je; 201-2 Ag; 50:172-4 S; 164-7 O '43

Large grinding wheel stopped in 12 seconds. *H. E. Peters. diags Am Mach 87:110 Jl 22 '43*

Precision grinding. *Il* Automobile Eng 33:191-4 My '43

Accidents

Grinding wheel accidents. *Nat Safety N 47:26-7+ Ap '43*

Manufacture

Abrasive industry makes efficient use of its equipment; Abrasive co. manufacture of grinding wheels. *Il* Brick & Clay Rec 102:48-50, 52 Ja '43

Safety measures

Hazards to women employed in war plants on abrasive-wheel jobs. bibliog *U S Women's Bur Special Bul 7:1-6; pa 5c Supt. of doc. 42*

Revision adds new speed rules in abrasive wheel code. *A. Rousseau. Il* Ind Stand 14:249-50 S '43

Standards

Standard markings for grinding wheels. *H. B. Lindsay. Mach 49:180-1 My '43*

Standard markings for grinding wheels; data sheet. *Mach 50:209 O '43*

Standardize markings to help in use of grinding wheels. *H. B. Lindsay. Il* diag Ind Stand 14:109-11 Ap '43

Truing

Diamond tools; methods employed by A. Shaw and son in preparing stones for industrial applications. *Il* diags Automobile Eng 33:310-12 Ag '43

How to secure fine surfaces by grinding. *H. J. Wills. Mach 50:172-4 S; 164-7 O '43*

GRISCOM, John, 1774-1852

Chemist. *E. F. Smith. bibliog por(front) J Chem Educ 20:211-18 My '43*

GRIT chambers. *See* Sewage disposal—Grit chambers

GROCERIES**Prices**

Locality price differentials in the western retail grocery trade; Safeway stores. *R. Cassidy, Jr. and E. T. Grether. Harvard Business R 21 no 2:190-206 [Ja] '43; Correction. 21 no 3:396 [Ap] '43*

GROCERY bags. *See* Paper bags (shopping)

GROCERY manufacturers of America

Annual meeting, 34th, Nov. 18-20. *Sales Management 51:44, 46 D 1 '42*

Meeting, New York, 1942. *Business Week p29-30 N 28 '42*

GROCERY stores

Vitamin sales boom as harried retailers battle for distribution rights. *R. C. Fyne. Il* Sales Management 52:72+ Je 15 '43

Who should sell vitamins, druggist or grocer? *A. Gray. Adv & Sell 36:28 O '43*

See also

Market stores

GROCERY trade

Del Monte's service program eases grocers' wartime business woes; Calpak. *E. Gidlow. Il* Sales Management 52:21-6 Je 1 '43

Food quiz: how is war affecting the supermarket, the cooperative grocery and the independent? *Il* Adv & Sell 36:15-16+ Je '43

Food's big jolt; point rationing restores buyer's market. *Il* Business Week p17-19 Mr 27 '43

Grocers muscle in; druggists can't retaliate. *Business Week p62+ Mr 27 '43*

Grocers say city folk eat most of canned goods, deserve more points. *Ptr Ink 202:29 F 26 '43*

Grocery audit; A. C. Nielsen report. *Business Week p73-4+ D 5 '42*

Krasne brothers salesmen ration scarce foods to their customers. *Sales Management 51:68 D 1 '42*

Let them eat cake! some data on brand and product loyalty in the face of scarcity; 864 women queried. *Ptr Ink 202:24, 28, 30 F 19 '43*

Posters help balance nation's market basket; Del Monte buy-for-a-week plan. *Il* Mod Packaging 16:77-8+ Ja '43

Sealtest's duration selling plan helps grocers maintain volume; National dairy products' promotion aids for pushing unrationed foods. *L. M. Hughes. Il* Sales Management 52:24-5 Ag 1 '43

Well-engineered trucking operation; Salley grocer co. Bernice, La. 300-mile haul. *Il* map Food Ind 15:72-3 N '43

See also

Butter	Eggs
Canned food	Food industry and trade
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Coffee trade	also Great Atlantic and Pacific tea company; Jewel tea company; Kroger grocery and baking company; Safeway stores, inc.

Finance

Grocery store earnings. *Nat City Bank p65-6 Je '43*

See also

First national stores, inc.

Statistics

Independents gain at chain store expense; statistics, 1933-1942 and first quarter, 1943. *Business Week p88 Je 12 '43*

Sales of chain and independent grocery stores, 1935-May 1943; chart. *Survey of Cur Business 23:2 Jl '43*

What are the largest selling grocery items? pictograph. *Sales Management 52:45 Mr 15 '43*

Western states

Locality price differentials in the western retail grocery trade; Safeway stores. *R. Cassidy, Jr. and E. T. Grether. Harvard Business R 21 no2:190-206 [Ja] '43*

GROSVENOR, William Mason, 1873-
 American contemporaries. *D. H. Killeffer. por Chem & Eng N 21:777 My 25 '43*

GROUNDING. *See* Electric distribution—Grounding

GROUNDNUT oil. *See* Peanut oil

GROUP bonus. *See* Wage payment plans—Group system

GROUP insurance. *See* Insurance, Group

GROUP riding. *See* Automobiles, Employees'

GROUP velocity (term)

What is the precise meaning of group-velocity and how can this conception be readily appreciated? *Electrician 130:324 Mr 26 '43*

GROUPING errors (statistics)

Correction formulas for moments of a grouped-distribution of discrete variates. *J. A. Pierce. Am Stat Assn J 38:57-62 Mr '43*

Second moment correction for grouping; Sheppard's correction in estimating population variance of grouped sample data. *G. R. Davies and N. Bruner. Am Stat Assn J 38:63-8 Mr '43*

GROUPS, Theory of

Early mastery of the group concept. G. A. Miller. Science 97:90-1 Ja 22 '43

Elements of the generality of the group concept. G. A. Miller. Science 98:362-3 O 22 '43

See also

Crystallography

GROUSE

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GROUTING

Cement-grout effectively ends maintenance problem; Norfolk & western railroad concrete driveways and storage platforms, West Roanoke yard and engine facilities. H. F. Smith. Il Eng N 130:818 Je 3 '43

Cement grouting answers the need for emergency paved areas. Il Concrete 51:15+ JI '43

Design and construction methods for a tight plug in a concrete dam. Il diags Eng N 130: 684 My 6 '43

Fighting water in a bridge foundation. Il diags Eng N 130:806-10 Je 3 '43

Foundation grouting of reservoir. H. C. McCrea. Il diags Pub Works 74:23-4, 28 S '43

How cement grout restores old masonry railway structures; with cost data. Il Concrete 51:2-3+ JI '43

Problem of foundation settlement solved by cement grouting; Cities service gas company gas compressor station. Il Concrete 51:8+ JI '43

Stabilizing railway track base with portland cement grout. Il Concrete 51:2-3+ Ag '43

GROWTH

See also

Plant growth

GROWTH promoting substances

Growth stimulation by ammonium sulfamate in low concentration. F. Fromm. Science 98:391-2 O 29 '43

New growth factor for streptococcus lactis. J. C. Keresztesy, E. L. Rickes and J. L. Stokes. Science 97:465 My 21 '43

Observations on the biological value of a mixture of essential amino acids. A. A. Albanese and V. Irby. Science 98:286-8 S 24 '43

Severity of narcissus basal rot increased by the use of synthetic hormones and nitrogen bases. N. W. Stuart and W. D. McClellan. Science 97:15 Ja 1 '43

See also

Auxins

GRUMMAN aircraft engineering corporation

Decade of Grumman amphibians. F. J. Kurt. Il Aeronautical Eng R 1:63 N '42

GUAIAICUM

Stabilization of fats and fatty foods. H. S. Mitchell and H. C. Black. bibliog Ind & Eng Chem 35:50-2 Ja '43

GUANABANA seed oil

Puerto Rican fatty oils; the characteristics and composition of guanabana seed oil. C. F. Asenjo and J. A. Goyco. bibliog Am Chem Soc J 65:208-9 F '43

GUANINE

Detection of minute amounts of adenine and guanine in casein. A. Bloch. Franklin Inst J 236:219-24 Ag '43

GUARANTY. See Suretyship and guaranty**GUARANTY of bank deposits. See Banks and banking—Guaranty of deposits****GUARANTY trust company of New York**

Annual report. Bankers M 146:169 F '43

GUARDS, Highway. See Roads—Safety guards**GUATEMALA**

See also

Roads—Guatemala

Foreign relations

United States

Guatemala purchases U.S. war bonds. For Comm W 13:21 O 30 '43

GUAVAS

Tropical guava shrubs; rich source of vitamin C. Science 98:sup10 O 22 '43

GUAYULE

Compounding of guayule rubbers; effect of various factors on physical properties. R. E. Morris and others. India Rubber W 107: 463-7 F '43

Effects of blending guayule rubber with GR-S. R. E. Morris and others. Il India Rubber W 109:150-2+ N '43

Expansion of guayule program forecast by rubber officials. Rubber Age 53:537-8 S '43

Rubber from guayule. Il Engineer 174:504-6 D 18 '42

Studies in compounding guayule rubber. E. A. Hauser and D. S. le Beau. India Rubber W 106:447-9; 107:568-70; 108:37-9+ Ag '42, Mr-Apr '43

U.S. rubber; guayule and kok-saghyz sources now striding ahead. Sci Am 168:172-3 Ap '43

QUERICKE, Otto von

Otto von Quericke; a neglected genius. T. Coulson. For Franklin Inst J 236:241-64, 333-51 S-O '43

GUGGENHEIM, John Simon, memorial foundation

Guggenheim fellowships, 1943. Science 97:324-5; 98:33-4, 338 Ap 9, JI 9, O 15 '43

GULF coast

See also

Geology—Gulf Coast region

GULF, Colorado & Santa Fe railroad

Lease, etc. Comm & Fin Chr 157:553 F 8 '43

GULF, Mobile and Ohio railroad

Benefits of a railroad merger. Barron's 23: 19+ Ja 11 '43

Bonds offered. Comm & Fin Chr 158:391 JI 26 '43

Proposes \$18,000,000 refinancing issue. Comm & Fin Chr 158:87 JI 5 '43

Railroad securities. Comm & Fin Chr 157:2265 Je 17 '43

To redeem RFC notes; defers dividend action; plans new financing. Comm & Fin Chr 157:2348 Je 21 '43

GULF oil corporation

Gulf fellowship in geology. Econ Geol 38:90 Ja '43

Stock offered. Comm & Fin Chr 157:2250-1 Je 14 '43

GUM arabic

From caravan to corner drug store; French Africa. E. M. Schwarztrauber. Il For Comm W 10:17-+ F 27 '43

GUM gualac. See Gualacum**GUMMED paper. See Paper, Gummed****GUMS and resins**

Adaptability of resins in present-day formulation problems, including federal specifications. E. Edelstein. Paint Oil & Chem R 105:12-14+ Ap 8 '43

Concrete protection afforded by freeze-resistant resin from pine wood; Vinsol. Sci Am 169:228-9 N '43

Effect of vinsol resin on bond between concrete and steel. C. E. Wuerpel. Am Concrete Inst J 14:129-30 N '42

Heavy-traffic plain concrete pavement utilizes resin-treated cement; Vinsol. Il diags Concrete 50:33 D '42

Import licenses for water-soluble gums. For Comm W 11:30 My 15 '43

l-Pimaric acid content of longleaf and slash pine oleoresins. B. L. Davis and E. E. Fleck. Ind & Eng Chem 35:171-2 F '43

Resin method of indicating yield. J. S. Blair. Engineer 174:455-6 D 4 '42

Sticky substitute, sodium cellulose glycolate; Germans making more than 40 different preparations. V. Kinnard. For Comm W 11: 11+ My 15 '43; Same. Chem & Met Eng 50:192-4 Je '43; Same abr. Chem Ind 53: 85-6 JI '43

Structural plastic; incorporating Vinsol with various cellulosic fibers. J. M. Crowe. Chem Ind 52:54-5 Ja '43

Studies in compounding guayule rubber; deresinification. E. A. Hauser and D. S. le Beau. India Rubber W 108:37-9+ Ap '43

GUMS and resins—Continued

Textile applications of natural and synthetic resins. M. H. Gurley, jr. bibliog Rayon 23: 726-7; 24:34-6 D '42-Ja '43

See also

Balata	Naval stores
Copaiba	Resinous products
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Gasoline—Gum for-	Shellac
mation	Storax

GUN carriages

Gun recoil; design of recoil mechanisms. A. F. Macconochie. il diag Steel 113:96-8 Ag 2 '43

Large castings support 16-inch gun. il Foundry, 71:116+ O '43; Same. Steel 113:94+ O 18 '43

Redesigning the machine-gun mount by the industry-ordnance team. C. D. Alderman. il Mech Eng 65:637-8 S '43

Manufacture

Anti-aircraft gun mount production; with cost data; Westinghouse electric elevator co. il Iron Age 151:68 Mr 18 '43

Borg-Warner rehabilitates abandoned factory; now makes Oerlikon gun mounts for navy. J. Geschell. il Automotive & Aviation Ind 88:10-13+ Mr 1 '43

Building the mounts for 90-mm. anti-aircraft guns. C. O. Herb. il Mach 49:129-41 Je '43

Castings nonferrous parts for ordnance; Northern pump co. P. Dwyer. il Foundry 71:106-9+ N '43

Gun mounts require high degree of accurate machining. il Sci Am 168:78 F '43

Machining vital parts of the 90-mm. anti-aircraft gun mount; Worthington pump & machinery corporation. H. L. Horton. il diags Mach 50:159-63 O '43

Redesign speeds gun production; change from riveted to welded construction; Bofors automatic anti-aircraft cannon; abstracts. J. L. Miller. il Machine Design 14:83-3+ D '42; Iron Age 150:51-9 D 3 '42; Welding J 22:99-107 F '43; Automotive & Aviation Ind 88:30-5 Ja 1 '43

Special automotive production machine converted to war work; gun mount parts, Midland steel products co. il Iron Age 150:49 D 17 '42

GUN metal

Low-tin and tin-free bronzes and brasses. F. Hudson. bibliog il diags Iron Age 150: 46-50 D 3; 62-4 D 10 '42

Navy makes gun metal castings. E. Portman. Foundry 71:117+ O '43

GUN turrets, Airplane. See Airplanes, Military—Gun turrets**GUNITÉ**

Corrosion protection of storage tanks; gunité lining, galvanized and aluminum roofs, etc. F. L. Newcomb, E. S. Dixon and C. F. Kelly. il diags Am Pet Inst Proc 23(8): 38-58 '42; Excerpts. Nat Pet N 34 pt 2: R397-403 N 25 '42; Abstract. Oil & Gas J 41:263 N 12 '42

Forty-year-old concrete bridge is reconstructed by guniting. J. H. Brayton. il Concrete 51:14 O '43

Gunité linings for purifiers. J. H. Erwin. il diag Am Gas J 158:21-3 My '43

New method of applying concrete saves time and material; gunité for salt water disposal pits and other oil field uses. H. F. Simons il Oil & Gas J 41:34-5 Ja 21 '43

GUNNERY*See also***Ballistics****GUNPOWDER**

Loading gun powder to fight the Nazis. R. E. Hardy. il Chem & Met Eng 50:98-100 Ap '43

Pressure of exploding gunpowder is recorded with oscillograph. il Electronics 16:186+ Ag '43

GUNPOWDER, Smokeless. See Smokeless powder**GUNS**

Captured enemy equipment; photographs of German guns and army vehicles. S A E J 51:sup29-32 Jl '43

Slug slingers. il Business Week p38+ Je 12 '43

See also
Rifles

Manufacture

Heat treatment of small gun barrels. T. Denness. Metal Prog 43:242-3 F '43

GUNS (ordnance)

First cast-iron cannon made in England. H. Schubert. bibliog Iron & Steel Inst J 146: 131-40 no 2 '42; Same. Engineering 155:5-6 Ja 1 '43

Guns and ammunition. K. Rose, comp. diags Metals & Alloys 18:313, 315 Ag '43

Improved method for rifling artillery; patent. V. Bush. Science 98:sup 10 Jl 9 '43

Making shells for the largest mobile howitzer in the world. H. L. Horton. il diags Mach 50:133-48 S '43

See also

Bazooka	Machine guns
Guns, Aircraft	Naval guns
Guns, Anti-aircraft	

Manufacture

Boys anti-tank guns, made in Canada. il diags Am Mach 87:112-20 Mr 18 '43

Canadian armament redesigns conserve critical materials and increase production. J. Montagnes. il Product Eng 14:327-32 Je '43

Dickson gun plant. R. W. Tuer. plans Heat & Ven 40:56-61 Je '43

Finishing 57-millimeter gun barrels; Yoder co. J. Lucas. il Mach 49:140-7 My '43

Forged gun parts from steel strip; Murray Ohio mfg. co. G. W. Birdsall. il diags Steel 113:194-6+ O 11 '43

Grind deep-hole drills properly. F. O. Hoagland. il diags Am Mach 87:91-3 F 18 '43

Heat treating small arms parts; abstract. Metals & Alloys 17:834+ Ap '43

Heavy gun tubes from seamless tubing; illustrations. Iron Age 152:74-9 Ag 12 '43

Making 90-mm. guns; Wheland co. il Steel 113:110-12, 114+ Jl 19 '43

New manufacturing methods; two new ways of making gun or cannon barrels. il Mach 49:146-7 D '42

Searless tube mill pierces billets for 75-mm. gun tubes; illustrations with text. Metal Prog 44:15-19 S '43

37- and 57-mm. guns from Pennsylvania's oil country; Titusville iron works co. E. C. Grandin. il Mach 49:184-96 Ap '43

Testing

Measuring muzzle velocity. A. F. Macconochie. il diags Steel 113:206-8, 210+ O 11 '43

GUNS, Aircraft

Aircraft cannon; factors in design and operation of aircraft cannon; shell and ammunition. L. Bruchiss. il diags Steel 111: 78-9+ N 16 '42

American gun turrets; illustrations. Automotive & Aviation Ind 87:42-3 D 1 '42

Ballistic and technical problems of aerial combat; abstract. T. W. Schmidt. Roy Aeronautical Soc J 47:sup543+ O '43

Boulton Paul gun turret mechanism. M. W. Bourdon. il diags Automotive & Aviation Ind 88:28-33 Ap 1 '43

Comparative aircraft armament fire power; World war I and II; tables. P. G. Masefield. Automotive & Aviation Ind 89:31 Jl 15 '43

Designing gun turrets as integral part of aircraft. L. G. Frise. il diags Aviation 42: 227, 229, 231 Ap; 247-8, 250, 253 My '43

Development of British aircraft armament. il Aero Digest 41:179-30, 183+ D '42

Fire power details of Nazi planes. diags Aviation 41:200-1 N '42

Gun turret development in England. M. W. Bourdon. il Automotive & Aviation Ind 87: 34-7+ N 15 '42

Hydraulic machine gun chargers. S. I. Macduff and G. A. Goepfrich. il Aero Digest 42: 243-4+ F '43

More fire power for our fighting aircraft. L. Bruchiss. il diag Steel 113:100-2+ Jl 12 '43

Mustang acquires added fire-power. il Aero Digest 43:147 Ag '43

Parnall power-operated gun turret. il Engineering 154:366-7, 370 N 6 '42; Engineer 174:386-7 N 6 '42

GUNS, Aircraft—Continued**Sights**

Some details of automatic gun-sight revealed.
 il Aero Digest 43:217+ J1 '43
 Sperry sight suppliants gunner's guess. il
 Aviation 42:229 Ag '43

GUNS, Anti-aircraft

Machine gun with plastic bullets to use in
 training soldiers. Franklin Inst J 236:409
 O '43

Plastic petroleum for anti-aircraft guns.
 Automotive & Aviation Ind 89:34 S 1 '43;
 Same cond. Franklin Inst J 235:653-4 Je '43

Design

Redesigns save man hours and materials;
 parts of Bofors guns. diags Product Eng
 14:266-7 My '43

Manufacture

Anti-aircraft gun mount production; with
 cost data; Westinghouse electric elevator
 co. il Iron Age 151:68 Mr 18 '43

Building the mounts for 90-mm. anti-air-
 craft guns. C. O. Herb. il Mach 49:129-41
 Je '43

Chrysler builds the Bofors gun. il diags Am
 Mach 87:97-112 Ap 29 '43

Machining vital parts of the 90-mm. anti-air-
 craft gun mount; Worthington pump &
 machinery corporation. H. L. Horton. il
 diags Mach 50:159-63 O '43

Redesign speeds gun production; change from
 riveted to welded construction; Bofors
 automatic anti-aircraft cannon; abstracts.
 J. L. Miller. il Machine Design 14:83-8+ D
 '42; Iron Age 150:51-9 D 3 '42; Welding J
 22:99-107 F '43; Automotive & Aviation
 Ind 88:30-5 Ja 1 '43

Substitute for 90 Cu, 10 Sn bearings; for
 Bofors anti-aircraft gun; abstracts. M. F.
 Garwood and E. H. Stilwell. Metal Prog 43:
 396 Mr '43; Automotive & Aviation Ind 88:
 18-19 F 1 '43

Welding plays top role in anti-aircraft gun
 recoil; R. Hoe & company. il Am Mach
 86:1372-82 N 26 '42

GUNS, Naval. See Naval guns**GUT. See Catgut****GUTTA percha**

Statistical lengths of rubber-like hydrocar-
 bon molecules. F. T. Wall. bibliog J Chem
 Phys 11:67-71 F '43

GUTTERS (roof)

Wooden roof-gutters. Consumers' Research
 Bul 11:26 Mr '43

GUY anchors. See Anchors, Guy**GUYS**

Reinforce concrete with steel guy wire. Elec
 W 120:664 Ag 21 '43

GYPSUM

Gypsum, 1938-1941. Survey of Cur Business
 1942 Sup p164 [supplemented in monthly
 numbers]

Gypsum statistics for 1942. Rock Prod 46:116
 Ag '43

Outlook in gypsum. M. H. Baker. Comm &
 Fin Chr 157:386 Ja 28 '43

Report of A.S.T.M. committee C-11 on gyp-
 sum. Am Soc T M Proc 42:260-4 '42

See also United States gypsum company

GYPSUM products

Dry-wall construction; time saver standards.
 H. R. Sleeper. diags Arch Rec 94:77-8 O
 '43

Gypsum products sales reported, 1941-1942.
 Oil Paint & Drug Rep 143:33 Mr 15 '43

Gypsum products sold or used, 1938-1941. Sur-
 vey of Cur Business 1942 Sup p164 [sup-
 plemented in monthly numbers]

Research contributes to war production; Na-
 tional gypsum co. M. H. Baker. Rock Prod
 46:62-3 J1 '43

Versatile gypsum finds applications in new
 wallboards and roofs. Sci Am 169:13 J1
 '43

GYRO compass

Cleaning the directional gyro air nozzle. M. J.
 Wiggins. Instruments 16:200 Ap '43

Elmer Sperry and his magic top. F. S. Wick-
 ware. il Sci Am 169:66-7+ Ag '43

Sperry gyro-compass; machining operations.
 H. L. Horton. il Mach 50:172-8 N '43

GYROMAGNETIC effects. See Magnetism**GYROPLANES****See also****Autogiros****GYROSCOPE**

AC engineers use automotive methods to
 speed automatic pilot production. J.
 Geschel. il Automotive & Aviation Ind 89:
 34-7+ Ag 1 '43

Elmer Sperry and his magic top. F. S. Wick-
 ware. il Sci Am 169:66-7+ Ag '43

Fisher Body mass-produces Sperry instru-
 ments. il Aero Digest 42:247-8, 251-2 Ap '43

Gyros: unknown heroes; automatic pilot or
 Gyroplot. P. Romanelli. il Instruments 15:
 470+ N '42

Notes on overhaul of gyro rotors. G. E.
 McEwen. Instruments 16:626+ O '43

Overhaul procedure, pendulum assembly of
 horizon and bank and climb unit. R. B.
 Kees. il Instruments 15:523+ D '42

Probable cause of noise in gyro instruments
 and a suggestion for its prevention. R. G.
 Ojers. Instruments 16:144+ Mr '43

Testing machine for aeroplane auto-pilot
 gear. il Engineering 154:385-6, 390 N 13 '42

See also

Sperry corporation

H**HAAS, Francis Joseph, 1889-**

Tough assignment. por Business Week p100
 My 29 '43

HAENSEL, Vladimir

Portrait. Chem Ind 53:343 S '43

HAFNIUM

Concentration of hafnium; preparation of
 hafnium-free zirconia. E. M. Larsen, W. C.
 Fernelius and L. L. Quill. bibliog diags Ind
 & Eng Chem Anal ed 15:512-15 Ag '43

HAGEMANN ester

Alkylation of 3-methyl-4-carbethoxy-2-cyclo-
 hexen-1-one (Hagemann's ester) and re-
 lated substances. L. I. Smith and G. F.
 Rouault. bibliog Am Chem Soc J 65:631-5
 Ap '43

HAIL insurance. See Insurance, Hail**HAIR**

Dielectric properties of animal fibers. J.
 Errera and H. S. Sack. bibliog diags
 Ind & Eng Chem 35:712-16 Je '43

Optimum conditions for cross-linking animal
 fibers with formaldehyde and quinone. J.
 B. Speakman and P. L. D. Peill. bibliog
 Textile Inst J 34:T70-6 S '43

See also

Baldness

HAITI

New market places meet Haiti's basic needs.
 For Comm W 12:14 J1 17 '43

See also

Rubber industry and
 trade—Haiti

Economic conditions

News by countries. For Comm W 10:20-1 Mr
 13; 11:15 Je 5; 12:24-5 Ag 21; 20-1 S 18;
 13:12-13 N 6 '43

War bolsters Haiti's economy. H. N. Stark.
 il For Comm W 9:4-8, 38-40 D 12 '42

Industries and resources

Activities and purposes of S-H-A-D-A; Haiti
 turns to new farming tasks. T. A. Fennell.
 il For Comm W 10:4-5+ Mr 20 '43

Haiti encourages hand weaving. For Comm,
 W 10:27 Mr 6 '43

**HALFTONE process. See Photoengraving;
Photomechanical processes****HALIDES**

Catalytic interchange of groups in aliphatic
 amines. K. Nozaki. Am Chem Soc J 64:
 2920-3 D '42

Electron transfer spectra and their photo-
 chemical effects. E. Rabinowitch. bib-
 liog (84 references) diags Rs Mod Phys 14:
 112-31 Ap-J1 '42

HALIDES—Continued

Factors determining the course and mechanism of Grignard reactions. M. S. Kharasch and others. *Am Chem Soc J* 65:491-507 Ap '43

Factors determining the course and mechanism of Grignard reactions; the effect of metallic halides on the reaction of Grignard reagents with benzalacetophenone and with benzophenone. M. S. Kharasch and D. C. Sayles. *bibliog Am Chem Soc J* 64:2972-5 D '42

Sainte-Claire Deville hot-cold tube and some of its applications. R. C. Young. *bibliog J Chem Educ* 20:378- Ag '43

See also

Chlorides Iodides
Fluorides Salt
Grignard reagents

Analysis

Simple device for detecting small concentrations of organic halide gases in the atmosphere. G. W. Jones and R. E. Kennedy. *pl U S Bur Mines Rep of Invest* 3697:1-10 '43; *Abstract. Chem Ind* 53:538 O '43

HALL, Arthur Fletcher, 1872-1942

Sketch. *por East Underw* 43:3 N 13 '42; *Nat Underw (Life ed)* 46:3+ N 13 '42; *Weekly Underw* 147:1143+ N 14 '42

HALL effect

Electrical conductivity and isothermal Hall effect in cuprous oxide. W. Feldman. *bibliog Phys R* 64:113-18 Ag 1 '43

HALLEY, Edmond, 1656-1742

Ode on Newton's theory of gravitation by Edmond Halley. A. Weinstein. *Science* 97: 69-70 Ja 15 '43

HALOGEN compounds

Acetylenic ethers; halogen derivatives of phenoxylacetylene. T. L. Jacobs and W. J. Whitchee. *bibliog Am Chem Soc J* 64:2635-8 N '42

Action of diazomethane upon acyclic sugar derivatives; halogen derivatives. M. L. Wolfrom and R. L. Brown. *bibliog il Am Chem Soc J* 65:1516-21 Ag '43

Electric moments of ortho-substituted phenols and anisoles; halogen derivatives. W. F. Anzilotti and B. C. Curran. *bibliog Am Chem Soc J* 65:607-11 Ap '43

Halogen compounds derived from 4-methyl-2,5-diphenylfuran. R. E. Lutz and C. E. McGinn. *Am Chem Soc J* 64:2583-5 N '42

Ketene acetals; the pyrolysis of ketene acetals and orthoesters. S. M. McElvain, H. I. Anthes and S. H. Shapiro. *bibliog Am Chem Soc J* 64:2525-31 N '42

Optical rotation and atomic dimension: the four optically active 2-halogenopentanes. D. H. Brauns. *bibliog J Research Nat Bur Stand* 31:83-106 Ag '43

Raman spectra of acetylenes; symmetrical-por acetylenes. F. F. Cleveland and M. J. Murray. *bibliog J Chem Phys* 11:450-4 O '43

Role of neighboring groups in replacement reactions; retention of configuration in the reaction of some dihalides and acetoxy-halides with silver acetate. S. Winstein and R. E. Buckles. *bibliog Am Chem Soc J* 64: 2780-6 D '42

Some boron trifluoride catalyzed alkylations of halobenzenes. G. F. Hennion and V. R. Pieronek. *bibliog Am Chem Soc J* 64:2751-2 D '42

See also

Chlorides Sandmeyer reaction
Grignard reagents Trichloroethylene
Halides

HALOGENATION

Influence of the 5-nitro-group on the halogenation and nitration of 5-nitro-1-naphthylamine and of some related naphthalides. H. H. Hodgson and H. S. Turner. *Chem Soc J* p723-5 N '42

Influence of the 6-nitro-group on the halogenation, nitration, mercuration, and diazo-coupling of 6-nitro-1-naphthylamine and of some related naphthalides. H. H. Hodgson and H. S. Turner. *Chem Soc J* p391-4 Ag '43

Kinetics of aromatic halogenation. P. W. Robertson, P. B. D. de la Mare and W. T. G. Johnston. *Chem Soc J* p276-81 Je '43

See also

Bromination Fluorination
Chlorination Iodination

HALOGENS

Reaction between ethylene derivatives and the halogens. S. V. Anantkrishnan and R. Venkataraman. *bibliog(122 references)* *Chem R* 33:27-55 Ag '43

See also

Bromine Halogen compounds
Chlorine Iodine
Fluorine

Analysis

Determination of halogen in organic compounds. P. K. Winter. *bibliog diags Ind & Eng Chem Anal ed* 15:571-4 S 15 '43

Determination of halogenated hydrocarbons in the atmosphere. F. H. Goldman and C. G. Seegmiller. *bibliog diag J Ind Hygiene* 25:181-4 My '43

Determination of halogens in organic compounds. R. R. Umhoefer. *bibliog Ind & Eng Chem Anal ed* 15:383-4 Je 15 '43

Determination of volatile halogenated hydrocarbons in blood. H. E. Moran. *bibliog diag J Ind Hygiene* 25:243-8 Je '43

Modification of the Carlus combustion tube to minimize losses by explosion: pressures attained on heating nitric acid to 300° C. C. L. Gordon. *bibliog diag J Research Nat Bur Stand* 30:107-11 F '43

New technique for the ultimate micro-analysis of organic compounds. R. Belcher and C. E. Spooner. *diags Chem Soc J* p313-16 Jl '43

Recent developments in analytical chemistry. *bibliog diags Chem Age (Lond)* 49:207-9 Ag 28 '43

Reductions with nickel-aluminum alloy and aqueous alkali; quantitative determination of halogens in organic compounds. E. Schwenk, D. Papa and H. Ginsberg. *Ind & Eng Chem Anal ed* 15:576-7 S 15 '43

Report on recommended specifications for microchemical apparatus; sulfur and halogens. *diags Ind & Eng Chem Anal ed* 15:230-4 Mr 15 '43

Spectrographic detection and determination of the halogens. W. W. A. Johnson and D. P. Norman. *bibliog Ind & Eng Chem Anal ed* 15:119 F 15 '43

HAMILTON, Harold Lee, 1890-
Becomes Electro-Motive executive committee chairman. *por Ry Age* 115:239-40 Ag 7 '43

HAMILTON, Herbert Clifton, 1868-1942
Sketch. O. Kamm. *Science* 97:256 Mr 19 '43

HAMILTON, John Henry
John Henry Hamilton and the positive scavenging engine. A. K. Bruce. *Engineer* 176: 281-2, 301-3, 320-3 O 8-22 '43

HAMILTON, Ontario

Water supply

Overcoming plankton difficulties at the Hamilton filtration plant. D. H. Matheson. *il Water & Sewage* 41:38+ Ap '43

HAMMERS

Hardening hammers for unit coal mills. J. H. Reichenbach. *Rock Prod* 46:49 Ja '43

HAMMERS, Drop

Douglas drop hammer technique; use of Cecostamps, rubber pads and Kirksite dies. P. Stayboldt. *il Iron Age* 152:58-61 Jl 8 '43

Drop hammer, hydraulic press punches. *il Mod Plastics* 20:68-9+ F '43

Fabricating drop hammer dies; illustrated instructions. C. J. Frey and S. S. Kogut. *Aviation* 42:155-60 D '42

Hammers of war; drop forges; the bottleneck. *il Fortune* 27:98-103+ Mr '43

More from your drop hammers. C. J. Frey and S. S. Kogut. *il diags Aviation* 42:143+ Ja '43

New method of making metal drop hammer dies; use of Cerrobond. H. G. Groehn. *il Aero Digest* 43:229, 231 S '43

Plastic punches are tough; Vega aircraft corporation. *il Am Mach* 87:83-6 F 4 '43; *Same. Aero Digest* 42:121+ F '43; *Same. Iron Age* 151:68-72 F 13 '43; *Same. Automotive & Aviation Ind* 88:40-2 F 1 '43

HAMMERS, Drop—Continued

Quicker and cheaper setup method for drop-hammer dies. *Il Aero Digest* 42:157 My '43
Range of drop hammer operations. C. J. Frey and S. S. Kogut. *Il diags Aviation* 41:118-21+ N '42

Rope drop hammers; hazards and precautions. *Nat Safety N* 46:38+ N '42

HAMMERS, Steam. See Steam hammers

HAMMOND, Alonzo John, 1869-
Sketch. *por Civil Eng* 13:48-9 Ja '43

HAMMOND, Indiana

Public works programs; Hammond ready for postwar construction. C. A. Mason. *il Pub Works* 74:11-12+ Ag '43

HAND, William Flowers

Sketch. M. F. Etheredge. *por Chem & Eng N* 20:1649-50 D 25 '42

HAND

Trigger finger and chipper's palsy. G. W. Richmond. *Safety Eng* 86:41-2+ J1 '43

See also

Fingers

Protection

Case for abrasive hand soaps. *il Soap & San Chem* 19:28-9+ Mr '43

Hand soaps in a war time market; protective ointments. F. Reilly. *il Soap & San Chem* 19:28-9+ F '43

Hands and arms. *Nat Safety N* 47:42+ Mr '43

HAND creams. See Cosmetics

HAND driers

Hot-air hand drier. *Engineering* 154:370 N 6 '42

HAND grenades. See Grenades

HAND soap. See Soap

HAND stamps

Increasing the life of hand stamps. E. K. Spring and A. R. Uhl. *Iron Age* 152:53 S 30 '43

HANDICAPPED

Better than before; program of rehabilitation of handicapped. L. Moholy-Nagy. *il Tech R* 46:21-34+ N '43

Compensation laws and the handicapped worker; abstract. V. E. Brink. *Management R* 32:153 Ap '43

Handicapped workers can help beat labor shortage. H. R. Wallace. *il Inland Ptr* 112: 61-3 O '43

Handicapped workers meet the need. *il Am Mach* 87:94-6 Je 10 '43

How handicapped workers fill manpower needs. *il Factory Management* 101:108-11+ Mr '43

How to use the physically handicapped; abstract. K. V. Banta. *Management R* 32: 208-9 Je '43

Jobs for oldsters; plane plants hiring aged, blind, and infirm. *Business Week* p66 D 5 '42

Lower handicap; Los Angeles employers' experience in hiring war workers who have physical disabilities. *Business Week* p92 F 20 '43

Manpower pool; 16,000,000 physically handicapped persons available for war work. *Business Week* p58 F 27 '43

More job opportunities for the handicapped. *Nat Safety N* 46:104-5 D '42

Physical placement program for a large industrial plant; handicapped or physically limited workers. A. C. Dick, J. L. Barritt and T. W. Willis. *Ind Med* 12:303-5 My '43

Physically handicapped; orthopedic impairment, major part of problem. B. D. Karpinos. *Pub Health Rep* 58:1573-92 bibliog(p1591-2) O 22 '43

Physically handicapped; their rehabilitation and employment in Connecticut. J. H. Biram. *Ind Med* 12:448-50 J1 '43

Physically handicapped workers get their chance; Caterpillar tractor company. *il Am Mach* 87:86-7 Mr 13 '43

Physically handicapped workers handle control system for ice-box rivets at Curtiss-Wright Columbus plant. *il Steel* 113:84+ J1 5 '43

Placement of the cardiac in industry. R. B. Crain. *bibliog Ind Med* 12:368-71 Je '43

Recruits from the handicapped; how application service company is solving problem of repair manpower. *Elec West* 90:51 Ja '43
Rehabilitation and resettlement of disabled persons in Great Britain. *Int Labour R* 48:43-55 J1 '43

Their handicaps don't interfere; Westinghouse electric elevator company. L. J. Keller. *il Am Mach* 87:93-6 Ag 19 '43

Use of handicapped workers in war industry. F. J. Montgomery and S. E. Lurie. *bibliog Monthly Labor R* 57:435-43 S '43

We hire men and women who are physically handicapped; Minneapolis artificial limb company. R. Trautman. *il Factory Management* 101:116-17+ Ja '43

Who can work? D. L. Lynch. *Ind Med* 12: 145-6 Mr '43

See also

Blind

Deaf

Disabled

Epileptics—Employment

HANDICRAFT

See also

Weaving (handicraft)

Bibliography

Index to handicrafts, modelmaking, and workshop projects; supplement. E. C. Lovell and R. M. Hall, comps. 527p bibliog(p 1-12) \$6 F. W. Faxon co, Boston '43

HANDKERCHIEFS**Advertising**

Hanky ads get verse. J. Tyler. *il Adv & Sell* 36:19 Ag '43

HANDLING, Mechanical. See Mechanical handling

HANDLING of materials

Behind the assembly line; feeder departments; Consolidated Vultee aircraft corporation. R. B. Parkhurst. *il Am Mach* 87:91-4 J1 8 '43

Materials handling facilities play important part in segregation and reclamation; General electric co. F. E. Bliven. *il Steel* 112:106-7, 109+ My 3; 104-6 My 10 '43

Materials handling principles. A. S. Knowles. *Steel* 113:122+ J1 19; 79-80 Ag 30; 99 S 27 '43

Modern methods of handling and storing dies and fixtures. B. C. Brosheer. *il Am Mach* 87:88-91 O 28 '43

Special handling facilities and efficient production control system; wings for the Republic P-47 Thunderbolt fighter plane; Servel inc. G. E. Stedman. *il Steel* 113: 124-6+ N 8 '43

See also

Coal handling

Conveying machinery

Electric trucks, Industrial

Freight handling

Holisting machinery

Lifting

Loading and unloading

Mechanical handling

Motor trucks, Industrial

Sand handling

Trucks

Safety measures

Handling with care; safe and efficient methods in stores department. G. A. Goerner. *il Nat Safety N* 48:12-13+ J1 '43

How to prevent weight-lifting injuries. *diags Steel* 113:112, 115-16+ Ag 16 '43

HANDWHEELS

Down-East handwheels for destroyers. W. E. Parsons. *il Mod Plastics* 20:61+ Ag '43

HANGARS

Air-borne front line hangar. W. B. Larkin. *il Aero Digest* 42:245+ Je '43

Arches of laminated wood. *il Arch Rec* 94: 75 J1 '43

Blimp hangars built by contrasting methods. *il Eng N* 129:841-6 D 17 '42

Blimp hangars point to new uses for wood. *il Ry Age* 114:1224 Je 19 '43

Cantilever hangar, Santos Dumont airport, Rio de Janeiro. *il diags plan Arch Rec* 92: 41-4 D '42

Flying flivver garage; prefabricated of plywood and laminated strips bonded with urea-formaldehyde glue. *il Mod Plastics* 20: 47 F '43

Hangar door details; time-saver standards. W. J. Ward, jr. *diags Arch Rec* 94:77-80 J1 '43

HANGARS—Continued

- Hangar doors that roll or rise; illustrations. Arch Rec 94:76 J1 '43
- Long-span arches for modification center. il diags Eng N 131:632-5 O 21 '43
- Movable scaffold solves problem; erecting towering arches of timber blimp hangar. il Manuf Rec 112:44-5 N '43
- Navy develops all-timber blimp hangar. A. Amirikian. il diags Civil Eng 13:471-4, 525-8. O-N '43
- Permanent hangar for war planes. il diags Arch Rec 94:73-4 J1 '43
- Steel-frame portable airplane hangars. W. B. Larkin. il Eng N 130:675-7 My 6 '43
- Timber arches for blimp dock erected from scaffold on flatcars. il diags Eng N 131:320-3 Ag 26 '43
- Timber bowstring trusses supported on buttressed concrete columns. il diags Eng N 129:771-4 D 3 '42
- Two timber blimp docks erected with traveling timber scaffolds. il diags Eng N 131:460-5 S 23 '43
- Two traveling tower derricks erect huge timber blimp hangar. il diags Eng N 130:542-6 Ap 22 '43
- Types of hangar trusses. E. E. Seelye. il diags Arch Rec 94:71-2 J1 '43
- Unique wood hangar at Fairchild plant. il Aeronautical Eng R 2:170 O '43
- Winds wreck wood arches of partly erected hangar. il Eng N 130:272 F 25 '43
- World's greatest timber structure; huge airship hangar made possible by use of timber connectors. H. Harvey. il Roads & Bridges 81:40-1 My '43; Abstract. Roads & Sts 86:52 J1 '43
- World's largest timber structure; hangar for blimps. il Pub Works 74:45 My '43

Heating and ventilation

- Army air force airplane hangars; radiant heating system. E. Hall. il diags Heat & Ven 140:51-3 S '43
- Floor heating system in hangar conserves metal; nonmetallic ducts circulating warm air heated by steam. J. K. Fairbairn and J. D. Dillon. il diags Heating-Piping 15:573-5 N '43
- HANKEY, Maurice Paschal Alers Hankey, 1st baron, 1887- I.E.E. presentations. por Electrician 130:458-9 My 7 '43

HAPGOOD brothers. See Columbia conserve company

HAPLOSPORANGIUM parvum

- Isolation of haplosporangium parvum n. sp. and coccidioides immitis from wild rodents; their relationship to coccidioidomycosis. C. W. Emmons and L. L. Ashburn. bibliog diags Pub Health Rep 57:1715-27, pl 1-4 N 13 '41

HAPTENS

- Serological properties of simple substances; hapten inhibition of precipitation of antibodies and polyhaptenic simple substances. D. Pressman, D. H. Brown and L. Pauling. Am Chem Soc J 64:3015-20 D '42
- Serological properties of simple substances; precipitation reactions between antibodies and substances containing two or more haptenic groups. L. Pauling and others. bibliog Am Chem Soc J 64:2994-3003 D '42
- Serological properties of simple substances; the composition of precipitates of antibodies and polyhaptenic simple substances; the valence of antibodies. L. Pauling, D. Pressman and C. Ikeda. diags Am Chem Soc J 64:3010-14 D '42
- Serological properties of simple substances; the effects of changed conditions and of added haptens on precipitation reactions of polyhaptenic simple substances. L. Pauling and others. Am Chem Soc J 64:3003-9 D '42
- Serological properties of simple substances; the precipitation of polyhaptenic simple substances and antiserum homologous to the *p*-(*p*-azophenylazo)-phenylarsonic acid group and its inhibition by haptens. D. Pressman and others. bibliog Am Chem Soc J 65:728-32 Ap '43

HARBOR workers

- Supreme court issues twilight zone opinion; employe may claim state compensation while under Longshoremen's act. East Underw 43:32 D 18 '42

HARBORD, Frank William, 1860-1942 Sketch. por Engineer 175:9-10 Ja 1 '43

HARBORS**See also**

- | | |
|----------------------|---------------------|
| Breakwaters | Loading and unload- |
| Dredging | ing—Ships |
| Dry docks | Longshoremen |
| Free ports and zones | Piers |
| | Ports |

HARD facing

- Hard-facing hot trimming dies. il diags Am Mach 87:98-100 S 16 '43
- Hard-facing protects valve trim against wear. P. W. Swain and E. W. Feller. il diags Power 86:874-5 D '42
- Hard surfacing prolongs life. il Rock Prod 46:58-9 O '43
- Reclaiming high-speed steel tools by an improved welding process. T. Sutton. il Steel 111:88, 90 N 30 '42
- Reclaiming worn tractor parts. il diags Roads & Bridges 81:42, 44- Ap '43
- Reclamation by hard-facing. F. G. Jones. Welding J 22:797-8 O '43
- Reducing valve wear by hard-facing. R. L. Lerch. il Power Pl Eng 47:71-3 Mr '43
- Salvaging shovel teeth and buckets. il Roads & Bridges 81:58 Mr '43
- Salvaging worn tractor running gear parts; building up and hard surfacing by electric welding. A. D. Willisroft. Pulp & Pa of Can 43:962-4 D '42
- Welding pointers; rebuilding and hard-facing construction equipment. diags Roads & Sts 86:84-6 O '43

HARD of hearing. See Deaf

HARD woods

- Grinding of hardwoods; studies on swamp tupelo, paper birch, green ash, sugarberry, southern cottonwood, black willow, and American elm. E. R. Schafer and J. C. Pew. bibliog Paper Tr J 116:26-32 Ja 28 '43
- Plywood and hardwoods replace critical metals in new business machine. il diags Product Eng 14:337-8 Je '43
- HARDEN, Arthur, 1865-1940 Sketch. F. G. Hopkins and C. J. Martin. Chem Soc J p334-40 J1 '43

HARDENING

- Reversible hardening of shellac in storage. L. McCulloch. Ind & Eng Chem 35:825-6 J1 '43
- Strain-hardening and recrystallization. C. H. Mathewson. diags Iron Age 152:54-8 O 28 '43
- Wearproofing cast iron bushings. G. C. Masters. Am Mach 87:160 J1 8 '43

See also

- Case hardening
- Metals—Aging
- Steel, Hardening of
- HARDESTY, Shortridge, 1884- Sketch. por(p46) Civil Eng 13:45 Ja '43
- HARDNESS
- Effect of elements in solid solution on hardness and response to heat treatment of iron binary alloys. C. R. Austin. bibliog Am Soc for Metals Trans 31:321-35; Discussion. 335-9 Je '43
- Hardness conversion for cartridge brass; tabulation. Metal Prog 44:714 O '43
- Hardness vs. wear resistance. J. R. Spence. il Welding J 22:179-81 Mr '43
- Precipitation reaction in aged cold-rolled 1 per cent cadmium-copper; its effects on hardness, conductivity, and tensile properties. R. H. Harrington and L. E. Cole. bibliog il Am Soc for Metals Trans 31:651-69; Discussion. 669-74 S '43
- What is hardness? S. R. Williams. il diags Sci Am 169:109-11 S '43

See also

- Case hardening
- Steel, Hardening of

Testing

- Calculation of Jominy end-quench curve from analysis; study of NE steels. J. Field. il diags Metal Prog 43:402-5 Mr '43

HARNESS—Testing—Continued

- Clark hardness tester. *Il Ind & Eng Chem Anal ed* 15:538 Ag 15 '43
- Detecting working temperatures by hardness drop. E. J. Willis and R. G. Anderson. *Il diags Machine Design* 15:105-8 Je '43
- Diamond tools; methods employed by A. Shaw and son in preparing stones for industrial applications; indenter points. *Il Automobile Eng* 33:313-14 Ag '43
- Dynamic hardness testing of metals and alloys at elevated temperatures. E. Fetzl. *Il diag Am Soc for Metals Trans* 30:1419-61 bibliog(p1459-61); Discussion. 1461-2 D '42
- Effect of moderate cold rolling on the hardness of the surface layer of 0.34 per cent carbon steel plates. H. K. Herschman. bibliog *Il Am Soc for Metals Trans* 31:501-13 Je '43; Same. *J Research Nat Bur Stand* 29:57-67 J1 '42; Discussion. *Am Soc for Metals Trans* 31:513-16 Je '43
- Effect of welding on the shear and hardness properties of mild steel bars. W. D. Lewis. *diags Welding J* 21:sup559-61 N '42
- Effects of various solute elements on the hardness and rolling textures of copper. R. M. Brick, D. L. Martin and R. P. Angier. bibliog *diags Am Soc for Metals Trans* 31:675-95; Discussion. 695-8 S '43
- Elusive measurement of hardness; A.S.T.M. symposium. *Iron Age* 152:74 Ag 5 '43
- Hardenability of shallow hardening steels. C. B. Post, O. V. Greene and W. H. Fenstermacher. bibliog *Il diags Am Soc for Metals Trans* 30:1202-47; Discussion. 1247-54 D '42
- Hardness conversion for cartridge brass; tabulation. *Metal Prog* 43:235 F '43
- Hardness conversion relationships. R. H. Hoyer. *Am Soc T M Proc* 42:708-21; Discussion. 722-6 '42
- Hardness of aluminum sheet; tests and conversion charts. R. L. Templin. *Il Metal Prog* 44:86-8 J1 '43
- Hardness testing of high speed steel at high temperatures. E. C. Bishop and M. Cohen. *diag Metal Prog* 43:413-16+ Mr '43
- Hardness testing with the Barcol impressor. J. H. Hruska. *Il diag Iron Age* 152:84-7 O 14 '43
- Hardness tests; mechanical aspects. *Metal Prog* 44:273 Ag '43
- Hardness tests; tables. R. S. Burpo, Jr. *Metals & Alloys* 17:1217, 1219 Je '43
- How to estimate hardening depth in bars; Jominy end quench hardenability test. J. L. Lamont. bibliog *diags Iron Age* 152:64-70 O 14 '43
- How to interpret Jominy test results. *diags Iron Age* 151:64-6 F 11 '43
- How to use the Jominy end-quench test. G. Van Dyke. *Il diag S' steel* 112:106, 108, 110 My 17 '43
- How to use the NE (national emergency) alloy steels; with information on the end-quench test. *Il Steel* 112:78+ Mr 22 '43
- Magnetic comparator checks hardness of axle shafts. *Il Electronics* 16:214+ Je '43
- Mar resistance of plastics. L. Boor. bibliog *Il Am Soc T M Proc* 42:927-41 '42; Same cond. *Mod Plastics* 20:79-83 S '42; Discussion. *Am Soc T M Proc* 42:942-3 '42
- Microhardness tester as a metallurgical tool; abstract. C. B. Brodie. *Automotive & Aviation Ind* 89:43 N 1 '43
- Micro-hardness tester, new tool in powder metallurgy. R. Steinitz. *Il Metals & Alloys* 17:1183-7 Je '43
- Micro-hardness tests; abstract. Bückle. *Metals & Alloys* 17:1066 My '43
- Microhardness vs. width of microcut for use with Bierbaum's microcharacter. *Metal Prog* 44:848A O '43
- Parts schedule for hardness testers; manufacture of Rockwell hardness tester by Wilson mechanical instrument company. A. A. Blue. *Am Mach* 87:102-3 O 28 '43
- Powder hardness can now be measured on single metal grains. *Sci Am* 169:182-3 O '43
- Selection of toolsteel by its hardenability. S. M. DePoy. charts *Metal Prog* 43:917-18 918a Je '43
- Significance of mechanical test properties of metals. H. O'Neill. *Engineering* 156:18-20, 38-40, 56-8 J1 2-16 '43; Discussion. 156:15-16, 34-5 J1 2-9 '43

- Surface hardness of metals; measuring method involving reduction of optical reflectivity after sand impact. *Il diag Iron Age* 152:43-5 S 30 '43
- Third element effects on hardenability of a pure hypereutectoid iron-carbon alloy. C. R. Austin, W. G. Van Note and T. A. Prater. bibliog *Il Am Soc for Metals Trans* 31:517-50; Discussion. 550-8 S '43
- Use of Shore Durometer for measuring hardness of rubber; abstract. R. H. Taylor. *Franklin Inst J* 236:135-6 Ag '43; Same. *Rubber Age* 53:434 Ag '43
- Weld-bead hardness tests on some carbon, nickel and nickel-chromium War department steels. O. E. Harder and C. B. Vol-drich. *Il diags Welding J* 22:sup441-50 O '43

HARDWARE

- Hardware design and engineering in a noteworthy installation at Washington's Hotel Statler. *Il diags Arch Rec* 93:84+ My '43

See also

- | | |
|----------------|--------|
| Bolts and nuts | Screws |
| Nails | Tools |

HARDWARE industry and trade

- British Guiana's imports, 1941. *For Comm W* 10:21-2 F 13 '43
- Profit planning for the small business. C. J. Whipple. *Il Am Business* 13:13-16+ Je '43

Insurance requirements

- Hardware business; Spectator staff survey. *Il Spectator (Property ed)* 9:10-12+ S 23 '43

New Zealand

- New Zealand's imports, 1941 and 1942. *For Comm W* 12:24-5 J1 31 '43

HARDWARE stores

- New buildings for 194X; hardware store. *Il plans Arch Forum* 72:106-7 My '43

HARDY, Godfrey Harold, 1877-

- Hardy-Weinberg law. C. Stern. *Science* 97:137-8 F 5 '43

HARMONIC analysis

- Harmonic analysis by photographic method. A. W. Stratton and G. K. Terhune. *J Ap Phys* 14:535-6 O '43
- 36 and 72 ordinate schedules for general harmonic analysis. R. P. G. Denman. *Electronics* 15:44-7 S '42; Correction. 16:214-15 Ap '43

HARMONIC analyzers

- Operation of an harmonic analyser, and its principal uses. *Electrician* 130:224 F 26 '43
- Simple harmonic wave analyzer. R. F. Thomson. *Il diags Electronics* 15:61-2+ D '42

HARMONIC motion. See Vibration**HARMONIC synthesizer**

- Use of a mechanical synthesizer to solve trigonometric and certain types of transcendental equations, and for the double summations involved in Patterson contours. S. L. Brown and L. L. Wheeler. bibliog *Il diags J Ap Phys* 14:30-6 Ja '43

HARMONICS (electric waves)

- Deionization considerations in a harmonic generator employing a gas-tube switch. W. G. Shepherd. *diags Inst Radio Eng Proc* 31:66-74 F '43
- Distribution factors and pitch factors of the harmonics of a fractional-slot winding. M. M. Liwshitz. *Elec Eng* 62:Trans 664-6 O '43
- Harmonic generator for frequencies above 100 mc/s. W. M. Colles. *Il diag Wireless Eng* 20:300-2 Je '43
- Harmonics and load balance of multiphase rectifiers; considerations in the selection of the number of rectifier phases. R. D. Evans. bibliog *Elec Eng* 62:Trans 182-7 Ap '43
- High harmonics of quartz crystals control vhf oscillator circuits; abstract. I. E. Fair. *diags Electronics* 16:176+ Ag '43
- Power-tube performance in class C amplifiers and frequency multipliers as influenced by harmonic voltage. R. I. Sarbacher. *Il diags Inst Radio Eng Proc* 31:607-25 N '43
- Practical radio course; harmonic and frequency distortion produced by power pentode tubes. A. A. Ghirardi. *diags Radio N* 30:55-6+ N '43
- Rectifier circuit power factors, harmonics and wave shapes. R. D. Evans. *diag Elec W* 120:1345-8 O 16 '43

HARRELL, William F.

Retires as U.S. Army chief of Life insurance section. por East Underw 44:16 O 8 '43

HARRIMAN, William Averell, 1891-

Ambassador to Russia. Comm & Fin Chr 158:1515 O 14 '43

HARRIMAN memorial medals for safety

E. H. Harriman memorial medals awarded. pors Ry Age 115:24 J1 3 '43

HARRIS, Alfred F. 1860-1943

Sketch. por Inland Ptr 111:56 J1 '43

HARRISON, Joseph W. 1861-

63 years a foundryman. por Foundry 71:102-3+ My '43

HARRISON, Ross Granville, 1870-

Portrait. J Ap Phys 14:378 Ag '43

HARRISON steel castings company

68 years a foundryman; J. W. Harrison. il Foundry 71:102-3+ My '43

HARSTAD, Oscar N. 1886-

New railway aides named by Eastman. por Ry Age 114:141-2 Ja 2 '43

HARTFORD, Connecticut

How Hartford became a great insurance center. L. K. Porritt. Nat Underw 47:10-11 S 2 '43

Bridges

Charter Oak bridge. il diags plan Engineer 176:261-4 O 1 '43

Long plate girders in Hartford bridge. C. H. Gronquist. il diags map Eng N 130:344-7 Mr 11 '43

Plate-girder erection at Hartford. R. M. Boynton. il diag Eng N 130:443-6 Mr 25 '43

Hospitals

Hartford hospital; prewar, postwar. il plans Arch Rec 93:65-8 My '43

HARTMAN, E. W.

Oil well reviver; method of heating dead fields to renew flow. Business Week p85 F 27 '43

HARVARD school of dental medicine

Changes in dental program. Science 98:130 Ag 6 '43

HARVARD university**Graduate school of business administration**

Business, labor: class of '43. il Business Week p96+ My 29 '43

Libraries

Houghton library of rare books. il plans Arch Rec 94:42-7 J1 '43

HASHISH. See Marihuana**HASS, Henry Bohn, 1902-**

Fathers and sons in chemistry. por Chem & Eng N 21:1252 Ag 10 '43

HASS, Robert Henry, 1922-

Fathers and sons in chemistry. por Chem & Eng N 21:1252 Ag 10 '43

HASTINGS, Edgar Morton, 1882-

Sketch. por Civil Eng 12:694 D '42

HASTINGS, John Beazley, 1858-1942

Memorial. C. P. Berkey. por(pl) bibliog Geol Soc Proc 1942:189-94 Ap '43

HAT factories**Employees**

Hat union takes 1st action under anti-strike bill. Comm & Fin Chr 158:133 J1 8 '43

HATS

Felt hats. J. Kotsiakos. Textile Col 65:177-9 Ap '43

Felts on top; men's hat stores are kept busy. Business Week p57-8 Ap 3 '43

Record systems are important to selling; Dobbs women's hats. A. J. Stack. il Ptr Ink 203:17-18+ My 14 '43

Salvaging hats by redyeing them. G. Rice. Textile Col 65:115-16 Mr '43

See also

Straw hats

Rating

Felt hats for men. il Consumers' Research Bul 12:13-15 N '43

HATS, Safety

Skull savers. il Nat Safety N 47:21 Mr '43

HAULAGE

Cheaper to move plant to job; Ready mixed concrete corporation, Indianapolis, has built five plants to cut down mileage of hauls. P. J. Pirmann. il map Rock Prod 45:70-1+ D '42

Saves tires and gas; Arrow sand and gravel co. builds batching plant near war construction. B. Nordberg. il diags Rock Prod 46:62-3+ Mr '43

Saving motor truck maintenance; loaded trucks hauled up incline at Cedar Bluff quarry by means of barney car. B. Nordberg. il Rock Prod 45:50-1 N '42

Two-way barney car system. J. Q. Taylor. il Rock Prod 46:50-3 Ja '43

See also

Cableways Locomotives
Conveying machinery Mine haulage
Delivery of goods Motor trucks
Electric trucks, Industrial Motor trucks in freight service
Loading and unloading Tractors
Trucks

HAUSMANNITE. See Manganese ores**HAWAIIAN ISLANDS****Economic conditions**

Beacon in Hawaii; trade has risen 25%. il Business Week p30+ D 12 '42

Politics and government

To restore civil rule to Hawaii government. Comm & Fin Chr 157:856 Mr 4 '43

HAWORTH, Walter Norman, 1883-

Royal medal award. H. Dale. Science 97:30 Ja 8 '43

HAY, John, 1839-1905

Fate of mighty nations; in the Republican era of 1897-1912 American internationalism was born. R. W. Davenport. por Fortune 27:114-19+ My '43

HAY

Forced ventilation improves hay-making methods. Heat & Ven 40:95 Je '43

HAY fever

General electrophoretic pattern in extracts of pollens causing hay fever. H. A. Abramson, D. H. Moore and H. H. Gettner. il J Phys Chem 46:1129-39 D '42

Hay fever and vitamin C. H. N. Holmes and W. Alexander. Science 96:497-9 N 27 '42

North American ragweeds and their occurrence in other parts of the world. H. A. Allard. Science 98:292-4 O 1 '43

HAYDENITE

Haydenite in the production of service raincoats. Rubber Age 52:403-4 F '43

HAYDITE aggregate. See Concrete—Aggregate**HAYES, William E. 1897-**

New railway aides named by Eastman. por Ry Age 114:142 Ja 2 '43

HAYS, Joseph Weller, 1868-1943

Appreciation of industry's first combustion engineer. P. T. Sprague. por Power 87: 458 J1 '43

HEAD**See also**

Skull

HEADING machines

Design of cold headed parts. H. Chase. il diags Metals & Alloys 18:292-7 Ag '43

HEADLIGHTS, Automobile. See Automobiles—Lighting**HEADLINES, Advertising. See Advertisements—Headlines****HEALTH****See also**

Hygiene

Public health

Sickness

HEALTH and accident underwriters conference

Annual meeting, 42d, Chicago, June 3-4. East Underw 44:31-4, 36, 38-43 Je 4; 38-9 Je 11 '43; Ins Field (Fire ed) 72:17-18+ Je 10 '43; Ins Field (Life ed) 72:15-16+ Je 11 '43; Nat Underw (H. & A. conference no) 47:3-14 Je 4 '43; Nat Underw (Life ed) 47:2 Je 11 '43; Spectator (Property ed) 8:32-4 Je 24 '43; Weekly Underw 148: 1208+, 1289+ Je 5-12 '43

Thermometers and
thermometry
Waste heat

HEAT conduction

Design of solid

Numerical solution of heat-conduction problems. H. W. Emmons, bibliog diagrs A S M E Trans 65:607-12; Discussion, 612-15 Ag '43

HEAT conductivity

Conductivity determination by the guarded hot-plate method. F. C. Houghten, diag Am Soc T M Proc 42:277-83; Discussion.

Effect of wood structure upon heat conductivity. F. F. Wangaard, bibliog il A S M E Trans 65:127-35 F '43

Heat-conduction problems in presses used
for gluing of wood. G. H. Brown. diag
Inst Radio Eng Proc 31:537-48 O '43

Measurement of the thermal conductivity of fire-clay refractories. T. C. Patton and C. L. Norton, jr. 11 diags Am Cer Soc J 26: 250-2, 3, 143

Measurement of thermal conductivity of thermal insulating materials by means of the guarded hot plate. C. B. Bradley. 11

Refrig Eng 45:337-41 My '43
Properties affecting resistance welding; table.
K. Rose, comp. Metals & Alloys 18:529 S '43

Spherical furnace, calorimeter for direct measurement of specific heat and thermal conductivity. J. R. Winckler, bibliog il diag
Am Cer Soc I 26:339-49 Q 1 '43

Thermal and electrical conductivities of tungsten and tantalum. M. Cox. bibliog Phys R 64:241-7 O 1 '43

Thermal conductivity nomographs for wood.
D. S. Davis. Ind & Eng Chem 35:673 Je '43
Thermal conductivity of nonmetallic single
crystals. W. J. Krupp. biblic. diag. Am.

Two new hot-filament resistances, C. C Minter, diag J Ap Phys 14:49-50 Ja '43

See also
Heat transmission
HEAT convection

Design of solid

Lovell and G. Karnofsky, bibliog 11 Ind &
Eng Chem 35:391-7 Ap '43
Effect of convection in ceiling insulation.
G. D. Walker and L. D. Higgins, 43 days

Effect of free convection on viscous heat transfer in horizontal tubes. D. Q. Kern

Am Inst Chem Eng Trans 39:517-52; Discussion. 552-5 Ag '43

Forced convection heating to 1750 degrees fahr. is practical in new furnace design. L. H. Remiker, il Steel 111:81-2 N 30 '42
Ventilation and convection heating for living

and working spaces on ships. G. M. Cody.
il Marine Eng 48:202-5 Jl '43

First aid for heat cramps; carbonated salt water. J. U. Buchanan. Nat Safety N 47.
25 My '43

Heat. il Nat Safety N 47:163-4+ Mr '43

Ellenwood. J Eng Educ 33:707-12 My '43

See also
Diesel engines
Gas and oil engines
Gas turbines
Steam engines
Steam turbines
Thermodynamics

HEAT exchangers

Application of arc-welding in the maintenance of heat-transfer equipment; with cost data. W. H. Parlette. *Ind Eng Pet Refiner*

22:87-9 Ja '43
Automatic temperature control for heat ex-
changer. il Blast F & Steel Pl 31:437 Ap
'43

Conduction, convection and heat release in catalytic converters. R. H. Wilhelm, W. C. Johnson and F. S. Acton, *Il diags Inc*

Conversions from oil to waste heat. T. W. Reynolds, *plant Heat & Ven* 40:73-4 My '43

HEAT exchangers—Continued

Counter-current multitubular heat exchangers; comparison of design methods; applied to cooling aniline and to cooling and heating oil. M. G. Larian. *bibliog il Ind & Eng Chem* 35:840-4 Ag '43

Design of cross flow heat exchangers from tested core sections. P. A. Scherer. *Aero Digest* 42:138+ Ja '43

Design of solid-fluid heat exchangers. C. L. Lovell and G. Karnofsky. *bibliog il Ind & Eng Chem* 35:391-7 Ap '43

Dished cast iron heat exchanger head is replaced with arc-welded steel. H. F. Steinman. *il Nat Pet N* 35 pt 2:R354 Ag 4 '43

Effect of metal wall on heat transfer. Oil & Gas J 41:90+ Ap 8 '43

Forced-oscillation approach to the problem of the automatically-controlled continuous process. P. R. Ewald. *diags Instruments* 16:474-6, 506 Ag '43

Have you ever thought of installing a heat exchanger? chart. W. F. Schaphorst. *Am Dyestuff Rep* 32:211-12 Ap 26 '43

Heat exchanger restored to service by welding on partial baffles. W. H. Parlette. *il Nat Pet N* 35 pt 2:R353 Ag 4 '43

Heat transfer and pressure drop in heat exchangers (revision of bulletin no. 3819). B. E. Short. *diags Texas Univ Bur of Eng Research, Eng Research Ser* 37:1-55 '43

How to double your heat-exchanger surface. W. L. Nelson. *diag Oil & Gas J* 41:34-5 Ja 14 '43

Niagara aero heat exchanger maintains constant temperature in liquids. *il Blast F & Steel Pl* 31:1056 S '43

Oil coolers; new theories and tests on the subject of heat exchange. E. W. Steinitz and F. J. Grosé. *il diags Automobile Eng* 33:121-2 Mr '43

Plastic pipe and power; Saran pipe is being utilized in rectifying and heat exchange installations in electrolytic mass production of magnesium. *il Chem & Eng N* 21: 1052-3 Jl 10 '43; Same cond. *Chem & Met Eng* 50:116 Jl '43

Removing scale and sludge by chemical treatment. L. W. Lee and E. C. Hardy. *il diag Steel* 113:106+ N 1 '43

Review of recent progress in heat transfer. C. H. Lander. *bibliog il diags Inst Mech Eng J & Proc* 148:Proc 81-112 Ja '43; Discussion. 149:Proc 117-32 Je '43

Six ways to conserve heat exchangers in plant design and operation. *il Nat Pet N* 35 pt 2:R248, R250 Je 2 '43

Small-tube heat exchangers offer many advantages. J. W. Courtis. *bibliog il Food Ind* 15:58-60+ S '43

Thermal efficiency in topping plants. W. L. Nelson. *Oil & Gas J* 41:180-1 Ja 28 '43

Trebbling air supply with 20% power rise; fan and heat exchanger installation. J. Cassie. *diags Elec W* 119:782+ Mr 6 '43

Wartime standards are adopted for refinery still tubes. *Nat Pet N* 35 pt 2:R66-7 F 3 '43

Welded steel tube for condensers and heat exchangers. A. F. Zoell. *il diags Pet Eng* 14:35-7, 40 F '43

See also
Condensers (steam)

Cleaning

Chemical descaling of refinery heat exchange equipment. *bibliog il Nat Pet N* 35 pt 2: R152-4 Ap 7 '43

Chemical removal of scale from heat-exchange equipment. F. N. Alquist, C. H. Groom and G. F. Williams. *bibliog il A S M E Trans* 65:719-22 O '43; Same cond. *Power Pl Eng* 47:71-2 Jl '43

Chemical removal of scale from heat-exchange surfaces. G. F. Williams. *il diag Power* 87:20-2 Ja '43

Chemical removal of scale is factor in speeding production. H. F. Simons. *bibliog plans Oil & Gas J* 42:59-60, 63 My 20 '43

Testing

Design of cross-flow heat exchangers from tested core sections. P. A. Scherer. *charts S A E J* 50:542-8 D '42; Same. *Aero Digest* 42:138+ Ja '43

HEAT exhaustion

Desert warriors use air conditioning; treatment of heat prostration; using refrigerated trucks as portable hospitals. G. E. Weiss. *Heating-Piping* 15:418 Ag '43

HEAT insulation. *See* Insulation (heat)

HEAT measurement

See also

Calorimeters and calorimetry	Temperature—Measurement
Pyrometers and pyrometry	Thermocouples
	Thermometers and thermometry

HEAT of adsorption. *See* Adsorption, Heat of

HEAT of combustion. *See* Combustion, Heat of

HEAT of dilution. *See* Dilution, Heat of

HEAT of formation. *See* Thermochemistry

HEAT of solution. *See* Solution, Heat of

HEAT of vaporization. *See* Vaporization, Heat of

HEAT pump

Heat pump. T. F. Wall. *diags Engineering* 155:221 Mr 19 '43

Reverse refrigeration cycle for winter and summer air conditioning. H. R. Sewell. *Refrig Eng* 45:328-30 My '43

HEAT radiation

Reflection as a factor in heating; use of metallic surfaces and bronze paint. M. Fielden. *Engineer* 175:486-7 Je 18 '43

Review of recent progress in heat transfer. C. H. Lander. *bibliog Inst Mech Eng J & Proc* 148:Proc 82-8 Ja '43

See also

Electric lamps—Heat radiation	Radiators
Heat transmission	Solar radiation

HEAT resisting alloys. *See* Alloys, Heat resisting

HEAT resisting materials

Heat resistance of neoprene GN vulcanizates. D. B. Forman. *bibliog il diags Ind & Eng Chem* 35:952-7 S '43

Heat-resistant phenolics. *il Am Gas J* 159: 25-6 O '43

Heat-resistant plastic; abstract. G. M. Kuettel. *Chem Ind* 53:86 Jl '43

Heat resisting and stoving finishes. R. L. Frost. *bibliog Chem & Ind* 62:306-10; Discussion. 309 Ag 14 '43

Heat shock resisting bodies now produced by stoneware manufacturers. J. M. Robit-schek. *Cer Ind* 41:48, 50-1 Jl; 64, 66 S '43 (to be cont)

Improved heat-resistant methacrylate. G. M. Kuettel. *il Mod Plastics* 20:98-100+ Je '43

See also

Insulation (heat)
Refractory materials
Steel, Heat resisting

HEAT resisting steel. *See* Steel, Heat resisting

HEAT storage

Controlled heating; electric space-heating machines of the hot-water-radiator type in association with thermal storage cylinders. *diags Elec R (Lond)* 132:613-15 My 7 '43

Heating buildings; improved performance of a thermal-storage installation. F. Mather. *Elec R (Lond)* 132:250-1 F 19 '43

Some problems in the application of electric heating to residential and commercial premises; with cost data. W. Gilchrist. *diags Inst E E J* 89 pt 2:377-90; Discussion. 390-9 O '42

HEAT transmission

Conduction, convection and heat release in catalytic converters. R. H. Wilhelm, W. C. Johnson and F. S. Acton. *il diags Ind & Eng Chem* 35:562-75 My '43

Current-carrying capacity of overhead conductors. H. A. Enos. *Elec W* 119:1612-14 My 15 '43

Effect of metal wall on heat transfer. Oil & Gas J 41:90+ Ap 8 '43

Effect of studs and joists on heat flow through frame construction. P. D. Close. *Heating-Piping* 15:529-31 O '43

HEAT transmission—Continued

Electronics applied to heat transfer tests; circuits employ Wheatstone bridge and photoelectric relay; units applicable to other measurement and control problems. R. V. Brown. *II diags Electronics* 16:113-15 JI '43

Heat exchange and engine cooling systems. diags Diesel Power 21:914-18†, 1037-41, 1130-3† O-D '43

Heat, mass and momentum transfer in the flow of gases through granular solids. B. W. Gamson, G. Thodos and O. A. Hougen. bibliog diag Am Inst Chem Eng Trans 39:1-32; Discussion. 32-5, 583-4 F, O '43

Heat transfer and fluid resistances in Ljungstrom regenerative-type air preheaters. H. Karlsson and S. Holm. bibliog II diags A S M E Trans 65:61-71; Discussion. 71-2 Ja '43

Heat transfer and friction in the turbulent boundary layer of a compressible gas at high speeds; abstract. F. Frankl and V. Voishel. Roy Aeronautical Soc J 47:sup207-9 My '43

Heat transmission in surface condensers. T. Petty. bibliog Inst Mech Eng J & Proc 145: Proc 106-14 Je '41; Discussion. 148:Proc 113-19 Ja '43

Heat transmission through insulation as affected by orientation of wall. F. B. Rowley and C. E. Lund. *II diags Heating-Piping* 15:361-5; Discussion. 365-6 JI '43

Lime kiln energy streams; diagrams depict heat interchange and energy flow. V. J. Azbe. Rock Prod 46:62-4 My '43

Review of recent progress in heat transfer. C. H. Lander. bibliog II diags Inst Mech Eng J & Proc 148:Proc 81-112 Ja '43; Abstract. Can Chem & Process Ind 26:697-9 D '42; Discussion. Inst Mech Eng J & Proc 149:Proc 117-32 Je '43

Study of some soluble inhibitors, with special reference to heat transfer and water-line attack. R. S. Thornhill and U. R. Evans. diags Iron & Steel Inst J 146:73-103, pl 5; Discussion. 103-5 no 2 '42

Water sprayed direct expansion coils. W. Goodman. diag chart Heating-Piping 15: 165-8, 243-8, 295-9, 350-2 Ap-JI '43

See also

Blast furnace stoves Heating—Tables, calculations, etc.
Heat conductivity Calculations, etc.
Heat convection Insulation (heat)
Heat exchangers Textile fabrics—Heat transmission
Heat radiation transmission

Bibliography

Heat transfer bibliography. F. C. Vilbrandt and others. (Eng. exp. sta. ser. no53) 72p pa 25c Virginia polytechnic institute, Blacksburg '43

Electric analogies

Analyzing heat flow in cyclic furnace operation; electric method simplifies determination of economic insulation thickness. C. B. Bradley and C. E. Ernst. diags Mech Eng 65:125-9 F '43; Discussion. 65:527-30 JI '43

Establishment of cooling curves of welds by means of electrical analogy. V. Paschiks. bibliog diags Welding J 22:sup462-83 O '43

Heat transfer problems solved by electrical analyzer. *II diags Product Eng* 14:442-6 JI '43

Heat-transfer problems solved with roomful of r-c networks; Paschiks heat and mass flow analyzer. *Electronics* 16:180† Ap '43

Tables, calculations, etc.

Counter-current multitubular heat exchangers; comparison of design methods; applied to cooling aniline and to cooling and heating oil. M. G. Larian. bibliog II Ind & Eng Chem 35:840-4 Ag '43

Effect of free convection on viscous heat transfer in horizontal tubes. D. Q. Kern and D. F. Othmer. bibliog flow sheet diags Am Inst Chem Eng Trans 39:517-52; Discussion. 552-5 Ag '43

Graphical method of calculating heat losses. P. D. Close. charts Heating-Piping 15:305-10 Je '43; Discussion. 15:379-80 JI '43

Heat transfer and pressure drop in annuli. E. S. Davis. bibliog A S M E Trans 65: 755-9; Discussion. M. Jakob. 760 O '43

Heat-transfer characteristics of an indirectly-heated digester. J. G. L. Caulfield, L. C. Jenness and G. L. Nystrom. diag Paper Tr J 115:25-9 D 3 '42

Heat transfer coefficients for condensers. G. T. Atkins, jr. bibliog II Oil & Gas J 41: 180, 183, 185-6† Mr 25 '43

Heat transfer coefficients for roof constructions. P. D. Close. Heating-Piping 15:248 My '43

Heat transfer to a fluid flowing periodically at low frequencies in a vertical tube. R. C. Martinelli and others. bibliog diags A S M E Trans 65:789-96; Discussion. 796-8 O '43

Heat transmission tables; values of U for walls, roofs, floors and ceilings using plywood; reference data. Heat & Ven 40:74a-74b JI '43

Influence of nonuniform development of heat upon the temperature distribution in electrical coils and similar heat sources of simple form. M. Jakob. bibliog A S M E Trans 65:593-602; Discussion. 602-5 Ag '43

Nomograph of Dittus-Boelter equation. C. J. Ryant, jr. Ind & Eng Chem 35:1187-8 N '43

Numerical solution of heat-conduction problems. H. W. Emmons. bibliog diags A S M E Trans 65:607-12; Discussion. 612-15 Ag '43

Studies of heat transmission through boiler tubing at pressures from 600 to 3300 pounds. W. F. Davidson and others. *II diags A S M E Trans* 65:553-79; Discussion. 579-91 Ag '43

Summer comfort factors as influenced by the thermal properties of building materials. C. O. Mackey and L. T. Wright, jr. Heating-Piping 14:750-7 D '42; Discussion. 15:150-2 Mr '43

Tests of steam-pipe insulation; rock wool, glass wool and corrugated asbestos. E. A. Allcut. bibliog II diags A S M E Trans 65: 407-17; Discussion. 417-19 JI '43

Theory and practice of sewage sludge digestion tank heating. N. C. Wittwer. diags Water Works & Sewerage 90:229-39 Je '43

Thermal conductances and heat transmission coefficients of Freon refrigerants. W. H. Markwood, jr. and A. F. Benning. Refrig Eng 45:95-9 F '43

Thermal transmittance calculations; figuring fuel economies through the use of insulation. J. McCawley. Sheet Metal Worker 34:23-4† Je; 36, 38 JI; 42-3† Ag '43

HEAT treating furnaces. See Furnaces, Heat treating

HEAT treatment

Ar" range in some iron-cobalt-tungsten alloys. W. P. Sykes. *II Am Soc for Metals Trans* 31:284-302; Discussion. 302-3 Je '43

Beryllium-copper. E. M. Foster. *II Electrician* 151:56-8 JI 16 '43

Effect of cold-work and heat-treatment on 24ST aluminum alloy. B. Mitchell. bibliog II J Aeronautical Sci 10:36-90 Mr '43

Effect of elements in solid solution on hardness and response to heat treatment of iron binary alloys. C. R. Austin. bibliog Am Soc for Metals Trans 31:321-35; Discussion. 335-9 Je '43

Elevated temperature aging of 24S aluminum alloy. P. P. Mozley. J Aeronautical Sci 10: 180-4 Je '43

Ford makes improved heat treated malleable iron. A. R. Allen. Foundry 71:144 N '43

Heat treating aluminum bronzes. G. P. Halliwell. Metals & Alloys 17:1222 Je '43

Heat treating problems in aviation. M. E. Tatman. *II Automotive & Aviation Ind* 89: 34-5† O 1 '43

Heat treatment effect on the torsion impact properties of meehanite. C. R. Austin and M. M. Lipnick. diags Iron Age 152:54-5 O 7 '43

Heat-treatment of alloys; Wrought aluminum problems. Chem Age (Lond) 48:610 Je 5 '43

Heat treatment of aluminum and magnesium and their alloys. tables Am Gas Assn Proc 1942:187-204 bibliog(p 193)

Heat treatment of non-ferrous alloys, 1942. A. S. Henderson and E. W. Gonser. Metals & Alloys 17:77-8 Ja '43

Heat treatment of wrought aluminum alloys. Engineering 155:506; 156:27-8 Je 25, JI 9 '43

HEAT treatment—Continued

- Heat treatment vs. corrosion of duralumin; abstract, J. C. Arrowsmith and G. Murray. *Metals & Alloys* 17:612-4 Mr '43
- Influence of heat treatment on solutions of crystalline horse serum albumin. G. R. Cooper and H. Neurath. *bibliog J Phys Chem* 47:383-98 My '43
- Investigations of ferromagnetic impurities in copper, silver, and brass. F. W. Constant, E. E. Fairless and H. E. Lenander. *bibliog Phys R* 63:441-5 Je 1 '43
- Metallographic study of the formation of austenite from aggregates of ferrite and cementite in an iron-carbon alloy of 0.5 per cent carbon. T. G. Digges and S. J. Rosenberg. *bibliog J Am Soc for Metals Trans* 31:753-74; Discussion. 775-6 S '43
- Metallography of commercial magnesium alloys. J. B. Hess and P. F. George. *J Am Soc for Metals Trans* 31:439-43 Je '43
- Metallurgical aspects of spot-welds in aluminum alloys. J. R. Heising and E. H. Burkart. *bibliog J Metals Metal Prog* 42: 1027-34 D '42
- New equipment; heat treating and process control. *J Am Iron Age* 151:67-70 Mr 11 '43
- Predicting spring performance of beryllium copper wire and strip. H. G. Williams. *J Iron Age* 152:62-7 J 18 '43
- Prescriptions for head cracks in 24ST rivets; laboratory tests of strengths, corrosion resistance, heat treatments, and aging. E. C. Hartmann, C. F. Westcoat and M. W. Brennecke. *J Aviation* 42:139-43-4 N '43
- Progress in heat treatment of alloy cast iron. J. S. Vanick. *Foundry* 71:90-2+ JI; 96-7+ Ag '43
- Super-aluminum alloys for aircraft structures. K. R. Jackman. *diags Aviation* 42: 168-9+ S '43
- Testing and classification of ball clays; thermal history. C. G. Harman and C. W. Parmelee. *Am Cer Soc Bul* 21:283-6 N 15 '42
- 30th buyers reference number. *J Am Mach* 87:334-8 Ja 21 '43
- War accelerates technical progress. *Steel* 112: 311-12+ Ja 4 '43

See also

- | | |
|--------------------|--------------------|
| Annealing | Furnaces, Heat |
| Case hardening | treating |
| Electric furnaces, | Quenching |
| Heat treating | Steel, Heat treat- |
| | ment of |

HEATERS

- Aircraft heating systems; critical comparison of three types. W. W. Reaser. *diags Mech Eng* 65:775-80 N '43
- Development and performance of a coal-fired unit heater. R. M. Rush. *J diags A S M E Trans* 65:279-86 My '43
- General steel castings corp. applies direct-fired oil heaters in plant manufacturing tank castings. E. F. Hyde. *diag Heat & Ven* 40:88-90 Je '43
- How to meet war time restrictions in heating and air conditioning design; direct-fired heaters. T. W. Reynolds. *Heat & Ven* 40: 60G F '43
- Unit heaters and ventilating equipment. *J Factory Management* 101:156, 158 S '43

See also

- | | |
|----------------------|---------------------|
| Electric heaters | Gas water heaters |
| Electric water heat- | Oil burners |
| ers | Steam heaters |
| Furnaces | Steam water heaters |
| Gas heaters | |

Testing

- Performance characteristics of a coal-fired space heater. R. C. Cross. *J diags Heating-Piping* 15:46-50 Ja '43

HEATERS, Feed water. See Feed water heaters

HEATERS, Tile

- Ceramic heater; Pittsburgh housing project with built-in hollow-tile furnace. *J Business Week* p96 Ag 7 '43

See also

- Stoves, Ceramic

HEATH hens

- Heath hen. J. H. Pannell. *Science* 98:174 Ag 20 '43

HEATING

- American society of heating and ventilating engineers semi-annual meeting, Pittsburgh, June 6-8. *Power* P1 Eng 47:108-4 JI '43
- Auxiliary heating for fuel-oil users; stove in open fireplace. *J Consumers' Research Bul* 11:16-17 F '43
- Does the 65 deg. ruling save fuel? problem. *Power* P1 Eng 47:94 Ja '43; Solutions. 47: 91, 94, 96 Mr; 95-3 Ap '43
- Domestic heating; balanced system proposed; abstracts. J. Dalton. *Elec R (Lond)* 132: 479-80 Ap 9 '43; *Electrician* 130:370-1 Ap 9 '43
- Economical operation of heating systems. Heating-Piping 14:720-1 D '42
- 57 fuel conservation reminders. Heating-Piping 15:557 O '43
- Fuel conservation. H. Coonley. Heating-Piping 15:374-6 JI '43
- Fuel conservation possibilities shown by survey of present status of heating facilities. K. C. Richmond. Heating-Piping 15:495-8 S '43
- Fuel saving methods. C. W. Kimball. Heating-Piping 15:287-8 Je '43
- Furnaceless heating methods; abstract. F. W. Marklin. *Chem & Met Eng* 50:178+ Ap '43
- Heat pump. T. F. Wall. *diags Engineering* 155:221 Mr 19 '43
- Heating of the future. E. N. McDonnell. Heating-Piping 15:345 JI '43
- Here are ways to save fuel. *Consumers' Research Bul* 11:23-6 Ja '43
- How to be a local expert on fuel conservation. *J Am Bld* 55:36-7+ N '43
- How to check your heating system. *diags Consumers' Research Bul* 12:8-12 N '43
- How to keep fit in cold homes; discussion. Heating-Piping 15:152-5 Mr '43
- How to meet war time restrictions in heating and air conditioning design. T. W. Reynolds. *Heat & Ven* 40:60B-60L F; 50-3 Mr; 62-3 Ad '43
- How to save fuel and keep comfortable. Heating-Piping 15:552-6 O '43
- How to save fuel at home. J. F. Barkley. *U S Bur Mines Information Circ* 7229:1-5 '42
- How U.S. houses are heated; from data made available by the 1940 census. G. Littlewood. *maps Heat & Ven* 39:33-4 N '42
- Less fuel vs. comfort. M. F. Blankin. *J Heating-Piping* 15:547-50 O '43
- Modern developments in heating. F. Buckingham. *Engineering* 155:305, 324-5, 344-5 Ap 16-30 '43
- Post-war house heating. J. E. Haines. *Heat & Ven* 40:67+ Ag '43
- Reflection as a factor in heating; use of metallic surfaces and bronze paint. M. Fielden. *Engineer* 175:486-7 Je 18 '43
- Save fuel for victory. *diags Ill U Eng Exp Sta Circ* 47:1-35 '42 (pa 25c)
- Solar heating; survey proves large windows, properly oriented, save fuel even in rigorous climates. *J diags plan Arch Forum* 79: 6-8+ Ag '43
- Supplementing anthracite with other fuels for home heating. W. T. Reid. *diags U S Bur Mines Information Circ* 7260:1-22 '43; Excerpt. *Sheet Metal Worker* 34:38 D '43
- Thrifty warmth; economizing in use of fuel. J. Holt. *Tech R* 45:77-8+ D '42
- Ways to obtain additional heat this winter; fireplaces, stoves, coal burning water heaters. *diags Consumers' Research Bul* 11:8-11+ N; 18 D '42
- Weather data for normal heating season; principal cities in the U.S.; reference data. *maps Heat & Ven* 40:70a-70b O '43

See also

- | | |
|--------------------|-------------------|
| Air conditioning | Gas heaters |
| Boilers, Heating | Gas heating |
| Building—Heating | Heaters |
| aspects | Heating, Warm air |
| Chimneys | Hot water heating |
| Electric heaters | Insulation (heat) |
| Electric heating | Mechanical equip- |
| Fuel | ment of buildings |
| Furnaces, Warm air | Oil burners |

HEATING—See also—*Continued*

Oil fuel Steam heating
Radiators Stoves
Refractory materials Ventilation
Solar heating
 also subdivision Heating and ventilation
 under special subjects, e.g.
Air raid shelters Moving picture thea-
Factories ters
Foundries Office buildings
Hospitals Ships
 also American society of heating and
 ventilating engineers

Bibliography

Reprints of ASHVE papers; list. Heating-
Piping 15:58-63 Ja '43

Control

Better heating to follow victory. J. E.
Haines. diag Sheet Metal Worker 34:32+
Ap '43
Controls, another wartime sales necessity.
il diags Dom Eng 161:44-8 My '43
Controls versus fuel conservation. Sheet
Metal Worker 34:45-6 Je '43
Heating the home of tomorrow; zone control.
J. E. Haines. diags Gas Age 92:25-7
Jl 29 '43

See also

Thermostats

Cost

Cash value of insulation savings. J. Mc-
Cawley. Sheet Metal Worker 34:42-3+ Ag
'43
How to charge tenants for extra hour heating
in multiple occupancy buildings. R. E.
Hieronymus. Heating-Piping 15:135-7 Mr '43
How to determine cost of overtime heat in
industrial buildings when tenants operate
long wartime hours. P. B. Jameson. Heat-
ing-Piping 15:67-8 F '43

Panel system

Floor heating system in hangar conserves
metal; nonmetallic ducts circulating warm
air heated by steam. J. K. Fairbairn and
J. D. Dillon. il diags Heating-Piping 15:
573-5 N '43
Modern developments in heating. F. Buck-
ingham. Engineering 155:324-5 Ap 23 '43
Optimum surface distribution in panel heat-
ing and cooling systems; second progress
report of research sponsored by A.S.H.V.E.
in cooperation with the University of Cali-
fornia. B. F. Raber and F. W. Hutchinson.
il diags Heating-Piping 15:602-14 N '43
Performance of a residential panel heating
system. H. F. Randolph and J. B. Wallace.
il plans Heating-Piping 15:424-9; Discus-
sion. 429-30 Ag '43
Practical radiant heating. R. V. Hall. il
plans Arch Rec 94:62-6+ Ag '43

See also

Hot water heating—
Panel system

Standards

WPB announces new war housing construc-
tion rules; permissible installations of
heating units. Heating-Piping 14:720 D '42;
Dom Eng 160:41+ N '42

Statistics

Housing census: heating fuel and equip-
ment. Gas Age 90:28-9 N 19 '42

Study and teaching

Heating and air conditioning curriculum. J.
James. J Eng Educ 33:251-9 N '42

Tables, calculations, etc.

Army fuel consumption studies of 1941-42.
L. C. McCabe, S. Konzo and R. E. Biller.
il map Heating-Piping 15:38-45 Ja '43
British climate and the space-heating en-
gineer. R. Grierson. bibliog diags Inst E E
J 90 pt 1:187-96 My '43
Graphical method of calculating heat losses.
P. D. Close. charts Heating-Piping 15:305-
10 Je '43; Discussion. 15:379-80 Jl '43
Heating economy; comparison of seasons. Elec
R (Lond) 132:782 Je 11 '43

Heating economy; distributing the ration
equitably over the season. R. Grierson.
Elec R (Lond) 132:381-2 Mr 19 '43
How much of my fuel should I have used?
Tables. Heating-Piping 15:410-12, 464 Ag-S
'43

Industrial degree days for 10 cities; cal-
culated on both a 55F and 45F basis, for
inside temperatures of 60F and 50F. Heat
& Ven 39:62-3 N '42

It's the weather; value of the degree day
and long-range statistics. R. Little. Am
Gas Assn Mo 25:355-60+ S '43

What temperature can be maintained under
fuel oil rationing program. J. K. Peebles,
Jr. Heating-Piping 15:127 Mr '43; Discus-
sion. 15:156+ S '43

HEATING, Industrial

Autoclaves for pressure-temperature reac-
tions. D. B. Gooch. il diags Ind & Eng
Chem 35:93+6 S '43

Core sand reclamation by the thermal
method; Wright aeronautical corp. W. A.
Phair. il diags Iron Age 150:43-8 D 17 '42

Design of a large-capacity steam-gas line
heater. M. K. Watson and B. B. Morgan.
il diag Oil & Gas J 42:213-14+ S 23 '42

Direct-fired air heaters designed for de-
hydration and chemical processes. R. M.
Rush and B. B. Reilly. il diags Mech Eng
65:511-14 Jl '43

Factors governing the selection of baking
finishes. il Product Eng 14:689-92 N '43

Heaters on natural-gas transmission line;
preventing of hydrate formation. F. Willis.
il diags Oil & Gas J 42:203-4 S 23 '43

High-temperature heating with hot water in
dyehouses. P. L. Geiringer. il Textile World
93:100-1 S '43

High temperature spraying of paints; heat-
ing units using hot water and steam. il
Iron Age 162:73 Jl 8 '43

Joseph T. Ryerson & son, inc. uses heated
discharge air for maintaining dry condi-
tions in warehouses. Heat & Ven 39:49 N
'42

No delays for winter; Certified concrete co.
equipment for heating aggregates and
water. R. S. Torgerson. il Rock Prod 46:
68-70 O '43

Planning the post-war power plant; take
advantage of high-pressure boiler and high-
temperature hot water heating. P. L.
Geiringer. diags Textile World 93:90-1 Mr
'43

Portable heater for preventing hydrate
formation. J. C. Albright. il Pet Eng 14:
52 N '42

Principles of shrinking and straightening dis-
torted low carbon steel used in shipbuild-
ing. M. D. Offen. diags Welding J 22:14-16
Ja '43

Radiant gas heat in baking, curing and dry-
ing operations. C. P. Mann. il diag Gas
Age 92:21-3+ S 9 '43; Same. Chem Ind 53:
332-5 S '43; Same abr. Can Chem & Process
Ind 27:613-15 N '43; Excerpts. Iron Age
152:58-9 Jl 22 '43

Rivet heater with improved burner. il diags
Ry Mech Eng 117:44-5 Ja '43

Special kettle setting simplifies temperature-
cycle control; heating varnish oil. W. J.
Shore. diag Chem & Met Eng 49:93-5 D
'42

Warpage corrected by flame. C. W. Hale.
diags Am Mach 87:91 Ap 15 '43

See also

Drying	Metallurgy
Drying apparatus	Oil fuel
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dustrial	Ovens
Foundry practice	Paint—Drying
Furnaces	Paper drying
Furnaces, Forging	Salamanders (heat-
Furnaces, Heating	ers)
Gas as fuel	Solder and soldering
Heat treatment	Steel, Heat treatment
Infrared rays—In-	of
dustrial heating	Waste heat
Kilns—Firing	Welding

HEATING, Warm air

Air diffusion with ceiling outlets. il diags
Sheet Metal Worker 34:90-5 Ja '43

Armor plate building, Ford motor company.
Rouge plant. R. W. Tuer. il Heat & Ven
40:62-7 Je '43

HEATING, Warm air—Continued

Better heating to follow victory. J. E. Haines. *diag* Sheet Metal Worker 34:32+ Ap '43

Chrysler corp. builds Dodge-Chicago plant; heating, ventilating and air conditioning equipment. G. S. Whittaker. *il* Heat & Ven 40:40-5 S '43

Clay products can solve problem of supplying heating needs of military and war housing structures; combination of chimney furnace with new-style warm air circulating system. *diags* Brick & Clay Rec 102:21-2 F '43

Development and performance of a coal-fired unit heater. R. M. Rush. *il* *diags* A S M E Trans 65:279-86 My '43; Abstract. Engineering 155:277-8 Ap 2 '43

Floor heating system in hangar conserves metal; nonmetallic ducts circulating warm air heated by steam. J. K. Fairbairn and J. D. Dillon. *il* *diags* Heating-Piping 15:573-5 N '43

Glenn L. Martin company's new building heated by oil-fired direct heaters. R. V. Mehaffey. *il* plans Heat & Ven 39:30-2 D '42

Heating industrial buildings with direct fired air system; corrugated sheet iron building. D. Henderson *diags* Heating-Piping 15:587-9 N '43

Heating; the future indoor climate industry. W. E. McFee. Sheet Metal Worker 34:36, 39+ Je '43

Heating the world's largest incubator for bombers; Ford bomber plant at Willow Run. *il* Dom Eng 161:78-80 Je; 55-7 JI '43

Hot-air ducts of non-metallic material. Engineering 155:87-8 JI 30 '43

How to improve forced-air layouts. J. D. Constance. *il* *diags* Power 87:16-19+ Ja '43

How to meet war time restrictions in heating and air conditioning design; direct-fired heaters. T. W. Reynolds. Heat & Ven 40:60 F '43

Performance of a residential panel heating system. H. F. Randolph and J. B. Wallace. *il* plans Heating-Piping 15:42-9; Discussion. 429-30 Ag '43

Plane modification center of Bechtel, McCone & Parsons. R. M. Rush. *il* *diag* Heat & Ven 40:66-9 S '43

Post-war heating market. G. Boeddener. Sheet Metal Worker 34:32, 34 JI '43

Post-war planning. P. B. Zimmerman. Sheet Metal Worker 34:32+ Mr '43

Study in substitutes; plumbing and heating equipment; dormitory for ship builders. *il* Dom Eng 161:57-8+ Ap '43

Unusual heating and ventilating problem; grandstand in Toronto exhibition grounds converted to barracks and recreation building for Canadian air force. *il* *diag* Engineer 175:354-5 Ap 30 '43

Ventilation and heating of Maritime commission ships. J. W. Markert. *il* *diags* plans Heat & Ven 40:32-57 F '43

War reduces 1942 furnace production. Sheet Metal Worker 34:44, 46 Mr '43

Warm-air heating sales, 1915-1943. Sheet Metal Worker 34:40 Ag '43

See also

Furnaces, Warm air
Heaters

Specifications

Revised heating specifications; forced circulation warm-air systems for war housing. Sheet Metal Worker 34:42+ JI '43

Tables, calculations, etc.

Air volume and pipe size; with charts and tables. W. Scott. Sheet Metal Worker 33:32, 34, 36+ D '42

Pressure losses in registers and stackheads in forced warm-air heating; a report of an investigation conducted by the Engineering experiment station, University of Illinois in cooperation with the National warm-air heating and air conditioning association. A. P. Kratz and S. Konzo. *il* *diags* III U Eng Exp Sta Bul 342:1-58 '43 (pa 65c); Abstract. Sheet Metal Worker 34:48-50 JI; 53-5 Ag '43

Simplified heat calculation method for gravity and forced air gas furnaces. F. A. Herr. Am Gas J 158:16-21+ Ja '43

Simplified procedure for selecting capacities of duct systems for gravity warm-air heating plants. A. P. Kratz and S. Konzo. *diags* III U Eng Exp Sta Circ 45:1-48 '42 (pa 55c)

HEATING boilers. See Boilers, Heating

HEATING contracts

Legal questions. Dom Eng 161:96-9 Ja '43
When can the heating contractor collect for extras? L. T. Parker. Heat & Ven 40:35-7 Mr '43

HEATING equipment

Green light for sale of controls. Sheet Metal Worker 34:21+ O '43

Heating equipment for Victory Village. Sheet Metal Worker 34:36 O '43

Heating equipment—tear sheet offer. Consumers' Research Bul 12:12 N '43

Here are the products and methods for fuel saving! *il* Dom Eng 161:54-7+ Je '43

Materials and products developed to meet war restrictions. *il* *diags* Sheet Metal Worker 34:56-8+ Ja '43

Our industry speaks; heating equipment and fuel conservation. *il* Dom Eng 162:47-53, 68 JI; 53-4+ Ag '43

Predicted: fitted boilers, burners, stokers. *diag* Dom Eng 162:33-4+ Ag '43

Rationing spurs winterizing drive; advice to home owners for making their own repairs leads to increased business for heating contractors. *il* Sheet Metal Worker 34:46+ O '43

Review of power and mechanical equipment; heating, ventilating, refrigerating, air conditioning. *il* Power 86:933-5 Mid-D '42

Spotlight on plastics for plumbing and heating. J. C. Louer. *il* Dom Eng 161:44-6+ Ap '43

Substitution of materials; plumbing and heating equipment. Dom Eng 161:49 Ja '43

Summer care of heating systems. Sheet Metal Worker 34:38, 40+ Ap '43

WPB removes limitations to save fuel. Am Bid 64:14 N '42

See also

Air diffusers

Boilers, Heating

Coal burning equipment

Furnaces

Gas burning equipment

Heaters

Heating pipes

Oil burners

Oil burning equipment

HEATING from central stations

Converting from oil to district steam. L. W. Mauger. *il* Heating-Piping 15:468-70 S '43

District heating; possible effect upon development of gas supply; comparative efficiency of steam district heating and gas heating. J. E. Davis. Gas J (Lond) 242:135 Ag 4 '43

Growth of district heating in Russia and Germany. A. E. Margolis. Engineering 156:283-4 O 8 '43

Vacuum pump trouble in district heating system. S. R. Lewis. *diag* Heating-Piping 15:513 O '43

See also

Electric plants (central stations)—Steam distribution

HEATING industry

AA-5 for repair and maintenance; P-84 as amended supplies AA-5 rating for plumbing and heating; text. Dom Eng 162:62-3+ S '43

Advance sale, postwar delivery, plan to enlist support of contractors in East; results of survey. Dom Eng 161:50-1+ Mr '43

After the war, what? future as seen by leaders in research and manufacturing. Sheet Metal Worker 34:29-32 Ja '43

Changes in priority regulations. Sheet Metal Worker 34:23-4 Ag '43

Civilian supply means plumbing and heating. Dom Eng 161:49+ My '43

Conservation chief points opportunity. H. Coonley. Dom Eng 161:53+ Je '43

Controls, another wartime sales necessity. *il* *diags* Dom Eng 161:44-8 My '43

Dealers urged to unite in business. C. P. Balsam. Sheet Metal Worker 33:36+ N '42

Eight methods of meeting labor shortages. A. Maier. Dom Eng 160:52 N '42

Fuel conservation for coal, oil and gas, will increasingly be necessary. Dom Eng 161:42-3+ Ja '43

HEATING industry—Continued

- Fuel conservation opportunity. *il* Dom Eng 162:60-3 O '43
- Get ready for winter campaign. Sheet Metal Worker 34:32+ My '43
- Good news for the plumbing and heating industry; maintenance and repair order P-84, equipment order L-79 revised. Sheet Metal Worker 34:24-5+ S '43
- Guide to price orders for plumbing, heating industry. Dom Eng 160:48-9 D '42
- Honor roll of industry's contractors. Dom Eng 161:50-1 Ap; 59-60 My '43
- Industry's biggest job; fuel conservation; government publicity; FHA loans. Dom Eng 161:48-50, 52 Je '43
- Maintenance and repairs; questions and answers prepared by FHA, relating to heating systems. Sheet Metal Worker 33:38 D '42
- Materials situation; with special reference to repair, maintenance and Controlled materials plans. Dom Eng 161:54+ Mr '43
- New business for many; making homes more comfortable by caulking cracks around doors and windows. Sheet Metal Worker 33:42+ N '42
- New L-79, bodyguard for new P-84; text of order. Dom Eng 162:64 S '43
- 1/3 of contractors do 90% of business. Dom Eng 160:45+ D '42
- Opportunities for heating and plumbing contractors in fuel rationing. Dom Eng 160:42-4+ N '42
- Our industry speaks; heating equipment and fuel conservation. *il* Dom Eng 162:47-53, 68 JI; 53-4+ Ag '43
- P-84 and L-79 interpreted. Dom Eng 162:84, 98 O '43
- Postwar heating as industry foresees it. Dom Eng 161:40-2 Mr '43
- Post-war heating market. G. Boeddeners. Sheet Metal Worker 34:32, 34 JI '43
- Post-war market development plan; indoor climate campaign; abstract. P. B. Zimmerman. Sheet Metal Worker 34:48-9 Je '43
- Post-war planning. P. B. Zimmerman. Sheet Metal Worker 34:32+ Mr '43
- Post-war planning for the plumbing, heating and air conditioning industry. Dom Eng 161:58+ My '43
- Post-war planning for the plumbing, heating and air conditioning industry; analysis and information bulletin. Dom Eng 161:41 F '43
- Post war planning in our industry. *il* Dom Eng 160:46-7+ O; 54 N '42
- Questions and answers on CMP. Dom Eng 161:58+ Ja '43
- Rationing brings conservation business. *il* Dom Eng 160:40-2+ D '42
- Rationing spurs winterizing drive; advice to home owners for making their own repairs leads to increased business for heating contractors. *il* Sheet Metal Worker 34:46+ O '43
- Recap; what industry thinks on postwar heating. Dom Eng 161:54-5+ Ap '43
- Regulations and amendments; WPB, OPA, PAW, etc. Heating-Piping 15:532-9 O '43
- Sales plan for war and post-war; Nugent plan includes sale of plumbing and heating equipment. *il* Dom Eng 161:34-9+ F '43
- Simplification of products and concentration of industry. Dom Eng 161:48 Ja '43
- See also*
- Heating contracts
- Oil burner industry
- Stokers, Mechanical
- Advertising**
- Advertising helped this manufacturer avoid wartime conversion; H. B. Smith co. boilers. J. E. Reed. *il* Ind Marketing 28:21-2 Ap '43
- How to cash in on fuel saving national campaign. Sheet Metal Worker 34:38-40+ O '43
- Promotion to the public; Domestic Engineering advertising service. *il* Dom Eng 162:55-7+ Ag '43
- See also*
- Oil burner industry
- Advertising

Directories

Directory section; names and addresses of manufacturers of equipment and products used in warm-air heating, air conditioning, ventilation and sheet metal work. Sheet Metal Worker 34:117-34 Ja '43

1943 directory of heating, piping and air conditioning equipment for industry and large buildings; classified by products, trade names and manufacturers' addresses. Heating-Piping 15:211-305 Ja '43

Remodeling

Curing sick systems; remodeling hot water heating plant. E. F. Jones. *il* plans Dom Eng 162:85, 88-90 S; 92, 95+ O '43

Oil saving, 2,575 gals.; remodeling job by Illinois heating & ventilating co. *il* Dom Eng 162:64-5+ Ag '43

Wanted, war housing; 650,000 remodel jobs ready for contractors. *il* Dom Eng 160:38-9 N '42

Statistics

Continued decline in furnace production; orders booked for the first quarter of 1943. Sheet Metal Worker 34:47 Je '43

Fuel equipment and heating apparatus, 1938-1941. Survey of Our Business 1942 Sup p145-6 [supplemented in monthly numbers]

Furnace production higher in third quarter. Sheet Metal Worker 33:42-3 D '42

Furnace production increased; orders booked for warm-air furnaces and complete winter air-conditioning units. Sheet Metal Worker 34:48 S '43

How U.S. houses are heated; from data made available by the 1940 census. G. Littlewood. maps Heat & Ven 39:33-4 N '42

\$1,000,000,000 market; statistics for 1942. Dom Eng 161:85+ Ja '43

20 million heating jobs; heating equipment for occupied units, for the United States, by regions, urban and rural, 1940; U.S. census tabulation. Dom Eng 162:69 S '43

War reduces 1942 furnace production. Sheet Metal Worker 34:44, 46 Mr '43

HEATING pipes

Ductwork; wartime work demands use of wartime materials; non-metallic ducts. diags Dom Eng 160:70-2+ D '42

Hot-air ducts of non-metallic material. Engineering 156:87-8 JI 30 '43

Substitutes for metal in heating ducts. Franklin Inst J 235:79-81 Ja '43

See also

Heating, Warm air

HEATING research

British climate and the space-heating engineer. R. Grierson. bibliog diags Inst EEJ 90 pt 1:187-96 My '43; Abstracts. Elec R (Lond) 131:516 O 23 '42; Electrician 129:447-8 O 23 '42

Committee on research, ASHVE, annual report, 1942. *il* Heating-Piping 15:95-101 F '43

Final values of the interaction constant for moist air. J. A. Goff, J. R. Andersen and S. Gratch. Heating-Piping 15:319-24 Je '43

Make heating and ventilating survey at insulate plant of M. & O. paper co.; Engineering experiment station, University of Minnesota. F. B. Rowley, R. C. Jordan and C. E. Lund. *il* Paper Tr J 115:9-11 D 31 '42

Operation of the Research home with reduced room temperatures at night. A. P. Kratz, W. S. Harris and M. K. Fahnestock. Heating-Piping 14:743-9 D '42

Optimum surface distribution in panel heating and cooling systems; second progress report of research sponsored by A.S.H.V.E. in cooperation with the University of California. B. F. Raber and F. W. Hutchinson. *il* diags Heating-Piping 15:602-14 N '43

Performance of a residential panel heating system. H. F. Randolph and J. B. Wallace. *il* plans Heating-Piping 15:424-9; Discussion. 429-30 Ag '43

Pressure losses in registers and stackheads in forced warm-air heating; a report of an investigation conducted by the Engineering experiment station, University of Illinois

HEATING research—Continued

- Pressure losses etc.—*Continued*
 in cooperation with the National warm-air heating and air conditioning association. A. P. Kratz and S. Konzo. *il diags III U Eng Exp Sta Bul* 342:1-58 '43 (pa 65c); Abstract. *Sheet Metal Worker* 34:48-50 *Jl*; 53-5 *Ag* '43
 Proved: smaller boilers, radiators, pipes point way to worthwhile economies; I-B-R research home. *plan Dom Eng* 162:82-4 *Ag* '43
 Reducing weights and costs of radiator heating systems; experiment at Washburne trade school. A. J. Sander. *il diags plan Heat & Ven* 39:17-19 *D* '42
 Sell insulation, help check fuel waste, tests prove value. B. L. Johnson. *il plans Am Bld* 64:32-4+ *N* '42

HEATRONIC molding. See Molding

HEAVING-shale problem. See Petroleum—Well drilling

HEAVISIDE layer. See Kennelly-Heaviside layer

HEAVY oxygen water. See Water—Heavy oxygen water

HECKER products corporation. See Best foods, inc.

HEDEFINE, Alfred, 1906-
 Sketch. *por*(p46) *Civil Eng* 13:47 *Ja* '43

HEDERAGENIN

Melanthigenin and its identity with hederagenin. Z. Mustafa and G. Sollman. *Chem Soc J* p70-1 *F* '43

HEDGE, William Russell, 1876-1943
 Sketch. *por East Underw* 44:22 *Ap* 23 '43; *Nat Underw* 47:1+ *Ap* 22 '43

HEDGES, Herbert A.
 New president of N.A.L.U. *por Nat Underw (Life ed) Daily ed* 47:3, 24 *S* 17 '43

HEDGING

See also

Speculation
 Stock exchange

HEDLEY, William, 1779-1843
 Pioneer of the locomotive. *Engineering* 155: 33 *Ja* 8 '43

HEDRICK, Earle Raymond, 1876-1943
 Sketch. V. Snyder. *Science* 97:214-15 *Mr* 5 '43

HEELS, Rubber

Conductive heels remove danger from static sparks. *Sci Am* 169:129 *S* '43

Victory heels; reprocessing cost is greater than for crude. *Business Week* p34+ *Je* 12 '43

HEINZ, H. J., company

Fitting designs for the "57"; warehouses for H. J. Heinz co., California; views and plans. *Arch Rec* 93:61-4 *Ap* '43

Pickles to honey; Heinz to market entire output of W. F. Straub & co. *Business Week* p102-3 *F* 20 '43

HELIARC welding. See Electric welding, Arc
 —Heliarc process

HELICOPTERS

Aerodynamic considerations of rotors in hovering and vertical climb conditions. C. H. Kaman. *bibliog J Aeronautical Sci* 10: 201-8 *Jl* '43

Air bus service planned by Greyhound. *il Bus Transportation* 22:54 *Jl* '43

Aircraft that hover. *Sci Am* 168:201 *My* '43

Anti-sub helicopters. *il Sci Am* 169:120 *S* '43

Burlington seeking air service rights; would operate helicopters. *Ry Age* 115:30-1 *Jl* 3 '43

Coast plane plants rush tests of variety of helicopter plans; development of jet propulsion. S. Bangs. *il Aviation N* 1:9-10 *O* 11 '43

Coming; the helicopter land boom. H. S. Kahm. *Barron's* 23:3 *O* 18 '43

Every spot on earth made accessible by helicopter; abstracts. I. I. Sikorsky. *S A E J* 51:sup18-20 *My* '43; *Comm & Fin Chr* 157:1372 *Ap* 15 '43

Everyman's giro. *Business Week* p18-19 *Ag* 7 '43

Future of helicopter. *Steel* 112:74 *F* 1 '43

Helicopter air bus service planned by Greyhound corporation. *Comm & Fin Chr* 157: 2262+ *Je* 17 '43

Helicopter blazes trail for new flying era. *il diags Machine Design* 15:94-6 *F* '43

Helicopter convertible to autogyro principle; abstract. I. I. Sikorsky. *S A E J* 51:sup46 *Ap* '43

Helicopter mail service would blanket New England. *Ry Age* 114:802 *Ap* 17 '43

Helicopter plans spread throughout the United States. *Bus Transportation* 22:65 *Ag* '43

Helicopter progress. A. Klemm. *Sci Am* 169: 40 *Jl* '43

Helicopter proves worth as anti-submarine weapon. *il Aero Digest* 42:311+ *Je* '43

Helicopter speedup. *Business Week* p19-20 *Je* 19 '43

Helicopters' hope. *Business Week* p22+ *Ap* 24 '43

Helicopters may become air buses; trial operations planned in Michigan. *Iron Age* 152:95 *Jl* 1 '43

Latest helicopter is a two-seater with enclosed cockpit. A. Klemm. *il Sci Am* 168: 275 *Je* '43

Let's be calm about the helicopter; overwhelming publicity will ruin prospects. L. Leavitt. *il Aviation* 42:114-15+ *N* '43

Method for rapid estimation of helicopter performance. Q. Wald. *bibliog J Aeronautical Sci* 10:131-5 *Ap* '43

New helicopter put through paces in Washington demonstration. B. Stubblefield. *Aviation N* 1:3 *O* 18 '43

PV-2 helicopter makes first public flight. *il Aviation* 42:229 *N* '43

Progress of the Vought-Sikorsky helicopter program in 1942. I. I. Sikorsky. *il Aeronautical Eng R* 2:41, 43 *Ap* '43

Revolving wings. H. L. Brownback. *Automotive & Aviation Ind* 88:23 *Je* 1 '43

Sikorsky helicopter, the air world's runabout? *il Civil Aero J* 4:76-7 *Je* 15 '43

Sikorsky, Stout back Greyhound plan for 14-passenger helicopter buses. *Aviation N* 1: 10 *O* 25 '43

Vought-Sikorsky helicopter. *il Engineer* 175: 230 *Mr* 19 '43

See also

Autogyros

HELIUM

Density of carbon black by helium displacement. R. P. Rossman and W. R. Smith. *bibliog il diags Ind & Eng Chem* 35:972-6 *S* '43

Distribution of helium and radioactivity in rocks; helium age investigations of diabase and granodiorites from Yellowknife, Northwest Territories, Canada. N. B. Keevil, A. W. Jolliffe and E. S. Larsen. *map Am J Sci* 240:831-46 *D* '42

Distribution of helium and radioactivity in rocks; rocks and associated minerals from Quebec, Ontario, Manitoba, New Jersey, New England, New Brunswick, Newfoundland, Tanganyika, Finland, and Russia. N. B. Keevil. *Am J Sci* 241:277-306 *My* '43

First helium shipment made from new plant in Texas. *Manuf Rec* 112:50 *Ap* '43

Geiger-Mueller counter pulse size. C. W. Miller. *diag R Sci Instr* 14:68-76 *Mr* '43

Helium age measurement; preliminary magnetite index. P. M. Hurley and C. Goodman. *bibliog Geol Soc Bul* 54:305-23 *Mr* '43

Helium densitometer for use with powdered materials. W. C. Schumb and E. S. Rittner. *diag Am Chem Soc J* 65:1692-5 *S* '43

Helium indexes for several minerals and rocks. N. B. Keevil. *Am J Sci* 241:680-93 *N* '43

Helium's rebirth. *Business Week* p50 *Ap* 24 '43

Retardation and neutralization of argon ions in helium. W. J. Hamm. *bibliog diags Phys R* 63:433-8 *Je* 1 '43

Scattering of low velocity hydrogen ions in helium. J. H. Simons, E. E. Muschultz, Jr. and L. G. Unger. *bibliog J Chem Phys* 11: 322-8 *Jl* '43

Specific primary ionization of cosmic rays in helium. W. E. Hazen. *il Phys R* 63:107-10 *F* 1 '43

HELIUM—Continued

Viscosities of carbon monoxide, helium, neon, and argon between 80° and 300°K. coefficients of viscosity. H. L. Johnston and E. R. Grilly. *bibliog J Phys Chem* 46:948-63 N '42

See also

Electric welding, Arc
—Heliarc process

Transportation

Spherical containers for transporting gas under high pressure; transportation of helium under 2000 lb. pressure in multiple-sphere tank cars, reprinted from *Mechanical engineering*, Dec. 1929. *il Welding J* 22:sup304-7 J1 '43

HELLER, Walter E., and company

Notes offered. *Comm & Fin Chr* 158:771 Ag 23 '43

HELMETS

Wind-up of the helmet; third method of producing army helmet; molding irregular shapes from impregnated fabric. *il Mod Plastics* 20:49-52+ Ap '43

HELMHOLTZ theorem

Make and break network theorem of Helmholtz. *diags Wireless Eng* 20:319-22 J1 '43; Discussion. A. Bloch. 20:367-8 Ag '43

HELMHOLTZ-KIRCHHOFF theory

Damping of large amplitude vibrations of a fluid in a pipe. R. C. Binder. *Acoustical Soc Am J* 15:41-3 J1 '43

HELP wanted ads. See Advertisements, Classified—Want ads; Employment systems—Advertising aids**HEMATITE**

Hydrothermal replacement in deep seated iron ore deposits of the Lake Superior region. H. M. Roberts and M. W. Bartley. *diags maps Econ Geol* 38:1-24 *bibliog*(p23-4) Ja '43

Reserves probed; iron ore mines jointly are financing research on low-grade ores. *Business Week* p65-7 S 4 '43

United nations' newest source of iron; Brazil's Itabira hematite deposits. A. Malozemoff. *il maps Eng & Min J* 143:55-9 D '42; 144:56-9 Ja '43

Wanted, an idea; research program to develop means for utilizing low-grade hematite. *il Steel* 113:73-4 J1 19 '43

HEMICELLULOSES

Hemicellulose content and strength properties; beechwood pulps; abstract. G. Jayme and E. Lochmuller-Kerler. *Paper Ind* 25:812-13 O '43

Polysaccharides of Iceland moss (*Cetraria islandica*); preliminary study of the hemicelluloses. H. Granichstaden and E. G. V. Percival. *Chem Soc J* p54-8 F '43

Ten years of fundamental research in the pulp, paper, and paperboard industry. H. F. Lewis. *Paper Tr J* 115:32-6 D 31 '42

HEMINGWAY, W. Linn

New ABA president. H. V. Odle. *por Burroughs Clearing House* 27:13-15+ N '42

HEMOGLOBIN**Analysis**

Determination of blood in packing-house by-products. R. Reiser and G. S. Fraps. *bibliog Ind & Eng Chem Anal ed* 14:851-3 N 15 '42

HEMORRHAGE

Crystalline bisulfite addition compounds of menadione. F. Abbondi and others. *Am Chem Soc J* 65:1776 S '43

Water-soluble compounds with antihemorrhagic activity. B. R. Baker and G. H. Carlson. *bibliog Am Chem Soc J* 64:2657-64 N '42

HEMP

Concrete and concrete masonry produce hemp processing plants. *diags Concrete* 51:26-7 J1 '43

Hemp cultivation in Chile. *For Comm W* 11:32 Ap 3 '43

Hemp cultivation in United States; long-neglected American crop takes over 240,000 acres in Mid-West, in program to replace lost imports from the Far East. *Textile Col* 65:326-7 J1 '43

Hemp slows up. *Business Week* p40 O 23 '43
It's a hemp year. *il Business Week* p61-2 Ap 24 '43

Survey of the American textile fiber shortage. A. C. Whitford. *il Rayon* 24:73-5 F '43

U.S. to produce big hemp crop in 1943. *Barron's* 22:6 N 23 '42

See also

Manila hemp
Marihuana
Sisal hemp

HEMP mills

Companies watch hemp mill lines. *Nat Underw* 47:2+ Mr 25 '43

HENDERSON, James, 1868-
President, Iron and steel institute, portrait. *Iron & Steel Inst J* 145:front a no 1 '42

HENDERSON, Leon, 1895-
Resigns as Price administrator. *Comm & Fin Chr* 156:2252 D 24 '42

HENDY, Joshua, iron works

Assembling 16-ton Liberty ship engine crankshaft. *il Marine Eng* 48:215-16 S '43

Builds West coast foundry in record time. *il Foundry* 71:104-6+ Ag '43

We can junk it or run it; how the high-flying Six companies boys of the West salvaged Joshua Hendy. *il Fortune* 28:120-3+ J1 '43

HENLEY, Russell Gray, 1884-

Vice-chairman, Mechanical division, Norfolk & Western. *por Ry Mech Eng* 117:252-7 Je '43

HENRICI, Arthur Trautwein, 1889-1943

Sketch. W. P. Larson. *Science* 98:77-8 J1 23 '43

HENRY, Joseph, 1797-1878

Joseph Henry, G. W. O. Howe. *Wireless Eng* 19:547-9 D '42

HENSON, William Samuel, 1805-1888

Grandfather of flight. S. F. Johnston. *por Tech R* 45:419-22, 432, 436, 438 Je '43

Henson, inventor of the airplane. A. F. Zahm. *por Franklin Inst J* 236:235-9 S '43

Henson's aerial steam carriage, 1843. J. E. Hodgson. *por Roy Aeronautical Soc J* 47:118-28 Ap '43

HEPARIN

Abolishment of alimentary lipemia following injection of heparin. P. F. Hahn. *Science* 98:19-20 J1 '43

Chemical studies on crystalline barium acid heparinate. M. L. Wolfrom and others. *Science* 97:450 My 14 '43

HEPATITIS. See Jaundice**HEPTALDEHYDE**

Catalytic degradation of heptaldehyde in vapor phase. T. J. Suen and S. Fan. *Am Chem Soc J* 65:1243-5 Je '43

HEPTANE

Film formation by pure liquids. C. W. Foulk and J. E. Barkley. *bibliog diag Ind & Eng Chem* 35:1013-16 S '43

Interfacial-tension studies of sodium laurate solutions. J. K. Davis and F. E. Bartell. *bibliog J Phys Chem* 47:40-50 Ja '43

Pure hydrocarbons from petroleum; vapor-liquid equilibria of close-boiling hydrocarbons. J. Griswold. *bibliog il Ind & Eng Chem* 35:247-51 F '43

Surface tension of n-heptane and n-butane containing dissolved nitrogen. G. J. Reno and D. L. Katz. *bibliog Ind & Eng Chem* 35:1091-3 O '43

HERBS, Fossil

Tertiary prairie grasses and other herbs from the high plains. M. K. Elias. *Geol Soc Special Pa* no 41:1-176, pl 1-17 *bibliog*(p147-52) '42

HERBS, Medical. See Botany, Medical

HERCULES powder company

Consolidated income account, 1940-1942. *Comm & Fin Chr* 157:603-4 F 15 '43

News from the chemists' front. *Barron's* 23:26-7 S 20 '43

Report for 1942. *Comm & Fin Chr* 157:474 F 1 '43

HEREDITY

Influence of the environment on the expression of hereditary factors in relation to plant breeding. S. H. Yarnell. *Science* 96: 505-8 D 4 '42

See also

Genetics
Mendel's law
Mutation (biology)

HEREDITY of disease

Integration of genetic and epidemiological methods of analysis in rheumatic fever. M. G. Wilson, R. Lubschez and M. D. Schweitzer. *Science* 97:335-6 Ap 9 '43

HERNIA

Strains and hernia. H. Bartle. *Nat Safety* N 47:34, 38+ F '43; Excerpt. *Safety Eng* 84:44 N '42

HEROISM. See **Courage****HERRING**

Canada increases herring canning. *For Comm* W 11:29 Ap 10 '43

HERSHEY, Pennsylvania

Hershey's war; chocolate town doing pretty well. *il Business Week* p84+ D 12 '42

HESPERIDIN

Influence of methyl chalcone of hesperidin on the toxicity of mapharsin in rabbits. D. H. Goldstein, A. Stolman and A. E. Goldfarb. *biolog Science* 93:245-6 S 10 '43

HEROCYCLIC compounds

New syntheses of heterocyclic compounds; 2:3-dialkylquinolines. V. A. Petrow. *Chem Soc J* p693-6 N '42

New syntheses of heterocyclic compounds; 2-phenyl-3:4:6:7-dibenzo-1:5-naphthyridine. V. A. Petrow, M. V. Stack and W. R. Wragg. *Chem Soc J* p316-18 JI '43

Ultraviolet absorption spectra of nitrogenous heterocycles. J. R. Loofbourow, M. M. Stimson and others. *biolog Am Chem Soc J* 65:148-55 F '43

HEVEA. See **Rubber plants and planting****HEVEA latex**. See **Rubber latex****HEXACHLOROETHANE**

Chlorinolysis of chloroparaffins. E. T. McBee, H. B. Hass and C. Bordenca. *biolog diags Ind & Eng Chem* 35:317-20 Mr '43

HEXADECANE

Premelting anomalies of some long chain normal paraffin hydrocarbons. A. Van Hook and L. Silver. *biolog J Chem Phys* 10:686-90 N '42

HEXAHYDROXYBENZENE

Hexahydroxybenzene and some of its derivatives. I. E. Neifert and E. Bartow. *Am Chem Soc J* 65:1770-2 S '43

HEXAMETHYLENETETRAMINE

Addition of boron fluoride to hexamethylenetetramine. A. B. Burg and L. L. Martin. *diag Am Chem Soc J* 65:1635-7 Ag '43

HEXAMINE

Hexamine for blockbusters. *il Chem & Met Eng* 50:117 JI '43

HEXANE

Heats of vaporization of some hexanes. J. F. Lemons and W. A. Felsing. *biolog diag Am Chem Soc J* 65:46-8 Ja '43

Normal addition of hydrogen bromide to 3-butenic, 4-pentenic and 5-hexenoic acids in hexane. A. Michael and H. S. Mason. *biolog Am Chem Soc J* 65:683-6 Ap '43

Pure hydrocarbons from petroleum; composition of a commercial hexane. J. Griswold, C. F. Van Berg and J. E. Kasch. *biolog Ind & Eng Chem* 35:854-7 Ag '43

System *n*-hexane-methylcyclopentane-aniline. B. deB. Darwent and C. A. Winkler. *biolog diags J Phys Chem* 47:442-54 Je '43

Viscosity of *n*-paraffin solutions; viscosity and structural relations of linear polymers. A. R. Kemp and H. Peters. *biolog Ind & Eng Chem* 35:1108-12 O '43

See also

Dimethylbutane

HEXENOIC acid

Normal addition of hydrogen bromide to 3-butenic, 4-pentenic and 5-hexenoic acids in hexane. A. Michael and H. S. Mason. *biolog Am Chem Soc J* 65:683-6 Ap '43

HEXESTROL

Factors determining the course and mechanism of Grignard reactions; a new synthesis of hexestrol dimethyl ether (3,4-dianisylhexane). M. S. Kharasch and M. Kleiman. *Am Chem Soc J* 65:491-3 Ap '43

Interconversion of hexestrol and isohexestrol. D. A. Peak and W. F. Short. *Chem Soc J* p232 My '43

Some analogs of hexestrol. B. R. Baker. *biolog Am Chem Soc J* 65:1572-9 Ag '43

Studies on the preparation of synthetic sex hormones; concerning some derivatives of hexestrol. J. F. Lane and E. S. Wallis. *Am Chem Soc J* 65:994 My '43

HEXONE

Solvents in industry; methyl isobutyl ketone. *Metal Finishing* 41:56-7 Ja '43

HEXYLRESORCINOL

Effect of various chemical agents affecting permeability of the mucosa on the formation of ulcers. R. L. Driver, G. S. Dozier and H. C. Denham. *biolog Science* 98: 158-9 Ag 13 '43

HEXYNE

Studies in the polyene series; the condensation product of 1-hexyne with crotonaldehyde and its anionotropic rearrangement. I. M. Heilbron, E. R. H. Jones and R. A. Raphael. *Chem Soc J* p264-5 Je '43

HEYDEN chemical corporation

Stocks offered. *Comm & Fin Chr* 157:1362 Ap 12 '43

HIBBERT, Harold

Dr. Hibbert's students pay him tribute. *por Pulp & Pa. of Can* 44:762, 764 S '43

HIBISCUS cannabinus

Jute and manila fibers; hibiscus cannabinus as substitute. A. C. Whitford. *Textile Col* 64:526-7 N '42

HIDES and skins

Tanners study requisitions for armed forces, civilians. *Oil Paint & Drug Rec* 143:7+ My 31 '43

Two hopes for easier hide situation. *Barron's* 23:8 O 11 '43

See also

Leather

Statistics

Hides and skins, 1938-1941. Survey of Cur Business 1942 Sup p129 [supplemented in monthly numbers]

Hides and skins production in Peru, 1942. *For Comm W* 10:27 Mr 27 '43

HIGGINS, Andrew Jackson, 1886-

Boss; knows how to get men to do what he wants them to do. *por Fortune* 28:101-3+ JI '43

Builder of boats and airplanes. *por(p88) Steel* 113:90-2 JI 12 '43

HIGGINS industries, incorporated

Boss; Andrew Jackson Higgins knows how to get men to do what he wants them to do. *il Fortune* 28:101-3+ JI '43

HIGH buildings

Office and loft buildings; considerations of their past, present and future; building types study; with time-saver standards. E. J. Kahn. *il diags plans Arch Rec* 93:73-82 Ap '43

See also

Office buildings
Steel construction

HIGH school buildings. See **School buildings****HIGH school students**

Fortune survey; high-school youth; aspiring to more education, more specialized jobs, better pay; personal relations satisfactory. *Fortune* 26:8-10+ D '42

War corps utilizes young men at Firth carpet co. *il Textile World* 93:86-7 S '43

See also

High school victory corps

Employment

Boys at work; combining job with high school study. *Business Week* p86+ Je 5 '43

Fortune management poll; employment of Negroes, women, and students. *Fortune* 27: 143-4 F '43

HIGH school students—Employment—Continued
 High school boys help overcome serious track labor shortage; Chicago, Milwaukee, St Paul & Pacific railroad. *il Ry Age* 115: 273-5 Ag 14 '43

HIGH school victory corps
 War organization of high-school students. *Monthly Labor R* 56:74-5 Ja '43

HIGH schools
 Air education program succeeds in high schools. *Civil Aero J* 4:1+ Ja 15 '43
 War work in the high schools. G. W. Warner. *Science* 97:262-3 Mr 19 '43

HIGH voltages
 Design and operation of high-voltage axial air-blast circuit breakers. A. K. Leuthold. *il diags Elec Eng* 61:Trans 869-75 D '42
 Ferranti high-voltage direct-current testing equipment. *il diags Engineering* 156:6-8 JI 2 '43

High tension testing; new research laboratory at Zurich. *il Electrician* 131:273-5 S 17 '43

High-voltage plant; maintenance difficulties with modern designs. J. H. M. Sykes. *diags Elec R (Lond)* 131:551-3 O 30 '42

Measurement of peak voltages in high-voltage testing, with particular reference to a modified diode peak voltmeter. R. N. Buttery. *bibliog diags Inst E E J* 90 pt 2: 186-91 Je '43

New high-interrupting-capacity fuse for voltages through 138 kv. H. H. Fahnoe. *il diags Elec Eng* 62:Trans 630-5 O '43

Oerlikon laboratory for H.T. research. *il diags plans Engineer* 176:269-72 O 1 '43

Radio-frequency-operated high-voltage supplies for cathode-ray tubes. O. H. Schade. *il diags Inst Radio Eng Proc* 31:158-63 Ap '43

See also

Lightning
 Overvoltage (electric lines)

HIGHLAND PARK, Michigan

Streets

Davison limited highway, Wayne county. H. A. Shuptrine and J. C. Mead. *il diag map Civil Eng* 12:673-6; 13:15-18 D '42-Ja '43

HIGHWAY accidents. *See* Automobile accidents; Road accidents; Roads—Safety measures; Street accidents

HIGHWAY accounting
 Accounting for local road funds. *J Account* 75:441 My '43

HIGHWAY administration
 Achieving maximum highway use in the United States; abstract. S. J. Williams. *Roads & Bridges* 81:76-8 Ap '43

Cleveland freeways a major problem; reconditioning state's system by the Ohio department of highways. R. C. Chaney. *il diags map Roads & Sts* 86:40-4 Je '43

Ohio maintenance geared to wartime; state road program. H. D. Metcalf. *map Roads & Sts* 86:39-43 Ap '43

Planning for the post-war period. W. J. Moore. *Roads & Bridges* 81:98+ Mr '43

Road maintenance in Grand Forks county, North Dakota. J. W. Harty. *il Pub Works* 74:28, 30+ Mr '43

See also

Highway depart- Roads—Finance
 ments Streets
 Highway transportation

also American association of state highway officials

War measures

Highway operations under war conditions; special section. *il maps diags Eng N* 130: 43-62 Ja 14 '43

Selection of civilian evacuation routes; Pennsylvania chooses major highways for emergency movement. R. F. Riegelmeier. *il Civil Eng* 12:659-60 D '42

HIGHWAY departments

Directory, provincial highway officials; organization charts, provincial highways departments, Canada. *Roads & Bridges* 81:50-66 JI '43

Well worded state highway specifications. *Pub Works* 73:38-9 D '42; 74:42 Mr '43

Employees

Kentucky paves the way; safety for highway workers. T. B. Smith. *il Nat Safety* N 46: 20-1+ N '42

Equipment

Carlton County's electric welder. N. C. Nickerson. *il Pub Works* 74:14 O '43

Equipment for winter road maintenance; eighteen county engineers give their views. *il Roads & Bridges* 81:48-50+ O '43

Equipment maintenance. *il diags Roads & Sts* 85:49-60 N; 49-60 D '42

Equipment maintenance in Massachusetts. J. E. Lawrence. *il Roads & Sts* 86:75-8 Ap '43

How Marion county, Kans. beats the labor shortage; using material from its scrap pile, made its Caterpillar patrol into a loader. J. F. Meisner. *il Pub Works* 74:23 Ag '43

Keeping highway equipment in service despite war restrictions. F. Kelso. *il Eng N* 130:50-1 Ja '43

Maintaining West Virginia's roads under war restrictions. E. L. Worthington. *il diags Roads & Sts* 86:54-5+ Je '43

Maintenance of public works equipment; lower Merion township, Ardmore, Penna. W. E. Rosengarten. *il Pub Works* 74:42 S '43

Make it do! Vermont highway department wartime equipment upkeep. H. J. McKeever. *il Roads & Sts* 86:65-8 My '43

Modern equipment and garage set-up of Winnebago county, Wis. *il Roads & Sts* 85: 27-9 N '42

Road equipment to be pooled under state-WPB plan. *Eng N* 130:321 Mr 4 '43

See also

Street cleaning apparatus

Public relations

Public service aspects of winter maintenance; how reports concerning road conditions in Ontario are collected and disseminated. E. H. Murray. *il map Roads & Bridges* 81:37-8+ O '43

Shops

Complete tear-downs feature of Colorado's preventive maintenance program. A. Swanson. *il diags Roads & Sts* 86:79-82 S '43

Keep every machine going! Wayne county's shop order. *il Roads & Sts* 86:78-82 F '43

Keeping up Cincinnati's fleet; modern departmentalized shop. H. J. McKeever. *il Roads & Sts* 86:67-70 JI '43

N.Y. highway shops hum on salvage jobs. *il Roads & Sts* 86:69-70 My '43

Oconto County's modern, well equipped highway shop. C. L. Foley. *il plan Pub Works* 74:18-19 Ag '43

Salvage! is the word in Ohio Div. 7 shop. H. J. McKeever. *il Roads & Sts* 86:67-71 Je '43

Tool check-up system that works; Gogebic County, Michigan, highway shop. G. W. Koronski. *il Roads & Sts* 86:74 Je '43

HIGHWAY engineering

Access road follows century-old canal bed; Lockland-Arlington Heights section of Ohio state route 987. J. A. Byrnes. *il Roads & Sts* 86:47-8 Je '43

Access to the world's largest building; roads, bus terminal, parking field for Pentagon building. *il diag map Eng N* 130:420-4 Mr 25 '43

Alaska highway. E. E. R. Tratman. *il map Engineer* 175:204-6, 224-6 Mr 12-19 '43

Alaska highway; construction activities of the Public roads administration. T. H. MacDonald, L. I. Hewes and J. S. Bright. *il Civil Eng* 13:171-4 Ap '43

Alaska highway; effect of climate and soils on design. A. C. Clark. *il Civil Eng* 13:209-12 My '43

Alaska highway; its survey and construction. *il Engineer* 175:480-1+, 498-500 Je 13-25 '43

Alcan, America's glory road. H. W. Richardson. *il maps Eng N* 129:853-72, 907-14; 130: 63-70 D 17, 31 '42, Ja 14 '43

HIGHWAY engineering—Continued

- Alcan highway. H. J. McKeever. *il* diags maps Roads & Sts 86:34-62, 70-2 Ja; 40-52 F '43
- Alcan military highway. C. L. Sturdevant; A. L. Lane. *il* maps Civil Eng 13:131-8 Mr '43
- Allegheny county improves Duquesne Way. *il* diags plan map Eng N 131:540-3 O 7 '43
- Army reports on Pan American highway. E. C. Kelton; H. E. Spickard. *il* map Civil Eng 13:515-21 N '43
- Building the Alcan. America's glory road. H. W. Richardson. *il* map Comp Air M 48:7047-54 Je '43
- Building the Inter-American highway. A. N. Carter. *il* map Eng N 131:209-22, 269-76, 339-46 JI 29, Ag 12, 26 '43
- Built 1921, rebuilt 1941; Iowa highway. E. Capel. *il* Roads & Sts 86:67-70 Mr '43
- Cleveland freeways a major problem; reconditioning state's system by the Ohio department of highways. R. C. Chaney. *il* diags map Roads & Sts 86:40-4 Je '43
- Construction of the Alaskan international highway. *il* map Engineering 155:321-3, 330 Ap 23 '43
- Davison limited highway, Wayne county, Michigan. H. A. Shuptrine and J. C. Mead. *il* diag map Civil Eng 12:673-6; 13:15-18 D '42-Ja '43
- Engineering aspects of today's progress on the Inter-American highway. E. W. James. *il* map For Comm W 13:11-13+ O 2 '43
- Evaluating soils for specific road uses; methods developed in Kansas. D. L. Lacey. Eng N 130:312-15 F 25 '43
- Highway exploration in Bolivia. H. P. Hart. *il* map Eng N 130:482-5 Ap 8 '43
- Highway plans for the post-war period are urgently needed. C. M. Upham. Roads & Bridges 81:70+ Ap '43
- Huge highway project for Philadelphia. J. U. Shroyer. *il* map Civil Eng 13:370-2 Ag '43
- Improving Connecticut highways for heavy wartime traffic. A. H. Sibley. *il* Explosives Eng 21:136+ JI '43
- Michigan builds war roads. *il* diags map Eng N 130:58-62 Ja 14 '43
- New War department building road network. J. Barnett. *il* diag map Civil Eng 13:127-30 Mr '43
- Oregon highways open rugged country. *il* map Eng N 129:718-19 N 19 '42
- Right-of-way and project markers. Pub Works 74:42 Mr '43
- Road construction on western cantonments. D. H. McCreery. *il* diags Civil Eng 13:101-3 F '43
- Roads under war restrictions. *il* Eng N 129: 484-8, 555-7, 627-30, 847-60; 130:351-6 O 8, 22, N 5, D 17 '42, Mr 11 '43
- 2nd year on the big road; Alcan highway. H. J. McKeever. *il* Roads & Sts 86:45-61 O '43
- Some problems of road construction and maintenance in Alaska. S. Taber. *il* map Pub Roads 23:247-51 JI '43
- Speeding-up the Alaska highway by aerial-survey methods. R. N. Johnston. *il* map Roads & Bridges 80:17-23+ N '42
- Surveyor's part in road location and construction; abstracts of papers. J. R. Scott; M. M. Gibson; J. C. Monteith. Roads & Bridges 81:44+ Mr '43
- 29-mile streamlined logging road. *il* Roads & Sts 86:53, 60-2+ S '43
- U.S. Army's first official story of the Alaska highway. C. L. Sturdevant. *il* maps Roads & Bridges 81:27-32+ Mr '43
- Wolf Creek and Wilson River highways, Oregon. *il* Pub Works 73:13-14 N '42
- Work continues on Pittsburgh expressway. *il* diags map Eng N 131:110-11 JI 8 '43
- See also*
- | | |
|------------------|---------------------|
| Bridge design | Pavements, Concrete |
| Bridges | —Design |
| Highway research | Roads |
| Mountain roads | Roads, Elevated |
| Pavements | Roads, Military |
| | Streets |

Study and teaching

- Highway engineering education; progress report of the committee of the Highway division. Am Soc C E Proc 69:499-505 Ap '43

HIGHWAY finance. *See* Roads—Finance

HIGHWAY law

See also

- | | |
|---------------------------------|--------------------------------------|
| Automobile laws and regulations | Motor bus lines—Laws and regulations |
| Highway administration | Motor trucks—Laws and regulations |
| | Traffic regulations |

HIGHWAY lighting. *See* Roads—Lighting

HIGHWAY officials**Directories**

- Directory of municipal road officials in Canadian cities, towns, counties and townships. Roads & Bridges 81:114-54 JI '43
- Directory, provincial highway officials; organization charts, provincial highways departments, Canada. Roads & Bridges 81:50-66 JI '43

HIGHWAY officials of the North Atlantic states. Association of. *See* Association of highway officials of the North Atlantic states

HIGHWAY research

- Highway research board meet centers on studies of pavements and their bases. Eng N 129:817; 130:144-7 D 10 '42, Ja 28 '43
- Paving with soil and cement. M. D. Catton. *il* Comp Air M 48:7184-8 N '43
- Wartime importance of granular stabilized roads; recommendations for their design, construction and maintenance. *il* diags Roads & Bridges 81:26-30+ Je; 33-4+ JI; 84+ S '43

HIGHWAY transportation

- Amount and characteristics of trucking on rural roads. J. T. Lynch and T. B. Dimmick. *il* tables map Pub Roads 23:213-46 JI '43
- California's fighting roads. *il* Roads & Sts 86:73-4+ O '43
- Highway transport as army officers see it. Bus Transportation 22:42-3 Ag '43
- Highways in war and peace. T. G. Morgan. Roads & Bridges 81:90+ Mr '43
- Lifeline of the Americas; completion of Pan American highway would relieve present shipping hazards and aid the war program. E. W. James. *il* map Roads & Bridges 80:33-5+ D '42
- National highway situation under war conditions. T. H. MacDonald. *il* Eng N 130: 44-8 Ja 14 '43
- On the threshold of great developments in highway and airport construction; report of National resources planning board. *il* Roads & Bridges 81:24+ F '43
- Pan American highway is key to wartime transportation. E. W. James. *il* Oil & Gas J 41:91, 94+ D 31 '42
- Plan now for the post-war period. W. D. Colby. Roads & Bridges 81:120-2 Mr '43
- Unifying road transport; post-war problems; fuel, etc. C. Ridley. Automobile Eng 33: 109-14 Mr '43
- Whither are we bound? R. G. Lovell. *il* Pet Eng 14:67-8 JI '43

See also

- | | |
|---------------------------------|---------------------|
| Highway engineering | Railroads—Motor |
| Motor bus lines | vehicle auxiliaries |
| Motor trucks in freight service | Road traffic |
| Motor vehicles | Roads |
| Pan-American highway | Street traffic |
| | Trailers |

HILLMAN Sidney, 1887-

- No pay rise asked; Hillman's clothing workers propose to adhere to present scale. por Business Week p22+ Ap 10 '43

HILLSIDE architecture

- Commanding a vista across the valley; small house. *il* plans Arch Rec 92:54-5 N '42
- Hillside house, Berkeley, Calif. *il* diags plans Arch Forum 79:77-87 S '43
- Planned for the panorama; hillside house, Portland, Oregon; views and plans. Arch Rec 93:42-5 My '43

HINGES

- Self-aligning door hinge saves assembly time. *il* diags Product Eng 14:147 Mr '43
- Slotted hinge speeds removal of cargo doors. *il* Aviation 42:242 Mr '43

- HINSHELWOOD, Cyril Norman**, 1897-
Davy medal award. *H. Dale, Science* 97:30-1
Ja 8 '43
- HIPERSIL steel**. See Silicon steel
- HIPPURIC acid**
Thermal data; heats of combustion and free
energies of some compounds containing the
peptide bond. *H. M. Huffman, bibliog J*
Phys Chem 46:885-91 N '42
- HIPPURYLGLYCINE**
Thermal data; heats of combustion and free
energies of some compounds containing the
peptide bond. *H. M. Huffman, bibliog J*
Phys Chem 46:885-91 N '42
- HIRST, Hugo** Hirst, 1st bart, 1863-1943
Sketch. *por Engineering* 155:96 Ja 29 '43;
Elec R (Lond) 132:142 Ja 29 '43
- HISTAMINE**
Culprit is histamine; its role in allergies.
L. W. Giellerup, Sci Am 169:68-9 Ag '43
Digestion of living tissues by proteolytic
enzymes. *C. A. Dragstedt, Science* 98:131-2
Ag 6 '43
- HISTIDINE**
Quantitative investigations of amino acids
and peptides; equilibria between histidine
and formaldehyde. *E. H. Frieden, M. S.*
Dunn and C. D. Coryell, J Phys Chem 47:
85-94 F '43
- HOARDING**
Currency in circulation. *Fed Res Bul* 29:497-
9 Je '43
Food retailers point finger at wholesalers and
consumers in hoarding muddle. *Ptr Ink*
201:68 D 11 '42
How to fight currency hoarding. *R. S. Brad-*
ford, Banking 35:62-3 Mr '43
- HOBBIES**
White-collar hobby mechanics fill shop posts;
Arthur C. Badger metal products co. Iron
Age 151:89 Ap 1 '43
- HOBBING**
Broaching and hobbing engine-starter parts
having dual lead angles. *il Mach* 49:196-7
F '43
Dual lead angles produced by broaching and
hobbing; mechanisms for starting engines
in racing cars, aircraft, yachts, etc. *il Steel*
112:114+ Je 7 '43
Multiple cut hobbing of ring gears. *H. Byng*
and E. Erickson, il Iron Age 152:60-1
Ag 19 '43
- HOBS**
Checking fixture decreases hob set-up time.
M. J. Vorgitch, diags Am Mach 87:103-4
My 27 '43
Fixture sharpens thread hobs. *R. Gerhart,*
diags Am Mach 86:1429 D 10 '42
Only from accurate hobs; testing and
handling methods. *General electric com-*
pany, J. T. Hess, il Am Mach 87:83-5 Ap 15
'43
Standardization of hobs; abstract. *G. P.*
Maurer, Iron Age 152:68-9 N 4 '43
- HOERNING, Arnold B.**
Hoernings of Menasha, American royal fam-
ily, operate concrete block plant. *por*
Concrete 51:20 N '43
- HOEY, Jane Margueretta**, 1892-
Sketch. *por East Underw* 44:3-4 Ap 2 '43
- HOFFMAN, Paul**
Portrait. *Business Week* p27 Ja 2 '43
- HOFFMANN-MARTIUS reaction**
Nuclear alkylation of aromatic bases; the
action of methyl alcohol on *m*-toluidine
hydrochloride. *R. W. Cripps and D. H.*
Hey, Chem Soc J p14-15 Ja '43
- HOG fuel**. See Wood as fuel
- HOG houses**. See Swine houses
- HOGS**. See Swine
- HOISTING**
Devise wire gin to hoist conductors. *il diag*
Elec W 120:338 JI 24 '43
How to determine size of rope for tackle. *il*
Elec W 120:1386 O 16 '43
See also
Mine hoisting
- HOISTING machinery**
A.C.E. tricerane may be used as a crane,
stacker, platform hoist, power shovel and
light tractor. *il diags Mech Handling* 30:
449-54 O '43
- Hydraulic propeller hoist saves vital man-
hours at Willow Run. *il Steel* 112:62 My 24
'43
- Ingenious lifting devices that speed pre-
fabrication at Calship yard; illustrations.
Eng N 130:119 Ja 28 '43
- Job-made tackle lifts heavy trusses. *J. D.*
Watson, il Eng N 131:144-5 JI 15 '43
- Mechanical lift speeds degreasing operation.
R. L. Dunlap, Factory Management 101:
228+ Mr '43
- Mine car maintenance hoist uses brake cylin-
der. *il Coal Age* 48:98 O '43
- New device cuts haulage costs; hoisting unit
made to fit any motor chassis; Dempster-
Dumpster. *il Mech Handling* 30:122-4 Mr '43
- New equipment; material handling. *il Iron*
Age 150:64-6 D 17 '42
- See also*
Cableways Mine hoisting
Conveying machinery Stacking machines
Cranes, derricks, etc. Windlass
Elevators Wire rope
- Accidents**
Hoisting operations; circumstances and
causes of accidents. *Nat Safety N* 47:54.
56+ Ja '43
- Safety measures**
Handy block and tackle chart for determining
safe loads. *W. F. Schaphorst, Am Gas J*
159:30 Ag '43
How to determine safe loads for manila rope
slings. *Elec W* 119:2161 Je 26 '43
How to determine safe loads for sisal rope.
Elec W 120:334 JI 24 '43
How to determine safe loads for wire rope
slings. *Elec W* 120:1022 S 18 '43
Mechanical equipment; handling materials.
il Nat Safety N 47:70-2+ Mr '43
Safe sling practice. *F. L. Spangler, il Nat*
Safety N 47:22-3+ Ap '43
Safety for hoisting equipment. *J. C. Wheat,*
il Ind Stand 14:104-7 Ap '43
Slings; new approach to an old problem.
il Mech Handling 29:226-7 D '42
Watch weakest link; tips on inspecting
chains and hooks used for hoists or slings.
W. E. Rossmagel, diags Power 87:153+ Mr
'43
- HOISTING machinery, Electric**
See also
Mine hoisting, Elec-
tric
- Maintenance and repair**
Maintain machines and services for con-
tinuous operation; cranes and hoists; West-
inghouse. *il Factory Management* 101:182-3
Ag '43
- HOKKAIDO island**
Along the Aleutian route; white Ainus cling
to ancient customs. *N. James, il Tech R*
45:310-12+ Ap '43
- HOLDERS (for printed matter)**
Welded display holder for printed matter.
V. P. Weidner, il Welding J 22:322 My '43
- HOLDING companies**
Divestments; electric utility properties severed
from holding company systems since
the effective date of the Holding company
act, and properties subject to divestment
orders; tabulation. *Elec W* 119:270-2 Ja 23
'43
Granddaddy of all utility holding companies.
M. R. Kynaston, Pub Util 31:479-85 Ap 15
'43; *Abstract, Am Gas Assn Mo* 25:188
My '43
Holding companies found more cooperative
by SEC; eighth annual report to Congress.
Elec W 119:2133 Je 26 '43
Is the profession going legalistic? *R. H. Mont-*
gomery, J Account 74:523-4 D '42
Motive: suicide; maneuvers of U.G.I. and
Niagara Hudson toward voluntary dissolution.
Business Week p85+ Ja 9 '43
SEC brief assails two Bond & Share com-
panies. *Elec W News* ed 119:1871 Je 5 '43
See also
Allegheny corpora- Commonwealth and
tion southern corpora-
Associated gas and tion
electric system Consolidated natural
Columbia gas and gas company
electric corporation

HOLDING companies—See also—*Continued*

- Electric bond and share company
- Engineers public service company
- Middle West corporation
- National power and light company
- North American company
- North American power and light company
- Northern states power company of Delaware
- Omnibus corporation
- Portland electric power company
- United corporation
- United gas improvement company

Accounting

- SEC revisions for holding company accounting. *Comm & Fin Chr* 156:2241 D 24 '42
- Uniform system of accounts for public utility holding companies. *J Account* 75:186 F '43

Finance

- Brief articles on holding companies. *O. Ely. Pub Util* 31:365-6, 430-2, 497-8, 562-3, 629-30, 698, 761-3, 827-9; 32:39-40, 101-3, 166-7, 232-5, 296-8, 365-8, 431-6 *Mr* 18-S 30 '43
- New status for holding company debts. *W. T. Hyde, jr. Barron's* 22:19 D 14 '42

Laws and regulations

- Can "death sentence" repeal pass? *W. T. Hyde, jr. Barron's* 23:1+ F 15 '43
- Constitutionality of death sentence upheld by court; decision affirms SEC orders on divestment of North American co. properties. *Elec W* 119:285-6 *Ja* 23 '43
- Death in wartime; SEC is going ahead with enforcement. *Business Week* p106+ *Ag* 21 '43
- Death sentence legality again upheld in court. *Elec W News* ed 119:1203-4 *Ap* 10 '43
- Investors need a war-time stay in the execution of the utility act death sentence. *C. A. O'Neill. Comm & Fin Chr* 158:1189, 1214-15+ S 23 '43
- Moratorium for non-essential activities in wartime. *E. R. Abrams. Comm & Fin Chr* 158:685, 698-9 *Ag* 19 '43
- North American's break-up plan introduces new wrinkle. *Comm & Fin Chr* 158:599-600 *Ag* 12 '43
- Prince; public utility holding companies victims of fashionable politics. *H. Fleming. Comm & Fin Chr* 157:1666-7 *My* 6 '43
- Purpose of the Holding company act. *Pub Util* 32:379 S 16 '43
- SEC and the war. *E. R. Abrams. Pub Util* 31:23-9 *Ja* 7 '43
- SEC death sentence activities in wartime threaten private enterprise. *C. Tatham, jr. Comm & Fin Chr* 158:997+ S 9 '43
- SEC justifies it appropriation. *Pub Util* 31:378-9 *Mr* 18 '43
- SEC stock ruling is rejected by Supreme court; decision holds purchase of stocks by company officers during reorganization is legal. *Elec W* 119:461 F 6 '43
- Utilities need a war-time moratorium on death sentence. *O. Ely. Comm & Fin Chr* 158:782+ *Ag* 26 '43
- Will holding company integration be made the handmaiden of public ownership? *Pub Util* 31:439-42 *Ap* 1 '43

See also

- Securities and exchange commission

Securities

- Another test of SEC policy on tenders. *O. Ely. Pub Util* 31:428-30 *Ap* 1 '43
- Can "death sentence" repeal pass? If so, market would give earning power recognition in valuing utilities. *W. T. Hyde, jr. Barron's* 23:1+ F 15 '43
- Favorable liquidating values in utility holding company securities. *F. C. Fullerton. Mag of Wall St* 71:425+ *Ja* 23 '43
- Investors need a war-time stay in the execution of the utility act death sentence. *C. A. O'Neill. Comm & Fin Chr* 158:1189, 1214-15+ S 23 '43
- Liquidating value of United Light & Power. *W. T. Hyde, jr. Barron's* 23:16 *Ja* 18 '43
- Optimistic forecast on holding company securities. *O. Ely. Pub Util* 32:496-8 O 14 '43

- Problems for American Power & Light; SEC unlikely to permit retirement of part of bonds. *W. T. Hyde, jr. Barron's* 22:18 N 16 '42

- SEC ruling on stocks upheld by federal court; participation of common stock in liquidation of holding company, contrary to bankruptcy technique; *United Light & Power case. Elec W* 120:475 *Ag* 7 '43

- SEC utility policy; decision in *United Light & Power* dissolution. *Bankers M* 146:420-1 *My* '43

- Strong holding company bond; Philadelphia Co. collateral trust 4½s. *W. Andrews. Barron's* 23:10 *Je* 28 '43

- UGI dissolution plan. *W. T. Hyde, jr. Barron's* 22:16 D 28 '42

- Utilities on the way back? *O. Ely. Mag of Wall St* 72:72-4+ *My* 1 '43

HOLDING devices

- Aids in holding work in machine shops. *diags Power Pl Eng* 47:91 *Ag* '43
- Impression-cast jaws for aircraft fittings. *H. F. Lenz. Il Aero Digest* 42:269-70+ *My* '43
- Same. *Automotive & Aviation Ind* 89:34-6 *Il* 1 '43
- Jigs and fixtures for arc welded mass production; *R. G. LeTourneau inc. W. J. Brooking. Il diag Steel* 113:80, 82+ O 25; 102, 104+ N 1; 119-20, 122 N 8 '43
- Kirk site cast jaws facilitate machining operations. *Il Mach* 49:216+ *Il* '43
- Leveler holds turbine blade for milling. *B. Litzman. diag Am Mach* 86:1439-40 D 10 '42
- Self-adapting work support ring; manufacture of clutch disc for Cyclone 14's. *B. Hatfield. il diags Metals & Alloys* 17:787 *Ap* '43
- Tools of our trade; how to run a drilling machine. *Il Am Mach* 87:104-6 *Ap* 15 '43
- Welded supports for large tubes. *A. Silvester. diags Am Mach* 86:1298 N 12 '42

See also

- Chucks
- Clamps

HOLIDAYS

- Revision of French regulations on holidays with pay. *Int Labour R* 47:90-2 *Ja* '43
- Vacation and holiday provisions in union agreements. *Monthly Labor R* 56:924-31 *My* '43; *Excerpt. Management R* 32:177-8 *My* '43

See also

- Bank holidays
- Vacations

HOLLAND. See Netherlands**HOLLANDER, A., & son, inc.**

- Securities disturbing investors. *J. S. Williams. Mag of Wall St* 71:168-9 N 28 '42

HOLLOW tile

- Clay products cut building time by two weeks on WAAC barracks at Des Moines. *Il Brick & Clay Rec* 101:19-20 N '42

Testing

- Measuring shrinkage and weight loss of Kentucky shale hollow tile. *Brick & Clay Rec* 102:25 F '43

HOLLYWOOD, California

- Seven commercial units for Rodeo drive. *Il plans Arch Forum* 78:97-102 *Je* '43

HOLME, Stanley

- Sketch. *por Sales Management* 51:18-19 D 15 '42

HOLMES, Harry Nicholls, 1879-

- Fathers and sons in chemistry. *P. H. Fall. por Chem & Eng N* 20:1623-4 D 25 '42

HOLMES, Oliver Wendell, 1841-1935

- Soldier's faith; a remarkable testament from Mr Justice Oliver Wendell Holmes on the values in high and dangerous action; excerpts from his address delivered at Harvard in 1895. *por Fortune* 27:98-9 *Ap* '43

HOLMES, Richard Remsen, 1920-

- Fathers and sons in chemistry. *P. H. Fall. por Chem & Eng N* 20:1624 D 25 '42

HOLECELLULOSE

- Influence of cooking and bleaching upon the chain length distribution of the carbohydrate fraction in pulpwood. *J. E. Atchison. bibliog Paper Tr J* 116:23-34 *Je* 3 '43; *Same. cond. Paper Ind* 24:1282-6 *Mr* '43

HOLOTHURIANS

- Method for narcotizing holothurians. *W. G. Hewatt. Science* 97:588 *Je* 25 '43

HOLYOKE mutual fire insurance company
Salem honors 100 year old Holyoke Mutual
Fire. Weekly Underw 149:886 O 23 '43

HOME

See also

Housekeeping service
(social work)

HOME and colonial stores, limited
Ordinary general meeting, 48th, London.
Economist 145:185 Ag 7 '43

HOME builders, National association of. See
National association of home builders

HOME economics

See also

Budget, Household
Cost of living
Food
Fuel

Furniture
Heating
Kitchens
Standard of living

Study and teaching

Kitchen laboratory at Montana college sets
pattern for homemakers. J. McQueen. il
Am Gas Assn Mo 25:417-18 O '43

HOME economics teachers

These professors aren't unrealistic; home
economists influence the buying habits of
practically every literate American. F. Nye.
Ptr Ink 203:78+ Ap 23 '43

HOME insurance company of New York
1942 operating results. Comm & Fin Chr
157:661 F 18 '43

Ninetieth anniversary; to invest all premiums
on new business in war bonds for balance
of 1943. East Underw 44:1+ Ap 16 '43

HOME labor

Decline of home work in New York state.
Monthly Labor R 57:42 J1 '43

40-cent minimum for home workers in em-
broidery industry. Monthly Labor R 57:791
O '43

Homework. Economist 144:271-2 F 27 '43

HOME loan banks

About the home loan banks. Business Week
p119 D 12 '42

Chicago home loan bank repurchases govern-
ment investments. Comm & Fin Chr 158:616
Ag 12 '43

FHLB advances pass billion dollar mark.
Comm & Fin Chr 157:1965 My 27 '43

Home loan banks' resources higher. Comm
& Fin Chr 158:1099 S 16 '43

Pay off FHLB debentures. Comm & Fin Chr
158:2061 D 10 '42

12 Federal home loan banks report income of
\$1,899,682 for six months of 1943. Comm
& Fin Chr 158:327 J1 22 '43

12 Federal home loan banks report income
of \$3,903,000 for 1942. Comm & Fin Chr
157:746 F 25 '43

HOME loans. See Home owners' loan corpora-
tion; Home ownership—Finance

HOME office life underwriters association

HOLU elects officers at annual meeting. East
Underw 44:4 My 28 '43; Nat Underw (Life
ed) 47:7 My 21 '43

HOME office underwriters, Institute of. See In-
stitute of home office underwriters

HOME owners' loan corporation

HOLC in a hole. Arch Forum 78:35 Ap '43

HOLC launches advertising drive in 62 news-
papers to sell 10,000 homes. il Ptr Ink 204:
38 Ag 6 '43

HOLC making progress in liquidation, total
loans and properties reduced 53%. Comm
& Fin Chr 158:915 S 2 '43

Says banks take best HOLC loans. J. H.
Fahey. Banking 35:85 F '43

Status of HOLC liquidation. H. D. Ralph.
Burroughs Clearing House 28:20-1 O '43

War helps HOLC. Business Week p42+ Ag
21 '43

See also Insurance, Fire—Home owners
loan corporation contract

HOME ownership

Home ownership; the backbone of democracy.
il Am Bld 65:98-9+ O '43

Home planners' institute, educational and
savings program for prospective homeowners.
R. H. Cake. Comm & Fin Chr 158:1699
O 28 '43

Homes for heroes. W. McKinnell. Economist
143:698 D 5 '42

Land and homes for returning servicemen;
with analysis by Canadian and New Zea-
land legislation. D. T. Rowlands. Ann Am
Acad 227:143-51 My '43

Largest department stores of many cities
promote post-war home savings. il Am Bld
65:48+ J1 '43

OFA rules discourage home ownership. C.
Crane. Comm & Fin Chr 157:761 F 25 '43
Planning file for war bond homes. il Am
Bld 64:64-5 N '42

Post-war home builders' club will please come
to order; contribution of Peoples bank of
Cumberland, Maryland. J. L. Cooley. il
Banking 36:21-3 N '43

See also

Building sites
Home owners' loan
corporation
Housing, Cooperative

Finance

Backbone of savings and loan lending of
small loans for wartime homes. J. Claw-
son. Comm & Fin Chr 157:1581 Ap 29 '43

Demonstration of one-stop home buying tech-
nique. Burroughs Clearing House 27:3-4 Ag
'43

Home financing through savings and loan
associations. C. M. Torrance. Monthly La-
bor R 56:932-40 My '43

Home is for keeps. M. Kane. il Banking 36:
58+ N '43

How St Louis builders guild plan allows to-
morrow's home to be bought today. M.
Gill. il plans Am Bld 65:70-3 Ap '43

How to make A-1 prospects for your post-
war houses; with text of land contract
and terms of sale. N. P. Ninneman. il Am
Bld 65:35+ J1 '43

Installation plan; Nugent plan and houses.
Arch Forum 78:35-6 F '43

Private enterprise program for post-war
home building. Am Bld 65:30-1+ My '43

HOME work. See Home labor

HOMEMAKER service. See Housekeeping serv-
ice (social work)

HOMES, Institutional

Sewage treatment plant for a home for men-
tal defectives; with cost data. B. V. Howe.
diags Pub Works 73:22-3+ D '42

HOMESTAKE mining company

Another look. Mag of Wall St 71:298-9 D 26
'42

Homestake Mining as a peace speculation. H.
Lawrence. Barron's 23:1 My 10 '43

HONDURAS

Building the Inter-American highway; con-
tract work in Honduras. A. N. Carter. il
Eng N 131:273-5 Ag 12 '43

Commercial policy

Documentary requirements for customs entry
and clearance of goods liberalized. For
Comm W 10:15-16 Ja 23 '43

Economic conditions

Honduras faces its unsold bananas problem.
D. H. Bradley. il For Comm W 11:5-8+ Ap
3 '43

News by countries. For Comm W 10:24-5 F
27 '43

HONESS, Arthur Pharaoh, 1886-1942

Memorial. P. D. Krynine. por(pl) Geol Soc
Proc 1942:195-200 bibliog(p198-200) Ap '43

HONEY

Honey production in Cuba. For Comm W 11:
25-6 Ap 3 '43

Prices

Bulk honey prices established by OFA. Oil
Paint & Drug Rep 143:62 Je 28 '43

HONGKONG and Shanghai banking corporation

Ordinary general meeting, London. Economist
144:800 Je 19 '43

HONING machines

Giant size Barnesdril honing machine. il
Mach 49:215-16 D '42

Micromatic builds vertical honing machines.
il Am Mach 87:134 My 27 '43

HONN engines. See Diesel engines—Design

HONOLULU

Honolulu in year of war adds \$100,000,000 buying power. *Sales Management* 52:37-8 Ja 1 '43

Industries

Lime plant behind the battle front; Hawaiian gas products co. V. J. Azbe. *il Rock Prod* 46:56-8 Je; 56-8+ JI '43

HOOKS

Watch weakest link; tips on inspecting chains and hooks used for hoists or slings. W. E. Rossmagel. *diags Power* 87:153+ Mr '43

HOOVER company

Common stock offered. *Comm & Fin Chr* 158:672 Ag 16 '43

HOOVER medal

Gerard Swope, Hoover medalist; address by K. T. Compton, with response by G. Swope. *Elec Eng* 62:154-8 Ap '43

HOPF, Harry Arthur, 1882-

Sketch. por(p4) *Spectator* (Life ed) 151:7, 40 S '43

HOPKINS, Sir Frederick Gowland, 1861-

Great biochemist; retirement of Sir F. G. Hopkins. por *Chem Age* (Lond) 49:335-6 O 2 '43

HOPKINSON, Edward, 1885-

Portrait. *Arch Forum* 79:108 S '43

HOPS**Prices**

Hops prices established by OPA. *Oil Paint & Drug Rep* 142:5+ D 14 '42

HORMONES

cis- and *trans*-8-methyl-1-hydrindanone. W. E. Bachmann and S. Kushner. *bibliog Am Chem Soc J* 65:1963-7 O '43

Conversion of desoxycorticosterone to pregnadiol-3 (a). 20 (a). W. R. Fish, B. N. Horwitt and R. I. Dorfman. *Science* 97:227-8 Mr 5 '43

Does the parathyroid hormone influence phosphatase activity? T. R. Wood and W. F. Ross. *bibliog Am Chem Soc J* 64:2759-60 D '42

Gonadal hormones in snakes. J. R. Valle and L. A. R. Valle. *bibliog Science* 97:400 Ap 30 '43

Hormone profits; pregnant mares yield estrogenic hormone, helpful in menopausal treatment. *Business Week* p70-1 S 11 '43

Isolation of adrenocorticotrophic hormone from sheep pituitaries. Choh Hao Li, M. E. Simpson and H. M. Evans. *Science* 96:450 N 13 '42

Molecular weight of the adrenocorticotrophic hormone. E. Burtner. *Am Chem Soc J* 65:1238 Je '43

Perfusion of rat livers with estrogen in vitro. J. Schiller and G. Pincus. *bibliog Science* 98:410-12 N 5 '43

Studies on the preparation of synthetic sex hormones; concerning some derivatives of hexestrol. J. F. Lane and E. S. Wallis. *Am Chem Soc J* 65:994 My '43

See also

Testosterone

HORMONES, Plant

Plant hormones now used in dusting powder for seeds. *il Sci Am* 169:219 N '43

Present status of plant hormones. P. W. Zimmerman. *il Ind & Eng Chem* 35:596-601 My '43

See also

Auxins

HORNS, Loud speaker. *See Loud speaking apparatus*

HOROLOGICAL association, United. *See United horological association*

HORSE flies

Courting flights of tabanids. L. Haseman. *Science* 97:285 Mr 26 '43

HORSE insurance. *See Insurance, Horse*

HORSE meat

Dobbin for dinner; unprecedented sales threaten to deplete herds. *il Business Week* p42 Ap 17 '43

HORSEPOWER

Determining exact horsepower needed for a particular job may reveal important possible savings. J. A. Setter. *il Steel* 112:34+ F 22 '43

Indicated and brake horsepower of compression. G. M. Stearns. *Oil & Gas J* 41:139-40 Ap 15 '43

Isothermal compression horsepower; Polytropic and adiabatic compression horsepower. G. M. Stearns. *Oil & Gas J* 41:79-80 Mr 18 '43

HORSES

Energy cost of standing in horses. C. F. Winchester. *Science* 97:24 Ja 1 '43

Horse-power at a premium. T. J. McInerney. *Barron's* 22:6 D 28 '42

Horse scarcity. *Business Week* p29-30 JI 24 '43

Mail-order horses. J. M. Stenbuck. *Adv & Sell* 36:17+ JI '43

Number of horses in Canada. *For Comm W* 10:27 Mr 27 '43

Wild horses of Santa Ana Mesa. C. Holbrook. *il Comp Air M* 48:6937-40 Ja '43

See also

Photography of horses

HORSESHOES

Dobbin is shod; only five manufacturers of horseshoes are left. *Business Week* p48 S 25 '43

Advertising

Keeping horse power on its feet; manual to help keep horses' and mules' feet in working order. H. W. Blankenship. *il Ind Marketing* 28:53+ Mr '43

HORTICULTURAL libraries

Horticulture and the nutrition program. D. S. Manks. *Special Lib* 34:274-5 JI-Ag '43

HORTICULTURE

See also

Nurseries (horticulture)

HOSACK, David, 1769-1835

Who established the Elgin botanic garden? C. S. Gager. *Science* 96:439-41 N 13 '42

HOSE

Correct use of rubber hose. S. S. Kogut. *il diag Aviation* 42:157-8+ Mr '43

How to lengthen hose life. *il Roads & Sts* 86:78-9 Ja '43

Rubber scarcity; special care of hose and lined vessels. *Chem Age* (Lond) 48:398 Ap 10 '43

Simple splicing operation saves rubber hose; Canadian Pacific railway's Angus shops. *Rubber Age* 53:327 JI '43

See also

Fire hose

Rating

Test of wartime garden hose. *il Consumers' Research Bul* 11:24-5 Je '43

HOSE couplings

Hose joint machine. *il Mech Handling* 30:362-3 Ag '43

Standards

American national standard hose connections for welding and cutting torches; data sheet. *diags Mach* 49:167 Mr '43

HOSIERY

Celanes hosiery. J. P. Holmes. *Rayon* 24:241 My '43

Conservation program on hosiery. *Rayon* 24:226-7 My '43

Finding new synthetic detergents for rayon hosiery. C. M. Robbins. *Rayon* 24:480 S '43

Knit goods for military purposes; cotton and wool socks, wool hose-tops and sweaters. *Textile World* 93:69 Ja '43

Knit goods for military purposes; cushion-sole socks. *il Textile World* 93:102-3 Ap '43

Processing of full fashioned rayon hosiery yarns with a new treatment; Nopco treatment. *il Rayon* 23:673-4, 727-8 N-D '42

Rayon hosiery comes to stay. H. A. Lester. *il Rayon* 23:699-701 D '42

Significant changes in rayon full fashioned hosiery yarns. H. R. Mauersberger. *Rayon* 24:477 S '43

Solving a rayon hosiery problem; 51 gauge rayon stocking has badly streaked boot. *Rayon* 24:37-8 Ja '43

Substitute fibers gaining knit goods leadership. W. B. Dall. *il Textile World* 93:100-1 Ap '43

HOSIERY—Continued

Use of combed cotton yarns in hosiery. Rayon 24:6-7 Ja '43
 Why rayon hosiery is not what it could be. Rayon 24:478 S '43

Dyeing

See Dyes and dyeing—Hosiery

Inspection

Checking finished hosiery; simple form and tickets for inspectors. D. Bradfield. *il* Textile World 93:86 JI '43

Manufacture

Handling acetate rayon in full-fashioned mills. *il* Textile World 93:107 Ap '43
 New rayon hosiery oils. Rayon 24:91 F '43
 Portioning hosiery yarns. K. R. Barker. *il* Textile World 93:114 F '43
 Problems in the evolution of rayon hosiery. H. H. Mosher. Rayon 24:142-4 Mr '43
 Setting, dyeing and finishing nylon hosiery. H. H. Mosher. Textile Col 64:542-4 N '42
 Technique in the manufacture of acetate rayon hosiery. M. Opitz; S. L. Dills and others. *il* Rayon 24:197-9, 253-5 Ap-May '43
 Throwing rayon for hosiery. C. W. Bendigo. *il* Textile World 93:110 Ap '43

See also

Hosiery machines
 Hosiery mills

Prices

Analysis of maximum price regulation 339; rayon hosiery. Rayon 24:171-2 Ap '43
 Comments on M.P.R. no. 339; rayon hosiery. G. A. Urlaub. Rayon 24:173-4 Ap '43
 How government standardization obstructs progress; setting top prices on women's rayon hosiery; ignores cumulative contribution of product differences brought about by advertising. L. D. H. Weld. *Ptr Ink* 204: 21-2 JI 23 '43
 Maximum price regulation no. 95 governing women's nylon hosiery. Rayon 23:643 N '42
 Price-quality control in women's rayon hosiery; O.P.A. release. Rayon 24:167-8 Ap '43
 Trade recommendations for changing OPA-MPR 339 submitted. Rayon 24:518-21 O '43

Rating

Foot socks; if you are going without stockings; rating. Consumers' Research Bul 11: 14 O '42
 Men's socks. Consumers' Research Bul 12: 8-9 O '43
 Rayon stockings for women in wartime. *diag* Consumers' Research Bul 11:11-14 Je '43

Standards

OPA standards of inspection for women's rayon hosiery. Rayon 24:169-71 Ap '43

Storage

Care in storing gray hosiery. M. M. Abrams. *il* Textile World 93:78 Ja '43

Testing

Service study of women's full-fashioned hosiery manufactured from four varieties of long staple American cotton. M. B. Hays, R. E. Rogers and M. C. Boyer. *bibliog* *Am Dyestuff Rep* 32:187-90, 209-11 Ap 26 '43
 Wearing qualities of rayon hose compared with silk and nylon hose. H. M. Fletcher. Rayon 24:537-8, 601-3 O-N '43
 Wearing qualities of similar brands of silk and nylon hose compared. G. M. Smith and H. M. Fletcher. *bibliog* Rayon 23:671-2, 722-4 N-D '42

HOSIERY machines

Are synthetics dooming the full-fashioned hosiery machine? J. W. Hughes; M. C. Miller. *il* Textile World 93:74-8 Ag '43
 Fixers for hosiery machines. K. R. Barker. Textile World 93:109 Mr '43

Fixing hosiery machines; circular machines (cont.). J. W. Hughes. *il* Textile World 92: 118 D '42; 93:112 Ap; 117 My; 117 JI; 112 O '43

Fixing hosiery machines; full fashioned machines (cont.). W. A. Simond. *il* *diag* Textile World 92:123 N '42; 93:101 Ja; 137 F; 111 Mr; 111 Ap; 111-12 Je; 141 S '43

HOSIERY mills

Plane parts replace silk hosiery; Se-Ling hosiery company; war conversion. *il* Textile World 92:71 N '42

Air conditioning

In full-fashioned hosiery mills temperature and humidity requirements have changed due to use of new fibers. Textile World 93: 95 O '43

Employees

Employment outlook in the full-fashioned hosiery industry. F. L. Schoenberg. *Monthly Labor R* 56:429-41 Mr '43
 Fixers for hosiery machines. K. R. Barker. Textile World 93:109 Mr '43

Equipment

Tray-lift steps-up hosiery output. *il* Rayon 23:685 N '42
 Yarn conveyors at May Hosiery. S. Schwartz. *il* *diag* Textile World 93:92-3 O '43

See also

Hosiery machines

Management

Care in storing gray hosiery. M. M. Abrams. *il* Textile World 93:78 Ja '43
 Taking the month-end inventory in hosiery mill. D. Bradfield. Textile World 93:92 Mr '43

Records

Checking finished hosiery; simple form and tickets for inspectors. D. Bradfield. *il* Textile World 93:86 JI '43
 Simple inventory record system; finishing department of a hosiery mill. H. McCarn. *il* Textile World 92:92-3 D '42

HOSIERY trade

Allocation of rayon yarns to hosiery manufacturers. Rayon 24:60-2 F '43
 Brown kraft for the duration for hosiery envelopes. *il* *Mod Packaging* 16:47 JI '43
 Labeling delayed and order cutting prices on women's rayon stockings. *Business Week* p70 Ap 17 '43
 Rayon hose snag. *Business Week* p80 Mr 20 '43
 Something for all; grade-labeling order on rayon hosiery. *Business Week* p18 My 22 '43
 War speeds retail diversification. V. Lebow. *il* *Ptr Ink* 203:28, 30+ Ap 16 '43

Advertising

Devotes campaign to defending principle of brand names; Berkshire knitting mills, Reading, Pa. *il* *Ptr Ink* 205:96 O 29 '43

Statistics

Hosiery, 1938-1941. Survey of *Cür Business* 1942 Sup p165 [supplemented in monthly numbers]
 Hosiery shipments, by major divisions, first eight months 1942, compared with first eight months 1941; tabulation. Rayon 23:674 N '42

HOSPITAL libraries

Patients do read! E. Brodman. *Special Lib* 33: 329-31 N '42
 Patients' free library, Johns Hopkins hospital, Baltimore, Maryland. M. T. Chapman. *Special Lib* 33:332-4 N '42
 Patients' library; a guide book for volunteer hospital library service. M. F. Mason. 111p pa \$1 Wilson, H.W. '42
 Publicity for the medical library; St Luke's hospital, New York. H. Lemcke. *bibliog* *Special Lib* 33:335-6 N '42

HOSPITAL social work

Rehabilitation clinics at the New York hospital. *Science* 98:319 O 8 '43

HOSPITAL trains

Ambulance train in Britain for U.S. army. *Ry Age* 114:792 Ap 17 '43

HOSPITALIZATION insurance. See Insurance, Hospitalization

HOSPITALS

Planning of postwar hospitals. I. Rosenfield. *il* *Arch Rec* 93:61-2 My '43

Resolutions passed by the Hospital bureau of standards and supplies. *Science* 97:416-17 My 7 '43

HOSPITALS—Continued

Rules for affiliated hospital units of the Office of civilian defense. Science 97:572-3 Je 25 '43

Vacuum in a modern hospital. J. Naab. *il* Comp Air M 48:6958-9 F '43

See also

Hartford, Connecticut—New York (city)—
cut—Hospitals Hospitals
Health centers

Designs and plans

Hospitals; building types study. *il* plans Arch Rec 93:61-78 My '43

New buildings for 194X: hospital. *il* diag plans Arch Forum 72:146-9 My '43

Superintendent speaks. R. D. Brisbane. Arch Forum 77:112, 114 N '42

Electric equipment

Army hospital; electrical equipment in a Canadian establishment. *il* Elec R (Lond) 132:739-41 Je 4 '43

Hospital installations; abstract. F. C. Raphael. Elec R (Lond) 132:485 Ap 9 '43; Discussion. Electrician 130:395-7 Ap 16 '43

Large hospital installation; St Helier hospital of the Surrey County council. *il* Elec R (Lond) 131:807-10 D 25 '42

Employees

Conditions of work of hospital employees in the United States. Int Labour R 48:56-63 Jl '43

Hospital employee health. L. Brahdry. Ind Med 12:344 My '43

Equipment

Plumbing and water heating for Old Mexico; work on military hospital. *il* Dom Eng 161: 64-5 Je '43

Food service

Mass methods for hospital meals. *il* plans Arch Rec 93:78 My '43

Heating and ventilation

Automatic heat for a hospital. *il* Dom Eng 160:70-1 N '42

Naval hospital officers' quarters; hot water heating system. R. E. Hattis. *il* diag plans Heat & Ven 40:37-40 My '43

Nurseries

New plan standards for hospital nurseries. *il* plans Arch Rec 93:76-7 My '43

Operating rooms

Functional planning of hospitals. L. A. Abramson. plans Arch Rec 93:69-70 My '43

Power

Hospital cleanliness pays dividends; Mount Sinai hospital. *il* Power 87:45-8 Ja '43

Small plants need good engineering too; power plant, Newberry, Mich. state hospital. E. R. Little. plans Power Pl Eng 47: 76-7 Ja '43

Statistics

Incidence of hospitalization, October and November 1942. Pub Health Rep 57:1990 D 25 '42 [cont monthly]

Variation in hospitalization with size of city, family income, and other environmental factors, based on records for 9,000 families in 18 states visited periodically for 12 months, 1928-31. S. D. Collins. bibliog Pub Health Rep 57:1635-59 O 30 '42

HOSPITALS, Emergency

Hospitals for war workers. *il* Arch Rec 93: 74-5 My '43

HOSPITALS, Industrial

Industrial health in Canada; new health centre opened at Lever House. *il* Ind Med 12:285-9 My '43

Prepared for war-time needs; Manhattan rubber manufacturing division of Raybestos-Manhattan, inc. Industrial hospital. *il* Nat Safety N 47:38+ Ap '43

Wartime role of factory hospitals; abstract. J. A. McWethy. Management R 32:170-1 My '43

See also

Dispensaries, Industrial

HOSPITALS, Military

Army decides on masonry construction; hospital unit at Camp White, Oregon. *il* Brick & Clay Rec 103:29-30 S '43

Army hospital built of concrete blocks. *il* Eng N 130:856-7 Je 10 '43

Surgery under fire; Portable surgical hospital at Buna. C. Edmundson. Fortune 28: 156+ Jl '43

Winter protection for construction; army hospital. *il* Eng N 130:738-41 My 20 '43

See also

Hospital trains

HOSPITALS, Naval and marine

Naval hospital officers' quarters; hot water heating system. R. E. Hattis. *il* diag plans Heat & Ven 40:37-40 My '43

HOTELS for war workers. See Housing—Great Britain

HOT air heating. See Heating, Warm air

HOT boxes. See Cars—Bearings

HOT plates

Conductivity determination by the guarded hot-plate method. F. C. Houghten. diag Am Soc T M Proc 42:277-83; Discussion. 284 '42

Measurement of thermal conductivity of thermal insulating materials by means of the guarded hot plate. C. B. Bradley. *il* Refrig Eng 45:337-41 My '43

HOT plates, Electric

Cooker hotplates. J. Allen. Elec R (Lond) 132:249-50 F 19 '43

HOT water heating

Behr-Manning corporation; high pressure hot water heating system; drying system to facilitate production of abrasives and war materials. J. O. Amstutz and J. F. Gschwind. *il* diag Heat & Ven 40:41-5 Ja '43

Carnegie-Illinois armor plate plant. R. E. Hattis. plans Heat & Ven 40:63-73 Je '43

Complete air conditioning features Washington's new Hotel Statler. M. J. Wilson. *il* diag Heat & Ven 40:41-4 Ag '43

Curing sick systems; remodeling hot water heating plant. E. F. Jones. *il* plans Dom Eng 162:85, 88-90 S; 92, 95+ O '43

Curtiss-Wright electric propellers are made and assembled in windowless controlled atmosphere plant. R. A. Rotz. *il* Heat & Ven 40:75-8 S '43

Douglas aircraft company's Tulson plant is year-round air conditioned. R. F. Hurt. *il* diag Heat & Ven 40:54-61 S '43

Emergency valves for high-pressure heating systems. *il* diag Engineer 176:273-4 O 1 '43; Engineering 156:347 O 29 '43

General electric company; plant for aircraft part gear assemblies; air conditioned gauge room; ventilation and heating. D. Adams. *il* diag Heat & Ven 40:46-50 S '43

Heating for the navy; military building on the West coast. *il* Dom Eng 161:52-3 Mr '43

Heating the ships for victory. J. Clarke. *il* Heating-Piping 15:240-1 My '43

How to size radiators and convectors when used in the same hot water heating system. F. E. Giesecke. Heating-Piping 15:408-9 Ag '43

Idea on fuel conservation; connecting coal burning water heater to oil-fired boiler. *il* Dom Eng 161:72-3 Mr '43

Naval hospital officers' quarters; hot water heating system. R. E. Hattis. *il* diag plans Heat & Ven 40:37-40 My '43

Operation of the Research home with reduced room temperatures at night. A. P. Kratz, W. S. Harris and M. K. Fahnestock. Heating-Piping 14:743-9 D '42

Piping cost cut; forced circulation in hot-water heating system. Business Week p44+ F 20 '43

Planning the post-war power plant; take advantage of high-pressure boiler and high-temperature hot water heating. P. L. Geiringer. diag Textile World 93:90-1 Mr '43

HOT water heating—Continued

- Plumbing and heating in a modern shipyard. *il* Dom Eng 161:53-5 Ja '43
 Proved: smaller boilers, radiators, pipes point way to worthwhile economies; I-B-R research home. plan Dom Eng 162:82-4 Ag '43
 Reducing weights and costs of radiator heating systems; experiment at Washburne trade school. A. J. Sander. *il* diags plan Heat & Ven 39:17-19 D '42
 Should the heating system be drained? Power Pl Eng 46:100+ D '42
 Steam for water heating. diags Power 87: 126-8 F '43

Control

- Controlled heating; electric space-heating machines of the hot-water-radiator type in association with thermal storage cylinders. diags Elec R (Lond) 132:613-15 My 7 '43
 Heating buildings; improved performance of a thermal-storage installation. F. Mather. Elec R (Lond) 132:250-1 F 19 '43
 Space-heating machines; controlling hot-water radiator type. R. Grierson. Elec R (Lond) 131:581-2 N 27 '42

Panel system

- Army air force airplane hangars; radiant heating system. E. Hall. *il* diag Heat & Ven 40:51-3 S '43
 Court house system combines panel heating and cooling, conditioning; Yakima County, Wash. court house. E. L. Weber. diags Heating-Piping 15:13-15 Ja '43
 Radiant heat used in modern New England home. *il* Heat & Ven 40:28-30 Mr '43
 Radiant heating and cooling for a new plant cafeteria. T. N. Adam. *il* diags plans Heating-Piping 15:277-80 Je '43
 Radiant heating for a war building. E. L. Blair. flow diag *il* Eng N 131:620-2 O 21 '43
 Radiant heating; industrial and residential. *il* diag Dom Eng 162:72-3 O '43
 Radiant heating serves war plant. E. L. Blair. *il* diags Power 87:672-3+ O '43
 Weather-controlled residential radiant heating system. P. E. Frederick. *il* diags Heat & Ven 40:34-7 O '43

HOT water heating, Industrial

- High-temperature heating with hot water in dyehouses. P. L. Geiringer. *il* Textile World 93:100-1 S '43

HOT water supply

- Converting from oil to district steam. L. W. Mauger. *il* Heating-Piping 15:469-70 S '43
 Economical hot water service for hotels. P. L. Geiringer. diags Power Pl Eng 46: 79-81 D '42
 How should this exhaust steam water heater be piped? diags Heating-Piping 15:76-7 F '43; Discussion. 15:185-8 Ap '43
 New aspects in the prevention of damage to materials by hot water, from the hygienic and chemical-technical viewpoints. F. Konrich and L. W. Haase. Am Water Works Assn J 35:1133-4 Ag '43
 Plumbing and water heating for Old Mexico; work on military hospital. *il* Dom Eng 161:64-5 Je '43
 Problem of copper and galvanized iron in the same water system. L. Kenworthy. Engineering 156:85-6, 125, 164, 205 Jl 30, Ag 13, 27, S 10 '43
 Some problems in the application of electric heating to residential and commercial premises; with cost data. W. Gilchrist. diags Inst E E J 89 pt 2:377-90; Discussion. 390-9 O '42

See also

- Electric water heaters Gas water heaters
 Steam water heaters

HOT water tanks

- Cement lining salvages hot water tanks. diags Eng N 131:482-3 S 23 '43
 Hot water tank hook-ups. W. F. Schaphorst. diags Heat & Ven 40:59 Ap '43
 Problem of copper and galvanized iron in the same water system. L. Kenworthy. Engineering 156:85-6, 125, 164, 205 Jl 30, Ag 13, 27, S 10 '43

Explosions

- Dynamite plus; tank explosion wrecks home. *il* Dom Eng 162:67 O '43

- Explosion of storage water heater causes damage and excitement. *il* Locomotive 44: 182-3 Ap '43

- Why boiler and hot water tank explosions are violent. *il* Locomotive 44:162-7 Ap '43

HOTBEDS, Electric

- Electric heating of hotbeds. A. G. H. Dent. *il* Electrician 129:632-4 D 25 '42
 Electric hotbeds; abstract. C. A. C. Brown and E. W. Golding. Elec R (Lond) 131:547 O 30 '42

HOTELS

- Army purchases of hotels. Arch Forum 78: 106+ Mr '43
 Great evacuation; army's cancellation of leases leaves hotels with big problem. Business Week p28+ Jl 10 '43
 Hotel as an organism. R. Heap. diags Arch Rec 94:68-9 S '43
 Hotels: building types study. *il* plans Arch Rec 94:67-82 S '43
 Innkeeper no. 1; Air forces still hangs onto 240 of the 473 hotels taken over by the army. Business Week p28+ O 9 '43
 No more beds. Business Week p34+ F 20 '43

See also

- Dormitories
 Restaurants
 also subdivision Hotels under names of cities, e.g. Chicago—Hotels

Advertising

- Hotel literature needs revising. C. Pierre. *il* Ptr Ink 204:26 S 10 '43

Air conditioning

- Carrier conduit system in Washington Statler. Refrig Eng 46:111 Ag '43
 Complete air conditioning features Washington's new Hotel Statler. M. J. Wilson. *il* diag Heat & Ven 40:41-4 Ag '43
 Last word in heating and air conditioning; Statler hotel, Washington, D.C. *il* Dom Eng 161:74-5 My; 72-3 Je '43

Designs and plans

- New buildings for 194X; hotel. *il* diags plans Arch Forum 72:74-9 My '43
 Setting new planning standards; Hotel Statler. *il* plans Arch Rec 94:70-4 S '43
 Washington Statler; views, plans, and construction outline. Arch Forum 78:61-76 Je '43

Equipment

- Economical hot water service for hotels. P. L. Geiringer. diags Power Pl Eng 46: 79-81 D '42
 Gas kitchens chosen for Washington's newest and largest hotel. T. M. Offutt. *il* Am Gas Assn Mo 25:373-4 S '43
 Hardware design and engineering in a noteworthy installation at Washington's Hotel Statler. *il* diags Arch Rec 93:84+ My '43
 Steel penthouses for storage rooms; Dayton Biltmore hotel. *il* Sheet Metal Worker 33: 33 N '42

Finance

- Real estate securities; Hotel Lexington. Comm & Fin Chr 157:908 Mr 11 '43

Fires and fire protection

- Fire traps with meals. T. A. Fleming. East Underw 44:21 Ap 2 '43

Heating and ventilation

- Heat economy in large hotels. P. L. Geiringer. Power Pl Eng 47:67-9 Ag '43

Insurance requirements

- Liability lines for hotels. L. S. McCombs. *il* Spectator (Property ed) 9:10-14 Ag 5 '43

Lighting

- Baker hotel, Dallas, Texas; lighting of lobby, banquet room and mezzanine. *il* Illum Eng 37:619-21 D '42

Management

- Service pains. Business Week p35 Ap 10 '43

Securities

- Hotel bonds strong in real estate security market. Comm & Fin Chr 158:601 Ag 12 '43

HOTELS *Securities Continued*

Inflation hedge; hotel securities show market strength. *Comm & Fin Chr* 158:219 J1 15 '43

Park Central hotel general mortgage bonds. *Comm & Fin Chr* 157:1770 My 13 '43

Post-war future of New York City hotels. *Comm & Fin Chr* 157:1959 My 27 '43

Sherry Nederland hotel; first mortgage bonds. *Comm & Fin Chr* 157:1284+ Ap 8 '43

Three hotel bonds that can share in profits. *Comm & Fin Chr* 157:356 Ja 28 '43

Service

Wisconsin salesman organize a Cooperative riders' club; hotels maintain bulletin boards for posting of itineraries. *Sales Management* 51:67 D 15 '42

Statistics

Average sale per occupied room, rooms occupied, restaurant sales index, 1938-1941. Survey of Cur Business 1942 Sup p100 [supplemented in monthly numbers]

HOTHOUSES. See Greenhouses**HOU, Te-pang, 1890-**

Sketch. *Science* 98:381-2 O 20 '43

HOUDAILLE-HERSHEY corporation

Strong preferred yielding 6.6%. H. Lawrence. *Harron's* 23:1 My 10 '43

HOUDRY process

Houdry announces new catalytic process. *Oil & Gas J* 41:10 Ja 21 '43; *Nat Pet N* 35:15 Ja 20 '43; *Chem & Eng N* 21:186 F 10 '43

Producing wartime aviation gasoline by improved Houdry catalytic process. *Bibliog I* *Nat Pet N* 35 pt 3:1264-6, R208 My 5 '43

Thermofor catalytic cracking process. T. P. Simpson and others. *Flow data Oil & Gas J* 41:96+ N 12 '42; *Same*. *Nat Pet N* 34 pt 2:1427-31 N 25 '42; *Same*. *Am Pet Inst Proc* 23(3):59-66 '42; *Same*. *Pet Eng (Ref annual)* 14:209-11, 213-14 J1 1 '43; *Abstract, Chem & Met Eng* 49:156-9 D '42

Used equipment speeds Sun butadiene plant construction. J. P. O'Donnell. *Oil & Gas J* 41:38-9+ N 26 '42

HOURS of business. See Banks and banking—

Hours of business; Department stores—

Hours of business; Gasoline service stations—

Hours of business; Retail trade—

Hours of business; Staggered hours

HOURS of labor

Compliance with 48 hour week rule held difficult for insurance companies. *East Underw* 44:33+ Ap 2 '43

Controls failer. *Business Week* p87+ Mr 6 '43

Determination of the optimum work week in United States war industries. *Int Labour R* 47:243-4 F '43

Effect of 48-hour work week analyzed in reports from key centers. *Iron Age* 151:110-12+ F 18 '43

Effects of forty-eight hour week. *Trusts & Estates* 76:217 Mr '43

Establishment of minimum 48-hour week. *Monthly Labor R* 56:471-3 Mr '43

For 52-hr. week; WMC weighs increase in minimum. *Business Week* p86+ My 1 '43

Fortune management poll; about a longer work week. *Fortune* 27:144+ F '43

48 hour minimum work week established; overtime pay above 40 hours continues. *Comm & Fin Chr* 157:564+ F 11 '43

48-hour week. *Nat City Bank* p27 Mr '43

48-hour week. W. Powers. *Banking* 35:27 Ap '43

48-hour-week areas to grow. *Business Week* p15-16 F 20 '43

48-hour week compliance problems. *Elec W* 119:1122-3 Ap 3 '43

48-hour week held equivalent to adding 1,000,000 to labor force. *Steel* 112:51-2 F 15 '43

48-hr. week in steel deemed confusing. *Iron Age* 151:124 My 20 '43

48-hour week proposal seen as effort to bypass wage formula; suburban Chicago 48-hour week protested by employers. *Steel* 112:34-5 Mr 29 '43

48-hour work week order; summary. R. M. Mears. *J Account* 75:331-3 Ap '43

Hartford insurers granted relief on 48 hour week; situation in Seattle. *Nat Underw* 47:1 Ap 1 '43

Hours of work and holidays in Great Britain. *Int Labour R* 47:89-90 Ja '43

Hours of work; with tables giving average hours worked in various industries. Survey of Cur Business 23:8-9+ Je '43

How the 48-hour week operates. *Sheet Metal Worker* 34:50 Ag '43

Industrial health and hours of work in Great Britain. H. M. Vernon. *Monthly Labor R* 56:1163-4 Je '43

Late developments in manpower; 48-hour work week. *Factory Management* 101:90+ Mr '43

Lengthened work schedule; Consolidated gas electric light & power co. of Baltimore. W. A. Kelly. *Am Gas Assn Mo* 25:319-20 J1-Ag '43

Modify clerical work week in Los Angeles. *Nat Underw* 47:31 S 2 '43

New hours of work regulations in Belgium. *Int Labour R* 47:654-7 My '43

President opposes longer work week as lowering productive efficiency. *Comm & Fin Chr* 156:1816 N 19 '42

Problems of work week over 40 hours. M. A. Hills. *Comm & Fin Chr* 153:1431 O 7 '43

Recommended optimum hours in Australia. N. T. Johnson. *Monthly Labor R* 57:792-3 O '43

Regulations on the 48-hour week. *Monthly Labor R* 56:666-8 Ap '43

Senate group urges 48-hour work week. *Comm & Fin Chr* 156:2157 D 17 '42

Some probable results of a 48-hour week. *Harron's* 23:1 Mr 22 '43

Steel advisory committee holds WMC hours regulation confusing. *Steel* 112:72+ Je 7 '43

Steelmakers approve 48 hour week; hope for modifications. *Steel* 112:70 My 17 '43

WMC flayed for creating intolerable situation in steel industry with its 48-hr. week policies. *Iron Age* 152:92-4 J1 22 '43

Why 48 hours? steel industry not convinced longer work-week is necessary. *Business Week* p88+ J1 21 '43

Would a longer work week pay? J. K. Westerfield. *Am Business* 12:16-18 D '42

See also

Overtime

Part time employment

Staggered hours

Woman—Employment

Shift schedules

How about the 168-hour week? *Fortune* 26:70+ D '42

How to arrange working shifts for maximum production. *Steel* 112:126+ Ap 12 '43

Multiple shift problems. N. Kleitman. *Foundry* 71:139-41 Ja '43; *Same*. *Min Cong J* 29:15-16 Ja '43

Schedule upheld; arbitrator sustains right of management to shift to four turns. *Business Week* p72-3 Ja 16 '43

Short shift pays; white-collar men adept on many part-time war jobs. *Business Week* p83-3 Ap 10 '43

Split-shift as a solution of the manpower problem. B. R. Otto. *Aero Digest* 42:313+ Je '43

Split-shift plan adds man-hours to war effort. *Int Factory Management* 101:105 Je '43

Work schedules for a 6-day week. *Power Engr* 47:94-6 O '43

Working around the clock; abstract. P. Pikors and P. Pikors. *Management R* 32:334-6 S '43

See also

Night work

Statistics

Average hours worked per week in selected manufacturing industries, third quarter, 1939 and 1942. Survey of Cur Business 23:4 D '42

Average work week in British metal trades. *Monthly Labor R* 56:1201-2 Je '43

Earnings and hours in the pocket-cutlery industry, July 1942. J. F. Lacikey. *Monthly Labor R* 56:1015-20 N '42

Earnings in machine-tool-accessories industry, 1942. O. C. Clark. *Monthly Labor R* 56:336-46 F '43

HOURS of labor—Statistics—Continued

- Handbook of labor statistics, 1941 edition; v2, Wages and wage regulation. U S Bur Labor Statistics Bul 694:1-426; pa 45c Supt. of doc. '42
- Hourly and weekly wages and hours worked per week; tabulations. Automotive & Aviation Ind 88:88-90 Mr 15 '43
- Statistics of hours of work in industry in various countries, yearly 1929-1941 and quarterly March 1941-December 1942. Int Labour R 47:408-10 Mr '43 (cont quarterly)
- Union wages and hours in the baking industry, June 1, 1942. Monthly Labor R 56:347-55 F '43
- Union wages and hours in the building trades, July 1, 1942. K. E. Mohn and A. V. Simi. Monthly Labor R 55:1272-8 D '42
- Union wages and hours in the printing trades, June 1, 1942. Monthly Labor R 56:558-84 Mr '43
- Wage and hour statistics. Published in Monthly labor review
- Wages and hours of union motortruck drivers and helpers, June 1, 1942. Monthly Labor R 56:128-35 Ja '43

HOUSE decoration

- Town house for Sherman Fairchild, New York; views, plans, and construction outline. Arch Forum 78:37-50 Ap '43

See also

- Furniture Trimmings (for Recreation rooms drapery, upholstery, etc.)

HOUSE organs

- Assigns new wartime objectives to localized paper for farmers; Republic Steel's Farm spokesman. Il Ptr Ink 201:14-15+ N 27 '42
- Contacts today for contracts tomorrow; how house organs are helping. H. Botsford. Barron's 23:9 Ag 16 '43
- Have you a war cartoonist in your plant? James Barstow's Hopeless Hector and his house magazine editorial cartoons. Il Ptr Ink 203:70+ My 7 '43
- How offer proved industrial house magazine is being read; SKF industries gets 13% response. R. A. Sholl, jr. Il Ptr Ink 205:21+ O 8 '43
- Ideas that the house magazine should sell. W. Peterson. Ptr Ink 201:24 N 13 '42
- Lincoln house organ gives weldors opportunity for self-expression. G. E. Stedman. Il Ind Marketing 28:35-6, 38 O '43
- Merchandising your house publication. F. J. O'Brien. Il Ptr Ink 203:68-9 Ap 9 '43
- New formula for a house publication; Graham transmissions, inc. L. A. Graham. Il Ind Marketing 27:34+ D '42
- No spine, no spirit, no sparkle: is your house organ like that? Sales Management 52:48-9 My 1 '43
- Revival of house organs. Trusts & Estates 76:446-7 My '43
- Trading Post for jobbers does three-way job for Imperial Brass. E. F. Todd. Il Ind Marketing 27:32-3+ D '42
- See also*
- Employees' magazines

Names

- How to pick a house organ name. P. H. Erbes, jr. Il Ptr Ink 202:20-1+ Mr 26 '43

Printing

- Presentation of sponsored magazine. J. C. Gries. Il Inland Ptr 110:33-6 Ja '43
- Professional treatment helps the sponsored magazine. J. C. Gries. Il Inland Ptr 110:27-30 F '43
- Sponsored magazines; good business for wide-awake printers. J. C. Gries. Il Inland Ptr 110:37-40 D '42

Typography

- Modern design and typography does a job; Libby, McNeill & Libby Kitchen chatter. L. Barfuss. Il Inland Ptr 111:34-5 My '43

HOUSE organs, Employees'. See Employees' magazines**HOUSE painting**

- Conserving linseed oil in house paints. J. F. Broeker. Paint Oil & Chem R 105:10+ Je 3 '43

- Sealing knots under house paint, by Western New York club. Oil Paint & Drug Rep 144:52 N 1 '43

HOUSEFLIES. See Flies**HOUSEHOLD budget. See Budget, Household****HOUSEHOLD finance corporation**

- Appellate court affirms finding for company.

Comm & Fin Chr 157:2449 Je 28 '43

- Court voids notes of three borrowers on legal technicality. Comm & Fin Chr 157:993 Mr 15 '43

- Decline in small loan business. H. Lawrence. Barron's 23:5 F 22 '43

HOUSEHOLD furniture insurance. See Insurance, Household furniture**HOUSEHOLD pests***See also*

- Cockroaches
Flies

HOUSEHOLD products

- Attention manufacturers! 115 specific suggestions for postwar product and home improvements. A. P. Hirose. Adv & Sell 36:15-16+ S '43

See also

- Kitchen utensils

HOUSEHOLD products industries

- Appliance field hustles to meet demand for home dehydrators. R. C. Fyne. Il Sales Management 52:66, 68+ Ag 1 '43
- Average family spends \$472 when moving into new home. Ptr Ink 203:29 Je 18 '43
- No more weaker sex, after the war; women to demand and get, contrivances ultra convenient and labor saving. A. Hirose. Ptr Ink 203:45 My 7 '43
- Post war competitive trends in consumer durable goods. E. A. Krauss. Il Mag of Wall St 72:285-7+ Je 26 '43

HOUSEKEEPING occupations

- Women in public-housekeeping occupations in California. Monthly Labor R 56:914-21 My '43

HOUSEKEEPING service (social work)

- Homemaker service as an aid to war effort. M. V. Manginelli. Monthly Labor R 56:913-14 My '43
- Supervised homemaker service, a method of child care. U S Children's Bur Pub 296:1-36; pa 10c Supt. of doc. '43

HOUSES

- Ahead: the world's finest homes! Il plans Am Bld 65:82-5 O '43
- America's builders speak on post-war home building. J. B. Mason. Il plans Am Bld 65:32-45+ My '43
- Arc-welded T-beams for use in residences. E. J. Slygh. Il diags W Soc E J 48:59-67 Je '43
- House of the future, 1947-1957? K. K. Stowell. Arch Rec 94:41 JI '43
- Houses for human beings. Il plan Fortune 27:100-5+ Ap '43
- How Simms of Portland builds better war housing. Il plans Am Bld 65:42-5 N '43
- How to frame 30' x 24' house and stay within WPB 5 board ft. rule. Il plans Am Bld 65:38+ Je '43
- Masonry for war housing; how to conserve lumber and nails. F. W. Cortright. Il plan Am Bld 64:46-7+ D '42
- More homes for families with children, Detroit builders pledge. Il plans Am Bld 65:48-50+ Je '43
- Of things to come. L. Friedman. Gas J (Lond) 241:464, 469+ Ap 14 '43
- Practical way to save fuel and keep the house comfortable; adding insulation to your house. Consumers' Research Bul 11:20, 23 O '42
- Radiant heat used in modern New England home. Il Heat & Ven 40:28-30 Mr '43
- Small-town Title VI job for post-war. Il diags plan Am Bld 65:48-9 S '43
- Suburban group, 24 houses, Sioux Falls, South Dakota. Il plans Arch Forum 79:103-7 O '43
- Sun-exposed glass walls provide test for solar heating. Il Glass Ind 24:384-5 S '43
- War housing at Vallejo, Calif. Il diags plans Arch Forum 79:54-5 JI '43
- What kind of a post-war house? R. Evans. Il plans Am Bld 65:36-9+ Ja '43

HOUSES—Continued

What will war do to tomorrow's home? D. Bareuther. plans Am Bld 65:52+ N '43

See also

Apartment houses
Architecture, Domestic
Brick houses
Bungalows
Concrete houses
Country houses
Cottages
Dormitories
Farmhouses
Home ownership
Housing
Ranch houses
Steel houses
Suburban homes
Week-end houses

HOUSES, Brick. See Brick houses

HOUSES, Concrete. See Concrete houses

HOUSES, Demountable

Demountable buildings. Il Ry Age 115:55-6 J1 10 '43

Emergency war-time housing in the United States. Il Engineering 155:110, 118-20 F 5 '43

Single wall system of house assembly. S. Paul. Il plans Eng N 130:362-4 Mr 11 '43

Six-room home in six hours' time. Il Eng N 130:260-1 F 13 '43

This little house goes to market? Il diag plans Am Bld 65:52-3 My '43

HOUSES, Model

Concrete house of the future; Ketchin brick and tile co. demonstration house. Il Rock Prod 46:72+ F '43

Our small homes will have all practical conveniences; prize award small home, by D. J. Robinson, Elgin, Ill. for two people. Il diag plans Am Bld 65:44-5 My '43

Standardized war models to aid private builders. Il diag plans Am Bld 65:30-1+ Ag; 38-40 S; 42-5 N; 38-9 D '43

HOUSES, Portable

Building time: 20 minutes; suitcase house. Il Arch Forum 79:45 S '43

Expandable portable house. Il plan Am Bld 65:33+ Je '43

Folded house. Il Sci Am 169:222 N '43

House folds up like accordion. Am Gas Assn Mo 25:310 J1-Ag '43

Trailer house; TVA's new approach to mobile shelter. Il plan Arch Rec 93:49-52 F '43

See also

Houses, Demountable

HOUSES, Prefabricated

Brick prefabrication experiments conducted in Glasgow. Brick & Clay Rec 103:16 O '43

Directory of wartime prefabricators. Il diag plans Arch Forum 78:79-86+ Ap '43

Early Fox; department store sells Homasote house. Il Arch Forum 78:35 Ap '43

Electrical possibilities of pre-fabricated buildings; abstracts. G. Smith. Electrician 130: 351 Ap 2 '43; Elec R (Lond) 132:451 Ap 2 '43

Emergency war-time housing in the United States. Il Engineering 155:110, 118-20 F 5 '43

Engineered home of tomorrow. B. Outerbridge. Il Burroughs Clearing House 27:26-7+ Mr '43

Factory-made houses; electrical fittings as part of mass produced units. diag Electrician 131:231-2 S 3 '43

Four-cylinder house with self-stiffening walls of curved fiberboard. Il diag plan Arch Forum 79:102 Ag '43

House in six hours. Il Sci Am 168:258 Je '43

Largest department stores of many cities promote post-war home savings. Il Am Bld 65:48+ J1 '43

Modular shelter; proposed new system of prefabrication permits wide variety of expandable plans. Il diag plans Arch Forum 79:71-4 J1 '43

New buildings for 194X: house factory for production of prefabricated houses, flow chart Il plans Arch Forum 72:134-7 My '43

Pre-fab homes a postwar opportunity. E. Dahlberg. Il Am Business 13:8-10+ J1 '43

Prefab methods speed Seattle housing. Il diag plan Am Bld 64:50-1 D '42

Prefab sections create quick housing; plywood panels for floor, walls and roofs. Il plans Am Bld 64:35+ N '42

Prefabricated house. Il diag plans Arch Forum 77:49-60 D '42; 78:53-64 Ja; 67-78 F; 71-82 Mr; 71-86+ Ap; 89-96 Je '43

Prefabricated wiring for prefabricated houses. Il Elec West 90:42-3 Ja '43

Prefabrication; assembly lines reach out for markets. D. Haskell. Il Arch Rec 93:62-9 Je '43

Prefabrication case study; how E. L. Bruce builds war houses. L. M. Forbes. Il diag plan Am Bld 65:46-7+ F '43

Prefabrication case study; Prefabricated products co, Seattle, Wash. B. L. Johnson. Il diag plans Am Bld 65:46-8+ Ja '43

Prefabrication; list of prefabricators. Il Arch Rec 93:75-9 Je; 94:84 O '43

Prefabrication; technical advances: present and postwar. H. P. Vermilya. Il diag Arch Rec 93:70-4 Je '43

Prefabrication up-to-date. F. V. Wilson, Jr. Brick & Clay Rec 102:30+ F '43

Prefabrication, up to date and down to earth. bibliog Il Am Bld 65:36-47+ Mr '43

Prefabrication up-to-date; summary of prefab history; with directory of prefabricators up-to-date and data on operations. Il Am Bld 65:44-5+ Ja; 95 F '43

Prefabrication vs. architects' ethics. G. L. Kaufman. Arch Rec 94:30+ O '43

Prefabricators view their future and the architect's. Arch Rec 94:52 J1 '43

Rush dry-built homes by train from Tonawanda, N.Y. to Dayton, O. Il Am Bld 65: 36-7+ Ag '43

Seventy houses a day; Victory Village project for Norfolk shipyard workers. Il Sheet Metal Worker 34:56 Ag '43

Texans break all prefab records; 16' x 16' victory huts. Il plans Am Bld 65:42-3+ S '43

See also Prefabricated home manufacturers association

HOUSES, Remodeled

Builders busy with home conversions; program under NHA. Il plans Am Bld 65:34-5 Ag '43

Conversion still an important source of war housing; four modern apartments out of unlivable mansion. Il plans Am Bld 65:42 J1 '43

First capitol conversion is simple, economic, fast. Il plans Arch Forum 78:53 Je '43

How abandoned garage was made into duplex for war workers. Il plans Am Bld 65:64 Ja '43

How to convert old homes into apartments with Uncle Sam as a partner. Il plans Am Bld 65:36-7+ Je '43

It would have been better this way; criticizes remodeling jobs. Il Am Bld 65: 58-9 N '43

Jake on the job for U.S.A.; makes six war worker apartments from one old house. Il plans Am Bld 65:42-3+ F '43

Look again; there's a house in that scrap heap! Il plans Am Bld 65:35 F '43

Parsonage gets needed wartime reconditioning. Il plans Am Bld 65:60 N '43

Remedy is remodeling; house in Nashville, Tenn. Il plans Arch Rec 93:52-3 My '43

Remodeled house in Bronxville, N.Y.; views, plans and construction outline. Arch Forum 78:64-6 F '43

HOUSES, Row

Apartment-row house project, Chicago; incity rental project. Il plans Arch Forum 79:111-19 O '43

800 houses, 3½ months at Norfolk, Va. Il diag plan Am Bld 65:36-7+ J1 '43

HOUSES, Steel. See Steel houses**HOUSES, Two-family.** See Architecture, Domestic—Two-family houses**HOUSING**

Basic data system of the National housing agency and its problem of obtaining source material under war conditions. F. L. Huesmann. Special Lib 34:204-11+ J1-Ag '43

Housing and the democratic process; with sketches by G. T. LeBoutillier. J. Hudnut. Arch Rec 93:42-6 Je '43; Reply. G. H. Gray. 94:52-5+ S '43

How private enterprise can rebuild blighted areas. Il Am Bld 65:102-4+ O '43

Parents Magazine survey; postwar housing. Arch Forum 79:44 J1 '43

Shall we ration crowding? F. J. Adams. Tech R 45:368-70+ My '43

HOUSING—Continued

Urban planning and public opinion; study by Bureau of urban research at Princeton university. C. M. Jones. J Land & Pub Util Econ 19:87-9 F '43

See also

Apartment houses
Architecture, Domestic
Building—Cost
City planning

Dormitories
Housing finance
Housing projects
Negroes—Housing
Rent

Costs

Index of costs for standard house in representative cities, 1935-1939=100; 1938-1942. Eng N 130:638 Ap 22 '43

Index of small house costs, 1936-1942. Eng N 130:636 Ap 22 '43

War-housing projects cost summary. Eng N 130:634 Ap 22 '43

Economic aspects

What makes the housing market? postwar housing potential by price groups. S. M. Livingston. Arch Forum 78:45-8 F '43

Finance

See Housing finance

Occupancy statistics

See Housing—Statistics

Standards

New war housing construction standards. J. M. Dickey. Arch Rec 93:10 Mr '43

New WPB war housing standards. diags Am Bld 64:48-9+ D '42

Statistics

Building construction, 1941. U S Bur Labor Statistics Bul 713:1-130; pa 20c Supt. of doc. '42

Dwellings and density of inhabitants in certain European countries. Pub Util 32:21 Jl 8 '43

Efficiency of deep stratification in block sampling. B. J. Tepping, W. N. Hurwitz and W. E. Deming. Am Stat Assn J 38:93-100 Mr '43

Facts from the 1940 census of housing. H. G. Brunsmann and D. Lowery. J Land & Pub Util Econ 19:89-93 F '43

Housing census: heating fuel and equipment. Gas Age 90:28-9 N 19 '42

Housing census: refrigeration equipment in occupied dwelling units for the United States, 1940. Gas Age 90:29 D 3 '42

Housing provided in 138 defense areas. A. C. Findlay. Monthly Labor R 55:1203-12 D '42

Marketing and sampling uses of population and housing data. A. R. Eckler and E. P. Staudt. Am Stat Assn J 38:87-92 Mr '43

New dwelling units in nonfarm areas, first 9 months of 1942. G. Schumm. Monthly Labor R 55:1212-18 D '42

New dwelling units in nonfarm areas, first quarter of 1943. G. Schumm. Monthly Labor R 56:1149-54 Je '43

New dwelling units in nonfarm areas, first half of 1943. G. Schumm. Monthly Labor R 57:749-55 O '43

New dwellings decrease during first six months of 1943. Comm & Fin Chr 158:717 Ag 19 '43

New housing in nonfarm areas, 1941 and 1942. G. Schumm. Monthly Labor R 56:652-60 Ap '43

Occupancy of housing in war-production centers. B. B. Lapin. J Land & Pub Util Econ 19:222-4 My '43

Residential vacancies in wartime United States. K. W. Johnson. Survey of Cur Business 22:19-22 D '42

See also

Housing surveys

Vacancy statistics

See Housing—Statistics

Argentina

Social services for residents of low-cost housing in Argentina. Monthly Labor R 57:508-9 S '43

Australia

Australians study housing problems. D. R. Crone. For Comm W 12:14+ Ag 21 '43

Canada

Canadian war housing shows sound planning. il diags plans Am Bld 65:38-9 Ag; 44-5 S '43

Chicago

Apartment-row house project, Chicago; in-city rental project. il plans Arch Forum 79:111-19 O '43

Applications of residential data from the Chicago land use survey. H. M. Mayer. J Land & Pub Util Econ 19:85-7 F '43

Gypsies snagged; no vacant places to move into. Business Week p38+ My 1 '43

Housing plan for Chicago. E. Woods. W Soc E J 48:120-2 S '43

Chile

Chile plans low-rent homes. W. K. Harrison. il For Comm W 13:5+ O 9 '43; Same abr. Concrete 51:33 O '43

Connecticut

State housing authority set up by Connecticut to assist rehabilitation. Eng N 131:297 Ag 19 '43

Denmark

Denmark's housing problems serious. For Comm W 12:27-8 S 18 '43

Detroit

Satellite town for the Detroit area; proposal for a complete residential community of 15,000. il plans Arch Forum 79:91-9 O '43
Store homes; Detroit's effort to convert idle commercial units. Business Week p29-30 Ap 10 '43

Great Britain

British hostels for unmarried war workers. il diags plans Arch Forum 78:65-70 Ja '43

British plan big post-war building program. il Am Bld 65:54-5 Ja '43

Britons plan post-war houses for workers. plan Ptr Ink 203:48+ My 21 '43

Brown on housing. Economist 145:529 O 16 '43

Concrete construction is replacing timber in British wartime housing. Eng N 130:741 My 20 '43

Hostels for Britain's war workers. F. R. S Yorke. il diags plans Arch Rec 94:79-82 S '43

Housing needs. Economist 143:630 N 21 '42

Nation's shelter. Economist 144:583-4 My 8 '43

New houses for old. Economist 145:132-3 Jl 31 '43

Palmer to the President. Arch Forum 78:33-5 Ja '43

Post-war planning in England. B. Mittel. Gas Age 92:23-4 Jl 15 '43

Rent dilemma. Economist 144:136-7 Ja 30 '43

War workers' hostels. il Elec R (Lond) 132: 571-3 Ap 30 '43

New York (city)

Metropolitan housing plan approved. East Underw 44:10 Je 11 '43

No holds barred; legal barrier to Manhattan's vast postwar housing project. Stuyvesant Town, hurdled. Arch Forum 78:50 Je '43

Parkchester 2 for 194X. il Arch Forum 72: 66+ My '43

Proposed postwar housing project; Stuyvesant housing project. il plan Arch Rec 93:16 Je '43

Norfolk, Virginia

Municipal improvements for large war housing projects in Norfolk and Portsmouth. H. W. Alexander. il diags plan Pub Works 74:20-6+ F '43

Pittsburgh

Home swap plan. Business Week p90+ F 20 '43

Portsmouth, Virginia

Municipal improvements for large war housing projects in Norfolk and Portsmouth. H. W. Alexander. il diags plan Pub Works 74:20-6+ F '43

St John, New Brunswick

Canadian council specifies brick for municipal housing projects. St John. il Brick & Clay Rec 103:38-9 S '43

HOUSING—Continued

San Francisco

Converted war housing, San Francisco; how sites and utilities left over from temporary projects may be re-used to create post-war residential communities. *il plans Arch Forum* 79:69-75 O '43

War housing that's built to last; plumbing and heating equipment, Metropolitan life insurance company's Parkmerced building project. *il Dom Eng* 161:52-3 My '43

Seattle

Services in check; Seattle protests effort of armed forces to preempt more hotels and apartment houses. *Business Week* p34 My 15 '43

Scotland

Scotland needs hundreds of thousands of new houses. *For Comm W* 10:23 Ja 16 '43

United States

Ahead: the world's finest homes! *il plans Am Bld* 65:82-5 O '43

Builders of 1-family houses in 11 areas, 1940 and 1941. A. C. Findlay. *Monthly Labor R* 56:301-7 Ap '43

Building permit survey, 1939. U S Bur Labor Statistics *Bul* 689 v 1:1-85 '41; v2:1-134 '42; v3:1-116 '42; v4:1-46 '42; v6:1-38 '41; v8:1-28 '42; v9:1-73 '41

Great housing demand predicted after war necessitating changes in building industry. A. H. Ferguson. *Comm & Fin Chr* 156:1884 N 26 '42

Home building wave of the future. W. C. Bober. *il Am Bld* 65:32-4+ Ja; 54+ F '43

Homes for veterans considered by NAHB. *Am Bld* 65:30-1 Je '43

Homes up to \$6000 will dominate market, Parents' magazine survey shows. *il Gas Age* 92:21-4 Ag 12 '43

Housing for peace. *Business Week* p26+ My 29 '43

How many postwar houses? T. S. Holden. *Arch Rec* 94:50-1+ S '43

Inter-industry cooperation in electrifying post-war housing. I. W. Clark. *Edison Elec Inst Bul* 11:245-8 Ag '43

Interview on problems of immediate postwar period. J. B. Blandford. *Arch Forum* 79:60-4+ S '43

Kaiser summons private enterprise to do post-war housing job. *Am Bld* 65:16 Ja '43

Large volume of new construction and modernization seen for post-war period. M. Bodfish. *Comm & Fin Chr* 158:1699 O 28 '43

Million houses, more or less; potential market for postwar houses. R. Newcomb. *Arch Rec* 94:48-51 Ji '43

NRPB on housing; public works. *Arch Forum* 78:34 Ap '43

New dwelling units in nonfarm areas, first 9 months of 1942. G. Schumm. *Monthly Labor R* 55:1212-18 D '42

New dwelling units in nonfarm areas, first half of 1943. G. Schumm. *Monthly Labor R* 57:749-55 O '43

New housing in nonfarm areas, 1941 and 1942. G. Schumm. *Monthly Labor R* 56:652-60 Ap '43

New type house seen for post-war building. A. F. Schubert. *Comm & Fin Chr* 157:1019 Mr 18 '43

Postwar building; Federal housing administration launching survey. A. H. Ferguson. *Dom Eng* 162:68-9 S '43

Postwar housing program for urban areas. H. Bartholomew. *il Civil Eng* 13:276-8 Je '43

Postwar markets; facts and figures. *Arch Forum* 78:51-2 Je '43

Predicts large, sustained post-war era of building. J. B. Blandford, jr. *Comm & Fin Chr* 156:1885 N 26 '42

Returning heroes want homes not mass housing. *il Am Bld* 65:78-9+ O '43

Toward a rational post-war housing program. F. M. Babcock. *Am Bld* 65:33-4+ Ji '43

War housing and war financing; savings and loan associations preparing now for post-war building boom. J. Twohy. *Barron's* 23:13-14 Ja 11 '43

War housing tapers off but postwar need may be a million units annually. *Eng N* 130:721 My 20 '43

Wartime housing. E. N. Bacon. *Ann Am Acad* 229:125-37 S '43

What makes the housing market? postwar housing potential by price groups. S. M. Livingston. *Arch Forum* 78:45-8 F '43

What 1942 can teach 1943; housing can be changed by proper administrative steps. H. Potter. *Am Bld* 64:32-3 D '42

See also

Federal housing administration

Housing projects

Housing projects, Government

Housing surveys

National housing agency

Defense workers

Better homes, more ships; houses for California shipyard workers feature extra war worker room for rent. *il plans Am Bld* 65:34-7+ Ap '43

Builders busy with home conversions; program under NHA. *il plans Am Bld* 65:34-5 Ag '43

Campaign to open homes to 600,000 war workers. *Am Bld* 65:25+ S '43

Concrete masonry goes to war. *il Concrete* 51:10-11, 20 Ag '43

Construction situation. *Sheet Metal Worker* 34:40+ F '43

Conversion program. W. J. Casey. *Arch Rec* 92:8 D '42

Converted war housing, San Francisco; how sites and utilities left over from temporary projects may be re-used to create post-war residential communities. *il plans Arch Forum* 79:69-75 O '43

Estimating electric loads for military-training bases, federal housing, and other wartime projects. H. M. Potts. *Elec Eng* 62:Trans 253-4 My '43

FDR asks \$400,000,000 more for war housing, says funds needed to help shelter workers. *Comm & Fin Chr* 157:1981 My 27 '43

Future war housing program. *Arch Rec* 93:74- Je '43; Correction. 94:96 Ji '43

Home conversion is a big job. *plan Dom Eng* 161:46-7 Ja '43

House-to-house feeds on defense projects. *plan Elec W* 119:1121 Ap 3 '43

Housing for war workers; government will lease homes and buildings. *Arch Rec* 92:10 N '42

Housing for war workers; National committee of housing associations proposal. *Arch Rec* 93:14+ Ap '43

Housing jam. *Business Week* p16 Ja 23 '43

Housing muddle; Willow Run scratch for manpower. *Business Week* p75-6+ Mr 13 '43

Housing program; well-knotted. *Arch Forum* 79:47-8 Ag '43

Housing provided in 138 defense areas. A. C. Findlay. *Monthly Labor R* 55:1203-12 D '42

Housing vs. absenteeism. *Arch Forum* 78:104 Ap '43

How to convert old homes into apartments with Uncle Sam as a partner. *il plans Am Bld* 65:36-7+ Je '43

Ideal war home; Mills & sons Westbrook development near Chicago. R. E. Sangster. *il plans Am Bld* 64:28-31 N '42

Industrial defense housing construction. *Sheet Metal Worker* 34:51-2 My '43

Kaiserville; population, 40,000; Vanport will be Oregon's second largest city. *il Arch Forum* 78:34 F '43

Large housing requirements indicated for southeastern war workers. *Eng N* 131:116 Ji 8 '43

Materials-economics of war housing. J. L. Crane, jr. *il Civil Eng* 13:383-5 Ag '43

NHA home conversion program gets under way; with list of cities approved, and names of persons in charge of each region. *il plans Am Bld* 65:68-9, 87 Ja '43

NHA's war housing policy. J. B. Blandford, jr. *il Am Bld* 65:33+ Ap '43

Need for private building emphasized by President. *Am Bld* 65:27+ Je '43

New housing for war workers, 1940-43. A. C. Findlay. *Monthly Labor R* 57:513-20 S '43

New procedures, standards speed up war housing; James H. March, Tacoma, Washington is building for rent under WPB regulations. *il diag plans Am Bld* 65:50-1 My '43

HOUSING—United States—Defense workers—Continued

Paint firm advertising seeks to ease West coast housing crisis; W. P. Fuller sponsors posters carrying a direct appeal and a local tie-in. *il Sales Management* 52:57-8 F 15 '43

Policy of the government on removal of war housing projects in postwar period. J. B. Blandford. *Arch Forum* 79:61-2 S '43

Private builder and war housing. *Arch Forum* 78:87-8+ Ap '43

Private funds for war housing financing surveyed by Mortgage bankers association. *Comm & Fin Chr* 157:70 Ja 7 '43

Private housing as against public housing in war program fared better than anticipated. C. A. Mullenix *Comm & Fin Chr* 157:1682 My 6 '43

Remodeling houses for war workers. *il plan Dom Eng* 160:44-5+ D '42

Revised heating specifications; forced circulation warm-air systems for war housing. *Sheet Metal Worker* 34:42+ JI '43

Springfield, Ohio, builder does his best on war housing. *il plans Am Bld* 64:40-1+ D '42

Standardized war models to aid private builders. *il diags plan Am Bld* 65:30-1+ Ag; 38-40 S; 42-5 N; 38-9 D '43

State legislatures enact war housing measures. *Comm & Fin Chr* 157:1877 My 20 '43

Uneasy seat; Federal public housing authority lease of furniture to tenants in Authority projects. *Arch Forum* 79:104+ S '43

Urges war housing by private builders. F. Burns. *Comm & Fin Chr* 157:70 Ja 7 '43

Use of existing housing space. *il Arch Forum* 77:33-4 N '42

Utility services for war housing; proposals for minimum use of materials of a critical character. *il diags Am Gas Assn Mo* 25: 97-101+ Mr '43

Vanport City. *il plans map Arch Forum* 79: 53-62 Ag '43

Victory house, development of the John B. Pierce foundation. *il diags plans Arch Forum* 78:51-4 Ap '43

Wallace E. Johnson, the Henry Kaiser of war housing. *il plans Am Bld* 65:32-4 F '43

Wanted, war housing; 650,000 remodel jobs ready for contractors. *il Dom Eng* 160:38-9 N '42

War housing. *Sheet Metal Worker* 34:18-19+ Mr '43

War housing at Vallejo, Calif. *il diags plans Arch Forum* 79:54-5 JI '43

War housing built in first half of 1943 increased 57% over previous six months. *Comm & Fin Chr* 158:609 Ag 12 '43

War housing construction is still one of the country's leading industries. *Eng N* 131: 374 S 9 '43

War housing construction to operate under controlled-materials plan. *Eng N* 130:864 Je 17 '43

War housing plans for revised WPB standards. *Am Bld* 65:48-9+ Mr '43

War housing policies clarified. *Am Bld* 65: 25-6 Ja '43

War-housing projects cost summary. *Eng N* 130:634 Ap 22 '43

War housing projects to use concrete products; United cement products company supplies block for Planeview war housing project, Wichita, Kansas. R. S. Torgerson. *il Rock Prod* 46:135-6 Ag '43

WPB and NHA housing regulations. J. M. Dickey. *Arch Rec* 93:10 Mr '43

WPB announces new war housing construction rules; permissible installations of heating units. *Heating-Piping* 14:720 D '42; *Dom Eng* 160:41+ N '42

WPB-NHA war housing policy; joint declaration. W. J. Casey. *Arch Rec* 93:7+ Ja '43

We're the suicide troopers of the war building industry; case for private building of war housing. F. B. Burns. *il plan Am Bld* 64:36-9+ D '42

See also
Dormitories
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Mixed rental neighborhood, Washington. *il diags plans Arch Forum* 79:79-87 O '43

HOUSING, Cooperative

Features of cooperative housing. Monthly Labor R 56:93-9 Ja '43

Mud mansions; Detroit co-op rammed-earth homes. *il Business Week* p63-4 D 12 '42

HOUSING finance

Answers to repair and remodel questions by FHA. *Am Bld* 64:42 N '42

Effect of business fluctuations upon public housing finance; low-rent housing in peacetime. M. Nurnberg. *J Land & Pub Util Econ* 19:180-92 My '43

Engineered home of tomorrow. B. Outerbridge. *il Burroughs Clearing House* 27:26-7+ Mr '43

Home financing in Canada. Burroughs Clearing House 27:28+ Je '43

Housing provided in 138 defense areas. A. C. Findlay. Monthly Labor R 55:1203-12 D '42

Important role in post-war housing field for life insurance funds. H. J. Johnson. *Comm & Fin Chr* 157:1982 My 27 '43

Municipal news; income and expense statements of 22 projects operated by housing authorities. *Comm & Fin Chr* 157:1674+ My 6 '43

Paying for houses after the war. *Economist* 145:39-40 JI 10 '43

Private capital invested in housing will be protected; changes in mortgage financing. A. H. Ferguson. *Comm & Fin Chr* 157:1868 My 20 '43

Private funds for war housing financing surveyed by Mortgage bankers association. *Comm & Fin Chr* 157:70 Ja 7 '43

Progressive liberal local financing needed. *Am Bld* 65:90-1+ O '43

Public housers are edging in. F. S. Cannon. *Am Bld* 64:18 N '42

Title I and Title VI financing assured by amendment. *Am Bld* 65:13+ My '43

Wartime home loans; some exceptions to Regulation W. Banking 35:50, 52 Je '43

Who controls the purse strings, controls building; two points of view on home financing. W. H. Upson, Jr.; F. Hardinge, Jr. *Am Bld* 65:32-3+ Ag '43

See also

Building—Finance	Home ownership—
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Home loan banks	workers
Home owners' loan corporation	Housing, Cooperative Mortgages

HOUSING laws

Senator Wagner on land; a bill to encourage development of good neighborhood conditions in towns and cities by private enterprise with the collaboration of public enterprise. *Arch Forum* 79:37-8 JI '43

See also

Building laws and regulations	Rent—Laws and regulations
-------------------------------	---------------------------

HOUSING of war workers. See Housing—United States—Defense workers**HOUSING projects**

All-electric estate. *il Elec R (Lond)* 133:67-70 JI 16 '43

Apartment-row house project, Chicago; in-city rental project. *il plans Arch Forum* 79:111-19 O '43

Art in housing. J. Hudnut. *il Arch Rec* 93: 57-62 Ja '43

Better homes, more ships; houses for California shipyard workers feature extra war worker room for rent. *il plans Am Bld* 65: 34-7+ Ap '43

Blue ribbon homes; how to give variety to a street of homes; Seattle Wedgwood project. *il diags plans Am Bld* 65:30-1, 90-1 Mr '43

Build 'em for keeps and you will keep on building; garden type rental war apartments, Weiser's Rahway Gardens. *il plans Am Bld* 65:38-9+ JI '43

Converted war housing, San Francisco; how sites and utilities left over from temporary projects may be re-used to create post-war residential communities. *il plans Arch Forum* 79:69-75 O '43

Duplexes; low cost housing for better post-war living; projects developed for war housing in Birmingham, Alabama. *il plans Am Bld* 65:49+ My '43

HOUSING projects—Continued

- For Baltimore's one-fifth: Joseph P. Day's housing project for Negro workers. Arch Forum 79:44-5 S '43
- Housing project, Bellmawr, N.J.; comments by the architects on planning the community. il diag plans Arch Forum 78:74-80 Ja '43
- Housing projects help the building industry. Eng N 130:521 Ap 15 '43
- How California aircraft workers got good homes at substantial savings: Title I and Title VI homes in Whittier Park use planned production, basic plans, leased lots. il plans Am Bld 64:50-1 N '42
- Ideal war home; Mills & sons Westbrook development near Chicago. R. E. Sangster. il plans Am Bld 64:28-31 N '42
- Kaiserville; population, 40,000; Vanport will be Oregon's second largest city. il Arch Forum 78:34 F '43
- Metropolitan's plans for big N.Y. project. East Underw 44:13 Ap 23 '43; Weekly Underw 148:885+ Ap 24 '43
- Mixed rental neighborhood, Washington. il diag plans Arch Forum 79:79-87 O '43
- New York postwar housing project planned by Metropolitan life insurance company. Comm & Fin Chr 157:1531 Ap 29 '43
- One way to invest; Metropolitan Life plans to build another housing project. Business Week p103+ My 8 '43
- Parkchester 2 for 194X. il Arch Forum 72: 66+ My '43
- Permanent housing for New England; Lucy Mallary Village, Springfield, Mass. il plans Arch Rec 94:49-51 O '43
- Planning principles applied in wartime; town for Willow Run workers. T. B. Augur. plans Arch Rec 93:72-7 Ja '43
- Power equipment speeds big war housing job in face of serious delays; 273-house Title VI project in Mobile, Ala. il plans Am Bld 64:42-4+ D '42
- Prefab methods speed Seattle housing. il diag plans Am Bld 64:50-1 D '42
- Springfield, Ohio, builder does his best on war housing. il plans Am Bld 64:40-1+ D '42
- Vanport City. il plans map Arch Forum 79: 53-62 Ag '43
- War housing that's built to last; plumbing and heating equipment, Metropolitan life insurance company's Parkmerced building project in San Francisco. il Dom Eng 161: 52-3 My '43
- You can expect planned communities and garden apartments; River Oaks project, Houston, Texas. il plans Am Bld 65:46-8 My '43
- See also*
Apartment houses
Model towns
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- HOUSING projects, Company**
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- HOUSING projects, Cooperative.** *See* Housing, Cooperative
- HOUSING projects, Government**
Better—quicker—cheaper; comparison of private job in Cranford, New Jersey, and Winfield Park, Federal works agency project. il plans Am Bld 64:34-5+ D '42
- Can't stop U.S.; city ordinances not applicable to federal war housing projects, district court rules. Business Week p30+ J1 17 '43
- Flexible rents; Federal housing projects boosting rental up to OPA maximum. Business Week p63-4 Ag 28 '43
- Heating equipment for Victory Village. Sheet Metal Worker 34:36 O '43
- Housing shipyard workers at Marinship. il plans Marine Eng 48:158-60 F '43
- Municipal improvements for large war housing projects in Norfolk and Portsmouth, Virginia. H. W. Alexander. il diag plans Pub Works 74:20-6+ F '43
- Negroes to occupy 12% of dwellings when federal housing program is completed. Comm & Fin Chr 157:1691 My 6 '43
- New housing authorized in mining areas. Sheet Metal Worker 34:48 F '43

War housing projects to use concrete products; United cement products company supplies block for Planeview war housing project, Wichita, Kansas. R. S. Torgerson. il Rock Prod 46:135-6 Ag '43

See also
Military posts

Social services

Social services for residents of low-cost housing in Argentina. Monthly Labor R 57: 508-9 S '43

HOUSING projects, Municipal

Canadian council specifies brick for municipal housing projects. St. John, N.E. il Brick & Clay Rec 103:38-9 S '43

FPHA discovers Columbus; Ohio Supreme court denies tax-exemption to Columbus housing authority. Arch Forum 77:34 D '42

HOUSING research

Basic data system of the National housing agency and its problem of obtaining source material under war conditions. F. L. Huesmann. Special Lib 34:204-11+ J1-Ag '43

Prefabricated house. il diag plans Arch Forum 77:49-60 D '42; 78:53-64 Ja; 67-78 F; 71-82 Mr; 71-86+ Ap; 89-96 Je '43

HOUSING surveys

Analyzing obsolescent neighborhoods; sampling technique by which Syracuse is accumulating background data for redevelopment and reconstruction plans. W. P. Crane. plans Arch Forum 79:120-2 O '43

Applications of residential data from the Chicago land use survey. H. M. Mayer. J Land & Pub Util Econ 19:85-7 F '43

Homes up to \$6000 will dominate market, Parents' magazine survey shows. il Gas Age 92:21-4 Ag 12 '43

Occupancy of housing in war-production centers. E. B. Lapin. J Land & Pub Util Econ 19:222-4 My '43

Practical applications of theoretical sampling methods; vacancy surveys. J. N. Webb, M. S. Northrop and S. L. Payne. Am Stat Assn J 38:70-3 Mr '43

Real estate survey reports critical national house shortage. Am Bld 65:139 O '43

Residential vacancies in wartime United States. K. W. Johnson. Survey of Cur Business 22:19-22 D '42

HOUSTON, Bryan

Portrait. Business Week p88 O 23 '43

HOUSTON, John M.

Politics behind NLRB appointment. por Business Week p38 Mr 13 '43

HOUSTON, Texas**Water supply**

Houston, Texas, to begin \$2,000,000 San Jacinto water supply project work. Eng N 129:673 N 12 '42

Maintenance of chlorine residual in the distribution system. C. R. Harvill and J. H. Morgan. Am Water Works Assn J 34:1797-1801 D '42

HOUSTON fire and casualty insurance company
Company analysis. Spectator (Property ed) 8:36-7 Ja 21 '43

HOUSTON lighting and power company
Common stock offered. Comm & Fin Chr 157:1845 My 17 '43

HOWE, Harrison Estell, 1881-1942

Portrait. Ind & Eng Chem 35:1 Ja '43

Sketch. por Chem Eng N 20:1617-18 D 25 '42; Oil Paint & Drug Rep 142:4+ D 14 '42

Sketch. F. J. Van Antwerpen. Science 97:82-4 Ja 22 '43

Tribute. por Chem & Eng N 21:678 My 10 '43

HOWELL, Charles Fish, 1868-1943
Sketch. por East Underw 44:22 Je 11 '43; Nat Underw 47:19 Je 10 '43; Weekly Underw 148:1258, 1303 Je 12 '43

HOWITZERS. *See* Guns (ordnance)

HOWLAND, Fred Arthur, 1864-

Sketch. por East Underw 44:12-13 Ja 29 '43

HRDLICKA, Aleš, 1869-1943

Sketch. W. M. Krogman. Science 98:254-5 S 17 '43

HÜBNERITE

Methods and costs of concentrating hübnerite ores at the Ima tungen mine, Lemhi county, Idaho. C. M. Dice. flow sheet U S Bur Mines Information Circ 7230:1-14 '43

- HUDSON and Manhattan railroad**
Hudson & Manhattan bonds recover. A. Jan-
sen. Barron's 23:15-16 My 17 '43
10c fare authorized. Comm & Fin Chr 158:
672 Ag 16 '43
- HUDSON Bay company.** See Hudson's Bay
company
- HUDSON motor car company**
Hudson Motor net steady. Barron's 23:1 Ag
23 '43
- HUDSON'S Bay company**
Arctic networks; radio for Hudson's Bay
company fur trade posts. S. G. L. Horner.
il Radio N 30:17-19+ S '43
- HUGGINS, Charles Brenton, 1901-**
First Charles L. Mayer award of the Na-
tional science fund. Science 97:349 Ap 16
'43
Presentation of the first Charles L. Mayer
award. Science 97:504-5 Je 4 '43
- HUGHES, Charles Evans, 1862-**
Hall of fame in life insurance. R. W.
Sheehan. por Spectator (Life ed) 150:10-14
F 28-9, 32-3 Ap '43
- HULL, Albert Wallace, 1880-**
Personalities in science. por Sci Am 168:195
My '43
Sketch. por Inst Radio Eng Proc 31:248 Je
'43
- HULL, Cordell, 1871-**
Public opinion and foreign policy; public is
outdistancing Mr Hull and needs leader-
ship again. Fortune 28:134-5 N '43
- HUMANITARIAN doctrine.** See Negligence
- HUMIDIFIERS**
Determining the coefficient of evaporation of
humidifiers. E. Ledoux. diags Chem & Met
Eng 50:124-6 Je '43
Humidifier as a production tool; Bibb mfg.
co. cotton waste mill. H. L. Galsion and
H. L. Kempaner. il Textile World 93:92-5
Jl '43
Winter humidity in homes and the problem of
condensation on windows and walls. Con-
sumers' Research Bul 11:14-16 Mr '43
- HUMIDITY**
B. F. Goodrich co. maintains constant relative
humidity in creel room. il Heat &
Ven 40:56-7 Ag '43
Blushing of lacquers. P. B. Torrance. Metal
Finishing 41:314-16 My '43
Bone dry or three grains? three papers on
conditioning air for blast furnaces. E. H.
Sweetser and others. il Heating-Piping 15:
249-53 My '43
Condensation of water vapour from air. M.
Hirsch. diags Inst Chem Eng Trans 19:69-
78; Discussion. 78-81 '41
Determination of humidity. G. M. Stearns.
diag Oil & Gas J 41:93 F 25 '43
Effect of moisture in blast air. R. J. Cowan.
il diags Iron Age 150:43-50 N 12; 46-50 N 19
'42
Effect of relative humidity on load-elongation
properties of certain fibers. H. Hindman
and K. R. Fox. bibliog il Rayon 24:235-6,
287-9 My-Je '43
Final values of the interaction constant for
moist air. J. A. Goff, J. R. Andersen and
S. Gratch. Heating-Piping 15:319-24 Je '43
Humidity indicator supplements work of
silica gel. il Sci Am 169:132 S '43
Humidity measurements in presence of
water-soluble salts. G. C. Williams and
R. J. Williams. bibliog Ind & Eng Chem
35:730-2 Je '43
Humidity test chamber. Chem Ind 53:366 S
'43
Moisture removal in room coolers. A. H.
Eberhart. il diag Heat & Ven 39:26-7 D '42
Natural humidity control. F. S. Graham.
diags Power Pl Eng 46:112, 114+ O; 73-7
D '42; Discussion. C. T. Baker. 47:98+ Ap
'43
Problems involving humidity. G. M. Stearns.
Oil & Gas J 41:59 Mr 4 '43
Relative humidity; chart. W. F. Schaphorst.
Chem Ind 52:614 My '43
Testing generator dielectric absorption under
adverse humidity conditions of Brazilian
plants. R. V. DeBeech. il diags Elec W
119:1766-8 My 29 '43
Variations in the weight of mortar pots due
to humidity. R. F. Adams. Am Concrete
Inst J 14:217-18 Ja '43
- Winter humidity in homes and the problem
of condensation on windows and walls.
Consumers' Research Bul 11:14-16 Mr '43
See also
Air conditioning
Dampness in build-
ings
Dehumidifiers
- HUMM-WADSWORTH temperament scale.** See
Personality tests
- HUMMERT, Anne**
Portrait. Ptr Ink 204:23 S 3 '43
- HUMUS**
Humus from rubbish and sludge. F. C.
Temple. Pub Works 73:28 D '42
- HUNGARY**
See also
Labor and laboring
classes—Hungary
Economic conditions
Adjustments in Hungary. Economist 145:175-
6 Ag 7 '43
Hungary's war effort. Economist 144:299 Mr
6 '43
- HUNT, Thomas Sterry, 1826-1892**
Chemical philosophy of Thomas Sterry Hunt.
E. R. Atkinson. por J Chem Educ 20:244-5
My '43
- HUNTING**
Happy hunting; WPB lets down bars on use
of ammunition. Business Week p32+ O 2
'43
See also
Game
- HUNTINGTON, Indiana**
Martyr of Huntington; story of struggle of
mayor who battled in vain for municipal
ownership. J. Brooks. Pub Util 31:275-81
Mr 4 '43
- HURONIAN epoch.** See Geology, Stratigraphic
—Huronian
- HURRICANES**
Houston, Galveston hit in record hurricane.
Elec W 120:471-2 Ag 7 '43
Salt content of wells in Massachusetts af-
fected by the tidal wave and hurricane of
1938. V. M. Hynes. N E Water Works Assn
J 56:355-60 S '42
Storm damage quickly repaired; Shell re-
veals how Houston refinery was restored.
Nat Pet N 35:24 S 8 '43
- HUSBAND and wife**
Minnesota Supreme court rules on fine legal
points in accident case. Weekly Underw
149:33 Jl 3 '43
New York courts will enforce Massachusetts
rule denying wife recovery against husband
for injuries in latter state. Weekly Underw
148:623 Mr 13 '43
See also
Community property
- HUTCHESON, William Anderson, 1868-1942**
Sketch. por East Underw 43:8 N 27 '42
- HUYGENS eyepiece**
Empirical approach to lens designs; the
Huygens eyepiece. W. M. Stempel. Opt Soc
Am J 33:278-92 My '43
- HYATT, John Wesley, award**
John Wesley Hyatt award for 1942 to Frank
H. Shaw. il Mod Plastics 20:56 Jl '43
- HYBRIDIZATION**
Mock dominance; reply to F. D. Richey.
E. R. Dempster. Science 97:464-5 My 21 '43
- HYCAR rubber.** See Rubber, Artificial
- HYDANTOINS**
Conversion of Δ^2 -cyclohexenones and cyclo-
hexanones into spirohydantoins. H. R.
Henze, R. C. Wilson and R. W. Townley.
bibliog Am Chem Soc J 65:963-5 My '43
5,5-Dimethylhydantoins containing a —NRR'
substituent. H. R. Henze and D. D. Hum-
phreys. Am Chem Soc J 64:2881 D '42
Direct replacement of oxygen in hydantoins
and barbiturates by sulfur. H. R. Henze
and P. E. Smith. bibliog Am Chem Soc
J 65:1090-2 Je '43
Some 5,5-disubstituted hydantoins. H. R.
Henze and others. bibliog Am Chem Soc J
65:323-5 Mr '43

HYDROCARBONIC acid

Researches on thiazoles; a thiazole analog of hydrocarmonic acid. F. Brody and M. T. Bogert. *bibliog Am Chem Soc J* 65:1080-2 Je '43

Synthesis of a pyridine analog of hydrocarmonic acid and of a lower homolog. F. Brody and M. T. Bogert. *bibliog Am Chem Soc J* 65:1075-80 Je '43

HYDRANTS

Hydrant discharge measurements. P. S. Wilson. *il Water Works & Sewerage* 90:sup87-90 Je '43

Shreveport hydrant. T. L. Amis. *il diags Water Works & Sewerage* 90:119-20 Ap '43
Specifications for uniform marking of fire hydrants. *Am Water Works Assn J* 35:700 Je '43

HYDRATES

Hydrothermal reactions of tricalcium aluminate and its hydrates. G. M. Harris, W. G. Schneider and T. Thorvaldson. *il Concrete (mill sec)* 51:205-6 Jl '43

See also
Carbohydrates

HYDRATION

Hydration-pressure relations in clays and heaving shale. H. H. Power, B. L. Towle and J. B. Plaza. *bibliog il diags Am Pet Inst Proc* 23(4):64-76 '42; Same. *Oil & Gas J* 41:215+ N 12 '42; Discussion. *Am Pet Inst Proc* 23(4):76-7 '42

Nature of hydration and fiber bonding. J. d'A. Clark. *il diags Paper Ind* 25:382-6, 507-10 *bibliog(p510) JI-Ag* '43

Rehydration study of clays. L. H. Berkhamer. *bibliog il Am Cer Soc J* 26:120-6 Ap 1 '43

Useful life of pyro-, meta-, and tetraphosphates. R. A. Morgen and R. L. Swoope. *bibliog Ind & Eng Chem* 35:821-4 Jl '43

HYDRATION, Heat of

How added materials affect heats of hydration of cement clinkers. E. S. Newman and others. *Concrete (mill sec)* 51:184-6 Je '43

HYDRAULIC accumulators

Design and installation factors for aircraft hydraulic accumulator systems. E. M. Greer. *il diags Aviation* 41:150-5+ D '42
Development of hydraulic pressure accumulators: Bendix aviation, ltd. N. DeKiss. *il Aero Digest* 41:130, 136+ D '42

HYDRAULIC brakes. See Brakes, Hydraulic**HYDRAULIC control**

Aeroproducts constant-speed propeller. J. F. Haines. *il Aero Digest* 42:219-20+ Ap '43

Application of pneumatic and air-hydraulic devices to machine tools; abstract. J. C. Cotner. *Iron Age* 152:47 O 21 '43

Boulton Paul gun turret mechanism. M. W. Bourdon. *diags Automotive & Aviation Ind* 88:28-30 Ap 1 '43

Bristol hydraulic system. *il plan Engineer* 175:236, 237-9 Mr 19 '43

Bristol hydraulic system for aeroplanes. *il Engineering* 155:225-7, 230 Mr 19 '43

Bristol power-operated gun turret. L. G. Frise. *il diags Engineer* 175:312-14 Ap 16 '43

Design simplicity prerequisite of hydraulic control standardization. J. W. Kelly. *diags Aero Digest* 41:211-12, 215-16, 218+ D '42

Designing gun turrets as integral part of aircraft; developments by Boulton Paul aircraft, ltd. *il diags Aviation* 42:227-9, 231, 343-4+ Je '43

Forms of pumps used in hydraulic circuits. *diags Product Eng* 14:636-7 O '43

Gun turret development in England. M. W. Bourdon. *il Automotive & Aviation Ind* 87:34-7+ N 15 '42

Hydraulic control of aircraft engine temperature. W. A. Ray. *il Automotive & Aviation Ind* 89:25+ N 1 '43

Hydraulic machine gun chargers. S. I. Macduff and G. A. Goepfrich. *il Aero Digest* 42:243-4+ F '43

Hydraulic valve lifter on the M-M tractor engine. *diag Automotive & Aviation Ind* 89:60-1 S 15 '43

New processes require more powerful automatic-control equipment. J. B. McMahon. *diags Oil & Gas J* 41:90, 93-4, 96 Mr 25 '43

Parnall power-operated gun turret. *il Engineering* 154:366-7, 370 N 6 '42; *Engineer* 174:386-7 N 6 '42

Progressive die is oil-operated; drawing rear brake drum web. H. Chase. *diags Am Mach* 87:89-91 Mr 4 '43

Remote control of hydraulic installations. C. G. Hebel. *il diags Aero Digest* 41:228, 230, 233 D '42

Rotol four-bladed variable-pitch airscrew. *il diags Engineering* 156:125-8 Ag 13 '43

VDM propeller pitch changing mechanism. *diags Automotive & Aviation Ind* 88:40-1 F 15 '43

Wicket gates eliminated in low-cost water-wheel governor. *il diags Elec W* 119:1958-9 Je 12 '43

HYDRAULIC engineering

Flow-control weir at Niagara falls. *il diags map Engineering* 156:241-4, 250 S 24 '43

Flow diversion at Niagara falls. N. Marr; C. G. Cline; H. C. Woods. *il diags maps Civil Eng* 13:321-4, 359-62, 403-6 JI-S '43

Hydraulic structures; model-prototype conformity. J. E. Warnock and H. G. Dewey, jr. *il diags Am Soc C E Proc* 68:1269-94 O '42; Discussion. 69:316-20 F '43

Hydrological factors in the design of culverts and small bridges. F. W. Grove. *Roads & Bridges* 81:32, 66+ Ap '43

Seismic subsurface exploration on the St Lawrence River project. E. R. Shepard and R. M. Haines. *il diags map Am Soc C E Proc* 68:1743-61 D '42; Discussion. 69:584-6, 861-7 Ap Je '43

Testing theoretical losses in open channel flow. J. G. Jobes and J. H. Douma. *il Civil Eng* 12:613-15, 667-9 N-D '42

See also

Aqueducts	Mattresses (hydraulic engineering)
Artesian wells	Penstocks
Breakwaters	Pumping
Bridges—Foundations and piers	Pumping machinery
Caissons	Pumping stations
Canals	Pumps
Channels	Reservoirs
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Dams	Spillways
Drainage	Stream flow
Dredging	Stream measurement
Flood control	Tunnels and tunneling, Subaqueous
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Hydraulic machinery	Water
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Hydrodynamics	Water supply
Hydroelectric plants	Water supply engineering
Intakes	Waterworks
Irrigation	Wells
Irrigation canals	
Leaves	
Locks (hydraulic engineering)	

Tables, calculations, etc.

Aeration of spillways. G. H. Hickox. *il diags Am Soc C E Proc* 68:1777-96 D '42; Discussion. 69:422-4, 785-8, 868-70 Mr, My-Je '43

Centrifugal-pump performance as a function of specific speed. A. J. Stepanoff. *bibliog diags A S M E Trans* 65:629-36; Discussion. 636-47 Ag '43

Sedimentation in reservoirs. B. J. Witzig. *Am Soc C E Proc* 69:793-815 *bibliog(p814-15) Je* '43; Discussion. *bibliog* 69:1104-8 S 13 '43

Submergence effect on sharp-crested weirs. J. K. Vennard and R. F. Weston. *bibliog diags Eng N* 130:314-16 F 3 '43; Discussion. J. C. Stevens. 131:187 JI 29 '43

Use of alignment charts. W. F. Covill. *fold charts Boston Soc C E J* 30:205-11 JI '43

See also

Hydraulics—Tables, calculations, etc.	Run-off
	Sewage flow

HYDRAULIC jacks

Bootstrap jacking rigs raise bridge; Kansas City, Kan. *il diags Eng N* 130:558-9 Ap 22 '43

Leakless hydraulic jack made of odds and ends. *il diag Coal Age* 48:85 Mr '43

Raise long bridge under traffic to clear flood waters. *il diag Ry Age* 114:202-5 Ja 16 '43

Sac Paulo tower is righted with jacks. *il Eng N* 131:623 O 21 '43

Shovel leveling done automatically by electronic units; equipment controls pairs of jacks. W. E. Gildersleeve and D. Stoetzel. *il diag Coal Age* 47:56-8 N '42

HYDRAULIC jump

- Entrainment of air in flowing water; closed conduit flow. A. A. Kalinske and J. M. Robertson. *il diag Am Soc C E Proc* 68: 1141-53 S '42; Discussion. 69:306-10 F '43
- Hydraulic jump in sloping channels. C. E. Kindsater. *bibliog il diags Am Soc C E Proc* 68:1473-86 N '42; Discussion. 69:311-15, 719-32, 924-6, 1097-1103 F, My-Je, S '43
- Removal of air from pipe lines by flowing water. A. A. Kalinske and P. H. Bliss. *il Civil Eng* 13:480-2 O '43

HYDRAULIC laboratories

- New hydraulic laboratory designed for precision testing of pumps. *il Power* 87: 319 My '43

HYDRAULIC machinery

- Aircraft experience aids industrial hydraulics. H. J. Marx. *il diags Machine Design* 15:91-5 S; 100-4 O '43
- Hydraulic bellows measure torque; patent assigned to Owens-Illinois glass co. *diag Machine Design* 15:154 Mr '43
- Hydraulic drive spins steel casting machines. E. Bremer. *il Foundry* 71:154, 157 N '43
- Hydraulic-jet machine for removing bark from timber. D. K. MacBain. *Engineering* 156:175 Ag 27 '43
- Hydraulic operation of lathes for the production of shells. W. L. Philip. *il diags Engineering* 155:396-9, 418-20 My 14-21 '43; Same cond. *Engineer* 175:367-9, 396-8, 410 My 7-14 '43; Discussion. *Engineer* 175:371-2 My 7 '43; *Engineering* 155:374-5 My 7 '43
- Hydraulic self-adjusting press tool. *il diags Engineering* 155:6-7 Ja 1 '43
- Hydraulically supported spherically seated compression testing machine platens. R. L. Templin. *il diags Am Soc T M Proc* 42:968-76 '42
- Rayon rope seals in the power of vital hydraulic machines. Rayon 23:672 N '42

See also

- | | |
|------------------------|-------------------|
| Hydraulic jacks | Pumps |
| Hydraulic presses | Turbines |
| Hydraulic rams | Valves, Hydraulic |
| Hydraulic transmission | |

Cavitation

- Hydraulic-turbine practice of the T.V.A. H. J. Petersen and J. F. Roberts. *il Mech Eng* 65:241-2 Ap '43
- Theory of stress due to collapse of vapour bubbles in a liquid. R. S. Silver. *Engineering* 154:501-2 D 25 '42

Design

- Controlling pulsations in hydraulic equipment. C. E. Grosser. *diags Machine Design* 14: 108-12 D '42

HYDRAULIC mining

- Multiple purpose river development; storage of hydraulic mining debris in reservoir; Narrows development on Yuba river; Pacific gas and electric company. H. V. Lutge and E. F. Maryatt. *il diags plans Elec West* 90:60-4 Ap '43
- New data on mining and pumping phosphate debris in Florida. F. B. Bowen. *Eng & Min J* 144:62 Mr '43

See also

- Gold dredging

HYDRAULIC models

- Conformity between model and prototype; symposium. *il diags Am Soc C E Proc* 68: 1268-1382 *bibliog*(57 titles, p1378-81) O '42; Discussion. 69:170-4, 528-44, 737-57, 967-76, 1115-19, 1279-92 Ja, Ap-Je, S-O '43
- Distorted river models, by A. Rohringer; tr. and abstr. by D. C. Davis. *diags Am Soc C E Proc* 69:sup4-6 S '43

HYDRAULIC presses

- All-hydraulic press is now adapted successfully to forging operations. A. F. Maccanochie. *il diag Steel* 112:100-14 My 17 '43
- Brake beam repairs; use of hydraulic press. Reading, Pa. shops. *il diag Ry Mech Eng* 117:275-6 Je '43
- Drop hammer, hydraulic press punches. *il Mod Plastics* 20:68-9+ F '43
- Efficient handling; production of artillery cartridge cases; using H-P-M Fastraverse self-contained hydraulic presses. *il plan Steel* 111:92-4 N 23 '42

- 5000-ton hydraulic press speeds production of army's Bell Airacobras. *il Aero Digest* 41: 192 N '42
- Four tables feed aircraft press. S. H. Brams. *il Iron Age* 152:61 S 9 '43

- H-P-M Fastraverse drawing press of seven-million pounds capacity. *il Mach* 49:216 D '42; *Automotive & Aviation Ind* 87:43 N 15 '42

- Huge press draws cowl ventilators for Liberty fleet. A. R. Boone. *il Steel* 112:104, 106+ Mr 15 '43

- Hydraulic efficiency of rubber pads. W. Tucker. *il diags Aviation* 42:167, 169+ My '43

- Hydraulic presses for producing aircraft parts. *il Mach* 49:178-9 Ja '43

- Improved hydraulic presses for wartime requirements. J. H. Maude. *il diags A S M E Trans* 65:287-96 My '43

- New equipment. *il Iron Age* 150:42-5 D 31 '42
- 100-ton three-ram flanging press. *Engineering* 156:17 J 2 '43

- Plastic punches are tough; Vega aircraft corporation. *il Am Mach* 87:83-6 F 4 '43; Same. *Aero Digest* 42:121+ F '43; Same. *Iron Age* 161:68-72 F 18 '43; Same. *Automotive & Aviation Ind* 88:40-2 F 1 '43

- Press output upped by special built-in materials handling system. Douglas aircraft company. *il Steel* 113:99-100 J 26 '43

- Pressed pistons; technique employed by Specialoid limited in forging light wrought alloys. *il Automobile Eng* 33:349-59 S '43

- Simple hydropress formability test for sheet metals. G. C. Barber. *il Mech Eng* 65:643-6 S '43

- Two men and mechanical handling aids turn out 12,000 parts per shift; Consolidated Vultee aircraft corp. revolving table hydraulic press. *il Steel* 112:96 My 31 '43
- Work simplification gets most out of press. *il Factory Management* 101:129-30 O '43

HYDRAULIC rams

- Condenser tubes stretched in place; hydraulic ram device. *diags Elec W* 118:1632+ N 14 '42

- Metallizing restores press ram; abstract. G. E. Morgan. *diag Power* 87:466 J 1 '43

HYDRAULIC research

- Conformity between model and prototype; symposium. *il diags Am Soc C E Proc* 68: 1268-1382 *bibliog*(57 titles, p1378-81) O '42; Discussion. 69:170-4, 528-44, 737-57, 967-76, 1115-19, 1279-92 Ja, Ap-Je, S-O '43

- Effect of installation on the coefficients of Venturi meters. W. S. Pardoe. *charts A S M E Trans* 65:337-47; Discussion. 347-9 My '43

- Flow around bends in stable channels. C. A. Mockmore. *bibliog il diags Am Soc C E Proc* 69:335-60 Mr '43; Discussion. 69:1147-53 S '43

- Ninth annual report of the committee on hydraulic research. J. C. Stevens. *il Civil Eng* 13:113-14 F '43

- Removal of air from pipe lines by flowing water. A. A. Kalinske and P. H. Bliss. *il Civil Eng* 13:480-2 O '43

HYDRAULIC transmission

- Aircraft hydraulic control and power systems. *diags Product Eng* 13:656-8, 731-3 N-D '42

- Circuit diagrams of hydraulic transmissions. *Product Eng* 14:738-9 N '43

- Controlling pulsations in hydraulic equipment. C. E. Grosser. *diags Machine Design* 14: 108-12 D '42

- Fluid torque converter and coupling. R. Eksergian. *Franklin Inst J* 285:441-78, pl 1 My '43

- Hydraulic coupling with positive drive; patent assigned to the General Electric co. *diags Machine Design* 15:178+ J 1 '43

- Hydraulic couplings for marine Diesels. R. G. Olson. *diags Machine Design* 15:137-8 Ap '43

- Hydraulic vs. electric drives; abstract. R. A. Cole. *Iron Age* 151:56-7 Ap 15 '43

- Insures positive drive with fluid coupling; engine employing a gear-driven supercharger; patent assigned to Twin disc clutch company. *diags Machine Design* 15:190+ N '43

HYDRAULIC transmission—Continued

Multiple hydraulic drive; patent assigned to Vickers Inc. diag Machine Design 15:156-F '43

Remote electro hydraulic transmitter developed by Askania regulator co. il diag Blast F & Steel Pl 31:556 My '43

Reversing drive uses fluid couplings; patent assigned to General motors corp. diag Machine Design 15:158 My '43

Simple method for calculating hydraulic coupling performance. R. E. Bruckner. il diags Product Eng 13:698-703 D '42

Steering gear; hydraulic type. R. C. Lamond. il diag Marine Eng 48:174-F '43

Types of valves used in hydraulic transmissions. diags Product Eng 14:510-11 Ag '43

See also

Airplanes—Hydraulic equipment
Hydraulic control

HYDRAULICS

Abridged translations of hydraulic papers. Am Soc C E Proc 69:sup9-46 S '43

Graphical analysis of transient phenomena in industrial processes. K. J. DeJuhasz. diags Instruments 16:466-72, 508 bibliog(p472, 508) Ag '43

Hydraulics in transfer molding. G. W. De Bell. diags Mod Plastics 20:88-9+ Je '43

Hydraulics simplified; principles of hydraulics as applied to waterworks problems. il diags Pub Works 74:11-12+ Je '43

Proceedings of the second Hydraulics conference, June 1-4, 1942. J. W. Howe and H. Rouse, eds. Iowa Univ Studies in Engineering Bul 27:1-352 '43 (pa \$1.65)

See also

Flow meters	Run-off
Fluids	Silt
Hydraulic engineering	Stream flow
Hydrodynamics	Stream measurement
Intakes	Turbines
Kutter's formula	Water
Liquids	Water distribution
Nozzles	Water flow
Oil flow	Wells

Bibliography

Foreign hydraulic papers. Am Soc C E Proc 69:sup4-6 S '43

Study and teaching

Fundamentals of a university hydraulics education. S. B. Morris. Am Water Works Assn J 35:835-9 J '43

Tables, calculations, etc.

Entrainment of air in flowing water; closed conduit flow. A. A. Kalinske and J. M. Robertson. il diag Am Soc C E Proc 68:1141-53 S '42; Discussion. 69:306-10 F '43

Entrainment of air in flowing water; open channel flow at high velocities. L. S. Hall. il Am Soc C E Proc 68:1100-40 S '42; Discussion. 69:761-71, 847-57 My-Je '43

Flow characteristics at rectangular open-channel junctions. E. H. Taylor. il Am Soc C E Proc 68:1521-30 N '42; Discussion. 69:905-6, 1154-6, 1293-7 Je, S-O '43

Flow in channels with vertically curved beds. by H. Lauffer; tr. and abst. by C. E. Bardsley. Am Soc C E Proc 69:sup9-21 S '43

Flow of water in concrete pipe; hydraulic entrance losses; charts. Water Works & Sewerage 90:sup278-9 Je '43

Hydraulic jump in sloping channels. C. E. Kindsvater. bibliog il diags Am Soc C E Proc 68:1473-86 N '42; Discussion. 69:311-15, 719-32, 924-6, 1097-1103 F, My-Je, S '43

Nomographic chart simplifies fluid flow calculations through hydraulic tubing. fold chart Product Eng 14:353 Je '43

Rate of flow; charts. Water Works & Sewerage 90:sup280-1 Je '43

Technical data section; hydraulic data. Chem Ind 51:567-71 pt 2 (Buyer's guidebook) O '42

Weir with flow proportional to head, for float-regulated chemical dosing of sewage effluent. E. G. Smith. diags Eng N 131:198-9 JI 29 '43; Correction. E. Soucek. 131:317 Ag 26 '43

See also

Pumping—Tables, calculations, etc.

Terminology

Euler's number. H. A. Thomas. Mech Eng 65:210-11 Mr '43; Discussion. 65:372, 597 My, Ag '43

HYDRAZIDES

Synthesis of aldehydes from acylhydrazides. C. Niemann and J. T. Hays. bibliog Am Chem Soc J 65:482-4 Mr '43

HYDRAZINE

Configuration of tervalent nitrogen; bicyclic hydrazine derivative. E. L. Buhle, A. M. Moore and F. Y. Wiselogle. bibliog Am Chem Soc J 65:29-32 Ja '43

Electron diffraction study of hydrogen peroxide and hydrazine. P. A. Giguère and V. Schomaker. bibliog diag Am Chem Soc J 65:2025-9 O '43

Initial step in the action of acids on tetra-aryhydrazines. G. N. Lewis and J. Bigeleisen. Am Chem Soc J 64:2308-10 D '42

Investigation of pyrazole compounds; the condensation of α -carbethoxyacetothioacetanilide with hydrazines. A. Weissberger and H. D. Porter. Am Chem Soc J 65:732-4 Ap '43

HYDRAZINE cyanate

Kinetics of the transformation of hydrazine cyanate into semicarbazide. E. M. Baker and E. C. Gilbert. Am Chem Soc J 64:2777-80 D '42

HYDRIODIC acid

Action of cold concentrated hydriodic acid on carotenes; structure and *cis-trans*-isomerization of some reaction products. A. Polgar and L. Zechmeister. bibliog diags Am Chem Soc J 65:1528-34 Ag '43
Inhibitory effect of iodine on the photolysis of gaseous hydrogen iodide. R. A. Ogg, Jr. and R. R. Williams. Jr. J Chem Phys 11:214-15 Ap '43

HYDROABIETYL alcohol

Hydroabietyl alcohol. Chem & Eng N 21:1177 JI 25 '43

HYDRO-blast corporation

Hydro-blast corporation. Fortune 27:52 Ja '43

HYDROBROMIC acid

Activation energy of the reaction $\text{CH}_3 + \text{HBr} = \text{CH}_3 + \text{Br}$ and the carbon-hydrogen bond strength in methane. H. C. Andersen and G. B. Kistiakowsky. bibliog J Chem Phys 11:6-10 Ja '43

Aromatic cyclodehydration; the mechanism of the cyclization of *o*-benzylphenones. C. K. Bradsher and E. S. Smith. Am Chem Soc J 65:1643-5 Ag '43

Normal addition of hydrogen bromide to 3-butenic, 4-pentenic and 5-hexenoic acids in hexane. A. Michael and H. S. Mason. bibliog Am Chem Soc J 65:683-6 Ap '43

HYDROCARBONS

ABC of chemical derivatives from petroleum; aviation gasoline and basic hydrocarbon fractions. R. L. Wakeman and B. H. Well. il Nat Pet N 35, pt 2:R213-15, R220-1 My 5 '43

Additive physical properties in hydrocarbon mixtures. R. M. Deaneley and L. T. Carleton. bibliog J Phys Chem 46:859-70 N '42

Aliphatic hydrocarbon densities; correlation in the critical region. T. G. Stevenin and J. G. Allen. bibliog Ind & Eng Chem 35:788-9 JI '43

API research project 37; the fundamentals of hydrocarbon behavior. Am Pet Inst Proc 23(4):118-21 '42

Aniline points of hydrocarbons. J. S. Ball. U S Bur Mines Rep of Invest 3721:1-49 bibliog(82 titles, p47-9) '43

Apparatus for purification of hydrocarbons by recrystallization. J. L. Keays. diag Ind & Eng Chem Anal ed 15:391-2 Je 15 '43

Atomic and free radical mechanisms in hydrocarbon chemistry; abstract. E. W. R. Steacie. Can Chem & Process Ind 27:314-15 Je '43

HYDROCARBONS—Continued

- Catalytic dehydrogenation; catalytic conversion of alcohols into aldehydes, paraffins and olefins. E. J. Badin. *bibliog Am Chem Soc J* 65:1809-13 O '43
- Chemistry of *o*-terphenyl; derivatives prepared from the hydrocarbon. C. F. H. Allen and P. P. Einger. *bibliog Am Chem Soc J* 64:2639-43 N '42
- Coloured hydrocarbons; polyenes and cumulenes. G. S. Ranshaw. *Chem Age (Lond)* 47:417-20 N 14 '42
- Constants of some hydrocarbons in the gas-liquid boiling range. C. E. Boord. *bibliog Oil & Gas J* 41:188+ N 12 '42
- Cracking cyclohexane; thermal and catalytic decomposition at high pressures. V. Haensel and V. N. Ipatieff. *bibliog il diag Ind & Eng Chem* 35:652-8 Je '43
- Critical properties of volatile hydrocarbon mixtures. F. Kurata and D. L. Katz. *bibliog Am Inst Chem Eng Trans* 38:995-1021 D '42
- Cyclization of hydrocarbon mixtures. S. J. Green. *bibliog il diags Inst Pet J* 28:179-208 S '42
- Design for hydrocarbon absorption and stripping. W. C. Edmister. *flow diag Ind & Eng Chem* 35:837-9 Ag '43
- Digest of United States patents on alkylation of hydrocarbons. H. Heinemann, comp. *Pet Refiner* 22:148+ Ag '43
- Digest of United States patents on isomerization of hydrocarbons. H. Heinemann, comp. *Pet Refiner* 22:126+ Jl '43
- Effect of oxygen on the fluorescence of certain hydrocarbons. J. A. Miller and C. A. Baumann. *bibliog il Am Chem Soc J* 65:1540-6 Ag '43
- Empirical relation between octane number and molecular structure. A. Mibashan. *Pet Refiner* 22:89-90 Jl '43
- Exploring the dark continent of heavy hydrocarbon structure. *Oil & Gas J* 42:61 S 30 '43
- Heat capacities of hydrocarbon gases. D. R. Stull and F. D. Mayfield. *bibliog Ind & Eng Chem* 35:639-45 Je '43
- Isomerization, a useful but as yet a little used tool for the refiner. A. L. Foster. *il Oil & Gas J* 41:66, 69, 71-2 F 25; 51-2 Mr 4 '43
- Kinetics of aromatic halogenation; the chlorination of hydrocarbons. P. B. D. de la Mare and P. W. Robertson. *Chem Soc J* p279-81 Je '43
- Marine microorganisms which oxidize petroleum hydrocarbons. C. E. Zobell, C. W. Grant and H. F. Haas. *Am Assn Pet Geologists Bul* 27:1175-93 *bibliog (p 1191-3) S* '43
- Methods of preparing butadiene. G. Egloff and G. Hulla. *bibliog Oil & Gas J* 41:40-1, 43 N 5; 228-33 N 12; 41-4, 46-7 N 19; 124+ N 26; 36, 39-42+ D 3; 45-61 D 10; 36-40, 42-3 D 17; 35-7, 39 D 24 '42
- Oil isomerization. F. Battline. *bibliog Paint Oil & Chem R* 105:13-16 My 6 '43
- Paraffin hydrocarbons; correlation of physical properties. A. W. Francis. *bibliog Ind & Eng Chem* 35:442-9 Ap '43
- Petroleum resins. C. A. Thomas. *il Chem & Eng N* 20:1507-8 N 25 '42
- Petroleum solvents. E. M. Tobyr, jr. *il Ind & Eng Chem* 35:1043-7 O '43
- Phase equilibria at high temperatures. R. R. White and G. G. Brown. *flow diag bibliog diags Ind & Eng Chem* 34:1162-74 O '42; Same. *Nat Pet N* 34 pt 2:R374, R376-8, R380-1, R432-5 O 28, N 25 '42; Same. *Pet Eng (Ref annual)* 14:232-3, 286-32, 295-6 Jl '43
- Phase equilibria in hydrocarbon systems; composition of dew-point gas in ethane-water system. H. H. Reamer and others. *bibliog il Ind & Eng Chem* 35:790-3 Jl '43
- Phase equilibria in hydrocarbon systems; heat of solution of ethane and propane. R. A. Budenholzer, B. H. Sage and W. N. Lacey. *bibliog il diag Ind & Eng Chem* 35:1214-20 N '43
- Phase equilibria in hydrocarbon systems; methane-decane system. H. H. Reamer and others. *bibliog Ind & Eng Chem* 34:1526-31 D '42
- Phase equilibria in hydrocarbon systems; volumetric behavior of methane. R. H. Olds and others. *il Ind & Eng Chem* 35:322-4 Ag '43
- Pressure-volume-temperature relations of 2,2,4-trimethylpentane. W. A. Felsing and G. M. Watson. *bibliog Am Chem Soc J* 65:780-1 My '43
- Properties of mixtures of molecular weight hydrocarbons; abstract. R. W. Schiessler and others. *Oil & Gas J* 41:127-8 Ap 15 '43; Same. *Pet Refiner* 22:124 My '43
- Pure hydrocarbons from petroleum; vapor-liquid equilibria of close-boiling hydrocarbons. J. Griswold. *bibliog il Ind & Eng Chem* 35:247-51 F '43
- Quenching of cadmium resonance radiation (3261A) by hydrocarbons and other gases. E. W. R. Steacie and D. J. LeRoy. *bibliog J Chem Phys* 11:164-71 Ap '43
- Raman spectra of hydrocarbons; diisobutylene, cyclohexene, and dipentene. F. F. Cleveland. *bibliog J Chem Phys* 11:301-6 Jl '43
- Raman spectra of hydrocarbons; 2-methyl-1-heptene and 6-methyl-1-heptene. F. F. Cleveland. *J Chem Phys* 11:227-30 My '43
- Raman spectra of hydrocarbons; 1-octene, *cis*-4-octene, 2-octene, *trans*-3-octene, *trans*-4-octene, 4-octyne, and 1-octyne. F. F. Cleveland. *bibliog il diags J Chem Phys* 11:1-6 Ja '43
- Results of tests on volumeters for liquid hydrocarbons. R. J. S. Pigott, E. E. Ambrosius and E. W. Jacobson. *A S M E Trans* 65:350-2 My '43
- Selective adsorption of hydrocarbon and water vapor on alumina at atmospheric pressure; abstract. Chen Chun Ku, R. L. Huntington and L. S. Reid. *Oil & Gas J* 42:73+ My 20 '43
- Some formaldehyde derivatives of acetylenic hydrocarbons. G. F. Hennion and E. P. Bell. *bibliog Am Chem Soc J* 65:1847-8 O '43
- Statistical lengths of rubber-like hydrocarbon molecules. F. T. Wall. *bibliog J Chem Phys* 11:67-71 F '43
- Studies of the physical properties of alicyclic hydrocarbons; boiling points of monocyclic hydrocarbons. G. Egloff and R. C. Kuder. *bibliog J Phys Chem* 46:934-45 N '42
- Supply of hydrocarbons fully adequate for emergency needs. G. G. Oberfell and R. C. Alden. *Oil & Gas J* 41:36-7+ N 26 '42
- Synthesis and properties of hydrocarbons of high molecular weight. J. N. Cosby and others. *bibliog il Am Pet Inst Proc* 22(3):13-24 '41; 23(3):15-36 '42
- Thermal decomposition of hydrocarbons, resonance stabilization and isomerization of free radicals. A. Kossiakoff and F. O. Rice. *bibliog Am Chem Soc J* 65:590-5 Ap '43
- Vapor-pressure chart for volatile hydrocarbons. R. V. Smith. *bibliog (43 titles) U S Bur Mines Information Circ* 7215-1-10 '42; Same. *Pet Eng* 14:145 Ja; 88, 90, 92 F '43
- Viscosities of the methane-propane system. L. B. Bicher, jr. and D. L. Katz. *bibliog diags Ind & Eng Chem* 35:754-61 Jl '43
- Wartime chemicals from natural gas. G. Egloff. *Pet Eng* 14:33-8 N '42; Same. *Science* 96:502-5, 527-30 D 4-11 '42; Same. *Inst Pet J* 29:124-34 Ap '43; Same cond. *Am Gas Assn Mo* 25:21-2+, 71-2+ Ja-F '43; Same cond. *Gas Age* 90:22+ N 19 '42; Same. *Am Gas J* 157:21-2 D '42

See also

Acetylene
Benzene
Butane
Dicosane
Ethane
Fischer-Tropsch process
Hexane
Methane
Naphthalene

Olefins
Paraffins
Petroleum
Petroleum refining
Propane
Propylene
Styrene
Terphenyl
Toluene
Triptane

Analysis

- Butane and pentane content of petroleum products. W. L. Nelson. *bibliog Oil & Gas J* 42:58, 60 Ag 12 '43
- Determination of butadiene in the presence of other unsaturated and saturated gaseous hydrocarbons. J. F. Cuneo and R. L. Switzer. *bibliog Ind & Eng Chem Anal ed* 15:508-9 Ag 15 '43

HYDROCARBONS—Analysis—Continued

Determination of fumigants; determination of chlorohydrocarbons by thermal decomposition. F. P. W. Winteringham. *diag Soc Chem Ind J* 61:190-2 D '42

Determination of fumigants; determination of chlorohydrocarbons in air by reaction in monoethanolamine. F. P. W. Winteringham. *diags Soc Chem Ind J* 61:186-7 D '42

Determination of halogenated hydrocarbons in the atmosphere. F. H. Goldman and C. G. Seegmiller. *bibliog diag J Ind Hygiene* 25: 181-4 My '43

Determination of unsaturates in hydrocarbon gases; the hydrogenation method. R. F. Robey and C. E. Morrell. *Ind & Eng Chem Anal ed* 14:880-3 N 15 '42

Determination of volatile, halogenated hydrocarbons in blood. H. E. Moran. *bibliog diag J Ind Hygiene* 25:243-8 Je '43

Development in analysis of hydrocarbon gases by adsorption fractionation. N. C. Turner. *diags Oil & Gas J* 41:48, 51-2+ Ap 29 '43; Same. *Nat Pet N* 35 pt 2:R234-7 My 5 '43; Same. *Pet Refiner* 22:98-102 My '43

Gas analysis by means of the mass spectrometer. O. L. Roberts. *il diag Pet Refiner* 22:107-9 My '43

Hydrocarbons in petroleum; some results of A.P.I. research project 6. F. D. Rossini. *bibliog* (80 titles) *il diag Pet Eng* 14:41-2+ F '43

Mass spectrometer as an analytical tool. H. W. Washburn, H. F. Wiley and S. M. Rock. *il diag Ind & Eng Chem Anal ed* 15:541-7 S 15 '43

Mass spectrometry; new quantitative method for determining light hydrocarbons in process control. *il diag Nat Pet N* 35 pt 2: R258-62 Je 2 '43

Method for analyzing gasoline fraction of petroleum; with preliminary results on east Texas and Oklahoma crudes. F. D. Rossini and others. *bibliog Oil & Gas J* 41:106, 108, 111+ N 12 '42; Same. *Am Pet Inst Proc* 23 (3):7-14 '42; Same. *Pet Eng* (Ref annual) 14:245-8, 250 JI 1 '43

Pure hydrocarbons from petroleum; composition of a commercial hexane. J. Griswold, C. F. Van Berg and J. E. Kasch. *bibliog Ind & Eng Chem* 35:854-7 Ag '43

Quantitative analysis by mass spectrometry. O. L. Roberts. *il diag Pet Eng* 14:109-11, 114+ My '43

Rapid infra-red analytical method for hydrocarbon mixtures and a routine spectrophotometer for plant control. R. R. Brattain and O. Beeck. *il diags J Ap Phys* 13:699-705 N '42

Some uses of infra-red spectroscopy for hydrocarbon analysis. R. R. Brattain. *bibliog il diag Pet Refiner* 22:92-8 Ap '43; Same *abr. Oil & Gas J* 41:34-8+ Ap 1 '43

Spectroscopic analysis of hydrocarbon mixtures; abstract. G. B. E. M. Sutherland. *Chem & Ind* 62:234 Je 19 '43

Synthetic rubber; spectroscopic method for analysis and control. R. R. Barnes, U. Lidei and V. Z. Williams. *bibliog il diags Ind & Eng Chem Anal ed* 15:83-90 F 15 '43

Viscosity of solutions in branched-chain paraffins. E. H. McArdie and A. E. Robertson. *Ind & Eng Chem Anal ed* 15:484-7 Ag 15 '43

See also**Butane—Analysis****HYDROCARBONS, Aromatic**

Catalytic dehydrogenation of 2-substituted-5,6,7,8-tetrahydronaphthalene derivatives. M. S. Newman and H. V. Zahm. *bibliog Am Chem Soc J* 65:1097-1101 Je '43

Chemicals from petroleum. W. T. Ziegenhain. *Oil & Gas J* 41:54 N 19 '42

Petroleum as a source of the aromatic hydrocarbons. A. W. Trusty. *bibliog Pet Refiner* 22:83-7 Ap '43

Pure hydrocarbons from petroleum; vapor-liquid equilibrium of methylcyclopentane-benzene and other binary aromatic systems. J. Griswold and E. E. Ludwig. *bibliog Ind & Eng Chem* 35:117-19 Ja '43

Solvent properties of C₈ aromatic hydrocarbons. P. D. Hammond and E. H. McArdie. *bibliog Ind & Eng Chem* 35:809-10 JI '43

Ultraviolet absorption spectra of aromatic hydrocarbons. R. N. Jones. *Chem R* 32:1-46 bibliog(262 references, p41-6) F '43

See also**Benzene****Naphthalene****HYDROCHLORIC acid**

Chemical removal of scale from heat-exchange equipment. F. N. Alquist, C. H. Groom and G. F. Williams. *bibliog il A S M E Trans* 65:719-22 O '43; Same *cond. Power Pl Eng* 47:71-2 JI '43

Chlorination of 2,4-diketotetrahydropyrimidines by action of a mixture of superoxol and hydrochloric acid. T. B. Johnson. *Am Chem Soc J* 65:1218-19 Je '43

Cleaning encrusted pipe lines and vacuum filters with inhibited muriatic acid. K. L. Mick. *Water Works & Sewerage* 90:sup248 Je '43

Formal electrode potentials of palladium in aqueous hydrochloric and perchloric acid solutions; stability of chloropalladate ion. D. H. Templeton, G. W. Watt and C. S. Garner. *bibliog Am Chem Soc J* 65:1608-12 Ag '43

Inversion of menthone with hydrogen chloride in benzene. A. Weissberger and D. S. Thomas, Jr. *Am Chem Soc J* 65:402-3 Mr '43

Liquid-vapor equilibrium compositions in hydrogen chloride-*n*-butane system. J. H. Ottenweller, C. Holloway, Jr. and W. Weinrich. *bibliog Ind & Eng Chem* 35:207-9 F '43

Mud acid; its theory and application to oil and gas wells. P. J. Lehnard. *bibliog Pet Eng* (Ref annual) 14:82+ JI 1 '43

Plant manufacture of HCl for use in isomerization. *flow diag il Oil & Gas J* 41:202-3+ Mr 25 '43

Reaction of hydrochloric acid with 6-methyl-5,5-dichloroxyhydrouracil. T. B. Johnson. *Am Chem Soc J* 65:1220-2 Je '43

Scale removal by acid at high temperatures. F. Gibadio. *diag Power Pl Eng* 47:97-8 O '43

Sensitive color reaction for the detection of uracil and cytosine. T. B. Johnson. *Science* 98:90-2 JI 23 '43

Weighting acid with calcium chloride aids in freeing stuck tools. H. F. Simons. *il diag Oil & Gas J* 42:239, 241 S 23 '43

Deuterium chloride

Evidence of deuterium exchange in the system DCl-CH₃OH. A. G. Gassmann, C. J. Hochanadel and R. J. Hartman. *Am Chem Soc J* 65:988 My '43

Manufacture

Anhydrous hydrogen chloride gas; review of methods of production. A. H. Maude. *bibliog flow diag il diag* '43; *Am Inst Chem Eng Trans* 38:865-82 Ag '43; Same. *Chem Ind* 51:348-54 S '42; Same *cond. Chem Age* (Lond) 48:145-50 Ja 30 '43; *Abstract. Chem & Eng N* 20:661-2 My 25 '42

HYDROCHLORIDES

Studies on high molecular weight aliphatic amines and their salts; transference numbers of some primary amine hydrochlorides in aqueous solution and their significance in the interpretation of the micelle theory. C. W. Hoerr and A. W. Ralston. *bibliog Am Chem Soc J* 65:976-83 My '43

HYDROCYANIC acid

Hydrocyanic acid poisoning by absorption through the skin; abstract. B. Müller-Hess. *J Ind Hygiene* 25:sup58-9 Mr '43

Hydrolysis of hydrogen cyanide in acetic acid solutions with mineral acids as catalysts. V. K. Kriebie, F. C. Duennebier and E. Colton. *bibliog Am Chem Soc J* 65: 1479-82 Ag '43

I-Type doubling in linear polyatomic molecules. G. Herzberg. *bibliog Rs Mod Phys* 14:219-23 Ap-J '42

HYDRODYNAMICS

Bearing design as affected by lubrication theory. A. H. Korn. *diags Machine Design* 15:77-9 Ja '43

Cavitation in an elastic liquid. E. H. Kennard. *Phys R* 63:172-81 Mr 1 '43

Design of sleeve bearings by hydro-dynamic theory. H. W. Hamm. *bibliog diags Product Eng* 14:422-4, 464-6 JI '43

HYDRODYNAMICS—Continued

Flow around bends in stable channels. C. A. Mockmore. bibliog. il diags Am Soc C E Proc 69:335-60 Mr '43; Discussion. 69:1147-53, 1317-18, 1594-6 S-O, D '43

See also

Aerodynamics	Stokes' law
Compressibility	Viscosity
Gas flow	Water flow
Hydraulics	

HYDROELECTRIC plants

Civil engineering in 1942. il Engineer 175:45-6 Ja 15 '43

Effect of air warfare on hydro dam building. J. E. Bullard. il Pub Util 32:611-18 N 11 '43

See also

Dams	Penstocks
Hydroelectric power	Turbines

Automatic operation

Dutch Flat designed as fully automatic; plant of Pacific gas and electric co. T. J. Corwin and D. P. Dinapol. il diag Elec West 91:60-2 S '43

Combination with Diesel engine stations

Water and oil still mix at Waverly, Iowa; combination of hydroelectric and Diesel plant; with cost data. R. E. Doonan. il Diesel Power 21:305-7 Ap '43

Combination with steam plants

Design of recent TVA projects; unified plan for 34 major hydroelectric and steam power plants. G. R. Rich. il diag plans Civil Eng 13:144-7 Mr '43

Construction

Big powerhouse of Santee-Cooper project is masterpiece in quality concrete. il diags Concrete 51:2-3+ F '43

Hydro-plant doubles Costa Rican power. A. N. Carter. il maps Eng N 131:466-8 S 23 '43

Oberhasli hydro-electric power scheme. il diags plans Engineer 175:187-9, 208-11, 226-9, 244-7, 264-7, 286-9, 305-9 Mr 5-Apr 16 '43

Design

Design of recent TVA projects. G. R. Rich; T. Mundal. il diags plan Civil Eng 13:165-7, 205-8 Ap-May '43

Design of recent TVA projects; Kentucky dam, power house, and lock. E. H. Welleman. il diags Civil Eng 13:257-60 Je '43

Multiple purpose river development; storage of hydraulic mining debris in reservoir; Narrows development on Yuba river; Pacific gas and electric company. H. V. Lutge and E. F. Maryatt. il diags plans Elec West 90:60-4 Ap '43

Oberhasli hydro-electric power scheme. il diags Engineer 175:187-9 Mr 5 '43

Equipment

Dutch Flat designed as fully automatic; plant of Pacific gas and electric co. T. J. Corwin and D. P. Dinapol. il diag Elec West 91:60-2 S '43

Electric fish screen saves steel; Farad hydro-electric plant on the Truckee river, Calif. T. J. Welsh. il Elec West 90:37-8 Ja '43

Green Mountain hydroelectric power plant; new project of U.S. Bureau of reclamation. A. W. Schmidt. diags Power Pl Eng 47:84-5 Ag '43

New western hydroelectric plant completed and placed in operation by U.S. government. L. N. McClellan. plan Power Pl Eng 47:65-6 My '43

Now machine cleans hydro plant tunnels; cleaning of caddis fly larvae from tunnels, flumes and pipe lines. B. T. C. Stavert. il Elec W 119:992+ Mr 20 '43

Power for the Southwest; new Bureau of reclamation hydroelectric plant. L. N. McClellan. il diags Elec West 90:35-7 Mr '43

Rlg cleans moss from hydro flumes. A. F. Frontz. diag Elec W 119:320+ Ja 23 '43

See also

Penstocks
Turbines

Government ownership

Administration of federal power projects. C. H. Pritchett. J Land & Pub Util Econ 18:379-90 N '42

Hearing on FPC order requiring utility to act as common carrier for Bonneville power. Elec W 119:1305-6 Ap 17 '43

New power administration established for the Southwest; will sell power from War department's Denison and Norfork dams and from Grand river in Oklahoma. Eng N 131:563 O 14 '43

Planning, but for what? plan of the National planning association. E. R. Abrams. Pub Util 31:406-13 Ap 1 '43

Power line wins but Interior dept. will divert other funds to erect transmission system from Shasta dam. Business Week p38+ J1 31 '43

Power standoff; Ickes' Shasta contract with Pacific Gas & Electric. Business Week p20 O 16 '43

Shasta line to go ahead despite Congress defeat. Elec W News ed 120:182 J1 17 '43

WPB orders construction halt. Power 86:989a-989c, 990a Mid-D '42

See also

Columbia river—	Tennessee Valley au-
Grand Coulee dam	thority
Ontario—Hydroelec-	
tric power commis-	
sion	

Heating and ventilation

Locomotive heats hydro plant; Safe Harbor plant. S. D. Althouse. il Power 87:328 My '43

Maintenance and repair

Maintenance practices for penstocks and flow lines. J. M. Spaulding. Elec W 120:463-5 Ag 7 '43

Penstock, tunnel, flow line maintenance; hydro plants, Southern California Edison co. T. C. Stavert. il Elec West 91:66-7 S '43

Plant restored with salvaged penstock; emergency repairs of Washington water power station. N. W. Humphrey. il Elec West 89:42-3 N '42

Australia

Engineers and the British empire; water supply and hydro-electric power, M. Smith. il maps Engineer 176:218-21 S 17 '43

California

Dutch Flat designed as fully automatic; plant of Pacific gas and electric co. T. J. Corwin and D. P. Dinapol. il diag Elec West 91:60-2 S '43

Multiple purpose river development; storage of hydraulic mining debris in reservoir; Narrows development on Yuba river; Pacific gas and electric company. H. V. Lutge and E. F. Maryatt. il diags plans Elec West 90:60-4 Ap '43

Power line wins but Interior dept. will divert other funds to erect transmission system from Shasta dam. Business Week p38+ J1 31 '43

Power standoff; Ickes' Shasta contract with Pacific Gas & Electric. Business Week p20 O 16 '43

See also

Central Valley project, California

Canada

Canada building world's biggest power plant to serve aluminum plant. D. C. Howe. Elec W 118:2111 D 26 '42

Canada's 1942 output, new plant at record. Elec W News ed 119:141-2 Ja 16 '43

Canadian hydro electricity. il Electrician 129:628-30 D 1 '42

Canadian water power; annual review of hydro-electric progress. Engineering 155:152 F 19 '43; Elec R (Lond) 132:225 F 12 '43; Electrician 130:160 F 12 '43

Engineers and the British empire; water power production in Canada. M. Smith. il Engineer 176:82-4 J1 30 '43

Costa Rica

Hydro-plant doubles Costa Rican power. A. N. Carter. il maps Eng N 131:466-8 S 23 '43

HYDROELECTRIC plants—Continued

Germany

Air force targets; Ruhr dams and water power stations. *il* Engineer 175:405-9 My 21 '43

Ontario

See also Ontario—Hydroelectric power commission

Peru

Made to measure; Peruvian discovery of magnesium deposits may provide another power outlet for new hydroelectric development. *map* Business Week p64+ Je 5 '43

Quebec

Canada's giant hydro power plant revealed; Shipshaw project. *map* Elec W News ed 119:527-8 F 13 '43

Canada's new war-born hydroelectric giant. F. J. McDiarmid. *Pub Util* 31:552-7 Ap 29 '43

Canadian hydro-electricity; the Shipshaw development. *il* Electrician 130:535 My 28 '43

Denies Shipshaw power was financed by U.S.A. Elec W 119:1129-30 Ap 3 '43

Million yards concrete for dam; Shipshaw power development. *il* Rock Prod 46:52-4 Je '43

Oodles of power at Shipshaw. J. N. Stephenson. *il* Pulp & Pa of Can 44:362-4 Ap '43

Power for aluminum; Shipshaw power development. *Min & Met* 24:230-1 Je '43

Shipshaw on Saguenay to develop 1,500,000 hp. *il* Power Pl Eng 47:36 Ag '43

Shipshaw power development in Canada. J. M. Coffee. *Pub Util* 32:149-53 Ag 5 '43

Shipshaw project defended; abstract. D. M. Nelson. *Pub Util* 31:644 My 13 '43

Sardinia

Air force targets; Tirso dam and powerhouse, Sardinia. *il* diag Engineer 175:443-5 Je 4 '43

Scotland

Electro-metallurgical prospects; effects of Scottish hydro-electric development. H. A. Sieveking. *il* Elec R (Lond) 138:459-63 O 8 '43

Highlands water power development bill passes committee stage. Elec R (Lond) 132:647-8 My 14 '43

Hydro-electric development in Scotland; abstracts. Engineer 174:515-17 D 25 '42; Chem Age (Lond) 47:557 D 19 '42; Electrician 129:637; 130:11-12 D 25 '42; Ja 1 '43; Elec R (Lond) 131:815-16 D 25 '42

Hydro-electric development; proposed new body for North Scotland. Electrician 130:107 Ja 29 '43

Scottish water power. Electrician 130:249-50 Mr 5 '43; Elec R (Lond) 132:313-14 Mr 5 '43

Scottish water power; details of new bill. Elec R (Lond) 132:150 Ja 29 '43

South America

Electrification for the American republics. C. A. Howard. *il* map For Comm W 13: 3-5+ N 13 '43; Same abr. *Manuf Rec* 112: 38-9+ N '43

Switzerland

Oberhasli hydro-electric power scheme. *il* diags plans Engineer 175:187-9, 208-11, 226-9, 244-7, 264-7, 286-9, 305-9 Mr 5-Apr 16 '43

Tennessee valley

Design of recent TVA projects; Apalachia and Ocoee No.3. H. W. Goodhue. R. L. Smart and A. A. Meyer. *il* diag plan Civil Eng 13:465-8 O '43

Design of recent TVA projects; Cherokee and Douglas projects. J. C. Nowell. *il* plans Civil Eng 13:373-6 Ag '43

Hydraulic-turbine practice of the T.V.A. H. J. Petersen and J. F. Roberts. *il* diags Mech Eng 65:237-44 Ap '43

Uruguay

U.S. aid helps Uruguayan production of electricity. For Comm W 10:39 Mr 6 '43

HYDROELECTRIC power

Hydro-electric economics; abstract. J. K. Hunter and R. W. Mountain. Elec R (Lond) 131:745; Discussion, 745-6 D 11 '42

More power water flows into the Great Lakes; projects will divert water from Hudson bay. *maps* Power 87:14-15 Ja '43

See also

Columbia river— Ontario—Hydroelectric Power utilization tric power commission Hydroelectric plants sion

HYDROELECTRIC power commission. See Ontario—Hydroelectric power commission

HYDROFLUORIC acid

Addition of hydrogen fluoride to acetylenic compounds. A. L. Henne and E. P. Plueddeman. *Am Chem Soc J* 65:587-9 Ap '43

Addition of hydrogen fluoride to halo-olefins. A. L. Henne and E. P. Plueddeman. *bibliog* *Am Chem Soc J* 65:1271-2 Jl '43

Anhydrous HF, tomorrow's refining process catalyst. A. L. Foster. *bibliog* Oil & Gas J 41:125-6 Ja 7 '43

How to handle anhydrous hydrofluoric acid safely. C. M. Fehr. *il* Pet Refiner 22:89-94 Ag '43; Same abr. Oil & Gas J 42:39-42 Jl 22 '43; Same abr. Nat Pet N 35 pt 2: R364-7 Ag 4 '43

Hydrofluoric acid burns. *Ind Med* 12:634 S '43

Hydrogen fluoride as a condensing agent; aralkyl ketones. J. H. Simons and E. O. Ramler. *bibliog* *Am Chem Soc J* 65:1390-2 Jl '43

Hydrogen fluoride as a condensing agent; the addition of an alkyl chloride to the double bond. J. H. Simons and A. C. Meunier. *Am Chem Soc J* 65:1269-71 Jl '43

Hydrogen fluoride, the catalyst. J. H. Simons. *bibliog* *il* Pet Refiner 22:83-9 Je; 83-7 Jl '43

Nitric-hydrofluoric bath for removing welding flux from aluminum alloy parts. P. M. Craig. *il* Automotive & Aviation Ind 88: 19+ Mr 1 '43

Polymerization of gaseous hydrogen and deuterium fluorides. R. W. Long, J. H. Hildebrand and W. E. Morrell. *bibliog* diags *Am Chem Soc J* 65:182-7 F '43

Properties of low reflection films produced by the action of anhydrous acid vapor. F. H. Nicoll and F. E. Williams. *il* Opt Soc Am J 33:434-5 Ag '43

Safe handling and storage of anhydrous hydrofluoric acid. C. M. Fehr. *il* diag Chem Ind 53:505-10 O '43

Safety in the operation of HF alkylation plants. R. Benson. *il* diags Nat Pet N 35 pt 2:R532-4, R536 N 3 '43; Same. *Pet Refiner* 22:116-20 D '43

Special catalyst-handling equipment provided in HF alkylation plant. *bibliog* flow diag *il* Nat Pet N 35 pt 2:R243-4 Je 2 '43

HYDROGEN

Aggressors minus N and H; disarmament of our enemies by restrictions on nitrate and hydrogenation plants. M. G. Harris. *Fortune* 28:53+ N '43

Associating effect of the hydrogen atom; hydrogen bonds involving the sulphur atom; the S-H-N bond. G. Hopkins and L. Hunter. *Chem Soc J* p638-42 O '42

Average H—H₂ repulsive potential from collision cross section measurements. I. Amundur. *J Chem Phys* 11:157-9 Ap '43

Determination of the solubility of hydrogen in iron and iron alloys. J. H. Andrew, H. Lee and A. G. Quarrell. *plan* Iron & Steel Inst J 146:181-92 no 2 '42

Forces between hydrogen molecules. H. Margenau. *bibliog* Phys R 64:131-47 S 1 '43

Geiger-Mueller counter pulse size. C. W. Miller. *diag R Sci Instr* 14:68-76 Mr '43

Low temperature adsorption of nitrogen, oxygen, argon, hydrogen, n-butane and carbon dioxide on porous glass and on partially dehydrated chabazite. P. H. Emmett and T. W. Dewitt. *bibliog* *Am Chem Soc J* 65:1253-62 Jl '43

Low velocity scattering of H⁺ and H₂⁺ in hydrogen. J. H. Simons and others. *J Chem Phys* 11:307-12 Jl '43

Low velocity scattering of H₂⁺ in hydrogen; the determination of neutralization. J. H. Simons and others. *bibliog* diag *J Chem Phys* 11:312-16 Jl '43

Method of cooling hydrogen discharge tubes. C. Hsueh. *il* diags R Sci Instr 14:250-3 Ag '43

HYDROGEN—*Continued*

Photochemical reaction of hydrogen and chlorine: a lecture demonstration. C. M. Furgason and J. W. Moore. *il J Chem Educ* 20:41-2 Ja '43

Polarizability of H⁺. L. R. Henrich. *Phys R* 62:545-7 D 1 '42

Polarographic investigations of hydrogen bonding; ortho- and para-nitrophenols. M. J. Astie and W. V. McConnell. *bibliog Am Chem Soc J* 65:35-8 Ja '43

Positive and negative point-to-plane corona in pure and impure hydrogen, nitrogen, and argon. G. L. Weissler. *bibliog diag Phys R* 63:96-107 F 1 '43

Reduction of ferric oxide by hydrogen. F. Olmer. *bibliog diags J Phys Chem* 47:317-25 Ap '43

Relation of hydrogen to adherence of sheet-steel enamels. W. A. Deringer. *bibliog il Am Cer Soc J* 26:151-9 My 1 '43

Scattering of low velocity hydrogen ions in helium. J. H. Simons, E. E. Muschlitz, Jr. and L. G. Unger. *bibliog J Chem Phys* 11:322-8 J 1 '43

Scattering of low velocity hydrogen ions in water vapor. J. H. Simons and others. *bibliog diag J Chem Phys* 11:316-21 J 1 '43

Solubility of hydrogen at low pressure in iron, nickel and certain steels at 400 to 600°. M. H. Armbruster. *bibliog Am Chem Soc J* 65:1043-54 Je '43

Solubility of hydrogen in *n*-butane. E. E. Nelson and W. S. Bonnell. *Ind & Eng Chem* 35:204-6 F '43

Studies on overvoltage; a study of decomposition potentials; cathodic and anodic polarization of a platinized platinum cathode near the reversible value in hydrogen saturated acid solutions. A. L. Fergu-son and M. B. Towns. *Electrochem Soc Trans* 83 (preprint 8):105-17 Ap '43

Suggested method for replaceable hydrogen. H. A. Liebhafsky. *Am Chem Soc J* 65:1778 S '43

Surface recombination of H atoms and OH radicals. W. V. Smith. *diags J Chem Phys* 11:110-25 Mr '43

Thermal hydrogen-oxygen reaction; measurements in large vessels. O. Oldenberg and J. E. Morris. *J Chem Phys* 11:247 My '43

Tracer studies with radioactive hydrogen; some experiments on photosynthesis and chlorophyll. T. H. Norris, S. Ruben and M. B. Allen. *bibliog Am Chem Soc J* 64:3037-40 D '42

Wave function for the negative hydrogen ion. R. E. Williamson. *bibliog Phys R* 62:538-9 D 1 '42

See also
Hydrogenation
Protons

Steel—Hydrogen ef-
fect

Analysis

Absorption tube tares in carbon and hydrogen microdetermination. W. M. MacNevin and J. E. Varner. *bibliog Ind & Eng Chem Anal ed* 15:224-5 Mr 15 '43

New technique for the ultimate micro-analysis of organic compounds. R. Belcher and C. E. Spooner. *diags Chem Soc J* p313-16 J 1 '43

Atomic hydrogen

Atomic beam apparatus for studying the atomic spectra of gases, especially hydrogen. J. E. Mack and E. C. Barkofsky. *bibliog il diags Rs Mod Phys* 14:82-93 Ap-J 1 '42

Attempts at obtaining excitation of an atomic beam of monatomic hydrogen. W. E. Williams. *Rs Mod Phys* 14:94-5 Ap-J 1 '42

See also Electric welding, Arc—Hydrogen process

Industrial applications

See also Electric welding, Arc—Hydrogen process

Isotopes

Chemical separation of the isotopes of hydrogen by the addition of metals and compounds of metals to water, acids and bases; relative efficiencies of specific reactions; the effects of certain factors other than temperature. H. L. Johnston and C. O. Davis. *bibliog diag Am Chem Soc J* 64:2613-20 N '42

Equilibrium in hydrogen-water systems containing tritium. J. F. Black and H. S. Taylor. *diags J Chem Phys* 11:395-402 S '43

Interchange of hydrogen isotopes with complex salts; kinetics of the interchange with platinumous and palladous tetrammines. J. S. Anderson and others. *diag Chem Soc J* p367-72 Ag '43

Interchange of hydrogen isotopes with complex salts; kinetics of the interchange with the luteocobaltic complex. J. S. Anderson, H. V. A. Briscoe and N. L. Spoor. *diag Chem Soc J* p361-7 Ag '43

Vibrational frequencies of the isotopic water molecules; equilibria with the isotopic hydrogens. W. F. Libby. *bibliog J Chem Phys* 11:101-9 Mr '43

See also
Deuterium

Manufacture

Electrolysis of water; plant for the production of pure hydrogen and oxygen. *il Chem Age (Lond)* 47:535-6 D 12 '42

HYDROGEN bromide. *See* Hydrobromic acid

HYDROGEN chloride. *See* Hydrochloric acid

HYDROGEN compounds

See also
Deuterium com-
pounds
Hydrocarbons

Analysis

Microdetermination of hydroxyl content of organic compounds; acetic anhydride-pyridine mixture as reagent. J. W. Petersen, K. W. Hedberg and E. E. Christensen. *bibliog Ind & Eng Chem Anal ed* 15:225-6 Mr 15 '43

HYDROGEN cyanide. *See* Hydrocyanic acid

HYDROGEN electrodes. *See* Electrodes

HYDROGEN engine. *See* Erren engine

HYDROGEN fluoride. *See* Hydrofluoric acid

HYDROGEN halides

See also
Hydrobromic acid
Hydrochloric acid
Hydrofluoric acid

HYDROGEN ion concentration

Assay of potassium *p*-phenolsulfonate, its pH range, and its ultraviolet absorption spectrum. E. E. Sager, M. R. Schooley and S. F. Acree. *J Research Nat Bur Stand* 31:197-204 O '43

Determination of the pH of textile materials. H. R. R. Wakeham and E. L. Skau. *bibliog Ind & Eng Chem Anal ed* 15:616-18 O 15 '43

Dissociation constants and pH-titration curves at constant ionic strength from electrometric titrations in cells without liquid junction; titrations of formic acid and acetic acid. R. G. Bates, G. L. Siegel and S. F. Acree. *bibliog diag J Research Nat Bur Stand* 30:347-59 My '43

Effect of pH changes upon some of the properties of sodium thymonucleate solutions. C. F. Vilbrandt and H. G. Tennent. *Am Chem Soc J* 65:1806-9 O '43

Effect of pH on the solubility of calcium oxalate. W. H. McComas, Jr. and W. Rieman. *3d. Am Chem Soc J* 64:2948-9 D '42

pH factor in the hypochlorite bleaching of wood pulp; single-stage treatment of sulphite pulp. F. Casciani and G. K. Storin. *Paper Tr J* 115:33-40 N 12; 27-31 N 19 '42

pH in pulp bleaching. F. Casciani. *Paper Ind* 25:426-+ J 1 '43

Hydrogen-ion concentration; new German recording method. *diags Electrician* 131:65-6 J 16 '43

pH value of boiler feed water. R. L. Rees and J. Jackson. *il diag Engineer* 176:247-9 S 24 '43

pH zones of import in water supply and sewage treatment practice; pH conversion chart; effect of carbonate and bicarbonate alkalinity. *Water Works & Sewerage* 90:sup285-7 Je '43

Method of determining the pH of ball clays. G. J. Barker and E. Truog. *Am Cer Soc Bul* 21:263-5; Discussion. 265 N 15 '42

HYDROGEN ion concentration—Continued

- Scalar diagram for pH of calcium carbonate equilibrium. A. A. Hirsch. *Am Water Works Assn J* 35:594-6 My '43
- Second dissociation constant of *p*-phenol-sulfonic acid and pH values of phenolsulfonate-chloride buffers from 0° to 60° C. R. G. Bates, G. L. Siegel and S. F. Acree. *bibliog J Research Nat Bur Stand* 31:205-23 O '43
- Semimicro scheme of qualitative analysis for the anions. J. T. Dobbins and M. E. Kapp. *J Chem Educ* 20:118-20 Mr '43
- Thermostatically controlled glass electrode apparatus for pH measurements. L. F. Le Brocq. *diag Chem & Ind* 62:350-1 S 11 '43
- Two-step lime addition for sewage coagulation and pH control. W. Rudolfs and G. B. Nickel. *Pub Works* 74:30, 32 S '43
- Ultraviolet absorption spectra of nitrogenous heterocycles; the effect of pH on the spectrum of uracil-5-carboxylic acid. M. M. Stimson and M. A. Reuter. *Am Chem Soc J* 65:151-2 F '43
- Why the difference in pH in these two boilers? *Power Pl Eng* 47:102+ N '43
- See also
Isoelectric point

Control

- Some factors affecting automatic pH control. W. N. Greer and A. L. Chaplin. *diags Electrochem Soc Trans* 83 (preprint 15): 193-9 Ap '43

HYDROGEN peroxide

- Catalytic activity of activated nitrogenous carbons; decomposition of hydrogen peroxide. P. F. Bente and J. H. Walton. *bibliog il J Phys Chem* 47:133-48 F '43
- Continuous peroxide bleaching as developed in the Piedmont section; presented for the A.A.T.C.C. Piedmont section by R. E. Rupp. *diags Am Dyestuff Rep* 31:638-40 D 7 '42
- Effect of active nitrogen and of certain nitrogen compounds on catalytic properties of carbon; decomposition of hydrogen peroxide. P. F. Bente and J. H. Walton. *bibliog J Phys Chem* 47:329-37 Ap '43
- Electron diffraction study of hydrogen peroxide and hydrazine. P. A. Giguère and V. Schomaker. *bibliog diag Am Chem Soc J* 65:2025-9 O '43
- Hydrogen peroxide. J. S. Reichert. *il Chem & Eng N* 21:480-2 Ap 10 '43
- Hydrogen peroxide; manufacture, shipping and use. J. H. Hubel. *il Can Chem & Process Ind* 27:392-4 Jl '43
- Improvements in continuous peroxide bleaching. H. R. Mauersberger. *flow plan il Rayon* 24:144-5 Mr '43
- Mechanism of the oxidation of oleic and elaidic acids and their methyl esters by hydrogen peroxide in acetic acid; further observations on the configurations of the 9:10-dihydroxystearic acids. G. King. *Chem Soc J* p37-8 Ja '43
- Oxidation of amino acids by hydrogen peroxide in formic acid. G. Toennies and R. P. Homiller. *bibliog Am Chem Soc J* 64:3054-6 D '42
- Rate of decomposition of hydrogen peroxide in concentrated solutions. R. Livingston. *bibliog J Phys Chem* 47:260-4 Mr '43

Analysis

- Colorimetric determination of hydrogen peroxide. G. M. Eisenberg. *bibliog Ind & Eng Chem Anal* ed 15:327-8 My 15 '43

HYDROGEN sulfide

- Hydrogen sulfide generator (Kipp principle); diagram. C. J. Heimerzheim. *J Chem Educ* 20:136 Mr '43
- Hydrogen sulphide removal; the recovery of sulphur from commercial gases. D. D. Howat. *Chem Age (Lond)* 49:75-8 Jl 24; 99-105 Jl 31 '43
- Mechanism of the reaction between hydrogen sulfide and sulfur dioxide in liquid media. N. E. Albertson and J. P. McReynolds. *bibliog Am Chem Soc J* 65:1690-1 S '43
- Problems involved in conventional refining of sour crudes. R. B. Waite and R. H. Altken. *flow diags Oil & Gas J* 42:27-32, 35+ Ag 5 '43

- Qualitative analysis of microgram samples; separation, estimation, and identification of the more common ions of the hydrogen sulfide group. A. A. Benedetti-Pichler and M. Cefola. *bibliog il Ind & Eng Chem Anal ed* 15:227-30 Mr 15 '43

Analysis

- Automatic apparatus for determination of small concentrations of sulfur dioxide in air; application to hydrogen sulfide, mercaptan, and other sulfur and chlorine compounds. M. D. Thomas and others. *bibliog diags Ind & Eng Chem Anal* ed 15:287-90 Ap 15 '43
- Determination of hydrogen sulfide content of natural gas. G. M. Stearns. *diags Oil & Gas J* 41:71-2 F 11 '43
- Determination of sulfur in acid-soluble sulfides. H. C. Froelich. *Ind & Eng Chem Anal* ed 14:900 N 15 '42
- Small quantities of H₂S in gas. *diags Oil & Gas J* 41:69 F 18 '43

HYDROGENATION

- Addition of hydrogen to multiple carbon-carbon bonds; the electrolytic reduction of alkyl and aryl acetylenes. K. N. Campbell and E. E. Young. *bibliog Am Chem Soc J* 65:965-7 My '43
- Apparatus for quantitative catalytic hydrogenation. L. M. Joshel. *diag Ind & Eng Chem Anal* ed 15:590-1 S 15 '43
- Application of palladium- and platinum-polyvinyl alcohol-vanadium catalysts. L. D. Rampino and F. F. Nord. *bibliog Am Chem Soc J* 65:429-31 Mr '43
- Catalytic hydrogenation of benzene over metal catalysts. P. H. Emmett and N. Skau. *bibliog Am Chem Soc J* 65:1029-35 Je '43
- Catalytic hydrogenation of cystine. K. E. Kavanagh. *bibliog Am Chem Soc J* 64:2721 N '42
- Catalytic hydrogenation of dimedone (dimethylidihydroresorcinol), and a preparation of 1,1-dimethylcyclopentane. T. Henshall. *Soc Chem Ind J* 62:127-8 Ag '43
- Catalytic hydrogenation rates; equipment and control. N. K. Anderson and C. A. Rowe. *flow sheet il diags Ind & Eng Chem* 35: 554-7 My '43
- Catalytic hydrogenation rates; interpretation of results. R. B. Beckmann, A. E. Pufahl and O. A. Hougen. *Ind & Eng Chem* 35: 558-62 My '43
- Custom-built fats. H. W. Vahlteich. *bibliog il Chem & Eng N* 21:1238-42 Ag 10 '43
- Determination of unsaturates in hydrocarbon gases; the hydrogenation method. R. F. Robey and C. E. Morrell. *Ind & Eng Chem Anal* ed 14:880-3 N 15 '42
- Effect of composition and rank of coal upon hydrogenation. C. H. Fisher and others. *il map Oil & Gas J* 41:40-2, 44+ Ja 21 '43
- Hardened edible oils. H. R. Mitchell. *flow sheet diag Chem Age (Lond)* 48:471-5, 495-9 My 1-3 '43
- Hydrogenation and liquefaction of coal; characterization of assay oils. L. L. Hirst and others. *bibliog U S Bur Mines Tech* Pa 646: 1-27; pa 10c Supt. of doc. '42
- Hydrogenation and liquefaction of coal; effect of petrographic composition and rank of coal. C. H. Fisher and others. *il diags map U S Bur Mines Tech* Pa 642:1-162; bibliog(144 titles, p145-51) '42; Excerpt. Oil & Gas J 41:40-2, 44+ Ja 21 '43
- Hydrogenation and liquefaction of coal; effect of temperature, catalyst, and rank of coal on rates of coal-hydrogenation reactions. H. H. Storch and others. *bibliog U S Bur Mines Tech* Pa 654:1-50; pa 10c Supt. of doc. '43; Excerpt. Gas Age 92:40, 42 D 16 '42
- Hydrogenation of lignin; abstract. W. Lautsch and G. Piazzolo. *Paper Ind* 25:812 O '43
- Hydrogenation of some sulphur compounds. C. M. Cawley and C. C. Hall. *bibliog Soc Chem Ind J* 62:116-19 Ag '43
- Hydrogenation of the triple bond. A. L. Henne and K. W. Greenlee. *Am Chem Soc J* 65:2020-3 O '43
- Hydrogenation of tutin. S. N. Slater. *Chem Soc J* p50-1, 143-4 F, Ap '43
- Mechanism of catalytic hydrogenation. E. K. Rideal. *Chem & Ind* 62:335-8 S 4 '43

HYDROGENATION—Continued

Methods of preparing butadiene. G. Egloff and G. Hulla. bibliog Oil & Gas J 41:128+ N 26 '42

Preparation of mixed, secondary aliphatic amines, RR'NH. H. R. Henze and D. D. Humphreys. bibliog Am Chem Soc J 64: 2878-80 D '42

Pyrethrum analysis; a modification of the hydrogenation method for determination of pyrethrins. F. B. La Forge and B. B. Bendigo. Soap & San Chem 19:100+ Ap '43

Simple apparatus for small-scale catalytic hydrogenation. C. R. Noller and M. R. Barusch. diag Ind & Eng Chem Anal ed 14: 907-8 N 15 '42

Splitting with hydrogenation; patent. B. Winer. Soap & San Chem 19:73 N '43

Studies on lignin and related compounds; hydrogenolysis and hydrogenation of maple wood. J. R. Bower, jr., L. M. Cooke and H. Hibbert. bibliog Am Chem Soc J 65: 1192-5 Je '43

Use of semimicro technic in elementary organic chemistry; semimicro hydrogenation at atmospheric pressure. N. D. Cheronis and M. Koeck. bibliog diag J Chem Educ 20:488-96 O '43

Volatile hydrogenation derivatives of lignin. A. Bailey. bibliog Am Chem Soc J 65: 1165-8 Je '43

See also

Coal liquefaction Fischer-Tropsch process
Dehydrogenation

HYDROGRAPHIC surveying

See also

Sounding

HYDROGRAPHY

See also

Lakes Ocean bottom
Navigation Stream measurement

HYDROLOGY. See Water**HYDROLYSIS**

Analytical separations by means of controlled hydrolytic precipitation. R. Gilchrist. J Research Nat Bur Stand 30:89-99 F '43

Carbamates of cellulose and cellulose acetate; stability toward hydrolysis. W. M. Hearon, G. D. Hiatt and C. R. Fordyce. Am Chem Soc J 65:833-6 My '43

Catalyzed hydrolysis of amide and peptide bonds in proteins. J. Steinhart and C. H. Fugitt. bibliog J Research Nat Bur Stand 29:315-27 N '42

Hydrolysis and catalytic oxidation of cellulosic materials; characterization of cellulose. R. E. Nickerson. bibliog Ind & Eng Chem 34:1480-5 D '42

Hydrolysis of d-peptides. G. E. Pickford. bibliog Science 98:14-15 Jl 2 '43

Hydrolysis of hydrogen cyanide in acetic acid solutions with mineral acids as catalysts. V. K. Kriebel, F. C. Duennel and E. Colton. bibliog Am Chem Soc J 65: 1479-82 Ag '43

Kinetics of the aqueous hydrolysis of sodium phenylbromacetate and sodium phenylchloroacetate. W. R. Bulcraig and H. M. Dawson. Chem Soc J p80-4 Mr '43

Occurrence of sucrose and inulin-hydrolyzing enzymes in commercial enzyme preparations. W. W. Pigman. bibliog J Research Nat Bur Stand 30:159-75 Mr '43

Partial hydrolysis products derived from proteins and their significance for protein structure. R. L. M. Syngé. Chem R 32:135-72 bibliog(235 references, p 168-72) F '43

Resolution and rates of hydrolysis of d, l- α -bromopropionic acid and its glycine derivatives. A. F. Chadwick and E. Pacu. bibliog Am Chem Soc J 65:392-402 Mr '43

Study of the dilatometric method of measuring rates of reactions: the application to the determination of the rate of hydrolysis of acetal. L. K. J. Tong and A. R. Olson. diag Am Chem Soc J 65:1704-7 S '43

HYDROMECHANICS

See also

Hydraulic engineering Hydrodynamics
Hydraulics Hydrostatics

HYDROMETERS

Studies of subscreen sizing; grinding and grinding efficiencies. I. M. Six. bibliog Il Can Min J 64:147-55 Mr '43

Testing

Methods of testing hydrometers. J. P. Bader and E. L. Pfeffer. bibliog Il Am Soc T M Proc 42:463-72 '42

HYDROQUINONE

Catalytic activity of activated nitrogenous carbons; oxidation of hydroquinone. P. F. Bente and J. H. Walton. bibliog Il J Phys Chem 47:133-48 F '43

Detection of an intermediate step in the autooxidation of hydroquinone; aerial fogging of photographic emulsions. T. H. James. bibliog Il J Chem Phys 11:183-7 Ap '43

Effect of active nitrogen and of certain nitrogen compounds on catalytic properties of carbon; oxidation of hydroquinone. P. F. Bente and J. H. Walton. bibliog J Phys Chem 47:329-37 Ap '43

Oxidation processes; the effect of reducing agents on the autooxidation of some photographic developing agents. A. Weissberger, D. S. Thomas, jr. and J. E. Lu Valle. bibliog Am Chem Soc J 65:1489-95 Ag '43

HYDROSOLS. See Colloids**HYDROSTATICS**

Measurements of pore-water pressure in silt and clay; use of the elastic-wire strain meter. K. Terzaghi. diags Civil Eng 13: 33-6 Ja '43

Tests of thin hemispherical shells subjected to internal hydrostatic pressure; reprint of University of Illinois Engineering experiment station bulletin 295. W. M. Wilson and J. Marin. il diags Welding J 22:sup214-20 My '43

See also

Fluids
Gases

HYDROSULFIDES

Determination of chloride in the presence of hydrosulfide or sulfide ion. M. M. Maglio and F. Fazio. Ind & Eng Chem Anal ed 15:265-6 Ap 15 '43

HYDROURACIL

Reaction of hydrochloric acid with 6-methyl-5,5-dichloroxyhydrouracil. T. B. Johnson. Am Chem Soc J 65:1220-2 Je '43

HYDROXIDES

Analytical separations by means of controlled hydrolytic precipitation. R. Gilchrist. J Research Nat Bur Stand 30:89-99 F '43

See also

Sodium hydroxide

HYDROXY compounds

Enediols; vinyls of ethylene and acetylene glycols. R. C. Fuson, D. J. Byers and A. I. Rachlin. bibliog Am Chem Soc J 64:2891-3 D '42

Hydroxy- by-products in nitration; abstract. G. M. Bennett. Chem & Ind 62:149 Ap 17 '43

Hydroxyalkylamino-acids. W. Cocker. Chem Soc J p373-8 Ag '43

Ultraviolet absorption spectra of nitrogenous heterocycles; the blocking effect of methyl groups on the ultraviolet absorption spectra of some hydroxypurines and pyrimidines. J. R. Loofbourow, M. M. Stimson and J. H. Hart. bibliog Am Chem Soc J 65: 148-61 F '43

Ultraviolet absorption spectra of nitrogenous heterocycles; the effect of hydroxy substitutions on the ultraviolet absorption of the series; hypoxanthine, xanthine and uric acid. M. M. Stimson and M. A. Reuter. bibliog Am Chem Soc J 65:153-5 F '43

HYDROXYDIPHENYLPHthalide

2'-Hydroxydiphenylphthalide. M. H. Hubacher. Am Chem Soc J 65:1655-6 Ag '43

HYDROXYFURANONE

Conversion of unsaturated 1,4-diketones into furans and hydroxyfuranones. R. E. Lutz and C. E. McGinn. bibliog Am Chem Soc J 64:2585-8 N '42

HYDROXYFURANS

Acylation of β -hydroxyfurans. R. E. Lutz, C. E. McGinn and P. S. Bailey. Am Chem Soc J 65:843-9 My '43

3-Hydroxy-2,5-dimesitylfuran and related compounds. R. E. Lutz and C. E. McGinn. Am Chem Soc J 65:849-53 My '43

HYDROXYINDOLE

5-Hydroxyindole. F. Bergel and A. L. Morrison. *Chem Soc J* p49 F '43

HYDROXYISOBUTYRIC acid

Preparation of allyl and methallyl methacrylates by the thermal decomposition of allyl and methallyl α -acetoxyisobutyrate. C. E. Rehberg, C. H. Fisher and L. T. Smith. *bibliog Am Chem Soc J* 65:1003-6 Je '43

HYDROXYKETOTOLANIC acid

Barbier-Wieland degradation of 3-hydroxy-12-ketotolanic acid. B. Riegel and R. B. Moffett. *bibliog Am Chem Soc J* 65:1971-3 O '43

Preparation of the homologs of 3-hydroxy-12-ketotolanic acid. E. Schwenk and others. *bibliog Am Chem Soc J* 65:549-51 Ap '43

HYDROXYNAPHTHOIC acid

Synthesis of 4-hydroxy-2-naphthoic acids. R. D. Haworth, B. Jones and Y. M. Way. *Chem Soc J* p10-13 Ja '43

HYDROXYQUINOLINE

Chemistry of indium; a colorimetric method for the estimation of small amounts of indium. T. Moeller. *bibliog Ind & Eng Chem Anal ed* 15:270-2 Ap 15 '43

Concentration methods in spectrographic analysis; recovery of cobalt, nickel, molybdenum, copper, and zinc from plant materials and soil extracts by 8-hydroxyquinoline. R. O. Scott and R. L. Mitchell. *bibliog Soc Chem Ind J* 62:4-8 Ja '43

Determining magnesium in plants and soils; adaptation of the 8-hydroxyquinolate micro-method. M. E. Weeks and J. R. Todd. *bibliog Ind & Eng Chem Anal ed* 15:297-9 Ap 15 '43

Extraction and colorimetric estimation of certain metals as derivatives of 8-hydroxyquinoline. T. Moeller. *bibliog Ind & Eng Chem Anal ed* 15:346-9 My 15 '43

New oxine technique; determination of magnesium in aluminium alloys. *Chem Age (Lond)* 48:627 Je 12 '43

HYDROXYLAMINE

Estimation of carbonyl groups in chromic anhydride oxystarch and oxycellulose by means of hydroxylamine. E. K. Gladding and C. B. Purves. *bibliog Disag Paper Tr J* 116:26-31 Ap 8 '43; Same cond. *Paper Ind* 25:306-9 Je '43

Influence of age and surface conditions on the reactivity of certain precipitates. T. H. James. *bibliog J Phys Chem* 46:1068-76 D '42

Some factors affecting the reduction of silver oxalate. T. H. James. *bibliog J Chem Phys* 10:744-6 D '42

HYDROXYLAMINO BENZENESULFONAMIDE

Properties of *p*-hydroxylaminobenzenesulfonamide and a related molecular complex. M. G. Sevag. *bibliog Am Chem Soc J* 65:110-13 Ja '43

HYDROXYL group

Analysis of cellulose derivatives; determination of free hydroxyl content. C. J. Malm, L. B. Genung and R. F. Williams, jr. *bibliog Ind & Eng Chem Anal ed* 14:935-40 D 15 '42

Microdetermination of hydroxyl content of organic compounds; acetic anhydride-pyridine mixture as reagent. J. W. Petersen, K. W. Hedberg and B. E. Christensen. *bibliog Ind & Eng Chem Anal ed* 15:225-6 Mr 15 '43

Structure of monocrotaline; the proof of primary and secondary hydroxyl groups in retronecine. R. Adams and K. E. Hamlin, jr. *bibliog Am Chem Soc J* 64:2597-9 N '42

HYGIENE

Ventilation and hygiene in houses. *Gas J (Lond)* 240:135-6 O 23 '42

See also

Air conditioning—	Mental hygiene
Hygienic aspects	Nutrition
Air pollution	Physical examinations
Children—Care and hygiene	Public health
Clothing and dress—	Sickness
Hygienic aspects	Temperature—Physiological effect
Diet	Ventilation
Disinfection and disinfectants	Water pollution
Fatigue	Water purification
Food	Water supply
Humidity	

Bibliography

Physical fitness. T. K. Cureton, E. M. Layman and C. E. Turner, comps. *Booklist [ALA]* 39:231-40 pt 2 F 1 '43

HYGIENE, Industrial

Absence due to sickness. D. L. Lynch. *Ind Med* 12:575-82 S '43

Absenteeism control. J. J. Wittmer. *Ind Med* 12:281-4 My '43

Abstracts of papers of the Industrial hygiene section meetings of the 71st annual meeting of the American public health association, St. Louis. *Ind Med* 12:61-7 Ja '43

Accident prevention in aircraft manufacturing. W. S. Rhodes. *Automotive & Aviation Ind* 88:151-2+ Mr 15 '43

Accidents and health in British factories, 1941. *Monthly Labor R* 56:76-9 Ja '43

Activities of state and local industrial hygiene services in a war year. V. M. Trasko. *Pub Health Rep* 58:904-15 Je 11 '43

Atmospheric contamination from the casting of magnesium. C. R. Williams. *bibliog J Ind Hygiene* 24:277-80 N '42

Blood banks don't fail; blood giving does not affect absenteeism and production. *Il Safety Eng* 85:41-+ Je 43

British industrial health advisory committee. E. M. Hodgkinson. *Monthly Labor R* 57:118-19 J1 '43

Carry on health and safety activities. *Il Factory Management* 101:134-44 Ag '43

Chemical work of the factory department; aspect of industrial health report. S. H. Wilkes. *Chem Age (Lond)* 49:27-30 J1 10 '43

Chlorinated naphthalenes and diphenyls. L. Greenburg. *bibliog Ind Med* 12:520-1; Discussion. 521-2 Ag '43

Community services vs. lost man-hours. P. V. McNutt. *Pub Health Rep* 58:1082-8 J1 16 '43

Congress on industrial health; abstracts of papers. *Ind Med* 12:31-97 F '43

Conservation of man-power in United States war industries; industrial health and safety campaign. V. A. Zimmer. *Int Labour R* 48:611-18 N '43

Control of health in industry. J. H. Foulger. *Ind Med* 12:136-9; Discussion. 139-40 Mr '43

Co-operation between chemist and doctor in factory welfare. F. S. Fowweather. *Chem & Ind* 61:524-6 D 26 '42

Cutting oils and the skin. C. Leggo. *Ind Med* 12:102-8 F '43

Danger, women working! safety and hygiene. J. V. Grimaldi. *Il Safety Eng* 84:9, 12-13 D '42

Dermatitis due to the formaldehyde resins; prevention and methods of control. K. E. Markuson, T. P. Mancuso and J. S. Soet. *Ind Med* 12:333-6 Je '43

Dermatitis in war industries. C. A. Weslager. *Il Safety Eng* 84:36-8, 42 N '42

Disability table for urban workers. H. F. Dorn. *Pub Health Rep* 57:1761-75 N 20 '42

Disabling morbidity among industrial workers, third quarter of 1942, with a note on the occurrence of the respiratory diseases, 1933-42. W. M. Gafafer. *Pub Health Rep* 58:232-4 F 5 '43

Distribution of health services in the structure of state government; industrial health activities by state agencies. J. W. Mountin and E. Flook. *Pub Health Rep* 58:33-58 Ja 8 '43

Dust off your gray matter; test questions on occupational hygiene. *Safety Eng* 86:45-6, 48 J1 '43

Effects of war on the scope of industrial hygiene. L. M. Farner. *Ind Med* 12:714-17; Discussion. 717-18 O '43

Fatigue problem in industry. S. D. Piatek. *Foundry* 71:133-4 Je '43

First British industrial health conference. *Int Labour R* 48:447-65 O '43

Flame shrinking galvanized plates without generating obnoxious fumes. A. Lake. *Il Steel* 112:108-9+ Ap 19 '43

Frequency and duration of disabilities causing absence from work among the employees of a public utility, 1938-42; Boston Edison company. W. M. Gafafer. *bibliog Pub Health Rep* 58:1554-60 O 15 '43

Governmental industrial hygiene practice in 1942. J. J. Bloomfield. *Ind Med* 12:491-5 J1 '43

HYGIENE, Industrial—Continued

- Guard the health of our industrial soldiers. V. G. Heiser. *Il Concrete* (mill sec) 50:281-2 D '42
- Health and safety to make best use of manpower. *Il Factory Management* 101:89-112 Ja '43
- Health and welfare of women in war factories; abstract. *J Ind Hygiene* 25:sup53-4 Mr '43
- Health aspect of the magnesium industry. H. H. Gay. bibliog(59 titles) *Iron Age* 150:60-3 D 3 '42
- Health conservation in industrial establishments of the War department. W. J. McConnell. *Ind Med* 12:600+ S '43
- Health hazards in the fur industry. H. Heimann. bibliog(34 titles) *J Ind Hygiene* 24:322-31 D '42
- Health hazards of cutting oils. C. L. Weirich. *Il Safety Eng* 85:36-40 Mr '43
- Health in war plants. C. P. Engel. *Il Safety Eng* 35:41, 44-5 My '43
- Health of industrial workers, 1942. Monthly Labor R 56:734-5 Ap '43
- Health of industrial workers; Peoria conference. *Ind Med* 11:518-19 N '42
- Industrial health and safety, 1942. *Economist* 145:501 O 9 '43
- Industrial health and the war; statistical analysis of the medical causes of absenteeism. D. L. Lynch. *Ind Med* 12:236+ Ap '43
- Industrial health; appointment of Industrial health advisory committee. *Economist* 144:370 Mr 20 '43
- Industrial health conference. *Economist* 144:736+ Je 5 '43
- Industrial health; its war and postwar significance. C. O. Sappington. *Ind Med* 12:361-4 Je '43
- Industrial health; points from the factory inspector's report. *Chem Age (Lond)* 49:389-90 O 16 '43
- Industrial health units; considerations and designs for the smaller installations. W. L. Ritter and J. W. Dugger. plans *Ind Med* 12:650-4 O '43
- Industrial hygiene in Los Angeles county. F. M. Stead. *Ind Med* 11:542-6 N '42
- Industrial hygiene in synthetic rubber manufacture. F. S. Mallette. bibliog flow sheet *Il Ind Med* 12:495-9 J '43
- Industrial hygiene of rubber materials; control of health hazards in synthesis and compounding. F. A. Van Atta and A. M. Noyes. bibliog *Il Can Chem & Process* Ind 27:183-5+ Ap '43; Same abr. *Chem & Met Eng* 50:119-21 Je '43
- Industrial hygiene plant surveys; abstracts. F. R. Holden. Heating-Piping 15:199-202 Ja '43; Concrete (mill sec) 51:157-8 Ap '43
- Industry's step-child; combatting sick absenteeism. V. M. Calohan. *Il Safety Eng* 85:10-12+ Je '43
- Information on nutrition in industry. *Ind Med* 12:172 Mr '43
- Investigation into the effects of continued exposure to the vapor of volatile solvents. E. M. Killick and R. S. F. Schilling. bibliog *J Ind Hygiene* 24:307-14 D '42
- It's a woman's war, too; feminine influence in safety equipment market. E. W. Andrews. *Il Nat Safety N* 47:8-9+ Mr '43
- Keep war workers well; abstracts of proceedings of the 7th annual meeting of the Industrial hygiene foundation of America. *Ind Med* 12:14-51 Ja '43
- Labor's attitude on industrial health measures. L. Hollander. *Ind Med* 12:77-9 F '43
- Manpower conservation. P. V. McNutt. *Safety Eng* 84:17, 20 D '42
- Medical service statistics; Standard Oil's ten-year review. *Ind Med* 11:593-4 D '42
- Metal fume hazards. J. W. Fehnel. *Il Safety Eng* 86:45-6, 48-9 Ag; 48-3 S '43
- 1021 answers to industrial health and safety problems. J. E. Weiss and others, eds. 699p \$10 Occupational hazards inc, 812 Huron road, Cleveland, Ohio '43
- Outline of an industrial hygiene program. (Public health rep supp 171) 13p U.S. Public health service, Washington; pa 5c Supt. of doc. '43
- Physiological reactions applicable to workers in hot industries. F. C. Houghten, C. Gutberlet and M. B. Ferderber. bibliog *Il Heating-Piping* 15:205-8 Ap '43
- Practical nutrition program for industry. W. A. Sawyer. *Ind Med* 12:278-80 My '43
- Problem of industrial hygiene. J. G. Townsend. *Ind Med* 12:503-4 J '43
- Proper nutrition an important factor in efficiency of workers. V. G. Heiser. *Il Concrete* (mill sec) 51:126-7 F '43
- Protecting the health of young workers in wartime. U S Children's Bur Pub 291:1-10; pa 5c Supt. of doc. '43
- Second National congress on industrial health in Mexico. *Int Labour R* 48:661-4 N '43
- Sickness absenteeism among industrial workers, final quarter of 1942, with a note on the occurrence of bronchitis and pneumonia, 1933-42. W. M. Gafafer. *Pub Health Rep* 58:677-9 Ap 23 '43
- Sickness absenteeism among industrial workers, first quarter of 1943, with an inquiry into the occurrence of the respiratory diseases, 1934-43. W. M. Gafafer. *Pub Health Rep* 58:1273-7 Ag 20 '43
- Sickness absenteeism among male and female industrial workers, 1933-42, inclusive. W. M. Gafafer. *Pub Health Rep* 58:1250-4 Ag 13 '43
- Some industrial hygiene problems in the synthetic rubber industry. F. A. Van Atta and A. M. Noyes. bibliog *Rubber Age* 54:35-9 O '43; Same cond. *Can Chem & Process* Ind 27:183-5+ Ap '43; Same abr. *Chem & Met Eng* 50:119-21 Je '43
- Special consideration; protecting health of women workers. H. Truax. *Safety Eng* 86:51-2 S '43
- Studies on the duration of disabling sickness; duration of disability from the nonrespiratory-nondigestive diseases among male employees with particular reference to the older worker. W. M. Gafafer. *Il R. S. Sigraeves. Pub Health Rep* 58:969-79 Je 25 '43
- Supplementary feeding in industry. H. W. Haggard. *J Ind Hygiene* 24:332-5 D '42
- Symposium on industrial hygiene. American chemical society, Division of water, sewage, and sanitation chemistry. *Ind Med* 12:718-20 O '43
- Testing toxic atmospheres. N. R. Bernz. bibliog *Il Heating-Piping* 15:236-7, 482-4, 518-20 My, S-O '43
- They're sick; Health league of Canada plans nutritional program. *Business Week* p52 J 3 '43
- Ventilation for control of solvent exposures in fabricating rubber military equipment. T. R. Thomas and B. D. Tobbens. bibliog diags Heating-Piping 15:122-6 Mr '43
- Vitamin pills for employees. A. J. Abrams. *Management R* 32:289-91 Ag '43
- War on health hazards; Wright field. Z. T. Wirtschafter. *Il Nat Safety N* 48:18-19+ J '43
- War services of Industrial hygiene foundation at Mellon institute. *Chem & Eng N* 21:472-4 Ap 10 '43
- Wartime feeding of industrial workers; British and American programs. R. Goodhart. *Ann Am Acad* 225:116-21 Ja '43
- Wartime lighting and industrial hygiene. P. A. Lawrence. *Illum Eng* 38:448-9 S '43
- Why do employees stay away from work and what can we do about it? C. D. Selby. *Steel* 112:25+ Ja 18 '43
- Wisconsin's industrial hygiene unit. *Ind Med* 12:281 My '43
- Women in industry; a study of 135 women working as riveters in the aircraft industries. W. C. Bradbury and C. B. S. Evans. bibliog *Ind Med* 12:690, 692 O '43
- Women in industry; their problems of health. M. H. Kronenberg. *Ind Med* 11:589-92 D '42

See also

Air conditioning
Benzene poisoning
Coal miners—Diseases and hygiene
Dental service, Industrial
Diseases, Industrial
Dust
Dust removal
Factories—Air conditioning
Factories—Lighting
Factory sanitation
Fatigue

Fumes, Acid
Lead poisoning
Lunches, Employees'
Lunchrooms and cafeterias, Employees'
Lungs—Dust diseases
Medical service, Industrial
Mental hygiene, Industrial
Noise
Nurses and nursing, Industrial

HYGIENE, Industrial—See also—*Continued*
Physical examina- Temperature—Phys-
tions iological effect
Poisons, Industrial Tuberculosis
Posture Welding—Hygienic
Safety devices and aspects
measures
Solvents—Physiolog-
ical effect

Bibliography

References on industrial hygiene in relation to national defense and war. *Ind Med* 11: 184, 234, 446; 12:420-1 Ap-May, S '42, Je '43

HYGIENE, Public. See Public health

HYGROMETERS

Instrumentation studies; penetration of papers by water vapor; electric sword hygrometer for measuring the relative humidity of air inside packages or other enclosures. *il diags Paper Tr J* 116:16-19 Je 17; 117:12-15 Ji 1 '43

See also

Humidity

HYGROSCOPICITY

Aktivin corporation offers new hygroscopic agent. *Corpolin. Oil Paint & Drug Rep* 143: 50 F 8 '43

Effect of acetylation on water-binding properties of cellulose; relation between physical properties and hygroscopicity. W. H. Aiken. *bibliog Ind & Eng Chem* 35:1206-10 N '43

HYOSCINE

Hyoscine manufactured in Australia. *For Comm W* 13:22-3 N 6 '43

HYPERCONJUGATION. See Conjugation (chemistry)

HYPERTENSIN

Destruction of hypertensin and pepsitensin by an aminopeptidase obtained from yeast. R. Croxatto and H. Croxatto. *bibliog il Science* 96:519-20 D 4 '42

HYPERTENSINOGEN (term)

Suggested change in designation of renin-activator (hypertensinogen) to renin-substrate (α_2 globulin). I. H. Page and others. *bibliog Science* 98:153-4 Ag 13 '43

HYPNOTICS

See also

Anesthetics

HYPNOTISM

Hypnotism; is it a fraud? *Sci Am* 169:22 Ji '43

HYPO. See Sodium thiosulfate

HYPO elimination. See Photographic chemistry

HYPOCHLORITES

Bleaching rag stock with chlorite activated by hypochlorite. J. E. Brennan, J. D. MacMahon and G. P. Vincent. *Paper Tr J* 115: 25-6 N 19 '42

HYPODERMIC syringes

Expendable hypodermic syringe. *il Mod Plastics* 20:55+ Ap '43

Fabric bubbles removed with hypodermic needle. R. A. Herb. *il Am Mach* 87:115 O 14 '43

Medical packs help reduce war casualties. D. Guernsey. *il Mod Packaging* 16:51-3 Ag '43

HYPOID gearing. See Gearing, Hypoid

HYPOIODITES

Kinetics of hypoiodite decomposition. Choh Hao Li and C. F. White. *bibliog Am Chem Soc J* 65:335-9 Mr '43

HYPOPHYSEAL (term)

Spelling of the adjective hypophyseal. G. W. Corner. *Science* 97:67-8 Ja 15 '43

HYPOXANTHINE

Ultraviolet absorption spectra of nitrogenous heterocycles; the effect of hydroxy substitutions on the ultraviolet absorption of the series: hypoxanthine, xanthine and uric acid. M. M. Stimson and M. A. Reuter. *bibliog Am Chem Soc J* 65:153-5 F '43

HYSTERESIS

Investigations of ferromagnetic impurities in copper, silver, and brass. F. W. Constant, R. E. Faires and H. E. Lenander. *bibliog Phys R* 63:441-5 Je 1 '43

HYSTERESIS (mechanics)

Design office problem in the estimation of the torsional resonance characteristics of small marine Diesel-propulsion units. R. W. S. Mitchell. *diag Inst Mech Eng J & Proc* 149: Proc 133-42 S '43

Torsional damping capacity of solid magnesium-alloy rods as affected by cold-working. A. U. Kutsay and A. J. Yorgiadis. *bibliog il diag J Aeronautical Sci* 10:303-10 O '43

HYSTERIA

Mass hysteria causing injury held compensable. *Ins Field (Fire ed)* 72:11-12 S 16 '43

I

ICE

Augusta, Georgia, lowers 30-in. cast iron water main by melting blocks of ice. *J. D. Twiggs. Refrig Eng* 45:60 Ja '43

See also

Airplanes—Ice protection
Glacial geology
Glaciers
Cold storage
Ice industry

Manufacture

Rate of ice formation. A. L. London and R. A. Seban. *bibliog diags A S M E Trans* 65:771-8 O '43

Shattering and cracking of ice; role of carbon dioxide. P. W. West. *bibliog il Ind & Eng Chem* 34:1515-18 D '42

ICE anesthesia. See Anesthesia

ICE boxes. See Refrigerators

ICE cream factories

Ice cream plant and sales room for Heep superior dairies, Austin, Texas; views and plan. *Arch Rec* 93:65 Ap '43

ICE cream, ices, etc.

British food technologists improvise to meet shortages; manufacturers of frozen desserts kept on making products acceptable to consumers without "essential" ingredients. H. B. Cronshaw. *Food Ind* 15:57+ F '43

Frozen desserts need the right stabilizer. B. I. Masurovsky. *bibliog Food Ind* 14:66-7 D '42

Research discovers new stabilizer; extract of quince seed. G. Hadary. *il Food Ind* 15: 76-7 F '43

ICE cream industry

Ice cream doubts; shortage of corn sugar and scheme for conversion to frozen foods. *Business Week* p37-8 Je 19 '43

ICE flow. See Glaciers

ICE industry

He looked at an ice pond, and saw a world trade. *Adv & Sell* 36:78 O '43

Ice comes back. *Business Week* p37-8 Ji 3 '43

Ice men get hot; by pooling delivery and sales service hope to steal march on mechanical refrigerators. *Business Week* p38+ N 21 '42

ICE machines

Automatic production of tube-ice. B. F. Kubaugh. *diags Power Pl Eng* 47:79-81 F '43

ICE plants

Cathodic protection of metals in ice plants. R. W. Warner and A. J. McCrocklin, jr. (Engineering research ser. 36) 30p Bur. of engineering research, Univ. of Texas, Austin '43

See also

Cold storage warehouses

Equipment

Use of recording pressure gage saves water in ice plant. L. S. Lyon. *Power Pl Eng* 46: 88 D '42

ICE sheets. See Glaciers

ICELAND

Refrigeration in Iceland. R. E. Orcutt. *Refriger Eng* 45:327+ My '43

See also

Fisheries—Iceland

ICELAND—Continued

Economic conditions

Trend of cost of living and worker income.
Monthly Labor R 56:747 Ap '43

ICELAND moss

Polysaccharides of Iceland moss (*Cetraria islandica*); preliminary study of the hemi-celluloses. H. Granichstaden and E. G. V. Percival. Chem Soc J p54-8 F '43

ICKES, Harold Le Claire, 1874-

Coal man Ickes. F. Tisdale. por Coal Age 48:52-7 Je '43

Ickes eyes REA. Business Week p42+ S 18 '43

Mr Ickes comes into his own. E. Janeway. Fortune 27:202+ Ja '43

Oil's united front, for the duration. Business Week p54 Ap 17 '43

Portrait. Business Week p15 My 8 '43

ICTEROHEMORRHAGIC spirochetosis. See Well's disease

IDAHO

See also

Geology—Idaho
Mines and mineral resources—Idaho

IDAHO power company

Recent offering of Idaho Power common stock. Comm & Fin Chr 158:1101-2 S 16 '43

Stock offered. Comm & Fin Chr 158:985 S 6 '43

IDEAS, Protection of. See Intellectual property—Protection

IDEAS in business

Idea jackpot; WPB maintains file of 500 prize suggestions for alleviating production snarls. il Business Week p76+ F 6 '43

What's in your business attic; Ideas from past advertising, sales policies, etc. Adv & Sell 36:82 Ag '43

See also

Advertising cam- Products, New
paigns Suggestion systems
Advertising copy

IDENTIFICATION of employees. See Employees, Identification of

IDENTIFICATION of piping. See Piping—Identification

IDLENESS, Industrial

Bonus to boost output; rewards for keeping all machines on the job every minute of 24-hour day. P. Bernstein. Factory Management 101:118+ Je '43

Proposed procedure for determining machine capacity. V. D. Geers. N A C A Bul 24: 249-59 N 1 '42

IGLOOS for explosives. See Explosives—Storage

IGNEOUS rocks. See Rocks, Igneous

IGNITION

Analytical reactions involving ignition with manganous nitrate. M. J. Preising, O. F. Slonek and J. H. Reedy. bibliog Ind & Eng Chem Anal ed 14:875-7 N 15 '42

Ignition points of plastic materials. J. Delmonte and M. A. Azam. diags Mod Plastics 20:88+ F '43

Significance of ignition temperature test of fuels. A. W. Trusty. Pet Eng 14:78, 80+ Ja '43

See also

Combustion Explosions
Electric ignition Inflammable mixtures

IGNITION, Electric. See Electric ignition

IGNITRON

Electric brain remembers what happens in a rectifying circuit. W. E. Pakala. il Sci Am 169:25-6 Jl '43

Ignitron for direct current power. W. E. Schwarz. il plan Power Pl Eng 47:76-9+ Mr '43

Ignitron rectifiers save critical materials in aluminum plants. A. F. Kenyon. Blast F & Steel Pl 31:336 Mr '43

Ignitron substation closely knit with little field wiring; Vesta-Shannopin coal division, Jones & Laughlin steel corp. C. R. Drum. il diag Coal Age 48:74-6 Ag '43

Load pickup by a group of ignitron rectifiers; application to large electrochemical loads, such as aluminum cell lines. L. W. Morton and D. I. Bohn. bibliog diags Elec Eng 62: Trans 679-84 N '43

ILKOVIĆ equation

Deviations between observed and calculated polarographic diffusion currents. W. M. MacNevin and E. W. Balis. bibliog il diag Am Chem Soc J 65:1660-5 Ap '43

ILLEGITIMACY

Illegitimate posthumous child may recover proceeds of group policy payable to children of employee. Weekly Underw 148:687 Mr 20 '43

ILLINOIS

Spirit leveling in Illinois, 1896-1941. Apts, pt 1-3. maps U S Geol S Bul 930-A:1-481, pl 1-4; 930-B:482-918, pl 1-2, 5-6; 930-C: 919-1281, pl 1-2, 7-8 pt 1 pa 65c; pt 2 pa 60c; pt 3 pa 40c Supt. of doc. '42-'43

See also

Petroleum industry
and trade—Illinois
Wages—Illinois

Economic conditions

Illinois business activity, 1937-1942. F. L. White, comp. (Bur. of economic and business research bul. 64) 76p Univ. of Illinois, Urbana '43

ILLINOIS bankers life assurance company

MacArthur moves to buy Illinois Bankers Life. Nat Underw (Life ed) 47:4 Jl 16 '43

ILLINOIS Bell telephone company

Income account, 1939-1942. Comm & Fin Chr 157:729 F 22 '43

ILLINOIS central railroad

Annual report. Comm & Fin Chr 157:2150-1 Je 7 '43

Equipment trusts offered. Comm & Fin Chr 158:1638 O 25 '43

Illinois Central earnings at record levels. A. Jansen. Barron's 23:9 F 1 '43

Yield on Illinois Central bonds high. Barron's 23:12+ Ag 16 '43

ILLINOIS institute of technology

Illinois institute of technology. P. O. Ridings. il J Eng Educ 33:482-8 Mr '43

ILLINOIS-Iowa power company

Files for refunding. Comm & Fin Chr 158: 1732 N 1 '43

Files suit against North American light & power co. Comm & Fin Chr 157:474 F 1 '43

Gets extension. Comm & Fin Chr 157:2349 Je 21 '43

Illinois Iowa Power preferred. Comm & Fin Chr 158:1501 O 14 '43

To sell Des Moines Electric common. Comm & Fin Chr 157:1559 Ap 26 '43

ILLINOIS state academy of science

Annual meeting, 36th, Jacksonville, May 7-8. Science 97:583-4 Je 25 '43

ILLINOIS university

Research work in welding. il Welding J 22: sup273-7 Jl '43

War services of the University of Illinois. Science 97:156 F 12 '43

College of medicine

American medical association report. Science 96:577 D 25 '42

Gifts, legacies, etc.

Gifts and grants to the University of Illinois. Science 98:255-6 S 17 '43

ILLINOIS waterway

Effect of river mud deposits on determination of B.O.D. of supernatant liquor. W. A. Moore and C. C. Ruchhoff. Ind & Eng Chem Anal ed 14:933-4 D 15 '42

Illinois water litigation, 1940-1941; petition by state of Illinois for temporary increase in diversion from Lake Michigan. L. L. Pearse. bibliog map Am Soc C E Proc 68: 1689-1713 D '42; Discussion. 69:772-4, 942-8 My-Je '43

ILLNESS. See Sickness

ILLUMINATING engineering society

General secretary's report, 1941-1942. A. D. Hinckley. Illum Eng 37:627-54 D '42

ILLUMINATING engineering society—Cont.

- Illuminating engineering society in wartime.
W. C. Brown, *Illum Eng* 37:623-6 D '42
I.L.S. medal, *Illum Eng* 38:400-1 S '43
New officers, *Illum Eng* 38:334-6 JI '43

ILLUMINATING engineering society, London

- Annual meeting, London, May 11, *Electrician* 130:573-4 Je 4 '43

ILLUSTRATION of books and periodicals

- Numbering book illustrations, L. G. Westgate, *Science* 96:581 D 25 '42

ILMENITE

- Ilmenite and magnetite produced in quantity at National Lead's new MacIntyre development; titanium dioxide recovered from ilmenite, I. D. Hagar, *Il Min & Met* 23:594-6 D '42

- MacIntyre development; new source of titanium, I. D. Hagar, *Il Eng & Min J* 143:47-9 D '42

- Mineral dressing of Oregon beach sands, J. Dasher, F. Fraas and A. Gabriel, *diags U S Bur Mines Rep of Invest* 3668:1-19 '42

IMHOFF tanks

- Repairs save concrete tank after settlement causes cracks, *diags Eng N* 130:754-6 My 20 '43

- Wood Imhoff tanks serve an army camp, *Il diags Eng N* 130:490-2 Ap 8 '43

IMIDAZOLES

- Chemistry of the biologically important imidazoles, S. W. Fox, *Chem E* 32:47-71 bibliog (113 references, p69-71) F '43

IMIDAZOLINE

- Complex formations between iodine and μ -mercapto-dihydroxyoxalines, T. B. Johnson and C. O. Edegar, *Am Chem Soc J* 64:2706-8 N '42

IMINES

- Aromatic cyclodehydration; the mechanism of the cyclization of *o*-benzylphenones, C. K. Bradsher and E. S. Smith, *Am Chem Soc J* 65:1643-5 Ag '43

IMMIGRANTS in United States

- I am an American, A. Boyajian, *Illec Eng* 61:614-15 D '42

See also

- Aliens
Japanese in the United States

IMMIGRATION and emigration

See also

- Refugees

Great Britain

- Freedom to migrate, *Economist* 144:684 My 29 '43

United States

- Admission of alien farm workers into United States, *Monthly Labor R* 57:124-5 JI '43

IMMUNITY

- Attempt to protect against influenza virus with various sulfonamides, acridines and antibiotics, *bibliog Science* 98:348-9 O 15 '43

- Extent of immunization and case histories for diphtheria, smallpox, scarlet fever, and typhoid fever in 200,000 surveyed families in 28 large cities, S. D. Collins and C. Council, *Pub Health Rep* 58:1121-51 bibliog (p1150-1) JI 23 '43

- Immunization; majority of children now immunized against diphtheria and smallpox; scarlet and typhoid fever vaccinations, in comparison, are still negligible; abstract, S. D. Collins and C. Council, *Science* 98:sup 12 Ag 27 '43

- Mechanism of antitoxic immunity in clostridium perfringens (welchii) infections in guinea pigs, S. B. Stewart, *Pub Health Rep* 58:1277-80, pl 1-2 Ag 20 '43

- Parental and familial factors in the acceptance of diphtheria and smallpox immunization, L. Brewster, P. R. Shull and G. W. Anderson, *Pub Health Rep* 58:384-96 Mr 5 '43

- Persistence of yellow fever virus in the brains of monkeys immunized by cerebral inoculation, H. A. Penna and A. Huttoncourt, *Science* 97:448-9 My 14 '43

- Protective effect of separate inoculation of spotted fever virus and immune serum by intradermal route, L. Angstein, M. N. Bader and G. Young, *Science* 98:285-6 S 24 '43

See also

- | | |
|-------------------------|---------------------|
| Allergy | Infectious diseases |
| Antigens and antibodies | Serumtherapy |
| Complement (immunity) | Vaccination |
| | Vaccines |

IMMUNITY (law)

- Governmental immunity; digest of recent cases, J. L. Roesch, *Spectator* (Property ed) 8:22-4 JI 8 '43

- Supreme court holds Peru did not waive immunity in Ucayali case, *East Underw* 44:29 Ap 16 '43

- Supreme court rules on ship immunity, *Comm & Fin Chr* 157:1601 Ap 29 '43

- Waiver of sovereign immunity to U.S. court's jurisdiction denied, *East Underw* 44:23 Ja 1 '43

IMMUNIZED cotton. See Cotton—Immunized cotton**IMPACT**

- Dynamic loading in design, C. O. Dohrenwend and W. R. Mohaffey, *bibliog Il diags Machine Design* 15:99-104 Je '43

- Impact loads determined by Brinell technique, L. D. Hagenhook, *Il diag Product Eng* 14:300-2 My '43

- Impact resistance and tensile properties of metals at subatmospheric temperatures, H. W. Gillett, *Welding J* 22:sup 375 Ag '43

- Impact resistance of reinforced concrete slabs, R. W. Kluge, *Il diags Am Concrete Inst J* 14:397-412 Ap '43; Discussion, 14:sup 412-413 N '43

- Low temperature impact resistant steel castings, N. A. Ziegler and H. W. Northrup, *bibliog Il Am Soc for Metals Trans* 30:1087-1109; Discussion, 1109-14 D '42

See also

- Elastically
Notched bar testing
Strains and stressors

IMPEDANCE

- Cathode follower circuits for coupling high-impedance source to low-impedance loads, W. Richter, *bibliog diags Electronics* 16:112-17+ N '43

- Charts for simplifying high-impedance measurements with the radio-frequency bridge, R. L. Nielsen, *bibliog diags Inst Radio Eng Proc* 31:372-8 JI '43

- Compact direct-reading Z-meter, R. P. Turner, *Il diags Radio N* 28:10-12-1 O '43

- Correlation of system overvoltages and system-grounding impedance, *bibliog Elec Eng* 62:Trans 17-24 Ja '43

- General reactance theorem for electrical, mechanical, and acoustical systems, D. Maa, *bibliog Inst Radio Eng Proc* 31:365-71 JI '43

- High-frequency resistance of plated conductors, R. E. Proctor, *diags Wireless Eng* 20:55-65 F '43

- Impedance magnitude and phase angle charts; reference chart, T. C. How, *Electronics* 16:94-5 Ja '43

- Impedance of some simple electrical circuits; reference sheet, H. Dudley, *diags Electronics* 15:75-7 D '43

- Mutual impedance of antennas, C. W. Harrison, Jr, *bibliog J Ap Phys* 14:306-9 Je '43

- Transmission line equation in terms of impedance, J. R. Pierce, *Bell System Tech J* 22:263-6 JI '43

- Workshop impedance tests, G. W. Stubbings, *diags Electrician* 130:575-6 Je 4 '43

See also

- Acoustic impedance

IMPERIAL chemical industries, Ltd.

- Annual report and chairman's address, *Chem Age* (Lond) 48:566 My 22 '43

- Extract from the chairman's statement, H. D. McGowan, *Economist* 144:701 My 29 '43
Group earnings, *Economist* 144:629 My 15 '43

IMPERIAL oil, Ltd.

- Imperial's position in Canal project disclosed by Gallagher statement, *Il Oil & Gas J* 42:47-8 O 21 '43

IMPERIALISM

Future of imperialism. M. J. Bonn. Ann Am Acad 228:71-7 J1 '43

IMPETIGO. See Skin—Diseases**IMPORT associations**

Casein importers association formed. Oil Paint & Drug Rep 143:4 Ap 12 '43

IMPORTS

Import control tightened by WPB. Oil Paint & Drug Rep 142:5+ D 21 '42

Import order M-63 again amended. Oil Paint & Drug Rep 143:7+ My 24 '43

Important new amendments to General imports order. For Comm W 11:36, 46 My 1 '43

Imports make total war possible. W. Y. Elliott. Il For Comm W 13:8-11 O 23 '43
Larger commodity imports indicated. Barron's 23:6 Ag 2 '43

OPA eases importers ceilings. Oil Paint & Drug Rep 144:4+ Ag 23 '43

See also
Commerce
Tariff

Advertising

Why reciprocal trade agreements are important to advertisers! C. H. Minor. Ptr Ink 203:73-5 My 14 '43

Statistics

Value of imports by geographic divisions and countries, and economic classes. Survey of Cur Business 1942 Sup p81-2, 94-5

INCANDESCENT electric lamps. See Electric lamps, Incandescent

INCENDIARY bombs. See Bombs, Incendiary

INCENTIVE pay. See Wage payment plans

INCENTIVES in industry

Apply incentives that will get production. Il Factory Management 101:116-23 Ag '43

Are war production drives out of date? J. T. Chirurg. Il Ind Marketing 28:28-9+ F '43; Abstract. Textile World 93:64 Mr '43

Army-Navy E assumes vital role in war production and promotion. L. M. Hughes. Il Sales Management 52:28, 30, 32 Mr 15 '43

Army-Navy E awards in foundry industry. Il Foundry 71:166, 168, 170, 182 Je '43

Army-Navy production awards analyzed. Marine Eng 48:232 S '43

Bank night contest stimulates regular attendance on the job; Webster-Brinkley co. marine machinery defense plant in Seattle. Il Sales Management 51:26 N 15 '42

Competition licks absenteeism; American brake shoe company. B. K. Price. Il Foundry 71:89+ J1 '43

Curtiss-Wright offers its employee relations techniques to other firms. R. C. Pyne. Il Sales Management 52:60, 62 Je 1 '43

E flag winners. Published in Business week E is for excellence; winners of Army-Navy E award. Il Iron Age 151:66-71+ Ja 7 '43

Employee-morale boosters. Il Textile World 93:80-1 Ag; 88-9 S '43

Gifts of corsages and cigars used to stimulate aircraft parts production. Ptr Ink 203:30 Je 25 '43

How an advertising department helps with wartime activities; Walter Kidde company. Il Ind Marketing 27:30-1+ D '42

How Britain inspires war workers to improve output. F. B. Barton. Il Factory Management 101:118-21 S '43

How Britain runs war production drives. Factory Management 101:170+ Ap '43

How Britain stimulates production; abstract. H. K. McCook. Management R 32:142-3 Ap '43

How to get production back on schedule. C. E. Wilson. Il Factory Management 101:82-6 S '43

Incentive o.k.'d; NWLB permits individual production bonus at Alcoa plant. Business Week p18-19 My 15 '43

Incentive plan ready. Business Week p5 Ap 3 '43

Incentive wages in the war. Business Week p82+ Ag 14 '43

Inspirational booklets heighten morale of Allis-Chalmers' workers. G. J. Callos. Il Ind Marketing 28:25-7 Mr '43

Labor and management unite for war; abstract. Management R 32:65-7 F '43

Midwest regional conference probes victory promotions; war production drives; training in industry, conservation and salvage. Il Ind Marketing 28:18-20 F '43

NIAA holds labor-management war production conference in Philadelphia. Ind Marketing 28:29-31 My '43

Navy forms air unit in Incentive division. Aviation N 1:22 N 1 '43

One year of Army-Navy E awards. Business Week p59 Ag 14 '43

Plant war production drive; Glenn L. Martin co. Il Steel 111:54-5+ D 23 '42

Production spur; navy's road shows of battle-scarred fighters and materiel. Il Business Week p92+ S 11 '43

Raybestos division found a new job for its sales promotion and advertising departments in improving plant morale. W. S. Simpson. Il Ptr Ink 203:17+ My 7 '43

Sales executive slant helps boost Stromberg-Carlson war production. Sales Management 52:52-5 My 1 '43

Slug 'em or sell 'em? Reliance Electric sells rather than exhorts in employee posters. Il Ptr Ink 203:30+ My 14 '43

South's industrial roll of honor; Army-Navy E awards and Maritime M awards. Manuf Rec 112:41-5 S; 93 O '43

Specific know-why builds morale of Towmotor employees; simple folders mailed to workers at home show why materials handling equipment is important in wartime. E. Southworth. Il Ind Marketing 28:28-9 O '43

Suggestions for planning and timing "E" award programs. Il Ind Marketing 28:28-9 Mr '43

Unconventional, but maybe it will reduce absenteeism! offering travel and other rewards. J. O. Young. Ptr Ink 203:52, 54 Ap 2 '43

U.S. war advertising sells workers, industry by industry. G. A. Nichols. Il Ptr Ink 202:16-18+ F 12 '43

Victory gifts for employee incentive. Trusts & Estates 76:311-12 Ap '43

Wage systems and incentives. T. E. A. K. Jackson. Engineering 155:516-17 Je 25 '43

War production drives, their possibilities and progress. W. E. Chalmers. Ind Marketing 28:32-3+ My '43

What have management, labor and government to gain by work incentives? Iron Age 151:79-81 Ap 29 '43

See also
Bonus system Profit sharing
Employment management Wage payment plans

INCOME

Ability, wages, and income. H. Staehle. R Econ Stat 25:77-87 F '43

Effects of income redistribution. L. A. Metzler. R Econ Stat 25:49-57 F '43

Incomes of chemists. Science 97:63 Ja 15 '43
Money illusion and demand analysis. J. Marschak. R Econ Stat 25:40-8 F '43

Price flexibility and the level of income. A. Bergson. R Econ Stat 25:2-5 F '43

Study of fixed income trusts. L. H. Roseberry. Il Burroughs Clearing House 27:22-4+ D '42

Wills and trusts; income used in testamentary trust construed to have usual and general meaning. Trusts & Estates 75:623 D '42

See also
Capital Salaries
Farm income Wages
Profit

Statistics

American economy in 1942: consumer income and savings; with comparisons for earlier years. C. A. R. Wardwell and E. B. Bangs. Survey of Cur Business 23:17-18 Ja '43

American economy in 1942: national income; with comparisons for earlier years. C. A. R. Wardwell and E. B. Bangs. Survey of Cur Business 23:15-16 Ja '43

Consumer income and retail sales; graph. Business Week p13 O 30 '43

Democracies at war; proportion of net national income of Great Britain and the United States devoted to various purposes, 1938-1942. Economist 143:570-1 N 7 '42

Distribution of income. H. Fischer. Spectator (Life ed) 150:42-3 Ap '43

INCOME—Statistics—Continued

- Distribution of income in 1935-36. R. S. Tucker. *Am Stat Assn J* 37:489-95 D '42
- Earnings and social security in the United States. W. S. Woytinsky. 260p \$2.50 Social science research council, 230 Park av, New York '43
- Economic status of the members of the American chemical society. *Chem & Eng N* 20:1497-1505 N 25 '42
- Estimate of how American spending power has changed in six years. E. Battey, jr. *Gas Age* 90:17-20 D '42
- Estimates of national output, distributed income, consumer spending, saving, and capital formation. M. Hoffenberg and M. S. Lewis. *bibliog R Econ Stat* 25:101-74 My '43
- Income in selected professions; private duty nursing. E. F. Denison. *Survey of Cur Business* 23:25-8 S '43
- Income in selected professions; veterinary medicine, 1938-41. E. F. Denison. *Survey of Cur Business* 23:25-8 JI '43
- Income payments, consumer expenditures, and cost of living, 1940-first quarter 1943; chart. *Survey of Cur Business* 23:1 O '43
- Income payments, 1938-1941. *Survey of Cur Business* 1942 Sup p6 [supplemented in monthly numbers]
- Income payments; revised series, monthly, 1939-1941. *Survey of Cur Business* 23:27 Mr '43
- Incomes in selected professions; legal service. E. F. Denison. *Survey of Cur Business* 23:23-7 Ag '43
- Incomes in selected professions; medical service. E. F. Denison and A. Slater. *Survey of Cur Business* 23:16-20 O '43
- Method for estimating the size distribution of a given aggregate income. E. Ames. *R Econ Stat* 24:184-9 N '42
- National income, a practical yardstick. C. L. Merwin. *il Dun's R* 50:12-15+ N '42
- National income and national product in 1942. M. Gilbert and G. Jaszi. *tables Survey of Cur Business* 23:10-26 Mr '43
- National income, quarterly totals expressed at annual rate; chart. *Survey of Cur Business* 22:2 N '42
- National product and income in the first half of 1943. G. Jaszi. *Survey of Cur Business* 23:9-14 Ag '43
- 1942 effective buying income, per capita, for counties with cities in the 100,000 group; table. *Sales Management* 52:90 Ag 15 '43
- Relation of government financing to gross income flow. C. Warburton. *Survey of Cur Business* 23:17-22 Ap '43
- State income payments by type of payment, selected years, 1929-42; tabulation. D. Creamer and C. F. Schwartz. *Survey of Cur Business* 23:21-2 Je '43
- State income payments in 1942. D. Creamer and C. F. Schwartz. *Survey of Cur Business* 23:10-22 Je '43
- Wages and salaries and other income, 1939-43. *Monthly Labor R* 57:788-90 O '43
- War rearranges state income payments; percentage gains between 1939 and 1942. *map Business Week* p78 JI 10 '43
- Wealthy wage earner. E. R. Smith. *Ptr Ink* 203:15-17+ Ap 16 '43

Great Britain

- British white paper on war finance; national income 1942. *Fed Res Bul* 29:735-40 Ag '43
- Budget white paper; national income. *Economist* 144:518-19 Ap 24 '43; *Correction*. 144:545 My 1 '43
- Budget white paper; personal incomes. *Economist* 144:650-1 My 22 '43
- Incomes and taxation. *Bankers M* 145:427-8 N '42
- White paper statistics; national income and expenditure, 1938-1942. *Economist* 144:499-500 Ap 17 '43

Puerto Rico

- Incomes and expenditures of wage earners in Puerto Rico, 1940-41. A. C. Hanson. *Monthly Labor R* 56:223-32 F '43

Russia

- Private incomes. *Economist* 145:17 JI 3 '43

United States

- Composition of income and ownership of capital by income classes in the United States in 1936. R. S. Tucker. *Am Stat Assn J* 38:187-200 Je '43
- Estimate of how American spending power has changed in six years. E. Battey, jr. *Gas Age* 90:17-20 D '42
- Income and where it comes from. *Trusts & Estates* 76:407-8 My '43
- National income, a practical yardstick. C. L. Merwin. *il Dun's R* 50:12-15+ N '42
- National income and national product in 1942. M. Gilbert and G. Jaszi. *tables Survey of Cur Business* 23:10-26 Mr '43
- National income tops \$10 billion a month; war expenditures equivalent to more than half the total. *Barron's* 22:1 N 16 '42
- National income will exceed \$150 billions. H. Bruere. *East Underw* 44:10 My 28 '43
- National product and income in the first half of 1943. G. Jaszi. *Survey of Cur Business* 23:9-14 Ag '43
- 1942 national income reached all-time high. *Comm & Fin Chr* 157:1780 My 13 '43
- Outlook for national product and national income in 1943. *Survey of Cur Business* 23:5 Mr '43
- Relation of government financing to gross income flow. C. Warburton. *Survey of Cur Business* 23:17-22 Ap '43
- Sales Management survey of buying power, 1943; retail sales, effective buying income and other indices of buying power, with new 1942 population estimates, and census data on occupied dwellings, median rents, urban and farm residents. *il maps Sales Management* 52:11-322 My 10 '43
- Secretary of commerce sees national income above \$117 billion. *Comm & Fin Chr* 157:78 Ja 7 '43
- Some questionable inferences drawn from estimates of national income. W. E. Spahr. *Comm & Fin Chr* 157:1857+ My 20 '43
- State income payments in 1942. D. Creamer and C. F. Schwartz. *Survey of Cur Business* 23:10-22 Je '43
- Wage rates and living costs in a war economy; income trends, 1923-42. M. S. Brody. *J Business* 16 pt 2:28-33 JI '43
- INCOME statements**
- Adaptation of the income statement to present conditions. W. A. Paton. *J Account* 75:8-15 Ja '43
- INCOME tax**
- Corporate structures and federal income taxation; comparison with English tax. G. O. May. *Harvard Business R* 22 no 1:10-18 [O] '43
- Income tax must be considered throughout the year. A. C. Kiechlin. *Inland Ptr* 111:38-40 Ap '43
- Income tax under federal and Louisiana laws. E. A. Saliers. (Louisiana business bul, v 5, no 1) 21p Bur. of business research, College of commerce, Louisiana state university, Baton Rouge, La. F '43
- Money illusion and demand analysis. J. Marschak. *R Econ Stat* 25:40-8 F '43
- Revenue implications of a progressive-rate tax on expenditures; a study of selected aspects of Irving Fisher's proposal to eliminate savings from the income tax base. C. L. Harris. *bibliog R Econ Stat* 25:175-91 Ag '43
- See also
Corporations—Taxation
- Accounting**
- Accounting procedures relating to war facilities covered by necessity certificates. R. B. Carpenter. *Edison Elec Inst Bul* 11:141-6 My '43
- Another tax accounting plan for farmers. *il Burroughs Clearing House* 28:8-9 N '43
- Bank accounting plan for farmers; Farmers state bank of Lottant, Illinois. C. A. Whitney. *Burroughs Clearing House* 27:26-7+ N '42
- Better management for the rubber factory; taxes. A. Roberts. *Rubber Age* 53:143-5, 437-8, 441 My, Ag '43
- Calculation of interdependent taxes through ratio and proportion. E. H. Dale. *J Account* 75:60-4 Ja '43

INCOME tax—Accounting—Continued

Computation of earnings and profits included in invested capital. V. H. Maloney. J Account 75:114-25 My '43

Current problems in income tax procedure. T. G. Thurston. J Account 75:231-46 Mr '43

High court to review stock dividend tax. Comm & Fin Chr 156:2165 D 17 '42

Income tax work sheet. R. T. Jones. Burroughs Clearing House 27:2 Ja '43

Keeping down your pay-go tax. L. J. Freeman. Barron's 23:11+ JI 19 '43

Ownership certificates filing no longer required. Comm & Fin Chr 156:2344 D 31 '42

Premier products company case; life-insurance proceeds 1940 to be abnormal income but not attributable to other years. J Account 76:438-9 N '43

Section 722. P. D. Seghers. J Account 76:436-7 N '43

Tax adjustment contract. H. W. Funk. J Account 75:137-9 F '43

Tax problems of value contractors. J. K. Lasser. J Account 76:409-14 N '43

Test case showing computation of depreciation under the group plan by the asymptotic method. H. G. Avery. Edison Elec Inst Bul 11:75-8+ Mr '43

Upkeep and taxes; deferred maintenance, a legitimate charge against earnings. Business Week p42 N 6 '43

Your new taxes; additional relief given war contractors and "lifo" taxpayers. L. J. Freeman. Barron's 23:3 F 15 '43

Your new taxes; levies payable for short periods. L. J. Freeman. Barron's 23:19 Ja 4 '43

Your new taxes; treatment of certain professional income eased, investment expenses deductible. L. J. Freeman. Barron's 22:7 N 16 '42

See also

Inventories

Bibliography

Tax guides boom. Business Week p95+ Mr 6 '43

Capital gains tax

Capital gains tax and the stock market. H. S. Koster. Trusts & Estates 77:138-9 Ag '43

How securities profits can be preserved. A. A. Mol. Barron's 22:8-9 N 30 '42

Speculative investment program aided by new tax law on capital gains and losses. J. K. Williams. Comm & Fin Chr 156:2239 D 24 '42

Tax saving for the small investor. H. Lawrence. Barron's 23:20 F 8 '43

Collection

A-E-C of pay-as-you-go. H. S. Redeker. East Underw 44:12 Ag 13 '43; Same abr. Ins Field (Life ed) 72:14 S 17 '43

Advocates income tax collection-at-source and spendings tax. R. E. Paul. Comm & Fin Chr 156:1801+ N 19 '42

Banks and tax withholding. Banking 36:10+ Ag '43

Banks slow to seek depository status. Burroughs Clearing House 27:21 Ag '43

Britain's pay-as-you-go tax. D. Tyerman. Comm & Fin Chr 158:1422 O 7 '43

Canada adopts pay-as-you-go. Trusts & Estates 76:216 Mr '43

Collection of income tax. Economist 144:331-2, 358 Mr 13-20 '43

Collection of income tax at source favored. S. S. Surrey. Comm & Fin Chr 157:371 Ja 28 '43

Compromise pay-go tax bill passed by House. Comm & Fin Chr 157:2060 Je 3 '43

Controllers issue pay-go tax manual. Comm & Fin Chr 158:138 JI 8 '43

Defends pay-as-you-go tax plan. B. Ruml. Comm & Fin Chr 157:281+ Ja 21 '43

Estimates \$100,000,000 borrowed to pay income taxes; favors pay-go tax plan. S. J. Hughes. Comm & Fin Chr 157:1309 Ap 8 '43

FDIC banks to act as depositories of taxes withheld from wages. Comm & Fin Chr 158:235 JI 15 '43

FDR favors some kind of pay-as-you-go tax. Comm & Fin Chr 157:381 Ja 28 '43

Future of income tax; pay as you go. Economist 145:357-8 S 11 '43

House adopts compromise pay-go tax plan to abate 75% of 1942 income liability. Comm & Fin Chr 157:1681+ My 6 '43

House again rejects skip-year tax bill. Comm & Fin Chr 157:1879 My 20 '43

House group drops pay-as-you-go tax plans; favors discount system and 20% withholding tax. Comm & Fin Chr 157:1003+ Mr 18 '43

House returns pay-go tax proposals to committee after rejecting Ruml plan. Comm & Fin Chr 157:1214 Ap 1 '43

House-Senate conferees agree on compromise legislation for pay-as-you-go income tax. Comm & Fin Chr 157:1956+ My 27 '43

If 1943 tax is less than 1942. Trusts & Estates 77:357-8 O '43

Implications of the withholding tax for business and retail trade. G. B. Collingwood. Mag of Wall St 72:336-8+ JI 10 '43

Income tax; shift to current-collections procedure. Survey of Cur Business 23:8-9 Ap '43

Keeping down your pay-go tax. L. J. Freeman. Barron's 23:11+ JI 19 '43

Moving the tax clock ahead to war time. B. Ruml. II Dun's R 51:7-11+ Mr '43

Pay-as-you-earn. Economist 145:422-3 S 25 '43

Pay-as-you-earn adopted. Nat City Bank p66-7 Je '43

Pay-as-you-earn income tax; Canada adopts modified Ruml plan. A. R. Courtice. Trusts & Estates 76:553-4+ Je '43

Pay as you earn plan. N. Picchione. Trusts & Estates 76:119 F '43

Pay-as-you-earn tax controversy. Nat City Bank p39-40 Ap '43

Pay-as-you-earn tax in Canada's new budget. For Comm W 11:3-4+ Ap 17 '43

Pay as you go. Economist 145:393-4 S 18 '43

Pay-as-you-go cuts cost of dying. H. S. Koster. Trusts & Estates 76:513 Je '43

Pay-as-you-go tax. P. G. Evans. Trusts & Estates 76:550-1 Je '43

Pay-as-you-go tax law likely to be passed in few months. E. Blair. Barron's 23:4 Ja 18 '43

Pay-as-you-go tax, less group favoritism needed to battle inflation. H. H. Heilmann. Comm & Fin Chr 157:669 F 18 '43

Pav-as-you-go taxation. H. S. Koster. Trusts & Estates 76:19-21 Ja '43

Pay-as-you-go taxes. Nat City Bank p18-19 F '43

Pay-while-we-earn taxation; statement before House ways and means committee on February 10, 1943. W. A. Cooper. J Account 75:283-4 Mr '43

Pensions subject to withholding tax. T. C. Weinberg. Nat Underw (Life ed) 47:1+ N 5 '43

President hints veto of pay-go measure cancelling full year's tax payments. Comm & Fin Chr 157:1890 My 20 '43

President opposes Ruml pay-go tax plan. Comm & Fin Chr 157:1026 Mr 18 '43

President signs pay-as-you-go tax bill; withholding rules issued by Treasury. Comm & Fin Chr 157:2281 Je 17 '43

President to sign pay-go tax bill; major provisions. Comm & Fin Chr 157:2181+ Je 10 '43

Provisions of new income tax law explained in detail. A. C. Kiechlin. Inland Ptr 111:22-4 Ag '43

Ruml (garbled); operating pay-as-you-go tax plan. Business Week p118, 120-1 Je 19 '43

Ruml heat on. Business Week p19 Ja 16 '43

Ruml plan advocated for Canada; abstract. S. H. Logan. Burroughs Clearing House 27:28 F '43

Ruml plan endorsed by American retail federation. Comm & Fin Chr 157:366 Ja 28 '43

Some withholding tax rulings. Banking 36:94-5 S '43

Tax experts argue pay-as-you-go plan at Commerce and Industry business forum. Comm & Fin Chr 157:495 F 4 '43

Tax return extensions. J Account 75:281-3 Mr '43

Text of current tax payment act of 1943. Comm & Fin Chr 157:2288-94 Je 17 '43

To what extent is a plan for pay-as-you-go taxing feasible? G. V. Kracht and C. A. Harmon. Comm & Fin Chr 157:577, 582-3 F 11 '43

INCOME tax—Collection—Continued

- Treasury pay-as-you-go tax plan favors 24% withholding rate, opposes Ruml plan. Comm & Fin Chr 157:490 F 4 '43
- 20% withholding tax on wages favored as part of pay-go plan, Comm & Fin Chr 157:825+ Mr 4 '43
- Two innovations in federal tax structure. Survey of Cur Business 23:11 Jl '43
- Urges President Roosevelt to impress workers with need of accepting 20% withholding tax. G. J. Seedman. Comm & Fin Chr 158:724 Ag 19 '43
- Which pay-as-you-go tax? Business Week p15-16 My 1 '43
- Why separate Victory and withholding tax? Trusts & Estates 76:311 Ap '43
- Withholding tax. H. Bratner. Banking 36:12 S '43
- Withholding tax at source held essential to combat inflation. E. M. Friedman. Comm & Fin Chr 157:665+ F 18 '43
- Withholding tax brings new problems. H. D. Ralph. Burroughs Clearing House 27:20-1 Jl '43
- Withholding tax may set new form of liability. Credit & Fin Management 45:18 S '43
- Without Ruml; Canadian taxpayers put on pay-as-you-go basis. Business Week p102+ My 22 '43

Bibliography

Income tax collection plans. D. C. Tompkins. (War bibliographies, no. 5) 8p pa 35c Bur. of public administration, Univ. of California, Berkeley '43

Deductions

- Advertising is deductible from income tax. Bankers M 145:449-50 N '42
- Allowable deduction for depreciation: Virginian hotel corporation of Lynchburg v. Helvering. J. L. Dohr. J Account 76:86-7 Jl '43
- Current problems on amortization. C. L. Turner. J Account 75:30-5 Ja '43
- Deferred maintenance; suggests that United States bonds equal to amount of deductions must be held in segregated fund. W. A. Hosmer. J Account 76:161-2 Ag '43
- Employees' pension trusts and annuity plans under section 162, Revenue act of 1942. M. Kurtz. J Account 75:124-30 F '43
- Expert points to opportunities for refunds under 1942 Revenue law. J. K. Lasser. Banking 35:44-5+ F '43
- How to reduce your taxes; security sales and switches. L. O. Hooper. Mag of Wall St 71:163-5+ N 28 '42
- Insurance angle of salary limit. Weekly Underw 147:1117 N 14 '42
- Integrated plan for postwar reserve allowances. W. A. Cooper. J Account 76:192-9 S '43
- Internal revenue bureau explains deductible advertising expenses. Comm & Fin Chr 156:1895 N 26 '42
- Internal revenue bureau outlines procedure for liquidating corporation as war loss. Comm & Fin Chr 157:65 Ja 7 '43
- Life insurance tax deduction bill backed by Bridges. Nat Underw (Life ed) 47:1+ Ap 30 '43
- NY state income tax amendments explained. Comm & Fin Chr 157:1318 Ap 8 '43
- Pension trust regulations released. P. G. Evans. Comm & Fin Chr 158:425+ J 29 '43
- Tax problems of war contractors. J. K. Lasser. J Account 76:409-14 N '43
- Taxation developments have favorable aspects. V. J. Skutt. Weekly Underw 148:1208+ Je 5 '43; Same abr. East Underw 44:33 Je 4 '43
- Trend towards humanizing taxation favors insurance companies. Comm & Fin Chr 156:2235+ D 24 '42
- Upkeep and taxes; deferred maintenance, a legitimate charge against earnings. Business Week p42 N 6 '43
- Your new taxes; additional relief provisions of the Revenue act. L. J. Freeman. Barron's 23:5 F 1 '43
- Your new taxes; treatment of certain professional income eased, investment expenses deductible. L. J. Freeman. Barron's 22:7 N 16 '42

Your new taxes; war loss deductions liberalized by new law. L. J. Freeman. Barron's 23:7 Ja 25 '43

See also

Pension trusts—Income tax deductions

Payment financing

- Estimates \$100,000,000 borrowed to pay income taxes; favors pay-go tax plan. S. J. Hughes. Comm & Fin Chr 157:1309 Ap 8 '43
- Problems in the funding of tax and other reserves. W. A. Hosmer. N A C A Bul 24:1049-75 My 1 '43
- Tax certificates and bank loans. Economist 144:243 F 20 '43
- Tax delinquents may make weekly payments. Comm & Fin Chr 156:2173 D 17 '42

Pension trust deductions

See Pension trusts—Income tax deductions

Canada

- Canadian income tax payments. J. Montagnes. Burroughs Clearing House 27:48 My '43
- Canadian securities; shift to monthly pay-as-you-earn basis. E. Williams. Comm & Fin Chr 157:914 Mr 11 '43
- How premiums may be used as offset under Canadian income tax act. East Underw 44:3+ Ja 1 '43
- Pay-as-you-earn income tax; Canada adopts modified Ruml plan. A. R. Courtice. Trusts & Estates 76:553-4+ Je '43
- Pay-as-you-earn tax in Canada's new budget. For Comm W 11:3-4+ Ap 17 '43
- Personal income taxes in the United States, Canada, and the United Kingdom. R. A. Musgrave. Fed Res Bul 28:1192-6 D 42
- Without Ruml; Canadian taxpayers put on pay-as-you-go basis. Business Week p102+ My 22 '43

Great Britain

- Britain's pay-as-you-go tax. D. Tyerman. Comm & Fin Chr 158:1422 O 7 '43
- Collection of income tax. Economist 144:331-2, 358 Mr 13-20 '43
- Comparison of U.S. and British tax rates. Nat City Bank p140-3 D '42; Excerpt. J Account 75:147 F '43
- Depreciation allowances. Economist 144:17-18 Je 2 '43
- Future of income tax; pay as you go. Economist 145:357-8 S 11 '43
- Future of income tax; taxes on business. Economist 145:389-90 S 18 '43

New York (state)

- NY state income tax amendments explained. Comm & Fin Chr 157:1318 Ap 8 '43
- Recognize premiums under N.Y. tax law; commissioner tells what is deductible. East Underw 44:6+ Mr 26 '43

Palestine

- Increased income taxes. For Comm W 11:21-2 My 8 '43

United States

- Ability to pay income taxes. H. L. Lutz. Trusts & Estates 76:422 My '43
- Anti-windfall joker. P. Bauman. Comm & Fin Chr 158:98+ Jl 8 '43
- Are investments in railroads really assets? A.A.R. publication objects to designation for taxes as outside investments. Ry Age 115:465 S 18 '43
- Beware the ides of March; how much you will have to save to pay federal income taxes. Barron's 22:1 N 30 '42
- Changes in Revenue act affecting operations of American companies abroad; earned income from sources without the United States. For Comm W 9:16 N 21 '42
- Comparison of U.S. and British tax rates. Nat City Bank p140-3 D '42; Excerpt. J Account 75:147 F '43
- Coordination or integration? E. N. Griswold's plan for coordination of our income-tax structure with gift and estate tax provisions. E. N. Cahn. J Account 75:530-1 Je '43; Discussion. 76:256-7 S '43

INCOME tax—United States—Continued

- Current problems in income tax procedure. T. G. Thurston. *J Account* 75:231-46 Mr '43
- Current tax payment act problems. D. B. Chase. *J Account* 76:435-6 N '43
- Don't spend Uncle Sam's money. H. S. Koster. *Trusts & Estates* 75:581 D '42
- Effective rates of the individual income tax on net income under the Revenue acts of 1941 and 1942; chart. *Survey of Cur Business* 22:5 N '42
- Federal revenue act of 1942. F. L. Morton. *Spectator* (Life ed) 149:4-7, 67-70 D '42
- Implications of the withholding tax for business and retail trade. G. B. Collingwood. *Mag of Wall St* 72:336-8+ JI 10 '43
- Increased revenues from personal incomes imperative. S. S. Surrey. *Comm & Fin Chr* 158:607 Ag 12 '43
- Many income taxpayers say they can't make major purchases now; Printers' Ink survey. *Ptr Ink* 202:31 Mr 26 '43
- Moving the tax clock ahead to war time. B. Ruml. *il Dun's R* 51:7-11+ Mr '43
- New income tax provisions allow business man to level off losses. A. C. Kiechlin. *Inland Ptr* 110:65-6 Mr '43
- 1941 income tax returns number 25,618,013. *Comm & Fin Chr* 157:1394 Ap 15 '43
- Pay-as-you-earn adopted; sources of additional taxes; taxes by net income classes, 1933-1943. *Nat City Bank* p66-9 Je '43
- Personal income taxes in the United States, Canada, and the United Kingdom. R. A. Musgrave. *Fed Res Bul* 28:1192-6 D '42
- Pleasant surprise; provision in tax law permitting investment companies to choose between paying taxes as ordinary corporations or as regulated investment companies. *Comm & Fin Chr* 156:1967+ D 3 '42
- Proposes 30% withholding tax; revision of the revenue laws. M. S. Eccles. *Comm & Fin Chr* 157:1021 Mr 18 '43
- Public could bear \$30 billion of personal taxes, predicts higher income taxes. R. E. Paul. *Comm & Fin Chr* 158:120 JI 8 '43
- Record income tax payment hailed as proof of people's unity and loyalty. J. L. Sullivan. *Comm & Fin Chr* 157:1309 Ap 8 '43
- Revenue implications of a progressive-rate tax on expenditures; a study of selected aspects of Irving Fisher's proposal to eliminate savings from the income tax base. C. L. Harriss. *bibliog R Econ Stat* 25:175-91 Ag '43
- Tax bill at last. *Business Week* p16-17 My 29 '43
- Text of current tax payment act of 1943. *Comm & Fin Chr* 157:2283-94 Je 17 '43
- This time for Uncle Sam; number of days' salary in various brackets that will go to the payment of federal taxes. *Banking* 35:36 Ja '43
- Treasury move for personal EPT will place left wingers on defensive. E. Blair. *Barron's* 23:4 JI 12 '43
- Treasury proposes paid up U.S. cover for tax refund. *Nat Underw* (Life ed) 47:10 O 8 '43
- Your new taxes. L. J. Freeman. *Barron's* 22:7 N 16; 7+ N 23; 7+ D 7 '42; 23:19 Ja 4; 7 Ja 25; 5 F 1; 3 F 15 '43

Decisions

- Advance rents and deposits on income. *J Account* 76:259-60 S '43
- Business life insurance not subject to excess profits tax. *Comm & Fin Chr* 158:693 Ag 19 '43
- Cash values paid as income are not taxable as annuity. *Nat Underw* (Life ed) 47:4 JI 30 '43; *Weekly Underw* 149:224 JI 31 '43
- Current federal tax notes; stock dividend of common stock on common stock not taxable. F. G. Evans. *Trusts & Estates* 76:293-4 Mr '43
- Dividend paid in stock not taxable by government. Supreme Court rules. *Comm & Fin Chr* 157:1022 Mr 18 '43
- Legislation and litigation in re stock dividends. W. L. Ashbaugh. *J Account* 76:11-13 JI '43
- More notes on American dental company. J. K. Lasser. *J Account* 75:535-6 Je '43
- Stockholder wins; Supreme court refuses to sustain tax on prorata stock dividend. *Business Week* p98 Mr 6 '43

Supreme court rules dividends paid in stock are not subject to federal income tax. *Comm & Fin Chr* 157:1392 Ap 15 '43

Taxability of stock dividends; U.S. Supreme court decisions. J. L. Dohr. *J Account* 75:466-8 My '43

Victory tax

- Amount of gross Victory tax, post-war credit, and net Victory tax; chart. *Survey of Cur Business* 22:5 N '42
- Effect of new Victory tax on employees. W. H. Bennett. *Ins Field* (Fire ed) 71:13-14 D 24 '42; Same. *East Underw* 43:15+ D 25 '42; Same. *Weekly Underw* 147:1471+ D 26 '42
- Employers' payroll accounting under the Victory tax. J. A. Crafts. *J Account* 75:16-26 Ja '43
- New Victory tax. E. M. McConney. *East Underw* 43:11 N 27 '42
- Treasury ruling extends time on statements of Victory tax deductions in job terminations. *Comm & Fin Chr* 156:2072 D 10 '42
- Victory tax deductions. *Am Business* 13:22-3 Ja '43
- V-tax withholding clarified by Treasury. *Comm & Fin Chr* 157:195 Ja 14 '43
- War bonds credited against Victory tax. *Comm & Fin Chr* 157:287 Ja 21 '43
- Workings of new V-tax explained by Treasury. *Comm & Fin Chr* 157:428 Ja 28 '43
- Your new taxes; how the new Victory tax works. *Barron's* 22:7+ N 23 '42

Venezuela

- Venezuela initiates income-tax system. H. P. Crawford. *il For Comm W* 9:6-7+ N 21 '42

INCOME tax, State

- Federal tax burden may impair state revenues. *Comm & Fin Chr* 157:657 F 18 '43
- State income tax revenues reviewed. *Comm & Fin Chr* 157:2175 Je 10 '43

INCONEL. See Nickel alloys**INCORPORATED municipal electrical association**

- Annual meeting, London, June 17. *Engineer* 175:505 Je 25 '43; *Electrician* 130:639-42 Je 25 '43; *Elec R* (Lond) 132:837-42 Je 25 '43
- Annual report. *Electrician* 130:617-19 Je 18 '43; *Elec R* (Lond) 132:809-10 Je 18 '43

INDAN

- Reactions and enolization of cyclic diketones, 3-*t*-butyl-1,2-diketohydrindene. C. F. Koelsch. *bibliog Am Chem Soc J* 65:1640-3 Ag '43

INDANONE

- Indanone ring closure of unsymmetrical β,δ -diarylpipronic acids. C. F. H. Allen and J. W. Gates, jr. *bibliog Am Chem Soc J* 65:422-4 Mr '43

INDANTHRENE blue

- Theory and practice of the reduction and oxidation of indanthrone and its derivatives (indanthren blues). H. A. Brassard. *Soc Dyers & Col J* 59:127-9 Je '43

INDANTHRONE

- Theory and practice of the reduction and oxidation of indanthrone and its derivatives (indanthren blues). H. A. Brassard. *Soc Dyers & Col J* 59:127-9 Je '43

INDAZOLE

- Preparation of sulfanilamidoindazoles. C. E. Kwartler and P. Lucas. *Am Chem Soc J* 65:1804-6 O '43

INDENE

- Action of methylmagnesium iodide on methyl α -phenylcinnamate and a synthesis of 1,1-dimethyl-2-phenylindene. C. F. Koelsch and P. E. Johnson. *Am Chem Soc J* 65:565-7 Ap '43

- Oxidoketones in the indene series. C. F. H. Allen and J. W. Gates, jr. *bibliog Am Chem Soc J* 65:1230-5 Je '43

- Reaction of indene and styrene bromohydrins with sodium sulfite; cleavage of alkali sulfonates with sodium in liquid ammonia. C. M. Suter and H. B. Milne. *Am Chem Soc J* 65:582-4 Ap '43

- Studies on indene derivatives; triketo-hydrindene. A. Schöenberg and R. Moubacher. *Chem Soc J* p71-2 F '43

INDENE—Continued

Thermal decomposition of the dibromide of β -methyl- $\alpha,\alpha,\gamma,\gamma$ -tetraphenylpropene. C. F. Koelsch and R. V. White. *Am Chem Soc J* 65:1639-40 Ag '43

Thermal isomerization of some indene derivatives. C. F. Koelsch and P. R. Johnson. *Am Chem Soc J* 65:567-73 Ap '43

Analysis

Cryoscopic analysis of styrene, indene, and dicyclopentadiene. E. H. Smoker and P. E. Burchfield. *Ind & Eng Chem Anal ed* 15: 128-9 F 15 '43

INDENOBENZANTHRONE

Indeno-2": 3": 2': 1'-benzanthrone; tumour-inhibitory properties. G. Swain and A. R. Todd. *Chem Soc J* p626-8 O '42

INDENONE. See Indone**INDEPENDENT petroleum association of America**

Annual meeting, 14th, Fort Worth, Texas. *Oil & Gas J* 42:23-4 N 4 '43

Meeting, St Louis, May 6-8. *Nat Pet N* 35: 19-20+ My 12 '43; *Oil & Gas J* 42:28-9 My 13 '43

INDEX numbers (economics)

Boeckh index of construction costs, U.S. average, 1926-29=100; 1913-1942. *Eng N* 130:582 Ap 22 '43

Bureau of labor statistics cost-of-living index in wartime. F. M. Williams. *Monthly Labor R* 57:82-95 J1 '43

Business Week index revised. *Business Week* p14 N 6 '43

Changes in Bureau of labor statistics food-cost index. *Monthly Labor R* 56:1214-15 Je '43

Changes in Labor dept. living costs index. *Comm & Fin Chr* 157:2085 Je 3 '43

Cost of living index misleading as to electricity; situation to be remedied. *Edison Elec Inst Bul* 11:316 O '43

Cost of living indexes in wartime. F. M. Williams, F. R. Rice and E. D. Schell. *Am Stat Assn J* 37:415-24 D '42

Economist profit figures. *Economist* 144:708 My 29 '43

ENR construction cost index, 1903-1942. *Eng N* 130:572-3 Ap 22 '43

Explanatory notes on periodical statistics of cost of living, wages, unemployment, employment and hours of work. *Int Labour R* 47:116-25 Ja '43

Index revised; cost-of-living index to take account of changes in wartime diet. *Business Week* p18-19 Ap 17 '43

Indexes of cost of controlled and uncontrolled goods and services. F. R. Rice. *Monthly Labor R* 56:104-8 Ja '43

Labor bureau revising indexes of retail food and living costs. *Comm & Fin Chr* 157: 1602 Ap 29 '43

Moving seasonal indexes. D. J. Cowden. *Am Stat Assn J* 37:523-4 D '42

New index of retail prices, 1939-43. *Survey of Cur Business* 23:28 Ag '43

New indexes of factory employment and payrolls. *Fed Res Bul* 29:13-14 Ja '43

New multiplicative seasonal index. J. Shiskin. *Am Stat Assn J* 37:507-16 D '42

Observations on the cost of living index of the Bureau of labor statistics. L. Teper. *bibliog Am Stat Assn J* 38:271-84; Discussion. A. J. Wickens and F. M. Williams. 284-6 S '43

Physical volume of farm marketings, 1929-42. L. J. Paradiso, M. Kaufman and C. M. Purves. *Survey of Cur Business* 23:23-32 Ap '43

Price deflators for consumer commodities and capital equipment, 1929-42. H. Shavell. *Survey of Cur Business* 23:13-21 My '43

Revised measure of industrial production. *Survey of Cur Business* 23:6-8 O '43

Revision of industrial production index. *Fed Res Bul* 29:940-84 O '43

Special building cost and volume indexes, 1914-1942. *Eng N* 130:574, 576-7 Ap 22 '43

Standstill earnings; Economist new profits series, with figures for quarterly period ending Sept. 30, 1942. *Economist* 143:639-40 N 21 '42

You can't eat indexes. L. V. Burton. *Food Ind* 15:47-8 Je '43

See also
Stocks—Price indexes and averages

Bibliography

Index numbers, new and revised. M. E. Jameson. *Special Lib* 34:9-14+ Ja '43

Regional indexes

Measurement of business activity in the Puget Sound area. G. I. Butterbaugh. *bibliog map J Business* 16:1-72 pt 2 Ap '43

INDEXES

Index to plays in collections; an author and title index to plays appearing in collections published between 1900 and 1942. J. H. Ottemiller. 130p \$2.50 Wilson, H.W. '43

Management index; a subject index to publications of the American management association, February, 1932-August 1942. 79p American management assn, 330 W. 42d st, New York '43

See also
Periodicals—Indexes

INDEXING

Abstracting and indexing. E. J. Crane. *J Chem Educ* 20:537-9 N '43

New York state library indexing; principles, rules and examples. M. T. Wheeler. 4th ed Univ of State of N Y (Albany) Bul 1230: 1-76 F 16 '42 (pa 50c)

See also
Files and filing (documents, etc.)

INDEXING (machine work)

Ball-bearing indexing fixture for slotting heavy work. *diags Mach* 49:188-9 D '42

Dividing head replaced by automatic indexing fixture. G. F. Groschke and R. J. Thimineur. *il Am Mach* 87:93 My 27 '43

Index jig speeds radial drill work. F. Pfeiffer. *diag Am Mach* 87:95 Ap 29 '43

Indexing fixture cuts machine down time. *diags Am Mach* 87:108 Je 10 '43

Indexing fixture eliminates handling time. G. H. Groschke. *il Am Mach* 87:106 O 28 '43

Saves day per week; universal indexing trunnion fixture. *Gen Elec R* 45:710 D '42

See also
Graduating

INDIA

Britain's economic stake in India. T. A. Raman. *Barron's* 23:9 S 6 '43

See also
Budget—India
Census—India
Labor and laboring classes—India
Lumber trade—India
Plastic industries—India
Silver as money—India
Tobacco industry and trade—India
World war, 1939—India

Antiquities

Gujarat prehistoric expedition. *Science* 96: 530-1 D 11 '42

Commercial policy

Regulations governing remittance of proceeds from sale of distressed cargo. *For Comm W* 9:14 N 14 '42

Economic conditions

India in 1942. *Economist* 144:sup11-12 Mr 13 '43

Indian economic trends diverge; charts. *Business Week* p4 J1 3 '43

Industrial and economic situation in India and preparation for post-war reconstruction. *bibliog Int Labour R* 47:753-6 Je '43
News by countries. *For Comm W* 9:20 D 12 '42; 11:19-20 Je 19 '43

Economic policy

Post-war reconstruction and agrarian reform in India. *Int Labour R* 48:346, 348-9 S '43

Wartime and post-war social and economic policy in India. *Int Labour R* 48:625-8 N '43

Wartime measures in India. *bibliog Int Labour R* 46:724-8 D '42

INDIA—Continued

Industries and resources

- India's contribution to the war effort. *Il Comp Air M* 48:7085 J1 '43
 Industrial research in India; developments to meet war shortages. *Chem Age (Lond)* 48: 649-50 Je 19 '43
 Lend-lease to China and India. *Science* 97: sup12 Mr 12 '43
 Mediterranean shortcut; seizure of island bases clears a path for convoys to India. *Business Week* p98+ Je 19 '43
 New industries in changing India. *For Comm W* 12:28 S 4 '43
 Organisation and development of war supplies in India. *Int Labour R* 48:207-9 Ag '43

Politics and government

- Independence for India? J. E. Johnsen, comp. *Ref Shelf v* 16, no 3:1-292 bibliog(p263-92) '43 (\$1.25)
 Soldier into statesman; Sir Archibald Wavell from commander-in-chief in India to viceroy. *Economist* 144:809-10 Je 26 '43

INDIAN ocean

- Peaceful ocean. map *Economist* 144:779-80 Je 19 '43

INDIAN science congress. See Science—India

INDIANA academy of science

- Annual meeting, 58th, Oct. 29-31, at the University of Notre Dame. *Science* 96:539 D 11 '42

INDIANA hydro-electric power company

- Recapitalization. *Comm & Fin Chr* 157:42 Ja 4 '43

INDIANA service corporation

- Improved status for Indiana Service bonds. *Barron's* 23:10+ S 13 '43

INDIANAPOLIS

See also

- Motor bus lines—Indianapolis

Rapid transit

- Successful cooperation program in Indianapolis. E. B. Walker. *Mass Transportation* 39:292-3 Ag '43

INDIANS of North America

- Dehydration is old stuff; practices of New Mexico and Arizona Indians. C. Holbrook. *Il Comp Air M* 48:7006-9 Ap '43
 Pioneer printing among the Indians of Canada. J. T. Faris. *Il Inland Ptr* 110:60 N '42

See also

- Navaho Indians

Antiquities

- Ancient New Mexicans lived a simple life, as revealed by research. *Sci Am* 168:274 Je '43
 Indian kitchen middens in Tennessee excavated, flooded. *Sci Am* 168:209 My '43

Alaska

- Love of color among primitive arctic peoples. A. Fiala. *Textile Col* 64:555-6 D '42

INDIANS of South America

- Indian populations of America offer worthwhile post-war markets, expert asserts. M. Gamio. *For Comm W* 12:23 Ag 21 '43
 Yumbos, beads, and rubber; commerce in the far places; Ecuador. *Il For Comm W* 10:9+ Mr 27 '43

INDICATOR diagrams

- Improved hydraulic presses for wartime requirements; analysis of indicator cards and time-cycle studies. J. H. Maude. *diags A S M E Trans* 65:291-3 My '43

INDICATORS

- Hot-spot indicator monitors series lights. J. E. Toomey. *diag Elec W* 119:800 Mr 6 '43
 Indicators held in toolholders. C. F. Fitz. *diag Am Mach* 86:1296 N 12 '42
 Inspection cut from two days to one hour; fixture with dial indicators checks location and diameter of ball-bearing fits. H. Bernadt. *Il diags Am Mach* 87:105-6 J1 22 '43

See also

- Water gages
 Water level indicators

INDICATORS (for gas and oil engines)

- Industrial applications of the oscilloscope. G. Dexter. *Radio N* 30:66+ N '43
 Study of machinery vibration; piezoelectric instruments for measuring pressure and vibration. H. Seymour. *Electrician* 129:691-2 D 25 '42

INDICATORS (for steam engines)

- Counter-pressure brake testing of locomotives; cathode-ray indicating apparatus. T. Robson. *Il Engineering* 155:338-40 Ap 23 '43
 Indicator checks steam engine valve operation. G. M. Stearns. *diags Oil & Gas J* 41: 157 N 26 '42

INDICATORS and test papers

- Certain indicators for volumetric analysis; abstract. A. D. Mitchell. *Chem & Ind* 62: 195-6 My 22 '43
 External indicators; a modified technique in their use; abstract. A. C. Hoiler. *Am Water Works Assn J* 35:512 Ap '43
 Methylene blue and other indicators in general acids; the acidity function. G. N. Lewis and J. Bigeleisen. *bibliog Am Chem Soc J* 65:1144-50 Je '43
 Revision of the oxidation potentials of the orthophenanthroline- and dipyriddy-ferrous complexes. D. N. Hume and I. M. Kolthoff. *bibliog Am Chem Soc J* 65:1895-7 O '43

See also

- Bromothymol blue
 Colorimetric analysis

INDIGO

- Continuous indigo piece dyeing. *Textile Col* 65:291-2 J1 '43
 Dyeing woolen piece goods for the navy; continuous indigo dyeing on woolen piece goods. G. O. Linberg. *Il Am Dyestuff Rep* 32:33-9, 318-20 Ja 18, J1 19 '43; Discussion. 32:40-1, 106 Ja 18, Mr 1 '43
 Dyeing woolen piece goods for the navy; piece goods dyeing with leuco ester of indigo. R. E. Derby. *Am Dyestuff Rep* 32: 30-2+, 320-3 Ja 18, J1 19 '43; Discussion. 32: 40-1, 324-6 Ja 18, J1 19 '43
 Indigo; the medieval devil's dye. B. Brown. *Textile Col* 65:335-8+ Ag '43
 Navy blue with or without indigo. A. A. Claflin. *Am Dyestuff Rep* 32:323-4 J1 19 '43

INDIGOSOL

- Screen printing of rayons. *Rayon* 24:421-2, 539-40 Ag, O '43 (to be cont)

INDIUM

- Contributions to the chemistry of indium; the effects of certain hydroxy anions upon the precipitation of hydrous indium hydroxide. T. Moeller. *bibliog J Phys Chem* 46:794-800 O '42
 Indium. *R Sci Instr* 14:191 Je '43
 Indium scores. *Business Week* p56+ O 23 '43
 Thermal expansivity and density of indium. P. Hidnert and M. G. Blair. *bibliog J Research Nat Bur Stand* 30:427-33 Je '43
 Vapour pressure of metallic indium. J. S. Anderson. *Chem Soc J* p141-3 Ap '43

Analysis

- Chemistry of indium; a colorimetric method for the estimation of small amounts of indium. T. Moeller. *bibliog Ind & Eng Chem Anal ed* 15:270-2 Ap 15 '43
 Physiologic properties of indium and its compounds. G. C. Harrold and others. *J Ind Hygiene* 25:233-7 Je '43

Physiological effect

- Physiologic properties of indium and its compounds. C. P. McCord and others. *bibliog J Ind Hygiene* 24:243-54; 25:233-7 N '42, Je '43

INDIUM alloys

- Corrosion of lead-indium diffusion alloys. J. M. Freund, H. B. Linford and P. W. Schutz. *diags Electrochem Soc Trans* 84 (preprint 7):61-5 O '43
 Indium surface-alloys resist corrosion and wear. *Il Product Eng* 14:630-2 O '43
 Physical characteristics of gold-indium alloys. *Iron Age* 152:49 S 2 '43

INDIUM chloride

- Physiologic properties of indium and its compounds. C. P. McCord and others. *bibliog J Ind Hygiene* 24:243-54; 25:233-7 N '42, Je '43

INDIUM compounds

See also
Indium chloride

INDIUM hydroxide

Contributions to the chemistry of indium; the effects of certain hydroxy anions upon the precipitation of hydrous indium hydroxide. T. Moeller. bibliog J Phys Chem 46:794-800 O '42

INDIUM plating

Bearing inspection without contact; silver-plated and lead-indium plated bearings checked by Air-O-Limit and Electrolimit gages. il diags Am Mach 87:86-9 Ag 19 '43
Diffusion in indium plating; abstract. A. A. Smith, jr. Iron Age 152:68 O 28 '43
Indium surface-alloys resist corrosion and wear. il Product Eng 14:630-2 O '43

INDIUM sulfate

Physiologic properties of indium and its compounds. C. P. McCord and others. bibliog il J Ind Hygiene 24:243-54; 25:233-7 N '42, Je '43

INDO-CHINA, FRENCH

Indo-China; eighty years of French rule. J. Handler. Ann Am Acad 226:129-36 Mr '43

INDOLE

Mechanism of indole formation from phenacylarylamines. A. F. Crowther, F. G. Mann and D. Purdie. bibliog Chem Soc J p58-68 F '43

Preparation of certain 3-substituted indoles. R. H. Cornforth and R. Robinson. Chem Soc J p680-2 N '42

Use of N^2 as a tracer element in chemical reactions; the mechanism of the Fischer indole synthesis. C. F. H. Allen and C. V. Wilson. Am Chem Soc J 65:611-12 Ap '43

INDONE

Apparently anomalous bromination in the polyphenylindene series. C. F. H. Allen and J. W. Gates, jr. bibliog Am Chem Soc J 65:419-22 Mr '43

INDOOR climate institute. See Air conditioning industries**INDUCTANCE**

Formulas for the calculation of the inductance of linear conductors of structural shape. T. J. Higgins. bibliog diags Elec Eng 62:Trans 53-8 F '43

Formulas for the geometric mean distances of rectangular areas and of line segments. T. J. Higgins. J Ap Phys 14:188-95 Ap '43

Formulas for the inductance of rectangular tubular conductors. T. J. Higgins. diag J Ap Phys 13:712-15 N '42

New formulas for the inductance of reactance of square tubular conductors. T. J. Higgins. diag J Ap Phys 14:185-7 Ap '43

Radio-frequency capacitometer; cathode-ray-tube instrument for precise radio-frequency measurement of capacitance and inductance. F. J. Moles. il diags Gen Elec R 46:457-9 Ag '43

INDUCTANCE coils

Design chart for single layer inductance coils. T. C. Blow. Electronics 16:91 F '43

Powdered iron cores. A. Crossley. il J Ap Phys 14:451-5 S '43

Variable inductors. G. Dexter. il diags Radio N 30:43-4+ Ag '43

INDUCTION (electricity)

Effects of mutual induction between parallel transmission lines on current flow to ground faults. J. I. Holbeck and M. J. Lantz. diags Elec Eng 62:Trans 712-15 N '43

Induction control for experimenters; induction transmission becoming increasingly popular. W. T. Peterson. diags Radio N 28:20-1 Jl; 18-19+ O '42

INDUCTION accelerator. See Electron accelerator**INDUCTION motors.** See Electric motors, Induction**INDUCTIVE interference.** See Electric lines—Inductive interference**INDUSTRIAL accidents.** See Accidents, Industrial**INDUSTRIAL advertising.** See Advertising, Industrial**INDUSTRIAL allocations.** See Priorities and allocations, Industrial**INDUSTRIAL arts**

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Building	Metallurgy
Business	Paint
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Chemistry, Technical	Patents
Clay products	Photography
Commerce	Plumbing
Design	Pottery
Dyes and dyeing	Printing
Electric engineering	Production
Engineering	Rubber
Factories	Shipbuilding
Foundry practice	Soap
Glass manufacture	Tanning
Industry	Technical education
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Machine shops	Waste products
Machinery	Weaving
Manufactures	

INDUSTRIAL automobiles. See Automobiles, Industrial**INDUSTRIAL brushes.** See Brushes, Industrial**INDUSTRIAL buildings**

Better buildings for industry. il diags plans Arch Rec 93:61-72 Ap '43

Clay products add beauty and utility to modern industrial building; G. D. Searle co. laboratories, Chicago. il Brick & Clay Rec 102:22-4 My '43

Construction after the war. G. A. Bryant; L. Kahn; M. C. Tuttle. il Eng N 131:616-19 O 21 '43

Industrial building for today and tomorrow. il Factory Management 101:B51-B90+ Ap '43

Industrial buildings back the attack; building types study. il Arch Rec 94:61-76 O '43

See also

Automobile factories	Office buildings, Industrial
Chemical plants	Petroleum refineries
Concrete construction	Printing offices
Factories	Radio corporation of America—Laboratories
Foundries	Warehouses
Loft buildings	
Machine shops	
Metallurgical plants	
Munition factories	

INDUSTRIAL chemistry. See Chemistry, Technical**INDUSTRIAL cooperation**

Aircraft industry in all-out cooperation. Aviation 41:94-5+ N '42

Associate producers plan speeds CG-4A gliders; eleven California manufacturers pooled their equipment. O. W. Timm. il Aviation 42:121-31 N '43

Authorizes transfer of idle machine tools when tool deliveries fail to meet demand. Am Mach 87:136f F 18 '43

Contractors pool on jobs, cut expenses, increase profits. Sales Management 52:86 Ap 15 '43

Every machine tool in Los Angeles indexed. diags Elec West 90:69-72 Ap '43

Here to stay; Grand Rapids experiment in industrial cooperation. Business Week p34 S 4 '43

How local companies shared production drive experiences. Factory Management 101:114-15 Ja '43

How ready-mixed concrete men work out pooling plan; Fox River Valley ready-mixed concrete producers. Concrete 51:19 My '43

Ice men get hot; by pooling delivery and sales hope to steal march on mechanical refrigerators. Business Week p38+ N 21 '42

Joint use of production facilities and manpower. H. M. Stalcup. Oil & Gas J 42:70+ My 27 '43

INDUSTRIAL cooperation—Continued

Network of shops for heat treating small armor. L. Stouffer. *il Metal Prog* 43:390-1 Mr '43

New co-operative program formed to aid small manufacturing plants. *Steel* 112:56 Ap 26 '43

Power teamwork for victory. P. W. Swain. *Paper Tr J* 115:29-32 N 12 '42

Refining resources pooled to produce essential wartime products. W. Miller. *il Nat Pet N* 35 pt 2:R99-100 Mr 3 '43

Tooling data service speeds war program. *il Iron Age* 150:145-6 D 3 '42

WPB moves to pool idle tools as aid for plants needing machines. *Iron Age* 151:109 F 18 '43

We fight too; Canadian paper mill machine shops make munitions. F. E. Palmer. *il Pulp & Pa of Can* 43:869-87 N '42

West Coast pools help small business weather the war. *Sales Management* 61:48+ D 15 '42

See also

Contracts, Government—Pooling	Gasoline industry—Joint use of marketing facilities
-------------------------------	---

INDUSTRIAL dentistry. *See* Dental service, Industrial

INDUSTRIAL design. *See* Design

INDUSTRIAL diamonds. *See* Diamonds, Industrial

INDUSTRIAL disarmament. *See* World war, 1939—Peace and mediation

INDUSTRIAL diseases. *See* Diseases, Industrial

INDUSTRIAL dispensaries. *See* Dispensaries, Industrial

INDUSTRIAL editors' associations, National council of. *See* National council of industrial editors' associations

INDUSTRIAL education

Mexican trade trainees in U.S. earn as they learn. E. S. Hanson. *il For Comm W* 10:10+ Ja 30 '43

Training plan for Latin-Americans to aid homelands' industrialization. *il Steel* 112:62 F 15 '43

Training spreads; WMC plans to handle almost ten million trainees in next twelve months. *Business Week* p84+ Ag 21 '43

Vocational classes at Cooper-Bessemer. *il Marine Eng* 48:212-13 Jl '43

See also

Apprentices	Salesmen—Training
Employees, Training of	Salesmen, Retail—Training
Engineering education	Supervisory workers—Training
Foremen—Training	Technical education
Foundry practice—Study and teaching	Trade schools
	Vocational education

Cooperative plan

Co-operation with U.S. agencies, schools may help solve problem; experience of American bantam car co. E. R. Prosser. *Steel* 111:40 D 28 '42

Three-way training eases local labor shortage; Cooper-Bessemer corporation school for apprentices, high school students and workers from other industries. *il Factory Management* 101:109-11 O '43

W. T. Henley's education scheme. *Engineer* 176:225 S 17 '43

Workers for new jobs quickly; vocational school and plant executives cooperate. *il Textile World* 93:57-8 Mr '43

Defense workers

See also Technical education—Engineering, science and management war training

Great Britain

Training for industry; courses in electrical practice; government training centre at Hounslow. *Electrician* 130:210 F 26 '43

INDUSTRIAL efficiency. *See* Efficiency, Industrial

INDUSTRIAL electric locomotives. *See* Electric locomotives, Industrial

INDUSTRIAL engineering

Institution of production engineers 21st annual general meeting, London, Oct. 23. *Engineering* 154:354-5, 363-4 O 30-N 6 '42

Organization and control of mass production. E. A. Boyan. *diags Factory Management* 101:97-112 S '43

Production paces the war. C. E. Wilson. *Mech Eng* 65:792-4 N '43

Relationship between the unions and engineers; unions' attitudes toward the industrial-engineering profession. W. Gomborg. *bibliog Mech Eng* 65:425-30 Je '43

Staff organization for control. J. K. Loudon. *Advanced Management* 8:17-22+ Ja '43

War time problems, planning, and performance; discussion. A. G. Ramsey and others. *Inst Mech Eng J & Proc* 148:Proc 57-65 D '42

See also

Chemical engineering	Industrial management
Factories—Maintenance and repair	Motion study
Factory management	Power plants
	Time study

Study and teaching

Industrial administration; how it affects the electrical engineer; training in administration. G. A. T. Burdett. *Elec R (Lond)* 131:615-16 N 13 '42

Personnel management in industry; a synthesis of the viewpoint of the psychologist and the engineer. T. A. Ryan. *J Eng Educ* 33:239-50 N '42

Quick lessons in layout; Paraffine companies. W. L. Maffey. flow chart *il diag plans Factory Management* 101:82-7 Ja '43

Training for administration. H. Shaw. *bibliog Inst E E J* 90 pt 1:109-12 Mr '43

INDUSTRIAL fans. *See* Fans, Mechanical

INDUSTRIAL fatigue. *See* Fatigue

INDUSTRIAL heating. *See* Electric heating, Industrial; Heating, Industrial; Infrared rays—Industrial heating

INDUSTRIAL hospitals. *See* Hospitals, Industrial

INDUSTRIAL hygiene. *See* Hygiene, Industrial

INDUSTRIAL hygiene foundation of America Annual meeting, 7th, Pittsburgh. *Business Week* p88 N 28 '42

Annual meeting, 7th, Pittsburgh, Nov. 10-11. *Ind Med* 12:14-31 Ja '43

Elects officers. *Nat Safety N* 47:71 Ja '43

INDUSTRIAL insurance. *See* Insurance, Industrial

INDUSTRIAL insurers conference

Annual meeting, 34th, Atlanta, May 26. *Ins Field (Life ed)* 72:9-10 My 28 '43; *Nat Underw (Life ed)* 47:3-4 Je 4 '43; *Weekly Underw* 148:1167, 1238 My 29-Je 5 '43

IIC lives up to its ideals. D. Wimmer. *Ins Field (Life ed)* 72:12-13 My 28 '43

INDUSTRIAL laws and legislation

See also

Labor laws and legislation	Patent laws and legislation
----------------------------	-----------------------------

INDUSTRIAL lighting. *See* Factories—Lighting; Lighting, Industrial

INDUSTRIAL management

Does labor want maximum production? A. Ramond. *Advanced Management* 7:157-60 O-D '42

Education for management. H. V. Coes. *Mech Eng* 65:486-8 Jl '43; Same cond. *Min & Met* 24:393-400 S '43; Discussion. *Mech Eng* 65:745-6 O '43

Management's contribution to the war-production effort. H. V. Coes. *il Mech Eng* 65:408-9 Je '43

Taylor-made production; Frederick Winslow Taylor. F. B. Kirkbride. *Trusts & Estates* 76:135-6 F '43

Ten years' progress in management; symposium. A. S. M. E. *Trans* 65:213-60 Ap '43

INDUSTRIAL management—Continued

Tools for management diagnosis. E. H. Schell. *Advanced Management* 8:27-30 Ja '43

See also

Bonus system
Budget, Business
Business management
Coal mines and mining—Management
Controllers
Efficiency, Industrial
Employees' representation in management
Employment management
Employment systems
Factory management
Foremen
Foundry management
Gas companies—Management
Hygiene, Industrial
Industrial engineering
Industrial relations
Inspection
Insurance, Business
Inventories
Job analysis
Machine shop management
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Motion study
Motor trucks—Management
Office management
Organization in industry
Planning
Purchasing
Railroads—Management
Standardization
Suggestion systems
Time study
Wage payment plans

INDUSTRIAL market

First-hand view of Latin-American industrial markets. F. Johnston. *Ind Market-*
ing 28:42, 46+ O '43

How will electronics affect industrial marketing? J. S. Smith. *Ind Marketing* 28:19-21+ Ag; 40, 44+ S '43

Market trends and postwar probabilities. *Ind Marketing* 28:25-7+ Ja '43

Next job for industrial advertising. W. Chevalier. *Ptr Ink* 203:80+ Je 4 '43

Ten years' progress in management; industrial marketing. H. J. Loberg. *A S M E Trans* 65:230-3 Ap '43

War-hit sales staff aids public relations, serves war industries; Detecto scales, inc. *Ptr Ink* 204:20 S 3 '43

See also

Advertising, Industrial
Equipment industries
Railroads—Purchasing

INDUSTRIAL medicine. See Medical service, Industrial

INDUSTRIAL mobilization

All out, how far? our economic mobilization against the background of British experience. V. L. Horoth. *Il Mag of Wall St* 71:158-62 N 28 '42

America's new industrial empire; construction of war plants. *Index* 23 no 3:45-50 [S] '43

Bottlenecks again; competition for parts. *Business Week* p15 Ja 23 '43

Engineers in wartime. C. D. Howe. *Tech R* 45:233-4+ Mr '43

Expenditures to total \$106 billion, 80 per cent increase over 1942; report by Donald M. Nelson. *Steel* 112:58-9 Je 21 '43

'43 war production program set at \$106 billion; WPB report cites impact on civilian economy. *Comm & Fin Chr* 157:2278 Je 17 '43

In the direction of WPB. D. M. Nelson. *Oil Paint & Drug Rep* 143:52 My 31 '43

Job of war production less that of government and more of industry. J. S. Knowlson. *Comm & Fin Chr* 157:491 F 4 '43

Making the parts to win; Wilson's emphasis on scheduling and early orders. *Business Week* p15-16 Ap 24 '43

Management's contribution to the war-production effort. H. V. Coes. *Il Mech Eng* 65:408-9 Je '43

Offensive will be on many fronts; cites huge war production volumes. J. F. Byrnes. *Comm & Fin Chr* 157:2085 Je 3 '43

Office of war mobilization recommended. Trusts & Estates 75:452 N '42

Our war effort. E. A. Johnston. *Bankers M* 145:549-50 D '42

Pattern for 1943. *Nat City Bank* p 1-3 Ja '43

Pattern of the all-out war effort. *Nat City Bank* p133-4 D '42

Ten silver months mirror Nation's striking power; winning the battle of production, in critical 1942. *Il Steel* 111:32-3 N 23 '42

Truth about cutbacks. D. M. Nelson. *Il Factory Management* 101:82-7 J '43; Same cond. *Management R* 32:322-4 S '43

United States transformed; sets record of war time production. *Manuf Rec* 112:22-3+ Ja '43

WPB announces plans to break bottlenecks. *Comm & Fin Chr* 157:671 F 18 '43

War 'production in 1943. L. R. Boulware. *Mech Eng* 65:99-100 F '43

War production programs to meet changing demands; Joint production survey committee. *Oil Paint & Drug Rep* 144:3+ O 4 '43

War-time material conservation and production problems. W. H. Harrison. *Elec Eng* 62:53-4 F '43

See also

Automobile industry
Automobile industry and trade—Municipalities manufacture
Contracts, Government—Subcontracting
Factories—Conversion
Incentives in industry
Priorities and allocations, Industrial
Smaller war plants corporation
United States—War production board—Controlled materials plan

Concentration policy

Britain's shrunken industries. W. Hill. *Il Banking* 36:26-7 Ag '43

British foundry concentration program unsatisfactory. *Foundry* 71:101+ My '43

Clothing concentration. *Economist* 145:377 S 11 '43

Concentration at peak. *Business Week* p70 Je 12 '43

Concentration; Britain's experiences with nucleus plants take on a new meaning for U.S. business as result of recent WPB action. *Business Week* p58+ N 14 '42

Concentration in Britain. J. Welch. *Factory Management* 101:98 My '43

Concentration of civilian industries offers solution to war manpower problem. L. W. Moffett. *Iron Age* 151:66, 68 Ap 22 '43

Concentration of consumer industry; abstract. A. N. Weckler. *Management R* 31:404-6 D '42

Concentration of industries. H. A. Dinigar. *Steel* 112:64-5+ My 31 '43

Concentration of industry. *Oil Paint & Drug Rep* 143:40 Ja 11 '43

Concentration of production. A. R. Burns. *Harvard Business R* 21 no 3:277-90 [Ap] '43

Concentration of production in nucleus plants. Trusts & Estates 75:443 N '42

Concentration of the stove industry. T. Geiger. *Harvard Business R* 22 no 1:19-28 [O] '43

Concentration or confusion? *Fortune* 27:104-7+ Ja '43

If at first; WPB plans new approach to concentration of industry. *Business Week* p26+ Ja 9 '43

Impact of war on advertising; British pattern. *Adv & Sell* 36:19-22 Ja '43

Is concentration necessary? *Management R* 32:2-3 Ja '43

New phase in British concentration. A. W. Williams. *Textile World* 93:70 Ja '43

Now at stage where restriction means extinction. W. D. Fuller. *Comm & Fin Chr* 156:2059 D 10 '42

Progress of concentration. *Economist* 144:632 My 15 '43

United Kingdom's industry concentration now nears completion. K. O. Horton. *Il For Comm W* 11:3-6+ My 1 '43

WPB completing plans for concentration of civilian industries. *Brick & Clay Rec* 102:9-10 F '43

Why and how of the WPB concentration program. J. L. Weiner. *Il Ind Stand* 14:8-11 Ja '43

Will printing be concentrated? H. R. Wallace. *Inland Ptr* 110:29-32 D '42

Australia

Australia's industry; industrial mobilization job since 1939. A. H. Allen. *Il Steel* 113:75-6 Ag 2 '43

Brazil

Economic mobilisation and man-power problems in Brazil. *Int Labour R* 47:721-30 Je '43

Canada

Overseas arsenal. *Business Week* p50+ Mr 27 '43

INDUSTRIAL mobilization—Canada—Continued
Six months ahead of U.S., Canada's war experiences prove of great benefit. Iron Age 151:118+ Ap 1 '43

Great Britain

British view; adjustment for attack under way. D. Tyerman. Barron's 23:8 Ag 23 '43
Delays in war production. H. J. Wilson. Personnel J 21:273-6 F '43

Means of war. Economist 145:486-7 O 9 '43
See also Industrial mobilization—Concentration plan

INDUSTRIAL motor trucks. See Motor trucks, Industrial

INDUSTRIAL museums

See also
Museum of science and industry, Chicago

INDUSTRIAL nursing. See Nurses and nursing, Industrial

INDUSTRIAL office buildings. See Office buildings, Industrial

INDUSTRIAL pensions. See Pensions, Industrial

INDUSTRIAL physicians and surgeons, American association of. See American association of industrial physicians and surgeons

INDUSTRIAL poisons. See Poisons, Industrial

INDUSTRIAL priorities. See Priorities and allocations, Industrial

INDUSTRIAL psychology. See Psychology, Industrial

INDUSTRIAL rayon corporation

Annual report. Comm & Fin Chr 157:729 F 22 '43

Post-war outlook. H. Lawrence. Barron's 23:5-6 F 22 '43

Thumbnail stock appraisal. Mag of Wall St 72:252 Je 12 '43

Thumbnail stock appraisal. Mag of Wall St 72:687 O 2 '43

INDUSTRIAL relations

Advertising can continue, after the war, to foster spirit of teamwork in industry. J. L. Spencer. Ptr Ink 205:93-4+ O 8 '43

Bases labor relations on mutual respect; brief on behalf of Canadian pulp and paper industry to National war labor board. E. M. Little. Paper Tr J 116:7 Je 17 '43

Basis for good labor relations. S. G. Blaylock. Il Eng & Min J 144:71-4 O '43

Better human relations for victory; discussion at Silver Bay industrial conference. Factory Management 101:252-4 S '43

Commerce and industry association forms industrial relations bureau. Comm & Fin Chr 158:1922 N 11 '43

Company's most important investment; Socony-Vacuum's principles governing industrial relations. J. A. Brown. Trusts & Estates 77:27 J1 '43

Conducts Institute of business for its plant and office workers; Carrier corporation offers 14-week course to give them clearer perspective of cooperative capital-labor job. R. H. Ganly. Il Ptr Ink 205:24-5+ O 15 '43

Coöperation between utility management and labor. A. M. Cooper. Pub Util 31:15-22 Ja 7 '43

Design for the future in industrial relations; abstract. C. L. Huston, jr. Factory Management 101:282-4 S '43

Explains his philosophy on labor-management relations. B. Jack. Ind Marketing 28:31 My '43

Fellow workers are one part of your public. C. C. Carr. Adv & Sell 36:61-2 N '43

Free enterprise depends on balance of profits, wages. J. P. Frey. Steel 112:76-7 Je 14 '43

Future of organized labor. L. Stern. Mag of Wall St 71:570-2+ Mr 6 '43

Handbook of industrial relations. J. C. Aspley and E. Whitmore, eds. 1056p bibliog (p1011-24) \$10 Dartnell corp, 4660 Ravenswood av, Chicago '43

How one big industrial plant avoids labor trouble; Lincoln electric company; abstract. J. R. Lincoln. Concrete (mill sec) 51:204 J1 '43

Industrial relations entering new era dictated by conditions. C. L. Huston, jr. Steel 112:32-3 My 31 '43

Intelligent selfishness and manufacturing. J. F. Lincoln. Am Gas J 158:16 Je '43

Joint production committees in United States war plants. W. E. Chalmers. Int Labour R 47:22-45 Ja '43

Labor leader finds ad men more open-minded than other managers; labor-management conference. Ptr Ink 203:36 Ap 16 '43

Labor's views on war production drives. M. Harris. Ind Marketing 28:34-5+ My '43

Making management negotiation persuasive. R. C. Nyman. Advanced Management 8:23-6 Ja '43; Abstract. Management R 32:410-12 N '43

Management group advised to study re-employment problem; abstract. L. H. Hill. Steel 112:66 F 22 '43

Management-labor cooperation. E. C. Robbins. Harvard Business R 21 no4:415-24 [J1] '43

Management mentalities and worker reactions. R. N. McMurtry. Advanced Management 7:165-72 O-D '42

NAM appeals to American management for wider acceptance of good industrial relations. Comm & Fin Chr 158:930 S 2 '43

Organization as a project in human engineering; review of Dynamic administration: the collected papers of Mary Parker Follett. P. Pigors. Mech Eng 65:40-1 Ja '43

People in war production; relations determine; digest, with comments, of a British study. C. S. Slocombe. Personnel J 22:165-71 N '43

Pepperell book graphically portrays textiles' dramatic role in the war effort; distributed to personnel and to textile trade. Il Ptr Ink 205:36+ O 22 '43

Polling the employees; Monsanto chemical co. Fortune 27:72+ F '43

Recent state legislation on labor relations. Monthly Labor R 56:941-4; 57:778-80 My, O '43

Relationship between the unions and engineers; unions' attitudes toward the industrial-engineering profession. W. Gomberg. bibliog Mech Eng 65:425-30 Je '43

Review of current conditions; business and government and personnel problems. L. R. Frazier. Personnel J 21:338-43 Ap '43

Sales executive slant helps boost Stromberg-Carlson war production. Sales Management 52:52-5 My 1 '43

Selling the staff; Carrier corp. is conducting lecture course among employees. Il Business Week p104 O 30 '43

Sound industrial relations ease man-power problems. L. C. Hart. Sales Management 52:58-9 Ja 15 '43

Strike brake set; Canadian public is to sit with belligerents on jury weighing industrial disputes. Business Week p88 Ap 17 '43

Such legislation will not give industrial peace. S. G. Blaylock. Can Min J 64:557-60 S '43

Ten years' progress in management; labor relations in evolution. W. R. Burrows. A S M E Trans 65:240-2 Ap '43

Third component; faith and understanding that must flow between management and worker and customer. H. A. Bedau. Elec West 89:39-41 D '42

Training, key to the skilled help shortage; labor relations. C. W. Stapleton. Il Bus Transportation 22:36-8 Ap '43

Unions and grievances. S. Barkin. Personnel J 22:38-48 Je '43

War production drives; blessings in disguise. E. T. Johnstone. Ptr Ink 202:70 Mr 5 '43

Wartime labor relations policy. A. Earl. Personnel J 21:258-64 Ja '43

What's ahead in industrial relations policies. C. L. Huston, jr. Am Business 13:20-1+ Je '43

Where is labor headed? W. Williams. Factory Management 101:81+ F '43

INDUSTRIAL relations—Continued

Yaleman and communist worked things out together for the good of Emerson Electric—and the war. *il* Fortune 28:146-9+ N '43

See also

Arbitration, Industrial	Labor and laboring classes
Building trades—	Labor disputes
Labor conditions	National labor relations board
Coal miners	National war labor board
Collective bargaining	Open and closed shop
Employees	Profit sharing
Employees, Reports to	Safety devices and measures
Employees' representation in management	Strikes
Employment management	Trade agreements
Industrial management	Trade unions
Labor and capital	Unemployment
	Wage payment plans
	Welfare work in industry

also United States—Labor, Department of—Conciliation service

Bibliography

Office library of an industrial relations executive, 1943. H. Baker. 4th ed 33p pa 40c
Industrial relations section, Princeton Univ, Princeton, N.J. '43

INDUSTRIAL research

American chemical society, 4th war conference, Pittsburgh, Sept. 6-11; research management. *Chem Ind* 53:339-40 S '43
Applied research in wartime. L. W. Bass. *J Chem Educ* 20:462-3 S '43
Chemist looks at research; development cost comparisons. E. Ayres. *Sci Am* 167:250-2 D '42

Electrical developments of 1942; research and laboratory investigations. G. Bartlett. *il* *diag Gen Elec R* 46:58-60 Ja '43
Electron microscope, most recent research tool. V. K. Zworykin. *il* *diags Electronics* 16:146-7+ Mr '43

Goodyear's new research laboratory. *il* *Mod Packaging* 16:102 *il* '43

Industrial research in Great Britain. *Science* 98:146-7 Ag 13 '43

Industrial research in Great Britain. P. Dunsheath. *Engineer* 175:106-7, 109 F 5 '43; Abstracts. *Elec R (Lond)* 132:226 F 12 '43; *Chem Age (Lond)* 48:335-6 Mr 27 '43

Industrial research in India; developments to meet war shortages. *Chem Age (Lond)* 48: 649-50 Je 19 '43

Industrial research laboratory of the University of Rochester; X-ray laboratory equipped with 3 million-volt unit. *Science* 97:395-6 Ap 30 '43

Industrial research progress at the Armour research foundation 1941-1942. *il* *Chem & Eng N* 21:17-26 Ja 10 '43

Kilgore bill threatens government monopoly of industrial research, NAM warns. *Comm & Fin Chr* 157:1981 My 27 '43

Mass spectrometer aids research. J. A. Hipple. *il* *diags Electronics* 16:120-4 N '43

Mellon institute in wartime. *il* *Chem & Eng N* 21:467-78 Ap 10 '43

Mobilization of science; war uses and pre-view of fundamental scientific research in peace. F. B. Jewett. *Trusts & Estates* 75: 445-50 N '42

National research. S. Cripps. *Engineer* 176:17 *il* 2 '43

New pastures; Goodyear's researches in electronics, aviation, plastics. *il* *Business Week* p24+ Je 26 '43

Pittsburgh, a center for industrial research. *il* *Chem & Eng N* 21:976-8 Je 25 '43

Regional development through industrial research. L. W. Bass. *Elec Eng* 62:496-7 N '43

Research; a general survey. O. W. Roskill. *Engineering* 156:263-4, 282-3, 303-5, 325, 343-5, 364, 385 O 1-N 12 '43

Research and patents. R. E. Wilson. *il* *Ind & Eng Chem* 35:177-85 F '43; Same abr. *Nat Pet N* 35 pt 2:R126+ Mr 3 '43

Research at a government arsenal in co-operation with universities. L. S. Fletcher. *J Eng Educ* 33:781-6; Discussion. L. M. K. Boelter; A. W. Hixson. 786-93 Je '43

Research contributes to war production; National gypsum co. M. H. Baker. *Rock Prod* 46:62-3 *il* '43

Research results will make new post-war world; abstract. A. W. Herrington. *S A E J* 51:sup32-3 Je '43

Science and industry in Eire. *Economist* 144: 44 Ja 9 '43

Science and industry; Sir Harold Hartley's pamphlet entitled *Industrial research*. *Science* 98:303-4 O 1 '43; *Elec R (Lond)* 133: 334-5 S 10 '43

Stresses research. H. W. Rose. *Manuf Rec* 112:46+ Je '43

University education and research in America; abstract and discussion. E. Simon. *Engineer* 175:375-6 My 7 '43

Wartime science and the engineer. H. V. Coes. *Power Pl Eng* 47:49 *il* '43

What is research? L. T. Work. *Ind & Eng Chem* 35:221-2 F '43

See also

Agricultural laboratories	Leather research
Australia—Council for scientific and industrial research	Market research
Cement research	Metallurgical research
Chemical research	Paper research
Coal research	Petroleum research
Corrosion research	Purdue research foundation
Cotton research	Rubber research
Gas research	Scientific research
Laboratories	Steel research
	Textile research
	Wool research

also Pittsburgh university, Mellon institute of industrial research; United States—Standards, National bureau of

Accounting

Research accounting. D. H. Sheehan and F. J. Curtis. *Ind & Eng Chem* 35:225-6 F '43

Bibliography

Ten years' progress in management; management research. E. H. Hempel. *A S M E Trans* 65:252-8 Ap '43

INDUSTRIAL research institute

Annual meeting, New York, May 21-22. *Science* 97:527-8 Je 11 '43; *Chem & Eng N* 21:894 Je 10 '43

Winter meeting, Philadelphia, Jan. 22-23. *Science* 97:179 F 19 '43

INDUSTRIAL statistics

American economy in 1942: plant and equipment; with figures for earlier years. C. A. R. Wardwell and R. B. Bangs. *Survey of Cur Business* 23:7-8 Ja '43

Automotive and aviation industries 1943 statistical issue. *il* maps *Automotive & Aviation Ind* 88:53-97 Mr 15 '43

Industry tightens its belt for second year of war; statistical survey; charts. *Steel* 112: 202-9 Ja 4 '43

Measurement of capacity utilization of existing plant facilities. I. H. Siegel. *Am Stat Assn J* 37:430-6 D '42

Statistics in the fuel and power industries. O. W. Roskill. *Engineering* 155:404, 425-6, 444 My 21-Je 4 '43; Excerpts. *Gas J (Lond)* 241:651 My 26 '43; Discussion. 241:672-3 Je 2 '43

See also

Employment—Statistics	Occupations—Statistics
Labor and laboring classes—Statistics	Production—Statistics
Market statistics	Wages—Statistics
<i>also</i> subdivision of industries, e.g. Petroleum industry and trade—Statistics	Statistics under names of industries

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INDUSTRIAL tractors. See Tractors, Industrial

INDUSTRIAL traffic league, National. See National industrial traffic league

INDUSTRIAL traffic management. See Traffic management, Industrial

INDUSTRIAL unions. See Congress of industrial organizations

INDUSTRIAL waste. See Trade waste

INDUSTRIAL welfare. See Welfare work in industry

INDUSTRY

Ahead, new industrial horizons. W. Gates. *il* Mag of Wall St 71:271-3+, 346-8 D 26 '42-Ja 9 '43

Charting the future for postwar advertising and marketing. B. Chapple. *Ind Marketing* 23:36+ F '43

Coming battle of materials. J. V. Sherman. *Barron's* 23:3 N 1 '43

Growing concentration of industrial production. H. L. Blackburn. *Mag of Wall St* 72:623-5+ S 13 '43

How 22 industries line up at start of 1943; volume of business, prices and profit margins, 1942 results, war prospects, peace prospects. *Barron's* 23:36-7 Ja 11 '43

Industrial planning. W. S. Landis. *Chem Ind* 51:342-5, 700-3 S N '42

Industry, be prepared for quick shifts; War congress of American industry under sponsorship of National association of manufacturers. *Steel* 11:74-6 D 7 '42

Industry expands by solving its customers' problems. J. A. Murphy. *Adv & Sell* 36:50+ Ag '43

Industry plans the future. W. D. Teague. *Adv & Sell* 36:109-10+ F '43

Industry's capacity to meet postwar needs. *Management R* 32:51-2 F '43

Industry's post-war problem is providing greater economic security. E. A. Johnston. *Comm & Fin Chr* 153:1509 O 14 '43

Leadership in industry will take chapter from war; fourth dimension of public relations. F. Garrett. *Comm & Fin Chr* 157:1977+ My 27 '43

More industry needed to build basis of good society. H. Ford. *Comm & Fin Chr* 158:497+ Ag 5 '43

National policy for industry. *Engineering* 154:415-16, 439-40 N 20-27 '42

1943 to see all-out war economy. *Textile World* 93:53-4 Ja '43

Progressive certainty of the future. F. McQuillin. *il* Edison Elec Inst Bul 11:176-8 Je '43

Which are the most stable industries? graphs. *Sales Management* 52:45 Je 15 '43

Which industries have least favorable peace prospects? E. A. Krauss. *il* Mag of Wall St 72:564-6+ S 4 '43

Which industries offer best prospects for 1943? G. W. Mathis. *il* Mag of Wall St 71:328-32, 377-80 Ja 9 '43

See also

Airplane industry and trade

Automobile industry and trade

Business

Ceramic industries

Chemical industries

Clay industries

Commerce

Corporations

Dairying

Dye industry

Economic planning

Efficiency, industrial

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Factories

Gas industry

Gasoline industry

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Government regulation of industry

Handicraft

Idleness, industrial

Industrial market

Industrial mobilization

Industrial relations

Industrial research

Industry and state

Iron industry and trade

also subdivision Industries and resources under names of countries, e.g. Great Britain—Industries and resources

also National association of manufacturers

Concentration

See Industrial mobilization—Concentration policy

Decentralization

Dispersal of manufacturing operations aids aircraft industry; facts of Willow Run plant. *il* *Steel* 113:94, 99 N 8 '43

Industry will decentralize, says N.A.M. Gas Age 92:20 J 1 '43

Out of Detroit; Ford would limit Willow Run to plane assembly. *Business Week* p19 My 1 '43

Outworking and production. *Engineer* 176:288-9 O 8 '43

Satellites gleam; branch plants set up near big aircraft companies. *Business Week* p78+ Mr 13 '43

Migration

Regional shifts in industry and markets, which temporary? which permanent? J. D. C. Weldon. *il* *Mag of Wall St* 72:339-41+ J 10 '43

Reports to government

See Business—Reports to government

INDUSTRY and state

Enterprise and efficiency. *Economist* 145:306-7 S 4 '43

Why nationalise? *Economist* 145:328-30 S 4 '43

See also

Commercial policy

Economic planning

Economic policy

Government aid to business

Government loans to industry

Government regulation of industry

Industrial mobilization

Labor laws and legislation

Public utilities

Public utilities—Regulation

Public utilities commissions

Railroads and state

Tariff

Great Britain

Britain asks, what price liberty? V. Delpont. *il* *Steel* 112:352-4+ Ja 4 '43

How much industry control is best? D. Tyerman. *Barron's* 23:1 N 1 '43

Policy against monopoly. *Economist* 144:612-13 My 15 '43

Postwar program outlined by leading British industrialists. V. Delpont. *Steel* 111:34-6 D 21 '42

Problems of employment and of the relations between government and industry after the war. *Engineer* 176:35-7, 56-8 J 1 9-16 '43

Palestine

Monopolies in Palestine. *Economist* 145:112 J 1 24 '43

United States

America's new industrial empire; construction of war plants; problems of peacetime conversion. Index 23 no 3:45-53 [S] '43

Basis for postwar planning; one-fifth of a nation, government-owned. *Business Week* p52-3 Je 19 '43

Government should befriend the enterpriser; reprinted from *Life*, Sept. 13-20, 1943. J. K. Jessup. *Banking Law J* 60:826-8 O '43

Industrial embassies in Washington. H. Bratter. *Pub Util* 31:663-75 My 27 '43

Industry plans for the future; ability to provide full employment dependent upon adoption of proper national policies. L. S. Lyon. *Comm & Fin Chr* 158:1589+ O 21 '43

Planning board's idea would mean untimely end of private enterprise. R. A. Taft. *Comm & Fin Chr* 157:1977 My 27 '43

Plant financing in a war economy; problem of new facility financing. M. D. Ketchum. *J Business* 16:28-50 Ja '43

Post-war prosperity hinges on government cooperation with industry, labor, agriculture. D. Sarnoff. *Comm & Fin Chr* 157:581 F 11 '43

Postwar world and the American tradition. H. W. Dodds. *Gen Elec R* 46:425-30 Ag '43

Preparing industry for peace. E. A. Krauss. *il* *Mag of Wall St* 73:71-3+ O 30 '43

Role of government in post-war world. H. E. Stassen. *Trusts & Estates* 76:227-8 Mr '43

INDUSTRY and state—United States—Cont.

Spirit of enterprise, by E. M. Queeny. Reviews. *Business Week* p123 J1 10 '43; *Comm & Fin Chr* 158:201+ J1 15 '43

\$25 billion federal investment in American industry; what should be done with it? E. A. Krauss. *Mag of Wall St* 72:618-19+ S 13 '43

Vast investment in plants gives government great power, but Jones predicts a fair deal. *Iron Age* 152:79-80 J1 29 '43

Washington's postwar thinking. A. W. Pearce. *Ind Marketing* 28:58, 60 Ag '43

Windows of Washington; year's developments summarized. *Il Steel* 112:226-7, 230, 233+ Ja 4 '43

You can't lick an economic theory by knocking its sales manager! T. S. Shore. *Ptr Ink* 202:15-17 Ja 22 '43

See also

Business—Reports to government

INEQUALITIES, Statistical

Note on a common statistical inequality. I. H. Siegel. *Am Stat Assn J* 38:217-22 Je '43

INERTIA. See Moments of inertia**INFANT mortality****Statistics**

Births, infant mortality, maternal mortality; graphic presentation, 1940. maps tables U S Children's Bur Pub 238:1A-34A, 1B-34B '43

Increase in infant mortality and infant diarrhea in San Francisco, Calif. *Pub Health Rep* 58:917-18 Je 11 '43

INFANTILE paralysis

Attempts at purification of a murine strain of human poliomyelitis virus. J. Bourdillon and D. H. Moore. *biblog Science* 96:541-2 D 11 '42

Effect of activated sludge process on poliomyelitis virus. H. J. Carlson, G. M. Ridenour and C. F. McKhann. *diags Water & Sewage* 81:23-4+ S '43

Efficacy of water purification in removing polio virus. H. J. Carlson, G. M. Ridenour and C. F. McKhann. *Water & Sewage* 81:16-18+ Ag '43

Grant to the University of Michigan from the National foundation for infantile paralysis. *Science* 97:528-9 Je 11 '43

Hypothetical relationship of water supplies to poliomyelitis; abstract. K. F. Maxcy. *Am Water Works Assn J* 35:628-9 My '43

National foundation for infantile paralysis. *East Underw* 44:13 Ja 15 '43

Oscillographic records of foot and muscle action aid in treating infantile paralysis and war victims. *Franklin Inst J* 236:331-2 S '43

Paralysis fund drive to use FDR's birthday. *Comm & Fin Chr* 156:2067 D 10 '42

Pathway of invasion in a cynomolgus monkey after oral application of poliomyelitis virus. H. K. Faber and R. J. Silverberg. *Science* 96:473-5 N 20 '42

Polio; second crusade of our industry. *Il Dom Eng* 162:58-9+ J1; 59-61 Ag; 59-61, 84+ S; 64-6 O '43

Polio virus and water purification. H. J. Carlson, G. M. Ridenour and C. F. McKhann. *biblog Eng* N 129:933-4 D 31 '42

Poliomyelitis in the United States in 1942, and a summary of its prevalence from 1933 to 1942, inclusive. C. C. Dauer. *biblog map Pub Health Rep* 58:937-49 Je 18 '43

Poliomyelitis virus in sewage. R. E. Thompson. *Water & Sewage* 81:24+ Mr '43

Prevalence of poliomyelitis; January-September 11, 1943. *Pub Health Rep* 58:1412-14 S 17 '43

Relation of food intake to response of mice inoculated with Lansing strain of murine poliomyelitis virus. C. Foster and others. *Science* 97:207-8 F 26 '43

Signs that an epidemic may be brewing. *Science* 98:sup12 J1 16 '43

Spread of infantile paralysis; abstract. H. H. Howe. *Science* 98:sup12 O 29 '43

INFANTILE paralysis, National foundation for. See National foundation for infantile paralysis**INFANTS, Newborn**

See also

Hospitals—Nurseries

INFANTS, Photography of. See Photography of infants

INFANTS' clothing
3,000,000 babies demand priorities. F. La-Clave. *Il Ptr Ink* 203:18-20 My 7 '43

INFANTS' foods
Baby food boom. *Business Week* p40-2 Mr 20 '43

How to make better malt sugar for infant feeding. W. O. Gordon. *flowsheet Food Ind* 15:60-2 Je '43

INFANTS' supplies

Buy, buy, baby; booms for infants' supplies industry. *Business Week* p76+ Ap 17 '43

INFECTION

Infection on the production line. *Il Safety Eng* 84:39-40 N '42

See also

Disinfection and dis- Rats as carriers of infection

Insects as carriers of Rodents as carriers of infection

INFECTIOUS diseases

Air-borne infection. O. H. Robertson. *biblog Science* 97:495-502 Je 4 '43

Disease problems after the war; abstract. K. F. Meyer. *Science* 97:sup10 Je 4 '43

Infectious hepatitis and infectious keratoconjunctivitis provisionally added to manual "Control of communicable diseases." *Pub Health Rep* 58:405-6 Mr 5 '43

Leslie Tiltston Webster; contribution to epidemiology. J. Casals and T. M. Rivers. *Science* 98:167 Ag 20 '43

Ornithodoros ticks as a medium for the transmission of disease agents. R. R. Parker. *biblog Pub Health Rep* 57:1963-6 D 25 '42

Specific prophylaxis against enteric diseases; abstract. S. Mudd. *Am Water Works Assn J* 35:629-30 My '43

See also

Chemotherapy Rheumatic fever

Cold (disease) Rocky Mountain spotted fever

Diphtheria Ticks

Encephalitis, Epidemic Tuberculosis

Immunity Tularemia

Infantile paralysis Typhoid fever

Influenza Typhus fever

Malaria Viruses

Meningitis Weil's disease

Paratyphoid fever Whooping cough

Plague Yellow fever

Statistics

Notifiable diseases prevalence in states, 1941. (Public health rep supp 172) 13p U.S. Public health service, Washington; pa 5c Supt. of doc. '43

Reported whooping cough morbidity and mortality in the United States. C. C. Dauer. *map Pub Health Rep* 58:661-76 Ap 23 '43

World distribution of cholera, plague, smallpox, typhus fever, and yellow fever. *Pub Health Rep* 58:1454-6 S 24 '43

See also

Meningitis—Statistics

INFIRMARIES. See Hospitals**INFLAMMABLE liquids**

Cleaning drums which have held flammable substances; hazards and precautions. *Nat Safety N* 47:40 Ja '43; Same, *Metal Finishing* 41:535 Ag '43

Organic industrial solvents; in terms of their fire hazards. W. H. Easton. *biblog Ind Med* 12:647-9 O '43

Storage and protection of flammable liquids. H. E. Newell. *Metal Finishing* 41:681-3 O '43

Unloading inflammable liquids; tank-car practice. *diags Chem Age (Lond)* 48:664-6 Je 26 '43

Unloading tank cars containing flammable liquids. *diags Chem & Met Eng* 49:95-6 D '42

See also

Gasoline

Petroleum

INFLAMMABLE materials

- Commodity list of dangerous articles. Chem & Eng N 21:626-7 Ap 25 '43
 Fire defense in finishing rooms. L. F. Maar. *il Metal Finishing* 41:609-10 S '43
 Inflammability and explosibility of metal powders. I. Hartmann, J. Nagy and H. R. Brown. pls U S Bur Mines Rep of Invest 3722:1-44 '43
 Safe handling and storage of phenol. *il diags Chem Ind* 52:730-3 Je '43; Excerpt. Chem Age (Lond) 49:285-6 S 18 '43
 Self-ignition temperature. Safety Eng 85:30 Ap '43

See also
 Magnesium—Fire hazards

INFLAMMABLE mixtures

- Annual report of the Explosives division, fiscal year 1942. W. J. Huff. bibliog diags pls U S Bur Mines Rep of Invest 3669:1-43 '42
 Baby lightning; dangers of static electricity. P. W. Kearney. *il Nat Safety* N 47:12-13+ Ja '43
 British safety men seek new ways to make explosive gases and coal dust innocuous. *diag Coal Age* 48:97-8 My '43
 Explosion hazards of combustible anesthetics. G. W. Jones, R. E. Kennedy and G. J. Thomas. pls diags U S Bur Mines Tech Pa 653:1-47; pa 15c Supt. of doc. '43
 Explosion hazards of gases, vapors and dusts. Nat Safety N 47:149 Mr '43
 Fires and explosion; hazards of flammable gases, vapors, liquids and dusts. W. J. Burke. Safety Eng 85:27-31+ Mr '43
 Gases in war-time plants; compressed, dissolved and liquefied gases used mainly in shipyards. W. R. Stewart. *il Safety Eng* 86:48, 50-2 O '43
 Inflammability of methylene chloride-oxygen-nitrogen mixtures. G. W. Jones, R. E. Kennedy and R. E. Scott. diags U S Bur Mines Rep of Invest 3727:1-7 '43
 Inflammability of trichloroethylene-oxygen-nitrogen mixtures. G. W. Jones and G. S. Scott. U S Bur Mines Rep of Invest 3666:1-5 '42
 Prevention of butadiene-air explosions by addition of nitrogen and carbon dioxide. G. W. Jones and R. E. Kennedy. *diag U S Bur Mines Rep of Invest* 3691:1-11 '43; Same abstr. Nat Pet N 35 pt 2:R328-30 Ji 7 '43
 Safe practice in repairing tanks. diags Sheet Metal Worker 34:26-9 Ap '43; Abstract. Chem Age (Lond) 48:425-6 Ap 17 '43
 Safety. T. A. Mighill. Am Gas Assn Proc 1942:316-17
 Safety precautions in manufacturing butadiene. C. E. Starr, jr. bibliog Nat Pet N 35 pt 2:R521-2, R524-5 N 3 '43
 Significance of ignition temperature test of fuels. A. W. Trusty. Pet Eng 14:78, 80+ Ja '43

See also
 Explosions
 Explosives

INFLAMMATION

- Studies on the isolation of the factor responsible for tissue injury in inflammation. V. Menkin. bibliog Science 97:165-7 F 12 '43

INFLATION (finance)

- After the war; inflation or deflation? answer is up to every one of us. A. A. Mol. Barron's 23:1 O 25 '43
 Alternative to inflationary price rise. Trusts & Estates 76:7 Ja '43
 Bank stocks; experience of French banks under inflation. E. A. Van Deusen. Comm & Fin Chr 157:742+ F 25 '43
 British food subsidies; weapon against inflation. J. Backman. *il Dun's R* 51:12-16, 36-7 Mr '43
 Calls ceilings, saving best weapons against war inflation. W. T. Childs. Comm & Fin Chr 156:2314+ D 31 '42
 Calls for courageous tax program to prevent inflation. F. M. Vinson. Comm & Fin Chr 158:1886-7+ N 11 '43
 Can America conquer inflation? F. Bernstein. Comm & Fin Chr 157:1097+ Mr 25 '43
 Can product-of-the-future advertising hold back V-day lust to buy? *il Ptr Ink* 204:15-16+ Ji 23 '43

- Canada held it; joint assault of labor and politics against inflation. Business Week p42+ N 6 '43
 Capture dangerous dollars. T. R. Gamble. Nat Underw (Life ed) Daily ed 47:10+ S 15 '43
 Coming labor upheaval. *il Factory Management* 101:82-8 Je '43
 Continued threat of inflation overshadows all other dangers. L. S. Headley. Comm & Fin Chr 157:680 F 18 '43
 Counter inflation in India. Economist 144:662 My 22 '43
 Crisis on the home front; effects of new OPA price regulations and subsidies on retailing profits. L. Stern. Mag of Wall St 72:173-5+ My 29 '43
 Danger, savings bonds and idle cash, de-tour, forced savings. H. Spero. Bankers M 146:495-500 Je '43
 Dangerous dollars. Trusts & Estates 76:423-4 My '43
 Economic stabilization controls and war finance. Fed Res Bul 28:1065-77 N '42
 Effect of inflation upon the values of securities. I. Wright. Comm & Fin Chr 157:1097+ Mr 25 '43
 Effects of President Roosevelt's executive order freezing wages and prices. Comm & Fin Chr 157:1370+ Ap 15 '43
 Eighteen things you can do to check inflation. S. B. Pettengill. Am Business 13:13+ Ag '43
 Emergency price control; text of Act to amend Act of 1942 and executive order. Fed Res Bul 28:1080-5 N '42
 Every weapon used to combat inflation in Britain. D. Tyerman. Barron's 23:1 Je 21 '43
 Federal attempts to control living costs. Monthly Labor R 56:877-82 My '43
 FDR urges public to put more in Treasury payroll savings plan. Comm & Fin Chr 158:35 Ji 1 '43
 Higher cost, prices and wages held major post-war problem. F. C. Mills. Comm & Fin Chr 158:1804 N 4 '43
 Hold the line order. Trusts & Estates 76:401-3 My '43
 Home-front soundness means world-success; today's anti-inflation battle. For Comm W 11:12-13+ Ap 10 '43
 How fire and casualty companies fared under European first war inflation. E. A. Van Deusen. Comm & Fin Chr 157:1002+ Mr 18 '43
 Idle money in the stock market; comparison of inflation bases in United States and Europe. L. A. Hahn. Trusts & Estates 76:455-6, 458-9 My '43
 Incentive, inflation and investment. E. Schram. Trusts & Estates 77:395-7 O '43
 India fights inflation. Economist 145:117-18 Ji 24 '43
 Industry warns of inflation peril; urges government action; offers preventive measures. Comm & Fin Chr 158:410 Ji 29 '43
 Inflation, and the United States. J. Hirsch. Comm & Fin Chr 157:1955+ My 27 '43
 Inflation at work in Brazil. Business Week p46 O 16 '43
 Inflation being pushed by powerful congressional coalition. E. Blair. Barron's 23:5+ Je 21 '43
 Inflation can still be checked. *il Fortune* 27:78-81+ Mr '43
 Inflation control. Is it too late? Trusts & Estates 76:213-14 Mr '43
 Inflation factors. Mag of Wall St 71:602-3 Mr 6 '43 [cont bi-weekly]
 Inflation gap of 1942 and of 1943. Survey of Cur Business 23:5 S '43
 Inflation in France. Economist 144:74-5 Ja 16 '43
 Inflation in India. Economist 145:468-9 O 2 '43
 Inflation in 3 countries of the Middle East. K. C. Dougall. For Comm W 12:12-15+ S 18 '43
 Inflation in your business. R. W. Rabson. Comm & Fin Chr 158:1109+ S 16 '43
 Inflation; its causes, and effects. Bankers M 146:251-3 Mr '43
 Inflation now inevitable; how far can it go? H. M. Tremaine. Mag of Wall St 71:398-400+ Ja 23 '43
 Inflation; the alternatives. Trusts & Estates 77:116-17 Ag '43

INFLATION (finance)—*Continued*

- Inflation the economic enemy; Office of war information presents world's past experiences. *Il Weekly Underw* 148:25-7 sec 2 My 8 '43
- Inflation through Federal Reserve security purchases. *Trusts & Estates* 75:441-2 N '42
- Inflation would leave health best asset of all. E. J. Schlesinger. *Comm & Fin Chr* 157:1858+ My 20 '43
- Inflationary finance. *Trusts & Estates* 76:491-2 Je '43
- Inflationary pressure slackens; government at present obtaining funds from the public rather than banks. W. Von Tresckow. *Baron's* 23:3 Ag 2 '43
- Influence of life insurance in curbing inflation. H. H. Jackson. *Il Weekly Underw* 148:28-30 sec 2 My 8 '43
- Investment policy during an inflation. C. H. Rauch. *Trusts & Estates* 77:67-8, 70-2 J '43
- Issuance of \$660,000,000 Reserve notes called dangerous inflationary action. R. A. Taft. *Comm & Fin Chr* 157:669 F 18 '43
- Large part of Nation's population faced with disaster from rising tide of inflation. *Comm & Fin Chr* 158:10 JI 1 '43
- Lewis forces a showdown on inflation program. E. Blair. *Barron's* 23:4+ F 15 '43
- Life insurance and inflation in Germany after the first World war. L. M. Simon. *East Underw* 43:3-4 D 18 '42; *East Underw* 43:6 D 25 '42
- Managing a business for stockholders through the vicissitudes of inflation. I. A. Wright. *Comm & Fin Chr* 158:37+ JI 8 '43; *Discussion*. 158:201+, 299, 402+ JI 15, 22, 29 '43
- Measures required to prevent inflation. M. S. Eccles. *Trusts & Estates* 76:322 Ap '43
- Middlemen's stake in hold-the-line. *Barron's* 23:7 Ap 19 '43
- More successful in inflation curb now than in last war, but further control held necessary. A. Sproul. *Comm & Fin Chr* 157:1308 Ap 8 '43
- 1943 preview of business and industry. G. W. Mathis. *Mag of Wall St* 71:268-70+ D 26 '42
- 1943-44 budget and inflation. *Trusts & Estates* 76:105 F '43
- Normal consumption no longer the guide; labor and the Little Steel formula. *Nat City Bank* p25 Mr '43
- OPA's fear of inflation ebbs. *Business Week* p15-16 S 4 '43
- OWI booklet on fight to control living costs. *Comm & Fin Chr* 157:1400 Ap 15 '43
- Pay-as-you-go tax, less group favoritism needed to battle inflation. H. H. Heimann. *Comm & Fin Chr* 157:669 F 18 '43
- Pay for your own inflation. J. Weinstein. *Trusts & Estates* 77:203 S '43
- Paying for the war. *Bankers M* 146:138-43 F '43
- Paying for war out of income called ideal method of controlling inflation. C. F. Roos. *Comm & Fin Chr* 158:1+ JI 1 '43
- Political and industrial effects of changing economic controls. W. Gates. *Mag of Wall St* 72:12-15+ Ap 17 '43
- Post-war inflation can be avoided by rapid reconversion to peacetime production. E. Schram. *Comm & Fin Chr* 157:1663+ My 6 '43
- Post-war inflation, what to prepare for. *Comm & Fin Chr* 158:997+ S 9 '43
- Practical interpretation of inflation. H. B. Dorsey. *Comm & Fin Chr* 158:686+ Ag 19 '43
- Preservation of capital; role of institutional investors. L. M. Simon. *Trusts & Estates* 75:539-43, 604-5 D '42
- President calls on CIO for aid to prevent inflation. *Comm & Fin Chr* 156:1983 D 3 '42
- President Roosevelt bars further increases in prices and wages to prevent inflation. *Comm & Fin Chr* 157:1385+ Ap 15 '43; *Excerpt (Text of executive order)*. *Oil Paint & Drug Rep* 143:3+ Ap 12 '43
- Price control at the cross roads. *Survey of Cur Business* 23:2 Mr '43
- Price control facing most critical period with inflation danger becoming real. A. W. Zelomek. *Comm & Fin Chr* 158:214 JI 15 '43
- Progress of inflation in other countries and the lessons for the United States. G. E. Collingwood. *Mag of Wall St* 72:178-9+ My 29 '43
- Roosevelt's Wadi el Akarit: hold-the-line order. *Business Week* p15-16 Ap 17 '43
- Score of inflation factors given by the OWI. *Trusts & Estates* 77:202 S '43
- Should we fear inflation—or deflation? productive power promises huge supplies after the war. J. Hirsch. *Barron's* 23:3 S 6 '43
- Some questionable inferences drawn from estimates of national income. W. E. Spahr. *Comm & Fin Chr* 157:1857+ My 20 '43
- Stabilization Director Byrnes plans strong fight against inflation. E. Blair. *Barron's* 23:4 F 8 '43
- Subsidies delusion not solution. P. S. Willis. *Comm & Fin Chr* 158:98+ JI 8 '43
- Tackling inflation in Sweden. *Economist* 144:79 Ja 16 '43
- Tax policy and the inflation problem; the Treasury view. R. Blough. *Trusts & Estates* 75:545-6 D '42
- Taxes against inflation. *Banking* 35:13-14 D '42
- Threat to prices; Canadians will provide a critical test for anti-inflation line. *Business Week* p70+ Je 5 '43
- To whip inflation. *Business Week* p91 Ja 16 '43
- Towards inflation in Belgium. *Economist* 144:590-2 My 8 '43
- Trade balances and Latin American inflation. *Nat City Bank* p17-19 O '43
- Trend towards world inflation. *Nat City Bank* p69-71 Je '43
- U.S. can carry \$200 billion debt, preserve credit and avoid inflation. R. Weisman. *Comm & Fin Chr* 158:99+ JI 8 '43
- Urges government to stimulate current income bond buying to prevent inflationary effect. R. S. Hecht. *Comm & Fin Chr* 157:2285+ Je 17 '43
- Wage and price stabilization act must prevail. J. F. Byrnes. *Comm & Fin Chr* 158:709+ Ag 19 '43
- Wage rates and living costs in a war economy. M. S. Brody. *J Business* 16 pt 2:1-5 JI '43
- Wage stabilization and inflation. J. E. Johnsen, comp. *Ref Shelf v* 16, no 4:1-187 bibliog(p177-87) '43 (1.25)
- War bonds for economic stability; American marketing association proposes sale of special victory merchandise bonds in conjunction with advance sale of post-war durable merchandise. R. J. McFall. *Edison Elec Inst Bul* 11:69-75 Je '43
- War bonds, taxes, and economic stability. M. S. Eccles. *Fed Res Bul* 29:393-6 My '43
- War, inflation and the stock market. *Comm & Fin Chr* 158:498+ Ag 5 '43
- War mobilization office to fight inflation. H. D. Ralph. *Burroughs Clearing House* 27:19-20 JI '43
- Wartime inflation and department stores. M. P. McNair. *Harvard Business R* 22 no 1:40-53 [O] '43
- Wartime savings and postwar inflation. E. T. Weller. *Survey of Cur Business* 23:13-18 JI '43
- Well-known laymen praise life insurance buying as a curb on inflation. H. Bruere and others. *East Underw* 44:24, 26, 28, 47 pt 2 O 1 '43
- What are you thinking about inflation? P. F. Cadman and R. G. Taylor. *Am Inst Banking Bul* 25:6-8 Ap '43
- When inflation comes, deflation cannot be far behind. I. Wright. *Comm & Fin Chr* 158:297+ JI 22 '43; *Discussion*. 158:499+, 590+, 691 Ag 5, 12, 19 '43
- Wiseest investment policy in this period of inflation. J. S. Williams. *Mag of Wall St* 71:512-14+ F 20 '43
- Withholding tax at source held essential to combat inflation. E. M. Friedman. *Comm & Fin Chr* 157:665+ F 18 '43

See also

Business Gold as money
Deflation (finance) Money

INFLUENCE charts. See Structural engineering—Tables, calculations, etc.

INFLUENZA

- Antibacterial action of several sulfonamide compounds on hemophilus influenzae type b. M. Pittman. *bibliog* Pub Health Rep 57:1899-1910 D 11 '42
- Attempts to protect against influenza virus with various sulfonamides, acridines and antibiotics. *bibliog* Science 98:348-9 O 15 '43
- Detergents on influenza virus; abstract. A. P. Krueger. *Soap & San Chem* 19:65 Ja '43
- Influenza and meningitis. *Science* 96:sup 12 D 25 '42
- Influenza and pneumonia mortality in a group of 90 cities in the United States, August 1935-March 1943, with a summary for August 1920-March 1943. M. Gover. *Pub Health Rep* 58:1033-61 *bibliog*(p1049) J1 9 '43
- Interference of inactive virus with the propagation of virus of influenza. W. Henle and G. Henle. *Science* 98:87-9 J1 23 '43
- Isolation and characterization of influenza virus B (Lee strain). D. G. Sharp and others. *Science* 98:307-8 O 1 '43
- Lethal effect of triethylene glycol vapor on air-borne bacteria and influenza virus. O. H. Robertson and others. *bibliog* Science 97:142-4 F 5 '43
- Method for the removal of bacterial contaminants from suspensions of influenza virus. *Science* 96:543-4 D 11 '42
- Rationale for studies in the control of epidemic influenza. T. Francis, jr. *Science* 97:229-35 Mr 12 '43
- Simplified procedure for the concentration and purification of influenza virus. T. Francis, jr. and J. E. Salk. *bibliog* Science 96:499-500 N 27 '42

INFORMATION service

- Information service; the creation and development of an industrial library or information bureau. B. J. Ledoux. *Automobile Eng* 33:29-30 Ja '43
- Organisation and use of technical intelligence services; abstract. S. J. Johnstone. *Chem Age (Lond)* 49:392 O 16 '43
- Scientific information; suggestions for centralized abstracting, bibliographic and information service. J. G. Crowther. *Engineer* 176:272-3 O 1 '43

See also

- Business information Rapid transit—Information service
Investment advisers
Libraries, Special

INFORMATION service, Government

- Bureau of foreign and domestic commerce, how it can help you; Division of commercial and economic information. A. R. Hahn. *Sales Management* 52:32, 34+ S 15 '43

See also

- British information United States—War services information, Office of

INFORMERS (law)

- Informers cashes in; electrical contractors in Pittsburgh suit pay \$260,000, but U.S. gets half, and informer faces huge income tax. *Business Week* p39-40 Ag 21 '43

INFRARED photography. See Photography, Infrared**INFRARED rays**

- Infra red camouflage; paints emerge from the panel stage. D. B. Williams and C. H. Wastle. *Il Can Chem & Process Ind* 27:500-1 S '43
- Infrared reflectance and radiance absorption, testing of paint. *Oil Paint & Drug Rep* 144: 65 N 1 '43
- Infrared reflecting and fluorescent pigments on textiles for the armed forces. R. K. Jackson. *diag Am Dyestuff Rep* 32:259-60 Je 7 '43
- Predicting infrared reflectance of camouflage finishes. *Il Paint Oil & Chem R* 104:10-12+ D 17 '42
- Visual observations in the infra-red. J. M. Preston. *Il Soc Dyers & Col J* 59:141-3 J1 '43
- See also
Photography, Infrared
Spectrum, Infrared

Industrial heating

- Army helmets dried by infra-red lamps. *Il Factory Management* 101:76 Ap '43

Clarifying radiant heat applications in textile finishing. G. R. Van Kampen. *Il Rayon* 24: 431-2 Ag '43

- Drying operations are speeded up at Progressive silk finishing co. by use of gas-fired radiant heaters. *Il Textile World* 92:73 N '42
- Factory process heating; Moffats, ltd. *Il Elec R (Lond)* 132:603-5 My 7 '43
- Finishing by infra-red. *Il Factory Management* 101:145 O '43
- Finishing warplanes. F. V. Faulhaber. *Il Metal Finishing* 41:173-6 Mr '43
- Heat beyond red light. *Fortune* 28:76+ O '43
- Infra-red carbonizing and drying unit perfected by Riggs & Lombard. *Il Rayon* 24: 209 Ap '43
- Infrared dehydration of meats and vegetables tested; preliminary investigations of carrots, sweet potatoes, turnip greens, beef and pork successful. F. M. Tiller, E. E. Litkenhous and W. Turbeville. *bibliog* Il Food Ind 15:77-9+ O '43
- Infra-red drying; results obtained in drying of paints. *Il Elec R (Lond)* 133:205-6 Ag 13 '43
- Infrared finish. *Business Week* p55-6+ Ja 23 '43
- Infrared for industrial purposes. *Il Gas J (Lond)* 241:621-2 My 19 '43
- Infra-red in textile industry. *Il Textile World* 93:56-61 Ja '43
- Infra-red industrial lamps. *Il Electrician* 131: 59-60 J1 16 '43
- Infra-red lamp heating and its application to industrial purposes; abstracts. F. E. Rowland. *Electrician* 130:444 Ap 30 '43; *Elec R (Lond)* 132:591 Ap 30 '43; *Engineer* 175: 355 Ap 30 '43
- Infra-red lamp heating for paint drying and other industrial-heating applications. F. E. Rowland. *Engineering* 154:424 N 27 '42; Same cond. *Il Electrician* 129:575-7 N 27 '42; Abstract. *Elec R (Lond)* 131:655 N 20 '42
- Infra-red penetrates many process industries. E. H. Robinson. *Il Chem & Met Eng* 50:105-6 Ag '43
- Infra-red tunnel temperature measurements. D. E. Andersen. *Il Instruments* 16:28 Ja '43
- Infra-red units push up denim output; drying endless felt belt used in production process. *Il Elec W* 120:134+ J1 10 '43
- Miskella infra-red oven built of panel sections. *Il Am Mach* 87:125-6 Je 10 '43
- Near infra-red applications; illustrations with text. P. H. Krupp. *Iron Age* 151:60-1 F 18 '43
- Near infra-red speeds drying of wet motors. *Il Marine Eng* 48:131 Ja '43
- Near infrared, what it is, where you can use it. *Il Cer Ind* 41:28-30 S '43
- New facts on infra-red drying. S. L. Grapnel. *Il Textile World* 93:94-5 Ag '43; Discussion (More data on infra-red). F. G. McLaughlin. 93:88 O '43
- Painting speed increased 400 per cent; Propeller division plants of Nash-Kelvinator corp. *Il Steel* 112:111 Je 21 '43
- Quick-dried by infra-red. *Il Factory Management* 101:121-3 F '43
- Radiant gas heat in baking, curing and drying operations. C. P. Mann. *Il Gas Age* 92:21-3+ S 9 '43; Same. *Chem Ind* 53:332-5 S '43; Same abstr. *Can Chem & Process Ind* 27:613-15 N '43
- Radiant heat for paint drying. L. W. Andrew. *Chem Age (Lond)* 49:111-14 J1 31 '43
- Radiant heat; the application of gas-generated infra-red rays. L. W. Andrew and E. A. C. Chamberlain. *Automobile Eng* 33:326-9 Ag '43; Same. *Gas J (Lond)* 242:110, 115, 140, 145+ J1 28-Ag 4 '43; Same. *Engineering* 156:245-6, 298-300 S 24, O 8 '43; Discussion. *Gas J (Lond)* 242:201-2+ Ag 18 '43
- Scientifically applied radiant heat in the textile industry. M. R. Weiss. *Il diag Rayon* 24:499-501 S '43
- Some preliminary investigations on dehydration of fruits and vegetables with infrared energy. J. E. Nicholas. *Il Franklin Inst J* 236:285-91 S '43
- Submerged salvaged; salt encrusted dredge motors dried out by infrared lamps. *Il Elec West* 90:45 Ja '43

INFRARED spectrum. See Spectrum, Infrared

INFUSORIA

See also
Paramecium

INGERSOLL-RAND company

Another look. Mag of Wall St 71:428-9 Ja 23 '43

Another look. Mag of Wall St 72:706 O 2 '43

INGOTS

Electric arc hot topping on ingots and castings developed many years ago by International nickel co. G. F. Sullivan. *il diag Iron Age* 151:56-60 F 11 '43

See also
Steel ingots

INHERITANCE and succession

Effect of laws of domicile on succession to personal property acquired in another state. Trusts & Estates 76:480 My '43

War bond inheritance important. Banking 35:52+ Mr '43

What of remote heirs? escheat or heavy taxation where intestate leaves only distant relatives. F. N. Thompson and G. Newhall. Trusts & Estates 76:465-6; Discussion. 466-9 My '43

See also
Estates, Decedents' Executors and administrators

Inheritance tax

Life tenants and remaindermen
Perpetuities (law)
Trusts and trustees
Wills

INHERITANCE tax

Business and life insurance trusts; considerations from drafting and taxation angles. J. McCormack. Trusts & Estates 75:573-9 D '42

Catching up with the American radical; taxes deny family security. J. S. Myrick. Comm & Fin Chr 153:1086+ S 16 '43

Coordination or integration? E. N. Griswold's plan for coordination of our income-tax structure with gift and estate tax provisions. E. N. Cahn. J Account 75:530-1 Je '43; Discussion. 76:256-7 S '43

Effects of present income and estate tax policy. R. Magill. Comm & Fin Chr 153:1685, 1694-5 O 28 '43

Estate and inheritance; reimbursement by beneficiary of life insurance. Trusts & Estates 77:408 O '43

Estate and inheritance; right of commonwealth to intervene in proration proceeding. Trusts & Estates 77:310-11 S '43

Estate and inheritance; tax assessed against each gift and deductible therefrom. Trusts & Estates 75:624 D '42

Estate taxation of life insurance; 1942 Revenue act recasts tests for inclusion in estate. S. J. Foosaner. *bibliog Trusts & Estates* 75:613-16 D '42

Federal tax law changes in past year as they affect life insurance. J. V. Bloys. *East Underw* 44:32+ pt 2 O 1 '43

Incidence of succession duties where disposition is altered by order under dependents' relief act. Trusts & Estates 76:95 Ja '43

June 30, 1943 deadline on release of powers of appointment; bibliography. Banking 35:57 Je '43

Life insurance to provide for death taxes. R. E. Moyer. *East Underw* 44:3-4 My 21 '43; Same. *Spectator (Life ed)* 150:24-5 Je '43; Abstract. *Nat Underw (Life ed)* 47:7 My 21 '43

Planning your estate; some tax-saving mechanisms still available. R. A. Wormser. Trusts & Estates 76:185-8 F '43

Planning your estate with some emphasis on when not to save taxes. R. A. Wormser. Trusts & Estates 76:47-50 Ja '43

Powers of appointment under the Revenue act of 1942. J. H. Alexander. J Account 76:14-18 Jl '43

Reducing estate taxes through insurance. Trusts & Estates 77:358-9 O '43

Regulations on estate tax liability issued. *Nat Underw (Life ed)* 47:3 Mr 19 '43

State and federal taxation; year's developments affecting estates and trusts. W. L. Nossaman. Trusts & Estates 77:228-36 S '43

Taxation of estate and trust income; uncertainties demand revision of section 111 of 1942 act. F. H. Medinger. Trusts & Estates 76:285-8 Mr '43

Taxation of powers of appointment; abstract. E. N. Griswold. Trusts & Estates 76:196 F '43

Taxes on powers of appointment. M. N. Fisher. Trusts & Estates 75:483-7 N '42

Tentative estate tax for net taxable estates from \$50,000 to \$10,000,000; graph. *Nat Underw (Life ed)* 47:29 pt 2 My 21 '43

Treatment of life insurance proceeds under new federal estate tax law. D. B. Maduro. *East Underw* 43:14+ D 11 '42

Who should pay estate taxes on property not passing by will? Trusts & Estates 77:36 Jl '43

Will tax on community property be upheld? R. W. Smith. Trusts & Estates 76:85-8 Ja '43

You new taxes; estate and gift tax provisions altered. L. J. Freeman. *Barron's* 22:7+ D 7 '42

Canada

Canadian securities and Canadian estate taxes. B. Williams. *Comm & Fin Chr* 157:1105 Mr 25 '43

INHIBITORS of corrosion. See Corrosion and anti-corrosives

INJUNCTIONS

Use of injunctions in labor disputes; court decisions. *Monthly Labor R* 56:496-7 Mr '43

INJURIES. See Accidents; First aid in illness and injury; Wounds

INJURIES (law). See Damages; Employers' liability; Personal injuries; Workmen's compensation

INK

All-America package competition award; Carter's ink co. *il Mod Packaging* 16:103+ Ap '43

All-America package competition award; E. J. Kelly co. ink in paper containers. *il Mod Packaging* 16:99+ Ap '43

Analysis of the xeritropy of pigment-vehicle suspensions; basic principles of the hysteresis loop. H. Green and R. N. Weltmann. *bibliog Ind & Eng Chem Anal ed* 15:201-6 Mr 15 '43

Anilin inks and drying systems. F. E. Boughton. *diag Inland Ptr* 110:54-6 Mr '43

Better ink records with recording instruments. L. J. Lunas. *diags Power Pl Eng* 47:65-7 Ja '43

Developments in the graphic arts, 1942. M. S. Kantrowitz. *Paper Tr J* 116:37-8 My 27 '43

Ink from autos; printing ink makers say car conversion has left enough for all. *Business Week* p63+ Ja 9 '43

Motting a common worry; here are some helps. E. St John. *Inland Ptr* 110:38 N '42

New York daily news; rotogravure printing plant recovers ink-solvent, employing activated carbon adsorption method. T. F. J. Moffett. *flow diag il Heat & Ven* 40:33-6 Ap '43

Present day use of natural oils and resins in printing inks. F. E. Petke and C. H. Allen. *il Chem Ind* 53:502-4 O '43

Relation of ink to paper. H. J. Wolfe. *il Paper Tr J* 116:32-4 Mr 25 '43; Same cond. *Paper Ind* 25:200-1 My '43

Right quantity of ink. *Inland Ptr* 111:59-60 Je '43

Soybean protein dispersions as printing ink vehicles. A. F. Schmutzler and D. F. Otmer. *bibliog il Ind & Eng Chem* 35:1196-1202 N '43

What prospects for printing ink materials? W. F. Talbot. *Mod Packaging* 16:172-3+ Ap '43

See also
Pigments

Drying

Ink drying as affected by various paper stocks. M. J. Leckey. *Paper Tr J* 116:29-32 My 20 '43; Same cond. *Paper Ind* 25:300+ O '43

Newsprint papers; relationship between ink drying and paper properties. L. J. Morin. *Pulp & Pa of Can* 44:445-6 My '43

INLAND marine insurance. See Insurance, Inland marine

INLAND navigation. See River traffic; Waterways

- INLAND steel company**
Fiftieth milestone observed. *Il Steel* 113:100-1 N 8 '43
- Thumbnail stock appraisal.** *Mag of Wall St* 72:251 Je 12 '43
- INLAND waterways corporation**
U.S. barge lines had big '42 deficit. *Ry Age* 115:186 Jl 24 '43
- INNOVATIONS (economic theory)**
Economics of innovation; adjustment of the national economy to new products. R. E. Freeman. *Tech R* 45:313-14+ Ap '43
- Innovations.** O. Lange. *R Econ Stat* 25:19-25 F '43
- Professor Schumpeter's theory of innovation.** P. M. Sweezy. *R Econ Stat* 25:93-6 F '43
- INOCULATION**
See also
Immunity
Serumtherapy
Vaccination
- INOSITOL**
Inositol, a tumor growth inhibitor. D. Laszlo and C. Leuchtenberger. *Science* 97:515 Je 4 '43
- INSANITY.** *See* Mental diseases
- INSECT dyes.** *See* Dyes and dyeing—Natural dyes
- INSECT gun.** *See* Spraying apparatus
- INSECT infestation of food.** *See* Food—Insect infestation
- INSECT repellents**
Insect repellents; demand for use by armed forces puts new life into a dead market. *Soap & San Chem* 19:103, 105+ Mr '43
See also
Fly sprays and repellents
- INSECTICIDE and disinfectant manufacturers.** National association of. *See* National association of insecticide and disinfectant manufacturers
- INSECTICIDE and fungicide association, Agricultural.** *See* Agricultural insecticide and fungicide association
- INSECTICIDES**
Agriculture insecticide makers discuss production problems. *Oil Paint & Drug Rep* 144:7+ Ag 2 '43
- Army louse powder and other insecticidal possibilities of diphenyl trichloroethane from which it is being manufactured.** *Soap & San Chem* 19:101, 103+ Jl '43
- Cockroaches and their control.** M. H. Doner and E. G. Thomssen. *bibliog il Soap & San Chem* 19:94-7+ S '43
- Conference on attaining maximum effectiveness of insecticides and fungicides.** C. I. Bliss. *Science* 97:216 Mr 5 '43
- Container situation; glass bottles, closures, and paper packaging needs for insecticides and disinfectants.** E. F. Bertrand. *Soap & San Chem* 19:111+ Ja '43
- Fluorine insecticides.** R. H. Carter and E. L. Gooden. *bibliog il Soap & San Chem* 19:99, 101+ Mr '43
- Forecast of insecticide and fungicide raw material supplies for 1943 and 1944.** *il Chem Ind* 53:71-2 Jl '43
- Increased acreage brings new demands for British fertilizer and insecticides.** *Chem & Met Eng* 50:220-2 My '43
- Insect control in food production.** E. G. Thomssen and M. H. Doner. *il Soap & San Chem* 19:94-7 F; 90-2+ Mr '43
- Insect control on aircraft.** G. L. Dunnahoo. *il Soap & San Chem* 19:111+ F '43
- Insect kill; the action of insecticides on insect tissue.** A. Weed. *bibliog Soap & San Chem* 19:117, 119+ Je '43
- Insect war aided; new synthetic insecticide; Lethane 60.** *il Business Week* p56+ Je 26 '43
- Insecticidal aerosol production; spraying solutions in liquefied gases.** L. D. Goodhue. *bibliog il diags Ind & Eng Chem* 34:1456-9 D '42
- Insecticidal possibilities in the yam bean seed.** *Soap & San Chem* 19:105+ My '43
- Insecticide chemicals needed for war food supply.** R. S. McBride. *Chem & Met Eng* 50:101-3 Mr '43
- Insecticide marketing problems.** A. W. Morrison. *Soap & San Chem* 19:105+ Ja '43
- Insecticide outlook; the possibilities of supply and requirements in 1944 for rotenone, pyrethrum, thiocyanates, arsenicals and other raw materials.** *Soap & San Chem* 19:107, 109+ N '43
- Insecticide supplies.** P. H. Groggins. *Oil Paint & Drug Rep* 143:32C Je 14 '43
- Insecticide supply outlook.** P. H. Groggins. *Soap & San Chem* 19:98-9+ My '43
- Insecticides.** G. A. Freak. *Chem & Ind* 61:429-31, 526-9 O 24, D 26 '42
- Insecticides after the war.** J. Powell. *Soap & San Chem* 19:111+ Jl '43
- Insects bombed.** *Business Week* p50+ My 8 '43
- Jap beetle insecticide; abstract.** *Soap & San Chem* 19:111 Ap '43
- Market outlook on insecticide materials.** P. H. Groggins; H. Noble. *Soap & San Chem* 19:94-6 Jl '43
- N.A.I.D.M. meeting; president's address.** J. N. Curlett. *Soap & San Chem* 19:107-8 Je '43
- New insecticide from castor plant.** J. E. Good. *Oil Paint & Drug Rep* 143:4+ Ap 12 '43
- New insecticide material; study of toxicity of alpha beta dibromo-beta-nitroethylbenzene in oil sprays against houseflies.** E. R. McGovran, M. S. Schechter and J. H. Fales. *Soap & San Chem* 19:107+ Mr '43
- New potential insecticides.** R. C. Roark. *bibliog Soap & San Chem* 19:95-6 Ja '43
- 3,2'-Nicotyrine; insecticidal properties of certain azo derivatives.** R. L. Frank, R. W. Holley and D. M. Wikholm. *bibliog Am Chem Soc J* 64:2335-8 D '42
- Organic insecticides; suggested substitutes for lead arsenate.** *Chem Age (Lond)* 43:200 F 13 '43
- Properties of some anils.** T. F. West. *Soc Chem Ind J* 61:158-9 O '42
- Pyrethrum replaced by new insecticide.** *Oil Paint & Drug Rep* 143:7 Je 21 '43
- Replacements materials for roach control.** G. E. Gould. *bibliog Soap & San Chem* 19:90-3+ Ag '43
- Roach powders; study of comparative effectiveness of insecticidal powder mixtures against the German cockroach.** E. C. Klostermeyer. *Soap & San Chem* 19:98-9+ F '43
- Roach powders; what composition for poisonous and non-poisonous types.** *il Soap & San Chem* 19:97-8+ Ap '43
- Sesame in insecticides.** C. Eagleson. *Soap & San Chem* 18:125+ D '42
- Simple method of protecting cereals and other stored foodstuffs against insect pests; new type of inert dust.** J. A. Kitchener, F. Alexander and H. V. A. Briscoe. *Chem & Ind* 62:32-3 Ja 23 '43
- Sodium fluoride crayons for roach control.** J. M. Hutzler. *bibliog Soap & San Chem* 19:107, 109+ Ag '43
- Some new properties of inorganic dusts; abstract.** H. V. A. Briscoe. *Chem Age (Lond)* 48:582-3 My 29 '43
- Standardization of insecticide packages.** W. E. Braithwaite. *Soap & San Chem* 19:97, 99 Ag '43
- Synthetic insecticide; Lethane.** *Chem & Met Eng* 50:211 My '43
- Thiocyanate compounds for pea aphid control.** H. F. Wilson and E. J. Campau. *bibliog Soap & San Chem* 19:105, 107+ F '43
- Toxicity of two organic thiocyanate insecticides.** R. J. Main and H. B. Haag. *Ind Med* 11:531-3 N '42
- See also*
Fly sprays and repellents
Hydrocyanic acid
Methyl bromide
Phenothiazine
Pyrethrins
Pyrethrum
Rotenone
- Analysis**
Determination of sulfur residues from sulfur application on citrus foliage. F. A. Gunther, R. L. Beier and J. P. Ladue. *bibliog Ind & Eng Chem Anal* ed 15:574-5 S 15 '43
- Laws and regulations**
Insecticide coloration in legislative spotlight. *Soap & San Chem* 19:109 Mr '43

INSECTICIDES—Laws and regulations—*Cont.*
Insecticide law; enforcement under war-time conditions outlined. E. L. Griffin. Soap & San Chem 19:109 Ja '43
U.S. insecticide color law needed; abstract. A. J. Cox. Soap & San Chem 19:117 Ja '43

Patents

Aerosol method patented; making insecticidal aerosols with liquefied gases; assigned to Secretary of Agriculture. P. N. Annand. II Soap & San Chem 19:117, 119 O '43

Prices

Agricultural insecticide price formula set. Oil Paint & Drug Rep 143:5+ F 8 '43
Agricultural insecticides get specific ceilings. Oil Paint & Drug Rep 143:7+ Ap 5 '43

Specifications

Insecticide specifications. Soap & San Chem 18:129+ D '42

Testing

Observations on the chemical and biological testing of pyrethrum extracts and the relative toxicity of pyrethrins I and II. R. G. Green and others. Soc Chem Ind J 61:173-6 N '42

Rapid insecticide testing; settling mist method for testing of vaporized contact insecticides against houseflies. T. C. Allen, R. J. Dicke and J. W. Brooks. II diags Soap & San Chem 19:94-6+ Ap '43

Small chamber method for testing effectiveness of insecticides against houseflies. C. W. Kearns and R. B. March. II diags Soap & San Chem 19:101, 103-4+ F '43

Testing aerosols against houseflies. E. R. McGovern, J. H. Fales and L. D. Goodhue. bibliog diag Soap & San Chem 19:99+ S '43

INSECTS

See also

Cockroaches
Color of insects
Fleas
Flies

Food—Insect infestation
Horse flies

Classification

Suggested caste taxonomy for the common termite. A. L. Plickens. Science 97:116-18 Ja 29 '43

Nests

See Nests

Sound production

Songs of insects. G. W. Pierce. Franklin Inst J 236:141-6 Ag '43

INSECTS, Fossil

Studies on carboniferous insects from Commeny France; introduction and families protagriidae, meganeuridae, and campylopteridae. F. M. Carpenter. diags Geol Soc Bul 54:527-54, pl 1 bibliog (p553-4) Ap '43

INSECTS, Injurious and beneficial

Animal sources of dyes; insect and other contributors. E. Hardy. Textile Col 64: 563-4 D '42

Livestock insect control. E. G. Thomssen and M. H. Doner. bibliog II Soap & San Chem 19:96-7+ N '43 (to be cont)

See also

Bark beetles
Carpet beetles
Caterpillars
Fleas

Mosquitoes
Moths
Pea aphids

Food—Insect infestation

Plant quarantine
Silverfish (insect)
Spruce sawfly
Termites

Insecticides

INSECTS, Photography of. *See* Photography of insects

INSECTS as carriers of infection

Triatoma sanguisuga (LeConte) and triatoma ambigua. Nelva as natural carriers of trypanosoma cruzi in Texas. D. J. Davis, T. McGregor and T. deShazo. bibliog Pub Health Rep 58:353-4 F 26 '43

See also

Mosquitoes

INSIGNIA

Fasteners for army insignia. II diags Mod Plastics 21:86 O '43

Use of government insignia and uniforms in advertising. G. Adams. Adv & Sell 36:48 My '43

See also

United States—Marine corps—Insignia

INSULATION

Insulation in the polar atmosphere. A. Court. bibliog fold chart Franklin Inst J 235:169-78 F '43

See also

Solar heating

INSPECTION

Accurate inspection of worm gears. V. F. St Louis. II diags Am Mach 87:97-8 F 18 '43

Aluminum parts gaged at constant temperature. diag Iron Age 152:53 S 9 '43

Applicable methods of inspection for pressure vessels and piping. W. D. Halsey. Welding J 22:821-2 O '43

Concentricity testing fixture. diags Mach 50: 174-5 S '43

Conveyor aids parts inspection; N. W. Woodworth co.; illustrations with text. Iron Age 152:66 Ag 26 '43

Critical seeing on critical materials. H. J. Chanon. II diags Elec West 91:46-8 S '43

Detecting surface flaws in non-ferrous and non-magnetic materials; Zyglo fluorescent penetrant method. G. Ellis. II Iron Age 150:56-9 D 17 '42

Douglas streamlined inspection system. C. C. Harrison. II Automotive & Aviation Ind 89: 24-5+ JI 15 '43

Especially equipped comparator speeds inspection of aircraft radio part. II Mach 49: 141 Je '43

Exemplary inspection system is foolproof and time-conserving; Nash-Kelvinator corp. II Aero Digest 42:193+ My '43

Fluorescent inspection of tungsten; cracks in leads passing through glass are major cause of gassy electronic tubes; Zyglo inspection method. S. A. Kulini. II Electronics 16:95+ JI '43

Fluorescent method detects leaks in process vessels; Zyglo. F. Catlin. II Chem & Met Eng 50:116 Ag '43

Inspection and common sense. F. C. Hudson. Am Mach 87:143-4 Mr 4 '43

Inspection cut from two days to one hour; fixture with dial indicators checks location and diameter of ball-bearing fits. H. Bernad. II diags Am Mach 87:105-6 JI 22 '43

Inspection history stamped on part; Aircraft parts production corp. Iron Age 151: 63 Je 17 '43

Inspection innovations; Nash-Kelvinator corp. II Steel 113:174-5+ O 11 '43

Inspection of precious metals. II Light & Lighting 36:143 S '43

Inspection time reduced on aircraft parts; Consolidated Vultee aircraft corp. J. E. Childers. II Iron Age 152:66-9 S 16 '43

Inspectors in ten weeks; Johns Hopkins course in precision inspection in aircraft work. D. H. Fax. II Factory Management 101:118-19+ Ja '43

Lockheed's experience with magnetic particle inspection. R. Mitchell and C. Geist. II Automotive & Aviation Ind 89:26-9+ S 1 '43

Magnifying inspection device aids output. II Factory Management 101:230 Mr '43

Management problems in judging quality conformance in the inspection function. J. M. Juran. Mech Eng 65:805-8 N '43

Management problems of measurement in the inspection function. J. M. Juran. Advanced Management 8:86-91+ JI '43

Methods and equipment for the inspection of machine gun parts and assemblies. C. G. Nelson. II Instruments 15:510-13 D '42

Ordnance inspection, 1942. J. J. Target. Metals & Alloys 17:116-17 Ja '43

Production controls aid the war program; electronic devices. R. A. Powers. II diags Electronics 16:126-8 Mr '43

Progress in precision; inspection methods through the automotive age to World war II; abstract. O. J. Snider. S A E J 51: sup65 JI '43

Projection inspection of form tools. W. Stewart. II Am Mach 87:78-9 Ap 1 '43

Proper grinding and inspection of tool steels. J. E. Erb. II Iron Age 151:28-32 Ja 14 '43

INSPECTION—Continued

- Quality assurance through sampling inspection. H. Rissik. Engineer 175:334-5, 346-7 Ap 23-30 '43
- Quality control; its demands grow tighter as war gets tougher. *il* Fortune 28:126-7 O '43
- Quality control will reduce costs; manufacturing operations at Westinghouse. J. Manuele. *il* diags Am Mach 87:73-81 Ap 29 '43
- Quality inspection of beryllium copper. W. Martin. *il* Metals & Alloys 17:1203-7 Je '43
- Radiography as an inspection tool; panel discussion. T. A. Triplett and others. *il* Metal Prog 43:226-34 F '43
- Recruiting and training of inspectors; National metal congress report. L. L. Wyman. Metal Prog 42:893-4 N '42
- Round-the-clock inspection; men and women new to industry can be trained in short order. Warner & Swasey company. *il* Am Mach 86:1424-5 D 10 '42
- Some problems of inspection; abstract. W. Raphael. Management R 31:417-19 D '42
- Subcontractors attain precision by well engineered program of setup and inspection; Stewart-Warner corp. H. E. Fleming. *il* Steel 112:104-5, 128+ Je 7 '43
- Ten years' progress in management; gaging and inspection in interchangeable manufacture. C. deZafra. A S M E Trans 65:221-2 Ap '43
- Tests for the selection of inspector-packers; abstract. E. E. Ghiselli. Management R 32:139 Ap '43
- To one-millionth of an inch; at SKF as much as 40 per cent of the man-hours go into quality control. *il* Fortune 28:128-9+ O '43
- Using color to train women; Jacobs aircraft engine company. F. W. Rohde. Factory Management 101:298+ S '43

See also

- | | |
|---------------------|-------------------|
| Building inspection | Gages |
| Car inspection | Magnetic testing |
| Electric inspection | Mine inspection |
| Factory inspection | Safety inspection |
- also subdivision Inspection under special subjects, e.g. Castings—Inspection; Motor vehicles—Inspection

INSPIRATION consolidated copper company

- Another look. Mag of Wall St 71:356 Ja 9 '43
- Another look. Mag of Wall St 72:479 Ag 7 '43

INSTALLMENT plan

- Advance sale, postwar delivery, plan to enlist support of contractors in East; results of survey. Dom Eng 161:50-1+ Mr '43
- Hartford has post-war appliance purchase plan; advance savings, invested in war bonds, on future delivery through regular dealer channels. Elec W 119:76 Ja 9 '43
- Informal extensions of time for payment. C. R. Rosenberg, jr. Burroughs Clearing House 28:30 N '43
- Installment selling for post-war delivery. J. G. Frederick. Barron's 23:1 Mr 8 '43
- Nugent test due; terms on your postwar auto. Business Week p16 Ja 16 '43
- OPA to adopt buy-in-advance plan for post-war deliveries. Ptr Ink 202:43 Ja 1 '43
- Sales plan for war and post-war; Nugent plan includes sale of plumbing and heating equipment. *il* Dom Eng 161:34-9+ F '43
- Sees return of installment buying in post-war economy. A. Haring. Credit & Fin Management 45:9 O '43
- Sell today, deliver tomorrow; war savings for consumer goods; Nugent plan, the McFall plan, and that of Hartford electric light company. C. E. Greenwood. Edison Elec Inst Bul 11:47-8 F '43

See also

- | | |
|---------------------|-------------------|
| Loans, Bank—Instal- | Loans, Bank—Small |
| ment payment | loans |

Accounting

- Things learned in accounting for installment sales of electrical appliances; Georgia power company. Atlanta. H. W. Boozer. N A C A Bul 25:147-62 O 15 '43

Finance

- Banks and consumer credit. T. E. Savage. Bankers M 146:102-4, 106-21, 193-222 F-Mr '43

Regulation

- Advances to agents held exempt. Nat Underw (Life ed) 46:3+ N 20 '42
- Advances to life insurance agents and regulation on consumer credit. Fed Res Bul 29:595-6 Jl '43
- Consumer credit; amendments to Regulation W (cont). Fed Res Bul 28:1078 N '42
- Consumer credit; interpretations of Regulation W (cont). Fed Res Bul 28:1078-9, 1185-6 N-D '42
- Consumer credit; suspension of license. Fed Res Bul 28:1184-5 D '42
- Hire-purchase and credit sales controlled. For Comm W 11:23 Ap 24 '43
- Hire purchase restrictions. Economist 144:243 F 20 '43; Correction. 144:273 F 27 '43
- Hire-purchase sales prohibited in the United Kingdom. For Comm W 10:20 Mr 20 '43
- Rate regulation in the field of consumer credit. W. P. Mors. bibliog J Business 16:130-7 Ap '43
- Retail credit in wartime. R. M. Severa. J Retailing 19:35-40+ Ap '43
- Varying opinions on the future of Regulation. W. Burroughs Clearing House 28:5 O '43

Statistics

- Consumer credit statistics, annually 1929-1941, and monthly, Sept. 1941-Oct. 1942. Fed Res Bul 29:88 Ja '43
- Decline in consumer credit. Fed Res Bul 29:485-91 Je '43
- Decline in consumer short-term debt; year subsequent to effective date of Regulation W. Fed Res Bul 28:1180-1 D '42
- Installment sales, New England department stores, 1938-1941. Survey of Cur Business 1942 Sup p37 [supplemented in monthly numbers]
- Monthly estimates of short-term consumer debt, 1929-42. D. M. Holthausen. tables Survey of Cur Business 22:9-25 N '42
- Retail credit survey, 1942. Fed Res Bul 29:604-8 Jl '43

INSTITUTE of bankers, London

- Carry on, effects of the war on the work of the London institute of bankers. W. J. Hinton. Am Inst Banking Bul 24:3-4+ O '42

INSTITUTE of British foundrymen

- Annual meeting, 40th, London, June 26. Foundry 71:100, 179-82 S '43

INSTITUTE of ceramic engineers

- Rules. Am Cer Soc Bul 22:251-4 Jl 15 '43

INSTITUTE of food technologists

- Annual food conference, 4th, St Louis, June 2-4. Food Ind 15:61-3+ Jl '43

INSTITUTE of gas technology

- Functions of the Institute of gas technology. F. W. Sullivan, jr. *il* Pet Refiner 22:118, 120 Je '43
- Gas industry coordinates research under unique new institute. A. L. Foster. *il* Oil & Gas J 41:37-9 Mr 18 '43
- Institute of gas technology increases fellowship stipend. Am Gas J 158:36 Mr '43
- Research at the Institute of gas technology; illustrations. Am Gas Assn Mo 25:196-7 My '43
- War and post-war research at the Institute of gas technology. F. W. Sullivan, jr. Am Gas Assn Proc 1942:37-8

INSTITUTE of home office underwriters

- Annual meeting, Chicago, Oct. 15-16. East Underw 44:13 O 22 '43; *il* Field (Life ed) 72:4+ O 22 '43; Nat Underw (Life ed) 47:1+ O 22 '43

INSTITUTE of life insurance

- Annual meeting, New York, Dec. 2. East Underw 43:6 D 4 '42; *il* Field (Life ed) 71:5+ D 4 '42; Nat Underw (Life ed) 46:7 D 4 '42; Weekly Underw 147:1336-7+ D 5 '42
- To tie in field forces with Institute work in future programs. East Underw 44:1+ Jl 23 '43

INSTITUTE of metals

- Annual autumn meeting, 35th, London, Sept. 22. Engineering 156:273-4, 294 O 1-8 '43
- Annual meeting, 35th, London, March 3. Engineering 155:213-15 Mr 12 '43

INSTITUTE of radio engineers

- Address of retiring president. A. Van Dyck. Inst Radio Eng Proc 31:175-8 Ap '43
- I.R.E. and the war. A. Van Dyck. Inst Radio Eng Proc 31:36-8 Ja '43

INSTITUTE of radio engineers—Continued

Report of the secretary, 1942. *Inst Radio Eng Proc* 31:457-60 Ag '43
 Winter meeting, New York, Jan. 28. *Electronics* 16:157+ Mr '43

INSTITUTE of radio engineers. Proceedings
 Cumulative index 1913-1942. *Inst Radio Eng Proc* 31:1-69 pt2 Je '43 (pa \$1)

INSTITUTE of scrap iron and steel
 Annual meeting, 15th, New York, Jan. 15-16. *Steel* 112:37 J 25 '43

INSTITUTE of the aeronautical sciences
 Annual meeting, 11th, Detroit, New York, Los Angeles. *Aviation* 42:161, 163+ Mr '43;
Automotive & Aviation Ind 88:24-6, 42+ F 15 '43

Annual meeting, 11th, Jan. 25-29; review of technical papers. A. Klemin. *Aeronautical Eng R* 2:7-39+ Ap '43

Annual meeting, 11th, New York, Jan. 27; reports, awards, officers. *Aeronautical Eng R* 2:147+ Mr '43

First ten years, 1932-1942. *il Aeronautical Eng R* 1:7-20 N '42

Honors night dinner. *Aeronautical Eng R* 2:7-9+ Mr '43

Membership roster. *Aeronautical Eng R* 1:228-55 N '42

When engineers meet. A. Klemin. *Sci Am* 168:232-3 My '43

INSTITUTES, Technical. See Technical education

INSTITUTION of chemical engineers

Annual corporate meeting, 21st, London, April 2. *Chem Age (Lond)* 48:393-7 Ap 10 '43

INSTITUTION of electrical engineers

Annual report. *Elec R (Lond)* 132:649-50 My 14 '43; *Electrician* 130:484-5 My 14 '43

Brief biographies of new chairmen. *pors Elec R (Lond)* 133:369-70 S 17 '43

New president and officers. *Electrician* 131:223 S 3 '43

New president and vice-presidents. *pors Elec R (Lond)* 133:80-1 J 16 '43

Report of the Council for the year 1942-1943. *Inst E E J* 90 pt 1:234-52 Je '43

INSTITUTION of gas engineers

Annual general meeting, 80th, London, June 9. *Gas J (Lond)* 241:739-40, 743 Je 16 '43

Third report of the chairmen's technical committee, 1941-42. *Gas J (Lond)* 241:88, 93+ Ja 20 '43

INSTITUTION of mechanical engineers

Annual general meeting, London, Feb. 19. *Engineer* 175:169-71 F 26 '43; *Engineering* 155:174-5 F 26 '43

Annual report for the year 1942. *Engineer* 175:174-5 F 26 '43

Annual report of the council for the year 1942. *Inst Mech Eng J & Proc* 149:Proc 11-33 Ap '43

Mechanics in 1847. *Engineer* 175:113-14 F 5 '43

INSTITUTIONAL advertising. See Advertising, Institutional

INSTITUTIONAL market

Conservation cost and the institution market. A. G. Mezerik. *il Ptr Ink* 203:18-20 Ap 2 '43

INSTITUTIONAL securities corporation

Offers ten-year debentures to New York savings banks. *Comm & Fin Chr* 153:392 J 26 '43

INSTITUTIONS, Public

Institutional sewage treatment and water supply. H. E. Green. *il layout Pub Works* 74:11-15+ Ap '43

Sewage treatment for public institutions. R. C. Wheeler. *diags plan Pub Works* 74:17-18+ F '43

See also

Hospitals
 Old age homes

INSTITUTUM Divi Thomae

Sperli's Institutum: Irradiation expert heads research of Dominican school, covering new agar source and biodyne for burns. *il Business Week* p20+ S 18 '43

INSTRUCTION cars. See Cars, Instruction

INSTRUCTION in use of product

Army likes "how-to" advertising, too; instructing service men in proper use of equipment and tools; R. G. LeTourneau, inc. G. C. McNutt. *Ptr Ink* 204:23+ Ag 27 '43

Carboly: visual training slidefilm program is sold at cost to users. *il Ind Marketing* 28:46, 48+ F '43

How to build training manuals and parts books for the war and after. K. A. Cook. *il Ind Marketing* 28:26-7 F '43

Some ways to avoid delay in getting an OK for instruction manuals. R. G. E. Ullman. *il Ind Marketing* 28:37-9 Ja '43

INSTRUCTIONS

Assignment boards tell what to do, how to do it; Vultee aircraft. J. M. Druliner. *il diags Factory Management* 101:112-13 My '43

Position charts guide inexperienced workers at Vultee. *il Automotive & Aviation Ind* 88:23 F 15 '43

See also

Employees' manuals
 Safety instructions
 and training

INSTRUMENT dials. See Dials, Instrument

INSTRUMENTS

Application of turbine-supervisory instruments to power-generating equipment. J. L. Roberts and H. M. Dimond. *il A S M E Trans* 65:803-7 O '43; *Abstract, Power* 86:966 Mid-D '42; *Discussion, C. C. Franck, A S M E Trans* 65:807-8 O '43

Characteristics of hydraulic and pneumatic relays as energy-converting devices. H. Ziebold. *diags Instruments* 15:340-5 S '42

Control instruments in pulp and paper production. C. D. DeMers. *il Paper Ind* 25:375-8 J 1 '43

Does your numbering system need revamping? unified system for numbering machine parts, subassemblies and catalog items; used by Taylor instrument company. R. T. Soule. *il diag Machine Design* 15:113-16+ N '43

Instrument application progress in process industries. *il diags Chem & Met Eng* 50:139-44 My '43

Instrument for measuring the liquid permeability of paper and porous materials. W. H. Lane. *diag Paper Tr J* 117:26-7 J 15 '43

Instrument panel for combustion tests of domestic fuel-burning equipment. P. R. Wischnef and R. C. Cross. *il(cover) Instruments* 15:448+ N '42

Instrumentation in kraft pulp mills. A. J. Philip. *flow diag il diags Pulp & Pa of Can* 44:367-77 Ap '43

Instrumentation, 1942. A. E. Krogh. *Metals & Alloys* 17:120 Ja '43

Instrumentation studies; measurement of the tensile strength of paper. *il Paper Tr J* 116:10-12 F 11; 13-14 Mr 4 '43

Instrumentation studies; penetration of paper by water vapor. *il diags Paper Tr J* 116:11-15 Ap 8; 10-13 Je 10; 16-19 Je 17; 117:12-15 J 1 '43

Instruments for measuring and controlling process variables. *diags Chem & Met Eng* 50:108-24 My '43

Instruments in the pulp and paper industry. J. N. Franklin. *Pulp & Pa of Can* 43:306-10, 434-5+; 695-7, 817-20+; 950-2; 44:304-6, 441-4, 499-500, 530, 653-5 Mr, My, Ag, O, D '42, Mr, My-Je, Ag '43

Metered results; where precise control is imperative. *Business Week* p61-2 Ja 30 '43

New and rare instruments; requests and offers. *Science* 97:178-9; 98:57, 257 F 19, J 16, S 17 '43

Put idle instruments to work! lease-lend plan of the American association of scientific workers. *Instruments* 15:458 N '42

Review of power and mechanical equipment; meters and instruments. *il Power* 86:941-8 Mid-D '42

Shredded bank notes and excelsior preferred; Taylor instrument companies. *il Mod Packaging* 16:64-6 Ag '43

Some valuable pointers on gage design and accuracy. C. L. Hastings. *il diags Diesel Power* 21:826-8 S '43

INSTRUMENTS—Continued

View into the next decade in industrial instruments. W. B. Heinz. bibliog diags Chem & Met Eng 50:125-8 My '43
WBP orders. Instruments 16:528-56 S '43

See also

Aeronautic instruments	Measuring instruments
Balances	Optical instruments
Control equipment	Radio instruments
Dental instruments and apparatus	Recording instruments
Dynamometers	Scientific apparatus and instruments
Electric apparatus and appliances	Stroboscopic instruments
Electric instruments	Surgical instruments and apparatus
Integrators	Tenderometers
Magnetic instruments	Volumenometer
Mathematical instruments	

Bearings

Instrument pivots and bearings. M. F. Behar. *il* diags Instruments 16:262, 264, 266+, 340+ My-Je '43

Bibliography

Manufacturers' new literature pertaining to instrumentation. Published in monthly numbers of Instruments, the magazine of measurement and control

Care

Maintenance steps to prolong instrument life. T. A. Cohen. diags Chem Ind 52:345-7 Mr '43; Same. Steel 113:100-1+ J1 5 '43; Same abr. Mod Plastics 20:96-7+ Mr '43; Same abr. Aero Digest 42:244, 248, 251 Mr '43; Same abr. Pet Eng 14:69-70, 72 Mr '43; Same abr. Cer Ind 40:38-40 Je '43

Directories

1943 Instruments index. Instruments 16:11-121 pt 2 Ja '43

INSTRUMENTS, Aeronautic. See Aeronautical instruments

INSTRUMENTS, Astronomical. See Astronomical instruments

INSTRUMENTS, Electric. See Electric instruments

INSTRUMENTS, Surgical. See Surgical instruments and apparatus

INSULATING bushings. See Bushings, Insulating

INSULATING materials

Buna S for wire insulation; abstract. J. H. Ingmanson and others. Rubber Age 53: 528 S '43; Same. India Rubber W 109:59 O '43

Canadian talc for use in steatite insulators. H. S. Spence, J. G. Phillips and W. T. Turrall. Am Cer Soc Bul 22:295-8 Ag 15 '43

Cellulose acetate yarn for wire insulation. D. R. Brobst. *il* Mod Plastics 19:50+ Mr '42; Same. Rayon 24:467-8 S '43

Conduction of electricity in highly insulating liquids. C. Pao. bibliog diags Phys R 64: 60-74 Ag 1 '43

Control, specialised testing and use of some modern insulating materials; abstract and discussion. A. R. Dunton. Electrician 130: 422-3 Ap 23 '43

Corrosion causes and remedies in fine wire magnet coils. B. W. Erikson. *il* Product Eng 14:158-60 Mr '43

Electric cable insulation from synthetic rubbers. S. E. McCrary and others. India Rubber W 107:157-62+, 265-71 N-D '42

Electrical and mechanical properties of the system Buna S-gilsonite. A. H. Selker, A. H. Scott and A. T. McPherson. bibliog J Research Nat Bur Stand 31:141-61 S '43

Electrical properties of fibers. J. W. Illingworth. *il* Textile Col 65:269-73 Je '43

Electrical properties of neoprene. F. L. Yezley. *il* Ind & Eng Chem 35:330-5 Mr '43; Excerpts. Electrician 131:207-8 Ag 27 '43

Fiberglass; some properties and new applications. F. V. Tooley. *il* Am Cer Soc Bul 22:60-4 Mr 15 '43

Fibrous glass for electrical purposes. A. M. Robertson. Elec R (Lond) 132:515 Ap 16 '43

Fibrous-glass insulation. A. M. Robertson. Elec R (Lond) 132:247-8 F 19 '43

Glass fabric for electrical insulation; abstract. A. M. Robertson. Engineering 155: 452 Je 4 '43

Insulating tubing system for wiring; Plaster. *il* Electrician 129:499 N 6 '42

Insulating wood; improved qualities for electrical purposes. A. E. L. Jervis. diags Elec R (Lond) 131:581-3 N 6 '42; Abstract. Elec W 119:1146 Ap 3 '43

Lignin in phones; new insulating material made from paper waste. *il* Sci Am 168:84-5 F '43

Moulded parts from Mycalex. *il* Electrician 131:211 Ag 27 '43

Multiform glass for insulation developed by Corning. *il* Glass Ind 24:168 Ap '43; Sci Am 168:255 Je '43

Organic plastics as insulating materials. J. Delmonte. bibliog *il* Elec Eng 62:19-23 Ja '43

Plastic insulations for conductors. E. D. Youmans. Elec W 120:457-9, 812-15 Ag 7, S 4 '43

Pyrex brand multiform glassware. *il* R Sci Instr 14:155-6 My '43

Recent developments in organic plastics for electrical insulation. T. Hazen. bibliog Elec Eng 62:191-7 My '43

Salvaging insulation from wire and cable. A. C. Mathews. *il* Factory Management 101:72-5 Ap '43

Synthetic flexible insulations. A. M. Ross, Jr. chart Gen Elec R 46:212-13 Ap '43

Synthetic plating insulations. J. McGee. *il* Metal Finishing 41:138-9 Mr '43

Vinyl copolymers in electric wire and cable. Rubber Age 52:517 Mr '43

War standards for ceramic materials for radio insulators. A. N. Goldsmith. *il* Ind Stand 14:81-3 Mr '43

Winding-wire covering; various tests on modified nylon. H. C. Gee and J. F. Cowen. *il* Elec R (Lond) 133:134-6 J1 30 '43

See also

Glass—Electric properties	Paper, Insulating
Glass fibers	Porcelain, Insulating
Insulating tape	Pyranol
Oil, Insulating	Rubber
	Talc

Testing

Chemical changes affecting the stability of cellulose insulation. F. M. Clark. Electrochem Soc Trans 83 (preprint 6):81-96 Ap '43

High temperature resistivity measurements on compressed granular refractory materials. G. H. Fetterley. *il* diags Electrochem Soc Trans 83 (preprint 2):5-18 Ap '43

Mineral insulating oils; effect of additives on electrical and chemical stability. A. G. Assaf and J. C. Balsbaugh. bibliog *il* Ind & Eng Chem 35:909-16 Ag '43

Q-meter for power factor and dielectric constant. D. M. Hill. *il* diags Elec W 120:1365+ O 16 '43

Specialised testing laboratory for classifying insulating materials. *il* Electrician 131:347-9 O 8 '43; Engineering 156:307, 310 O 15 '43; Elec R (Lond) 133:469-70 O 8 '43

Vitrified cordierite bodies. L. E. Thless. bibliog *il* Am Cer Soc J 26:99-102 Mr 1 '43

See also

Paper, Insulating—Testing
INSULATING materials, Thermal. See Insulation (heat)
INSULATING oil. See Oil, Insulating
INSULATING paper. See Paper, Insulating
INSULATING porcelain. See Porcelain, Insulating
INSULATING tape

New A.S.T.M. emergency alternate provisions; standard specifications for friction tape for general use for electrical purposes (D 69-38) and rubber insulating tape (D 119-38). Rubber Age 53:47-8 Ap 19 '43

INSULATION (electric)

Cleaning, waxing high-tension insulators. Elec W 118:2124+ D 26 '42

INSULATION (electric)—Continued

- Condenser fields re-insulated in utility's own shops; Southern California Edison co. *il Elec West* 91:49 Ag '43
- Dipole theory and the characteristics of organic insulators. T. F. Wall. *Engineering* 156:81-3 JI 30 '43
- Electrical insulation—weakest link. H. C. Park. *Elec West* 90:92 F '43
- Gas-filled cable pothead compoundless. J. H. Nicholas. *il diag Elec W* 119:1482+ My 1 '43
- Influence of measurements on development of magnet wire. F. P. Wilson, jr. and J. A. Weh. *il Gen Elec R* 45:612-14 N '42
- Insulation coordination protects power systems; abstract. H. N. Muller. *Power Pl Eng* 47:150+ O '43
- Invisible film repelling water. *Science* 97: suppl Ap 30 '43
- Mechanism of insulation breakdown. T. F. Wall. *diags Engineering* 155:261-2 Ap 2 '43
- New insulating tubing system; Plasduct. *Engineer* 174:407-8 N 13 '42
- New invisible raincoat; Dri-film; treatment of ceramic insulators. *Power Pl Eng* 47: 83 O '43
- New manufacturing process for making glass insulation. *Mach* 50:165 S '43
- New standard on glass-bonded mica radio insulators. *diags Ind Stand* 14:239 Ag '43
- Second war standard in series covers statite radio insulators. H. R. Wilsey. *il Ind Stand* 14:273-5 O '43
- Temperature and electric insulation. H. C. Park. *Elec West* 90:57-8 Mr '43
- Time lag of impulse breakdown at high pressures. J. D. Cobine and E. C. Easton. *bibliog J Ap Phys* 14:321-31 JI '43
- Wiring economies under wartime code; higher temperature capabilities of wires insulated with oil base rubber compounds. L. C. Peterman. *Elec W* 119:2119-20 Je 26 '43

See also

- | | |
|----------------------|-----------------------|
| Dielectrics | Oil, Insulating |
| Electric cables | Porcelain, Insulating |
| Electric resistance | Power factor, Dielec- |
| Electric wiring | tric |
| Insulating materials | |

Testing

- Answers to technical questions. *diag Electrician* 130:653 Je 25 '43
- Cable testing. H. C. Anderson. *il diags Gen Elec R* 45:621-3 N '42
- Concentricity; testing concentricity of enamel film on round wire; special testing utilizing electronic circuits. E. F. Hansen. *il diag Gen Elec R* 45:615-16 N '42; Same. *Electrician* 130:105-6 Ja 29 '43; Abstract. *Electronics* 16:170+ Ap '43
- Impulse strength of solid and gas-filled high voltage cables. A. Gemant. *bibliog Franklin Inst J* 234:519-33 D '42
- Impulse voltage and 60-cycle life tests of 22-kv cables and cable terminals. W. P. Cook. *diags Edison Elec Inst Bul* 11:273-6 S '43
- Insulation-resistance meter; electronic instrument. R. N. Bushman. *il diag Gen Elec R* 46:403-5 JI '43
- Insulation testing of electric windings. C. M. Foust and N. Rohats. *bibliog il diag Elec Eng* 62:Trans 203-6 Ap '43
- Intrinsic electric strength and conductivity of varnish films and their variation with temperature. A. M. Thomas and M. V. Griffith. *bibliog diags Inst E E J* 89 pt 1:487-98 N '42
- Makes insulator testing one-man job. *il Elec W* 119:483 F 6 '43
- Testing generator dielectric absorption under adverse humidity conditions of Brazilian plants. A. V. DeBeech. *il diags Elec W* 119: 1766-8 My 29 '43
- Testing shaft insulation. *diags Power* 87:548-9 Ag '43

INSULATION (heat)

- Analyzing heat flow in cyclic furnace operation; electric method simplifies determination of economic insulating thickness. C. B. Bradley and C. E. Ernst. *diags Mech Eng* 65:125-9 F '43; Discussion. 65:527-30 JI '43
- Cash value of insulation savings. J. McCawley. *Sheet Metal Worker* 34:36, 38, 40 My; 23-4+ Je; 36, 38 JI; 42-3+ Ag '43

- Cold storage plant modernized for frozen food; asphalt-enclosed Fiberglas board used for insulation. *il Refrig Eng* 45:416+ Je '43
- Economy in steam production in industrial plants. *Mech Handling* 30:52-3 F '43
- Effect of convection in ceiling insulation. G. B. Wilkes and L. R. Vianey. *il diags Heating-Piping* 15:102-4 F '43
- Effect of structural interruptions of insulation in warehouses. J. F. Stone. *diags Refrig Eng* 45:243-5 O '43
- Fuel conservation. H. Coonley. *Heating-Piping* 15:374-6 JI '43
- Fuel rationing and the A, B, C and D's of insulation; with cost data. *Dom Eng* 160: 50+ D '42
- Heat insulation, its relation to mill efficiency. R. C. Parlett. *Paper Ind* 24:1165-6+ F '43
- Heat transmission through insulation as affected by orientation of wall. F. B. Rowley and C. E. Lund. *il diags Heating-Piping* 15:361-5; Discussion. 365-5 JI '43
- High temperature heat insulation. G. W. Patterson. *Blast F & Steel Pl* 31:932-3 Ag '43
- Home insulation. *il Consumers' Research Bul* 12:13-20 O '43
- How did that insulation campaign work out? experiences of Pittsburgh natural gas companies. H. Stanley. *il Gas Age* 91:57-8+ Ap 22 '43

- How to figure insulation jobs quickly. H. F. Lotz. *Am Bid* 65:41 JI '43
- How to save thermal insulation. L. C. Harris. *Can Chem & Process Ind* 27:35 Ja '43; Same. *Can Min J* 64:357 Je '43
- If winter comes: fuel conservation is the campaign keynote of insulation, weatherstripping, and sash and door industries. *Business Week* p64+ Ag 14 '43
- Insulating refractory brick. *il Brick & Clay Rec* 102:41-4 F '43
- Insulation for industrial fuel conservation program. *il Dom Eng* 162:68-9 O '43
- Insulation for low temperatures. J. F. Stone. *charts Refrig Eng* 46:31-7 *bibliog*(p36); Discussion. 37-8 JI '43
- Maintain insulation to save more heat. P. W. Swain and E. W. Feller. *diags Power* 86: 881-3 D '42
- Measurement of thermal conductivity of thermal insulating materials by means of the guarded hot plate. C. B. Bradley. *il Refrig Eng* 45:337-41 My '43
- One hundred degrees below zero; Ferro-Therm steel insulation applied in altitude testing chambers. J. G. Macormack. *il Refrig Eng* 45:239-42+ Ap '43
- Pipe insulation for low temperatures. *diags Dom Eng* 161:69+ Ja '43
- Practical furnace insulation; abstract. J. W. Dawson. *Metals & Alloys* 17:1252+ Je '43
- Practical way to save fuel and keep the house comfortable; adding insulation to your house. *Consumers' Research Bul* 11: 20, 23 O '42
- Preventing building condensation. F. B. Rowley. A. B. Algren and C. E. Lund. *diag Sheet Metal Worker* 33:46 N '42
- Revised standards for fiber insulating board. *Sheet Metal Worker* 34:40 JI '43
- Sell insulation, help check fuel waste, tests prove value. B. L. Johnson. *il plans Am Bid* 64:32-4+ N '42
- Thermal insulating properties of clothing. S. Baxter and A. B. D. Cassie. *diags Textile Inst J* 34:T41-54 JI '43
- Thermal insulation for electrostatic heating; manufacture of Pregwood propeller blocks. *il Electronics* 16:180+ N '43
- Thickness of insulation required to prevent sweating on cold pipes; reference data. *Heat & Ven* 40:82a-82b My '43
- Thrifty warmth; economizing in use of fuel. J. Holt. *Tech R* 45:77-8+ D '42
- Uncle Sam will help you sell insulation. *il Am Bid* 65:40+ JI '43

See also

- | | |
|---|-----------------------------------|
| Asbestos | Refrigerator cars |
| Building—Heating aspects | Textile fabrics—Heat transmission |
| Glass, Cellular | |
| Refrigeration and refrigerating machinery | |

INSULATION (heat)—Continued**Testing**

Conductivity determination by the guarded hot-plate method. F. C. Houghten, diag. Am Soc T M Proc 42:277-83; Discussion. 284 '42

Tests at Cornell show insulation affects radiator heat output. D. Dropkin, il plan Heat & Ven 39:26-7 N '42

Tests of steam-pipe insulation; rock wool, glass wool and corrugated asbestos. E. A. Allcut, bibliog il diags A S M E Trans 65: 407-17; Discussion. 417-19 JI '43

INSULIN

Improved insulin treatment for diabetes. Science 98:sup 10+ S 3 '43

In vitro effect of insulin in pigeon breast muscle. L. Rice and E. A. Evans, jr. bibliog Science 97:470-1 My 21 '43

Insulin safeguard; avoid wastage of glands. Business Week 978-9 Jo 19 '43

Mechanism of insulin action; observations with radioactive phosphorus. J. Sacks. Science 98:388-9 O 29 '43

INSULL utility investments, inc.

Holders may receive small payment. Comm & Fin Chr 157:345 Ja 25 '43

INSURABLE interest

Court holds warehouseman has no insurable interest in stored goods. East Underw 44:30 O 22 '43

Down to cases; insurable interest. L. A. Burke. Spectator (Life ed) 151:20-1 JI '43

INSURANCE

Bigger day after war for insurance. S. McDonald, Nat Underw 46:19+ D 10 '42

Future depends upon advance from national to international stature. F. L. Brokaw. East Underw 44:17 Ag 6 '43

Insurance broadcast realistic. L. A. Mack. Weekly Underw 148:937+ My 1 '43

Insurance companies likened to chain stores as public benefactors. Comm & Fin Chr 156:2049+ D 10 '42; Same. Weekly Underw 147:1418+ D 19 '42

Insurance continually subjected to screwy conclusions by analysts and economists. F. L. Brokaw. Weekly Underw 147:1170+ N 21 '42

Quiz prepared for women's convention. E. B. Mayer. East Underw 44:24 JI 16 '43

Some changes I would like to see. J. A. Dougherty. Ins Field (Fire ed) 71:22-3 D 3 '42

Two hundred 64-dollar questions every informed insurance man should know. Weekly Underw 149:154+ JI 24 '43

U.S. Chamber insurance broadcast is fine success. Nat Underw 47:1+ Ap 29 '43; Nat Underw (Life ed) 47:1+ Ap 30 '43

Unsold markets offer agents opportunities; looking into the future; abstracts. M. W. Heard. Weekly Underw 149:1012+ N 6 '43; Nat Underw 47:29 N 4 '43

Views post-war problems; abstracts. K. Spencer. East Underw 44:21+ O 15 '43; Ins Field (Fire ed) 72:4-5+ O 14 '43; Ins Field (Pittsburgh Conv Daily ed) 72:1+ O 13 '43; Nat Underw 47:48B O 14 '43; Weekly Underw 149:828, 846-7 O 16 '43

Weekly news review digest. \$1.50 Published by Insurance research and review service, 123 W. North st, Indianapolis

World wicked place without insurance. J. Lichtenstein. Weekly Underw 148:521+ Mr 6 '43

See also

Banks and banking—Insurance requirements

Benefit societies

Department stores—Insurance requirements

Hardware industry and trade—Insurance requirements

Insurance companies and other subjects beginning Insurance

Shoe industry and trade—Insurance requirements

War damage corporation

Adjustment of claims

Adjusters approve loss forms. Nat Underw 47:6+ My 27 '43

Big storm proves it again; Jim Miazza and the adjusting Miazzas. F. C. Crowell, jr. Ins Field (Fire ed) 72:6 Ag 19 '43

Claim man and public relations. C. W. Young. East Underw 44:29+ Mr 19 '43

Court holds that specific policy, not floater, pays. Nat Underw 47:6 JI 29 '43

Defense that insurer was real party in interest not stricken as sham. Weekly Underw 149: 283 Ag 7 '43

Importance of the functions of claim men. T. J. Cullen. Weekly Underw 148:1228-9 Je 5 '43

Independent adjusters form service association. Nat Underw 46:4 D 10 '42

New factors enter loss adjusting; no fixed rule during wartime. P. B. Reed. East Underw 44:22 Mr 5 '43; Same. Ins Field (Fire ed) 72:22-3 Mr 4 '43; Abstract. Nat Underw 47:3+ Mr 4 '43

Price roll-back questions studied; liability for subsidies to food processors. Nat Underw 47:1 My 20 '43

Procedure for handling war damage claims. R. M. Beatty. Nat Underw 46:6 N 19 '42

Reviews facts of claim situation. W. E. Hein. Weekly Underw 149:577+ S 18 '43

Sees dramatic public relations story in claim dept work. A. Broughton. East Underw 44: 38+ S 17 '43

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Bibliography

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Sabotage! insurance policies probably cover hazards that aggregate staggering sums. W. E. Roesch. Spectator (Property ed) 8: 10-12+ F 4 '43

Urges true needs for insurance buyers be met. D. C. Bowersock. Weekly Underw 149:1006-7+ N 6 '43

Wartime protection; American insurance co. of Newark, N.J.; table. Spectator (Property ed) 8:29 N 12 '42

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Dishonesty insurance; an increasingly important credit consideration. R. W. Kammann. Credit & Fin Management 45:22+ O '43

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Honesty insurance as an aid to credit. W. J. Purcell. Credit & Fin Management 45:44 Je '43

National credit men hold insurance data highly desirable. East Underw 44:1+ Je 4 '43

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Reinsurance review; some aspects of the international situation. W. E. Roesch. II Spectator (Property ed) 8:10-14+ Ap 22 '43

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War department acts to reduce insurance data going abroad. East Underw 44:1+ Ja 8 '43

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Hardware business; Spectator staff survey. II Spectator (Property ed) 9:10-12+ S 23 '43

How the insurance business looks to prospect and client; study by Curtis publishing co. Ins Field (Fire ed) 72:6+ S 16 '43; Nat Underw 47:27+ S 9 '43

Insurance buyer gives sage advice to the producers. J. C. Conley. Nat Underw 47:2+ Ap 15 '43

Insurance buyer speaks; abstracts. J. G. Reese. Ins Field (Fire ed) 71:22-3 D 10 '42; East Underw 43:77+ D 11 '42

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Questions insurance men failed to answer satisfactorily at buyers' meeting. P. L. Bachman. Weekly Underw 149:116 Jl 17 '43

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Viewpoint of buyers. P. L. Bachman. Weekly Underw 149:444-5+ S 4 '43; Same. Ins Field (Fire ed) 72:22, 25-6 S 16 '43; Same abr. East Underw 44:24+ S 10 '43; Same. Nat Underw 47:1+ S 9 '43

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Moral hazard satisfactory during war period; comments on 1943 outlook. J. A. Diemand. East Underw 44:1+ Ap 2 '43

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Non-can accident and health as public relations factor. J. M. Powell. Nat Underw 47:28 Mr 25 '43
Non-can Mass. accident decision; court upholds receiver in treatment of dissenting policyholders. Nat Underw 47:23 O 21 '43; Same. Nat Underw (Life ed) 47:6 O 22 '43
Reinstatement plan agreed upon; will restore non-cancellable policies after demobilization. Nat Underw 46:15+ N 26 '42; Same. Nat Underw (Life ed) 46:2 N 27 '42

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American Auto announces \$5 traffic accident policy. Weekly Underw 148:554 Mr 6 '43
Defense workers policy of National Casualty. East Underw 44:25 Ag 20 '43
Hartford Accident's \$5 auto accident policy now covers transportation hazards by rider. East Underw 44:33 Ap 23 '43
Home Indemnity will use schedule type of policy. Nat Underw 47:20 S 16 '43; Same. Nat Underw (Life ed) 47:17-18 S 17 '43
Indemnity issues policy offering new cover. Weekly Underw 148:864 Ap 17 '43
National Casualty's new form designed for women. Nat Underw 47:22 F 11 '43
Now using accidental bodily injuries phrase; liberalized underwriting of impaired risks; Employers' group. J. N. Whitaker. East Underw 44:28 Jl 9 '43
Occidental ties A. & H. and life in more closely. Nat Underw 47:22 Je 17 '43; East Underw 44:33 Je 13 '43
Plan for standardizing approval of A. & H. forms. Weekly Underw 148:1264 Je 12 '43
Sharply limited policies scored; abstracts. P. F. Jones. East Underw 44:33 Je 11 '43; Nat Underw (H. & A. conference no) 47:4+ Je 4 '43
Sun Indemnity broadens A. & H. policy contracts. East Underw 43:27 D 25 '42; Nat Underw 46:15 D 24 '42
Traffic accident policy of American automobile insurance company. Spectator (Property ed) 8:25 Mr 18 '43
Uniform policy form tests in A. & H. field framed. Nat Underw 47:51-2+ O 14 '43; Same. Nat Underw (Life ed) 47:3+ O 15 '43
Unique A. & H. policy announced by Garret. Ins Field (Fire ed) 72:27 F 4 '43

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Blind physician received \$119,837 in weekly indemnity payments. Nat Underw 47:19 Mr 11 '43

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Preventive work

Advertising in uniform; insurance company launches campaign to smash the 7th column. Il Nat Safety N 47:21+ Ja '43

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A. & H. policy as it affects men who enter service; Insurance clause. B. Blake. East Underw 44:36 S 24 '43
Adds up war's score on underwriting. H. W. Dingman. Nat Underw (Life ed) 47:1+ My 28 '43; Same. Nat Underw 47:21+ My 27 '43
Common sense and care needed in underwriting war workers, accident conference points out. Weekly Underw 148:494-5 F 27 '43; East Underw 44:38 Mr 5 '43; Nat Underw 47:15 F 25 '43
War changes put emphasis on term occupation. Nat Underw 47:24+ Ag 26 '43

Tax deductions

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Great Britain

Fire and accident insurance. Economist 145:210-11 Ag 14 '43

West Virginia

Changes in W.Va. A. & H. law now in effect. Nat Underw 47:20 Ag 19 '43

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Crop insurance chief Washington topic. Weekly Underw 149:109+ Jl 17 '43
Efforts made to include Florida fruit risks under crop insurance. East Underw 44:24 Ja 8 '43
Federal crop insurance now to be liquidated. Nat Underw 47:2+ Jl 15 '43
House committee approves bill abolishing Farm security administration and federal crop insurance program. B. C. Clarke. Ins Field (Fire ed) 72:11 Ap 15 '43
Lively ghost; Administration will fight to revive program. Business Week p68+ Jl 24 '43
Pioneering rice flood insurance on the Carolina coast through London. E. G. Seibels. East Underw 44:27 Ja 8 '43
President hopes Congress will restore funds for crop insurance program. Comm & Fin Chr 158:334 Jl 22 '43
Swinging the ax; farm bloc in House votes crop insurance out. Business Week p42+ My 1 '43
U.S. crop cover to be continued. Nat Underw 47:2 Jl 1 '43
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Automobile insurance number. Nat Underw (Auto ins no) 47:1-33 Ap 26 '43
Automobile line holding up. J. J. Hart. East Underw 44:26 Jl 30 '43
Connecticut auto bill provides whole state with accident insurance free of costs. R. Morris. Weekly Underw 148:861 Ap 17 '43
Effect of drastic changes; sales opportunities are at hand. A. B. Nickerson. Nat Underw 47:32 My 20 '43

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Gas-tire rationing as aid to sale of automobile insurance. W. B. Glassick. East Underw 43:27 N 20 '42

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Insurers signing ride sharing pact listed. Nat Underw 46:20 D 17 '42

Loss ratios in auto lines for 1942 have been downward. East Underw 44:29 Ja 8 '43

Many fears of underwriters have proved groundless. Nat Underw 47:12 Ag 19 '43

Twelve reasons why wartime automobile insurance is necessary. W. H. Kinnannon. Weekly Underw 148:655 Mr 20 '43

Warm weather brings out cars. J. J. Hart. Nat Underw 47:23 My 6 '43

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Assured's transportation of others to work under share expense agreement does not violate warranty. Weekly Underw 149:143 Jl 17 '43

Auto insurer asks suit delay; assured in service. Nat Underw 46:29 D 31 '42

Automobile liability policy does not cover injury by being struck by ice after its removal from truck. Weekly Underw 148:170 Ja 9 '43

Automobile theft insurance; digest of recent cases. J. L. Roesch. Spectator (Property ed) 9:28-30 Jl 22 '43

Backing of automobile for attachment to scraper held not commercial use exempting insurer from liability. Weekly Underw 149:875 O 16 '43

Bodily injury and property damage claim situation now favorable. Nat Underw 47:22 Jl 8 '43

Ceilings, other problems in automobile adjusting. B. L. Jones. Nat Underw 47:3+ Ap 15 '43; Correction. 47:4 My 13 '43

Collision policy covers car driven by minor of permit age though without license. Weekly Underw 148:831 Ap 10 '43

Commercial use of vehicles; digest of recent cases. J. L. Roesch. Spectator (Property ed) 9:24-5 S 23 '43

Comprehensive auto policy does not cover collision if excluded. East Underw 44:23 Je 11 '43

Cooperation of the insured; abstract. E. W. Patterson. Management R 31:431-3 D '42

Court decision upsets long held assumption; damage by collision to car taken by chauffeur without owner's consent. Ins Field (Fire ed) 72:10 Mr 25 '43

Court on cost of repair of insured car and measure of damage done. East Underw 44:24 Jl 30 '43

Death of named assured held not covered by Massachusetts automobile liability policy. Weekly Underw 148:215 Ja 16 '43

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Defense of insured under notice of non-waiver prevents estoppel of insurer in subsequent suit on policy. Weekly Underw 149:679 S 25 '43

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Disadvantage to plaintiff is held essential to make estoppel claim. East Underw 44:31 Ap 2 '43

Disappearance and cooperation; digest of recent cases. J. L. Roesch. Spectator (Property ed) 8:22-4 Je 3 '43

Fine work accomplished by Automobile Claims body. Nat Underw 47:11 Ag 19 '43

Georgia supreme court relieves insurer of liability under loading and unloading clause. Weekly Underw 147:1382 D 12 '42

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Insurer's responsibility under motor vehicle liability policy attaches at time of accident. Weekly Underw 148:1023 My 8 '43

Joinder of liability insurer with assured as party defendant in damage suit. Weekly Underw 149:99 Jl 10 '43

Loading and unloading. R. Alexander. Weekly Underw 148:656 Mr 20 '43

Loading and unloading clause of auto policy; digest of recent cases. J. L. Roesch. Spectator (Property ed) 8:28-9+ F 18 '43

Minor held operator although assured took control of wheel from his position on right hand side of car. Weekly Underw 148:875 Ap 17 '43

Misdescription of car in policy; digest of recent cases. J. L. Roesch. Spectator (Property ed) 9:36-8 N 4 '43

Naming of insurer in suit allowed if there are no personal injuries. East Underw 44:24 Jl 2 '43

Omnibus clause covers minor daughter using car operated by another without knowledge or consent of assured. Weekly Underw 148:1351 Je 19 '43

Only commercial delivery in assured's designated occupation held excepted under policy on car used for business and pleasure. Weekly Underw 149:187 Jl 24 '43

Only named assured can maintain action for reformation on ground of fraudulent deletion of omnibus clause. Weekly Underw 148:407 F 13 '43

Oral extension of automobile risk by duly authorized agent upheld. East Underw 44:35 Ap 9 '43

Oral fire policy covering auto held not precluded in Missouri. East Underw 44:28 Ap 30 '43

Owner's injured mother must prove not in control of car to recover. East Underw 44:44 Ap 30 '43

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Payment for gasoline by persons regularly transported by assured held consideration for agreement to carry. Weekly Underw 149:379 Ag 21 '43

Plan proposed for improving claim procedure in automobile insurance; simplified forms. East Underw 43:22 N 27 '42

Policy provision against liability while car rented renders intent of receiver of car immaterial. Weekly Underw 149:483 S 4 '43

Provision requiring immediate notice does not fix period of less than ninety days for giving notice. Weekly Underw 148:303 Ja 30 '43

Recordings of mortgage on automobile does not constitute notice to insurer of existence of incumbrance. Weekly Underw 148:1171 My 29 '43

Refusal to pay extra premium bars recovery on whole policy. East Underw 44:30 Je 4 '43

Settling auto claims has some changes. Nat Underw 47:15 Ag 19 '43

Son cannot delegate assured's permission to use of car so as to render insurer liable under omnibus clause. Weekly Underw 148:459 F 20 '43

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Subrogee held necessary party in automobile collision case in Ohio. East Underw 44:27 Mr 19 '43

Unique construction of omnibus clause of automobile policy; digest of recent cases. J. L. Roesch. Spectator (Property ed) 8:30-2 Ap 22 '43

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Agency leaders take practical view, *Nat Underw* (Auto ins no) 47:3+ Ap 26 '43
Automobile producing opportunities, N. C. Flanagan, *Nat Underw* (Auto ins no) 47:8+ Ap 26 '43

Georgia commissioner under fire; licensing automobile men to sell insurance, *R. L. Mills, Weekly Underw* 148:1077-1 My 22 '43
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Sell towing cover to meet danger in gas rationing, *Nat Underw* 46:30 N 19 '42

Uses automobile quotation chart; customer provided with complete data, D. F. Giberzon, *Nat Underw* (Auto ins no) 47:6 Ap 26 '43

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Auto writings of stock casualty companies, 1939-1942, *East Underw* 44:41-2, 44 Ap 30 '43

Automobile bodily injury liability, 1942; aggregate auto casualty experience, 1938-1942; companies licensed by the New York department, *Spectator* (Property ed) 8:22-3 My 20 '43

Automobile figures; investment house draws conclusions as to effect on companies, *Nat Underw* 46:13-1 N 19 '42

Automobile premiums and losses of stock casualty, stock full cover, mutual, reciprocal and Lloyds companies, 1941-1942, *Nat Underw* (Auto ins no) 47:22-6 Ap 26 '43

Automobile premiums of fire companies, 1939-1942, *East Underw* 44:31, 33, 36, 38+ Ap 30 '43

Automobile premiums of fire insurers are better than expected, *East Underw* 44:1+ Ap 30 '43

Company group standings show changes in 1942; comparisons with 1941, *Nat Underw* (Auto ins no) 47:20-1 Ap 26 '43

Five year automobile insurance experience exhibit, 1938-1942, *Nat Underw* (Auto ins no) 47:1 Ap 26 '43

N.Y. state auto writings of stock casualty companies from 1939 to 1942, *East Underw* 44:46-7 Ap 30 '43

N.Y. study of 1942 country-wide auto experience; tabulation, *Nat Underw* 47:17-18 My 13 '43

1942 ocean marine premiums rise; automobile income shows decline; tabulation by company, *East Underw* 44:20, 29 Mr 5 '43

Stock fire auto premiums and losses, 1941 and 1942; tabulation by company, *Nat Underw* (Auto ins no) 47:18+ Ap 26 '43

Trend of automobile liability net premiums, first six months, 1942 and 1943, *Spectator* (Property ed) 9:22 O 21 '43

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Asks strong support for safety law in Ohio, J. C. Hiestand, *Nat Underw* 47:16 O 28 '43

Caution counseled by some toward N.Y. type auto law, *Nat Underw* 47:22+ My 27 '43

Decisions affecting the financial responsibility act; digest of recent cases, J. L. Koesch, *Spectator* (Property ed) 8:24-5 F 4 '43

Evaluation of responsibility laws points to sound, popular legislation, L. A. Mills, *East Underw* 44:48 O 8; 47+ O 15; 33 O 22 '43

First year's report on operation of N.Y. responsibility law, *East Underw* 44:29+ Mr 26 '43

Illinois responsibility bill failure is disheartening, *Nat Underw* 47:15+ JI 8 '43

Legislative trend to model safety responsibility laws after New York's, *East Underw* 44:36 Mr 26 '43

Michigan files injunction suit over new safety responsibility law, *East Underw* 44:33 Ag 13 '43

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New Michigan auto law covers bodily injury cases only, *Nat Underw* 47:17+ Ap 15 '43

N.Y. auto public liability sales 50% higher than before safety law, *Nat Underw* 47:33 Mr 18 '43

N.Y. type of auto law has strong backing in Illinois, *Nat Underw* 47:17+ My 13 '43

Ohio auto responsibility law, R. L. Davis, *Nat Underw* 47:16 Ag 5 '43

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Guest liability

Liability under the share-the-ride program; digest of recent cases. J. L. Roesch. Spectator (Property ed) 8:38-40 D 10 '42
Share-ride plans don't alter guest law construction. L. J. Oare. Nat Underw 47:23+ Ag 26 '43

Interstate aspects

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Canada's transit pool cover; special policy protects owner against claims of ride sharers. Nat Underw 47:21+ Mr 4 '43
Drive-other-car cover extended by NAUA. Ins Field (Fire ed) 72:8 JI 15 '43
80-20 collision form approved for western field. Nat Underw 47:1+ Ap 15 '43
First aid clause of the liability policy. R. Alexander. Weekly Underw 148:1099-1100 My 22 '43
New non-ownership and group passenger policy in Canada. East Underw 43:35 N 20 '42
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Revised comprehensive policy forms. E. W. Sawyer. Weekly Underw 148:201-3, 214 Ja 16 '43
Ride-sharing coverages. Management R 32: 154 Ap '43
Share-the-ride agreement for Canada. Spectator (Property ed) 8:28 Je 3 '43
Travelers recommends comprehensive cash value automobile form. Nat Underw 46:35 N 19 '42
Two special auto coverages announced; ride-sharing forms. Nat Underw 47:15+ Ap 1 '43; Weekly Underw 148:754 Ap 3 '43
Urges insurers to fit statutory policies to the law. H. M. Shughart. Nat Underw 47: 23 Ag 26 '43

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Commercial car bodily injury liability rates get 20% cut; taxis, buses increased 25%. East Underw 44:37 F 12 '43; Nat Underw 47:19 F 11 '43; Weekly Underw 148:379-80 F 13 '43
Cut rates for auto collision insurance. Comm & Fin Chr 157:70 Ja 7 '43
Effect of auto insurance rate reductions. F. C. Crowell, jr. Barron's 22:2 N 16 '42
Experience rating; Louisiana chairman tells how plan may be determined. O. W. Brown. Weekly Underw 148:731 Ap 3 '43
Explains reasons for rate action; abstracts. O. Patterson. Nat Underw 46:22 N 19 '42; East Underw 43:33 N 20 '42
Gibbs announces bodily injury liability rate cuts for Texas. Ins Field (Fire ed) 71:30-1 N 12 '42

Harrington on results of auto rate hearing. East Underw 43:98 D 11 '42
Illinois approves cut in auto collision rates. Comm & Fin Chr 157:842 Mr 4 '43
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Illinois equity rate issue for fleets is resolved. Nat Underw 47:19 O 7 '43
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Canada's transit pool cover; special policy protects owner against claims of ride sharers. Nat Underw 47:21+ Mr 4 '43
Canadian auto rates are sharply reduced. East Underw 44:30 F 5 '43
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Share-the-ride agreement for Canada. Spectator (Property ed) 8:28 Je 3 '43

Kansas

New Kansas automobile manual. Spectator (Property ed) 9:33 S 23 '43

INSURANCE, Aviation

Age of flight; great future for aircraft industry and aviation insurance predicted. H. A. Giddings. East Underw 44:37-8 My 28 '43
Air freezing order puts damper on insurance activity. Nat Underw 47:20 F 11 '43
Air premium row; Lea bill. Business Week p45-6 Je 5 '43
Airline group favors mutual company proposal. Nat Underw 47:17+ Ap 15 '43
Airlines group proposes special insurance plan. Nat Underw 47:17+ Ap 8 '43; East Underw 44:24 Ap 9 '43
Airlines' insurance study is detailed and provocative. Nat Underw 47:15, 22-3 Ap 29 '43
Aviation bill holds insurance attention; Lea bill. Weekly Underw 148:844+ Ap 17 '43
Aviation insurance. W. Shadle. Civil Aero J 4:123 O 15 '43
Aviation insurance problems. A. J. Smith. East Underw 44:44+ O 15 '43
Bar committee assails Lea bill for federal insurance. Nat Underw 47:21 Ag 26 '43
Civil aeronautics administration may buy private cover on planes owned by D.P.C. Nat Underw 47:1+ JI 1 '43
CAB prepares report on aviation insurance. J. M. Breen. East Underw 44:28-9 JI 16 '43
Conflicting views on air transport cover; lawyers conduct forum discussion. Nat Underw 47:1+ JI 1 '43
Cover for war pilot training program outlined. Nat Underw 47:21+ F 18; 17 F 25 '43
Future of aviation insurance. J. Randolph. East Underw 44:1+ S 3 '43
Is a great new line looming? H. A. Giddings. East Underw 44:34+ Ap 23 '43
Navy drops A. & H. for pilot trainees. Nat Underw 46:29 D 31 '42
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Optimistic on post-war outlook for aviation insurance. E. C. Stone. East Underw 44:31 Je 18 '43
Outline cover on training planes. Nat Underw 47:4 Ag 12 '43

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Pilot trainees covered even if not hospitalized. Nat Underw 46:21 N 19 '42

Plea for better domestic reinsurance for aircraft. E. S. Gambrell. East Underw 44:32-3 Ag 27 '43

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Stock and mutual companies urged to join forces for aircraft insurance study. East Underw 44:47 O 8 '43

Study aviation insurance now. E. L. Stephenson. Ins Field (Fire ed) 71:22 N 12 '42

To insure planes of War training service. East Underw 44:24 Ag 6 '43; Nat Underw 47:4 Ag 5 '43

Washington interested in aviation insurance. L. S. McCombs. Spectator (Property ed) 8:14 Mr 18 '43

What's ahead for aviation? H. E. Somerville. Ins Field (Fire ed) 72:24-5 S 30 '43

What's ahead in aviation; insurance angles. G. L. Lloyd. East Underw 44:38 My 28 '43

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Clarification of inland marine jurisdiction over processor and bailee risks. L. S. McCombs. Spectator (Property ed) 9:32 N 4 '43

Commission clause claims. F. Groves. East Underw 44:20 O 29 '43

Court holds that specific policy, not floater, pays. Nat Underw 47:6 JI 29 '43

Decision ends confusion on bailee's insurance. Nat Underw 46:32 D 17 '42

Rates may increase on customer goods; many losses on laundry and cleaning. Nat Underw 47:2 Ag 19 '43

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High court holds F.&G. Fire liable on Tacoma bridge. Nat Underw 47:4 Ap 8 '43

INSURANCE, Builders' risk marine

Problems arise in application of British institute protection and indemnity clauses.

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Reviews development of cover on war projects; abstracts. L. F. Beck. Nat Underw 47:22 My 27 '43; East Underw 44:18 My 21 '43

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Coffee burglaries may foreshadow loss ratio upturn. Nat Underw 46:19+ N 12 '42

Harlem riot loss report. East Underw 44:28 S 3 '43

Knowledge of contracts is key to winning customers. J. H. Carney. Nat Underw 47:19 Je 24 '43

Optimistic over prospects for burglary lines in post-war era. J. R. Mainzer. East Underw 44:36 O 22 '43

Underwriters expect increased burglary losses in some lines. Nat Underw 47:17 Ja 14 '43

See also

Insurance, Safe deposit box
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Adjustment of claims

Books and accounts exclusion in burglary policies; digest of recent cases. J. L. Roesch. Spectator (Property ed) 9:40-1 S 9 '43

Burglary insurance and the burden of proof; digest of recent cases. J. L. Roesch. Spectator (Property ed) 8:22-3+ N 12 '42

Unique federal court case hinged on definition of the term premises. East Underw 44:34 F 19 '43; Nat Underw 47:24 JI 8 '43

Policies

All risk burglary policies; abstracts. F. A. Brinkman. Ins Field (Fire ed) 72:18-19+ Mr 11 '43; East Underw 44:46 Mr 12 '43

Valuation of property

Suggestion for improving insurance service; appraisal companies protect clients by establishing means of proving fire and burglary claims. A. I. Warren. Weekly Underw 148:28, 55 Ja 2 '43

INSURANCE, Business

Business and life insurance trusts; considerations from drafting and taxation angles. J. McCormack. Trusts & Estates 75:573-9 D 42

Business insurance first year death loss. Weekly Underw 148:5 sec 2 My 8 '43

Business life insurance not subject to excess profits tax. Comm & Fin Chr 158:693 Ag 19 '43

By-passing technicalities helps partnership sales. R. W. Wilkinson. Nat Underw (Life ed) 47:5 JI 16 '43

Cultivate established markets in selling small business. W. R. Jenkins. East Underw 44:42+ pt 2 O 1 '43

Key man has no right to business insurance on life. Nat Underw (Life ed) 47:1+ My 14 '43

Not hard to sell small business firms. R. W. Wilkinson. East Underw 44:44+ pt 2 O 1 '43

Owners of small war plants sold on business approach. Nat Underw (Life ed) 47:19 F 19 '43

Points to check in setting up trusts. V. L. Desmond. Nat Underw (Life ed) 46:23-4 N 13 '42

Speculation in applications on key men. Nat Underw (Life ed) 47:2 Ag 13 '43

Wills from partnership trusts; opportunity for coordinating estate and obtaining new business. W. R. Spinney. Trusts & Estates 75:565-8 D 42

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Two business insurance issues litigated. Nat Underw (Life ed) 47:4 Ja 15 '43

Stock liquidation agreements

Selling the stock purchase plan. J. H. Evans. Ins Field (Life ed) 72:16-17+ Ag 20 '43

INSURANCE, Business interruption. See Insurance, Use and occupancy

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American Auto will write burglary and glass. Weekly Underw 148:243 Ja 23 '43
 Both premiums and profits greater in casualty-surety lines for 1942. W. L. Clapp. East Underw 44:24 Ja 1 '43
 Carolina Casualty is organized at Burlington, N.C. Nat Underw 47:26 S 2 '43
 Casualty and surety business entrenched in Nation's economy. A. G. Oakley. East Underw 44:25 S 3 '43
 Casualty insurance year. J. W. Randall. Ins Field (Fire ed) 71:8-9+ D 31 '42
 Casualty lines put to year of test by war. E. C. Stone. Weekly Underw 148:80, 82, 84+ Ja 2 '43
 Casualty-surety developments and outlook for 1943 given by leaders. W. L. Clapp. East Underw 44:25+ Ag 6 '43
 Effect of the war on casualty-surety lines. A. W. Spaulding. East Underw 44:32 Ja 8 '43
 Future of casualty insurance; abstracts. S. Harris. East Underw 44:33+ Ap 23 '43; Nat Underw 47:17+ Ap 29 '43
 Future outlook for casualty insurance. E. C. Stone. Weekly Underw 147:1384, 1388-90 D 12 '42; Same abr. East Underw 43:77+ D 11 '42; Abstract. Nat Underw 46:17+ D 10 '42
 Golden era. H. A. Giddings. East Underw 44:26+ J 1 2 '43
 Inter-ocean casualty of Cincinnati observing its fortieth anniversary in '43. East Underw 44:30 Ja 8 '43
 National Fire will have casualty organization. Nat Underw 47:25+ O 28 '43
 Possible changes in casualty lines; abstracts. E. W. Sawyer. Weekly Underw 147:1281+ D 5 '42; Nat Underw 46:19+ D 10 '42
 Scrutinize developments, trends in casualty field; Chicago round table discussion. Nat Underw 46:18 D 17 '42
 Success of women in casualty survey field revealed in career of Lois M. Pountney. Weekly Underw 148:497 F 27 '43

See also

Insurance, Accident	Insurance, Plate glass
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Insurance, Burglary	Insurance, Tornado
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also Association of casualty and surety executives; Casualty actuarial society; National bureau of casualty and surety underwriters

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Alabama high court clarifies status of adjuster. Nat Underw 47:22+ My 27 '43; Weekly Underw 148:1121+ My 29 '43
 Associations file Wilkey case briefs in Alabama litigation. Nat Underw 47:24 Ap 8 '43

Advertising

Greater need for insurance advertising as war restricts travel and calls. W. L. Clapp. East Underw 44:9+ pt 2 My 21 '43

Agents

Agents find new casualty coverages open sales opportunities for 1943. C. I. Fisher and others. East Underw 44:25+ Ja 22; 23 Ja 29 '43

Greater need for insurance advertising as war restricts travel and calls. W. L. Clapp. East Underw 44:9+ pt 2 My 21 '43

Finance

Casualty-surety writings in New Jersey in 1942. East Underw 44:30-4 Mr 19 '43
 Comparative financial and operating results of casualty insurance companies for first six months ending June 30, 1943 and 1942. Spectator (Property ed) 9:35 S 9; 44 N 4 '43
 Country wide experience of stock casualty companies; underwriting exhibit, companies entered in New York, 1942 and comparisons for earlier years. Nat Underw 47:23-5 My 27 '43

Country-wide underwriting results, 1938-42, of companies licensed in New York state; tabulation by company. East Underw 44:6-7+, 11-12+ pt 2 My 21 '43

Developed loss experience, stock and non-stock companies, 1938-1941. Nat Underw 47:26 Mr 18 '43

Gain in casualty premiums; 1942 results. Nat Underw 47:15+ Ap 8 '43

Insurance stocks; casualty companies figures for first six months, 1942 and 1943. E. A. Van Deusen. Comm & Fin Chr 158:1300 S 30 '43

Net premiums and paid losses in 1942 in California. Nat Underw 47:26 Mr 25 '43

Net premiums and paid losses in 1942 in Florida. Nat Underw 47:33 My 27 '43

Net premiums and paid losses in 1942 in Illinois. Nat Underw 47:17-18 Ap 1 '43

Net premiums and paid losses in 1942 in Indiana. Nat Underw 47:30+ Mr 18 '43

Net premiums and paid losses in 1942 in Iowa. Nat Underw 47:18+ Ap 8 '43

Net premiums and paid losses in 1942 in Kansas. Nat Underw 47:31-2 Ap 8 '43

Net premiums and paid losses in 1942 in Maryland. Nat Underw 47:32-3 Mr 25 '43

Net premiums and paid losses in 1942 in Michigan. Nat Underw 47:28-9+ Ap 8 '43

Net premiums and paid losses in 1942 in Minnesota. Nat Underw 47:25-6 Ap 1 '43

Net premiums and paid losses in 1942 in Missouri. Nat Underw 47:25-6 Ap 8 '43

Net premiums and paid losses in 1942 in New Jersey. Nat Underw 47:27 Mr 18 '43

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Net premiums and paid losses in 1942 in Ohio. Nat Underw 47:19-20 Ap 22 '43

Net premiums and paid losses in 1942 in Pennsylvania. Nat Underw 47:30-1 Mr 25 '43

Net premiums and paid losses in 1942 in West Virginia. Nat Underw 47:27 Ap 1 '43

Net premiums and paid losses in 1942 in Wisconsin. Nat Underw 47:21-2 Ap 1 '43

News of the casualty companies; annual statements. Nat Underw 47:22 Ja 28; 24-6 F 4; 25-8 F 11; 26-8 F 18; 16 F 25; 30, 36-7 Mr 4; 24-6 Mr 11; 38+ Mr 18; 25 Mr 25; 24 Ap 1 '43

1942 casualty-surety results of all companies for New York state; tabulation by company. East Underw 44:14+ pt 2 My 21 '43

1942 exhibit shows net premiums of casualty-surety at \$809,253,457. East Underw 44:27-8 My 21 '43

1942 underwriting and investment exhibit from Argus casualty chart. Nat Underw 47:16 Ap 8 '43

Statistical record of casualty and surety companies in 1942. Spectator (Property ed) 8:10-15 My 20 '43

Underwriting and investment profits and losses of 100 casualty, surety and miscellaneous companies, 1932-1941. Spectator (Property ed) 8:14-15+ N 12 '42

Underwriting results of groups of fire and casualty insurance companies in 1942. Spectator (Property ed) 9:20 O 21 '43

Inspection

Would deprive insurance companies of inspection right; seek Los Angeles code amendment. East Underw 44:30 S 3 '43

Policies

Casualty and surety coverages unite in comprehensive commercial policy; abstracts. D. Quinn. East Underw 44:42 My 7; 37-8 My 14 '43; Nat Underw 47:17+ Ap 29 '43

Underwriters told that casualty comprehensive coverage is certain to grow. J. C. Bunyan. Weekly Underw 148:698+ Mr 27 '43

Preventive work

Maryland Casualty's safety service aids the Nation in its war effort. H. W. Hoover. East Underw 44:30 Ja 1 '43

Prospects

Lessons from consumer research; Aetna Casualty. P. W. Stewart. Nat Underw 47:25 Ja 28 '43

INSURANCE, Casualty—Continued**Rates**

Conflicting views voiced on interstate problem. Nat Underw 46:17, 21 D 3 '42; East Underw 43:30+ D 4 '42
 Seek solution of Interstate rating. Nat Underw 47:22+ Je 10 '43

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Contracts, Government—Insurance aspects

Reinsurance

Casualty reinsurance problems. J. P. Gibson, Jr. East Underw 44:29 Ja 1 '43
 Cellina Mutual is reinsuring Mercer Casualty. Nat Underw 46:26 N 19 '42
 Country-wide experience, 1938-42, of the reinsurance companies. East Underw 44:12 pt 2 My 21 '43
 Employers Reinsurance sizes up the '42 record. Nat Underw 46:29 D 31 '42
 Insurance society course; reinsurance material. J. A. Cathcart. Nat Underw 46:14, 22-3 D 31 '42
 Reinsurers in casualty field close fine year. Nat Underw 46:27-8 D 31 '42

Reserves

Debate change from Schedule P reserve method at commissioners convention. Nat Underw 47:21+ Je 10 '43

Statistics

Summary of miscellaneous casualty and surety lines by states in 1942. Spectator (Property ed) 9:10-11+ Ag 19 '43

Study and teaching

Casualty and liability insurance course no. 3 (cont). E. W. Sawyer and others. Weekly Underw 148:201-3+, 441-4, 656, 866, 1099-1100; 149:131-3, 366-70+, 585-7, 1179-81 Ja 16, F 20, Mr 20, Ap 17, My 22, Jl 17, Ag 21, S 18, N 27 '43

War problems

Oppose requiring special reserves for war liability. Nat Underw 47:21+ O 21 '43; East Underw 44:21 O 22 '43
 Wartime developments in casualty insurance; abstracts. F. J. Marryott. East Underw 44:25+ Jl 2 '43; Nat Underw 47:17+ Jl 1 '43

Canada

Casualty business in Canada, 1942. Spectator (Property ed) 8:16 Ap 22 '43
 Casualty-surety production results in Canada for 1942. East Underw 44:46 Ap 9 '43

United States

Biography of a business, 1792-1942. M. James. 431p \$4 Bobbs; Review. East Underw 43:24+ N 27 '42

INSURANCE, Cold storage locker

Cold storage locker cover o.k'd in Minnesota. Nat Underw 47:18 S 23 '43

INSURANCE, Compulsory

Checks go out; Rhode Island's cash sickness insurance program. Business Week p92 My 8 '43

Shall coverage be voluntary or compulsory? E. H. O'Connor. Weekly Underw 148:89-90 Ja 2 '43

INSURANCE, Contractors' equipment floater

Floater protection to contractors. East Underw 44:22 Jl 2 '43

INSURANCE, Cooperative

Co-ops advised to stay out of insurance business. Elec W News ed 119:1866 Je 5 '43
 Insurance program of R.E.A. cooperatives. A. C. Moore. Nat Underw 47:11 My 27 '43
 New mutuals formed for REA cooperatives. East Underw 44:24 Ja 29 '43

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INSURANCE, Cotton

Cotton export business will surmount handicaps and reach new high level. E. G. Seibels. East Underw 43:58+ D 11 '42
 Cotton warehouse held liable for stored bales. Nat Underw 47:40 Mr 11 '43

Loss due to exchange fluctuations held covered under riot insurance. East Underw 44:28 Ap 30 '43

Owner's right of action against insured warehouseman for fire loss. East Underw 44:28 My 28 '43

Riot and civil commotion coverage; action to recover on cotton stored in Barcelona and taken over by authorities during Spanish civil war; digest of recent case. J. L. Roesch. Spectator (Property ed) 9:28-30 Ag 19 '43

INSURANCE, Credit

American Credit Indemnity, 50 years in business. Weekly Underw 148:78 Ja 2 '43
 American Credit Indemnity reaches 50th milestone. W. L. Clapp. East Underw 44:31-2 F 5 '43
 Cancelled contracts cause credit cover activity. Nat Underw 47:21 My 6 '43
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Disability claims seek to anticipate future benefits. Nat Underw (Life ed) 47:3 Ag 13 '43

Gives further details of his low-cost disability policy. W. T. Hammer. East Underw 44:36+ F 5 '43

Is writing of permanent disability form feasible? C. O. Pauley and others. Nat Underw (H. & A. conference no) 47:3+ Je 4 '43

New female disease rider; Continental Casualty makes it applicable to disability division contracts. East Underw 44:32 Jl 16 '43

Security Mutual disability contract to sell with life. East Underw 44:7 Ja 15 '43; Correction. 44:12 F 5 '43

Why total disability is not in National service life policies. H. W. Breining. East Underw 44:6+ Ap 23 '43

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Insurance, Accident Insurance, Life—Disability provisions
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Declines to review insanity issue. Nat Underw (Life ed) 47:1 Je 25 '43

Insured satisfactorily performing duties of postmaster though suffering from osteomyelitis cannot recover disability benefits. Weekly Underw 147:1502 D 26 '42

Benefits recovery

Insurer cannot recover overpayments of disability benefits due to misstatement of insured's age. Weekly Underw 148:1395 Je 26 '43

INSURANCE, Earthquake

Issue over first loss quake cover. Nat Underw 47:3 Jl 29 '43

INSURANCE, Employers' liability

Two special auto coverages announced; ride-sharing forms. Nat Underw 47:15+ Ap 1 '43; Weekly Underw 148:754 Ap 3 '43

See also

Insurance, Workmen's compensation

Farm policies

Employers' liability for farms. L. S. McCombs. Spectator (Property ed) 9:14-15 Ag 19 '43

Farm employers liability program adopted for New York. Nat Underw 47:16+ Jl 8 '43; East Underw 44:24 Jl 9 '43; Spectator (Property ed) 9:22 Jl 22 '43; Weekly Underw 149:78 Jl 10 '43

Farm employees covered on nation-wide basis. East Underw 44:24 Ag 20 '43; Same. Nat Underw 47:19+ Ag 19 '43; Same. Weekly Underw 149:360+ Ag 21 '43

New farm liability rates in Washington. Nat Underw 47:11 Jl 29 '43

Rules on farm employees liability cover: Ohio ed. J. E. Crabbe. Weekly Underw 149:692 O 2 '43

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Explosion conference announces revisions in rates and rules. East Underw 44:17 Ja 1 '43; Nat Underw 46:2 D 24 '42
 Governor vetoes N.Y. bill to broaden explosion field. Nat Underw 47:4 Ap 22 '43
 Pave way for revising extended cover, explosion in New York. Nat Underw 47:1+ Ap 1 '43

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Court upholds large judgment against insurers; explosion under extended coverage in Lever Brothers case. Nat Underw 46:1+ D 24 '42
 Explosion provision construed in case before federal district court. East Underw 44:22 Ag 20 '43

INSURANCE, Fidelity. See Insurance, Surety and fidelity**INSURANCE, Fire**

Fire insurance year. D. Porter. Ins Field (Fire ed) 71:6-7+ D 31 '42
 New England fire assn. changes several rules. East Underw 44:25 F 19 '43
 Position of fire insurance companies on bills to keep regulation of indemnity carriers in hands of the states. Spectator (Property ed) 9:10-11, 14+ O 7 '43
 Record proves contract obligations have been met fairly, honorably. G. W. Carter. East Underw 44:31 F 19 '43
 True or false program; questions at meeting of Illinois fire underwriters. Nat Underw 47:3 J 22 '43
 Warns insurance to drop secrecy veil. H. McFarland. Nat Underw 46:4+ D 17 '42

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Adjusting and paying losses. P. B. Reed. Weekly Underw 148:63-5 Ja 2 '43
 Adjustment of losses; contribution and apportionment. P. B. Reed. Weekly Underw 149:257-8, 452, 709 Ag 7, S 4, O 2 '43
 Adjustment of losses; general groups of losses. P. B. Reed. Weekly Underw 148:949-50 My 1 '43
 Adjustment of losses; requirements in case of loss. P. B. Reed. Weekly Underw 149:850-1 O 16 '43
 Agent's transfer of fire insurance by binder upheld by federal court. East Underw 44:21 Je 11 '43
 Arbitrators fix egg products loss at Dubuque, Ia. Nat Underw 46:2 N 12 '42
 Assured wins his case as to date when policy was in effect. Nat Underw 47:13 S 2 '43
 Catastrophe loss program set up by National Board. Nat Underw 47:3+ My 27 '43
 Cites adjustment problems caused by war conditions. P. B. Reed. East Underw 44:38 O 15 '43
 Court hold tenants in common can recover separately on insurance. East Underw 44:26 Ap 2 '43
 Critical view toward agents and adjusters refuted by settlement; fire loss in a Memphis store. R. W. Van Horn. East Underw 44:22 J 16 '43
 Decision concerning diamond lost during a fire. Nat Underw 47:15 Ag 12 '43
 Decision on double insurance won by insurer. Nat Underw 47:30-1 Ja 7 '43
 Destruction of furnace by fire lighted by thermostat control not covered. Weekly Underw 148:127 Ja 2 '43
 Fall River rubber salvage problem settled. Nat Underw 46:1 D 10 '42
 Fire insurer consenting to repair of building by assured held not liable for injuries during repairs. Weekly Underw 147:1406 D 12 '42
 Garage 18 feet away not covered as adjoining and communicating. East Underw 44:32 My 7 '43
 How a U. & O. loss, with priority delays, was satisfactorily settled; Kobacker stores, inc. Toledo. E. J. Komarek. East Underw 44:15-16 J 2 '43

How value and loss are determined. P. B. Reed. Weekly Underw 148:325-7, 542-3 F 6, Mr 6 '43

Liable for loss on last day of redemption period despite owner called sole. Nat Underw 47:14 Mr 18 '43
 Minnesota high court holds company responsible for any act of its agents. Ins Field (Fire ed) 72:5+ F 11 '43; Nat Underw 47:4 F 11 '43; East Underw 44:34 Ap 9 '43
 Other insurance clause doesn't bar excess cover. Nat Underw 47:11 Ag 5 '43
 Policy conditions. P. B. Reed. Weekly Underw 148:1328-9; 149:18-19 Je 19, J 3 '43
 Sprinkler system efficiency holds down fire loss in Dayton warehouse; U. & O. and salvage factors in adjustment. H. E. Stokes. East Underw 44:16+ J 9 '43
 Subrogation and fire insurance; digest of recent cases. J. L. Roesch. Spectator (Property ed) 8:30-1+ Mr 18 '43

Advertising

National Board ads feature local agent. East Underw 44:15 J 9 '43

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Companies are not too concerned over survey business under gas curb. Nat Underw 46:12 D 17 '42

Commissions

Assaults DPC arrangement. L. C. Hilgemann. Nat Underw 46:1+ N 26 '42
 Commissions incurred on New York state risks by stock fire insurance companies in 1942. Spectator (Property ed) 9:10-12 J 22 '43
 Mississippi disallows 5% deal on risks of DPC. Nat Underw 47:28 F 4 '43
 Threat of government insurance; details of DPC program; abstracts. C. W. Pierce and others. East Underw 43:16+ D 4 '42; Nat Underw 46:2+ D 3 '42
 Withdraw opposition to DPC plan; report at NALA convention. East Underw 44:37 O 15 '43; Nat Underw 47:1+ O 14 '43

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Legal relations between companies and agents on term expirations; accounts receivable and moneys in the possession of agencies. C. G. Myers. East Underw 44:18+ Ag 27; 23 S 3 '43

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Cancellation decision; payment of refund where there was no unearned premium. East Underw 44:30 Je 4 '43
 Letter canceling policy held sufficient by court. East Underw 44:24 Ag 13 '43

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New classification proposal by experts of New York department; tabulation. Nat Underw 46:15 D 3 '42

Coinurance

Convincing way to present subject of co-insurance. H. A. Broderick. Nat Underw 47:40 Mr 25 '43
 Question on coinsurance and depreciation answered. Nat Underw 47:11 S 2 '43
 Translating co-insurance clauses from the original Greek. H. H. Hood. Spectator (Property ed) 8:30+ F 18 '43

Coverage

Governor vetoes N.Y. bill to broaden explosion field. Nat Underw 47:4 Ap 22 '43
 Hartford Steam Boiler battles to save precincts. Nat Underw 47:17+ Mr 25 '43
 Loss due to exchange fluctuations held covered under riot insurance. East Underw 44:28 Ap 30 '43
 Pave way for revising extended cover, explosion in New York. Nat Underw 47:1+ Ap 1 '43
 War protection under fire policy and extended coverage. J. A. Munro. East Underw 43:22 N 13 '42

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Farm policies

Easing of inspections on farm business dangerous. Nat Underw 46:6 D 3 '42
 Farm business in Canada. Spectator (Property ed) 9:14 Ag 5 '43
 Farm business possesses greater appeal in 1943. Weekly Underw 148:740 Ap 3 '43
 Much interest in problem of making farm inspections. Nat Underw 46:5 D 17 '42
 Prosperous farm field is attracting new companies. Nat Underw 47:13 Mr 18 '43
 Urges caution in connection with farm underwriting. C. E. Parks. Nat Underw 47:2+ Je 24 '43

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Insurance, Agricultural machinery

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Aggregate experience of stock fire and marine companies, 1942, with percentage comparisons for 1941. Spectator (Property ed) 9:13-20 S 9 '43
 Comparative financial and operating results of fire insurance companies for first six months ending June 30, 1943 and 1942. Spectator (Property ed) 9:34 S 9 '43
 Distribution of the stock fire insurance earned premium dollar; graph. Spectator (Property ed) 9:33 O 21 '43
 Experience of fire insurers in N.Y. for '42; tabulation by company. Nat Underw 47:13+ Mr 11 '43
 Figures filed by stock fire-insurance companies, first six months of 1943. Comm & Fin Chr 158:1105+ S 16 '43
 Fire companies '42 premiums up \$100 million; stock fire experience by lines, from Argus chart. Nat Underw 47:3+, 4-5, 16 Mr 18 '43
 Fire insurers report income maintained at high level this year. East Underw 44:1+ JI 16 '43
 Fire mutual companies' 1942 figures. Nat Underw 47:10 Ja 23; 12 F 4; 36 F 11; 6 F 18; 15 Mr 4; 10 Mr 11; 12 Mr 13 '43
 Fire reinsurance company record for 1941; tabulation. Nat Underw 46:12 D 31 '42
 Insurance stocks; profits of twenty-one representative stock fire companies, 1925 to 1942. Comm & Fin Chr 158:1703+ O 28 '43
 Insurance stocks; why leading fire insurance companies attract conservative investors. E. A. Van Deusen. Comm & Fin Chr 157:654 F 18 '43
 Nation-wide fire insurance net premiums and losses paid in 1942; tabulation by company. East Underw 44:24 Mr 5 '43
 N.Y. department gives '42 fire company aggregates. Nat Underw 47:3, 14-16 Ag 26 '43
 New York risks; results of fire insurance experience during 1941. L. S. Fischer. Spectator (Property ed) 8:10-13+ N 26 '42
 New York state fire insurance net premiums-losses incurred in 1942. East Underw 44:24+ Mr 5 '43
 1942 fire insurance experience, with comparisons for earlier years; New York insurance department summary. East Underw 44:22 Ag 27 '43
 1942 New Jersey fire company net premiums and losses incurred. East Underw 44:24 Mr 19 '43; Correction. 44:27 Mr 26 '43
 1942 underwriting and investment exhibit from Argus chart. Nat Underw 47:3-4 Mr 25 '43
 Rank stock companies by assets, surplus, premiums. Nat Underw 47:1-2 Mr 11 '43
 Six months survey presents spotted condition in field. Nat Underw 47:1+ JI 22 '43
 Specialty lines of fire companies generally show higher premiums; tabulation by company. East Underw 44:28-9 Mr 5 '43
 Spectator fire index; with underwriting results for 1942, by groups of companies. Spectator (Property ed) 8:9-13, 32 Mr 18 '43
 Standard fire classification report; 1941 business in New York city and state; tabulation. East Underw 43:24 D 4 '42; Same. Nat Underw 46:4 D 3 '42
 Statistical record of fire insurance companies in 1942; operations of 270 stock companies. Spectator (Property ed) 8:12-17 My 6 '43

Underwriting results of groups of fire and casualty insurance companies in 1942. Spectator (Property ed) 9:20 O 21 '43

See also
 Home insurance company of New York

Fraudulent claims

Companies win action in Sanders mill suit. Weekly Underw 149:242 Ag 7 '43

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Policy held not voided by false statements in proofs where loss exceeded face amount of policy. Weekly Underw 148:570 Mr 6 '43

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Antitrust loses. Business Week p108 Ag 14 '43
 Atlanta probe may move to U.S. Supreme court. Weekly Underw 147:1288 D 5 '42
 Await new move in Atlanta anti-trust case. Nat Underw 46:3+ D 17 '42
 Biddle launches anti-trust probe in New York. Nat Underw 47:1 My 6 '43; East Underw 44:22 My 7 '43
 Companies file demurrer at Atlanta; call move invasion of state rights. East Underw 44:15 Ja 15 '43; Nat Underw 47:3 Ja 21 '43
 Department of justice appeals Atlanta decision. J. B. Hosmer. Ins Field (Fire ed) 72:5-6 S 2 '43
 Fire companies file rebuttal argument to government charges. East Underw 44:1+ My 21 '43; Nat Underw 47:1+ My 20 '43; Nat Underw (Life ed) 47:1+ My 21 '43
 Fire insurance indictment; text of action brought by the federal government against the South-eastern underwriters association. Spectator (Property ed) 8:20-1, 44-6+ D 10 '42
 Government brief meets commerce issue head on. Nat Underw 47:2 My 6 '43; Nat Underw (Life ed) 47:2 My 7 '43
 Helpful decision is given in Atlanta case; insurers get protective order from judge. Nat Underw 46:1 N 19 '42
 Insurance companies likened to chain stores as public benefactors. Comm & Fin Chr 156:2049+ D 10 '42; Same. Weekly Underw 147:1418+ D 19 '42
 Insurance test; fire companies argue that federal authorities are infringing state regulatory rights. Business Week p46 Je 5 '43
 Investment house sees value in federal probe. Nat Underw 46:8 D 3 '42
 Reversal of Paul vs. Virginia wouldn't destroy bureaus. E. W. Sawyer. Nat Underw 47:17 Ja 28 '43
 Shooting from the hip. Business Week p96 N 28 '42
 SEUA companies take firm stand at Atlanta. F. C. Crowell, Jr. and J. B. Hosmer. Ins Field (Fire ed) 72:5-6+ My 27 '43
 S.E.U.A. files brief supporting its demurrer. Nat Underw 47:7 Ap 22 '43
 S.E.U.A. indicted by federal grand jury. East Underw 43:14+ N 27 '42; Nat Underw 46:1-1 N 26 '42; Ins Field (Fire ed) 71:7 N 26 '42; Weekly Underw 147:1237+ N 28 '42
 S.E.U.A. scores complete victory in Atlanta case; with text of Judge Underwood decision. Nat Underw 47:1+ Ag 12 '43; Same. Nat Underw (Life ed) 47:1+ Ag 13 '43
 Status of federal probe. Spectator (Property ed) 8:38-40 My 6 '43
 Subpoenas served on National board and cotton pools. Nat Underw 47:2 My 13 '43
 Text of Judge Underwood decision in South-eastern underwriters association, et al. case. East Underw 44:17+ Ag 13 '43; Same. Ins Field (Fire ed) 72:6-7 Ag 12 '43; Same. Weekly Underw 149:293+ Ag 14 '43; Same. Spectator (Property ed) 9:12-13+ Ag 19 '43
 Underwriters pleased over SEUA action. Weekly Underw 149:293+ Ag 14 '43
 U.S. Atlanta brief calls insurance commerce. Nat Underw 47:1+ Ap 29 '43; Same. Nat Underw (Life ed) 47:3+ Ap 30 '43; Same abr. East Underw 44:19 Ap 30 '43

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U.S. Supreme court will decide status of insurance. Nat Underw 47:1+ O 28 '43; Same abr. Comm & Fin Chr 158:1708 O 28 '43

What about Paul v. Virginia? review of the past, a look into the future; abstracts. J. E. Gontum. Ins Field (Fire ed) 72:6-8+ Ag 26 '43; Same. East Underw 44:17+ S 3 '43

Government policies

Defense plant corporation, fire and extended coverage. Spectator (Property ed) 8:30-1 D 10 '42

Home owners' loan corporation contract

Stock-HOLC contract has Pink's endorsement. Weekly Underw 44:16 Ja 1 '43; Nat Underw 46:2 D 31 '42

Inspection

Action by company inspector ends bad risk to huge supply of cork. East Underw 44:16 Ja 15 '43

Easing of inspections on farm business dangerous. Nat Underw 46:6 D 3 '42

Fire protection in aircraft manufacturing. F. Hargrett. Weekly Underw 147:1310-13 D 5 '42

Insured held entitled to copy of examination made by fire insurer. East Underw 43:20 N 27 '42

Losses

Derailed oil cars cause \$500,000 loss in Ohio. Nat Underw 47:1 S 30 '43

1942 fire experience gratifying. F. B. Simpson. Weekly Underw 148:20+ Ja 2 '43

Railroad losses cause concern to underwriters; \$1,000,000 Bellefontaine fire. Nat Underw 47:3+ S 9 '43

Seattle plant loss from bomber crash is about \$620,000. Nat Underw 47:4 Mr 11 '43

\$350,000 whisky loss at Pekin rectifying plant. Nat Underw 47:2 Ap 1 '43

Moral hazard

Moral hazard not serious fire insurance factor now. W. C. Perry. Nat Underw 47:3 Ja 28 '43

Refuse renewals on roadside taverns. Nat Underw 47:5 F 4 '43

Mortgagee interest

Finds mortgagee didn't abuse discretion. Nat Underw 47:10 O 28 '43

Mortgagee clause in New Jersey fire policy analyzed. H. G. Guemple. East Underw 44:20 Ag 20 '43

Mortgagee's right to payment not dependent upon existing security. East Underw 44:21 Jl 30 '43

N.Y. exchange warns against modification of mortgagee clause. East Underw 44:1+ F 5 '43; Weekly Underw 148:321+ F 6 '43

Notice and opportunity to participate held necessary to render appraisal binding on mortgagee. Weekly Underw 149:1039 N 6 '43

Unconditional and sole ownership; policy conditions as affected by existence of mortgages under laws of title and lien states. R. A. W. Banta. East Underw 44:20 Mr 26 '43

WDC mortgagee clause is held unnecessary. W. L. Clayton and C. O. Pate. Weekly Underw 147:1427+ D 19 '42; Same abr. East Underw 43:22 D 18 '42

Multiple location policies

Interstate rating proposals made to commissioners by fire insurers. East Underw 43:17-13 D 4 '42; Nat Underw 46:1+ D 3 '42

Weights advantages of I.U.E. operations on Pacific coast. H. W. Nason. Nat Underw 47:6 Mr 11 '43

Policies

Analysis of changes found in new N.Y. standard form. J. Lucas. East Underw 44:20 My 14 '43

Analyzes changes in new N.Y. fire form. J. Lucas. East Underw 44:15 Ja 1 '43

Another step in simplification; dwelling and household furniture; Mississippi form. Nat Underw 47:4 F 4 '43

Backs N.Y. fire form. W. E. Allyn. East Underw 44:26 S 17 '43

Backs wide use of new fire form. R. R. Barbour. East Underw 44:14 O 28 '43

Before we go any further; standard fire policy. C. G. Hale. Spectator (Property ed) 9:10-12 N 4 '43

Blanket rider adds new N.Y. cover to old forms. Nat Underw 47:3+ My 13 '43; East Underw 44:18 My 14 '43; Weekly Underw 148:1079+ My 22 '43

Commends proposed Texas form. E. W. Patterson. East Underw 44:22 My 28 '43

Comprehensive fire insurance coverage; new omnibus policy available. Barron's 23:13 Ap 5 '43

Construe policies to conform to new form; notify New York department. East Underw 44:20 Ag 4 '43

Effective; July 1, 1943; inside story of the New York standard fire policy. W. A. Hamlin. Ins Field (Fire ed) 72:6-7 Jl 1 '43

Favor new Texas fire form at department hearing. Nat Underw 47:9 My 27 '43

Hold up Georgia o.k. on New York policy; S.E.U.A. preparing form. Nat Underw 47:2 Jl 29 '43

Important changes in fire insurance policy; new standard contract. C. T. Hubbard. Barron's 23:10 O 25 '43

New fire insurance policies in New York after July 1st. Credit & Fin Management 45:17-20, 28-9 F '43; Excerpt. Management R 32:191-2 My '43

New Illinois dwelling form is progressive move. Nat Underw 47:1+ Ja 21 '43

N.J. agents support revised fire policy of New York state. East Underw 43:1+ N 13 '42

New Jersey bar assn. report tells why it favors new New York fire policy. East Underw 44:29 Je 18 '43

N.J. bar committee reports on N.Y. form. East Underw 44:22 Ja 15 '43

1943 New York fire policy goes in use in Mississippi. Nat Underw 47:1 Jl 8 '43

North America broadens cover in Canada. Nat Underw 47:3 Ap 1 '43

Off-premises fire insurance rule published by Middle department rating assn. Spectator (Property ed) 9:26 Ag 5 '43

Predicts comprehensive fire insurance policies. J. C. Bunyan. East Underw 44:23 Mr 12 '43

Proposes greatly simplified fire policy in Texas; abstracts. R. S. Mauk. Nat Underw 47:3-4 Ap 8 '43; East Underw 44:34 Ap 9 '43; Ins Field (Fire ed) 72:6 Ap 8 '43

S.E.U.A. considers optional policy. Nat Underw 47:2 Ag 5 '43

Statutory hitch stops o.k. of new policy in Georgia. J. B. Hosmer. Ins Field (Fire ed) 72:3 Jl 29 '43

See also

Insurance, Fire—

Farm policies

Insurance, Fire—

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Insurance Fire—Pub-

lic buildings policies

Insurance, Fire—Un-

earned premium

policies

See also

Extended coverage endorsements

Companies win verdict in Minneapolis court; loss caused by high water, not windstorm. East Underw 44:27 My 14 '43

Court upholds large judgment against insurers; explosion under extended coverage in Lever Brothers case. Nat Underw 46:1+ D 24 '42

Gas holder loss in Chicago; largest aircraft property damage under fire and extended coverage. Nat Underw 47:1 My 27 '43

Peoria storm unspectacular but destructive. K. Force. Nat Underw 47:1+ Ag 12 '43

Texas presents serious problem in extended coverage. Nat Underw 47:3 N 4 '43

Unusual aircraft loss paid under extended coverage. Nat Underw 47:2+ Ja 21 '43

Preventive work

Campaign against fire losses. Economist 144:218 F 13 '43

Defeating Axis on home front by keeping war plants safe from fire; abstracts. W. E. Mallalieu. East Underw 44:25 Ap 9 '43; Nat Underw 47:2 Ap 8 '43

INSURANCE, Fire—Preventive work—Cont.

Every fire sabotage, an effective slogan; public relations work of National Board. Weekly Underw 148:132+ My 29 '43; East Underw 44:17 My 28 '43

Fire control big factor in early victory. W. E. Mallalieu. Weekly Underw 148:34, 47-8 Ja 2 '43

Fire prevention committee named for commissioners. Nat Underw 47:3 Jl 29 '43

Fire protection in aircraft manufacturing. F. Hargrett. Weekly Underw 147:1310-13 D 5 '42

Forward step is taken in Illinois to protect food. C. M. Cartwright. Nat Underw 47:3+ Ja 21 '43

National board battles night club fires. Weekly Underw 148:137+ Ja 9 '43

National Board describes part of wartime contribution of fire insurance industry to war effort. Weekly Underw 14:502 S 11 '43; East Underw 44:16 S 8 '43

National Board engineers geared to assist nation's war efforts. F. S. Dauwalter. East Underw 44:19 Je 18 '43

New York's wartime safeguards. R. P. Barbour. Weekly Underw 148:24+ Ja 2 '42; Abstract. East Underw 43:1+ D 18 '42

Outlines work of the National board. J. M. Thomas. East Underw 44:24 Ag 27 '43

Protection of war plants expanded greatly in last year. H. V. Smith. East Underw 43:20 D 18 '42

Service new FIA furnishes American industry; abstracts. C. W. Pierce. East Underw 44:1+ Jl 23 '43; Nat Underw 47:2 Jl 22 '43

Six-man committee to confer with OCD on fire prevention. Nat Underw 47:1+ Jl 15 '43

Three-point program for agents in fire prevention work. H. N. Mann. East Underw 44:19 Ja 1 '43

War and Navy departments praise Board's fire prevention services. East Underw 44:18+ My 28 '43

See also

Fire patrols
Underwriters' laboratories

Public buildings policies

Michigan school survey program gets under way. Nat Underw 47:5 O 28 '43

Rates

Accountants will have to study more statistics. E. P. Smith. Nat Underw 47:4 O 14 '43

Agents take rate cut with a smile; SEUA dwelling reduction taken in stride. Ins Field (Fire ed) 72:3+ Jl 29 '43

Estimate S.E.U.A. rate cut at 25%. Nat Underw 47:6 My 27 '43

Factory insurance association; examination report, made by New York Insurance department. W. E. Roesch. Spectator (Property ed) 8:10-14, 26 Mr 4 '43

Fire companies present report on interstate rating to commissioners. East Underw 44:19+ Je 11 '43

Fire insurance rates and rating methods; report by staff of New York insurance department. Spectator (Property ed) 8:10-16, 18 D 10; 10-15, 22 D 14 '42

Fire rates in Kansas substantially reduced. C. F. Hobbs. Weekly Underw 149:303+ Ag 14 '43

Illustrating the ever-decreasing cost of fire protection, 1900-1943; graph. Spectator (Property ed) 9:21 O 21 '43

New rating schedule adopted in Ontario. J. J. O'Brien. East Underw 44:28 S 24 '43

N.Y. dept. issues fire rating report. East Underw 43:14+ N 27 '42; Nat Underw 46:3+ D 3 '42; Weekly Underw 147:1237+ N 28 '42

N. Y. report on F.I.A. hits competitive rating methods. Nat Underw 47:1+ F 18 '43; East Underw 44:23 F 19 '43

Oklahoma farm schedules revised. Nat Underw 46:27 N 26 '42

Postwar planning and possibilities of reduced fire insurance premiums as a factor in the cost of small town water works systems. J. R. McComas. Am Water Works Assn J 35:556-61 My '43

Tennessee dwelling schedule revamped. Nat Underw 47:29 Ja 28 '43

Withdraw opposition to DPC plan; report at NAIA convention. East Underw 44:37 O 15 '43; Nat Underw 47:1+ O 14 '43

Reinsurance

Fire reinsurance company record for 1941; tabulation. Nat Underw 46:12 D 31 '42

Fire reinsurers enjoy capacity business today. Nat Underw 46:1+ D 31 '42

Renewal certificates

Wary of renewal certificates. C. F. J. Harrington. East Underw 44:16 Ag 13 '43

Reserves

War damage reserve question brought up at Boston convention. East Underw 44:1, 27 Je 11 '43

Risks

Bowling alley line gets another black eye. Nat Underw 47:2+ S 2 '43

Companies watch hemp mill lines. Nat Underw 47:2+ Mr 25 '43

Insurers watch bowling alley risks closely. Nat Underw 47:4+ Ja 28 '43

New York risks; results of fire insurance experience during 1941, by classes of hazards. L. S. Fischer. Spectator (Property ed) 8:10-13+ N 26 '42

See also

Insurance, Fire—
Whisky risks

Self insurance

Minnesota self-insurers tax held unconstitutional. East Underw 44:20 Ag 20 '43

State policies

Georgia may hire fire insurance expert; Governor makes statement. E. Arnall. East Underw 44:39 O 15 '43

Georgia state cover decision provokes row. Nat Underw 47:3+ O 14 '43; Same abr. East Underw 44:26+ O 8 '43

Insurance written on Louisiana state risks. East Underw 44:28 Ap 23 '43

Present state policies cancelled in Georgia. Ins Field (Fire ed) 72:3+ S 30 '43

State self insurance

Twenty-seven states are self-insurers. East Underw 44:25 Ja 8 '43

Statistics

Cook County premiums for 1942. Nat Underw 47:2 Jl 29 '43

Fire premiums for New York, 1941 and 1942; figures for principal company groups. Nat Underw 47:1 Mr 4 '43

Stock and mutual fire premiums; percentage distribution of fire insurance premiums of all classes; graphs. Spectator (Property ed) 9:23 O 21 '43

See also

Insurance, Fire-Fi-
nance

Study and teaching

Fire and marine insurance (cont). W. C. Howe, Jr. and others. Weekly Underw 148: 63-5, 325-7, 542-3, 949-50, 1328-9; 149:18-19, 257-8, 452, 706-9, 850-1 Ja 2, F 6, Mr 6, My 1, Je 19, Jl 3, Ag 7, S 4, O 2, 16 '43 (to be cont)

Massachusetts agents sponsor fire courses. East Underw 44:18 Ja 1 '43

Start insurance class for bank executives. Weekly Underw 148:942 My 1 '43

Taxation

Eye effect of restrictions; tax position of firm whose property burns. J. T. W. Babcock. Nat Underw 47:4 S 16 '43

Unearned premium policies

Unearned premium change on Pacific coast. Nat Underw 47:2 Jl 8 '43

Valuation of property

Annie doesn't live here anymore; three-quarter value clause goes by the board. E. L. Scott. Ins Field (Fire ed) 72:18 Mr 25 '43

How value and loss are determined. P. B. Reed. Weekly Underw 148:325-7, 542-3 F 6, Mr 6 '43

INSURANCE, Fire—Valuation of property—*Continued*

Ponder how to insure buildings now obsolete. Nat Underw 47:1+ Ja 14 '43
 Stresses need for insurance appraisals. A. I. Warren. Spectator (Property ed) 8:11 My 6 '43

Suggestion for improving insurance service; appraisal companies protect clients by establishing means of proving fire and burglary claims. A. I. Warren. Weekly Underw 148:28, 55 Ja 2 '43

War problems

How fire underwriters are meeting numerous problems caused by war. East Underw 44:21 Je 4 '43

War risks

Agreement reached on war exclusion clause in New York. East Underw 44:1+ Mr 19 '43; Nat Underw 47:6+ Mr 18 '43

Canadian war risk perils are defined. East Underw 44:22 Je 25 '43

Companies asked to back approval by other states of N.Y. war clause. East Underw 44:19 Je 11 '43

N.Y. Exchange seeks war risks uniformity. East Underw 43:29 N 20 '42

N.Y. fire policy war clause change becomes official. Nat Underw 47:6 Ap 29 '43

St Paul group lists war hazards covered by companies or WDC. East Underw 44:20 Ji 23 '43

Study new N.Y. fire policy war clause. Nat Underw 47:3+ Mr 11 '43; East Underw 44:1+ Mr 12 '43

War clause bill signed by Governor Dewey. East Underw 44:24 Ap 30 '43

W.D.C. must close policy gaps; abstracts. J. Lucas. Ins Field (Fire ed) 72:25-6 F 4 '43; East Underw 44:18 Ja 29 '43

War damage coverage recommendations approved by Canadian superintendents. Weekly Underw 148:322-3 F 6 '43

Whisky risks

Issue new market value clause for whisky in Kentucky. Nat Underw 47:1+ S 16 '43; Spectator (Property ed) 9:33 N 4 '43

May adjust whiskey dispute; companies willing to pay losses on market value basis. Weekly Underw 148:677+ Mr 27 '43

OPA bulk whisky price ceiling creates problems. Nat Underw 47:1+ Mr 11 '43

Canada

Canadian fire loss ten-year ratios. Spectator (Property ed) 8:25 Je 3 '43

Canadian insurance; draft section dealing with other insurance and war exclusion clause. Spectator (Property ed) 8:33 Mr 4 '43

Fire premiums reported off last year in Canada; losses on increase. East Underw 44:20 Ja 8 '43

McNairn report flays C.U.A. contract. East Underw 44:24 Mr 26 '43

New rating schedule adopted in Ontario. J. O'Brien. East Underw 44:28 S 24 '43

Non-tariff insurance companies form own Canadian conference. East Underw 44:1+ F 26 '43; Same abr. Nat Underw 47:29 F 25 '43

Premiums in Canada dropped 5.51% in 1942. Weekly Underw 148:585 Mr 13 '43

Chicago

Brokers Chicago board suit filed. Nat Underw 46:3+ D 17 '42

Chicago board and real estate men get together. Nat Underw 47:8 Mr 11 '43

Chicago board, brokers settle row out of court. Nat Underw 47:1+ Mr 4 '43

Chicago board launches program; prestige advertising, other aids to members. Nat Underw 47:3+ My 13 '43

Chicago board O.K.'s agreement. Nat Underw 47:10 Mr 18 '43

Chicago board postpones action; proposals to give brokers greater voice put aside. Nat Underw 46:1+ D 24 '42

Reviews Chicago Board battle. T. C. McConnell. Nat Underw 47:3+ My 20 '43

Snag in Chicago Board settlement. Nat Underw 47:7 Ap 15 '43

Subrogation suit for \$583,223 filed in Chicago. Nat Underw 47:27 N 4 '43

Great Britain

Fire and accident insurance. Economist 145: 210-11 Ag 14 '43

Missouri

Change tactics in Missouri rate hearings. Nat Underw 47:1+ Ja 14 '43

Companies lose final decision in Missouri case. Nat Underw 47:3+ Ja 7 '43

Cross-examine in Missouri hearings. Nat Underw 47:5+ Ja 7 '43

Hobbs continues in Missouri hearings. Nat Underw 47:6 Ja 21 '43

McKittrick action returns to Missouri. Weekly Underw 148:316 F 6 '43

McKittrick attacks Missouri Supreme court commissioner. Nat Underw 47:4 Ap 1 '43

Missouri policyholders win \$8,000,000 premiums. Weekly Underw 147:1375 D 12 '42; Nat Underw 46:3B D 10 '42

Policyholders in Missouri rate case may get nothing; attorneys \$800,000. Weekly Underw 148:1279 Je 12 '43

Problems delay Missouri refund. Nat Underw 47:2+ Mr 11 '43

Question Terry in Missouri hearings. Nat Underw 47:6 F 11 '43

Supreme court quashes Missouri convictions. East Underw 44:26 Ja 8 '43

New Jersey

Fire rules and forms are revised by schedule rating office of N.J. East Underw 44:24 Ja 8 '43; Nat Underw 46:2 D 31 '42

New York (state)

Fire insurance rates and rating methods; report by staff of New York insurance department. Spectator (Property ed) 8:10-16, 18 D 10; 10-15, 22 D 24 '42

New York risks; results of fire insurance experience during 1941. L. S. Fischer. Spectator (Property ed) 8:10-13+ N 26 '42

Pleads for insurance industry to unite to tell people true facts. G. F. Kern. East Underw 44:22 Mr 19 '43

North Carolina

New fire co. formed in North Carolina; North state insurance co. Ins Field (Fire ed) 72:4 Ag 12 '43

Southern states

Fire insurance review of the South. M. R. McGruder. Weekly Underw 148:30, 53-4 Ja 2 '43

United States

Fire insurance companies organized or retired during 1942. Spectator (Property ed) 8:20 F 4 '43

Scans current fire insurance scene. W. N. Achenbach. Nat Underw 47:1+ Ap 22 '43

Wants government to keep hands off business; fire insurance is capitalism at work. R. P. Barbour. East Underw 44:1, 20 My 28 '43

INSURANCE, Flood

Pioneering rice flood insurance on the Carolina coast through London. E. G. Seibels. East Underw 44:27 Ja 8 '43

Seed need of flood cover. N. T. Robertson. Nat Underw 47:10 My 27 '43; Reply. S. R. Kennedy. 47:4 Je 3 '43

Wave of flood cover requests; no takers. Nat Underw 47:3 My 20 '43

INSURANCE, Forgery

Currency exchange losses heavy. Nat Underw 47:25 Ag 19 '43

Depositors forgery and commercial bonds; revisions. Spectator (Property ed) 9:48-9 O 21 '43

Forgery bond coverage broadened; also new form 25 for insurance companies. East Underw 44:31+ S 24 '43; Nat Underw 47:23 S 23 '43

INSURANCE, Furriers' customers

Furriers customers insurance considered line with appeal at present time. C. Welk. Weekly Underw 148:853-4 Ap 17 '43

New Haven fur loss is now set at \$1,500,000. Nat Underw 47:2 S 30 '43

INSURANCE, Grain elevator

Explosions, fire wreck grain elevator. Il Nat Underw 47:3 Ag 5 '43

INSURANCE, Group

- Army rating plan is set up for group covers. Nat Underw 47:19+ Mr 11 '43; Same. Nat Underw (Life ed) 47:1+ Mr 12 '43
- Bankers of Iowa offers permanent forms under group. Nat Underw (Life ed) 46:1+ N 13 '42; East Underw 43:1+ N 13 '42
- Chicago plan of clothing workers arouses interest. Nat Underw (Life ed) 47:4 Ja 15 '43
- Disability benefits denied; judgment against insurance carrier reversed. East Underw 44:12 S 3 '43
- Employer can change group A. & H. insurer at will. Nat Underw 46:29 D 31 '42; Nat Underw (Life ed) 47:20 Ja 1 '43
- Government personnel in foreign service under group cover. East Underw 44:1+ Ag 6 '43; Weekly Underw 149:241+ Ag 7 '43
- Group in force gains two billion. T. I. Parkinson. Nat Underw (Life ed) 47:2+ Ja 8 '43
- Group insurance, greatest force to combat agitators. E. J. Brand. East Underw 44:38 Je 4 '43
- Group leaders study line in progressive spirit. Nat Underw (Life ed) 46:3 D 25 '42
- Group policy ceases when employment ends. Ins Field (Life ed) 72:6 O 22 '43; Nat Underw (Life ed) 47:4 O 22 '43; Weekly Underw 149:1194 N 27 '43
- Group policyholder's interest in labor law; abstracts. A. T. Collier. East Underw 44:10 Ag 27 '43; Nat Underw (Life ed) 47:3+ Ag 27 '43
- Illegitimate posthumous child may recover proceeds of group policy payable to children of employee. Weekly Underw 148:667 Mr 20 '43
- Keen interest in novel group plan of Bankers of Iowa. Nat Underw (Life ed) 46:5 N 20 '42
- Labor union agency a factor in placing big group cases. Nat Underw 47:19 J1 '43; Same. Nat Underw (Life ed) 47:4 J1 2 '43
- Michigan group act explained. Nat Underw (Life ed) 47:13 S 10 '43
- New group rules for Michigan. Nat Underw 47:24 S 23 '43; Same. Nat Underw (Life ed) 47:10 S 24 '43
- N.Y. savings banks to sell group business. Ins Field (Life ed) 72:3 F 12 '43
- Plan for group insurance on shipyard employees. Nat Underw 47:21 Mr 4 '43
- Project group cover for all clothing workers. Nat Underw 47:22 Ja 7 '43; Same. Nat Underw (Life ed) 47:3 Ja 8 '43
- Saskatchewan group case; M and C Aviation plant. J. Carver. East Underw 44:12 O 1 '43
- Savings banks to extend group life insurance. Comm & Fin Chr 157:504 F 4 '43
- They call him ace; A. C. Campbell, a great group salesman. J. Philp. East Underw 43:43+ D 11 '42
- Unions' group cover demands pave way for many sales. Nat Underw (Life ed) 47:6 J1 16 '43
- U.S. will pay more under War dept. group rating plan. Nat Underw 47:51 O 14 '43; Same. Nat Underw (Life ed) 47:3 O 15 '43
- War department rating plan gets frigid comment. Nat Underw (Life ed) 47:4 Je 11 '43
- War department's plan to control group insurance cost, commissions. East Underw 44:13 Mr 12 '43
- War projects plan for group cover is revised. Nat Underw 47:24 My 27 '43; Same. Nat Underw (Life ed) 47:1 My 28 '43

See also

Insurance, Hospital-ization

Insurance, Life—Family group policies

Employees' insurance

- Continental Assurance announces group plans. W. E. White. East Underw 44:11 Ag 20 '43; Same. Nat Underw (Life ed) 47:7 Ag 13 '43
- Employer-pay-all trend develops in group field. Nat Underw (Life ed) 47:3+ Ap 23 '43; Same abr. Nat Underw 47:17 Ap 22 '43
- Group on Stern bros., N.Y. department store. East Underw 44:10 Ag 20 '43
- Uninsurables in 5% plans are problem. Nat Underw (Life ed) 47:1 J1 23 '43
- Value of group. W. L. Funk. East Underw 44:11 Ag 20 '43

INSURANCE, Hall

- Hall advisory committee confers; 1942 experience. Nat Underw 46:1+ D 3 '42
- Hall insurance bureau will educate farmers. Il Ptr Ink 203:21 Ap 30 '43
- Hall insurance cover popular in Middle West. Weekly Underw 149:256 Ag 7 '43
- Hall losses on crops are heavy over wide area. Nat Underw 47:1 Ag 5 '43
- Hall season starts off briskly; prospects good. Nat Underw 47:6 My 7 '43
- Hall season will end unprofitably. Nat Underw 47:1+ S 2 '43
- Most disastrous hail underwriting season on record, Minnesota underwriters report. Weekly Underw 149:567 S 18 '43
- One of the biggest hail years in 1943. Nat Underw 47:1+ J1 8 '43
- Operations not so good for insurers on the banks of the Saskatchewan. Weekly Underw 149:651 S 25 '43
- Prospects good for big hail year; Texas school. Nat Underw 47:6 Mr 13 '43
- Texas hail writers in two day session. East Underw 44:19 Mr 26 '43

INSURANCE, Health

- Blue Cross spokesman's views on federal health cover. A. M. Calvin. Nat Underw 47:27 O 28 '43; Same. Nat Underw (Life ed) 47:14 O 8 '43
- Discusses social plans. R. A. Hohaus. Weekly Underw 149:690, 718-19+ O 2 '43; Same abr. East Underw 44:3+ O 1 '43; Abstracts. Nat Underw 47:15+ S 30 '43; Nat Underw (Life ed) 47:6 O 1 '43
- New structure of social security; the work of the Inter-American conference on social security at Santiago de Chile. Int Labour R 46:661-91 D '42
- Urges state health cover in N.Y. C. Poletti. Nat Underw 47:23 Ja 7 '43

See also

- Insurance, Accident Insurance, Hospital-Insurance, Disability zation
also Bureau of personal accident and health underwriters; Health and accident underwriters conference

Adjustment of claims

- Analysis is made of limited policy claims by Sterling of Chicago. Nat Underw 47:22 My 20 '43

Fraudulent claims

- See also*
Malingering

Policies

- Continental Casualty women's H. & A. coverage. Weekly Underw 149:460 S 4 '43; Nat Underw 47:22 S 2 '43
- New health insurance policy; economy contract of Royal, Eagle and Globe Indemnity. East Underw 44:32 J1 16 '43

Australia

- Planning of medical services in Australia. bibliog Int Labour R 47:731-45 Je '43

Canada

- Canada's health programme; Advisory committee's important proposals. bibliog Int Labour R 43:466-78 O '43
- Canadian health insurance plan under consideration. Nat Underw 47:21 Mr 11 '43
- Canadian officers association files brief on health insurance project. East Underw 44:9+ Je 18 '43
- Sets up standards for Canadian health plan. East Underw 44:53 Ap 30 '43
- Social security planning in Canada; Proposed health insurance legislation. Int Labour R 47:612-16 My '43

Great Britain

- Assumption B. Economist 144:721 Je 5 '43
- Paying for illness. Economist 144:685 My 29 '43

Rhode Island

- Checks go out; Rhode Island's cash sickness insurance program. Business Week p92 My 8 '43
- What Rhode Island health act provides. I. G. Weissman. Nat Underw 47:19 F 4 '43; Same abr. Nat Underw (Life ed) 47:19 F 5 '43

INSURANCE, Horse

Valued policy laws; digest of race horse insurance case. J. L. Roesch. Spectator (Property ed) 8:22-3 My 6 '43

INSURANCE, Hospitalization

Accident and health insurance in 1942 by states, hospitalization plans included; tabulation. L. S. Fischer, comp. Spectator (Property ed) 9:30 O 21 '43; Same. Spectator (Life ed) 15:16 N '43

Asks dissolution of D. of C. hospital insurer. Nat Underw 47:6 S 23 '43

Commercial travelers organizations hear paper: Hospitalization benefits for the family. M. W. Hobart. Weekly Underw 149:465 S 4 '43

Explores hospital insurance situation. W. Ford. East Underw 44:36 Mr 19 '43

Group insurance, greatest force to combat agitators. E. J. Brand. East Underw 44:38 Je 4 '43

Lahm, inc., build up big business for hospital expense policy. Weekly Underw 148:1293 Je 12 '43

No pay increase; NWLB ruling on hospitalization insurance. Business Week p116 Jl 10 '43

Prudential agents and employees get group plan. Nat Underw (Life ed) 47:3 Ap 23 '43

Standard Accident broadens group hospital plan. Nat Underw 47:18 F 25 '43

Urges hospital plans not to buck social security. L. H. Pink. Nat Underw 47:20 F 11 '43

INSURANCE, Household furniture

Bailees, household furniture forms in laundry loss. Nat Underw 47:1+ Jl 29 '43

Great need to increase household goods cover. Nat Underw 46:4 N 26 '42

10% extension rule has narrow application. Nat Underw 47:34 Ag 12 '43; Correction. 47:2+ S 2 '43

Viewpoints vary on off-premises coverage. East Underw 44:32 N 5 '43

INSURANCE, Industrial

Industrial insurers geared to war demands. R. Daniel. Weekly Underw 148:108, 117-18 Ja 2 '43

Industrial life insurance fulfilling its war responsibilities. R. Daniel. Weekly Underw 148:44+ sec 2 My 8 '43

Industrial prospers despite six-month production sag. Nat Underw (Life ed) 47:9 Jl 30 '43

Trends are studied in the industrial field. Nat Underw (Life ed) 47:24 F 5 '43

See also

Industrial insurers conference

Agency management

Supervision is keynote of industrial. W. A. Lonsford. Ins Field (Pittsburgh Conv Daily ed) 72:8+ S 16 '43; Same abr. Nat Underw (Life ed) Daily ed 47:23+ S 16 '43

Agents

Debit men push ordinary sales. Nat Underw (Life ed) 47:10 S 3 '43

Industrial agent in today's market. E. B. Stevenson. Ins Field (Life ed) 71:20-2 N 20 '42; Abstract. Nat Underw (Life ed) 46:4+ N 20 '42

Lack of manpower plagues industrial. Nat Underw (Life ed) 47:4 Je 25 '43

Metropolitan and CIO sign agreement covering N.Y. city agents. Nat Underw (Life ed) 47:11 My 14 '43

Prudential and CIO sign national pact covering debit men. Nat Underw (Life ed) 47:4 F 12 '43

Women agents

Can a woman carry a debit? R. P. Baxter. Ins Field (Life ed) 72:18-19 F 12 '43

Prudential of England and their women agents. J. Burn. Il Weekly Underw 148:55-6+ sec 2 My 8 '43

Women are successful as agents. P. F. Clark. Il Weekly Underw 148:52-4+ sec 2 My 8 '43

Women on the debit; experience of John Hancock. W. C. Hill. Nat Underw (Life ed) 47:7 S 17 '43

Women on the debit; Industrial department of John Hancock. P. F. Clark. East Underw 44:52 pt 2 O 1 '43

History

History of industrial life insurance in the United States in the life of one man. C. F. Nettleship. Weekly Underw 148:50-1+ sec 2 My 8 '43

Lapses and surrenders

Pru's weekly premium surrenders, paid-ups. East Underw 44:8 My 21 '43

Policies

Compares Canada and British industrial policies. K. R. Wilson. East Underw 44:4 Je 4 '43

Support urged for uniform industrial policy bill; abstracts. S. F. Keeble. Nat Underw (Life ed) 47:8 O 8 '43; Weekly Underw 149:795+ O 9 '43

Uniform industrial policy bill. East Underw 44:10 Je 18 '43

Prospects

Timely analysis of the big industrial market. W. Guon. Ins Field (Life ed) 72:3-4, 16-20 S 17 '43; Same abr. Nat Underw (Life ed) Daily ed 47:4+ S 17 '43

Great Britain

English industrial insurers oppose state death benefit. Nat Underw (Life ed) 46:1+ D 25 '42

Future of industrial assurance. Economist 144:625-6 My 15 '43

Industrial assurance. Economist 143:706-7 D 5 '42

Prudential of London on Beveridge scheme. East Underw 44:4 Ja 1 '43

Savings and assurance. Economist 144:358 Mr 20 '43

Study report on English insurance manpower question. Nat Underw (Life ed) 47:1+ Ja 1 '43

Trade in thrift; Kennet committee report. Economist 143:629-30 N 21 '42

Michigan

Law regulating industrial business in Michigan revised. Nat Underw (Life ed) 47:8 Ap 2 '43

INSURANCE, Inland marine

Historical background and definition of inland marine insurance. A. C. Charles. Weekly Underw 149:400-1, 454-7, 519-21, 573-5 Ag 28-S 18 '43; Same abr. East Underw 44:15+ Ag 27; 24 S 3 '43

Inland marine has shown very greatly increased business. Nat Underw 47:3 S 30 '43

Inland marine vision still needed. H. W. Melville. Weekly Underw 148:76 Ja 2 '43

Inland marine will show further gains in income this year. East Underw 43:1+ D 25 '42

Peak inland marine cover on railroad freight. Nat Underw 47:2 S 16 '43

Views field of cargo coverage. P. J. Leen. Nat Underw 47:9+ S 23 '43

See also

Insurance, Furriers' customers	Insurance, Motor truck contents
Insurance, Jewelers' block	Insurance, Personal effects
Insurance, Laundry bundle	

Adjustment of claims

Adjustment of inland marine losses. W. M. Mortimer. Weekly Underw 149:1004-5 N 6 '43

Court holds warehouseman has no insurable interest in stored goods. East Underw 44:30 O 22 '43

Inland marine loss adjustments; abstract. W. H. Rodda. Management R 32:391-3 O '43

Insurance on goods shipped by railroads, railway express, air express and motor truck. P. J. Leen. Weekly Underw 149:711-13 O 2 '43

N.Y. court rules on overturning of auto; damage caused to excavating shovel. East Underw 44:14 Ag 27 '43

Agents

Selling inland covers found most profitable. D. E. Demmon. Weekly Underw 148:1331+ Je 19 '43

INSURANCE, Inland marine—Agents—Cont.

Through the field glasses; suggestions for selling inland marine lines. *Ins Field (Fire ed)* 72:17 F 25 '43

Unusual risks require inland marine coverage. J. H. Means. *Weekly Underw* 148:1199+ Je 5 '43

Coverage

Clarification of inland marine jurisdiction over processor and bailee risks. L. S. McCombs. *Spectator (Property ed)* 9:32 N 4 '43

Marine ruling on negative films, contingent liability. *East Underw* 44:30 Je 4 '43

Processing and bailee's customers' risks subject to interpretations. *East Underw* 44:25 Ja 29 '43; Same. *Weekly Underw* 148:237+ Ja 23 '43; Same abr. *Nat Underw* 47:31 Ja 21 '43

Urges true needs of insurance buyers be met; abstracts. D. C. Bowersock. *Weekly Underw* 149:1006-7+ N 6 '43; *East Underw* 44:25 N 5 '43; *Nat Underw* 47:1+ N 4 '43

Finance

Inland marine premium writings, 1939-1942, and losses, 1942. *East Underw* 44:20+ Mr 12 '43

Policies

Demand evident for floatier coverage on dairy herds, cattle and young stock. *Weekly Underw* 149:309 Ag 14 '43

How 3 lost tubs of radium were found in Rochester, Minn. sewer. *East Underw* 44:24 My 21 '43

Philatelist agent develops coverage for stamp dealers. G. J. Mayer. *Nat Underw* 47:8 S 2 '43

Small town inland marine business. A. W. Frost. *Weekly Underw* 149:356 Ag 21 '43

Personal property floatier

Fire association broadens personal property floatier. *Nat Underw* 46:1+ N 12 '42; *Weekly Underw* 147:1249 N 28 '42

Forbes modifies requirement as to PPF charter letters. *Nat Underw* 47:3+ Ag 5 '43

Get set for big personal property floatier drive in Michigan. *Nat Underw* 47:2 Ap 8 '43

Inspection bureau to set Michigan P.P.F. rates. *Nat Underw* 47:32 Je 24 '43

Insurance rate reduction; personal property floatier policy modernized. *Barron's* 23:6 F 8 '43

Michigan letter is causing concern to some companies; writing of personal property floatier. *Nat Underw* 47:1 Ji 29 '43

Motor truck cargo now larges. class of inland marine cover; all states but ten give permission for writing PPF. G. G. Quirk. *East Underw* 43:1+ D 11 '42

New Jersey companies may write PPF in Michigan. *Nat Underw* 47:2 S 30 '43

New property floatier. H. D. Van Gils. *Weekly Underw* 148:375 F 13 '43

Personal effects, personal property floaters changed. *Nat Underw* 47:3 My 27 '43; *East Underw* 44:28 My 23 '43

Personal property floatier legalized in Michigan. *Nat Underw* 47:1+ Ap 1 '43

P.P.F. writing in Michigan to be denied N.J. carriers. *Nat Underw* 47:2+ S 2 '43

Personal property rate cut in Canada; rule changes made. *East Underw* 43:28+ D 4 '42; *Weekly Underw* 147:1317 D 5 '42

Provisions of revised PPF. *Nat Underw* 46:1+ D 24 '42; *Weekly Underw* 147:1434-5 D 19 '42; *East Underw* 43:23 D 25 '42

3-year P.P.F. with \$25 deductible is big seller. *Nat Underw* 47:3 My 6 '43

War problems

Inland marine adequately meeting new problems arising out of war. A. W. Barthelmes. *East Underw* 44:37-8 Mr 12 '43

Canada

Leckey, chairman of Canadian inland association; other officers. *East Underw* 44:22 Je 25 '43

Personal property rate cut in Canada; rule changes made. *East Underw* 43:28+ D 4 '42; *Weekly Underw* 147:1317 D 5 '42

Report on year's activities of Canadian inland underwriters. W. McLean. *East Underw* 44:30 Je 11 '43

INSURANCE, Jewelers' block

Atlas is upheld on jewelry loss. *Nat Underw* 47:13 S 2 '43

Insuring nation's jewelry values. E. V. Sullivan. *il Spectator (Property ed)* 9:10-14+ S 9 '43

Jewelry cover active; small losses on increase. *Nat Underw* 47:32 S 2 '43

Legal difficulties sometimes result when full coverage has not been sold. *Weekly Underw* 149:259+ Ag 7 '43

INSURANCE, Laundry bundle

Another laundry's cover inadequate. *Nat Underw* 47:2 O 28 '43

Atlanta laundry loss litigation is expanding. *Nat Underw* 47:14 Ag 26 '43

Bailees, household furniture forms in laundry loss. *Nat Underw* 47:1+ Ji 29 '43

INSURANCE, Liability

Demand arises for legal liability cover. *Nat Underw* 47:1+ Ja 28 '43

Development of liability incurred losses, policy years, 1938-1941. *Spectator (Property ed)* 9:19 O 21 '43

Fiduciary entitled to reimbursement from estate for premiums. *Trusts & Estates* 76:392-3 Ap '43

Legal liability cover raises charter questions. *Nat Underw* 47:6+ Mr 25 '43

Liability lines for hotels. L. S. McCombs. *il Spectator (Property ed)* 9:10-14 Ag 5 '43

Recent liability cover trends. G. Watts. *Weekly Underw* 149:170-2 Ji 24 '43; Abstracts. *East Underw* 44:38 Ap 23 '43; *Nat Underw* 47:17+ Ap 15 '43; *Management R* 32:313-15 Ag '43

Study in contrasts provided by old liability manual of 1904. *East Underw* 44:25 Ji 9 '43

See also

Insurance, Automobile
Insurance, Employers' liability
Insurance, Manufacturers' and contractors' public liability
Insurance, Motor truck

Insurance, Owners', landlords' and tenants' public liability
Insurance, Safe deposit box
Insurance, Workmen's compensation

Adjustment of claims

Advance under loan agreement does not constitute payment depriving assured of right of action against co-insurer. *Weekly Underw* 149:971 O 30 '43

Automobile liability policy does not cover injury by being struck by ice after its removal from truck. *Weekly Underw* 148:170 Ja 9 '43

Subrogation ruled on by N.Y. court in interesting teacher's liability case. *Nat Underw* 47:32 Ag 12 '43

When is an assault covered? digest of recent cases. J. L. Roesch. *Spectator (Property ed)* 8:23-30 Je 24 '43

Agents

Comprehensive liability insurance and the producer. E. W. Sawyer. *Weekly Underw* 147:1198-1200 N 21 '42

Contractual liability policies

Court upholds hold harmless clause in road work contract. *Nat Underw* 47:30 N 4 '43

Farm policies

Farm employees' covered on nation-wide bases; employers' liability and owners', landlords' and tenants', etc. *East Underw* 44:24 Ag 20 '43; Same. *Nat Underw* 47:19+ Ag 19 '43; Same. *Weekly Underw* 149:360+ Ag 21 '43

See also Insurance, Employers' liability—Farm policies

Finance

Liability and compensation experience in 1942. *Nat Underw* 47:30 Ap 8 '43

Medical payments

Neel sets up program for medical payments. *East Underw* 44:41 Je 11 '43

Policies

Concentrated insurance coverage; new personal liability form. *Barron's* 23:9 Mr 1 '43

INSURANCE, Liability—Policies—Continued

- Defense plant corporation, comprehensive liability. Spectator (Property ed) 8:30-1 D 10 '42
- Gets results in pushing comprehensive policies. M. S. Allison. East Underw 44:29 Ag 20 '43
- New comprehensive policy; General Accident contract. East Underw 44:33 S 24 '43
- New standard provisions for personal liability. East Underw 44:28+ Ja 8 '43; Nat Underw 47:21+ Ja 7 '43; Spectator (Property ed) 8:31 Ja 21 '43; Weekly Underw 148:153+ Ja 9 '43
- Personal activities should be emphasized; comprehensive personal liability policy. Nat Underw 47:7 Ap 1 '43
- Personal liability; questions and answers. A. E. Redding. East Underw 44:36 My 14 '43; Same abr. Nat Underw 47:20 My 13 '43
- Predicts broader forms of comprehensive personal liability. W. F. Somerville. East Underw 44:29 Je 25 '43
- Quiz program on the new personal liability policy. Nat Underw 47:21 S 2 '43
- Revised comprehensive policy forms. E. W. Sawyer. Weekly Underw 148:201-3, 214 Ja 16 '43
- St Paul-Mercury Indemnity issues new policy. Weekly Underw 147:1484 D 26 '42; East Underw 44:26 Ja 1 '43
- Territorial application of comprehensive liability policies. E. W. Sawyer. Weekly Underw 148:866 Ap 17 '43
- Two acts, two sales; playlet giving explanation of comprehensive personal liability policy. R. O. Yocum. Ins Field (Fire ed) 72:20-3 F 11 '43

Distance limiting clauses

- Exclusion clauses limiting location; digest of recent cases. J. L. Roesch. Spectator (Property ed) 8:30-2 Ap 8 '43

Statistics

- Number of suits outstanding per \$100,000 of earned premiums of liability business, policy years 1940-1942; tabulation. Spectator (Property ed) 9:39 N 4 '43

INSURANCE, Life

- After the war. H. Krueger. Weekly Underw 148:1305-6+ Je 12 '43
- Broadening market for insurance production seen in post-war world. C. J. North and others. East Underw 44:50-1+ pt 2 O 1 '43
- Budget adviser gets data on life insurance outlays. E. Stapleton. Nat Underw (Life ed) 46:2 D 18 '42
- Cites problems of tomorrow. L. S. Lindsay. Nat Underw (Life ed) 47:3-4 My 28 '43
- Criticizes proposal for federal government supervising insurance; address at American Life convention. P. F. Jones. Comm & Fin Chr 158:1513 O 14 '43
- Emergence from innoass; times demand that we drive into the face of our problems. E. M. McConney. Il Spectator (Life ed) 149:30-4+ D '42; Abstracts. East Underw 43:3+ N 20 '42; Nat Underw (Life ed) 46:4 N 20 '42; Weekly Underw 147:1169+ N 21 '42
- Exception to Harry Hopkins' statement. H. K. Cassidy. Ins Field (Life ed) 71:6 D 11 '42
- Farm Bureau Life buys Eureka-Maryland Assurance. East Underw 44:5 Ag 20 '43
- Grist of the legislative mill; results of actions of 44 state legislative sessions. Ins Field (Life ed) 72:4+ O 15 '43
- Growth of administrative law and its effect on life insurance. R. B. Lucas. Nat Underw (Life ed) 47:4+ O 8 '43
- Insurance always to be in demand. J. H. Wood. East Underw 44:3-4 F 12 '43
- Let's not give them the old stuff; positive post war project for the life insurance industry. H. V. Wade. Ins Field (Life ed) 72:8-9 Je 18 '43; Same abr. East Underw 44:3+ Je 18 '43
- Life mortality rate takes on added significance. Ins Field (Life ed) 71:12 D 25 '42
- Making plans come true; true story of life insurance in action. J. Brown. Ins Field (Life ed) 72:14 O 29 '43
- New perspectives in management. H. A. Hopf. Spectator (Life ed) 151:4-6, 8-9, 22 S; 4-8+ O; 34-9+ N '43 (to be cont)

- Over-planned world of tomorrow; discussions of interest to life insurance agent. T. J. V. Cullen. Il Spectator (Life ed) 150:4-9+ Je '43
- Post-war pros and cons affecting life insurance. K. H. Mathus. Spectator (Life ed) 151:12-16 O '43
- Rapid fire recommendations; tips on current topics. I. Bendiner. Nat Underw (Life ed) 47:1+ J1 16 '43
- Reasons for life sales decline. H. Daniels. Nat Underw (Life ed) 47:21 Mr 26 '43
- Said by national leaders, civic leaders, clergy, service leaders; endorsement of life insurance. A. E. Smith and others. Pors Spectator (Life ed) (Special no) 149: 6-23 D '42
- Sales outlook for '43. W. J. Sieger. East Underw 43:12+ N 20 '42
- Sees life aid on home front greater in '43; reviews year. A. E. Patterson. East Underw 44:12 Ja 8 '43
- Situation surveyed before New York managers; abstracts. G. W. Smith. East Underw 44:3-4 My 28 '43; Nat Underw (Life ed) 47:1+ My 28 '43
- Treasury proposes paid up U.S. cover for tax refund. Nat Underw (Life ed) 47:10 O 8 '43
- Wall Street journal on safety of insurance. East Underw 44:10 J1 23 '43
- What about my life insurance today? H. S. Koster. Trusts & Estates 75:489-90 N '42
- What life companies can do now to prepare for post-war period; abstracts. A. A. Rydgren. Nat Underw (Life ed) 47:2+ O 1 '43; East Underw 44:1+ O 1 '43
- Why the life insurance policy is safe. C. F. J. Harrington and others. East Underw 44:13-16+ pt 2 O 1 '43

See also

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|---|----------------------------|
| Annuities | Insurance trusts |
| Benefit societies | Military service—Insurance |
| Business | Insurance aspects |
| Group | Mortality |
| Industrial | Savings banks—Insurance |
| Military | Insurance selling |
| and naval service | |
| also American institute of actuaries; | |
| American life convention; Association of life insurance presidents; National association of life underwriters | |

Actuaries

See Insurance actuaries

Adjustment of claims

- Applicant told agent of illness when policy was delivered, insurer liable. Nat Underw (Life ed) 47:5 Ap 9 '43
- Down to cases. L. A. Burke. Spectator (Life ed) 150:9 F '43 (cont monthly)
- Pittsburgh judge says policy exclusion is void when surgeon corrects unforeseen condition. East Underw 44:15 Ja 8 '43
- Policy ready in morning; applicant too busy to pick it up; dies that evening. Nat Underw (Life ed) 47:23 F 12 '43
- Simultaneous death of husband and wife. Nat Underw (Life ed) 47:11 Ag 27 '43
- Widow gets policy face undiminished by bank loan under North Carolina decision. Nat Underw (Life ed) 47:9 Ja 29 '43

See also

- Insurance, Life—
War death claims

Advertising

- Advertising agency official wonders whether primary function of life insurance advertising manager is yes man or guess man. Spectator (Life ed) 151:42-3 S '43
- Big institutional anti-inflation campaign opens. Nat Underw (Life ed) 47:1+ Ag 20 '43; Weekly Underw 149:345+ Ag 21 '43; Comm & Fin Chr 158:833 Ag 26 '43; Ptr Ink 204:45-6 Ag 20 '43
- Can you top this for results? R. Manville. Ptr Ink 203:68 Je 4 '43
- Connecticut Mutual has new sales tool; Three step advertising plan. East Underw 44:5 F 26 '43
- Connecticut Mutual 3 step plan successful. East Underw 44:4 Ag 20 '43
- Cooperative campaign; favorable response to anti-inflation ads of life companies. J. S. Sinclair. East Underw 44:10 O 22 '43

INSURANCE, Life—Advertising—Continued

Copy that clicked; Bowery savings bank insurance advertisement in newspapers. R. Manville. *Il Ptr Ink* 204:30+ S 17 '43

Exhibits by mail awards announced by Life Insurance advertisers assn. East Underw 44:9 Ja 16 '43; Nat Underw (Life ed) 47:3+ Ja 16 '43

Increasing use of direct mail. F. L. Fisher. East Underw 44:9-10 O 22 '43

It has to be sold; new and rising potential market. R. D. Parker. *Spectator* (Life ed) 150:34-6 Ja '43

L.A.A. awards result from many exhibits. *Ins Field* (Life ed) 72:8 O 29 '43

Life advertisers listen to editor of Harper's bazaar. C. Snow. Nat Underw (Life ed) 47:3 Mr 19 '43

Mutual Life initiates ad service for field. East Underw 44:7 Jl 30 '43

1943 advertising by individual life companies in magazines of national circulation. J. H. McCarroll. East Underw 44:41+ pt 2 O 1 '43

Panel on wartime advertising. East Underw 44:10 O 29 '43

Sweepstakes winners; L.A.A. exhibits displayed. East Underw 44:12 Mr 19 '43

See also Life insurance advertisers association

Advisers

See Insurance advisers

Agency management

Better day when veterans return, managers' goal; General agents and managers section meeting. Nat Underw (Life ed) Daily ed 47:3+ S 16 '43

Big agency's man-power analysis. C. W. Wyatt. East Underw 44:4+ F 19 '43

Building of new agencies and recruiting are chief problems confronting agency men; A.L.C. Agency Section. *Ins Field* (Life ed) 72:8-11+ O 8 '43

General agents conference is held in Chicago. Nat Underw (Life ed) 47:1+ Ap 23 '43

Guarantee Mutual plan of bonus compensations. A. B. Olson. East Underw 44:11 Ap 30 '43

How to make profit. E. E. Besser, jr. Nat Underw (Life ed) 47:19 Ap 16 '43

Meet your new market; abstracts. B. N. Woodson. East Underw 43:3+ N 27 '42; Nat Underw (Life ed) 46:11 N 20 '42

Modern life insurance agencies; D.C. branch office of the Acacia mutual life, Washington. W. A. Hamlin. *Il Spectator* (Life ed) 149:18-24 D '42

Modern life insurance agencies. Ernest H. Perkins agency, Albany, of the Provident Mutual Life. W. A. Hamlin. *Spectator* (Life ed) 150:18-24+ Ap '43

Modern life insurance agencies; 55 John St. agency. Travelers in New York city. W. A. Hamlin. *pers Spectator* (Life ed) 150:16-21 Mr '43

Modern life insurance agencies; Fraser agency, Connecticut Mutual Life, in New York city. F. Ellington. *Spectator* (Life ed) 150:38-42 My '43

Modern life insurance agencies; Heale agency of Mutual life of Canada, Toronto. *pers Spectator* (Life ed) 151:30-4 Ag '43

Modern life insurance agencies; history and operational analysis of George E. Lackey agency of the Massachusetts Mutual Life in Detroit. *Il Spectator* (Life ed) 150:10-17+ Je '43

Modern life insurance agencies; history and operational analysis of the Home office agency of the Phoenix mutual life insurance company of Hartford. E. P. Monley. *Spectator* (Life ed) 151:13-18 Jl '43

Modern life insurance agencies; Scranton agency, Mutual life of New York; operational survey. W. A. Hamlin. *Spectator* (Life ed) 150:18-23 F '43

Modern life insurance agencies; Wm. J. Dunsmore agency of Equitable life assurance society in New York. F. Ellington. *Il Spectator* (Life ed) 151:18-23+ O '43

Modern life insurance agencies; Youngman agency, Mutual Benefit Life, New York city; operational survey. W. A. Hamlin. *Il Spectator* (Life ed) 150:38-44 Ja '43

New field methods shown. E. M. Schwemm. Nat Underw (Life ed) 47:3+ Mr 5 '43

N.Y. managers hear analysis of survey on various aspects of agency operations. A. Thorp, jr. Nat Underw (Life ed) 46:3+ D 11 '42

Pattern followed in his agency. H. S. Bell. Nat Underw (Life ed) Daily ed 47:21 S 16 '43

Personal service by cashiers; telephone calls and correspondence. F. M. Exline. *Ins Field* (Life ed) 72:14 Ap 9 '43

Sales setup must be revamped. J. A. McLain. Nat Underw (Life ed) 47:15 My 14 '43

Tells challenge to leadership; abstracts. J. A. Stevenson. *Ins Field* (Pittsburgh Conv Daily ed) 72:1+ S 16 '43; East Underw 44:6+ S 17 '43; Nat Underw (Life ed) Daily ed 47:8+ S 16 '43

Union Mutual Life adopts regional agency supervision for duration. East Underw 43:11 D 4 '42

Wartime responsibilities of managers. D. G. Hunter. Nat Underw (Life ed) 46:9 D 4 '42

Agency managers

Better selected and trained managers needed. W. K. Niemann. Nat Underw (Life ed) Daily ed 47:20-1 S 16 '43

How Acacia Mutual Life aids field force in war time; abstracts. S. E. Mooers. East Underw 43:16 N 20 '42; Nat Underw (Life ed) 46:9 N 20 '42

Need to appraise managerial ability. V. B. Coffin. East Underw 43:15 N 20 '42

Today's basic needs of managers. J. M. Holcombe, jr. *Weekly Underw* 147:1208-9+ N 21 '42; Abstract. Nat Underw (Life ed) 46:1+ N 20 '42

Agency system

New agency methods must be drafted. H. A. Hedges. *Ins Field* (Life ed) 72:3+ O 15 '43; Same abr. Nat Underw (Life ed) Conv no 47:3+ O 7 '43

State supervision policyholders' guarantee; privately controlled life insurance. J. M. McCormack. *Weekly Underw* 148:35-6+ sec 2 My 8 '43

Agents

Advice to agents in 1857 still has familiar ring. *Il Nat Underw* (Life ed) 47:9 F 5 '43

App-a-week habit insures steady production. H. R. Coursen. Nat Underw (Life ed) 47:19 Jl 30 '43

Better agents best way to improve persistency. P. H. Dunnavan. Nat Underw (Life ed) Daily ed 47:39-40 S 15 '43

Building a permanent clientele. C. T. Farrow, jr. *Weekly Underw* 143:166-7 Ja 9 '43

Closing the sale. K. F. Comstock. *Weekly Underw* 148:621-2 Mr 13 '43

Equitable Society suggests sales ideas based on new Revenue act of 1942. East Underw 43:30+ D 11 '42

Federal social security; agents find it an aid in increasing existing life insurance ownership. R. B. Thompson. East Underw 44:20+ pt 2 O 1 '43

Find fire agents profitable contacts for life business. Nat Underw (Life ed) 46:12B N 13 '42

Find high grade men mean quality business. J. G. Stephenson. East Underw 43:14 N 20 '42

Freedom that spell failure. R. C. Laub. East Underw 44:13 Je 25 '43

Gives heartening message to Ohio group. I. S. Kibrick. Nat Underw (Life ed) 46:1 N 27 '42

Gold book of life insurance selling. East Underw 44:11-128 pt 2 O 1 '43

How do they get that way? factors contributing to the success of outstanding life insurance salesmen; survey. L. S. Fischer. *Spectator* (Life ed) 151:32-6 Jl; 24-6 Ag; 46-8 S '43

How I expect to get business in 1943. J. H. Brady. *Weekly Underw* 143:456-8 F 20 '43

How I expect to get business in 1943. D. W. Fluegelman. *Weekly Underw* 143:403-4, 456 F 13-20 '43

How I will work in 1943. J. F. Love. *Ins Field* (Life ed) 72:16+ Ja 15 '43

How life underwriters are reacting to the war and its effect on their business. J. E. Spence. *Weekly Underw* 148:47-8 sec 2 My 8 '43

INSURANCE, Life—Agents—Continued

How many interviews do you have? H. T. Wright. *Ins Field (Life ed)* 72:16 Je 18 '43
 I stopped selling life insurance; sale to meet definite needs. M. von Babo. *Spectator (Life ed)* 150:10-12+ Ap '43
 Is life insurance work essential? W. R. Jenkins. *Weekly Underw* 148:716 Mr 27 '43
 Julius Selling agency makes unusual sales record: Nat Underw (Life ed) 47:8 Ja 15 '43; East Underw 44:10 Ja 1 '43
 Labor migration; brand new market for life insurance. T. J. V. Cullen. *Il Spectator (Life ed)* 149:9-13 D '42
 Life insurance agent and how he gets his impetus. K. H. Mathus. *Spectator (Life ed)* 151:20-1+ S '43
 Life insurance is guarantee of happiness; effective war-time selling. E. L. Relley. *Ins Field (Pittsburgh Conv Daily ed)* 72:5+ S 17 '43; Same abr. *Nat Underw (Life ed)* Daily ed 47:17+ S 16 '43
 Life insurance sales philosophy. E. M. Schwemm. *East Underw* 44:3-+ S 3 '43
 Life underwriter a teacher. J. S. Stein. *Ins Field (Life ed)* 72:18 S 3 '43
 Life underwriter is absolutely necessary to the Nation today. T. B. Reed. *Ins Field (Life ed)* 72:12-13 Jl 16 '43
 Maintaining field efficiency. H. W. Baird; A. W. Christopher, Jr.; L. J. Seymour. *Weekly Underw* 147:1400-2 D 12 '42
 Manpower situation; analysis of part insurance men play. P. B. Hobbs. *East Underw* 44:10 Ap 2 '43; Abstract. *Nat Underw (Life ed)* 47:1+ Ap 2 '43
 Manpower situation in Canadian insurance. C. C. Martin. *East Underw* 44:8 Je 4 '43
 Marketing life insurance. J. H. Reese. *Ins Field (Life ed)* 71:14+ N 27 '42
 Merchandising methods. L. H. Behr. *Nat Underw (Life ed)* 47:9 Ag 20 '43
 Million dollar round table sessions. *Nat Underw (Life ed)* Daily ed 47:11+ S 15 '43
 Mind of the salesman. L. G. Simon. *Ins Field (Life ed)* 72:16-17 Ap 23 '43
 National seriousness creates grand sales opportunity. S. T. Whatley. *Nat Underw (Life ed)* 47:3+ My 7 '43
 Need clarification of agent's status; abstracts. J. E. Rutherford. *Nat Underw (Life ed)* 46:2+ N 20 '42; East Underw 43:1+ N 20 '42
 New manpower program may give lift to insurance. *Nat Underw (Life ed)* 46:1+ D 11 '42
 1943 million dollar round table rules. *Nat Underw (Life ed)* 47:2 Mr 19 '43
 Observations on insurance and living in the East. A. R. Jaqua. *Nat Underw (Life ed)* 47:4 Ap 9; 25 Ap 23 '43
 Opportunities for new men in life insurance. H. F. Gray. *Nat Underw (Life ed)* 47:2+ Je 4 '43
 Organizing for personal efficiency. V. M. Sieving. *Spectator (Life ed)* 150:12 Mr '43
 Outlines selling technique. J. M. Fraser. *East Underw* 44:12 O 22 '43
 Plan today for tomorrow. H. S. Parsons. *Ins Field (Life ed)* 72:16 S 3 '43
 Plans for making life insurance selling easier. A. R. Jaqua. *Nat Underw (Life ed)* 47:19 My 14 '43
 Plans used by Louisville agent in dislocated days. C. B. Hall. *Nat Underw (Life ed)* 47:19 Ja 1 '43
 Post-war holds much for life men. I. Bendiner. *Ins Field (Pittsburgh Conv Daily ed)* 72:4+ S 17 '43; Same abr. *Nat Underw (Life ed)* Daily ed 47:4+ S 16 '43
 Professional technique analyzed; abstracts. L. D. Stark. *Nat Underw (Life ed)* Daily ed 47:14+ S 16 '43; *Ins Field (Pittsburgh Conv Daily ed)* 72:14-17 S 17 '43
 Psychology of sale explained. E. L. Relley. *Nat Underw (Life ed)* 47:27 Ap 23 '43
 Reasons why agents fail to sell. H. F. Silver. *Weekly Underw* 149:97-8 Jl 10 '43
 Rumors on agent draft status stir some uneasiness. *Nat Underw* 47:3+ F 11 '43; Same. *Nat Underw (Life ed)* 47:1 F 12 '43
 Sale of century-old product. J. E. Rutherford. *East Underw* 44:4 F 26 '43
 Selling to war workers in Quincy, Mass. *Nat Underw (Life ed)* 47:31 O 8 '43
 Selling under social security. *East Underw* 44:3+ Jl 2 '43

Serve today's needs in today's markets. E. A. Krueger. *Weekly Underw* 148:65-6, 86-7 sec 2 My 8 '43
 Stay on the main track; advises fieldmen to keep selling protection. F. W. Chapman. *Ins Field (Life ed)* 71:16 D 18 '42
 Stop selling; get production from your prospects. G. Bogue. *Ins Field (Life ed)* 72:16-17 Ja 22 '43
 Successful agents show how to meet objections. *Nat Underw (Life ed)* 47:6-7 Mr 5 '43
 Successful technique for reaching the war worker. J. E. Henderson. *Nat Underw (Life ed)* 47:19 Ja 1 '43
 Survey shows salesmen are insurance buyers. *East Underw* 44:11 Jl 2 '43
 Talks to life associations on responsibilities in wartime. J. R. Hull. *East Underw* 44:18 F 12 '43
 Telephone plan successful. R. E. Richman. *Nat Underw (Life ed)* 47:9-10 S 3 '43
 Tells round tablers of NALU duty. G. Taggart. *Ins Field (Pittsburgh Conv Daily ed)* 72:18+ S 15 '43
 \$10,000 prospect made a \$1,000,000 reality, because of an idea. K. F. Comstock. *Weekly Underw* 149:333-4 Ag 14 '43
 Tips on home canvassing. *Nat Underw (Life ed)* 47:23 S 10 '43
 Two attitudes pointed out. W. M. Rothaermel. *Nat Underw (Life ed)* 47:19 Jl 2 '43
 Urges emphasis on production. T. H. Spindle. *Ins Field (Life ed)* 71:5+ D 25 '42
 War changes, distractions renew emphasis on organized effort; abstracts. H. S. Parsons. *Nat Underw (Life ed)* Daily ed 47:5+ S 15 '43; *Ins Field (Pittsburgh Conv Daily ed)* 72:8+ S 15 '43
 What do you mean professional? B. A. Hedges. *Ins Field (Life ed)* 72:14-15+ N 5 '43
 What gets results today; Sea of life presentation. R. H. Ruch. *Ins Field (Life ed)* 71:18-20 D 11 '42

See also

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 Prospects
 also National association of life underwriters

Approach

Give telephone call demonstrations. W. N. Hiller and H. G. Walter. *Nat Underw (Life ed)* 47:19 Mr 12 '43

Associations

See also American society of chartered life underwriters

Automobile problem

Gasoline rationing and the agent. O. J. Arnold. *Ins Field (Life ed)* 71:22-4 N 6 '42; Same. *East Underw* 43:26-4 D 11 '42
 How agents can meet wartime travel curb. R. R. Roberts. *East Underw* 44:13 Mr 19 '43
 Provident agents tell of car use. *East Underw* 44:14 My 14 '43
 Solving the gas ration problem. G. W. Payne. *Ins Field (Life ed)* 72:18 F 5 '43
 Suggestions made as to rationing of gasoline. R. C. Johnson. *Nat Underw (Life ed)* 46:19 D 18 '42
 Trying to prospect on "B" gas card basis. *Weekly Underw* 147:1335 D 5 '42

Biography

Million dollar writer's career. F. J. Rubenstein. *East Underw* 44:11 Mr 5; 10 Mr 12 '43
 New York life leader, writing mostly doctors, sells 317 policies in 2 years; Brown C. Woodbury. A. V. Bowyer. *East Underw* 44:94 pt 2 O 1 '43

Commissions

Advances to agents held exempt from regulation pertaining to consumer credit. *Nat Underw (Life ed)* 46:3+ N 20 '42
 Advances to life insurance agents and regulation on consumer credit. *Fed Res Bul* 29:595-6 Jl '43
 Agency expense limits under N.Y.'s section 213. W. J. Cameron. *East Underw* 44:6+ Ap 9 '43; Abstract. *Nat Underw (Life ed)* 47:1+ Ap 9 '43

INSURANCE, Life—Agents—Commissions—*Continued*

Arnold system program is being expanded. Nat Underw (Life ed) 47:11 F 5 '43; Ins Field (Life ed) 72:7 Ja 29 '43

Capitol Life new compensation plan; managers contract also modernized. Nat Underw (Life ed) 47:2+ Ap 23 '43

Compensation and the pattern of the future. H. D. Josephson. Spectator (Life ed) 151: 4-7+ Ag '43

Compensation group drafts report for agency officers. Nat Underw (Life ed) 47:7 S 24 '43

Compensation group plans. H. Wright. Nat Underw (Life ed) 47:6 Je 25 '43

Compensation plan meets approbation with most agents. Nat Underw (Life ed) 47: 3+ S 10 '43

Conference on agents' compensation agrees on its objectives. East Underw 44:1+ JI 9 '43; Nat Underw (Life ed) 47:2+ JI 9 '43

Dewey signs expense amendment bill 213; vetoes Guertin bill. East Underw 44:1+ Ap 30 '43

Equitable, N.Y., service agents' commissions. East Underw 44:13 My 14 '43

50 year review of contracts and pay. K. A. Luther. East Underw 44:7+ Ap 9 '43

Guarantee Mutual plan of bonus compensations. A. B. Olson. East Underw 44:11 Ap 30 '43

Mantz loses suit for damages under direct mail plan. Nat Underw (Life ed) 47:6 Ja 15 '43

Modern developments in agents' compensation methods. C. F. B. Richardson. East Underw 44:71+ pt 2 O 1 '43

More details of Mutual's compensation plan. Nat Underw (Life ed) 47:11-12 N 5 '43

Mutual Life adopts new lifetime plan of compensation for field underwriters; abstracts. J. R. Hull. Weekly Underw 149: 724+ O 2 '43; Nat Underw (Life ed) 47: 4+ O 1 '43; East Underw 44:4 O 1 '43; Spectator (Life ed) 151:53 O 1 '43

New commission setup big improvement. H. T. Wright. Nat Underw (Life ed) Daily ed 47:24-5 S 15 '43; Same abr. East Underw 44:14+ S 17 '43

N.Y. managers present suggestions for new compensation system. C. Axman. East Underw 44:1+, 3+ Ap 9 '43

N.Y. managers seek drastic shift in agents' pay basis. R. B. Mitchell. Nat Underw (Life ed) 47:1+ Ap 9 '43

Oregon Mutual Life adopts unique commission and retirement schedules. Ins Field (Life ed) 72:8-9 Ap 30 '43; East Underw 44:12 Ap 30 '43; Nat Underw (Life ed) 47:5 Ap 30 '43

Prudential sets up service commission plan. Nat Underw (Life ed) 47:1 Ja 15 '43

Revise life agents' pay basis. Weekly Underw 148:789+ Ap 10 '43

Stabilize income for life agents. T. J. Cullen. Weekly Underw 148:729+ Ap 3 '43

Company relations

Action, not discussion, key to lasting morale. A. E. Patterson. Nat Underw (Life ed) 47:2+ O 22 '43

All-company agency plan. L. G. Simon. Spectator (Life ed) 151:4-7 JI '43

All company plan; discussion. Ins Field (Life ed) 72:13-14 Je 11 '43

Companies pool ideas to aid field forces; abstracts. A. E. Patterson. East Underw 44:3+ Je 18 '43; Nat Underw (Life ed) 47: 7 Je 18 '43

Continues debate with Simon. R. R. Roberts. Ins Field (Life ed) 72:3+ JI 2 '43

Hits proposal to sever agent-company bond. J. E. Rutherford. Nat Underw (Life ed) 47:1+ My 14 '43; Same. East Underw 44: 1+ My 14 '43; Same. Weekly Underw 148: 1033+ My 15 '43

Lack of control over men checks insurance sales. J. F. Wohlgermuth. Nat Underw (Life ed) 46:12C N 13 '42

Loyalty to company essential in betterment program; all-company license plan. J. E. Rutherford. Nat Underw (Life ed) 47:2+ Ap 30 '43

Maintaining good field relationships; abstracts. R. C. McCankie. East Underw 44: 13 O 22 '43; Nat Underw (Life ed) 47:3+ O 22 '43

Merit of all company license idea should be debated. L. G. Simon. East Underw 44:1+ My 21 '43; Same. Ins Field (Life ed) 72: 3-4+ My 21 '43; Same. Weekly Underw 148: 1102+ My 22 '43; Abstract. Nat Underw (Life ed) 47:4 My 21 '43

Metropolitan acts to aid agents' morale. C. J. North. Weekly Underw 147:1342 D 5 '42

Refreshers courses for agents in services. Penn Mutual plan. East Underw 44:1+ N 5 '43; Ins Field (Life ed) 72:6-7 N 5 '43; Nat Underw (Life ed) 47:3 N 5 '43; Weekly Underw 149:1026 N 6 '43

Replies to Roberts' objections. L. G. Simon. Ins Field (Life ed) 72:3, 12-13 Je 11 '43

Report of joint field cooperation committee. il East Underw 44:3+ S 10 '43; Nat Underw (Life ed) 47:9-10 S 10 '43; Weekly Underw 149:493+ S 11 '43

Simonism vs. the agency system. L. C. Mersfelder. Ins Field (Life ed) 72:6 JI 16 '43; Reply. L. G. Simon. Ins Field (Life ed) 72:4 JI 23 '43; Same abr. Nat Underw (Life ed) 47:8 JI 30 '43; Rejoinder. Ins Field (Life ed) 72:5 Ag 6 '43; Reply. 72:6-7 Ag 13 '43

Underwriter's independent status. R. R. Roberts. Ins Field (Life ed) 72:6+ My 28 '43

Urges underwriters insist on independent status in rousing Boston sales congress speech. L. G. Simon. Ins Field (Life ed) 72:3-4 Ap 23 '43

Letters to prospects

Increasing use of direct mail. F. L. Fisher. East Underw 44:9-10 O 22 '43

Making mailings make money. N. A. White; R. B. Thompson. Weekly Underw 147:1151-5 N 14 '42

Sales letters produce prospects in war period. R. B. Thompson. Weekly Underw 148:662 Mr 20 '43

Pensions

Announce agents' retirement plans; Aetna Life; Connecticut General. East Underw 44: 3+ Ap 2 '43; Nat Underw (Life ed) 47:4, 6 Ap 2 '43

Another pension plan adopted; Continental Assurance announces details. Nat Underw (Life ed) 47:4 Ja 22 '43

National life Vermont, announces pension plan for its agents. East Underw 44:1+ JI 30 '43; Nat Underw (Life ed) 47:6 JI 30 '43

New pension service fee plan of Indianapolis Life. Nat Underw (Life ed) 47:1 JI 2 '43

Public relations

It's time to advertise men; companies should sell underwriter to the public; abstracts. J. E. Rutherford. Ins Field (Life ed) 72:6-7+ Mr 26 '43; Nat Underw (Life ed) 47:1+ Mr 26 '43

Salaries

Expect passage of N.Y. bill to permit paying salaries. Nat Underw (Life ed) 47:1 Mr 19 '43

Sun Life's incentive financing plan for agents; abstracts. W. S. Penny. East Underw 43:11 N 20 '42; Ins Field (Life ed) 71: 16-17+ N 20 '42; Nat Underw (Life ed) 46: 7-8 N 20 '42

Sales conventions

Aetna's conference stresses complete sales talk mastery. Nat Underw (Life ed) 47:3+ JI 16 '43; East Underw 44:3+ JI 16 '43

Boston Life men hold victory sales congress. East Underw 44:6+ Ap 30 '43

Chicago sales congress calls forth much talent. Nat Underw (Life ed) 47:2+ Ap 23 '43

Gov. Baldwin addresses Connecticut sales congress. East Underw 44:3 My 7 '43

How to sell life insurance these days; New York City underwriters sales clinic. J. M. Holcombe, Jr.; B. N. Woodson; W. Phelps. East Underw 43:6+ N 13 '42; Nat Underw (Life ed) 46:5-6 N 13 '42

Mental attitudes, motivation, spirit of times stressed at Chicago association sales congress. Nat Underw (Life ed) 46:19 N 27 '42

New York Life underwriters' sales congress. East Underw 44:14-15+ Mr 19 '43; Nat Underw (Life ed) 47:19 Mr 19; 23 Mr 26 '43; Weekly Underw 148:660-1 Mr 20 '43

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Sales congress for women goes over well. East Underw 43:12 N 20 '42
 Wartime sales problems viewed in San Francisco. Nat Underw (Life ed) 47:27 Ap 23 '43

Sales conventions by mail

Penn Mutual Life's seminar on paper. East Underw 44:8+ Je 25 '43

Selection

Caution urged in hiring essential workers as agents. Nat Underw (Life ed) 47:8 S 10 '43
 How to get men; recruiting methods in rural territory. R. E. Habermann. Ins Field (Pittsburgh Conv Daily ed) 72:18+ S 16 '43; Abstract. Nat Underw (Life ed) Daily ed 47:22+ S 16 '43
 How Union Central prepares for five-year duration. W. F. Hanselman. East Underw 43:3+ N 27 '42
 Metropolitan Life solves wartime recruiting problem. Nat Underw (Life ed) 47:10 Ap 23 '43
 Recruiting activity is regarded as a must today. Nat Underw (Life ed) 47:8 Jl 23 '43
 Recruiting ideas published; Manpower, bulletin of Massachusetts Mutual. Nat Underw (Life ed) 47:15 F 26 '43
 Recruiting plans. K. W. Conrey. Nat Underw (Life ed) 47:17 F 5 '43
 Recruiting problem is but temporary condition; Field survey uncovers manpower problems and solutions. D. Porter. Ins Field (Life ed) 71:8+ D 11 '42
 Wartime recruiting; abstracts. W. Boileau, Jr.; L. W. S. Chapman. East Underw 43: 6+ N 20 '42; Nat Underw (Life ed) 46:1+ N 20 '42
 Wartime responsibilities of managers. D. G. Hunter. Nat Underw (Life ed) 46:9 D 4 '42
 Where will manpower come from? experience of the California-Western States Life in recruiting women. O. J. Lacy. Ins Field (Life ed) 71:18+ N 20 '42

Service

Agent's high conception of life insurance and its service. S. L. Wolkenberg. Nat Underw (Life ed) 46:23 N 13 '42
 How I expect to get business in 1943. S. L. Wolkenberg. Weekly Underw 148:402-3 F 13 '43
 Life agent helps America plan for future. G. Taggart. Weekly Underw 148:106+ Ja 2 '43
 Life field man indispensable in war. H. J. Johnson. East Underw 44:10 Mr 5 '43; Same. Ins Field (Life ed) 72:3-4+ Mr 5 '43; Same. Weekly Underw 148:521+ Mr 6 '43
 Life sales and war service. I. Bendiner. East Underw 44:10 F 12 '43
 Life underwriters proving essential to the country's war strategy. G. Taggart. il Weekly Underw 148:40-2+ sec 2 My 8 '43
 N.A.L.U. is making soldiers' service bureau nationwide. Nat Underw (Life ed) 47:1+ Ap 23 '43
 New service for the Nation; sell millions of dollars worth of national life insurance without pay. Ins Field (Life ed) 72:8-9 F 26 '43; Nat Underw (Life ed) 47:1+ F 26 '43
 Pay dirt through programming. W. C. Smerling. Weekly Underw 148:1018-20 My 8 '43
 Pension trust writing being corrected; talk on servicing of life insurance. M. A. Linton. Weekly Underw 149:749-50+ O 9 '43; Same. Nat Underw (Life ed) Conv no 47:3. 9-13 O 7 '43
 Service activities of average agent. C. L. McMillen. East Underw 44:3+ Je 4 '43
 Service bureau plans for armed forces. S. Wertimer. East Underw 44:11 Ap 2 '43
 Shifting service work to specialists is considered. Nat Underw (Life ed) 47:2 Ag 13 '43
 Simplified programming; high income brackets. W. H. Fissell. Spectator (Life ed) 151: 37-9, 46 Jl '43
 Simplified programming; medium income class group. W. H. Fissell. Spectator (Life ed) 150:18-21+ Je '43

Views on agents' service and proper compensation. W. M. Anderson. Nat Underw (Life ed) Conv no 47:6+ O 7 '43
 War bond work held major contribution. H. Andrews, Jr. Ins Field (Pittsburgh Conv Daily ed) 72:5 S 15 '43
 What agents must do when they service. C. L. McMillen. East Underw 44:7+ Ap 9 '43

Service fees

New pension service fee plan of Indianapolis Life. Nat Underw (Life ed) 47:1 Jl 2 '43

Training

Formula for training women agents. O. J. Lacy. Weekly Underw 148:57-8+ sec 2 My 8 '43
 Kansas City Life course shows interview control. W. J. Whitehead. Nat Underw (Life ed) 47:19 J 22 '43
 Lack of control over men checks insurance sales. J. F. Wohlgenuth. Nat Underw (Life ed) 46:12C N 13 '42
 Refresher courses for agents in services. Penn Mutual plan. East Underw 44:1+ N 5 '43; Ins Field (Life ed) 72:6-7 N 5 '43; Weekly Underw 149:1026 N 6 '43

Women agents

Chinese woman is making outstanding career for herself and family in life insurance; Julia M. Wong. por Weekly Underw 149: 371 Ag 21 '43
 Explodes some old fallacies; business which women are writing; abstracts. E. Jones. Ins Field (Pittsburgh Conv Daily ed) 72: 1+ S 16 '43; East Underw 44:12 S 17 '43; Nat Underw (Life ed) Daily ed 47:25 S 16 '43; Weekly Underw 149:611, 615 S 18 '43
 Formula for training women agents. O. J. Lacy. Weekly Underw 148:57-8+ sec 2 My 8 '43
 League of insurance women hears of opportunities in their field. V. B. Coffin. East Underw 44:1+ Mr 5 '43
 Life insurance as field for women. Coast forum topic. Nat Underw (Life ed) 47:19 Mr 12 '43
 Life insurance belongs to women. L. Skelton. Ins Field (Life ed) 71:16+ D 4 '42
 Men receive tips as to women life agents. East Underw 44:8 Ap 2 '43; Weekly Underw 148:759 Ap 3 '43
 Metropolitan's sole pre-war debit woman tells of career. L. Lilburn. Nat Underw (Life ed) 47:9 Jl 23 '43
 Rare opportunities for women as agents; leading women underwriters tell why. C. V. Loomis and others. Weekly Underw 148: 59-61 sec 2 My 8 '43
 Sales congress for women goes over well. East Underw 43:12 N 20 '42; Spectator (Life ed) 149:38-40 D '42
 Success came to Beatrice Jones in life insurance. Weekly Underw 148:158 Ja 9 '43
 Survey shows more women underwriters; abstracts. E. M. Matthews. Ins Field (Pittsburgh Conv Daily ed) 72:7-8 S 16 '43; Weekly Underw 149:604 S 18 '43
 Where will manpower come from? experience of the California-Western States Life in recruiting women. O. J. Lacy. Ins Field (Life ed) 71:18+ N 20 '42; Abstracts. Nat Underw (Life ed) 46:10 N 20 '42; Weekly Underw 147:1213 N 21 '42
 Woman's role in life insurance. M. Jacobson. il Spectator (Life ed) 151:10-15+ S '43
 Women agents discuss insurance as career. East Underw 44:8 Ja 8 '43
 Women as life insurance agents have greatest opportunity ever. C. V. Loomis. Weekly Underw 148:251 Ja 23 '43
 Women in life insurance work. E. Jones. Nat Underw (Life ed) Conv no 47:5+ O 7 '43; Same. Weekly Underw 149:778 O 9 '43
 Women tell where to look for business today; panel discussion. East Underw 44:13+ S 17 '43; Ins Field (Pittsburgh Conv Daily ed) 72:14-16 S 16 '43; Nat Underw (Life ed) Daily ed 47:5+ S 16 '43; Weekly Underw 149:588-9+ S 18 '43
 Women's quarter million dollar round table; rules for qualification. East Underw 44:13 Je 11 '43

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Equitable's Agency items 35 years old. East Underw 43:24 D 11 '42

Annuities

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Applications

Applications declined and accepted by companies in 1942; tabulation. Weekly Underw 148:70 sec 2 My 8 '43

Aviation risks

Court rules definition of aeronautic expedition has not changed since 1923. East Underw 44:4 Ja 22 '43

Drowns after plane falls; recovery is denied. Nat Underw (Life ed) 46:20 D 18 '42

New Minnesota war and aviation clause issued by the Prudential. East Underw 44:21 S 17 '43

Recent aeronautics clause decisions. J. Simpson. East Underw 44:9+ Ap 23 '43

See also

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Travel risks

Banking operations

Bank plan; suggests life companies accept deposits in event limitation is changed. R. R. Lounsbury. Weekly Underw 149:689+ O 2 '43

Trade views on savings bank issue. R. R. Lounsbury and C. B. Plantz. Nat Underw (Life ed) 47:10 O 22 '43

Biography

Hall of fame in life insurance; Connecticut candidates. R. W. Sheehan. Spectator (Life ed) 150:44-5 My '43

We have with us today; interesting personalities in the life insurance business. pors East Underw 43:6-7+ D 11 '42

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Insurance, Life—
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Business beneficiaries

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Children's policies

Equitable Life Society announces new plans for writing juvenile insurance. Weekly Underw 149:548 S 11 '43

Penn Mutual's juvenile plans in New York and New Jersey. Nat Underw (Life ed) 47:22 Ji 16 '43

Raises juvenile limit; Prudential issues up to \$5,000 on one life. East Underw 44:19 O 8 '43

Single premium juvenile policies age 0-14; Union Central. Nat Underw (Life ed) 47:16 Ji 2 '43

Contingency funds

Importance of contingency funds is emphasized. F. M. Hope. Nat Underw (Life ed) 47:5 Je 4 '43

Cost

One year term insurance cost; short term premium angle of Treasury department's recent pension trust regulations. P. H. Evans East Underw 44:7 Ag 13 '43

Seek formula to fix insurance cost in pensions. Nat Underw (Life ed) 47:3 Ag 20 '43

Disability provisions

Disability benefits denied; judgment against insurance carrier reversed. East Underw 44:12 S 3 '43

Disability loss in 15 years was \$879 million; New York figures, 1927-1941. Nat Underw (Life ed) 47:4 Mr 12 '43

Disability turns to profit side, reports show; results in 1942. Nat Underw (Life ed) 47:1-2 Mr 5 '43

Down to cases; total and permanent disability. L. A. Burke. Spectator (Life ed) 150:9 F '43

Insanity as excuse for failure to give notice of disability required as condition precedent to liability under policy. Weekly Underw 148:511, 719 F 27, Mr 27 '43

New disability and additional indemnity riders of Equitable. Nat Underw (Life ed) 47:18 My 28 '43

Predicts liberality in restoration of disability benefits. W. O. Menge. Nat Underw (Life ed) 47:8+ O 22 '43

Receipt of legal fees for services during period claimed total incapacity bars recovery of disability benefits. Weekly Underw 147:1270 N 28 '42

Double indemnity provisions

Accidental death; digest of recent cases. J. L. Roesch. Spectator (Property ed) 8:30-1 D 24 '42

Double indemnity for navy man killed at Pearl Harbor. Nat Underw (Life ed) 47:1 A 27 '43

Exception to payment of double indemnity where death due to war does not require participation by United States. Weekly Underw 147:1459 D 19 '42

Fall from blows struck in an affray with prize fighter held not accident within meaning of policy. Weekly Underw 148:354 F 6 '43

Judgment for New York Life; sailor in convoy. East Underw 43:9 N 13 '42

Results in 1942 on disability, double indemnity, annuities; tabulation. Nat Underw (Life ed) 47:2 Mr 5 '43

Says double indemnity should be paid in Boston. L. W. Dawson. Nat Underw (Life ed) 47:1+ Ja 8 '43

Economic aspects

Americans should know this; life insurance policyholders' money goes into U.S. war chest. H. J. Johnson. Weekly Underw 148:21-4 sec 2 My 8 '43

Capture dangerous dollars. T. R. Gamble. Nat Underw (Life ed) Daily ed 47:10+ S 15 '43

Companies mailing to policyholders Elmer Davis letter. East Underw 44:1+ Ja 15 '43

Cooperation in financial protection; contribution of life insurance to economy stability. H. J. Johnson. Trusts & Estates 76:495-6 Je '43

Each worker must carry more than his share of load. G. S. Nollen. Nat Underw (Life ed) 46:12B N 13 '42

Importance of life insurance to the Nation. R. H. Kastner. Weekly Underw 148:32-4+ sec 2 My 8 '43

Influence of life insurance in curbing inflation. H. H. Jackson. il Weekly Underw 148:28-30 sec 2 My 8 '43

Insurance year from the Capitol. B. C. Clarke. Ins Field (Life ed) 72:8+ Ja 8 '43

Life insurance holding the line. W. C. Schuppel. Weekly Underw 148:1011+ My 8 '43

Life insurance playing double role. R. H. Kastner. East Underw 44:11 Mr 15 '43

Life insurance to play essential post-war role. S. H. Slichter. Nat Underw (Life ed) 47:3+ Ap 23 '43

Life insurance's aid to war effort. W. M. Rothaermel. Nat Underw (Life ed) 47:19 S 17 '43

OWI program includes strong appeal to insure. Nat Underw (Life ed) 47:1 Je 25 '43

Place of life insurance in the war economy. V. P. Whitsitt. il Weekly Underw 148:43+ sec 2 My 8 '43

Well-known laymen praise life insurance buying as a curb on inflation. H. Bruere and others. East Underw 44:24, 26, 28, 47 pt 2 O 1 '43

Employees' insurance

Annuity forms not usable for 5% wage purposes. F. J. Budinger. Nat Underw (Life ed) 47:6 Ji 9 '43

Brisk trade in policies in lieu of salary increases. Nat Underw (Life ed) 46:1+ D 25 '42

Clarifies tax situation for agents. A. S. Potwin. Nat Underw (Life ed) 47:6-6 S 24 '43

Current trends in employees' plans. M. M. Goldstein. East Underw 43:12+ D 11 '42

5% rule amendment doesn't outlaw old one-man deals. Nat Underw (Life ed) 47:1 O 22 '43

5% sale O.K. even for one employee. Bureau rules. Nat Underw (Life ed) 47:1 F 19 '43

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- Hint of nature of 5% regulations. J. M. Williamson. Nat Underw (Life ed) 47:3+ J 2 '43
- Junior executives offer best market for 5% approach. Nat Underw (Life ed) 47:1 Ja 8 '43
- Paying for policy not a salary boost, regulations hold. Nat Underw (Life ed) 46:2 D 11 '42
- Regulations on 5% arrangement expected. Nat Underw (Life ed) 47:2+ My 21 '43
- Rules on relation of insurance to wage stabilization. Nat Underw (Life ed) 47:3+ Je 18 '43
- Urges caution in capitalizing on 5% rule. M. M. Goldstein. Nat Underw (Life ed) 47:9 Je 18 '43
- Vinson gets letter on anti-inflationary act; sent by three associations. East Underw 44:12-13 Ag 6 '43; Nat Underw (Life ed) 47:2+ Ag 6 '43

Endowment policies

- New endowment income policy of Union Central. Spectator (Life ed) 150:31-2 Ja '43
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Estate protection

- Estate building for average man; life insurance seems only sure way for creation of financial program. G. A. Lawton. East Underw 44:3+ J 16 '43
- I stopped selling life insurance; sale to meet definite needs. M. von Babo. Spectator (Life ed) 150:10-12+ Ap '43
- Life insurance to provide for death taxes. R. E. Moyer. East Underw 44:3-4 My 21 '43; Same. Spectator (Life ed) 150:24-5 Je '43; Abstract. Nat Underw (Life ed) 47:7 My 21 '43
- Reducing estate taxes through insurance. Trusts & Estates 77:358-9 O '43
- Sales aids afforded by new Federal revenue act. Weekly Underw 147:1261+ N 28 '42
- Showing the capitalist how to make taxation painless, improve his estate. O. B. Kiese-wetter. East Underw 44:10 F 19 '43
- Today's principal insurance needs. W. H. Fissell. Spectator (Life ed) 150:8-9, 28 Mr '43

Family group policies

- New family group policy rules for Illinois adopted. Nat Underw (Life ed) 46:2 N 13 '42

Farm property

- Farm real estate yield. Equitable of Iowa, 8.17% in 1942. F. W. Hubbell. East Underw 44:3+ Ap 30 '43
- Farm rehabilitation nearing completion. East Underw 44:6 Je 18 '43
- Metropolitan aids tenant farmers in boosting Nation's pork supply. East Underw 44:11 Ja 15 '43

Farmers as prospects

- Equitable Society's special campaign to find rural prospects. East Underw 44:1+ Ag 13 '43
- Farmers planting swollen incomes in life insurance. K. Hager. Ptr Ink 204:96+ S 24 '43
- Farmers to stay on farms. V. L. Bushnell. East Underw 44:8+ S 10 '43
- Farmers' wives strongly favor life insurance, survey shows. C. Streeter. East Underw 44:80 pt 2 O 1 '43
- How to sell the farmer. R. S. Pickford. Ins Field (Life ed) 71:16+ D 11 '42
- Tapping rural areas for new business. Nat Underw (Life ed) 47:8 Ja 1 '43
- Ways to interest farmers in life insurance. Nat Underw (Life ed) 47:20 Ag 20 '43
- Why farmer is big potential life insurance buyer. D. Ross. East Underw 44:78+ pt 2 O 1 '43

Finance

- Aggregate business of life companies, as of December 31, 1942. Spectator (Life ed) 151:26-7 O '43
- Company rank in 1942 by insurance in force. Nat Underw (Life ed) 47:1-2 Mr 26 '43
- Company reports show business being conserved. Weekly Underw 148:352-3, 397+, 450-1, 506, 563 F 6-Mr 6 '43

Detailed statement of ten leading life companies; tabulation. Spectator (Life ed) 150: 48-9 Je '43

Figures from Dec. 31, 1942, statements. Nat Underw (Life ed) 47:9 Ja 22; 2 Ja 29; 2 F 5; 2 F 12; 2 F 19; 2 F 26; 4 Mr 5; 2 Mr 12; 2 Mr 19; 24 Ap 2 '43

Important net costs factor; interest earnings as seen from the gain and loss exhibits of 41 leading companies. L. S. Fischer. Spectator (Life ed) 151:17 O '43

Life insurance companies, business of 1942 and condition Dec. 31, 1942. Weekly Underw 148:95-8 sec 2 My 8 '43

1942 life payments average \$7,767,868 a day; names of insured and statistics. Nat Underw (Life ed) 47:5-54 pt 2 My 21 '43

Policy payments and credits 2.6% over life premium income, 1941; chart. Nat Underw (Life ed) 46:12C N 13 '42

Rank by assets, income, in force. Nat Underw (Life ed) 47:2 Ap 16 '43

Rank of leading life insurance companies on Jan. 1, 1943; new business paid for, premium income, payments to policyholders, etc. Weekly Underw 148:1244-6 Je 5 '43; Corrections. 148:1347, 1391 Je 19-26 '43

Ranking by 1942 new business totals and in force by classes. Nat Underw (Life ed) 47: 6-7 Ap 16 '43

Results in 1942 on disability, double indemnity, annuities; tabulation. Nat Underw (Life ed) 47:2 Mr 5 '43

Results of operations of life insurance companies as of Dec. 31, 1942. Spectator (Life ed) 150:48 F; 62-3 My '43

Results of operations of life insurance companies as of Dec. 31, 1942; tabulation. Spectator (Life ed) 150:38 Je '43; Correction. 151:61 Ag '43

Surplus, assets, in force well ahead, persistency excellent, reports show. Nat Underw (Life ed) 47:2+ Ja 29; 2 F 5; 2+ F 12; 3-4 F 19; 3 F 26; 4 Mr 5; 3+ Mr 12; 3 Mr 19 '43

Time magazine takes a look at life insurance. Nat Underw (Life ed) 47:11 O 8 '43

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Contingency funds

also John Hancock mutual life insurance company

First year claims

Life companies paid \$38,981,000 in 1942 on first-year death claims; with stories of cases. Weekly Underw 148:3-16+ sec 2 My 8 '43

Fraudulent statements

Insurer may maintain cancellation action on ground of fraud despite inapplicability of incontestable provision. Weekly Underw 147:1354 D 5 '42

Permits recovery despite hospitalization. Nat Underw (Life ed) 47:5 Ap 9 '43

Proof of materiality; evidence regarding misrepresentations as required by New York statute. East Underw 44:12 S 3 '43

Government investigation

Armstrong committee echoes. W. C. Johnson. East Underw 44:3, 12 O 15 '43

Charles Evans Hughes and the Armstrong investigation. R. W. Sheehan. Spectator (Life ed) 150:10-14 F; 28-9, 32-3 Ap '43

Federal control; review of attempts by Congress to take over supervision of insurance. T. F. Cunneen. II Spectator (Life ed) 150:4-7, 52-4 Mr '43

N.A.M. issues critique of TNEC monographs. Nat Underw (Life ed) 47:1+ Ja 1 '43

Health conservation service

Life insurance Nation's health benefactor. Weekly Underw 148:45-6+ sec 2 My 8 '43

History

Alabama; development of life insurance; with a short history of domiciled companies. L. S. McCombs. II Spectator (Life ed) 151:36-44 Ag '43

California; statistical study of present-day operations and short history of domiciled institutions. F. Ellington. II Spectator (Life ed) 149:52-8 D '42

Century of progress. G. S. Hastings. East Underw 43:34 D 11 '42

INSURANCE, Life—History—Continued

Indiana; development of life insurance, including a review of operations of domestic companies. L. S. McCombs. *il Spectator* (Life ed) 151:32-9, 58+ S '43

Maryland; study of present-day operations of life insurance; with historical background. L. S. McCombs. *il Spectator* (Life ed) 150:18-25+ My '43

Minnesota; study of life insurance operations. F. Ellington. *il Spectator* (Life ed) 150:36-40 Ap '43

Montana and the Dakotas. L. S. McCombs. *il Spectator* (Life ed) 151:38-43+ O '43

Ohio; statistical study of present-day operations with historical background on domiciled institutions. F. Ellington. *il Spectator* (Life ed) 150:34-41 F '43

Pennsylvania; statistical study of present-day operations and short history of domiciled institutions. F. Ellington. *il Spectator* (Life ed) 150:52-9 Ja '43

Tennessee; statistical study of present-day operations of life insurance. L. S. McCombs. *il Spectator* (Life ed) 151:22-8, 42-3 Jl '43

Tri-state review; origin and development of life insurance in Vermont, New Hampshire and Maine. L. S. McCombs. *il Spectator* (Life ed) 150:26-32 Je '43

Virginia; some features of early history and present day operations of life insurance. F. Ellington. *il Spectator* (Life ed) 150:32-7 Mr '43

Income plan

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Industrial insurance

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Inspection reports

Why the life insurance policy is safe; unbiased protection by inspection. East Underw 44:16+ pt 2 O 1 '43

International aspects

Warns companies must look now to peace treaty; abstracts. R. D. Taylor. Nat Underw (Life ed) 47:1+ O 8 '43; East Underw 44:8 O 8 '43; Weekly Underw 149:797+ O 9 '43

Investment value

Big demand for short term investments now. H. B. Rockwell. Nat Underw (Life ed) Daily ed 47:33 S 16 '43

Life insurance economics. H. S. Koster. Trusts & Estates 77:139-40 Ag '43

Why policy contract values never vary. L. S. Fischer. *Spectator* (Life ed) (Special no) 149:27 D '42

Investments

Advice to investment officers; abstracts. M. Nédier. Nat Underw (Life ed) 47:2 O 15 '43; East Underw 44:12 O 8 '43

Asks equity financing by insurers, banks. N. Jacoby. Nat Underw (Life ed) 47:2, 23 O 22 '43

Cites FHA insured loans as attractive investment outlet; abstracts. L. D. Meredith. Comm & Fin Chr 158:1425 O 7 '43; East Underw 44:4 O 8 '43

Comments on life company portfolios. L. Henderson. Nat Underw (Life ed) 47:2 N 5 '43

Dispose of municipal bonds at good profit. Nat Underw (Life ed) 46:1+ N 13 '42

Effect of exchanging tax-exempt bonds for taxable U.S. issues. F. E. Huston. Nat Underw (Life ed) 47:8 Ja 22 '43

Equitable Life offers Mid-West farmers new prepayment reserve loan service plan. Comm & Fin Chr 157:282 Ja 21 '43; East Underw 44:10 Ja 15 '43

Financial position of life insurance and prospects for the future; abstracts. F. W. Hubbell. Weekly Underw 149:788+ O 9 '43; Nat Underw (Life ed) Conv no 47:8 O 7 '43

Fund portfolio's role in war; how premium money flows into many channels. G. W. Smith. East Underw 44:1, 6 F 19 '43

How Equitable Society investments are made. East Underw 44:12 Mr 5 '43

Insurance funds go to war. Business Week p98 D 19 '42

Insurers give victory loan drive big send-off. Nat Underw (Life ed) 46:1 D 4 '42

Investment portfolio trend of insurers since 1906; tabulation. Nat Underw (Life ed) 46:4 D 18 '42

Life companies add their weight to war loan drive. Nat Underw (Life ed) 47:1+ S 17 '43

Life company holdings of FHA mortgages nearing a billion. East Underw 43:1+ D 18 '42

Life insurance, admitted assets, 1938-1941. Survey of Cur Business 1942 Sup p68 [supplemented in monthly numbers]

Life presidents body reviews '42 asset trend; abstracts. V. P. Whitsitt. Nat Underw (Life ed) 46:1+ D 11 '42; Weekly Underw 147:1365+ D 12 '42; Comm & Fin Chr 156: 2161+ D 17 '42

Need underwriting rules applied to investment end. W. P. Coler. Nat Underw (Life ed) 47:3+ O 8 '43

1942 life net earning interest rate was 3.40%. East Underw 44:10 Jl 30 '43; Nat Underw (Life ed) 47:2 Jl 8; 6 Ag 20 '43

Record purchases of U.S. bonds; life companies bought 3.65 billions in 1942. Weekly Underw 148:469+ F 27 '43

Revenue bonds. J. W. Johnson. Nat Underw (Life ed) 47:2+ O 8 '43

States urged to amend insurance laws to permit investing in unencumbered real estate. W. H. Rolapp. Comm & Fin Chr 158: 1427 O 7 '43

War-time controls bring problems; life company investment departments having difficult time. E. A. Camp, jr. Weekly Underw 149:968 O 30 '43

Why the life insurance policy is safe; security in investment of funds. R. K. Paynter, jr. East Underw 44:14 pt 2 O 1 '43

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Insurance, Life—
Farm property Insurance, Life—Real estate operations

Lapses and surrenders

Better agents best way to improve persistency. P. H. Dunnayan. Nat Underw (Life ed) Daily ed 47:39-40 S 15 '43

Blue note payments are not premiums. Nat Underw (Life ed) 47:10 F 12 '43

Changes in redating reinstatement. Nat Underw (Life ed) 47:16 Jl 2 '43

Clear atmosphere in Illinois on reinstatement issue. Nat Underw (Life ed) 47:5 F 5 '43

Lapse, surrender ratio at another all-time low. Nat Underw (Life ed) 47:2 Ap 9 '43

Lapsed and surrendered policies; figures for 1941 and 1942. Weekly Underw 148:72 sec 2 My 8 '43

Lapsed policy is a disappointing legacy. Weekly Underw 148:67 sec 2 My 8 '43

Life insurance surrender rate at all time low; chart showing trend, 1900-1942. Nat Underw (Life ed) 46:20 D 18 '42

Suspension of premium payments because of war; abstracts. A. D. Mason. East Underw 44:3+ My 14 '43; Nat Underw (Life ed) 47:1 My 21 '43

Terminations by surrender and lapse, 1922-1941. *Spectator* (Life ed) 150:38-7 My '43

West Coast Life's Far East policyholders. East Underw 44:11 Mr 19 '43

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Insurance, Life—Policy valuation

Legal departments

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Association of life insurance counsel

Mail order selling

Mantz loses suit for damages under direct mail plan. Nat Underw (Life ed) 47:6 Ja 15 '43

Mathematics

Proposes use of preliminary term before Actuarial society; abstracts. J. B. Maclean. East Underw 44:5+ O 15 '43; Nat Underw (Life ed) 47:1 O 15 '43

Why the life insurance policy is safe; actuarial role. V. Howell. East Underw 44:16 pt 2 O 1 '43

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INSURANCE, Life—Continued**Medical examinations**

- Broadening the scope of non-medical underwriting. Nat Underw (Life ed) 47:9 Ja 1 '43
 Companies easing standards regarding medical examiners. Nat Underw (Life ed) 47:3 Ja 1 '43
 Consider removing city size limits on non-medical. Nat Underw (Life ed) 47:3 My 28 '43
 Guardian Life raises non-medical limits. East Underw 44:19 Ap 9 '43; Nat Underw (Life ed) 47:18 Ap 9 '43
 Massachusetts Mutual will write non-medical; New England Mutual issues non-medical. Ins Field (Life ed) 72:10, 11 F 19 '43
 Medical examiner important factor. H. C. McAlister. Nat Underw (Life ed) 47:3 Ja 29 '43
 Mutual Benefit in non-medical field. Nat Underw (Life ed) 47:17 Jl 23 '43
 Non-medical selection has advantages now. O. E. Aleshire. Nat Underw (Life ed) 47:27+ O 1 '43
 Occidental Life announces new non-medical limits. Nat Underw (Life ed) 47:17 Jl 23 '43
 Prudential liberalizes non-medical ordinary issues. East Underw 44:4 Jl 30 '43
 Qualifications for medical examiner appointments. C. L. O'Brien. East Underw 44:15 O 22 '43

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Insurance, Life—Risks

Mortality statistics**See Mortality—Statistics****Mortgage redemption policies**

- Selling mortgage insurance today. Ins Field (Life ed) 71:16-18+ N 13 '42
 Selling mortgage redemption. F. L. Jackson. Ins Field (Life ed) 72:20+ Ja 29 '43

Negroes as policy holders

- Negro leader tells stand on insurance proposal. E. A. Carter. Nat Underw (Life ed) 46:16 D 4 '42
 Pink suggests new company for writing colored risks in New York state; report to the legislature. East Underw 44:1+ Ja 22 '43; Nat Underw 47:1+ Ja 21 '43; Nat Underw (Life ed) 47:2+ Ja 22 '43

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Participating policies

- Pan-American Life to write participating. East Underw 43:14 D 18 '42

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- Bankers National Life issues life expectation plan and term to 65. Nat Underw (Life ed) 47:18 Je 13 '43
 Connecticut Mutual annuity income endowment at 65. Spectator (Life ed) 151:52 Ag '43
 Connecticut Mutual offers income replacement form. Nat Underw (Life ed) 47:8 Mr 19 '43
 Ear marking life insurance for primary purposes. H. S. Koster. Trusts & Estates 76:133 F '43
 Empire State Mutual's 24-month pay policy. East Underw 44:10 Ja 1 '43
 Home Life tells of new policy features. East Underw 44:6 Ja 8 '43
 Life policy contracts; Equitable of Iowa. R. C. McCankie. East Underw 44:3-4 Ap 30 '43
 Management's role in development of the modern life insurance policy. H. L. Rietz. East Underw 44:54 pt 2 O 1 '43
 Metropolitan Life makes new rulings as to civilians abroad. East Underw 44:6 Ap 16 '43
 Mutual Life's new policy form is crisp in style. Nat Underw (Life ed) 47:1 Ja 22 '43; East Underw 44:5 Ja 15 '43
 New conversion privilege offered by Manhattan Life. Nat Underw (Life ed) 47:16 O 15 '43
 New England Mutual revises investment forms. Nat Underw (Life ed) 46:18 D 18 '42

- New Prudential industrial and intermediate policies. East Underw 44:6 O 15 '43
 Prudential announces new ordinary plans. East Underw 44:7 O 29 '43
 Prudential issues temporary income. Nat Underw (Life ed) 47:17 Je 11 '43; Spectator (Life ed) 151:29 Jl '43
 Union Central issuing premium reduction form. Nat Underw (Life ed) 47:8-9 Mr 19 '43

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Non-forfeiture benefits

- Comments on Guertin report phases. H. H. Jackson. Weekly Underw 147:1350 D 5 '42
 Comments on legislation and utopia before actuaries' meeting; abstracts. H. H. Jackson. East Underw 43:10+ N 13 '42; Nat Underw (Life ed) 46:8 N 13 '42
 Dewey signs expense amendment bill 213; vetoes Guertin bill. East Underw 44:1+ Ap 30 '43
 Enact Guertin law in Illinois. Nat Underw (Life ed) 47:4 Jl 9 '43
 Guertin report now goes to states for legislative action; commissioners adopt proposal. East Underw 43:1+ D 4 '42; Nat Underw (Life ed) 46:1 D 4 '42; Weekly Underw 147:1304 D 5 '42
 Indiana, first state to pass Guertin bills; progress in New York. Nat Underw (Life ed) 47:6 Mr 12 '43
 19 states have had Guertin bills; governors get some. East Underw 44:1+ Mr 19 '43
 Tells fraternal to meet modern demands. A. N. Guertin. Nat Underw (Life ed) 47:6 Je 4 '43
 Text of laws proposed by Guertin committee. Nat Underw (Life ed) 46:2, 9-11 D 11 '42

Policies, Illegal

- Dual pay scheme is outlawed by Utah high court. Nat Underw (Life ed) 47:1 Je 18 '43

Policy assignment

- Assignment of policy may be accomplished other than in formal style. Nat Underw (Life ed) 47:8 Ja 8 '43
 Eyes banks' practices in loaning on life policies. C. A. Strahorn. Nat Underw (Life ed) 47:11 Jl 30 '43
 Life insurance loans. C. V. T. Ludlow. Banking 35:50 F '43
 Life insurance policy as security for notes. C. R. Rosenberg, jr. Burroughs Clearing House 27:30 Ag '43
 New law aids N.Y. bank policy loans. Nat Underw (Life ed) 47:1 Ap 2 '43

Policy beneficiaries

- Assured is upheld in change of the beneficiary. Nat Underw (Life ed) 47:3 S 3 '43
 Beneficiary change is held effectuated even though not endorsed. Nat Underw (Life ed) 47:19 S 17 '43
 College gift fund plans for graduating classes. F. A. Tucker. Nat Underw (Life ed) 47:19 Jl 23 '43
 Effect of trust agreement on changing beneficiary. Spectator (Life ed) 151:11 O '43
 Murder by beneficiary; Community property. L. A. Burke. Spectator (Life ed) 151:26-7 S '43
 Questions as to service insurance beneficiaries are answered. Nat Underw (Life ed) 47:6 Ap 9 '43
 Switching the insurance beneficiary. M. L. Hayward. Barron's 22:5 D 14 '42
 Waiver of right to change beneficiary. Nat Underw (Life ed) 47:9 S 24 '43

Policy dividends

- Dividend histories; with table showing how declining interest rates are reflected in dividend payments. L. S. Fischer. Spectator (Life ed) 150:28-9 F '43
 Dividend scales for '43 are set by several insurers. Nat Underw (Life ed) 46:4 D 11; 5 D 18; 14-15 D 25 '42

INSURANCE, Life—Policy dividends—Cont.

Guardian life insurance company of America revises 1943 dividend scale. *Comm & Fin Chr* 156:2223 D 21 '42
 John Hancock adopts new dividend formula. *East Underw* 43:8 N 13 '42
 New dividend scale for savings bank life insurance. *Comm & Fin Chr* 157:1211 Ap 1 '43
 N.Y. savings bank dividend scale. *Nat Underw* (Life ed) 47:18 Ap 9 '43
 20 year illustrated dividend scale per \$1000 on 1943 basis; dividends per \$1,000 on fully paid life policies, 1943 dividend basis. *Spectator* (Life ed) 150:30-1 Mr '43
 Urges joint investigation; dividends. *W. Montgomery. East Underw* 44:6-7- Je 11 '43

Policy holders

Contacts with policyholders; suggestions for improvement in procedure. *K. H. Mathus. Spectator* (Life ed) 151:8-11- JI '43
 Farmers' wives strongly favor life insurance, survey shows. *C. Streeter. East Underw* 44:80 pt 2 O 1 '43
 Gets sure protection for his folks and \$1,000 check at age 96; *H. B. Morgan. Nat Underw* (Life ed) 47:13 O 8 '43
 How to win policyholders and influence people. *K. H. Mathus. Spectator* (Life ed) 151:16-21 Ag '43
 Keystoneers question policyholders' panel. *Weekly Underw* 147:1339 D 5 '42; *Nat Underw* (Life ed) 46:3-4 N 13 '42
 List of prominent patrons in the United States who own \$50,000 or more of life insurance; arranged geographically. *Spectator* (Life ed) (Special no) 149:33-58, 60-88, 90 D '42
 Marshall Field gets \$898,000 more. *Nat Underw* (Life ed) 47:1 F 12 '43
 Ohio man outlives mortality table; *R. S. Campbell. East Underw* 44:3 O 29 '43
 Owners of a million or more in life insurance; list. *Spectator* (Life ed) (Special no) 149:30-1 D '42
 Penn Mutual's annual policyholders' meeting held at home office. *East Underw* 44:1, 3-4- Ja 8 '43
 Prominent life payments in 1942; lists by policy holders and by states and towns. *Nat Underw* (Life ed) 47:12-54 pt 2 My 21 '43
 Public opinion; individuals in low income group offer pretty general endorsement of life insurance. *F. Ellington. Spectator* (Life ed) 150:44-5 Je '43
 Public opinion; interviews with typical life insurance policyholders. *J. H. Rees. Spectator* (Life ed) 150:38-9 Mr '43
 Show must go on; theatre folk tell how insurance has helped them and why it is needed. *W. A. Hamlin. Spectator* (Life ed) (Special no) 149:24-6 D '42

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Policy loans

Bill affects banks' policy loans. *L. W. Dawson. Weekly Underw* 148:581- L Mr 13 '43
 Borrowings on life insurance in advance of income tax lower. *Comm & Fin Chr* 157:1667 My 6 '43; *East Underw* 44:10 Ap 16 '43
 Out of the red; policyholders continue to pay off loans; graph, 1925-1943. *Business Week* p105 O 16 '43
 Policy loans drop. *Trusts & Estates* 75:556 D '42
 Policy loans \$220,000,000 lower in year. *Weekly Underw* 148:503 F 27 '43; Same. *Comm & Fin Chr* 157:847 Mr 4 '43; Same abr. *Nat Underw* (Life ed) 47:26 Ap 23 '43

Policy settlement

Advises on life settlement programs. *R. C. Dimon. Weekly Underw* 149:474 S 4 '43
 Drafting of fathers emphasizes need of flexible options. *O. F. Grahame. Nat Underw* (Life ed) 47:10 S 3 '43
 Flexibility in arranging insurance program stressed. *C. H. Smith. Nat Underw* (Life ed) 47:23 My 7 '43
 Insurance settlement agreements. *O. F. Grahame. East Underw* 44:11 My 14 '43
 Life income plans increased. *Weekly Underw* 149:637- S 25 '43

Life insurance installments and the income tax. *H. S. Koster. Trusts & Estates* 76:337-8 Ap '43
 New wave of settlement option requests seen. *Nat Underw* (Life ed) 47:3 Mr 26 '43
 Recent ruling may permit tax saving; some proceeds are exempt. *L. W. Dawson. East Underw* 44:7-4- My 28 '43
 Restrictive trend found in policy as to settlements. *Nat Underw* (Life ed) 46:4 D 4 '42
 Settlement options and insurance trusts. *L. Lloyd. Trusts & Estates* 76:443-5 My '43; Same. *East Underw* 44:13 My 28 '43
 Tax-free beneficiaries. *H. S. Redeker. East Underw* 44:15 Ap 23 '43
 Use of accumulated income under settlement option prior to agreed time. *Trusts & Estates* 76:553-4 Je '43
 We, the salesmen! clean-up policies. *C. Orr. Ins Field* (Life ed) 72:18 Je 4 '43
 We, the salesmen! why include a common disaster clause. *C. Orr. Ins Field* (Life ed) 72:16 My 21 '43

Policy valuation

Explanation of Guertin committee proposals. *T. A. Phillips. Nat Underw* (Life ed) 46:6 N 20 '42
 Text of laws proposed by Guertin committee. *Nat Underw* (Life ed) 46:2, 9-11 D 11 '42
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Premiums, Payment of

Creditors get proceeds due to constructive fraud. *Nat Underw* (Life ed) 47:6 Ag 27 '43
 Down to cases; waiver of prompt payment; accepting overdue premiums. *L. A. Burke. Spectator* (Life ed) 151:22-3 Ag '43
 Drawee bank not liable in contract to holder of check for failure to honor check. *Banking Law J* 60:537-43 JI '43
 Eyes question of what constitutes policy due date. *B. H. Sachar. Nat Underw* (Life ed) 46:5 D 18 '42
 Giving and receipt of check as unconditional payment of life insurance premium. *Weekly Underw* 149:231 JI 31 '43
 Payment of premium after death illegal. *Weekly Underw* 148:365 F 13 '43
 Prepayment of life insurance premiums. *H. S. Koster. Trusts & Estates* 76:433 My '43
 Trend of reminder notices decreases. *J. Scott. East Underw* 44:20 O 8 '43

Premiums, Recovery of

Assured wants combination life, annuity money back; claims tax feature misrepresented. *Nat Underw* (Life ed) 47:3-4 Je 4 '43

Prospects

Best prospects: those used to money. *F. Bremier. East Underw* 44:13 Mr 26 '43
 Birth rate gains, Social security boon to sales. *J. F. Eubanks. Nat Underw* (Life ed) 46:27 N 20 '42
 Comfort and decency protection best counter to federal menace; selling additional insurance to workers. *B. A. Hedges. Nat Underw* (Life ed) 47:2-4 JI 30 '43
 Connecticut Mutual has new sales tool; Three step advertising plan. *East Underw* 44:5 F 26 '43
 Draft change to have little immediate effect. *Nat Underw* (Life ed) 47:3-4 Ap 16 '43
 Find the best buyer market. *L. J. Beauchage. Ins Field* (Life ed) 72:16-17 My 7 '43
 Give up idea of writing war worker. *Nat Underw* (Life ed) 47:4 N 5 '43
 How producers in industrial Seattle find their prospects. *S. Bernbaum. East Underw* 44:1-4 Mr 12 '43
 How Union Central prepares for five-year duration. *W. F. Hanselman. East Underw* 43:3-4 N 27 '42
 It has to be sold; new and rising potential market. *R. D. Parker. Spectator* (Life ed) 150:34-6 Ja '43
 It is fashionable for war industry key men to buy policies. *P. Sanborn. East Underw* 44:65-6 pt 2 O 1 '43
 Life salesmen need to follow their old-time courses; plenty of prospects in all groups. *R. E. Richman. Nat Underw* (Life ed) 47:7-8 JI 16 '43

INSURANCE, Life—Prospects—Continued

Manpower edict puts damper on sales to prospects under 38. Nat Underw (Life ed) 47:1+ F 19 '43

More intelligence is needed in present day prospecting. H. C. Herrmeyer. Nat Underw (Life ed) Daily ed 47:5+ S 16 '43

New market new only for strictly ordinary agent. E. B. Stevenson. Nat Underw (Life ed) 46:4+ N 20 '42

1943 market for life insurance. A. H. Thiemann. East Underw 44:12 Ap 2 '43

Old sales fields offer greatest opportunity. J. P. Costello. Nat Underw (Life ed) Daily ed 47:8+ S 17 '43; Same abr. Ins Field (Life ed) 72:14-15+ S 24 '43

\$115,000 in 14 days; business among younger prospects. B. C. Wharton. Ins Field (Life ed) 72:14-17 Ap 16 '43

Priority prospecting work in life insurance selling. P. B. Turner. Nat Underw (Life ed) 47:19 F 19 '43

Prospecting pleasant work. E. L. Allison. Nat Underw (Life ed) 47:6 Ja 1 '43

Selling insurance to the current war worker. E. J. Wilson. East Underw 44:14 Ap 16 '43

Selling insurance to war workers. T. R. Hawkins and others. East Underw 44:106-8 pt 2 O 1 '43

Simplified programming; high income brackets. W. H. Fissell. Spectator (Life ed) 151:37-9, 46 J1 '43

Simplified programming; low income group where the thirty billion dollar market exists. W. H. Fissell. Spectator (Life ed) 150:10-14+ My '43

Simplified programming; medium income class group. W. H. Fissell. Spectator (Life ed) 150:18-21+ Je '43

Some cases in prospect file that agent did not sell. T. E. Berry. Nat Underw (Life ed) 47:23 S 24 '43

Spade work needed to sell assigned policyholder; merchandising company leads. C. S. McAllister. East Underw 44:11 Mr 26 '43

Telephone used to round up teacher prospects. R. T. Mather; R. Emerson. Nat Underw (Life ed) 47:23 N 5 '43

Tells agents to hit moderate income groups. L. G. Simon. Nat Underw (Life ed) 47:4 J1 16 '43

Timely analysis of the big industrial market. W. Guon. Ins Field (Life ed) 72:3-4, 16-20 S 17 '43; Same abr. Nat Underw (Life ed) Daily ed 47:4+ S 17 '43

Using push from the outside; solicit parents of men in uniform. A. B. Olson. Nat Underw (Life ed) 47:5 Ap 9 '43

War marriages. Spectator (Life ed) 150:16-17, 41 Ap '43

War worker is good prospect for package. Nat Underw (Life ed) 47:19 O 29 '43

Women tell where to look for business today; panel discussion. East Underw 44:13+ S 17 '43; Ins Field (Pittsburgh Conv Daily ed) 72:14-16 S 16 '43; Weekly Underw 149: 588-9, 617-24 S 18 '43

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Purchasing

Analysis shows sales field among women, juveniles. Nat Underw (Life ed) 47:6 Je 25 '43

John Hancock ad study shows sales by ages. M. Diver. East Underw 44:10 O 29 '43

Upturn of life insurance sales contributing to inflation fight. Comm & Fin Chr 158: 134 J1 8 '43

Workers buying life insurance, Institute reports. Weekly Underw 149:937+ O 30 '43

Rates

Connecticut General makes extensive rate changes. Nat Underw (Life ed) 47:16 Ja 29 '43

Rates, reserves, major problem. L. S. Lindsay. East Underw 44:11 Je 4 '43

Travelers raises premium rates on some forms. Nat Underw (Life ed) 46:21-2 N 20 '42

Real estate operations

Important role in post-war housing field for life insurance funds. H. J. Johnson. Comm & Fin Chr 157:1982 My 27 '43

Metropolitan housing plan approved. East Underw 44:10 Je 11 '43

Metropolitan's plans for big N.Y. project. East Underw 44:13 Ap 23 '43; Weekly Underw 148:885+ Ap 24 '43

Near-inflationary housing prices let companies unload. Nat Underw (Life ed) 47:1 S 10 '43

OPA rules affect real estate sales. Nat Underw (Life ed) 46:2 D 25 '42

Receiverships

Consolidation of Chapter 9 companies approved in California. Nat Underw (Life ed) 47:10 F 12 '43

Court awaits counter moves in life merger. East Underw 44:10 Ja 29 '43

Ready for decree in Illinois Bankers case. Nat Underw (Life ed) 47:8 O 22 '43

Reinstatement

See Insurance, Life—Lapses and surrenders

Reinsurance

Empire State Mutual reinsures business of fraternal order. East Underw 44:1+ Ag 20 '43

Republic national life of Dallas absorbs American savings life of Kansas City. Ins (Life ed) 72:5+ F 19 '43; Same abr. Weekly Underw 148:450 F 20 '43

Several reinsurance deals approved in Illinois. Nat Underw (Life ed) 47:8 Ja 15 '43

Reserves

Chicago suits dismissed; sought accounting of reserve funds of mutual life companies. Weekly Underw 148:1392 Je 26 '43

Proposes use of preliminary term before Actuarial society; abstracts. J. B. Maclean. East Underw 44:5+ O 15 '43; Nat Underw (Life ed) 47:1 O 15 '43

See also

Insurance, Life—Contingency funds

Retirement income policies

Bankers National makes changes. Nat Underw (Life ed) 46:24 N 13 '42

John Hancock has new policies. Nat Underw (Life ed) 47:18 My 28 '43

Massachusetts Mutual alters income settlements. East Underw 44:13+ Ap 2 '43

Pension trust plans of Equitable Society. Spectator (Life ed) 151:28-30 S '43

Risks

Life insurance to provide for death taxes. R. E. Moyer. East Underw 44:3-4 My 21 '43; Abstract. Nat Underw (Life ed) 47:7 My 21 '43

Medical picture is much improved. K. W. Anderson. Nat Underw (Life ed) 47:4 Ja 8 '43

Optimistic about future mortality; abstracts. A. J. Robinson. Nat Underw (Life ed) 47: 2+ O 29 '43; East Underw 44:13 O 22 '43

Problems of current home office underwriting. J. C. Archibald. East Underw 44:56+ pt 2 O 1 '43

Removing the mystery of selection for agent; abstracts. R. C. McCankie. Nat Underw (Life ed) 47:3+ O 22 '43; East Underw 44: 13 O 22 '43

Selection problems as to both civilians and military growing. W. H. Dallas. East Underw 43:1+ D 11 '42

Uninsurables in 5% plans are problem. Nat Underw (Life ed) 47:1 J1 23 '43

War worker is selection problem. N. M. Longworth. Nat Underw (Life ed) 47:4 O 22 '43

Warns on careful risk selection. H. W. Crawford. East Underw 44:37 Ap 2 '43

Why the life insurance policy is safe; thorough check on risk selection. W. Tobetts. East Underw 44:15+ pt 2 O 1 '43

See also

Insurance, Life—Aviation risks Insurance, Life—Travel risks
Insurance, Life—Negotiables as policy holders Insurance, Life—War risks
also Home office life underwriters association

INSURANCE, Life—Continued

Salary savings plan

- New market created for life insurance. E. C. Hoy. Nat Underw (Life ed) 46:12D N 13 '42
- Salary savings sales open new field for prospects. H. M. Zepp. Nat Underw (Life ed) Daily ed 47:24 S 16 '43

Social aspects

- Conflict with government unnecessary; abstracts. J. A. Fulton. Weekly Underw 148: 633+ Mr 20 '43; East Underw 44:12 Mr 19 '43
- Finds life insurance guards American way of life. A. O. Benz. Nat Underw (Life ed) 47:31 O 1 '43
- Importance of life insurance to the Nation. R. H. Kastner. Weekly Underw 148:32-4+ sec 2 My 8 '43
- Meet social change. G. S. Nollen. East Underw 44:6 Ja 22 '43; Same. Weekly Underw 148:225+ Ja 23 '43
- Opportunities for life insurance defined in President's message. E. B. Stevenson. Nat Underw (Life ed) 47:7 Ja 22 '43
- Quest for security from cave man days and how it has been met. E. Shuler. il East Underw 44:11-12, 99 pt 2 O 1 '43

Statistics

- Alabama; development of life insurance; with a short history of domiciled companies. L. S. McCombs. il Spectator (Life ed) 151:36-44 Ag '43
- Applications declined and accepted by companies in 1942; tabulation. Weekly Underw 148:70 sec 2 My 8 '43
- Average size policy sold and in force, 1941 and 1942. Nat Underw (Life ed) 47:8 Mr 26 '43; Weekly Underw 148:74 sec 2 My 8 '43
- California; study of present-day operations and short history of domiciled institutions. F. Ellington. il Spectator (Life ed) 149: 52-8 D '42
- Death benefits by states, 1942; tabulation. Weekly Underw 148:76 sec 2 My 8 '43
- History of 10,000 life insurance policy holders; chart. Ins Field (Life ed) 72:14 Ap 2 '43
- Impact of war on life insurance; chart. Nat Underw (Life ed) 47:9 Ja 1 '43
- Indiana; development of life insurance, including a review of operations of domestic companies. L. S. McCombs. il Spectator (Life ed) 151:32-9, 58+ S '43
- Life insurance, admitted assets, insurance written, premium collections, 1933-1941. Survey of Cur Business 1942 Sup p63-70 [supplemented in monthly numbers]
- Life insurance in U. S. at new peak per family. Weekly Underw 147:1398 D 12 '42
- Life insurance production, 1913-1942; tabulation. Spectator (Life ed) 150:60-3 F '43
- Life-insurance sales in the Pacific Coast states, 1923-1942. E. G. Daniel. 23p Bur. of business research, School of business administration, Univ. of Oregon, Eugene '43
- List of prominent patrons in the United States who own \$50,000 or more of life insurance; with statistics by states. Spectator (Life ed) (Special no) 149:33-58, 60-88, 90 D '42
- Maryland; statistical study of present-day operations of life insurance. L. S. McCombs. il Spectator (Life ed) 150:18-25+ My '43
- Minnesota; study of life insurance operations. F. Ellington. il Spectator (Life ed) 150:36-40 Ap '43
- Montana and the Dakotas. L. S. McCombs. il Spectator (Life ed) 151:38-43+ O '43
- 1942 life payments average \$7,767,868 a day; names of insured and statistics. Nat Underw (Life ed) 47:5-54 pt 2 My 21 '43
- Ohio; study of present-day operations with historical background on domiciled institutions. F. Ellington. il Spectator (Life ed) 150:34-41 F '43
- Ordinary life insurance in force increased \$2,158 billion in 1942; record 1938-1942. Comm & Fin Chr 157:353 Mr 4 '43; Nat Underw (Life ed) 47:4 F 26 '43

- Pennsylvania; study of present-day operations and short history of domiciled institutions. F. Ellington. il Spectator (Life ed) 150:52-9 Ja '43
- Sales off for year; gain over 1940; group soars; monthly comparisons for 1940-42. Nat Underw (Life ed) 47:1 Ja 29 '43
- Sales record in N.Y. for 1942. Nat Underw (Life ed) 47:4 Mr 12 '43
- Tennessee; statistical study of present-day operations of life insurance. L. S. McCombs. il Spectator (Life ed) 151:22-8, 42-3 Jl '43
- U. S. life companies paid out less in 1942. Comm & Fin Chr 157:848 Mr 4 '43
- Virginia; some features of early history and present day operations of life insurance. F. Ellington. il Spectator (Life ed) 150:32-7 Mr '43

See also

- Insurance, Life—
First year claims

Study and teaching

- Hundreds take examinations of American college of underwriters. East Underw 44: 110+ pt 2 O 1 '43
- Lectures on insurance by Huebner foundation; Life insurance: trends and problems. East Underw 44:13 Je 18 '43
- Life and accident insurance, course no 2 (cont). R. S. Maechtel and others. Weekly Underw 148:166-7, 402-4, 456-8, 508-9, 621-2, 1018-20, 1305-6+; 149:97-8, 333-4, 549-50, 805-6, 1081-2+; 1325-6 Ja 9, F 13-27, Mr 13, My 8, Je 12, Jl 10, Ag 14, S 11, O 9, N 13, D 11 '43
- Penn Mutual supervisors get advanced course. Nat Underw (Life ed) 46:12A N 13 '42
- Progress made in education; activities both inside and outside the business. R. R. Roberts. Ins Field (Pittsburgh Conv Daily ed) 72:17 S 15 '43

See also

- American college of Life office management association
Life underwriters
Insurance—Life—
Agents—Training

Suicide death claims

- War-time prosperity lowers suicide rate. T. J. V. Cullen. il map Spectator (Life ed) 151: 8-15, 61 Ag '43

Tables

- Commissioners adopt proposal for a new mortality table for life insurance and non-future benefits. Weekly Underw 147:1304 D 5 '42; East Underw 43:1+ D 4 '42
- Twelve states enact legislation allowing use of modern mortality tables. Weekly Underw 149:112 Jl 17 '43

Tax deductions

- Dominion tax offset didn't change trend. R. L. Foster. East Underw 44:5+ My 28 '43
- How premiums may be used as offset under Canadian income tax act. East Underw 44: 3+ Ja 1 '43
- Life insurance tax deduction bill backed by Bridges. Nat Underw (Life ed) 47:1+ Ap 30 '43
- Life insurance, taxes and America; Chicago address. S. Bridges. Ins Field (Life ed) 72: 4-5 O 29 '43
- Premium deduction from income tax comes first; Bridges Senate bill 1016. Ins Field (Life ed) 72:3-4+ Ag 20 '43
- Recognize premiums under N.Y. tax law. East Underw 44:6+ Mr 26 '43
- Recognize thrift in new tax. Weekly Underw 147:1365+ D 12 '42
- Tells D.C. group purpose of his tax credit bill. H. S. Bridges. Nat Underw (Life ed) 47:1+ O 15 '43
- Trend towards humanizing taxation favors insurance companies. Comm & Fin Chr 156: 2235+ D 24 '42
- Urge policyholders to back Bridges tax bill. B. J. Perry. East Underw 44:6 Ag 6 '43
- Why U.S. Senator wants premiums of \$1,000, or less, deducted. S. Bridges. East Underw 44:58 pt 2 O 1 '43

Taxation

- Advises on life settlement programs. R. C. Dimon. Weekly Underw 149:474 S 4 '43

INSURANCE, Life—Taxation—Continued

Application of 1942 Revenue act to life insurance. F. W. Forker. *Ins Field* (Fire ed) 72:16+ Ja 8 '43

Assured wants combination life, annuity money back; claims tax feature misrepresented. *Nat Underw* (Life ed) 47:3+ Je 4 '43

Cash values paid as income are not taxable as annuity. *Nat Underw* (Life ed) 47:4 JI 30 '43; *Weekly Underw* 149:224 JI 31 '43

Catching up with the American radical; taxes deny family security. J. S. Myrick. *Comm & Fin Chr* 158:1086+ S 16 '43; *Abstract*. *Nat Underw* (Life ed) 47:12 S 10 '43

Clarifies tax situation for agents. A. S. Potwin. *Nat Underw* (Life ed) 47:5-6 S 24 '43

Equitable Society suggests sales ideas based on new Revenue act of 1942. *East Underw* 43:30+ D 11 '42

Estate taxation of life insurance; 1942 Revenue act recasts tests for inclusion in estate. S. J. Foosaner. *bibliog Trusts & Estates* 75:613-16 D '42

Federal revenue act of 1942. F. L. Morton. *Spectator* (Life ed) 149:4-7; 67-70 D '42

Federal tax law changes in past year as they affect life insurance. J. V. Bloys. *East Underw* 44:32+ pt 2 O 1 '43

Gifts of life insurance policies. H. S. Koster. *Trusts & Estates* 77:271-2 S '43

Life insurance installments and the income tax. H. S. Koster. *Trusts & Estates* 76:337-8 Ap '43

New wave of settlement option requests seen. *Nat Underw* (Life ed) 47:3 Mr 26 '43

Pensions subject to withholding tax. T. C. Weinberg. *Nat Underw* (Life ed) 47:1+ N 5 '43

Prentice-Hall book gives 150 tax answers. *East Underw* 44:13 F 19 '43

Recent ruling may permit tax saving; some proceeds are exempt. L. W. Dawson. *East Underw* 44:7+ My 28 '43

Regulations on estate tax liability issued. *Nat Underw* (Life ed) 47:3 Mr 19 '43

Reversionary right subjects proceeds to estate levy. *Nat Underw* (Life ed) 47:1+ S 24 '43

Safeguarding income settlements against estate tax complications. H. C. Spencer. *East Underw* 44:40+ pt 2 O 1 '43

Seek compromise on taxing proceeds. F. L. Morton. *Nat Underw* (Life ed) 46:3+ D 11 '42

Sees life policies taxed in New Jersey. *East Underw* 43:11 D 25 '42

Tax-free beneficiaries. H. S. Redeker. *East Underw* 44:15 Ap 23 '43

Tax sales opportunities. A. C. F. Finkbinder. *Nat Underw* (Life ed) 47:19-20 Je 4 '43

Taxability of proceeds under recent Treasury decision. *East Underw* 44:16 Ap 9 '43

Treasury ruling; installment payment of proceeds not subject to income tax. *Nat Underw* (Life ed) 47:1 Mr 19 '43

Treatment of life insurance proceeds under new federal estate tax law. D. B. Maduro. *East Underw* 43:14+ D 11 '42

Value of amended section 826(c) to the life underwriter. J. H. Brady. *Weekly Underw* 149:805-6 O 9 '43

Travel risks

Civilian travel hazards; abstracts. J. R. Ward. *East Underw* 44:14-15 O 22 '43; *Nat Underw* (Life ed) 47:4+ O 22 '43

Trust company cooperation

Life underwriter; trust principles. *Trusts & Estates* 76:523 Je '43

Trusteeship and insurance in pension planning; combination serves the client best. L. G. Hammer. *Trusts & Estates* 77:143-6 Ag '43

Urges cooperation of life, trust companies on pension cases. *Nat Underw* (Life ed) 47:2+ JI 9 '43

See also

Insurance trusts

Twisting

Good results reported for replacement plan. *Weekly Underw* 147:1212 N 21 '42

Retirement of Wood recalls old rebate or twisting dramas. *East Underw* 44:1+ JI 2 '43

War death claims

British report, new war manual at claim meeting. *Nat Underw* 47:14-15 S 16 '43

Same. *Nat Underw* (Life ed) 47:9 S 17 '43

Death claims paid in first war year. *Nat Underw* (Life ed) 47:2 Mr 19 '43

Detailed analysis of war death claims; Mutual Life record. *Nat Underw* (Life ed) 47:2 Je 18 '43

Draw plan for Merchant marine claims. *Weekly Underw* 148:365+ F 13 '43; *East Underw* 44:19 F 12 '43; *Nat Underw* (Life ed) 47:3 F 12 '43

Exception to payment of double indemnity where death due to war does not require participation by United States. *Weekly Underw* 147:1459 D 19 '42

Handling of claims on missing service men. *East Underw* 44:15 My 14 '43

Judgment for New York Life; sailor in convoy. *East Underw* 43:9 N 13 '42

List deaths among policyholders in armed forces. *Nat Underw* (Life ed) 47:3+ F 12; 8 F 19 '43

Mutual Life pays off on word to next of kin. *Nat Underw* (Life ed) 47:8 JI 2 '43

Procedure with war death claims; abstracts. J. W. Fischbach. *Nat Underw* (Life ed) 47:2+ My 14 '43; *East Underw* 44:3 My 14 '43

Revise procedure for handling war death claims. *Nat Underw* 47:17+ Ja 21 '43; *Same*. *Nat Underw* (Life ed) 47:1 Ja 22 '43

Service claims are \$32,000,000 this year. *Nat Underw* (Life ed) 47:7 S 24 '43; *East Underw* 44:8 S 24 '43

Sun Life tells war death record. *Nat Underw* (Life ed) 47:8 F 12 '43

War claim problems of companies. J. G. Kelly. *Nat Underw* (Life ed) 47:7 Mr 12 '43

War death claims procedures. J. W. Fischbach. *East Underw* 44:3 Ag 27 '43

War problems

Manpower edict puts damper on sales to prospects under 38. *Nat Underw* (Life ed) 47:1+ F 19 '43

Office complexities due to war. W. C. Braden. *Nat Underw* (Life ed) 47:28 O 1 '43

Predicts liberality in restoration of disability benefits. W. O. Menge. *Nat Underw* (Life ed) 47:3+ O 22 '43

Suspension of premium payments because of war; abstracts. A. D. Mason. *East Underw* 44:3+ My 14 '43. *Nat Underw* (Life ed) 47:1 My 28 '43

Treasury rules on enemy nationals' policy payments. *Nat Underw* (Life ed) 47:4+ JI 16 '43

War problems faced by life insurance are analyzed. C. S. Casady. *Nat Underw* (Life ed) 46:1+ D 18 '42

Warns companies must look now to peace treaty; abstracts. R. D. Taylor. *Nat Underw* (Life ed) 47:1+ O 8 '43; *East Underw* 44:8 O 8 '43; *Weekly Underw* 149:797+ O 9 '43

War risks

Daily papers take out special insurance for war correspondents. *East Underw* 44:1+ My 7 '43

Down to cases; war risk insurance. L. A. Burke. *Spectator* (Life ed) 150:22 Je '43

Effect of war restrictions on sale of life insurance. R. E. Moyer. *East Underw* 44:3+ O 22 '43

Government personnel in foreign service under group cover. *East Underw* 44:1+ Ag 6 '43; *Weekly Underw* 149:241+ Ag 7 '43

Illuminates war clause question on reinstatements. H. H. Jackson. *Nat Underw* (Life ed) 47:1 My 28 '43

Life insurance policy during wartime. C. A. Kline. *Ann Am Acad* 227:76-82 My '43

National service life insurance. F. T. Hines. *Ann Am Acad* 227:83-93 My '43

Notifies all assured in uniform of policy change; Mutual Life action. *Nat Underw* (Life ed) 47:2 Ag 20 '43

Seamen's coverage; explanatory bulletin issued by War shipping administration. *Weekly Underw* 148:998 My 8 '43

Selection problems as to both civilians and military growing. W. H. Dallas. *East Underw* 43:1+ D 11 '42

INSURANCE, Life—War risks—Continued

WSA permits owners blanket crew policies. Weekly Underw 147:1185-6 N 21 '42; Nat Underw 46:35 N 19 '42

See also

Insurance, Life—
Travel risks

Wholesale insurance

Prudential to quit writing wholesale cover. Nat Underw (Life ed) 47:15 Ja 15 '43

Women as prospects

Advises men agents to cultivate the women's market. B. Jones. East Underw 44:26 Mr 19 '43

Analysis of sales to women. M. J. DuPaul. East Underw 44:102 pt 2 O 1 '43

How to sell women. E. Sullivan. Ins Field (Life ed) 72:18-19 F 26 '43

Six sources of women buyers. A. L. Wiswell. Nat Underw (Life ed) Daily ed 47:32 S 17 '43

Woman market is offering great possibilities. Nat Underw (Life ed) 47:23 Ap 2 '43

Woman war worker today, executive tomorrow! C. Snow. Ptr Ink 203:38+ Ap 2 '43; Abstracts. Weekly Underw 148:657 Mr 20; Nat Underw (Life ed) 47:3 Mr 19 '43

Woman's role in life insurance. M. Jacobson. Il Spectator (Life ed) 151:10-15+ S '43

Women, a growing new life insurance market; outstanding underwriters review prospects. B. Jones and others. Weekly Underw 148:61-3 sec 2 My 8 '43

Women's attitude

Harper's Bazaar insurance questions; abstracts. L. Gould. East Underw 44:10 F 5 '43; Weekly Underw 148:290 Ja 30 '43

Alabama

Alabama; development of life insurance; with a short history of domiciled companies. L. S. McCombs. Il Spectator (Life ed) 151:36-44 Ag '43

California

California; statistical study of present-day operations and short history of domiciled institutions. F. Ellington. Il Spectator (Life ed) 149:52-8 D '42; 150:49 Ja '43

Canada

Dominion tax offset didn't change trend. R. L. Foster. East Underw 44:5+ My 28 '43

Effect of budget on Canadian sales called overrated. Nat Underw (Life ed) 46:2+ N 13 '42

How premiums may be used as offset under Canadian income tax act. East Underw 44:3+ Ja 1 '43

Life underwriters do not oppose social insurance; abstracts. J. G. Parker. Weekly Underw 148:1232+ Je 5 '43; East Underw 44:5+ My 28 '43

Manpower situation in Canadian insurance. C. C. Martin. East Underw 44:3+ Je 4 '43

New York Life opens Canadian department; head office Toronto. East Underw 44:1+ Ja 1 '43

War steps up Canada's life insurance sales. E. C. McDonald. East Underw 44:18+ pt 2 O 1 '43

Why Canadian production has larger percentage gains. W. B. Bailey. East Underw 43:19 D 11 '42

See also Canadian life insurance officers association

Far East

West Coast Life's Far East policyholders. East Underw 44:11 Mr 19 '43

Germany

Life insurance and inflation in Germany after the first World war. L. M. Simon. East Underw 43:3-4 D 18; 6 D 25 '42

Great Britain

Britain's Parliament gets manpower report; make some recommendations. East Underw 43:6 N 27 '42

Death benefits paid by British life companies again showed decline in 1942. Comm & Fin Chr 157:2277 Je 17 '43; Same. East Underw 44:11 Je 18 '43; Same. Weekly Underw 148:1257+ Je 12 '43

Equity and law life assurance society annual general meeting. London. Economist 144:406 Mr 27 '43

Life assurance; Kennet report on manpower and the Beveridge report on social services. Economist 145:178-9 Ag 7 '43

Life assurance new business in 1942. Economist 144:244 F 20 '43

Refuge assurance company, limited, Scottish amicable life assurance society, Britannic assurance company, limited; annual meetings. Economist 144:436-8 Ap 3 '43

Sun life assurance society statement to shareholders. W. H. Goschen. Economist 144:278 F 27 '43

Hawaii

Premiums on upgrade in Hawaii in 1941. Ins Field (Life ed) 71:20 D 18 '42

Indiana

Indiana; development of life insurance, including a review of operations of domestic companies. L. S. McCombs. Il Spectator (Life ed) 151:32-9, 58+ S '43

Maryland

Maryland; statistical study of present-day operations of life insurance. L. S. McCombs. Il Spectator (Life ed) 150:18-25+ My '43

Minnesota

Minnesota; study of life insurance operations. F. Ellington. Il Spectator (Life ed) 150:36-40 Ap '43

Montana

Montana and the Dakotas. L. S. McCombs. Il Spectator (Life ed) 151:38-43+ O '43

New Hampshire

Tri-state review; origin and development of life insurance in Vermont, New Hampshire and Maine. L. S. McCombs. Spectator (Life ed) 150:30-1 Je '43

North Dakota

Montana and the Dakotas. L. S. McCombs. Il Spectator (Life ed) 151:38-43+ O '43

Ohio

Ohio; statistical study of present-day operations with historical background on domiciled institutions. F. Ellington. Il Spectator (Life ed) 150:34-41 F '43

Pennsylvania

Pennsylvania; statistical study of present-day operations and short history of domiciled institutions. F. Ellington. Il Spectator (Life ed) 150:52-9 Ja '43

South Dakota

Montana and the Dakotas. L. S. McCombs. Il Spectator (Life ed) 151:38-43+ O '43

Tennessee

Tennessee; statistical study of present-day operations of life insurance. L. S. McCombs. Il Spectator (Life ed) 151:22-8, 42-3 Jl '43

Texas

Policies property under Texas law; abstracts. W. A. Vinson. East Underw 44:13 O 8 '43; Weekly Underw 149:789 O 9 '43

United States

Increase in sales of insurance noted. Nat Underw (Life ed) 47:9 Jl 2 '43

Insurance year from the Capitol. B. C. Clarke. Ins Field (Life ed) 72:8+ Ja 8 '43

Kansas City Life on trends of insurance market over a period of years. East Underw 44:11 Ja 8 '43

Life companies admitted, withdrawn and retired. Spectator (Life ed) 150:51 Ja '43

Life insurance in force at highest level on record totals \$130 billions and covers 67 million. V. P. Whitsett. Comm & Fin Chr 156:2075 D 10 '42; Same. Weekly Underw 147:1281+ D 5 '42; Same. East Underw 43:46+ D 11 '42

Life insurance in 1943. H. J. Johnson. Comm & Fin Chr 157:391 Ja 28 '43

Life insurance mobilized for war. H. J. Johnson. Weekly Underw 148:5, 114 Ja 2 '43

INSURANCE, Life—United States—*Continued*.
 Life insurance, taxes and America. S. Bridges. *Ins Field* (Life ed) 72:4-5 O 29 '43
 National service life insurance; implications for privately operated life insurance. T. J. V. Cullen. *Spectator* (Life ed) 150:4-8, 42-6 F '43
 1942 in review. C. C. Klocksins. *Ins Field* (Life ed) 72:6-7+ Ja 1 '43; Same. *Nat Underw* (Life ed) 47:2+ Ja 1 '43; Same. *Weekly Underw* 148:102+ Ja 2 '43; Same *abr.* *East Underw* 44:6 Ja 1 '43
 1942, year of transition; chronologies spotlighting important events. *Ins Field* (Life ed) 71:6-10 D 25 '42
 Observations on insurance and living in the East. A. R. Jaqua. *Nat Underw* (Life ed) 47:4 Ap 9; 25 Ap 23 '43
 Optimistic about future; abstracts. P. F. Clark. *Nat Underw* (Life ed) Daily ed 47:19+ S 15 '43; *East Underw* 44:3+ S 17 '43; *Ins Field* (Pittsburgh Conv Daily ed) 72:1+ S 15 '43; *Weekly Underw* 149:602+ S 18 '43
 Outlook for the year as seen by executives. F. D'Olier and others. *Spectator* (Life ed) 150:4-5, 12-13+ Ja '43
 Urges joint investigation of whole system of life insurance. W. Montgomery. *East Underw* 44:6-7+ Je 11 '43
 War efforts strengthening life insurance. H. J. Johnson. *Weekly Underw* 148:104+ Ja 2 '43
 Year-end views of life company executives. G. A. White and others. *Weekly Underw* 148:110, 112-13, 115 Ja 2 '43

Vermont

Tri-state review; origin and development of life insurance in Vermont, New Hampshire and Maine. L. S. McCombs. *Il Spectator* (Life ed) 150:26-32 Je '43

Virginia

Virginia; some features of early history and present day operations of life insurance. F. Ellington. *Il Spectator* (Life ed) 150:32-7 Mr '43

INSURANCE, Live stock

Demand evident for floater coverage on dairy herds, cattle and young stock. *Weekly Underw* 149:309 Ag 14 '43
 Explore idea of creating market to insure feeder cattle. *Nat Underw* 47:3 Ag 19 '43
 Feeder cattle coverage offered by marine departments; Springfield fire and marine insurance company. *Spectator* (Property ed) 9:32 S 23 '43
 Feeder cattle insurance; Hartford live stock insurance company. *Spectator* (Property ed) 9:30 S 9 '43
 War increases some live stock premiums, cuts others. W. H. Timmons. *Nat Underw* 47:28 Mr 4 '43

See also

Insurance, Horse

INSURANCE, Machinery

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Insurance, Power plant

INSURANCE, Malpractice liability

Doctor needs malpractice cover; position in court. *Nat Underw* 47:14 O 28 '43
 Employers Liability now writing malpractice. *Nat Underw* 47:53 O 14 '43
 Malpractice cover needed by doctors in army, navy. *Nat Underw* 47:19 Mr 25 '43

INSURANCE, Manufacturers' and contractors' public liability

Casualty companies construe policies to cover alienated premises. *East Underw* 44:28 Ag 20 '43
 M. & C. premiums now to exclude overtime factor. *Nat Underw* 47:18 O 7 '43

INSURANCE, Marine

British commentator sees more comprehensive future agreements with United States government. D. King-Page. *Weekly Underw* 148:544+ Mr 6 '43
 Changes in underwriting principles for 1943 season by Great Lakes syndicate. *Weekly Underw* 148:741 Ap 3 '43
 Insured's right to switch brokers upheld in marine insurance case. *East Underw* 43:29 D 4 '42

Jurisdiction in general average case is left to Argentine courts. *East Underw* 44:23 Ja 22 '43
 Lakes syndicate will underwrite WSA list. *Weekly Underw* 147:1316+ D 5 '42; *East Underw* 43:29 D 4 '42

Marine committees forming to study postwar expansion. *Nat Underw* 47:2+ S 9 '43
 Marine insurance misfortunes, legal and otherwise, experience in past year. M. Detels. *Weekly Underw* 148:149-50+ Ja 9 '43

Marine insurance situation. C. L. Despard. *Management R* 32:271-2 Jl '43
 Marine insurance year. H. B. DeGray. *Ins Field* (Fire ed) 71:10-11+ D 31 '42
 North America obtains valuable relic of sea; tureen given British captain in 1807 by insurance companies and individual underwriters. *Il Weekly Underw* 148:953 My 1 '43

River marine writings boosted by war activity. *Nat Underw* 47:3 Je 10 '43
 Theft and pilferage worries of British underwriters. *Weekly Underw* 149:453 S 4 '43
 Underwriters sign with WSA on lost vessels. *Weekly Underw* 147:1187 N 21 '42
 WSA, Maritime bureau insurance work described. *Nat Underw* 47:10 S 23 '43

See also

Insurance, Inland marine
 Insurance, Motor boat
 also American institute of marine underwriters

Adjustment of claims

British court holding in flying boat action. *Weekly Underw* 148:1151 My 29 '43
 Coxwold case echoes; British action changed underwriting fundamentals. *Weekly Underw* 148:1284 Je 12 '43
 Dividing line between marine and war risks; Coxwold case. F. P. Gore. *Weekly Underw* 148:72, 74-5+ Ja 2 '43
 Holds flying boat is not legally a vessel. *Weekly Underw* 148:190 Ja 16 '43
 Insurer not liable if cause of loss occurs during suspension. *East Underw* 44:28 Mr 26 '43
 Insurers on paying hull policy may escape cost of removing wreck. *East Underw* 44:29 Ap 30 '43
 Underwriters held liable in partial sinking caused by jamming of valve. *Weekly Underw* 149:952-3 O 30 '43

Agents

Commissions

Trend to lower commissions on marine risks. C. L. Despard. *East Underw* 44:18 Ap 30 '43; Same. *Weekly Underw* 148:951+ My 1 '43

Coverage

Cargo barge shipments covered by endorsement. *Weekly Underw* 147:1378 D 12 '42
 Question of unrepaired damage continues to annoy British underwriters. *Weekly Underw* 149:572 S 18 '43

Finance

1942 ocean marine premiums rise; net premium income received by stock fire and marine insurance companies; tabulation by company. *East Underw* 44:20, 23 Mr 5 '43
 Ocean marine underwriting results in 1942; stock companies. *Spectator* (Property ed) 8:10-11 Jl 8 '43
 Ocean marine (war risk only) business in 1942; tabulation by company. *Spectator* (Property ed) 8:37 Mr 4 '43
 Ocean war risk premiums and losses, 1942. *Nat Underw* 47:38 Mr 11 '43

International aspects

Marine insurance future; is nationalism feasible? D. King-Page; J. J. Eberli. *Weekly Underw* 149:345+ Ag 21 '43; Reply. H. Chubb. 149:653 S 25 '43
 Regulations regarding sending insurance information outside United States announced by censors. *Weekly Underw* 148:484+ F 27 '43

Policies

Cites features of master policy. *Nat Underw* 47:28 Jl 15 '43

INSURANCE, Marine—Policies—Continued

2,000 cases decided under British marine policy since Elizabeth's time; discussion of questions on marine by Minnesota buyers. Weekly Underw 149:855-6 O 16 '43

Premiums, Recovery of

Court holds marine contract valid on ship returned to Canadian port. East Underw 44:30 My 14 '43

Rates

British raise rates for Atlantic war risks. Weekly Underw 147:1184 N 21 '42

Cargo war risk rates keep downward trend. Weekly Underw 147:1185 N 21 '42

Caribbean area rate reductions by both WSA and private underwriters. Weekly Underw 148:236 Ja 23 '43

Commercial coverage extension announced. Weekly Underw 149:766 O 9 '43

Commercial underwriters take action following allied successes. Weekly Underw 148:1153-4 My 29 '43

Drastic war risk rate reduction is announced. Weekly Underw 149:571 S 18 '43; East Underw 44:27 S 17 '43; Nat Underw 47:5 S 16 '43; Business Week p105-6 S 25 '43

Extension clause change to bring rate reduction. Nat Underw 47:32 Je 3 '43

Further cuts made in cargo war risk rates. Nat Underw 47:3 Ja 7 '43

Lakes syndicate will underwrite WSA list. Weekly Underw 147:1316+ D 5 '42

Lower marine war risk rates reflect improved situation of allies. Nat Underw 47:32 Je 17 '43

Marine cargo rates in downward trend. Weekly Underw 148:137+ Ja 9 '43; Same. East Underw 44:23 Ja 15 '43

Marine war risk rates generally are reduced. Nat Underw 47:36 My 20 '43

Marked war risk rate cuts from high-point encouraging. Nat Underw 47:40 Ag 26 '43

Mediterranean rates again being quoted; action of London institute. Weekly Underw 148:1283+ Je 12 '43

New rate reduction is announced by WSA. Weekly Underw 148:430 F 20 '43

New rate reductions; voyages to West Africa and Alaska and to east coast of South America affected. Weekly Underw 148:1044 My 15 '43

Radar will avert collisions, cut marine rates; panel discussion. W. D. Winters and others. Nat Underw 47:3+ O 21 '43

Rate adjustments on several routes. Weekly Underw 149:710 O 2 '43

Rate cuts made in cargo war risk field. Nat Underw 46:32 D 10 '42; East Underw 43:63 D 11 '42; Weekly Underw 147:1379 D 12 '42

Rates for cargo risks continue downward. Weekly Underw 148:428 F 20 '43

Revised war risk export rates on twenty routes announced by WSA. East Underw 43:31 N 20 '42

Trend still downward for war risk coverage. Weekly Underw 147:1480 D 26 '42

War risk rates at sea are cut. Nat Underw 46:35-6 N 12 '42

War risk rates one year ago were at peak. Nat Underw 47:32 S 2 '43

WSA announces marine war risk rate cuts for Caribbean area. East Underw 44:23 Ja 22 '43

WSA rate changes; new schedule issued for cargo risks to Near and Far East. Weekly Underw 148:692 Mr 27 '43

WSA reduces war risk rates on fishing vessels. Nat Underw 47:39 Je 10 '43

War risks

British marine insurance tested by war; leading changes to meet new conditions. Weekly Underw 149:765+ O 9 '43

Differences in American and British F.C.&S. clauses. D. King-Page. Weekly Underw 149:518 S 11 '43

Dividing line between marine and war risks; Coxwold case. F. P. Gore. Weekly Underw 148:72, 74-6+ Ja 2 '43

Drafter of new F. C. & S. clause did not make it snappy, Britisher observes. Weekly Underw 149:306+ Ag 14 '43

Extension clause change to bring rate reduction. Nat Underw 47:32 Je 3 '43

Free capture-seizure clause defined by British. Weekly Underw 147:1433+ D 19 '42

Insuring export cargoes may soon be turned back to underwriters. F. Chubb. Weekly Underw 149:950 O 30 '43

Marine underwriting results improve. H. T. Chester. Weekly Underw 148:70, 73 Ja 2 '43

Marine war risks total \$17,061,000,000; experience covering three and one-half years. Weekly Underw 148:269-7, 279 Ja 30 '43; East Underw 44:26 Ja 29 '43; Nat Underw 47:5 F 4 '43; Comm & Fin Chr 187:583 F 11 '43

New balance set between marine and war perils. Nat Underw 47:4 Je 24 '43; East Underw 44:16 Je 25 '43

New clause in connection with extended transshipment coverage on cargo. Weekly Underw 148:747 Ap 3 '43; Same. East Underw 44:31 Ap 2 '43

New ocean marine endorsements; limited war risk assumption clause, war risks coverage between ship and shore. Spectator (Property ed) 9:27 Ag 5 '43

Ocean war risks; strengthened commercial market has cooperated with the War shipping administration. W. A. Hamlin. II Spectator (Property ed) 8:10-12+ Ap 8 '43

Ship time loss claims must have WSA approval. Weekly Underw 147:1381 D 12 '42

Views on capture and seizure clause. H. T. Chester. Weekly Underw 149:390+ Ag 28 '43; Same. Nat Underw 47:2 Ag 26 '43; Same abr. East Underw 44:25 Ag 27 '43

War risk marine report requires careful study on part of stockholders. F. L. Brokaw. Weekly Underw 148:328+ F 6 '43

War risk open cargo policies of WSA in line with those of private underwriters. Weekly Underw 148:192 Ja 16 '43; Nat Underw 47:31 Ja 21 '43

War risks extended transshipment clauses. Spectator (Property ed) 8:20 Jl 8 '43

WSA eases clause voiding policy. Nat Underw 47:5 F 11 '43

WSA opens New York office. East Underw 44:26+ Ag 13 '43; Weekly Underw 149:307 Ag 14 '43

WSA revises its cargo war risk open policy. Nat Underw 47:31 Ja 21 '43

WSA rules on cargoes under collect freight. Weekly Underw 147:1248 N 28 '42; East Underw 43:23 N 27 '42

Warshipopencargo. D. M. Perry. Weekly Underw 147:1432 D 19 '42; Correction. 148:151 Ja 9 '43

Warshipopencargo; revisions announced Jan. 11, 1943. Spectator (Property ed) 8:29 F 4 '43

Great Britain

British marine insurance during wartime. A. B. Stewart. East Underw 44:26+ My 14 '43

British marine insurance tested by war; leading changes to meet new conditions. Weekly Underw 149:765+ O 9 '43

British underwriters co-operated fully in handling new problems that arise. G. I. Ried. Weekly Underw 148:596 Mr 13 '43

Burden of deferred ship repairs; annual report of Eagle Star. E. Mountain. East Underw 44:23 Jl 23 '43

Increase in British marine income called tremendous. Weekly Underw 149:458 S 4 '43

Marine insurance. Economist 145:242 Ag 21 '43

Marine underwriting in 1942. Economist 144:724 Je 19 '43

New F.C. & S. clause; liability for certain warlike operations will be assumed. Weekly Underw 148:428 F 20 '43

No change in hull understanding. D. King-Page. Weekly Underw 148:690 Mr 27 '43

Problems arise in application of British institute protection and indemnity clauses. D. King-Page. East Underw 43:27 N 13 '42

2,000 cases decided under British marine policy since Elizabeth's time; discussion of questions on marine by Minnesota buyers. Weekly Underw 149:855-6 O 16 '43

India

Marine policies issued in U.S. dollars and Canadian dollars restricted to shipments to the U.S. and Canada, respectively. For Comm W 9:13 D 26 '42

INSURANCE, Marine—Continued

Sweden

Swedish results, 1942. Weekly Underw 148:546
Mr 6 '43

United States

Are American underwriters resigned to playing second fiddle in marine field? abstracts. H. H. Reed. Weekly Underw 148:330-1 F 6 '43; East Underw 44:27 F 5 '43

Comments on marine underwriting; conditions after United States entered war. J. A. Diemand. Weekly Underw 148:645+ Mr 20 '43

How marine underwriters in U.S. have met war's shock period. F. B. Zeller. East Underw 43:52+ D 11 '42

Keep 'em sailing! how government and private underwriters have worked to move and protect cargoes; chronology. chart Ins Field (Fire ed) 72:8-10 Mr 18 '43; Same, without chart. East Underw 44:17 Mr 19; 17 Mr 26 '43

Marine insurance future. H. H. Reed. Weekly Underw 149:5+ J1 3 '43

Marquis James' North America book cites marine preparations for war. East Underw 43:15+ N 27 '42

INSURANCE, Military and naval service
Army takes action to promote service cover. Nat Underw (Life ed) 47:1 F 19 '43

Bill by Senator Clark seeks revision of National service life. B. C. Clarke. Ins Field (Life ed) 72:3, 11 My 14 '43

Charges service life insurance misses objective. E. L. Bowers. Nat Underw (Life ed) 47:3+ My 21 '43

Government life insurance for service men. E. G. Johnson. East Underw 44:36+ pt 2 O 1 '43

Legal effects of war service; National service life insurance. G. J. Baldwin and J. K. Clark, Jr. East Underw 44:9 Ag 27 '43

National service life insurance. F. T. Hines. Ann Am Acad 227:83-93 My '43

National service life insurance; implications for privately operated life insurance. T. J. V. Cullen. Spectator (Life ed) 150:4-8, 42-6 F '43

New service for the Nation; sell millions of dollars worth of national life insurance without pay. Ins Field (Life ed) 72:8-9 F 26 '43; Nat Underw (Life ed) 47:1+ F 26 '43

\$100,000,000-a-week life production in Navy division. C. P. Slater. Nat Underw (Life ed) 46:2+ N 27 '42

Penn Mutual's war service booklet. East Underw 44:3 Ag 6 '43

Questions and answers on service men's insurance. East Underw 44:38 pt 2 O 1 '43

Questions as to service insurance beneficiaries are answered. Nat Underw (Life ed) 47:6 Ap 9 '43

Radio used to transmit applications from Philippines. H. L. McCoy. Nat Underw (Life ed) 47:2+ Ag 27 '43

Service bureau plans for armed forces. S. Wertimer. East Underw 44:11 Ap 2 '43

Service insurance shown by theaters. Nat Underw (Life ed) 47:1 J1 30 '43

Two navy National service life insurance questions answered. East Underw 44:5 O 29 '43

Veterans administration program. H. L. McCoy. East Underw 44:3+ Ag 27 '43

Veterans irked by 30% combat troops not insured by U.S.; discuss app form red tape, etc. East Underw 44:1, 15-16 Ap 16 '43

Why total disability is not in National service life policies. H. W. Breining. East Underw 44:6+ Ap 23 '43

See also

Military service—Insurance aspects

INSURANCE, Motor boat

Adjustment of claims

Aetna wins P. & I. decision; insured motor boat operated without searchlight. Nat Underw 47:32 Je 17 '43

INSURANCE, Motor bus

Selling school bus insurance. A. E. Leu. East Underw 44:30 J1 30 '43

Adjustment of claims

Insurer's refusal to defend passenger's suit relieves assured from giving notice of later action by another passenger. Weekly Underw 147:1158 N 14 '42

Policies

Medical cost reimbursement can now be readily sold. Nat Underw 47:36 Ag 12 '43

INSURANCE, Motor truck

Commercial car insurers watch changing scene. Nat Underw 46:27 D 31 '42
Their friends are not forgotten. C. W. Benfield. East Underw 44:33+ pt 2 My 21 '43

Adjustment of claims

Agent's knowledge of encumbrance on truck bars move to void policy. East Underw 43: 23 D 25 '42

Auto liability policy does not cover injury caused by slipping on oil which leaked from tank of oil truck. Weekly Underw 149:423 Ag 28 '43

Calculation of value recoverable after collision before Iowa court. East Underw 43: 30 N 13 '42

Company paying truck fire damage entitled to salvage, court holds. East Underw 44:34 Ap 30 '43

Exclusion clauses limiting location; digest of recent cases. J. L. Roesch. Spectator (Property ed) 8:30-2 Ap 8 '43

Process of unloading truck continues until goods are actually delivered to party to whom consigned. Weekly Underw 149:927 O 23 '43

Interstate aspects

Motor carrier laws, the difficulties and a remedy. E. W. Sawyer. Weekly Underw 149:555-7 S 18 '43

Rates

American Auto commercial car reduction matches Bureau's. Nat Underw 47:21 F 18 '43

Commercial car bodily injury liability rates get 20% cut. East Underw 44:37 F 12 '43; Nat Underw 47:19 F 11 '43; Weekly Underw 148:379-80 F 13 '43

Illinois

Problems of Illinois truck act enforcement. Nat Underw 47:23 O 21 '43

INSURANCE, Motor truck contents

Motor truck cargo now largest class of inland marine cover. G. G. Quirk. East Underw 43:1+ D 11 '42

Adjustment of claims

Insured common carrier cannot transfer cargo to another truck. East Underw 44:30 Je 4 '43

Sun wins important issue over cargo dishonesty loss. Nat Underw 47:31-2 F 4 '43

INSURANCE, Musical instruments

Musical instruments provide sales field. Weekly Underw 147:1251 N 28 '42

INSURANCE, Mutual

Both domestic and foreign mutuels may write non-assessable policies under new Maine law. East Underw 44:30 Ap 23 '43

Central Mutual receiver wins smashing victory. Nat Underw 47:17+ Ag 12 '43

Country-wide underwriting results, 1938-42, of companies licensed in New York state; tabulation. East Underw 44:11-12+ pt 2 My 21 '43

Eastern Mutual Casualty levy on policyholders O.K. Nat Underw 47:19 F 11 '43

Factory mutuels had reduced loss in '42. Weekly Underw 148:528 Mr 6 '43

Fire mutual companies' 1942 figures. Nat Underw 47:10 Ja 28; 12 F 4; 36 F 11; 6 F 18; 15 Mr 4; 10 Mr 11; 12 Mr 18 '43

Georgia assessment decision analyzed; distinctions found. Nat Underw 47:17 Je 24 '43

Hot hearing in Wisconsin over Mutual assessment. Nat Underw 47:18 Ap 15 '43

Liberty Mutual wins Massachusetts case; mutual not required to account to policyholders for accumulated surplus funds. East Underw 44:41 F 26 '43

Mutual agents hear federal threat stressed at convention in New York. Nat Underw 47:3+ O 7 '43; East Underw 44:1+ O 8 '43

INSURANCE, Mutual—Continued

- Mutual-stock cost difference narrows. Nat Underw 47:2+ O 14 '43
- Mutuals may write surety and fidelity business in New Hampshire. D. Knowlton. Weekly Underw 149:957 O 30 '43
- N.Y. agents' assn. states views on mixed agencies and branch offices. East Underw 44:17 O 29 '43
- 1942 automobile premiums and losses of mutual companies; comparisons for 1941. Nat Underw (Auto Ins no) 47:24-5 Ap 26 '43
- Ohio National mutualization plan is upheld. Nat Underw (Life ed) 47:8 Je 13 '43
- Pan-American Life mutualization plan approved. Nat Underw (Life-ed) 47:12 Ja 29 '43
- Prudential mutualized formally. East Underw 44:8 Ap 2 '43
- REA drops mutual cover scheme. Weekly Underw 149:57+ JI 10 '43; Nat Underw 47:15 JI 8 '43
- REA insurance scheme criticized. Weekly Underw 149:109+ JI 17 '43
- Stock and mutual fire premiums; percentage distribution of fire insurance premiums of all classes; graphs. Spectator (Property ed) 9:23 O 21 '43

See also

Insurance, Cooperative

also National association of mutual insurance agents

INSURANCE, Owners', landlords' and tenants' public liability

- Casualty companies construe policies to cover alienated premises. East Underw 44:28 Ag 20 '43
- O.,L.&T. liability; revision of National bureau of casualty & surety underwriters manual. Spectator (Property ed) 8:30 Ja 21 '43

INSURANCE, Personal effects

- Personal effects, personal property floaters changed. Nat Underw 47:3 My 27 '43; East Underw 44:28 My 23 '43

INSURANCE, Personal property. See Insurance, inland marine—Policies—Personal property floater**INSURANCE, Plate glass**

- Glass breakage heavy after Harlem rioting. East Underw 44:25 Ag 6 '43
- Glass reinsurance plan covers war risk hazard. East Underw 44:32-3 Mr 5 '43
- Harlem riot loss report. East Underw 44:28 S 3 '43
- Questions and answers regarding plate-glass coverage. Weekly Underw 149:666 S 25 '43

INSURANCE, Power plant

- Agents deplore rift in boiler-machinery. East Underw 44:42 F 26 '43

Boiler and machinery; coverage changes by Hartford steam boiler inspection & insurance company. Spectator (Property ed) 8:22 F 18 '43

Boiler and machinery insurance. H. M. Osers. East Underw 43:30 D 25 '42

Boiler rewriting rash now breaks out in New York. Nat Underw 47:21 Ag 26 '43

Bureau's new boiler manual includes many changes. W. D. Leslie. Nat Underw 47:15+ Ap 1 '43; Same. East Underw 44:32+ Ap 2 '43; Same. Ins Field (Fire ed) 72:5-6+ Ap 1 '43; Same. Weekly Underw 148:749+ Ap 3 '43; Same. Spectator (Property ed) 8:24-5 Ap 8 '43

Hartford Steam Boiler battles to save precincts. Nat Underw 47:17+ Mr 25 '43

Hartford Steam Boiler brings out new manual. Nat Underw 47:17 F 4 '43; Same abr. East Underw 44:28 F 5 '43; Same abr. Weekly Underw 148:334 F 6 '43

Hartford Steam Boiler, Employers' leave Bureau; differences on steam boiler and machinery ratings and procedure. East Underw 44:29 Ja 1 '43

Hartford Steam Boiler helps in war effort; annual report to stockholders. East Underw 44:36 F 12 '43

Hartford Steam Boiler to file brief. W. A. Hamlin. Ins Field (Fire ed) 72:10+ My 6 '43

Hits statement on boiler cover. C. I. Fisher. Nat Underw 47:13 Ja 7 '43

National bureau outlines and justifies boiler, machinery wartime moves. Nat Underw 46:15 D 24 '42; Same. Weekly Underw 147:1486-7 D 26 '42; Same abr. East Underw 43:24-5 D 25 '42

New boiler and machinery manual of National Bureau now in effect. Weekly Underw 148:956+ My 1 '43; East Underw 44:48 Ap 30 '43; Nat Underw 47:17+ Ap 22 '43

Outlook in boiler field clouded; changes expected following withdrawal of Hartford Steam Boiler. Nat Underw 47:23 Ja 7 '43

Overhauling forms and coverage for boiler and machinery cover under way. W. Leslie. Weekly Underw 148:194 Ja 16 '43

Reports on development of merchandising program over three years. R. W. Howe. Weekly Underw 149:902-3 O 23 '43

Revised manual of Hartford Steam Boiler surprise move in New York. East Underw 44:27 Ag 13 '43; Nat Underw 47:17 Ag 12 '43

Seeks to compose broad form dispute; N.Y. wants boiler, machinery insurers to act uniformly. Nat Underw 47:17 Mr 25 '43

See also

Insurance, Boiler

Rates

Adopt special risk rating in boiler field. Nat Underw 46:17+ D 17 '42

Boiler and machinery cover held basic lines; observations on rating methods. S. E. Smith. Weekly Underw 147:1328-9 D 5 '42

Boiler battle rages with little hope of peace. Nat Underw 47:19+ Je 3 '43

Boiler rate cut amounts to year's free insurance. Nat Underw 47:17 JI 15 '43

Bureau evens score with Hartford in N.Y. boiler war. Nat Underw 47:19+ Ag 19 '43; East Underw 44:24 Ag 20 '43

Hartford counters with new slash in boiler rates. Nat Underw 47:21+ My 6 '43

Hartford increases boiler manual zone reductions. Nat Underw 47:22 Je 10 '43

New boiler rating plan effective Dec. 28. Nat Underw 46:29 D 31 '42

No instant decision on boiler and machinery by N.Y. department; abstracts. J. D. Whelehan. East Underw 44:37+ Ap 9 '43; Nat Underw 47:17+ Ap 8 '43

Progress made in harmonizing boiler conflict. Nat Underw 47:19 Je 17 '43

Steam Boiler war noted in different sections of the field. Nat Underw 47:25+ Mr 18 '43

English problem with profits cover similar to U. S. E. L. Butler. Nat Underw 47:3 F 11 '43

INSURANCE, Profits and commissions

INSURANCE, Prospective earnings. See Insurance, Use and occupancy

INSURANCE, Race horse. See Insurance, Horse

INSURANCE, Radium floater. See Insurance, inland marine—Policies

INSURANCE, Reciprocal

Authority of state to regulate reciprocals upheld; U.S. Supreme court holds for N.Y. in Warner exchanges' case. Nat Underw 47:3+ Mr 4 '43; East Underw 44:18+ Mr 12 '43

Warner case significance. J. F. Wohlgenuth. Nat Underw 47:7 Mr 13 '43

Warner decision marks epoch in reciprocal field. J. F. Wohlgenuth. Nat Underw 47:2 Mr 25 '43

INSURANCE, Registered mail

War damage insurance on securities and money. A. E. Muller. Trusts & Estates 75: 587-93 D '42

INSURANCE, Rent

Chicago bank asks rent question. Nat Underw 46:3 D 10 '42

Coast boom raises question on rental form. Nat Underw 47:39 O 21 '43

Fallen building clause and rents insurance figure in a decision. Nat Underw 47:13 Ag 5 '43

Rent combination plan is used. Nat Underw 47:15 Mr 4 '43

Rental coverage under war stress. H. I. Harris. Spectator (Property ed) 8:31 Je 3 '43

INSURANCE, Residence burglary, robbery, theft and larceny. See Insurance, Theft

INSURANCE, Riot and civil commotion

- Complications in Harlem riot loss. Nat Underw 47:7 Ag 12 '43
 Explosion conference points out trebled rates where risks are bad. East Underw 44:21 J1 9 '43
 Loss due to exchange fluctuations held covered under riot insurance. East Underw 44:28 Ap 30 '43
 Riot and civil commotion coverage; action to recover on cotton taken over by authorities during Spanish civil war; digest of recent case. J. L. Roesch. Spectator (Property ed) 9:28-30 Ag 19 '43
 Riot losses heavy in Harlem. Nat Underw 47:2 Ag 5 '43

INSURANCE, Robbery. See Insurance, Burglary; Insurance, Theft**INSURANCE, Safe deposit box**

- Agency discusses need of safe deposit coverage. Nat Underw 47:14 J1 22 '43
 Big deposit box loss attracts insurance eyes. Nat Underw 47:17+ J1 15 '43
 Maryland Casualty arranges to pay safety box loss. Nat Underw 47:16 S 30 '43

INSURANCE, Self. See Insurance—Self insurance; Insurance, Fire—Self insurance; Insurance, Fire—State self insurance; Insurance, Workmen's compensation—Self insurance**INSURANCE, Sickness.** See Insurance, Health
INSURANCE, Social

- Approach to a philosophy of social insurance. R. Billings and J. Farley. Weekly Underw 148:773-7, 826-30 Ap 3-10 '43; Excerpts. East Underw 43:38 D 4 '42
 Beveridge and National resources planning board social plans. J. B. Maclean. East Underw 44:7 Ag 13 '43
 Beveridge plan and U.S. version are contrasted. W. S. Connell. Nat Underw 47:19 J1 1 '43; Same. Nat Underw (Life ed) 47:3+ J1 2 '43
 Beveridge talk at Chicago proves real eye opener; American proposals. Weekly Underw 148:1317+ Je 19 '43
 Beveridge talks to insurance men; talks at Columbia university. East Underw 44:1+ Je 4 '43
 Casualty actuary and social insurance—more attention to this field urged. R. H. Blanchard. Weekly Underw 147:1255+ N 28 '42; Abstracts. East Underw 43:24+ N 27 '42; Nat Underw 46:15+ N 26 '42
 From the cradle to the grave. P. F. Cadman. Banking 35:28-9, 32 F '43
 Future of the commercial insurance business. J. H. Magee. Harvard Business R 21 no 3:321-35 [Ap] '43; Abstract. Weekly Underw 148:732 Ap 3 '43
 His plan for post-war social security unsuited to United States. W. H. Beveridge. Comm & Fin Chr 157:2061 Je 3 '43
 Insurance economics society publishes "Facts about social insurance." East Underw 44:28-9 Ja 8 '43; Nat Underw 47:26 Ja 28 '43; Nat Underw (Life ed) 46:7 D 25 '42
 Modern social security plans and unemployment. S. Eckler. bibliog Int Labour R 48: 555-83 N '43
 Needs economic activity at high level to maintain Beveridge plans. B. Leman. East Underw 44:3+ Je 4 '43
 New structure of social security; the work of the Inter-American conference on social security at Santiago de Chile. Int Labour R 46:661-91 D '42
 Nothing in Beveridge plan for this nation. M. Fishbein. Weekly Underw 148:1209+ Je 5 '43; Same abr. East Underw 44:42 Je 4 '43
 Possible effects on national advertising of international tendency to insure freedom from want; Beveridge plan. Adv & Sell 36:19-20 Mr '43
 Progress in social security; review of National resources planning board report and Beveridge report. A. A. Bright, jr. Mech Eng 65:588-9 Ag '43
 Security would absorb 20% of income; Beveridge and National resources plans. M. A. Linton. East Underw 44:15 Mr 26 '43
 Sir William Beveridge working on new program to provide maximum post-war employment. Comm & Fin Chr 157:1883 My 20 '43

- Social insurance movement. R. C. White. Am Stat Assn J 38:358-64 S '43
 Social security abroad. T. J. V. Cullen. Il Spectator (Life ed) 150:4-9+ Ap '43
 Social security and private life insurance. T. J. V. Cullen. Trusts & Estates 76:115-16 F '43
 Social security in private enterprise. East Underw 44:7+ J1 16 '43
 Three conditions of security. W. Beveridge. Ins Field (Fire ed) 72:6-7 Je 17 '43; Same. Ins Field (Life ed) 72:6-7 Je 18 '43
 What is this social security? some necessary distinctions between public assistance and private insurance. G. Hirschfeld. Trusts & Estates 76:109-15 My '43

See also

- | | |
|-------------------------|-----------------------------------|
| Insurance, Disability | Insurance, Workmen's compensation |
| Insurance, Health | Old age pensions |
| Insurance, Unemployment | |

Beveridge plan

See Insurance, Social—Great Britain

Bibliography

- Review of basic social insurance literature. H. O. Oille. Special Lib 34:301-6 J1-Ag '43

Cost

- Cost element of social security. M. A. Linton. Nat Underw (Life ed) 47:2 My 21 '43
 Cost of an American Beveridge plan. G. Hirschfeld. Barron's 23:1 Mr 22; 16 Mr 29 '43
 \$20 billion for social security? cost appraisal of proposals for expansion of coverage and of services. G. Hirschfeld. Trusts & Estates 77:107-14 Ag '43

Finance*See also*

- Old age pensions—
 Finance

Australia

- Australian Beveridge. Economist 144:233-4 F 20 '43

Brazil

- Social insurance movement in Brazil. Int Labour R 47:525-8 Ap '43

Bulgaria

- Labor conditions in Bulgaria. A. L. Whitney. Monthly Labor R 57:684-8 O '43

Canada

- Canadian securities; Marsh post-war social security plan. B. Williams. Comm & Fin Chr 157:1203 Ap 1 '43
 Social insurance plans in Canada. Int Labour R 47:516-20 Ap '43
 Social security and the Canadian constitution. Economist 144:792 Je 19 '43
 Social security planning in Canada; Dr L. C. Marsh's report; Proposed health insurance legislation. Int Labour R 47:591-616 My '43
 Views on social insurance; abstracts. J. G. Parker. East Underw 44:5+ My 28 '43; Weekly Underw 148:1232+ Je 5 '43

Chile

- Social insurance for journalists in Chile, 1941. Monthly Labor R 56:690-2 Ap '43
 Social insurance movement in Chile; non-manual workers' medical service. Int Labour R 47:522-5 Ap '43
 Social insurance movement in Chile; establishment of regional workers' insurance boards. Int Labour R 48:530-2 O '43
 Social security in Chile. Il For Comm W 10:6-7+ F 6 '43

Costa Rica

- Social insurance regulations in Costa Rica. Int Labour R 47:520-1 Ap '43

Cuba

- Social insurance movement in Cuba. Int Labour R 47:784-5 Je '43

Germany

- Reform of miners' pensions in Germany. Int Labour R 48:391-3 S '43
 Social insurance reforms in Germany. Int Labour R 47:248-51 F '43

INSURANCE, Social—Continued

Great Britain

- America and the Beveridge plan. H. A. Behrens. *Ins Field* (Fire ed) 72:7-9 Ja 14 '43; Same. *Weekly Underw* 143:181+ Ja 16 '43; Same. *Ins Field* (Life ed) 72:8-10 Ja 15 '43; Same abr. *Nat Underw* 47:15+ Ja 14 '43; Same. *Nat Underw* (Life ed) 47:2+ Ja 15 '43; Excerpts. *East Underw* 44:24-5 Ja 15 '43
- Before Beveridge. *Economist* 143:569 N 7 '42
- Beveridge ideas are for national minimum. *East Underw* 43:3+ D 25 '42
- Beveridge plan and British capitalism. *Trusts & Estates* 75:534-5 D '42
- Beveridge plan and pre-war benefits; chart. *East Underw* 44:12 Ja 22 '43
- Beveridge plan; summary. *Economist* 143:699-700 D 5 '42
- Beveridge program. M. A. Linton. *East Underw* 44:22 pt 2 O 1 '43
- Beveridge report. *Nat City Bank* p8-11 Ja '43
- Beveridge report has many insurance angles. *Nat Underw* 46:19 D 10 '42; *Nat Underw* (Life ed) 46:5 D 11 '42
- Beveridge report summarized by Chamber of commerce of the U.S. *East Underw* 43:11+ D 18 '42
- Beveridge report text now being studied by life companies here. *East Underw* 43:1+ D 25 '42
- Beveridge report, with special reference to pensions and workmen's compensation. H. Lesser. *Gas J* (Lond) 241:435-6, 471, 495-6 Ap 7-21 '43; Discussion. 242:55+ JI 14 '43
- British Society of individualists grows. F. Plachy. *East Underw* 44:3 O 1 '43
- Central medical service? *Economist* 144:96-7 Ja 23 '43
- Consolidation of social coverages is Beveridge aim. *Nat Underw* (Life ed) 47:9 Ja 22 '43
- Eire and Beveridge. *Economist* 143:800 D 26 '42
- English insurance reaction given on Beveridge report; Review of London. *Nat Underw* 47:19+ F 11 '43; Same abr. *Nat Underw* (Life ed) 47:1+ F 12 '43
- Expounds his program before the Chicago association of commerce. W. Beveridge. *Nat Underw* 47:21+ Je 17 '43; Same. *Nat Underw* (Life ed) 47:2+ Je 18 '43
- Freedom from want; examination of the Beveridge report, together with thoughts on how demand for social legislation can be anticipated by expansion of services of private enterprise. T. J. V. Cullen. *Il Spectator* (Life ed) 150:14-21+ Ja '43; Same abr. *Spectator* (Property ed) 8:10-14, 25-9 Ja 21 '43; Excerpts. *Trusts & Estates* 76:115-16 F '43
- Insurance and assurance. *Economist* 144:233 F 20 '43
- Linton and Altmeyer quiz Beveridge over the radio. *East Underw* 44:3 F 26 '43
- Provisions of Beveridge British social insurance scheme now before Parliament. *Weekly Underw* 147:1341+ D 5 '42; Abstracts. *East Underw* 43:5 D 4 '42; *Nat Underw* 46:19 D 3 '42; *Nat Underw* (Life ed) 46:5 D 4 '42
- Reactions to Beveridge plan; English insurance interests hesitant about voicing negative opinions. *Nat Underw* 47:15+ Ja 14 '43
- Reconstruction priorities; Beveridge plan cost. *Economist* 144:198-200 F 13 '43
- Sir William Beveridge's report on social insurance and allied services. *Int Labour R* 47:46-57 Ja '43
- Social insurance and allied services. W. C. Betts. *Comm & Fin Chr* 157:1019 Mr 18 '43
- Social insurance movement in Great Britain. *Int Labour R* 48:535-7 O '43
- Social-insurance proposals in Great Britain; Beveridge report. *Monthly Labor R* 56:272-6 F '43
- Social priorities; Sir William Beveridge's remarkable plan. *Economist* 143:689-91 D 5 '42
- Standard of living. *Economist* 145:325-6+ S 4 '43
- Tidal wave in Britain; insurance industry sees Beveridge borew ahead. R. Walker. *Ins Field* (Fire ed) 72:6-8 JI 8 '43; Same. *Ins Field* (Life ed) 72:8-10 JI 9 '43

Will human welfare be better protected under British Beveridge plan? P. E. Tumblety. *East Underw* 44:3 Ja 22 '43

Haiti

Creation of a social insurance fund in Haiti. *Int Labour R* 48:532 O '43

Ireland

Eire and Beveridge. *Economist* 143:800 D 26 '42

Italy

Social insurance reform in Italy. *Int Labour R* 48:251-4 Ag '43

Mexico

Application of the Mexican social insurance act. *Int Labour R* 48:533-4 O '43

Mexican social insurance act. *Int Labour R* 47:246-8 F '43

Mexican social security act of 1943; outline of general provisions. H. P. Crawford. *Il For Comm W* 11:8-10+ My 15 '43

Panama

Social insurance reform in Panama. *Int Labour R* 48:113-15 JI '43

Peru

Extension of social insurance in Peru, 1942. *Monthly Labor R* 57:512 S '43

Spain

Social insurance and assistance. *Int Labour R* 47:660-5 My '43

Sweden

Social planning in Sweden. *Int Labour R* 48:308-15 S '43

United States

Action on social security issues sidestepped. *Nat Underw* (Life ed) *Daily ed* 47:4+ S 15 '43

Administration's social security bills presented. *Nat Underw* 47:21+ Je 10 '43; *Nat Underw* (Life ed) 47:3+ Je 11 '43

Altmeyer in hot cross examination; Senate finance committee grills Social security board head. B. C. Clarke. *Ins Field* (Life ed) 72:3+ O 22 '43

Appraising the new deal's post-war plan for a semi-socialistic economic system. L. Stern. *Mag of Wall St* 71:680-2+ Ap 3 '43

Clarify Economics society social security position. *Nat Underw* 47:16 Ap 1 '43; Same. *Nat Underw* (Life ed) 47:3+ Ap 2 '43

Delano plan of social security. T. J. V. Cullen. *Spectator* (Life ed) 150:4-9 My '43

Discusses social plans. R. A. Hohaus. *Weekly Underw* 149:690, 718-19+ O 2 '43; Same abr. *East Underw* 44:3+ O 1 '43; Abstracts. *Nat Underw* 47:15+ S 30 '43; *Nat Underw* (Life ed) 47:6 O 1 '43

Don't throw bricks at proposed social security plans. J. A. Stevenson. *Nat Underw* 47:24 Ap 29 '43

Earnings and social security in the United States. W. S. Woytinsky. 26pp \$2.50 Social science research council, 230 Park av, New York '43

Federal social security; insurance agents find it an aid in increasing existing life insurance ownership. R. B. Thompson. *East Underw* 44:20+ pt 2 O 1 '43

Fifth freedom needed; urges class warfare be buried; extending Social security act. E. H. O'Connor. *Weekly Underw* 148:600+ Mr 13 '43

\$5,000,000,000 annual taxes in Wagner plan. *Weekly Underw* 148:1224 Je 5 '43

For workers, veterans, and candidates; Wagner-Dingell bills. *Business Week* p7 Je 12 '43

FDR favors rise in social security tax. *Comm & Fin Chr* 157:2281 Je 17 '43

Government moves in; soldiers' and sailors' aid may be means of expansion of social security. B. C. Clarke. *Ins Field* (Life ed) 72:8-9 Ag 6 '43

Insurance counsel group assails cradle-grave plan. *Nat Underw* 47:17+ JI 1 '43; Same. *Nat Underw* (Life ed) 47:1+ JI 2 '43

Long social study urged. J. S. Williams, 3d. *Weekly Underw* 148:1257+ Je 12 '43

INSURANCE, Social—United States—Continued
 Many favor social security spread with modest benefits. Nat Underw 47:15 Ja 28 '43;
 Same. Nat Underw (Life ed) 47:10 Ap 9 '43
 National resources board social security proposals criticized as inadequate and vague by American association for social security. Comm & Fin Chr 157:2269 Je 17 '43
 Naturalized citizens penned Delano report. J. E. Garrett. Weekly Underw 148:905 Ap 24 '43
 New post-war social security plan offered in Congress. Comm & Fin Chr 157:2183 Je 10 '43
 No unanimity so far on social security issue; conference under auspices of Insurance economics society. Nat Underw 47:21 F 18 '43; Same. Nat Underw (Life ed) 47:2 F 19 '43
 Pension trust writing being corrected; talk on social security. M. A. Linton. Weekly Underw 149:749-50 O 9 '43; Same. Nat Underw (Life ed) Only no 47:3, 9-13 O 7 '43
 Points to perils in federal supervision; some social aspects of insurance; abstracts. J. M. Broughton. East Underw 44:26 O 29 '43; Ins Field (Fire ed) 72:6 O 21 '43
 President offers Congress post-war program and security, work and relief system; reports of the National resources planning board. Comm & Fin Chr 157:1017, 1024-5 Mr 18 '43
 Reacts to social security talk by Secretary Frances Perkins. J. R. Garrett. East Underw 44:38 F 26 '43; Same. Ins Field (Fire ed) 72:8-9 Mr 4 '43
 Roosevelt makes social security prime topic. D. Porter. Ins Field (Life ed) 72:5+ Ja 15 '43
 Security for all; Wagner bill's program. Business Week p110+ JI 10 '43
 Shall coverage be voluntary or compulsory? E. H. O'Connor. Weekly Underw 148:89-90 Ja 2 '43
 Should we expand social security now? abstracts. O. J. Arnold. Ins Field (Life ed) 72:6-7 F 19 '43; East Underw 44:3 F 19 '43
 Slant on Wagner-Dingell bill. E. H. O'Connor. East Underw 44:35 S 10 '43
 Social insurance expansion as proposed by the National resources planning board. East Underw 44:3+ Mr 19 '43
 Social security and private savings. Trusts & Estates 76:215-16 Mr '43
 Social security aspects as viewed by United States Senator. T. F. Green. Weekly Underw 148:244 Ja 23 '43
 Social security board urges big expansion of coverage in act. East Underw 44:1+, 30 Mr 26 '43
 Social security eight-year record. P. V. McNutt. Nat Underw (Life ed) 47:10 Ag 13 '43; Same. Nat Underw 47:17+ Ag 12 '43
 Social security expansion; should it be opposed by the insurance industry? C. G. Williams. Ins Field (Fire ed) 72:22 Mr 18 '43; Same. Ins Field (Life ed) 72:14 Mr 19 '43; Reply. E. H. O'Connor. Ins Field (Life ed) 72:3-4 Ap 9 '43
 Social security laws and extension into disability field; aims and cost; abstracts. J. M. Powell. East Underw 44:32-3 My 28 '43; Nat Underw (Life ed) 47:8 My 28 '43; Nat Underw 47:21 My 27 '43
 Social security may be investigated. B. C. Clarke. Ins Field (Life ed) 72:3, 27-8 O 1 '43
 Social security system has proved utility in last eight years. P. V. McNutt. Comm & Fin Chr 158:712 Ag 19 '43
 Spirited debate on expanding social security. Nat Underw 47:17 Ja 21 '43
 State social security expansion detrimental to Nation's welfare; abstracts. T. I. Parkinson. Comm & Fin Chr 157:753+ F 25 '43; Weekly Underw 148:508-9 F 27 '43; Ins Field (Life ed) 72:6 Mr 5 '43
 Thinks Congress may halt security's runaway. F. Nelson. East Underw 44:4+ Ag 13 '43
 Too rapid enlargement of social security may injure entire movement. L. H. Pink. Comm & Fin Chr 157:763 F 25 '43
 Treasury shows integration of pensions, social security. Nat Underw (Life ed) 47:2+ S 3 '43

Unions are closing in on social security. Ins Field (Life ed) 72:5-6+ Ja 8 '43
 U.S. Chamber gathers Wagner bill views; comments from insurance executives. East Underw 44:3+ Ag 13 '43
 U.S. Chamber solicits post-war planning ideas; federal social security program adopted by the UAW-CIO. Nat Underw 47:21+ Ag 19 '43; Same. Nat Underw (Life ed) 47:1 Ag 20 '43
 Views social program costs economically, socially, politically; abstracts. C. O. Pauley. East Underw 44:28-9 JI 9 '43; Pub Util 32:375-8 S 16 '43
 Wagner amendments to social security set up new social insurance system. East Underw 44:8 Je 18 '43
 Wagner-Murray bill seen as too costly venture. D. Bradshaw. Nat Underw (Life ed) 47:29-30 O 1 '43
 Wagner's social scheme will mean heavy taxes. E. H. O'Connor. Weekly Underw 148:1377 Je 26 '43
 Walsh bill includes all charitable groups in social security system. Ins Field (Life ed) 72:8 F 5 '43
 Who wants it? talk before N.J. agents. E. H. O'Connor. East Underw 44:30+ Ap 16 '43; Same. Weekly Underw 148:902+ Ap 24 '43
 Why change American way of living; enlarged social security plans. E. H. O'Connor. Weekly Underw 148:37-9+ sec 2 My 8 '43
 Wider social aid in post-war era urged. F. E. Perkins. Comm & Fin Chr 157:1673 My 6 '43
 See also
 Insurance, Social—
 Cost
 Uruguay
 Retirement benefits for domestic servants in Uruguay. Monthly Labor R 56:1116-17 Je '43
INSURANCE, Sprinkler leakage
 Hazards not covered clause in sprinkler policy held ambiguous. Nat Underw 47:6 Ag 19 '43
 Insurers barred as parties to suit even though they defend it. East Underw 43:21 D 25 '42
 Interpretation of terms of sprinkler leakage policy by higher court. Nat Underw 47:7 JI 29 '43
 Recovers for sprinkler loss suffered on day of New England hurricane. Nat Underw 47:32 Je 3 '43
INSURANCE, Stamp collection floater. See Insurance, Inland marine—Policies
INSURANCE, State
 Cites McCarran bill as warning trend. R. Murphy. Weekly Underw 149:946+ O 30 '43
 English industrial insurers oppose state death benefit. Nat Underw (Life ed) 46:1+ D 25 '42
 State fund target for political job seeker. Weekly Underw 148:806 Ap 10 '43
 Treasury proposes paid up U.S. cover for tax refund. Nat Underw (Life ed) 47:10 O 8 '43
 See also
 Insurance, Military Insurance, Unemployment
 Insurance, Social War damage corporation
INSURANCE, Surety and fidelity
 Both premiums and profits greater in casualty-surety lines for 1942. W. L. Clapp. East Underw 44:24 Ja 1 '43
 Casualty and surety business entrenched in Nation's economy. A. G. Oakley. East Underw 44:25 S 3 '43
 Claim records show that serious dishonesty loss can happen in any business. W. O. Rose. Weekly Underw 149:128 JI 17 '43
 Companies holding certificates from Treasury as acceptable sureties on federal bonds; net limit acceptable, states in which incorporated and licensed, acceptable reinsuring companies, etc.; tabulation. Spectator (Property ed) 8:32-3 N 26 '42
 Developments in suretyship during 1942. A. F. Lafrentz. Weekly Underw 148:86, 88 Ja 2 '43

INSURANCE, Surety and fidelity—Continued

Discovery bond. R. T. Wood. Weekly Underw 147:1490-2; 148:246-3, 258 D 26 '42, Ja 23 '43

Dishonesty insurance; an increasingly important credit consideration. R. W. Kammann. Credit & Fin Management 45:22+ O '43

Fidelity bonds and the war. B. C. Brown. Ins Field (Fire ed) 72:22 My 20 '43; Abstract. East Underw 44:31 Ap 16 '43

Fidelity line gets big lift in war period. A. Foster, jr. Nat Underw 47:28+ O 14 '43; Same. East Underw 44:44+ O 15 '43; Same. Weekly Underw 149:862-4 O 16 '43

Forgery, fidelity losses go up. Nat Underw 47:19 F 18 '43

Honesty insurance as an aid to credit. W. J. Purcell. Credit & Fin Management 45:44 Je '43

Importance of fidelity coverage in wartime. G. W. Patterson. East Underw 44:34 My 28 '43; Same abr. Weekly Underw 148:1223 Je 5 '43

Judicial trends in fidelity and surety bond cases. J. K. Bartlett, jr. East Underw 44:34 S 3 '43

Lawyers fight McCarran bill; surety committee solicits aid in defeating U.S. bonding fund. Nat Underw 47:30 Ag 26 '43

Need for coordinated sales and advertising by surety companies; postwar market for private construction bonds; abstracts. M. W. Lewis. East Underw 44:37 F 12 '43; Nat Underw 47:17 F 4 '43

New tax withholdings furnish another solid reason for fidelity bonds. W. C. Eaton. Weekly Underw 149:587 S 18 '43

Public employe blanket bond form devised. Nat Underw 47:26 Je 24 '43

Qualifying powers; Treasury department listing, by states. Weekly Underw 148:1338 Je 19 '43

Reduce the shock of economic loss; fidelity losses of special importance in war period. J. D. Hall. Credit & Fin Management 45:7-8+ My '43

Senate bill would establish federal fidelity fund. East Underw 44:48 Ap 30 '43

Surety insurance year. A. Foster, jr. Ins Field (Fire ed) 71:14-15, 22-3 D 31 '42

Surety limits for U.S. bonds listed by Treasury, figures as of April and Oct. 1942 and April 1943. Nat Underw 47:19 My 13 '43

Suretyship plays war time role; abstracts. A. Foster, jr. Weekly Underw 147:1324+ D 5 '42; Nat Underw 46:26-7 D 10 '42

Tailor-made fidelity coverage; joint use of the primary commercial blanket bond and the discovery bond. R. T. Wood. Weekly Underw 147:1259-60 N 23 '42

Treasury list of approved securities, as of Oct. 1942, and April and Oct. 1943. Nat Underw 47:19 O 7 '43

Treasury lists surety limits for U.S. bonds; figures for Oct. 1941, and April, and Oct. 1942. Nat Underw 46:21 N 19 '42

War has created lively field for fidelity cover. Nat Underw 46:22 N 19 '42

Wm. B. Joyce paid tribute on 50 years in business. Weekly Underw 148:433+ F 20 '43

Withholding tax opens fidelity bond field. M. W. Lewis. East Underw 44:30 J1 16 '43

See also
Bankers' blanket Insurance companies bond
also National association of surety bond producers

Adjustment of claims

Claims under inventory losses; abstracts. J. F. Hayden. East Underw 44:40 F 26 '43; Nat Underw 47:20 F 18 '43

Fidelity and surety claims; dishonesty losses caused by unidentified employees, or who-dunit? T. H. Bivin. Weekly Underw 148:1384-6 Je 26 '43

Fidelity and surety claims; surety in court. C. R. McNamee. Weekly Underw 149:664-6 S 25 '43

History and purpose of the Surety company claim men's forum. Weekly Underw 148:1229 Je 5 '43

Inventory losses and fidelity bonds. J. F. Hayden. Weekly Underw 148:909-14 Ap 24 '43

Obligee's release to wrong doer does not give surety company action for frustration of subrogation. Weekly Underw 149:739 O 2 '43

Agents

Bond producers press fight for expense allowance. Nat Underw 47:19 S 2 '43

Form contract bond producers organization. Nat Underw 47:15+ Ja 14 '43

Servicing renewal accounts important in light of current war conditions; boom for fidelity bond coverage. D. Quinn. East Underw 44:42 F 12 '43

Special features in wartime fidelity sales drive. D. Quinn. Weekly Underw 148:704-6 Mr 27 '43

Surety producers, companies patch up differences. Nat Underw 47:15 S 30 '43

Surety situation stimulates much discussion at N.A.I.A. parley. Nat Underw 47:19+ F 18 '43

Time ripe for fidelity sales. D. E. Gorton. Nat Underw 46:21 N 12 '42

Continuity riders

Value of retroactive extension rider. R. T. Wood. Nat Underw 46:19 D 3 '42

Contract bonds

Addresses surety round table; surety's rights as affected by claim of United States for contractor's unpaid taxes. E. B. McCahan, jr. East Underw 44:27 Ag 27 '43

Corporate suretyship for navy contracts. East Underw 44:44 My 7 '43

Owner's protective bond form; abstracts. S. Gottsman. East Underw 44:34 Mr 5 '43; Nat Underw 47:22 Mr 4 '43

Restoration of bond requirements will aid war effort. E. H. Cushman. Credit & Fin Management 45:11-14 Ap '43; Abstract. East Underw 44:54 Ap 30 '43

Sureties and contractor win in suit brought by City of New York. East Underw 44:32-3 Mr 5 '43

Surety companies and housing plans; opportunity open for contract bonds. Nat Underw 47:20 F 18 '43

Surety producers present plea to company men; commission problems in the contract bond field. Nat Underw 47:21+ My 20 '43

Will require bonds on war housing contracts. East Underw 44:27 My 21 '43

Coverage

Value of retroactive extension rider. R. T. Wood. Nat Underw 46:19 D 3 '42

Fiduciary bonds

Surety must be wary if estate owns a business. A. C. Holmes. Nat Underw 47:22+ Ag 26 '43

Finance

Casualty-surety writings in New Jersey in 1942. East Underw 44:30-4 Mr 19 '43

Country-wide underwriting results, 1938-42, of companies licensed in New York state; tabulation. East Underw 44:6-7+, 11-12+ pt 2 My 21 '43

Fidelity and surety record for 1942; premiums earned country-wide by companies operating in New York. Nat Underw 47:20 Je 17 '43

1942 casualty-surety results of all companies for New York state; tabulation. East Underw 44:14+ pt 2 My 21 '43

Statistical record of casualty and surety companies in 1942. Spectator (Property ed) 8:10-15 My 20 '43

Judicial bonds

New handbook of judicial bonds (N.Y.) prepared by G. P. Finster. East Underw 44:29 J1 9 '43

Surety held liable in Texas; supersedeas bond action. Weekly Underw 149:220 J1 31 '43

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Liquor bonds

Liquor bond action held to be illegal in Pennsylvania. Weekly Underw 147:1284 D 5 '42

INSURANCE, Surety and fidelity—Continued**Policies**

Casualty and surety coverages unite in comprehensive commercial policy; abstracts. D. Quinn. East Underw 44:42 My 7; 37-8 My 14 '43; Nat Underw 47:17-18 Ap 29 '43
 New blanket bond promulgated for insurance carriers. Nat Underw 47:23 S 23 '43; East Underw 44:31-32 S 24 '43

Preventive work

Fidelity and surety loss prevention. W. L. Flynn. Weekly Underw 149:174-5 Jl 24 '43
 U.S.F.&G. applies prevention idea to dishonesty. Nat Underw 47:17 O 7 '43

Public officials bonds

Careless writing of bonds in Pennsylvania is alleged. Nat Underw 46:32 D 31 '42
 Court holds bank party to unlawful procedure; Seaboard Surety wins case. East Underw 44:29 O 29 '43
 Public official bond claims. O. R. U. del Giudice. Weekly Underw 149:409-11 Ag 28 '43
 Surety held not liable for damages; Manteno, Ill. State hospital case. Nat Underw 46:13-14 D 24 '42

Statistics

Fidelity premiums by section; geographic trend of premium income as distinguished from surety, for years since 1936. L. S. McCombs. Spectator (Property ed) 9:6-9+ O 21 '43
 Summary of miscellaneous casualty and surety lines by states in 1942. Spectator (Property ed) 9:10-11+ Ag 19 '43

Study and teaching

Fidelity and surety bonds, course no. 4 (cont). J. A. Manning and others. Weekly Underw 147:1490-2; 148:246-9, 258, 704-6, 909-14, 1228-9, 1384-6; 149:174-5, 409-11, 664-6, 908-11, 1119-20, 1412-13 D 26 '42, Ja 23, Mr 27, Ap 24, Je 5, 26, Jl 24, Ag 28, S 25, O 23, N 20, D 25 '43

New Hampshire

Mutuals may write surety and fidelity business in New Hampshire. D. Knowlton. Weekly Underw 149:357 O 30 '43

INSURANCE, Taxicab

Approved credit rates for New York taxicabs. East Underw 44:28 Jl 16 '43
 Taxi retrospective plan is delayed in New York. Nat Underw 47:19 Je 3 '43

INSURANCE, Theft

Answers questions under new theft form; abstracts. R. A. Algire. Nat Underw 47:19+ Je 17 '43; East Underw 44:36 Je 18 '43
 Clarifies new theft policy. P. Girard and D. F. Thornton. Nat Underw 47:23 Je 10 '43
 Comments on mysterious disappearance. E. W. Sawyer. Nat Underw 47:32 N 4 '43
 How to sell theft and money and securities policies. C. A. Soriero. Nat Underw 47:21+ My 20 '43; Excerpts. Weekly Underw 148:1094-5 My 22 '43
 New policy quickens interest in burglary line. Nat Underw 47:17+ Ap 22 '43
 New residence burglary and theft policy; abstracts. H. J. McCloskey. Weekly Underw 148:1051+ My 15 '43; East Underw 44:20-1 My 14 '43
 Ohio Casualty has new theft form. Nat Underw 47:8 Ap 1 '43
 Residence and outside theft insurance. W. H. McKinney. Weekly Underw 149:131-3, 366-70+ Jl 17, Ag 21 '43
 Residence burglary and outside theft is a profitable line for producers. F. W. Potter. Nat Underw 47:25 S 23 '43; Same. Weekly Underw 149:580-1 S 18 '43; Same. East Underw 44:34 N 12 '43
 Revised residence theft form covers disappearance loss. Nat Underw 47:15+ Ap 8 '43; East Underw 44:38 Ap 9 '43; Spectator (Property ed) 8:24-5 Ap 22 '43; Weekly Underw 148:812-13 Ap 10 '43
 Robbery, burglary, theft or hold-up. M. L. Hayward. Barron's 23:9 O 25 '43
 Seek mysterious disappearance loss commitments; new theft policy. Nat Underw 47:15-16 Ap 29 '43

INSURANCE, Tobacco warehouse

Angles on tobacco adjustments. F. Nelson. Weekly Underw 149:749 O 9 '43

INSURANCE, Tornado

Northeast Ohio windstorms cause \$2,500,000 damage. Nat Underw 47:1+ My 6 '43
 Texas presents serious problem in extended coverage. Nat Underw 47:3 N 4 '43

Adjustment of claims

Adjustment forces rally to expedite Texas hurricane loss settlements. East Underw 44:16+ Ag 6 '43; Nat Underw 47:1+ Ag 5 '43
 Home is sustained in Lily Tulip Cup case. Ins Field (Fire ed) 71:9-10 D 10 '42
 Hurricane insurance; digest of recent cases. J. L. Roesch. Spectator (Property ed) 8:28-9 Mr 4 '43
 Study bettering of disaster setup; Texas hurricane losses. Nat Underw 47:1 N 4 '43

Losses

Peoria storm unspectacular but destructive. K. Force. Nat Underw 47:1+ Ag 12 '43
 \$12,000,000 loss estimate in Texas storm conservative. J. C. Leissler. Nat Underw 47:1+ Ag 12 '43
 Windstorm excess losses expected. Nat Underw 47:4 Ag 12 '43

Rates

Agitate for higher windstorm rates in Texas. Nat Underw 47:30 S 2 '43

INSURANCE, Trade union

New company for clothing workers of America. East Underw 44:5 Ag 6 '43

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Increase liability on turkeys in Minnesota and Dakotas. Nat Underw 47:35 Mr 25 '43

INSURANCE, Unearned premiums. See Insurance, Fire—Unearned premium policies**INSURANCE, Unemployment**

Unemployment insurance and the returning serviceman. W. H. Wandel. Ann Am Acad 227:136-42 My '43

Costs

Cost of unemployment benefits in Great Britain, 1920-41. Monthly Labor R 55:1168-9 D '42

Statistics

Labor conditions, employment security operations (Social security board) 1938-1941. Survey of Cur Business 1942 Sup p47 [supplemented in monthly numbers]
 Unemployment-compensation operations, 1942. Monthly Labor R 56:1113-14 Je '43

Great Britain

British unemployment-insurance fund in 1942. Monthly Labor R 57:63-4 Jl '43
 Cost of unemployment benefits in Great Britain, 1920-41. Monthly Labor R 55:1168-9 D '42
 Extension of coverage. Monthly Labor R 56:693 Ap '43

Illinois

Court upholds Illinois unemployment tax on agents 1937-41. Nat Underw 47:27 Ap 29 '43; Nat Underw (Life ed) 47:9 Ap 30 '43

Ireland

Compulsory insurance against intermittent unemployment in Ireland. Monthly Labor R 55:1167 D '42

New York (state)

Amend N.Y. state unemployment insurance. Comm & Fin Chr 156:2165 D 17 '42

United States

Job benefits rise; laws liberalized. Business Week p68+ Ap 3 '43
 Job or union? worker must make choice under recent decisions of state unemployment compensation boards where union is issue. Business Week p92+ Ag 28 '43
 Opposes federal unemployment insurance control. M. A. Linton. Comm & Fin Chr 158:1485+ O 14 '43
 State unemployment-compensation law applicable to employees in maritime pursuits. Monthly Labor R 56:731-2 Ap '43

INSURANCE, Unemployment—United States—*Continued*

Unemployment-compensation operations, 1942.
Monthly Labor R 56:1113-14 Je '43

INSURANCE, Use and occupancy

Affirmative U. & O. rider; assumption clause being adopted for priorities losses. Nat Underw 47:1+ Je 17; 1+ Je 24 '43

Buyer suggests more detailed working sheet.
J. P. Compton. Nat Underw 47:3+ Je 24 '43

Complicated U. & O. losses may occur under mixture of forms. Nat Underw 47:7 My 13 '43

Effect of business interruption upon credit.
E. D. Schane, il Credit & Fin Management 45:12-14+ F '43

Effects of war on business interruption insurance; abstracts. F. C. Beazley. Weekly Underw 148:530-1+ Mr 6 '43; Nat Underw 47:1+ Mr 4 '43; East Underw 44:17+ Mr 12 '43

Factory mutuals tell U.&O. stand. Nat Underw 47:4 Ap 29 '43

Insurers rue piling up of U. & O. on old terms. Nat Underw 47:11 Ap 15 '43

Insurers watch bowling alley risks closely. Nat Underw 47:4+ Ja 28 '43

Renegotiation poses several U. & O. questions. Nat Underw 47:1 Jl 15 '43

Texas adopts new U. & O. forms and farm schedule. Nat Underw 47:11 S 23 '43

Through the field glasses, use and occupancy. Ins Field (Fire ed) 72:17 Ja 14 '43

Underinsuring U. & O. may risk tax levy on mythical profit. Nat Underw 47:1+ O 28 '43

U. & O. endorsement accepts time liability. East Underw 44:16 Je 25 '43

U. & O. features discussion at A.M.A. gathering. Nat Underw 47:1+ My 27 '43

U. & O. is now easier to place; most assured select double rate alternative. Nat Underw 47:2 My 6 '43

Use and occupancy mandatory endorsements. Spectator (Property ed) 9:23 Jl 22 '43

Use and occupancy situation from loss angle. J. H. Burlingame. Nat Underw 46:3 N 26 '42

Adjustment of claims

How a U. & O. loss, with priority delays, was satisfactorily settled. E. J. Komarek. East Underw 44:15-16 Jl 2 '43

Policies

Raw-stock clause in use and occupancy; abstract. R. D. Boyd. Management R 32:38-9 Ja '43

Reciprocals offer specific U&O cover on WPB order loss. Nat Underw 47:4 Ap 22 '43

Reciprocals offering broad U.&O. cover for boost in rate. East Underw 44:26 Ap 30 '43

Rates

Eastern groups concur in U & O rate increase. Ins Field (Fire ed) 72:5+ Ap 1 '43

Excitement in U.&O. field now subsides; still some demand for dating back. Nat Underw 47:1+ Ap 8 '43

U. & O. change is now in effect in most places. Nat Underw 47:1+ Ap 1 '43

U. & O. rates doubled unless aggravation of loss erased. Nat Underw 47:1+ Mr 25 '43; East Underw 44:1+ Mr 26 '43

Tuition fee coverage

Tuition fees cover. Weekly Underw 149:506 S 11 '43

INSURANCE, Valuable papers

California valuable papers cover flareup; casualty, fire companies at odds. Nat Underw 47:1 Ap 8 '43

Cost of war damage claims seen as slight. Comm & Fin Chr 157:2187 Je 10 '43

How to sell theft and money and securities policies. C. A. Soriero. Nat Underw 47:21+ My 20 '43

Money and securities policy limits increased; progress report issued. East Underw 44:40 Mr 12 '43

Money, securities WDC cover sales lagging. Nat Underw 47:17+ Ja 14 '43

Seek compromise on all-risk cover. Nat Underw 47:7 Ap 15 '43

\$2,456,669,000 liability on money and securities as of March 31. East Underw 44:44 My 7 '43; Comm & Fin Chr 157:1792 My 13 '43

W.D.C. coverage on money and securities. W. H. Bennen. Ins Field (Fire ed) 72:22-5 F 18 '43; Abstracts. East Underw 44:30, 36 F 19 '43; Nat Underw 47:19+ F 18 '43; Weekly Underw 148:434+ F 20 '43

W.D.C. coverage on money and securities reviewed by A.B.A. Nat Underw 47:23 Mr 4 '43

WDC interpretation of money, securities war damage cover. Nat Underw 47:22 My 6 '43

War damage coverage on intangibles. J. E. Baum. Banking 35:54 Mr '43

War damage insurance, money and securities; interpretation of specific clauses and requirements for loss. Spectator (Property ed) 8:28-9 My 6 '43; East Underw 44:38 My 14 '43

War damage insurance; money and securities memorandum no. 2. Spectator (Property ed) 8:24 Mr 18 '43

War damage insurance on money and securities; new policy coverage for assets on premises. A. F. Lafrentz. Trusts & Estates 76:259-61 Mr '43

War damage insurance on money and securities; with list of members of Money and securities group. Spectator (Property ed) 8:26-7 D 24 '42; Weekly Underw 147:1445 D 19 '42

War damage insurance on securities and money. A. E. Muller. Trusts & Estates 75:587-93 D '42

War damage money and securities plan starts. Nat Underw 46:17+ D 17 '42; East Underw 43:31+ D 18 '42; Barron's 22:9 D 28 '42

Watch California battle over writing power; conflict between fire, casualty interests. Nat Underw 47:3 F 11 '43

INSURANCE, War risk

Animated forum on war damage insurance by insurance buyers. Nat Underw 46:8-10 D 19 '42

Ask WDC set-up revision. C. M. Smith; C. Chatters. Ins Field (Fire ed) 72:3+ Je 10 '43

B. D. O. war damage selling drive is literally sweeping the country. D. Porter. Ins Field (Fire ed) 71:8-9+ N 12 '42

Commissioners discuss war damage reserves. Nat Underw 47:1+ Je 10 '43; East Underw 44:1, 27 Je 11 '43

Future of the commercial insurance business. J. H. Magee. Harvard Business R 21 no 3:325-8 [Ap] '43

General of Seattle war risk writings. Spectator (Property ed) 8:8 Ja 7 '43

Glass reinsurance plan covers war risk hazard. East Underw 44:32-3 Mr 5 '43

How fiduciary views WDC. E. W. Harrington. East Underw 43:24 D 18 '42

Informing the public on war damage. M. W. Mays. Weekly Underw 148:32, 40 Ja 2 '43

Liability of brokers on war risks. Weekly Underw 147:1118+ N 14 '42

Money, securities WDC cover sales lagging. Nat Underw 47:17+ Ja 14 '43

New York's wartime safeguards; war damage insurance. R. P. Barbour. Weekly Underw 148:24+ Ja 2 '43

Procedure for handling war damage claims. R. M. Beatty. Nat Underw 46:6 N 19 '42

Report war damage premiums in 1942. East Underw 44:1+ Mr 5 '43

Saturday evening post in tribute to war damage job. Nat Underw 47:5 Ja 7 '43

\$63,000,000 war claims filed with corporation. Weekly Underw 148:845 Ap 17 '43

\$2,456,669,000 liability on money and securities as of March 31. East Underw 44:44 My 7 '43; Comm & Fin Chr 157:1792 My 13 '43

War damage and the producer. W. H. Stevens. Ins Field (Fire ed) 71:20-1+ D 10 '42; Abstract. Nat Underw 46:3A D 10 '42

WDC mortgagee clause is held unnecessary. W. L. Clayton and C. O. Pate. Weekly Underw 147:1427+ D 19 '42; Same abr. East Underw 43:22 D 18 '42

WDC outlines attitude toward nationals of Germany and Japan. East Underw 44:20 Ja 15 '43

WDC premium return would be enormous task. J. M. Close. Nat Underw 47:1+ My 27 '43

War damage educational campaign carried to public all over country. M. W. Mays. East Underw 43:66 D 11 '42

INSURANCE, War risk—Continued

War damage insurance now over \$122 billion. J. H. Jones. *Comm & Fin Chr* 157:2109 Je 7 '43

What to do about war risk insurance. C. T. Hubbard. *Barron's* 22:19 N 30 '42

Why sell war damage insurance? L. M. Baldwin. *Weekly Underw* 147:1128 N 14 '42

Year of war damage insurance. *Management R* 32:230-1 Je '43

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Insurance, Military War damage corporation and naval service ration
also subdivision War risks under kinds of insurance, e.g. Insurance, Life—War risks

Adjustment of claims

Cost of war damage claims for losses of money and securities. *Comm & Fin Chr* 157:2187 Je 10 '43

Coverage

Forms and specimen policies for war damage insurance on money and securities. *Comm & Fin Chr* 156:2334 D 31 '42

Four types of war damage insurance offered to banks. *Bankers M* 145:553 D '42

Money and securities policy limits increased; progress report issued. *East Underw* 44:40 Mr 12 '43

New war damage protection. J. E. Baum. *Banking* 35:79 Ja '43

Problems of war damage insurance; study being made to provide full coverage. *Credit & Fin Management* 45:22, 24 Ja '43

W.D.C. coverage on money and securities. W. H. Bennet. *Ins Field (Fire ed)* 72:22-5 F 18 '43; Abstracts. *East Underw* 44:30, 36 F 19 '43; *Nat Underw* 47:19+ F 18 '43; *Weekly Underw* 148:434+ F 20 '43

WDC coverage valuable; claims being paid for certain types of losses. *East Underw* 44:20 JI 23 '43

W.D.C. must close policy gaps; abstracts. J. Lucas. *Ins Field (Fire ed)* 72:25-6 F 4 '43; *East Underw* 44:18 Ja 29 '43

War damage coverage on intangibles. J. E. Baum. *Banking* 35:54 Mr '43

War damage insurance, money and securities; memoranda 14 and 15. *Spectator (Property ed)* 8:28 N 12 '42

War damage insurance on money and securities; new policy coverage for assets on premises. A. F. LaFrentz. *Trusts & Estates* 76:259-61 Mr '43

War damage insurance on money and securities; with list of members of Money and securities group. *Spectator (Property ed)* 8:26-7 D 24 '42; *Weekly Underw* 147:1445 D 19 '42

War damage insurance on securities and money. A. E. Muller. *Trusts & Estates* 75:587-93 D '42

War damage money and securities plan starts. *Nat Underw* 46:17+ D 17 '42; *East Underw* 43:31+ D 18 '42; *Barron's* 22:9 D 28 '42

War protection under fire policy and extended coverage. J. A. Munro. *East Underw* 43:22 N 13 '42

Wartime protection; American Insurance co. of Newark, N.J.; table. *Spectator (Property ed)* 8:29 N 12 '42

Laws and regulations

WDC changes made in memoranda, nos. 33, 34 and 35. *East Underw* 44:28 Je 18 '43

WDC memorandum no. 16 answers vital questions; relates to enemy aliens, cancellation, etc. *East Underw* 43:21+ N 27 '42; *Nat Underw* 46:1+ N 26 '42

War damage corporation memorandum no. 34. *Spectator (Property ed)* 8:36-7 Je 24 '43

War damage insurance; loss adjustment. *Spectator (Property ed)* 8:24-5 N 26 '42

War damage insurance, memorandum 16-19. *Spectator (Property ed)* 8:23 Ja 7 '43

War damage insurance, memorandum 20-26. *Spectator (Property ed)* 8:28 F 4 '43

War damage insurance, memorandum no. 27; cancellation. *Spectator (Property ed)* 8:25 Ap 8 '43

War damage insurance, money and securities; interpretation of specific clauses and requirements for loss. *Spectator (Property ed)* 8:28-9 My 6 '43; *East Underw* 44:38 My 14 '43

War damage insurance; money and securities memorandum no. 2. *Spectator (Property ed)* 8:24 Mr 18 '43

War damage memoranda 38 and 39 issued. *East Underw* 44:21 JI 23 '43

Loss records

WDC sets up simplified plan for loss records. *Nat Underw* 47:3+ Je 10 '43

Rates

Canada reduces war risk rates by 20%. *East Underw* 44:18 Ag 20 '43; *Nat Underw* 47:2 Ag 19 '43

On the other foot; policyholders seek war-risk cut from the government. *Business Week* p118+ JI 10 '43

Renewals

Devise short form renewal application for WDC coverage. *East Underw* 44:1+ My 7 '43

Free war damage renewal coverage; Kennedy bill. *Spectator (Property ed)* 8:9 Ap 8 '43

High war damage renewal record. *Nat Underw* 47:3 S 16 '43

Renewals on war damage coming in at good rate. *Nat Underw* 47:3 Je 17 '43

WDC forgives deviations from specified procedure. *Nat Underw* 47:2 O 7 '43

WDC instructions on renewal issued. *Nat Underw* 47:1+ Ap 22 '43

WDC renewal questions clarified under new setup. *Nat Underw* 47:2 JI 1 '43

War damage corporation memorandum no. 31; deposit procedure of premium remittances in connection with renewals. *Spectator (Property ed)* 8:29 Je 3 '43

War damage renewals. *Barron's* 23:4 Je 21 '43

War damage renewals high in Chicago area. *Ins Field (Fire ed)* 72:3-4 JI 28 '43

Canada

Canada reduces war risk rates by 20%. *East Underw* 44:18 Ag 20 '43; *Nat Underw* 47:2 Ag 19 '43

Canada responds well to war risk refund. *East Underw* 43:16 D 25 '42

Canadian war risk insurance rulings. J. Matson. *East Underw* 43:30 N 20 '42

War damage coverage recommendations approved by Canadian superintendents. *Weekly Underw* 148:322-3 F 6 '43

Ceylon

Insurance of immovable property against war damage provided by government. *For Comm W* 11:15 My 15 '43

Great Britain

British war damage cost \$346,000,000 in year and half. *Nat Underw* 47:2 F 18 '43

British war damage premiums fall far short of amount needed to meet claims. *Weekly Underw* 148:425+ F 20 '43

War damage; government's scheme for public utilities. *Elec R (Lond)* 131:657-8 N 20 '42

War risks insurance; guidance for electrical traders. F. E. Sugden. *Elec R (Lond)* 131:684 N 27 '42

Michigan

Michigan to renew war damage cover. *Ins Field (Fire ed)* 72:8 Je 24 '43

INSURANCE, Water damage

Michigan court denies water damage policy covers surface water claim. *East Underw* 44:26 JI 23 '43

INSURANCE, Weather. See Insurance, Hail; Insurance, Tornado

INSURANCE, Windstorm. See Insurance, Tornado

INSURANCE, Workmen's compensation

Action on large premium risk; Chattanooga insurance exchange. *Nat Underw* 47:14 JI 29 '43

Bar group studies status of minors, silicosis claims. *Nat Underw* 47:16 Ag 26 '43

Expect new moves to liberalize compensation benefits; report at meeting of National council on compensation insurance. W. F. Roeber. *Nat Underw* 46:18+ D 10 '42

Lectures doctors on compensation laws. H. D. Sayer. *East Underw* 43:37 N 20 '42

INSURANCE, Workmen's compensation—Cont.
N. Y. group insurance makes good start; group compensation insurance for members of New York state sheet metal, roofing and air conditioning contractors' association; questions and answers. *Sheet Metal Worker* 33:23-4+ D '42

Pennsylvania Attorney General applies retaliatory law to Ohio companies. *East Underw* 44:29 Ag 13 '43; *Nat Underw* 47:19 Ag 12 '43

Supreme court issues twilight zone opinion; employe may claim state compensation while under Longshoremen's act. *East Underw* 43:32 D 18 '42

Things to come in compensation. H. D. Sayer. *East Underw* 44:30 Ja 15 '43

Accounting

Audits by mail experiment is well received. *Nat Underw* 47:19 Je 3 '43

Mail audits prove satisfactory. *Nat Underw* 47:20 S 2 '43

Payroll audit by mail is getting a test. *Nat Underw* 47:27 My 27 '43

Payroll audit work subject to many changes due to war. *Nat Underw* 47:18 Mr 25 '43

Adjustment of claims

Athlete entitled to compensation if injured in contest, Minnesota board rules. *East Underw* 44:30 Ag 13 '43

Employee cannot recover compensation for injuries sustained while repairing his automobile on premises of employer. *Weekly Underw* 148:778 Ap 3 '43

Injury to one assaulting fellow employee because of tale bearing does not arise out of employment. *Weekly Underw* 148:1111 My 22 '43

Mass hysteria causing injury held compensable; Michigan Supreme court upholds commission in Webster-Eisenlohr case. *Ins Field (Fire ed)* 72:11-12 S 16 '43

Parents employing minor son as truck driver in laundry business cannot recover as dependents from compensation carrier. *Weekly Underw* 149:335 Ag 14 '43

Settlement of 38 suits in California approved. *East Underw* 44:50 O 15 '43

34 California-ship X-ray claims settled. *Nat Underw* 47:21 S 2 '43; *East Underw* 44:32 S 3 '43

Agents

Agent needs self reliance in new comp plan. *Nat Underw* 47:19+ S 2 '43

Responsibility of agent heavy in new comp program. *Nat Underw* 47:20+ Ag 19 '43

Commissions

Agents offer new compensation commission plan. *Nat Underw* 47:19+ F 18 '43; *East Underw* 44:42 F 25 '43

Agents win Texas victory; board rejects demand for compensation acquisition cost cut. *Nat Underw* 47:16 Ja 14 '43

Biggest sacrifice in \$1-5,000 bracket. *Nat Underw* 47:18 O 17 '43

Expense item in compensation rate upheld in Texas. W. Greaves. *Nat Underw* 46:18+ D 10 '42

General agents' workmen's compensation overriding explained. *Nat Underw* 47:35 O 23 '43

Graded cost to cut Michigan compensation boost. *Nat Underw* 47:13 Jl 22 '43

Producers submit commission gradation plan. *Nat Underw* 47:17 Mr 25 '43

Cancellation

Compensation act forbids retroactive cancellation. *East Underw* 44:31 Je 4 '43

Coverage

Broadened compensation cover in New York. L. S. McCombs. *Spectator (Property ed)* 9:30 S 9 '43

To compensate disease not caused by accident. *East Underw* 44:29 Jl 30 '43; *Nat Underw* 47:15 Ag 5 '43; *Correction*. *East Underw* 44:28 Ag 13 '43

Finance

Country-wide experience on workmen's compensation in 1942. *Nat Underw* 47:20 Je 3 '43

Development of compensation incurred losses, policy years, 1938-1941. *Spectator (Property ed)* 9:18-19 O 21 '43

Liability and compensation experience in 1942. *Nat Underw* 47:30 Ap 8 '43

Pacific employers insurance company analysis. *Spectator (Property ed)* 8:34-5 D 24 '42

Fraudulent claims

N.Y. state fund suspends six accused in probe. *Nat Underw* 47:17 Mr 25 '43; *East Underw* 44:33 Mr 26 '43

Industrial diseases

Occupational disease is main problem of future; abstracts. H. D. Sayer. *Nat Underw* 47:17+ Ja 14 '43; *East Underw* 44:30 Ja 15 '43

To compensate disease not caused by accident. *East Underw* 44:29 Jl 30 '43; *Correction*. 44:28 Ag 13 '43

Policies

Escalator clause is added to insurance lexicon. *Nat Underw* 47:22 O 21 '43

Rates

Advocates end of contingency factor; abstracts. C. W. Hobbs. *East Underw* 44:42 Je 11 '43; *Nat Underw* 47:34 Je 10 '43

Agent's efforts solve a national problem; Adolph Reutlinger originates plan to stop premium collection on overtime pay. *Ins Field (Fire ed)* 72:8 S 9 '43

Base rates on compensation insurance for construction, April 1, 1943. *Eng N* 130:586 Ap 22 '43

Committee recommends abandonment of compensation contingency loading. *East Underw* 44:37 Je 18 '43

Compensation discount plans aired at Texas hearing. *East Underw* 44:30 Ag 27 '43; *Ins Field (Fire ed)* 72:3+ Ag 26 '43; *Nat Underw* 47:24+ Ag 26 '43

Compensation rate cut in Oklahoma. *Weekly Underw* 149:311, 363 Ag 14-21 '43

Compensation rating plan; abstracts. J. H. Egloff. *Ins Field (Fire ed)* 72:11 S 16 '43; *Nat Underw* 47:24 S 23 '43

Compensation schedule rating out on permanent basis in New York. J. F. Collins. *East Underw* 44:36 Je 11 '43

Compensation set-up displeases Tennessee Commissioner; abstracts. J. M. McCormack. *Weekly Underw* 149:640+ S 25 '43; *Nat Underw* 47:25 S 23 '43; *East Underw* 44:31+ S 24 '43

Compensation trends; abstracts. W. F. Roerber. *Weekly Underw* 147:1386-7 D 12 '42; *East Underw* 43:90 D 11 '42

Conflicting views voiced on interstate problem. *Nat Underw* 46:17, 21 D 3 '42; *East Underw* 43:30+ D 4 '42

Demands compensation rate probe. J. M. McCormack. *East Underw* 44:31-2 O 22 '43

Effect of proposed new compensation program. *Nat Underw* 47:19+ My 13 '43

Effect of the war on workmen's compensation rates and rate-making. C. W. Hobbs. *East Underw* 43:96-7 D 11 '42

Elimination of compensation contingency loading voted by commissioners. *East Underw* 44:31 Je 11 '43

Expense item in compensation rate upheld in Texas. W. Greaves. *Nat Underw* 46:18+ D 10 '42

Final cost differential between stock, mutual plans. *Nat Underw* 47:18 Ag 12 '43

Initial premium higher for non-stock carriers. *East Underw* 44:24 Jl 23 '43

Michigan to study compensation rates. *Nat Underw* 47:22 Je 3 '43

Moderate compensation rate rise for Michigan. *East Underw* 44:27 Jl 30 '43

Move to eliminate bonus overtime from pay base. *Nat Underw* 47:19 Ag 19 '43

National Council ok's both stock and mutual plans. *Nat Underw* 47:13 Jl 22 '43

New coal mine rating plan obtains approval. *Weekly Underw* 149:197+ Jl 31 '43

New compensation rating plan. W. J. Jeffery. *Weekly Underw* 149:1021 N 6 '43

New compensation rating program. *Weekly Underw* 148:981+ My 8 '43; *East Underw* 44:36 My 7 '43; *Nat Underw* 47:21+ My 6 '43

INSURANCE, Workmen's compensation—Rates
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New compensation rating program partially approved by Council rates committee. East Underw 44:26 Je 25 '43

New York compensation rates fully revised. H. D. Sayer. East Underw 44:31+ Je 4 '43; Same abr. Weekly Underw 148:1204 Je 5 '43

New York discontinues schedule, specific O.D. ratings. Nat Underw 47:24 Je 10 '43

Omit overtime wages in reckoning premium. East Underw 44:30 S 3 '43; Weekly Underw 149:403 Ag 28 '43; Nat Underw 47:34 Ag 26 '43

Recommends 50% cut in workmen's compensation rates on air instructors. Nat Underw 46:19 D 3 '42

Reduce compensation rates in New Jersey. East Underw 44:29 My 21 '43

Reply to McCormack; defends stock companies proposed rating program; abstracts. C. W. Hobbs. East Underw 44:44+ O 8 '43; Nat Underw 47:17+ O 7 '43

Reports on development of merchandising program over three years. R. W. Howe. Weekly Underw 149:902-3 O 23 '43; Abstract. East Underw 44:36 O 22 '43

Sayer makes annual compensation report. East Underw 44:30+ F 5 '43

16 states to use new workmen's compensation plan. Nat Underw 47:30 S 16 '43

Stock companies take firm stand on compensation program. K. Spencer. East Underw 44:27 Jl 2 '43; Same. Weekly Underw 149:24 Jl 3 '43; Same abr. Nat Underw 47:17+ Jl 1 '43

Stock insurers file workmen's compensation program; non-stock group espouses separate expense loading scheme. Nat Underw 47:17 Jl 8 '43; East Underw 44:24+ Jl 9 '43

Tells Risk research institute members about compensation rating program; abstracts. C. J. Haugh. East Underw 44:44 Je 4 '43; Nat Underw 47:21 Je 3 '43

Texas approves new workmen's compensation plan. Nat Underw 47:29 N 4 '43

Texas costs discounts plan effective Jan. 1. Ins Field (Fire ed) 72:7 N 4 '43

War dept. rating plan debated in committee; also new compensation program. East Underw 44:29 O 15 '43

Retrospective plan

Holds retrospective rates discriminatory; plans outlawed in Georgia. East Underw 44:33 S 10 '43

Mutuals to pay even dividend; to allow same percentage on entire premium under retrospective. Nat Underw 47:20 S 16 '43

Utah proposes premium return; compensation rating decision reached by industrial commission. Weekly Underw 148:1361+ Je 26 '43; Nat Underw 47:17+ Je 24 '43

Self insurance

Illinois industrial body has no right to receive self insurance deposits. Nat Underw 46:28 D 31 '42

California

Caminetti investigates compensation practices. East Underw 44:40 Je 11 '43; Nat Underw 47:24 Je 10 '43

Caminetti starts hearings in compensation probe. Nat Underw 47:21 Je 3 '43

Cites eighteen carriers in compensation probe. East Underw 44:24+ Jl 9 '43

Plan set up for Mexican laborers. Nat Underw 47:32-3 Ag 26 '43

Great Britain

Beveridge report and workmen's compensation. R. H. Blanchard. Weekly Underw 149:958-9 O 30 '43

Industrial disability. Economist 143:736-7 D 12 '42

Study Beveridge report on compensation system. East Underw 44:29 Ja 1 '43

Workmen's compensation; present and proposed benefits. Economist 145:147-8 Jl 31 '43

Kentucky

Comp rates reduced in Kentucky. Business Week p80. Je 5 '43

Exempts 75% overtime from compensation premiums. East Underw 44:36 My 28 '43

Massachusetts

Leads opposition to state fund measure. J. W. Downs. East Underw 44:42-3 Ap 9 '43

Michigan

Broadened compensation Michigan law in effect. Weekly Underw 149:213+ Jl 31 '43; Nat Underw 47:11 Jl 29 '43

New York (state)

Calls compensation act free society's bulwark; vetoes two measures. T. E. Dewey. East Underw 44:32 Ap 16 '43

Tennessee

Decision threatens to upset Tennessee law. Ins Field (Fire ed) 72:8 O 21 '43

INSURANCE accountants association

Accountants elect R. S. Stryker as president; other officers. Nat Underw 46:4 D 17 '42

Insurance accountants association. East Underw 44:21 Ap 16 '43

INSURANCE accounting and statistical association

Annual meeting, Chicago, April 22-23. Nat Underw (Life ed) 47:6 Ap 30 '43; East Underw 44:46 My 7 '43; Nat Underw 47:17 Ap 29 '43

INSURANCE actuaries

Actuarial group merger; recommendations at annual meet of Actuarial society. J. B. Maclean. Nat Underw (Life ed) 47:1 O 15 '43

Casualty actuary and social insurance, more attention to this field urged. R. H. Blanchard. Weekly Underw 147:1255+ N 28 '42; Abstracts. East Underw 43:24+ N 27 '42; Nat Underw 46:15+ N 26 '42

Long line of prominent actuaries; each head of Mutual Life's department served as Actuarial society's president. A. Hunter. East Underw 44:3+ J 29 '43

Moral obligation of actuaries to be human. H. H. Jackson. Weekly Underw 149:294, 324-5 Ag 14 '43

151 of Metropolitan's actuarial division now in armed services. East Underw 44:8 Ap 23 '43

Why the life insurance policy is safe; actuarial role. V. Howell. East Underw 44:16 pt 2 O 1 '43

See also

American institute of Casualty actuarial actuaries society

INSURANCE adjusters

Navy to use insurance company adjusting service. Nat Underw 47:1+ S 9 '43

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Insurance—Adjustment of claims
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INSURANCE advertising conference

Advertising conference holds one-day session in New York. East Underw 43:31+ D 4 '42; Weekly Underw 147:1288 D 5 '42; Nat Underw 46:17+ D 10 '42; Ins Field (Fire ed) 71:7-8 D 10 '42; Spectator (Property ed) 8:22+ D 10 '42

Annual meeting, New York, Sept. 21-22. East Underw 44:20+ S 24 '43; Ins Field (Fire ed) 72:5-6 S 23 '43; Nat Underw 47:6 S 23 '43; Spectator (Property ed) 9:31 S 23 '43; Weekly Underw 149:644+ S 25 '43

Meeting, New York. Weekly Underw 148:992+ My 8 '43; Nat Underw 47:3+ My 13 '43

INSURANCE advisers

Counselor must pay premiums for term cover. Nat Underw (Life ed) 47:1+ My 7 '43

Court order adjudges Siegels to be bankrupt. East Underw 44:9 Ap 9 '43

Insurance adviser is compelled to refund fee. Nat Underw (Life ed) 47:3+ Mr 12 '43

N.Y. consultants' radio talks fade to 60 hours weekly. East Underw 43:20+ D 11 '42

\$10,000 award to Metropolitan in case against Besdine. East Underw 44:6 Ja 15 '43

INSURANCE agents

Agent looks at war's effect. L. E. Canfield, E. Cochrane and others. Ins Field (Fire ed) 71:24-5 D 3 '42; 72:18 Ja 7; 18-19 Ja 14; 20-1 Ja 21; 20 Ja 28; 22-3 F 4 '43

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- Agent looks at war's effect; conserving agencies of men who have left for the duration; abstracts. H. H. Hendren. *Ins Field* (Fire ed) 72:20 Ja 28 '43; East Underw 43:21 N 20 '42
- Art of making call-backs. E. Wheeler. *Ins Field* (Fire ed) 72:24-5 My 20 '43; Same. *Ins Field* (Life ed) 72:14-15 My 21 '43
- Attempt to check agency conversion; Western underwriters association acts on non-policy-writing offices. Nat Underw 47:2 Ap 29 '43
- Back in the horse and buggy days. J. C. Laming. *Ins Field* (Fire ed) 72:22-3 Je 24 '43
- Business is there; six-point production program through customer analysis; case of A. C. Davis. *Ins Field* (Fire ed) 72:24 Ag 5 '43
- Call to arms; what's wrong and what to do about it. J. B. Ladley. *Ins Field* (Fire ed) 71:20-1+ D 17 '42
- Camden County plan for conservation of agent's business during war service. *Weekly Underw* 147:1140+ N 14 '42
- Charting future course for producers; abstracts. C. W. Carpenter. *Weekly Underw* 148:581+ Mr 13 '43; East Underw 44:25 Mr 19 '43
- Cole and Lane winners in contest of U.S.F. & G. on audits. East Underw 43:34 N 20 '42
- Don't write, telegraph! aimless statements don't make sales. E. Wheeler. *Ins Field* (Fire ed) 72:16-17 Jl 1 '43
- Effects of war on local agencies presented in California analysis. H. I. Callis. East Underw 43:62-3 D 11 '42
- Five vital sales fundamentals. W. W. Ellis. *Weekly Underw* 149:1014+ N 6 '43
- Follow through! how to make the most out of your business under war-time conditions; abstracts. W. J. Traynor. *Ins Field* (Fire ed) 72:24-6+ S 9 '43; East Underw 44:19-20 S 10 '43; Nat Underw 47:4 S 9 '43
- Formula for progress; heed signposts put up by War damage corporation. C. J. Schoen. *Ins Field* (Fire ed) 71:20-1 N 19 '42
- General agents meet war-time problems with plenty of hard work and ingenuity. B. McGehean. *Ins Field* (Fire ed) 71:17+ D 24 '42
- How best to solicit personal accounts. R. Tucker. *Ins Field* (Pittsburgh Conv Daily ed) 72:15-16 O 12 '43
- Increasing the average sale. E. Wheeler. *Ins Field* (Fire ed) 72:18 My 6 '43; Same. *Ins Field* (Life ed) 72:14 My 7 '43
- Inspiration from books. C. T. Hubbard. *Ins Field* (Fire ed) 72:8 Ap 1 '43
- Insurance is restless. E. H. Bradshaw. *Ins Field* (Fire ed) 71:20-1 N 26 '42
- Insurance vision of A. W. Marshall of twenty years ago fully realized. *Weekly Underw* 148:858 Ap 17 '43
- Joe Doaks goes to town; alertness captures large line. M. L. Lane. East Underw 44:32 Ag 13 '43
- Keep in step with your prospect. E. Wheeler. *Ins Field* (Life ed) 72:15-17 Je 4 '43; Same. *Ins Field* (Fire ed) 72:20-1 Je 3 '43
- Making personal accounts profitable; B.D.O. pattern for production. Nat Underw 47:21+ O 14 '43
- Pigs, umbrellas and mosquitoes; illustrations of the value of contacts; abstracts. E. L. Coman. *Ins Field* (Fire ed) 72:18-19 Ap 15 '43; East Underw 44:33 Ap 16 '43
- Plan devised in N.J. for handling business of agents in the services. East Underw 44:30 F 26 '43
- Private enterprise interest dictates war measures must be temporary; wartime agent. E. M. Allen. East Underw 44:32 My 21 '43
- Problem of acquisition and servicing scanned by New York managers and general agents. Nat Underw (Life ed) 47:6 Je 18 '43
- Prospect comes first. E. Wheeler. *Ins Field* (Fire ed) 72:26-7 Je 10 '43; Same. *Ins Field* (Life ed) 72:24-5 Je 11 '43
- Putting the "sure" into insurance; selling sentences and power phrases. E. Wheeler. *Ins Field* (Fire ed) 72:16-17 Ap 29 '43; Same. *Ins Field* (Life ed) 72:18-19 Ap 30 '43
- Read, think, talk, sell! E. Wheeler. *Ins Field* (Fire ed) 72:20 My 13 '43; Same. *Ins Field* (Life ed) 72:14 My 14 '43
- Red Grange likes being an insurance salesman. East Underw 43:22 D 18 '42
- Satisfactions and rewards from forty years as a local agent. C. E. Bent. East Underw 44:30 O 1 '43
- Say it with flowers; prove your statements and fortify your words with performance. E. Wheeler. *Ins Field* (Fire ed) 72:18-19 Jl 8 '43; Same. *Ins Field* (Life ed) 72:14-15 Jl 16 '43
- Sell the sizzle. E. Wheeler. *Ins Field* (Life ed) 72:14-15 Jl 2 '43
- Sharp gets 3 to 6 years in premium discount frauds. Nat Underw 47:3+ F 18 '43
- Sharp pleads guilty in Rochester; local agent confesses premium finance fraud. Nat Underw 47:3+ F 4 '43
- Streamline your selling. E. Wheeler. *Ins Field* (Fire ed) 72:20-1 Je 17 '43
- Three important steps for cashing in on survey selling. East Underw 44:38 O 8 '43
- Views post-war problems; abstracts. K. Spencer. East Underw 44:21+ O 15 '43; *Ins Field* (Fire ed) 72:4-5+ O 14 '43; *Ins Field* (Pittsburgh Conv Daily ed) 72:1+ O 13 '43; Nat Underw 47:48B O 14 '43; *Weekly Underw* 149:828, 846-7 O 16 '43
- War comes to the agent. F. C. Crowell, jr. *Ins Field* (Fire ed) 72:20-1 Ap 1; 16 Ap 8; 16-17 Ap 15; 22 Ap 22; 18 Ap 29; 16 My 6; 22 My 13 '43
- Wartime aids for local agents prepared by American group of N.J. East Underw 44:22 Ja 23 '43
- Watch your bark; the way you say it is exactly as important as what you say. E. Wheeler. *Ins Field* (Fire ed) 72:24-5 Jl 22 '43; Same. *Ins Field* (Life ed) 72:14-15 Jl 30 '43
- We, the agents! S. Ragland. *Ins Field* (Fire ed) 72:20-1 Ja 7 '43 [cont weekly]
- What it takes, to sell steadily. E. Wheeler. *Ins Field* (Fire ed) 72:20-1 My 27 '43; Same. *Ins Field* (Life ed) 72:20-1 My 28 '43
- What's in a name? seeks suitable substitute for designation of general agents. B. McGehean. *Ins Field* (Fire ed) 71:15+ N 19 '42
- Why agents should become organization men. R. H. Alexander. *Weekly Underw* 149:822 O 16 '43
- Why not let the telephone deliver added premium volume for you? M. L. Lane. East Underw 44:38 pt 2 My 21 '43
- See also
Insurance associations
Insurance brokers
also subdivision Agents under various forms of insurance, e.g. Insurance, Life—Agents
also American association of insurance general agents; National association of insurance agents; National association of mutual insurance

Advertising

- Advertising has played big part in New Rochelle agency's rise. East Underw 43:94-5 D 11 '42
- National Fire group devises new personalized advertising service. East Underw 43:20 D 25 '42
- Wide-awake advertising has brought fame to H. S. Bowen of Norwalk. O. East Underw 44:3+ pt 2 My 21 '43

Agency management

- Agency operation and management discussed. Nat Underw 47:21-2+ O 21 '43
- Eleanor Ganey; she's doing the job. E. E. Gesner. *Ins Field* (Fire ed) 72:14 F 18 '43
- Five agency principles. E. M. Davis. East Underw 44:50 O 8 '43
- Form letters effective for collection, renewal. R. A. Duffus. Nat Underw 47:22 My 20 '43
- How agents meet problems of wartime conditions. C. G. Hallowell. East Underw 44:51 Ap 30 '43; Same. *Weekly Underw* 148:1002+ My 8 '43
- Insurance management in wartime dictates simplicity and system. O. Belling. East Underw 44:17-18 Je 25 '43
- Running an office in time of war. O. Belling. *Weekly Underw* 148:982, 1007-9 My 8 '43

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- Suggestions for improving office management. O. Beling. East Underw 44:26-7+ N 5 '43
- Taking care of the business of men going into service. J. M. Warner. Nat Underw 47:16 S 9 '43
- War comes to the agent; problem of manpower and agency personnel. F. C. Crowell, jr. Ins Field (Fire ed) 72:16 Ap 8 '43
- War comes to the agent; time control and inside office detail. F. C. Crowell, jr. Ins Field (Fire ed) 72:16 My 6 '43
- Why our office stays open 24 hours every day; J. Gordon Gaines, inc., Akron. J. G. Gaines. Il Am Business 13:14-16, 24 Jl '43

Costs

- Giberson agency's expense analysis reviewed. Nat Underw 47:4 Mr 4 '43

Agency system

- Agency system today and tomorrow. E. R. Wilson. Ins Field (Fire ed) 71:20 N 12 '42
- Agents must be qualified; evils of the agency system must be corrected. E. R. Moore. Ins Field (Fire ed) 72:14 O 14 '43
- Insurance agent of tomorrow. S. D. Kolb. Ins Field (Fire ed) 71:22 N 19 '42
- Intuitive cognition of general agents invaluable; the AAIAGA charts its course for the year. S. L. Johnson. Ins Field (Fire ed) 72:18 Jl 22 '43

Automobile problem

- Draws on past experiences to solve agency problems of today. H. R. Kendall. East Underw 43:26 D 25 '42
- Gas rationing aids producers by compelling better planning of time. East Underw 44:34 Ap 30 '43
- Most field men and adjusters get B gasoline cards. Nat Underw 46:3 D 10 '42
- Prepare for gas rationing in insurance. Nat Underw 46:19+ N 12 '42
- War comes to the agent; the problem of gasoline and tire rationing. F. C. Crowell, jr. Ins Field (Fire ed) 72:18 Ap 29 '43

Collecting of premiums

- See Insurance—Premiums, Payment of

Commissions

- Acquisition cost problem held high place in 1942 discussions. E. J. Schofield. East Underw 43:82+ D 11 '42
- Commission limitation reviewed. W. H. Bennett. East Underw 44:38 O 15 '43
- Employee-salesman's pay restricted. Nat Underw 47:17 O 7 '43; Same. Nat Underw (Life ed) 47:3+ O 8 '43
- U. S. tax may affect contingent of agents. Nat Underw 47:1 Je 3 '43

Company relations

- And pass the information; underwriting department pleads for all the facts. C. T. Hubbard. Ins Field (Fire ed) 72:6-7 Jl 22 '43
- Asks close insurance cooperation, between companies and producers; abstracts. W. R. Thomas. Weekly Underw 149:433+ S 4 '43; East Underw 44:1+ S 3 '43
- Georgia agents deplore failure of qualification bill; charge companies defeated proposed law. R. L. Ellis. Nat Underw 47:3+ My 27 '43
- Pleads for greater cooperation. F. R. Bell. Nat Underw 47:3+ Ag 19 '43; Same. Ins Field (Fire ed) 72:20+ Ag 19 '43; Abstract. East Underw 44:16 Ag 20 '43
- Sabotage to agency system; indiscriminate appointments. S. Ragland. Ins Field (Fire ed) 72:3+ Je 17 '43
- War comes to the agent; problem of company relations in war-time. F. C. Crowell, jr. Ins Field (Fire ed) 72:22 My 13 '43

Law

- A. & H. license bill in Ohio signed by Governor. East Underw 44:28 Je 25 '43; Same. Weekly Underw 148:1382 Je 26 '43
- Advances to agents held exempt from regulation pertaining to consumer credit. Nat Underw (Life ed) 46:3+ N 20 '42
- Advances to life insurance agents and regulation on consumer credit. Fed Res Bul 29: 595-6 Jl '43

Agents list fundamental provisions for adequate qualification law. East Underw 44:29 O 22 '43; Nat Underw 47:12 O 21 '43; Weekly Underw 149:901 O 23 '43

Backs qualification laws; abstracts. A. W. Perkins. East Underw 44:24 S 24 '43; Nat Underw 47:4+ S 23 '43; Nat Underw (Life ed) 47:4 S 24 '43

California ruling on appointment of agents. Weekly Underw 149:984 N 6 '43

Court upholds Illinois unemployment tax on agents 1937-41. Nat Underw 47:27 Ap 29 '43; Nat Underw (Life ed) 47:9 Ap 30 '43

Fraizer backs Nebraska qualification bill. Judge asks for amendments. Nat Underw 47:31 F 11 '43

Georgia agents deplore failure of qualification bill. R. L. Ellis. Nat Underw 47:3+ My 27 '43

Georgia qualification bill held by House. Ins Field (Fire ed) 72:3-4 Mr 11 '43

Illinois department acts in battle over agents law. Nat Underw 47:7 O 21 '43

Illinois dept. resumes issuing licenses. Nat Underw 47:1 N 4 '43; Same. Nat Underw (Life ed) 47:1 N 5 '43

Legal relations between companies and agents on term expirations; accounts receivable and moneys in the possession of agencies. C. G. Myers. East Underw 44:18+ Ag 27, 23 S 3 '43; Abstract. Nat Underw 47:1 Ag 26 '43

Less information asked of carriers; Massachusetts department acts because of shortage of help. Weekly Underw 148:472 F 27 '43

Minnesota high court holds company responsible for any act of its agents. Ins Field (Fire ed) 72:5+ F 11 '43; Nat Underw 47:4 F 11 '43; East Underw 44:34 Ap 9 '43

Oral contract by agent is held binding against mutual company. East Underw 43:70 D 11 '42

Payment of lawyers' fee held to be rebate by Illinois department. Nat Underw (Life ed) 47:6 Ja 15 '43

Provisions made for absentee agents: NATA surveys state actions. Ins Field (Fire ed) 72:10-11 Ja 28 '43; Excerpts. East Underw 44:22 Ja 29 '43

Quebec Superintendent demands producers obey law. G. LaFrance. East Underw 44:22 Ag 20 '43

Responsibility for appointment and licensing of agents. F. E. Bailey. East Underw 44: 66+ pt 2 O 1 '43

Superintendent Crabbe of Ohio amends licensing rule. Weekly Underw 149:314 Ag 14 '43

Urges underwriters insist on independent status in rousing Boston sales congress speech. L. G. Simon. Ins Field (Life ed) 72:3-4 Ag 23 '43

Letters to prospects

- Now it can be sold. R. A. Laird. Ins Field (Fire ed) 71:22-3 D 17 '42
- Writes new book of insurance business building letters. J. S. Miller. East Underw 44: 39 Ap 9 '43

Multiple line selling

- Selling one-line assured other lines of insurance. G. M. O'Brien. Nat Underw 47:6 Ap 29 '43

Part-time agents

- Insurers lose fight on part-time rule in Ohio. Nat Underw (Life ed) 47:3 Jl 9 '43
- Ohio part-timer ruling is taken to court. Nat Underw (Life ed) 47:3 Je 11 '43

Policy execution

- Countersignature laws. D. A. North. Weekly Underw 149:834, 838-9 O 16 '43
- Countersignature proposals an issue at Boston meeting. Nat Underw 47:1 Je 10 '43
- Endorsement is held contrary to N.J. law. Ins Field (Fire ed) 71:12 D 17 '42; East Underw 44:27 Ja 1 '43
- Resident agent law test starts in Virginia. Weekly Underw 148:789+ Ap 10 '43; East Underw 44:30 Ap 16 '43
- Rouillard disapproves section of agreement; discusses countersignature; New Hampshire agents. East Underw 44:29 Ja 29 '43
- Signature cases fail to stick in Virginia. Weekly Underw 149:359 Ag 21 '43

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Tennessee official rules policies must be signed by agents. East Underw 44:34 Ap 16 '43

Public relations

Agents to launch new campaign in public relations. East Underw 44:1+ F 19; 28-9 P 26 '43
Aggressive public relations for NAIA; abstracts. A. Broughton. Ins Field (Fire ed) 72:6-8 S 30 '43; Nat Underw 47:15+ S 30 '43
Answer questions on agents' public relations program. Weekly Underw 148:315 Ap 24 '43
Appeals for progressive spirit within N.A.I.A.; emphasizes public relations. D. A. North. Nat Underw 47:1+ F 13 '43
Asks close insurance cooperation between companies and producers; abstracts. W. R. Thomas. Weekly Underw 149:433+ S 4 '43; East Underw 44:1+ S 3 '43
Chicago fund raising starts. Nat Underw 47:4 My 13 '43
Confuse public relations with lobbying; objects of Association program misunderstood; abstracts. D. A. North. Weekly Underw 148:677+ Mr 27 '43; Nat Underw 47:1 Mr 25 '43
How National Board helps agents in prestige building. H. K. Schauflier. East Underw 44:24 O 22 '43
Insurance bills in Congress spur agents' public relations campaign. East Underw 44:20+ O 22 '43
NAIA states program to better relations. Weekly Underw 148:637 Mr 20 '43
N.J. agents pledge full support to national public relations program. E. N. Eager. East Underw 44:23-4 Ap 23 '43
Outlines agents' Washington activities. L. A. Grier. East Underw 44:18 Ja 1 '43
Public relations on the march; NAIA program forges ahead. W. A. Hamlin. Ins Field (Fire ed) 72:8-9 Ag 5 '43
Public relations plan getting wide support. D. A. North. East Underw 44:30 My 7 '43
Public relations program will turn public interest searchlight on agent. W. R. Thomas. East Underw 44:21 My 14 '43
Tells NAIA public relations program; abstracts. A. Broughton. Weekly Underw 149:826+ O 16 '43; Nat Underw 47:2+ O 14 '43
Views era of public relations; abstracts. D. A. North. East Underw 44:33+ O 16 '43; Nat Underw 47:24+ O 14 '43
We must create better public relations. C. H. Smith. Ins Field (Fire ed) 72:6-9 F 28 '43; Same. Weekly Underw 148:469+ F 27 '43
Where are you going, Mr Agent? abstracts. H. Brown. Ins Field (Fire ed) 72:3-9 O 23 '43; East Underw 44:22 O 29 '43; Weekly Underw 149:344+ O 30 '43

Rural agents

Rural agents' welfare association concern. Weekly Underw 149:332+ O 16 '43

See also
Insurance. Fire
Farm policies

Selection

Let's face the facts; opinions concerning agency appointments. S. L. Johnson. Ins Field (Fire ed) 72:21+ S 23 '43

Service

Friendliness is key to servicing. F. S. Wilkinson. Ins Field (Pittsburgh Conv Daily ed) 72:7-8+ O 12 '43; Abstract. Nat Underw 47:57-8 O 14 '43
Viewpoint of buyers. F. L. Bachman. Weekly Underw 149:44-5+ S 4 '43; Same. Ins Field (Fire ed) 72:22, 25-6 S 16 '43; Same abt. East Underw 44:24+ S 10 '43; Same. Nat Underw 47:1+ S 9 '43

Training

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Insurance—Study and Insurance. Life—teaching
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Unions

Metropolitan and CIO sign agreement covering 2,000 N.Y. city agents. Nat Underw (Life ed) 47:11 My 14 '43

Prudential Industrial agents and CIO bargaining status. East Underw 44:4 Ja 22 '43
Prudential signs with agents labor union. Ins Field (Life ed) 72:5+ F 5; Nat Underw (Life ed) 47:4 F 13 '43

Women agents

How war challenges women to render full service. D. A. North. East Underw 44:1+ Je 15 '43
Insurance women, on the production line. J. S. Daniel. pers East Underw 44:20-2+ pt 2 My 21 '43
Minnick sisters run fine agency in Seattle. Weekly Underw 148:1058 My 15 '43
Rescue of agency's business by agent's wife shows value of company franchise. Weekly Underw 148:1010 My 8 '43
Traditions of Morris Harris agency in Mrs Henry Harris' capable hands. Mrs H. Harris. East Underw 44:34 Ji 16 '43
Woman keeps Seattle's fire insurance agency offices operating efficiently; Dean Rohrdanz. 1. Loewenheim. Weekly Underw 148:1296 Je 12 '43
Women can be successful in insurance as revealed by career of Ada V. Doyle. Weekly Underw 148:6 Ja 2 '43
Women in two worlds. Mrs C. C. Henson. Weekly Underw 149:35 Ji 3 '43

See also

Insurance, Industrial Insurance, Life—
—Agents—Women Agents—Women
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Insurance women

California

Restrict Coast general agencies; future appointees must have principal office in San Francisco. Nat Underw 47:2+ My 13 '43

Canada

Canadian agents want qualification standard. East Underw 44:24 My 14 '43
Quebec Superintendent demands producers obey law. G. LaFrance. East Underw 44:22 Ag 20 '43

Michigan

Revokes license of agency in Detroit controlled by bank. Nat Underw 47:4+ N 4 '43

New Jersey

History of New Jersey association published on fiftieth anniversary. East Underw 44:21 S 24 '43

New York (city)

Decries agents secession. A. C. Wallace. Nat Underw 47:3 S 9 '43
New York City agents resign from state association. East Underw 44:16 S 3 '43; Nat Underw 47:3 S 2 '43
New York's property underwriters described in handsome volume. W. Hay. Weekly Underw 149:510 S 11 '43

New York (state)

N.Y. agents' assn. states views on mixed agencies and branch offices. East Underw 44:17 O 29 '43

Ohio

Cincinnati agents withhold dues to Ohio state unit. Nat Underw 47:14 S 2 '43
Ohio agents open way to re-affiliation with NAIA. Ins Field (Fire ed) 72:3, 26-7+ O 26 '43; Nat Underw 47:15+ O 28 '43
Ohio trustees ask for authority to act on re-affiliation. Nat Underw 47:3 S 23 '43

Pennsylvania

New commissioner will study proposal to require statements from existing agents. G. L. Neel. East Underw 44:24 F 19 '43

Puerto Rico

Puerto Rico agents form association. East Underw 44:24 Je 25 '43

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INSURANCE as a profession.

What do you mean professional? E. A. Hodges. Ins Field (Life ed) 72:14-15+ N 5 '43

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Insurance agents

INSURANCE associations

N.Y. ex-fieldmen hold annual meeting. W. L. Hadley. East Underw 44:28 My 7 '43
 1942, year of change. Ins Field (Fire ed) 71: 10 D 24 '42
 Organized insurance women important influence for good in business. J. D. Saint. Weekly Underw 148:867 Ap 17 '43
 Why agents should become organization men. R. H. Alexander. Weekly Underw 149:822 O 16 '43

See also

Factory insurance associations

also names of insurance associations, e.g.
 Institute of life insurance Interstate underwriters board
 Insurance economics National association of insurance agents
 society of America National Negro insurance association
 Insurance executives insurance association
 association Risk research institute, incorporated

INSURANCE brokers

Broker selected by book publishers; Anne M. Foster. por East Underw 44:40 My 7 '43
 Brokerage business more desirable; agencies showing more interest. Nat Underw (Life ed) 47:8 Ap 2 '43
 Brokers are potent force in sale of life insurance during this war period. S. D. Rosan. Weekly Underw 148:100-2 sec 2 My 8 '43
 Brokers Chicago board suit. Nat Underw 46: 3+ D 17; 1+ D 24 '42; 47:1+ My 4 '43
 Continuing liability to broker for commissions subsequent to substitution of brokers by assured. Weekly Underw 148:804 Ap 10 '43; East Underw 44:25 Ap 9 '43
 Federal file on brokerage being built; abstracts. C. O. Pate. Weekly Underw 148: 937+ My 1 '43; Nat Underw 47:15+ Ap 29 '43
 Insured's right to switch brokers upheld in marine insurance case. East Underw 43: 29 D 4 '42
 Legal battle in Chicago called ill advised. Weekly Underw 148:313+ F 6 '43
 Liability of brokers on war risks. Weekly Underw 147:1118+ N 14 '42
 Licensing procedure report; recommendations by brokers to New York department. Weekly Underw 148:147-8 Ja 9 '43; East Underw 44:22 Ja 8 '43
 Lower commissions, higher overhead plague brokers. J. C. Kemp. Nat Underw 47:9 Ag 19 '43
 Reviews Chicago Board battle at brokers' meeting. T. C. McConnell. Nat Underw 47: 3+ My 20 '43
 Three brokerage houses merge in New York city. East Underw 44:30 D 4 '42
 Two strikes have been called! brokers face being retired to bench. H. E. Moore. Weekly Underw 148:22+ Ja 2 '43

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Commissions

Broker loses suit for commissions when assured changed producers. East Underw 44: 18 Ji 23 '43
 Cincinnati association amends brokerage rule. East Underw 44:18 Je 18 '43
 Plnk hits payments of excess commissions. East Underw 44:20 F 5 '43; Weekly Underw 148:320 F 6 '43; Nat Underw 47:5 F 4 '43
INSURANCE brokers' association of New York
 Annual meeting. New York. East Underw 44: 22 Ap 30 '43; Nat Underw 47:15+ Ap 29 '43; Weekly Underw 148:960-1 My 1 '43

INSURANCE commissioners

A. J. Kouillard joins North British group; was commissioner of New Hampshire. por East Underw 44:18 Ap 30 '43; Nat Underw 47:2 Ap 29 '43

Blackall replaced by Ellery Allyn in Connecticut. Nat Underw 47:3 Ap 22 '43

Central conference of commissioners organized; many problems considered. Nat Underw 46:1 N 12 '42; Nat Underw (Life ed) 46:1+ N 13 '42

D.A. Forbes named Michigan commissioner. por Nat Underw 47:9 F 18 '43

Dineen now on job in New York. Nat Underw 47:1+ S 30 '43

Latest roster of state insurance commissioners; list. Weekly Underw 147:1239 N 28 '42

Maryland commissioner named to bench; John E. Gontrom is succeeded by L. E. Ensor. Nat Underw 47:2 S 23 '43; Nat Underw (Life ed) 47:1 S 24 '43

Maynard Garrison named California commissioner. Ins Field (Life ed) 72:9 S 10 '43; Ins Field (Fire ed) 72:5+ S 9 '43; Nat Underw 47:3 S 9 '43; Nat Underw (Life ed) 47:3 S 10 '43

New Hampshire attorney-general's office holds no insurance man can be commissioner. Nat Underw 47:4 Je 24 '43; Same. Nat Underw (Life ed) 47:4 Je 25 '43

State supervisors' national scope. F. J. Viehmann. Nat Underw (Life ed) 47:5 Ja 22 '43

Urges career men for commissioners. G. Cox. Weekly Underw 148:1267 Je 12 '43

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INSURANCE companies

American automobile of St Louis buys Associated companies. East Underw 44:27+ Ag 13 '43; Nat Underw 47:17 Ag 12 '43

Brief review of events occurring in 1942; official changes in 1942, new companies, etc. Weekly Underw 148:10-19 Ja 2 '43

Company affiliations in West. Nat Underw 47:15 Mr 18 '43

Future of the commercial insurance business. J. H. Magee. Harvard Business R 21 no 3: 321-35 A '43; Abstracts. Weekly Underw 148:732 Ap 3 '43; Nat Underw 47:3 Ap 29 '43

Potomac Indemnity is created. Nat Underw 46:13 D 24 '42

See also Mutual life insurance company of New York

Accounting

Advocates free interchange of opinion; accountancy as stepping stone to executive position. A. N. Butler. East Underw 44:30+ N 5 '43

In praise of accounting technique. J. D. Whelehan. East Underw 44:26 O 8 '43

Insurance accountants unit is growing in influence; fourth annual conference. Nat Underw 47:3 O 14 '43

Advertising

Advertising in uniform; insurance company launches campaign to smash the 7th column. II Nat Safety N 47:21+ Ja '43

It's time to advertise men; companies should sell underwriter to the public; abstracts. J. E. Rutherford. Ins Field (Life ed) 72:6-7+ Mr 26 '43; Nat Underw (Life ed) 47:1+ Mr 26 '43

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Insurance—Advertising
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Branch offices

Agents asked to fight branch offices. East Underw 44:24 Ap 16 '43

Branch office question still is just a question; discussion by N.A.I.A. directors. Nat Underw 47:15+ F 25 '43

Charges agents with responsibility for increases in branch offices. A. C. Deisseroth. East Underw 44:21 My 14 '43

Comment on branch office issue. Nat Underw 47:18 Je 24 '43

Comments on branch office problem. D. A. North. East Underw 44:16 My 28 '43

Modern life insurance agencies; D.C. branch office of the Acacia Mutual Life, Washington. W. A. Hamlin. II Spectator (Life ed) 149:18-24 D '42

Modern life insurance agencies; 55 John St. agency, Travelers in New York city. W. A. Hamlin. pors Spectator (Life ed) 150:16-21 Mr '43

N.Y. agents' assn. calls for study of branch office costs. E. N. Eager. East Underw 44:1+ My 14 '43

N.Y. agents put branch offices up to N.A.I.A. R. B. Mitchell. Nat Underw 47:1+ My 13 '43

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 N.Y. City agents aim big guns at branch offices. Nat Underw 47:1+ Ap 29 '43; East Underw 44:22 Ap 23 '43
 New York Life opens Canadian department; head office Toronto. East Underw 44:1+ Ja 1 '43
 New Yorkers call branch office menace; cause and remedy debated at Syracuse meeting. E. M. Ackerman. Weekly Underw 148:1034+ My 15 '43
 Reviews branch office developments. W. S. Keese, jr. Ins Field (Pittsburgh Conv Daily ed) 72:3+ O 13 '43; Same. East Underw 44:20+ O 22 '43

Employees

British reception plan perfected for service men. Nat Underw 47:2 Ja 28 '43
 Companies recruit and train women to replace wartime man-power losses. East Underw 43:55-6 D 11 '42
 Compliance with 48 hour week rule held difficult for insurance companies. East Underw 44:32+ Ap 2 '43
 Equitable plan for employees' retirement becomes effective. East Underw 44:1+ Jl 16 '43; Nat Underw (Life ed) 47:8 Jl 23 '43
 Father Draft is ominous insurance prospect. Nat Underw 47:1+ Ag 19 '43; Nat Underw (Life ed) 47:2+ Ag 20 '43
 Find and develop human values in business; methods of Union central life insurance company. R. H. Stuebing. Am Business 13:16-17+ Mr '43
 41½-hour week in Hartford. Nat Underw 47:2 Ap 29 '43
 Hartford insurers granted relief on 48 hour week; situation in Seattle. Nat Underw 47:1 Ap 1 '43; Same. Nat Underw (Life ed) 47:1 Ap 2 '43
 Hiring order is studied. Nat Underw 47:1 Ap 15 '43
 How insurance can reduce man-hours. W. Hay. Weekly Underw 148:1056-7 My 15 '43
 Increases and decreases of wages and salaries of insurance organizations under federal control. W. H. Bennett. Weekly Underw 147:1172+ N 21 '42
 Independent investigator is held to be employee. Nat Underw 47:18 Ja 21 '43
 Insurance fathers are unsettled. Nat Underw (Life ed) 47:4 Ag 27 '43; Nat Underw 47:1+ Ag 26 '43
 Insurance not ranked with artificial flowers. Nat Underw 47:3+ F 4 '43; Same. Nat Underw (Life ed) 47:3+ F 5 '43
 Insurance personnel; Kennet report. Economist 143:538 O 31 '42
 Interest widespread in Kennet manpower report. L. S. McCombs. Spectator (Property ed) 8:9 Ja 7 '43
 Life insurance surveys manpower; 79 per cent reduction in single men. Weekly Underw 149:197+ Jl 31 '43; Same. Nat Underw (Life ed) 47:3+ Jl 30 '43
 North America to expand its pension plan. Nat Underw 47:4 S 30 '43; Same. Nat Underw (Life ed) 47:14 O 1 '43
 Number of men in life insurance business down 17% in first war-year. Comm & Fin Chr 157:1598 Ap 29 '43
 Personnel and office management problems. East Underw 44:39 Je 11 '43
 Problems of work week over 40 hours. M. A. Billis. Comm & Fin Chr 158:1431 O 7 '43; Same. East Underw 44:20 O 8 '43
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 Replacement of employees means big training job. Nat Underw 46:3 N 12 '42
 San Franciscans to ask uniform status under 48-hour rule. Nat Underw 47:2 Je 3 '43
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 Study report on English insurance manpower question. Nat Underw (Life ed) 47:1+ Ja 1 '43; Same abr. Nat Underw 46:1+ D 31 '42
 Tells LOMA's group of training within industry plan. R. M. Green. East Underw 44:1+ O 29 '43
 Trade in thrift; Kennet committee report. Economist 143:629-30 N 21 '42

War impact on personnel of life insurance business; chart. Nat Underw (Life ed) 47:19 Ap 16 '43
 War manpower status of life insurance personnel defined. East Underw 44:1+ Je 18 '43; Nat Underw (Life ed) 47:1+ Je 18 '43; Spectator (Life ed) 151:7 Jl '43; Weekly Underw 148:1317+ Je 19 '43
 Washington National of Evanston, Ill. has profit sharing plan for employees, agents. Nat Underw (Life ed) 47:24 Ap 23 '43
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Finance

Aggregate results of 1942 operations. Nat Underw 47:8 Mr 18 '43
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 Underwriting and investment profits and losses in 1942; record of 100 leading casualty, surety and miscellaneous insurance companies; tabulation. Spectator (Property ed) 9:26-7 O 21 '43
 Underwriting and investment profits and losses of 100 casualty, surety and miscellaneous companies, 1932-1941. Spectator (Property ed) 8:14-15+ N 12 '42

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Houston fire and casualty insurance company	Security insurance company of New Haven

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Big bond buyers; life insurance companies. Business Week p 118 Ag 28 '43
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 Municipal bond sales continue. Nat Underw (Life ed) 46:1 D 18 '42
 Negro companies interested in many current questions; investments. R. M. Clark. Nat Underw (Life ed) 47:6+ Jl 30 '43

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 Canada Life war economies outlined. J. M. Brown. Nat Underw (Life ed) 47:7 O 1 '43
 Emerson loses United Services proxy fight. Nat Underw (Life ed) 47:13 Mr 19 '43
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 Help shortage forces junking of non-essentials. Nat Underw 47:3-4 Ap 1 '43
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 Mutual life of New York initiates correspondence program; retain firm to study methods. East Underw 44:10 My 14 '43
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 Pacific Mutual stockholders take positive action. Nat Underw 47:15 F 25 '43; Same. Nat Underw (Life ed) 47:7 F 26 '43
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 Views war adjustments before LOMA. J. B. Slimmon. East Underw 44:10 O 1 '43
 War's end to mean scant relief for office management. H. E. Niles. Nat Underw 47:3 N 4 '43
 We, the agents! company set-ups. S. Ragland. Ins Field (Fire ed) 72:24 My 13 '43
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 Brief review of events occurring in 1942; official changes. Weekly Underw 148:10-14 Ja 2 '43
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 Careers of West and Smalley and President Crawford of Glens Falls. East Underw 44:17 My 21 '43
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 Union Life of Richmond, Va. making sound progress with woman as president. T. D. Eaton. Weekly Underw 149:221 Jl 31 '43
 We have with us today; interesting personalities in the life insurance business. pors East Underw 43:6-7+ D 11 '42
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Accident and health meeting wartime responsibilities. C. W. Young. Nat Underw (H. & A. conference no) 47:4+ Je 4 '43
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- Consideration of people's reactions, interest, stressed. F. L. Conklin. Nat Underw (Life ed) Conv no 47:6+ O 7 '43
- Development better public relations; ideas advanced by junior executives of fire offices. Weekly Underw 148:642-3 Mr 20 '43
- Discusses competition in public interest; abstracts. G. L. Neel. Ins Field (Pittsburgh Conv Daily ed) 72:1+ O 13 '43; East Underw 44:31 O 15 '43; Nat Underw 47:26+ O 14 '43
- Discusses public relations; Mutual Life's periodic public opinion surveys. C. B. Reeves. East Underw 44:18 O 8 '43
- Facts of public opinion survey; conducted for American newspaper publishers association. Weekly Underw 148:981+ My 8 '43; East Underw 44:36+ My 7 '43
- How to win policyholders and influence people. K. H. Mathus. Spectator (Life ed) 161:16-21 Ag '43
- Improvement of public relations. W. Hay. Weekly Underw 148:649+ Mr 20 '43; Reply. A. J. Mountney. 148:791+ Ap 10 '43
- Mutual Fire leaders ask unity to oppose government threats; public must be aroused. R. C. Baker. East Underw 44:1+ O 8 '43
- National board issues booklet to aid in public relations efforts. East Underw 44:16 S 3 '43
- Need new management concept; life insurance must meet demands of current social needs. G. S. Nollen. Weekly Underw 148:225+ Ja 23 '43; Same. East Underw 44:6 Ja 22 '43
- Post-war planning, public relations program urged. W. G. Alpaugh. Nat Underw (H. & A. conference no) 47:5+ Je 4 '43
- Preparing news for the public press. E. Shuler. Nat Underw (Life ed) 47:19-20 Mr 26 '43
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- Rules governing public relations are set forth. C. M. Shanks. Nat Underw (Life ed) 47:4+ O 22 '43
- Warns insurance to drop secrecy veil. H. McFarland. Nat Underw 46:4+ D 17 '42
- We must create better public relations. C. H. Smith. Ins Field (Fire ed) 72:6-9 F 25 '43; Same. Weekly Underw 148:469+ F 27 '43; Abstract. Nat Underw 47:1+ F 25 '43
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- Anti-trust bill sponsors speak at first hearing. R. B. Mitchell. Nat Underw 47:1+ O 21 '43; Same abr. Nat Underw (Life ed) 47:1 O 22 '43
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- Atlanta investigation recalls famous Paul vs. Virginia decision. J. B. Hosmer. Ins Field (Fire ed) 71:9+ D 3 '42
- Authority of state to regulate reciprocals upheld; U.S. Supreme court holds for N.Y. in Warner exchanges' case. Nat Underw 47:3+ Mr 4 '43; East Underw 44:18+ Mr 12 '43
- Bailey-Van Nuys bill. Spectator (Property ed) 9:16-17, 42-3 N 4 '43
- Biddle declares he doesn't want U.S. insurance control; hearing of Senate's judiciary committee on the Bailey-Van Nuys bill. C. Axman. East Underw 44:1+ O 29 '43
- Biddle loudly rattles some old skeletons; fire insurance attacked. E. M. Ackerman. Weekly Underw 149:937+ O 30 '43
- Biddle opposes legislation to exempt insurance business from anti-trust acts. Comm & Fin Chr 158:1814 N 4 '43
- Bill in Congress to retain state control of fire insurance companies backed by underwriters. Comm & Fin Chr 158:1324 S 30 '43
- Champions state supervision. J. A. Fulton. Nat Underw 46:1+ D 3 '42; Same. Nat Underw (Life ed) 46:1+ D 4 '42
- Comments of judiciary committeemen; strong for state supervision at hearing on Bailey-Van Nuys bill. East Underw 44:3+ O 29 '43
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- Commissioners report on progress in unauthorized insurance legislation. East Underw 44:34 Je 11 '43
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- Court concludes insurance is commerce; decision in Polish Alliance case. Nat Underw (Life ed) 47:7 Je 11 '43; Nat Underw 47:6+ Je 10 '43
- Denial of slush fund. E. L. Williams. Weekly Underw 149:390+ N 6 '43
- Department of justice appeals Atlanta decision. J. B. Hosmer. Ins Field (Fire ed) 72:6-8 S 2 '43
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- Federal control; review of attempts by Congress to take over supervision of insurance. T. F. Cunneen. II Spectator (Life ed) 150:4-7, 52-4 Mr '43
- Federal supervision of insurance. Management R 32:352-3 S '43
- Fire companies file rebuttal argument to government charges. East Underw 44:1+ My 21 '43; Nat Underw 47:1+ My 20 '43; Nat Underw (Life ed) 47:1+ My 21 '43
- Flays federal control attempts. M. Garrison. Nat Underw 47:2+ O 21 '43; Same abr. Nat Underw (Life ed) 47:8-9 O 22 '43
- Functions of a rating bureau; federal control aspect. E. W. Sawyer. Weekly Underw 148:336+ F 6 '43; Abstract. East Underw 44:38 F 5 '43
- Future outlook for casualty insurance; state supervision has worked well. E. C. Stone. Weekly Underw 147:1384, 1388-90 D 12 '42; Same abr. East Underw 43:77+ D 11 '42
- Government accused of attempt to control insurance business. W. E. Allyn. Comm & Fin Chr 158:1416 O 7 '43
- Government brief meets commerce issue head on. Nat Underw 47:2 My 6 '43; Nat Underw (Life ed) 47:2 My 7 '43
- Government trains guns on Bailey-Van Nuys bills. L. Cartwright. Nat Underw 47:3-4 O 28 '43; Same abr. Nat Underw (Life ed) 47:2+ O 29 '43
- Governors and state attorneys stirred by Atlanta indictment. East Underw 43:1+ D 4 '42
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- Growth of administrative law and its effect on life insurance. R. B. Lucas. Nat Underw (Life ed) 47:4+ O 8 '43
- Hearing on states rights bill is illuminating. Nat Underw 47:3+ N 4 '43; Same abr. Nat Underw (Life ed) 47:2+ N 5 '43
- Heckling of Biddle by congressmen at hearing on Van Nuys-Bailey bill. East Underw 44:3+ N 5 '43

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Insurance bills stand up under opposition, final hearing on S.1362. *Ins Field (Fire ed)* 72:3+ N 4 '43

Insurance crucible is seething. *W. R. Thomas. East Underw* 44:15 O 29 '43

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Mutual agents hear federal threat stressed at convention in New York. *Nat Underw* 47:3+ O 7 '43; *East Underw* 44:1+ O 8 '43

PM takes some wild swings. *Nat Underw* 47: 11 O 7 '43

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Polish Alliance appeals case to U.S. Supreme court. *Nat Underw* 47:4 Ag 12 '43; *Nat Underw (Life ed)* 47:9 Ag 13 '43

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Position of fire insurance companies on bills to keep regulation of indemnity carriers in hands of the states. *Spectator (Property ed)* 9:10-11, 14+ O 7 '43

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Replies to charges by Biddle. *C. E. Hancock. East Underw* 44:24+ N 5 '43

Sees dual control of insurance; believes Paul vs. Virginia will be reversed. *A. B. Kelly. Nat Underw* 47:3 S 16 '43

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State regulation of insurance upheld; federal control called dangerous remedy. *L. H. Pink. Comm & Fin Chr* 157:501 F 4 '43

State supervision policyholders' guarantee. *J. M. McCormack. Weekly Underw* 148:35-6+ sec 2 My 8 '43

State system of supervision effective. *E. A. Agger. Weekly Underw* 148:5+ Ja 2 '43

States rights note dominates meeting of commissioners. *Nat Underw* 47:1+ Je 10 '43; *Nat Underw (Life ed)* 47:1, 22-4 Je 11 '43

Status of federal probe. *Spectator (Property ed)* 8:38-40 My 6 '43

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Supervising problem. *Nat Underw* 47:13 Ag 5 '43

Text of Judge Underwood decision in Southeastern underwriters association, et al., case. *East Underw* 44:17+ Ag 13 '43; Same. *Ins Field (Fire ed)* 72:6-7 Ag 12 '43; Same. *Weekly Underw* 149:298+ Ag 14 '43; Same. *Spectator (Property ed)* 9:12-13+ Ag 19 '43

Third hearing is held on bills in Congress. *R. B. Mitchell. Nat Underw* 47:1+ N 4 '43; Same abn. *Nat Underw (Life ed)* 47:1+ N 5 '43

Trust exemption bill getting full support; Senator Bailey's measure. *Weekly Underw* 149:689+ O 2 '43

Unauthorized plan bane of existence of commissioners. *Nat Underw* 46:18+ D 10 '42; *Nat Underw (Life ed)* 46:2+ D 11 '42

Underwriters pleased over SEUA action. *Weekly Underw* 149:293+ Ag 14 '43

U.S. Atlanta brief calls insurance commerce. *Nat Underw* 47:1+ Ap 29 '43; Same. *Nat Underw (Life ed)* 47:3+ Ap 30 '43; Same abn. *East Underw* 44:19 Ap 30 '43

U.S. Supreme court will decide status of insurance. *Nat Underw* 47:1+ O 28 '43; Same. *Nat Underw (Life ed)* 47:1+ O 29 '43; Same abn. *Comm & Fin Chr* 158:1708 O 28 '43

Uphold regulation of insurance by states; abstracts. *L. H. Pink. East Underw* 44:19 O 29 '43; *Nat Underw* 47:29 N 4 '43; *Nat Underw (Life ed)* 47:2 N 5 '43

Upholds state supervision. *E. E. Agger. East Underw* 44:28 O 1 '43

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Warner case significance. *J. F. Wohlgenuth. Nat Underw* 47:7 Mr 18 '43

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What about Paul v. Virginia? review of the past, a look into the future; abstracts. *J. B. Gontrum. Ins Field (Fire ed)* 72:6-8+ Ag 26 '43; *East Underw* 44:17+ S 3 '43

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Department to ease up on demands for detail in company reports. *East Underw* 43:1+ N 27 '43

Home issues statement in form easily understandable by public. *East Underw* 44:27 Mr 26 '43

How to sell life via the annual statement. *L. S. Lindsay. East Underw* 44:21 Ap 9 '43

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Proposed new statement form for life companies wins acclaim. *Nat Underw (Life ed)* 47:1+ Je 4 '43

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Financial stocks affected by war. *J. S. Williams. Mag of Wall St* 72:352-3+ JI 10 '43

Fire insurance stocks; 1942 results and prospects for 1943. *Comm & Fin Chr* 157:270 Ja 21 '43

Insurance share index; table showing index of shares at December 31, 1942, with figures at half-yearly intervals since 1940. *Economist* 144:114 Ja 23 '43

Insurance stocks; examples of subsidiary holdings and parent vs. consolidated figures. *E. A. Van Deusen. Comm & Fin Chr* 157:1969-70 My 27 '43

Insurance stocks; fire companies operating under war conditions. *E. A. Van Deusen. Comm & Fin Chr* 157:486 F 4 '43

Insurance stocks; investment income, dividend payments, underwriting profits. *E. A. Van Deusen. Comm & Fin Chr* 158:511+ Ag 5 '43

Insurance stocks; investor should comply with principle of diversification. *E. A. Van Deusen. Comm & Fin Chr* 158:304 JI 22 '43

Insurance stocks; leading fire insurance companies of 50, 100 and 150 years ago also leaders today. *E. A. Van Deusen. Comm & Fin Chr* 157:1374 Ap 15 '43

Insurance stocks, old-line fire companies. *E. A. Van Deusen. Comm & Fin Chr* 158:123 JI 8 '43

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Insurance stocks regarded favorably for investment. R. L. Hoadley. Nat Underw 47:10-11 Ag 19 '43
 Insurance stocks; results of representative stock fire insurance companies 1941 and 1942. E. A. Van Deusen. Comm & Fin Chr 157:1198 Ap 1 '43
 Insurance stocks; why leading fire insurance companies attract conservative investors. E. A. Van Deusen. Comm & Fin Chr 157:654 F 18 '43
 Mackubin, Legg prints insurance stock index. East Underw 44:34 Ap 2 '43
 Security markets fail to stage demonstration to celebrate good news all along line. F. L. Brokaw. Weekly Underw 147:1119+ N 14 '42
 Trend of insurance stocks for year. Nat Underw 47:11 F 18 '43
 Urge Manufacturers Casualty stockholders to accept offer of Commercial Credit. Nat Underw 46:16+ N 26 '42
 Urges investors to buy securities of insurance companies. R. W. Babson. East Underw 44:34 F 12 '43

Service

New Aetna form helps assureds in service. East Underw 44:24 F 12 '43

Statistics

Nearly four billions paid to public in '42. East Underw 44:14 Ja 8 '43
 Recording and statistical corporation. East Underw 44:15 Mr 5 '43
 Spectator, Property insurance review; statistical issue. Spectator (Property ed) 9:3-35 O 21 '43

Taxation

California may tax premiums derived from California residents under contract made in Kansas. Nat Underw 47:53 O 14 '43
 Effect of federal income taxes incurred applicable to underwriting profits in 1941-42; casualty and surety, fire and marine companies. Spectator (Property ed) 9:16-17, 28-9 O 21 '43
 Excess profits tax will hit some insurers. Nat Underw 46:3 D 31 '42
 Federal tax law changes in past year as they affect life insurance. J. V. Bloys. East Underw 44:32+ Pt 2 O 1 '43
 Fraternal societies subject to U.S. tax; change to mutual legal reserve life company. Ins Field (Life ed) 71:7 D 18 '42
 Insurance dabbles in tax-reform. W. C. Betts. Comm & Fin Chr 156:1890 N 26 '42
 Insurance tax state money maker; report of Missouri department. Weekly Underw 149:293+ Ag 14 '43
 Kentucky cities have right to tax premiums. Ins Field (Life ed) 72:5 My 7 '43
 Minnesota self-insurers tax held unconstitutional. East Underw 44:20 Ag 20 '43
 Moot points in stamp tax law. Nat Underw 47:1+ Ja 28 '43
 N.Y. catch-all tax is upheld. Nat Underw (Life ed) 47:4 My 21 '43
 Right to tax renewals is upheld in Texas. East Underw 44:6 O 1 '43
 Seattle levies tax on premiums in surprise move. Nat Underw 47:38 Je 10 '43
 Settle California annuity premium tax situation. Nat Underw (Life ed) 47:2 Ja 22 '43
 Standard Accident Ins in tax fight. East Underw 44:41 P 26 '43
 Tax burden of fire companies; comparison of '42 and '41 reserves. Nat Underw 47:3+ Ap 15 '43
 Tax reserve increase shown. Nat Underw 47:15 Ap 1 '43

See also

Benefit societies—
 Taxation

California

California Supreme court denies application; dismissal of order in Chapter 9 cases. East Underw 44:11 O 1 '43
 Caminetti acts to merge Chapter 9 California companies. Nat Underw (Life ed) 47:7 Ja 1 '43
 Commissioner Caminetti reports on Chapter 9 companies in hands of conservator. East Underw 44:14 My 7 '43

Consolidation of Chapter 9 companies approved in California. Nat Underw (Life ed) 47:10 F 12 '43
 Court awaits counter moves in life merger. East Underw 44:10 Ja 29 '43

Chile

Pearson charge shows reciprocity need; Chile reinsurance bank. Nat Underw 47:23 Je 10 '43

Europe

German control of insurance in Europe reviewed in Allied report. East Underw 44:25 Mr 26 '43

France

How fire and casualty companies fared under European first war inflation. E. A. Van Deusen. Comm & Fin Chr 157:1002+ Mr 18 '43

Germany

How fire and casualty companies fared under European first war inflation. E. A. Van Deusen. Comm & Fin Chr 157:1002+ Mr 18 '43

Great Britain

Alliance assurance company, Caledonian insurance company, Employers' liability assurance corporation, Sun insurance office; annual meetings. Economist 144:635-6 My 15 '43
 Atlas assurance company limited, annual general court, London. Economist 144:737 Je 5 '43

British paper tells contributions of insurance to the war effort. East Underw 44:22 Jl 23 '43
 Censor issues rules on exporting insurance data; examples of BICO. Nat Underw 47:21+ Mr 4 '43

Clerical, medical and general assurance society; Midland employers' mutual assurance, limited; annual meetings. Economist 144:538-9 Ap 24 '43
 Commercial Union reports good results on operations of 1942. East Underw 44:23 Jl 9 '43

Details of operations of BICO. Nat Underw 47:1 F 25 '43
 Distribute rules on sending data abroad; operations under BICO plan. East Underw 44:24+ F 26 '43

Foreign business of British companies. H. W. Walker. Weekly Underw 148:1148-9 My 29 '43
 Guardian assurance company, limited, annual general meeting, London. Economist 144:769 Je 12 '43

Insurance personnel; Kennet report. Economist 143:538 O 31 '42
 Liverpool & London & Globe shows satisfactory progress last year. East Underw 44:20 Jl 9 '43

London & Lancashire; comment on the year's operations. F. P. Ruter. Nat Underw 47:12+ Je 24 '43

London Assurance reports on 1942 fire, marine and casualty results; Northern Assurance had successful year in 1942. East Underw 44:28, 29 Je 11 '43

Royal exchange assurance, North British and mercantile insurance company, limited, London assurance, Royal London mutual insurance society, annual general meetings. Economist 144:567-9, 571 My 1 '43

Royal Exchange reports successful results in all fields last year. East Underw 44:20 Je 11 '43

Royal insurance company, limited, Norwich union fire insurance society, statements by the chairman. Economist 144:700 My 29 '43

Royal issues report on 1942 experience. East Underw 44:23 Je 25 '43

Scottish union and national insurance company, Liverpool and London and globe insurance company, limited, Standard life assurance company, Equitable life assurance society, Commercial union assurance company, limited; annual meetings. Economist 144:667-9 My 22 '43

Seven arrive from London to run BICO. Nat Underw 47:1 Ja 28 '43

Tidal waves in Britain; insurance industry sees Beveridge bogey ahead. R. Walker. Ins Field (Fire ed) 72:6-3 Jl 8 '43; Same.

Ins Field (Life ed) 72:8-10 Jl 9 '43

INSURANCE companies—Great Britain—Cont.
Wartime aid of British insurers is summarized. Nat Underw 47:13 Je 17 '43
Working out control of cable messages.
Weekly Underw 148:239 Ja 23 '43

See also
Prudential assurance
company

Missouri

Scheufler acts to ease claims litigation. Ins Field (Life ed) 72:10 O 1 '43; East Underw 44:1+ S 24 '43

INSURANCE companies blanket bond

Insurance companies blanket bond standard form no. 25. L. S. McCombs. Spectator (Property ed) 9:26-7 O 7 '43

New blanket bond promulgated for insurance carriers. Nat Underw 47:23 S 23 '43; East Underw 44:31+ S 24 '43

INSURANCE company buildings

Aetna Fire moves New York offices. East Underw 44:24 My 7 '43

A.R.P. in office buildings; Metropolitan Life Insurance building in New York and du Pont and Nemours buildings in Wilmington. Il plans Arch Forum 77:34-92 N '42

Fidelity and Deposit opens new building in downtown New York. Il East Underw 43:36 D 18 '42; Nat Underw 46:17+ D 17 '42

Republic of Texas buys building at 110 Fulton street. East Underw 44:1+ Ag 6 '43; Weekly Underw 149:249 Ag 7 '43

INSURANCE company of North America

Biography of a business, 1792-1942. M. James. 43ip 34 Bobbs; Reviews. East Underw 43:24+ N 27 '42; Nat Underw 46:4+ D 3 '42; Weekly Underw 148:58-9 Ja 2 '43

Celebrates its 150th anniversary year. Weekly Underw 147:1372-3 D 12 '42; East Underw 43:72 D 11 '42

INSURANCE counsel, international association of. See International association of insurance counsel

INSURANCE departments

Elections portend changes in state departments. Nat Underw (Life ed) 46:3 N 13 '42; Nat Underw 46:3 N 12 '42

Lawyers in Missouri case must pay taxes. Weekly Underw 148:590 Mr 13 '43

New York liquidation bureau. L. H. Pink. East Underw 44:18 Ja 22 '43

Retirement of Wood recalls old rebate or twisting dramas; activities of the complaint bureau. East Underw 44:1+ Jl 2 '43

Tennessee insurance department. East Underw 44:3+ Mr 5 '43

INSURANCE economics society of America

Appoints research expert, publishes two new booklets. East Underw 44:28 Ja 1 '43

Clarify Economics society social security position. Nat Underw 47:16 Ap 1 '43; Same. Nat Underw (Life ed) 47:3+ Ap 2 '43

I.E.S. rides again. D. Porter. Ins Field (Fire ed) 72:10-12 Ja 21 '43; Same. Ins Field (Life ed) 72:10-12 Ja 22 '43

INSURANCE executives association

E. L. Williams elected president of the IEA. East Underw 44:26 S 17 '43; Weekly Underw 149:565 S 18 '43

INSURANCE field (periodical)

New officers, editor, por Ins Field (Fire ed) 72:3+ Ja 7 '43; Same. Ins Field (Life ed) 72:3+ Ja 8 '43

INSURANCE institute of America

Annual conference, 35th, New York. East Underw 44:25+ O 29 '43; Nat Underw 47:25+ O 28 '43; Weekly Underw 149:938 O 30 '43

Insurance institute issues new syllabus. East Underw 44:22-3 Ag 6 '43

INSURANCE law

Atlanta investigation recalls famous Paul vs. Virginia decision. J. B. Hosmer. Ins Field (Fire ed) 71:9+ D 3 '42

Comments on legislation and utopia before actuaries' meeting; abstracts. H. H. Jackson. East Underw 43:10+ N 13 '42; Nat Underw (Life ed) 46:8 N 13 '42

Grist of the legislative mill; results of actions of 44 state legislative sessions. Ins Field (Fire ed) 72:8+ O 7 '43

Grist of the legislative mill; results of actions of 44 state legislative sessions in the life insurance field. Ins Field (Life ed) 72:4+ O 15 '43

Little company does big business (illegally). Ins Field (Life ed) 72:19 O 8 '43

19 states have had Guertin bills; governors get some. East Underw 44:1+ Mr 19 '43
Only state-licensed agents permitted to sell in army posts. Nat Underw (Life ed) 47:6 O 22 '43

Reviews year's cases for bar committee. T. M. Galphin. Nat Underw 47:4 Ag 26 '43

Some important bills presented to various state legislatures. Weekly Underw 148:184, 228, 316, 367, 419, 471, 524, 584, 635, 681, 338, 939 Ja 16-23, F 6-Mr 27, Ap 24-May 1 '43

Some insurance department rulings made in 1942. East Underw 43:36+ D 11 '42

States get legal title to company deposits. Ins Field (Fire ed) 71:13 D 31 '42

Strong program presented at A.L.C. Legal section meeting. Nat Underw (Life ed) 47:6+ O 8 '43

Text of laws proposed by Guertin committee. Nat Underw (Life ed) 46:2, 9-11 D 11 '42

Trends affecting insurance; abstracts. R. H. Kastner. East Underw 44:6 Ap 2 '43; Weekly Underw 148:680 Mr 27 '43

Valued policy laws; digest of race horse insurance case. J. L. Roesch. Spectator (Property ed) 8:22-3 My 6 '43

Why the life insurance policy is safe; how law departments safeguard policy. B. K. Elliott. East Underw 44:14-15 pt 2 O 1 '43

See also

Insurance, Automobile—Financial responsibility laws	Insurance companies—Regulation
Insurance, Life—Policies, Illegal	Savings banks—Insurance selling
Insurance agents—Law	

also Association of life insurance counsel

California

California commissioner warns fire and casualty insurers for invading each other's fields. East Underw 44:16 Ja 15 '43

California complaint gets re-hearing; Republic of Dallas, Tex. Ins Field (Fire ed) 72:8 Mr 11; 6 Mr 18 '43

Watch California battle over writing power; conflict between fire, casualty interests. Nat Underw 47:3 F 11 '43

Colorado

Novel sales proposition turned down as violating Colorado laws. L. J. Kavanaugh. East Underw 43:15 D 25 '42

Illinois

Illinois law hits at misrepresentation. Ins Field (Life ed) 72:3+ Ag 13 '43

Jones lauds measures adopted for Illinois. East Underw 44:18 Jl 9 '43

Indiana

Indiana bill signed with ceremonies; Guertin proposals. Nat Underw (Life ed) 47:6 Mr 26 '43

Minnesota

Minnesota bars fire companies with casualty charters. Nat Underw 47:2 F 25 '43

New York (state)

Authority of state to regulate reciprocals upheld; U.S. Supreme court holds for N.Y. in Warner exchanges case. Nat Underw 47:3+ Mr 4 '43; East Underw 44:13+ Mr 12 '43

Review of insurance legislation passed in the past legislative session. T. J. Cullen. East Underw 44:12 S 24 '43

Pennsylvania

Neel sets up program for medical payments. East Underw 44:41 Je 11 '43

Peru

Peru's new insurance law and organization procedure. H. P. Crawford. Il For Comm W 12:15-17+ Ag 21 '43

INSURANCE law—Continued

South America

Reinsurance laws of South America. W. F. Delaney, jr. Nat Underw 46:11-12, 16-21 D 31 '42

Texas

Bond liability subject of Texas ruling requested by insurance commissioners. Weekly Underw 149:941 O 30 '43

Venezuela

Insurance law of Venezuela. H. P. Crawford. II For Comm W 13:10-11, 34-5 O 16 '43

Virginia

Resident agent law test starts in Virginia. Weekly Underw 148:789+ Ap 10 '43; East Underw 44:30 Ap 16 '43

INSURANCE libraries

Handbooks of the Hardware Mutuals' library. E. C. Turner. Special Lib 34:294-6 JI-Ag '43
Insurance librarians discuss wartime problems. Nat Underw 47:15 Je 24 '43; Same. Nat Underw (Life ed) 47:8 Je 25 '43
More war problems in insurance libraries. H. M. Helmie. Special Lib 34:410-13 O '43
War problems in insurance libraries. E. D. Knapp. Special Lib 34:407-9+ O '43

See also
Social security board
—Libraries

INSURANCE library association of Boston

Annual meeting. Boston, Oct. 22. East Underw 44:30 N 5 '43

INSURANCE research

Urges true research in insurance. W. F. Kimball. Nat Underw 47:2+ My 27 '43

INSURANCE society of New York

Annual report to the board of directors. A. C. Goerlich. East Underw 44:19 Mr 5 '43
Decrease of 50% in students; officers re-elected. Nat Underw 47:24+ My 27 '43

INSURANCE surveys

Curtis publishing co. completes its property insurance survey. East Underw 44:19 Ap 30 '43

Curtis survey reports customer opinions. F. Bremier. East Underw 44:5+ pt 2 My 21 '43

Facts of public opinion survey; conducted for American newspaper publishers association. Weekly Underw 148:981+ My 8 '43; East Underw 44:36+ My 7 '43; Nat Underw 47:21 My 6 '43

Farmers' wives strongly favor life insurance, survey of Farm journal of Philadelphia shows. C. Streeter. East Underw 44:30 pt 2 O 1 '43

How the insurance business looks to prospect and client; study by Curtis publishing co. Ins Field (Fire ed) 72:6+ S 16 '43; Nat Underw 47:27+ S 9 '43

Lessons from consumer research; Aetna Casualty. P. W. Stewart. Nat Underw 47:25 Ja 28 '43

Public's attitude on insurance; Indiana university takes a poll. A. Manes. East Underw 43:10 D 11 '42

Sample public's insurance notions; Curtis publishing company results. Nat Underw 47:6 My 20 '43

INSURANCE trusts

Business and life insurance trusts; considerations from drafting and taxation angles. J. McCormack. Trusts & Estates 75:573-9 D '42

4-entity funded insurance trust. H. S. Koster. Trusts & Estates 76:513-14 Je '43

Points to check in setting up trusts. V. L. Desmond. Nat Underw (Life ed) 46:23-4 N 13 '42

Settlement options and insurance trusts. L. Lloyd. Trusts & Estates 76:443-5 My '43; Same. East Underw 44:13 My 28 '43

Should life insurance trusts be revoked? Trusts & Estates 77:37 JI '43

Wills from partnership trusts; opportunity for coordinating estate and obtaining new business. W. R. Spinney. Trusts & Estates 75:565-8 D '42

INSURANCE women

Aetna Life girls' club has what it takes, and proves it! E. E. Gesner. II Ins Field (Fire ed) 71:28-9 N 19 '42

Companies recruit and train women to replace wartime man-power losses. East Underw 43:55-6 D 11 '42

How you can help your boss. A. V. Doyle. Ins Field (Fire ed) 72:17 My 13 '43

Insurance women. Weekly Underw 148:6 Ja 2 '43 [cont weekly]

Insurance women of Raleigh engage in variety of defense activities. East Underw 44:19 Mr 19 '43

Mildred F. Stone's success demonstrates value of sound preparation for business. Weekly Underw 148:345+ F 6 '43

Miss Algie manager of the bankers bond section of Maryland Casualty. Weekly Underw 149:217 JI 31 '43

Opportunity for service is greater; purposes for which insurance women are organized. Mrs W. H. White. Ins Field (Fire ed) 72:16-17 Ap 22 '43

Organized insurance women important influence for good in business. J. D. Saint. Weekly Underw 148:867 Ap 17 '43

Sees new opportunity for women. E. Brown. East Underw 44:31+ Je 18 '43

Success of women in casualty survey field revealed in career of Lois M. Pountney. Weekly Underw 148:497 F 27 '43

Three important executive positions in life insurance now occupied by women. Weekly Underw 148:204+ Ja 16 '43

Union Life of Richmond, Va. making good progress with woman as president. T. D. Eaton. Weekly Underw 149:221 JI 31 '43

Woman supervises all of Seattle bank's insurance. J. Loewenheim. Weekly Underw 149:134 JI 17 '43

Women who are efficient at home-making can make good insurance executives; Mrs Hugo Dalmar. R. W. Budlong. Weekly Underw 148:445 F 20 '43

See also
Insurance, Life—
Agents—Women
agents
also National association of insurance women

INSURED mortgages. See Federal housing administration—Insured mortgage plan

INTAKES

Now machine cleans hydro plant tunnels; cleaning of caddis fly larvae from tunnels, flumes and pipe lines. B. T. C. Stavert. II Elec W 119:992+ Mr 20 '43
Toledo water supply. II diag map Engineer 175:136-8, 146-7 F 12-19 '43

INTEGRATORS

Improved current integrator. J. M. Blair. bibliog diag R Sci Instr 14:64-7 Mr '43

INTELLECT

See also
Creative ability

INTELLECTUAL cooperation

Geology texts for Latin America. H. E. Stocking. Science 98:198-9 Ag 27 '43
U.S. text-books for students in Latin American universities. E. R. Hall. Science 98:15-16 JI 2 '43

INTELLECTUAL property

See also
Copyright Patents
Ideas in business Trade marks

Protection

So you have an idea you want to protect? H. Hibschan. Ptr Ink 201:21+ D 11 '42

INTELLECTUAL workers

See also
Office workers

INTELLIGENCE

American man-in-the-street; by his leader looked upon as a thirteen-year-old. II Fortune 26:142-4 D '42

Engineering mind. P. R. Elfstrom. W Soc E J 48:91-7 Je '43

Your place in the world of tomorrow. J. R. Roberts. II Franklin Inst J 235:577-85 Je '43

INTELLIGENCE tests. See Ability tests

INTER-AMERICAN conference on social security

New structure of social security; the work of the Inter-American conference on social security at Santiago de Chile. Int Labour R 46:661-91 D '42

- INTER-AMERICAN** highway. See Pan American highway
- INTER-AMERICAN** institute of agricultural sciences
 Help Latin America produce more things to sell, and it will be able to buy! G. A. Nichols. *Il Ptr Ink* 203:18-20+ Ap 9 '43
- Henry A. Wallace's visit. Science 97:sup10 Mr 26 '43
- Institute now being developed at Turrialba, Costa Rica. Science 97:132-3 F 5 '43
- Institute of agricultural sciences established. For Comm W 9:17 N 21 '42
- Inter-American institute of agricultural sciences; combination school of agriculture and agricultural research center. Science 97:371 Ap 23 '43
- INTER-AMERICAN** trade scholarship. See Scholarships and fellowships, International
- INTER-ASSOCIATION** council on animal disease and production
 Production of the meat, milk and eggs to win the war and the peace. H. W. Jakeman. Science 97:244-5 Mr 12 '43
- INTERCHANGEABLE** mechanism
 Interchangeability of parts for army vehicles is next objective. E. L. Warner, Jr. *Il Automotive & Aviation Ind* 88:17+ F 15 '43
- Interchangeable power plants for British bombers. M. W. Bourdon. *Il diag Automotive & Aviation Ind* 88:42-3 Ja 15 '43
- INTERCOMMUNICATING** systems
 Commercial sound enlists; the microphone and the loudspeaker join in war effort to increase efficiency of operations. G. R. Ewald. *Il Sci Am* 168:70-2 F '43
- Communication system with new annunciator selector. *Il Metal Finishing* 41:574 S '43
- Interphones go to war. *Il Radio N* 29:74-5+ Je '43
- Priority-free radio intercomm; conversion of small ac-dc sets. R. F. Scott. *Il diags Radio N* 29:28-9+ Mr '43
- Sound, and its place in the sun. F. D. Wilson. *Il Electronics* 16:108-10 Mr '43
- Sound systems in design of modern buildings. *Il plan Arch Forum* 79:6-7 Jl '43
- INTERCONNECTIONS** of power systems. See Electric plants—Interconnection
- INTEREST**
 Bank loan rates. Economist 144:594 My 8 '43
- Bond market now inflation-proof; government authorities have complete control over cost of borrowing. M. Nadler. *Barron's* 23:3 Mr 22 '43
- British view; cheap money can be maintained post-war. D. Tyerman. *Barron's* 23:1 Je 7 '43
- Cheap money for ever? Economist 144:647-8 My 22 '43; Same abr. *Trusts & Estates* 77:23-4 Jl '43
- Commercial loan rates; averages of rates charged customers by banks in principal cities; annual average, 1934-1941; monthly, Nov. 1938-Feb. 1939; quarterly, March 1939-Sept. 1942. Fed Res Bul 29:67 Ja '43 [cont monthly]
- Consumer credit; discount vs. interest; abstract. J. L. Jeger. *Bankers M* 146:273-4 Mr '43
- Consumer credit prospects. K. R. Cravens. *Banking* 35:58+ My '43
- Dynamics, statics, and the stationary state. P. A. Samuelson. *bibliog R Econ Stat* 25:58-68 F '43
- Fair way to quote charges on installment loans. G. O. Thorpe. *Bankers M* 146:322-7 Ap '43
- Future of interest rates. J. H. Riddle. *Bankers M* 146:225-37 Mr '43; Same abr. *Trusts & Estates* 76:171-3 F '43; Excerpts. *Comm & Fin Chr* 157:769 F 25 '43
- Future of interest rates with special reference to the Treasury's borrowing policy. B. M. Anderson. *Comm & Fin Chr* 158:781+ Ag 26 '43; Excerpts. *Trusts & Estates* 77:343-4 O '43; Discussion. 158:903+, 998+, 1087, 1098-9, 1317, 1399, 1687+ S 2, 9, 16, 30, O 7, 28 '43
- Government finance and money rates. J. A. Howe. *Comm & Fin Chr* 158:1400, 1418-19 O 7 '43
- How should interest rates be stated? C. W. Phelps; A. A. Friedrich. *Banking* 35:44-5+ Ap '43
- How the tax law aids borrowers; cost of borrowed money under several conditions. J. K. Lasser. *Banking* 35:29+ Ja '43
- Interest rate and saving. D. S. Tucker. *Am Stat Assn J* 38:101-2 Mr '43
- Interest rates. *Bankers M* 146:55-6 Ja '43
- Interest rates at member banks. Fed Res Bul 28:1089-97 N '42
- Interest rates on customer loans at large banks. Fed Res Bul 29:814-15 S '43
- Keynesian and other interest theories. R. M. Goodwin. *R Econ Stat* 25:6-12 F '43
- Money and interest rates, 1938-1941. Survey of Cur Business 1942 Sup p65 [supplemented in monthly numbers]
- 1942 life net earning interest rate was 3.40%. East Underw 44:10 Jl 30 '43; Nat Underw (Life ed) 47:2 Jl 9; 6 Ag 20 '43
- Open-market money rates in New York city, monthly, Nov. 1941-Nov. 1942. Fed Res Bul 29:67 Ja '43 [cont monthly]
- Open market rates; United Kingdom, Germany, Netherlands, Sweden and Switzerland, yearly Oct. 1929-Oct. 1941, monthly Nov. 1941-Oct. 1942. Fed Res Bul 29:103 Ja '43 [cont monthly]
- Post-war interest rates. Economist 143:805 D 26 '42
- Probable trend of interest rates. F. R. Macaulay. *Comm & Fin Chr* 158:1399+ O 7 '43
- Protest against the CCC rate cut. *Banking* 36:48 Ag '43
- Quantity of money and the rate of interest. A. Smithies. *R Econ Stat* 25:69-76 F '43
- Trend of interest rates; abstract. M. Nadler. *Management R* 32:387-9 O '43
- Unpaid and undeclared interest as liability. J Account 76:444 N '43
- What about future of interest rates? R. W. Babson. *Comm & Fin Chr* 158:1397+ O 7 '43
- Why not candor in small loans? R. Nugent. *Bankers M* 146:328-34 Ap '43
- X per cent per month on small loans. *Banking* 35:78 Mr '43
- See also
 Bank deposits—Inter- Savings deposits—
 est Interest
 Loans, Small—Laws Usury
 and regulations
- Tables, etc.
 Quick the formula! instalment loan field. M. C. Miller. *Banking* 36:39-40+ N '43
- INTERFACES**
 See also
 Electric double layer
- INTERFACIAL** contact angle. See Contact angle
- INTERFACIAL** tension
 Adsorption at solid-liquid interfaces; determination of adsorption by adhesion-tension and interfacial-tension measurements on binary organic liquid systems. F. E. Bartell and F. C. Benner. *bibliog diags J Phys Chem* 46:847-69 N '42
- Antonoff's rule. A. Yoffe and E. Heymann. *bibliog J Phys Chem* 47:409-10 My '43
- Attachment and detachment of dropping mercury under various conditions. I. M. Kolthoff and G. J. Kahan. *Il Am Chem Soc J* 64:2553-7 N '42
- Interfacial tension reveals oil sludging. G. W. Gerell. *Elec W* 119:1466+ My 1 '43
- Interfacial-tension studies of sodium laurate solutions. J. K. Davis and F. E. Bartell. *bibliog J Phys Chem* 47:40-50 Ja '43
- See also
 Contact angle
 Surface tension
- INTERFERENCE**. See Radio communication—Interference
- INTERFEROMETERS**
 Introduction to the theory of photoelasticity and its application to problems of stress analysis. R. E. Arthur. *Il diag Roy Aeronautical Soc J* 47:271-2 Ag '43
- INTERFEROMETERS**, Sonic
 Use of the Pierce interferometer for measuring the absorption of sound in gases. H. C. Hardy. *bibliog diags Acoustical Soc Am J* 15:91-5 O '43

INTERIOR decoration

Seven commercial units for Rodee drive, Hollywood. II plans Arch Forum 78:97-102 Je '43

See also

Architecture, Domes— Trimmings (for dra-
Carpeting, upholstery,
Furniture etc.)
Mural painting and
decoration

INTERLOCKING devices

Circuit elements in electrical remote control. C. J. Dorr and L. N. Galton. diags Electronics 15:58-60 D '42; Correction. 16:124 Ja '43

Interlock for electric dynamometers. C. H. Haarman. diag Am Mach 86:1504 D 24 '42

Interlocking circuits permit efficient use of group conveyor systems. diags Coal Age 48:74+ Ja '43

Resistance network provides interlock for simple relays; pushbutton-operated remote receiver. J. H. Miller. diag Electronics 16: 317-18 Mr '43

INTERLOCKING plants. *See* Railroads—Signals

INTERMEDIATE credit banks

FIC banks celebrate twentieth anniversary. Comm & Fin Chr 157:1293 Ap 8 '43

INTERMETALLIC compounds

Catalytic activity of intermetallic compounds in the vapor-phase reduction of nitrobenzene. B. Berk and O. W. Brown. bibliog diag J Phys Chem 46:964-8 N '42
Distribution equilibria between molten metals and molten salts, with reference to the stability of intermetallic compounds in the molten state. E. Heymann, R. J. L. Martin and M. F. R. Mulcahy. bibliog J Phys Chem 47:473-84 O '43

INTERNAL combustion engines. *See* Gas and oil engines

INTERNAL friction. *See* Friction, Internal

INTERNAL revenue

See also

Corporations—Tax-
ation Income tax
Inheritance tax

INTERNAL revenue, Bureau of. *See* United States—Internal revenue, Bureau of

INTERNATIONAL, Third

Comintern's record. Economist 144:690-1 My 29 '43

Communist International dissolved ending Moscow control of world organization. Comm & Fin Chr 157:2084 Je 3 '43

Implications of Comintern dissolution. Trusts & Estates 76:493-4 Je '43

Laying the ghost. Economist 144:677-8 My 29 '43

INTERNATIONAL airports. *See* Airports, International

INTERNATIONAL association of electrical inspectors

Northwestern section 17th annual meeting. Seattle, Aug. 26-27. Elec West 91:81+ O '43

INTERNATIONAL association of electrical leagues

Annual meeting, Cincinnati. Elec W News ed 120:1089 S 25 '43

INTERNATIONAL association of insurance counsel

Annual meeting, Chicago, June 28-30. East Underw 44:25+ JI 2 '43; Nat Underw 47: 1-1 JI 1 '43; Nat Underw (Life ed) 47:1+ JI 2 '43; Weekly Underw 149:26+ JI 3 '43

INTERNATIONAL association of machinists

Driving a bargain; machinists' move to leave A.F.L. Business Week p78+ Je 5 '43
Machinists union ends AFL tie. Comm & Fin Chr 157:2083 Je 3 '43

Machinists win; I.A.M. takes about 50% of votes in NLRB election at big Douglas plant. Business Week p74+ Aug 14 '43

INTERNATIONAL association of printing house craftsmen

Convention, Memphis, Aug. 10-12. Inland Ptr 111:30-7 S '43

INTERNATIONAL balance of payments. *See* Balance of payments

INTERNATIONAL bank. *See* Bank for international settlements

INTERNATIONAL brotherhood of boiler makers, iron ship builders, welders and helpers of America

Boilermaker row; International ousts Ray as head of Portland local. Business Week p102 O 16 '43

Ray won't bounce. Business Week p107-8 O 23 '43

INTERNATIONAL brotherhood of electrical workers

Industrial relations and utility labor. J. C. McIntosh. Pub Util 32:477-81 O 14 '43

INTERNATIONAL business machines corporation

1942 annual report. Comm & Fin Chr 157: 1559 Ap 26 '43

INTERNATIONAL claim association

Annual meeting, 34th, Chicago, Sept. 13-14. East Underw 44:38-9 S 17 '43; Ins Field (Fire ed) 72:5, 19-20 S 16 '43; Ins Field (Life ed) 72:3, 11-12 S 17 '43; Nat Underw 47:19+ S 16 '43; Nat Underw (Life ed) 47: 3+ S 17 '43; Weekly Underw 149:576-9+ S 18 '43

Committees, 1943. Ins Field (Life ed) 72:7 F 12 '43

INTERNATIONAL commercial arbitration commission

Establishment of the International commercial arbitration commission. Comm & Fin Chr 156:2253 D 24 '42

INTERNATIONAL communication. *See* Communication, International

INTERNATIONAL conferences

Our stake in the pre-peace conferences. II Business Week p53-60 My 22 '43

See also

United nations food
conference, 1943

INTERNATIONAL cooperation

Anglo-American co-operation after the war. E. A. Johnston; O. Lyttelton. Engineer 176: 172-3 Ag 27 '43

Canadian blue print calls for post-war world organization embracing all nations. Comm & Fin Chr 158:1020 S 9 '43

Combined board may aid control of postwar distribution problems. Steel 112:71-2 Mr 8 '43

Cooperation, the way to inter-American development. J. C. McClintock. Pet Eng 15:92, 94 O '43

Economic co-operation between Mexico and the United States. Int Labour R 48:622-3 N '43

Economic cooperation between Mexico, U.S. urged in joint report. Comm & Fin Chr 158:310 JI 22 '43

Economic pooling and lend-lease operations among the belligerent Allies. H. Chalmers. For Comm W 10:3-6, 35-6 Mr 13 '43

Food: weapon for peace. Business Week p15-16 My 15 '43

Four-power agreement urged to assure stable world in post-war years. S. Welles. Comm & Fin Chr 158:1623 O 21 '43

Go north! United States and Canada co-operate in opening up a new frontier on route of today's troop movements to Alaska. Business Week p40+ JI 10 '43

Inter-American affairs of interest to the engineer. J. L. Schley. II Elec Eng 62:385-9 S '43

Inter-American co-operation in the development of standards. R. E. Zimmerman. Elec Eng 62:390-2 S '43

Inter-American relations setup aims to spur economic growth. Steel 113:71 JI 5 '43

International co-operation or World War III. W. Agar. Ann Am Acad 228:47-51 JI '43

International example. Middle East supply centre. Economist 145:334, 317-18 S 4 '43

International organization of research. Engineering 156:171-2 Ag 27 '43

International public works and post-war anti-depression policy. L. L. Lorwin. For Comm W 12:15 S 11 '43

International public-works enterprises as a post-war measure. O. T. Mallory. For Comm W 11:17 Ap 24 '43

International systems and standards. R. Gregory. Assn of Sp Lib & Inf Bur Proc 1942:14-20

Is the lesson of this continent applicable to all continents? D. M. Nelson. For Comm W 12:11 JI 17 '43

INTERNATIONAL cooperation—Continued

Linchpin of peace; Canada's historic opportunity. B. Hutchison. *Il Fortune* 28:108-13+ J1 '43

Mexico's program; joint commission urges industrial expansions. *Business Week* p46+ J1 24 '43

Post-war thinking in Canada. *Economist* 145:142-3 J1 31 '43

Republicans urging post-war international cooperation for peace. *Comm & Fin Chr* 158:431 J1 29 '43

United nations in war and peace; organization. N. Mirkovich. *Ann Am Acad* 228:30-3 J1 '43

U.S., Britain, Russia and China sign pact, closer military unity and post-war cooperation. *Comm & Fin Chr* 158:1799+ N 4 '43

What Willkie and Chiang Kai-Shek urge is that a new League of nations be started now. E. Blair. *Barron's* 22:4 N 23 '42

World co-operation now: a declaration of interdependence. K. W. Shaw. *Ann Am Acad* 228:16-20 J1 '43

See also

Economic planning, Patents—International aspects
Finance, International Reconstruction
Non-partisan council to win the peace (World war, 1939-)
Pan Americanism United nations, 1942

INTERNATIONAL electrotechnical commission

International standardization; historical review of two international standards-making bodies of concern to the electrical industry. L. F. Adams. *Elec Eng* 62:498-9 N '43

INTERNATIONAL federation

More perfect United nations—how and when? C. Pepper. *Ann Am Acad* 228:40-6 J1 '43

Next steps in the organization of the United nations. C. M. Eichelberger. *Ann Am Acad* 228:34-9 J1 '43

Plan now for post-war, United nations urged. S. Welles. *Comm & Fin Chr* 157:761 F 25 '43

INTERNATIONAL federation of commercial

travelers insurance organizations
Annual meeting, 44th, Huntsville, Ontario, August 23-25. *Weekly Underw* 149:464 S 4 '43

INTERNATIONAL federation of trade unions

Report of activities during April 1942 to March 1943. *Int Labour R* 48:396-7 S '43

INTERNATIONAL finance. See Finance, International**INTERNATIONAL harvester company**

Annual report. *Comm & Fin Chr* 157:1082-3 Mr 22 '43

Consumer relations stressed by International harvester co. Roads & Bridges 81:84 O '43

Peace-time leaders. *Mag of Wall St* 72:509 Ag 21 '43

INTERNATIONAL hydro-electric system

Merger proposed. *Comm & Fin Chr* 157:994 Mr 15 '43

INTERNATIONAL labor organization

President of the Czechoslovak Republic and the I.L.O. *Int Labour R* 48:64-7 J1 '43

INTERNATIONAL ladies' garment workers' union

Jurisdictional; California judge holds that union must answer libel suit. *Business Week* p36 J1 3 '43

Pensions in ILGWU contract. *Nat Underw* (Life ed) 47:7 J1 2 '43

Relationship between the unions and engineers; unions' attitudes toward the industrial-engineering profession. W. Gomberg. *bibliog Mech Eng* 65:425-30 Je '43

INTERNATIONAL law

President sees need for world body of law. *Comm & Fin Chr* 157:1768 My 13 '43

Six million prisoners of war. *Il Fortune* 27:103-11+ F '43

What is our foreign policy? revitalizing and strengthening of international law; is that enough? *Fortune* 27:126-8 Mr '43

See also

Aliens
Enemy property
Freedom of the air
International relations
Maritime law
Prisoners of war—Employment
Trading with the enemy

INTERNATIONAL law, Private**See also**

World war, 1939—
Freezing of assets

INTERNATIONAL mercantile marine company

Merger approved; United States lines co. *Comm & Fin Chr* 157:2043 My 31 '43

INTERNATIONAL minerals and chemical corporation

Completes refunding. *Comm & Fin Chr* 157:254 Ja 13 '43

News from the chemists' front. *Barron's* 23:24-5 S 20 '43

Outstanding warrants and rights change hands. *Comm & Fin Chr* 157:729 F 22 '43

Warrants offered. *Comm & Fin Chr* 157:1845-6 My 17 '43

INTERNATIONAL nickel company of Canada

Annual report. *Comm & Fin Chr* 157:1650 My 3 '43

Expansion in Canada completed. *Iron Age* 150:70-1 D 31 '42

INTERNATIONAL paper company

Nets \$7,814,319; annual report. *Paper Tr J* 116:13, 26, 28 Ap 15 '43

INTERNATIONAL police. See Police, International**INTERNATIONAL relations**

Accounting control for peace; the future of international prosperity. A. Grey. *J Account* 75:397-407 My '43

After victory, what? S. S. Hayden. *Special Lib* 34:231-2 J1-Ag '43

Basis for permanent peace and methods of preventing aggression subject of forum. J. T. Shotwell and others. *Comm & Fin Chr* 158:9+ J1 1 '43

Britain in the world. *Economist* 145:300-2 S 4 '43

Chemistry in international affairs. H. E. Howe. *Chem & Ind* 62:154-6 Ap 24 '43

Inter-American system suggested as guide for international organization in post-war period. *Comm & Fin Chr* 157:1781 My 13 '43

Modern foreign policy. J. M. Jones. *Il Fortune* 28:112-15+ Ag; 130-3+ S; 117-21+ O '43

Our goal, personal security, national prosperity. S. Welles. *For Comm W* 9:3+ D 12 '42

Post-war foreign policy plan, embodying zones of safety. C. B. Kelland. *Comm & Fin Chr* 158:917 S 2 '43

Unconscious ambassadors; relationships between nations can be no more than the sum of those between individuals. B. S. W. Dodge. *Tech R* 45:185-6+ F '43

US and United nations to discuss methods of preparing for post-war problems. S. Welles. *Comm & Fin Chr* 157:844-5 Mr 4 '43

See also

Aeronautics, Commercial—International aspects
Aliens
Colonies
Commercial treaties and agreements
Economic planning, International
Freedom of the air
Geopolitics
International cooperation
also subdivision Foreign relations under names of countries, e.g. Great Britain—Foreign relations; United States—Foreign relations
International law
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Munitions
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Peace
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INTERNATIONAL scholarships and fellowships. See Scholarships and fellowships, International**INTERNATIONAL shoe company**

Annual report. *Comm & Fin Chr* 157:254 Ja 18 '43

INTERNATIONAL society of surgery

Transfer to the United States of the headquarters. *Science* 96:508-9 D 4 '42

INTERNATIONAL standards. See Standards, International**INTERNATIONAL standards association**

International standardization. L. F. Adams. *Elec Eng* 62:498-9 N '43

- INTERNATIONAL telephone and telegraph corporation**
Annual report. Comm & Fin Chr 157:1743-4 My 10 '43
Another look. Mag of Wall St 71:173 N 28 '42
- INTERNATIONAL trade composition association**
Convention, Cleveland, Sept. 21-22. Inland Ptr 112:81 O '43
- INTERNATIONAL trade control institute (proposed)**
Accounting control for peace; the future of international prosperity. A. Grey. J Account 75:397-407 My '43
- INTERNATIONAL trusts.** See Trusts, Industrial—International trusts
- INTERNATIONAL typographical journal**
I.T.U. pays printing bills but skips May journal. Inland Ptr 111:63-4 Je '43
- INTERNATIONAL utilities corporation**
Files amended plan of reorganization. Comm & Fin Chr 158:192-3 J1 12 '43
SEC orders company to terminate existence. Comm & Fin Chr 157:1650-1 My 3 '43
- INTERNATIONALISM**
Illusion of internationalism. B. De Casseres. Comm & Fin Chr 158:1806 N 4 '43
School for statesmen. H. Beukema. Fortune 27:108-9+ Ja '43
See also
International cooperation
- INTERNATIONALISM, Education in**
World citizenship to improve relations between countries recommended by educators. Comm & Fin Chr 158:1226 S 23 '43
- INTER-SOCIETY color council**
Annual report of TAPP delegates. J. L. Parsons. Paper Tr J 116:23 My 6 '43
Symposium; color in art education. Opt Soc Am J 32:698-726 D '42
- INTERSTATE aircraft and engineering corporation**
Current financial position. Comm & Fin Chr 158:504 Ag 5 '43
- INTERSTATE commerce**
Barriers remain; some states still retain stiff truck regulations. Business Week p84+ Ag 21 '43
Comments of judiciary committeemen; strong for state supervision at hearing on Bailey-Van Nuys bill. East Underw 44:3+ O 29 '43
Fire companies file rebuttal argument to government charges. East Underw 44:1+ My 21 '43; Nat Underw 47:1+ My 20 '43; Nat Underw (Life ed) 47:1+ My 21 '43
Government brief meets commerce issue head on. Nat Underw 47:2 My 6 '43; Nat Underw (Life ed) 47:2 My 7 '43
Polish Alliance case to high court. Nat Underw 47:1 Je 17 '43; Same. Nat Underw (Life ed) 47:1 Je 18 '43
Some important recent court decisions involving chemicals; Fair labor standards act cases. L. T. Parker. Chem Ind 53:346 S '43
Status of federal probe. Spectator (Property ed) 8:38-40 My 6 '43
Those state trade barriers, fact or fiction? E. F. Downs and S. J. Konenkamp. Pub Util 31:465-72, 539-47 Ap 15-29 '43
U.S. Atlanta brief calls insurance commerce. Nat Underw 47:1+ Ap 29 '43; Same. Nat Underw (Life ed) 47:3+ Ap 30 '43; Same abr. East Underw 44:19 Ap 30 '43
U.S. Supreme court will decide status of insurance; will review Atlanta and Polish national alliance cases. Nat Underw 47:1+ O 28 '43; Same. Nat Underw (Life ed) 47:1+ O 29 '43
Wage hour law not for copy writers. A. Gray. Ptr Ink 203:30+ J1 2 '43
What about Paul v. Virginia? review of the past, a look into the future; abstracts. J. B. Gontrum. Ins Field (Fire ed) 72:6-8+ Ag 26 '43; East Underw 44:17+ S 3 '43
See also
Federal trade commission
Insurance executives—Regulation
Railroad law
Railroads and state—United States
Restraint of trade
- INTERSTATE commerce commission**
Annual report, 56th. Ry Age 114:164-7 Ja 9 '43
- Bureau of valuation to have new director; appointment of Robert A. Lacey. Ry Age 115:72-3 J1 10 '43
Equities lose in Supreme court; Commission upheld in expropriating shareholders in reorganization cases. Ry Age 114:544-6 Mr 20 '43
Finds power to fix status of workers; new ICC disclaimer of Labor act authority. Ry Age 114:832-3 My 1 '43
New I.C.C. chairman for one-year term; Aldridge elected for 1943. Ry Age 113:1039-40 D 26 '42
- Bureau of locomotive inspection**
Annual report. Ry Age 114:279-81 Ja 30 '43; Ry Mech Eng 117:74-6+ F '43
- Bureau of safety**
Annual report. Ry Age 114:213-14 Ja 16 '43
- INTERSTATE compacts**
Sharing the water; states drained by Missouri river organize to seek compact for protection of basin interests. Business Week p50-1 Je 26 '43
- INTERSTATE oil compact commission**
Coordination of conservation practices in the various states; activities of the Interstate oil compact commission. E. H. Dahlgren. Oil & Gas J 41:118+ N 12 '42
Quarterly meeting, Oklahoma City, Dec. 18-19. Nat Pet N 34:18 D 23 '42
Quarterly meeting, Wichita, April 2-3. Nat Pet N 35:24+ Ap 7 '43; Oil & Gas J 41:35-6 Ap 8 '43
Quarterly meeting, Pittsburgh, June 26. Nat Pet N 35:24+ Je 30 '43; Oil & Gas J 42:18-19 J1 1 '43
Quarterly meeting, Santa Fe, Sept. 24-25. Oil & Gas J 42:20-1 S 30 '43
Survey of stripper wells made at Compact meeting. W. V. Howard. Oil & Gas J 41:10-12 D 24 '42
- INTERSTATE transmission.** See Electric power—Interstate transfer; Gas, Natural—Interstate transfer
- INTERSTATE underwriters board**
I.U.B. premiums up 54%; report at annual meeting. East Underw 44:13 Ja 29 '43
- INTERSTELLAR space.** See Space, Interstellar
- INTERURBAN railroads**
See also
Electric railroads
Street railroads
- INTERVIEWING**
Factors in the variability of response in enumerative studies. G. L. Palmer. Am Stat Assn J 38:143-52 Je '43
Use both mail-type questionnaire and personal interviews in readership research; study made by Los Angeles times; readers don't want to admit reading certain ads. R. E. Baxter. Ptr Ink 203:24+ My 7 '43
See also
Employment systems
—Interviews
- INTESTACY.** See Inheritance and succession
- INTESTINAL and parasitical worms.** See Worms, Intestinal and parasitical
- INTESTINES**
Diseases
Research and control; outbreaks of intestinal disease; is water the cause? N. J. Howard. Water & Sewage 81:22+ My '43
- INULASE**
Occurrence of sucrose and inulin-hydrolyzing enzymes in commercial enzyme preparations. W. W. Pigman. bibliog J Research Nat Bur Stand 30:159-75 Mr '43
- INULIN**
Occurrence of sucrose and inulin-hydrolyzing enzymes in commercial enzyme preparations. W. W. Pigman. bibliog J Research Nat Bur Stand 30:159-75 Mr '43
- INVAR**
Free-machining Invar alloy. Il Mach 49:218+ Ap '43; Steel 112:90+ Je 28 '43
Free machining 36% nickel alloy steel; new type of Invar developed by Carpenter steel company. G. V. Luerssen. Il Aero Digest 42:229, 231 Mr '43
Low-expansion alloy made free-machining. Il Iron Age 151:57 My 20 '43

INVASION currency. See Money, Military **INVENTIONS**

- Bottleneck in ideas; still missing: a technical agency for lost ideas and full technical mobilization. *Fortune* 27:82-5+ My '43
 Importance of invention to the Nation. H. A. Toulmin, Jr. *Chem Ind* 51:696-9 N '42
 Inventions in the oil industry. J. A. Schley. *Pet Eng* 14:91-3 N '42
 Inventions of workers in the U.S. Department of agriculture. *Science* 96:sup9 N 20 '42
 Inventions, patents, and the engineer. W. E. Crawford. *Elec Eng* 62:10-16 Ja '43
 Library versus laboratory research. A. G. Connolly. *J Chem Educ* 20:531-3 N '43
 Pride of America. A. A. Potter. *Mech Eng* 65:133-4 F '43
 Some problems in which the army is interested. *Chem & Eng N* 21:1329 Ag 25 '43; Same. *Mech Eng* 65:692 S '43
 Time and the production of mechanisms. *Engineer* 175:342-4 Ap 30 '43
 When does good engineering constitute invention? G. V. Woodling. *diags Machine Design* 15:111-14 S '43

See also

- Patent laws and legislation
 Patents

INVENTORIES

- American economy in 1942: manufacturers' inventories; with comparisons for earlier years. C. A. R. Wardwell and R. B. Bangs. *Survey of Cur Business* 23:12 Ja '43
 Business executives hope to avoid disastrous post-war inventory deflation. *Comm & Fin Chr* 157:1783 My 13 '43
 Business inventories; general inventory expansion ended; manufacturers' inventories higher. *Survey of Cur Business* 23:6-8 Mr '43
 Changes in business inventories, quarterly, 1941 and 1942; chart. *Survey of Cur Business* 22:2 D '42
 Civilian supply: inventories. *Survey of Cur Business* 23:5-8 Je '43
 Consumers' goods inventories level fixed at December, 1941. *Oil Paint & Drug Rep* 143:7 Ja 4 '43
 Current inventory problems; abstract. W. J. Jacquette. *Management R* 32:266-8 Jl '43
 Inventory control regulations. *Sheet Metal Worker* 34:49-52 F '43
 Inventory control to save millions for government; system at Eclipse machine division of Bendix aviation corporation. *Il Am Business* 13:14-15+ S '43
 Inventory limitation L-order base \$35,000. *Oil Paint & Drug Rep* 143:7+ Je 21 '43
 Manufacturers' orders, shipments and inventories, Dec. 1938-Dec. 1941. *Survey of Cur Business* 1942 Sup p15 [supplemented in monthly numbers]
 Necessity of living off each other's inventories; WPB pooling of surplus equipment and supplies. J. H. Collins. *Pub Util* 32:210-15 Ag 19 '43
 Priority stocks badly balanced? Honeywell finds a solution; clearing house enabled distributors to trade products short in some areas and long in others. *Sales Management* 52:38 Ap 15 '43
 Redistribute idle inventories. *Chem Ind* 52:729 Je '43
 Sales and inventories of retail apparel stores, 1939-first quarter 1943; chart. *Survey of Cur Business* 23:2 Jl '43
 Simple inventory record system; finishing department of a hosiery mill. H. McCarn. *Il Textile World* 92:92-3 D '42
 Some wartime inventory problems. C. H. Knapp. *Elec W* 120:366-7 Jl 24 '43
 Trend in inventories. *Survey of Cur Business* 23:4-6 Ag '43
 Turnaround in inventories; charts. *Business Week* p38 My 22 '43
 War's impact on inventories; tabulation. *Business Week* p100 Mr 20 '43
 Wartime guides for your business; financing war production; liquidating frozen inventories. W. H. Hillyer. *Barron's* 22:3 N 23 '42

Wartime guides for your business; how the inventory limitation order works. W. H. Hillyer. *Barron's* 23:6 F 22 '43; Correction. 23:5 Mr 8 '43

See also

- Purchasing Stores systems
 Retail trade—Stock Warehousing

Accounting

- Inventory procedure for product frozen by government. *J Account* 75:167-8 F '43
 Limitation order L-219. G. N. Farrand. *J Account* 75:334-42 Ap '43
 Physical inventories in wartime; statement on auditing procedure no. 17. *J Account* 75:156-61 F '43
 Valuation of inventories. *J Account* 75:46-8 Ja '43
 Valuation of inventories. R. A. Foulke. *Il Dun's R* 50:5-11 D '42; Abstract. *Management R* 32:149-51 Ap '43

INVENTORIES, Retail. See Retail trade—Stock

INVENTORS*See also*

- Gatling, Richard Jor- Guericke, Otto von
 dan Morse, Samuel Finley
 Griffiths, Robert Breese
INVENTORS council, National. See National inventors' council

INVERSION. See Optical rotation; Sugar; Walden inversion

INVERTASE

- Invertase activity in identical mixtures in the liquid and frozen state. Z. I. Kertesz. *bibliog. Am Chem Soc J* 64:2577-8 N '42
 New methods for the purification of invertase and some properties of the resulting products. M. Adams and C. S. Hudson. *bibliog. Am Chem Soc J* 65:1359-68 Jl '43
 Occurrence of sucrose and inulin-hydrolyzing enzymes in commercial enzyme preparations. W. W. Pigman. *bibliog. J Research Nat Bur Stand* 30:159-75 Mr '43
 Some enzymes present in highly purified invertase preparations; a contribution to the study of fructofuranosidases, galactosidases, glucosidases and mannosidases. M. Adams, N. K. Richtmyer and C. S. Hudson. *bibliog. Am Chem Soc J* 65:1369-80 Jl '43

INVESTMENT advisers

- Attorney as investment adviser; cautions in accepting and exercising investment responsibility. B. F. Winkelman. *Trusts & Estates* 76:537-8, 540-2 Je '43
 Satirist's eye views investment advisers. *Trusts & Estates* 77:375-6 O '43
 SEC adopts rule on registration withdrawal of investment advisers. *Comm & Fin Chr* 157:189 Ja 14 '43

INVESTMENT bankers association of America Annual meeting, 32d, New York, Nov. 3-5. *Comm & Fin Chr* 158:1869+ N 11 '43; *Inv Banking* 14:1-41 N '43

INVESTMENT banking

- Coming revival of private financing; investment bankers plan for large public issues. G. B. Collingwood. *Il Mag of Wall St* 72:395-7+ Jl 24 '43
 Investment banking industry will have vast financing responsibilities after the war. *Comm & Fin Chr* 158:24-+ Jl 1 '43
 New confidence among investment bankers. J. P. Broderick. *Barron's* 23:9 Je 7 '43
 War job investment banking is doing. J. N. Whipple. *Inv Banking* 13:1, 3 D '42

See also

- Investment bankers association of America

INVESTMENT companies

- Annual report of investment companies. *J Account* 76:441-2 N '43
 War changeover; Panhandle producing & refining co. arranges to turn itself into a diversified investment company. *Business Week* p109 O 16 '43

See also

- Investment banking National association of investment companies
 Investment trusts of investment companies

Accounting

- Investment company accounts. J. F. Lynch. *J Account* 76:240-9 S '43

INVESTMENT companies, National association of. See National association of investment companies

INVESTMENT counsel. See Investment advisers

INVESTMENT trusts

Changes in portfolios of three leading investment companies. Barron's 23:3 F 22 '43

50 stocks investment companies prefer. L. Tomlinson. Barron's 23:3 F 22 '43

How investment companies view the market; considerable switching of holdings took place in second quarter. Barron's 23:16 JI 26 '43

Investment company portfolio changes; purchases, and sales during the third quarter. Barron's 23:19 O 25; 16 N 1 '43

Wanted: a haven for aviation securities; analysis of investment trust holdings shows both transport and manufacturing stocks dropped from trust portfolios. H. L. Federman. Aviation 42:183+ S '43

What big investors are doing; portfolio changes of investment companies. Barron's 23:7+ Ap 26 '43

Finance

Investment trusts; dividend policy. Comm & Fin Chr 156:2151+ D 17 '42

Investment trusts gain; asset value, 1941 and 1942 for some leading companies. Trusts & Estates 76:275 Mr '43

Quarterly investment trust gauge. L. Tomlinson. Barron's 23:9 Ja 25; 16 Ap 12; 13 JI 19; 9 O 18 '43

Regulation

SEC amends repurchase rules. Comm & Fin Chr 156:2238 D 24 '42

Securities

Financial stocks affected by war. J. S. Williams. Mag of Wall St 72:352-3+ JI 10 '43

First quarter reports. Comm & Fin Chr 157:1760+ My 13 '43

Legal views on outside investment management and place of investment company shares in trusts. M. A. Shattuck. Trusts & Estates 76:273-5 Mr '43

Leverage investing shares back in fashion. L. Tomlinson. Barron's 23:9 Mr 15 '43

Pleasant surprise; provision in tax law permitting investment companies to choose between paying taxes as ordinary corporations or as regulated investment companies. Comm & Fin Chr 156:1967+ D 3 '42

Tax-reducing investment field; some investment company shares permit cut in individual's income levy. L. Tomlinson. Barron's 22:9 D 7 '42

Taxation

Pleasant surprise; provision in tax law permitting investment companies to choose between paying taxes as ordinary corporations or as regulated investment companies. Comm & Fin Chr 156:1967+ D 3 '42

Tax-reducing investment field some investment company shares permit cut in individual's income levy. L. Tomlinson. Barron's 22:9 D 7 '42

INVESTMENTS

Advantages of buying for capital appreciation today. L. O. Hooper. Mag of Wall St 71:568-9+ Mr 6 '43

Attorney as investment adviser; cautions in accepting and exercising investment responsibility. B. F. Winkelman. Trusts & Estates 76:537-8, 540-2 Je '43

Battle for investment survival. G. M. Loeb. Barron's 23:5 Ag 9; 7 Ag 16; 5 Ag 23; 1 S 6; 7 S 13 '43

Brokers-dealers urged to protect millions of investors government bond sales create; potential investing customers. E. J. Schlesinger. Comm & Fin Chr 157:1194 Ap 1 '43

Can real estate be a two-way hedge? R. P. Crawford. Barron's 23:3-4 O 25 '43

Divergence investing; method of switching based on fluctuations in group averages. F. R. Uhlig. Barron's 23:6 My 3 '43

Dynamic future of common stock investment. G. S. Kent. II Mag of Wall St 72:64-8, 104-5, 120-2, 154-6, 170-2+ My 1-29 '43

How can I increase my investment income to meet higher living costs and taxes? Mag of Wall St 71:462-4+ F 6 '43

How investment companies view the market; considerable switching of holdings took place in second quarter. Barron's 23:16 JI 26 '43

How to increase your investment income. J. S. Williams. Mag of Wall St 73:66-7+ O 30 '43

How to invest \$10,000. J. S. Williams. Mag of Wall St 71:412-13+ Ja 23 '43

Incentive, inflation and investment. E. Schram. Trusts & Estates 77:395-7 O '43

Industrial product studies. Trusts & Estates 76:543-4 Je '43

Investing for a widow, four years later; contest winners review and revise 1939 programs. M. W. Moore. Barron's 23:3-4 S 27; 3-4 O 11; 8 O 25 '43

Investing in second grades; 1939 widow list shows 35% appreciation and 9½% yield; guides to proper selection. H. C. Trundle. Barron's 23:8 Ap 26 '43

Investment company portfolio changes; purchases and sales during the third quarter. Barron's 23:19 O 25; 16 N 1 '43

Investment information, please; will there be a major revival in common stock investment and speculation? Mag of Wall St 71:286-8+ D 26 '42

Investment policy during an inflation. C. H. Rauch. Trusts & Estates 77:67-8, 70-2 JI '43

Investment, the second century. Economist 145:333-4 S 4 '43

Marriageability of industrial products. Trusts & Estates 76:369-70 Ap '43

Postwar framework. Economist 144:186 F 6 '43

Post-war investment opportunities. S. H. Slichter. Comm & Fin Chr 157:1473+ Ap 22 '43; Same. East Underw 44:3+ Ap 23 '43

Post-war outlook with special reference to savings and investments. R. W. Robey. Comm & Fin Chr 158:1781, 1790-1+ N 4 '43

Preservation of capital; role of institutional investors. L. M. Simon. Trusts & Estates 75:539-43, 604-5; 76:11-16 D '42-Ja '43

Reinvestment of corporate earnings; review of current economic literature. D. S. Tucker. Mech Eng 64:899-900+ D '42

Sees greatest investment era in decade following war. J. C. Folger. Comm & Fin Chr 158:1879+ N 11 '43; Same abr. Inv Banking 14:6-9 N '43

Speculating for financial security. G. W. Smith. Barron's 23:3 JI 5 '43; Reply. J. R. Bancroft. 23:7-8 Ag 23 '43

Stock market outlook and investment policy. W. F. Edwards. Comm & Fin Chr 158:401+ JI 29 '43

Strategic investment program for 1943. J. S. Williams. Mag of Wall St 71:274-6+ D 26 '42

Successful investing formulas; case for automatic timing. L. Tomlinson. Barron's 23:3+ My 24; 9 My 31; 7 Je 7; 6+ Je 14; 6+ Je 21; 9 JI 5; 8 JI 19; 4+ Ag 2; 18 Ag 16 '43

Successful investing formulas; volatility a consideration in selection of individual stock issues. L. Tomlinson. Barron's 23:6 Ag 30 '43

Survey shows investment dealer looking to substantial increase in post-war business. Comm & Fin Chr 158:407 JI 29 '43

Three sound security portfolios for income, for capital growth. J. S. Williams. Mag of Wall St 72:458-9+ Ag 7 '43

Use of formula plans for investment timing. H. G. Carpenter. Trusts & Estates 76:368-4, 366-8 Ap '43

Warns dealers not to destroy bright future of investment business; some SEC activities. J. B. Geraghty. Comm & Fin Chr 157:1208 Ap 1 '43

War's duration as market factor. H. Lawrence. Barron's 23:5 Mr 29 '43

What and when to buy. R. W. Babson. Comm & Fin Chr 158:129+ JI 8 '43

What big investors are doing. Barron's 23:7+ Ap 26 '43

What has happened to the investor class? W. I. King. Trusts & Estates 76:71-2, 74-5 Ja '43

What is the wisest investment policy now? L. Stern. Mag of Wall St 72:9-11+ Ap 17 '43

INVESTMENTS—Continued

When inflation comes, deflation cannot be far behind; how can savings, investments and business be protected against these destructive forces? I. Wright. *Comm & Fin Chr* 158:297+ J1 22 '43

Which government bond shall I buy? Barron's 23:1 Ap 12 '43

Which industries have least favorable peace prospects? E. A. Krauss. *il Mag of Wall St* 72:564-6+ S 4 '43

Which industry to choose; review of Ebb and flow of investment values, by E. S. Mead and J. Grodinsky. D. S. Tucker. *Mech Eng* 65:741+ O '43

Who will make money in Diesels? P. Dobbs. *il Mag of Wall St* 73:84-5, 97-8 O 30 '43

Wiseest investment policy in this period of inflation. J. S. Williams. *Mag of Wall St* 71:512-14+ F 20 '43

See also

Banks and banking—
Investments
Bonds
Building and loan associations
Chemical industries—
Securities
Insurance, Life—
Investments
Insurance companies
—Investments
Interest
Investment advisers
Investment banking
Investment trusts
Mining industry and
finance—Securities
Mortgages

Advertising*See also*

Building and loan associations—
Advertising
Securities—
Advertising

INVESTMENTS, Foreign

Capital investment in southeastern Asia and the Philippines. H. G. Callis. *Ann Am Acad* 226:22-31 Mr '43

Dynamic future of common stock investment; profit potentials under world recovery. G. S. Kent. *Mag of Wall St* 72:120-2, 154-6 My 15 '43

International investment in the post-war world. V. L. Horoth. *il Mag of Wall St* 71:515-17+ F 20 '43

Lost properties in territory held by Germans and Japanese, industry plans for recovery. *Business Week* p101 My 22 '43

Potential security profits from currency stabilization; Canadian and British stocks. G. Collingwood. *il Mag of Wall St* 72:123-5+ My 15 '43

See also

Balance of payments

Great Britain

Britain's gamble; England has retained Latin-American investments. *Business Week* p40+ My 8 '43

British overseas investments. *Economist* 145:372-3 S 11 '43

Lord Kindersley on foreign investments. *Economist* 143:708 D 5 '42

Netherlands

Present status of Dutch accounts in the U.S.A. F. W. Eisner. *Bankers M* 145:442-3 N '42

United States

American corporate investments abroad, by geographic areas and industrial classification, 1940-1941; table. *Mag of Wall St* 72:453 Ag 7 '43

American-owned property abroad; comprehensive new census undertaken. *For Comm W* 12:3+ J1 10 '43

Census of property in foreign countries. G. N. Farrand. *J Account* 76:19-26 J1 '43

Foreign dollar bonds serviced in full in 1942 were only 50.07% of total. *Comm & Fin Chr* 158:216 J1 15 '43

Investment in China's postwar industry. Kuang Tai Hu. *Harvard Business R* 21 no 3:309-20 [Ap] '43

New government census on foreign-owned property. *Comm & Fin Chr* 157:2387 Jc 24 '43

Outlook for American investments abroad. Burroughs Clearing House 28:5-6 N '43

Postwar international economic position of the United States. M. Nadier. *Ann Am Acad* 228:92-100 J1 '43

Property survey; Treasury calls for a new list of American-owned foreign holdings. *Business Week* p68+ Je 12 '43

Protective committee for victims of Axis property seizures. *Comm & Fin Chr* 157:1868 My 20 '43

Report on property in foreign countries. *Fed Res Bul* 29:596-8 J1 '43

Reports of foreign property required. *Barron's* 23:11 O 11 '43

Sees U.S. post-war foreign aid comprising direct investments. J. T. Madden. *Comm & Fin Chr* 158:1590+ O 21 '43

Treasury form TFR-500 explained. *Trusts & Estates* 77:285-9 S '43

U.S. capital flows south; many U.S. industrial enterprises expanding operations in Brazil. *Business Week* p98+ J1 10 '43

United States in the world economy; the international transactions of the United States during the interwar period. H. B. Lary and others. 38 charts 25 tables U S Bur For & Dom Com, *Economic Ser* 23:1-216; pa 35c Supt. of doc. '43

War and American foreign investments. M. Winkler. *Comm & Fin Chr* 157:1857+ My 20 '43; Discussion. 157:1954+, 2058+ My 27-Je 3 '43

Windfalls in millions; from recovery of foreign assets by American corporations. G. B. Collingwood. *il Mag of Wall St* 72:224-6+ Je 12 '43

INVESTMENTS, Foreign (in Argentina)

Argentina takes over U.S.-owned companies. *Comm & Fin Chr* 158:505 Ag 5 '43

INVESTMENTS, Foreign (in Bolivia)

Bolivia's good neighbor. *Comm & Fin Chr* 157:1755+ My 13 '43

INVESTMENTS, Foreign (in Brazil)

U.S. capital flows south; many U.S. industrial enterprises expanding operations in Brazil. *Business Week* p98+ J1 10 '43

INVESTMENTS, Foreign (in China)

Investment in China's postwar industry. Kuang Tai Hu. *Harvard Business R* 21 no 3:309-20 [Ap] '43

Two resolutions adopted on China's post-war industrialization and foreign investments. *Comm & Fin Chr* 158:1116 S 16 '43

INVESTMENTS, Foreign (in Great Britain)

Non-residents' investments. *Economist* 145:499, 592 O 9, 30 '43

INVESTMENTS, Foreign (in Latin America)

Brazil, Argentina, Chile, from an investment standpoint. V. L. Horoth. *Mag of Wall St* 71:683-5+ Ap 3 '43

Britain's gamble; England has retained Latin-American investments. *Business Week* p40+ My 8 '43

Foreign investment information service. *Comm & Fin Chr* 157:1767 My 13 '43

Industrial revolution in S. A. invites investment. C. S. Carson. *Ptr Ink* 203:91 My 21 '43

Latin America seen offering opportunity for investment of U.S. private capital. F. Pardo de Zela. *Comm & Fin Chr* 157:760 F 25 '43

Mexico, Central America and Cuba from an investment standpoint. V. L. Horoth. *il Mag of Wall St* 72:18-20+ Ap 17 '43

New Office of foreign investment information. *For Comm W* 11:16 Je 5 '43

What is ahead in the Americas? J. C. Rovensky. *Comm & Fin Chr* 158:1200-1+ S 23 '43

INVESTMENTS, Foreign (in South America)

Developing South America. *Economist* 145:532+ O 16 '43

INVESTMENTS, Foreign (in United States)

More assets iced; Treasury's control over enemy aliens' funds now covers \$8,500,000. *Business Week* p95-6+ F 27 '43

Net capital movement to United States since Jan. 2, 1935. *Fed Res Bul* 29:472 My '43 [cont monthly]

INVESTORS syndicate

Bond concerns are pursued by some relentless fate. Nat Underw (Life ed) 47:1+ J1 9 '43

Consent judgment except two counts. Nat Underw (Life ed) 47:13 O 22 '43

Gross misconduct charged by SEC to Investors syndicate and affiliates. Comm & Fin Chr 158:193 J1 12 '43

Investors concern wins first round in SEC attack. Nat Underw (Life ed) 47:5+ J1 16 '43; Same abr. Comm & Fin Chr 158:207 J1 15 '43

Partial peace; Investors syndicate and SEC enter consent decree. Business Week p111+ O 23 '43

SEC asks dismissal of temporary injunction suit. Comm & Fin Chr 158:393 J1 26 '43

SEC contest dropped; consent judgment signed by company; two counts still for trial. Comm & Fin Chr 158:1638 O 25 '43

SEC set back; suit to enjoin Investors syndicate tossed out. Business Week p100-1+ J1 17 '43

SEC starts fight; charges against Investors syndicate. Business Week p122 J1 10 '43

INVOICES

How American Chicle handles accounts receivable. J. Garth. II Am Business 13:22-3+ My '43

IODATES

See also

Potassium iodate

IODIDES

Kinetics of some exchange reactions of the type $RI + I^{*-} \rightleftharpoons RI^{*} + I^{-}$ in alcoholic solution. H. A. C. McKay. Am Chem Soc J 65:702-6 Ap '43

IODIMETRY. See Iodometry**IODINATION**

Iodinated organic compounds as contrast media for radiographic diagnoses; ethyl esters of iodinated straight and branched chain phenyl fatty acids. J. T. Plati, W. H. Strain and S. L. Warren. bibliog Am Chem Soc J 65:1273-6 J1 '43

Iodination of tyrosine by iodine monochloride. P. Block, Jr. and G. Powell. bibliog Am Chem Soc J 65:1430-1 J1 '43

IODINE

Complex formations between iodine and μ -mercapto-dihydroxyoxalines. T. B. Johnson and C. O. Edens. Am Chem Soc J 64:2706-8 N '42

Configuration of starch and the starch-iodine complex; optical properties of crystalline starch fractions. R. E. Rundle and D. French. bibliog II Am Chem Soc J 65:558-61 Ap '43

Configuration of starch and the starch-iodine complex; the dichroism of flow of starch-iodine solutions. R. E. Rundle and R. R. Baldwin. bibliog diags Am Chem Soc J 65:554-8 Ap '43

Configuration of starch in the starch-iodine complex; X-ray diffraction studies of the starch-iodine complex. R. E. Rundle and D. French. bibliog II Am Chem Soc J 65:1707-10 S '43

Determination of mercury in rubber by the Volhard method; separation of iodine. C. L. Luke. bibliog diag Ind & Eng Chem Anal ed 15:597-9 S '43

Inhibitory effect of iodine on the photolysis of gaseous hydrogen iodine. R. A. Ogg, Jr. and R. R. Williams, Jr. J Chem Phys 11:214-15 Ap '43

Iodine extraction from oil-well brines; abstract. A. G. Baichikov and Selimov. Chem & Met Eng 50:226-7 My '43

Kinetics of some exchange reactions of the type $RI + I^{*-} \rightleftharpoons RI^{*} + I^{-}$ in alcoholic solution. H. A. C. McKay. Am Chem Soc J 65:702-6 Ap '43

Kinetics of the reaction between copper and iodine in aqueous (potassium iodide) solution. L. L. Bircumshaw and M. H. Everdell. pl diag Chem Soc J p598-805 O '42

Nature of fiber staining by iodine stains. H. W. Rowe. bibliog Paper Tr J 116:26-34 Mr 11 '43; Abstract. Paper Ind 24:873-7 N '42

Versatile apparatus for photolysis studies in the gas phase; acetone and iodine mixtures. S. W. Benson and G. S. Forbes. bibliog diags Am Chem Soc J 65:1399-1405 J1 '43

See also

Iodometry

Analysis

Determination of iodine in tetralodophenolphthalein. S. Weiner, B. E. Leach and M. J. Bratz. bibliog Ind & Eng Chem Anal ed 15:373-4 Je 15 '43

Quantitative decomposition of organic bromine and iodine compounds by the lime-fusion method. W. M. MacNevin and G. H. Brown. Ind & Eng Chem Anal ed 14:908 N 15 '42

Semimicrodetermination of chlorine, bromine, and iodine in organic compounds. E. W. Peel, R. H. Clark and E. C. Wagner. bibliog Ind & Eng Chem Anal ed 15:149-51 F 15 '43

IODINE applicator

All-America package competition award; Johnson & Johnson; ampoules and applicators for iodine and mercurochrome. II Mod Packaging 16:95+ Ap '43

IODINE chloride

Iodine monochloride; the system potassium chloride-iodine monochloride. J. Cornog and E. E. Bauer. bibliog Am Chem Soc J 64:2620-4 N '42

Unsaturation of butadiene and related polymers as determined by iodine chloride addition. A. R. Kemp and H. Peters. bibliog Ind & Eng Chem Anal ed 15:453-9 J1 15 '43

IODINE compounds

Organic compounds of polyvalent iodine. R. E. Sandlin. Chem E 32:249-76 (bibliog 205 references, p272-6) Je '43

IODINE number

Rapid iodine number determinations. F. A. Norris and R. J. Buswell. bibliog Ind & Eng Chem Anal ed 15:258-9 Ap 15 '43

Unsaturation of butadiene and related polymers as determined by iodine chloride addition. A. R. Kemp and H. Peters. bibliog Ind & Eng Chem Anal ed 15:453-9 J1 15 '43

Woburn iodine absorption method; use in combination with partial iodine values for the determination of diene numbers. J. D. von Mikusch and C. Frazier. bibliog Ind & Eng Chem Anal ed 15:109-13 F 15 '43

IODININ

Bacterial inhibition by metabolite analogues; reactions and antibacterial properties of *p*-diazine di-*N*-oxides. H. McIlwain. Chem Soc J p322-5 J1 '43

IDOANILINE

Structure of molecular compounds; the crystal structure of *p*-iodoaniline-*s*-trinitrobenzene. H. M. Powell, G. Huse and P. W. Cooke. Chem Soc J p153-7 Ap '43

IDOFORM

Iodoform microtest for the higher alcohols and ketones. F. H. Stodola. bibliog Ind & Eng Chem Anal ed 15:72-3 Ja 15 '43

IDOHYDROQUININE

Note on 10-iodohydroquinines. A. G. Renfrew, C. L. Butler and L. H. Cretcher. Am Chem Soc J 65:2038-9 O '43

IODOMERCURATES

Iodomercurates. M. Meyer. J Chem Educ 20:145-6 Mr '43

IODOMETRY

Determination of iodate in the presence of bromate and chlorate. I. M. Kolthoff and D. N. Hume. Ind & Eng Chem Anal ed 15:174-5 Mr 15 '43

Iodometric determination of nitrogen in milk. E. R. Ling. Soc Chem Ind J 61:194-6 D '42

Iodometric estimation of zinc in magnesium alloys. C. C. Casto and A. J. Boyle. Ind & Eng Chem Anal ed 15:623-4 O 15 '43

Iodometric semimicroprocedure for determination of arsenic in sodium cacodylate and cacodylic acid. V. Levine and W. M. McNabb. Ind & Eng Chem Anal ed 15:76-7 Ja 15 '43

IODOMETRY—Continued

- Spray residues of tartar emetic on citrus leaves; determination by iodometric titration. R. L. Busbey and R. A. Fulton. *Ind & Eng Chem Anal* ed 15:37-8 J 15 '43
- Sugar analysis by alkaline ferricyanide method; determination of ferrocyanide by iodometric and other procedures. D. T. Englis and H. C. Becker. *Ind & Eng Chem Anal* ed 15:262-4 Ap 15 '43

IODOPROPYNE

- Raman spectra of acetylenes; symmetrical-top acetylenes. F. F. Cleveland and M. J. Murray. *bibliog J Chem Phys* 11:450-4 O '43

IOILITE. See Cordierite**ION** counters. See Counters (electrons, ions, etc.); Geiger-Müller counters**IONIZATION, Electrolytic**

- Acidic dissociation constants of phenoxyacetic acid and its derivatives. N. V. Hayes and G. E. K. Branch. *bibliog Am Chem Soc J* 65:1555-64 Ag '43
- Acidic ionization constant of glycine in dioxane-water solutions. H. S. Harned and C. M. Birdsall. *bibliog Am Chem Soc J* 65:54-7 J 43

- Automatic adjustment of solute concentration in the moving boundary method for the determination of transport numbers. R. Wright. *Chem Soc J* p678-80 N '42

- Basic ionization constant of glycine in dioxane-water solutions. H. S. Harned and C. M. Birdsall. *bibliog Am Chem Soc J* 65:1117-19 Je '43

- Clays as colloidal electrolytes. C. E. Marshall and C. A. Krinbill. *bibliog J Phys Chem* 46:1077-90 D '42

- Conductivity of sulfuric acid in methanol at 25°. E. W. Kanning, E. G. Bobalek and J. E. Byrne. *bibliog Am Chem Soc J* 65:1111-16 Je '43

- Differential moving boundary method for transference numbers. L. G. Longworth. *bibliog J Chem Soc J* 65:1755-65 S '43

- Dissociation constants and pH-titration curves at constant ionic strength from electrometric titrations in cells without liquid junction; titrations of formic acid and acetic acid. R. G. Bates, G. L. Siegel and S. F. Acree. *bibliog J Research Nat Bur Stand* 30:347-59 My '43

- Dissociation constants of some acids in mixed solvents. J. C. Speakman. *Chem Soc J* p270-3 Je '43

- Effect of sodium chloride upon the ionization of boric acid at various temperatures. B. B. Owen and E. J. King. *bibliog Am Chem Soc J* 65:1612-20 Ag '43

- pH values of certain phosphate-chloride mixtures, and the second dissociation constant of phosphoric acid from 0° to 60° C. R. G. Bates and S. F. Acree. *bibliog J Research Nat Bur Stand* 30:129-55 F '43

- Ionic nature of the Grignard reagent. W. V. Evans and R. Pearson. *bibliog Am Chem Soc J* 64:2865-71 D '42

- Ionization constant of carbonic acid in water and the solubility of carbon dioxide in water and aqueous salt solutions from 0° to 50°. H. S. Harned and R. Davis, Jr. *bibliog J Chem Soc J* 65:2030-7 O '43

- Ionization constant of morpholine in water. A. R. Ingram and W. F. Luder. *Am Chem Soc J* 64:3043-4 D '42

- Ionization constants of acid and nitro forms of some nitroparaffins. D. Turnbull and S. H. Maron. *bibliog Am Chem Soc J* 65:212-18 F '43

- Ionization constants of several substituted phenylarsonic acids. D. Pressman and D. H. Brown. *bibliog Am Chem Soc J* 65:540-3 Ap '43

- Ionization of strong electrolytes; general remarks, nitric acid. O. Redlich and J. Bigel-eisen. *bibliog Am Chem Soc J* 65:1883-7 O '43

- Migration data in solutions of a colloidal electrolyte; laurylsulfonic acid. M. E. L. McBain. *bibliog J Phys Chem* 47:196-204 Mr '43

- Raman spectra of L-ascorbic acid, tetrionic acid and related compounds. J. T. Edsall and E. L. Sagall. *bibliog Am Chem Soc J* 65:1312-16 JI '43

- Simple approximate relation between successive dissociation constants of symmetrical inorganic oxygen acids. T. L. Hill. *bibliog Am Chem Soc J* 65:1564-6 Ag '43
- Spectrophotometric determination of the dissociation constants of diphenylselenium dibromide and diphenylselenium diiodide. J. D. McCullough. *bibliog Am Chem Soc J* 64:2672-6 N '42

- Studies on high molecular weight aliphatic amines and their salts; ionization constants of primary and symmetrical secondary amines in aqueous solution. C. W. Hoerr, M. R. McCorkle and A. W. Ralston. *bibliog Am Chem Soc J* 65:323-9 Mr '43
- Studies on high molecular weight aliphatic amines and their salts; transference numbers of some primary amine hydrochlorides in aqueous solution and their significance in the interpretation of the micelle theory. C. W. Hoerr and A. W. Ralston. *bibliog Am Chem Soc J* 65:976-83 My '43

See also

Activity coefficients

Lyotropic series

IONIZATION, Gaseous

- Deionization considerations in a harmonic generator employing a gas-tube switch. W. G. Shepherd. *diags Inst Radio Eng Proc* 31:66-74 F '43

- Electric breakdown and cumulative ionization. B. Davydov. *Phys R* 64:156-8 S 1 '43

- Electron tubes; their principles and their instrumentation applications. A. W. Kramer. *diags Instruments* 16:602-4+ O '43

- Ionization and dissociation by electron impact; butene-1. D. P. Stevenson. *bibliog Am Chem Soc J* 65:209-12 F '43

- Ionization and dissociation by electron impact; isobutylene, propane, and propylene. D. P. Stevenson and J. A. Hipple. *bibliog Am Chem Soc J* 64:2769-72 D '42

- Ionization and dissociation by electron impact; normal propyl chloride and tertiary butyl chloride. D. P. Stevenson and J. A. Hipple. *bibliog Am Chem Soc J* 64:2766-8 D '42

- Ionization and dissociation by electron impact; the methyl and ethyl radicals. J. A. Hipple and D. P. Stevenson. *bibliog J Phys R* 63:121-6 F 1 '43

- Saturation characteristics for alpha-particles in purified gases. E. D. Klema and H. H. Barschall. *bibliog Phys R* 63:18-23 Ja 1 '43

See also

Cosmic rays—Ioniza-

tion effects

Electrons

IONIZATION chambers

- Large cosmic-ray bursts in an unshielded ionization chamber. R. E. Lapp. *diag Phys R* 64:129-30 S 1 '43

IONONE

- Studies on ionones; cleavage of ethyl ionylidene acetate. H. Sobotka, E. Bloch and D. Glick. *Am Chem Soc J* 65:1961-3 O '43

IONOSPHERE. See Atmosphere, Upper**IONS**

- Adsorption of simple and complex cobalt ions on titanium dioxide. D. G. Nicholson. *Am Chem Soc J* 64:2320-2 D '42

- Complex ions; monamine-silver ion. W. C. Vosburgh and R. S. McClure. *Am Chem Soc J* 65:1060-3 Je '43

- Complex ions; the magnetic moments of some complex ions of nickel and copper. C. D. Russell, G. R. Cooper and W. C. Vosburgh. *bibliog Am Chem Soc J* 65:1301-6 JI '43

- Deminerizing industrial water and process liquors. E. Nordell. *J Chem & Met Eng* 50:112-15 O '43

- Electron transfer spectra and their photochemical effects. E. Rabinowitch. *bibliog(84 references) diags Rs Mod Phys* 14:112-31 Ap-JI '42

- Electronics and ionics. J. Slepian. *Instruments* 16:186-7+ Ap '43

- Emission spectrum of the ion CO⁺. S. Mrozowski. *Rs Mod Phys* 14:216-18 Ap-JI '42

- Exchange of radioactive silver and bromide with silver bromide suspensions. A. Langer. *bibliog J Chem Phys* 11:11-15 Ja '43

- Experimental mass spectrometer. N. D. Coggeshall and E. B. Jordan. *bibliog diags R Sci Instr* 14:125-9 My '43

IONS—Continued

- Ion exchange resins; abstract. R. J. Myers. Chem Ind 52:608 My '43
 Molar dispersion and refraction of free and bonded ions. N. Bauer and K. Fajans. bibliog Am Chem Soc J 64:3023-34 D '42
 Parachors and radii. K. Sun and A. Silverman. bibliog J Phys Chem 47:50-9 Ja '43
 Semimicro scheme of qualitative analysis for the anions. J. T. Dobbins and M. E. Kapp. J Chem Educ 20:118-20 Mr '43
 Spectra of ions in crystals and solutions; spectra of ions in fields of various symmetry in crystals and solutions. S. Freed. bibliog Il Rs Mod Phys 14:106-11 Ap-Jl '42
 Variation in the structure of water in ionic solutions. G. W. Stewart. bibliog J Chem Phys 11:72-4 F '43

See also

- Activity coefficients
 Base exchanging compounds
 Chemical reaction—Velocity
 Cyclotron
 Electrolysis
 Electrolytes
 Electrons
 Hydrogen ion concentration
 Ionization, Electrolytic
 Ionization, Gaseous
 Lyotropic series

Beams

- Electrostatic focusing of high speed ion and electron beams. J. D. Craggs. Il diags J Ap Phys 13:772-80 D '42
 Improved current integrator. J. M. Blair. bibliog diag R Sci Instr 14:64-7 Mr '43

Mobility

- Conductance of aqueous solutions of potassium bromide at temperatures from 15° to 45° C, and the limiting mobility of bromide ion. H. E. Gunning and A. R. Gordon. bibliog J Chem Phys 11:18-20 Ja '43
 Transference numbers of potassium bromide in aqueous solution at 25°C. A. G. Keenan and A. R. Gordon. bibliog J Chem Phys 11:172-4 Ap '43

Scattering

- Low velocity scattering of H⁺ and H₂⁺ in hydrogen. J. H. Simons and others. J Chem Phys 11:307-12 Jl '43
 Low velocity scattering of H₂⁺ in hydrogen; the determination of neutralization. J. H. Simons and others. bibliog diag J Chem Phys 11:312-16 Jl '43
 Retardation and neutralization of argon ions in helium. W. J. Hamm. bibliog diags Phys R 63:433-8 Je 1 '43
 Scattering of low velocity hydrogen ions in helium. J. H. Simons, E. E. Muschitz, jr. and L. G. Unger. bibliog J Chem Phys 11:322-8 Jl '43
 Scattering of low velocity hydrogen ions in water vapor. J. H. Simons and others. bibliog diag J Chem Phys 11:316-21 Jl '43

IOWA

Industries and resources

- Rehabilitating idle plants in the Middle West; Iowa brewery makes industrial alcohol; beet sugar factory reopened. Il Chem & Met Eng 49:107 N '42

IOWA power and light company

- Bonds offered. Comm & Fin Chr 158:985-6 S 6 '43
 Registers with SEC. Comm & Fin Chr 157:1944-5 My 24 '43

IPATIEFF, Vladimir Nikolaevich, 1867-

- Ipatieff, catalysis authority, honored at Chicago dinner. por Oil & Gas J 41:27 N 28 '42; Nat Pet N 34:26 D 2 '42
 Portrait. Chem Ind 54:343 S '43

IPECAC

- Western-hemisphere ipecac helps men fight global war. For Comm W 10:19 F 6 '43

IRAQ

Economic conditions

- Inflation in 3 countries of the Middle East. K. C. Dougall. For Comm W 12:12-15+ S 18 '43
 Iraq today. R. J. Barr. Il map For Comm W 10:6-9+ F 20 '43

IRELAND

See also

- Chemical industries—Insurance, Unemployment—Ireland
 Electric industries—Ireland

Commerce

- Eire's balance of payments. Economist 143:575-6 N 7 '42

Economic conditions

- Eire now. D. F. Heatherington. Il For Comm W 11:7-9+ Ap 21 '43
 Eire's supply position. Economist 144:590 My 8 '43
 News by countries. For Comm W 10:16-17 F 6; 13:12 N 6 '43
 Northern Ireland; Eire in 1942. Economist 144:sup10-11 Mr 13 '43

Industries and resources

- Science and industry in Eire. Economist 144:44 Ja 9 '43

Politics and government

- Eire votes. Economist 144:782-3 Je 19 '43
 Eire's majority. Economist 144:210-11 F 13 '43
 Irish elections. Economist 145:47-8 Jl 10 '43
 Party politics in Eire. Economist 143:636-7 N 21 '42

IRISH moss. See Carrageen

IRON

- Catalysis in the oxidation of lubricating oil. R. G. Larsen and F. A. Armfield. bibliog Il Ind & Eng Chem 35:581-8 My '43
 Channel irons for roof control; St Joseph Lead finds them effective at the Leadwood mine. W. W. Weigel. Il diag Eng & Min J 144:70-2 My '43
 Electronic energy bands in body-centered iron. M. F. Manning. bibliog Phys R 63:190-202 Mr 1 '43
 Electronic energy bands in face-centered iron. J. B. Greene and M. F. Manning. bibliog Phys R 63:203-10 Mr 1 '43
 Fe-Ni-S system; an introduction with new data on the crystallization of pyrrhotite and pentlandite. H. E. Hawley, G. L. Colgrove and H. F. Zurbrigg. bibliog Il Econ Geol 38:335-38 Ag '43
 Solubility of hydrogen at low pressure in iron, nickel and certain steels at 400 to 600°. M. H. Armbruster. Am Chem Soc J 65:1043-54 Je '43
 Specific heat of pure iron at low temperatures. K. K. Kelley. J Chem Phys 11:16-18 Ja '43
 Transition state theory of the formation of thin oxide films on metals. E. A. Gulbransen. diags Electrochem Soc Trans 93 (preprint 4):53-65 Ap '43
 Use of iron lines as intensity standards. G. H. Dieke and H. M. Crosswhite. Opt Soc Am J 33:425-34 Ag '43

See also

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| Blast furnaces | Iron, Sponge |
| Cast iron | Iron works |
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| Corrosion and anti-corrosives | Pickling (metals) |
| Foundry practice | Pig iron |
| Galvanizing | Water purification—Iron removal |
| Iron, Powdered | Wrought iron |

Analysis

- Color reactions of 1,10-phenanthroline derivatives. M. L. Moss, M. G. Mellon and G. F. Smith. Ind & Eng Chem Anal ed 14:931-3 D 15 '42
 Colorimetric determination of iron with 2,2'-bipyridyl and with 2,2',2''-terpyridyl. M. L. Moss and M. G. Mellon. bibliog Ind & Eng Chem Anal ed 14:862-5 N 15 '42
 Determination of ferrous iron in difficultly soluble materials. G. E. Seil. bibliog diags Ind & Eng Chem Anal ed 15:189-92 Mr 15 '43
 Determination of iron in the presence of chromium and titanium with the Jones reductor. F. S. Grimaldi, R. E. Stevens and M. K. Carron. bibliog Ind & Eng Chem Anal ed 15:387-8 Je 15 '43
 Determination of iron in water; a modified colorimetric procedure. F. J. Hallinan. Ind & Eng Chem Anal ed 15:510-12 Ag 15 '43
 Separation of iron from cobalt or nickel. R. J. DeGray and E. P. Rittershausen. bibliog Ind & Eng Chem Anal ed 15:26-7 Ja 15 '43

IRON—Analysis—Continued

Simplified technique in the use of liquid amalgam reducers. G. F. Smith and L. T. Kurtz. *bibliog diag Ind & Eng Chem Anal* ed 14:854-5 N 15 '42

Spectrochemical determination of silicon, iron, and aluminum in mineral powders with a high voltage direct current arc. H. I. Oshry, J. W. Ballard and H. H. Schrenk. *bibliog il diags Opt Soc Am J* 32:672-80 N '42

Spectrographic analysis of cast iron. F. B. Ling, J. McPheat and J. Arnott. *il diag Engineer* 176:76-8 JI 23 '43

Spectrophotometric determination of iron with *o*-phenanthroline and with nitro-*o*-phenanthroline. J. P. Mehlig and H. R. Hulett. *bibliog Ind & Eng Chem Anal* ed 14:863-71 N 15 '42

Use of phosphate for separation of cobalt from iron. V. North and R. C. Wells. *bibliog Ind & Eng Chem Anal* ed 14:859-60 N 15 '42

Bibliography

Review of iron and steel literature for 1942. E. H. McClelland. *Blast F & Steel Pl* 31: 95-101 Ja '43 [reprinted by Carnegie Library, Pittsburgh]

Survey of literature on the manufacture and properties of iron and steel, and kindred subjects. *Iron & Steel Inst J* 145:1A-258A no 1; 146:1A-233A no 2 '42

Desulfurization

See Iron—Sulfur content

Hydrogen content

Determination of the solubility of hydrogen in iron and iron alloys. J. H. Andrew, H. Lee and A. G. Quarrell. *plan Iron & Steel Inst J* 146:181-92 no 2 '42; *Abstract. Metal Prog* 44:572 O '43

Isotopes

Nuclear energy levels in Fe^{56} from the decay of Mn^{56} and Co^{56} . L. G. Elliott and M. Deutsch. *bibliog Phys R* 63:321-2 Ap 1 '43

Metallography

Acicular structure in nickel-molybdenum cast irons. R. A. Flinn, M. Cohen and J. Chipman. *bibliog il Am Soc for Metals Trans* 30:1255-77; Discussion. 1278-83 D '42

$A_{T\alpha}$ range in some iron-cobalt-tungsten alloys. W. P. Sykes. *il Am Soc for Metals Trans* 31:284-302; Discussion. 302-3 Je '43

Chromium-manganese stainless irons. J. M. Parks. *bibliog il Metals & Alloys* 17:330-5 F '43

Crystal structures of Fe, FeO and Fe_3O_4 and their interrelations. H. J. Goldschmidt. *bibliog Iron & Steel Inst J* 146:157-74; Discussion. 175-80 no 2 '42

Determining the $A_{C\alpha}$ critical point in iron by a grain elimination method. J. K. Desmond. *il Am Soc for Metals Trans* 31:1-7 Mr '43

Electrical resistance method for the determination of isothermal austenite transformations. F. B. Rote, W. C. Truckenmiller and W. P. Wood. *bibliog il diags Am Soc for Metals Trans* 30:1359-73; Discussion. 1373-6 D '42

Iron-iron carbide equilibrium diagram. *Metal Prog* 44:736 O '43

Magnetic structure of iron crystals; colloid patterns on silicon-iron crystals. W. C. Elmore. *il diags Phys R* 62:486-93 N 1 '42

Metallographic study of the formation of austenite from aggregates of ferrite and cementite in an iron-carbon alloy of 0.5 per cent carbon. T. G. Digges and S. J. Rosenberg. *bibliog il Am Soc for Metals Trans* 31:753-74; Discussion. 775-6 S '43

Study of the iron-rich iron-manganese alloys. A. R. Troiano and F. T. McGuire. *il Am Soc for Metals Trans* 31:340-59 *bibliog*(p357-9); Discussion. 359-64 Je '43

X-ray study of the A_s point of pure iron using the Geiger-Müller counter. A. P. Wangsgard. *bibliog diags Am Soc for Metals Trans* 30:1303-22; Discussion. 1322-7 D '42

See also

Cast iron—Graphitization

Phosphorus content

Mechanical properties of iron-phosphorus alloys. J. K. Stanley. *Iron Age* 152:42-4 Ag 19 '43

Bibliography

Selected bibliography on phosphorus in cast iron. *Foundry* 71:187-8 S '43

Prices

Average monthly quotations in 1942. *Steel* 112:365 Ja 4 '43

Comparison of prices; market prices at date, and one week, one month, and one year previous. Published in weekly numbers of *Iron age*

Iron and steel scrap prices; finished and semi-finished iron and steel prices; iron and steel warehouse prices. Published in weekly numbers of *Iron age*

Market prices. Published in weekly numbers of *Steel*

Monthly price averages for twelve years, 1929-1942; tabulation. *Steel* 112:366-8 Ja 4 '43

New OPA digest of price regulations; iron and steel. *Iron Age* 152:110+ Ag 5 '43

OPA issues new price interpretations. *Iron Age* 152:114+ JI 1 '43

Pricing procedure for secondary iron and steel explained. *Iron Age* 151:151-4 Mr 4 '43

Steel, iron and scrap prices composites, 1937-1942; tabulation. *Steel* 112:377 Ja 4 '43

Sulfur content

Basic cupola lining aids desulfurization. E. S. Renshaw. *Foundry* 71:171-2 S '43

Desulfurizing of cast iron. G. S. Evans. *il diag Metals & Alloys* 16:876-80 N '42

Desulfurizing with acid slags; abstract. W. Oelsen and H. Maetz. *Iron Age* 152:42 S 30 '43

Ramming mix as refractory for desulfurizing ladles. C. E. Bales and D. R. Smith. *diags Brick & Clay Rec* 103:41-3 Ag '43

Testing

Progressive changes in fatigue failure. J. B. Kommers. *Machine Design* 15:108-10+ S '43

IRON, Galvanized

Data and instructions on use of galvanized iron wire as line conductor material. *Elec W* 118:1637 N 14 '42

Problem of copper and galvanized iron in the same water system. L. Kenworthy. *Engineering* 156:85-6, 125, 164, 205 JI 30, Ag 13, 27, S 10 '43

Switching station modified to save copper and steel; treated timbers for structures and galvanized conduit for buses. P. H. Adams. *il diag Elec W* 119:1946-9 Je 12 '43

IRON, Meteoric. See Meteorites**IRON, Molten**

Induction furnace as a high temperature calorimeter and the heat of solution of silicon in liquid iron. J. Chipman and N. J. Grant. *bibliog Am Soc for Metals Trans* 31:365-78; Discussion. 378-9 Je '43

IRON, Pharmaceutical. See Iron by hydrogen (ferrum reductum)**IRON, Powdered**

Iron powder; general description, properties, and uses. C. Hardy. *il Metal Prog* 43:62-4, 126 Ja '43

Iron powder today; abstract. C. V. Firth. *Metals & Alloys* 18:338+ Ag '43

Powder metallurgy; physical properties of parts made from iron powder. F. V. Lenel. *diags Mech Eng* 65:489-92 JI '43; Same. *Machine Design* 15:130-3 JI '43; Same. *Automobile Eng* 33:415-18 O '43

Powder metallurgy used for war production. *Blast F & Steel Pl* 31:667-8 Je '43

Powdered iron cores. A. Crossley. *il J Ap Phys* 14:451-5 S '43

See also

Iron by hydrogen (ferrum reductum)

IRON, Reduced. See Iron by hydrogen (ferrum reductum)**IRON, Sponge**

Blast furnace practice, 1942. R. H. Sweetser. *Metals & Alloys* 17:50-1 Ja '43

Brassett-Cape process. T. W. Lippert. *diag Iron Age* 151:55-6, 63 Ja 7 '43

IRON, Sponge—Continued

- Footnote on sponge iron. F. T. Sisco. *Min & Met* 24:449 O '43
- Is direct iron (sponge iron) a substitute for melting stock? classification of processes and their potentialities. R. S. Dean. *Metal Prog* 42:1040-2 D '43
- Manufacture of sponge iron. C. F. Ramseyer. *il diags Blast F & Steel Pl* 31:516-20, 649-53 My-Je '43
- New Swedish sponge iron process. E. Edwin. *Iron Age* 152:56 S 2 '43
- Ore reduction; use of gas in Republic Steel's new sponge iron plant. J. J. Craig. *Am Gas Assn Mo* 25:147-8 Ap '43
- Process spreads. *Business Week* p 14 D 26 '42
- Rude awakening; tests show limitations. *Business Week* p58+ F 13 '43
- Sponge iron controversy; plant to be erected by Republic steel corporation, *diag Steel* 111:84, 86-7 D 7 '42
- Sponge iron gets its chance. *Fortune* 27:44+ Ja '43
- Sponge iron process. *Engineer* 174:417 N 20 '42
- Sponge iron process in the production of steel, by advisory committee on metals and minerals. *il Metal Prog* 42:1043-7+ D '42
- Sponge-iron production already proved practical. H. G. S. Anderson. *il Min & Met* 23:563-4 N '42; Discussion. 599-600 D '42
- Urges sponge iron industry; Governor of North Carolina tells Boykin steel shortage committee state's ore can be utilized. *Steel* 112:42-3 My 31 '43

IRON, Wrought. See Wrought iron**IRON age (periodical)**

- Who advertises what in business papers? product analysis by *Iron Age*. O. Johnson. *Ptr Ink* 204:24+ JI 2 '43

IRON alloys

- Addendum to second report of the research committee on high-duty cast irons for general engineering purposes. J. G. Pearce. *Inst Mech Eng J & Proc* 149:Proc 101-2 Je '43
- Effect of elements in solid solution on hardness and response to heat treatment of iron binary alloys. C. R. Austin. *bibliog Am Soc for Metals Trans* 31:321-35; Discussion. 335-9 Je '43
- Magnetic properties and uses of iron alloys. R. D. Haigh. *Inst E E J* 89 pt 1:473-5 O '42
- Progress in heat treatment of alloy cast iron. J. S. Vanick. *Foundry* 71:90-2+ JI; 96-7+ Ag '43
- Spectrographic analysis of cast iron. F. B. Ling, J. McPheat and J. Arnott. *il diag Engineer* 176:76-8 JI 23 '43
- Study of inverse segregation suggests new method of making certain alloys. M. L. Samuels, A. R. Elsea and K. Grube. *bibliog il diags Am Soc for Metals Trans* 31:459-82; Discussion. 482-6 Je '43
- Third report of the research committee on high-duty cast irons for general engineering purposes. J. G. Pearce. *Inst Mech Eng J & Proc* 149:Proc 103-12 Je '43

See also

- Ferroalloys Steel
Meehanite Steel alloys

Carbon alloys

- Diffusion of carbon in iron alloys. *J Ap Phys* 14:217 My '43
- Metallographic study of the formation of austenite from aggregates of ferrite and cementite in an iron-carbon alloy of 0.5 per cent carbon. T. G. Digges and S. J. Rosenberg. *bibliog il Am Soc for Metals Trans* 31:753-74; Discussion. 775-6 S '43
- Third element effects on hardenability of a pure hypereutectoid iron-carbon alloy. C. R. Austin, W. E. Van Note and T. A. Prater. *bibliog il Am Soc for Metals Trans* 31:517-50; Discussion. 550-8 S '43

Chromium alloys

- Properties of important wrought chromium-iron alloys; tabulation. *Metal Prog* 43:560a Ap '43

See also

- Chromium steel

Chromium manganese alloys

- Chromium-manganese stainless iron. J. M. Parks. *bibliog il Metals & Alloys* 17:330-5, 539-43 F-Mr '43
- Stainless irons of manganese and chromium. W. L. Nelson. *Oil & Gas J* 42:62+ Je 10 '43

Chromium nickel alloys

- Properties of important wrought chromium-nickel-iron alloys; tabulation. *Metal Prog* 43:412A Mr '43

See also

- Chromium nickel steel

Cobalt alloys

- Diffusion rate of carbon in iron-cobalt alloys. R. Smoluchowski. *bibliog Phys R* 62:539-44 D 1 '42

Cobalt tungsten alloys

- "Ar" range in some iron-cobalt-tungsten alloys. W. P. Sykes. *il Am Soc for Metals Trans* 31:284-302; Discussion. 302-3 Je '43

Manganese alloys

- Study of the iron-rich iron-manganese alloys. A. R. Troiano and F. T. McGuire. *il Am Soc for Metals Trans* 31:340-59 *bibliog*(p357-9); Discussion. 359-64 Je '43

See also

- Ferromanganese

Molybdenum alloys

- Diffusion rates of carbon in iron-molybdenum and iron-tungsten alloys. R. Smoluchowski. *bibliog Phys R* 63:438-40 Je 1 '43

See also

- Molybdenum steel

Nickel alloys

- Determination of the solubility of hydrogen in iron and iron alloys. J. H. Andrew, H. Lee and A. G. Quarrell. *plan Iron & Steel Inst J* 146:181-92 no 2 '42
- Monel and nickel cast-iron pump has long life. W. L. Nelson. *Oil & Gas J* 42:70+ O 7 '43

See also

- Invar
Nickel steel

Nickel chromium alloys**See also**

- Chromium nickel
steel

Nickel cobalt alloys

- Miniature steel mill aids Uncle Sam; makes Kovar for thermometers to measure heat in airplane engines and wings. *Steel* 112:84 Mr. 29 '43

Nickel molybdenum alloys

- Acicular structure in nickel-molybdenum cast irons. R. A. Flinn, M. Cohen and J. Chipman. *bibliog il Am Soc for Metals Trans* 30:1255-77; Discussion. 1278-83 D '42

Phosphorus alloys

- Mechanical properties of iron-phosphorus alloys. J. K. Stanley. *Iron Age* 152:42-4 Ag 19 '43

Silicon alloys

- Acid-resisting metal; a notable high-silicon iron. Meldrum. *il Chem Age (Lond)* 49:240 S 4 '43

Tin alloys

- Constitution of the iron-tin alloys. O. E. Romig. *bibliog il Metal Prog* 42:899-904 N '42
- Thermal diagram of the system iron-tin. W. F. Ehret and D. H. Gurinsky. *bibliog il diag Am Chem Soc J* 65:1226-30 Je '43

Tungsten alloys

- Diffusion rates of carbon in iron-molybdenum and iron-tungsten alloys. R. Smoluchowski. *bibliog Phys R* 63:438-40 Je 1 '43

IRON alum. See Ferripotassium sulfate**IRON bacteria**

- Chloramine for crenothrix; experience of Stillwater, Minnesota; abstract. H. S. Grove. *Water & Sewage* 81:20 Ja '43

IRON by hydrogen (ferrum reductum)

Iron for food enrichment, produced by process employed in making negative active material for storage batteries; Thomas A. Edison, Inc. G. E. Stringfellow. *Il Steel* 112:72, 74 My 31 '43

IRON carbonate

See also
Siderite

IRON chlorides

APC ves. I.G. iron chloride patent. Oil Faint & Drug Rep 143:3+ Mr 15 '43
Heat contents at high temperatures of the anhydrous chlorides of calcium, iron, magnesium and manganese. G. E. Moore. *Am Chem Soc J* 65:1700-3 S '43

Specific heats at low temperatures of anhydrous chlorides of calcium, iron, magnesium and manganese. K. K. Kelley and G. E. Moore. *bibliog Am Chem Soc J* 65:1264-7 J1 '43

Treatment of supernatant digester liquor; using ferric chloride and lime. W. Rudolfs and L. L. Faulk. *Pub Works* 74:13-15 Ag '43

IRON chromates

See also
Chromite

IRON compounds

Magnetic susceptibility of the brown ferric phenanthroline complex. L. Michaelis and S. Granick. *Am Chem Soc J* 65:481-2 Mr '43

IRON cyanides

Reversible chromatic thermosensitivity. E. W. Blank. *bibliog J Chem Educ* 20:171-4 Ap '43

IRON fireman manufacturing company

Thumbnail stock appraisal. *Mag of Wall St* 72:365 J1 10 '43

IRON founding

Basic cupola lining aids desulphurization. E. S. Renshaw. *Foundry* 71:171-2 S '43

British use gray cast iron for trench mortar bombs; Institute of British foundrymen, cast iron subcommittee report. *bibliog diags Foundry* 71:107-8+ S '43

Builds West coast foundry in record time; Joshua Hendy iron works. *Il Foundry* 71:104-6+ Ag '43

Castings in aircraft construction; Vultee field division, Consolidated Vultee aircraft corp. D. M. Davis. *Il Iron Age* 152:52-6+ N 4 '43

Controlling today's gray iron problems. F. G. Seifing. *Foundry* 70:141-2+ D '42

Desulphurizing of cast iron. G. S. Evans. *Il diag Metals & Alloys* 16:876-80 N '42

Dries molds in continuous oven; Kaukauna machine corp. P. Dwyer. *Il Foundry* 71:88-91+ F '43

Effect of moisture in blast air. R. J. Cowan. *Il diags Iron Age* 150:43-50 N 12; 46-50 N 19 '42

Ford makes improved heat treated malleable iron. A. H. Allen. *Foundry* 71:144 N '43

Foundry cupola; operating the cupola. D. J. Reese. *Il Comp Air M* 48:7110-14 Ag '43

Gating and rising of cast iron; abstract. W. G. Reichert. *Foundry* 71:122+ J1 '43

Gating of castings. E. W. Harding. *Il Iron Age* 152:51-4 J1 29 '43

Gray iron founders' society 15th annual meeting, Cincinnati, Oct. 5-6. *Foundry* 71:113+ N '43

Gray-iron foundry cupola using egg anthracite as fuel; abstract. J. F. K. Brown. *Coal Age* 48:102-4 Mr '43

High test iron production is not difficult. A. P. Alexander. *Il diags Foundry* 71:92-4+ Mr '43

Iron from the basic cupola; abstract. E. S. Renshaw. *Metals & Alloys* 18:372+ O '43

Ladle inoculation improves gray iron properties and structure. H. W. Lowrie, jr. *bibliog Il Foundry* 71:126-7+ N '43 (to be cont)

Ladle treatments for iron; abstract. J. H. Williams. *Metals & Alloys* 17:810+ Ap '43

Maintains production of quality castings; Caterpillar tractor co. F. W. Shipley. *Il Foundry* 71:96-7 Mr '43

Make piston rings for war machines; Perfect circle co. P. Dwyer. *Il Foundry* 71:88-91+ Mr '43

Malleable foundry keeps 'em rolling. P. Dwyer. *Il plan Foundry* 70:84-6+ S '42; Same. *Mech Handling* 30:54-8 F '43

Metal and melting cost in a gray iron foundry.

A. E. Grover. *Il Foundry* 71:72-4, 159-62 Ja '43

Production of malleable-iron castings. J. Roxburgh. *Il Engineering* 156:230, 236-40 S 17 '43

Ramming mix as refractory for desulfurizing ladles. C. E. Bales and D. R. Smith. *diags Brick & Clay Rec* 103:41-3 Ag '43

Savings to effected in cupola melting. J. Lowe. *Foundry* 71:158+ N '43

Skin dry sand for large glass molds. *Foundry* 71:149-50 Ja '43

Symposium on melting of malleable iron; A.F.A. annual meeting. *Foundry* 71:174+ Je '43

See also

Cast iron	Molding machines
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Duplex process

Duplexing malleable iron; abstract. R. Williams. *Metals & Alloys* 18:554+ S '43

History

First cast-iron cannon made in England. H. Schubert. *bibliog Iron & Steel Inst J* 146:131-40 no 2 '42; Same. *Engineering* 155:5-6 Ja 1 '43

Foundry cupola; history. I. R. Loss. *Il Comp Air M* 48:7106-8 Ag '43

Study and teaching

Education and the gray iron foundry. W. W. Rose. *Foundry* 71:83+ J1 '43

IRON industry and trade

Review of the iron ore industry. M. D. Harbaugh. *Il Blast F & Steel Pl* 31:55-9 Ja '43

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History

Old Oxford furnace. A. G. Yount. *Il Comp Air M* 48:7026-30 My '43

See also

Iron founding—History

Statistics

Iron and steel, 1938-1941. Survey of Cur Business 1942 Sup p136-8 [supplemented in monthly numbers]

Iron output up 7% in 1942. *Steel* 113:56 Ag 9 '43

See also

Pig iron—Statistics

Brazil

U.S. and Brazil sign new steel credit pacts. *Comm & Fin Chr* 157:1310 Ap 8 '43

Germany

Iron and steel in Nazi Germany. Engineer 174:342-4 O 23 '42; Abstract. *Metal Prog* 43:108+ Ja '43

Great Britain

Iron and steel industries in 1942. Engineer 175:6-7 Ja 1 '43

Manchuria

Increased production in Manchuria. For Comm W 11:26-7 Ap 3 '43

Tennessee

Another chapter in the South's iron and steel industry. D. V. Plan. *Il Explosives Eng* 21:87+ My '43

Texas

New Texas pigs. Business Week p52-3 Ja 2 '43

United States

Iron and steel, 1942. F. B. Foley. *Il Min & Met* 24:106-8 F '43

IRON metallurgy

Blast furnace metallurgy. C. D. Smith. *bibliog Il Steel* 112:86-8, 91-2 Mr 29 '43; Same. Blast F & Steel Pl 31:529-34+ My '43

Foundry metallurgy in the castings industry. J. W. Bolton. *bibliog Il Foundry* 71:84-5, 180-4 J1; 100-1+ Ag '43

IRON metallurgy—Continued

Furnacemen look to your sinter. J. D. Knox. *Il Steel* 112:254-6, 258 Ja 4 '43

Increased blast furnace capacity and how accomplished. G. T. Williams and B. M. Stubblefield. *Blast F & Steel Pl* 31:645-8, 780-2 Je-Jl '43

Iron extraction now reaching high peak; abstract. C. H. Lenhart. *S A E J* 51:sup42+ J1 '43

Iron ore beneficiation, 1942. L. J. Erck. *Eng & Min J* 144:100-1 F '43

Is direct iron (sponge iron) a substitute for melting stock? classification of processes and their potentialities. R. S. Dean. *Metal Prog* 42:1040-2 D '42

Magnetic separation comes into its own. R. L. Manegold. *Il Eng & Min J* 144:86-8 Ag '43

Manufacture of sponge iron. C. F. Ramseyer. *Il diags Blast F & Steel Pl* 31:516-20, 649-53 My-Je '43

New smelting process; patented by Thomas V. Moore of Houston, Tex. *Science* 97:sup 12 Je 18 '43

Ores key to steel's future in Northwest. J. D. Knox. *Il maps Steel* 113:114-17 S 20 '43

Production of low-phosphorus charging stock by direct reduction; synthetic scrap produced by the Harman process. *diags plans Steel* 113:88-90, 92+ Ag 30 '43

Sinter and blast furnace thermal principles. C. E. Agnew. *Il Steel* 113:110-12, 114+ O 4; 262+ O 11 '43

Sinter, its development and use. C. E. Agnew. *Il Steel* 112:84-6, 88, 102 My 31; 119-20+ Je 7; 112+ Je 14; 103-4+ Je 21 '43

Sintering plant practice and the use of sinter in the blast furnace. M. E. Nickel. *Blast F & Steel Pl* 31:sup65+ Ap '43

Smelting of vanadium-bearing titaniferous sinter in an experimental blast furnace. C. E. Wood. T. L. Joseph and S. S. Cole. *bibliog Il diags U S Bur Mines Rep of Invest* 3679:1-24 '43; *Excerpts. Iron Age* 151:59, 131 Je 24 '43

Smelting sinter in the blast furnace. C. E. Agnew. *Il Steel* 112:100-2+ F 15; 88-90, 94, 97 F 22 '43

Study of the reducibility of ores and blast furnace sinter. W. O. Philbrook. *bibliog Il diags table(insert) Blast F & Steel Pl* 31:890-7+, 1019-24, 1141-7 Ag-O '43

Use of inwall temperatures in determining improper gas flow. L. Tofft. *Blast F & Steel Pl* 31:759-66 J1 '43

Utilizing idle rotary cement kilns in the war effort; sintering iron ore fines, blast furnace flue dust and other iron bearing materials. A. B. Andersen. *Il Rock Prod* 46:88+ Ag '43

Wanted, an idea; research program to develop means for utilizing low-grade hematite. *Il Steel* 113:73-4 J1 19 '43

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Basset process

Propose use of rotary cement kilns to increase steel production; sintering iron ore; pig iron production; Basset process. *Concrete (mill sec)* 51:200-1 J1 '43

Electrometallurgy

Smelting iron ores electrically. H. Cowes. *Il diags Iron Age* 150:41-4 D 3; 50-4 D 10 '42

IRON mines and mining**See also**

Iron ores

Brazil

Outlook for iron from Brazil. F. G. Pardee. *Il map Eng & Min J* 144:75-7 O '43

United nations' newest source of iron; Brazil's Itabira hematite deposits. A. Malozemoff. *map diag Eng & Min J* 144:56-9 Ja '43

China

Ore production from mines in China. *For Comm W* 12:25-6 Ag 14 '43

Eastern states

Eastern magnetite. R. E. Crockett. *Il Min & Met* 24:34 F '43

Lake Superior region

Development in the methods of mining and treating iron ores. *flow sheet Il Blast F & Steel Pl* 31:84-7 Ja '43

Lake Superior iron mine operators sign agreement with CIO union. *Steel* 112:61-2 Mr 3 '43

Largest fleet in history will operate on Great Lakes in 1943; plans for iron mines. *Steel* 112:69-70 F 22 '43

OPA price ceiling threatens continuing supply for war. W. R. Van Slyke. *Steel* 112:50-3+ F 1 '43

Ore producers square off for greatest season; price question still in air. *Il Iron Age* 151:87-8 Ap 1 '43

Record tonnage contributed by 176 Lake Superior mines. *Steel* 112:96 Ap 5 '43

Review of the iron ore industry. M. D. Harbaugh. *Il Blast F & Steel Pl* 31:55-8 Ja '43

See also

Iron ores—Lake Superior region

Michigan

Scrap recovery campaign in Michigan iron and copper country a model. *Il Min & Met* 24:316-17 J1 '43

Unusual procedure at an iron mine. *Il Eng & Min J* 144:62 Mr '43

Minnesota

Growth of an independent iron ore operator; Evergreen mines co. *flow sheets Il Eng & Min J* 144:74-7 J1 '43

Personal contact promotes safety; Minnesota iron mines. A. J. Wiseley. *Il Safety Eng* 86:18-20 J1 '43

Preventive maintenance on the iron range; repair shop of Butler Bros. A. J. Wiseley. *Il Min Cong J* 29:20-2 Ag '43

Scramble for ore. *Business Week* p32+ J1 31 '43

Winter stripping on the Mesabi range. J. H. Wilson. *Il Explosives Eng* 21:128-9, 152-3 J1 '43

New York (state)

Century-old iron workings now yield titanium; National lead company. C. H. Vivian. *Il Comp Air M* 48:7100-5 Ag '43

Eastern mines push production. *Steel* 112:82 Je 21 '43

Iron ore in the Adirondacks. *Barron's* 23:13 Ap 26 '43

MacIntyre development; new source of titanium. I. D. Hagar. *Il Eng & Min J* 143:47-9 D '42

Ontario

Steep Rock. *Il Fortune* 28:114-15 J1 '43

Steep Rock; drain lake to expose ore body. *Il map Steel* 113:48-9 S 27 '43

Steep Rock lake, Canada's first big iron mine. H. C. Rickaby. *Il diags map Min & Met* 24:436-9 O '43

Steep Rock ore project progressing. S. H. Brams. *Il Iron Age* 152:92-3 S 2 '43

Steep Rock; roads, bridges, earth and rock moving, pumping—then an iron mine. *Il map Roads & Bridges* 81:42-8+ S '43

United States

Iron ore, review and preview. M. D. Harbaugh. *Min Cong J* 29:38-41 F '43

Utah

Iron ore output in Utah increasing. *Il Min Cong J* 29:31-2 Ap '43

IRON ores

Briquetting machine supplies charge and feed iron in cubes. J. D. Knox. *Il diags Steel* 112:82-4+ Ja 11 '43

Development in the methods of mining and treating iron ores. *flow sheet Il Blast F & Steel Pl* 31:84-7 Ja '43

Iron ore, review and preview. M. D. Harbaugh. *Min Cong J* 29:38-41 F '43

IRON ores—Continued

New iron ore sources probed. *il map Business Week* p17-19 N 14 '42
 Process for briquetting soft iron ores. *Eng & Min J* 144:71 Ap '43
 Reduction of iron ores in clay plants. *C. Austin, Brick & Clay Rec* 102:17-18 Mr '43
 Rotary kilns for agglomerating ores. *S. G. Thyre, il Steel* 113:116-18+ J 15 '43
 Study of the reducibility of ores and blast furnace sinter. *W. O. Philbrook, bibliog il diags table(insert) Blast F & Steel Pl* 31:390-7+, 1019-24, 1141-7 Ag-O '43

See also

Chromite	Iron mines and min-
Hematite	ing
Ilmenite	Magnetite
Iron metallurgy	Pyrrhotite

Prices

Monthly price averages for twelve years, 1929-1942; tabulation. *Steel* 112:366 Ja 4 '43
 OPA price ceiling threatens continuing supply for war. *W. R. Van Slyke, Steel* 112:50-3+ F 1 '43

Transportation

Lake ore quota 95,000,000 tons. *Blast F & Steel Pl* 31:sup 71-2 Ap '43
 Lake ore shippers strain to make up early season tonnage deficit. *Steel* 113:74-5 J 19 '43
 Lakes' ore record. *Business Week* p 17-18 D 19 '42
 Largest fleet in history will operate on Great Lakes in 1943. *Steel* 112:69-70 F 22 '43
 Ore season cut; ice halts Lake Superior shippers. *il Business Week* p46 Ap 24 '43
 Record ore movement, 92,000,000 tons. *Iron Age* 151:91-2+ Ja 7 '43
 Streamlining the ore carrier. *K. C. Thornton, il diags plans Marine Eng* 48:180-97 S '43
 To hasten ore; MacArthur lock will increase flow of iron ore through the Soo canal by 10,000 tons a day. *il Business Week* p24 J 10 '43

Africa, North

Benefit of African manganese to U.S. questioned by some importers. *Iron Age* 151:124 F 25 '43

Brazil

United nations' newest source of iron; Brazil's Itabira hematite deposits. *A. Malozemoff, il maps Eng & Min J* 143:55-9 D '42; 144: 56-9 Ja '43

Lake Superior region

Anticipate no shortage of iron ore for war. *Eng & Min J* 144:86+ Mr '43
 Hydrothermal replacement in deep seated iron ore deposits of the Lake Superior region. *H. M. Roberts and M. W. Bartley, diags maps Econ Geol* 38:1-24 bibliog(p23-4) Ja '43
 Iron ore, Lake Superior, 1938-1941. Survey of Cur Business 1942 Sup p136 [supplemented in monthly numbers]
 Lake ore quota 95,000,000 tons. *Blast F & Steel Pl* 31:sup71-2 Ap '43
 Lake Superior iron ore and the war emergency. *E. W. Davis, map Blast F & Steel Pl* 30:1364-8; 31:211-16 D '42, F '43
 Milestone in production of Lake Superior iron ore. *Marine Eng* 47:160 N '43
 1942 mine shipments of Lake Superior iron ore by railroads to upper lake ports and all-rail; tabulation. *Blast F & Steel Pl* 31:450 Ap '43
 Non-Bessemer ore 74.7% of total shipped in 1942 from Superior region. *Iron Age* 151:144 F 11 '43
 Ore goal sighted; Great Lakes iron ore fleet 1943 quota. *Business Week* p34+ O 23 '43
 Range totals given for Superior ores; annual summary of shipments. *Iron Age* 151:103 Mr 25 '43
 Record ore movement, 92,000,000 tons. *Iron Age* 151:91-2+ Ja 7 '43
 Shipments from upper lake ports of Lake Superior iron ore in June as compiled by the Lake Superior iron ore association; tabulations. *Blast F & Steel Pl* 31:936 Ag '43
 Wanted, an idea; research program to develop means for utilizing low-grade hematite. *il Steel* 113:73-4 J 19 '43

Who produced the record iron-ore tonnage; principal producers in Lake Superior district. *Min & Met* 24:278 Je '43

Minnesota

Iron ore goes to war; Mesabi ore; illustrations. *Eng & Min J* 144:76-7 Ag '43
 More iron ore, Embarrass Lake project. *Business Week* p40 N 28 '42
 Reserves probed; iron ore mines jointly are financing research on low-grade ores. *Business Week* p65-7 S 4 '43

New York (state)

Ilmenite and magnetite produced in quantity at National Lead's new MacIntyre development; titanium dioxide recovered from ilmenite. *I. D. Hagar, il Min & Met* 23:594-6 D '42
 New York iron ores may provide additional vanadium supplies. *Steel* 112:89 Ap 12 '43; Same. *Blast F & Steel Pl* 31:539 My '43
 New York state's iron ores draw new attention. *map Eng & Min J* 144:67-9 My '43
 Smelting of vanadium-bearing titaniferous sinter. *Iron Age* 151:59, 131 Je 24 '43
 See also Iron mines and mining—New York (state)

North Carolina

Urges sponge iron industry; Governor of North Carolina tells Boykin steel shortage committee state's ore can be utilized. *Steel* 112:42-3 My 31 '43

Ontario

Iron from a lake bed; Steeprock lake. *C. H. Vivian, il maps Comp Air M* 48:7002-5 Ap '43
 Steep Rock iron ore. *C. Eaton, il Iron Age* 151:51-3 Ja 21 '43
 Steep Rock iron ore deposits. plans maps Can Min J 64:437-44 J 1 '43

Pacific coast

Ores key to steel's future in Northwest. *J. D. Knox, il maps Steel* 113:114-17 S 20 '43

United States

United States iron ore reserves. *il Manuf Rec* 112:22-3+ Mr '43

IRON oxides

Crystal structures of Fe, FeO and Fe₂O₃ and their interrelations. *H. J. Goldschmidt, bibliog Iron & Steel Inst J* 146:157-74; Discussion. 175-80 2 '42
 Estimation of colloidal properties of ferric oxide and iron oxide purifying material. *F. Gibadlo, Gas Eng* 91:24-5+ My 6 '43
 Possible use of ferruginous talcs in steatite dielectrics. *L. E. Kane and H. G. Ueltz, Am Cer Soc J* 26:389-92 N 1 '43
 Reactions of cobalt(III), cobalt(II), and iron(II) oxides in liquid ammonia. *T. E. Moore and G. W. Watt, bibliog Am Chem Soc J* 64:2772-5 D '42
 Reactions of nickel(II), nickel(II,III), and iron(III) oxides in liquid ammonia. *R. B. Holt and G. W. Watt, Am Chem Soc J* 65: 988-9 My '43
 Red iron oxides specifications drafted. *Oil Paint & Drug Rep* 143:7 Je 7 '43
 Reduction of ferric oxide by hydrogen. *F. Olmer, bibliog diags J Phys Chem* 47:317-25 Ap '43
 See also Magnetite

Analysis

Why determine FeO? *F. G. Norris, Blast F & Steel Pl* 31:sup41-2+ Ap '43

IRON plating

Iron deposition. *C. T. Thomas, bibliog Electrochem Soc Trans* 80 (preprint 15):155-62 O '41; Abstract. *Metal Prog* 43:438+ Mr '43
 Iron plating. *W. B. Stoddard, jr. il Electrochem Soc Trans* 84 (preprint 5):37-45 O '43
 Sulfate-chloride solution for iron electroplating and electroforming; abstract. *R. M. Schaffert and B. W. Gonser, Iron Age* 152: 55-6 O 21 '43

IRON powder. See Iron, Powdered

IRON research

Addendum to second report of the research committee on high-duty cast irons for general engineering purposes. J. G. Pearce. *Inst Mech Eng J & Proc* 149:Proc 101-2 Je '43

British open new laboratory. V. Delport. *Il Foundry* 71:102-3 Ag '43

Cast iron research; annual report of the British cast iron research association. *Engineer* 174:527-8 D 25 '42

Determining the Acs critical point in iron by a grain elimination method. J. K. Desmond. *Il Am Soc for Metals Trans* 31:1-7 Mr '43

Induction furnace as a high temperature calorimeter and the heat of solution of silicon in liquid iron. J. Chipman and N. J. Grant. *Bibliog Am Soc for Metals Trans* 31:365-78; Discussion. 373-9 Je '43

Research on cast iron; British cast iron research association laboratory. *Il Engineering* 155:445, 450 Je 4 '43

Third report of the research committee on high-duty cast irons for general engineering purposes. J. G. Pearce. *Inst Mech Eng J & Proc* 149:Proc 103-12 Je '43

IRON rust. See Corrosion and anti-corrosives**IRON sulfarsenide. See Arsenopyrite****IRON sulfates**

Application of ferric salts in water and sewage treatment; with especial reference to ferrisul. F. K. Burr. *bibliog Il Water Works & Sewerage* 90:347-51 S '43

Recovery of free acid from pickling liquors. H. W. Gehm. *Ind & Eng Chem* 35:1003-4 S '43

Silica sol as auxiliary coagulant with copers: graphical determination of optimum proportions of dual coagulants in water treatment. A. A. Hirsch. *bibliog Ind & Eng Chem* 35:811-14 JI '43

Specific heats at low temperatures of anhydrous sulfates of iron, magnesium, manganese, and potassium. G. E. Moore and K. K. Kelley. *bibliog Am Chem Soc J* 64:2949-51 D '42

IRON sulfides

Fe-Ni-S system; an introduction with new data on the crystallization of pyrrhotite and pentlandite. J. E. Hawley, G. L. Colgrove and H. F. Zuerbrigg. *bibliog Il Econ Geol* 38:335-88 Ag '43

Ferro sulfide source of unexplained tank fires. D. V. Schonegevel. *Oil & Gas J* 41:34 F 4 '43

Tank fires caused by bacteria; spirillum desulfuricans. *Oil & Gas J* 42:40 Je 10 '43

IRON workers

Effect of the war on employment in the iron and steel industry. R. H. Lewis. *Monthly Labor R* 56:253-67 F '43

Industrial-injury experience in the iron and steel industry, 1941. F. S. McElroy and H. J. Butler. *Monthly Labor R* 55:1191-9 D '42

See also

Foundries—Employ-

ees

Steel workers

IRON works

How to work wrought iron. *Il Factory Management* 100:113 D '42

See also

Blast furnaces

Foundries

Steel works

Equipment

Brazilian pipemaker operates four charcoal stacks. G. A. Maigne. *Il diags Steel* 112:68-70+ Ja 25 '43

Youngstown Sheet and Tube now making sinter at Campbell works. *Il Blast F & Steel Pl* 31:109-12+ Ja '43

IRRADIATION

Irradiation of abietic acid with ultraviolet rays. R. F. Brown, G. B. Bachman and S. J. Miller. *bibliog Am Chem Soc J* 65:623-6 Ap '43

Methods and instruments for the selective irradiation of chromatin. S. Zamenhof. *bibliog diags R Sci Instr* 14:17-21 Ja '43

See also

Infrared rays

Radiation

Ultraviolet rays

X rays

IRRIGATION

Classification of irrigable lands. W. W. Johnston. *map Am Soc C E Proc* 68:667-82 My '42; Discussion. 68:781-2, 1452-4; 69:716 My, O '42, My '43

Utilization for pumping loads; utility can net dividends, help farmers increase production by engineering irrigation equipment; with cost data. E. G. Stahl. *Elec West* 90:56-3 Ja '43

See also

Dams

Irrigation canals

California

Antelope Valley farmers profit from irrigation by Diesel pumping units; with cost data. M. D. Pugh. *Il Diesel Power* 21:713-14 Ag '43

Reclamation bureau studies projects' economic aspects. *Eng N* 130:255 F 15 '43

Utilization engineering for large agricultural customers; work of farm power adviser; Pacific gas and electric company. E. G. Stahl. *Il Edison Elec Inst Bul* 11:20-2 Ja '43

See also

Central Valley project, California

India

Irrigation research in India. *Engineering* 155:163 F 26 '43

Mexico

Water for the thirsty lands of Mexico. A. O. Alba. *Il For Comm W* 11:6-7+ Je 5 '43; Same abr. *Concrete* 51:33-4 Je '43

IRRIGATION canals

Earthwork and tunnel. Tucumcari project, New Mexico; unit prices. *Eng N* 129:734 N 19 '42

Floating mower removes grass from irrigation ditches. J. F. Burdett. *Il Eng N* 129:796 D 3 '42

IRVING trust company

Annual report. *Comm & Fin Chr* 157:383 Ja 28 '43

ISATIN

Nitration of isatin. W. C. Sumpter and W. F. Jones. *bibliog Am Chem Soc J* 65:1803-3 O '43

ISATIS tinctoria. See Woad**ISELIN, Columbus O'Donnell, 1904-**

Presentation of the Agassiz medal for the year 1942. T. Isarbour. *Science* 97:431-3 My 14 '43

ISETHIONIC acid

Isethionic acid. A. A. Goldberg. *Chem Soc J* 9716-13 N '42

ISINGLASS

Fining of beer. E. N. Hamnett. *Chem & Ind* 62:294 JI 31 '43

ISLANDS of the Pacific

Islands in the Pacific; submarine mountain system. F. Thone. *Science* 97:sup10-11 Ap 30 '43

Pacific island base. D. Burke. *Fortune* 28:56, 94, 209 Ag '43

See also

Botany, Economic—Islands of the Pacific

ISOAMYL alcohol

Adsorption at solid-liquid interfaces; determination of adsorption by adhesion-tension and interfacial-tension measurements on binary organic liquid systems. F. E. Bartell and F. C. Ender. *bibliog diags J Phys Chem* 46:547-59 N '43

ISOBENZOTHIOPHENE. See Isothianaphthene**ISOBUTANE**

Heat capacities of and hindered rotation in n-butane and isobutane. E. F. Dailey and W. A. Felsing. *bibliog Am Chem Soc J* 65:44-6 Ja '43

Increasing isobutane production in natural gasoline plants. G. N. Hile. *diag Pet Eng (Ref annual)* 14:275, 277-8 JI 1 '43

Manufacture and stabilization. W. L. Nelson. *Oil & Gas J* 41:55 D 3 '42

Rapid infra-red analytical method for hydrocarbon mixtures and a routine spectrophotometer for plant control; analysis of n-butane-isobutane mixtures. R. R. Brat-tain and O. Beek. *Il diags J Ap Phys* 13:699-705 N '42

ISOBUTANE—Continued

Viscosity of propane, butane, and isobutane. M. R. Lipkin, J. A. Davison and S. S. Kurtz, Jr. *bibliog diags Ind & Eng Chem* 34: 976-8 Ag '42; Same. *Pet Eng (Ref annual)* 14:279-80 Jl 1 '43

Analysis

Analysis of butane-isobutane mixture. A. W. Francis. *bibliog Ind & Eng Chem Anal ed* 15:447-8 Jl 15 '43; Same. *Nat Pet N* 35 pt 2:R418+ S 1 '43

ISOBUTENE

Polymerization of mixtures of olefins and diolefins in presence of metallic sodium. V. N. L'vov. *Oil & Gas J* 42:38-9+ Jl 8 '43

See also

Vistanex

ISOBUTYLENE

Alkylated cresols from refinery gases. W. Weinrich. *Il plan Ind & Eng Chem* 35:264-72 Mr '43

Chemistry of diisobutylene formation. R. Kauffman. *bibliog Oil & Gas J* 41:60+ F 11 '43

Competition for butylenes between the 100-octane and synthetic-rubber programs; abstracts. B. K. Brown. *Oil & Gas J* 41:63 Ja 14 '43; *Nat Pet N* 35:16+ Ja 13 '43

Ionization and dissociation by electron impact: isobutylene, propane, and propylene. D. P. Stevenson and J. A. Hipple. *bibliog Am Chem Soc J* 64:2769-72 D '42

Molecular weights and intrinsic viscosities of polyisobutylenes. P. J. Flory. *bibliog Am Chem Soc J* 65:372-82 Mr '43

Separation of individual cresols and xylenols from their mixtures. D. R. Stevens. *bibliog Il Ind & Eng Chem* 35:655-60 Je '43

ISOBUTYRALDEHYDE

Aldol condensation; the reaction of isobutyraldehyde with its aldol. R. H. Saunders, M. J. Murray and F. F. Cleveland. *bibliog Am Chem Soc J* 65:1714-17 S '43

ISOBUTYRIC acid

Reactions of atoms and free radicals in solution; decomposition of acetyl peroxide in aliphatic acids, a new synthesis of succinic acid and its substitution derivatives. M. S. Kharasch and M. T. Gladstone. *bibliog Am Chem Soc J* 65:15-17 Ja '43

ISOCAFESTEROL

Cafesterol; isocafesterol. P. N. Chakravorty and others. *bibliog Am Chem Soc J* 65: 1325-8 Jl '43

ISOCYANATES

Carbamates of cellulose and cellulose acetate; preparation. W. M. Hearon, G. D. Hiatt and C. R. Fordyce. *Am Chem Soc J* 65:329-33 My '43

ISOELECTRIC point

Theory of the isoelectric point; applications to weak acids and bases and to their intermediate salts; the relative isoelectric points. T. L. Hill. *J Phys Chem* 47:70-83 Ja '43

ISOFLAVONE

Active principles of leguminous fish-poison plants; the synthesis of furanooisoflavones related to rotenone. S. H. Harper. *Chem Soc J* p595-8 O '42

ISOHEXESTROL

Interconversion of hexoestrol and isohexoestrol. D. A. Peak and W. F. Short. *Chem Soc J* p232 My '43

ISOMERISM

Application of group theory of isomerism in general. T. L. Hill. *bibliog J Chem Phys* 11:294-7 Je '43

Coordination of silver ion with unsaturated compounds; *cis*- and *trans*-2-pentene. H. J. Lucas, R. S. Moore and D. Pressman. *bibliog Am Chem Soc J* 65:227-9 F '43

Geometrical isomerism of cyclic acetals derivable from nitro polyhydric alcohols. M. Senkus. *Am Chem Soc J* 65:1656 Ag '43

Hydrate isomerism in the hydrated chromic chlorides; preparation of triethylenediamine chromium(III) chloride from hexaquo chromium(III) chloride. L. E. Marchi and J. P. McReynolds. *Am Chem Soc J* 65:480-1 Mr '43

Investigations on the stereoisomerism of unsaturated compounds; the composition of divinyl glycol from acrolein; the system *meso*-*dl*-diethyl glycol. W. G. Young, S. J. Cristol and F. T. Weiss. *bibliog Am Chem Soc J* 65:1245-6 Je '43

Ionization constants of acid and nitro forms of some nitroparaffins. D. Turnbull and S. H. Maron. *bibliog Am Chem Soc J* 65: 212-18 F '43

Separation of diastereoisomerides by selective adsorption on optically inactive material. M. M. Jamison and E. E. Turner. *Chem Soc J* p611-12 O '42

Spectral characteristics and configuration of some stereoisomeric carotenoids including polycopene and pro- γ -carotene. L. Zechmeister and others. *bibliog Am Chem Soc J* 65:1940-51 O '43

Stereochemistry of coordination number eight. L. E. Marchi, W. C. Fernelius and J. P. McReynolds. *Am Chem Soc J* 65:329-33 Mr '43

Stereochemistry of coordination number eight; optical activity of potassium tetraoxalato-uranium-IV. L. E. Marchi and J. P. McReynolds. *bibliog Am Chem Soc J* 65:333-5 Mr '43

Stereoisomeric diphenyloctatetraenes. L. Zechmeister and A. L. LeRosen. *bibliog diags Am Chem Soc J* 64:2755-9 D '42

Sterical course and the mechanism of the diene reaction. F. Bergmann and H. E. Eschmazi. *bibliog Am Chem Soc J* 65:1405-11 Jl '43

See also

Molecular rearrange-

ments

Optical rotation

ISOMERIZATION

Action of cold concentrated hydriodic acid on carotenes: structure and *cis-trans*-isomerization of some reaction products. A. Polgar and L. Zechmeister. *bibliog diags Am Chem Soc J* 65:1528-34 Ag '43

Alicyclic-aromatic isomerization. E. C. Horning. *Chem R* 33:89-135 bibliog(144 references, p132-5) O '43

Alkylation and isomerization combined in aviation-gasoline plant; Cities service oil co. F. M. Simpson. *Il Oil & Gas J* 42:89+ Je 24 '43

Configuration of tervalent nitrogen; bicyclic hydrazine derivative. E. L. Buhle, A. M. Moore and F. Y. Wiselogle. *bibliog Am Chem Soc J* 65:29-32 Ja '43

Digest of United States patents on isomerization of hydrocarbons. H. Heinemann, comp. *Pet Refiner* 22:126+ Jl '43

Disappearance of thiosulfate in solutions of maleic acid; catalysis of *cis-trans* isomerization. H. Taube. *bibliog Am Chem Soc J* 65:526-31 Ap '43

Equilibrium of gaseous dibromoethylenes. R. M. Noyes and R. G. Dickinson. *Am Chem Soc J* 65:1427-9 Jl '43

Facts about and possibilities of alkylation and isomerization processes. A. L. Foster. *Il Oil & Gas J* 41:77, 81+ Ap 15 '43

Fries rearrangement and subsequent isomerization. G. Baddeley. *Chem Soc J* p273-4 Je '43

Grignard reactions; enolization of aliphatic hindered carbonyl compounds. F. C. Whitmore and C. E. Lewis. *Am Chem Soc J* 64:2964-6 D '42

Isomeric *p*-dibutylbenzenes. G. F. Hennion and A. L. Auspos. *bibliog Am Chem Soc J* 65:1603-6 Ag '43

Isomerization, a useful but as yet a little used tool for the refiner. A. L. Foster. *Il Oil & Gas J* 41:66, 69, 71-2 F 25; 51-2 Mr 4 '43

cis-trans Isomerization and spectral characteristics of carotenoids and some related compounds. L. Zechmeister and A. Polgar. *bibliog Am Chem Soc J* 65:1522-8 Ag '43

cis-trans Isomerization and spectral characteristics of gazanixanthin; further evidence of its structure. L. Zechmeister and W. A. Schroeder. *bibliog diags Am Chem Soc J* 65:1535-40 Ag '43

Oil isomerization. F. Battline. *bibliog Paint Oil & Chem R* 105:13-16 My 6 '43

Plant manufacture of HCl for use in isomerization. flow diags *Il Oil & Gas J* 41:202-3+ Mr 25 '43

ISOMERIZATION—Continued

- Studies in the polyene series; a new anionotropic rearrangement; isomerisation of ethynylcarbinols from α -unsaturated aldehydes. E. R. H. Jones and J. T. McCombie. *Chem Soc J* p261-4 Je '43
- Thermal decomposition of hydrocarbons, resonance stabilization and isomerization of free radicals. A. Kossiakoff and F. O. Rice. *bibliog Am Chem Soc J* 65:590-5 Ap '43
- Thermal isomerization of some indene derivatives. C. F. Koelsch and P. R. Johnson. *Am Chem Soc J* 65:567-73 Ap '43

ISOMERS

- Geometric isomers of piperylene. D. Craig. *bibliog Am Chem Soc J* 65:1006-13 Je '43
- Number of structural isomers in simple ring compounds. T. L. Hill. *bibliog J Phys Chem* 47:253-60, 413-21 Mr, Je '43
- Paraffin hydrocarbons; correlation of physical properties. A. W. Francis. *bibliog Ind & Eng Chem* 35:442-9 Ap '43
- Raman spectra of four pairs of *meso* and *dl* substituted butanes. H. J. Taufen, M. J. Murray and F. F. Cleveland. *bibliog Am Chem Soc J* 65:1130-4 Je '43

ISOMORPHISM

- Isomorphism and isotypism among silicates and phosphates. D. McConnell. *bibliog Science* 97:98-9 Ja 22 '43

ISOOCTANE

- Adsorption at solid-liquid interfaces; determination of adsorption by adhesion-tension and interfacial-tension measurements on binary organic liquid systems. F. E. Bartell and F. C. Benner. *bibliog diags J Phys Chem* 46:847-59 N '42
- Conduction of electricity in highly insulating liquids. C. Pao. *bibliog diags Phys R* 64: 60-74 Ag 1 '43
- Isooctane for aviation gasoline by polymerization and hydrogenation; illustrations. *Nat Pet N* 35 pt 2:R216-17 My 5 '43
- Pressure-volume-temperature relations of 2,2,4-trimethylpentane. W. A. Felsing and G. M. Watson. *bibliog Am Chem Soc J* 65: 780-1 My '43

ISOPENTANE

- Thermal data; the heat capacity and entropy of isopentane; the absence of a reported anomaly. G. B. Guthrie, jr. and H. M. Huffman. *Am Chem Soc J* 65:1139-43 Je '43

ISOPIESTIC measurements. See Vapor pressure**ISOPRENE**

- Addition of dienes to certain di-*o*-methoxy-substituted cinnamic acids. R. Adams and R. B. Carlin. *bibliog Am Chem Soc J* 65: 360-3 Mr '43
- Addition of dienes to coumarin and to certain substituted cinnamic acids. R. Adams and others. *bibliog Am Chem Soc J* 65:356-60 Mr '43
- Course of autoxidation reactions in polyisoprene and allied compounds; the oxidation of rubber in the presence of acetic acid or acetic anhydride. G. F. Bloomfield. *Chem Soc J* p356-60 Ag '43
- Course of autoxidation reactions in polyisoprenes and allied compounds. E. H. Farmer, D. A. Sutton and A. Sundralingam. *diags Chem Soc J* p119-33 Mr '43
- Polymerization of mixtures of olefins and diolefins in presence of metallic sodium. V. N. L'vov. *Oil & Gas J* 42:38-9+ JI 8 '43
- Rubber, polyisoprenes, and allied compounds; the relative tendencies towards substitutive and additive reaction during chlorination. G. F. Bloomfield. *diag Chem Soc J* p289-96 JI '43

ISOPROPYL alcohol

- Determination of halogens in organic compounds. R. R. Umhoefer. *bibliog Ind & Eng Chem Anal* 15:383-4 Je 15 '43
- Isopropyl alcohol-water system; density-composition data and pycnometric technique; plate factors in fractional distillation of isopropyl alcohol-water system. W. M. Langdon and D. E. Keyes. *bibliog diags Ind & Eng Chem* 35:459-69 Ap '43
- Liquid-liquid extraction. O. Bergelin, F. J. Lockhart and G. G. Brown. *bibliog flow sheet II Am Inst Chem Eng Trans* 39:173-200 Ap '43

Peroxides in isopropanol. C. E. Redemann. *Am Chem Soc J* 64:3049 D '42

Vapor-liquid equilibria for commercially important systems of organic solvents; binary systems ethanol-*n*-butanol, acetone-water and isopropanol-water. A. S. Brunjes and M. J. P. Bogart. *bibliog Ind & Eng Chem* 35:255-60 F '43

ISOPROPYLBENZENE. See Cumene**ISOPROPYL ether**

Trimolecular acetone peroxide in isopropyl ether. F. Acree, jr. and H. L. Haller. *Am Chem Soc J* 65:1652 Ag '43

ISOPROPYL formate

Kinetics of the thermal decomposition of *n*-propyl and isopropyl formates. R. B. Anderson and H. H. Rowley. *bibliog J Phys Chem* 47:454-63 Je '43

ISOQUINOLINE

See also
Tetrahydroisoquinoline

ISOSTASY

Geologic interpretation of gravity anomalies in the southern New England-Hudson Valley region. C. R. Longwell. *diags map Geol Soc Bul* 54:555-90, pl 1-3 bibliog (p590) Ap '43

Quantitative evaluation of the influence of the lithosphere on the anomalies of gravity. R. Gunn. *Franklin Inst J* 236:47-65 JI '43

Quantitative study of isobaric equilibrium and gravity anomalies in the Hawaiian Islands. R. Gunn. *Franklin Inst J* 236:373-90 O '43

Seismological evidence for roots of mountains. E. Gutenberg. *diags Geol Soc Bul* 54:473-98, pl 1-3 bibliog (p495-8) Ap '43

ISOTEL (term)

Isotel, isotelic. R. J. Williams. *Science* 98: 386 O 29 '43

ISOTHIANAPHTHENE

Instance of the diene synthesis with an isobenzothiophene. C. F. H. Allen and J. W. Gates, jr. *bibliog Am Chem Soc J* 65:1283-5 JI '43

ISOTOPES

Cyclotron targets; preparation and radiochemical separations; arsenic and germanium. J. W. Irvine, jr. *bibliog II J Phys Chem* 46:910-14 N '42

Differences in the vapor pressures and entropies of the liquid nitrogens. I. Kirshenbaum. *bibliog J Chem Phys* 10:717-22 D '42

Equilibrium in hydrogen-water systems containing tritium. J. F. Black and H. S. Taylor. *diags J Chem Phys* 11:395-402 S '43

Putting tagged atoms to work. J. A. Timm. *bibliog J Chem Educ* 20:54-9 F '43

Radioactive isotopes for the study of trace elements in living organisms. J. D. Kurbatov and M. L. Pool. *bibliog II Chem R* 32:231-48 Ap '43

Ratio rule; an empirical rule for calculating the frequencies of isotopic groups in molecules. H. D. Noether. *bibliog J Chem Phys* 11:97-9 F '43

Use of the exchange between carbon dioxide, carbonic acid, bicarbonate ion, and water for isotopic concentration. A. F. Reid and H. C. Urey. *bibliog J Chem Phys* 11:403-12 S '43

See also

Cobalt—Isotopes Mercury—Isotopes
Hydrogen—Isotopes Nitrogen—Isotopes
Lanthanum—Isotopes

ISOTOPIC weights. See Atomic weights**ISOVALERIC acid**

Nitration of 8-polyalkylphenylisovaleric acids; β -[3,5-dimethylphenyl]-isovaleric acid. L. I. Smith and L. J. Spillane. *Am Chem Soc J* 65:232-9 F '43

ISTLE

New WPB order on istle. *For Comm W* 11: 31 My 29 '43

Problems of istle-fiber supply. *For Comm W* 12:21 JI 31 '43

ITALIAN superpower company

Exempted by SEC. *Comm & Fin Chr* 158: 578 Ag 9 '43

ITALY

Italian topography. Science 98:sup10+ S 24 '43

See also

Chemical industries— Steel industry and Italy trade—Italy
Food supply—Italy World war, 1939—Italy

Colonies

Ritornere? future of the empire. Economist 144:610-12 My 15 '43

Description and travel

Italy. J. C. Cosgrove. il map Explosives Eng 21:132-5+, 176-9, 199 JI-S '43
Southern Italy. Science 98:sup12 Ag 6 '43

Economic conditions

Axis economics. Economist 144:622 My 15 '43

Industries and resources

Have not in raw materials. Steel 113:63+ Ag 2 '43
Italian chemical resources. T. E. R. Singer. il map Chem Ind 53:610-11 O '43
Italian industry. Economist 144:363-4 Mr 20 '43

Politics and government

Italy under Badoglio. Economist 145:366-7 S 11 '43
Seed beneath the snow? review of novel by I. Silone. Economist 144:790-1 Je 19 '43

IXODES. See Ticks

J

JABELMANN, Otto, 1891-1943

Tribute. H. Hartley. por Ry Mech Eng 117:313 JI '43

JACK and Heintz, inc.

Bill Jack tells all; reveals philosophy of labor-management relations. Ind Market-ing 23:60, 64 Je '43
House that Jack built; generosity toward associates produces results. il Business Week p103-10 My 22 '43

JACKS

All work and no care makes a dull jack. F. J. Jakoubek. il diags Roads & Sts 86:78-80 Mr '43
Duff-Norton telescopic hand-operated lifting jack. il Engineering 154:426 N 27 '42

JACKS, Hydraulic. See Hydraulic jacks

JACKSONVILLE gas company

Plea for the stockholder; dangers from general application of the SEC Jacksonville Gas formula. H. H. Frank. Pub Util 30:781-7 D 3 '42

JACOBS aircraft engine company

Decade for Jacobs aircraft engine company. C. E. Mines. il Aeronautical Eng R 1:83 N '42

JACOBUS, David Schenck, 1862-

Presentation of Samuel Wylie Miller memorial award to Dr D. S. Jacobus, Oct. 18, 1943, by H. C. Boardman; with reply by D. S. Jacobus and sketch. por Welding J 22:923-4+ N '43

JACQUARD weaving

Defects in Jacquard fabrics. T. Nelson. il Textile World 93:82-3 O '43

JAM

Preserving fruits with SO₂ to aid lend-lease program; Good jams can be made from SO₂ treated fruits; peaches, strawberries and youngberries. J. G. Woodroof and S. R. Cecil. il Food Ind 15:59-61 My; 67-8+ Je '43

JAMAICA

Economic conditions

News by countries. For Comm W 10:10-11 Ja 23 '43

JAMAICA quassia. See Quassia

JAMES, William, 1842-1910

Native philosopher. por Fortune 27:114-15 Mr '43

JAMESON, Sir William Wilson, 1885-

Buchanan medal award. H. Dale. Science 97:31-2 Ja 8 '43

JANITORS

Women in public-housekeeping occupations in California; housekeeping occupations in office buildings and department stores. Monthly Labor R 56:918-21 My '43

JAPAN

Japan, a formidable enemy. W. G. Hillen. il Refrig Eng 46:233-6 O '43

See also

Airplanes, Military— World war, 1939—Japan

Commerce

Southeastern Asia and the Philippines as a market. A. R. Uppgren. Ann Am Acad 226:20-1 Mr '43

Economic conditions

Japan; basic elements in empire's war economy. M. H. Walker. il For Comm W 12:3-9+ S 18 '43
Japan's economic gains. Economist 143:765-6 D 19 '42

Economic policy

Japan spurns fair and honest trading. J. C. Grew. For Comm W 9:3+ N 21 '42

Foreign relations

Implications of Japanese foreign policy for the Philippines and southeastern Asia. H. M. Vinacke. Ann Am Acad 226:50-61 Mr '43

Industries and resources

Japan develops a Ruhr; industries in Manchukuo. il map Business Week p88+ Je 26 '43

Territorial expansion

Japan digs in. Economist 144:167-8 F 6 '43

JAPANESE in the United States

Japanese-American relocation. Economist 144:588 My 8 '43

Japanese family in America. Ann Am Acad 229:150-6 S '43

Japanese help; to practice their skill of chicken-sexing. Business Week p58+ D 12 '42

Supreme court backs West Coast curfew for U.S.-born Japs. Comm & Fin Chr 158:113 J 8 '43

Work in evacuees' interests by Federal reserve bank of San Francisco. Fed Res Bul 29:295 Ap '43

JAPANESE pottery. See Pottery, Japanese

JAPANNING

See also

Varnish and varnishing

JARVIS, W. B., company

Thumbail stock appraisal. Mag of Wall St 71:242; 72:198 D 12 '42, My 29 '43

JAUNDICE

Infectious hepatitis and infectious keratoconjunctivitis provisionally added to manual "Control of communicable diseases." Pub Health Rep 58:405-6 Mr 5 '43

Jaundice following administration of human serum. J. W. Oliphant, A. G. Gilliam and C. L. Larson. bibliog Pub Health Rep 58:1233-42 Ag 13 '43

JEEPS. See Automobiles, Military

JEFFERS, William Martin, 1876-

Jeffers: dynamo. por Business Week p28, 30 N 21 '42

Resigns as rubber director. Comm & Fin Chr 158:1114 S 16 '43

JEFFERSON, Thomas, 1743-1826

Architect's anniversary. il Arch Forum 78:2, 4 Ap '43

President dedicates Jefferson memorial. Comm & Fin Chr 157:1379 Ap 15 '43
Thomas Jefferson and the human design. por Fortune 28:156-7 N '43

Thomas Jefferson as a scientist and inventor. Science 97:sup10 Ap 9 '43

Thomas Jefferson memorial. il Arch Forum 72:68 My '43

Thomas Jefferson, the scientist. F. E. Brasch. Science 97:300-1 Ap 2 '43

JEFFERSON, Thomas—Continued

Two hundredth anniversary observance at meeting of American philosophical society. *F. Thone. Science* 97:sup10 My 7 '43

JEHOVAH'S witnesses

U.S. Supreme court rules against compulsory salute of flag where religious scruples exist. *Comm & Fin Chr* 158:52 Jl 5 '43

JELLY

Chemists adapt pectins to new industrial uses. C. W. Kaufman, E. R. Fehlberg and A. G. Olsen. *Il diag Food Ind* 14:57-8+ D '42; 15:58-60 Ja '43

See also
Colloids
Gelatin

JELLYFISH

First free-living freshwater jellyfish from South America. C. E. Porter and W. L. Schmitt. *Science* 96:515 D 4 '42

JERPE commission company

Big butter-and-egg man; saga of Carl A. Swanson. *Il Fortune* 28:122-5+ O '43

JERSEY central power and light company

Stock purchase plan. *Comm & Fin Chr* 158:127 S 27 '43

Supreme court orders reargument of FPC case. *Comm & Fin Chr* 157:730 F 22 '43

Supreme court rules company is a public utility under FPC jurisdiction. *Comm & Fin Chr* 157:2043 My 31 '43

Supreme court upholds FPC jurisdiction over Jersey Central. *Pub Util* 31:719-20 My 27 '43

Utility is a subsidiary. *Comm & Fin Chr* 155:1859 N 8 '43

JERUSALEM artichoke

d-Lactic acid fermentation of Jerusalem artichokes. A. A. Andersen and J. E. Greaves. *bibliog Ind & Eng Chem* 34:1522-6 D '42

JET propulsion

Coast plane plants rush tests of variety of helicopter plans; development of jet propulsion. S. Banga. *Il Aviation* N 1:9-10 O 11 '43

See also
Rocket propulsion

JETS

See also
Steam jets

JETTIES

See also
Breakwaters

JETTISON tanks. See Airplanes—Fuel tanks**JEWEL bearings. See Bearings, Jewel****JEWEL incandescent lamp company**

Awarded decision. *Comm & Fin Chr* 156:2225 D 21 '42

JEWEL tea company

Another look. *Mag of Wall St* 71:299 D 26 '42

JEWELERS' block insurance. See Insurance, Jewelers' block**JEWELRY**

Palladium will find increased use in jewelry. *Sci Am* 168:61 F '43

JEWELRY, Used

Spends \$150,000 a year advertising to buy outmoded diamonds and jewelry. *Ptr Ink* 204:54 Jl 30 '43

JEWELRY trade

Jewelry firm finds essential war task in medal making. *Sales Management* 52:50 F 15 '43

Jewelry's day. *Business Week* p62+ Ap 17 '43

Policies that built a \$2,500,000 costume jewelry business in 3 years; R. M. Jordan and co. *Il Sales Management* 52:73-5 Ag 15 '43

Advertising

Thinks now is time to establish trade-mark; Paul Flato, society jeweler, advertises low-price line. *Il Ptr Ink* 202:21 Mr 12 '43

Time for victory; Helbros watch co. in nationwide contest. *Sales Management* 52:26 Ap 1 '43

Insurance requirements

Insuring nation's jewelry values. E. V. Sullivan. *Il Spectator (Property ed)* 9:10-14+ S 9 '43

JEWETT, Frank Baldwin, 1879-

Portrait. *J Ap Phys* 14:374 Ag '43

JEWES

See also
World, 1939—
Jews

JEWES in Bolivia

Successful refugee agricultural colony in Bolivia. *For Comm W* 11:16 Je 19 '43

JIGGERS. See Chiggers**JIGS**

Aircraft industry competing with oil for re-claimed casing and tubing; jigs from re-claimed pipes. R. N. Swanson. *Il Oil & Gas J* 41:42-3 Ja 14 '43

Arc welded tubular jigs. R. H. Holmes. *Il Aero Digest* 42:301— Je; 43:327-9, 331 Jl '43

Armour-plate welding; jig construction. *Il Elec R (Lond)* 132:805-8 Je 18 '43

Designing aircraft jigs and fixtures for arc welding to eliminate machining. H. V. Wenger, Jr. *Il diag Aeronautical Eng R* 2:40, 45, 47+ Mr '43

Exhaust pipe jig. *Il Iron Age* 151:63 Mr 25 '43

Footproof procedures for precision production welding. F. Shaw and V. Forgett. *Il diag Aero Digest* 42:237-8, 241-2+ My '43

Hinged drill jig. *SpeeJig. Il Engineer* 174:368 O 30 '42

Jig assembly of tube lines for aircraft. *Il Automotive & Aviation Ind* 87:32-3+ N 15 '42

Jig for welding shafts and similar pieces. *Il diag Roads & Sts* 85:59 N '42

Jig makes circular pipe bends. H. H. Carney. *diag Am Mach* 87:97 Mr 18 '43

Jig speeds sheet metal welding; radiator grille frames. *Il Sheet Metal Worker* 34:26 My '43

Jigs and fixtures for arc welded mass production; R. G. LeTourneau inc. W. J. Brooking. *Il diag Steel* 113:80, 82+ O 25; 102, 104+ N 1; 119-20, 122 N 8 '43

Jigs of fusible alloy for small quantity production. T. Baldwin and B. Swindells. *Il Engineer* 175:98 Ja 23 '43

Machined casting drilled in five-way jig. F. Scriber. *diag Am Mach* 87:108 Jl 22 '43

Machining tubular airplane assembly jigs. F. W. Fromm. *diag Am Mach* 87:162 Mr 18 '43

Masonite jigs. B. E. Stewart. *Il Am Mach* 87:131 F 18 '43

Multi-flame jig facilitates the brazing of tool bits to shanks. *Il Mach* 49:139-41 Ja '43

Production jigs fluorescent lighted; Douglas aircraft co. J. A. Murray. *Il Elec West* 91:49 S '43

Rotating jig speeds welding of sea chests. J. A. Faoro. *Il diag Am Mach* 87:111 Je 10 '43

Single jig for drilling and reaming. F. Rondebush. *diag Am Mach* 87:87 Ja 7 '43

Two-way drill jig for right-angle holes. F. Scriber. *diag Am Mach* 87:105 Ag 19 '43

Welding jig holds pipe collars concentric. R. W. Day. *diag Am Mach* 87:104 Ag 5 '43

JOB analysis

Assigning card-room jobs to women; time studies and analysis. E. H. Helliwell. *Il Textile World* 93:62-3 Mr '43

Breaking down a small job. *Engineering* 156:58 Jl 16 '43

Can we pay women same wage rates as men? E. J. Benge. *Am Business* 12:12-13+ D '42

Cutting clerical costs. E. J. Benge. *Personnel J* 22:135-7 O '43

How to classify bank jobs. L. K. Curry. *Banking* 36:31-2 O '43

Job design as applied to the pumper's daily routine. H. G. Thuesen and M. R. Lohmann. *Il Oil & Gas J* 41:115-18 Ja 7; 36-8 Ja 14 '43

Job evaluation. D. M. Magor. *Power Pl Eng* 47:116, 118+ Ag '43

Labor-management, joint development and joint application of job evaluation in a single unit motor bodies plant. N. O. Paquette and C. Fraser. *Advanced Management* 8:92-6 Jl '43

Man and job evaluation. D. Pollard. *Personnel J* 21:344-8 Ap '43

JOB analysis—Continued

Ten years' progress in management; job evaluation and merit rating. A. S. Knowles. A S M E Trans 65:233-5 Ap '43

See also

Motion study

JOB choosing. See Employment—Job choosing

JOB conversion. See Occupations

JOB sheets. See Instructions

JOB work

Time standards by formula on job-order operations; Corrigan, Osburne, & Wells. V. C. Stephens. Factory Management 101:95 F '43

JOBBER helps

Zenith helps its distributors survive the global hurricane; hunt for new things to sell, development of service, and sometimes a tie-up with local war industry. O. E. Wolf. Il Sales Management 52:70+ F '43

JOBBER relations

Dumore's Dutch Uncle advertising to distributors. R. E. MacDonald. Il Ind Marketing 28:26-9 S '43

How to allocate restricted output; Durham-Enders razor corporation. J. Barteau. Ptr Ink 202:66+ F 19 '43

Modern concept of marketing through industrial distributors. R. N. D. Arndt. Il Ind Marketing 28:34, 38+ Mr '43

They'll remember this firm when the war is over! Jobber salesmen get letters and gifts from Meese, Inc. A. E. Zimmer. Il Ptr Ink 202:53-4 Ja 29 '43

JOBBERS

Effecting transportation conservation while maintaining distribution; G-E lamp department conserves clerical effort, warehouse labor and transportation facilities. F. Blumer. Il Ind Marketing 28:21-2 Jl '43

General Electric jobbers line up to help break war bottlenecks; Traffic Manager Ruehl of G-E, laid out plan for saving railroad equipment, trucks, tires, gas and manpower. Sales Management 51:57-9 N 15 '42

How wholesalers are helping to win the war; electrical wholesalers supply small parts to ship builders, plane makers and other prime armament manufacturers. A. W. Sullivan. Il Ptr Ink 203:78+ Ap 9 '43

Krasne brothers salesmen ration scarce foods to their customers. Sales Management 51: 68 D 1 '42

Priority stocks badly balanced? Honeywell finds a solution; clearing house enabled distributors to trade products short in some areas and long in others. Sales Management 52:38 Ap 15 '43

Profit planning for the small business. C. J. Whipple. Il Am Business 13:13-16+ Je '43

Trading Post for jobbers does three-way job for Imperial Brass. E. F. Todd. Il Ind Marketing 27:32-3+ D '42

Vanishing era; big dry goods jobbers going West. Business Week p49 Ja 23 '43

War has caused modifications rather than radical changes in marketing. L. D. H. Weld. Ptr Ink 203:64, 66-7 Ap 9 '43

Wholesalers prove they're not unessential. O. F. Rost. Ptr Ink 205:17-19 O 15 '43

Without orders; Butler bros. allocates all scarce merchandise alphabetically among dealers. Business Week p86 Jl 3 '43

See also

Advertising—Jobbers, Sales contests, Jobbers' Appeal to Wholesale trade—Marketing Statistics
Merchandizing

Advertising

Ice now gaining enlarged foothold in domestic refrigeration market; 69 Coolerator wholesalers out telling story to 5,000 retailers. Ptr Ink 201:78 N 20 '42

Wholesaler advertises in dealer's defense. Il Ptr Ink 202:38 Mr 26 '43

Wholesaler's approach to advertising; outline of successful advertising campaign promoted by wholesaler through dealers. W. Cayton. Il Ptr Ink 204:23-4 Jl 9 '43

JOBBERS, Wagon

Wagon jobbers cut mileage, but most of them are selling more; survey by National food distributors association. E. J. Martin. Sales Management 52:40, 42 Ja 1 '43

JOBBERS' sales contests. See Sales contests, Jobbers'

JOBS. See Occupations

JOHANSSON, Carl Edvard, 1864-1943

Grand master of industrial measurement; inventor and manufacturer of the famous gageblocks. J. Gaillard. por Ind Stand 14: 293 O '43

JOHN FRITZ medal. See Fritz, John, medal

JOHN HANCOCK mutual life insurance company

John Hancock gain in 1942 insurance exceeds 1/2 billion; report at annual meeting of policyholders. East Underw 44:1, 3-5 F 12 '43; Same abr. Comm & Fin Chr 157:663 F 18 '43

JOHNS-MANVILLE corporation

Earnings steady. Barron's 23:9 Ag 9 '43
Income statement, 1939-1942. Comm & Fin Chr 157:604 F 15 '43
Thumbnail stock appraisal. Mag of Wall St 71:290 D 26 '42

JOHNSON, Douglas Wilson, 1878-
Portrait. Geol Soc Proc 1942:front Ap '43

JOHNSON, Howard

Off the highways; Howard Johnson chain of restaurants has come back by finding new mouths to feed. Il Business Week p60-2 Je 19 '43

JOHNSON, Robert Wood, 1893-

Little man's pal. Business Week p20+ F 20 '43

New hope for small business in war program aroused by Johnson appointment. El. Blair. por(p 1) Barron's 23:4 Ja 25 '43
Portrait. Business Week p17 Ja 30 '43

JOHNSON, Wallace E.

Wallace E. Johnson, the Henry Kaiser of war housing. por Am Bld 65:32-4 F '43

JOHNSON, William Colet, 1876-1943

Sketch. C. Axman. por East Underw 44:3 O 15 '43

JOHNSON and Johnson research foundation
Grant to the National research council from the Johnson and Johnson research foundation. Science 98:339-40 O 15 '43

JOHNSTON, Eric Allen, 1896-

Portrait. Business Week p99 F 27 '43
Sketch. port(cover) Spectator (Life ed) 151:66 Ag '43

JOHNSTON, John, 1881-

Sketch. E. C. McDowell. por Metal Prog 43: 716-18 My '43

JOINT accounts. See Bank deposits—Joint accounts

JOINT council of professional scientists

Joint council of scientific men in Great Britain. Science 97:84 Ja 22 '43

JOINT tenancy

Joint registration or living trust? R. E. Towey. Trusts & Estates 77:278-80 S '43

See also

Bank deposits—
Joint accounts

JOINTS

Coal-pocket design eliminates need for major repairs; use of Regal-Vitrobond in joints. diag Coal Age 47:169 D '42

Cold welding; report of subcommittee, maintenance methods coordinating committee, SAE transportation and maintenance activity. Il diag S A E J 51:sup25-31 Ag '43

Cyclo weld; a new bonding process. Il Mod Plastics 21:65-9+ S '43

Cyclo welding applied successfully to airplane subassemblies. Il Automotive & Aviation Ind 89:33+ O 1 '43

Design of joints for arc and gas welding processes; joints which may be used in marine construction; diagrams. Welding J 21:758-66 N '42

Efficiently rigid arc-welded connections. R. P. V. Marquardsen. diag Welding J 22: 256-61 Ap '43

Engine block and head repairs by cold welding. Il diag Diesel Power 21:818-19 S '43

JOINTS—Continued

- Fatigue strength of welded aircraft joints. T. V. Buckwalter and O. J. Horger, bibliog il diags Welding J 21:sup525-39 N '42
- Information on the cycleweld method of joining structures. S. G. Saunders. Steel 113: 62+ S 27 '43
- Magnesium forming properties and design of joints. il Product Eng 14:574-5 S '43
- Plug welding facilitates changeover from bolted to welded construction. D. E. Tschudy. diags Steel 112:96, 98+ My 24 '43
- Problem of broken joints; method of sealing which prevents sticking. Electrician 131: 156 Ag 13 '43
- Redux process; resin adhesives enable light alloys and steel to be cemented together or to wood. Engineer 175:395 My 14 '43
- Spacing of split-ring timber connectors. F. J. Mehringer, J. H. Carr and A. G. H. Dietz. il diags Eng N 131:531-4 O 7 '43
- Strength of nailed plywood joints subjected to lateral loading. diags Eng N 130:691-3 My 6 '43
- Wartime designs for expansion joints and sash; with time-saver standards. J. Schurman. diags Arch Rec 92:64-6 D '42
- Welding tubular structures with sphere type joints; towing carriages. F. Waldo. il Steel 112:110, 112+ Je 7 '43

See also

- | | |
|------------------|----------------------|
| Boiler tubes—Ex- | Packing |
| panded joints | Pavements, Concrete |
| Brazing | —Joints |
| Couplings | Pipe joints |
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| Joints | Roads, Concrete— |
| Gaskets | Joints |
| Glass—Joining to | Screws |
| metal | Solder and soldering |
| Glue | Welding |

Testing

- Riveted and pin-connected joints of steel and aluminum alloys. L. S. Moisseiff, E. C. Hartmann and R. L. Moore, il diags Am Soc C E Proc 69:3-40 Ja '43; Discussion. 69:575-6, 1463-4 Ap, N '43
- Tests of riveted and welded joints in low-alloy structural steels. W. M. Wilson, W. H. Bruckner and T. H. McCrackin, jr. il diags Ill U Eng Exp Sta Bul 337:1-73 '42 (pa 80c)

JOINTS, Universal

- Constant velocity universal joint; patent assigned to Borg-Warner corp. diags Machine Design 15:194+ N '43
- Universal joint is compact; patent. diags Machine Design 15:122 Ja '43
- Velocity and acceleration analysis of universal joints. Machine Design 14:93-4 N '42

JOISTS

- Truss-braces on joists steady 22-foot spans. diags Eng N 129:797 D 3 '42

JOISTS, Concrete

- Precast concrete joists form basis for beam and girder floor system; Indiana state prison. L. C. Bernard. il diags Concrete 51: 10-11+ O '43
- Rolling long joists off the line; Gravel products corporation manufactures joists by compressing concrete. W. B. Lenhart. il Rock Prod 46:68, 70-1 My '43

JOJOBA nuts

- Jojoba bush, source of wax, yields dollars for Mexico. For Comm W 12:26 Ag 14 '43
- Nut yields wax. Business Week p60 Je 26 '43
- Rubber-like material from jojoba nut reported by Glidden. Rubber Age 53:344 Jl '43

JOMINY test. *See* Steel, Hardening of**JONES, Jesse Holman, 1874-**

- President relieves Wallace and Jones of foreign economic powers; abolishes BEW. Comm & Fin Chr 158:332 Jl 22 '43
- Vice-pres. Wallace contends Jesse Jones obstructs war effort. Comm & Fin Chr 153:20 Jl 1 '43; Oil Paint & Drug Rep 144: 3+ Jl 5 '43

JONES, Marvin

- Portrait. Business Week p19 Ap 17 '43

JONES, Stanley

- Gallery: the man who stuffs lulls. E. Graham. Adv & Sell 36:32+ Jl '43

JONES, Thomas Robert, 1891-
Sketch. por Explosives Eng 20:348-9 D '42

JONES reductor. *See* Reductors

JOURNAL of chemical education (periodical)
Section, Division, and Journal of chemical education. N. E. Gordon. J Chem Educ 20: 369-72+ Ag '43

JOURNALISM

See also
News letters
Newspapers
Periodicals

JOURNALISTS

Social insurance for journalists in Chile, 1941. Monthly Labor R 56:690-2 Ap '43

See also

War correspondents

JOURNALS (machinery). *See* Bearings

JUDGMENTS, Declaratory. *See* Declaratory judgments

JUDICIAL bonds. *See* Insurance, Surety and fidelity—Judicial bonds

JUDICIAL councils

Judicial council movement; its relation to trust and estate law. F. W. Grinnell. Trusts & Estates 76:289-92 Mr '43

JUGOSLAVIA. *See* Yugoslavia

JUNIOR colleges

Junior college courses in the light of war experience. J. A. Prior. J Eng Educ 33:235-8 N '42

JUNIOR directors. *See* Corporations—Directors, Junior

JURASSIC period. *See* Geology, Stratigraphic—Jurassic

JUSTICE, Administration of

See also

Judicial councils
Searches and seizures

JUTE

It's in the bag; India's big jute crop. Business Week p24 Jl 24 '43

Methods and efficiency of disinfecting jute packing. Pub Works 74:18+ Je '43

Process for protecting textile material against rot, corrosion and the like. Textile Col 65:30 Ja '43

Dyeing

See Dyes and dyeing—Jute

JUTE, Substitutes for

Can paper replace jute bags for raw sugar? il Mod Packaging 16:73+ Mr '43

Jute and manila fibers; sansevieria, hibiscus esculente (okra), hibiscus cannabinus, and urena lobata as substitutes. A. C. Whitford. Textile Col 64:526-7 N '42

JUVENILE delinquency

Child delinquency. T. Sellin. Ann Am Acad 229:157-63 S '43

Suggestions on juvenile delinquency. S. M. Robison. Spectator (Property ed) 8:14+ Ja 7 '43

K

KAFFIR. *See* Kafir

KAFIR

Rival for tapioca; waxy sorghum promises to bid for starch market. Business Week p37 My 22 '43

KAHN, Albert, 1869-1942

Sketch. por Arch Forum 78:36 Ja '43; Arch Rec 93:14+ Ja '43

KAHN, Albert, associated architects and engineers, inc.

Albert Kahn, architect. Arch Rec 93:14+ Ja '43

Honor Albert Kahn, inc., for work on naval bases. Eng N 130:644 Ap 29 '43

KAHN, Felix

Earth movers. por Fortune 28:98-107+ Ag; 118-23+ S '43

KAISER, Henry John, 1832-

C.I.O. gets ready to fight for room in shipyards. Business Week p72 Ap 3 '43

KAISER, Henry John—Continued

- Earth movers. *por* Fortune 28:98-107+ Ag; 118-23+ S; 138-44+ O '43
- Kaiser doctrine; policy governing units that expand after contract is signed. Business Week p88+ F 20 '43
- Kaiser empire typifies the West. A. H. Allen. Steel 113:86-9+ Ag 23 '43
- Kaiser fights. Business Week p80 Ja 16 '43
- Kaiser in autos; invasion of Detroit with new model jeep. Business Week p24 Ap 10 '43
- Kaiser integrates; recent purchases point to postwar industrial empire of great magnitude on Coast. Business Week p86-7 Ja 16 '43
- Kaiser on the pan; extravagance and waste at Richmond no. 3 yard charged. Business Week p20+ J1 3 '43
- Kaiser's contracts; NLRB charges against Coast shipbuilder. Business Week p94-5 N 28 '42
- Kaiser's gamble in taking over Brewster Aeronautical. *por* Business Week p28+ Mr 27 '43
- Precedent unsaluted at Kaiser steelworks; Fontana plant. J. D. Knox. Steel 113:72-5+ S 27 '43
- Publicist nitens in excelsos. T. W. Lippert. *por*(p55) Iron Age 151:57-8, 61 Ja 7 '43
- Something new in our time: an American businessman whose energy and imagination have earned him a popular following. *por*s Fortune 28:146-9+ O '43
- Vanport City. Arch Forum 79:53-5 Ag '43
- Wings for Kaiser; purchase of plane plant. Business Week p107+ Mr 13 '43
- Wonder man hit; replies to charges of misuse of priorities and faulty tanker construction. Business Week p30+ Mr 27 '43

KAISER day nurseries. See Day nurseries, Factory

KALAMAZOO, Michigan**Water supply**

- Resistors watch level in water system reservoir; automatic system controls operations of pumps. E. E. Norman. *il* diag Elec W 120:635-7 Ag 21 '43
- KALAMAZOO vegetable parchment company**
Buys Espanola mill of Abitibi company. Paper Tr J 116:9 Ja 14 '43
- KALES, William Robert, 1870-1942**
Sketch. *por* Tech R 45:137-8 Ja '43
- KALLIR, Ludwig, 1874-1943**
Sketch. E. T. B. Gross. Science 97:502 Je 4 '43
- KALLITYPE.** See Photography—Printing processes

KANSAS*See also*

- Petroleum—Kansas Salt mines and mining—Kansas
Petroleum industry ing—Kansas
and trade—Kansas
- KANSAS academy of science**
Seventy-fifth annual meeting. Science 97: 558-9 Je 18 '43
- KANSAS CITY, Fort Scott and Memphis railway**
Railroad securities. Comm & Fin Chr 158: 1873 N 11 '43
- KANSAS CITY, Kansas**
Bridges
Bootstrap jacking rigs raise bridge. *il* diag Eng N 130:568-9 Ap 22 '43
- KANSAS CITY, Missouri**
Field notes from the farm country. Fortune 27:226+ Je '43

Water supply

- Kansas City improvements meet wartime conditions. K. K. King. *il* Am Water Works Assn J 35:987-92 Ag '43; Same. Water Works & Sewerage 90:287-9 Ag '43
- KANSAS CITY public service company**
Kansas City public service company. Pub Util 31:104 Ja 21 '43

KAOLIN

- Hard and soft kaolins of Georgia. T. A. Klinefelter and others. *bibliog* U S Bur Mines Rep of Invest 3682:1-20 '43

Mining and washing kaolin in western North Carolina. A. H. Hubbell. flow sheets *il* Eng & Min J 144:51-3+ Ja '43

Nature of Georgia kaolin; evidence of chemical and colloidal analysis. L. Mitchell and E. C. Henry. map Am Cer Soc J 26:105-13 Ap 1 '43

Nature of Georgia kaolins; evidence of mineralogical analysis. L. Mitchell and E. C. Henry. *bibliog* Am Cer Soc J 26:113-19 Ap 1 '43.

See also

Clay

KAOLINITE

Anomalous heat absorption of kaolinite. F. H. Norton and W. G. Lawrence. Am Cer Soc J 26:388-9 N 1 '43

Nature of colloidal clay as revealed by the electron microscope. B. T. Shaw. *bibliog* *il* J Phys Chem 46:1032-43 D '42

KAPOK, Substitutes for

Cattails harvest on; substitute for kapok. Business Week p87-8 S 11 '43

Floating on air; Bubbli-fil. *il* Mod Plastics 20:70+ D '42

Milkweed instead of kapok; abstract. B. Berkman. Textile Col 65:45 Ja '43

Technical data on DuPont's Bubbli-fil product. J. B. Quig. *il* Rayon 24:77-8, 119-21 F-Mr '43; Abstract. Chem & Met Eng 50: 193-200 My '43

Weeds to rescue; milkweed and cattails answer demand for kapok. Business Week p55-6+ D 5 '42

KARELITZ, George Boris, 1895-1943

Sketch. J. M. Lessells. Mech Eng 65:287-8 Ap '43

KEELER, William Weaver, 1897-1943

Memorial. B. Rixleben. *por* Am Assn Pet Geologists Bul 27:564-6 Ap '43

KELLAWAY, Charles H.

Director of research of the Wellcome foundation. Science 98:358-9 O 22 '43

KELLETT autogiro corporation

Ten years progress. R. H. Prewitt. Aeronautical Eng R 1:65 N '42

KELLY, Howard Atwood, 1858-1943

Sketch. L. F. Barker. Science 97:176-7 F 19 '43

KEMMERER, Edwin Walter, 1875-

Retires from Princeton post. Comm & Fin Chr 158:131 J1 8 '43

KEMPOL. See Rubber, Artificial**KENNEDY, John E.**

Would John E. Kennedy O.K. it? E. H. Pearson. Ind Marketing 27:37 D '42

KENNELLY-HEAVISIDE layer

Reflection of an electromagnetic impulse from the Heaviside layer [and the resulting deformation]; abstract. V. L. Ginsburg. Wireless Eng 20:441-2 S '43

KENNEY, George Churchill

Advancing the bomber line; the Southwest Pacific air pays dividends on ingenuity and toughness. *por* Fortune 28:112-15+ S '43

KENT, Fred I. 1869-

Problems facing business and industry transcend any that have ever arisen before; address at luncheon in recognition of 50 years of public service. Comm & Fin Chr 158:329+ J1 22 '43

KENT, Hugh M.

Hugh M. Kent heads PAW's salvage operations. *por* Nat Pet N 35:9 F 3 '43

KENT, S. Stanley, 1887-1943

Sketch. *por* Boston Soc C E J 30:212-13 J1 '43

KENTUCKY*See also*

Electric utilities—
Kentucky

Social conditions

Case studies of nutrition; rural Kentucky. M. Grant. Ann Am Acad 225:52-5 Ja '43

KENTUCKY academy of science

Annual meeting, 30th, Louisville, April 23-24. Science 97:513-14 Je 4 '43

KENYA colony

Economic conditions. For Comm W 11:21-2 My 29 '43

See also

Mines and mineral resources—Kenya colony

KERATIN

Long X-ray diffraction spacings of the keratins. R. S. Bear. Am Chem Soc J 65: 1784-5 S '43

Separation and determination of protein sulfur, sulfide sulfur, and other sulfur in sodium sulfide dispersions of keratins. E. F. Potter and C. B. Jones. bibliog diag Ind & Eng Chem Anal ed 15:15-17 Ja 15 '43

Structure of fibrous proteins. M. L. Huggins. bibliog(60 references) Chem R 32:195-218 Ap '43

KERATO-CONJUNCTIVITIS. See Eye—Diseases and defects**KERMES**

Kermes, an ancient dyestuff. B. Brown. Textile Col 65:187-9 My '43

KEROSENE

Absorption oil in the cycling plant. J. A. Grimshaw. il Pet Eng 14:80, 82 D '42

Effect of catalysts in vapor phase cracking. P. P. Borisov and M. V. Gaverdovskaya. bibliog Nat Pet N 35 pt 2:R322-3 Jl 7 '43

Effect of petroleum products on Buna S vulcanizates. R. E. Morris and others. bibliog il Ind & Eng Chem 35:646-9 Je '43

Industrial applications of chemicals and related materials. Oil Paint & Drug Rep 144: 56 Jl 26 '43

Kerosene has extensive and varied field of service. A. W. Trusty. il diags Pet Eng 14:118+ My '43

Kerosene priorities set up. Comm & Fin Chr 157:489 F 4 '43

Liquid extraction in perforated-plate and packed towers. J. Allerton, E. O. Strom and R. E. Treybal. bibliog diags Am Inst Chem Eng Trans 39:361-83; Discussion. 383-4 Je '43

See also
Oil stoves

Analysis

Flash point of kerosenes, evaluation from crude oil. W. L. Nelson. Oil & Gas J 42:70 S 9; 80 O 21 '43

Statistics

Kerosene, 1938-1941. Survey of Cur Business 1942 Sup p158-9 [supplemented in monthly numbers]

Transportation

Emergency depot for unloading kerosene shipped from the Southwest to Boston in box cars. il Nat Pet N 35:34-5 F 17 '43

KERR effect

Origin and the complications of electric double refraction and of electric dichroism in dilute dispersed systems. W. Heller. Rs Mod Phys 14:390-409 bibliog(82 references, p408-9) O '42

KERSEY

Finishing 16-oz. green kersey to meet the Marine corps specification. D. Walsh. il Textile World 93:70-1 Mr '43

KETENE

Ketene acetals; the pyrolysis of ketene acetals and orthoesters. S. M. McElvain, H. I. Anthes and S. H. Shapiro. bibliog Am Chem Soc J 64:2525-31 N '42

KETOBUTYL naphthol

Experiments on the synthesis of substances related to the sterols; the preparation of 2:7-dihydroxyphenanthrene and certain derivatives; further observations on the reduction of 1- γ -ketobutyl-2-naphthol. J. W. Cornforth and R. Robinson. Chem Soc J p684-9 N '42

KETONES

Action of aliphatic diazo compounds upon α,β -unsaturated ketones; benzalacetone and diazomethane. L. I. Smith and K. L. Howard. Am Chem Soc J 65:165-6 F '43

Action of aliphatic diazo compounds upon α,β -unsaturated ketones; *cis*- and *trans*-dibenzoyl ethylene. L. I. Smith and K. L. Howard. bibliog Am Chem Soc J 65:159-64 F '43

Action of phosphorus pentachloride on non-symmetrically substituted acetones. A. Zaki and Y. Iskander. Chem Soc J p68-70 F '43

Chemistry of acrylonitrile; reactions with ketones. H. A. Bruson and T. W. Riener. Am Chem Soc J 64:2850-8 D '42

Condensation of vapors; film coefficients for alcohols, esters, and ketones. D. F. Othmer and S. Berman. bibliog il diags Ind & Eng Chem 35:1068-77 O '43

Conversion of unsaturated 1,4-diketones into furans and hydroxyfuranones. R. E. Lutz and C. E. McGinn. bibliog Am Chem Soc J 64:2585-8 N '42

Diallylmethylcarbinyl acetate. W. G. Young, L. J. Andrews and S. J. Cristol. Am Chem Soc J 65:1557 Ag '43

Hydrogen fluoride as a condensing agent; aralkyl ketones. J. H. Simons and E. O. Ramler. bibliog Am Chem Soc J 65:1390-2 Jl '43

Keto ethers; 1-methoxyethyl alkyl ketones. W. P. Wallace and H. R. Henze. bibliog Am Chem Soc J 64:2882 D '42

Ketone synthesis; the condensation of acid anhydrides with olefins. A. C. Byrns and T. F. Doumanli. bibliog il diag Ind & Eng Chem 35:349-53 Mr '43

Ketones as solvents for vinyl resins. R. W. Quarles. Ind & Eng Chem 35:1033-43 O '43

Oxidoketones in the indene series. C. F. H. Allen and J. W. Gates, jr. bibliog Am Chem Soc J 65:1230-5 Je '43

Preparation of aldehydes, ketones, and acids by ozone oxidation. A. L. Henne and P. Hill. Am Chem Soc J 65:752-4 My '43

Preparation of derivatives of chrysene by means of the Robinson-Mannich base synthesis of unsaturated ketones. A. L. Wilds and C. H. Shunk. Am Chem Soc J 65:469-75 Mr '43

Reaction of *n*-butylmagnesium bromide with some aromatic ketones. H. M. Crawford, M. E. Saeger and F. E. Warneke. Am Chem Soc J 64:2862-4 D '42

Reactions and enolization of cyclic diketones; 3-*t*-butyl-1,2-diketohydrindene. C. F. Koelsch. bibliog Am Chem Soc J 65:1640-3 Ag '43

Solubility studies; the solubilities of some isomeric ketones in water. J. H. Saylor, V. J. Baxt and P. M. Gross. bibliog Am Chem Soc J 64:2742-4 D '42

2,4,6-Trimethylbenzylphenylglyoxal. R. P. Barnes and R. J. Brown. Am Chem Soc J 65:412-15 Mr '43

α,β -Unsaturated aminoketones; the mechanisms of the reactions of secondary amines with α -bromo- α,β -unsaturated ketones. N. H. Cromwell and D. J. Cram. Am Chem Soc J 65:301-8 Mr '43

Vinyl alcohols; 1,4-dehydrogenation. R. C. Fuson and R. E. Foster. bibliog Am Chem Soc J 65:913-15 My '43

Vinyl alcohols; hindrance at the β -carbon atom. R. C. Fuson and Q. F. Soper. bibliog Am Chem Soc J 65:915-17 My '43

See also
Acetone

Analysis

Iodoform microtest for the higher alcohols and ketones. F. H. Stodola. bibliog Ind & Eng Chem Anal ed 15:72-3 Ja 15 '43

KETOSES

Action of diazomethane upon acyclic sugar derivatives; ketose synthesis. M. L. Wolfrom, R. L. Brown and E. F. Evans. bibliog il Am Chem Soc J 65:1021-7 Je '43

KETTERING

Portrait. Chem & Eng N 21:841 Je 10 '43

Portrait. J Ap Phys 14:385 Ag '43

KETTLES

Lead melting kettles; abstract. C. C. Downie. Metals & Alloys 17:134+ Ja '43

Special kettle setting simplifies temperature-cycle control; heating varnish oil. W. J. Shore. diag Chem & Met Eng 49:93-5 D '42

See also
Soap kettles

KEWEENAWAN series

Metamorphism of extrusives by basic intrusives in the Keweenaw of Minnesota. G. M. Schwartz. *bibliog Geol Soc Bul* 54: 1211-25, pl 1-2 Ag '43

KEYES, Donald Babcock, 1891-
Sketch. *por Chem & Eng N* 21:1719 O 25 '43

KEYNES, John Maynard, 1883-
Keynesian and other interest theories. R. M. Goodwin. *R Econ Stat* 25:6-12 F '43
Portrait. *Business Week* p14 S 18 '43

KEYS. See Locks and keys

KEYS and keyways (machinery)

Broaching fixture designed to produce keyways in two different parts. *diags Mach* 49:188 D '42

Carter and Wright slot-drilling and keyway-cutting machines. *il Engineering* 155:7-8, 10 Ja 1 '43

Cutting large accurate keyways on vertical shapers. *il diag Mach* 49:244 Jl '43

Dual lead angles produced by broaching and hobbing; mechanisms for starting engines in racing cars, aircraft, yachts, etc. *il Steel* 112:114-4 Je 7 '43

Giern & Anholtt duplex spline and keyway mill. *il Am Mach* 87:129 Ap 15 '43

Types of keys and keyways; their relative merits. A. H. Korn. *diags Product Eng* 14:242-3 Ap '43

KEYSER, Mildred Davis

Mildred Davis Keyser. *por Am Cer Soc Bul* 22:1-5 Ja 15 '43

KEYSTONE public service company

SEC approves merger. *Comm & Fin Chr* 158: 891 Ag 30 '43

KIDDE, Walter, and company, Inc.

Example of romance and financial success. B. Williams. *Comm & Fin Chr* 157:650 F 18 '43

Expansion in CO₂. *il Fortune* 27:130-1 Je '43

Walter Kidde & company, inc.; carbon dioxide equipment for fire extinction and other aircraft uses. A. M. Doxsey. *Aeronautical Eng R* 1:122 N '42

KIDNEYS

Effect of castration and testosterone propionate on d-amino acid oxidase activity in the mouse. L. C. Clark, Jr., C. D. Kochakian and R. P. Fox. *bibliog Science* 98:89 Jl 23 '43

KIELY, Helen

Helen Kiely honored on 25th anniversary with A.W.P. corp. *por Paper Ind* 25:56 Ap '43

KIERS

Kier boiling cotton piece goods. A. C. Tate. *il Textile World* 93:91-3 Ag '43

KIESLER, Frederick J. 1896-

New display techniques for Art of this century. *Arch Forum* 78:49-53 F '43

KILGORE bill. See United States—Scientific and technical mobilization, Office of (proposed)

KILN tires. See Tires, Kiln

KILNS

Bearings in kiln construction. *Mech Handing* 29:215 N '42

Blasting rings from rotary kilns by means of Cardox. R. Gibbs. *diags Rock Prod* 46: 96, 98+ Ag '43

Flat arch tunnel kiln permits square setting of brick. *il Brick & Clay Rec* 101:44-6 D '42
Making of Raku ware and its value in the teaching of beginner's pottery in America. W. Gilbertson. *diags Am Cer Soc Bul* 22: 41-4 F 15 '43

Periodic kilns can be converted to charcoal production. L. R. Whitaker. *Brick & Clay Rec* 103:15-16 Jl '43

Portable kilns for charcoal manufacture. *Engineering* 154:467-8 D 11 '42

Proper cooling of kilns helps control salt glazed tile color; Metropolitan brick co. *il Brick & Clay Rec* 102:18-19 Je '43

Refractory concrete for kiln crowns outlasts fire brick. *il Brick & Clay Rec* 101:50 N '42

What's happening inside your kiln (cont). L. R. Whitaker. *diags Brick & Clay Rec* 101:22-3 D '42; 102:38, 40+ Ja; 23-5 F; 32-4 Mr; 29-31 My; 103:23-4 Jl; 16-18 Ag; 20-1 S; 20 O '43 (to be cont)

Your kilns can be used to make charcoal for the steel and iron industry. *Brick & Clay Rec* 102:34 My '43

See also

Brickmaking
Cement kilns
Drying apparatus

Furnaces
Lime kilns

Air supply

Construction of kiln influences correct firing draft. J. G. Seanor. *il Brick & Clay Rec* 102:24-5 Je '43

What's happening inside your kiln? excess air, friend or foe? H. C. Kenyon. *Brick & Clay Rec* 102:29-31 My '43

Control

Air-operated controllers used to control tunnel kilns. *il diags Cer Ind* 41:34-5 Ag '43
Automatic kiln draft control with thermocouple as primary element. O. J. Parrett. *diag Instruments* 16:4 Ja '43

Centralize control of rotary kilns. T. Offrell. *il diag Rock Prod* 46:59-61+ Ag '43

Control of atmosphere in laboratory kilns. C. L. Thompson. *il Am Cer Soc Bul* 22:302-4 S 15 '43

Possibilities of automatic kiln control. J. R. Green. *il diags plan Rock Prod* 46:62-5, 68-9 Ag '43

Electric heating

Firing pottery; continuous electric kiln; Worcester royal porcelain co. *il Elec R (Lond)* 132:375-6 Mr 19 '43

Return recuperative electric kiln utilizes all heat input; transfer of heat in decorating kiln at the Hall china co. *il Cer Ind* 40:43-4+ F '43

Firing

Combustion principles should be applied when firing down-draft kilns. H. L. Longenecker. *diags Brick & Clay Rec* 102:26-7 Mr; 37-8+ Ap; 20, 22-3 Je '43

Direct radiant kiln firing in the ceramic industry. H. W. Smith, Jr. and J. A. Ehlinger. *il diag Am Cer Soc J* 26:132-6 Ap 1 '43

Distinctly colored brick produced by accurate firing control; Belden brick co. *il Brick & Clay Rec* 101:30-1 N '42

Effect of kiln gases in the glost firing of ware. J. H. Koenig. *Am Gas J* 153:41-5 My '43

Firebox design is important to quality of coal used. D. L. Wilson. *diags Brick & Clay Rec* 103:37-43 O '43

Stoker firing requires little attention and is dependable in operation; plant of Belden brick co. *il Brick & Clay Rec* 102:19-20 Mr '43

What's happening inside your kiln; firing methods. L. R. Whitaker. *diags Brick & Clay Rec* 103:20-1 S '43

Testing

Chart for estimating performance and production rates in rotary kilns. R. Gibbs. *Chem & Met Eng* 50:117-18 Ag '43

KIMBERLY-CLARK corporation

Strong paper company. H. Lawrence. *Baron's* 23:6 Ap 5 '43

KINEMATICS

Brief account of modern kinematics. A. E. R. de Jonge. *diags A S M E Trans* 65:663-75 bibliog(41 titles, p675); Discussion. 675-83 Ag '43

See also

Acceleration
Links and link-motion
Machinery, Kinematics of

Mechanical movements
Vibration

KINEMATICS of machinery. See Machinery, Kinematics of

KINGSBURY, Albert, 1863-1943

Sketch. *Mech Eng* 65:623 S '43

KINSLEY, Richard F.

Still learning; R. F. Kinsley, safety work at Dryden rubber company. G. R. Saccaro. *por Nat Safety N* 48:26 S '43

KIPLINGER, Willard Monroe, 1891-

Kiplinger, Washington's gloomy prophet. E. Whitmore. *Am Business* 13:10-12+ Mr '43

KIRKALDY system of metal protection. See Metal protection—Electrolytic process

KIRKSITE. See Zinc alloys

KITCHEN cabinets

Earle unit kitchen, featuring first practical, under-counter drawer refrigerator for domestic use. *il diag Arch Forum* 79:101 Ag '43

KITCHEN cars

Kitchen cars for troop movements being placed in service. *il Ry Age* 115:733-5 N 6 '43; Same. *Ry Mech Eng* 117:579-80+ D '43

KITCHEN middens

Indian kitchen middens in Tennessee excavated, flooded. *Sci Am* 168:209 My '43

KITCHEN utensils

Heating time and bottom temperatures of cooking utensils; gas and electric cooking compared. *diags Gas Age* 92:25-7 Ag 12 '43

New pans for old; metal substitutes. *il Consumers' Research Bul* 11:8-9 F '43

No metal! ceramic cooking ware fills housewives' needs. *bibliog il Cer Ind* 40:48, 50+ F '43

Post-war home appliances challenge designer and manufacturer alike; kitchen units and laundry equipment of future. *il Cer Ind* 40:45, 47 Je '43

See also
Enameled ware

Cleaning

See Dishwashing

Repair

Any pots to mend today? *Consumers' Research Bul* 11:22-4 Ap '43

KITCHENS

Freedom from drudgery in the kitchen. *il plans Arch Rec* 92:62 N '42

Full-scale model of tomorrow's kitchen shown by Libbey-Owens-Ford glass co. *Comm & Fin Chr* 158:16 Jl 1 '43

Kitchen air conditioning features Kansas City drive-in restaurant. *il Heat & Ven* 40:60-1 Ap '43

Kitchen for tomorrow. *il Dom Eng* 162:54 Jl '43

Mechanical equipment for factories; kitchens and cafeterias. H. E. Sloman, *il plan Arch Rec* 93:63-5 F '43

Planning the plant kitchen; abstract. E. F. Gilson. *Management R* 32:144-5 Ap '43

Planning the restaurant kitchen. H. Blumberg. *il diags Arch Rec* 94:75-7 Ag '43

Unit kitchens; Libbey-Owens-Ford glass co.'s design department and Long Island realtor project two radical new designs. *il diags Arch Forum* 79:99-101 Ag '43

See also
Hospitals—Food service

Electric equipment

Electric kitchen. *il Electrician* 131:150 Ag 13 '43

Unit kitchen equipment. *il Elec R (Lond)* 133:71 Jl 16 '43

Equipment

Gas kitchens chosen for Washington's newest and largest hotel. T. M. Offutt. *il Am Gas Assn Mo* 25:373-4 S '43

Kitchen laboratory at Montana college sets pattern for homemakers. J. McQueen. *il Am Gas Assn Mo* 25:417-18 O '43

See also
Kitchen utensils

KITOL

Kitol, a new provitamin A. N. D. Embree and E. M. Shantz. *bibliog Am Chem Soc J* 65:910-13 My '43

KIWANIS clubs

Kiwanis clubs sponsor campaign to "Keep his America American." S. Campbell. *il Pfr Inl* 204:16-17 Jl 16 '43

KJELDAHL method. See Nitrogen—Analysis

KLYDONOGRAPH

Study of voltage transients in arc-furnace circuits. J. B. Hodtum and J. B. Rice. *bibliog il diags Elec Eng* 62:Trans 556-62 Ag '43

KLYSTRON

Tubes employing velocity modulation. R. I. Sarbacher and W. A. Edson. *bibliog diags Inst Radio Eng Proc* 31:439-52 Ag '43

KNIT goods

Annual knitting section. *il Textile World* 93:97-112 Ap '43

Defects in military knit goods. *il Textile World* 93:106 Ap '43

Development and present status of the American warp knitting industry. W. C. Winkler. *il Rayon* 24:305-7 Je '43

Knit goods for military purposes; cotton and wool socks, wool hose-tops and sweaters. *Textile World* 93:69 Ja '43

Tickle in wool knit goods. A. F. Barker. *il Textile World* 93:90-1 My '43

What the government buys; knit goods, cotton, wool, rayon. *Textile World* 93:88-9 F '43

See also
Hosiery Sweaters
Rayon—Knit goods Underwear

Manufacture

See also
Knitting machines
Knitting mills

KNIT goods industry

Knitters essential, for soldier or civilian. *il Textile World* 93:98-9 Ap '43

KNITTING

Flexible anti-snagging size for nylon knitting yarns patented. *Rayon* 24:359-60 Jl '43

Yarn conveyors at May Hosiery, S. Schwartz. *il diags Textile World* 93:92-3 O '43

See also
Hosiery—Manufacture
Knit goods

KNITTING machines

Development and present status of the American warp knitting industry. W. C. Winkler. *il Rayon* 24:256-7, 305-7 My-Je '43

How to systemize knitting machine maintenance. *Textile World* 92:98-9 N '42

Modern warp-knitting techniques. W. C. Winkler. *il Textile World* 93:102-3 Je '43

See also
Hosiery machines

KNITTING mills

See also
Hosiery mills

Employees

Training new knitting employees. H. E. Reed. *il Textile World* 93:108-9 Ap '43

Management

How to systemize knitting machine maintenance. *Textile World* 92:98-9 N '42

KNIVES

Boom for knives; ban on sale of sliced bread. *Business Week* p42 F 27 '43

Care and treatment of knives. *il diags Consumers' Research Bul* 11:15-18 My '43

Manufacture

Earnings and hours in the pocket-cutlery industry, July 1942. J. F. Laciskey. *Monthly Labor R* 55:1015-20 N '42

KNOTS and splices

Cable splicing; how factory methods can improve results; with illustrated instructions. R. B. McKinley and C. H. Seaberg. *il Coal Age* 48:67-9 Jl '43

Rope knots; 14 kinds and their uses. *il Elec W* 120:666 Ag 21 '43

Splicing wire rope. *il Roads & Sts* 86:73-5 Ja '43

KNOX, Franklin, 1874-

Launching the land ship U.S.S. Knox; Secretary Knox's talk to General electric company. *pors Marine Eng* 48:210-11+ My '43

KNOXVILLE formation

Franciscan-Knoxville problem. N. L. Taliaferro. *bibliog diags maps Am Assn Pet Geologists Bul* 27:109-219, pl 1-7 F '43

KODACHROME. See Color photography

KODAKS. See Cameras

KODIAK, Alaska

See also

Banks and banking—

Kodiak, Alaska

KOHLSCHÜTTER'S silver sol
Mechanism of the formation of Kohlschütter's silver sol. H. B. Weiser and M. F. Roy. *J Phys Chem* 47:325-9 Ap '43

KOK-SAGYZ

Canadian cultivation of rubber-bearing plants. *For Comm W* 12:29 Jl 3 '43

Dandelion tested; first crop of domestic kok-saghyz. *Business Week* p97-8 D 12 '42

Get 50-pound-per-acre yield from rubber dandelion. *Nat Pet N* 35:7 My 26 '43

Goldenrod playing role in current emergency rubber program; kok-saghyz experiments. *Rubber Age* 53:250 Je '43

Kok-saghyz tires; experiments carried out by the Russians. *India Rubber W* 108:490+ Ag '43

Report on kok-saghyz. *Rubber Age* 52:424-5 F '43

Some interesting data on kok-saghyz; abstract. P. Kolachov. *Rubber Age* 53:174-5 My '43

U.S. rubber; guayule and kok-saghyz sources now striding ahead. *Sci Am* 168:172-3 Ap '43

KOLENE process. See Metal cleaning

KOLLERGANG beating. See Paper making—Beating

KOROSEAL

Plastic insulations for conductors. E. D. Youmans. *Elec W* 120:457-9 Ag 7 '43

Plastics you should know. flow diag. *Power Pl Eng* 47:90-2 Ap '43

Tank linings made of synthetic rubber bonded in place. *Sci Am* 169:13 Jl '43

KOSHER soap. See Soap

KOVAR. See Iron alloys—Nickel cobalt alloys

KRAEMER, Elmer Otto, 1898-1943

Sketch. *por Chem & Eng N* 21:1570 S 25 '43; *Franklin Inst J* 236:403-6 O '43

KRAFT paper. See Wrapping paper

KRAFT pulp. See Paper making—Sulfate process

KREIDL, Norbert J. 1904-

Sketch. bibliog. *por Am Cer Soc Bul* 22:76-7 Mr 15 '43

KRESS, S. H., and company

Retail merchandisers still showing large gains. H. Lawrence. *Barron's* 22:20 N 23 '42

KROGER grocery and baking company

Chain localized; Kroger men in stores do buying. *il Business Week* p87-8 My 29 '43

Charged with violations of anti-trust laws. *Comm & Fin Chr* 157:346 Ja 25 '43

KRYPTOGENIN

Sterols; sapogenins; kryptogenin, a new type of sapogenin from *Beth root*. R. E. Marker and others. *Am Chem Soc J* 65:739 Ap '43

KUNDT tube

Improved Kundt's tube. M. B. Reynolds. *diags J Chem Educ* 20:121-2 Mr '43

KURILE islands

Kuriles, strategic island stepping-stones, lying athwart northern trade routes. I. G. Matveev. *il map For Comm W* 13:11-15 O 30 '43

KURTZ, William, b. 1834

William Kurtz and the beginnings of process printing. J. H. McFarland. *por Inland Ptr* 111:29-31 Ag '43

KUTTER'S formula

Determination of Kutter's n for sewers partly filled. C. F. Johnson. *il diags Am Soc C E Proc* 69:187-203 F '43; Discussion. 69: 609-14, 1063-4 Ap, S '43

KYANITE. See Cyanite

KYLE, John J. b. 1838

Portrait. *J Chem Educ* 20:475 O '43

KYMOGRAPH

Further improvement in the Harvard kymograph. A. N. Solberg. *Science* 96:590 D 25 '42

L

L.C.L. freight. See Freight car service—Car load

LABELING

Method for inspection and control of liquid starch-base adhesives for bottle labeling and case sealing. A. Herman and F. M. Knowlton. *bibliog il Am Soc T M Proc* 42: 956-61; Discussion. 962-7 '42

LABELING machines

Progress in roll-type labels. R. C. Russell. *il Mod Packaging* 17:82-5+ N '43

LABELS

ASA committee recommends labels to show colorfastness of textiles. *il Ind Stand* 13: 271-2 N '42

Celanese replies; challenges FTC's right to compel it to label its fabrics as rayons. *Business Week* p90+ Je 12 '43

Chatham finds informative labeling improves manufacturing standards. *il Ptr Ink* 205: 28 N 12 '43

Congress acts in controversy over standards and labeling; OPA denied authority to require grade labeling of any commodity; statement of W. S. MacLeod before Boren subcommittee. *il Ind Stand* 14:205-10 Jl '43

Grade labeling called harmful to consumers, incentive-destroying by Advertising federation. *Comm & Fin Chr* 158:128 Jl 8 '43

Informative labeling in modern packaging; flake graphite. *il Chem & Eng N* 21:1068-9 Jl 10 '43

Office of economic stabilization orders meat labels continued. *Ind Stand* 14:238 Ag '43

OPA retains standards; drops grade labeling. *Ind Stand* 14:263-4 S '43

Progress in roll-type labels. R. C. Russell. *il Mod Packaging* 17:82-5+ N '43

Standards and labeling in controversy. *il Ind Stand* 14:140-5 My '43

See also

Grade marks

Tags

Misbranding

Trade marks

LABOR, Casual

See also

Longshoremén

Migration of workers

LABOR, Compulsory

Britain conscripts women for industry and war service. K. O. Horton. *il For Comm W* 9:3-11, 38 N 28 '42

Canada freezes men in high priority work. *Comm & Fin Chr* 158:1236 S 23 '43

Canadian regulations for employment of civilians. *Monthly Labor R* 56:673-7 Ap '43

Compulsory labour in British dependencies. *Int Labour R* 48:231-2 Ag '43

Compulsory labour in France. *Int Labour R* 47:645-6 My '43

Compulsory labor service in France. *Monthly Labor R* 56:33 Ja '43

Compulsory labor service in Switzerland. M. W. Altaffer. *Monthly Labor R* 55:1166 D '42

Compulsory transfer of manpower in Canada. *Monthly Labor R* 56:1095 Je '43

CIO's view of labor conscription; letter sent to Paul McNutt. P. Murray. *Personnel J* 21:330-3 Mr '43

Conscription of Netherlands labor. *For Comm W* 10:8+ Mr 27 '43

Drafting of labor from nonessential employment in Canada. *For Comm W* 11:16 My 29 '43

Emergency labour conscription in British dependencies. *Int Labour R* 46:744-8 D '42

Foreign workers and manpower in Germany. P. A. Speck. *Monthly Labor R* 57:495-8 S '43

Job freezing opposed by Wilson of GM. *Comm & Fin Chr* 156:1898 N 26 '42

Labor conscription. C. S. Slocombe. *Personnel J* 21:194-206 D '42

NAM opposes labor draft as harmful to production; offers alternative program. *Comm & Fin Chr* 157:1393 Ap 15 '43

National service law is next; report to executives. *Business Week* p34+ O 9 '43

National war service bill proposed in Congress. *Comm & Fin Chr* 157:574 F 11 '43

Will we get a labor draft? *Factory Management* 101:58-64 Ap '43

LABOR, Hours of. See Hours of labor

LABOR agreements. See Trade agreements

LABOR and capital

Capitalism and Americanism go hand in hand. J. B. Hill. *Comm & Fin Chr* 157: 2057, 2070-1 Je 3 '43

See also

Arbitration, Industrial
Capitalism
Cooperation
Industrial relations

Labor disputes
Strikes
Trade agreements
Trade unions

LABOR and laboring classes

Labor after the war; abstract. S. H. Slichter. *Management R* 32:162-4 My '43

See also

Absenteeism (labor)
Accidents, Industrial
Aeronautic workers
Apprentices
Arbitration, Industrial
Automobile factories—
—Employees
Bonus system
Building trades—La-
bor conditions
Chemical workers
Child labor
Coal miners
Contracts, Govern-
ment—Labor prob-
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Cooperation
Cotton mills—Em-
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Disabled—Rehabili-
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Diseases, Industrial
Efficiency, Industrial
Electric workers
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Employees' represen-
tation in manage-
ment
Employment man-
agement
Employment systems
Factory inspection
Farm labor
Foundries—Em-
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Fur workers
Gas companies—Em-
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Government employ-
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Handicraft
Home labor
Hours of labor
Housing
Hygiene, Industrial
Industrial education
Industrial manage-
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Industrial relations
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Insurance, Health
Insurance, Industrial
Insurance, Unem-
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Insurance, Work-
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tion

Labor and capital
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Longshoremen
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Sawmills—Employees
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Welfare work in in-
dustry
Woman—Employ-
ment
Working women
Workmen's compen-
sation
World war, 1939—
Labor problems

Civilian labor force; tables and charts. map
Automotive & Aviation Ind 88:64-7 Mr 15 '43

Distribution of the labor force, by indus-
tries; charts and tables. Automotive &
Aviation Ind 88:62-3 Mr 15 '43

Explanatory notes on periodical statistics of
cost of living, wages, unemployment, em-
ployment and hours of work. *Int Labour*
R 47:116-25 Ja '43

Handbook of labor statistics, 1941 edition.
2v U S Bur Labor Statistics Bul 694 v 1:1-
1042; v2:1-426; v 1 pa \$1; v2 pa 45c Supt.
of doc. '42

International standardisation of labour sta-
tistics; a review of the statistical work
of the International labour office and of
various international statistical conferences.
rev ed 169p pa \$1 *Int. labor office, Wash-
ington, D.C.* '43

Population and war labor supply. W. H.
Mautz and J. D. Durand. *Am Stat Assn J*
38:31-42 Mr '43

What has happened to labor in the war?
employment, hours, wages, and payroll
turnover. *Business Week* p34 Ap 10 '43

What the labor balance sheet shows; figures
behind the manpower problem. *Business*
Week p64 D 5 '42; 98 Mr 13; 84 Je 5; 102
Ag 28 '43

See also

Cost of living—Sta-
tistics
Employment—Statis-
tics
Hours of labor—Sta-
tistics

Occupations—Statis-
tics
Strikes—Statistics
Wages—Statistics

Africa, North

Labor conditions in French North Africa.
M. H. Schoenfeld and A. L. Whitney. map
Monthly Labor R 56:558-75 My '43

Australia

Conditions of employment and welfare of
women in Australian war industry. *Int*
Labor R 48:100-5 Jl '43

Government-employer-worker collaboration in
Australia. *Int Labour R* 47:225-8 F '43

Organisation of waterside employment in
Australia. *Int Labour R* 48:364-6 S '43

Recommended optimum hours in Australia.
N. T. Johnson. *Monthly Labor R* 57:792-3
O '43

See also

Labor supply—Aus-
tralia

Bolivia

Aid for Bolivia; joint commission tells of
labor's needs. *Business Week* p52+ My 1
'43

Labour troubles in Bolivia. *Economist* 144:395
Mr 27 '43

Brazil

Economic mobilisation and man-power prob-
lems in Brazil. *Int Labour R* 47:721-30 Je
'43

Employment and wages in São Paulo, 1942
and 1943. *Monthly Labor R* 57:581-2 S '43

Industrial distribution of workers in Brazil,
1940. *Monthly Labor R* 56:683 Ap '43

British Honduras

Labor conditions in British Honduras. *Int*
Labor R 48:655-6 N '43

Bulgaria

Labor conditions in Bulgaria. A. L. Whitney.
Monthly Labor R 57:672-83 O '43

California

Employment of women in California, March
1943. *Monthly Labor R* 57:105-6 Jl '43

Women in public-housekeeping occupations
in California. *Monthly Labor R* 56:914-21
My '43

Canada

Lockout medicine; Dominion aims reprisals at
defiant workers. *Business Week* p45 My 8
'43

Ottawa fireworks. *Business Week* p52+ S 18
'43

See also

Canadian congress of
labor
Labor supply—Can-
ada

Steel workers—Can-
ada
Wages—Canada

Bibliography

Recent publications of labor interest. Pub-
lished in *Monthly labor review*

Subject index to the *Monthly labor review*,
volumes 12 to 51, Jan. 1921 to Dec. 1940.
U S Bur Labor Statistics Bul 696:1-421;
pa 40c Supt. of doc. '42

International aspects

U.S. and Mexico agree on importing workers.
Comm & Fin Chr 157:2088 Je 3 '43

Statistics

Ability, wages, and income. H. Staehle. *R*
Econ Stat 25:77-87 F '43

American economy in 1942: manpower; with
figures for earlier years. C. A. R. Ward-
well and R. B. Bangs. *Survey of Cur Busi-
ness* 23:4-7 Ja '43

Characteristics of applicants for old-age and
survivors insurance. *Monthly Labor R* 57:
488-93 S '43

LABOR and laboring classes—Continued**Chile**

Labor conditions in Chile, 1942. J. C. Hudson.
Monthly Labor R 57:716-19 O '43

China

Labour policy in China. Int Labour R 47:
758-60 Je '43
Wartime economic and social organisation
in Free China. Int Labour R 46:692-715
D '42

Detroit

Traffic in labor at Detroit probed. Business
Week p110-11 Ap 17 '43

See also

Labor supply—De-
troit

France

Crisis prolonged. Economist 143:569-70 N 7
'42
Employment policy in France. Int Labour R
47:78-9 Ja '43
Recruitment of French labour for Germany.
Int Labour R 47:312-43 Mr '43

See also

Labor laws and legis-
lation—France

Germany

Contract conditions of foreign workers in Ger-
many; Rumanian workers, Spanish work-
ers. Monthly Labor R 56:43-5 Ja '43
German employment policy. Int Labour R 48:
518-20 O '43
Manpower control in Germany. H. Block. bib-
liog Monthly Labor R 56:10-21 Ja '43

See also

Labor supply—Ger-
many
Wages—Germany

Great Britain

Accidents and health in British factories,
1941. Monthly Labor R 56:76-9 Ja '43
British progress in training, upgrading,
supervision. Il Steel 112:90-1+ My 3 '43
Catering conflict. Economist 144:200-1 F 13
'43
Changes in wages and hours in agriculture in
England and Wales. Monthly Labor R 57:
583-4 S '43
How Britain inspires war workers to improve
output. F. B. Barton. Il Factory Manage-
ment 101:118-21 S '43
Importance of being Ernest; Mr Bevin and
labor. Economist 143:533-4 O 31 '42
Manpower and labour conditions in 1942.
Economist 144:sup4 Mr 13 '43
People in war production; digest, with com-
mentary, of a British study. C. S. Slo-
combe. Personnel J 22:154-71 N '43
Problems of employment and of the rela-
tions between government and industry
after the war. Engineer 176:35-7, 56-8 Jl 9-
16 '43
Rehabilitation and resettlement of disabled
persons in Great Britain. Int Labour R
48:43-55 Jl '43
Value of British joint production commit-
tees. Monthly Labor R 56:900-3 My '43
Women man Britain's war plants. D. V.
Baker. Il Steel 111:138+ D 7 '42
Work of the Factory department in Great
Britain; report of chief inspector for 1941.
E. Bevin. Int Labour R 47:466-78 Ap '43
Working conditions in Great Britain and
Northern Ireland in 1942. Monthly Labor R
56:686-9 Ap '43

See also

Child labor—Great Britain
Great Britain—Labor and national serv-
ice, Ministry of
Labor party (Great Britain)
Labor supply—Great Britain
Trade unions—Great Britain
Unemployment—Great Britain
Wages—Great Brit-
ain

Great Britain (colonies)

Labor in the British colonial dependencies.
Monthly Labor R 57:713-16 O '43

Labour in the eastern dependencies; Ceylon,
Mauritius and Malaya. Economist 144:818-
19 Je 26 '43

See also

Labor laws and leg-
islation—Great
Britain (colonies)

Greece

Labor conditions in Greece. A. L. Whitney
and M. H. Schoenfeld. Monthly Labor R
57:215-32 Ag '43

Houston, Texas

Office work in Houston, 1940. U S Women's
Bur Bul 188-1:1-58; pa 10c Supt. of doc. '42

Hungary

Labor conditions in Hungary. M. H.
Schoenfeld. Monthly Labor R 56:1069-88
Je '43

Illinois

Pre-war personnel practices in Illinois. H.
F. Underhill. bibliog J Business 16:14-27
Ja '43

See also

Wages—Illinois

India

Employment and working conditions in India.
R. K. Das. Monthly Labor R 57:452-69, 689-
99 S-O '43
Institution of a tripartite labour organiza-
tion in India. Int Labour R 47:1-21 Ja '43
Labour policy in India. Int Labour R 47:756-8
Je '43
Situation in India. Int Labour R 48:377-80
S '43
Tripartite labour organisation in India. bib-
liog Int Labour R 47:762-5; 48:499-500, 633-
7 Je, O-N '43

Ireland

Employment in Eire. Economist 145:464-5 O
2 '43
Transfer of Irish workers to Great Britain.
Int Labour R 48:338-42 S '43

Jamaica

Wages and conditions in the Jamaican sugar
industry. Int Labour R 48:240-2 Ag '43

Kansas City, Missouri

Office work in Kansas City, 1940. U S Women's
Bur Bul 188-3:1-74; pa 15c Supt. of doc.
'42

Mexico

See also

Wages—Mexico

New York (state)

Increase in woman factory workers in New
York state in 1942. Monthly Labor R 56:
921-3 My '43

See also

Wages—New York
(state)

New Zealand

Changes in New Zealand labor conditions.
Monthly Labor R 57:720-2 O '43
Extension of manpower controls in New Zea-
land. B. D. Dahl. Monthly Labor R 56:33-7
Ja '43

Norway

Labor conditions in occupied Norway. H.
Palmström. Int Labour R 48:584-610 N '43
Labor situation in Norway. H. V. Johnson.
Monthly Labor R 55:951-2 N '42

Palestine

Labor policy in Palestine. Economist 145:
176-7 Ag 7 '43

Philadelphia

Office work in Philadelphia, 1940. U S
Women's Bur Bul 188-5:1-102; pa 15c Supt.
of doc. '42

Portland, Oregon

DeShetler is back; C.I.O. organizer reopens
membership drive to win A.F.L. boiler-
makers at Kaiser yards. Business Week
p77-8 Je 5 '43

LABOR and laboring classes—Continued**Portugal**

Labour unrest in Portugal. Economist 143:670 N 28 '42

Puerto Rico

Incomes and expenditures of wage earners in Puerto Rico, 1940-41. A. C. Hanson. Monthly Labor R 56:223-32 F '43
Offshore labor; USES to find workers in Puerto Rico. Business Week p50 J1 24 '43

Richmond, Virginia

Office work in Richmond, 1940. U S Women's Bur Bul 188-4:1-61; pa 15c Supt. of doc. '42

Switzerland

See also
Unemployment—
Switzerland

United States

Chronology of labor events, October-December 1942. E. Nash. Monthly Labor R 56:411-18 F '43
Chronology of labor events, January-March 1943. Monthly Labor R 56:1026-36 My '43
Coming labor upheaval. il Factory Management 101:82-8 Je '43
Continued high wage structure after war predicted; Labor in the American economy. Comm & Fin Chr 158:1922 N 11 '43
Fortune survey; four potent segments of the U.S. working force judge their jobs, their unions, their employers, and their own prospects for the future. Fortune 27:8-9+ Ja '43

Fortune survey: labor still faithful to democracy; objectives: voice in management, share in profits, ceiling on incomes, sound peace. Fortune 27:8-10+ F '43

Labor has a choice; it can be swallowed by the state, or remain free in society. J. Chamberlain. il Fortune 27:124-7+ Je '43

Public looks at labor unions. E. Roper. Harvard Business R 21 no:4425-31 [J1] '43

Rights of labor abridged by war must be restored. T. E. Dewey. Comm & Fin Chr 158:783+ Ag 26 '43

Significant labor developments. Published in monthly numbers of Factory management

State of the Nation; American national unity fades as Nazism totters; U.S. approaches social crisis. S. Mangan. il Fortune 23:136-41+ N '43

Wallace warns of fascism in western world if labor, agriculture and industry fail to hold economic balance. Comm & Fin Chr 158:1920 N 11 '43

War workers answer these questions on post-war conditions. F. LaClave. Ptr Ink 204: 11-14 Ag 6 '43

Wealthy wage earner. E. R. Smith. Ptr Ink 203:15-17+ Ap 16; 17-19 Ap 23 '43

See also
American federation of labor
Automobile factories—Employees
Coal miners—United States
Congress of industrial organizations
Housing—United States
Labor laws and legislation—United States
Labor supply—United States
Migration of workers
Military service—Labor problems
Negroes—Employment
Trade unions—United States
Unemployment—United States
United States—Labor, Department of
Wages—United States
Welfare work in industry

Political aspects

Return of the prodigal. Business Week p17-19 My 29 '43

LABOR banks. See Banks and banking, Trade union

LABOR camps
Rest camps rising for Brazil's rubber-gathering army. For Comm W 11:14 Ap 3 '43

See also
Construction camps

LABOR contracts

Contract conditions of foreign workers in Germany; Rumanian workers, Spanish workers. Monthly Labor R 56:43-5 Ja '43

See also

Open and closed shop
Trade agreements

LABOR cost

Manpower in construction. L. E. Brigham. Civil Eng 13:485-7 O '43

Productivity and unit labor cost in selected manufacturing industries, 1939-42. Monthly Labor R 56:885-7 My '43

Accounting

Keeping track of labor costs. D. A. Dearle. Factory Management 101:116+ Mr '43

Performance determines direct labor costs. R. C. Berman. Factory Management 101: 113-16 J1 '43

Punched-card system of payroll and labor cost accounting. F. A. MacCauley. il N A C A Bul 24:685-702 F 15 '43

See also

Payrolls—Accounting

LABOR disputes

Car pact void? notice of termination is served by Pullman-Standard on union. Business Week p110 Mr 20 '43

Coming labor upheaval. il Factory Management 101:82-8 Je '43

Gentle art of cooling off. H. Corey. Pub Util 31:610-17 My 13 '43

Governmental adjustment of labor disputes, by H. S. Kaltenborn. Review, by W. R. MacLaurin. Mech Eng 65:312-13 N '43

Industrial disputes. Published in Monthly labor review

Industrial disputes in Great Britain in 1942. Int Labour R 48:359-61 S '43

Lockout medicine; Dominion aims reprisals at defiant workers. Business Week p45 My 8 '43

NWLB vs. Ward. Business Week p94-5 N 14 '42

NYSE wage dispute certified to WLB by Secretary Perkins after conciliation failure. Comm & Fin Chr 157:50 Ja 7 '43

WLB jurisdiction to cover wage disputes in non-war industries. Comm & Fin Chr 156: 2061 D 10 '42

WLB speeds handling of labor dispute cases. Comm & Fin Chr 157:199 Ja 14 '43

Ward's war order; mail order company loses another, and final, round of its fight to keep war agency out of dispute with union. Business Week p92 N 28 '42

See also

Arbitration, Industrial
National war labor board
Strikes
also United States—Labor, Department of—Conciliation service

LABOR inspection**See also**

Safety inspection

LABOR laws and legislation

Blanket suspension of state labor laws not favored by federal agencies. Monthly Labor R 56:256 F '43

Court decisions of interest to labor. Published in Monthly labor review

1943 sweatshop; terms and fines imposed for bilking girl workers. Business Week p96 O 9 '43

Recent state legislation on labor relations. Monthly Labor R 56:941-4; 57:778-80 My, O '43

State labor legislation in 1942. Monthly Labor R 55:978-9 N '42

State laws and women workers. M. Anderson. il Bus Transportation 22:35-7 My '43

Trends in labor relations bills in state legislatures. Personnel J 22:49-53 Je '43

Workers by edict; many state legislatures pass new laws. Business Week p100-3 Ap 24 '43

See also

Arbitration, Industrial
Insurance, Unemployment
Contracts, Government—Labor
Insurance, Workmen's compensation
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Minimum wage
Hours of labor

LABOR laws and legislation—See also—Cont.

Pensions, Industrial
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Sabotage
Strikes—Law

Wages—Law
Woman—Employment
Workmen's compensation

Australia

Regulations for employment of women in Australia, 1942. N. T. Johnson. Monthly Labor R 56:671-3 Ap '43

Belgium

New hours of work regulations in Belgium. Int Labour R 47:654-7 My '43

Bolivia

Amendments to Bolivian labor code, 1942. R. F. Woodward. Monthly Labor R 56:732-3 Ap '43

Brazil

Termination of employment of Axis nationals in Brazil, 1942. Monthly Labor R 55:1155-6 D '42

Canada

Compulsory-transfer orders covering labor in Canada. Monthly Labor R 57:241-3 Ag '43

Industrial relations in Canada. Int Labour R 48:221-5 Ag '43

Such legislation will not give industrial peace. S. G. Woodlock. Can Min J 64:557-60 S '43

Colorado

Labor act knifed; Colorado court invalidates two sections of regulatory measure. Business Week p88 S 18 '43

France

Compulsory labor service in France. Monthly Labor R 56:33 Ja '43

Employment of repatriated prisoners of war and demobilised men in France. Int Labour R 46:749-51 D '42

Germany

Soviet workers in Germany; methods of recruitment and conditions of employment. bibliog Int Labour R 47:576-90 My '43

Great Britain

See also Insurance, Unemployment—Great Britain

Workmen's compensation—Great Britain

Great Britain (colonies)

British colonial labour legislation. bibliog Int Labour R 48:212-16 Ag '43

Labour supervision in British dependencies. Int Labour R 48:495-8 O '43

Indiana

Take it or else; accept proffered employment or be denied state unemployment benefits. Business Week p89-90 S 18 '43

Mexico

Regulation of home work and small-scale undertakings in Mexico. Int Labour R 47:245-6 F '43

New York (state)

Adjustment of labor standards to war needs in New York. Monthly Labor R 56:38-42 Ja '43

See also Insurance, Unemployment—New York (state)

New Zealand

National emergency disputes board in New Zealand. Monthly Labor R 55:1189-90 D '42

Ontario

Collective-bargaining law of Ontario. Monthly Labor R 57:58-9 Jl '43

Palestine

Employment of women and children to be regulated. For Comm W 13:10-11 O 9 '43

South Africa

Wartime labor control in the Union of South Africa. Monthly Labor R 57:473-83 S '43

Switzerland

Compulsory labor service in Switzerland. M. W. Altaffer. Monthly Labor R 55:1166 D '42

Texas

Labor opposes regulation act of Texas legislature. Eng N 131:582 O 21 '43

United States

Applicability of Fair labor standards act. Monthly Labor R 56:491-4, 724-7, 1124-30; 57:307-9 Mr-Ap, Je, Ag '43

Decisions involving National labor relations act. Monthly Labor R 56:494-5, 728-31 Mr-Ap '43

Does Fair labor standards act affect you? L. T. Parker. Am Gas J 159:32-4 Jl '43

Explain provisions of wage-hour law and Walsh-Healey act. Concrete (mill sec) 51:218-20 Ag '43

Good labor standards increase production. W. B. Smith. Personnel J 21:323-9 Mr '43

Governmental adjustment of labor disputes, by H. S. Kaitenbom. Review, by W. R. MacLaurin. Mech Eng 65:812-13 N '43

How wage and hour law applies to clay products industry. Brick & Clay Rec 103:48+ Jl '43

Interpretations bring important changes in labor law applications. Oil & Gas J 42:46+ Ag 26 '43

Labor laws for government work. Iron Age 152:71-2 S 9 '43

Labor standards in the plastics industry. W. B. Smith. Mod Plastics 20:56+ Ap '43

Legal requisites for labor standards in the aviation industry. Aviation 42:127+ Ja '43

Newspaper not obliged to open records to Wage-hour bureau. Comm & Fin Chr 157:1686 My 6 '43

Prevention of industrial disputes in the United States. Int Labour R 48:500-4 O '43

Reviews overtime pay requirements under Wage-hour and Public contracts laws. L. M. Walling. Comm & Fin Chr 157:841+ Mr 4 '43

Supreme court agrees to wage-hour review; employees of a wholesaler. Comm & Fin Chr 156:1979 D 3 '42

Supreme court upholds Labor department subpoena powers under Walsh-Healey act. Comm & Fin Chr 157:374 Ja 28 '43

Wage and hour decisions; applicability of Fair labor standards act. Monthly Labor R 56:491-4, 724-7 Mr-Ap '43

Wage and hour regulation. Published in Monthly labor review

Wage hour law not for copy writers. A. Gray. Ptr Ink 203:30+ Jl 2 '43

Walsh-Healey act covers most mills. W. B. Smith. Textile World 92:69 D '42

War labor disputes act; Smith-Connelly act. Monthly Labor R 57:305-7 Ag '43

Will we get a labor draft? Factory Management 101:58-64 Ap '43

See also

Insurance, Unemployment—United States
National labor relations board
Strikes—Law
Minimum wage
Wages—Law

LABOR laws and legislation, International**See also**

Prisoners of war—Employment

LABOR lending. See Employment systems**LABOR libraries and collections**

American labor publications in the library; some special problems. E. M. Grieder. bibliog Special Lib 34:39-44 F '43

LABOR-management committees. See Employees' representation in management**LABOR mobility. See Migration of workers****LABOR party (Great Britain)**

Labour and the coalition. Economist 144:777-8 Je 19 '43

LABOR productivity

Decline in labor productivity. Management R 32:128 Ap '43

Labor productivity in peace and war; abstract. S. Fabricant. Management R 32:378-9 O '43

LABOR productivity—Continued

- Output per man-shift rises with seam thickness in W.Va. Coal Age 47:69-70 D '42
 Post-war manpower and its capacity to produce. S. M. Livingston. Survey of Cur Business 23:10-16 Ap '43
 Production committees. Economist 144:501-2, 507 Ap 17 '43; Excerpts. Monthly Labor R 56:1110-12 Je '43
 Productivity and unit labor cost in selected manufacturing industries, 1939-42. Monthly Labor R 56:885-7 My '43
 Recent productivity changes in copper mining. M. C. Heins and K. A. Middleton. Monthly Labor R 57:258-64 Ag '43
 Wartime labor productivity in railroad transportation. K. A. Middleton. biblog Monthly Labor R 57:444-51 S '43
 Wartime productivity in mining industries. C. S. Gody. Monthly Labor R 57:255-7 Ag '43

See also

- | | |
|------------------------|--------------------|
| Efficiency, Industrial | Music in industry |
| Labor cost | Time study |
| | Wage payment plans |

LABOR recruiting

- Boeing surprised; lands 1,538 workers in big drive. Business Week p88+ O 2 '43
 Buffalo plan moves west; controlled hiring system to be instituted in critical labor areas of Pacific coast. il Steel 113:66-7 S 13 '43
 C-H-B salvages "scrap manpower" to save huge tomato pack; California conserving co. takes men out of jail under parole. il Sales Management 52:25, 28, 30 Ja 1 '43
 Community action gets results; Dayton-Springfield and Buffalo plans. il Steel 113:69-70 S 6 '43
 Contracts or men? War dept.'s scheme for recruiting 9,000 workers for Boeing. Business Week p78+ JI 31 '43
 Crop is saved; recruiting labor saves hundreds of tons of tomatoes. Business Week p20+ Ag 28 '43
 Dayton solves its labor problem by halting in-migration, using local folk. Ptr Ink 204:39-40 Ag 27 '43
 Display advertising for workers. Am Business 13:39 Ap '43
 Employ modern recruiting procedures. il Factory Management 101:88-95 Ag '43
 Enrollment campaigns for woman workers, 1942. Monthly Labor R 56:488-90 Mr '43
 How New Britain war plants recruited women workers. W. J. Cashman. il Factory Management 101:66-8+ Ap '43
 How Newark super-sells to win 50,000 women to war work. il Sales Management 52:96+ O 15 '43
 Imported hands; reserves from Mexico, Jamaica, Bahamas. Business Week p22+ My 29 '43
 Industry points way to selection of college trained men; recruiting programs of various industries. il Ry Age 115:113-18 Ag 21 '43
 Meeting the labor squeeze; go get your women, by War manpower commission. Personnel J 22:179-85 N '43
 New Britain for 2,341 new war workers within its boundaries! il Ptr Ink 202:26+ Mr 26 '43
 Puppets recruit war workers. A. R. Fiske. il Ptr Ink 205:25+ O 22 '43
 Recruiting skilled workers; American bantam car company. E. R. Prosser. Am Mach 87:86 Ap 1 '43
 Recruitment and training for the textile industry. H. G. Greg. Textile Inst J 34:P64-6 Mr '43
 Recruitment of French labour for Germany. Int Labour R 47:312-43 Mr '43
 Sources of labor supply in West Coast shipyards and aircraft-parts plants. T. P. Kanninen. Monthly Labor R 55:926-31 N '42
 Soviet workers in Germany; methods of recruitment and conditions of employment. biblog Int Labour R 47:576-90 My '43
 Tested ways to recruit workers; abstract. C. Norton. Management R 32:416-17 N '43
 Transfer of Irish workers to Great Britain. Int Labour R 48:338-42 S '43
 Wartime guides for your business; how skilled labor will come under priorities and allocations. W. H. Hillyer. Barron's 22:3 D 21 '42

LABOR requirements for production

- Labor requirements for synthetic-rubber industry. J. M. Silberman and G. E. Sadler. Monthly Labor R 56:837-45 My '43

LABOR saving devices

- Processing short-cuts developed by workers. Steel 113:108 Ag 23 '43

See also

- | | |
|----------------------------|-------------------|
| Accounting—Mechanical aids | Milking machines |
| Mechanical handling | Office appliances |
| | Time saving |

LABOR standards

- Adjustment of labor standards to war needs in New York. Monthly Labor R 56:38-42 Ja '43
 Good labor standards increase production. W. B. Smith. Personnel J 21:323-9 Mr '43
 Labor standards in the plastics industry. W. B. Smith. Mod Plastics 20:56+ Ap '43
 Legal requisites for labor standards in the aviation industry. Aviation 42:127+ Ja '43
 Standards for young war workers. Monthly Labor R 56:694-7 Ap '43

See also

- Time study

LABOR supply

- Drafting of labor from nonessential employment. For Comm W 11:16 My 29 '43
 Manpower commission advice. L. B. F. Raycroft. Personnel J 22:2-11 My '43
 Manpower survey to determine the basis of industrial mobilization; abstract. R. J. Greenly. Ind Med 12:30-1 Ja '43
 Meeting the labor squeeze; by War manpower commission. Personnel J 22:172-85 N '43
 Practical applications of theoretical sampling methods; labor market surveys. J. N. Webb, M. S. Northrop and S. L. Payne. Am Stat Assn J 38:73-7 Mr '43
 Principles of employment supervision in war and peace. E. M. Johnstone. Int Labour R 48:277-307 S '43

See also

- | | |
|--------------------|-----------------------|
| Apprentices | Military service— |
| Employment | Labor problems |
| Employment systems | Public health workers |
| Labor recruiting | Unemployment |
| Labor turnover | |

Australia

- Man-power policy in Australia. Int Labour R 47:74-6 Ja '43

California

- Expansion of refining facilities aggravates manpower shortage. L. P. Stockman. il Oil & Gas J 42:16-18 Ag 5 '43

Canada

- Canadian regulations for employment of civilians. Monthly Labor R 56:673-7 Ap '43
 Consolidated manpower regulations; technical personnel. Can Chem & Process Ind 27:77+ F '43
 Labor mobilized. Business Week p50+ My 15 '43
 Labour supply in Canada. Int Labour R 48:225-30 Ag '43
 Labour supply policy in Canada. Int Labour R 47:72-4 Ja '43
 Manpower control in Canada. March 1942 to January 1943. Monthly Labor R 56:896-900 My '43
 When manpower really grows scarce. Fortune 26:68+ D '42

Dayton, Ohio

- Community action gets results. Steel 113:69-70 S 6 '43
 Dayton labor control plan. Factory Management 101:276+ O '43; Dun's R 51:10-12+ O '43
 Dayton solves its labor problem by halting in-migration, using local folk. Ptr Ink 204:39-40 Ag 27 '43

Detroit

- Automotive production methods cut manpower requirements. E. L. Warner, Jr. Automotive & Aviation Ind 87:17+ D 1 '42
 Detroit stopgap; new formula of production control in relation to manpower supply. Business Week p98-9 O 16 '43

LABOR supply—Detroit—Continued

- Job freeze helps, stabilization formula slashes work turnover 80%. Business Week p82+ Ja 30 '43
 Managerial engineers exempt from Detroit job-freeze plan. S A E J 51:sup51 Ja '43
 Oil men battle acute manpower problem in the labor paradise of Detroit. H. Taylor. Nat Pet N 35:19-20+ O 13 '43

Germany

- Conscription of Netherlands labor. For Comm W 10:8+ Mr 27 '43
 Employment of prisoners of war in Germany. Int Labour R 48:316-23 S '43
 Employment policy in Germany. Int Labour R 47:80-3 Ja '43
 Foreign workers and manpower in Germany. P. A. Speak. Monthly Labor R 57:495-8 S '43
 Germany at war; manpower paradox. Economist 145:49 J1 10 '43
 Germany at war; replacing losses. Economist 144:182 F 6 '43
 Man-power allocation in Germany. H. Block. Harvard Business R 21 no2:259-68 [Ja] '43
 New German labor-mobilization order. Monthly Labor R 56:681-2 Ap '43
 Recruiting of Italian metalworkers for Germany, 1941. Monthly Labor R 56:42 Ja '43
 Recruitment of French labour for Germany. Int Labour R 47:312-43 Mr '43
 Soviet workers in Germany; methods of recruitment and conditions of employment. bibliog Int Labour R 47:576-90 My '43

Great Britain

- Best organized; mobilisation of Britain's manpower. Economist 144:420 Ap 3 '43
 British manpower-control experience. T. K. Hitch. Survey of Cur Business 23:16-24 F '43
 Labor conscription; English and German experience. C. S. Slocombe. Personnel J 21:198-202 D '42
 Labour turnover; manpower statistics. Economist 145:264-5, 280 Ag 28 '43
 Man- and woman-power problems; Britain's exhausted reserves. F. B. Makin. Barron's 23:11 Mr 8 '43
 Manpower; a summary of the British experience. E. H. Biddle. Am Water Works Assn J 34:sup 1-2+ D '42
 Manpower available for Britain's war effort. For Comm W 11:19 Ap 3 '43
 Manpower-control policies in Great Britain. Monthly Labor R 55:1134-41 D '42
 Man-power mobilisation in Great Britain. Int Labour R 48:509-12 O '43
 Man-power policy in Great Britain. Int Labour R 47:374-9 Mr '43
 Manpower situation in Great Britain, 1943. Monthly Labor R 57:17-30 J1 '43
 Progress of British man-power policy. Int Labour R 47:636-8 My '43
 Regional machinery for controlling production; assuring better utilisation of equipment and labour. O. Lyttelton. Engineering 154:354-5 O 30 '42
 Report on British manpower problems in financial field. Comm & Fin Chr 157:1607 Ap 29 '43
 Transfer of Irish workers to Great Britain. Int Labour R 48:338-42 S '43

Louisville

- Louisville plan for manpower control. C. B. Coates. Il Factory Management 101:75-80 F '43

Netherlands

- Industry and labour in Holland. Economist 144:425-6 Ap 3 '43

New Zealand

- Labour supply problems in New Zealand. Int Labour R 48:82-5 J1 '43
 Man-power in New Zealand. Int Labour R 46:741-4 D '42
 Mobilisation of labour in New Zealand. Int Labour R 47:76-7 Ja '43

Pacific coast

- Buffalo plan moves west. Il Steel 113:66-7 S 13 '43
 Drastic manpower plan set-up for West coast. Elec W News ed 120:903 S 11 '43

Palestine

- Manpower-control regulations in Palestine. Monthly Labor R 55:1165 D '42

Portland, Oregon

- Lid on workers; employers are told how many men they may have. Business Week p97-8 O 9 '43

Russia

- Vocational training and labour reserves in the U.S.S.R. Int Labour R 47:499-501 Ap '43
 Wartime employment of women and children in the U.S.S.R. Int Labour R 48:361-4 S '43

United States

- Additional manpower needs great despite continued record volume of employment. Comm & Fin Chr 158:1331 S 30 '43
 American economy in 1942: manpower; with figures for earlier years. C. A. R. Wardwell and R. B. Bangs. Survey of Cur Business 23:4-7 Ja '43
 Army of skilled workers found available for industry in 41 strategic classes. Iron Age 150:65-6 D 31 '42
 Automotive council seeks manpower shortage solution. S. Freeman. Am Mach 87:124e-124f Mr 18 '43
 Can we allot manpower by voluntary methods? W. Haber. Il Dun's R 51:15-19 My '43
 Civilian labor force; tables and charts. map Automotive & Aviation Ind 88:64-7 Mr 15 '43
 Community services vs. lost man-hours. P. V. McNutt. Pub Health Rep 58:1082-8 J1 16 '43
 Concentration of civilian industries offers solution to war manpower problem. L. W. Moffett. Iron Age 151:66, 68 Ap 22 '43
 Crisis foreseen in 1943 war production program. Il Steel 112:22-4 Ja 18 '43
 Dallas formula. Business Week p95 N 6 '43
 Declares manpower pool will be exhausted unless population mobilized. W. R. Austin. Comm & Fin Chr 157:1887 My 20 '43
 Distribution of the labor force, by industries; charts and tables. Automotive & Aviation Ind 88:62-3 Mr 15 '43
 Employment organization in the United States. Int Labour R 47:496-9 Ap '43
 Federal manpower muddle. H. F. Byrd. Manuf Rec 111:25+ D '42
 Forgotten manpower; reply to Fortune's management poll. A. Ramond. Fortune 27:16+ My '43
 Fortune management poll; manpower shortage, its causes and effects, intensity and distribution, cures and palliatives. Fortune 27:138+ F '43
 48-hour and work-or-fight orders; textile status clarified. Textile World 93:59 Mr '43
 Further mobilization of manpower necessary. Survey of Cur Business 23:3-4 S '43
 Half-shift plan taps new manpower reservoir; two-man teams of white collar workers divide turns; Warner & Swasey co. Il Steel 111:22-3 N 30 '42
 How WMC classified cities; labor stringency determines their rank. Business Week p72 Ag 7 '43
 Imported hands; reserves from Mexico, Jamaica, Bahamas. Business Week p22+ My 29 '43
 Inventorying the labor asset. H. S. Swan. Tech R 45:360-1 My '43
 Is there enough manpower? abstract. H. W. Metz. Management R 32:23-4 Ja '43
 It's thin ice. Business Week p85-6+ My 15 '43
 Job freeze eased. Business Week p14-15 My 8 '43
 Job freeze, Louisville order. Business Week p94+ My 1 '43
 Juvenile labour in wartime in the United States. bibliog Int Labour R 48:324-37 S '43
 Labor areas shift. Business Week p92+ S 4 '43
 Labor czar next? Truman committee urges one-man control; organization chart of present control. Business Week p114+ N 21 '42
 Labor priorities; new workers allocated like materials. Business Week p 19-20 Ag 28 '43
 Labor shortage areas defined. Nat Pet N 35:15 F 17 '43

LABOR supply—United States—Continued

Labor shortage areas grow. *Business Week* p90 Je 5 '43
 Labor shortage problem being solved on voluntary basis. P. V. McNutt. *Comm & Fin Chr* 158:1921 N 11 '43
 Labor supply problems. *Fed Res Bul* 29:287-8 Ap '43
 Lift for Boeing? WMC orders shipyards to lay off 14,000 in hope they'll move to aircraft. *Business Week* p 17-18 Ag 28 '43
 Manpower becoming greatest problem in war production; Manpower utilization division is set up by Automotive council for war production. *Automotive & Aviation Ind* 88: 138+ Mr 15 '43
 Manpower; employment in war factories expanded by more than 10,000,000 in year. *Il Steel* 112:218-21+ Ja 4 '43
 Manpower hump still ahead. *Business Week* p15-16 O 9 '43
 Manpower; mobilization of the total victory force. *Index* 22 no 4:73-80 [D] '42
 Manpower outlook. P. V. McNutt. *Factory Management* 101:74-6 Ja '43
 Man-power policy in the United States. *Int Labour R* 47:229-34 F '43
 Manpower pool; 16,000,000 physically handicapped persons available for war work. *Business Week* p58 F 27 '43
 Manpower problem growing; approximate increase in manpower requirements by December 1943 from July 1942. *Survey of Cur Business* 23:3-4 N '42
 Manpower problem more acute. *Survey of Cur Business* 23:3-5 Mr '43
 Manpower program. W. C. Rose. *Min Cong J* 29:35-7 Je '43
 Manpower requirements for 1943-44. *Monthly Labor R* 57:204-11 Ag '43
 Manpower setup, at the moment; chart. *Business Week* p116 N 21 '42
 Manpower squeeze, will it catch coal mining? *Il Coal Age* 48:46-9 Mr '43
 Manpower trends; views of some prominent officials of government and industry. *Factory Management* 101:77-8 Ja '43
 Margin now is womanpower. *Il Fortune* 27: 98-103+ F '43
 More union men in WPB urged to smooth path for shifting workers. *Business Week* p80+ Jl 31 '43
 Nation-wide job stabilization plan cancelled by WMC; to use regional pacts instead. *Comm & Fin Chr* 157:1780 My 13 '43
 National service, by decree; McNutt as chairman of the War manpower commission. *Business Week* p15-16 D 12 '42
 National service law is next; report to executives. *Business Week* p34+ O 9 '43
 Nation's manpower problem. W. H. Spencer. *Am Inst Banking Bul* 25:10-12 Jl '43
 New labor shortage areas. *Comm & Fin Chr* 157:1394 Ap 15 '43
 1943 personnel job. A. H. Young. *Personnel J* 21:207-16 D '42
 Population and war labor supply. W. H. Mautz and J. D. Durand. *Am Stat Assn J* 38:31-42 Mr '43
 Post-war manpower and its capacity to produce. S. M. Livingston. *Survey of Cur Business* 23:10-16 Ap '43
 Problem no.1 on home front. *Steel* 113:83-5 S 20 '43
 Production and manpower. *Survey of Cur Business* 23:3-5 Jl '43
 Regulations relating to war manpower; critical occupations. *Monthly Labor R* 57: 704-11 O '43
 Report on manpower opposes national service act, calls for tightening of overall machinery. *Comm & Fin Chr* 156:1808 N 19 '42
 Ripple in a pool; WMC's work-or-flight order dredged up fewer than 100,000. *Il Business Week* p76+ F 13 '43
 Shortages grow. *Business Week* p98 Jl 17 '43
 Sources of labor supply for war. *Monthly Labor R* 57:212-14 Ag '43
 Stricter control of workers on war-useful jobs made effective by WMC. *Comm & Fin Chr* 158:1622 O 21 '43

Supply and price situation, 1942. *Fed Res Bul* 29:7-12 Ja '43
 Technical manpower. F. V. Harper. *Chem & Eng N* 21:651-2 My 10 '43
 Ten years' progress in management; history of the man situation. C. G. Marcy and M. M. Boring. *A S M E Trans* 65:238-40 Ap '43
 13 steps to manpower mobilization. *Trusts & Estates* 75:438-9 N '42
 Topping the peak in manpower. *Business Week* p124 Je 19 '43
 U.S. and Mexico agree on importing workers. *Comm & Fin Chr* 157:2088 Je 3 '43
 U.S. labor supply; where it is tight and where it is easy. *Business Week* p14 F 20 '43
 Want a new job? right of employees to change jobs. *Business Week* p92 Jl 17 '43
 Wanted; local help in the manpower problem. F. J. McSherry. *Factory Management* 100:78-8 D '42
 WMC curbs transfer of millions of workers in essential industries. *Comm & Fin Chr* 157:1497, 1501+ Ap 22 '43
 Wartime guides for your business; how skilled labor will come under priorities and allocations. W. H. Hillyer. *Barron's* 22:3 D 21 '42
 Washington; both sides of the curtain; measures to relieve manpower pinch. E. Blair. *Barron's* 23:1+ O 4 '43
 Washington stressing efforts to boost industrial efficiency to obtain more manpower. E. Blair. *Barron's* 23:4 Mr 15 '43
 Which will we get, men and/or planes? J. Foster, jr. *Aviation* 42:110-11+ O '43
 Whose manpower? armed services and the civilian agencies are warring over it. *Il Fortune* 27:78-82+ Ja '43
 Will women supply the needed manpower? A. Gray. *Ptr Ink* 204:26+ Ag 20 '43

See also

Farm labor	Military service—
Lumber workers	Labor problems
Manning tables	War manpower
	commission

Washington (state)

Contracts or men? War dept.'s scheme for recruiting 9,000 workers for Boeing. *Business Week* p78+ Jl 31 '43

Western states

Sources of labor supply in West Coast shipyards and aircraft-parts plants. T. P. Kanninen. *Monthly Labor R* 55:926-31 N '42

LABOR turnover

Earnings, hours, and labor turn-over in cordage and twine plants, October 1942. N. Buchalter. *Monthly Labor R* 56:355-6 F '43
 Labor turnover in manufacturing establishments, 1938-1941. *Survey of Cur Business* 1942 Sp p48 [supplemented in monthly numbers]
 Labor turnover in manufacturing establishments, separate rates per 100 employees, by cause of separation; monthly average, 1929-1942, and monthly figures, Jan.-Sept. 1942. *Survey of Cur Business* 22:5 D '42
 Labor turn-over in manufacturing industries, October 1942. *Monthly Labor R* 56:157-61 Ja '43 [cont monthly]
 Labor turnover rates in manufacturing industries, 1940-Feb. 1943; chart. *Survey of Cur Business* 23:5 My '43
 To halt turnover; California pact has stabilized state's construction labor. *Business Week* p102-3 O 30 '43
 Turnover multiplies labor worries. *Business Week* p92 O 2 '43
 Turnover studied; Pacific Coast aircraft men had to hire 150,435 to gain about 20,000 this year. *Business Week* p88+ S 25 '43
 Why women quit. *Business Week* p94 O 16 '43

See also

Employment management
 Employment systems

LABOR unions. See Trade unions

LABORATORIES

Dedicated to war and peace; RCA laboratories building, Princeton, New Jersey. *il* diags Arch Rec 93:57-62 Mr '43

See also

Food laboratories
Gas laboratories
Industrial research
Marine biological
laboratories
Moving picture laboratories
Petroleum laboratories

Pharmaceutical laboratories
Radio laboratories
Rubber laboratories
Sound laboratories
Testing laboratories
Textile laboratories
X ray laboratories

also American gas association—Appliance testing laboratory; Bell telephone laboratories; Radio corporation of America—Laboratories; Underwriters' laboratories

Air conditioning

Air conditioning helps army determine rations required under various climatic conditions; Laboratory of physiological hygiene; University of Minnesota, M. Eigen. *il* diags Heat & Ven 40:21-5 Mr '43
RCA research laboratories has two air conditioning systems and three separate ventilating systems. F. W. Buck. *il* diags plans Heat & Ven 40:51-5 Jl '43

Equipment

Dry-ice cabinet holds temperature within close limits. *il* Sci Am 169:34-5 Jl '43
Laboratory bellows pump. B. B. Corson and W. J. Cerveny. *il* diag Ind & Eng Chem Anal ed 14:899-900 N 15 '42

Limitation order L-144; important features of the amended order. Science 98:358, 401 O 22, N 5 '43

War production board regulations for laboratory equipment and materials, orders L-144, P-43 and P-135. Am Water Works Assn J 35:257-65 F '43

See also

Electric furnaces,
Laboratory

LABORATORIES, Testing. *See* Testing laboratories

LABORATORY furnaces. *See* Electric furnaces, Laboratory

LABORATORY work

New laboratory techniques expedite training in electronics. *il* diags Electronics 16:90-3 Je '43

LABORATORY workers

How Continental oil co. trains women laboratory workers. *il* Oil & Gas J 42:36-7 Je 17 '43

LAC

Brazilian substitute for gum lac from the pine nut; abstract. S. F. Veiga. Chem & Met Eng 50:189 O '43

Guatemalan substitute for lac? For Comm W 11:31 My 22 '43

See also

Shellac

LACE fabrics

Burnt-out effects with acetate rayon. A. J. Hall. Textile Col 65:433-4 O '43

Lace supply limited to 40 per cent. Rayon 24:203 Ap '43

LACEY, Robert A.

Bureau of valuation to have new director. por Ry Age 115:72-3 Jl 10 '43

LACHINE, Quebec**Water supply**

Improved filter-plant operation as a result of prechlorination. A. J. Deslauriers. *il* Water & Sewage 81:40+ Ap '43

LACLEDE gas light company

Change in program filed with SEC, refunding operation. Comm & Fin Chr 158:673-4 Ag 16 '43

Reorganization. Comm & Fin Chr 157:1083 Mr 22 '43

LACQUER and lacquering

Automobile finishes; lacquers giving increased gloss and abrasion-resistance. Automobile Eng 33:360 S '43

Blushing of lacquers. P. B. Torrance. Metal Finishing 41:314-16 My '43

Bonderized and lacquered steel sheet; German investigations; substitute for tinplate in fabrication of food cans. Iron Age 151: 39+ Ja 14 '43; Abstract. Chem Age (Lond) 48:179-81 F 6 '43

Bullet footprints in lacquer aid search for better weapons; use of Stresscoat. *il* Metal Finishing 41:539 Ag '43

Effect of binder on hiding power of enamels. A. Lightbody and D. H. Dawson. bibliog Ind & Eng Chem 34:1452-6 D '42

Finishes for plywood in the aircraft industry. R. B. Anderson. bibliog Mech Eng 65: 506-10 Jl '43

Footprints in lacquer reveal secrets of strains in metal. M. Hetenyi. *il* Sci Am 169:133 S '43

Methods of stress determination in engine parts; use of brittle lacquer, Stresscoat. C. Lipson. *il* diags S A E J 51:105-24 Ap '43

New lacquers for rubber footwear; research in Russia. India Rubber W 108:286+ Je '43
Pearl essence. Metal Finishing 41:123-4 F '43

Progress report on a study of the adhesion of lacquer films on metals. R. L. Savage, W. von Fischer and C. F. Fruton. bibliog *il* diags Paint Oil & Chem E 104:8-14, 16, 36-8 N 19 '42

Refinishing salvaged crown shells with lacquers or enamels. A. H. Warth. *il* Metal Finishing 41:399-401 Je '43

Solvent uses of nitroparaffins. R. L. Ericsson. bibliog *il* Ind & Eng Chem 35:1026-30 O '43

Strength of nitrocellulose solvents; reprinted from Ind & Eng Chem, Feb. '38. A. K. Doolittle. Metal Finishing 41:45-60, 52 bibliog(p57) Ja '43

Stripping lacquer protects fine finishes in process and assembly; Protektol. *il* Iron Age 151:61 F 11 '43

Testing designs of machine parts by the brittle lacquer method. R. G. Anderson. *il* diags Product Eng 14:611-14 O '43

See also

Shellac
Varnish and
varnishing

Statistics

Lacquer sales for 1942; quarterly reports, 1942 and totals for 1940 and 1941. Oil Paint & Drug Rep 143:35 Ja 11 '43

LACTIC acid

d-Lactic acid fermentation of Jerusalem artichokes. A. A. Andersen and J. E. Greaves. bibliog Ind & Eng Chem 34:1522-6 D '42

Lactic acid has many new industrial uses. Sci Am 169:12 Jl '43

Lactic method for making methyl acrylate studied. Oil Paint & Drug Rep 144:7+ S 13 '43

Pyrolysis of lactic acid derivatives; preparation of allyl and methallyl acrylates. C. H. Fisher, C. E. Reinberg and L. T. Smith. bibliog Am Chem Soc J 65:763-7 My '43

Uses of lactic acid and its derivatives in the pharmaceutical industry; abstract. W. R. Jackson. Can Chem & Process Ind 27: 561-2 O '43

LACTOFLAVIN. *See* Vitamins—Vitamin B₂

LACTOGLOBULIN. *See* Globulins

LACTONES

Minor by-products of the pulp industry. L. E. Wise. bibliog Paper Ind 24:1223-7 Mr '43

Oxidoketones in the indene series. C. F. H. Allen and J. W. Gates, jr. bibliog Am Chem Soc J 65:1230-5 Je '43

LACTOSE

Adsorption of riboflavin by lactose; influence of concentration. A. Leviton. *il* Ind & Eng Chem 35:589-93 My '43

LADDERS

Ladder device for applying side sheets. *il* Ry Mech Eng 117:222 My '43

Safety measures

Ladders; their selection, use and maintenance. *il* Nat Safety N 47:80-1+ Mr '43

Procedure for inspection of ladders. Elec W 120:854 S 4 '43

Proper use of equipment. Am Gas Assn Mo 25:150 Ap '43

LAGO petroleum corporation
Creole petroleum corp. to vote on merger.
Comm & Fin Chr 167:1422 Ap 19 '43

LAISSEZ faire
Tutoring in economics. Ptr Ink 205:89 O 22 '43

LA JOLLA, California
Shoreline erosion at La Jolla. F. P. Shepard.
Il Civil Eng 13:80-2 F '43

LAKE, Simon
Simon Lake, submarine genius. H. Manchester. Sci Am 168:120-3 Mr '43

LAKE colors
Mechanism of formation of orange II alumina color lakes. A. Voet. bibliog J Phys Chem 47:191-6 Mr '43

LAKES
Control of micro-organisms and aquatic vegetation in lakes and streams. L. F. Warrick. bibliog Il Water Works & Sewerage 90:267-72 J1 '43

Obtaining water from government lake during a drought. C. Fore. Il Pub Works 74: 25-6+ Je '43

Tibet

Chemistry of lake sediments from Indian Tibet. G. E. Hutchinson, A. Wollack and J. K. Setlow. bibliog pl Am J Sci 241:533-42 S '43

Wisconsin

Study of the plant microfossil succession in the bottom deposits of Crystal Lake, Vilas county, Wisconsin, and the peat of an adjacent bog. L. R. Wilson and A. T. Cross. bibliog Am J Sci 241:307-15 My '43

LAKES, Glacial. See Glacial lakes

LAMB, Arthur Becket, 1880-
Nichols medal address. por Chem & Eng N 21:365-9 Mr 25 '43

LAMB (meat). See Mutton

LAMBERT company
Earnings best since 1934. Barron's 23:4 N 8 '43

LAMINATED glass. See Glass, Laminated

LAMINATED paper. See Paper, Laminated

LAMINATED plastics. See Plastic materials, Laminated

LAMINATED products
More about laminations. Il Mod Packaging 16:50-3+ D '42

LAMINATED textile fabrics. See Textile fabrics, Laminated

LAMINATED wood. See Plywood; Wood, Laminated

LAMME, Benjamin G., medals

Joseph Slepian, Lamme medalist of A.I.E.E.; presentation addresses by S. B. Williams and L. W. Chubb; address by J. Slepian. Elec Eng 62:400-4 S '43

Lamme award of S.P.E.E. to Thomas Ewing French. J Eng Educ 34:4-6 S '43

LAMONT, Thomas William, 1870-
Successor to J. P. Morgan as chairman of international banking house. por Comm & Fin Chr 157:1113+ Mr 25 '43

LA MONT boiler. See Boilers, Water tube—La Mont boiler

LAMONTE, Everett

Nobody's war baby; N. A. Woodworth co., Detroit turns out two million high-precision Wright aircraft motor parts a month. por Fortune 27:138-9 Je '43

LAMPBLACK

See also

Carbon black

LAMPROPOSITY. See Visibility

LAMPS

See also

Electric lamps
Sunshine, Artificial

LANA, Francesco, 1631-1687

Four on war; from the writings of earlier scientists. M. F. Ashley-Montagu. por Tech R 45:316+ Ap '43

LAND, Emory Scott, 1879-
Admiral Land reappointed to Maritime commission. por(pl72) Marine Eng 48:175 My '43

Sketch. por(pl71) Marine Eng 48:173-6 Ag '43

LAND

Role of the land during flood periods. W. W. Horner. map Am Soc C E Proc 69: 665-90 My '43; Discussion. 69:911-14, 1138-43, 1321-3, 1611-19 bibliog(p 1615-16) Je, S, O, D '43

See also

Agriculture	Oil lands
County lands	Real estate business
Drainage	Real property
Irrigation	Rent
Land tenure	Wilderness areas
Mineral lands	
National parks and reserves	

Classification

Classification of irrigable lands. W. W. Johnston. map Am Soc C E Proc 68:667-82 My '42; Discussion. 68:781-2, 1452-4; 69:715 My, O '42, My '43

Subdivision

Excessive land subdivision in the New Jersey pine area. A. T. M. Lee and J. F. Hauck. maps J Land & Pub Util Econ 19: 207-21 My '43

Land-use control in the urban fringe of Portland, Oregon. F. Arpke. map J Land & Pub Util Econ 18:468-80 N '42

Subdivider of today and tomorrow. J. Laronge. J Land & Pub Util Econ 18:423-30 N '42

Subdivision planning standards; time-saver standards. plan Arch Rec 93:84-5 Ja '43

California

See also

Central Valley project, California

Georgia

Soil loss on Georgia farms; rainfall, runoff, and other factors are correlated at government experiment station. J. R. Carreker. Il Civil Eng 12:670-2 D '42

Great Britain

Betterment; Uthwatt, committee report. Economist 143:672-3 N 28 '42

Policies for post-war reconstruction in Great Britain; Scott committee and Uthwatt committee reports. Monthly Labor R 56: 46-52 Ja '43

Uthwatt report; extracts and comments. Arch Forum 77:49-51 N '42

New Jersey

Excessive land subdivision in the New Jersey pine area. A. T. M. Lee and J. F. Hauck. maps J Land & Pub Util Econ 19:207-21 My '43

North Dakota

County land as a factor in adjusting the agriculture of western North Dakota. R. E. Huffman. J Land & Pub Util Econ 18: 495-9 N '42

Selective selling and leasing of county land in North Dakota. M. H. Taylor. J Land & Pub Util Econ 19:238-42 My '43

Oklahoma

See also

Land tenure—Oklahoma

Wisconsin

Relocation of manpower and zoning; assisting non-conforming users and other northern Wisconsin settlers. S. Henderson and M. L. Upchurch. J Land & Pub Util Econ 19:3-17 F '43

LAND banks

Federal land banks to charge 4% loan rate. Comm & Fin Chr 158:1513 O 14 '43

LAND grant colleges

Mission of the land-grant colleges in promoting our good neighbor policies among the Latin American republics. E. J. Kyle. Science 97:53-6 Ja 15 '43

Unified command and democracy in agriculture. J. D. Hoskins. Science 96:567-71 D 25 '42

LAND grants, Railroad. See Railroad land grants

LAND settlement

Land and homes for returning servicemen; with analysis by Canadian and New Zealand legislation. D. T. Rowlands. Ann Am Acad 227:143-51 My '43

See also

Land utilization

LAND surveying. See Surveying**LAND tenure**

Land tenure ideal. C. H. Hammar. bibliog J Land & Pub Util Econ 19:69-84 F '43

Land tenure policy goals. J. F. Timmons. bibliog J Land & Pub Util Econ 19:165-79 My '43

See also

Farm ownership	Real property
Landlord and tenant	Rent
Oil lands	

Louisiana

Tenure status of new-ground settlers in Louisiana. J. E. Mason and A. L. Bertrand. J Land & Pub Util Econ 19:233-8 My '43

Oklahoma

Tenure arrangements in Oklahoma oil fields. R. D. Davidson and K. Wernimont. bibliog J Land & Pub Util Econ 19:40-58 F '43

LAND utilization

Attack on Uthwatt report. Economist 144: 537 Ap 24 '43

Betterment; Uthwatt committee report. Economist 143:672-3 N 28 '42

Britain's plans are bold. D. Haskell. II Arch Rec 93:49-56 Mr; 42-9 Ap '43

Campaign against the Uthwatt report. Economist 145:395 S 18 '43

Excessive land subdivision in the New Jersey pine area. A. T. M. Lee and J. F. Hauck. maps J Land & Pub Util Econ 19: 207-21 My '43

Fundamentals of land planning; areas of agreement and disagreement on city and regional planning. M. L. Colean. Arch Forum 79:66-8+ O '43

Land-use control in the urban fringe of Portland, Oregon. F. Arpke. map J Land & Pub Util Econ 18:463-80 N '42

Land values in New Zealand; abstract. W. Nash. Arch Forum 78:36+ Mr '43

National planning for town and country in Great Britain. Int Labour R 47:197-206 F '43

Objectives of area analysis in the northern Sierra Nevada. D. Weeks. J Land & Pub Util Econ 19:153-64 My '43

Ownership of land. Economist 145:35-6 JI 10 '43

Planned communities; a speculative survey of their future. R. Wank. II Arch Rec 93: 44-8 F '43

Policies for post-war reconstruction in Great Britain; Scott committee and Uthwatt committee reports. Monthly Labor R 56:46-52 Ja '43

Recreation livelihood area; northern Wisconsin and upper Michigan. G. S. Wehrwein and H. A. Johnson. bibliog map J Land & Pub Util Econ 19:193-206 My '43

Relocation of manpower and zoning; assisting non-conforming users and other northern Wisconsin settlers. S. Henderson and M. L. Upchurch. J Land & Pub Util Econ 19:3-17 F '43

Rural land use. Science 96:576-7 D 25 '42

Urban redevelopment corporations. A. C. Holden. J Land & Pub Util Econ 18:412-22 N '42

Uthwatt report; extracts and comments. Arch Forum 77:49-51 N '42

See also

Agriculture	Irrigation
Cotton growing	National parks and
Drainage	reserves
Farm management	Regional planning

LAND values

Capitalism or communism or what? land assessments. R. W. Babson. Comm & Fin Chr 158:712 Ag 19 '43

Coming; the helicopter land boom. H. S. Kahm. Barron's 23:3 O 18 '43

LANDERS, Howe Stone, 1885-1943

Sketch. por East Underw 44:28-9 Mr 19 '43; Nat Underw 47:32 Mr 18 '43; Weekly Underw 148:650 Mr 20 '43

LANDING mats, Steel. See Aviation landing stations—Portable landing mats

LANDIS, Walter Savage, 1881-
Chemists' institute medal awarded to Dr Landis. por Oil Paint & Drug Rep 143:3 Ap 19 '43

LANDLORD and tenant

Leases and dilapidations; protection for the tenant. F. E. Sugden. Elec R (Lond) 131: 794-5 D 18 '42

Repairs made insecurely costly to the landlord. Nat Underw 47:32 Ag 12 '43

War-damaged premises; remission or reduction of rent. F. E. Sugden. Elec R (Lond) 133:248 Ag 20 '43

See also

Apartment houses
Real estate business
Rent

LANDON, Alfred Mossman, 1887-

Landon charges new deal fosters Fascist planned economy. por Comm & Fin Chr 158: 517+ Ag 5 '43

LANDSCAPE design

Landscaping the individual house; planting design for houses in residential developments. M. B. Sprout. II plans Arch Forum 79:108-10 O '43

LANDSCAPE gardening

Landscaping sewage treatment plants and sewers; Princeton borough, N.J. I. R. Riker. II Pub Works 74:17-18+ O '43

LANDSLIDES

Soil avalanches on Oahu, Hawaii. C. K. Wentworth. diags Geol Soc Bul 54:53-64, pl 1-2 Ja '43

See also

Mud flow

LANDSTEINER, Karl, 1868-1943

Sketch. M. Heidelberger. Science 98:233-4 S 10 '43

LANGLEY flying machine

1914 tests of the Langley aerodrome. C. G. Abbot. diags Roy Aeronautical Soc J 46: 291-6 D '42; Same. J Aeronautical Sci 10: 31-5 Ja '43

LANGUAGE, Universal

International systems and standards. R. Gregory. Assn of Sp Lib & Inf Bur Proc 1942:18-19

See also

Basic English

LANGUAGE and languages

Origin of language. E. L. Thorndike. Science 98:1-6 JI 2 '43

Some reflections, statistical and other, on a non-material universe. A. J. Lotka. Am Stat Assn J 38:1-15 Mr '43

LANGUAGES, Modern

See also

Basic English
English language
Portuguese language

Study and teaching

See also

German language—
Study and teaching

LANITAL. See Wool, Artificial**LANTERN projection**

Make your own color-slide projector. S. C. Roth. II diags Am Phot 37:38-9 D '43

LANTERN slides

Color on parade. E. A. Hancock. Am Phot 37:18-19 My '43

Preparation of lantern slides. F. J. Van Antwerpen. bibliog II diag Chem & Eng N 21:1445-8 S 10 '43

See also

Slide films

LANTHANUM

Energies of the γ -rays from radioactive scandium, gallium, tungsten, and lanthanum. C. E. Mandeville. bibliog Phys R 64: 147-50 S 1 '43

Isotopes

Gamma-rays from Na²⁴ and La¹⁴⁰. C. E. Mandeville. bibliog Phys R 63:387-8 My 1 '43

LANTHANUM—Isotopes—Continued

Radioactive isotopes of lanthanum. K. E. Weimer, M. L. Pool and J. D. Kurbatov. bibliog chart Phys R 63:67-72 F 1 '43

LANTHANUM chloride

Heats of dilution and relative heat contents of aqueous solutions of lanthanum chloride and lanthanum sulfate at 25°. C. C. Nathan, W. E. Wallace and A. L. Robinson. bibliog Am Chem Soc J 65:790-4 My '43

LANTHANUM sulfate

Heats of dilution and relative heat contents of aqueous solutions of lanthanum chloride and lanthanum sulfate at 25°. C. C. Nathan, W. E. Wallace and A. L. Robinson. bibliog Am Chem Soc J 65:790-4 My '43

LAPPING

See also

Polishing

LAPPING machines

Machine lapping that couldn't be done; Allison division of General Motors. il Am Mach 87:92-3 Ap 15 '43

LARAMIE formation

Cretaceous-tertiary boundary in the Denver basin, Colorado. R. W. Brown. map Geol Soc Bul 54:65-86, pl 1-2 bibliog(p84-6) Ja '43

LARCH

British wood poles; tests on larch and Scots pine. il diag Elec R (Lond) 132:377-9 Mr 19 '43

Larch and Scots pine poles. il diags Electrician 130:77-80 Ja 22 '43

LARD

Lard in the lurch; refrigerated warehouses full to bursting. Business Week p22+ Ag 21 '43

Lard production in Canada. For Comm W 11: 29 Ap 24 '43

Lard weekly reserve ordered by Wickard. Oil Paint & Drug Rep 143:5 F 22 '43

Pictures of processes; lard making. Food Ind 15:68-9 Ag '43

Stabilization of fats and fatty foods. H. S. Mitchell and H. C. Black. bibliog Ind & Eng Chem 35:50-2 Ja '43

Prices

Export lard price premium established. Oil Paint & Drug Rep 144:5+ N 8 '43

LARD oil**Prices**

Lard oil ceilings based on lard cost. Oil Paint & Drug Rep 143:5 Ap 5 '43

LARMOR, Sir Joseph, 1857-

Sir Joseph Larmor and modern mathematical physics. G. D. Birkhoff. Science 97:77-9 Ja 22 '43

LA ROCHE, Chester J. 1892-

Gold medal to C. J. La Roche in recognition of his distinguished services to advertising. por Adv & Sell 36:6-7 F '43
Young & Rubicam loses LaRoche. Adv & Sell 36:26+ S '43

LATENT heat of vaporization. See Vaporization, Heat of

LATENT image. See Photography—Latent image

LATEX. See Rubber latex

LATHES

Applications of live centers. J. G. Jergens. diags Am Mach 87:99 F 18 '43

Automatic lathes. il diags Automobile Eng 32:478-82 N '42

Boring and grinding generator brackets on a vertical turret lathe. il Mach 49:175 D '42

Bullard 74-in. vertical turret lathe. il Ry Mech Eng 117:146 Mr '43

C.V.A. precision capstan lathe. il Automobile Eng 33:204-5 My '43

Cutting off work up to 30 in. diameter; lathe with new type of tool developed by Anthony tool co. il Iron Age 151:60 Ap 1 '43

Design standards for roller-turner tools. R. D. Mack. diags Am Mach 87:87-8 S 2 '43

Edgwick 8-in. centre high-speed lathe. il Engineering 155:86 Ja 29 '43; Automobile Eng 33:82 F '43

Foster Fastermatic lathes with independent turret face feeds. il Am Mach 87:138 F 18 '43; Mach 49:203-4 F '43; Automobile Eng 33:203-4 My '43

Herbert eight-inch high-speed lathe. il Engineer 175:40 Ja 8 '43

Home-made lathe wins \$25 war bond. il Bus Transportation 22:56-7 Ag '43

How to run an engine lathe. il diags Am Mach 87:113-28 J1 8 '43

Hydraulic operation of lathes for the production of shells. W. L. Philip. il diags Engineering 155:396-9, 410, 418-20 My 14-21 '43; Same cond. Engineer 175:367-9, 396-8 My 7-14 '43; Discussion. Engineering 155:374-5 My 7 '43; Engineer 175:371-2 My 7 '43

Lathe, carriage set quickly with dial. O. Craft. diag Am Mach 87:104 Mr 18 '43

Lathe equipped to machine spheres. E. J. Heyman. diag Am Mach 87:107 J1 22 '43

Lathe set-up for threading leadscrew nuts. A. Silvester. diag Am Mach 87:90 Ja 7 '43

Libby builds standardized type H heavy-duty turret lathes and fixed- and sliding-bed machines. il Am Mach 87:125 S 16 '43; Mach 50:181 S '43

Machining top plates on a lathe. R. Bone and J. M. McQuade. diags Am Mach 86:1366 N 26 '42

Minimizes error in 0.00005-in. lathe work; pilot-light indicating set-up. M. M. Cunningham. diag Am Mach 87:90 F 4 '43; Same. Mach 49:173 F '43

Myford centre lathe. il Automobile Eng 33: 413 O '43

Pilot light minimizes error in precision lathe work. diag Iron Age 151:59 F 18 '43

Repairing worn ways on engine lathes by metalizing. C. A. Shaffer. Mach 49:218+ J1 '43

Smart and Brown second-operation lathe. il Automobile Eng 32:529 D '42; Engineering 154:467 D 11 '42

Sommerfeld 50- and 60-in. lathes. il Am Mach 87:136 Mr 27 '43

Spindles drilled faster; use of turret lathes. D. H. Samuelson. il Am Mach 87:74-5 Ja 7 '43

Standard lathe fitted with controls to form-turn parts automatically; forged steel parts for torpedoes. il Steel 112:119 Ap 26 '43

Temperature control gives true leadscrews; development of special precision lathe; Lodge & Shipley machine tool company. F. Schoeffler. il Am Mach 87:90-2 Ag 19 '43

3½-in. centre precision capstan lathe. il Engineering 155:227-8 Mr 19 '43

Turret lathes. il diag Automobile Eng 33:78-8 F '43

See also

Machine shop practice

Machine tools
Screw machines

Accidents

Metal-working lathe accidents. il Nat Safety N 47:24-5+ Je '43

Design

Designing for production welding; motor-mounting base on a turret lathe. H. A. Oldenkamp. il diags Welding J 22:24-6 Ja '43

Ryder automatic lathes; single- and multi-spindle vertical machines. il diags Automobile Eng 33:137-45 Ap '43

Shell lathe design jumps ahead. K. Tech. il diags Machine Design 14:59-62 N '42

Time and materials saved in making stripped turret lathes; Gisholt machine co. il Iron Age 150:55-60 D 10 '42

Wickman multi-spindle automatic lathes. il diags Automobile Eng 33:11-18 Ja '43

Wickman single-spindle automatic lathes. il diags Automobile Eng 33:99-103 Mr '43

Manufacture

Time and materials saved in making stripped turret lathes; Gisholt machine co. il Iron Age 150:55-60 D 10 '42

Safety measures

G-E issues rules for safe lathe operation. Steel 113:132 Ag 23 '43

Herbert safety device for turret lathes. R. Buckley. diags Am Mach 87:92 Ja 7 '43

Safety device for turret lathes. il diag Iron Age 151:62 Mr 11 '43

Turret lathe safety device. Engineer 174: 368 O 30 '42; il Engineering 154:386 N 13 '42; il Automobile Eng 32:522 D '42

LATIN AMERICA

- Latin America, bonanza or boomerang? A. O. Stanley. *Ptr Ink* 203:22+ Je 18 '43
- Latin America practices safety. M. Moas. *il Nat Safety* N 46:32+ N '42
- Letter from Latin America. E. P. Cleary. *map Eng N* 131:501 S 30 '43
- Progress in the other Americas. *il For Comm W* 9:8-9 N 21 '42
- Tools go south; Board of economic warfare sends machinery for essential plants to Latin America. *Business Week* p37-8 Ja 16 '43
- Training plan for Latin-Americans to aid homelands' industrialization. *il Steel* 112:62 F 15 '43
- See also*
- Advertising—Latin America
- Botany, Economic—Latin America
- Cement industry and trade—Latin America
- Credit—Latin America
- Cuba
- Food supply—Latin America
- Investments, Foreign (in Latin America)

Bibliography

- Handbook of Latin American studies: 1941. M. Burgin, ed. 651p \$4 Harvard univ. press, Cambridge, Mass. '42
- Latin American reading list for the general reader. F. I. D. Avellino, comp. *N Y Pub Lib Bul* 46:949-54 N '42

Commerce

- Billion dollar backlog of orders awaits marketers in Latin America. H. N. Elterich. *map Ind Marketing* 28:17-18+ S '43
- Commercial standards cement Inter-American trade. S. C. Saunders. *For Comm W* 12:3-11+ Ag 28 '43
- Co-operative planning by Pan-American nations, given effect by U.S. loans, builds new economic solidarity. *il maps Steel* 112:32, 34-6 Ja 11 '43
- Economics of Latin American oils and fats. B. Levitt. *Chem Ind* 51:706-8 N '42
- Expanding Latin-American market challenges American exporters. J. F. Des Reis. *Sales Management* 52:84+ S 1 '43
- First-hand view of Latin-American industrial markets. F. Johnston. *il Ind Marketing* 23:42, 46+ O '43
- Help Latin America produce more things to sell, and it will be able to buy! G. A. Nichols. *il Ptr Ink* 203:18-20+ Ap 9 '43
- Latin-America: land of present, and future, sales opportunity. J. D. Cathcart. *il Sales Management* 52:18-19 Ja 1; 34+ F 1; 32, 34 Mr 1; 68+ Ap 1; 28, 30 My 1; 22-3 Je 1 '43
- Latin America to join in export plan. *Comm & Fin Chr* 157:1020 Mr 18 '43
- Latin-American credit survey; semi-annual report on collections. P. J. Gray. *map Credit & Fin Management* 45:22-5 F '43
- Latin-American ties tighten. *Business Week* p36+ My 8 '43
- Metric system and Latin-American friendship. O. E. Kraft. *il Dun's R* 51:14-16 Ja '43
- No. 1 postwar market, Latin America. H. R. Weber. *il Adv & Sell* 36:23-4+ O '43
- Offers U.S. manufacturers postwar trade opportunities. *Steel* 112:63-9+ Ap 19 '43
- Plan inter-American trade. H. B. Rogers. *Textile Col* 65:164-7+ Ap '43
- Post-war good neighbor market beckons U.S. advertisers. J. C. Rovensky. *il Ptr Ink* 202:15-17 F 26 '43
- Postwar shopping list. J. F. Chapman. *il Business Week* p 19-20+ Ja 9 '43
- Postwar trade looks up. *Business Week* p86+ Ap 3 '43
- Post-war trade with Latin America. A. R. Edwards. *Comm & Fin Chr* 157:922 Mr 11 '43
- Postwar trade with the Americas. J. C. Rovensky. *il Manuf Rec* 112:42-3+ Ag '43

- Tangled trade; South American export licenses temporarily clamped to ease backlogs. *Business Week* p33-4+ Ja 16 '43
- Total war in South America; struggle for markets there still finds Germany a formidable foe. S. Ross. *Barron's* 23:3 Jl 12; 7-8 Jl 19 '43
- Trade balances and Latin American inflation. *Nat City Bank* p117-19 O '43
- 20 more questions about selling and advertising in Latin-America. *Sales Management* 52:36+ O 15 '43
- 21 questions about selling and advertising in Latin-America. *Sales Management* 52:30+ Ag 15 '43
- U.S. trade with Latin American republics, first quarter of 1943. *For Comm W* 12:35 Jl 24 '43
- U.S. trade with other American republics, first half of 1943. *For Comm W* 12:29 Ag 28 '43
- War knits closer economic ties for American republics. J. C. Rovensky. *il map Steel* 112:74-5+ My 3 '43
- Wartime controls and stimuli upon the foreign trade of Latin America. H. Chalmers. *For Comm W* 11:3-5+ Ap 24; 14-17+ My 1 '43
- What is ahead in the Americas? J. C. Rovensky. *Comm & Fin Chr* 158:1200-1+ S 23 '43

Cultural relations

United States

- Geology texts for Latin America. H. E. Stocking. *Science* 98:198-9 Ag 27 '43
- Unconscious ambassadors; relationships between nations can be no more than the sum of those between individuals. B. S. W. Dodge. *Tech R* 45:185-6+ F '43
- U.S. text-books for students in Latin American universities. E. R. Hall. *Science* 98:15-16 Jl 2 '43

Economic conditions

- Brazil, Argentina, Chile, from an investment standpoint. V. L. Horoth. *Mag of Wall St* 71:633-5+ Ap 3 '43
- Latin-American boom; how much longer? V. L. Horoth. *il Mag of Wall St* 73:63-5+ O 30 '43
- Latin-American credit survey; 30th semi-annual report on credits and collections. P. J. Gray. *Credit & Fin Management* 45:24-6 Ag '43

Foreign relations

United States

- Department of state announces major new economic posts for service in the other American republics. *For Comm W* 9:3+ N 14 '42
- Inter-American affairs of interest to the engineer. J. L. Schley. *il Elec Eng* 62:385-9 S '43
- Paternalism in government should be abolished; development of trade with Latin America urged. W. L. Hemingway. *Comm & Fin Chr* 158:1191+ S 23 '43
- Short wave miracle pulls the Americas together. D. Francisco. *maps Ptr Ink* 205:20-1+ O 15 '43

Industries and resources

- Inter-American development; cooperative activity shapes future trends. W. F. Machold. *For Comm W* 11:3+ My 22 '43
- Paper production mounts in the other Americas. C. R. Budd. *il For Comm W* 9:14-17 D 5 '42
- Postwar shopping list. J. F. Chapman. *il Business Week* p 19-20+ Ja 9 '43

Sanitary affairs

- Sanitation construction in Latin America. *Eng N* 130:518 Ap 15 '43
- Sanitation in Latin-America. G. M. Fair. *il Eng N* 130:210-12 F 11 '43

LATTICE energy. See Crystallography

LAUCK, Charles Harold

- These exponents of one type now outstanding stylists. R. N. McArthur. *Inland Ptr* 111:42 My '43

LAUER, Conrad Newton, 1869-1943

- Sketch. *Franklin Inst J* 236:399 O '43
- Sketch. *Mech Eng* 65:623-4 S '43

LAUGHLIN, Harry Hamilton, 1880-1943
Sketch, C. B. Davenport, *Science* 97:194-5
F 26 '43

LAUNCHING

Construction men build fighting ships; destroyer escort vessels for the navy, *il diags Eng N* 131:15-16 JI 1 '43
Historic accidents and disasters; launch of the Daphne, *diags plans Engineer* 176:238-9+, 258-9 S 24-O 1 '43
Launching a ship; abstract, H. Williams, *Franklin Inst J* 236:410-11 O '43
Launching the Quint fleet; Dionne quintuplets launch five merchant ships, *il Marine Eng* 48:188-90 Je '43
Load indicator for launching triggers, A. R. Anderson, *il diags Marine Eng* 48:204-5 My '43
Pneumatic device launches floating dry docks, O. H. Pilkey, *diags Civil Eng* 13:546-7 N '43
Side-launching of ships, M. Palmieri, *diags Marine Eng* 48:202-4 My; 195-6 JI '43
Side launching on the Great Lakes; model experiments and practice; abstract and discussion, J. H. Fahey, *Marine Eng* 47:142-4 D '42
Tow bridge solves launching problem; Odenbach shipbuilding co. yards, *il Steel* 113:100-1 JI 19 '43

See also

Slipways

LAUNDEROMETER

Cooperative studies on a laboratory method for evaluating synthetic detergents, J. B. Crowe, *Am Dyestuff Rep* 32:237-41 My 24 '43

LAUNDRIES

Ceilings pierced; OPA allows 19 laundries to boost prices but holds down 29 competitors, *Business Week* p97 JI 31 '43
Is the wash late? laundries, short of help, are swamped, *Business Week* p38+ Je 12 '43
Laundries beset; WMC's relief measure no real help, *Business Week* p32+ JI 10 '43
Laundries rebel; irritation of Kansas City owners at OPA delays on price action, *Business Week* p14 S 4 '43
Laundry relief; industry dissatisfied with new OPA formula, *Business Week* p93 O 30 '43
Laundry remedy; relief in shape of price increases, *Business Week* p34+ O 16 '43
Laundry services, *Economist* 145:501-2 O 9 '43
Truss revision adds mezzanine space, J. Feld, *diags Eng N* 131:151 JI 15 '43

Equipment

See Laundry equipment

Sanitation

Destruction of bacteria in the commercial laundry, L. W. Wright, *il Soap & San Chem* 19:31-3+ Ag '43

LAUNDRY

Chemical engineering in the laundry industry, F. C. Harwood, *Chem & Ind* 61:469-72 N 14 '42
Comparison of an aryl sulfonate and soap for the washing in hard water of cotton, linen, spun cellulose-acetate rayon, spun regenerated-cellulose rayon, silk, and wool, V. Ester, and others, *bibliog Am Dyestuff Rep* 32:121-2, 135-41 Mr 15 '43
Cooperative studies on a laboratory method for evaluating synthetic detergents, J. B. Crowe, *Am Dyestuff Rep* 32:237-41 My 24 '43
Effect of laundering and laundry-bleaching processes on cotton, linen and viscose fabrics, E. Honegger and A. Schnyder, *pl Textile Inst J* 34:T29-40 Je '43
Factors in soap building; abstract, L. W. Wright, *Soap & San Chem* 19:62 Je '43
Properties of detergent solutions; comparison of detergent action and whiteness retention of laundry soap builders, T. H. Vaughn and A. Vittoni, jr, *bibliog Ind & Eng Chem* 35:1094-8 O '43
Rubbing and bleeding of dyestuff in printing and dyeing of textiles, *Textile Col* 64:373-6, 411-12, 424-8, 467-71+; 65:34-7 Ag-O '42, Ja '43
T.N.T. washing formula, *Soap & San Chem* 18:63 D '42

What laundries and drycleaners expect of fabrics, W. E. Coughlin, *Textile Col* 65:435-6+ O '43 (to be cont)

See also

Soap

LAUNDRY equipment

Chemical engineering in the laundry industry, F. C. Harwood, *Chem & Ind* 61:469-72 N 14 '42
Earnings in manufacture of domestic laundry equipment, 1942, O. F. Brown, *Monthly Labor R* 56:534-41 Mr '43

See also

Laundry machinery

LAUNDRY machinery

Chemical engineering in the laundry industry, F. C. Harwood, *Chem & Ind* 61:469-72 N 14 '42

See also

Pressing machines

Washing machines

LAUNDRY workers

Laundries beset; WMC's relief measure no real help, *Business Week* p32+ JI 10 '43
Laundry blues; labor shortage, *Business Week* p35-6 Mr 6 '43
NYC laundry workers are frozen in jobs, *Comm & Fin Chr* 153:233 JI 15 '43
Women's wages in laundries in New York state, 1942, *Monthly Labor R* 56:1121 Je '43

LAURIC acid

Direct reduction of certain carboxylic acids to aldehydes, and the preparation of undecaldehyde by a modified Blaise reaction, R. R. Davies and H. H. Hodgson, *Soc Chem Ind J* 62:128 Ag '43

LAURYL sulfonic acid

Foam and emulsion stabilities, S. Ross, *bibliog J Phys Chem* 47:266-77 Mr '43
Liquid dielectrics; sixty-cycle power factors, conductivities, and polar contents of systems containing sulfur or nitrogen compounds in liquid paraffin, J. D. Piper and others, *bibliog Ind & Eng Chem* 34:1505-9 D '42
Migration data in solutions of a colloidal electrolyte; laurylsulfonic acid, M. E. L. McBain, *bibliog J Phys Chem* 47:196-204 Mr '43

LAVA

See also

Pumice

Volcanoes

LAVATORIES

Army lavatory conserves critical materials and water, *il diags plan Eng N* 130:686-7 My 6 '43
Neglected sector, *il Nat Safety N* 47:26-7+ Ja '43
Washrooms and lockers, aids to health and morale, *il Nat Safety N* 47:169+ Mr '43

LAVOISIER, Antoine Laurent, 1743-1794

Anet Antoine Lavoisier, H. G. Fletcher, jr, *por Tech R* 45:478-80 JI '43
Bicentenary of Lavoisier, E. C. Smith, *Engineering* 156:154 Ag 20 '43
En joie et en santé, M. Schofield, *Chem & Ind* 62:321-3 Ag 21 '43
Founder of modern chemistry, *Chem Age (Lond)* 49:193-4 Ag 21 '43
Lavoisier, his scientific work, *Science* 98:sup 10 Ag 27 '43

LAW

Marketing legislation before 78th Congress, *Ptr Ink* 202:38 F 5 '43
Marketing legislation enacted by Congress in 1942; a review of laws affecting management, selling and advertising, *Ptr Ink* 202:30, 35-7 F 5 '43
U.S. Supreme court decisions of 1942; review of its opinions in cases affecting selling and advertising, *Ptr Ink* 202:24, 28 F 5 '43

See also

Administrative law

Advertising—Laws

and regulations

Automobile laws and

regulations

Banking law

Bankruptcy

Building laws and

regulations

Commercial law

Copyright

Corporation law

Damages

Drugs—Laws and

legislation

Food laws and legis-

lation

Fraud

LAW—See also—*Continued*

- Gifts (law) Partnership
- Government regula- Patent laws and
- tion of industry legislation
- Husband and wife Patents
- Immunity (law) Petroleum laws and
- Income tax regulations
- Insecticides—Laws Probate law
- and regulations Public health laws
- Insurance law Railroad law
- Labor laws and legis- Real property
- lation Remedies (law)
- Law libraries Salesmen—Law
- Legal service Searches and seizures
- Liability Securities—Law
- Limitation of actions State laws
- Liquor laws Taxation
- Maritime law Trusts, Industrial—
- Missing persons Law
- Mortgages Trusts and trustees
- Motor bus lines— Wages—Law
- Laws and regula- Wills
- tions Workmen's com-
- Municipal liability pensation

Indexes

State law index; an index to the legislation of the states of the United States enacted during the biennium 1941-1942. 9th biennial v 765p Library of Congress, Legislative reference service; \$1.75 Supt. of doc, Washington, 25, D.C. '43

Terminology

Simpler wording for our national laws urged. H. H. Heimann. *Comm & Fin Chr* 157:2300 Je 17 '43

LAW libraries

Cataloging manual for law libraries. E. Bas-set. 365p biblog(p269-87) \$5 Wilson, H.W. '42

Subject, method, scholarship and the Li-brary manual. M. A. McKavitt. *Special Lib* 33:357-60 D '42

LAWALL, Charles Elmer, 1891-

Sketch. *por Explosives Eng* 20:316-17 N '42

LAWLER, Florence H. 1893-

Union Life of Richmond, Va. making sound progress with woman as president. T. D. Eaton. *Weekly Underw* 149:221 J1 31 '43

LAWLESS, John T. 1885-

Should each company grow and train its own president? policies of American felt com-pany's president. J. A. Murphy. *por Sales Management* 51:18-21 N 15 '42

LAWN rollers

What an order! 100,000 concrete lawn rollers keep Thomas busy. *Concrete* 51:18 May '43

LAWSON, Lawrence Milton, 1879-

Sketch. *por Civil Eng* 13:49-50 Ja '43

LAWYERS

Attorney as investment adviser; cautions in accepting and exercising investment responsibility. B. F. Winkelman. *Trusts & Estates* 76:537-8, 540-2 Je '43

Incomes in selected professions. E. F. Deni-son. *Survey of Cur Business* 23:23-7 Ag '43

See also

- American bar as- Trust companies—
- sociation Lawyers' coopera-
- Legal service tion
- Women as lawyers

Fees

Brief on lawyer relations. *Trusts & Estates* 77:281-2 S '43

LAYOUT. See Advertisements—Layout; Air-plane factories—Layout; Factories—Layout; Shipyards—Layout**LAYOUT tables. See Machine shops—Equip-ment****LEA, Frederick Charles**

Portrait. *Inst Mech Eng J & Proc* 149:front Ap '43

LEACHING

Graphical approach to leaching problems. C. A. Lee. *diags Chem & Met Eng* 50:126-8 Je '43

Leached derivatives of arsenopyrite and chromite. R. Blanchard. *il Econ Geol* 37: 596-626 N '42

Post-mine leaching of galena and marmatite at Broken Hill. M. D. Garretty and R. Blanchard. *il map Econ Geol* 37:365-407 Ag '42; Discussion. F. L. Stillwell and A. B. Edwards. 38:253-4 My '43

Sand leaching at Nangodi; small-scale cy-anidation enterprise in West Africa. W. H. Dennis. *diag Eng & Min J* 144:65-7 Mr '43

See also

Extraction processes

LEAD

Atomic weight of lead from a second sample of pitchblende, Great Bear Lake, N.W.T., Canada. J. P. Marble. *Am Chem Soc J* 64:3047 D '42

Catalysis in the oxidation of lubricating oil. R. G. Larsen and F. A. Armfield. *bibliog il Ind & Eng Chem* 35:581-8 My '43

Corrosion of lead-indium diffusion alloys. J. M. Freund, H. B. Linford and P. W. Schutz. *diags Electrochem Soc Trans* 84 (preprint 7):61-5 O '43

Electrical conduction and recrystallization in thin Pb films deposited at low tempera-tures. E. L. Armi. *bibliog diag Phys R* 63: 451-4 Je 1 '43

Electrons in equilibrium with the penetrat-ing component of cosmic rays in lead at 10,000 feet and at sea level. W. E. Hazen. *bibliog il Phys R* 64:7-10 J1 1 '43

Filter paper method for lead fume collection. L. Silverman and J. F. Ege, Jr. *bibliog il diags J Ind Hygiene* 25:185-8 My '43

Lead as a lubricant. *Can Min J* 64:572 S '43

Lead-bearing magnesium aluminum alloys; effect on mechanical and working proper-ties. *Iron Age* 150:63 D 3 '42

Lead equipment used in industry. F. E. Wormser. *bibliog Metal Prog* 43:223-4 F '43

Lead; occurrence, recovery, and uses of metal and alloys. L. Sanderson. *Can Min J* 64:654-5 O '43

Lead saver of critical materials. *Min Cong J* 29:17 Ja '43

Lead substitutes for copper, tin, zinc. *Am Bld* 64:66-7 D '42

See also

White lead

Analysis

Detection and semiquantitative estimation of group I cations. S. S. Leikind, R. Maur-meyer and M. Cutler. *Ind & Eng Chem Anal* ed 14:871 N 15 '42

Detection of metallic driers in varnishes and oils by spot test analysis. J. V. Atkinson. *bibliog Paint Oil & Chem R* 106:10, 22-3 J1 1 '43

Determination of small amounts of arsenic, antimony, and tin in lead and lead alloys. C. L. Luke. *bibliog il Ind & Eng Chem Anal* ed 15:626-9 O 15 '43

Determination of tetraethyllead in gasoline. L. Schwartz. *Ind & Eng Chem Anal* ed 15: 499-501 Ag 15 '43; Same. *Pet Refiner* 22: 123-5 O '43

Identification of lead in glass; abstract. F. Feigl and Braille. *Glass Ind* 24:475-4 N '43

Microdetermination of lead by dithizone with an improved lead-bismuth separation. K. Bambach and R. E. Burkey. *bibliog Ind & Eng Chem Anal* ed 14:904-7 N 15 '42

Occurrence of lead, tin, and silver in wheat and its milling products. N. L. Kent. *bib-log il Soc Chem Ind J* 61:183-6 D '42

Photometric routine estimation of traces of lead by dithizone; application to materials used in the manufacture of cosmetics. J. Schultz and M. A. Goldberg. *bibliog Ind & Eng Chem Anal* ed 15:155-8 F 15 '43

Polarographic determination of lead in lead-bearing steels. G. Halm and W. C. E. Barnes. *bibliog Ind & Eng Chem Anal* ed 14:867 N 15 '42

Rapid volumetric method for the determina-tion of lead in brass. P. M. Fisk and F. F. Pollak. *Chem Soc J* p41-2 Ja '43

Simplified cell unit for internal electrolysis. R. F. Yeck and O. C. Zischkau. *il diags Ind & Eng Chem Anal* ed 15:221-2 Mr 15 '43

Physiological effect*See also*

Lead poisoning

LEAD—Continued

Prices

Lead at New York, monthly, 1929-1942; tabulation. *Iron Age* 151:210 Ja 7 '43
 Price, wholesale, pig, desilverized (New York) 1938-1941. *Survey of Cur Business* 1942 Sup p143 [supplemented in monthly numbers]
 Wartime price control of copper, lead, zinc; premium price plan. J. D. Sumner. *Min & Met* 24:11-11 Ja '43

LEAD acetates

Lead tetraacetate oxidations in the sugar group; the rates of oxidation of trehalose, levoglucosan, α -methyl-L-sorbosepyranoside, polygalitol, and styracitol in glacial acetic acid. R. C. Hockett, M. T. Dienes and H. E. Ramsden. *bibliog Am Chem Soc J* 65: 1474-7 Ag '43

Lead tetraacetate oxidations in the sugar group; triphenylmethyl ethers of β -methyl-D-arabinopyranoside and of α -methyl-L-fucopyranoside; the determination of their structures. R. C. Hockett and D. F. Mowery, jr. *bibliog Am Chem Soc J* 65:403-9 Mr '43

LEAD alloys

Bearings and bearing corrosion. L. Raymond. *bibliog il diag S A E J* 50:533-7 D '42; Same, without bibliog. *Automobile Eng* 33: 369-72 S '43

Lead; occurrence, recovery, and uses of metal and alloys. L. Sanderson. *Can Min J* 64: 654-5 O '43

New soft solder; lead-arsenic-antimony alloy. R. L. Dowdell and others. *il Metal Prog* 43:56-9+ Ja '43

Possible toxicity of lead alloys; experiments on the dog with solder. K. Salomon and G. R. Cowgill. *bibliog J Ind Hygiene* 25: 91-7 Mr '43

Possible toxicity of lead alloys; experiments on the rat with solder. G. R. Cowgill and K. Salomon. *bibliog J Ind Hygiene* 25:81-90 Mr '43

Analysis

Determination of small amounts of arsenic, antimony, and tin in lead and lead alloys. C. L. Luke. *bibliog il Ind & Eng Chem Anal ed* 15:626-9 O 15 '43

Determination of tin in babbitts, white metal alloys, and bronze. E. T. Saxer and R. E. Minto. *Ind & Eng Chem Anal ed* 15:261-2 Ap 15 '43

Some observations on the use of powders in spectrochemical analysis; lead-tin solders. A. E. Ruehle and E. K. Jaycox. *bibliog il Opt Soc Am J* 33:109-12 F '43

See also

Bearing metals—
 Analysis

LEAD arsenate

Effect of arsenates on the storage of lead. L. T. Fairhall, J. W. Miller and F. L. Weaver. *bibliog Pub Health Rep* 58:955-9 Je 18 '43

LEAD azide

Toxicity of lead azide. L. T. Fairhall and others. *bibliog diag Pub Health Rep* 58:607-17 Ap 9 '43

LEAD burning

Do's and don'ts of lead burning. T. G. Hieronymus. *il diags Elec W* 120:1188, 1190 O 2 '43

Special torch tip for lead burning. *il Elec W* 120:676+ Ag 21 '43

LEAD carbonate

Effect of arsenates on the storage of lead. L. T. Fairhall, J. W. Miller and F. L. Weaver. *bibliog Pub Health Rep* 58:955-9 Je 18 '43

See also

White lead

LEAD chloride

Activity coefficients of lead chloride determined from e. m. f. and solubility data at 25° in ethylene glycol-water solutions. A. B. Garrett, R. Bryant and G. F. Kiefer. *Am Chem Soc J* 65:1905-7 O '43

Lead chloride-ethylene glycol-water system at 25°. A. B. Garrett and others. *Am Chem Soc J* 65:293-4 F '43

LEAD chromate

Electrical conductivity of lead chromate. T. W. Lashof. *bibliog diags J Chem Phys* 11: 196-202 Ap '43

Less toxic lead chromate pigment. A. H. Gowen. *Can Chem & Process Ind* 27:12 Ja '43

Photo-conductivity of lead chromate. J. E. Goldman and A. W. Lawson. *diags Phys R* 64:11-18 Jl 1 '43

LEAD coating

Lead alone, or alloyed with small amounts of tin or zinc, replacement coating for hot galvanizing and hot tinning. J. M. Crowe. *Chem Ind* 52:612 My '43

Lead coating on iron and steel. *Sheet Metal Worker* 34:52 Ag '43

New lead-coating process eliminates use of zinc alloy. W. Yonkman. *il Product Eng* 14:282-3 My '43; Same. *Metal Finishing* 41: 560-1 S '43; Same. *Steel* 113:127, 130-1 N 15 '43; Excerpt. *Elec W* 119:1808 My 29 '43
 Zinc replaced. Western Electric process for coating iron with lead. *Business Week* p76 My 22 '43

LEAD compounds

Lead and zinc pigments and zinc salts sold by domestic manufacturers in the United States, 1941-42. *Chem Ind* 53:414 S '43

Reactions of group IV R4M compounds with silver and copper salts. H. Gilman and L. A. Woods. *bibliog Am Chem Soc J* 65:435-7 Mr '43

See also

Tetraethyl lead

LEAD in the body

Effect of lead absorption on blood calcium. W. V. Jenrette and L. T. Fairhall. *bibliog Pub Health Rep* 58:1001-6 Jl 2 '43

Experimental studies on lead absorption and excretion and their relation to the diagnosis and treatment of lead poisoning. R. A. Kehoe and others. *J Ind Hygiene* 25:71-9 F '43

Identification and localization of lead in bone tissue. L. T. Fairhall. *bibliog Pub Health Rep* 58:209-16, pl 1-2 F 5 '43

LEAD indium alloys

Bearing inspection without contact; silver-plated and lead-indium plated bearings checked by Air-O-Limit and Electrolimit gages. *il diags Am Mach* 87:86-9 Ag 19 '43

LEAD industry and trade

Lead being stockpiled. *E. Vogelsang. Metal Prog* 42:1039+ D '42

Statistics

Lead, 1938-1941. *Survey of Cur Business* 1942 Sup p143

Lead, 1942. F. E. Wormser. *Eng & Min J* 144:67 F '43

Lead; production, exports, etc.; tabulations. *Automotive & Aviation Ind* 88:78 Mr 15 '43
 1940 domestic production of copper-lead-zinc; tabulation. G. M. Fowler. *Eng & Min J* 143:51-2 N '42

Some light on our metal output. *Barron's* 23:6 My 31 '43

United States

Lead finding new markets. *Barron's* 22:12 N 23 '42

Lead has old and new tasks in the war. F. E. Wormser. *il Min Cong J* 29:24-5 F '43

Lead stocks and output decline. *Comm & Fin Chr* 157:2383 Je 24 '43

LEAD iodide

Spot reaction experiments; protective layer effect of thallium iodide and lead iodide on underlying sulfides. F. Feigl. *J Chem Educ* 20:299 Je '43

LEAD metallurgy

Blast furnace for solving blast furnace problems. J. S. Stewart. *il diags Eng & Min J* 144:64-8 Jl '43

Lead metallurgy, 1942. G. L. Oldright. *Eng & Min J* 144:104-6 F '43

Metallurgy of lead, 1942. J. D. MacKenzie. *il Min & Met* 24:64-5 F '43

Modern mill treats the Combined Metals ore. J. B. Blow. *il Min Cong J* 29:24-5 Ap '43

Reclaiming zinc and lead; the treatment of complex residues. A. G. Arend. *il Chem Age (Lond)* 48:11-13 Ja 2 '43

LEAD metallurgy—Continued

Rough milling followed by central milling prolongs life of Wisconsin lead-zinc district. R. E. Morgan. flow sheet il Eng & Min J 144:76-9 Je '43

Secondary tin and lead; the metallurgy of refining. G. E. Behr. bibliog Chem Age (Lond) 48:605-8 Je 5 '43

Tailings re-treatment plant produces flux for lead smelter; Dunker, Hill & Sullivan company recovers siderite. J. B. Huttli. flow sheet Eng & Min J 143:56+ N '42

LEAD miners

Wages in lead and zinc mines and mills in the Tri-State area, June 1943. E. M. Olsen. Monthly Labor R 57:558-63 S '43

LEAD mines and mining**British Columbia**

Kootenay region. T. A. Rickard. bibliog il Can Min J 64:285-95 My '43

Kansas-Oklahoma-Missouri district

Tri-state district strives to maintain output. E. Just. il Eng & Min J 143:69-70 D '42

Wages in lead and zinc mines and mills in the Tri-State area, June 1943. E. M. Olsen. Monthly Labor R 57:558-63 S '43

Missouri

Channel irons for roof control; St Joseph Lead finds them effective at the Leadwood mine. W. W. Weigel. il diag Eng & Min J 144:70-2 My '43

Wisconsin

Rough milling followed by central milling prolongs life of Wisconsin lead-zinc district. R. E. Morgan. flow sheet il Eng & Min J 144:76-9 Je '43

LEAD ores

Metals to win the war; what to look for and where. G. M. Fowler. map Eng & Min J 143:50-2 N '42

See also
Galena

LEAD oxides

Crystal structure of Pb_3O_4 . S. T. Gross. bibliog diags Am Chem Soc J 65:1107-10 Je '43

Lead phthalate in red lead-alkyd resin paints. J. J. Taylor. Paint Oil & Chem R 105:12 Mr 25; 10-11 My 20 '43

Use of lead oxide in glassmaking refractories. A. E. Badger, C. J. Uhrmann and A. C. Ottoson. il Glass Ind 24:465-7, 478+ N '43; Abstract. Cer Ind 41:44+ O '43

Analysis

Determination of active oxygen in the presence of barium and lead. M. Fleischer. Ind & Eng Chem Anal ed 15:31-2 Ja 15 '43

LEAD pencils. See Pencils

LEAD phthalate

Lead phthalate in red lead-alkyd resin paints. J. J. Taylor. Paint Oil & Chem R 105:12 Mr 25; 10-11 My 20 '43

LEAD plating

Bearing inspection without contact; silver-plated and lead-indium plated bearings checked by Air-O-Limit and Electrolimit gages. il diags Am Mach 87:86-9 Ag 19 '43

Lead-coated steel; abstract. G. Soderberg. Metals & Alloys 18:586+ S '43

Lead plating. M. B. Diggins. bibliog il Metal Finishing 41:418-22 Jl '43

Plated lead coatings on steel. G. Soderberg. Steel 113:98, 100+ O 18 '43; Abstract. Iron Age 152:71-2 Ag 5 '43

Some modern rustproof coatings; corrionising and lead plating. H. Simon. Chem Age (Lond) 48:481 My 1 '43

LEAD poisoning

Absorption of lead tetraethyl with radioactive lead as indicator. R. A. Mortensen. bibliog J Ind Hygiene 24:285-8 N '42

Control of the lead hazard in the manufacture of storage batteries. A. W. Elsten and G. Winn. ind Med 12:276-8 My '43

Effect of arsenates on the storage of lead. L. T. Fairhall, J. W. Miller and F. L. Weaver. bibliog Pub Health Rep 58:955-9 Je 18 '43

Encephalopathy from inhaling fumes from burning storage battery boxes. W. D. McNally. J Ind Hygiene 25:29-30 Ja '43

Experimental studies on lead absorption and excretion and their relation to the diagnosis and treatment of lead poisoning. R. A. Kehoe and others. J Ind Hygiene 25:71-9 F '43

Health of lead-exposed storage battery workers. W. C. Dreessen. bibliog flow sheet J Ind Hygiene 25:60-70 F '43

Identification and localization of lead in bone tissue. L. T. Fairhall. bibliog Pub Health Rep 58:209-16, pl 1-2 F 5 '43

Industrial lead poisoning as a clinical syndrome. W. F. Ashe. J Ind Hygiene 25:55-9 F '43

Lead hazard occurring during repair of a burned ship. W. E. Fleischer and F. J. Viles. Ind Med 12:713-14 O '43

Measurement of industrial lead exposure by analyses of blood and excreta of workmen. J. Choleak and K. Bambach. bibliog J Ind Hygiene 25:47-54 F '43

Measurement of industrial lead exposure by determination of stippling of the erythrocytes. L. W. Sanders. bibliog J Ind Hygiene 25:38-46 F '43

Measurement of industrial lead exposures by air analysis. J. Buxell. bibliog J Ind Hygiene 25:35-7 F '43

Plumbism resulting from oxyacetylene cutting of painted structural steel. I. R. Tabershaw, B. P. W. Ruotolo and R. P. Gleason. bibliog J Ind Hygiene 25:189-91 My '43

Possible toxicity of lead alloys; experiments on the dog with solder. K. Salomon and G. R. Cowgill. bibliog J Ind Hygiene 25:91-7 Mr '43

Possible toxicity of lead alloys; experiments on the rat with solder. G. R. Cowgill and K. Salomon. bibliog J Ind Hygiene 25:81-90 Mr '43

LEAD sulfide

See also
Galena

LEAD tetraacetate. See Lead acetates

LEAD tetraethyl. See Tetraethyl lead

LEAD tetramethyl. See Tetramethyl lead

LEAD welding. See Lead burning

LEAD work

Lead, and its job in conservation; plumbers urged to use lead welding in place of soldering. il Dom Eng 161:61 Je '43

LEAD work, Architectural

Sheet lead in war-time. diags Sheet Metal Worker 34:43-4+ Ja '43

LEADERSHIP

Longevity of the eminent. H. C. Lehman. Science 98:270-3 S 24 '43

LEADSCREWS

Minimize backlash in leadscrews. O. E. Hyler. Am Mach 87:107 Je 24 '43

Temperature control gives true leadscrews; development of special precision lathe; Lodge & Shipley machine tool company. F. Schoeffler. il Am Mach 87:90-2 Ag 19 '43

LEADVILLE, Colorado

Twice-used ores; lead and zinc to be extracted from dumps of old silver mines. il Business Week p30 My 8 '43

LEAGUE of nations

League of nations post-war program for world trade and stable economy in all nations. Comm & Fin Chr 158:119 Jl 8 '43

LEAKAGE of gas. See Gas leakage

LEAKAGE of water pipes. See Water pipes—Leakage

LEAR Avia, Inc.

Ten years' progress in airplane electric and radio equipment. L. Gelin. il Aeronautical Eng R 1:127 N '42

LEARNED institutions and societies

See also
Scientific societies
Technical societies

LEASEHOLD bonds. See Bonds, Real estate

LEASES

Leases as they affect mortgage investments. E. S. Campbell. East Underw 44:12 My 21 '43

Soldier and real estate leases. M. Bodfish. Ann Am Acad 227:58-61 My '43

LEASES—Continued**Accounting**

Borrowed capital and 722. J. K. Lasser. J Account 76:67 JI '43

LEAST squares

Simplifications in the statistical analysis of physical-chemical data. G. Egloff and R. C. Kuder. bibliog J Phys Chem 46:926-33 N '42

LEATHER

Care of leather belting. il diag Rayon 24:373-5 JI '43

Care of leather belts and straps. Elec W 119: 1152 Ap 3 '43

Density of leather and its significance. J. R. Kanagy and E. L. Wallace. bibliog diags J Research Nat Bur Stand 31:169-79 S '43

Dogs on the spot; salvaging of hog skins studied. Business Week p44-5 Ap 24 '43

Leather trades chemists; London symposium on war-time problems. Chem Age (Lond) 49:107 JI 31 '43

Leather V-belts introduced. il Iron Age 152: 40 JI 29 '43

Oil seals; leather and synthetic rubber. diags Automobile Eng 33:291-3 JI '43

See also

Belting Sheepskin
Car straps Shoes
Hides and skins Tanning
Shark leather

Cleaning

Dry cleaning leather coats; abstract. L. G. Stockdale. Soap & San Chem 19:58 Mr '43

Leather stain removal; abstract. L. G. Stockdale. Soap & San Chem 19:61 Ja '43

Manufacture

Pneumatic spreader stokers solve conversion problems, save \$25,000; Hunt-Rankin leather co. W. Macmichael. il diag Power 87:598-9+ S '43

See also

Tanning materials

LEATHER, Substitutes for

Replacements for shoe leather. W. Gallay. il Can Chem & Process Ind 27:561-4 O '43

See also

Soles, Plastic

LEATHER Industry and trade**See also**

Hides and skins
Shoe industry and trade

Statistics

Leather and leather manufactures, 1938-1941. Survey of Cur Business 1942 Sup p130-1 [supplemented in monthly numbers]

Brazil

Development of industry in Brazil. For Comm W 12:30-1 S 11 '43

Chile

Growth of Chilean industry. For Comm W 12:25 JI 3 '43

Great Britain

Leather supplies in the United Kingdom. For Comm W 10:35 F 27 '43

India

India's leather industry expanding. C. R. Budd. il For Comm W 12:6-7+ Ag 7 '43

United States

Tanners council discusses production and supplies. Oil Paint & Drug Rep 144:7 N 8 '43

LEATHER research

South African chemical progress; leather research aids chemical industry; abstract. S. G. Shuttleworth. Chem Age (Lond) 47: 427-8 N 14 '42

LEAVES

Analysing plant leaves; a method of determining fertiliser requirements. W. Thomas, W. B. Mack and R. H. Cotton. Chem Age (Lond) 48:600-2 Je 5 '43

Problems in chromatography and in colloid chemistry illustrated by leaf pigments. H. H. Strain. bibliog diags J Phys Chem 46:1151-61 D '42

LEAVITT, Robert Greenleaf, 1865-1942

Sketch. R. L. West. Science 97:195 F 26 '43

LEBANON, Ohio**Water supply**

Changing from artesian to deep well service. L. F. Wertz. il diags Pub Works 74: 34, 36+ F '43

LEBLANC, Nicolas, 1742-1806

Nicolas Leblanc. R. E. Oesper. J Chem Educ 19:567-72; 20:11-20 bibliog(p 19-20) D '42-Ja '43

Nicolas Leblanc, and the founding of the soda industry. T. S. Patterson. Chem & Ind 62:174-7 My 8 '43

LECITHIN

Deterioration of lubricating oils; soybean lecithin as an inhibitor. J. J. Jacobs and D. F. Othmer. bibliog il diag Ind & Eng Chem 35:883-9 Ag '43

Frozen desserts need the right stabilizer. B. I. Masurovsky. bibliog Food Ind 14:66-7 D '42

Lecithin; a shortening extender; abstract. Can Chem & Process Ind 27:13 Ja '43

Lecithin, mystery element of soya. A. Semrad. Barron's 23:28+ S 20 '43

LECTURE method

Elements of teaching. R. L. Starr. N E Water Works Assn J 57:100-9 Je '43

Technique of instructing. G. A. T. Burdett. Electrician 130:569-70, 594 Je 4-11 '43

LEE, John Clifford Hodges, 1887-

Chief, Service of supply, European theatre of operations. por Eng N 131:431+ S 16 '43

LEE, Massachusetts**Streets**

Pre-cast concrete curb in Lee; with cost data. L. A. Airoidi. Pub Works 74:26+ S '43

LEECHES

Strange cargo; Charles Yaccobellis, Long Island city deals in live leeches. il diag Mod Packaging 17:88 N '43

LEG**Protection**

Fortified feet. Nat Safety N 47:19 Mr '43

LEG make-up products

150 leg make-up products. il Ptr Ink 203: 86+ My 14 '43

Rating

Bottled hosiery for leg make-up. Consumers' Research Bul 11:15-17 Je '43

LEGAL advertising

Dividend notices as institutional advertisements. W. Smith. il Ptr Ink 205:22-3+ O 22 '43

LEGAL aid

Legal-aid work in the United States, 1941. Monthly Labor R 56:1158-60 Je '43

LEGAL photography. See Photography, Legal**LEGAL responsibility****See also**

Liability

LEGAL service

Tax returns and the practice of law. J Account 76:2-4 JI '43; Discussion. T. G. Thurston. 76:165 Ag '43

Tax returns and the practice of law; Lowell bar association v. Birdie T. Loeb, et al. J. W. Morton. J Account 76:84-6 JI '43

LEGISLATION**See also**

Law
State laws

LEGISLATIVE bodies**See also**

State legislatures

LEHIGH coal and navigation company

Annual report. Comm & Fin Chr 157:1181 Mr 29 '43

Liquidation plans impossible. Comm & Fin Chr 157:475 F 1 '43

Recovery in Lehigh Coal & Navigation 4 1/2%. 1954. A. Jansen. Barron's 22:18-19 N 30 '42

LEHIGH university

Welding research in our universities. bibliog il Welding J 22:sup185-8 My '43

LEHIGH Valley railroad

Annual report. Comm & Fin Chr 157:1560 Ap 26 '43

LEHIGH Valley railroad—Continued

Lehigh Valley bonds at big discounts. A. Jansen. *Barron's* 23:15-16 F 15 '43
 Railroad securities. *Comm & Fin Chr* 157:181 Ja 14 '43

LEHMAN, Herbert Henry, 1878-

Lehman named director of foreign relief. *Comm & Fin Chr* 156:2068 D 10 '42
 New post for Lehman as assistant to President. *Comm & Fin Chr* 158:1327 S 30 '43
 Sketch. *pors Spectator* (Life ed) 150:74, cover Ja '43

LEHMAN brothers

Banker-retailer; Lehman bros. arranges to buy into Chicago Mail Order. *Business Week* p109-10 N 6 '43

LEHMAN corporation

Lehman buys food and merchandising stocks. *Barron's* 23:4 JI 12 '43

LEISERSON, William M. 1883-

Leiserson, Schwartz appointed to National mediation board. *Ry Age* 114:411-12 F 20 '43
 Portrait. *Business Week* p18 F 20 '43

LEISURE

See also

Recreation

LEITH, Charles Kenneth, 1875-

Presentation of Penrose medal to Charles Kenneth Leith. *por(pi) Geol Soc Proc* 1942:57-62 Ap '43

LEMONADE powders

Storage of synthetic citrus powders; caramelization by citric or tartaric acid and various sugars at high temperatures. W. E. Isaac. *il Ind & Eng Chem* 35:470-4 Ap '43

LEND-lease operations. See World war, 1939—United States—Lend-lease operations

LENGTH measurement

Measurement and influence of fiber length. J. d'A. Clark. *bibliog diags Paper Tr J* 115:36-42 D 24 '42

LENSES

Air conditioning used in lens manufacture; Bausch and Lomb. *Refrig Eng* 46:181 S '43
 Allied plastics company manufactures plastic lenses for gas masks in room kept free from dust. *il Heat & Ven* 40:51-3 Ja '43
 Barlow lens. J. R. Haviland. *Sci Am* 169:141 S '43

Binoculars in mass; Universal camera corp., New York city. *il Fortune* 27:134-5 Je '43

Empirical approach to lens designs; the Huygens eyepiece. W. M. Stempel. *Opt Soc Am J* 33:278-92 Mr '43

Glassed diamond-charged lens grinding tools for precision optics. *il Sci Am* 168:159 Ap '43

One-ray system for designing spherical condensers for moving picture equipment. L. T. Sachtleben. *diags Soc Motion Picture Eng J* 39:358-74 D '42

Optics for photocell hobbyists. G. Dexter. *il diags Radio N* 29:22-3+ Mr '43

See also

Goggles

Optical instruments

Spectacles

Telescope

Testing

Ellison's claim to be originator of auto-collimation test. A. G. Ingalls. *il Sci Am* 169:236-7 N '43

Ophthalmic lens testing instrument. K. N. Ogle and A. Ames, jr. *il diags Opt Soc Am J* 33:137-42 Mr '43

LENSES, Contact

Contact lenses; advances in technique. A. Callahan. *il Sci Am* 167:267-9 D '42

LENSES, Photographing

Calibrating stop values of lenses; photoelectric measurement. D. B. Clark. *diag Electronics* 16:186+ JI '43

LEONARDO DA VINCI, 1452-1519

Four on war; from the writings of earlier scientists. M. F. Ashley-Montagu. *por Tech R* 45:315 Ap '43

LEPROSY

Chaulmoogra oil in the treatment of leprosy. G. W. McCoy. *bibliog Pub Health Rep* 57:1727-33 N 13 '42

Observations on the epidemiology of leprosy. G. W. McCoy. *bibliog Pub Health Rep* 57:1935-43 D 18 '42

Sulfanilamide in the treatment of leprosy. G. H. Paget, F. A. Johansen and Sister Hilary Ross. *Pub Health Rep* 57:1892-9 D 11 '42

See also

Hydnicarpic acid

LEPTOSIN

Anthochlor pigments; the pigments of coreopsis grandiflora. Nutt. T. A. Geissman and C. D. Heaton. *bibliog Am Chem Soc J* 65:677-83 Ap '43

LEPTOSPIRA icterohemorrhagiae. See Weil's disease

LEARNER stores corporation

Retail merchandisers still showing large gains. H. Lawrence. *Barron's* 22:20 N 23 '42

LESS-than-carload freight. See Freight car service—Car load

LESSEPS, Ferdinand Marie de, 1805-1894

Suez canal. *por Comp Air M* 47:6887-9 N '42

LETHANE

Synthetic lethane called solution to rotenone shortage. *Chem & Eng N* 21:788 My 25 '43

Toxicity of two organic thiocyanate insecticides. R. J. Main and H. B. Haag. *Ind Med* 11:531-3 N '42

LETTERHEADS

Judges make their selections and pick the prize winners of the Inland Printer letterhead contest! *il Inland Ptr* 110:42-5 Mr '43

LETTERING

Lettering on engineering drawings; mechanical means. F. P. Kuhl. *il diags Power Pl Eng* 46:89-90 D '42; Same. *Edison Elec Inst Bul* 10:415+ N-D '42; Same. *Gas Age* 90:20-1 N 19 '42; Excerpts. *Elec W* 118:1798 N 28 '42; Heat & Ven 40:41 Ap '43; *Eng N* 130:690 My 6 '43

LETTERS, Business. See Commercial correspondence; Sales letters

LETTERS, Collection. See Collecting of accounts

LETTUCE

Rich byproducts. *Business Week* p56 Ap 24 '43

LEUCEMIA

Enhancement of leukemogenic action of methylcholanthrene by pre-irradiation with X-rays. J. Furth and M. C. Boon. *bibliog Science* 98:138-9 Ag 6 '43

LEUCINE

Chromatography as a means of separating amino acids. J. L. Wachtel and H. G. Cassidy. *bibliog Am Chem Soc J* 65:665-8 Ap '43

Quantitative investigations of amino acids and peptides; equilibria between amino acids and formaldehyde; leucine and *N*-methylleucine. E. H. Frieden, M. S. Dunn and C. D. Coryell. *J Phys Chem* 47:10-20 Ja '43

LEUCOPENIA

Successful treatment of granulocytopenia and leukopenia in rats with crystalline folic acid. F. S. Daft and W. H. Sebrell. *bibliog Pub Health Rep* 58:1542-5 O 15 '43

LEUCOTRIPHENYLMETHANE

Mechanism of formation of leuco-triphenylmethane dyes, and an analogy in the Perkin reaction. R. R. Davies and H. H. Hodgson. *bibliog Soc Dyers & Col J* 59:196-8 S '43

LEUCYLGLYCINE

Thermal data; heats of combustion and free energies of some compounds containing the peptide bond. H. M. Huffman. *bibliog J Phys Chem* 46:885-91 N '42

LEVEES

Pendleton levee failure. K. E. Fields and W. L. Wells. *il diags Am Soc C E Proc* 68:1763-76 D '42; Discussion. 68:1797-1800; 69:949-59 D '42, Je '43

LEVELING

Spirit leveling in Illinois, 1896-1941. 4pts, pt 1-3. maps U S Geol S Bul 930-A:1-481, pl 1-4; 930-B:482-918, pl 1-2, 5-6; 930-C:919-1281, pl 1-2, 7-8 pt 1 pa 65c; pt 2 pa 60c; pt 3 pa 40c Supt. of doc. '42-'43

See also

Surveying

LEVER brothers company

Battle of the suds; court directs acquittal of P. & G. Business Week p100-2 F 20 '43

LEVER brothers, limited, Toronto

Industrial health in Canada; new health centre opened at Lever House. il Ind Med 12:285-9 My '43

LEVERHULME, William Hesketh Lever, 1851-1925

Viscount Leverhulme; first Leverhulme lecture. H. Ballantyne. Chem & Ind 62:363-8 S 25 '43

LEWIS, Isaac McKinney, 1878-1943

Sketch. O. B. Williams. Science 97:480-1 My 28 '43

LEWIS, John Llewellyn, 1880-

Brake on Lewis; strike issue arises again. Business Week p 14-15 Ag 28 '43
John L. reneges. Business Week p64 Ag 7 '43

Lewis forces a showdown on inflation program. E. Blair. Barron's 23:4+ F 15 '43

Lewis is outmaneuvered. Business Week p15 My 22 '43

Lewis plea for AFL membership has political implications. E. Blair. Barron's 23:4 My 24 '43

Lewis slowed, not yet stopped. Business Week p15-16 My 8 '43

Lewis switches; raiding railway labor. Business Week p56 D 26 '42

Lewis' triumph. Business Week p14 My 23 '43

New Lewis strategy. Business Week p96 O 2 '43

Return of the prodigal. por Business Week p17-19 My 29 '43

Special case of John L. Lewis; his philosophy of experience has immediate and long-term dangers. J. Chamberlain. por Fortune 28:106-9+ S '43

LEWIS, Winford Lee, 1878-1943

Sketch. Oil Paint & Drug Rep 143:35 Ja 25 '43

LEWIS institute. See Illinois institute of technology

LEWISITE

War problems in analysis and treatment; detection and removal of mustard gas and lewisite. A. M. Buswell and others. Am Water Works Assn J 35:1303-11 O '43

LEWISTON, Idaho**Water supply**

Lewiston water department saves money by modernizing equipment; with cost data. W. P. Hughes. il Pub Works 74:18-19+ Ap '43

LEXINGTON water power company

Merger into South Carolina electric and gas company. Comm & Fin Chr 157:2349-50; 158:38 Je 21, J1 5 '43

LIABILITY

Avoid liability for injuries to pedestrians. L. T. Parker. Am Gas J 157:26-8 D '42

How gas companies may avoid liability for explosion injuries. L. T. Parker. Am Gas J 159:57-60 O '43

Law on tickets. L. T. Parker. il Bus Transportation 21:548-9 D '42

Liability limitation for jewelry deposited with ship cashier upheld. East Underw 44:42 O 8 '43

Liability of charitable corporations; digest of recent cases. J. L. Roesch. Spectator (Property ed) 8:30-1+ N 26 '42

Liability under the share-the-ride program; digest of recent cases. J. L. Roesch. Spectator (Property ed) 8:38-40 D 10 '42; 34-6 My 20 '43

Limitation of liability for damage to railroad bridge denied by court. East Underw 44:27 J1 16 '43

Swimming pool operator held liable for drowning. Nat Underw 47:32 Ag 12 '43

When is a pilot legally liable? study of pertinent court decisions. L. T. Parker. Aviation 42:231+ Ag '43

See also

Bank liability

Damages

Employers' liability

Government liability

Insurance, Liability

Motor bus lines—

Claims

Municipal liability

State liability

Workmen's compensation

LIABILITY, Municipal. See Municipal liability

LIABILITY insurance. See Insurance, Liability

LIBBEY-OWENS-FORD glass company

Acquisition of Plaskon company approved. Comm & Fin Chr 157:1560 Ap 26 '43

Annual report. Comm & Fin Chr 157:1461 Ap 19 '43

Big tax refund. H. Lawrence. Barron's 23:5 Mr 29 '43

Comments on prices and earnings. Barron's 23:4 N 8 '43

Listing of additional common shares; acquisition of Liberty mirror works. Comm & Fin Chr 158:1639 O 25 '43

LIBBY, McNeill and Libby

Investment audit. H. J. Nelson. Barron's 23:16 J1 5 '43

LIBEL and slander

Libel and slander of discharged employee. C. R. Rosenberg, jr. Burroughs Clearing House 27:48-9 Ag '43

LIBERAL education

Bryn Mawr raises its torch. il Fortune 27: 106-11+ Ap '43

LIBERALISM**See also**

Democracy

LIBERTY

Calls freedom of enterprise base for other four freedoms. N. M. Butler. Comm & Fin Chr 158:1113 S 16 '43

Individual in a corporate world; freedom and security do not go hand in hand. A. Valentine. Comm & Fin Chr 157:1473+ Ap 22 '43
What is our foreign policy? revitalizing and strengthening of international law; is that enough? Fortune 27:126-8 Mr '43

See also

Democracy

Freedom of the press

Religious liberty

LIBRARIANS

Subject, method, scholarship and the Library manual. M. A. McKavitt. Special Lib 33: 357-60 D '42

See also

Platt, Elizabeth

Towar

Salaries

Salaries in public libraries, 1941-42. Monthly Labor R 57:579-80 S '43

LIBRARIES**See also**

Bookbinding

College libraries

Hospital libraries

Library architecture

Library buildings

Branches

Evaluating library procedures and services; coordination of branch office and home office libraries; Curtis publishing company. M. Hasselberg. Special Lib 34:54-6 F '43

Discussion. D. C. Binkley. 34:180-1 My '43

Lakeview branch of the Chicago public library; views, plans, and construction outline. Arch Forum 78:86-8 Je '43

Business branches and departments

Public library service to business; a comparative study of its development in cities of 70,000 and more. M. C. Manley. 217p \$3.50 Newark public library, Newark, N.J. '42

Instruction in use

Instruction in library use; a needed addition to the university curriculum. R. S. Hut-ton. bibliog Assn of Sp Lib & Inf Bur Proc 1942:27-30

Library key; an aid in using books and libraries. Z. Brown. 5th ed rev 133p pa 70c Wilson, H.W. '43

Making books work; a guide to the use of libraries. J. M. Flexner. 271p \$2.50 Simon and Schuster, 1230 6th av. New York '43

Training in the use of libraries as part of the school curriculum. C. H. C. Osborne. bibliog Assn of Sp Lib & Inf Bur Proc 1942: 21-7

Microfilm service

Microfilm reading machines. D. H. Litchfield and M. A. Bennett. bibliog Special Lib 34:15-20, 45-50, 81-8, 123-30, 157-64, 379-84 Ja-May, S '43

LIBRARIES—Microfilm service—Continued

Microfilms in libraries. E. Lancaster-Jones. Assn of Sp Lib & Inf Bur Proc 1942:34-7; Discussion. 64-7

Patent collections

Conservation in the special library; periodicals, photostats, reprints, company documents, patents. R. C. Cibella. Special Lib 34:53+ F '43

Periodical collections

American libraries and foreign periodicals. Science 97:36-7 Ja 8 '43; Same. Special Lib 34:94-5 Mr '43

New trend in magazine reading shown by 300,000 library visitors; facts and thought-provoking articles favored by callers at New York's library. G. M. Flanagan. Sales Management 52:78+ Ag 1 '43

Special library in time of war. E. M. R. Dittmas. Assn of Sp Lib & Inf Bur Proc 1942: 52-5

Picture collections

Modern American library economy as illustrated by the Newark, N.J. free public library; the picture collection; rev. by M. Frebaut. 5th ed 87p pa \$1.25 Wilson, H.W. '43

Protection

Air raid precautions in New York city libraries. E. Brodman. Special Lib 33:370-1 D '42

Reference work

Some methods used in the special library of a research department. J. E. Wright. bibliog Assn of Sp Lib & Inf Bur Proc 1942: 43-51

Slide film collections

Use of slidefilms in libraries. F. M. Brown. Special Lib 33:363-4 D '42

Special collections

Tutwiler collection of southern history and literature. S. A. Maxwell. Special Lib 33: 367-9 D '42

See also

Libraries—Trade union collections

Trade union collections

American labor publications in the library; some special problems. E. M. Grieder. bibliog Special Lib 34:39-44 F '43

Northwest, Pacific

Resources of Pacific Northwest libraries. J. VanMale. 404p \$4 Pacific Northwest library association, Seattle '43

LIBRARIES, Government. See Government libraries

LIBRARIES, Hospital. See Hospital libraries

LIBRARIES, Medical. See Medical libraries

LIBRARIES, Scientific. See Scientific libraries

LIBRARIES, Special

Conservation in the special library; periodicals, photostats, reprints, company documents, patents. R. C. Cibella. Special Lib 34:52-3+ F '43

Few timesaving methods; National oil products company library. Harrison, N.J. M. J. Hoyer. Special Lib 34:403-7 O '43

Information service; the creation and development of an industrial library or information bureau. B. J. Ledoux. Automobile Eng 33:29-30 Ja '43

Library time-savers. L. Keller. Special Lib 34:401-3 O '43

Publicity for the special library. L. O. Lewton. Special Lib 34:111-16 Ap '43

Some methods used in the special library of a research department. J. E. Wright. bibliog Assn of Sp Lib & Inf Bur Proc 1942: 43-51

See also

Advertising libraries
Aeronautic libraries
Business libraries
Chemical libraries
Government libraries
Hospital libraries

Labor libraries and collections
Medical libraries
Publishers' libraries
Shipyards—Libraries
Technical libraries

Directories

Special libraries directory of Greater New York. 93p pa \$1.50; to members \$1 Special libraries assn, New York chapter, New York; for sale by Edith C. Stone, librarian, Simmons-Boardman pub. co., 30 Church st, New York 7 '43

Public relations

Public relations as demonstrated throughout S.L.A. M. C. Manley. Special Lib 34:163-70 My '43

Responsibility for S.L.A.'s public relations program. M. C. Manley. Special Lib 33: 373-5 D '42

Staff manuals

Handbooks of the Hardware Mutual's library. E. C. Turner. Special Lib 34:294-6 Jl-Ag '43

Suggestions for the preparation of a staff manual. R. Boots. Special Lib 34:292-4 Jl-Ag '43

Terminology

Special library semantics; review of Contributions toward a special library glossary, by S. H. Morley. E. M. Fair. Special Lib 34:56-8 F '43

War problems

More war problems in insurance libraries. H. M. Helmle. Special Lib 34:410-13 O '43

SLA war activities committee; a progress report. P. Temple. Special Lib 34:58-62 F '43

Special library in time of war. E. M. R. Dittmas. Assn of Sp Lib & Inf Bur Proc 1942: 52-5

War problems in insurance libraries. E. D. Knapp. Special Lib 34:407-9+ O '43

Wartime problems in science libraries; a symposium. E. Brodman, E. Moyers and others. Special Lib 34:247-57 Jl-Ag '43

Washington, D.C.

Report from the Washington, D.C. chapter to the National biological sciences group. J. Brewer. Special Lib 34:251-3 Jl-Ag '43

LIBRARIES, Technical. See Technical libraries

LIBRARIES and war

Impact of the war on one college library; Riggs memorial library, Georgetown university. P. Temple. Special Lib 34:413-16 O '43

See also

Libraries, Special
—War problems

LIBRARY administration

Operating a technical library under a library committee; Central experiment station. Bureau of mines, Pittsburgh. C. W. Foote. J Chem Educ 20:544-5 N '43

LIBRARY architecture

Additions to Wheaton college. Norton, Mass.; views, plans, and construction outline. Arch Forum 78:81-3 Ja '43

Houghton library of rare books, Harvard university, Cambridge. It plans Arch Rec 94:42-7 Jl '43

Lakeview branch of the Chicago public library; views, plans, and construction outline. Arch Forum 78:86-8 J '43

Library for Carroll college, Waukesha, Wisconsin; views, plans, and construction outline. Arch Forum 78:66-70 Ap '43

LIBRARY binding. See Bookbinding

LIBRARY bookbinding. See Bookbinding

LIBRARY buildings

See also

Library architecture

Air conditioning

Air conditioning to kill bookworms; Howard-Tilton memorial library of Tulane university. Il Dom Eng 161:58, 61+ Mr '43

Bibliography

Preserving books by air conditioning; list of references. Heating-Piping 15:437 Ag '43

LIBRARY employees

See also

Librarians

LIFEBOATS—Continued

New sea packs; New Testament and two signaling mirrors for use on life-saving equipment. *il Mod Packaging* 16:49 JI '43
 Portable lifeboat transmitter. C. Coleman and J. T. Donnelly. *il diag Radio N* 30: 35-6+ JI '43

LIFEBOATS, Rubber

Fortress raft. *il Sci Am* 168:126 Mr '43
 New type life saving raft for use of heavy bomber crews. *il Aero Digest* 42:156+ F '43; *Aeronautical Eng R* 2:115 F '43; *Aviation* 42:261+ Mr '43

One-man parachute boat has unique features. *il Aero Digest* 41:298 N '42

LIFTING

How to prevent weight-lifting injuries. *diags Steel* 113:112, 115-16+ Ag 16 '43
 Lifting has its hazards. *Eng & Min J* 144: 85 JI '43

LIFTING magnets

Electro-lifting magnets. *il diag Mech Handing* 29:238-40 D '42

See also

Roads—Magnetic sweeping

LIGGETT and Myers tobacco company

Comments on prices and earnings. *Barron's* 23:4 N 8 '43
 Earnings, 1939-1942. *Comm & Fin Chr* 157: 475 F 1 '43

LIGHT

Illumination from a non-uniform sky. P. Moon and D. E. Spencer. *diags Illum Eng* 37: 707-22; *Discussion*. 722-6 D '42
 Light units and terminology. *Am Phot* 37: 20-1 Ap '43

Seeing through fog. J. G. Holmes. *Light & Lighting* 36:23-6, 28+ F '43

Significance of stray light in photoelectric filter photometers. M. N. States and J. C. Anderson. *bibliog il Opt Soc Am J* 32:659-66 N '42

See also

Absorption of rays

Brightness

Color

Daylight

Dyes, Fastness of

Eye

Fluorescence

Glass—Light trans-

mission

Light projection

Lighting

Luminescence

Optics

Paper, Effect of light

on

Photochemistry

LIGHT, Colored

Summary of researches in seeing at low brightness-levels. M. Luckiesh and A. H. Taylor. *Illum Eng* 38:189-207 Ap '43

Vision at low brightness-levels. A. H. Taylor. *bibliog il Illum Eng* 38:89-98 F '43

LIGHT, Polarization of. *See Polarization (light)*

LIGHT, Scattering of

Distribution of light intensity within a scattering medium. R. R. Newton. *bibliog J Ap Phys* 14:481-6 S '43

Light-scattering and the graininess of photographic emulsions. A. Goezt and F. W. Brown. *bibliog diag Soc Motion Picture Eng J* 39:375-83 D '42

Mathematics of turbid media. S. Q. Duntley. *bibliog diags Opt Soc Am J* 33:252-7 My '43

Optical characteristics of paper as a function of fiber classification. S. E. Parsons. *bibliog Paper Tr J* 115:34-42 D 17 '42

Simplified formulae for scattered and re-scattered sunlight. L. Silberstein. *Opt Soc Am J* 33:526-32 S '43

See also

Raman effect

LIGHT measurement. *See Photometry*

LIGHT projection

Emergency light turns on automatically when power fails; Exide Lightguard. *il Sci Am* 169:33-4 JI '43

Industry's first line of defense, protective lighting. C. L. Amick. *il diags Power Pl Eng* 47:54-7 Ja '43

Initial design simplifies floodlighting. *diags Elec W* 118:1797-8 N 28 '42

Protection against sabotage. J. A. Summers. *Edison Elec Inst Bul* 10:410-12+, N-D '42; Same. *il Illum Eng* 37:727-37 D '42; Same. *il Sci Am* 168:154-7 Ap '43

See also

Airports—Lighting
 Moving picture projection

LIGHT signals

Eight-way wind direction indicator. J. C. Smith. *Elec W* 119:479 F 6 '43

Full bin warning device. S. H. Kahler. *diags Ry Mech Eng* 117:433 S '43

Remote lamps show motor operation. *diag Elec W* 119:90 Ja 9 '43

See also

Military fireworks

LIGHTERS

Landing vessel production speeded at Charleston. *il Manuf Rec* 112:30-1 F '43

Tank lighter building at Greenport. *il Marine Eng* 48:142-5 Ja '43

LIGHTING

Colors and color-temperature of lighting. C. E. Weitz. *Rayon* 24:501-3 S '43

Contrast and background. *Light & Lighting* 36:91 Je '43

Effectiveness of lighting: its numerical assessment; abstracts of papers at the I.E.S. sessional meeting, London, Feb. 9. *Light & Lighting* 36:20-1 F '43

For better building; lighting developments. *il Arch Rec* 94:82+ JI '43

Good light, a social necessity; the cultivation and dissemination of lighting consciousness in Germany. W. Köhler. *Illum Eng* 38:148-51 Mr '43

Illuminographic camera. F. Benford. *il diags Opt Soc Am J* 33:440-3 Ag '43

Illuminating engineer, his job today and tomorrow. I. L. Illing. *Illum Eng* 38:289-99 Je '43

Illuminating engineering today and tomorrow. W. Harrison. *Illum Eng* 38:369-77 JI '43

Illumination of moving objects. W. D. Wright. *Light & Lighting* 36:72+ My '43

Light and vision; abstract. J. Parsons. *Light & Lighting* 36:67-8 My '43

Lighting for easy seeing. M. Luckiesh. *il Arch Rec* 93:54-9 bibliog(p98) My '43

Lighting problems; summary of a discussion. *diag Light & Lighting* 35:152 D '42

Plan now for postwar lighting promotion. O. R. Doerr. *il Elec West* 91:43-5 S '43

Progress interpretations; report of the I.E.S. committee. *bibliog il diags Illum Eng* 37: 655-90 D '42

Role of lighting in accident prevention. H. L. Logan. *bibliog Elec Eng* 62:143-7 Ap '43

Seeing is believing; abstracts. R. O. Ackerley. *il Light & Lighting* 35:126, 128 O '42; *Electrician* 129:408 O 16 '42

Some engineering aspects of lighting from cold-cathode fluorescent sources. H. J. Chanan and A. C. Barr. *Illum Eng* 37: 769-83; *Discussion*. 783-8 D '42

War lighting tools will find numerous peacetime applications. S. H. Hibben. *Sci Am* 169:27-8 JI '43

What's ahead in lighting? S. B. Williams. *Illum Eng* 38:415-20 S '43

See also

Airports—Lighting

Auditoriums—Light-

ing

Automobiles—Light-

ing

Brightness

Car lighting

Cotton mills—Light-

ing

Daylight

Dentists' offices—

Lighting

Electric lamps

Electric lighting

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Petroleum refineries

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Photometry

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ing

Roads—Lighting

Shipyards—Light-

ing

Store buildings—

Lighting

Street lighting

Subway stations—

Lighting

Television studios—

Lighting

Windows

LIGHTING—Continued

Bibliography

Current articles on lighting. Published in monthly numbers of Illuminating engineering
Literature on lighting. *Light & Lighting* 36: 16 Ja '43 [cont monthly]

Heating aspects

Lighting and air conditioning. H. M. Sharp. *Il Heat & Ven* 39:36-46 N '42

History

Lighting of the House of commons; historical review. *Light & Lighting* 36:8+ Ja '43

Laws and regulations

Post-war legislation on lighting. A. G. Higgins. *Light & Lighting* 35:154, 156 D '42

Standards

Australian standard code of lighting. *Light & Lighting* 35:140, 142+ N '42
Correct lighting protects against sabotage; new American war standard. C. Ainsworth. *Il Ind Stand* 14:36-9 F '43
Footcandle technique and spatial illumination. G. Ainsworth. *Ilum Eng* 38:410-12 S '43
Proposals for a new lighting code. H. C. Weston. *Light & Lighting* 36:4-5; Discussion. 5-6 Ja '43
Recommendations for a standard method for measuring and reporting illumination from artificial sources in building interiors. *diags Ilum Eng* 38:75-88 F '43

Tables, calculations, etc.

Analytical representation of standard response curves. P. Moon and D. E. Spencer. *bibliog Opt Soc Am J* 33:89-103 F '43
Chart for determining foot-candle values. *Light & Lighting* 35:133 O '42
Chart for determining utilization factors. *Light & Lighting* 35:138 N '42
Design of reflectors for fluorescent lamps. R. D. Douglass and D. P. Adams. *diags Ilum Eng* 35:141-7 Mr '43
Exact and approximate formulae for illumination from troffers. D. E. Spencer. *bibliog diag Ilum Eng* 37:596-606 N '42
Illumination from a non-uniform sky. P. Moon and D. E. Spencer. *diags Ilum Eng* 37: 707-22; Discussion. 722-6 D '42
New methods of calculating illumination. P. Moon. *bibliog* (43 titles) *diags Opt Soc Am J* 33:115-22 F '43

War measures

Aircraft defense lighting. W. T. Harding. *Ilum Eng* 37:844-5 D '42
Airport lighting under wartime conditions. G. J. Dykter. *diags Elec Eng* 62:64-7 F '43
Army revises New England dimout rules. *Elec W News* ed 119:2061 Je 19 '43
Bead striping for dimout areas now regular California practice. *Il Concrete* 51:38 O '43
Blackout spraying at low cost; spraying about 25,000 incandescent street-lighting bulbs. *Il Elec W* 118:2118 D 26 '42
City's highway brownout brings public protest; Lowell, Mass. *Elec W News* ed 119: 852 Mr 13 '43
Coast dimouts canceled; conservation continued. *Elec W* 120:1523 O 30 '43
Dimout control devices for street lighting; illustrations. *Elec W* 118:1612-13 N 14 '42
Dimout in detail. *Il diags Elec West* 89:66-7 D '42
Dimout III; down another notch; Pacific Coast area. *Elec West* 89:66 N '42
Discussion of coastal lighting dimout. H. G. Clum. *Ilum Eng* 37:826-9 D '42
Economy in lighting; shops, hotels, restaurants, etc.; Emergency power (defence) fuel direction order no. 1930. *Light & Lighting* 35:124 O '42
Experiences with the dimout. S. G. Hibben. *Il diags Ilum Eng* 38:251-63 My '43
Heat is on; WPB's power conservation program. *Business Week* p24+ Ag 7 '43
Issue stricter rules for east coast dimout area. *Elec W News* ed 118:1707 N 21 '42
Lighting control objectives of the War department. W. S. Everett. *Ilum Eng* 37: 862-5 D '42

Lighting for national defense buildings and services. E. W. Moodie. *Ilum Eng* 38: 300-6 Je '43

Modified dimout for New York subways; silver-bowl lamps keep within army requirements. E. C. Giddings. *Il Transit J* 86: 402-4 N '42

Observations of night sky brightness and lumen with special reference to coastal dimout requirements. H. A. Breeding. *Ilum Eng* 37:830-4 D '42

OWU voluntary brownout plan. *Pub Util* 32: 180-1 Ag 5 '43

Protection against sabotage. J. A. Summers. *Edison Elec Inst Bul* 10:410-12+ N-D '42; Same. *Il Ilum Eng* 37:727-37 D '42; Same. *Il Sci Am* 168:154-7 Ap '43

Seacoast dimouts reemphasized by army. *Elec W News* ed 118:2038-9 D 19 '42

Some comments on the dimout. M. Parker. *Ilum Eng* 37:866-8 D '42

Summer will bring the brownout. *Pub Util* 31:701-4 My 27 '43

Traffic safety in wartime. L. J. Schrenk. *Ilum Eng* 38:353-63 Jl '43

Wartime lighting and safety. E. Vennard. *bibliog Edison Elec Inst Bul* 11:93-101 Ap '43

Wartime lighting limitations and possibilities. M. N. Waterman. *Ilum Eng* 38:438-42 S '43

What, why, how of the conservation program. *Elec W* 120:819-20 S 4 '43

See also

Blackouts in war

LIGHTING, Decorative

See also

Light, Colored

LIGHTING, Electric. See Electric lighting

LIGHTING, Factory. See Factories—Lighting; Lighting, Industrial

LIGHTING, Industrial

Industrial vision. J. R. Wittekind. *Ilum Eng* 38:99-105 F '43

Light for a factory and for a pharmacy. *Il Elec West* 90:56 Mr '43

Nature and causes of small color differences in industry; lighting for their detection. A. H. Taylor. *Il Opt Soc Am J* 32:651-8 N '42

Progress in engineering knowledge during 1942; lighting. P. L. Alger and J. Stokley. *diag Gen Elec R* 46:127-9 *bibliog* (p137) F '43

Progress interpretations; report of the I.E.S. committee. *bibliog Il diags Ilum Eng* 37: 655-90 D '42

Researches on industrial lighting; report on lighting in the fluid milk division of the dairy industry. *Il diags Ilum Eng* 37:561-78 N '42

Salvaging waste light for victory. A. A. Brainerd and R. A. Massey. *Il diags Ilum Eng* 37:738-51 D '42; Same cont. *Edison Elec Inst Bul* 10:341-3+ S '42; Discussion. *Ilum Eng* 37:751-7 D '42

War advances cold cathode linear lighting in Northwest. *Il Elec West* 90:54-5 Mr '43

See also

Airplane assembly plants—Lighting

Cotton mills—Lighting

Factories—Lighting

Factories—Yards—Lighting

Machine shops—Lighting

Petroleum refineries—Lighting

Shipyards—Lighting

LIGHTING, Natural. See Daylight

LIGHTING fixtures

Alternate materials for luminaires. E. H. Robinson. *Il diags Ilum Eng* 37:691-9 D '42; Excerpts. *Elec W* 118:1446-7 O 31 '42

Elements of lighting maintenance. H. R. Heitzman and R. L. Knapp. *Ilum Eng* 38: 391-4 Jl '43

Essential war metals saved by the lighting industry. D. P. Caverly. *Il diag Ilum Eng* 38:133-40 Mr '43

Exact and approximate formulae for illumination from troffers. D. E. Spencer. *bibliog diag Ilum Eng* 37:596-606 N '42

Factory lighting. *Il Elec R (Lond)* 132:137-41 Ja 29 '43

Lighting fittings; annual report of the E.L.F.A. for 1942. *Electrician* 130:368-9 Ap 9 '43

LIGHTING fixtures—Continued

- Maintenance of protective lighting. G. A. Eddy. *Il plan Power El Eng* 46:73-6 N '42;
Same cond. *Ry Age* 113:998-9 D 13 '42
Make lighting fit war workers' needs. W. H. Kahler. *Il diags Factory Management* 100:116-18 D '42
New equipment; lighting and safety apparatus. *Il Iron Age* 151:74-6 F 18 '43
Plastics in wartime lighting; report by committee on illumination materials. M. H. Bigelow. *Ilum Eng* 38:106-8 F '43
Precast concrete for lighting standards; diagrams. *Eng N* 130:448 Mr 25 '43
Tip-up light fixture needs no catwalk. E. R. Bonds. *diags Elec W* 120:344+ J 24 '43
War production rulings as they affect the industry. W. Harrison. *Ilum Eng* 37:814-17 D '42
Wartime lighting limitations and possibilities. M. N. Waterman. *Ilum Eng* 38:438-42 S '43

See also

Electric lamps

Cleaning

- Fluorescent lighting maintenance. J. J. Neidhart. *Il Manuf Rec* 112:32-3+ JI '43;
Same. *Paper Ind* 25:608-10 S '43
Give light a chance. A. K. Gaetjens. *Il Nat Safety N* 48:22-3+ N '43
Maintain plant lighting efficiency; soap and water restores original output. *Il Elec West* 91:58 S '43
No wasted watts; light absorbed by dirty lamps and reflectors isn't helping to win the war. *Il Nat Safety N* 46:27+ N '42
Regular servicing keeps lighting fixtures fit. F. Clayton. *Il diag Factory Management* 101:132-4 Je '43

LIGHTING research

- Illuminagraphic camera. F. Benford. *Il diags Opt Soc Am J* 33:440-3 Ag '43
Illuminagraphs; photographs for computing and analyzing illumination from extended sources. F. Benford. *Il diag Gen Elec R* 46:494-6 S '43
Researches on industrial lighting; report on lighting in the fluid milk division of the dairy industry. *Il diags Ilum Eng* 37:561-78 N '42
Summary of researches in seeing at low brightness-levels. M. Luckiesh and A. H. Taylor. *Ilum Eng* 38:189-207 Ap '43

LIGHTNING

- Lightning and kindred phenomena. L. P. Dudley. *bibliog Electrician* 129:507-10 N 6 '42
Lightning discharge. C. E. R. Bruce and R. H. Golde. *Il diags Inst E E J* 88 pt 2:487-505 bibliog(80 references, p504-5) D '41;
Discussion. 88 pt 2:505-20; 89 pt 2:646-51 D '41, D '42
Lightning striking frequencies for various heights. *Inst Radio Eng Proc* 31:79 F '43
Measurement of lightning voltages and currents in South Africa and Nigeria, 1935 to 1937. F. R. Perry. *bibliog diags pl Inst E E J* 88 pt 2:69-87 Ap '41; Discussion. 88 pt 2: 521-4 D '41; 89 pt 2:653-4 D '42
Progress in engineering knowledge during 1942. P. L. Alger and J. Stokley. *Il Gen Elec R* 46:115-16 F '43

See also

Lightning protection

LIGHTNING arresters

- Report on application of lightning protective devices in wartime. *Elec Eng* 62: Trans 586-8 S '43

LIGHTNING protection

- Application of lightning protective devices in wartime. I. W. Gross. *Elec Eng* 62:Trans 173-5 Ap '43
How to ground a steel roof. *Sheet Metal Worker* 33:46+ D '42
Lightning damage prevented by using proper apparatus. J. A. Civilett. *diags Coal Age* 47:61-3 N '42
Lightning protection of hazardous structures. G. D. McCann. *bibliog il diags map Elec Eng* 61:591-7 D '42
Lightning protection of switchgear, unit substations, or a-c rotating machines closely connected to overhead lines. W. J. Rudge, Jr., V. L. Cox and E. M. Hunter. *Il diags Gen Elec R* 46:551-6 O '43

Lightning protection schemes compared. H. O. Byers. *Elec W* 120:657 Ag 21 '43Lightning protection survey of distribution transformers. W. H. Jones. *Elec W* 119: 941-4 Mr 20 '43110-kv. tie line uses progressive design. E. A. Church and E. G. Stebbins. *Il diags Elec W* 120:1506-8 O 30 '43Protection of structures against lightning; abstracts. J. F. Shipley. *Electrician* 130:494 My 14 '43; *Elec R (Lond)* 132:659 My 14 '43; Discussion. *Electrician* 130:494-6 My 14 '43; *Elec R (Lond)* 132:659-60 My 14 '43Report on application of lightning protective devices in wartime. *Elec Eng* 62:Trans 586-8 S '43Tubes lightning-proof existing 13.8-kv. line. *diags Elec W* 119:325-6 Ja 23 '43Umbrella shields plants from lightning; explosives plants and oil storage centers. *Il Pet Eng* 14:64 Ja '43; Same. *Nat Safety N* 47:25+ Ap '43; Excerpt. *Am Gas J* 158:31 Ja '43; Same. *Chem & Met Eng* 50:98 Ja '43; Abstract. *Comp Air M* 48:6969 F '43*See also*

Electric transient phenomena

LIGHTS inc.

Fantasy in lights; Lights inc., Alhambra, California; products include large part of all U.S. airplane lights and portable airfield-lighting equipment. *Il Fortune* 27:132-3 Je '43

LIGNIN

Enzymic degradation of cell wall substances.

D. H. F. Clayton. *bibliog Chem & Ind* 62: 49-51 F 6 '43Hydrogenation of lignin; abstract. W. Lautsch and G. Plazolo. *Paper Ind* 25:812 O '43Lignin esters of mono- and dibasic aliphatic acids. H. F. Lewis and others. *bibliog Ind & Eng Chem* 35:1113-17 O '43Lignin in phones; new insulating material made from paper waste. *Il Sci Am* 168:84-5 F '43

Lignin plastic developed from farm waste.

Oil Paint & Drug Rep 143:5 My 24 '43

Nature of fiber staining by iodine stains. H. W. Rowe. *bibliog Paper Tr J* 116:26-34 Mr 11 '43

New derivatives of lignin; esters of mono- and dibasic aliphatic acids, from Meadco prepared from soda black liquor. E. B. Brookbank and others. *Paper Tr J* 116:27-8 Ap 1 '43; Same. *Pulp & Pa of Can* 44:805-6 O '43; Same cond. *Paper Ind* 25:436+ JI '43

Producing plastics from lignin. *India Rubber W* 107:302+ D '42Properties of lignin esters. J. J. McNair and E. C. Jahn. *bibliog Paper Tr J* 117:29-33 Ag 19 '43

Studies on lignin and related compounds; hydrogenolysis and hydrogenation of maple wood. J. R. Bower, Jr., L. M. Cooke and H. Hibbert. *bibliog Am Chem Soc J* 65: 1192-5 Je '43

Studies on lignin and related compounds; isolation and identification of 1-(4-hydroxy-3,5-dimethoxyphenyl)-2-propanone and 1-(4-hydroxy-3-methoxyphenyl)-2-propanone from maple wood ethanolysis products; metabolic changes in lower and higher plants. M. Kulka and H. Hibbert. *bibliog Am Chem Soc J* 65:1180-5 Je '43

Studies on lignin and related compounds; isolation of 1-(4-hydroxy-3-methoxyphenyl)-2-propanone and 1-ethoxy-1-(4-hydroxy-3-methoxyphenyl)-2-propanone from the ethanolysis products of spruce wood. E. West, A. S. MacInnes and H. Hibbert. *bibliog Am Chem Soc J* 65:1187-92 Je '43

Studies on lignin and related compounds; re-ethanolysis of isolated lignins. W. B. Hewson and H. Hibbert. *bibliog Am Chem Soc J* 65:1173-6 Je '43

Studies on lignin and related compounds; synthesis and properties of 1-ethoxy-1-(4-hydroxy-3-methoxyphenyl)-2-propanone, 3-ethoxy-1-(4-hydroxy-3-methoxyphenyl)-2-propanone and their methyl ethers. M. Kulka and H. Hibbert. *bibliog Am Chem Soc J* 65:1185-7 Je '43

LIGNIN—Continued

- Studies on lignin and related compounds; synthesis and properties of 3-hydroxy-1-(4-hydroxy-3-methoxyphenyl)-1-propanone. K. A. West and H. Hibbert. *bibliog Am Chem Soc J* 65:1170-2 Je '43
- Studies on lignin and related compounds; the course of formation of native lignin in spruce buds. J. R. Bower, Jr, L. M. Cooke and H. Hibbert. *bibliog Am Chem Soc J* 65:1195-8 Je '43
- Studies on lignin and related compounds; the ethanolysis of maple wood. E. West and others. *bibliog Am Chem Soc J* 65:1176-80 Je '43
- Studies on lignin and related compounds; the ultraviolet absorption spectra of compounds related to lignin. R. F. Patterson and H. Hibbert. *bibliog Am Chem Soc J* 65:1862-9 O '43
- Studies on lignin and related compounds; the ultraviolet absorption spectra of ethanol lignins. R. F. Patterson and H. Hibbert. *bibliog Am Chem Soc J* 65:1869-73 O '43
- Ten years of fundamental research in the pulp, paper, and paperboard industry. H. F. Lewis. *Paper Tr J* 115:34-5 D 31 '42
- Volatile hydrogenation derivatives of lignin. A. Bailey. *bibliog Am Chem Soc J* 65:1165-8 Je '43
- See also*
Paper mills—Waste

Analysis

- Lignin in wood pulp; TAPPI tentative standard T 222 m-43. *Paper Tr J* 117:28-9 S 2 '43
- Lignin in wood; TAPPI tentative standard T 13 m-43. *Paper Tr J* 117:27-8 S 2 '43
- New reaction of sulfanilamide. W. T. Somerville. *bibliog J Chem Educ* 20:238 My '43
- LIGNIN sulfonic acid**
Nature of lignosulphonic acids fractionated by chemical and physical methods. W. A. Schenck. *bibliog Paper Tr J* 117:97-100 S 30 '43

LIGNITE

- Lignite an important chemical reserve; German and United States supply; German hydrogenation process. *Chem Ind* 52:672, 760 Je '43
- Lignite awaits utilization. C. J. Eckhardt, Jr. *il Power Pl Eng* 47:71-3 O '43
- Low-temperature carbonisation; methods which may be adopted in German four-year plan. *Chem Age (Lond)* 47:467 N 28 '42; *Chem & Eng N* 20:1521 N 25 '42

See also

Coal

LIGNOCELLULOSE

- Destructive distillation of lignocellulose. R. Katzen. R. E. Muller and D. F. Othmer. *bibliog diags Ind & Eng Chem* 35:302-5 Mr '43

LILAGENIN

- Sterols; sapogenins; the structure of lilagenin. R. E. Marker and others. *Am Chem Soc J* 65:1434 Jl '43

LILLY, Eli, and company

- Research award of Eli Lilly and company. *Science* 97:156-7 F 12 '43

LILLY, Josiah Kirby, 1861-

- Gets Remington medal. *por Oil Paint & Drug Rep* 142:7+ D 14 '42

LIMA beans

- Judging the maturity of raw lima beans. F. A. Lee. *il Food Ind* 15:70-1+ S '43

LIMA beans, Frozen

- Spending your ration points on frozen vegetables. *Consumers' Research Bul* 11:5-8 My '43

LIME

- Acid waste treatment with lime. W. Rudolfs. *Ind & Eng Chem* 35:227-30 F '43
- Brief history of lime, cement, concrete and reinforced concrete. J. O. Draffin. *bibliog* (114 titles) *diags W Soc E J* 48:14-17 Mr '43
- Compounds merwinite ($3\text{CaO} \cdot \text{MgO} \cdot 2\text{SiO}_2$) and its stability relations within the system $\text{CaO} \cdot \text{MgO} \cdot \text{SiO}_2$ (preliminary report). E. F. Osborn. *bibliog diags Am Cer Soc J* 26:321-32 O 1 '43

- Effect of lime in coagulation of sewage; with cost data. W. Rudolfs. *Pub Works* 73:15-17+ N '42

- Hydrated lime in sewage treatment. W. Rudolfs and W. A. Moggio. *il Pub Works* 74:11-13, 49, 51 Ja '43

- pH factor in the hypochlorite bleaching of wood pulp; single-stage treatment of sulphite pulp. F. Casciani and G. K. Storin. *Paper Tr J* 115:33-40 N 12 '42

- Increasing the reflectivity of concrete by additions of high-calcium lime. C. W. Mullenbruch and B. Marcin. *Eng N* 131:325 Ag 26 '43

- Lime and lime slaking. H. E. Lordley. *Water Works & Sewerage* 90:sup151-2 Je '43

- Lime may be spread with manure; Vermont agricultural experiment station finds advantages. A. R. Midgley. *il Rock Prod* 46:62-3 Ap '43

- Observations on solid-phase inversions of calcium orthosilicate, constituent of dolomite-silica brick. S. Zerfoss and H. M. Davis. *bibliog Am Cer Soc J* 26:302-7 S 1 '43

- Study of literature on separation of magnesia from lime in dolomite and similar materials, 1817 to 1943. G. E. Seil and others. *comps. bibliog* (461 titles) *Am Cer Soc J* 26:218-38 Jl '43

- Treatment of supernatant digester liquor; using ferric chloride and lime. W. Rudolfs and L. L. Faulk. *Pub Works* 74:13-15 Ag '43

- Two-step lime addition for sewage coagulation and pH control. W. Rudolfs and G. B. Nickol. *Pub Works* 74:30, 32 S '43

See also

Cement

Manufacture

- Controlling factors for efficient rotary lime kiln operation. R. Gibbs. *diags Rock Prod* 45:58, 86-90 N '42; 46:50-1+ F; 74-5 Mr '43
- Lime kiln energy streams; diagrams depict heat interchange and energy flow. V. J. Azbe. *Rock Prod* 46:62-4 My '43

See also

Lime kilns

Prices

- Application of 3 percent transportation tax to price. *Rock Prod* 46:109 Mr '43

LIME as fertilizer

- Agricultural liming materials advisory committee. *Rock Prod* 46:109 O '43
- Approximate consumption of liming materials on United States farms during 1942; tabulation. *Rock Prod* 46:45 S '43

- Getting the agricultural lime or limestone on the field; limestone spreader shortage calls for ingenuity. *il Rock Prod* 46:86, 88+ Je '43

- Lime and food. *il Rock Prod* 46:42-9, 61-8+ Ap '43

- Ohio producers promote use of agstone. *il Rock Prod* 46:59-60 My '43

- Production and use of agricultural lime. F. P. Stowell. *Chem & Ind* 62:382-5 O 9 '43; *Abstract. Chem Age (Lond)* 48:533 My 15 '43

History

- Sour soils and liming. J. W. White. *Rock Prod* 46:64-6 Ap '43

LIME industry and trade

- Getting the lime to run the war; methods of increasing capacity. V. J. Azbe. *diags Rock Prod* 45:57+ N '42

- Mexico increasing capacity of cement industry 60%; business opportunities in cement and lime in Mexico and Central America. *Rock Prod* 46:76-80 Ap '43

Advertising

- For victory gardens; what producers are using as promotional literature. *il Rock Prod* 46:55-8+ My '43

LIME kilns

- Charging induced draft kilns. V. J. Azbe. *Rock Prod* 45:72-3+ D '42

- Chart for estimating performance and production rates in rotary kilns. R. Gibbs. *Chem & Met Eng* 50:117-18 Ag '43

- Controlling factors for efficient rotary lime kiln operation. R. Gibbs. *diags Rock Prod* 45:58, 86-90 N '42; 46:50-1+ F; 74-5 Mr '43

LIME kilns—Continued

Getting the lime to run the war; methods of increasing capacity. V. J. Azbe, diags Rock Prod 45:57+ N '42
 Lime kiln energy streams; diagrams depict heat interchange and energy flow. V. J. Azbe. Rock Prod 46:62-4 My '43
 Reinforced brick and concrete substituted for steel kiln shells. V. J. Azbe. diag Rock Prod 46:78-9 S '43

Control

Automatic temperature control of rotary kilns. A. A. Blackman. il diag Rock Prod 46:72-3+ Ag '43

LIME oil

Investigation of the chemical constituents of distilled lime oil (citrus medica, L., var. acida, Brandis) (citrus aurantifolia, Swingle). E. S. Guenther and E. E. Lange-nau. bibliog Am Chem Soc J 65:959-63 My '43

LIME plants

Lime plant behind the battle front; Hawaiian gas products co. V. J. Azbe. il Rock Prod 46:56-8 Je; 56-8+ J1 '43

See also

Lime kilns

Equipment

Stepping up production for war; St Clair lime co. W. B. Lenhart. il Rock Prod 46:71-2, 74 O '43

LIME scale

Removing lime scale from truck bodies. R. W. Mitchell. Rock Prod 46:88 O '43

LIME spreaders

Getting the agricultural lime or limestone on the field; limestone spreader shortage calls for ingenuity. il Rock Prod 46:86, 88+ Je '43

LIMES

Volcano damages Mexican lime crop. For Comm W 11:30 Je 5 '43

LIMESTONE

Blasting a 22ft. limestone ledge over a wide area; Hillsville district, Ohio. il Rock Prod 46:54-5+ Ap '43

Brucite in limestone near Wilkinson, Ontario. I. C. Brown. bibliog il Econ Geol 38:408-19 Ag '43

Chemical lime in central Pennsylvania. G. M. Kay. bibliog il diags maps Econ Geol 38:188-203 My '43

Grinding five sizes in one operation; Thomasville stone and lime co. flow sheet il Rock Prod 46:64-6 O '43

How to remove limestone pebbles from clay. Brick & Clay Rec 103:60 S '43

Industrial applications of chemicals and related materials. Oil Paint & Drug Rep 143: 59 F 22; 42 Mr 1; 40 Ap 5 '43

Limestone production around the clock; flux stone for steel furnaces; Hillsville district near Youngstown, Ohio. W. B. Lenhart. il Rock Prod 46:50 Ap '43

Lithification processes and early oil formation in sediments. W. V. Howard. il Oil & Gas J 42:92-4 Je 17 '43

Mining a deep limestone deposit in Ohio; abstract. G. A. Morrison. Rock Prod 46:71 Mr '43

Permeability of porous solids to gases and liquids. L. Grunberg and A. H. Nissan. bibliog diags Inst Pet J 29:193-225 Ag '43

Quarrying stone for quicklime; Moores lime company. T. L. Wells. il diags Explosives Eng 20:319-23 N '42

Removing large overburden tonnage; limestone bed in Hillsville district, Ohio. il Rock Prod 46:51-2+ Ap '43

See also

Dolomite

Analysis

Accurate determination of calcium without reprecipitation in the presence of aluminum, iron, magnesium, manganese, phosphorus, sodium, and titanium. W. H. McComas, Jr. and W. Erieman. 3d. bibliog Ind & Eng Chem Anal ed 14:929-31 D 15 '42

LIMESTONE association, Processed. *See* Processed limestone association

LIMITATION of actions

Accommodation endorser as surety. C. R. Rosenberg, Jr. Burroughs Clearing House 27:29+ Mr '43

Limitation bar for forfeiture of ship, runs from discovery of facts. East Underw 44:26 Ag 13 '43

Statute of limitations affecting demand note. Banking Law J 60:646-8 Ag '43

Statute of limitations as applicable to renewal note under seal. Banking Law J 60:801-3 S '43

Time limitation on suits against vessels previously owned by government. East Underw 43:23 N 27 '42

LINCOLN, Abraham

Bank's records shed new light on Abraham Lincoln. Burroughs Clearing House 27:6+ F '43

LINCOLN, James F., arc welding foundation

New award program for engineering students announced by Lincoln foundation. Mech Eng 65:90 Ja '43

LINCOLN, James Finney, 1883-

Portrait. Am Gas J 158:16 Je '43

Portrait. Business Week p28 O 2 '43

LINCOLN electric company

Challenges order for renegotiation; practice penalizes efficiency of workers. Comm & Fin Chr 158:1639 O 25 '43

LINEMEN

Keeping up to concert pitch; dummy pole line for training of linemen. il Elec W 119: 94 Ja 9 '43

Lineman, patrolman training. C. T. Malloy. Elec W 119:1470, 1640, 1803 My 1-29 '43

LINEMEN'S equipment

Rubber situation as it affects protective devices for linemen. T. R. Claffy. Edison Elec Inst Bul 11:326 N '43

See also

Gloves, Rubber

LINEN

Linen bullet patches. V. F. Kimball. Textile Col 64:556 D '42

Quantitative analysis of linen in part linen fabrics. W. Krauss. bibliog il Rayon 23: 653-4, 713-14 N-D '42

See also

Flax

LINEN fabrics

Ancient tabernacle fabrics. B. Brown. Textile Col 64:557-8 D '42

Bagging from domestic flax. J. B. Hosmer. il Textile World 93:104-5 Je '43

Tech-flax system of processing flax. G. A. Rosselot. il Rayon 24:301-2, 357-8 Je-J1 '43

Testing

Effect of laundering and laundry-bleaching processes on cotton, linen and viscose fabrics. E. Honegger and A. Schnyder. pl Textile Inst J 34:T29-40 Je '43

LINEN mills

Flax milling. il Elec R (Lond) 133:427-30 O 1 '43

LINING fabrics

Graphical method for obtaining oven dry cotton percentages in government lining fabrics. H. C. Haller and A. Feigendregger. bibliog Am Dyestuff Rep 32:301-2, 311-14 J1 5 '43

LINKS and link motion

Acceleration construction for slider-crank and four-bar linkages. C. L. Brown. Product Eng 14:528-9 Ag '43

How to figure linkages. P. Swain. diags Power 87:130 F '43

Linkages for converting short motions or impulses; diagrams. Product Eng 14:38-9 Ja '43

New five-bar and six-bar linkages in three dimensions. M. Goldberg. bibliog il diags A S M E Trans 65:649-56; Discussion. 656-61 Ag '43

LINN, Milman H. 1861-1940

For fifty years a progressive potter. por Am Cer Soc Bul 22:301-2 S 15 '43

LINNEAN society of London

Microfilm records of the Linnean collections and manuscripts. E. D. Merrill. Science 97:110 Ja 23 '43

LINOLEIC acid

Studies on the chemistry of the fatty acids; the isolation of linoleic acid from vegetable oils by low temperature crystallization. J. S. Frankel, W. Stoneburner and J. B. Brown. *bibliog Am Chem Soc J* 65:259-62 F '43

Studies on the chemistry of the fatty acids; the preparation of alpha- and beta-linoleic acids by debromination in various solvents and observations on the chemistry of these acids. J. S. Frankel and J. B. Brown. *bibliog Am Chem Soc J* 65:415-13 Mr '43

Thiocyanogen absorption of linseed oils; thiocyanogen absorption of linoleic and linolenic acids and composition of linseed oils. E. P. Painter and L. L. Nesbitt. *bibliog Ind & Eng Chem Anal* 15:123-8 F 15 '43.

Analysis

Quantitative spectral analysis of fats. J. H. Mitchell, Jr., H. R. Kraybill and F. P. Zscheile. *bibliog Ind & Eng Chem Anal* 15:1-3 Ja 15 '43

LINOLENIC acid

Component glycerides of linseed oil; segregation by chromatography; the thiocyanogen value of linolenic acid. F. T. Walker and M. R. Mills. *bibliog Soc Chem Ind J* 62:106-9 JI '43

Thiocyanogen absorption of linseed oils; thiocyanogen absorption of linoleic and linolenic acids and composition of linseed oils. E. P. Painter and L. L. Nesbitt. *bibliog Ind & Eng Chem Anal* 15:123-8 F 15 '43

Analysis

Quantitative spectral analysis of fats. J. H. Mitchell, Jr., H. R. Kraybill and F. P. Zscheile. *bibliog Ind & Eng Chem Anal* 15:1-3 Ja 15 '43

LINOTYPE

How to hold clinics that click! Mergenthaler linotype company helps operators and repair men keep machines going. W. B. Patterson. *Ptr Ink* 204:22, 88-9 Ag 20 '43

LINSEED. See Flaxseed**LINSEED oil**

Alkylating of linseed oil. J. G. Smull and J. S. Saylor. *Am Chem Soc J* 64:3054 D '42

Authorized statement by National association on linseed oil situation. *Paint Oil & Chem R* 105:19-20 Ap 22 '43

Component glycerides of linseed oil; segregation by chromatography; the thiocyanogen value of linolenic acid. F. T. Walker and M. R. Mills. *bibliog Soc Chem Ind J* 62:106-9 JI '43

Conservation of linseed oil in interior paints. A. C. Goetz. *Paint Oil & Chem R* 105:11+ Je 3 '43

Conservation of linseed oil in paints. E. F. Hickson. *Metal Finishing* 41:467-9 JI '43

Conserving linseed oil by substitution. *Oil Paint & Drug Rep* 144:56 N 1 '43

Conserving linseed oil in house paints. J. F. Broeker. *Paint Oil & Chem R* 105:10+ Je 3 '43

Drying oils from liquid fats; fractionation by solvent extractions. A. W. Kleinsmith and H. R. Kraybill. *bibliog Ind & Eng Chem* 35:674-6 Je '43

Flaxseed to eat? linseed oil substitute for edible vegetable fats. *Business Week* p48+ F 20 '43

Industrial applications of chemicals and related materials. *Oil Paint & Drug Rep* 143:36 Ja 18; 34 Ja 25 '43

Less linseed oil. *Business Week* p110 JI 24 '43

Linseed oil, a possible replacement in the soap kettle. *Il Soap & San Chem* 19:24-7+ F '43

Linseed oil paint situation. *Oil Paint & Drug Rep* 143:3+ Ap 19 '43

Linseed oil stops scaling of concrete pavement. *Eng N* 131:543 O 7 '43

Linseed oil treatment against scaling. H. D. Metcalf. *Il Roads & Sts* 86:54 S '43

Linseed replacement oil. *Oil Paint & Drug Rep* 144:7+ O 4 '43

Linseed replacement oil must meet TFO-371. *Oil Paint & Drug Rep* 144:3+ Ag 2 '43

Linseed reserves ordered set aside. *Oil Paint & Drug Rep* 143:7+ Je 28 '43

Pleads industry's need for more oil. E. T. Trigg. *Paint Oil & Chem R* 106:20-1 O 7 '43

Possible available substitutes for linseed oil in camouflage paints. A. O. Allen. *Paint Oil & Chem R* 105:14 Je 17 '43

Suggestions for conserving oils in civilian paint products. J. A. Lutz. *Paint Oil & Chem R* 105:10-11 Je 17 '43

Vegetable oils and products, 1938-1941. Survey of Cur Business 1942 Sup p108 [supplemented in monthly numbers]

War production board's authorized statement to paint manufacturers at regional meetings. *Paint Oil & Chem R* 105:14, 16+ Ap 22 '43

Analysis

Thiocyanogen absorption of linseed oils; thiocyanogen absorption of linoleic and linolenic acids and composition of linseed oils. E. P. Painter and L. L. Nesbitt. *bibliog Ind & Eng Chem Anal* 15:123-8 F 15 '43

Prices

Linseed oil, flax prices ceiled. *Oil Paint & Drug Rep* 143:4 My 24 '43

LIPEMIA

Abolishment of alimentary lipemia following injection of heparin. P. F. Hahn. *Science* 98:19-20 JI 2 '43

LIPOXIDASE

Lipid oxidase in soybean meals. R. J. Sumner and D. K. Tressler. *Ind & Eng Chem* 35:921 Ag '43

Lipid oxidase studies; a method for the determination of lipoxidase activity. R. J. Sumner. *bibliog Ind & Eng Chem Anal* 15:14-15 Ja 15 '43

LIQUEFACTION of coal. See Coal liquefaction

LIQUEFACTION of gases. See Gas, Natural—Liquefaction; Gases—Liquefaction

LIQUEFIED petroleum gas

Liquefied petroleum gas in 1942. G. G. Oberfell. *Il Gas Age* 91:29-31+ Ja 14 '43; Same. *Pet Refiner* 22:100+ Ja '43; Same abr. *Oil & Gas J* 41:10-12 Ja 14 '43; Excerpts. *Chem & Eng N* 21:188-9 F 10 '43

LP-gas industry and its relation to the aviation and synthetic rubber programs. P. M. Raigorodsky. *Gas Age* 91:14-16+ F 11 '43; Same. *Pet Refiner* 22:108+ F '43

Maximum liquefied petroleum gas yields sought by wartime gasoline plants. *Il Nat Pet N* 35 pt 2:R7-9 Ja 6 '43

See also

Gas, Natural—

Liquefaction

Safety measures

Storage of liquefied petroleum gases. H. E. Chambers. *Pet Eng* 14:60, 62+ Ja '43

Statistics

Active market in liquefied petroleum gases in 1942. A. T. Coumbe. *Gas Age* 92:31-2+ Ag 12 '43; Excerpts. *Am Gas J* 159:32 Ag '43

Transportation

Transporting and storing liquefied petroleum gases. P. M. Raigorodsky. *Chem & Met Eng* 50:134 F '43

LIQUID air

Laboratory liquid-air storage. J. R. Roebuck. *diags R Sci Instr* 14:90-7 Ap '43

Method of cooling hydrogen discharge tubes. C. Hsueh. *Il diags R Sci Instr* 14:250-3 Ag '43

Refrigerants used for expansion flts. H. Smith. *Elec W* 118:1798+ N 28 '42

LIQUID assets. See Liquidity (economics)

LIQUID carbon dioxide. See Carbon dioxide, Liquid

LIQUID chlorine. See Chlorine, Liquid

LIQUID coal. See Coal liquefaction

LIQUID fuel

Coal tar oils for furnace heating; abstract. F. A. Cray, R. J. Sarjant and H. H. Utley. *Gas J* (Lond) 240:341 D 16 '42

Coal's new horizons; will be source of future gasoline and oil fuel supply. H. L. Ickes. *map Coal Age* 48:54-6, 60-1 Ap '43

Government production of synthetic liquid fuels discussed. *Chem & Eng N* 21:1368 Ag 25 '43

LIQUID fuel—Continued

- Oil from coal and shale deposits. Business Week p50+ J1 31 '43
- Outlook for coal in supplying liquid fuels and coke. A. C. Fieldner. Coal Age 48:109-11 F '43
- Petroleum substitutes study by government argued. Oil Paint & Drug Rep 144:3+ Ag 9 '43
- Plants for liquid fuel from coal proposed in O'Mahoney bill. Coal Age 48:112 Ag '43
- Synthetic-fuel plans approved; hearings before Senate committee. H. D. Ralph. Oil & Gas J 42:34-5 Ag 12 '43
- Urge U.S. speed tests on oil from coal, shale. Nat Pet N 35:14-16 Ag 11 '43

See also

- | | |
|---------------------|----------------------|
| Acetylene | Gas and oil engines— |
| Airplane engines— | Fuel |
| Fuel | Gasoline |
| Alcohol as fuel | Kerosene |
| Automobile engines— | Liquefied petroleum |
| Fuel | gas |
| Automotive fuel | Motor bus engines— |
| Benzol (commercial | Fuel |
| benzene) | Motor truck en- |
| Coal liquefaction | gines—Fuel |
| Diesel engines— | Naphthalene |
| Fuel | Oil burners |
| Fischer-Tropsch | Oil fuel |
| process | Triptane |
| Fuel, Colloidal | |

LIQUID level control

- Emergency liquid-level controller. E. M. Seagrave. diags Instruments 16:330 Je '43
- Floatless electrical liquid-level controller. diag Engineering 155:17 Ja 1 '43
- Lectralevel floatless pump control. II diag Electrician 129:549-50 N 20 '42; Elec R (Lond) 131:685 N 27 '42; Chem Age (Lond) 48:456 Ap 24 '43
- Pumps controlled automatically over phone line to reservoir; water system of Kalamazoo, Mich. diag Electronics 16:148+ Ap '43
- Rubber covered liquid level controller. II India Rubber W 108:574 S '43

LIQUID level indicators

- Application of recording fluid level gauge to oil production. L. C. Halpenny. II Pet Eng 14:133-4, 136 D '42
- Electronic liquid level indicator. S. C. Coroniti. bibliog diags R Sci Instr 13:484-8 N '42
- Resistors watch level in water system reservoir; automatic system controls operations of pumps; Kalamazoo water distribution system. E. E. Norman. II diag Elec W 120: 635-7 Ag 21 '43

See also

- Water level indicators

LIQUID meters*See also*

- Flow meters
- Water meters

LIQUID oxygen. See Oxygen, Liquid**LIQUID sulfur dioxide.** See Sulfur dioxide, Liquid**LIQUIDITY (economics)**

- Present savings and postwar markets. S. H. Slichter. Harvard Business R 22 no 1:1-73 pt 2 [O] '43

LIQUIDS

- Cavitation in an elastic liquid. E. H. Kennard. Phys R 63:172-81 Mr 1 '43
- Correlating fluid viscosity. A. S. Smith and G. G. Brown. bibliog Ind & Eng Chem 35: 705-11 Je '43
- Diffraction of X-rays by liquid elements. N. S. Gingrich. bibliog Rs Mod Phys 15:90-110 Ja '43
- Film formation by pure liquids. C. W. Foulk and J. E. Barkley. bibliog diags Ind & Eng Chem 35:1013-16 S '43
- Flow of liquids under critical conditions. A. H. Nissan. diags Inst Pet J 28:257-73 N '42
- Graphical analysis of transient phenomena in industrial processes. K. J. DeJuhasz. diags Instruments 16:466-72, 508 bibliog(p472, 508) Ag '43

Influence of hindered molecular rotation on the dielectric constants of water, alcohols, and other polar liquids. G. Oster and J. G. Kirkwood. bibliog J Chem Phys 11:175-8 Ap '43

Invertase activity in identical mixtures in the liquid and frozen state. Z. I. Kertesz. bibliog Am Chem Soc J 64:2577-8 N '42

Liquid-liquid extraction. O. Bergelin, F. J. Lockhart and G. G. Brown. bibliog flow sheet II Am Inst Chem Eng Trans 39:173-200 Ap '43

Modern liquid state theory in relation to engineering. R. S. Silver. Engineering 156:64-5, 114-15 J1 23, Ag 6 '43

Partition function for liquids from the harmonic oscillator model. F. A. Matsen and G. M. Watson. bibliog diags J Chem Phys 11:343-8 Ag '43

Statistical theory of liquids. G. Jaffé. bibliog Phys R 62:463-76; 63:313-21 N 1 '42, Ap 1 '43

Theory of stress due to collapse of vapour bubbles in a liquid. R. S. Silver. Engineering 154:501-2 D 25 '42

Thermodynamics of the liquid state; generalized prediction of properties. K. M. Watson. bibliog Ind & Eng Chem 35:393-406 Ap '43

Viscosity function; non-ideal systems. E. P. Irany. bibliog Am Chem Soc J 65:1392-8 J1 '43

See also

- | | |
|--------------------|----------------------|
| Boiling points | Inflammable liquids |
| Brownian movements | Interfacial tension |
| Dew points | Liquid fuel |
| Emulsions | Nitrogen, Liquid |
| Equation of state | Solution (chemistry) |
| Evaporation | Solvents |
| Films | Surface tension |
| Fluids | Viscosity |
| Hydraulics | Water |
| Hydrodynamics | |

LIQUIDS, Inflammable. See Inflammable liquids**LIQUOR laws**

- Timing the drinks; 30 states clamp down on liquor with curfews. Business Week p20+ F 6 '43
- Wets hold firm; progress in legislatures. Business Week p24 My 1 '43

Georgia

- Atlanta dries up; Georgia's capital outlaws public drinking of hard liquor. Business Week p24+ My 1 '43

LIQUOR problem

- Wets wash woes; liquor industry moving to correct conditions near big camps. Business Week p70 D 12 '42

See also

- Alcoholism

LIQUOR traffic

- Dousing the drys. Business Week p22+ N 14 '42
- Drier, but not dry. Business Week p37+ D 26 '42
- Drys advance; Ottawa slashes beer, wine, and liquor output. Business Week p45-6 Ja 2 '43
- Liquor business. M. M. Lebensburger. II Ptr Ink 202:11-13, 48-50 Ja 1 '43
- Liquor combine. II Business Week p20 F 6 '43
- Liquor furlough? Business Week p32+ Ag 14 '43
- Little liquor; distillers see some hope of resuming production. Business Week p80+ S 11 '43

See also

- | | |
|-----------------------|-------------|
| Beer | Liquor laws |
| Distilling industries | Whisky |
| Gin | Wine |

Advertising

- Promotion shoe on other foot! Chicago liquor retailer wants preferred stock allocation from distillers. C. Gavin. II Ptr Ink 204:17+ J1 23 '43

Statistics

- Liquor sales by states. Business Week p82 O 2 '43

Colorado

- Fair trade test; liquor firms enter pleas of nolo contendere in antitrust case to spur judicial clarification of Colorado trade law. Business Week p99-100 Ag 14 '43

LIQUOR traffic—Continued**Panama**

Panama's liquor production, 1941 and 1942.
For Comm W 10:24 Mr 6 '43

LIQUORS

Beverages, 1938-1941. Survey of Cur Business 1942 Sup p14-15 [supplemented in monthly numbers]

See also

Beer Whisky
Brandy Wine
Gin

Rationing

Bottoms up; spread of liquor rationing. Business Week p80+ Je 26 '43

LITHIA. See Lithium oxide

LITHIUM

Marketing lithium minerals; with list of buyers, producers and consumers. L. G. Houk. U S Bur Mines Information Circ 7225:1-14 '42

New reagents for sodium in presence of lithium. E. R. Caley and L. B. Rogers. bibliog Ind & Eng Chem Anal ed 15:32-6 Ja 15 '43

Rare alkalis in New England. F. L. Hess and others. bibliog il diags map U S Bur Mines Information Circ 7232:1-51 '43

Analysis

New selective reagent for lithium; application to the rapid volumetric estimation of lithium in the presence of potassium and sodium. L. B. Rogers and E. R. Caley. Ind & Eng Chem Anal ed 15:209-11 Mr 15 '43

LITHIUM aluminum silicate. See Spodumene

LITHIUM chloride

Phase behavior of lithium palmitate with water and with lithium chloride and water. M. J. Vold. bibliog Am Chem Soc J 65:465-9 Mr '43

LITHIUM compounds

Color test for some highly reactive organometallic compounds. H. Gilman and L. A. Woods. bibliog Am Chem Soc J 65:33-4 Ja '43

Factors determining the course and mechanisms of Grignard reactions; the effect of metallic halides on the reaction of organolithium compounds with organic halides. M. S. Kharasch, D. W. Lewis and W. B. Reynolds. Am Chem Soc J 65:498-500 Ap '43

Metalation of thianthrene dibenzo-*p*-dioxin. H. Gilman and C. G. Stuckwisch. bibliog Am Chem Soc J 65:1461-4 Ag '43

LITHIUM nitrate

Systems: $\text{LiNO}_3\text{-NH}_4\text{NO}_3$ and $\text{LiNO}_3\text{-NH}_4\text{NO}_3\text{-H}_2\text{O}$. A. N. Campbell. Am Chem Soc J 64:2680-4 N '42

LITHIUM ores

See also

Spodumene

LITHIUM oxide

Effects of lithia substitution for soda in vitreous enamel. M. O. Lewis. bibliog Am Cer Soc J 26:77-83 Mr 1 '43

LITHIUM palmitate

Phase behavior of lithium palmitate with water and with lithium chloride and water. M. J. Vold. bibliog Am Chem Soc J 65:465-9 Mr '43

LITHIUM stearate

Lithium soaps in lubricating greases. A. L. Foster. Oil & Gas J 42:77 JI 15 '43

LITHOGRAPHERS national association

Annual meeting, Chicago, May 10-12. Inland Ptr 111:25-8 Je '43

LITHOGRAPHY

Application of the lithographic processes to war work; manufacture of templates, dials, gage sticks, aeroplane loft panels, and similar items. W. H. Wood. Paper Tr J 116:27-9 Je 10 '43; Same cond. Paper Ind 25:314, 316-17 Je '43

Developments in the graphic arts, 1942. M. S. Kantrowitz. Paper Tr J 116:39-40 My 27 '43

Lithographers national association annual meeting, Chicago, May 10-12. Inland Ptr 111:25-8 Je '43

See also

Printing, Offset

LITHOSPHERE. See Earth

LITTLE ROCK, Arkansas

Water supply

Chlorine, a critical material solves a critical problem; sterilization and prevention of deposits in water pipe. L. A. Jackson and W. A. Mayhan. il Water Works & Sewerage 90:113-18 Ap '43

Construction problems of Little Rock's new water supply; abstract. E. A. Elliot. Water Works & Sewerage 89:466-7 N '42

LITTLE Steel formula. See Wages—Regulation

LIVE stock

Industrial effects of feed shortage. Barron's 23:7 Ag 9 '43

Livestock insect control. E. G. Thomssen and M. H. Doner. bibliog il Soap & San Chem 19:96-7+ N '43 (to be cont)

Livestock production and processing. H. C. M. Case. Ann Am Acad 225:216-21 Ja '43

Livestock vs. grain production. Nat City Bank p75-8 JI '43

More animals than meat. Business Week p15-16 Je 19 '43

More food without speculative expansion. E. B. Powell. Bankers Mo 60:310+ JI '43

See also

Agriculture Grazing associations
Cattle industry and Poultry
trade Swine

Feeding

See Feeding and feeding stuffs

Statistics

Livestock, 1938-1941. Survey of Cur Business 1942 Sup p122 [supplemented in monthly numbers]

Sweden's livestock census, 1937, 1941, and 1942. For Comm W 11:31 Ap 17 '43

LIVE stock insurance. See Insurance, Live stock

LIVE stock sheds

Protect cattle and sheep. il diags Am Bld 65:46+ Ag '43

LIVER

Efficacy of a commercial dried liver meal as a riboflavin-rich protein supplement in chick rearing rations. R. H. Common and W. Bolton. Soc Chem Ind J 61:153-5 O '42

Improved apparatus for liver perfusion. H. H. Rostorfer, L. E. Edwards and J. R. Murlin. diag Science 97:291-2 Mr 26 '43

Perfusion of rat livers with estrogen in vitro. J. Schiller and G. Pincus. bibliog Science 98:410-12 N 5 '43

Production of folic acid by rat liver in vitro. L. D. Wright and A. D. Welch. bibliog (20 references) Science 98:179-82 Ag 20 '43

Toxicity and histopathology of some azo compounds as influenced by dietary protein. M. I. Smith, R. D. Lillie and E. F. Stohlmann. bibliog Pub Health Rep 58:304-17 F 19 '43

Diseases

Cirrhosis. Sci Am 168:269-70 Je '43

Fractional cephalin-cholesterol flocculation in hepatic disease. M. Bruger. Science 97:585-6 Je 25 '43

Observations on the toxic effects resulting from exposure to chlorinated naphthalene and chlorinated phenyls with suggestions for prevention. H. Von Wedel, W. A. Holla and J. Denton. bibliog il Rubber Age 53:419-26 Ag '43

LIVER as food

Vitamin A potency of yellow beef fat and beef liver. B. W. Gardner, Jr. Consumers' Research Bul 12:16 Ag '43

LIVER extracts

Isolation of the antianemia factor (vitamin Bc) in crystalline form from liver. J. J. Paffner and others. Science 97:404-5 Ap 30 '43

Study of crystalline beef liver catalase dried in the frozen state. A. L. Dounce and J. W. Howland. bibliog Science 97:21-3 Ja 1 '43

LIVER extracts—Continued

Vitamin M factor. S. Saslaw and others. Science 97:514-15 Je 4 '43

LIVER oils. See Fish oil**LIVING rooms**

Freedom and space in the living room. *il* diags plans Arch Rec 92:58-9 N '42
Freedom gained and space saved by combining living and dining areas. *il* plans Arch Rec 92:60-1 N '42

LIVING trusts. See Trusts and trustees—Living trusts**LLAMAS**

See also
Auchenia

LLOYDS, London

Illinois high court holds for Lloyds in license battle. Nat Underw 47:16 S 30 '43
Lloyds stretches facilities within prudent bounds. Nat Underw 46:27 D 31 '42
London Lloyds is sued in Central Mutual case. Nat Underw 47:53 O 14 '43

LLOYDS bank

Address of the chairman posted to members. Lord Wardington. Economist 144:123-4 Ja 23 '43

LOAD (mechanics)

Angle of load to grain for timber connectors. M. S. Ketchum. diags Civil Eng 13:227 My '43

Bolt loads analyzed. Machine Design 15:134 Ag '43

Determination of moments in continuous beams with concentrated loads. O. Albert. Civil Eng 13:545-6 N '43

Effect of speed of loading upon the ductility of steel structural members. W. M. Wilson. *il* diags Welding J 22:sup317-25 Ji '43

Gasket-loading constants; review of those suggested in table UA-7 of the A.S.M.E. unfired pressure vessel code. D. B. Rossheim and A. R. C. Markl. tables Mech Eng 65:647-8 S '43

Graphical analysis of stresses in three-dimensional loading. C. R. Freberg and E. N. Kemler. *il* diags Product Eng 13:714-17 D '42

How to analyze continuous beams for combined dead and live loading; Hardy Cross method. J. Zalkin. diags Eng N 130:486-9 Ap 8 '43

How to figure beams. P. Swain. diags Power 86:513, 588, 668, 746, 826, 904 Ji-D '42

Impact loads determined by Brinell technique. L. D. Hagenbook. *il* diag Product Eng 14:300-2 My '43

Load required to compress concrete and rock. G. B. Sowers. *il* Civil Eng 13:389-90 Ag '43

Notch sensitivity of alloyed cast irons subjected to repeated and static loads. W. L. Collins and J. O. Smith. bibliog *il* diags Am Soc T M Proc 42:639-56; Discussion. 657-8 '42

Numerical procedure for computing deflections, moments, and buckling loads. N. M. Newmark. bibliog diags Am Soc C E Proc 68:691-718 My '42; Discussion. 68:783-7; 69:153-62, 427-30 My '42, Ja, Mr '43

Percentage stress-strain diagram as an index to the comparative behavior of materials under load. H. J. Gilkey and G. Murphy. Iowa Eng Exp Sta (Ames) Bul 159:1-43 bibliog(p41-3) '43

Pressures on unsymmetrical pile groups. R. B. B. Moorman. Civil Eng 13:326-7 Ji '43

Resistance of soft fill to static wheel loads. W. W. Pagon. *il* map Am Soc C E Proc 68:237-54 F '42; Discussion. 69:161-2 Ja '43

Safe beam loading for aluminum tubes. M. Holt. *il* Product Eng 14:36-7 Ja '43

Strength of nailed plywood joints subjected to lateral loading. diag Eng N 130:691-3 My 6 '43

Stresses and displacements from loads over rectangular areas. H. Gray. Civil Eng 13:227-9 My '43

Study of the effects caused by arc welding upon axially loaded structural steel bars. J. Neustadt, G. D. Lovdick and D. P. Schultz. *il* diags Welding J 22:sup353-61 Ag '43

See also

Bridges—Load

LOAD dispatching. See Electric plants (central stations)—Load dispatching

LOAD factor

See also
Demand meters

LOADING and unloading

Loading and unloading; clause in the standard automobile liability policy. E. Alexander. Weekly Underw 143:656 Mr 20 '43

Speed up truck movement with bulk cement plant; Spokane portland cement co. also develops conveyor to load cars. *il* Rock Prod 45:70 N '42

Yard moves. Factory Management 101:100-1 Ji '43

See also

Coal loading machines	Freight handling
Conveying machinery	Mechanical handling

Airplanes

Business at war; Colonel Edward S. Evans proposes to increase freight-car and air-cargo pay loads a third by scientific loading. Fortune 27:68, 72 F '43

Increasing payloads by scientific cargo loading. E. S. Evans. *il* Aero Digest 41:257-8+ D '42

Packaging and handling of air cargo. C. G. Peterson. S A E J 51:218-19 Je '43

Securing means for air cargo. E. S. Evans. Aviation 41:356+ D '42; Abstract. *il* Automotive & Aviation Ind 88:15-16 Mr 1 '43

Terminal handling of air cargo. K. O. Larson. S A E J 51:235-8+ Ag '43; Abstract. Automotive & Aviation Ind 88:37+ Ja 1 '43

Cars

Business at war; Colonel Edward S. Evans proposes to increase freight-car and air-cargo pay loads a third by scientific loading. Fortune 27:68, 72 F '43

Conveyor system installed in New York express terminal. *il* plan Ry Age 115:602-5 O 16 '43

Increased payloads, decreased shipping damage; use of loader-equipped freight cars. E. S. Evans. *il* Steel 112:125-6+ Ap 5; 114, 117 Ap 12; 110, 112+ Ap 19 '43

Mechanical load handling equipment. E. W. Weaver. *il* diags Welding J 22:619-23 Ag '43

Motor trucks

Conveyor system installed in New York express terminal. *il* plan Ry Age 115:602-5 O 16 '43

Ships

Coal handling equipment in Rotterdam harbour. D. Rebbeck. *il* Mech Handling 30:188-91 My '43

Move cement with air from silos to ships; loading plant of Permanente corporation. R. S. Torgerson. *il* Rock Prod 46:123-4 Ja '43

Timber unloading plant. *il* Mech Handling 30:350-1 Ag '43

Tractor equipped with a bulldozer speeds unloading of ships. *il* Steel 111:86 N 16 '42

See also
Coal docks

Tank cars

Revise tank car loading rules; API accident-prevention manual no. 12. *il* Nat Pet 35:40-2 Ag 25 '43

Rotation system of tank-car loading used at WEP terminal. P. Reed. *il* Oil & Gas J 41:67+ Ap 29 '43

Safe handling and storage of phenol. *il* diags Chem Ind 52:730-3 Je '43

Unloading inflammable liquids. diags Chem Age (Lond) 48:664-6 Je 26 '43

Unloading tank cars containing flammable liquids. diags Chem & Met Eng 49:95-6 D '42

Tank trucks

Merry-go-round loading rack; Chattahoochee (Atlanta) terminal of the Southeastern pipe line co. *il* Nat Pet N 35:26+ Ja 6 '43

Static eliminators at loading docks. *il* diag Oil & Gas J 41:43 Ap 1 '43

LOADING machines

White automatic loading machine, il diag
Mech Handling 30:129-31 Mr '43

See also

Coal loading machines

LOANS

See also

Building and loan

associations

Building loans

Credit

Debts, Public

Government loans

and grants

Government loans to

industry

Insurance, Life—

Policy loans

Interest

Investments

Reconstruction fi-

nance corporation

Securities

Collateral

High court limits a method of lending; holds state laws govern use of trade accounts as security. W. H. Hillyer. Barron's 23:9 Mr 29 '43

LOANS, Bank

Banking trends. T. F. Regan, il Am Inst

Banking Bul 25:11-12, 33 Ap '43

Explore for loans; survey. Bankers Mo 60:166+ Ap '43

Get facts about mortgage, says manual. M.

Kane, il Banking 35:43 Mr '43

How new loans are found; survey. il Bankers

Mo 60:106-7 Mr '43

Interest rates at member banks. Fed Res

Bul 28:1089-97 N '42

Large market for loans now and the day after

V-day; home and farm repairs and im-

provements. G. M. Underhill, il Bankers

Mo 60:442-4 O '43

Loan opportunities. E. C. Gersten, il Bur-

roughs Clearing House 28:13-15+ O '43

Loan opportunities on livestock farms. L. H.

Hartwig, il Bankers Mo 60:122-4 Mr '43

Mistake of fact in loan transaction purges it

from usury. Banking Law J 60:583-6 Jl '43

New real estate loans in prospect. G. Dumars.

Bankers Mo 60:275 Je '43

Post-war credit for small business. W.

Mitchell. Banking 35:29-30 My '43

Rating the neighborhood. M. Kane. Banking

35:52 Ap '43

Reasonable risk loans by banks called neces-

sary by F.D.I.C. Comm & Fin Chr 158:1331

S 30 '43

Six ideas for new loans. Bankers Mo 60:

264+ Je '43

Sympathetic bankers find loans; results of a

Bankers Monthly survey. Bankers Mo 60:

470+ O '43

Syndicated loans increase income for small

banks. F. F. Millsaps and others. Bankers

Mo 60:298-9 Jl '43

V-day bank credit; proposals for loans to

small business. J. H. Lucas, il Burroughs

Clearing House 28:13-15+ N '43

War financing and post-war business outlook.

A. R. Upgren. Bankers M 146:239-46 Mr

'43

Where Bankers Monthly readers have found

new loans. Bankers Mo 60:17-18 Ja '43

Where to look for credit flaws. S. G. Jones.

Banking 35:58+ Je; 36:52-4 Jl '43

See also

Agricultural credit

Credit, Bank

Insurance—Credit

aspects

Collateral

Accounts receivable; features of the Corn

exchange bank v. Klaunder decision by the

United States Supreme court. Banking 35:

57-8 Ap '43

Accounts receivable loans employ surplus

funds. R. L. Redheffer. Bankers Mo 60:

160-1+ Ap '43

Bank servicing of receivables. R. B. Cox.

Burroughs Clearing House 27:22-4, 34-6 Ja

'43

Banks' practices in loaning on life policies.

C. A. Strahorn. Nat Underw (Life ed) 47:11

Jl 30 '43

Bill affects banks' policy loans. L. W. Daw-

son. Weekly Underw 148:581+ Mr 13 '43

Dual control for collateral. W. C. Hubbell.

Bankers Mo 59:558+ D '42

Home is for keeps. M. Kane, il Banking 36:

58+ N '43

How to lend for insurance premiums. A. C.

Stevens. Bankers Mo 60:112+ Mr '43

How War production board orders affect

banking transactions. A. M. Strong. Bank-

ers Mo 59:485-6+ N '42

Life insurance loans. C. V. T. Ludlow. Bank-

ing 35:50 F '43

Life insurance policy as security for notes.

C. R. Rosenberg, jr. Burroughs Clearing

House 27:30 Ag '43

Loans on accounts receivable. R. S. Douglas.

Banking 35:45, 47 Ja '43

Loans to watch. Business Week p91+ F 6

'43

New law aids N.Y. bank policy loans. Nat

Underw (Life ed) 47:1 Ap 2 '43

Non-notification financing of receivables. C.

R. Rosenberg, jr. Burroughs Clearing

House 27:30+ Je '43

Rights of bank to deposits made to secure

loans. Banking Law J 60:761-5 S '43

Waiver of collateral sale. C. R. Rosenberg,

jr. Burroughs Clearing House 27:29 N '42

Defense loans

Bank loans for war production increase.

Comm & Fin Chr 157:1032 Mr 13 '43

Broadened V loan plan to aid war contractors

in event of termination. Iron Age 152:118+

S 23 '43

Guaranteed war loans; fees to be charged

financing institutions and table giving loans

authorized. Loans outstanding, etc. May-

Nov. 1942. Fed Res Bul 29:12, 55 Ja '43

[cont monthly]

Inside study of "V" bank loans. D. F. Valley.

il Burroughs Clearing House 27:16-18+ N

'42

Plant financing in a war economy; problem

of new facility financing. M. D. Ketchum.

J Business 16:28-50 Ja '43

Rediscounts; eligibility of notes evidencing

guaranteed loans. Fed Res Bul 28:1079-80

N '42

Regulation V's first birthday. H. Bratter.

Banking 35:42+ Ap '43

Renegotiation and bank loans. M. Karker.

Banking 36:30+ Ag '43

Report guarantees for war production loans;

April 6 to end of 1942. Comm & Fin Chr

157:759 F 25 '43

Revision of Regulation V is hailed as aid to

war contractors after termination. Credit

& Fin Management 45:4-7+ O '43

V-loan cushion; one way to bridge the re-

conversion gap. Business Week p109-10 Ag

21 '43

War loan financing; guarantee agreement;

national bank loan limitations. Fed Res

Bul 29:379-90 My '43

War loans. T. F. Regan. Am Inst Banking

Bul 25:23-4+ Ja '43

Winning address; American banking proud

of its share in financing the war program.

R. F. Wille. Am Inst Banking Bul 25:20+

Jl '43

Guaranty

Ancestry of insured credit. il Banking 35:

23-4 Je '43

Let's get back to real banking; guaranteed

loan is insurance American banking does

not need. P. F. Cadman, il Banking 36:21-

3+ O '43

Making Title I loans in wartime. A. E. Cus-

ter, il Burroughs Clearing House 27:22-4+

Ap '43

New type V loans to aid war contractors.

H. D. Ralph. Burroughs Clearing House 28:

20 O '43

Revision of Regulation V is hailed as aid to

war contractors after termination. Credit

& Fin Management 45:4-7+ O '43

SWPC plan for guaranteed bank loans to

small business. H. D. Ralph. Burroughs

Clearing House 28:43 N '43

Wartime home loans; some exceptions to

Regulation W. Banking 35:50, 52 Je '43

Income tax loans

Estimates \$100,000,000 borrowed to pay in-

come taxes; favors pay-go tax plan. S. J.

Hughes. Comm & Fin Chr 157:1309 Ap 8

'43

Instalment payment

Consumer credit prospects. K. R. Cravens.

Banking 35:58+ My '43

LOANS, Bank—Installment payment—Cont.

- Fair way to quote charges on installment loans. G. O. Thorpe. Bankers M 146:322-7 Ap '43
 Quick the formula! installment loan field. M. C. Miller. Banking 36:39-40+ N '43
 Servicemen's civil relief act increased loan delinquencies. ABA survey shows. Comm & Fin Chr 158:432 JI 29 '43
 Why not candor in small loans? R. Nugent. Bankers M 146:328-34 Ap '43

Small loans

- Banks and consumer credit. T. E. Savage. Bankers M 146:102-4, 106-21, 193-222 F-Mr '43
 Basis for personal loans under present conditions. Bankers Mo 60:77-8 F '43
 Consumer loans of insured banks, Dec. 31, 1942. Fed Res Bul 29:417-18 My '43
 Is a separate department needed to handle personal loans? Bankers Mo 60:258-9 Je '43
 Personal loan delinquency report, May 1941-April 1943. Banking 36:35 JI '43
 Rate regulation in the field of consumer credit. W. P. Mors. bibliog J Business 16:124-37 Ap '43

Statistics

- All banks in the United States, loans and investments. Published in monthly numbers of Federal reserve bulletin
 Condition of all member banks, loans and investments. Published in monthly numbers of Federal reserve bulletin
 Consumer loans of insured banks, Dec. 31, 1942. Fed Res Bul 29:417-18 My '43
 Delinquent loans percentages, monthly, May 1941-February 1943. Banking 35:37 My '43
 Personal loan delinquency report, May 1941-April 1943. Banking 36:35 JI '43
 Revised reports of bank loans. Fed Res Bul 29:300-1 Ap '43

LOANS, Foreign

- U.S. and Brazil sign new steel credit pacts. Comm & Fin Chr 167:1310 Ap 8 '43

See also

- Debts, Public
 Export-import bank of Washington
 Investments, Foreign

LOANS, Small

- FHA to guarantee loans for fuel-savings. Bankers Mo 60:278 Je '43
 How should interest rates be stated? C. W. Phelps; A. A. Friedrich. Banking 35:44-5+ Ap '43

See also

- Household finance Loans, Bank—Small corporation loans

Laws and regulations

- Banks and consumer credit. T. E. Savage. Bankers M 146:193-222 Mr '43
 Fair way to quote charges on installment loans. G. O. Thorpe. Bankers M 146:322-7 Ap '43
 Rate regulation in the field of consumer credit. W. P. Mors. bibliog J Business 16:51-63, 124-37 Ja-Apr '43
 Why not candor in small loans? R. Nugent. Bankers M 146:328-34 Ap '43

Statistics

- Monthly estimates of short-term consumer debt, 1929-42. D. M. Holthausen. tables Survey of Cur Business 22:9-25 N '42

LOBSTERS

- Canada's 1942 lobster catch. For Comm W 10: 26 Mr 13 '43
 Lobster production off. Business Week p34+ N 6 '43

LOCAL anesthetics. See Anesthetics, Local**LOCAL government**

- Short rations for local government. T. H. Reed. Trusts & Estates 75:550 D '42

See also

- State governments

Finance

- Local authority finance. Economist 145:421-2, 452-3 S 25-O 2 '43

LOCATING (machine work)

- Angle-plate Holocator. il Automobile Eng 33: 376 S '43

- Indicator locates eccentric work. W. Jakes. diags Am Mach 87:86 S 30 '43
 Layout tables speed work on turret punch presses. T. A. Wiedemann. il diags Iron Age 151:47-53 F 18 '43
 Locating holes with gage-blocks and microscope. D. V. Stevens. il Mach 49:210 D '42
 Locating work center by optical instrument. il diags Ry Mech Eng 117:289-90 Je '43
 Shuttles cut prop-grinding time; American propeller corporation. il Am Mach 87:95-6 S 30 '43
 Spring-loaded centers position shafts for grinding. W. Carps and H. Nelson. diags Am Mach 87:104 S 2 '43
 Work-locating devices simplify lathe work. F. J. Yunker. diags Mach 50:164 S '43

See also

- Centering (machine work)

LOCATION in business**See also**

- Factories—Location

- LOCKARD, Joseph L.**
 Signal corps heroes. por Radio N 28:134 N '42

- LOCKE, Leslie Leland, 1880-1943**

- Sketch. L. C. Karpinski. Science 98:274-5 S 24 '43

LOCKERS

- Industrial lockers ventilated to dry workers' clothes; scheme uses glass block room. diag Heat & Ven 40:61 JI '43

- LOCKERS, Cold storage. See Cold storage lockers**

LOCKERS, Public

- Check your bags! coin-operated parcel locker. il Bus Transportation 22:44-5 Mr '43

See also

- Cold storage lockers

LOCKHEED aircraft corporation

- Lockheed's service empire; providing engineering service for warplanes of the united nations. il Aero Digest 43:121-5 Ag '43
 Ten years of engineering. H. L. Hibbard. il Aeronautical Eng R 1:67 N '42

LOCKHEED overseas corporation

- Yank modification center rises in England. M. V. Cave. il Aviation 42:255+ My '43

LOCKING devices

- Bassick anchoring lock for hand trucks. il Engineering 156:17 JI 2 '43

- Locking system for threaded inserts and studs. il diags Mach 49:222 F '43

- New system for locking studs and inserts developed by Jose Rosán. il Iron Age 151: 44D Ap 22 '43

- Rapid release latches analyzed for performance. C. Thumlin. diags Product Eng 14: 740-2 N '43

- Rosan locking unit system has serrated stud and ring. diags Am Mach 87:128 Mr 4 '43

- Servomotor locking mechanism; patent assigned to Bendix aviation corp. diag Machine Design 15:180+ JI '43

- Vacuum-cup locks solve vertical lofting problem. il Product Eng 14:222 Ap '43

LOCKS (hydraulic engineering)

- Apparatus for port velocity tests on locks. M. J. Webster. diags Am Soc C E Proc 69:973-6 Je '43

- Design of recent TVA projects; Watts Bar and Fort Loudoun. T. Mundal. il diags plan Civil Eng 13:205-8 My '43

- New MacArthur lock formally opened; Sault Ste Marie canal. Iron Age 152:104 JI 15 '43

LOCKS and keys

- Keys go to war; keys yield 4,000,000 lb. of metal. Business Week p59-60 Ja 16 '43

History

- Complicated craft is mechanized; development of the pin-tumbler cylinder lock by Linus Yale, Jr. S. Giedion. il diags Tech R 46:26-31, 38+ N '43

LOCOMOTIVE boilers

- Beware of the empty water glass. J. M. Hall. Ry Mech Eng 117:83-4 F '43

- Experience with alloy steels in boilers. A. G. Trumbull. Ry Mech Eng 117:77-9 F '43

- Save critical materials by softening water. C. R. Knowles. il Ry Age 114:820-3 Ap 24 '43

LOCOMOTIVE boilers—Continued**Blowdown**

Locomotive boiler blow-off arrangement. *il* diag Ry Mech Eng 117:239 My '43; Correction. 117:290 Je '43; Same without diag. Ry Age 114:823-4 Ap 24 '43
Methods of systematic treatment of feed-water. *il* Ry Mech Eng 116:519-20+ D '42

Cleaning

Cleaner for boiler tubes and flues; Ryerson American wheelabrator. *il* diags Ry Mech Eng 117:102-3 F '43

Failure

How to guard against low water and prevent locomotive failures; roundtable discussion. diags Ry Mech Eng 117:470-3 O '43
Lessons from boiler explosions; steel with superior physical properties at high temperatures and syphons both contribute to safety. R. McBrien. *il* diag Ry Age 115:47-9 Jl 10 '43; Same. Ry Mech Eng 117:353-5 Ag '43
Low water cause of Century accident east of Canastota, N.Y. Ry Age 115:575+ O 9 '43; Same. Ry Mech Eng 117:568-9 N '43

Manufacture

Welded locomotive boiler. E. G. Young. *il* diags Welding J 22:823-7 O '43

Repair

Boiler patch calculation. L. R. Haase. diags Ry Mech Eng 116:385-6 S '42; Discussion. 117:128 Mr '43
Erie modernizes Hornell flue repair shop. *il* Ry Mech Eng 116:531-4 D '42
Setting and maintaining flues without copper ferrules. S. Christopherson. diags Ry Mech Eng 117:131-2, 179-81 Mr-Apr '43
Side-sheet template. *il* diag Ry Mech Eng 117:479 O '43

LOCOMOTIVE firemen

Education for Reading engineers; new fuel instruction car. *il* Ry Age 115:276-9 Ag 14 '43; Same. Ry Mech Eng 117:464-6 O '43

LOCOMOTIVE industry**Statistics**

Locomotives, 1938-1941. Survey of Cur Business 1942 Sup p172-3 [supplemented in monthly numbers]

Great Britain

Engineering outlook. Engineering 155:175 F 26 '43

LOCOMOTIVE inspection, Bureau of. See Interstate commerce commission—Bureau of locomotive inspection**LOCOMOTIVE institute**

Lawford Fry made research director. Ry Age 114:1236-7 Je 19 '43

LOCOMOTIVE shops

Many factors influence design of Diesel repair facilities. *il* Ry Age 114:900-3 My 8 '43

See also

Locomotive terminals

Locomotives—Repair

Railroads—Shops

Electric equipment

Locomotive depot; London and north eastern railway. *il* Elec R (Lond) 133:19-20 Jl 2 '43

Equipment

C.&N.W. gets good results with Chicago shop improvements. *il* diags Ry Age 114:1210-14 Je 19 '43

Driver-wheel handling car. *il* Ry Mech Eng 117:41-2 Ja '43

In the back shop and enginehouse. Published in monthly numbers of Railway mechanical engineer

Pangborn installation overhauls locomotives in two days; steel-blast cleaning room. *il* Steel 111:74 D 28 '42

Santa Fe Diesel shop kinks. *il* Ry Mech Eng 117:474-7 O '43

Shop manifolds on a post between pits. *il* Ry Mech Eng 117:270 Je '43

Sling for lifting smoke-stack extensions. diags Ry Mech Eng 117:477-8 O '43
Time savers on the Santa Fe; six jigs in use at the Topeka locomotive shops; illustrations. Ry Mech Eng 117:226-7 My '43

Layout

Converts shop to handle new power; Delaware & Hudson at Colonie, N.Y. *il* plan Ry Age 113:890-1 N 28 '42

LOCOMOTIVE smoke boxes

Smoke-box char as boiler fuel. diags Engineer 176:250 S 24 '43

LOCOMOTIVE terminals

Builds engine terminal to cope with growing coal traffic; B. & O. branch, Cowen, W. Va. *il* map Ry Age 115:414-17 S 11 '43
Engine terminal improvements speed locomotive handling. *il* diag Ry Age 114:1168-72 Je 12 '43

Speeding up operations in engine terminals. diag Ry Mech Eng 117:214-15 My '43

See also

Locomotive shops

LOCOMOTIVE works**Employees**

Women in shops; employment experience of the Montreal locomotive works, limited. L. L. Park. Mech Eng 64:858-9 D '42

LOCOMOTIVES

American-built 0-6-0 switchers for England. *il* Ry Age 114:546-7 Mr 20 '43

Austerity locomotives. diag Engineer 174:448 N 27 '42

Austerity 0-6-0 saddle-tank locomotive. *il* Engineering 155:155 F 19 '43

Austerity saddle tank locomotives. *il* Engineer 175:138 F 12 '43

Baldwin builds 4-8-4 locomotives for service on Frisco. *il* Ry Age 114:424-7 F 27 '43; Same. Ry Mech Eng 117:116-19 Mr '43

Canadian Pacific 2-8-2 type locomotives have high-tensile boiler shells. *il* Ry Age 114:946-7 My 15 '43

Century's investment and return; Stourbridge Lion comes back in rugged Austerity from Schenectady. A. M. Sullivan. *il* Dun's R 51:21 Ap '43

Diesel or steam power? with cost data. L. K. Sillico. Ry Mech Eng 117:204-8+ My '43

D.M. & I.R. freight power. *il* Ry Age 114:1135-9 Je 5 '43

Factors involved in the selection of railroad motive power; with cost data. H. C. Wilcox and A. G. Oehler. Elec Eng 62: Trans 235-40 My '43; Same abr. *il* Ry Age 114:716-19 Ap 10 '43; Discussion. 114:786-91, 833 Ap 17-24 '43

How to obtain more intensive use of motive power. J. M. Nicholson. Ry Age 113:879-81 N 28 '42

Locomotives of 1942. *il* diags Engineer 175:29-31, supp3 Ja 8 '43

London and north eastern railway 4-6-0 mixed-traffic locomotive. *il* diag Engineering 155:47-8 Ja 15 '43

London and north eastern railway mixed traffic engine. *il* Engineer 175:59 Ja 15 '43

Modern power carries the burden of today's war traffic. *il* Ry Age 113:839-40 N 21 '42

Motive power shortage eased by leasing. Ry Mech Eng 117:107-3 F '43

Motive power, wartime and after. L. H. Fry. Ry Age 115:559-61+ O 9 '43; Same. Mech Eng 65:862-4+ D '43; Abstract. Diesel Power 21:1060-1 N '43

New German locomotive conserves labor and material. For Comm W 10:30 Mr 20 '43

New York Central all-round road locomotives. *il* diags Ry Mech Eng 117:356-62 Ag '43; Same cond. Ry Age 114:1250-4 Je 26 '43

Nickel in railroad service. B. B. Morton. bibliography Ry Mech Eng 117:166-9 Ap '43

Progress in railway mechanical engineering, 1941-1942. *il* diag Mech Eng 65:21-30 Ja '43

Steam locomotive; study of book of that title by R. P. Johnson. W. T. Hoecker. Ry Mech Eng 117:260-2 Je '43

Sweden's new type of locomotive. For Comm W 12:29 Jl 3 '43

Wartime locomotives. Power 86:988b-988c Mid-D '42

LOCOMOTIVES—Continued

Will railroad traffic of the future require steam or Diesel? with cost data. L. K. Silcox. Ry Age 113:913-18 D 5 '42; Same. Ry Mech Eng 117:29-34 Ja '43

See also

Electric locomotives Stokers, Mechanical
Motor cars (railroad) Tractors
Steam engines

Axles

Steel dies from scrap locomotive axles. il
Ry Mech Eng 116:541 D '42

Bearings

Electronic bearing alarm system applied to journals of Diesel-electric locomotives. il
Ry Mech Eng 117:437 S '43

Cleaning

Huge blast-cleaning room for locomotives. il
Mach 49:187 F '43

Cost of operation

Road-switcher Diesel-electrics in short-line service; with comparative cost data; Atlanta & Saint Andrews Bay railway. il Ry Age 114:852-5+ My 1 '43

Counterbalances

Accurate determination of locomotive counterbalance. il Ry Mech Eng 117:323 JI '43
Determining counter-balancing effects by railstress measurements. diags Engineering 154:301-4, 341-4, 381-3, 421-2 O 16, 30, N 13, 27 '42
Suggested change for locomotive counterbalance. H. W. Stowell. diag Am Mach 86:1370 N 26 '42

Design

Compound locomotives in Great Britain. P. C. Dewhurst. diags Engineer 176:91-2 JI 30 '43
D.&H. 4-8-4 type freight power. il Ry Age 115:93-6 JI 17 '43; Same, with diag and partial list of materials and equipment. Ry Mech Eng 117:395-9 S '43
D.M. & I.R. freight power. il Ry Age 114:1135-9 Je 5 '43; Same, with diags. Ry Mech Eng 117:299-305 JI '43
Heavy freight Beyer-Garratt locomotive. il diag Engineer 175:463-6 Je 11 '43
Links in the history of the locomotive. J. Clayton. diags Engineer 175:247-50 Mr 26 '43
Locomotive machine friction. L. H. Fry. Ry Mech Eng 117:201-3 My '43
Locomotive steam distribution. W. Smith. Ry Mech Eng 117:247-51+, 308-12 Je-JI '43
Pennsylvania T-1 locomotives. il diags Ry Mech Eng 117:1-11 Ja '43; Same, without diags. Ry Age 113:956-62 D 12 '42
Refinements in 4-8-4 locomotives for the Canadian National. il Ry Age 114:211-12 Ja 16 '43

Efficiency

Locomotive steam distribution. W. Smith. Ry Mech Eng 117:247-51+, 308-12 Je-JI '43
Modern locomotive superheating. B. Reed. diags Engineer 175:283-5+, 304-5 Ap 9-16 '43

Electric equipment

One-wire electrical system. diag Ry Mech Eng 117:486 O '43

Equipment

Tachometers for fast trains. P. MacGahan. il diag Ry Mech Eng 117:429-30 S '43

See also

Locomotive boilers

Failure

Locomotive defects and casualties show decided increase; report of the Bureau of locomotive inspection. Ry Age 114:279-81 Ja 30 '43; Ry Mech Eng 117:74-6+ F '43

Fireless

See Locomotives, Fireless

Front ends

Compact headers save front-end space. diags Ry Mech Eng 117:341 JI '43

Fuel

Fuel figures without conversion; unit fuel and power consumption of locomotives and rail motor cars; tables. Ry Age 115:522-7 O 2 '43

Rock, the locomotive fuel of Esthonia. A. C. Selke. Pub Util 31:292 Mr 4 '43

Heating use

Locomotive heats hydro plant; Safe Harbor plant. S. D. Althouse. il Power 87:328 My '43

History

First steam engines in South Africa. diags Engineer 176:112 Ag 6 '43
Links in the history of the locomotive. J. Clayton. diags Engineer 175:247-50 Mr 26 '43
Links in the history of the locomotive. E. A. Forward. diags Engineer 176:125-8, 150-2 Ag 13-20 '43
Links in the history of the locomotive; Dr Church's tank engine. P. C. Dewhurst. diags Engineer 174:512-15 D 25 '42
Pioneer of the locomotive; William Hedley. Engineering 155:33 Ja 8 '43
Stephenson's Springwell locomotives, 1826. E. A. Forward. Engineering 155:345-6, 364-5, 384-5 Ap 30-My 14 '43

Inspection

See also Interstate commerce commission
—Bureau of locomotive inspection

Lubrication

Lubricators for driving journals. il Ry Mech Eng 117:236-7 My '43; Same. Ry Age 114:1214+ Je 19 '43

Manufacture

See also
Locomotive works

Performance

Fuel and locomotive performance, eight typical railroads; tabulation. Ry Mech Eng 117:85 F '43
Modern motive power the keystone of freight transportation. il Ry Age 114:1030-2 My 22 '43
New York Central locomotives. E. C. Poulteney. Engineer 175:500-3 Je 25 '43

Reconstruction

L.M.S. rebuild Royal Scot engines. il Engineer 176:254 S 24 '43
L.M.S. rebuild Royal Scot locomotive. il diag Engineering 156:256 S 24 '43
Rebuild locomotives for Mexican railways. il Ry Age 114:1145 Je 5 '43
Wabash rebuilds 3-cylinder steam locomotive at Decatur shops. il Ry Age 115:637-9 O 23 '43

Repair

Locomotive parts fabrication and welding of bronze bearing surfaces. J. W. Kenefic. il Welding J 22:799-805 O '43
New life for the war emergency; Baltimore & Ohio restores twenty old 2-8-2's to effective 4-8-2 freight power. il Ry Age 114:510-11 Mr 13 '43
Questions and answers on welding practices (cont). Ry Mech Eng 116:535; 117:40, 181-2, 224, 324-5, 374-5 D '42-Ja, Ap-May, JI-Ag '43
Railroad centralizes machine operations; packing rings for locomotive pistons. il diags Am Mach 87:100-2 Je 10; 96-8 JI 8 '43
Railroads extend use of metallizing. il diags Am Mach 86:1364-6 N 26 '42
Tool sets brass bushings. H. W. Stowell. diags Am Mach 86:1297-8 N 12 '42
Welding locomotive cylinders. C. R. Averitt. il Ry Mech Eng 117:223-4 My '43
Welding saves locomotive frames. H. A. Hocking. il Am Mach 86:1288-90 N 12 '42

See also
Locomotive shops

Runs

Factors which make for more use of motive power; development of long locomotive runs and measures in reducing out-of-service time. J. M. Nicholson. Ry Mech Eng 116:524-6 D '42

LOCOMOTIVES—Continued

Smoke problem

Proper throttle and reverse-lever control minimizes smoke, S. A. Dickson, *il Ry Age* 114:1177-9 Je 12 '43

Statistics

Diesels 2-to-1; 1942 statistics of locomotives, fuel, etc. *il Nat Pet N* 35:30+ Ja 27 '43
Many locomotives ordered were unauthorized by WPB, A. J. McGinnis, *Ry Age* 114:117-24 Ja 2 '43
Will 1943 motive power come from builder or back shop? H. C. Wilcox, *il Ry Age* 114:12-14 Ja 2 '43

Testing

Counter-pressure brake testing of locomotives, T. Robson, *diags Engineering* 155:318-20, 338-40 Ap 16-23 '43
Determining counter-balancing effects by rail-stress measurements, *diags Engineering* 154:301-4, 341-4, 381-3, 421-2 O 16, 30, N 13, 27 '42
Measuring photographically to obtain test data on a locomotive of new design, F. H. Catlin, *il Gen Elec R* 46:503-4 S '43

Valves and valve gear

Carbonisation of locomotive piston valves, J. F. S. MacDonald, *Engineer* 174:522-3 D 25 '42
Locomotive steam distribution, W. Smith, *Ry Mech Eng* 117:308-12 Jl '43

Weight

Future possibilities of Diesel road locomotives, P. B. Jackson, *diags Mech Eng* 65:335-8+ Mr '43; Same cond. *Ry Age* 114:353-7 F 13 '43; Same cond. *Ry Mech Eng* 117:113-15+ Mr '43; Discussion, *Ry Age* 114:357-8 F 13 '43; *Mech Eng* 65:673-5 S '43

Wheels

Counterbalancing driving wheels, *il Ry Mech Eng* 116:536 D '42
Determining counter-balancing effects by rail-stress measurements, *diags Engineering* 154:301-4, 341-4, 381-3, 421-2 O 16, 30, N 13, 27 '42
Driver-wheel handling car, *il Ry Mech Eng* 117:41-2 Ja '43
Welding liners on worn driving-wheel centers, C. H. Eason, *il diags Ry Mech Eng* 117:38-40 Ja '43; Same, without diags, *Steel* 112:108+ Je 14 '43

LOCOMOTIVES, Diesel

Diesel locomotive in industry, D. Rebbeck, *il Mech Handling* 30:305-7 Jl '43
Diesel locomotive use now country wide, G. W. Grupp, *Diesel Power* 21:34-5 Ja '43
Diesel prophecy; will it replace the iron horse? *Sci Am* 168:76-7 F '43
Use of Diesel engines in tunnels, S. H. Ash and L. L. Naus, *U S Bur Mines Information Circ* 7222:1-26 '42; Conclusions, *Nat Safety N* 47:42+ Je '43

Fueling stations

What kind of fueling facilities for Diesel locomotives? *il Ry Age* 114:763-6 Ap 17 '43

Repair

Many factors influence design of Diesel repair facilities, *il Ry Age* 114:900-3 My 8 '43

LOCOMOTIVES, Diesel-electric

Diesel and rail transportation, E. F. Weber, *il Diesel Power* 21:811-14, 919-21 S-O '43; Same, *Nat Pet N* 35 pt 2:R487-8, R490-3 O 6 '43
Diesel board would reject many demands, *Ry Age* 114:1092-3 My 29 '43
Diesel demands heard; demands of the Brotherhood of locomotive firemen and engineers for a fireman-helper on Diesel locomotives, *Ry Age* 114:472-3, 590, 625-6 Mr 6, 20-27 '43
Diesel-electrics serve war-time traffic needs on New Haven, P. H. Hatch, *il Ry Age* 114:1087-91 My 29 '43
Diesel in switching service, A. H. Candee, *Ry Age* 114:310-14 F 6 '43
Diesel-locomotive progress under war conditions, P. A. McGee and others, *il Mech Eng* 65:339-42 My '43

Diesel or steam power? with cost data, L. K. Silcox, *Ry Mech Eng* 117:204-8+ My '43

Eastern railroads settle Diesel case, *Ry Age* 115:380-1 S 4 '43

Factors involved in the selection of railroad motive power; with cost data, H. C. Wilcox and A. G. Oehler, *Elec Eng* 62: Trans 235-40 My '43; Same abr. *il Ry Age* 114:716-19 Ap 10 '43; Discussion, 114:786-91, 833 Ap 17-24 '43

44-ton heavy-duty Diesel-electric locomotive; improved generators and motors, S. E. Newhouse, *il Diesel Power* 21:933-5 O '43

44-tonner turns in work report; practicality of Diesel-electric for a one-locomotive railroad demonstrated by the M.&I.B.&B. A. A. Lampert, *il Ry Age* 115:566-7 O 9 '43
Handling of increased traffic by greater utilization of locomotives; Atchison, Topeka and Santa Fe railway, *Diesel Power* 21: 932+ O '43

Highlights of design and construction of the G-M Diesel-electric locomotive, W. P. Minger, Jr., *il Diesel Power* 21:43-6 Je '43

How to select Diesel-electric switchers, F. H. Craton, *il Diesel Power* 21:403-5 My '43

Industrialists view after-war prospects for the Diesel locomotive, H. L. Hamilton; C. M. Davis, *Diesel Power* 20:985 D '42
Innovation in Diesel-electric locomotives; Porter locomotive with two separate power plants, *il Diesel Power* 21:833-4 S '43

Interesting applications of supercharged automotive-type Diesel engines, *il Diesel Power* 20:986-8 D '42

Keep them rolling; maintenance of electric equipment, J. W. Teker, *Elec Eng* 62: Trans 107-12 Mr '43; Same cond. *Ry Mech Eng* 117:94-7 F '43

Oil-electric locomotives, E. C. Poultney, *Engineer* 175:173 F 26 '43

Oil-electric locomotives; repairing and overhauling; Central Argentine railway; abstract, C. R. Parker, *Elec R (Lond)* 131:619-20 N 13 '42

Railroad experts view Diesel-electric locomotives, *Diesel Power* 21:326+ Ap '43

Resurfacing and air curing commutators on Diesel-electric locomotives, J. W. Teker, *il diags Diesel Power* 21:498-9 Je '43

Road-switcher Diesel-electrics in short-line service; with comparative cost data; Atlanta & Saint Andrews Bay railway, *il Ry Age* 114:862-5+ My 1 '43

Vitamins for Diesel power; comparison of several types of control used to obtain best engine performance, W. H. Smith and A. H. Candee, *diags Ry Mech Eng* 116:334-7, 381-3 Jl-Ag '43

Will railroad traffic of the future require steam or Diesel? with cost data, L. K. Silcox, *Ry Age* 113:913-18 D 5 '42; Same, *Ry Mech Eng* 117:29-34 Ja '43

Cost of operation

Cost figures tell the tale; comparative cost records of steam and Diesel-electric locomotives, B. W. Reynolds, *Diesel Power* 21: 120+ F '43

Design

Future possibilities of Diesel road locomotives, P. B. Jackson, *diags Mech Eng* 65: 335-8+ Mr '43; Same cond. *Ry Age* 114: 353-7 F 13 '43; Same cond. *Ry Mech Eng* 117:113-15+ Mr '43; Discussion, *Ry Age* 114:357-8 F 13 '43; *Mech Eng* 65:673-5 S '43

Efficiency

Santa Fe Coast lines serve area important to war effort, *il map Ry Age* 114:505-6 Mr 13 '43

Manufacture

All-welded 5400-hp. Diesel-electric freight locomotive, J. H. Hruska, *il diags Welding J* 22:605-18 Ag '43
Boring and grinding generator brackets on a vertical turret lathe, *il Mach* 49:175 D '42

Repair

Sante Fe Diesel shop kinks, *il Ry Mech Eng* 117:474-7 O '43

LOCOMOTIVES, Diesel-electric—Continued**Testing**

Water rheostat for testing Diesel-electric locomotives. *il diags Ry Mech Eng* 117:137-9 Mr '43

LOCOMOTIVES, Electric. See Electric locomotives**LOCOMOTIVES, Fireless**

Fireless locomotives; war makes new need for thermos engines. *J. Kentline. il Manuf Rec* 112:36+ Je '43

LOCOMOTIVES, Gas and oil*See also*

Locomotives, Diesel

LOCOMOTIVES, Gas turbine

First gas turbine locomotive. A. Meyer. *diags Inst Mech Eng J & Proc* 150:Proc.1-10, p.1-4 N '43; Same abstr. *Engineering* 155:130, 138-9, 159-60, 179-80 F 12-26 '43; Excerpts. *Engineer* 174:524-7 D 25 '42; Discussion. *Engineering* 155:15-16, 33-4 Ja 1-8 '43; *Engineer* 174:521-2 D 25 '42

Gas-turbine locomotive with electrical transmission. P. R. Sidler. *il diags Mech Eng* 65:261-4 Ap '43; Same cond. *Ry Mech Eng* 117:69-71 F '43; Discussion. *Mech Eng* 65:264-6 Ap '43; *Ry Mech Eng* 117:71-3+ F '43

LOCOMOTIVES, Industrial

Diesel locomotive in industry. D. Rebbeck. *il Mech Handling* 30:305-7 JI '43
Getting along with obsolete machinery. J. B. Hess. *Eng & Min J* 143:73 D '42
How to select Diesel-electric switchers. F. H. Craton. *il Diesel Power* 21:403-5 My '43
Removable spark arrester for locomotives. S. H. Kahler. *il Ry Mech Eng* 116:325 JI '43

See also

Electric locomotives,
Industrial

LOCOMOTIVES, Mine

Use of Diesel engines in tunnels. S. H. Ash and L. L. Naus. *U S Bur Mines Information Circ* 7222:1-26 '42

LOCOMOTIVES, Oil-electric. See Locomotives, Diesel-electric**LODGES (architecture)**

Ski lodge designed for serious sportsmen; views and plans. *Arch Forum* 79:58-9 JI '43

LOESS

Loess and the farm lands of the United States. W. H. Hobbs. *Science* 97:sup8 Ja 22 '43

LOFT buildings

Office and loft buildings; considerations of their past, present and future; building types study; with time-saver standards. E. J. Kahn. *il diags plans Arch Rec* 93:73-82 Ap '43

LOGAN, Paul P.

Portrait. *Chem & Eng N* 21:1606 O 10 '43

LOGGING. See Lumbering**LOGISTICS**

War without adequate railroads? abstracts. F. K. Mitchell. *Ry Age* 114:466-8+ Mr 6 '43; *Ry Mech Eng* 117:163-5 Ap '43

LOGS**Transportation**

29-mile streamlined logging road. *il Roads & Sts* 86:58, 60-2+ S '43

LOGS of wells. See Petroleum—Well logging**LONDON, England**

Cost of reconstruction. *Economist* 145:105 JI 24 '43

End of the great wen? *il map Arch Forum* 79:51-2 Ag '43

London of the future; editorial. *Engineering* 156:51-2 JI 16 '43

London plan; reconditioning of London county. *Economist* 145:66-8 JI 17 '43

London sees the postwar city. W. G. Bowman. *Eng N* 131:123 JI 15 '43

Plan for London. maps *Engineer* 176:46-8, 64-6 JI 16-23 '43

See also Electricity supply—London, England

Railroads

Electricity and town planning; railways part in London reconstruction scheme. *diags map Electrician* 131:54-5 JI 16 '43

Transport in London; suggestions in the L.C.C. plan. *Elec R (Lond)* 133:141-2 JI 30 '43

Rapid transit

Transport in the new London; editorial. *Engineering* 156:71-2 JI 23 '43

Subways

Deep tunnel air raid shelters. *il diags Engineer* 174:445-6, 456-8, 472-4 N 27-D 11 '42

LONDON brick company

Annual general meeting, 43d, London. *Economist* 144:439 Ap 3 '43

LONDON, Midland and Scottish railway

Annual general meeting, 20th, London. *Economist* 144:340 Mr 13 '43

LONDON stock exchange

London market awaits elucidation of post-war uncertainties. D. Tyerman. *Barron's* 23:1 My 31 '43
Stock exchanges, 1942. *Economist* 144:sup5 Mr 13 '43

War and peace stocks in London. B. Ravits. *Barron's* 23:3 F 1 '43

LONDON university

Report on work during the year 1942-3. *Science* 98:212 S 3 '43

LONDONDERRY, Ireland

Derry navy base in North Ireland. W. G. Bowman. *il Eng N* 131:330-2 Ag 26 '43

LONE star gas corporation

Annual report. *Comm & Fin Chr* 157:2450 Jc 23 '43

Files proposal to sell properties. *Comm & Fin Chr* 156:2133 D 14 '42

Sale approved. *Comm & Fin Chr* 157:43 Ja 4 '43

SEC sanctions reorganization. *Comm & Fin Chr* 156:1954 N 30 '42

LONG distance telephone. See Telephone—Long distance**LONG ISLAND lighting company**

Annual report. *Comm & Fin Chr* 157:817-18 Mr 1 '43

LONG ISLAND railroad

Long Island tells patrons about its problems. *Ry Age* 113:796 N 14 '42

LONGEVITY

Longevity of the eminent. H. C. Lehman. *Science* 98:270-3 S 24 '43

LONGSHOREMEN

Organisation of dock labour in Great Britain. *Int Labour R* 47:379-80 Mr '43

Organisation of longshore labour in Canada. *Int Labour R* 48:366-8 S '43

Organisation of waterside employment in Australia. *Int Labour R* 48:364-6 S '43

Pre-existing disease and permanent disability. *East Underw* 43:36 D 4 '42

LOOFA. See Luffa cylindrica**LOOMS**

Automatic weaving developments. H. deG. Gaudin. *Textile Inst J* 34:P119-21; Discussion. P122 Ag '43

Hand loom for making samples. F. W. Sterling. *il diag Textile World* 93:85 JI '43

Harness stop-motion. J. Sterk. *diags Textile World* 93:120 JI '43

How to keep your looms in running condition. *il Rayon* 24:249-50+ My '43

How to make up the loom book. F. H. Gunther and M. Gross. *Textile World* 93:84 O '43

How to prolong life of weave-room equipment. A. C. Wayman. *diags Textile World* 92:96-7 N '42

Loomfixers' manual; cotton section (cont). I. Moberg. *il Textile World* 92:119 D '42; 93:98 Ag '43

Loomfixers' manual; rayon and silk section (cont). H. E. Wenrich. *diags Textile World* 92:124 N '42; 93:136 F; 136 Ap; 110 Je '43

Loomfixers' manual; wool section (cont). E. P. Schremp. *il diags Textile World* 93:100 Ja; 110 Mr; 96 My; 118 JI; 142 S; 110 O '43

Loomfixers' reference chart; reveals causes and indicated remedies for common defects in rayon fabrics. *Textile World* 93:78-9 JI '43

Stainless steel heddles and reeds essential to war effort. *Rayon* 24:483 S '43

See also

Shuttles
Weaving

LORD and Thomas

Lasker leaves Lord & Thomas; agency to change name to Foote, Cone and Belding. *Ptr Ink* 202:30 Ja 1 '43

LORILLARD, P., company

Annual report. *Comm & Fin Chr* 157:641 F 15 '43

Another look. *Mag of Wall St* 71:429 Ja 23 '43

FTC files complaint against Old Gold cigarettes advertising; statement issued by company. *Comm & Fin Chr* 157:994 Mr 15 '43

Registers new securities. *Comm & Fin Chr* 158:1279 S 27 '43

Securities offered. *Comm & Fin Chr* 158:1474 O 11 '43

Stockholders take 92% of stock. *Comm & Fin Chr* 158:1639 O 25 '43

LOS ANGELES

See also

Petroleum—Los Angeles

Bridges

Curved box girders for highway overpass. *Il diags Eng N* 129:698-9 N 19 '42

Los Angeles completes big viaduct project. *Il Eng N* 130:324-5 Mr 4 '43

Stiffleg-traveler sets 78-ton girders; erecting Arroyo Seco River bridge at Los Angeles. P. R. Watson. *Il Roads & Sts* 86:52-3 S '43

Industries

Dynamic Los Angeles plans for the future. A. H. Allen. *Il map Steel* 113:98-101 S 6 '43

Every machine tool in Los Angeles indexed. *diags Elec West* 90:69-72 Ap '43

Rapid transit

Wartime transportation in Los Angeles; Pacific electric railway company operates railroad, interurban, street car, and motor bus service. D. Batman. *Il map Civil Eng* 13:537-40 N '43

Water supply

40th annual report, Board of water and power commissioners of the city of Los Angeles; abstract. *Am Water Works Assn J* 35: 117-18 Ja '43

LOS ANGELES stock exchange

Weekly record. Published in weekly Monday numbers of Commercial & financial chronicle

LOST articles

See also

Motor bus lines—
Lost articles

LOST mines. See Mines and mineral resources—Lost mines

LOST wax process

Precision castings for ordnance and aircraft; jewelry manufacturers make small parts by lost wax centrifugal casting process. J. D. Wolf. *Il Metals & Alloys* 18:784-8 O '43

LOTIONS

Dermatitis prevention. *Soap & San Chem* 19: 67 O '43

See also

Insect repellents
Leg make-up products

Advertising

War brings new grouping of markets; war workers and service men; Hinds lotion and Camels posters. F. W. Combs. *Il Ptr Ink* 203:52+ Ap 30 '43

LOTUS ware. See Pottery—Manufacture

LOUD speaking apparatus

Army uses electronic bugler; public address system at Camp Wood. K. R. Porter. *Il Radio N* 29:22-4+ Ap '43

Centralized sound in an ordnance plant. S. Harman and H. A. Blair. *Il plan Radio N* 28:30-1+ O '42

Commercial sound enlists; the microphone and the loudspeaker join in war effort to increase efficiency of operations. G. R. Ewald. *Il Sci Am* 168:70-2 F '43

Conditions for wide angle radiation from conical sound radiators. R. W. Carlisle. *Acoustical Soc Am J* 15:44-9 J1 '43

Electronic megaphones; units using vacuum-tube amplifiers aid navy in maintaining communications among convoyed ships. *Il diags Electronics* 16:125-7 N '43

Frequency modulation distortion in loud speakers. G. L. Beers and H. Belar. *bibliog Soc Motion Picture Eng J* 40:207-21 Ap '43

Improved low frequency horn. P. W. Klipsch. *Bibliog Acoustical Soc Am J* 14:179-82 Ja '43

Industrial music and morale. D. D. Halpin. *Il Acoustical Soc Am J* 15:116-23 O '43

Industrial sound for war production. S. Harman and H. A. Blair. *Il diags Radio N* 28:42-3+ D '42

Music in the factory. *Il Elec R (Lond)* 132: 637-42 My 14 '43

Practical radio course. A. A. Ghirardi. *Il diags Radio N* 30:38-9+ Ag; 43-4+ S '43 (to be cont)

Public address system in safety work at Barron gold mines. E. Ross. *Can Min J* 64:512-13 Ag '43

Public address systems. S. Hill. *bibliog diags Inst E E J* 89 pt 3:124-34 S '42; Discussion. 89 pt 3:134-8; 90 pt 3:151-2 S '42, S '43

Railways and public address; new installation at Waverley station, Edinburgh. *Electrician* 131:102 J1 30 '43

Sound, and its place in the sun. F. D. Wilson. *Il Electronics* 16:108-10 Mr '43

Sound systems in design of modern buildings. *Il plan Arch Forum* 79:6-7 J1 '43

Universal equalizer provides a-f amplifier design data. *Il diags Electronics* 16:120-1+ Ag '43

See also

Microphones
Radio loud speakers

Testing

Distortion meter for public address men. R. P. Turner. *Il diags Radio N* 29:18-20+ Ap '43

LOUDNESS. See Sound—Measurement

LOUGHLIN, Anne

Portrait. *Business Week* p80 Ja 9 '43

LOUIS LIVINGSTON library of baking, Chicago

Libraries and the nutrition program; food products library. M. Schoener. *Special Lib* 34:265-7 J1-Ag '43

LOUISIANA

See also

Gas, Natural— Louisiana	Petroleum industry and trade—Louisiana
Land tenure—Louisiana	Salt mines and mining—Louisiana

LOUISIANA and Arkansas railway

Louisiana & Arkansas railway credit improving. M. Howe. *Barron's* 23:10 S 6 '43

LOUISVILLE, Kentucky

See also

Coal trade—Louisville, Kentucky	Labor supply— Louisville
---------------------------------	-----------------------------

Sewerage

Gaging and sampling Louisville's sewage. C. F. Johnson. *Il diags Civil Eng* 13:97-100 F '43

Water supply

84th annual report for year ending December 31, 1941, Louisville (Ky.) water co.; abstract. *Am Water Works Assn J* 35:119 Ja '43

LOUISVILLE and Nashville railroad

Railroad securities. *Comm & Fin Chr* 156: 2053 D 10 '42

LOUSE powder. See Lice

LOUVERS

Louvers for house construction; with time-saver standards. C. T. Sigman and W. J. Ward. *Il diags Arch Rec* 92:69-72 N '42

LOW melting alloys. See Alloys. Low melting

LOW temperature. See Temperature, Low

LOWELL, Abbott Lawrence, 1856-1943
Sketch. *por Tech R* 45:187-8 F '43

LOWTHER, William Earl, 1879-
General counsel of companies in Phoenix-
London group. C. Axman. por East Underw
44:25 My 14 '43

LUBEC, Maine

Neighbor to the great tides. A. Michel. il
Diesel Power 21:413-14 My '43

LUBRICATING greases

All-America package competition award; Sun
oil company fiberboard container for
greases. il Mod Packaging 16:112+ Ap '43
Lithium soaps in lubricating greases. A. L.
Foster. Oil & Gas J 42:77 Jl 15 '43
Lubricants containing soap and soap solu-
tions. Mach 49:166 Mr '43
New developments in greases. Iron Age 152:73
O 28 '43
Preparation of high temperature stopcock
greases. I. E. Puddington. Am Chem Soc
J 65:990-1 My '43

Manufacture

Refinery practice for the operating man;
manufacture of lubricating oils. Pet Eng 14:
108+ S '43

Testing

Characteristics of greases at low tempera-
tures. T. A. Maxwell. il diags Nat Pet N
35 pt2:R42-4 Ja 6 '43; Same. Pet Refiner 22:
76-8 Ja '43

LUBRICATING oil industry

Service

Sinclair's Farming for victory program: what
it is, how it works. W. J. Andree. il Sales
Management 52:18-21 Ja 15 '43

Statistics

Lubricants, 1938-1941. Survey of Cur Busi-
ness 1942 Sup p159 [supplemented in month-
ly numbers]

Taxation

OPA allows lube oil tax increase to be passed
along to consumer. Nat Pet N 34:9 N 18
'42

United States

Socony-Vacuum; fights the war from Kokomo
(Ind.) to Kirkuk (Iraq). il map Fortune 26:
110-15+ N '42; 27:114-19+ F '43

LUBRICATING oils

Bloom of petroleum oils. J. De Ment. flow
diag Pet Refiner 22:83-5 Ag '43
Boundary film lubrication; abstract. A. W.
Burwell. diag S A E J 51:sup26+ O '43
Catalysis in the oxidation of lubricating oil.
R. G. Larsen and E. A. Armfield. bibliog
il Ind & Eng Chem 35:581-8 Mr '43
Chart for determining the absolute viscosity
of oils. E. M. Sims. Power Pl Eng 47:110
Ap '43

Conservation of lubricating oil. diags Inst
Pet J 28:285-96 D '42

Corrosion of lead-indium diffusion alloys. J.
M. Freund, H. B. Linford and P. W.
Schutz. diags Electrochem Soc Trans 84
(preprint 7):61-5 O '43

Hot boxes a perennial problem. C. B. Smith.
Ry Age 114:395-7 F 20 '43

How to keep belting free of oil corrosion.
Brick & Clay Rec 102:36-7 Je '43

Is your turbine-oil care good, bad or indif-
ferent? W. G. Forbes. il diag Power 87:
539-40 Ag '43

Lubrication of gear wheels with special ref-
erence to conditions of boundary lubrica-
tion; abstract. E. Pietsch. Roy Aeronauti-
cal Soc J 47:sup220 My '43

Moroccan oil supplies; locally produced lubri-
cants. Chem Age (Lond) 48:23 Ja 2 '43

New lubricant developed in Sweden; Teveol.
For Comm W 11:26 Ap 3 '43

Oil additives. E. W. Steinitz and F. J. Grose.
bibliog diags Automobile Eng 33:273-5 Jl '43

Oil coolers; new theories and tests on the
subject of heat exchange. E. W. Steinitz
and F. J. Grose. il diags Automobile Eng
33:121-2 Mr '43

Recovery of lubricating oil on a small scale.
Engineer 176:170 Ag 27 '43

Selecting lubricants for industrial applica-
tions. il Product Eng 14:447-50 Jl '43

Stops emulsification of bearing oil. diag Elec
W 120:1216+ O 2 '43

Viscosimetry and new graphical viscosity
classifications. C. M. Larson and W. C.
Schwaderer. Oil & Gas J 42:49-50+ Jl 15 '43
Viscosity characteristics of lubricating oils
saturated with natural gases at high pres-
sures. J. S. Swearingen and E. D. Redding.
bibliog il diag Ind & Eng Chem 34:1496-8
D '42

See also

Castor oil
Lubrication and
lubricants

Analysis

Radioisulfur tracer study of sulfurized lubri-
cation addition agents. G. L. Clark, S. G.
Gallo and B. H. Lincoln. bibliog diags
J Ap Phys 14:428-34 Ag '43

Color

Proposed method of test for color of lubri-
cating oil by means of photoelectric col-
orimeter. Am Soc T M Proc 42:317-20 '42

Manufacture

Contact filtration as an aid to wartime pro-
duction. R. C. Davidson. diags Oil & Gas J
41:116, 120, 123-4+ Mr 25 '43

Refinery practice for the operating man
(cont). il diags Pet Eng 14:105, 108 Ja; 94,
96, 98 F; 78, 81 Mr; 90+ Ap; 142, 145, 148
My; 69-70, 72, 74 Je; 84, 86 Jl; 39-42 Ag;
108+ S; 15:162, 164+ O '43

Solvent extraction of lubricating oils. H. ter
Meulen. diags Inst Pet J 29:237-48; Dis-
cussion. 249-52 S '43

Solvent extraction of lubricating oils; ab-
stract. H. ter Meulen. Chem & Ind 62:35
Ja 23 '43

Testing

Armour institute is clearing house for heavy-
duty oil test data. Nat Pet N 35 pt 2:R472
O 6 '43

Base oil evaluation for heavy-duty service.
A. O. Willey. il Nat Pet N 35 pt 2:R503-4,
R506-8 N 3 '43

Check your turbine oil to make it last longer.
W. G. Forbes. diags Power 87:439-41+ Jl
'43

Chemical problems of engine lubrication; the
problem of lubricating oil stability. R. G.
Larsen, F. A. Armfield and G. M. Whitney.
il S A E J 51:310-16+ S '43

Correlation of laboratory oil bench tests with
full-scale engine tests. C. W. Georgi. il
S A E J 51:52-62 F '43; Abstract. Auto-
motive & Aviation Ind 87:94+ D 1 '42

Corrosion of bearing alloys. L. M. Tichvinsky.
bibliog il diags S A E J 51:69-76 Mr '43;
Abstract. Automotive & Aviation Ind 88:24
Ap 1 '43

Deterioration of lubricating oils; soybean
lecithin as an inhibitor. J. J. Jacobs and D.
F. Othmer. bibliog il diag Ind & Eng Chem
35:883-9 Ag '43; Correction. 35:1127 O '43

Electrical method for studying oil film thick-
ness; abstract. R. Poppinga. diags Auto-
motive & Aviation Ind 89:44+ Jl 1 '43

Engine wear and its measurement in the
study of lubrication; abstract. A. G. Cat-
taneo, W. Gasser and W. N. Malott. Oil
& Gas J 42:132+ Je 24 '43

Heavy-duty lubricating oils for naval Diesel
engines. E. N. Klemgard. il S A E J 50:
284-98 Jl '42

Influence of lubricating oil viscosity on
cylinder wear. H. A. Everett. il S A E J
51:165-9 My '43; Abstract. Automotive &
Aviation Ind 88:25+ Ap 1 '43

Lubricating oil detergency. S. K. Talley and
R. G. Larsen. il Ind & Eng Chem Anal ed
15:91-5 F 15 '43

Method for determining pour point stability
of lubricating oils. L. M. Henderson and
W. G. Annable. Nat Pet N 35 pt 2:R433-6
S '43; Same. Oil & Gas J 42:54-6+ S 9
'43

Oxidation-corrosion of lubricating oils. C. L.
Pope and D. A. Hall. bibliog il diag Nat
Pet N 35 pt 2:R279-81 Je 2 '43

Physical properties of lubricating oils at low
temperatures. A. Bondi. bibliog il diags
Pet Refiner 22:97-104 S '43

Piston-ring scuffing as a criterion of oil per-
formance. G. H. Keller. il diag S A E J 51:
125-9 Ap '43

LUBRICATING oils—Testing—Continued

- Potential service performance of lubricating oils; laboratory evaluation. G. W. Waters and E. C. Larson, bibliog il diag Ind & Eng Chem Anal ed 15:550-9 S 15 '43
- Four-point stability of treated oils under winter storage conditions. C. E. Hodges and A. E. Boehm, il diag Oil & Gas J 42: 103-6 Je 24 '43
- Propose new standard tests to indicate the acidity in lubricating oils. bibliog il Nat Pet N 35 pt 2:R90-1 F 3 '43
- Proposed method of test for oxidation characteristics of heavy-duty crankcase oils. diag Am Soc T M Proc 42:326-40 '42
- Re-refining of aircraft-engine oils. G. K. Brower, flow chart S A E J 51:130-8 Ap '43; Same cond. Nat Pet N 35 pt 2:R172, R174-9 Ap 7 '43; Abstract. Automotive & Aviation Ind 88:24- Mr 1 '43
- Simplified lubricating oil oxidation stability test. R. E. Hersh and others. bibliog diags Pet Refiner 22:91-9 Jl '43
- Test for oxidation characteristics of steam-turbine oils is proposed. Net Pet N 35 pt 2:R437-8 S 1 '43
- Test shows need for 60-day oil change. H. L. Moir, il Nat Pet N 35:32-3 Je 9 '43
- 24-hr test developed to study motor oils; abstract and discussion. H. L. Moir, W. J. Backoff and N. D. Williams. S A E J 51: sup60-1 Jl '43
- Viscosity measurement and viscosity index. J. C. Cragg and E. A. Evans, bibliog Inst Pet J 29:99-109; Discussion. 110-23 Ap '43
- Visage viscosity comparator. il Diesel Power 21:430-2 My '43
- LUBRICATION and lubricants**
- ABC of chemical derivatives from petroleum; detergents and lubricants. R. L. Wakeman and B. H. Well, il Nat Pet N 35 pt 2:R161-4, R166-7, R170-1 Ap 7 '43
- Bearing design as affected by lubrication theory. A. H. Korn, diags Machine Design 15:77-9 Ja '43
- Blast furnace lubrication; abstract. A. J. Jennings, Iron Age 152:72-3 O 7 '43
- Chart aids selection of lubricants. A. H. Korn, Machine Design 15:115-16 Mr '43
- Colloidal graphite, a modern lubricant. R. K. Carleton, bibliog il diags Chem Ind 52: 50-2 Ja '43
- Cooperative research comes of age. C. B. Veal, S A E J 51:45-51+ F '43; Same cond. Nat Pet N 35 pt 2:R136-9 Mr 3 '43
- Daily oiling saves motors. G. W. Donovan, il Factory Management 101:131-3 F '43
- Design of sleeve bearings by hydro-dynamic theory. H. W. Hamm, bibliog diags Product Eng 14:422-4, 464-6 Jl '43
- Dimensional value of lubricants in gear design. J. O. Almen, il diags S A E J 50: 373-80 S '42; Same. Automobile Eng 33:147-53 Ap '43
- Do you want your gear speed reducers to run better longer? W. F. Plume, il Power 87:615-17 S '43
- Dry lubrication method; dispersion of dag colloidal graphite in acetone. Electrician 131:89-90 Jl 23 '43
- Fuels and lubricants activities of the army; abstract. J. A. Richardson, Automotive & Aviation Ind 88:25 Ap 1 '43
- Fuels and lubricants for U.S. army motorized ground forces. G. A. Round, il Nat Pet N 35 pt 2:R291-4, R296-7, R 300 Jl 7 '43; Excerpts. S A E J 51:sup33-6 Ag '43
- Gear wheel lubrication. E. Pietsch, Automobile Eng 33:233 Jl '43
- How to get the lubricant to the bearing. G. A. Van Brunt, il diags plan Factory Management 101:[insert]76b Ap '43
- How to get the most out of lubricants. E. R. Lederer, Factory Management 101: 129-36 My '43
- Industrial lubricants. G. S. Collingridge, bibliog Chem Age (Lond) 47:577-82 D 26 '42
- Influence of machine design on lubrication. W. G. G. Godron, Mech Eng 65:347-9+ My '43
- Lead as a lubricant. Can Min J 64:572 S '43
- Lubricants for ordnance combat and motor-transport vehicles. R. E. Jeffrey, Jr. S A E J 51:345-9, 368 O '43
- Lubricants from tree stumps. Engineer 176:11 Jl 2 '43

- Lubricants; investigation of the conditions of boundary friction. Automobile Eng 32:532 D '42
- Lubrication and compressors. diag Eng & Min J 144:78 My '43
- Lubrication by thin metallic films and the action of bearing metals. F. P. Bowden and D. Tabor, il J Ap Phys 14:141-51 Mr '43
- Lubrication color guide from container to bearing. G. F. Keeley, il Factory Management 101:[insert]76a Ap '43
- Lubrication fundamentals for traction motors. J. W. Teker, il diag Mass Transportation 39:213-15 Je '43; Same. Diesel Power 21: 703-5 Ag '43
- Lubrication of machinery in water and sewage treatment plants, il diags table Pub Works 74:20-1+ Je; 22-4+ Jl '43
- Lubrication of speed reducers for oil-field pumping service. Am Pet Inst Proc 23(4): 210-12 '42
- Oil temperature must be controlled for highest efficiency in machinery. Sci Am 169: 159 O '43
- Oiliness and surface roughness. J. J. Bikerman, diag Soc Chem Ind J 62:41-2 Mr '43
- Physical basis of seizure. E. A. Smith, Engineering 154:481-2 D 18 '42
- Planned lubrication; Thompson aircraft products co. O. M. Albl, il diags Steel 113:82-3+ Ag 9 '43
- R for making good chain drives better by A-1 lubrication. C. J. Copley, il diags Power 87:687-9+ O '43
- Review of power and mechanical equipment; lubricating, il Power 86:936-7 Mid-D '42
- Role of surface chemistry and profile in boundary lubrication. J. T. Burwell, S A E J 50:450-7 O '42; Abstract. Metal Prog 43: 582+ Ap '43
- Scheduled lubrication keeps bearings rolling along. A. J. Strohmaier and C. L. Lovell, il Power 87:307-9 My '43
- Scheduled lubrication slashed upkeep costs; Dupont, Grasselli chemicals department. J. L. Bowman, il Factory Management 101: 133-6 O '43
- Soap serves the shop. Am Mach 87:102 Je 24 '43
- SAE fuels and lubricants meeting, Tulsa, Oct. 22-23. S A E J 50:sup22, 24+ D '42
- SAE war engineering production meeting; fuels and lubricants sessions. S A E J 51: sup 62-5 F '43
- Some information on the transportation, storage, and handling of lubricants in and about coal mines. D. S. Kingery, pls U S Bur Mines Information Circ 7244:1-7 '43
- Static friction; machine for measuring friction between contacting surfaces separated by thin lubricating films. W. Claypoole, il diag A S M E Trans 65:317-22; Discussion. 322-4 My '43
- Studies in lubrication; temperature behavior of journal bearing systems. M. Muskat and F. Morgan, diag J Ap Phys 14:234-44 My '43
- Trend is toward functional tests for lubricants. F. W. Kavanagh, Nat Pet N 35 pt 2: R465 O 6 '43
- See also*
- | | |
|--------------------------------------|-----------------------------------|
| Airplane engines—
Lubrication | Lubricating oil industry |
| Airplanes—Lubrication | Lubricating oils |
| Automobile engines—
Lubrication | Lubricators |
| Bearings | Oil reclamation |
| Cotton machinery—
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| Electric motors—
Lubrication | Road making machinery—Lubrication |
| Excavating machinery—
Lubrication | Rock drills—Lubrication |
| Graphite | Rolling mills—Lubrication |
| Lubricating greases | Wire rope—Lubrication |
- History**
- Beginnings of lubrication technique. Engineering 156:251-2 S 24 '43
- Patents**
- Digest of United States patents. H. Helmann, comp. Pet Refiner 22:152+ Mr '43
- Patents on lubricants and lubrication. Inst Pet J 28:436A-8A; 29:282A-4A N '42; Jl '43

LUBRICATION and lubricants—Continued**Standards**

WPB requests color code to identify machine lubricants. *il* Ind Stand 13:283 N '42

Testing

Natural fats as lubricants. E. M. Kipp. *bib-log Mech Eng* 65:809-11 N '43

See also

Lubricating oils—
Testing

LUBRICATION and lubricants (cutting and grinding)

Basic considerations in selecting coolant pumps. J. W. Greve. *il* Machine Design 15:66-8 Ja '43

Chloracne from cutting oils. L. Schwartz and F. A. Barlow. *Pub Health Rep* 57:1747-52, pl 1-6 N 20 '42

Cutting fluid recommendations for the new wartime metals. *Nat Pet* N 35 pt 2:R324 JI 7 '43

Cutting oil speeds production, lengthens tool life; Cut-aid. *Sci Am* 167:256 D '42

Cutting oils and the skin. C. Leggo. *Ind Med* 12:102-8 F '43

Cutting tools and lubricants. 1942. O. W. Boston. *Metals & Alloys* 17:69-71 Ja '43

Electrostatic precipitators remove oil mist in machine shops. *Electronics* 16:141-2+ JI '43

Have you recently appraised the cutting fluids? J. Geschelin. *Metal Prog* 43:548-9 Ap '43

Health hazards of cutting oils. C. L. Weirich. *il* Safety Eng 85:36-40 Mr '43

How to salvage chips and oil; why it pays. W. Heymann. *diags Factory Management* 101:124-6 F '43

Keep cutting fluids clean. P. H. Krupp. *il* Metal Prog 44:109-10 JI '43

Lubricants containing soap and soap solutions. *Mach* 49:166 Mr '43

Machinability ratings and cutting fluid recommendations; Independent research committee on cutting fluids, American society of tool engineers. *Automotive & Aviation* Ind 88:48, 50, 52 Ap 15 '43

Machinability ratings of metals and cutting fluid recommendations. O. W. Boston and others. *Metal Prog* 44:622-4, 624A O '43

Magnetic filter for lubricants. *il* Engineering 154:466 D 11 '42

New equipment. *il* Iron Age 150:65-6 D 10 '42

Prevention of skin rashes; the practical solution of the cutting-oil problem. J. H. Biram. *Ind Med* 12:208-10 Ap '43

Production surface grinding to micro-inch finish; machine requirements; magnetic chuck usage; proper selection of coolant. H. J. Chamberland. *il* Iron Age 152:56 N 11 '43

Reclaiming cutting oil from the air with a Precipitron. *il* Iron Age 151:43 F 25 '43

Two coolant streams improve grinding; Ford aircraft engine plant. *il* diags Am Mach 87:107-8 Ja 7 '43

LUBRICATION and lubricants (metal drawing)

Phosphate coatings aid metal drawing. A. Durer and others. *Iron Age* 152:59-60 S 30 '43; *Abstract. Metals & Alloys* 18:348 Ag '43

Sheldraw no. 151 compound for steel shell case drawing. *Am Mach* 87:118 Ap 1 '43

Use of cuprodine as a lubricant in the drawing of steel cartridges. G. S. Gardner. *Metal Finishing* 41:212 Ap '43

LUBRICATORS

Lubricators for driving journals. *il* Ry Mech Eng 117:236-7 My '43; *Same. Ry Age* 114:1214+ Je 19 '43

Rail lubricators demonstrate advantages. *il* Ry Age 114:581-2 Mr 20 '43

Regreasing added to service of rod end ball bearings. *il* diags Aero Digest 43:463+ JI '43

Testing

Test rack for mechanical lubricators. *il* Ry Mech Eng 117:224-5 My '43

LUCITE

Machining lucite. *il* Aero Digest 41:194-5 D '42

See also

Methyl methacrylate
Plastic materials,
Transparent

LUFFA aegyptiaca. *See* Luffa cylindrica

LUFFA cylindrica

Loofas ahoy! tale of the dish-rag gourd. E. F. Sylvester. *il* For Comm W 10:4-5, 23 Mr 6 '43

LUGGAGE. *See* Baggage

LUMARITH

Cellulose acetate sheet plastic assumes importance for aircraft. W. E. Moeller. *il* Aero Digest 42:183, 187, 191 My '43

Fittings for the Thunderbolt. *il* Mod Plastics 20:72-3 Je '43

LUMBER

Lumber for patternmaker and foundryman. E. T. Kindt. *Foundry* 71:159-63 Mr '43

Needed: log-rolling. *il* Arch Forum 79:48-9 Ag '43

Working stresses for lumber increased by 20 percent. *Eng N* 131:295 Ag 19 '43

See also

Hard woods	Wood
Mine timber	Wood construction
Pine	Wood containers

Prices

Price argument; Canada feels its lumber and newsprint industries are cramped by ceilings in U.S. *Business Week* p60+ Ja 9 '43

LUMBER camps

Portable camps on skids. J. Hundevad. *il* plans Pulp & Pa of Can 44:316-18+ O '43

Equipment

Drag line arrangement for sweeping pulpwood from banks of lakes. J. L. Kelly. *il* diags Pulp & Pa of Can 44:516-17 Je '43

LUMBER drying

Chemical seasoning of timber; the use of urea. *Chem Age (Lond)* 49:153-6 Ag 14 '43

LUMBER handling

Drag line arrangement for sweeping pulpwood from banks of lakes. J. L. Kelly. *il* diags Pulp & Pa of Can 44:516-17 Je '43

Moving timbers in a fabricating yard. *il* plan Eng N 130:428-9 Mr 25 '43

Timber unloading plant. *il* Mech Handling 30:350-1 Ag '43

LUMBER mills

See also

Sawmills

LUMBER trade

Common problems of the wooden-boat builder and the lumber industry. C. A. Rishell. *Marine Eng* 48:219-20, 222+ S '43

Junior prefabs; lumber yard transformed into factory for brooder houses, feed bunks, etc. *il* Business Week p34+ My 1 '43

Lumber crisis. *Arch Rec* 94:7 S '43

See also

Lumber workers
Pine

Statistics

Lumber and manufactures, 1938-1941. Survey of Cur Business 1942 Sup p132-5 [supplemented in monthly numbers]

Lumber statistics; revised series, monthly, 1937-1941. Survey of Cur Business 23:27-8 Mr '43

British Honduras

Exports from British Honduras, 1941. *For Comm W* 11:31 Ap 17 '43

Canada

Engineers and the British empire; Canadian lumber, pulp, and paper industries. M. Smith. *il* Engineer 176:160-1 Ag 27 '43

Second front of the pulp and paper companies of Canada. *Pulp & Pa of Can* 44:794-7+ O '43

Threatened shortage of pulpwood and of newsprint. L. H. Smith. *Paper Tr J* 117:7, 14 O 14 '43

Colombia

Prospects reported bright for Colombia's lumber industry. *For Comm W* 9:35 N 14 '42

India

Heavy demand for India's timber. *For Comm W* 10:23-4 Ja 16 '43

LUMBER trade—Continued**Michigan**

Ford saws wood; expanding lumber output.
Business Week p42+ O 30 '43

Nigeria

Nigeria's sawmill production. For Comm W
11:26-7 Je 5 '43

Northwestern states

Pulpwood supply for Pacific Northwest mills.
R. W. Cowlin. Il map Paper Ind 25:713-16
O '43

South Africa

South Africa's sawmilling industry. For
Comm W 13:22 N 6 '43

Southern states

South as the Nation's source of timber.
Q. T. Hardtner. Il Manuf Rec 112:40-1+
Ag '43

Southern pine production. H. C. Berckes. Il
Manuf Rec 112:36+ Ag '43

Sweden

Sweden's lumber industry; export figures,
1940-42. For Comm W 11:30 Je 19 '43

United States

Bureau set down; Forest service's plan to
harness the lumber industry. Business Week
p20+ Mr 6 '43

Lumber industry. Survey of Cur Business
23:5-6 Ap '43

Manpower shortage listed as principal cause
of tight lumber supply picture; lumber survey
committee's 46th quarterly report. Eng
N 129:814 D 10 '42

Sawmills ask aid; want Byrnes to break
bottle-necks. Business Week p 18-19 Je 12
'43

LUMBER workers

Declares pulpwood cutting essential. Paper
Tr J 117:14 Ag 5 '43

Forests rumble; pine workers threaten to
spread walkout. Business Week p108+ Ap
17 '43

Heading off labour trouble. G. Christian. Pulp
& Pa of Can 44:515 Je '43

Keeping woods workers at work; continuous
service bonus. Pulp & Pa of Can 44:820 O
'43

Labor shortage acute in Canadian woods.
Paper Tr J 117:12 Ag 19 '43

Labor situation in western logging camps
and sawmills. M. R. Sugg. Monthly Labor
R 55:1125-33 D '42

Loggers' demands. Business Week p104 Mr 13
'43

Loggers wanted; War manpower commission
combs the shipyards. Business Week p93-4
My 1 '43

Lumber dragging; shortage of labor in the
woods and pulp mills raises fears for 1944.
Business Week p19-20 Ag 14 '43

Model in lumber; West Coast lumber commis-
sion set up by NWLB; decentralization
scheme. Business Week p80 Ja 30 '43

Serious shortage of logging labor. Paper Tr
J 117:7 Jl 1 '43

Split in lumber. Business Week p111-13 Mr
20 '43

Woods labour training; six papers prepared
for the Canadian international paper com-
pany. M. G. Linekin and others. Pulp & Pa
of Can 44:325-32 Mr '43

Woodsmen essential; increasing shortage of
printing and other papers. Inland Ptr 111:
31-2 Ag '43

LUMBERING

Difficulties in timber conservation; commit-
tee report. Ry Age 114:950 My 15 '43

How to be a logger in one easy lesson;
humorous description. E. Nicol. Il Pulp &
Pa of Can 43:961-2 D '42

North for spruce; Alaskan forest wood needed
for airplanes. Il Business Week p58+ Jl 17
'43

Pulpwood operations in British Columbia. D.
G. Stenstrom. diag Pulp & Pa of Can 44:
270-3 F '43

See also

Lumber workers

Accidents

Accident risks in woods operations. O. Wall-
ner. Pulp & Pa of Can 43:907-9 N '42

Safety measures

Role of a safety committee in reducing
woods accidents. P. J. Hurley and D. R.
Stevens. Pulp & Pa of Can 44:322-4+ Mr
'43

LUMBERJACKS. See Lumber workers

LUMINESCENCE

Activating light sources for luminescent ma-
terials. E. W. Beggs. Il diag Opt Soc Am J
33:61-70 F '43

Destruction of the phosphorescence of ZnS-
Cu phosphors; abstract. Becker and Schap-
er. Wireless Eng 20:207 Ap '43

Electrification and luminescence phenomena
accompanying desorption of gases from
metals. J. W. McBain and C. I. Glassbrook.
bibliog Am Chem Soc J 65:1908-9 O '43

Exaggerated phosphorescence of zinc silicate
phosphors. H. C. Froelich and G. R. Fonda.
J Phys Chem 46:878-85 N '42

Phosphorescence of adsorbed tryptaflavine and
its quenching by oxygen. J. Franck and
P. Fringsheim. bibliog J Chem Phys 11:
21-7 Ja '43

Survey of luminescence; abstract. L. Levy
and D. W. West. Electronics 16:156+ My
'43

Template-making shortcuts in airplane man-
ufacture; General Motors X-ray activated
material prints from negative to positive
plates by phosphorescence. G. E. Stedman.
Il Steel 111:70-1+ N 23 '42

See also

Fluorescence

Luminol

Paint, Luminous

LUMINOL

Synthesis of aminobenzoyleneureas and of
dihydroxyquinoxalines isomeric with lumi-
nol. E. H. Huntress and J. V. K. Gladding.
bibliog Am Chem Soc J 64:2644-9 N '42

LUMINOSITY

See also

Visibility

LUMINOUS paint. See Paint, Luminous

LUNCH counters

See also

Railroads—Stations

—Lunch counters

LUNCHES

See also

School lunches

LUNCHES, Employees'

Food is ammunition; nutrition of workers. Il
Nat Safety N 47:7+ Mr '43

In-plant feeding; system announced by Meal-
pack, Inc. Coal Age 48:96 Ag '43

Meals served at plant increase production,
cut absences. Il Safety Eng 55:49-50 Je '43

Nutrition, a weapon to fight lost time; health
and nutrition programs being conducted by
industry. Am Business 12:30-2 N '42

Nutrition in industry has plenty rice bowl;
Serval plan; interview with G. S. Jones.
G. E. Stedman. Il Gas Age 90:22-4+ D 17
'42

Promoting nutrition to employees. R. G.
Spence. Il Factory Management 101:90-2 Ja
'43

Psychology and industrial nutrition programs;
food in relation to mental processes. L. S.
Selling. Ind Med 12:69-73 F '43

Square meals or sandwiches? portable vac-
uum-insulated food and liquid carriers. H.
P. Smith. Il Nat Safety N 46:20 D '42

Vitamin feeding pays. Business Week p42
F 20 '43

Vitamins in industry, yes or no? H. S. Bean.
Il Safety Eng 56:41+ S '43

War on health hazards; Wright field. Z. T.
Wirtschafter. Il Nat Safety N 48:19+ Jl '43

Winning with food; proper food facilities
and nutrition education in industry. E.
Perry. Il Nat Safety N 47:18-19+ F '43

Workers' canteens. Economist 144:339+ Mr
13 '43

LUNCHROOMS and cafeterias

Britain is feeding her workers well, and all
for a shilling. F. B. Barton. Il Factory
Management 101:112-15 O '43

LUNCHROOMS and cafeterias—Continued

- Help yourself by mechanical handling; Lyons & co. Strand Corner House. *il* Mech Handling 30:311-12 *Il* '43
 Modern cafeteria. *il* plan Arch Rec 94:78-9 Ag '43
 New buildings for 194X: restaurant, with individual moving tables. *il* diag plans Arch Forum 72:116-19 My '43
 Telephonic cafeteria. plan Arch Rec 94:72 Ag '43

LUNCHROOMS and cafeterias, Employees'

- Beating the ration; factory workers gorge at plant cafeterias. *Business Week* p56+ Mr 20 '43
 Feeding Britain's workers. D. V. Baker. *Steel* 113:118, 120, 122 *Il* 12 '43
 Food for production. Q. O. Dodge. *bibliog* Ind Med 12:297-301 My '43
 Good food, and no time lost; Brooklyn navy yard. *il* Factory Management 101:92-3+ My '43
 How industry is fighting hidden hunger. T. C. Desmond. *il* Factory Management 101:94-7 Je '43
 Industrial canteens in Great Britain. *Monthly Labor R* 56:1108-9 Je '43
 Industrial lunchrooms in wartime; abstract. K. MacRury. *Management R* 32:58-60 F '43
 Mechanical equipment for factories; kitchens and cafeterias. H. E. Sloman. *il* plan Arch Rec 93:63-5 F '43
 Proper feeding boosts worker production; Douglas aircraft co. L. S. Flint. *il* Aviation 41:104-5+ N '42
 Proper nourishment for employees. *Bankers M* 146:554-5 Je '43
 Radiant heating and cooling for a new plant cafeteria. T. N. Adlam. *il* diag plans Heating-Piping 15:277-80 Je '43
 Restaurant facilities for industrial workers. T. M. Erickson. *Management R* 32:134-6 Ap '43

LUNDBYE process. See Chromium plating

LUNGS**Diseases**

- Incidence and prevalence of cancer of the lung. H. F. Dorn. *bibliog* Pub Health Rep 58:1265-71 Ag 20 '43
 Method for handling cases gassed with nitrous fumes; value of blood platelet counts in assessing pulmonary irritation. A. J. Fleming. *Ind Med* 12:127-32 Mr '43

See also

- Pneumonia
 Tuberculosis

Dust diseases

- Byssinosis, report of two cases and review of literature. H. L. Bolen. *bibliog* *il* J Ind Hygiene 25:215-24 Je '43
 Pneumoconiosis among mica and pegmatite workers. T. F. Vestal, J. A. Winstead and P. V. Joliet. *bibliog* *il* Ind Med 12:11-14 Ja '43
 Wood dust as a cause of bronchitis. W. L. Bergman, G. J. Rukstinat and W. D. McNally. *Ind Med* 12:509-12 Ag '43

See also

- Silicosis

LUPEOL

- Isolation of lupeol from the osage orange (*maclura pomifera* Raf.). L. J. Swift and E. D. Walter. *bibliog* *il* Am Chem Soc J 64:2539-40 N '42

LURAY cavern. See Caves

LUSTER

- Silky appearance in textile materials. *Textile Col* 65:345-8 Ag '43

LUTEIN

- Conversion of lutein in a boric acid-naphthalene melt. L. Zechmeister and J. W. Sease. *il* Am Chem Soc J 65:1951-5 O '43

LUTEOL compounds

- Studies in the chromamines; preparation of luteo salts. C. L. Rollinson and J. C. Ballar, jr. *bibliog* Am Chem Soc J 65:250-4 F '43

LUTEOLIN

- Anthochlor pigments; the pigments of coreopsis grandiflora. Nutt. T. T. Geissman and C. D. Heaton. *bibliog* Am Chem Soc J 65:677-83 Ap '43

LYCOPODIUM

- Substitute for lycopodium parting; Partex, made by pulverizing English walnut shells. *Iron Age* 150:48 D 17 '42

LYES

- Glycerine recovery from lye; abstract. J. L. Boyle. *Soap & San Chem* 19:61-2 N '43

Analysis

- Determining glycerol in crude glycerol and in soap lyes. W. J. Govan, jr. *bibliog* Ind & Eng Chem Anal ed 15:260-1 Ap 15 '43

LYNN, Massachusetts

See also

- Motor bus lines—
 Lynn, Massachusetts

LYON, Marguerite

- Portrait. *Ptr Ink* 205:94 O 22 '43

LYOTROPIC series

- Lyotropic order and the effects of sodium salts on the miscibility of cyclohexane and methyl alcohol. E. L. Eckfeldt and W. W. Lucasse. *bibliog* J Phys Chem 47:183-9 F '43

LYSINE

- Anhydrides of basic amino-acids. D. W. Adamson. *Chem Soc J* p39-40 Ja '43
 Quantitative investigations of amino acids and peptides; equilibria between amino acids and formaldehyde: arginine and lysine. E. H. Frieden, M. S. Dunn and C. D. Coryell. *J Phys Chem* 47:118-33 F '43

LYXOSE

- Production of furfural from D-lyxose and D-ribose. R. C. Hockett, A. Gutttag and M. E. Smith. *bibliog* diag Am Chem Soc J 65:1-3 Ja '43

M**MCALLISTER, Charles Albert, 1867-1932**

- Liberty ships named after American bureau of shipping officials. *Marine Eng* 48:220 Je '43

MACARONI

- Macaroni plays wartime role. *Food Ind* 15:95 Ag '43

MCBRIDE, Katharine Elizabeth, 1904-

- Portrait. *Fortune* 27:107 Ap '43

MCCARTHY, John Joseph Sylvester, 1898-

- Gallery; Irish intrigue. M. Merner. *pers Adv & Sell* 36:129+ F '43

MCCCLINTOCK, Miller, 1894-

- Gallery; very dull fellow. *por Adv & Sell* 36:28+ Je '43

MCCOBB, T. C.

- Sketch. *por Nat Pet* N 35:2 Mr 3 '43

MCCORMICK and company, Baltimore

- Multiple management re-examined. T. R. Reid. *Advanced Management* 8:60-3 Ap '43

MCCULLOCH, Robert Osborne, 1864-1943

- Sketch. *East Underw* 44:13 My 14 '43

MCCULLOCH, Robert P.

- To develop helicopters. *por Business Week* p46 S 18 '43

MACERANS enzyme. See Enzymes

MCGIFFERT, James, 1863-1943

- Sketch. H. S. van Klooster. *Science* 98:294-5 O 1 '43

MACHINE gun trainer

- New machine gun trainer with sound equipment. *il* Radio N 30:47 O '43

MACHINE guns

- Dr Gatling and his humanitarian gun; a case history from 1860's contrasts sharply with today's attitude toward wartime inventors. G. F. Milton. *il* Tech R 45:425-6+ Je '43
 Greatest gun wizard. *Fortune* 27:36+ Ap '43
 Hydraulic machine gun chargers. S. I. Macduff and G. A. Goepfrich. *il* Aero Digest 42:243-4+ F '43

- Redesigning the machine-gun mount by the industry-ordnance team. C. D. Alderman. *il* Mech Eng 65:637-8 S '43

MACHINE guns—Continued

- Sten machine gun design permits mass production at low cost. *il* diags Product Eng 14:618-20 O '43
- Submachine gun, M3; abstract. R. R. Studler. Mech Eng 65:819 N '43
- Submachine gun redesigned to save materials, cost, and tool requirements. *il* Sci Am 169:222-3 N '43

Manufacture

- American steel and wire co. develops steel for use in machine guns. Blast F & Steel Fl 31:444 Ap '43
- Methods and equipment for the inspection of machine gun parts and assemblies. C. G. Nelson. *il* Instruments 15:510-13 D '42
- Producing the Reising gun; Harrington & Richardson arms co. H. L. Horton. *il* diags Mach 49:113-23 Ja '43
- Redesigned bits and pieces speed Detroit ordnance production. *il* diags Product Eng 14:546-9 S '43
- Rifling gun barrels by broaching. I. A. Swidlo. *il* diags Am Mach 87:117-24 O '43

Transportation

- Saran film, its properties and wartime uses; moisture proof packaging. W. R. Dixon and H. L. Schaefer. *il* Mod Packaging 16:72-3 JI '43

MACHINE guns, Aircraft. See Guns, Aircraft

MACHINE load board. See Control boards

MACHINE parts

- Advantages and limitations of die-forged machine parts. C. L. Tutt, jr. *il* diags Product Eng 14:521-5 Ag '43
- Axelson manufacturing co. produces gages and close-fitting machine parts in air conditioned room. C. O. Herb. *il* Heat & Ven 40:32-4 Mr '43
- Ceramic parts in design. *il* diags Machine Design 15:120-3 Ag '43
- Designing magnesium parts for strength and wear; diagrams. Product Eng 14:374-5 Je '43
- Designing powder metal machine parts. C. Carmichael. *il* Machine Design 15:124-7 N '43
- Designs of deep-drawn shapes made by simple dies and welding. E. H. Hautz. *il* diags Product Eng 13:728-30 D '42
- Effects of residual stress on the fatigue of metals. J. O. Almen. *il* diags Product Eng 14:348-52 Je '43; Abstract. Iron Age 151:63-4 My 27 '43
- Fatigue of metals as influenced by design and internal stresses. J. O. Almen. *il* diags Metal Prog 43:209-15+, 737-40; 44:254-61, 435-40 F, My, Ag-S '43; Same cond. Automotive & Aviation Ind 88:28-32+ F 1; 28-31+ F 15 '43; Same cond. Steel 112:88-9+ Mr 8; 112, 146-9 Ap 5 '43
- High-strength cast irons for machinery parts. *il* diags Product Eng 14:659-62 O '43
- Iron castings replace forgings for highly stressed parts. *il* diags Product Eng 14:161-4 Mr '43
- Powder metallurgy; Chrysler corp.'s Amplex division. F. M. Reck. *il* Aero Digest 42:170, 173-4 Ja '43
- Powder metallurgy; physical properties of parts made from iron powder. F. V. Lenel. diags Mech Eng 65:489-92 JI '43; Same. Machine Design 15:130-3 JI '43; Same. Automobile Eng 33:415-18 O '43
- Powder metals find wide use. *il* Am Mach 87:83-6 Je 24 '43
- Selecting metallic coatings for machine parts. R. K. Lotz. *il* Machine Design 15:87-90+ O '43
- Shot blasting to increase fatigue resistance. J. O. Almen. bibliog *il* diags S A E J 51:248-68 JI '43; Same cond. Iron Age 151:65-9+ Je 10 '43; Same cond. Machine Design 15:124-9+ Je '43; Same cond. Mech Eng 65:553-63 Ag '43
- Specify standard parts! C. Carmichael. *il* diags Machine Design 15:97-9 JI '43
- Spraying defective metal parts. J. E. Hubel. *il* Foundry 71:191-2 O '43
- Straightening heat-treated parts. G. B. Berlien. *il* diags Steel 112:114+ Mr 15; 74+ Mr 29; 112+ Ap 12; 98+ My 3 '43

Surface finish and the function of parts. G. Schlesinger. diags Engineer 175:434-6, 454-6, 466-7 My 28-Je 11 '43; Same cond. Engineering 155:458-60, 478-80, 498-9 Je 4-18 '43; Discussion. Engineer 175:429-30 My 23 '43; Engineering 155:434, 454-5, 464-5 My 28-Je 11 '43

Testing designs of machine parts by the brittle lacquer method. R. G. Anderson. *il* diags Product Eng 14:611-14 O '43

See also

Bearings
Bolts and nuts
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MACHINE shop management

- Bonus to boost output; rewards for keeping all machines on the job every minute of 24-hour day. P. Bernstein. Factory Management 101:118+ Je '43
- Centralized grinding for single-point tools. W. E. Ainsworth. *il* Iron Age 152:51-3 S 23 '43
- Charting man and machines. H. M. Huston. Factory Management 101:92-3 S '43
- Cut tool costs by teaching workers to appreciate tool values. G. E. Stedman. *il* Steel 112:78-80+ My 24 '43; Abstract. Management R 32:254-6 JI '43
- Ideal salvage setup; materials handling system in disposal of machine tool cuttings. G. E. Stedman. *il* Steel 112:70-2, 74+ Ja 18 '43
- Modern methods of handling and storing dies and fixtures. E. C. Brosheer. *il* Am Mach 87:88-91 O 28 '43
- Parts schedule for hardness testers; manufacture of Rockwell hardness tester by Wilson mechanical instrument company. A. A. Blue. Am Mach 87:102-3 O 28 '43
- Producing a precision product; Michigan gage plant. G. E. Stedman. *il* Steel 111:56-8, 60+ N 30 '42
- Production illustration as applied to precision parts. R. Kay. diags Automotive & Aviation Ind 89:28-31+ JI 1 '43
- Proposed procedure for determining machine capacity. V. D. Geers. N A C A Bul 24:248-59 N 1 '42
- Puff carbide applications in hands of specialist. K. R. Beardslee. *il* Iron Age 152:62-4 S 16 '43
- Putting quality into quantity; quality control, based on rules of probability. L. T. Rader. Am Mach 87:92-3 O 28 '43
- Quality control will reduce costs; manufacturing operations at Westinghouse. J. Manuele. *il* diags Am Mach 87:78-81 Ap 29 '43
- Scrap drive helps plant efficiency; American screw company. *il* Am Mach 86:1291 N 12 '42
- What's wrong with production? F. H. Colvin. Am Mach 86:1484+ D 10 '42
- See also**
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|-----------------------|---------------------|
| Assembling methods | Machinery, Re- |
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| Machine shops— | Tools |
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- Automatic screw machines in war production; operations as performed on Acne-Gridley multiple-spindle automatics. *il* diags Mach 49:143-53 Mr '43
- Automatics speed binocular production; Westinghouse electric & manufacturing company. J. Witchey. *il* Am Mach 87:92-3 Ag 5 '43
- Boys anti-tank guns, made in Canada. *il* diags Am Mach 87:112-20 Mr 18 '43
- Breech bolts for Boys anti-tank rifles. *il* diags Am Mach 87:99-101 My 13 '43
- Building Douglas wings for victory. C. O. Herb. *il* Mach 49:178-85 JI '43
- Building the mounts for 90-mm. anti-aircraft guns. C. O. Herb. *il* Mach 49:129-41 Je '43
- Building turbines for ships in our permanent merchant fleet; Merchant marine division, Westinghouse electric & mfg. co. E. L. Spray. *il* diags Mach 49:172-9 N '42; 154-7 Mr '43

MACHINE shop practice—Continued

- Chevrolet finds new ways; chambering the 90-mm. gun; aircraft piston grinding; tapping P. & W. power section. *il Am Mach* 87:112-13 O 28 '43
- Chrysler builds the Bofors gun. *il diags Am Mach* 87:97-112 Ap 29 '43
- Curtiss-Wright produces famous fighting planes. P. N. Jansen. *il Mach* 48:178-86 JI; 49:168-72 D '42
- Dimensioning to control sizes and to reduce scrap loss. S. C. Bliss. *diags Product Eng* 14:108-11 F '43
- Flammable metal, magnesium; techniques developed to safeguard processing. R. I. Thurne. *diags Nat Safety N* 46:22-3+ N '42
- Forged gun parts from steel strip; Murray Ohio mfg. co. G. W. Birdsall. *il diags Steel* 113:194-6+ O 11 '43
- Gadsden feeds the 105's. W. N. Howley. *il diags Am Mach* 87:101-16 Mr 4 '43
- Getting more production from planers. J. M. Walter. *il diags Mach* 49:169-72 F '43
- Height gage for layout operations. A. Elsnor and C. H. Welcome. *il diags Am Mach* 87:89 F 4 '43
- Ideas from Inglewood; some novel machine set-ups. *il Am Mach* 87:90-1 JI 22 '43
- Industrial know-how wins battles on production front; General electric company. *il diags Steel* 112:82-3, 110+ Je 28 '43
- Ingenuity makes up for lack of special tools; air box doors and crifics produced for adjusting airplane carburetors changed by jobbing tool shop. G. Letsche. *il diag Iron Age* 152:58-9 Ag 26 '43
- Inspection cut from two days to one hour; fixture with dial indicators checks location and diameter of ball-bearing flts. H. Bernadt. *il diags Am Mach* 87:105-6 JI 22 '43
- Inspection innovations; Nash-Kelvinator corp. *il Steel* 113:174-5+ O 11 '43
- Little ideas that pay big dividends. *il Am Mach* 87:86-8 Ap 15 '43
- Machining the Garand rifle. J. Kirk. *il Iron Age* 151:66-71 My 13 '43
- Making a world-famous automatic pistol; Colt's patent fire arms mfg. co. E. P. Herrick. *il diags Mach* 49:123-37 D '42
- Making 90-mm. guns; Wheland co. *il Steel* 113:110-12, 114+ JI 19 '43
- Making shells for the largest mobile howitzer in the world. H. L. Horton. *il diags Mach* 50:133-48 S '43
- Manufacturing boosters for high-explosive shells. J. B. Nealey. *il diags Mach* 49:129-35 Ja '43
- Manufacturing the light carbine. J. Kirk. *il Iron Age* 151:47-53 Ap 8 '43
- Martin Marauder. H. L. Horton. *il Mach* 49:192-6 JI '43
- Mass production of the caliber 0.30, M-1 carbine; Standard products co. T. E. Lloyd. *il Iron Age* 152:42-7 Ag 26 '43
- Menasco makes landing gear struts; illustrations with text. *Iron Age* 151:48-61 My 27 '43
- Microscopic precision tools. I. H. Such. *il Steel* 113:98-100+ S 13 '43
- Mortar shell; Lemppo products inc. G. E. Sears. *il diags Steel* 113:74-5+ O 25; 92-4, 96, 98+ N 1 '43
- Nash-Kelvinator shops use advanced gaging practices. S. H. Brams. *Iron Age* 151:76 My 20 '43
- New ways by Chevrolet; "before" and "after" data. *il Am Mach* 87:119-20 S 16 '43
- Only from accurate hobs; testing and handling methods, General electric company. J. T. Hess. *il Am Mach* 87:83-5 Ap 15 '43
- Precision manufacture; Hobourn aero components, ltd. *il Automobile Eng* 33:61-8 F '43
- Producing the Reising gun; Harrington & Richardson arms co. H. L. Horton. *il diags Mach* 49:113-23 Ja '43
- Production of slender parts on Swiss type automatics. F. J. Oliver. *il diags Iron Age* 151:27-35 Fa 28 '43
- Production short-cuts speed Mustangs and Mitchells to fighting fronts. R. H. Ruud. *il Mach* 49:144-51 JI '43
- Propellers in the making at the Nash-Kelvinator plant. J. Geschelin. *il Automotive & Aviation Ind* 87:20-5, 72+ D 15 '42
- Railroad centralizes machine operations; packing rings for locomotive pistons. *il diags Am Mach* 87:100-2 Je 10; 96-8 JI 8 '43
- Redesigned fuse adaptor saves time and metal. J. B. Nealey. *il diags Iron Age* 151:40-3 Ja 28 '43
- Republic Aircraft parts tool up the spider line; production of knuckle-pin locking plates for aircraft engines. *il Am Mach* 87:90-4 S 30 '43
- Shop shots; illustrations with text. *Am Mach* 87:80-1 Ja 7 '43
- Short cuts for the small shop. A. H. Waychoff. *il diags Am Mach* 86:1282, 1423 N 12, D 10 '42; 87:82 F 4; 94 Mr 18; 87 My 27; 95 JI 8; 89 S 2 '43
- Short cuts; illustrations and texts. Automotive & Aviation Ind 87:38-41 D 1 '42; 88:36-9 Ja 15; 34-5 F 1; 32-3 F 15; 20-1 Mr 1; 26-7 Ap 1; 32-3 Ap 15; 36-7 My 1; 30-1 Je 1; 36-7 Je 15; 89:32-3 JI 1; 26-7 JI 15; 28-9 Ag 1; 32-3 Ag 15; 30-1 S 1; 30-1 S 15; 34-5 O 15 '43
- Solving new production problems on standard automatic machines. H. L. Pope. *il diags Aero Digest* 42:176, 179-80 Ja '43
- Special devices used in aircraft building. H. F. Schwedes. *il Mach* 49:166-8 Je '43
- Tailoring methods practiced in industry; avoiding waste in cutting metal parts and gaskets. A. M. Hoffmann. *il Comp Air M* 48:6985-6 Mr '43
- Teaming handling devices with women; Wright aeronautical corporation. H. E. Linsley. *il Am Mach* 87:109-11 O 28 '43
- Temperature control gives true lead screws; development of special precision lathe; Lodge & Shipley machine tool company; F. Schoeffler. *il Am Mach* 87:90-2 Ag 19 '43
- Thompson aircraft products plant; production of engine valves and parts. J. Geschelin. *il Automotive & Aviation Ind* 89:20-5+ Ag 1 '43
- Tools of our trade; training aids. *il Am Mach* 87:105-20 F 18; 97-112 Ap 15; 105-20 My 27; 113-28 JI 8; 105-20 S 2 '43
- Two turret lathe parts at once. J. F. Allen. *diags Am Mach* 87:104 F 18 '43
- Using available machine tool equipment to best advantage. W. K. Bailey. *il diags Mach* 49:180-4 F '43
- War-winning suggestions. *il diags Am Mach* 86:1228-31, 1292-5, 1364-7, 1433-5, 1502-5 O 29-D 24 '42; 87:86-9 Ja 7; 130-2 F 13; 94-6 Mr 4; 97-9 Mr 18; 89-91 Ap 1; 122-4 Ap 15; 90-1 Ap 29; 102-4 My 27; 110-12 Je 10; 103-5 Je 24; 110-12 JI 22; 102-4 Ag 5; 106-8 Ag 19; 102-4 S 2; 110-12 S 16; 114-16 O 14; 114-16 O 28 '43
- Welding plays top role in anti-aircraft gun recoil; R. Hoe & company. *il Am Mach* 86:1372-82 N 26 '42
- Wings for the Flying Fortress. *il diags Am Mach* 86:1509-19 D 24 '42

See also

- | | |
|---|-------------------------|
| Airplane engines— | Guns (ordnance)— |
| Manufacture | Manufacture |
| Broaching | Hard facing |
| Chucks | Indexing (machine work) |
| Cylinders (engines, etc.)—Manufacture | Lathes |
| Dies | Locomotive shops |
| Drafting room practice | Machine shop management |
| Drilling and boring (metal working, etc.) | Machine tools |
| Electric driving | Machinery |
| Forging | Metal cutting |
| Foundry practice | Metal finishing |
| Gages | Milling |
| Gear cutting | Railroads—Shops |
| Grading | Riveting |
| Grinding | Rolling mills |
| | Sheet metal work |
| | Welding |

Study and teaching

- Synchrophone method of audio-visual instruction. *il Engineering* 155:157-8 F 19 '43

MACHINE shops

- Two-story plant for small plot; Canister company, Phillipsburg, N.J. *il diags Arch Rec* 93:70-2 Ap '43

MACHINE shops—Continued

Utility sells customers' abilities to produce bits and pieces; machine shops in Oregon and Washington supplying parts for Liberty ships. D. B. Leonard. *il Elec W* 118:2098-100 D 26 '42
 Windowless ordnance plant. *il Arch Rec* 93: 68-9 Ap '43

See also

Airplane factories Machine shop practice
 Automobile factories Machine tools
 Electric driving Railroads—Shops
 Locomotive shops Tool rooms
 Machine shop management
 also Canadian pulp and paper association
 —Wartime machine shop board

Accidents

Metal-working lathe accidents. *il Nat Safety N* 47:24-5+ Je '43

Accounting

See Factories—Accounting

Electric equipment

Machine tool electrification forum; broad scope of subjects attracts record attendance. G. Hubbard. *Steel* 112:73 Ap 19 '43

See also

Machine tools—
 Electric driving

Employees

Boypower breaks bottleneck; Portland machine & tool works. *il Steel* 113:71 S 6 '43
 Mechanical comprehension and dexterity. G. K. Bennett and R. A. Fear. *Personnel J* 22:12-17 My '43
 Put carbide applications in hands of specialist. K. R. Beardslee. *il Iron Age* 152: 62-4 S 16 '43

Results of testing machine-tool trainees. L. W. Ross. *Personnel J* 21:363-7 Ap '43
 Simplified training is best. F. C. Hudson. *Am Mach* 87:96 F 18 '43

Testing the new operator's knowledge of his machine. *diag Factory Management* 100: 84-5 D '42

Training women operators; abstract. H. Frommelt. *Iron Age* 151:58 Ap 15 '43

Training workers for machine tool operation; Briggs manufacturing co. J. W. Busman. *il diags Aero Digest* 42:116, 119-20, 125+ Ja '43

Why we like women in our shop; Allison division. General Motors corporation, Indianapolis. W. G. Guthrie. *il Factory Management* 101:90-4+ F '43

Women in machine shops; discussion at meeting of American society of tool engineers. *Iron Age* 151:65-6 Ap 1 '43

Women run this shop, and do it well; Republic drill & tool co. H. E. Fleming. *il Steel* 111:68-9+ D 21 '42

Equipment

Boeing builds Flying Fortresses to bomb the enemy. C. O. Herb. *il Mach* 48:198-204 J1 '42; 49:161-3 Mr '43

Layout table for small work. H. Aschenbach and D. Rae. *il diag Am Mach* 87:85 Ja 7 '43

Layout tables speed work on turret punch presses. T. A. Wiedemann. *il diags Iron Age* 151:47-53 F 18 '43

Machines raised to match men; blocks and platforms increase comfort of tall and short workers. I. C. Martin. *il Am Mach* 87:93 Je 24 '43

New equipment; pumps, cutting oils, and small tools and accessories. *il Iron Age* 150: 65-70 D 10 '42

Precision measurement; developments by E. H. Jones (machine tools) ltd. *il Automobile Eng* 33:123-5 Mr '43

Shell made in small shop; Anderson brass works. E. G. Collins. *il Am Mach* 87:113-21 Ap 15 '43

Shop shots; illustrations with text (cont). *Am Mach* 87:92-3 Mr 4 '43

Taylor, Taylor and Hobson toolmakers' microscope. *il Automobile Eng* 32:497-8 N '42

30th buyers reference number. *il diags Am Mach* 87:99-428 Ja 21 '43

See also

Holding devices
 Locomotive shops—
 Equipment
 Machine tools

Heating and ventilation

Extracting oil mist from air. E. H. R. Pegg. *il diags Sheet Metal Worker* 34:21-3 My '43; Excerpts. Heating-Piping 15:242 My '43; Heat & Ven 40:60-1 J1 '43

Lighting

Engineering works lighting; war-time change-over to Sieray fluorescent tube installation. *il Electrician* 130:622 Je 18 '43; Light & Lighting 36:124 Ag '43
 Lighting a war plant; small, privately-owned machine shop. H. L. Sykes, Jr. *il Illum Eng* 38:378-81 J1 '43

Records

Parts schedule for hardness testers; manufacture of Rockwell hardness tester by Wilson mechanical instrument company. A. A. Blue. *Am Mach* 87:102-3 O 28 '43

Proposed procedure for determining machine capacity. V. D. Geers. *N A C A Bul* 24:249-59 N 1 '42

Safety measures

Check your hazards. *Safety Eng* 86:24-5 J1 '43

Dynamic color; painting of machinery and shop as safety measure. R. A. Massey. *il Nat Safety N* 48:12-13+ Ag '43

Floors dry-cleaned. F. D. Keller. *Safety Eng* 85:22 Ap '43

Plastic safety devices reduce accidents. D. S. Frederick. *il Am Mach* 87:100-1 F 18 '43

Safety regulations for drill-press operators. *Sheet Metal Worker* 34:38 Mr '43

MACHINE tool builders' association, National.
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MACHINE tool industry
 Roll their own; Cincinnati machine tool builders, convert their product to making of direct war goods. *Business Week* p17-18 J1 10 '43

Tools kept moving; distributive techniques of a private firm and the Chicago ordnance office. *Business Week* p62+ O 2 '43

Tools of peace; makers of machine tools look ahead. *Business Week* p20+ O 23 '43

Views on postwar machine tool exports. *Am Mach* 87:142+ O 28 '43

Wartime expansion in machine-tool industry. C. P. Schloss. *Monthly Labor R* 57:484-7 S '43

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Advertising

Advertising spreads practical ideas for relieving chokes in production; Warner & Swasey's ideas for victory campaign. D. M. Pattison. *Sales Management* 52:74+ Ag 1 '43

Tool conservation. *il Ind Marketing* 28:89+ J1 '43

Directories

Directory of machines and machine tools. *Aero Digest* 42:279-82+ Ja '43

Finance

Finances of wartime tooling; RFC pool orders and DPC expansion programs have given us tools to make weapons. J. H. Jones. *Am Mach* 87:100-1 Mr 18 '43

Renegotiation of DPC contracts will decrease machine tool earnings. *Iron Age* 152:95 J1 22 '43

Turning point in machine tool trade. J. A. McWethy. *Barron's* 23:7 O 4 '43

Securities

At 2 to 5 times earnings; have machine tools discounted peace? O. Ely. *Mag of Wall St* 71:227-9+ D 12 '42

Basic readjustment ahead for machinery and machine tools; position of leading stocks. *il Mag of Wall St* 71:472-5+ F 6 '43

MACHINE tool industry—Securities—Continued
Have machine tools a way out? varying status of individual companies. E. A. Krauss. *il Mag of Wall St* 72:138-40+ My 15 '43
Uncertain prospects of machine tool industry. H. Lawrence. *Barron's* 23:11 Ap 26 '43

Service

Machine tool panels reduce "into-production" time; committees of trouble shooters aid war material manufacturers. L. C. Messick. *Am Mach* 87:120d Mr 4 '43

Statistics

Machine tools; dollar volume and indexes of shipments. *Automotive & Aviation Ind* 88: 84-5 Mr 15 '43
Total shipments by manufacturers and machine tool shipments, 1940-March 1943; chart. *Survey of Cur Business* 23:2 Je '43

Used machines

Surplus machine tools; a plan; resale of tools owned by the government. J. R. Porter. *Am Mach* 87:97 Mr 4 '43

Australia

War spurs Australian industry. F. W. McIntyre. *il Am Mach* 87:97-8 O 28 '43

Great Britain

Engineering outlook. *Engineering* 155:195 Mr 5 '43
Machine tool industry. *Economist* 145:243-4 Ag 21 '43

United States

American machine tool distributors' assn. 19th annual meeting, Montebello, Que. Oct. 14-15. *Iron Age* 152:48-9 O 21 '43; *Steel* 113:87+ O 25 '43
Big postwar demand backlog seen. *Steel* 112: 96-7 Je 7 '43
Early maldistribution caused by intensity of war effort. G. Hubbard. *il Steel* 112:54-7 Mr 8 '43
Earnings in machine-tool-accessories industry, 1942. O. C. Clark. *Monthly Labor R* 56:336-46 F '43
Finances of wartime tooling; RFC pool orders and DPC expansion programs have given us tools to make weapons. J. H. Jones. *Am Mach* 87:100-1 Mr 13 '43
Government storage advocated to avert postwar market collapse. D. Harrington. *Steel* 112:47 My 24 '43
Have machine tools a way out? E. A. Krauss. *il Mag of Wall St* 72:138-40+ My 15 '43
Industry faces adjustment. I. H. Such. *il Steel* 112:55-6 Je 21 '43
Industry holds postwar outlook warrants renegotiation changes; National machine tool builders' association publishes pamphlet. *Steel* 113:74-5+ S 13 '43
Industry produces itself out of business for at least a decade. *Steel* 112:70 Ap 5 '43
Machine tool builders redouble efforts to clear up backlogs. G. Hubbard. *il Steel* 112: 225, 403-5 Ja 4 '43
Machine tool output to level off at 50 per cent of capacity. T. E. Lloyd. *il Iron Age* 151:84-6+ Ap 22 '43
Machine tools keeping the pace. T. Berna. *il Aero Digest* 42:163-4, 166, 169 Ja '43
Machine tools over the hump. *Iron Age* 151: 136-9+ Ja 7 '43
Over the hump. *Business Week* p27-8 F 20 '43
Pattern in decline; machine tools give WPB a laboratory experiment. *Business Week* p24+ Jl 17 '43
Renegotiation and the machine tool industry. A. G. Bryant. *Automotive & Aviation Ind* 89:17-18+ O 1 '43
Speedup in tools; WPB wants delivery time reduced. *Business Week* p62+ N 21 '42
10,000 machine tools available for transfer to war contractors. *Iron Age* 152:101 S 16 '43
Three-point program advanced to assist machine tool industry. A. G. Bryant. *Iron Age* 151:102+ Ap 15 '43

Tool builders' position analyzed in statement to House committee. *Steel* 113:78-9 Jl 12 '43
Tool builders tell House group of injustices under the present act. *Steel* 113:91-2 Jl 5 '43
Tool makers see heavy reserves as key to post-war adjustment. *Sales Management* 52:65 O 1 '43
Tooled for war; epidemic of cancellations. *Business Week* p81-2 D 19 '42
U.S. tooled up; cuts back plant, machinery programs. *Steel* 112:69 My 17 '43
What will become of surplus tools? opinions of various officials. *Am Mach* 87:89-90 Ap 15; 85 Ap 29 '43

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Authorizes transfer of idle machine tools when tool deliveries fail to meet demand. *Am Mach* 87:136h F 18 '43
Automatic machines for operations on tank turret rings. *il Mach* 49:200+ Mr '43
Carter and Wright slot-drilling and keyway-cutting machines. *il Engineering* 155:7-8, 10 Ja 1 '43
De Walt heavy-duty metal-cutting machine. *il Engineering* 155:207 S 10 '43
Every machine tool in Los Angeles indexed. *diags Elec West* 90:69-72 Ap '43
Fabricating special machine tools by welding; equipment used in machining Transite pipe made from scrap materials. J. M. Wiley. *il Pet Eng* 14:86, 88 Ap '43
Iron Age critical tool locating chart. *Iron Age* 150:137 D 10 '42
Lorant multi-purpose machine. *Automobile Eng* 33:333 Ag '43
Machining 37-millimeter armor-piercing shot; how Bullard Mult-Au-Matics have been adapted. H. L. Horton. *il diags Mach* 49: 156-60 My '43
Microscope precision tools. I. H. Such. *il Steel* 113:98-100+ S 13 '43
Milling of compressor beds cut by 60 per cent; 131-ton milling and boring machine at the plant of Cooper-Bessemer corp. *Steel* 113:104 S 13 '43
New equipment (cont). *il Iron Age* 150:62-7 N 19 '42; 151:58-60 F 4; 73-4 F 11; 72-4 Je 17; 152:63-6 Jl 1; 57-62 O 21; 70-4 N 4 '43
Special-purpose machine tools step up war production. O. W. Young. *Steel* 112:80 Ja 25 '43
Stress design and production progress at fall convention of tool engineers. *il Steel* 113: 52-4 O 18 '43
Sundstrand shaft-end milling and centering machine. *il Engineering* 155:466 Je 11 '43
Tachometers guide precise operation. B. R. Hill. *il diag Machine Design* 15:161-3 Ag '43
30th buyers reference number. *il Am Mach* 87:99-114 Ja 21 '43
Tool deal aired; charges that items from Wright engine contract moved as scrap. *Business Week* p27 O 2 '43
Unskilled labor creates new tooling problems. O. W. Winter. *il Am Mach* 87:95-6 Mr 18 '43
Using available machine tool equipment to best advantage. W. K. Bailey. *il diags Mach* 49:180-4 F '43
WPB moves to pool idle tools as aid for plants needing machines. *Iron Age* 151:109 F 18 '43
WPB plans more complete utilization of machine tools. R. Colborn. *Am Mach* 87:132c My 27 '43
Wickman produces Swiss-type automatic suited for handling long slender pieces. *il Am Mach* 87:125 Je 10 '43
World's biggest inventory of machine tools is bigger now. E. L. Warner, Jr. *Automotive & Aviation Ind* 88:17+ Ja 15 '43

See also

Broaching machines	Machine tool industry
Chucks	Metal cutting
Cutting tools	Milling cutters
Drilling and boring	Milling machines
machinery	Planing machines
Feed mechanism	Pneumatic tools
Gear cutting machines	Reamers
Grinding machines	Saws. Metal working
Lathes	Screw machines
Machine shop practice	Tool steel

MACHINE tools—Continued

Control

- Ex-Cell-O wins; no infringement of Barnes' basic patents on control devices. *Business Week* p27-8 J1 3 '43
 Pneumatic controls speed cartridge machining. A. W. Lancaster. *il Product Eng* 13: 696-7 D '42

Design

- Gear finisher design provides for sub-assembly. H. Pelphrey. *il diags Machine Design* 15:87-90 F '43
 Production of slender parts on Swiss type automatics. F. J. Oliver. *il diags Iron Age* 151:27-35 Ja 28 '43
 Substitution challenges skill of designer. A. W. Meyer. *il diags Machine Design* 15:93-5+ My '43

Electric driving

- Direct-current adjustable-speed drives for machine tools. G. A. Caldwell. *diags Mach* 49:207-11 Ap; 173-6 My; 208-11 J1 '43
 Electronic motor control has excellent characteristics for new machine-tool drive. S. D. Fendley. *il diags Steel* 112:100, 103-4+ My 24 '43
 Floating head utilizes integral drive; tapping head of radial drill. R. S. Arnold. *il Machine Design* 15:192+ Ap '43
 Machine tool electrification forum; broad scope of subjects attracts record attendance. G. Hubbard. *Steel* 112:73 Ap 19 '43
 Operating characteristics of electric motor drives. L. H. Berkley. *Product Eng* 14:370-3 Je '43
 Organized maintenance keeps machinery running. A. Heckman. *il Power Pl Eng* 47: 86-7 Mr '43
 Reducing shut-down time for overheated motors; new circuit arrangement on tapping and drilling machine motors. F. J. Johns. *il diag Mach* 49:156-7 Ja '43
 Rewinding armatures; repairing universal motors for small machine tools. R. Newing. *diags Elec R (Lond)* 132:548-50 Ap 23 '43
 Selecting components for electrical controls. H. I. Stanback. *il Machine Design* 15:119-24 Ap '43
 Tank turrets machined faster on mills equipped with variable voltage speed control. *il diag Product Eng* 14:76-7 F '43
 Westinghouse machine tool forum attracts big audience. *il diags Iron Age* 151:55-8 Ap 15 '43
 Wiring diagram symbols recommended by National machine tool builders association; reference book sheet. *diags Product Eng* 14:537-8 Ag '43

Fixtures

- Consolidated retools the Coronado. E. P. Myers. *diags Am Mach* 87:33-90 Je 10 '43
 Cylindrical grinding with a flat belt; development of special fixture. E. A. Hepner and H. J. Moskow. *il diags Am Mach* 87: 86-7 O 28 '43
 Drill press fixture for replacing jigs and templates. C. W. Fuller. *il Automotive & Aviation Ind* 89:39 J1 1 '43
 Drilling and tapping fuse bodies; operations performed on Kingsbury machines. *il diags Mach* 49:127-40 Mr '43
 Fixture sharpens thread hobs. R. Gerhart. *diags Am Mach* 86:1429 D 10 '42
 Grinding fixtures for grooving tools. *il diags Am Mach* 87:90-1 S 16 '43
 Holders for Ardoloy cutting tools. *il Engineering* 155:347 Ap 30 '43
 Indicators held in toolholders. C. F. Fitz. *diag Am Mach* 86:1296 N 12 '42
 Modern methods of handling and storing dies and fixtures. E. C. Brosheer. *il Am Mach* 87:88-91 O 28 '43
 Profile-turning roller box. *il diags Engineering* 156:306-7 O 15 '43
 Quick-acting clamp for fixtures. E. Lay. *diags Am Mach* 87:107 O 28 '43
 Shell cutting fixtures; diagrams with explanatory text. *Iron Age* 152:43 O 21 '43
 Square toolbit slots simply made. R. A. Dickson. *diag Am Mach* 86:1296 N 12 '42
 Tapping fixture for small part. A. S. Arnott. *diags Mach* 49:160-1 Ja '43

- Toolholders for turret machining. *il diags Am Mach* 87:113-18 S 16 '43
 Tooling plays stellar role in building the constellation. G. A. Betts. *il diags Am Mach* 87:109-24 Ag 19 '43
 Universal drill fixture saves day per week; marine gear casings; General electric company. *il Iron Age* 151:73 F 18 '43
 Work machined with vertical toolbits. O. Craft. *diags Am Mach* 87:103 J1 8 '43
 Zagar collet chucking fixture. *il Mach* 49: 232 Ap '43

See also

- Arbors and mandrels
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Manufacture

- Alley contracts; tools being made for Army Ordnance by hundreds of small machine shops. *Business Week* p62+ Ja 16 '43
 Clean inside, too; flushing oil system; Kearney & Trecker corp. C. H. Hochmuth. *il Steel* 113:98+ Ag 16 '43
 Induction hardening of parts interest machine tool builders. *Iron Age* 151:158 My 20 '43
 Stamping plant converts to machine tool output; plant of Fisher Body division. S. H. Brams. *il Iron Age* 151:52-5 Mr 18 '43
 Tool builders broaden postwar prospects in slashing wartime bottlenecks. G. Hubbard. *il Steel* 113:70-1+ J1 26 '43
 Women on production at Monarch. W. E. Whipp. *il Iron Age* 150:59-63 N 5 '42; Same. *Steel* 112:58-9+ Ja 11 '43; Same cond. *Am Mach* 86:1213-15 O 29 '42; Same cond. *Mach* 49:222-5 N '42

Painting

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Reconstruction

- How machine tool rebuilding aids war effort. S. Koffsky. *il Mach* 49:155-60 Je '43
 Keeping old machines in service, for war needs; Westinghouse centralized repair department. J. A. Dorsner. *il Am Mach* 87:92-3 Mr 18 '43
 Precision created; remodeling and adding parts to old machine tools. *il Business Week* p46+ Ja 2 '43
 Special automotive production machine converted to war work; gun mount parts, Midland steel products co. *il Iron Age* 150: 49 D 17 '42

Repair

- Brazing averts tool shortages. R. C. Holloway. *il Am Mach* 87:102-4 My 13 '43

MACHINE work

- Are you working with plastics? advice on machining. J. Sasso. *il Am Mach* 86:1283-5, 1360-2 N 12-26 '42
 Breaking down a small job. *Engineering* 156: 53 J1 16 '43
 Cuts time for machining fuze bodies. D. Mallett. *diags Am Mach* 86:1505 D 24 '42
 Dimensioning to control sizes and to reduce scrap loss. S. C. Bliss. *diags Product Eng* 14:108-11 F '43
 In-line machining of aircraft cylinder heads; Greenlee transfer type machine built for Studebaker. W. A. Phair. *il diags Iron Age* 152:66-73 Ag 12 '43
 Large radii cut without special tools. E. D. Rothrock. *diags Am Mach* 87:96-8 My 13 '43
 Machinability and output; abstract. O. W. Boston. *Metals & Alloys* 18:578+ S '43
 Machining laminated phenolic plastics. F. P. Hunsicker. *il Mach* 49:197-200 D '42
 Machining laminated phenolics. E. L. Wolfe. *il diags Mod Plastics* 20:92-3+ My '43
 Machining tubular airplane assembly jigs. F. W. Fromm. *diag Am Mach* 87:102 Mr 18 '43
 Sperry gyro-compass; machining operations. H. L. Horton. *il Mach* 50:172-3 N '43
 War accelerates technical progress. *il Steel* 112:332-4+ Ja 4 '43

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- Airplanes—Manu-
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MACHINE work—See also—Continued

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Indexing (machine work) Metal cutting
Locating (machine work) Milling
Machine guns—Polishing
Manufacture Time study (of machinery)

Tables, calculations, etc.

Bolt-circle hole layout; reference book sheet. E. J. Farawell. diags Am Mach 87:114c Ja 21 '43
Section modulus for rectangles and for rounds under 1 inch diameter; data sheet. H. R. Teegarden and C. F. Crisafulli. comps. Mach 50:219 N '43

MACHINE works

Time standards by formula on job-order operations; Corrigan, Osbourne, & Wells. V. C. Stephens. Factory Management 101: 95 F '43

We can junk it or run it; how the high-flying Six companies boys of the West salvaged Joshua Hendy. il Fortune 28:120-3+ Jl '43

See also

Diesel engines—Rolling mills
Manufacture Tool rooms
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Accidents

Safety is a weapon. F. V. Geier. il Am Mach 87:71-3 Ja 7 '43

Employees

Earnings in machine-tool-accessories industry, 1942. O. C. Clark. Monthly Labor R 56:236-46 F '43

Earnings in manufacture of domestic laundry equipment, 1942. O. F. Brown. Monthly Labor R 56:534-41 Mr '43

Earnings in manufacture of food-products machinery, 1942. O. F. Brown. Monthly Labor R 55:1241-50 D '42

Earnings in manufacture of internal-combustion engines, 1942. G. E. Votava. Monthly Labor R 55:1042-7 N '42

Earnings in manufacture of mechanical power-transmission equipment, 1942. O. F. Brown. Monthly Labor R 56:109-18 Ja '43

Earnings in manufacture of miscellaneous metalworking machinery, 1942. H. R. Hosea. Monthly Labor R 55:1236-40 D '42

Earnings in manufacture of refrigerating equipment, 1942. O. F. Brown. Monthly Labor R 56:768-76 Ap '43

Earnings in manufacture of tractors, 1942. V. L. Amonette. Monthly Labor R 55:1048-52 N '42

Earnings in selected occupations in machinery manufacture, San Francisco Bay area, March 1943. Monthly Labor R 57:564-6 S '43

Effect of incentive payments on hourly earnings; fabrication of nonferrous metals. E. M. Olsen. Monthly Labor R 56:849-57 My '43

Four-point training for women; Lodge & Shipley machine tool company. R. S. Schultz and T. Applegate. il diags Am Mach 87:82-4 Ap 29 '43

Half-shift plan taps new manpower reservoir; two-man teams of white collar workers divide turns; Warner & Swasey co. il Steel 111:22-3 N 30 '42

Physically handicapped workers get their chance; Caterpillar tractor company. il Am Mach 87:86-7 Mr 18 '43

Round-the-clock inspection; men and women new to industry can be trained in short order; Warner and Swasey company. il Am Mach 86:1424-5 D 10 '42

Sigmund apprentice training scheme. il Engineer 175:348-9 Ap 30 '43

Using color to train women; Jacobs aircraft engine company. F. W. Rohde. Factory Management 101:298+ S '43

Vocational classes at Cooper-Bessemer. il Marine Eng 48:212-13 Jl '43

Wartime expansion in machine-tool industry. C. F. Schloss. Monthly Labor R 57:484-7 S '43

Women on production at Monarch. W. E. Whipp. il Iron Age 150:59-63 N 5 '42; Same. Steel 112:58-9+ Ja 11 '43; Same cond. Am Mach 86:1213-15 O 29 '42; Same cond. Mach 49:222-5 N '42

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Equipment

Big plant expansion at Ohio Crankshaft. J. Geschelin. il Automotive & Aviation Ind 89: 20-4 S 1 '43

Building turbines for ships in our permanent merchant fleet; Merchant marine division, Westinghouse electric & mfg. co. E. L. Spray. il diags Mach 49:172-9 N '42; 154-7 Mr '43

Canadian engines for Liberty freighters; John Inglis company, limited. A. L. Ainsworth. il diags Am Mach 87:105-11 Mr 18 '43

Choosing the right sling; Kearney & Trecker corp. C. R. Hochmuth. il Steel 113:117+ Jl 12 '43

Diversification of war products at Minneapolis-Moline plant. J. Geschelin. il Automotive & Aviation Ind 89:18-24+ N 1 '43

Industrial taxi service; Allis-Chalmers plant. G. E. Stringfellow. il Steel 111:84. 86 D 14; 76. 78 D 21 '42

Many production innovations in Ford P & W engine plant. F. M. Reck. il Aero Digest 43:256-7, 259-60 S '43

Spicer's new transmission plant. J. Geschelin. il Automotive & Aviation Ind 88:20-3+ My 1 '43

See also
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Safety measures

Safety as usual; Caterpillar tractor company. H. S. Simpson. il Nat Safety N 46:16-17+ D '42

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Crankshafts
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Steam turbines

Bases

Reduce capital outlay and operating cost with welded-base jaw crushers. R. W. Heer and W. A. Eckley. *il Concrete (mill sec)* 51:171-3+ My '43

Bedplates

Description of welded construction used in a thread miller bed for milling propeller blades. P. W. Martin. *il Welding J* 22:323-6 My '43

Cleaning

Easy to clean machines. R. W. Mitchell. *il Factory Management* 101:142-3 Ja '43

Color

See Machinery—Painting

Design

Acceleration construction for slider-crank and four-bar linkages. C. L. Brown. *Product Eng* 14:528-9 Ag '43
Advantages of square tubing; National cylinder gas company flame-cutting machines. *il diag Product Eng* 11:418-21 JI '43
Applying forgings in design. C. Carmichael. *il Machine Design* 15:97-9 F; 105-8 Mr '43
Applying principles of dynamic symmetry; sequel to Shape of things to come. R. S. Elbert. *il diags Machine Design* 15:135-7 N '43
Applying synthetic tubing in design. J. Delmonte. *il Machine Design* 15:126-8+ S '43
Arc welding in wartime redesign; sheet steel replaces aluminum for can sealing machine. S. Birkland. *il diags Metals & Alloys* 17:760-3 Ap '43
Auxiliary points aid acceleration analysis. A. S. Hall and E. S. Ault. *diags Machine Design* 15:120-3+ N '43
Calculating natural frequencies of torsional vibration; chart. *diag Machine Design* 15:119-20 My '43
Ceramic parts in design. *il diags Machine Design* 15:120-3 Ag '43
Code for working stresses facilitates design. J. Marin. *il diags Machine Design* 14:70-4 N; 99-103 D '42
Design of self-cooled journal bearings. M. F. Spotts. *diags charts Product Eng* 14:231-3, 253-4, 307-12 Ap-My '43
Design of sleeve bearings by hydro-dynamic theory. H. W. Hamm. *bibliog diags Product Eng* 14:422-4, 464-6 JI '43
Designing plastic parts. W. S. Larson. *Machine Design* 15:192+ JI '43
Designing powder metal machine parts. C. Carmichael. *il Machine Design* 15:124-7+ N '43
Designing with magnesium. *il diag Product Eng* 14:276-81, 359-65, 430-5 My-JI '43
Dynamic loading in design. C. O. Dohrenwend and W. R. Mehaffey. *bibliog il diags Machine Design* 15:99-104 Je '43
Effect of material and loading in calculating design stress. G. H. Neugebauer. *bibliog Product Eng* 14:31-4 Ja '43
Engineering economies of product design. R. E. Smith. *diag Blast F & Steel Pl* 31:790, 792-4 JI '43; Same cond. *Concrete (mill sec)* 51:137+ Je '43
Evaluating torsional stresses by membrane analogy. J. Marin. *bibliog il diags Machine Design* 15:118-23+ Je '43
Fatigue of metals as influenced by design and internal stresses. J. O. Almen. *il diags Metal Prog* 43:209-15+, 737-40; 44:254-61, 435-40 F, My, Ag-S '43; Same cond. *Automotive & Aviation Ind* 88:28-32+ F 1; 28-31+ F 15 '43; Same cond. *Steel* 112:88-9+ Mr 8; 112, 146-9 Ap 5 '43
Influence of machine design on lubrication. W. G. G. Godron. *Mech Eng* 65:347-9+ My '43

Problem of combined stress. J. J. Guest. *Engineering* 155:21-3, 101-2, 222, 281-2, 303-4 Ja 8, F 5, Mr 19, Ap 9-16 '43

Selecting components for electrical controls. H. I. Stanback. *il Machine Design* 15:119-24 Ap '43

Selecting working stresses for combined loading. J. Marin. *bibliog Machine Design* 15:151-3 N '43

Shape of things to come; design of the future from the appearance standpoint. R. S. Elbert. *il diags Machine Design* 15:115-17 Ag; 104-7 S; 91-3 O '43

Simplifying strain-rosette analysis. J. H. Meier. *diags Machine Design* 15:111-12 My '43

Specify standard parts! C. Carmichael. *il diag Machine Design* 15:97-9 JI '43

Strain-rosette analysis is effective design aid. J. Marin. *bibliog diags Machine Design* 15:101-4+ Mr '43

Stress concentration factors and their effect on design. G. H. Neugebauer. *bibliog diags Product Eng* 14:82-7, 168-72 F-Mr '43

Stress concentration factors in practical design. R. E. Peterson. *bibliog il diags Machine Design* 15:104-8 JI '43

Substitutions widen design horizons. I. H. Such. *il Machine Design* 15:128-32+ Ag '43

Supporting continuous beams. A. B. Cox. *diags Machine Design* 15:101-3 S '43

Surface finish and the function of parts. G. Schlesinger. *diags Engineer* 175:434-6, 454-6, 466-7 My 28-Je 11 '43; Same cond. *Engineering* 155:458-60, 478-80, 498-9 Je 4-18 '43; Discussion. *Engineer* 175:429-30 My 28 '43; *Engineering* 155:434, 454-5, 464-5 My 28-Je 11 '43

Testing designs of machine parts by the brittle lacquer method. R. G. Anderson. *il diags Product Eng* 14:611-14 O '43

Types of keys and keyways: their relative merits. A. H. Korn. *diags Product Eng* 14:242-3 Ap '43

Wartime drives and controls. *il diags Machine Design* 15:114-18+ Ag '43

Wartime metallurgy conserves strategic materials. R. E. Orton and W. F. Carter. *bibliog il diags Machine Design* 14:63-7+ Ag; 70-4+ S; 69-73 O; 82-6 N; 91-5 D '42; 15: 58-62 Ja; 111-15 F; 97-100 Mr; 128-31+ Ap; 107-10 My; 111-14 Je; 109-14 JI; 145-50+ Ag '43

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Failures

Effects of residual stress on the fatigue of metals. J. O. Almen. *il diags Product Eng* 14:348-52 Je '43

Fatigue failures in common machine parts. J. O. Almen. *il diags Metal Prog* 43:737-40 My '43

Mechanical mishaps; discussion. G. E. Windeler and others. *Inst Mech Eng J & Proc* 148:Proc 52-7 D '42

Foundations

Concrete strengthens welded steel base. *il diag Iron Age* 152:73 O 7 '43

Misalignment; foundations of mechanically connected machinery. E. L. Parry. *diags Elec R (Lond)* 133:183-4 Ag 6 '43

Idleness

See Idleness, Industrial

Maintenance and repair

Do you want your gear speed reducers to run better longer? W. F. Plume. *il Power* 67:615-17 S '43

Electric bonding saves vital war materials by metallizing. L. E. Kunkler. *il Oil & Gas J* 42:66, 69-70 Je 17 '43

Hard chrome plating for wear resistance and salvage. S. H. Brams. *il Iron Age* 151:56-7+ F 4 '43

How we rebuild machines; Foote bros. gear & machine corporation, Chicago. E. A. Johnson. *il Factory Management* 101:155-6 JI '43

MACHINERY—Maintenance and repair—Cont.

- Inspect, invent, prevent, for fewer breakdowns; Goodyear tire & rubber company. E. Clark. *il* Factory Management 101:146-9 O '43
- Keeping machinery on the job by welding. M. H. Rutishauser. Roads & Sts 85:54 N '42
- Keeping old machines in service, for war needs; Westinghouse centralized repair department. J. A. Dorsner. *il* Am Mach 87:92-3 Mr 18 '43
- Reclamation by hard facing. F. G. Jones. Welding J 22:797-8 O '43
- Reconditioning used equipment by metal-coating worn parts. C. K. Stipp. *il* Oil & Gas J 41:65, 67-9 Mr 18 '43
- Reduces machine downtime by welded repairs. G. L. Loughery. *il* Factory Management 101:111-12 F '43
- Reducing scrap piles and maintenance costs; reclamation of parts of machinery by metal spraying. *il* diag Power Pl Eng 47:92-4 Ag '43
- Repairing construction equipment by welding. *il* Roads & Sts 85:54-6 D '42
- Salvage is the answer to scarcity of replacement parts; use of oxyacetylene welding and cutting. R. B. Aitchison. *il* Welding J 22:5-9 Ja '43
- Sprayed metal saves material; American sugar refining co. *il* Power 87:115-17 F '43

Manufacture

- How to utilize most effectively the flame cutting of parts for arc welding. W. J. Brooking. *il* diags Steel 112:96, 98+ Je 21; 102-3+ Je 28 '43
- Mass production with a.c. welding. W. J. Brooking. *il* diag Iron Age 151:52-7 My 20 '43
- Metal-forming machine; electric weld pipe mill. E. W. Allardt. *il* Welding J 22:319-21 My '43
- Wartime finish of machinery and plant. Engineer 175:366-7 My 7 '43

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Mobile machines

- Selecting wheels and casters. J. W. Greve. *il* diags Machine Design 15:120-3 JI; 141-4 Ag '43

Moving

- Have to change layout often, here's how we do it; Spicer manufacturing company. M. Kallaher. *il* Factory Management 101:117-18 Mr '43

Noise

- Application of sound absorption to factory noise problems. H. J. Sabine and R. A. Wilson. *Acoustical Soc Am J* 15:27-31 JI '43
- Production of high-speed helical gears. S. A. Couling. *il* diags Engineer 175:98-100, 119-20 Ja 29-F 5 '43; Same cond. Engineering 155:197-200 Mr 5 '43; Discussion. Engineer 175:88-90 Ja 29 '43; Engineering 155:113-15 F 5 '43

Painting

- Color overcomes women's fear of machine parts. R. Mawson. *Am Mach* 87:95 S 16 '43
- Contrast painting aids light. *il* Elec West 91:56 S '43
- Co-ordinates paint and light to improve working conditions, increase production. M. Denning, A. A. Brainerd and R. A. Massey. *il* Steel 111:74+ D 21 '42
- Dynamic color; painting of machinery and shop as safety measure. R. A. Massey. *il* Nat Safety N 48:12-13+ Ag '43
- Good finish despite war restrictions; Cincinnati Bickford tool company. G. H. Robertson. *il* Am Mach 87:104-5 O 28 '43
- Industrial safety and lighting improved by bright paint colors; expansion of the three-dimensional seeing idea. *il* Rayon 24:551-2 O '43
- Preparation of arc welded machinery for finishing. W. J. Brooking. *il* Metal Finishing 41:671-4 O '43

Prices

- Ceilings pierced; sale of receivership assets at above-ceiling prices. *Business Week* p92 O 16 '43

Safety devices

- Foolproof guards for food choppers. *il* Nat Safety N 46:30 D '42
- Hard to guard? O. D. Bayrer. *il* Safety Eng 86:54+ O '43
- Machine guards; some principles and applications. *il* Nat Safety N 47:90+ Mr '43
- Plastics fight for safety; face shields and machine guards. *il* Safety Eng 86:14 JI '43
- Safety with transparent plastic guards. *il* Factory Management 101:82, 84 Ap '43

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Standards

- Backlash in gears; standard practice of the American gear manufacturers association. *il* diags Am Mach 87:121, 123 Ag 5 '43
- Specify standard parts! C. Carmichael. *il* diag Machine Design 15:97-9 JI '43

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- Fits (machinery)

Taxation

- Mesta tax ruling; government owned war plant's machinery clear of local levies. *Business Week* p74 Ja 23 '43

Temperature

- Design of self-cooled journal bearings. M. F. Spotts. *il* diags charts Product Eng 14:231-3, 253-4, 307-12 Ap-M'y '43

Testing

- Recording unit for strain and timing functions; dynamic performance of heavy machines recorded by combination of electronic and photographic equipment. J. H. Meier. *il* diags Electronics 16:79-83+ Ap '43

Transportation

- Delivered without dismantling; electric machine handled by the Chicago outer belt line. *il* Ry Age 115:97 JI 17 '43

Vibration

- Calculating natural frequencies of torsional vibration; chart. *diag* Machine Design 15:119-20 My '43
- Effectiveness of shear-stressed rubber compounds in isolating machinery vibration. B. C. Madden. *il* diags A S M E Trans 65:617-22 Ag '43; Same cond. Machine Design 15:63-5+ Ja '43; Abstract. Automotive & Aviation Ind 88:58+ Ja 1 '43; Discussion. A S M E Trans 65:622-4 Ag '43
- Eliminating vibration in reciprocating machinery. J. E. Hubel. *il* Power Pl Eng 47:89-90 S '43
- Felt mounting for machines. *Sheet Metal Worker* 34:55 Ag '43
- Frictional phenomena; technical applications of the internal friction of solids. A. Gemant. *il* diags J Ap Phys 14:258-62 Je '43
- Generator watchman; detects and records vibrations in rotating shafts. *il* Sci Am 168:106-7 Mr '43
- If your machines have the shakes. *il* diags Textile World 93:82-3 JI '43
- Measurement of vibration with electronic instruments. *il* Power Pl Eng 46:82-4 D '42
- Rubber mountings for vibration control; Lord manufacturing co. J. Geschell. *il* Automotive & Aviation Ind 89:20-4+ O 1 '43
- Standards for allowable vibration disturbance. L. M. Dekanski. *Product Eng* 13:736-7 D '42
- Stop vibrations and noise. W. F. Schaphorst. *il* diags Chem Ind 52:795 Je '43
- Study of machinery vibration; piezoelectric instruments for measuring pressure and vibration. H. Seymour. *Electrician* 129:691-2 D 25 '42
- Vibration testing; vibration meters and motors. R. O. Fehr. *il* Gen Elec R 45:695-9 D '42

See also

- Airplanes—Vibration

- Steam turbines—Vibration

MACHINERY—Continued

Weight
Machinery weights; data for estimating weights of ship machinery. E. A. Stevens, jr. Marine Eng 47:134-7 Ag; 156-9 S; 143-5 N; 167-8 D '42; 43:170, 172 Ja; 130, 192 F '43

MACHINERY, Automatic

In-line machining of aircraft cylinder heads; Greenlee transfer type machine built for Studebaker. W. A. Phair. *il* diags Iron Age 152:66-73 Ag 12 '43

MACHINERY, Kinematics of

Auxiliary points aid acceleration analysis. A. S. Hall and E. S. Ault. diags Machine Design 15:120-3+ N '43

Brief account of modern kinematics. A. E. R. de Jonge. diags A S M E Trans 65:663-75 bibliog(41 titles, p675); Discussion. 675-83 Ag '43

How acceleration analysis can be improved. A. S. Hall and E. S. Ault. diags Machine Design 15:100-2+ F; 90-2+ Mr '43; Discussion. 15:122+ My '43

Kinematic errors in inclined plane testers and methods for eliminating them. S. L. Gerhard. diags Rayon 24:237-9; Discussion. 239-40 My '43

Velocity and acceleration of Geneva mechanisms. J. H. Billings. diags Machine Design 15:157-8 Ag '43

See also

Mechanical movements

MACHINERY, Replacement of

Fitting a physical property mortality curve; use of a special form of graph paper. J. F. Brennan. Mech Eng 65:824 N '43

Modernization still possible even though curbed by war. J. E. Bullard. *il* Inland Ptr 111:33-5 Ap '43

Replacement of equipment; accounting problems. S. H. Withey. Electrician 129:582-3 N 27 '42

MACHINERY, Used

Idle equipment redistribution planned. Oil Paint & Drug Rep 144:7+ S 27 '43

If you can't buy a new machine; see if a used-equipment dealer can rebuild or recondition one. *il* Power 87:618-19, 638a+ S '43

Rebuilding used equipment for the process industries. N. G. Farquhar. *il* Chem & Met Eng 50:103-5 Je '43

Redistribution of tools is clarified. Iron Age 152:110+ O 21 '43

Secondhand plant; Rohm & Haas equips plant with used materials. Business Week p57 J1 31 '43

WPB to redistribute huge total of idle machines and other equipment. Iron Age 152: 94 S 23 '43

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Buy repair parts from manufacturers that pioneer. N. C. Rockwood. Rock Prod 46:88+ Ja '43

Lay-away orders for machinery; RCA plan. Mod Packaging 16:92+ My '43

Machinery men's part in the war. *il* Rock Prod 46:99-103 Ja '43

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Locomotive industry
Machine tool industry

Motor truck industry
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Textile machinery industry
Tractor industry and trade

Advertising

Industrial copy now for new kinds of post-war business; Spriess Tool stresses ingenuity. *il* Ptr Ink 203:87-9 My 21 '43

When lovely woman stoops to dolly; industrial advertisers play up the adaptability of their machines to women workers. *il* Ptr Ink 202:20-1 Ja 8 '43

Directories

Directory of machines and machine tools. Aero Digest 42:279-82+ Ja '43

30th buyers reference number. *il* diags Am Mach 87:99-428 Ja 21 '43

Finance

SEC issues report on industrial machinery manufacturing. Comm & Fin Chr 157:381 Ja 28 '43

SEC issues report on metal machinery manufacturing. Comm & Fin Chr 157:486 F 4 '43

Securities

Appraising near and longer prospect for machinery, rail and office equipment, position of leading stocks. R. Colston. *il* Mag of Wall St 72:469-73+ Ag 7 '43

Basic readjustment ahead for machinery and machine tools; position of leading stocks. *il* Mag of Wall St 71:472-5+ F 6 '43

Service

Where can industrial salesmen best fit into the war effort? training in the installation, use and repair of vital machines. H. Conover. Sales Management 51:60, 62-3 D 1 '42

Statistics

Machinery and apparatus, 1938-1941. Survey of Cur Business 1942 Sup p145-6 [supplemented in monthly numbers]

Great Britain

Engineering outlook. Engineering 155:24-5, 55-7, 74-5, 115-16, 123-5, 144, 175, 195, 215-16 Ja 8-22, F 5-Mr 12 '43

MACHINISTS

See also

Machine shop practice—Study and teaching

Machine shops—Employees

MACHINISTS, International association of. See International association of machinists

MACINTOSH, Charles, 1766-1842

George Macintosh and Charles Macintosh. N. L. Clow and A. Clow. Chem & Ind 62: 104-6 Mr 13 '43

MACINTOSH, George, 1739-1807

George Macintosh and Charles Macintosh. N. L. Clow and A. Clow. Chem & Ind 62:104-6 Mr 13 '43

MCKEE, Homer, 1880-

Portrait. Inland Ptr 111:21 J1 '43

MCKELVY, Francis Graham, 1883-

McKelvy of Alpha now heads Portland cement association. Concrete (misc) 50:235 D '42

MCKESSON and Robbins, inc.

New financing plan outlined. Comm & Fin Chr 158:1349 O 4 '43

Preferred stock offered. Comm & Fin Chr 158:1734 N 1 '43

Prospering drug and liquor business. H. Lawrence. Barron's 23:1 Je 14 '43

MCKIBBIN, John M.

Adman McKibbin given highest Westinghouse honor. *por* Ind Marketing 28:38 S '43

MCKINLEY, William, 1843-1901

Portrait. Fortune 27:114 My '43

MACLAURIN series

Application of Maclaurin series to beams under simultaneous transverse and axial loading. A. G. Strandhagen. J Aeronautical Sci 9:529-32 D '42

MCLEOD gauge

Accurate high sensitivity Apiezon oil McLeod gauge. J. Bannon. *il* diag R Sci Instr 14: 6-10 Ja '43

McMILLEN, Drury A.

Air navigation for global war; McMillen spherographical system. *por* Fortune 27:74-7+ Ja '43; Discussion. 27:34+ Mr '43

McMillen's spherographical system of celestial navigation. D. Brouwer and F. W. Keator. diags Aero Digest 42:116-18, 139-40+ Ap '43

MCNUTT, Paul Vories, 1891-

Labor conscription; Mr McNutt's position. C. S. Slocombe. Personnel J 21:194-7 D '42
National service, by decree. por Business Week p15-16 D 12 '42
Sketch. por(cover) Spectator (Life ed) 150: 62 Mr '43

MACY, R. H., and company

Cosmetic shop. il plan Arch Forum 79:94-6 S '43

MADAGASCAR**Commerce**

Agreement regarding exports from Madagascar for the United Nations. For Comm W 11:17, 35 My 15 '43

MADDER

Madder, ancient and medieval. B. Brown. Textile Col 65:93-5, 141-4 Mr-Apr '43

MADISON, Wisconsin**Sewerage**

Gas engine experience in sewage service; with cost data. J. C. Mackin and W. H. Gottlieb. il map Power Pl Eng 47:60-4 Ap '43

Streets

Madison has long-range plan; street projects; with cost data. T. F. Harrington. Roads & Sts 86:49-50 J1 '43

Water supply

Thirty years' experience with deep well pumping equipment; with cost data. L. A. Smith. il Pub Works 74:14-16 Ja '43
Watersphere of Madison. L. A. Smith. il Water Works & Sewerage 90:161-4 My '43

MAGAZINE marketing service

P.P.A. will operate Magazine marketing service. Ptr Ink 202:39 Mr 26 '43

MAGIE, William Francis, 1858-1943

Sketch. E. P. Adams. Science 98:31-2 J1 9 '43

MAGNAFLUX testing. See Magnetic testing**MAGNESIA**

Compound merwinite ($3\text{CaO} \cdot \text{MgO} \cdot 2\text{SiO}_2$) and its stability relations within the system $\text{CaO}-\text{MgO}-\text{SiO}_2$ (preliminary report). E. F. Osborn. bibliog diags Am Cer Soc J 26:321-32 O 1 '43

Economic considerations in the recovery of magnesia from dolomite. A. Schallis. U S Bur Mines Information Circ 7247:1-53 bibliog(p45-53) '43

Fertilizer by fusion of rock phosphate with olive. J. H. Walthall and G. L. Bridger. bibliog Ind & Eng Chem 35:774-7 J1 '43

Long-time volume changes in portland cement bars; effects of fineness and added magnesia. A. H. White and H. S. Kemp. Am Soc T M Proc 42:735-41 '42; Same. Concrete (mill sec) 50:249-51; 51:105-7 O '42, Ja '43; Discussion. Am Soc T M Proc 42: 742-9 '42

Magnesite refractories. J. H. Chesters. bibliog il diag Iron Age 151:46-51 Je 3 '43

New developments in the production of magnesia for refractories; abstract. G. E. Seil. Rock Prod 45:63 D '42

Study of literature on separation of magnesia from lime in dolomite and similar materials, 1817 to 1943. G. E. Seil and others, comps. bibliog(461 titles) Am Cer Soc J 26:218-38 J1 '43

See also**Periclase****Analysis**

Magnesia in portland cement. J. L. Heitzman. Rock Prod 45:74+ D '42

Bibliography

Study of literature on separation of magnesia from lime in dolomite and similar materials, 1817 to 1943. G. E. Seil and others, comps. Am Cer Soc J 26:228-38 J1 1 '43

MAGNESITE

Calcination of magnesite; abstract. M. Muñoz Lumbrer. Chem & Met Eng 50:195-6 Ap '43
Chromite and magnesite refractories. G. E. Seil. Blast F & Steel Pl 30:1304-5 N '42

Harblison-Walker ramming mix features economy of time and labor. il Brick & Clay Rec 103:55-6 S '43

Magnesite output at new peak in 1942. Iron Age 152:140 J1 8 '43

Magnesite refractories. J. H. Chesters. bibliog il diag Iron Age 151:46-51 Je 3 '43

Maintenance of the furnace linings in large basic open-hearth tilting furnaces by the use of chrome ore, magnesite and serpentine. A. Jackson. Engineering 156:265 O 1 '43

New kink in repairing open-hearth bottoms. J. D. Sawyer. il diag Steel 112:116-18+ Mr 8 '43

Permanente process of making magnesium from magnesite. Rock Prod 45:110+ Ag '43

MAGNESITE brick

Magnesite refractories. J. H. Chesters. bibliog il diag Iron Age 151:46-51 Je 3; 75-81 Je 10 '43

MAGNESIUM

Aluminum and magnesium: new potentialities. Index 23 no 2:26-35 [Je] '43

Atomic beam light sources applied to the structure of the magnesium I resonance line. R. A. Fisher. bibliog il diags Rs Mod Phys 14:79-81 Ap-J1 '42

Dow goes down to the sea; magnesium and war are making it a major power. il Fortune 26:110-13+ D '42

Earth movers; Henry Kaiser's ventures into industrial realms. il Fortune 28:138-44+ O '43

Electrodeposition of silver on magnesium. F. J. Bowen and L. I. Gilbertson. Electrochem Soc Trans 83 (preprint 1):1-4 Ap '43; Same. Steel 112:100 Ap 19 '43; Same. Metal Finishing 41:271+ My '43

Heat treatment of magnesium and its alloys. bibliog Am Gas Assn Proc 1942:192-3

Kansas oil field brines analyzed for the recovery of magnesium. W. H. Schoewe. Nat Pet N 35 pt 2:R466-74 O 6 '43

Light metals. il Business Week p45-58 Ag 28 '43

Light metals: aluminum and magnesium. J. St Peter. il J Chem Educ 19:556-62 D '42

Light metals and plastics vs. steel; potential competition over-emphasized. L. S. Hamaker. il Steel 113:57-9 N 1 '43

Light metals, 1942. J. H. Weitz. Eng & Min J 144:70 F '43

Machining of magnesium. A. M. Lennie. diags Am Mach 87:86-3 Mr 4; 88-90 Mr 18; 82-4 Ap 1 '43

Made to measure; Peruvian discovery of magnesium deposits may provide another power outlet for new hydroelectric development. map Business Week p64+ Je 5 '43

Magnesium. C. H. Desch. Engineering 155: 265-6, 284-5, 304-5 Ap 2-16 '43; Abstract. Chem Age (Lond) 48:241-2 F 27 '43

Magnesium becomes a major metal. Min & Met 23:602 D '42

Magnesium from sea water and dolomite supplies war effort. G. A. Blique. il Min Cong J 29:30-1 F '43

Magnesium; its properties and production. W. B. Spellmire. flow diags il Gen Elec R 46:372-5 J1 '43

Magnesium; its sources, methods of reduction, and commercial applications. P. D. V. Manning. il Min & Met 24:346-8 Ag '43

Magnesium; production, imports, exports, consumption, 1930-1942; table and chart. Automotive & Aviation Ind 88:77 Mr 15 '43

Mechanical ingotting of aluminum and magnesium turnings. M. Stern. il diag Iron Age 152:90-2 Ag 12 '43

New deal for Basic magnesium. Min & Met 24:2-3 Ja '43

Post-war future of the light metals. E. A. Krauss. il Mag of Wall St 72:675-7+ O 2 '43

Rate of solution of magnesium in acids. T. H. James. bibliog Am Chem Soc J 65:39-41 Ja '43

Scattering of protons by magnesium nuclei. G. A. Wrenshall. Phys R 63:56-7 Ja 1 '43

Steel versus light metals. B. Ravits. Barron's 23:11+ Ag 16 '43

Studies on the structure of thin metallic films by means of the electron microscope. R. G. Picard and O. S. Duffendack. il J Ap Phys 14:291-305 Je '43

See also**Magnesia****Magnesium founding**

MAGNESIUM—Continued

Analysis

- Determining magnesium in plants and soils; adaptation of the 8-hydroxyquinolate micromethod. M. E. Weeks and J. R. Todd. *bibliog Ind & Eng Chem Anal* 15:297-9 Ap 15 '43
- Microdetermination of magnesium with the polarograph. C. Carruthers. *bibliog Ind & Eng Chem Anal* 15:412-14 Je 15 '43
- New oxine technique; determination of magnesium in aluminum alloys. *Chem Age (Lond)* 43:627 Je 12 '43
- Photometric estimation of silicon in magnesium and magnesium alloys. A. J. Boyle and V. V. Hughey. *bibliog Ind & Eng Chem Anal* 15:618-19 O 15 '43
- Spectrophotometric determination of magnesium by titan yellow. E. E. Ludwig and C. R. Johnson. *bibliog Ind & Eng Chem Anal* 14:895-7 N 15 '42

Fire hazards

- Application of carbon tetrachloride-type fire-extinguisher liquid to burning magnesium chips and magnesium incendiary bombs. S. J. Pearce and others. *pls U S Bur Mines Rep of Invest* 3686:1-18 '43
- Extinguishing magnesium fires with hard pitch derived from coal tar. H. R. Brown, J. Hartmann and J. Nagy. *pls U S Bur Mines Rep of Invest* 3672:1-17 '42
- Fire prevention and control in magnesium foundries; abstract. R. I. Thrune. *Foundry* 71:118+ Jl '43
- Flammable metal, magnesium; techniques developed to safeguard processing. R. I. Thrune. *diags Nat Safety* N 46:22-3+ N '42; *Excerpt. Safety Eng* 86:62-3 O '43
- Machining of magnesium; fire hazard with grinding and polishing work. A. M. Lennie. *diags Am Mach* 87:82-4 Ap 1 '43
- Magnesium fires can be prevented. R. S. Moulton. *Foundry* 71:111, 196-7 O '43
- Magnesium in industry; magnesium burns. F. J. Jarzynka. *bibliog il Ind Med* 12:427-31 Jl '43
- Preventing and extinguishing magnesium fires. H. A. Knight. *il Metals & Alloys* 17:960-6 My '43
- Self-ignition temperature of cellulose and magnesium. *Franklin Inst J* 234:492-3 N '42

Metallography

- Metallography of commercial magnesium alloys. J. B. Hess and P. F. George. *bibliog il Am Soc for Metals Trans* 31:423-45; Discussion. 445-58 Je '43

Physiological effect

- Breathing magnesium dust not a serious hazard; abstract. L. U. Gardner and A. B. Delahant. *Nat Safety* N 47:26 My '43
- Health aspect of the magnesium industry. H. H. Gay. *bibliog(59 titles) Iron Age* 150:60-3 D 3 '42

Prices

- Magnesium at New York, 1929-1942; tabulation. *Iron Age* 151:212 Ja 7 '43

Protection

- Protecting magnesium against corrosion. W. G. Harvey. *il Aero Digest* 41:233+ N '42
- Surface protection of magnesium. S. H. Bar-masel. *il Iron Age* 151:44A-44D Ap 22 '43
- Surface treatment of magnesium; abstract. H. K. de Long and W. H. Gross. *Metals & Alloys* 17:1248+ Je '43
- Treatment with superheated steam as a possible means of improving the resistance to corrosion of the magnesium alloy A8. N. Parkinson and J. W. Cuthbertson. *diag Soc Chem Ind J* 61:155-7 O '42

Welding

- Arc welding of magnesium aircraft structures; with cost data. V. H. Pavlecka and J. K. Northrop. *il diag Metals & Alloys* 18:302-7 Ag '43
- Arc welding of magnesium alloys. W. S. Loose and A. R. Orban. *bibliog il diag Welding J* 21:sup598-607 D '42
- Fabrication of magnesium structures is possible with new welding process. *Product Eng* 14:50 Ja '43

- Flange welding of light metal sheets; Weibel process of joining aluminum and magnesium. W. Flatow. *diags Iron Age* 151:59 Ap 1 '43
- Heliarc welding. *il diags Mech Eng* 64:901-2 D '42
- Heliarc welding. T. E. Piper. *il diag Welding J* 21:770-2 N '42; *Abstract. Metal Prog* 42:404+ S '42
- Helium aids in welding; advantages in welding magnesium. S. R. Winters. *il diag Sci Am* 168:252-4 Je '43
- Post-treatment of welds; abstract. A. J. T. Eyles. *Metals & Alloys* 18:362+ Ag '43
- Spot welding magnesium; report by the magnesium welding subcommittee of the Engineering foundation; abstract. *Iron Age* 152:60-1 O 28 '43
- Welding of light metals; gas, arc and atomic-hydrogen welding. Herrmann and Zurbrugg. *Iron Age* 152:56-7 Ag 26 '43

MAGNESIUM alloys

- Corrosion of magnesium alloys; abstract. C. J. Bushrod. *Metals & Alloys* 17:630+ Mr '43
- Damping characteristics of light alloys; abstract and discussion. L. K. Stanton and F. C. Thompson. *Engineering* 155:214-15 Mr 12 '43
- Designing magnesium parts for strength and wear; diagrams. *Product Eng* 14:374-5 Je '43
- Designing with magnesium. *il diags Product Eng* 14:276-81, 359-65, 430-5, 493-8, 568-75 My-S '43
- Drilling deep holes in magnesium alloys. W. W. Gilbert and A. M. Lennie. *bibliog il diags Mech Eng* 64:877-87 D '42; Discussion. G. Schlesinger. 65:441-2 Je '43
- Factors to be considered when designing die-castings. H. Chase. *il Product Eng* 14:237-41, 303-6, 378-9 Ap Je '43
- Heat treatment of magnesium and its alloys. *bibliog Am Gas Assn Proc* 1942:192-3
- Lead-bearing magnesium aluminum alloys; effect on mechanical and working properties. *Iron Age* 150:63 D 3 '42
- Magnesium. C. H. Desch. *Engineering* 155:284-5, 304-5 Ap 9-16 '43; Same. *Automobile Eng* 33:251-3 Je '43; *Abstract. Chem Age (Lond)* 48:241-2 F 27 '43
- Magnesium alloys; compositions, properties, and designations of American commercial alloys; tabulation. H. S. Jerabek, W. H. Gross and E. T. Wood, comps. *Metal Prog* 43:65 Ja '43
- Magnesium and its alloys. C. J. P. Ball. *il Iron Age* 150:54-8 N 26 '42
- Magnesium in German aircraft. H. W. Schmidt. *il Aeronautical Eng R* 2:7+ Je '43
- Metallography of commercial magnesium alloys. J. B. Hess and P. F. George. *bibliog il Am Soc for Metals Trans* 31:423-45; Discussion. 445-58 Je '43
- Plastic working of magnesium alloy sheet; *Dowmetal Ma* and *Dowmetal J-1a*. C. E. Lehnhardt. *il diags Aeronautical Eng R* 2:21+ My '43; Same abr. *Iron Age* 151:45-51 Mr 18 '43
- Radiography of light alloys. R. C. Woods and V. C. Cetrone. *il Iron Age* 151:52-8 Mr 25 '43
- Surface protection of magnesium alloys; abstract and discussion. N. Parkinson and J. W. Cuthbertson. *Engineering* 156:274 O 1 '43
- Torsional damping capacity of solid magnesium-alloy rods as affected by cold-working. A. U. Kutys and A. J. Yorgiadis. *bibliog il diag J Aeronautical Sci* 10:303-10 O '43
- Treatment with superheated steam as a possible means of improving the resistance to corrosion of the magnesium alloy A8. N. Parkinson and J. W. Cuthbertson. *diag Soc Chem Ind J* 61:155-7 O '42
- Typical properties of structural magnesium alloys; specifications and compositions, tabulated; reference book sheet. *Product Eng* 14:325-6 My '43

Analysis

- Iodometric estimation of zinc in magnesium alloys. C. C. Casto and A. J. Boyle. *Ind & Eng Chem Anal* 15:623-4 O 15 '43

MAGNESIUM alloys—Analysis—Continued

Modified basic succinate estimation of aluminum in magnesium alloys. A. J. Boyle and D. F. Musser. *Ind & Eng Chem Anal* ed 15:621-2 O 15 '43

Photometric estimation of silicon in magnesium and magnesium alloys. A. J. Boyle and V. V. Hughey. *bibliog Ind & Eng Chem Anal* ed 15:618-19 O 15 '43

Testing

Correlation of the mechanical properties and radiographic appearance of magnesium alloy castings. R. S. Busk. *Am Soc T M Proc* 42:1076-83; Discussion. 1084-7 '42

Some calibration data and scatter measurements for the radiography of magnesium aircraft castings. L. W. Ball. *Am Soc T M Proc* 42:1064-70; Discussion. 1071-5 '42

X-ray inspection of castings; Army air forces' requirements. R. Katz. *Il Metal Prog* 44:89-94 JI '43

MAGNESIUM ammonium phosphate

Studies on aging and coprecipitation; the distribution coefficient of arsenate between magnesium ammonium phosphate and solution. I. M. Kolthoff and C. W. Carr. *J Phys Chem* 47:148-52 F '43

MAGNESIUM carbides

Carbides of magnesium. W. H. C. Rueggeberg. *bibliog diag Am Chem Soc J* 65: 602-7 Ap '43

Crystal structure of magnesium carbide. M. A. Bredig. *Am Chem Soc J* 65:1482-3 Ag '43

MAGNESIUM carbonates

See also

Dolomite

MAGNESIUM chloride

Action of magnesium and aluminum salts as binders for refractories. *Brick & Clay Rec* 103:43 Ag '43

Heat contents at high temperatures of the anhydrous chlorides of calcium, iron, magnesium and manganese. G. E. Moore. *Am Chem Soc J* 65:1700-3 S '43

Specific heats at low temperatures of anhydrous chlorides of calcium, iron, magnesium and manganese. K. K. Kelley and G. E. Moore. *bibliog Am Chem Soc J* 65: 1264-7 JI '43

Use of deliquescent materials in road construction. *Roads & Bridges* 81:96+ JI '43

MAGNESIUM chromate

Study of some soluble inhibitors, with special reference to heat transfer and water-line attack. R. S. Thornhill and U. R. Evans. *diags Iron & Steel Inst J* 146:73-103, pl 5; Discussion. 103-5 no 2 '42

MAGNESIUM compounds

Heats of formation of MgO , $MgCl_2$, $MgCl_2 \cdot H_2O$, $MgCl_2 \cdot 2H_2O$, $MgCl_2 \cdot 4H_2O$, and $MgCl_2 \cdot 6H_2O$. C. H. Shomate and E. H. Huffman. *Am Chem Soc J* 65:1625-9 Ag '43

Preparation of purified inorganic compounds for use in spectrographic standards. R. C. Hughes. *bibliog Il Opt Soc Am J* 33:49-60 Ja '43

See also

Grignard reagents

MAGNESIUM founding

Aluminum and magnesium castings, 1942. N. E. Woldman. *Il Metals & Alloys* 17:64-5 Ja '43

Aluminum-magnesium attract considerable attention; abstracts of A.F.A. annual meeting papers. *Foundry* 71:178+ Je '43

Atmospheric contamination from the casting of magnesium. C. R. Williams. *bibliog J Ind Hygiene* 24:277-80 N '42

Canadian foundry specializes in nonferrous castings; Robert Mitchell co. P. Dwyer. *Il Foundry* 71:98-100+ My '43

Castings poured on mechanized conveyor at Chevrolet magnesium foundry. J. Geschell. *Il Automotive & Aviation Ind* 89:36-8+ O 1 '43

Chevrolet casts magnesium. *Il Foundry* 71: 90-4+ Ag '43

Chevrolet grey iron men pour magnesium. F. M. Reck. *Il Aero Digest* 43:190, 198, 204+ JI '43

Cores for magnesium castings. N. M. Bris-kin and G. Walker. *Il Foundry* 71:140-1+ Ap; 96-7+ My '43

Fire prevention and control in magnesium foundries; abstract. R. I. Thrune. *Foundry* 71:118+ JI '43

Foundry practice and quality in light-alloy castings. H. G. Warrington. *Il Engineering* 158:90, 97-100 JI 30 '43

Heading and gating of aluminum and magnesium castings; abstract. R. E. Ward. *Foundry* 71:120+ JI '43

Light metal sand practice, inspection; abstracts of papers, A.F.A. aluminum and magnesium division. *Iron Age* 161:70-1, 172-3 My 6 '43

Magnesium casting practice. J. P. P. Jones. *Iron Age* 162:57+ S 2 '43

Magnesium castings impregnated by new method; tung oil forced through castings by direct pressure. S. H. Brams. *Il Iron Age* 162:57-9 N 11 '43

Magnesium castings output heavy. *Foundry* 71:171 O '43

Magnesium fires can be prevented. R. S. Moulton. *Foundry* 71:111, 196-7 O '43

Magnesium foundry practice; abstract. J. Ladhams. *Metals & Alloys* 17:576 Mr '43

Magnesium melting and casting; abstract. J. P. P. Jones. *Metals & Alloys* 18:838+ O 43

Modern methods in casting magnesium. F. A. Foxall. *Il Foundry* 71:110-11+ N '43 (to be cont)

Molding sand practice for magnesium foundries. C. Sanders. *Foundry* 71:209-10 Je '43

Producing magnesium castings; American magnesium corp. E. Bremer. *Il Foundry* 71: 76-81+ F; 82-5+ Mr '43

Recent production improvements in magnesium melting and aluminum ladle preheating through direct radiant gas firing. J. Kniveton. *Il diag Am Gas J* 159:10-13 JI '43

Saginaw magnesium foundry techniques worth study. S. H. Brams. *Iron Age* 152:84, 86 JI 8 '43

MAGNESIUM halides

See also

Grignard reagents

MAGNESIUM metallurgy

Aluminum and magnesium, 1942. H. A. Knight. *Metals & Alloys* 17:57-8 Ja '43

Big magnesium plant goes into production in Michigan. *Il Eng N* 130:650 Ap 29 '43

Cement to magnesium manufacture; Ford motor company uses cement plant in first stage. G. E. Stedman. *flow sheet Il Rock Prod* 46:59-61+ Ja '43

Dominion magnesium, trail blazer; Canada's Pidgeon process. R. H. Ramsey. *Il Eng & Min J* 144:56-61 My '43

Economic considerations in the recovery of magnesia from dolomite. A. Schallis. *U S Bur Mines Information Circ* 7247:1-53 bibl-*log* (p45-53) '43

First magnesium poured at Dow's sixth plant. F. J. Van Antwerpen. *Il Chem & Eng N* 21:546-7 Ap 25 '43

High vacuum technology for production of metallic magnesium. J. M. Crowe. *Chem Ind* 53:84 JI '43

How refractories are used in gigantic installation at Basic magnesium, inc. F. A. McCann. *Il Brick & Clay Rec* 103:51-4 S '43

Magnesium. C. H. Desch. *Engineering* 155: 265-6, 284-5 Ap 2-9 '43

Magnesium and its alloys. C. J. P. Ball. *Il Iron Age* 160:54-8 N 26 '42

Magnesium from dolomite. *Chem & Ind* 62: 156-7 Ap 24 '43

Magnesium in Italy; improved reduction process. *Chem Age (Lond)* 48:182 F 6 '43

Magnesium; its properties and production. W. B. Spellmire. *flow diags Il Gen Elec R* 46:372-5 JI '43

Magnesium; its sources, methods of reduction, and commercial applications. P. D. V. Manning. *Il Min & Met* 24:346-8 Ag '43

Magnesium: production and technology, 1942. P. D. Wilson. *Il Min & Met* 24:70-1 F '43

Mathieson begins production of magnesium in Louisiana. *Chem & Eng N* 21:980 Je 25 '43

More magnesium; new Michigan plant begins production. *Il Steel* 112:80-1 Ap 19 '43

Natural gas plays dual role in Kaiser magnesium plants. J. H. Gurnz. *Il Am Gas Assn Mo* 25:400-1+ O 43

MAGNESIUM metallurgy—Continued

- New Dow magnesium plant. S. H. Brams. *il Iron Age* 151:64+ Ap 15 '43
- New magnesium plant now in production. *il Aero Digest* 42:313+ My '43
- Permanent process of making magnesium from magnesite. *Rock Prod* 46:110+ Ag '43
- Plastic pipe and power; Saran pipe is being utilized in rectifying and heat exchange installations in electrolytic mass production of magnesium. *il Chem & Eng N* 21:1052-3 Jl 10 '43
- Radiant heat for magnesium melting. *il Iron Age* 151:55 Mr 11 '43
- Selas furnace for magnesium. *il Steel* 112: 122+ Mr 8 '43
- Silver frees copper to make more metallic magnesium. *il Chem & Met Eng* 50:164 My '43
- Why and how of Basic Magnesium. R. H. Ramsey. *il Eng & Min J* 144:61-7 O '43; Same abr. *Chem & Met Eng* 50:98-101+ O '43

MAGNESIUM ores

See also

Brucite

MAGNESIUM oxide. *See* Magnesia

MAGNESIUM perchlorate

- Conductance of aqueous solutions of magnesium perchlorate. P. Van Rysselberghe and J. M. McGee. *Am Chem Soc J* 65:737-8 Ap '43

MAGNESIUM silicates

- Specific heats at low temperatures of magnesium orthosilicate and magnesium metasilicate. K. K. Kelley. *bibliog Am Chem Soc J* 65:339-41 Mr '43

See also

Serpentine

Talc

MAGNESIUM sulfate

- Function of carbon dioxide in producing efflorescence on plaster and cement products. D. L. Bishop. *bibliog pl J Research Nat Bur Stand* 30:361-6 My '43
- Specific heats at low temperatures of anhydrous sulfates of iron, magnesium, manganese, and potassium. G. E. Moore and K. K. Kelley. *bibliog Am Chem Soc J* 64:2949-51 D '42
- Surface tension of solutions of electrolytes as a function of the concentration; magnesium sulfate. G. Jones and W. A. Ray. *Am Chem Soc J* 64:2744-5 D '42

MAGNET wire. *See* Electric wire—Testing

MAGNETIC brakes. *See* Brakes, Magnetic

MAGNETIC chucks. *See* Chucks, Magnetic

MAGNETIC field

- Electronic pump bends electrons. S. Summers. *diags Radio N* 29:22-3+ Ja '43
- Magnetic induction field of air-core coils; its application to high-frequency heating in valve manufacture. C. B. Kirkpatrick. *diags Wireless Eng* 20:372-82 Ag '43
- Theory of galvanic cells subject to fields of force; the electric and magnetic field. F. O. Koenig and S. W. Grinnell. *bibliog J Phys Chem* 46:980-1005 N '42

See also

Cyclotron

MAGNETIC induction

See also

Magnetostriction

MAGNETIC instruments

- Latest in magnetic oscillographs. K. R. Geiser and J. E. Hancock. *il diags Gen Elec R* 46:289-94 My '43
- Magnetism and electricity as utilized in aircraft instruments. R. J. Stephan. *Instruments* 16:495-6+ Ag '43

MAGNETIC materials

- Better magnetic core steel aids transformer engineer; Hipersil steel. C. C. Horstman. *il Product Eng* 14:28-30 Ja '43
- Coercive force. G. W. O. Howe. *diags Wireless Eng* 20:469-72 O '43
- Electrodynamic determination of the magnetic moment of plates. E. T. Benedikt. *diag R Sci Instr* 14:43-5 F '43
- Factors affecting the design of d-c magnets. L. T. Rader. *diags Elec Eng* 62:Trans 307-10 Je '43

- Investigations of ferromagnetic impurities in copper, silver, and brass. F. W. Constant, R. E. Faires and H. E. Lenander. *bibliog Phys R* 63:441-5 Je 1 '43
- Magnetic properties and uses of iron alloys. R. D. Haigh. *Inst E E J* 89 pt1:473-5 O '42
- Progress in engineering knowledge during 1942. P. L. Alger and J. Stokley. *il Gen Elec R* 46:97-9 bibliog(p133) F '43
- Regimenting atoms in search for better transformer cores. *Sci Am* 168:60 F '43
- Rolled steel cores for radio transformers; Hipersil. C. C. Horstman. *il diags Electronics* 16:110-11 Je '43
- Special metals in the electrical industry. F. R. Hensel and J. W. Wiggs. *Elec Eng* 62: 299-300 Jl '43

See also

Iron
Magnetic properties
Nickel
Steel
Magnets

Testing

- Absolute measurement of the energy loss in a single strip of sheet iron or steel under alternating magnetization. W. E. Shenk. *bibliog il diags Am Soc T M Proc* 42:595-618; Discussion. 619-21 '42
- B-H curve tracer for lamination samples; magnetic material used in transformers and chokes. R. Adler. *il diags Electronics* 16:128-31+ N '43
- Magnetic measurements. A. E. Kettner. *bibliog il Gen Elec R* 45:633-6 N '42

MAGNETIC measurements

- Absolute measurement of the energy loss in a single strip of sheet iron or steel under alternating magnetization. W. E. Shenk. *bibliog il diags Am Soc T M Proc* 42:595-618; Discussion. 619-21 '42
- Coercive force. G. W. O. Howe. *diags Wireless Eng* 20:469-72 O '43
- Magnetic measurements. A. E. Kettner. *bibliog il Gen Elec R* 45:633-6 N '42
- Magnetochemistry; ninth Liversidge lecture. S. Sugden. *Chem Soc J* p328-33 Jl '43
- Measurement of flux. R. N. Buttry. *diags Electrician* 131:321 O 1 '43
- Method of determination of the direction of the magnetic field of the earth in geological epochs. E. T. Benedikt. *Am J Sci* 241:124-9 F '43
- Neutron polarization and ferromagnetic saturation. F. Bloch, M. Hamermesh and H. Staub. *bibliog diags Phys R* 64:47-56 Ag 1 '43

See also

Magnetic testing

MAGNETIC moment

- Adiabatic demagnetization of iron alum. J. A. Sauer. *bibliog diag Phys R* 64:94-112 Ag 1 '43
- Complex ions; the magnetic moments of some complex ions of nickel and copper. C. D. Russell, G. R. Cooper and W. C. Vosburgh. *bibliog Am Chem Soc J* 65:1301-6 Jl '43
- Electrodynamic determination of the magnetic moment of plates. E. T. Benedikt. *diag R Sci Instr* 14:43-5 F '43
- Magnetochemistry; ninth Liversidge lecture. S. Sugden. *Chem Soc J* p328-33 Jl '43
- Mason theory of the magnetic moment of proton and neutron. J. M. Jauch. *bibliog Phys R* 63:334-42 My 1 '43

MAGNETIC properties

- Investigations of ferromagnetic impurities in copper, silver, and brass. F. W. Constant, R. E. Faires and H. E. Lenander. *bibliog Phys R* 63:441-5 Je 1 '43
- Magnetic and optical anisotropy of selected microscopic crystals and the linear magneto-optical anisotropy of their suspensions. W. Heller, G. Quimfe and Y. Ta. *bibliog il Phys R* 62:479-86 N 1 '42
- Magnetic properties of solid solutions; the paramagnetic alloys of copper and nickel. A. R. Kaufmann and C. Starr. *bibliog Phys R* 63:445-50 Je 1 '43
- Method of determination of the direction of the magnetic field of the earth in geological epochs. E. T. Benedikt. *Am J Sci* 241:124-9 F '43
- See also*
- Magnetic susceptibility
Magnetostriction

MAGNETIC rotation. See Optical rotation

MAGNETIC separation of ores

Magnetic separation comes into its own. R. L. Manegold. *Il Eng & Min J* 144:86-8 Ag '43

MAGNETIC separators

Magnetic filter for lubricants. *Il Engineering* 154:466 D 11 '42

Maintaining the magnetic pulley. R. L. Manegold. *diags Eng & Min J* 144:87-8 O '43

Oregon chrome sands yield to magnetic separation. J. B. Huttli. *flow sheets Il Eng & Min J* 144:62-5 S '43

Philips magnetic skimmer. *Il Engineer* 175:395 My 14 '43; *Automobile Eng* 33:242 Je '43; *Engineering* 155:406 My 21 '43

MAGNETIC susceptibility

Magnetic susceptibilities of metals dissolved in liquid ammonia. S. Freed and N. Sugarman. *bibliog diags J Chem Phys* 11:354-60 Ag '43

Magnetic susceptibility of oxygen and nitric oxide at low field strengths. A. Burris and C. D. Hause. *bibliog diag J Chem Phys* 11:442-5 O '43

Magnetic susceptibility of the brown ferric phenanthroline complex. L. Michaelis and S. Granick. *Am Chem Soc J* 65:481-2 Mr '43

MAGNETIC testing

Crack detection; method developed by Reynolds tube company. *Il Automobile Eng* 33:247-8 Je '43

Electro-magnetic crack detection in welded tubular structures. *Il diags Engineer* 175:178-9 F 26 '43

Fluorescent magnetic inspection; magnetic particle test called Magnaglo. W. E. Thomas. *Il Metals & Alloys* 16:386-90 N '42

Hard spots formed during inspection. E. F. Green. *Metal Prog* 43:747-8 My '43

Lockheed's experience with magnetic particle inspection. R. Mitchell and C. Geist. *Il Automotive & Aviation Ind* 89:26-9+ S 1 '43

Magnetic comparator checks hardness of axle shafts. *Il Electronics* 16:214+ Je '43

Magnetic powder method of inspecting weldments, and castings for subsurface defects. C. H. Hastings. *bibliog diags Welding J* 22:sup43-51 Ja '43

Reports on magnetic powder testing questionnaire. *Foundry* 71:183-4 O '43

MAGNETISM

Effect of current-transformer residual magnetism on balanced-current or differential relays. H. T. Seeley. *diags Elec Eng* 62:Trans 164-9 Ap '43

Electronic energy bands in body-centered iron. M. F. Manning. *bibliog Phys R* 63:190-202 Mr 1 '43

Influence of the transition from ferromagnetism to paramagnetism on catalytic activity. G. Cohn and J. A. Hedvall. *bibliog J Phys Chem* 46:841-7 N '42

See also
Demagnetization Magnetic separation
Electricity of ores
Electromagnetism Magnetization
Magnetic measure-
ments

MAGNETISM, Terrestrial

Possil magnetism; experimental evidence denies that the earth's magnetic field has been completely reversed. A. G. McNish. *Il Sci Am* 168:166-7 Ap '43

Geologic correlation of areal gravitational and magnetic studies in New Jersey and vicinity. G. P. Woollard. *bibliog Geol Soc Bul* 54:791-818, pl 1-5 Je '43

Graphical and mechanical determination of the true dip from magnetically orientable cores taken in crooked holes. G. D. Hobson. *diags Inst Pet J* 28:274-80 N '42

Interior of the earth viewed in relation to earthquake causes; measurements of terrestrial magnetism tell us little about earthquakes but may tell us much about the interior of the earth. W. A. Lynch. *J Ap Phys* 14:127-30 Mr '43

Method of determination of the direction of the magnetic field of the earth in geological epochs. E. T. Benedikt. *Am J Sci* 241:124-9 F '43

Relation of the cosmic radiation to geo-magnetic and heliophysical activities. J. W. Broxon. *bibliog Phys R* 62:508-22 D 1 '42

Transcontinental gravitational and magnetic profile of North America and its relation to geologic structure. G. P. Woollard. *bibliog diags Geol Soc Bul* 54:747-89, pl 1-9 Je '43

See also

Auroras

MAGNETITE

Crystal structures of Fe, FeO and Fe₃O₄ and their interrelations. H. J. Goldschmidt. *bibliog Iron & Steel Inst J* 146:157-74; Discussion. 175-80 no 2 '42

Eastern magnetite. R. E. Crockett. *Il Min & Met* 24:84 F '43

Helium age measurement; preliminary magnetite index. P. M. Hurley and C. Goodman. *bibliog Geol Soc Bul* 54:305-23 Mr '43

Ilmenite and magnetite produced in quantity at National Lead's new MacIntyre development; titanium dioxide recovered from ilmenite. I. D. Hagar. *Il Min & Met* 23:594-6 D '42

Supergene magnetite. J. S. Brown. *bibliog Il Econ Geol* 38:137-48 Mr '43

MAGNETIZATION

Absolute measurement of the energy loss in a single strip of sheet iron or steel under alternating magnetization. W. E. Shenk. *bibliog il diags Am Soc T M Proc* 42:595-618; Discussion. 619-21 '42

Magnetic structure of iron crystals; colloid patterns on silicon-iron crystals. W. C. Elmore. *Il diags Phys R* 62:486-93 N 1 '42

Neutron polarization and ferromagnetic saturation. F. Bloch, M. Hamermesh and H. Staub. *bibliog diags Phys R* 64:47-56 Ag 1 '43

MAGNETOCHEMISTRY

Magnetochemistry; ninth Liversidge lecture. S. Sugden. *Chem Soc J* p328-33 J1 '43

MAGNETO-OPTICAL rotation. See Optical rotation

MAGNETO-OPTICS

Magnetic and optical anisotropy of selected microscopic crystals and the linear magneto-optical anisotropy of their suspensions. W. Heller, G. Quimpe and Y. Ta. *bibliog il Phys R* 62:479-86 N 1 '42

MAGNETOS

Testing

How test unit simulates flight conditions; aircraft magnetos. V. Blasutta. *Il diags Machine Design* 15:107-11 Ap '43

MAGNETOSTRICTION

Magnetostriction made visible. S. C. Leonard. *bibliog il diags Gen Elec R* 45:637-41 N '42; Abstract. *Electronics* 16:162+ Ap '43

MAGNETRON

Theory of the magnetron. L. Brillouin. *Phys R* 63:127-36 F 1 '43

Ultrashort electromagnetic waves; generation. I. E. Mourmoutseff. *Elec Eng* 62:211-12 My '43

MAGNETS

Horseshoe magnet speeds up welding by eliminating arc blow. *Sci Am* 167:285-6 D '42

Magnetic control switch. *Il diags Electronics* 16:196+ J1 '43

Magnetic methods of sorting steel scrap. W. L. Nelson. *Il Oil & Gas J* 41:42 D 24 '42

Powder metallurgy used for war production. Blast F & Steel Pl 31:667-8 Je '43

See also
Electromagnets Roads—Magnetic
Magnetization sweeping

MAGNETS, Lifting. See Lifting magnets

MAGNIFICATION. See Electron microscope; Microscope and microscopy; Optical instruments

MAHOGANY

Mahogany output of British Honduras, 1942. For Comm W 12:38 Ag 21 '43

War industry increases demand for mahogany. For Comm W 10:33 Mr 13 '43

MAIL

Mail sorting and delivery system; Southern California gas co. F. A. Herr. *il Am Gas J* 159:9-11 Ag '43

See also

Postal service

MAIL advertising. *See* Advertising, Mail

MAIL banking. *See* Banks and banking—Mail service

MAIL conventions. *See* Sales conventions—Mail conventions

MAIL handling

See also

Air mail service

Mail trucks

Postal service

MAIL order business

Butler brothers split big general catalog into several smaller books. *Ptr Ink* 203:28 Ap 2 '43

Comes the pinch; new catalogs reflect shortages in hard lines and housewares. *Business Week* p85-6 *Jl* 17 '43

Firestone in mail-order business. *Ptr Ink* 201:46 *D* 11 '42

Fliers revised. *Business Week* p39-40 *Ja* 9 '43

Mail-order horses. J. M. Stenbuck. *Adv & Sell* 36:17+ *Jl* '43

Mail-order houses maintain selling effort at high level. *Ptr Ink* 202:52-3 *F* 12 '43

Mail order's war; catalogs of big houses haven't shrunk. *Business Week* p51-2 *Ja* 30 '43

New highway diverted traffic, so roadside stand went mail-order; Russell C. Nicoll's Valerie Jean date shop, Thermal, California. *il Ptr Ink* 202:47, 54 *Mr* 26 '43

New Sears catalog. *Sales Management* 52:20-1 *F* 1 '43

Shoes by mail. *Business Week* p60+ *My* 8 '43

Where to shop by mail. *Consumers' Research Bul* 12:26 *N* '43

See also

Advertising, Mail

Catalogs

Chicago mail order company

Insurance, Accident—

Mail order selling

Montgomery Ward

and company

Sears, Roebuck and

company

Advertising

Chicago Mail order co. offers advertised brands, new lines; starts name change. *Ptr Ink* 204:52 *Jl* 16 '43

How Sears, Roebuck produces mail-order copy that sells; issues Advertising guide for its copy writers. *Ptr Ink* 202:72-4 *Mr* 5 '43

How the Book-of-the-month club has thrived on direct-selling copy; success story of a former advertising agent (Harry Scherman). C. J. Swan. *il Ptr Ink* 202:58, 60-2 *F* 19 '43

Ward catalog given new dress. *il Inland Ptr* 111:25-7 *Ag* '43

Zebras of retailing; mail-order catalogs can't change their stripes; nevertheless, are meeting the war's challenge to selling fashions by mail. H. F. Keane. *il Ptr Ink* 201:18-20 *D* 4 '42

Purchasing

Sears goes south; opens buying office in Atlanta. *Business Week* p91-2 *My* 22 '43

MAIL order catalogs. *See* Catalogs

MAIL orders

Gasless shopping; department stores try mail order and phone schemes. *Business Week* p90+ *N* 21 '42

See also

Advertising, Mail

MAIL trucks

Electric mail-vans. *il Elec R* (Lond) 132:173-4 *F* 5 '43

MAILING lists

How Britain keeps up its mailing lists in wartime. H. Dennett. *Adv & Sell* 36:45 *Ap* '43

Now that paper is short and the mails congested. *Ptr Ink* 203:32 *Je* 18 '43

Obsolete lists, paper shortage, plague users of direct mail. *Sales Management* 52:72+ *N* 1 '43

MAIN, Charles Thomas, 1856-1943

Sketch. *por Boston Soc C E J* 30:128-9 *Ap* '43

MAINE central railroad

Maine Central maturity problem easing. A. Jansen. *Barron's* 23:18-19 *Jl* 19 '43

MAINTENANCE of membership, Trade union.

See Trade unions—Maintenance of membership

MAIZE. *See* Corn

MAKE-ready. *See* Printing, Practical—Press-work

MAKE-up (photography)

Making faces. J. McGrew. *il Am Phot* 37:8-10 *Mr* '43

MALACHITE green

Staining of yeast spores. L. S. McClung. *Science* 98:159-60 *Ag* 13 '43

MALARIA

American chemical society malaria symposium. *Can Chem & Process Ind* 27:251 *My* '43

Antimalarial ammunition; synthetic drugs. R. E. Gruber. *il Tech R* 45:179-81, 190+ *F* '43

Antimalarial screening tests. L. T. Coggeshall. *il Chem & Eng N* 21:1152-3 *Jl* 25 '43

Bismuth and recovery from malaria; abstract. M. D. Young, S. B. McLendon and R. G. Smarr. *Science* 97:sup8-9 *Je* 25 '43

Chemistry and development of atabrine and plasmochin. A. E. Sherndal. *il Chem & Eng N* 21:1154-8 *Jl* 25 '43; *Abstract. Chem Age* (Lond) 49:309-11 *S* 25 '43

Demonstration of the protozoan parasite of quail malaria by fluorescence microscopy. R. L. Patton and R. L. Metcalf. *Science* 98:184 *Ap* 20 '43

Hemisphere betterment, health and sanitation. A. R. Dreisbach. *il For Comm W* 9:4-5 *N* 21 '42

Influence of biotin upon susceptibility to malaria; experiments with avian malaria. W. Trager. *Science* 97:206-7 *F* 26 '43

Malaria; public health and economic aspects. L. L. Williams, jr. *bibliog il Chem & Eng N* 21:1148-51 *Jl* 25 '43

Malarial cryptozoites. C. G. Huff, F. Coulston and W. Cantrell. *Science* 97:286 *Mr* 26 '43

N-substituted 2-methoxy-6-chloro-9-amino-acridines. J. H. Burkhalter and others. *Am Chem Soc J* 65:2012-15 *O* '43

Occurrence of intravascular agglutinations in avian malaria. A. R. Lack, jr. *Science* 96:520-1 *D* 4 '42

Quinine after the war. T. W. Delahanty and E. D. Schutrumpf. *il For Comm W* 13:6-7+ *N* 6 '43

Ross institute of tropical hygiene (India branch). *Science* 98:168 *Ag* 20 '43

Search for an antimalarial chemical. P. F. Russell. *Science* 97:sup10+ *Ap* 9 '43

Synthesis of 1-substituted aminobenzo(f) quinolines. A. C. Mueller and C. S. Hamilton. *bibliog Am Chem Soc J* 65:1017-18 *Je* '43

To fight malaria in tropical America. *Nat Safety N* 46:81 *D* '42

Transmission of plasmodium lophurae, and avian malaria parasite, by anopheles quadrimaculatus. H. S. Hurlbut and R. Hewitt. *Pub Health Rep* 57:1891-2 *D* 11 '42

MALAY peninsula

Malaya. R. Winstedt. *Ann Am Acad* 226:97-111 *Mr* '43

MALEIC acid

Disappearance of thiosulfate in solutions of maleic acid; catalysis of *cis-trans* isomerization. H. Taube. *bibliog Am Chem Soc J* 65:526-31 *Ap* '43

Induced chlorination of maleic acid; evidence for chain reaction mechanisms. H. Taube. *bibliog diag Am Chem Soc J* 65:1876-82 *O* '43

MALEIC anhydride

Caution on the use of maleic anhydride as a reagent for conjugated diolefins. R. F. Robey. *Science* 96:470 *N* 20 '42

MALINGERING

Discussion on malingering with Sir Aruthnot Lane on visit to England in 1928. H. A. Ley. *East Underw* 44:12 *Mr* 12 '43

MALLEABLE iron. *See* Cast iron

MALONIC acid

Malonic ester synthesis and Walden inversion. W. E. Grigsby and others. bibliog Am Chem Soc J 64:266-10 N '42
Some reactions of amidines with derivatives of malonic acid. G. W. Kenner and others. Chem Soc J p388-90 Ag '43

MALONIC esters

Reaction between quinones and metallic enolates; dibromo-*p*-xyloquinone and sodiomalonic ester. L. I. Smith and J. Nichols. bibliog Am Chem Soc J 65:1739-47 S '43
Vinylalkylmalonic esters and barbituric acids. D. Heyl and A. C. Cope. bibliog Am Chem Soc J 65:669-73 Ap '43

MALT

Brewers' malt cut. Business Week p30+ Mr 6 '43

MALT sirup

All-America package competition award; Standard brands, inc. bag-in-carton for Fleischmann's Diamalt. *il* Mod Packaging 16:111+ Ap '43
Pillow in a carton. *il* Mod Packaging 16:56-7+ D '42

MALT sugar (maltose-dextrin)

How to make better malt sugar for infant feeding. W. O. Gordon. flowsheet Food Ind 15:60-2 Je '43

MALTA

Malta's constitution. Economist 145:71 JI 17 '43

MALTASE

Preparation of a sucrase-free taka-maltase. J. Feigenbaum. bibliog Science 96:521-2 D 4 '42

MALTOSE

See also

Malt sugar (maltose-dextrin)

Analysis

Sugar determination in starch hydrolyzates by yeast fermentation and chemical means. A. S. Schultz and others. bibliog Ind & Eng Chem Anal ed 15:496-8 Ag 15 '43

MAMMALS

Mammals and the nature of continents. G. G. Simpson. bibliog Am J Sci 241:1-31 Ja '43

See also

Gorillas

MAMMALS, Fossil

Presentation of the Daniel Giraud Elliot medal for 1935, with accompanying honorarium of \$200, to Edwin H. Colbert. W. K. Gregory. Science 97:433-4 My 14 '43

MAN

Biologist looks at man. J. Huxley. *il* Fortune 26:138-41+ D '42

See also

Anthropology

MAN, Prehistoric

Foison mystery; its solution is largely contingent on the solution of another mystery; relation of northern bison to fossil type. L. C. Eiseley. *il* Sci Am 167:260-1 D '42

Pseudo-fossil man; not all human skulls that look primitive are those of ancient primitive man. L. C. Eiseley. *il* Sci Am 168:118-19 Mr '43

Texas skeleton. C. N. Ray. Science 98:344 O 15 '43

Who were our ancestors? puzzle of the Swanscombe skull. *il* Sci Am 168:212-13 My '43

See also

Anthropology
Kitchen middens

MANAGEMENT

Education for management. H. V. Coes. Mech Eng 65:486-8 JI '43; Same. Can Chem & Process Ind 27:417-18, 420 JI '43; Same cond. Min & Met 24:398-400 S '43

Function of A.S.M.E. in management development. H. V. Coes. Mech Eng 65:833 N '43
Managerial responsibility. H. S. Fries. Advanced Management 8:45-8 Ap '43

See also

Administration,
Public
Business management

Efficiency, Industrial
Employment management
Factory management

Farm management
Foundry management
Industrial management
Machine shop management
Management
Managerial revolution
 also subdivision
 also headings, e.g.
Buildings
Department stores
Electric utilities
Insurance companies
Power plants

Mine management
Office management
Organization in industry
Planning
Retail trade—Store management
Sales management
Management under various headings, e.g.
Railroads
Textile mills
Trust companies
Waterworks

Bibliography

Management index; a subject index to publications of the American management association. February, 1932-August 1942. 79p
American management assn, 330 W. 42d st, New York '43

Ten years' progress in management; management research. E. H. Hempel. A S M E Trans 65:252-8 Ap '43

MANAGEMENT research

Office management; why and how of methods improvement. W. S. Bowser. Personnel J 22:137-9 O '43

MANAGERIAL revolution

Looking forward. P. S. Brown. Advanced Management 8:2-5 Ja '43

MANCHESTER, England

See also Electricity supply—Manchester, England

MANCHURIA

Japan develops a Ruhr; industries in Manchukuo. *il* map Business Week p88+ Je 26 '43

MANDELIC acid

Aqueous solubilities of *r*- and *l*-mandelic acids and three *O*-acyl-*r*-mandelic acids. W. R. Angus and R. P. Owen. Chem Soc J p231-2 My '43

Course of reaction in the transformation of *a,a*-dibromoacetophenone to mandelic acid by means of aqueous alkali. E. B. Ayres and C. R. Hauser. bibliog Am Chem Soc J 65:1095-6 Je '43

Effect of heat on mandelic acid. W. R. Angus and R. P. Owen. Chem Soc J p249-50 My '43

New methods for the resolution of enantiomorphs; liquid-liquid extraction. E. Shapiro and R. F. Newton. diags Am Chem Soc J 65:777-9 My '43

Stability of racemates; mandelic acid and some of its derivatives. W. R. Angus and R. P. Owen. Chem Soc J p227-30 My '43

Synthetic mydratics. F. F. Blicke and H. M. Kaplan. bibliog Am Chem Soc J 65:1967-70 O '43

MANDIOCA. *See* Cassava**MANDRELS. *See* Arbors and mandrels****MANGANESE**

Ferro-alloy metals, 1942. N. B. Melcher. Eng & Min J 144:72-3 F '43

Importance of manganese. Chem Age (Lond) 49:133-5 Ag 7 '43

Manganese, chromite, and molybdenum; private and government funds are being directed to production. *il* Min Cong J 29:26 F '43

Manganese in the soils of the state of S. Paulo; abstract. J. E. de Paiva Netto. Chem & Met Eng 50:194 JI '43

Nuclear energy levels in Fe⁵⁶ from the decay of Mn⁵⁶ and Co⁵⁶. L. G. Elliott and M. Deutsch. bibliog Phys R 63:321-2 Ap 1 '43

Open-hearth slag control for manganese. C. E. Quest, A. E. Martin and T. L. Joseph. Metals & Alloys 17:767-9 Ap '43

See also

Ferromanganese

Analysis

Detection of metallic driers in varnishes and oils by spot test analysis. J. V. Atkinson. bibliog Paint Oil & Chem R 106:10, 22-3 JI 1 '43

Polarographic determination of manganese as tri-dihydrogen pyrophosphatomanganate. I. M. Kolthoff and J. I. Watters. bibliog Ind & Eng Chem Anal ed 15:8-13 Ja 15 '43

MANGANESE—Analysis—Continued

Spot test for manganese in steel. *Metal Prog* 43:746-7 My '43

Prices

Metals reserve co. revises domestic chrome and manganese price schedules to simplify purchasing policy. *Eng & Min J* 144:91 Je '43

Monthly price averages for twelve years, 1929-1942; tabulation. *Steel* 112:366 Ja 4 '43

MANGANESE alloys

Use of manganese alloys for electrical condenser plates. E. V. Potter and R. W. Huber. *U S Bur Mines Rep of Invest* 3689: 1-9 '43

See also

Ferromanganese
Iron alloys—Chromium manganese alloys
Silicomanganese

MANGANESE bronze

Controls manganese bronze melting. N. K. B. Patch. *Foundry* 71:106+ S '43

MANGANESE carbide

Specific heats at low temperatures of manganese carbide and manganese dioxide. K. K. Kelley and G. E. Moore. *bibliog Am Chem Soc J* 65:782-5 My '43

MANGANESE carbonate

Heat content of manganese dioxide and carbonate at high temperatures. G. E. Moore. *bibliog Am Chem Soc J* 65:1398-9 Jl '43

MANGANESE chloride

Heat contents at high temperatures of the anhydrous chlorides of calcium, iron, magnesium and manganese. G. E. Moore. *Am Chem Soc J* 65:1700-3 S '43

Specific heats at low temperatures of anhydrous chlorides of calcium, iron, magnesium and manganese. K. K. Kelley and G. E. Moore. *bibliog Am Chem Soc J* 65: 1264-7 Jl '43

MANGANESE industry

Benefit of African manganese to U.S. questioned by some importers. *Iron Age* 151: 124 F 25 '43

Egypt's 1942 manganese output. *For Comm W* 10:28 Mr 20 '43

MANGANESE metallurgy

Importance of manganese. *Chem Age (Lond)* 49:133-5 Ag 7 '43

Manganese from low-grade ores. *Chem Ind* 52:745-6 Je '43

Manganese investigations; ore-dressing studies of eastern manganese ores. W. A. Calhoun and others. *U S Bur Mines Rep of Invest* 3684:1-11 '43

Recovery of manganese from low-grade ore; abstract. H. C. Weber and C. H. Davenport. *Chem & Met Eng* 50:200-1 My '43

Strategic materials from low-grade and complex domestic ores. R. R. Sayers. *il Chem Ind* 51:842-6 D '42

Electrometallurgy

Past pilot stage; successful commercial production of 99.9% pure manganese achieved. *il Business Week* p62 S 4 '43

MANGANESE mines and mining**Arkansas**

Arkansas travelogue; manganese and zinc deposits of northern Arkansas. E. Just. *il Eng & Min J* 144:46-9 Ja '43

California

Manganese deposits in the Paymaster mining district, Imperial county, California. J. B. Hadley. *il diags map U S Geol S Bul* 931-S: 459-73, pl 75-7; pa 30c Supt. of doc. '42

Cuba

Manganese deposits of Cuba. C. F. Park, jr. diags plans *U S Geol S Bul* 935-B:75-97, pl 21-3; pa 10c Supt. of doc. '42

Missouri

Ozark manganese. R. F. Hamilton. *il Explosives Eng* 20:369 D '42

Nevada

Three Kids manganese district, Clark county. C. B. Hunt, V. E. McKelvey and J. H. Wiese. diags fold maps *U S Geol S Bul* 936-L:297-319; pa 30c Supt. of doc. '42

Nova Scotia

Diamond drilling the manganese deposits of Nova Scotia. E. Walker. diags *Can Min J* 64:487-9 Ag '43

Virginia

Manganese deposits of Cedar Creek valley, Frederick and Shenandoah counties. W. H. Monroe. *U S Geol S Bul* 936-E:111-41, pl 12-16; pa 35c Supt. of doc. '42

Washington (state)

Manganese resources of the Olympic peninsula, Washington. C. F. Park, jr. diags maps *U S Geol S Bul* 931-R:435-57, pl 68-74; pa 35c Supt. of doc. '42

MANGANESE molybdenum steel

Weldability of (NiE-8338) manganese molybdenum steel piping. R. W. Emerson. *il Welding J* 22:sup170-8 Ap '43; Same cond. *Steel* 113:38-9, 92, 95-6 Jl 26 '43

MANGANESE nitrates

Analytical reactions involving ignition with manganese nitrate. M. J. Preising, O. F. Slonek and J. H. Reedy. *bibliog Ind & Eng Chem Anal ed* 14:875-7 N 15 '42

MANGANESE ores

Manganese deposits in the Paymaster mining district, Imperial county, California. J. B. Hadley. *il diags map U S Geol S Bul* 931-S: 459-73, pl 75-7; pa 30c Supt. of doc. '42

Manganese oxide minerals; a preliminary report. M. Fleischer and W. E. Richmond. *il Econ Geol* 38:269-86 Je '43

Manganese resources of the Olympic peninsula, Washington. C. F. Park, jr. diags maps *U S Geol S Bul* 931-R:435-57, pl 68-74; pa 35c Supt. of doc. '42

Manganese supply position comfortable as developments improve outlook. *Steel* 113: 60-1 Ag 9 '43

Presence of boron in braunite and manganese ores. B. Wasserstein. *bibliog Econ Geol* 38:389-98 Ag '43

Strategic materials from low-grade and complex domestic ores. R. R. Sayers. *il Chem Ind* 51:842-6 D '42

Three Kids manganese district, Clark county, Nevada. C. B. Hunt, V. E. McKelvey and J. H. Wiese. diags fold maps *U S Geol S Bul* 936-L:297-319; pa 30c Supt. of doc. '42

MANGANESE oxides

Equilibrium relationships on the MnO-Al₂O₃-SiO₂ surface in part of the MnO-Al₂O₃-SiO₂ system. R. B. Snow. *bibliog il diags Am Cer Soc J* 26:11-20 Ja 1 '43

Heat content of manganese dioxide and carbonate at high temperatures. G. E. Moore. *bibliog Am Chem Soc J* 65:1398-9 Jl '43

Heats of formation of manganomanganic oxide and manganese dioxide. C. H. Shonate. *bibliog Am Chem Soc J* 65:785-90 My '43

Manganese oxide minerals; a preliminary report. M. Fleischer and W. E. Richmond. *il Econ Geol* 38:269-86 Je '43

Specific heats at low temperatures of manganese carbide and manganese dioxide. K. K. Kelley and G. E. Moore. *bibliog Am Chem Soc J* 65:782-5 My '43

Spot reaction experiments; reaction of potassium chromate and manganese dioxide with activated hydrochloric acid. F. Feigl. *J Chem Educ* 20:240-1 My '43

MANGANESE poisoning

Exposure to manganese. *Safety Eng* 85:46 My '43

Manganese; industrial data sheet. *Nat Safety* N 47:56 F '43

War time standard for manganese concentration. *Nat Safety* N 46:89 D '42

MANGANESE steel

Austenitic manganese steels for exhaust valves; abstract. D. W. Rudorf. *Iron Age* 152:73 O 28 '43

Comparative effects of boron and manganese on some properties of heat treated steel. G. F. Comstock. *Iron Age* 152:48-52 S 9 '43

MANGANESE steel—Continued

Continuous production of manganese-steel castings from the Tropenas converter. L. W. Bolton and J. Hill. *diags Engineering* 156:158-60, 177-8 Ag 20-27 '43

Dredge bucket renewal conserves manganese steel. C. H. Thurman. *il Eng & Min J* 144:68 Ap '43

Some aspects of strain hardenability of austenitic manganese steel. D. Niconoff. *il Am Soc for Metals Trans* 31:716-34; Discussion. 734-8 S '43

See also
Chromium manganese steel

MANGANESE sulfates

Specific heats at low temperatures of anhydrous sulfates of iron, magnesium, manganese, and potassium. G. E. Moore and K. K. Kelley. *bibliog Am Chem Soc J* 64: 2949-51 D '42

MANGANESE tungstate

See also
Hübnerite

MANHOLE covers

Concrete manhole covers and ash receptacles; Best block co. *il Rock Prod* 45:63-4 N '42

Concrete manhole covers for Ohio highways. *diags Pub Works* 74:58-9 Je '43

How to make wood manhole covers. *diags Am Bld* 65:55 My '43

Manhole cover of treated wood. *il diags Roads & Sts* 85:46 D '42; Same cond. *Eng N* 129:668 N 12 '42

Metal manhole covers replaced with timber or concrete; with cost data. *il diags Eng N* 131:156-7 JI 15 '43

Wartime substitute manhole covers and frames. G. E. Symons. *il diags Water Works & Sewerage* 90:179-81 My '43

Wood and concrete manhole covers. *diags Elec W* 119:1650+ My 15 '43

Wood replaces metal for manhole covers. *diags Elec W* 119:1976+ Je 12 '43

MANHOLES

How one company streamlined old manholes. F. A. Hubbard. *diags Elec W* 119:1327 Ap 17 '43

Manhole explosion darkens Indianapolis. *Elec W News* ed 119:1044 Mr 27 '43

Underground channels utilized for airport drainage. *il diags plan Eng N* 130:498-9 Ap 8 '43

MANIFOLDS

Cutting and welding torch manifold developed at Brunswick yard. *il Marine Eng* 48: 200 Mr '43

Manifold built for needs of large pump station. F. Reed. *il diags Oil & Gas J* 41:151 N 26 '42

Manifold-solenoid de-icer systems with electronic control. M. L. Taylor and W. B. Pond. *il diags Aviation* 42:144-7 N '43

Save 12 hours in cooling manifold; Ohio River station, Evansville. *Elec W* 120:1027-8 S 18 '43

Shop manifolds on a post between pits. *il Ry Mech Eng* 117:270 Je '43

See also
Airplane engines—
Manifolds

MANIKINS

Military models; plastic manikins modeled to dimensions of men that fly. *il Business Week* p20 O 16 '43

MANILA hemp

Japs try hemp for soldiers' garments. *For Comm W* 13:25 O 2 '43

MANILA hemp, Substitutes for

Give them rope; many fibres besides manila. *Business Week* p24+ F 6 '43

Jute and manila fibers; sansevieria, hibiscus esculente (okra), hibiscus cannabinus, and urena lobata as substitutes. A. C. Whitford. *Textile Col* 64:526-7 N '42

MANILA paper insulation. See Paper, Insulating

MANILA rope. See Rope

MANITOBA

See also
Mines and mineral
resources—
Manitoba

MANNING tables

Draft gets down to business. *Business Week* p 15-17 D 19 '42

Essential occupations listed for construction industry. *Eng N* 129:667-8 N 12 '42

Government revises system of drafting key workers; individual-plant manning tables. *Elec W* 118:1621 N 14 '42; Same. *Power* 86:926b-926c D '42

How to take a manpower inventory; manning tables aid orderly replacement of workers. *il Textile World* 92:70-1 D '42

Manning table control of draft urged to maintain labor force. *Iron Age* 150:108+ N 19 '42

Manning table for banks. W. Powers. *il Banking* 35:28-9+ Mr '43

Manning table is basis for deferments, re-placements. R. Colborn. *il Am Mach* 87: 112c Ja 7 '43

Manning table plan lists jobs. *Foundry* 70: 150 D '42; Same. *Steel* 111:67-8 N 16 '42

Manning tables give employers blueprint for solving draft problems. *il Steel* 111:46-8, 143-4+ D 14 '42; Same. *Am Water Works Assn J* 35:127-33 Ja '43

Manning tables more important as deferments become restricted. *Steel* 111:42-3 N 23 '42

Manpower commission advice. L. B. F. Raycroft. *Personnel J* 22:2-11 My '43

Metal mining and the selective service; manning tables will be used. H. A. Rich. *Min Cong J* 28:36-8 D '42

To save key men; screw machine builders devise a chart to supplement manning tables. *Business Week* p70+ Ap 10 '43

Use of manning tables in steel outlined at production conference. *Iron Age* 151:129 My 13 '43

What's wrong with manning tables? WMC seeks to clear misunderstandings. *Iron Age* 151:96+ Mr 25 '43

MANNITOL

2,3,4,5-Dibenzylidene-D-mannitol and some of its derivatives. W. T. Haskins, R. M. Hann and C. S. Hudson. *Am Chem Soc J* 65:1419-22 JI '43

2,3,4,5-Dimethylene-D-mannitol and a second dimethylene-D-mannitol. W. T. Haskins, R. M. Hann and C. S. Hudson. *Am Chem Soc J* 65:67-70 Ja '43

Mannitol and sorbitol; the development of a new electrochemical industry. H. J. Creighton. *il plan Can Chem & Process Ind* 26:690-6 D '42

MANNOSE

Chemical constitution and the tanning effect; pentagalates of glucose and mannose. A. Russell, W. G. Tebbens and W. F. Arey. *Am Chem Soc J* 65:1472-4 Ag '43

Crystalline 4-methyl-D-mannose and some of its derivatives. W. T. Haskins, R. M. Hann and C. S. Hudson. *bibliog Am Chem Soc J* 65:70-3 Ja '43

Synthesis of an epimeric pair of trisaccharides containing mannose units. E. A. Talley and W. L. Evans. *Am Chem Soc J* 65:573-4 Ap '43

Synthesis of certain disaccharide acetates in the mannose series. E. A. Talley, D. D. Reynolds and W. L. Evans. *bibliog Am Chem Soc J* 65:575-82 Ap '43

MANOMETERS

Apparatus for port velocity tests on locks. M. J. Webster. *diags Am Soc C E Proc* 69:973-6 Je '43

Applications of electronics to physiology. W. E. Gilson. *Electronics* 16:89+ Ja '43

Automatic pressure-regulating manometer. R. Gilmont and D. F. Othmer. *diags Ind & Eng Chem Anal* ed 15:641-2 O 15 '43

Barcroft-Warburg manometric apparatus; usage, recent developments, and applications. J. J. Perkins. *bibliog(102 references) il diags Ind & Eng Chem Anal* ed 15:61-8 Ja 15 '43

Improved manometer built of plastics. J. Stuart. *il diags Instruments* 15:524 D '42

Measuring photographically to obtain test data on a locomotive of new design. F. H. Catlin. *il Gen Elec R* 46:503-4 S '43

Measuring the flow of fluids; use of orifices and manometers. W. Goodman. *diags Heating-Piping* 15:413-18, 461-4, 525-8, 596-8 Ag-N '43

MANOMETERS—Continued

- Multiple recording manometer for use in wind tunnels. P. J. Campbell. *il* *diags* J Aeronautical Sci 10:313-17 O '43
 Photoelectric manometer. W. E. Gilson. *il* *diag* Electronics 16:112+ Ap '43
 Short open-tube manometer for vacuum systems. S. C. Brown. *diag* R Sci Instr 13: 503-4 N '42

MANOSTATS. See Pressure regulators**MANPOWER** utilization, Bureau of. See War manpower commission**MANUFACTURERS****Directories**

See also
 Trade directories

MANUFACTURERS' booklets. See Advertising literature**MANUFACTURERS'** casualty insurance company

- Commercial credit co. gets stock control of Manufacturers' Casualty. East Underw 43: 76 D 11 '42
 Commercial Credit in offer to buy Manufacturers' Casualty. Nat Underw 46:21 N 19; 16+ N 26 '42

MANUFACTURERS trust company

- Deposits, 1942; report at annual meeting of stockholders; abstracts. H. C. Von Elm. Comm & Fin Chr 157:289 Ja 21 '43; Bankers M 146:166-7 F '43

MANUFACTURES

- Finance companies move into manufacturing fields. S. H. Brams. Iron Age 151:62, 64 Ap 22 '43

- Manufacturers' profit margins in thirties 40 per cent below those of twenties. Comm & Fin Chr 156:2170 D 17 '42

- Productivity and unit labor cost in selected manufacturing industries, 1939-42. Monthly Labor R 56:885-7 My '43

- Wartime employment of women in manufacturing. Monthly Labor R 57:723-8 O '43

See also
 Brickmaking
 Catalogs
 Chemistry, Technical
 Coke manufacture
 Commerce
 Competition
 Cost accounting
 Cotton manufacture
 Equipment industries
 Factories
 Factory management
 Foundries
 Fuel
 Gas manufacture
 Glass manufacture
 Home labor
 Industrial mobilization
 Industry
 Inspection

Knit goods
 Labor and laboring classes
 Machine shops
 Machinery
 Metal work
 Metals
 Paper making
 Patents
 Prices
 Priorities and allocations, Industrial
 Production
 Products, New
 Quality of products
 Rayon manufacture
 Textile fabrics
 Trade marks
 Waste products

also subdivision Manufacture under names of manufactured articles, e.g. Airplanes—Manufacture; Automobiles—Manufacture; Cement—Manufacture; Rubber—Manufacture

Statistics

- American economy in 1942: manufacturers' inventories; with comparisons for earlier years. C. A. R. Wardwell and R. B. Bangs. Survey of Cur Business 23:12 Ja '43

- Business and the war; some effects on manufacturing. W. Hayes and R. Wyant. Dun's R 50:17-19 D '42

- Electricity a small item in industry's costs; analysis of the 1939 census figures. Elec W 118:1782-3 N 28 '42

- 14 important financial ratios, 36 industries, 1941; tabulation. R. A. Foulke. Dun's R 50:8, 10-11 D '42

- Impact of the war upon smaller manufacturing plants. H. R. Bowen. Survey of Cur Business 23:19-24 Jl; 19-24 S '43

- Manufacturers' inventories higher. Survey of Cur Business 23:7-8 Mr '43

- Manufacturers' new orders and shipments, 1939-Aug. 1943, charts Survey of Cur Business 23:2-4 O '43

- Manufacturers' orders, shipments, and inventories, 1939-1941. Survey of Cur Business 1942 Sup p13-15 [supplemented in monthly numbers]

- Manufacturers' shipments, adjusted for number of working days, 1940-May 1943; chart. Survey of Cur Business 23:2 Ag '43

- Manufacturing in metropolitan districts. C. E. Haring. map Adv & Sell 36:38+ Ja '43

- 1942 manufactures put at \$121 billion. Comm & Fin Chr 157:672 F 18 '43

- Revision of industrial production index. Fed Res Bul 29:940-84 O '43; Excerpt (tables). Survey of Cur Business 23:18-20 D '43

- Total shipments by manufacturers and machine tool shipments, 1940-March 1943; chart. Survey of Cur Business 23:2 Je '43

- Value of manufacturers' output, 1942. Survey of Cur Business 23:5-6 Mr '43

See also

Production—Statistics**Canada**

- Production function for Canadian manufacturers. P. Daly and P. H. Douglas. Am Stat Assn J 38:178-86 Je '43

MANUFACTURING chemists association of the United States

- Annual meeting, 71st, New York, June 3. Oil Paint & Drug Rep 143:3+ Je 7 '43; Chem & Eng N 21:890+ Je 10 '43

MANURES

- Lime may be spread with manure; Vermont agricultural experiment station finds advantages. A. R. Midgley. *il* Rock Prod 46: 62-3 Ap '43

See also
 Fertilizers

MANUSCRIPTS**Bibliography**

- Manuscript division accessions during 1942. N Y Pub Lib Bul 47:91-8 F '43

Preparation for printing

See Printing, Practical—Copy preparation

- MANZELMANN, George F. 1895-
 Sketch. C. M. Cartwright. por Nat Underw 47:15+ Jl 29 '43

MAPHARSEN

- Influence of methyl chalcone of hesperidin on the toxicity of mapharsen in rabbits. D. H. Goldstein, A. Stolman and A. E. Goldfarb. bibliog Science 98:245-6 S 10 '43

MAPLE

- Fatigue characteristics of natural and resin-impregnated, compressed, laminated woods. F. B. Fuller and T. T. Oberg. bibliog *il* *diags* J Aeronautical Sci 10:81-5 Mr '43

- Studies on lignin and related compounds; hydrogenolysis and hydrogenation of maple wood. J. R. Bower, Jr, L. M. Cooke and H. Hibbert. bibliog Am Chem Soc J 65:1192-5 Je '43

- Studies on lignin and related compounds; isolation and identification of 1-(4-hydroxy-3,5-dimethoxyphenyl)-2-propanone and 1-(4-hydroxy-3-methoxyphenyl)-2-propanone from maple wood ethanolysis products; metabolic changes in lower and higher plants. M. Kulka and H. Hibbert. bibliog Am Chem Soc J 65:1180-5 Je '43

- Studies on lignin and related compounds; re-ethanolysis of isolated lignins. W. B. Hewson and H. Hibbert. bibliog Am Chem Soc J 65:1173-6 Je '43

- Studies on lignin and related compounds; the ethanolysis of maple wood. E. West and others. bibliog Am Chem Soc J 65:1176-80 Je '43

- Studies on lignin and related compounds; the ultraviolet absorption spectra of compounds related to lignin. R. F. Patterson and H. Hibbert. bibliog Am Chem Soc J 65:1862-9 O '43

- Studies on lignin and related compounds; the ultraviolet absorption spectra of ethanol lignins. R. F. Patterson and H. Hibbert. bibliog Am Chem Soc J 65:1869-73 O '43

MAPLE syrup

- Grazing versus maple syrup. P. B. Sears. Science 98:83 Jl 23 '43

MAPPING

Mapping Canada in peace and war. F. H. Peters. *Il Civil Eng* 13:215-18 My '43
Scale curves in cartography. E. Kasner and J. De Cicco. *Science* 98:324-5 O 8 '43

See also

Geological maps
MAPPING, Aerial

Bibliography

Bibliography on the interpretation of aerial photographs and recent bibliographies on aerial photography and related subjects. G. C. Cobb. *Geol Soc Bul* 54:1195-1210 Ag '43

MAPS

See also
Assessment maps Topographical drawing
Geological maps
Globes

MAPS, Geological. *See* Geological maps

MARBLE

See also

Terrazzo

MARCHEV, Alfred

Portrait. *Comm & Fin Chr* 158:401 Jl 29 '43

MARGARINE. *See* Oleomargarine

MARIHUANA

Molecular still designed for small charges. J. R. Matchett and J. Levine. *diag Ind & Eng Chem Anal* 15:296 Ap 15 '43
Tetrahydrocannabinol analogs with marihuana activity. R. Adams and others. *bibliog Am Chem Soc J* 64:2653-5 N '42

Analysis

Cannabis indica; an examination of the alkali-soluble portion of American hemp resin. A. Madinaveitia, P. B. Russell and A. R. Todd. *Chem Soc J* p628-30 O '42

MARINE ambulances. *See* Ambulances, Marine

MARINE bacteria. *See* Bacteria, Marine

MARINE biological laboratories

Marine biological laboratories; laboratory recently opened by University of Miami at Belle Isle. T. Barbour. *Science* 98:141-3 Ag 13 '43

MARINE biological laboratory, Woods Hole, Massachusetts

Woods Hole marine biological laboratory. *Science* 98:257-8 S 17 '43

MARINE biology

Geology and biology of north Atlantic deep-sea cores between Newfoundland and Ireland; mollusca; echinodermata; miscellaneous fossils and significance of faunal distribution. H. A. Rehder; A. H. Clark; L. G. Henbest. *U S Geol S Professional Pa* 196-D:107-33, pl 20-3; pa 30c Supt. of doc. '42

See also

Marine biological laboratories
Red water

MARINE boilers. *See* Boilers, Marine

MARINE borers

Marine borers on the Gulf coast. W. E. Wheat. *Il Civil Eng* 12:679-81 D '42
Pulled piles reveal effectiveness of asphalt-treated wrapping; protecting untreated piling from marine borers. *Il Eng N* 130:480-1 Ap 8 '43

MARINE corps. *See* United States—Marine corps

MARINE corps fabrics. *See* United States—Marine corps—Textile requirements

MARINE deposits. *See* Ocean bottom

MARINE engineering

British shipbuilding and marine engineering. *Il Engineer* 175:364-6, 384-6 My 7-14 '43

Conservation and substitution in marine engineering. J. L. Kimberley. *Marine Eng* 47:257-9 O; 133-5 N '42
Engineering outlook. *Engineering* 155:215-16 Mr 12 '43

Experience teaches. G. Preece. *Engineer* 176:221-3 S 17 '43; Same. *Engineering* 156:264-5 O 1 '43

Machinery installation. G. K. Marple. *Marine Eng* 48:180+ F '43

Shipbuilding and marine engineering in 1942. *Il diags Engineer* 175:35-7, supp2, 55-7, 73-4 Ja 8-22 '43

See also

Boilers, Marine	Ship model tanks
Diesel engines,	Ship propulsion
Marine	Ship propulsion,
Gas and oil engines,	Electric
Marine	Shipbuilding
Launching	Ships—Electric
Marine engines	equipment
Motor ships	Steam turbines,
Naval architecture	Marine
Propellers	Steamboats
Salvage	Warships
<i>also</i> Society of naval architects and marine engineers	

Study and teaching

From QMED to O/C to marine engineer; Maritime service officer school at Fort Trumbull. *Il Power* 87:150-2+ Mr '43

New maritime program speeds power men to sea licenses. S. A. Tucker. *Il Power* 87:296-8 My '43

Off to sea; Sheephead Bay training station for marine engineers. *Il Power* 87:516-17 Ag '43

Sea projects speed training of marine engineer officers. E. S. Hochull. *Il Power* 87:78-81 F '43

Stationary license, passport to sea duty; Training division of U.S. Maritime service. *Il Power* 87:222-4 Ap '43

Tables, calculations, etc.

Coefficient of propulsive efficiency. K. C. Barnaby. *Engineer* 175:472-5 Je 11 '43

Machinery weights; data for estimating weights of ship machinery. E. A. Stevens, jr. *Marine Eng* 47:134-7 Ag; 156-9 S; 143-5 N; 167-8 D '42; 48:170, 172 Ja; 190, 192 F '43

MARINE engineering laboratories

Marine engineering laboratory, Stow college, Glasgow. *Il Engineer* 176:16-17 Jl 2 '43

MARINE engines

Diesel ships circle globe; Maritime commission C-1B standardized cargo vessels; marine engineers wanted. S. A. Tucker. *Il Power* 87:2-4 Ja '43

From QMED to O/C to marine engineer. *Il Power* 87:150-2+ Mr '43

Training and prospects of seagoing engineers. *Engineering* 155:64-5 Ja 22 '43

MARINE engines

Castings for ships and marine engines; meehanite. C. E. Herington. *Il Marine Eng* 47:150-3 D '42

Electrolytic hydrogen engine; its use in German submarines; abstract. *Chem Age (Lond)* 48:559 My 22 '43

Iron sea horse built by York corporation; marine steam engines used in boats for sub-hunting. *Refrig Eng* 46:247 O '43

Reciprocating engines for marine power. K. W. Van Eman. *Il Power* 87:600-1+ S '43

Steam engines for Liberty ships. *Il diags Product Eng* 14:138-40 Mr '43

See also

Boilers, Marine	Marine engineering
Diesel engines,	Motor ships
Marine	Ship propulsion
Gas and oil engines,	Steam turbines,
Marine	Marine

Failures

Historic accidents and disasters; City of Paris. *Il diags Engineer* 175:84-8 Ja 29 '43

Manufacture

Assembling 16-ton Liberty ship engine crankshaft; Joshua Hendy iron works. *Il Marine Eng* 48:215-16 S '43

Builds West coast foundry in record time; Joshua Hendy iron works. *Il Foundry* 71:104-6+ Ag '43

Canadian engines for Liberty freighters; John Inglis company, limited. A. L. Ainsworth. *Il diag Am Mach* 87:105-11 Mr 18 '43

Gold mining and shipbuilding; program of wartime merchant shipping limited in eastern Canada's gold mine machine shops. R. C. Rowe. *Il Can Min J* 64:627-40 O '43

MARINE engines—Manufacture—Continued

Hair-splitting is no job here; measurement at Joshua Hendy iron works. *Il Steel* 113: 182 O 11 '43

Ship engine parts make a milling machine; Joshua Hendy iron works. *Il Am Mach* 87: 96-7 S 16 '43

We can junk it or run it; how the high-flying Six companies boys of the West salvaged Joshua Hendy. *Il Fortune* 28:120-3+ *Jl* '43

MARINE flora

See also

Bacteria, Marine

MARINE hospitals. *See* Hospitals, Naval and marine

MARINE insurance. *See* Insurance, Marine

MARINE midland corporation
Annual report. *Comm & Fin Chr* 157:641 F 15 '43

MARINE railways. *See* Slipways

MARINE sediments. *See* Ocean bottom

MARINE structures

See also

Breakwaters	Paint, Anti-fouling
Concrete construction	Piers
Subaqueous	Piles and pile driving
Marine borers	Wharves, Concrete

MARINE workers

State unemployment-compensation law applicable to employees in maritime pursuits. *Monthly Labor R* 56:731-2 Ap '43

See also

Longshoremen
Seamen

MARIONETTES

Puppets recruit war workers. *A. R. Fiske. Il Ptr Ink* 205:25+ O 22 '43

MARITIME commission. *See* United States—Maritime commission

MARITIME law

Attachment by cargo's creditor on requisitioned vessel not allowed. *East Underw* 44: 27 F 5 '43

British court rules on distinction between marine risk and war risk. *Weekly Underw* 149:72 *Jl* 10 '43

Court decisions; workmen's compensation; twilight zone between federal and state jurisdiction over compensation for injuries on navigable waters. *Monthly Labor R* 56: 497-8 Mr '43

Court holds both vessels at fault following collision occurring in fog. *East Underw* 44: 23 *Jl* 23 '43

Holds both vessels in violation of international rules for navigation; collision off the California coast. *East Underw* 44:42 O 8 '43

Legislation proposed to clarify Merchant marine act. *Marine Eng* 48:213 O '43

Ship making starboard passing is held responsible for collision. *East Underw* 44:30 *Je* 18 '43

Ship turning across another's bow without warning must pay damage. *East Underw* 44:30 *Je* 18 '43

Supreme court holds Peru did not waive immunity in Ucayali case. *East Underw* 44:29 Ap 16 '43

Supreme court rules on ship immunity. *Comm & Fin Chr* 157:1601 Ap 29 '43

Tankers not liable to salvors for saving of cargo after stranding. *East Underw* 44:28 F 19 '43

Vessel is not liable for deviation or sea water damage during a storm. *East Underw* 44:24 *Jl* 2 '43

See also

Admiralty	Insurance, Marine
Average (maritime law)	Shipping—Claims

MARITIME workers. *See* Marine workers

MARKET, Farm. *See* Farm market

MARKET, Industrial. *See* Industrial market

MARKET, Institutional. *See* Institutional market

MARKET, Military. *See* Military market

MARKET areas

Economic development of the Shreveport trade area. *S. A. Caldwell. (Louisiana business bul. v 5, no 2) 30p* Bur. of business research, College of commerce, Louisiana state university, Baton Rouge, La. *My* '43

How permanent will wartime shifts in population be? the Census bureau analyzes America's metropolitan counties to frame a tentative answer to the question. *P. M. Hauser. Sales Management* 52:40, 42+ F 1 '43

Is there a law of retail gravitation? *P. D. Converse. map Ptr Ink* 204:36, 40-1+ S 10 '43

Major trading area comparisons, 1942 and 1941. *Sales Management* 52:34, 36, 38, 53 *Je* 15 '43

Major trading areas, their sales and income. *Sales Management* 52:28, 30, 32 *My* 10 '43

New metropolitan districts as sales strategy for 1943. *C. E. Haring. Adv & Sell* 35:22+ D '42

Newspapers and retail gravitation determine trading area boundaries; results of study in Laurel, Md. and one in 20 Illinois towns. *J. P. Converse. map Sales Management* 52:21-3 O 15 '43

Regional shifts in industry and markets, which temporary? which permanent? *J. D. C. Weldon. Il Mag of Wall St* 72:339-41+ *Jl* 10 '43

Study of retail trade areas in east central Illinois. *P. D. Converse. map Il U Bur of Econ and Business Res, Business Studies* 2:1-68 '43

See also

Metropolitan districts
Shopping areas

MARKET research

American Main street at war; Norwalk, Ohio merchandising study. *F. LaClave. Il Ptr Ink* 205:17-19+ N 12 '43

Average family spends \$472 when moving into new home. *Ptr Ink* 203:29 *Je* 18 '43

Charles Coolidge Parlin, an appreciation. *H. H. Kynett. Ptr Ink* 202:30+ F 12 '43

Commerce department analysis of post-war marketing presents challenge to advertising. *F. LaClave. Ptr Ink* 203:17-19 Ap 30 '43

Consumer takes a hand in post-war planning. *M. Wilson. Il Ptr Ink* 203:23 *Je* 11 '43

Do housewives want grade labels? *P. Salisbury. Sales Management* 52:30-2, 34 *Ag* 15 '43

Gasoline rationing forces women to change food shopping habits. *Sales Management* 51:42-3 N 15 '42

General Foods quiz shows women want more facts on nutrition. *Sales Management* 52: 25-7 F 1 '43

How American Steel & Wire is organizing postwar planning; a sales research and development division. *Ind Marketing* 28:74+ *Ag* '43

How 1943 food shoppers are behaving under shortages and rationing; SM and Ross Federal visit 1,000 typical housewives in Providence, Denver, St Paul and Atlanta. *P. Salisbury. Il Sales Management* 52:18-20 Mr 1 '43

Is there a law of retail gravitation? *P. D. Converse. map Ptr Ink* 204:36, 40-1+ S 10 '43

Joe Doakes has more loose money, less to spend in '43. *E. R. Smith. Adv & Sell* 36: 36+ *Jl* '43

Let them eat cake! some data on brand and product loyalty in the face of scarcity; 864 women queried. *Ptr Ink* 202:24, 28, 30 F 19 '43

Many income taxpayers say they can't make major purchases now; *Printers' Ink* survey. *Ptr Ink* 202:31 Mr 26 '43

Markets after the war; review of Mr Livingston's report. *P. T. Cherington. Adv & Sell* 36:34+ *My* '43

Mr Consumer speaks up; 10,457 men in 248 U.S. cities tell which products of 24 are most and least essential to their wartime needs. *D. E. Robinson. Adv & Sell* 36:16+ Mr '43

Newspapers and retail gravitation determine trading area boundaries; results of study in Laurel, Md. and one in 20 Illinois towns. *J. P. Converse. map Sales Management* 52:21-3 O 15 '43

MARKET research—Continued

- Objectives for market research in postwar planning. F. Juraschek. *Ind Marketing* 28: 23-5+ S '43
- Panel, a new market test tube; Woman's Home Companion reader-reporter group. R. Robinson. *Adv & Sell* 36:23-4+ Je '43
- Ready or not, Mr Manufacturer, the public expects immediate post-war product changes; consumer survey. *il Ptr Ink* 203: 16-18 My 21 '43
- Sales managers, it's up to you! to keep the number of workers you are obligated to, employed. G. S. Jones, Jr. *Ptr Ink* 202:38+ Mr 19 '43
- Service women's gift quiz. *Ptr Ink* 203:37 Ap 2 '43
- Seven factors will affect post-war distribution. L. C. Lockley. *Ptr Ink* 205:100+ O 29 '43
- Ten years' progress in management; industrial marketing. H. J. Loberg. *A S M E Trans* 65:230-3 Ap '43
- Tracing of retail sales shows Lydia Pinkham how to advertise; selecting media; copy testing. *il Sales Management* 52:57-8+ Mr 1 '43
- What happens when the ghost walks for 810,430 war workers in 19 cities; pay dates and how, when, and how quickly, the housewife spends the money. P. Salisbury. *Sales Management* 52:16-18 My 1 '43; Abstract. *Management R* 32:298-9 Ag '43
- What kind of a guy is an aircraft worker, and how do you sell him? *il Sales Management* 52:44-7 Ja 1 '43
- What you find when you look inside homes of the 19,000,000 new rich. A. H. Center. *Sales Management* 52:69-70+ Mr 15 '43
- Who has the loose money in wartime? E. R. Smith. *il Adv & Sell* 36:120+ F '43
- See also*
Market statistics
- MARKET statistics**
- ABC approach to a study of markets in Latin-America. J. D. Cathcart. *il Sales Management* 52:34+ F 1 '43
- Data! data! who's got the data? marketing men search for new facts. V. D. Reed. *Ptr Ink* 202:13, 15, 36+ Ja 15 '43
- Major trading area comparisons, 1942 and 1941. *Sales Management* 52:34, 36, 38, 53 Je 15 '43
- Market changes in 98 cities as shown by their total newspaper lineage, 1941, 1942. *Ptr Ink* 202:45-6+ F 5 '43
- Market data book number, 1943. *Ind Marketing* 27:1-415 O 25 '42
- Marketing and sampling uses of population and housing data. A. R. Eckler and E. P. Staudt. *Am Stat Assn J* 38:87-92 Mr '43
- Milwaukee survey shows how war changes buying habits; public eats oftener, buys more fresh produce, smokes more and shops in independent stores. *Ptr Ink* 203: 23 Ap 9 '43
- 1942 effective buying income, per capita, for counties with cities in the 100,000 group; table. *Sales Management* 52:90 Ag 15 '43
- Preliminary consumer market data, 1941, map 72p pa 50c Canada. Dominion bur. of statistics, Ottawa '43
- Regional market outlook. *Business Week* p 42-3 Ja 9 '43 [cont monthly]
- Sales Management high-spot cities; retail sales and service estimates for February, 1943. *Sales Management* 52:56, 58-9 Ja 1 '43 [cont monthly]
- Sales Management survey of buying power, 1943; retail sales, effective buying income and other indices of buying power, with new 1942 population estimates, and census data on occupied dwellings, median rents, urban and farm residents. *il maps Sales Management* 52:11-322 My 10 '43
- Sixty new miniature markets. P. T. Cherington. *il plan Adv & Sell* 36:124, 126+ F '43
- Temporal stability of consumption patterns. W. A. Wallis. *R Econ Stat* 24:177-83 N '42
- Testing advertising and checking sales records by paired cities. *Sales Management* 52:78, 80, 82 JI 15 '43

- U.S. population shifts resulting from the war. P. M. Hauser. *il Am Gas Assn Mo* 25:87-90+ Mr '43; Same cond. *Sales Management* 52:40, 42+ F 1 '43; Abstract. *Business Week* p19-20 F 13 '43
- Wealthy wage earner. E. R. Smith. *Ptr Ink* 203:15-17+ Ap 16 '43
- What wartime population shifts mean to marketers. P. M. Hauser. *il Adv & Sell* 35:13-14 D '42
- What you find when you look inside homes of the 19,000,000 new rich. A. H. Center. *Sales Management* 52:69-70+ Mr 15 '43
- Where are the customers now? a comprehensive study of migration in wartime. L. J. McCarthy. *Ptr Ink* 202:21-2, 26, 66-7 F 12 '43

See also

- Consumption (economics)—Statistics
Sales estimates

MARKET stores

- Food rationing speeds trend toward advertised brands; a study of super markets. *il Sales Management* 52:21-3 JI 1 '43
- Modern sanitation pays dividends; use of new solution (Roccal) on fresh produce reduces bacteria and retards dehydration. J. R. Adams. *il Refrig Eng* 44:383-4 D '42
- More emphasis on household aids; Bellman super markets in Toledo. *il Mod Packaging* 16:78+ Ag '43
- New buildings for 194X: supermarket, flow diag *il diag plan Arch Forum* 72:98-100 My '43
- Rationing, an opportunity for brand manufacturers; after the war, battle of brands will begin again. L. A. Johnson. *Ptr Ink* 204:26 JI 9 '43

See also

- Shopping centers

MARKET Street railway company

- Market Street railway company, San Francisco. O. Ely. *Pub Util* 30:855 D 17 '42

MARKET surveys

- 81 markets + 85 daily newspapers = 61% of America's buying power. *Sales Management* 52:110 N 1 '43
- Georgia gas company conducts market survey. W. O. Croft. *il Gas Age* 92:21-2+ O 7 '43
- Homes up to \$6000 will dominate market. Parents' magazine survey shows. *il Gas Age* 92:21-4 Ag 12 '43
- Psychology plus, pays! faith in human integrity brings 58 per cent response in denture wearer survey for Polident. A. B. Day. *il Ptr Ink* 203:42+ Je 11 '43
- This is Boston. P. James. *il map Adv & Sell* 36:32, 36, 80+ Je '43
- This is Buffalo. P. James. *il Adv & Sell* 36: 25-6+ My '43
- This is Cleveland. P. James. *il Adv & Sell* 36:23, 30+ JI '43
- This is Pittsburgh. P. James. *il Adv & Sell* 36:23, 38, 40+ Ap '43
- Washington; the U.S.A. in miniature; study of changing conditions. P. James. *il Adv & Sell* 36:15-16+ Ag '43
- You know the answers, how about helping us out? Peoples Gas of Chicago surveys consumer opinions to guide post-war plans. F. X. Mettenet. *il Gas Age* 92:65-6 O 21 '43

See also

- Consumption (economics) Market research
Market statistics

MARKETING

- Anticipate, take advantage of changes in retail distribution. V. Lebow. *Ptr Ink* 204: 15-16 JI 30 '43
- Borden wins national distribution for Hemo in less than six months; chocolate flavored malt drink. R. C. Fyne. *il Sales Management* 52:74+ O 1 '43
- Breakfast Cup spurns appeal as substitute, but sales quadruple; sold through standard grocery outlets on the West coast. *Sales Management* 52:90-2 Je 15 '43
- Bureau of foreign and domestic commerce, how it can help you; Distribution division. A. R. Hahn. *Sales Management* 52:66+ O 15 '43

MARKETING—Continued

Challenge of change! V. Lebow. *Ptr Ink* 204: 17-18+ S 24 '43

Coolerator metal-less (almost) ice box beats materials shortage; has distribution in 7,000 stores in all 48 states and Alaska. J. H. Ganzer. *il Sales Management* 52:66+ F 15 '43

Dealers' scramble to survive foreshadows big changes in distribution; furniture in the five and ten, clothing in the tire store and household appliances in the grocery. P. H. Erbes, Jr. *il Ptr Ink* 203:14-16+ Ap 23 '43

Distribution in future will be different! producer will own his product, control its handling, promote its sale, utilizing existing distribution machinery. J. P. Callaway. *Ptr Ink* 204:20, 98 S 10 '43

Effecting transportation conservation while maintaining distribution; G-E lamp department conserves clerical effort, warehouse labor and transportation facilities. F. Blumer. *il Ind Marketing* 28:21-2 JI '43

General Electric jobbers line up to help break war bottlenecks; Traffic Manager Ruehl of G-E, laid out plan for saving railroad equipment, trucks, tires, gas and manpower. *Sales Management* 51:57-9 N 15 '42

Helps brokers survive until post-war period; Hawaiian pineapple company. F. LaClave. *il Ptr Ink* 203:26+ Je 25 '43

How to allocate restricted output; Durham-Enders razor corporation. J. Barteau. *Ptr Ink* 202:66+ F 19 '43

How will electronics affect industrial marketing? J. S. Smith. *il Ind Marketing* 28:19-21+ Ag; 40, 44+ S '43

Impact of shortages on marketing. C. F. Phillips. *Harvard Business R* 21 no4:432-42 JII '43

Issues own ration stamps to avert restricted output to dealers; Oshkosh B'Gosh. *il Ptr Ink* 202:94+ Mr 26 '43

Magazines' distribution system same as Callaway's post-war scheme. B. A. Mackinnon. *Ptr Ink* 204:20 S 24 '43

Making an ingredient a major selling factor; use of Botany label on men's suits; sold direct to retailers. *il Ptr Ink* 203:25-6 My 21 '43

Marketing's role in solving the postwar problems of industry. E. L. Lindseth. *Ind Marketing* 28:35-8 Ag '43

Postwar changes in primary outlets. R. M. Hixson. *il Adv & Sell* 36:23+ N '43

Seven major trends to watch in post-war distribution. B. Bigelow. *il Sales Management* 52:18-21 Ag 1 '43

Ten years' progress in management; industrial marketing. H. J. Loberg. *A S M E Trans* 65:230-3 Ap '43

Thousands of small businesses won't come back. T. K. Quinn. *Adv & Sell* 36:24+ My '43

Vitamin sales boom as harried retailers battle for distribution rights. R. C. Fyne. *il Sales Management* 52:72+ Je 15 '43

War has caused modifications rather than radical changes in marketing. L. D. H. Weld. *Ptr Ink* 203:64, 66-7 Ap 9 '43

War speeds retail diversification. V. Lebow. *il Ptr Ink* 203:28, 30+ Ap 16 '43

Who should sell vitamins, druggist or grocer? A. Gray. *Adv & Sell* 36:28 O '43

See also

Advertising
Auctions
Brokers
Chain stores
Company stores
Containers
Dealer helps
Dealer relations
Display of merchandise
Distribution (economics)
Exchanges
Exhibits
Farm market
Industrial market
Institutional market
Jobbers
Jobbers, Wagon
Mail order business

Market stores
Merchandizing
Military market
Negro market
Post exchanges
Price policies
Private brands
Products, New
Retail trade
Sales contests, Jobbers'
Sales management
Sales policies
Salesmanship
Salesmen
Salesmen, Retail
Securities—Marketing
Warehouses

Chain store outlets

Sales policies that won variety store leadership for Betty Lou; Columbia products corp. has concentrated for 25 years on a short line and one market. A. J. Siris. *il Sales Management* 51:60, 62-3 D 15 '42

Cost

Block that fallacy! cut from distribution costs to pay post-war debt. G. S. Jones, Jr. *Ptr Ink* 202:13-15 Mr 12 '43

Distribution costs aren't high, they're low! R. C. Cosgrove. *Ptr Ink* 205:19-20+ O 8 '43

Nature of marketing costs. J. E. Jeuck. *J Business* 16:7-13 Ja '43

Salesmen might suggest ways to cut costs of distribution. E. C. Morse. *Ptr Ink* 205:24 O 29 '43

Department store outlets

Ad men merchandise masterpieces to the masses; Tomorrow's masterpieces, inc. organized to sell work of established artists thru department stores. E. M. Housman. *il Ptr Ink* 205:24-5+ N 12 '43

Are department stores the right channel for your post-war product? J. C. Cumming. *Sales Management* 52:86+ O 15 '43

MARKETING, Cooperative**See also**

Farmers union grain terminal association Gasoline industry—Joint use of marketing facilities

MARKETING, Foreign. *See* Export trade—Marketing

MARKETS

New market places meet Haiti's basic needs. *For Comm W* 12:14 JI 17 '43

MARKETS, New

Industry expands by solving its customers' problems. J. A. Murphy. *Adv & Sell* 36: 50+ Ag '43

Josam blends headwork with footwork to crack a new market in wartime; Cleveland maker of valves, drains and related products breaks into marine field with a custom-built plan. W. S. Allen. *il Sales Management* 52:48+ N 1 '43

War opens new markets for industrial product; Lea manufacturing co., Waterbury, Conn. *il Ptr Ink* 202:38-9 Mr 5 '43

MARKING

Marking methods and war production. A. Throp. *il diags Engineering* 156:258-60, 278-9 S 24-O 1 '43; Same cond. *Engineer* 175: 512-14 Je 25 '43

Overseas shipments must be marked right. *il Mod Packaging* 17:60-4 O '43

Tools for marking overseas shipments. *il Mod Packaging* 17:70-3+ N '43

See also

Labels

MARKING machines

Provides cycle and temperature control; marking plastics with indented-colored letters for nameplates. D. Putnam. *il Machine Design* 16:115 Ap '43

MARL

Submerged shipways with steel sheeting walls; use of marl for filling. C. B. Jansen. *il diags Civil Eng* 13:310-14 JI '43

MARMATITE

Post-mine leaching of galena and marmatite at Broken Hill. M. D. Garrety and R. Blanchard. *il map Econ Geol* 37:365-407 Ag '42; Discussion. F. L. Stillwell and A. B. Edwards. 38:253-4 My '43

MARMOLA

Marmola hit again; the weight-reducer loses another round. *Business Week* p62+ Mr 6 '43

MARMON, Howard C. 1876-1943

Sketch. *por S A E J* 51:sup38-9 My '43

MARMOTS, Fossil

Fossil marmot from New Mexico and its climatic significance. C. E. Stearns. *bibliog map Am J Sci* 240:867-78 D '42

MARQUISETTE

Fabrics for military purposes; cotton marquisette for sandfly bars; fabrics for use in outfits for WAACS. *il Textile World* 92:70 N '42

MARRIAGE

- Fortune survey; men and marriage; young women's opinion. *Fortune* 28:12, 16, 20, 24 Ag '43
 Marriage and the family after the war. R. E. Baber. *Ann Am Acad* 229:164-75 S '43
 Marriage counseling in wartime. G. Gaylord. *Ann Am Acad* 229:39-45 S '43
 War marriages. *Spectator* (Life ed) 150:16-17, 41 Ap '43

Statistics

- Marriages, births, and divorces. W. F. Ogburn. *Ann Am Acad* 229:20-9 S '43

MARRIED women

- Feme covert; Beveridge report recommendation dealing with the married woman. *Economist* 143:696 D 5 '42

MARSHALL Field and company

- Marshall Field & co. sets up retirement program for 16,000. *Nat Underw* (Life ed) 47:1+ O 29 '43
 Marshall Field off to good start. *Barron's* 23:6 Ag 23 '43
 Policies of Marshall Field's new president. *Barron's* 23:5 Ap 19 '43

MARSHALLTOWN, Iowa**Water supply**

- Problem of a diminishing demand. H. V. Pedersen. *Am Water Works Assn J* 35:999-1001 Ag '43

MARSHES

- Drilling on land contrasted with barge drilling in semimarsh field. *Oil & Gas J* 41:59 D 3 '42

MARTEMPERING. See Steel, Heat treatment of**MARTENSITE**

- Atomic structure of martensite. N. J. Petch. *Metal Prog* 43:762 My '43
 Martempering; heat treating operation whereby martensite is produced with a minimum of residual hardening strains. E. F. Shepherd. *il diag Iron Age* 151:50-2 Ja 28; 45:8 F 4 '43
 Martensite and superstructures. A. M. Portevin. *Metal Prog* 44:645-6 O '43
 Study of martensite formation by a photometric method. E. R. Saunders and J. F. Kahles. *bibliog il Am Soc for Metals Trans* 30:1139-53; Discussion. 1153-8 D '42

MARTIN, Glenn L., company

- Glenn L. Martin company; ten years' progress. W. K. Ebel. *Aeronautical Eng R* 1:58 N '42

MARTINIQUE

- Martinique and France's other West Indian islands. H. N. Stark. *il For Comm W* 10:3-7, 34-5 Mr 27 '43
 Martinique, Guadeloupe and the five small islands in the French West Indies group. *Science* 98:sup8+ J1 23 '43
 President sees winning over of Martinique as justification of foreign policy. *Comm & Fin Chr* 158:436 J1 29 '43

MARTINS bank, limited

- Statement reviewing operations in 1942. F. A. Bates. *Economist* 144:126-7 Ja 23 '43

MARVIN, Charles Frederick, 1858-1943

- Sketch. W. J. Humphreys. *Science* 98:6-7 J1 2 '43

MARVINOL. See Rubber, Substitutes for**MARYLAND****Department of research and education**

- Reorganization of conservation work in Maryland. J. D. Corrington. *Science* 97:140-1 F 5 '43

MARYLAND casualty company

- McDonald issues statement on Maryland Casualty suit. *Nat Underw* 47:17 Ap 8 '43
 Stockholders sue to ease control of Maryland Casualty by RFC. *Nat Underw* 47:16 Ap 1 '43; *Weekly Underw* 148:729+ Ap 3 '43

MASONITE

- Coolerator metal-less (almost) ice box beats materials shortage; has distribution in 7,000 stores in all 48 states and Alaska. J. H. Ganzer. *il Sales Management* 52:66+ F 15 '43

- Cutting costs on perforating dies; use of masonite and Cerromatrix. E. H. Ruder. *il diags Aviation* 42:165-7+ Ag '43

- Low-cost dies for aircraft parts; use of semi-plastic materials, such as masonite and bakelite. B. Schlenzig. *il diags Am Mach* 86:1307-14 N 12 '42
 Masonite jigs. B. E. Stewart. *il Am Mach* 87:131 F 18 '43

MASONRY

- Breathing walls of brick and tile, a new masonry conception; Douglas aircraft plant at Oklahoma City. *il diag Brick & Clay Rec* 102:14-16 Ap '43

- Concrete masonry goes to war. *il Concrete* 51:10-11, 20 Ag '43

- Curing of masonry mortars. H. R. Staley. *bibliog il Am Soc T M Proc* 42:762-70; Discussion. 771-4 '42

- Modular size of clay-products units. H. C. Plummer and E. F. Wanner. *bibliog il diags plans Am Cer Soc J* 26:307-20 S 1 '43

- What causes volume changes in masonry. F. O. Anderegg. *Rock Prod* 46:109-10 Je '43

See also

- Brick construction
 Bricks
 Bridges—Foundations and piers
 Building
 Cement

- Concrete
 Concrete blocks
 Dams
 Foundations
 Mortar

Cleaning

- How to clean masonry. *il Brick & Clay Rec* 103:31-2 O '43

MASS (chemistry)

- Heat, mass and momentum transfer in the flow of gases through granular solids. B. W. Gamson, G. Thodos and O. A. Hougen. *bibliog diag Am Inst Chem Eng Trans* 39:1-32; Discussion. 32-5 F '43

MASS action, Law of

- Phase diagrams and the mass law. T. R. Briggs. *J Chem Educ* 20:484-7+ O '43

MASS spectra. See Spectrum—Mass spectra**MASS spectrograph.** See Spectrograph, Mass**MASS spectrometers.** See Spectrometers, Mass**MASSACHUSETTS**

- Massachusetts prepares for tomorrow. J. W. Culliton. *Harvard Business R* 21 no 3:298-308 [Ap] '43

See also

- Geology—Massachusetts
 Public utilities—Massachusetts

- Rain and rainfall—Massachusetts

MASSACHUSETTS institute of technology

- Our university welding research workers and their laboratories. *il Welding J* 22:sup97-100 Mr '43

MAST raising

- Signal corps mast-raising; molded resin-bonded plywood. *il Mod Plastics* 20:79 D '42

MASTER and servant**See also**

- Apprentices
 Employers' liability

MASTER electric company

- Debentures offered. *Comm & Fin Chr* 157:1182 Mr 29 '43

- Thumbnail stock appraisal. *Mag of Wall St* 72:196 My 29 '43

MATCH plates. See Pattern making**MATCHES**

- Waterproof matches. *Comp Air M* 48:7123 Ag '43

MATÉ

- Mate, South American beverage. A. J. Mullen. *il For Comm W* 10:3-5, 38 F 27 '43

MATERIA medica**See also**

- Analgesics
 Anesthetics
 Anesthetics, Local
 Antiseptics
 Antispasmodics

- Convulsants
 Drugs
 Medicine
 Mydriatics

MATERIAL control**See also**

- Inventories
 Purchasing

MATERIALS

- Coming battle of materials. J. V. Sherman. Barron's 23:3 N 1 '43
- Condensed review of some recently developed materials, arranged alphabetically by trade names. Mach 50:177-81 O; 189-93 N '43
- Conservation of materials. H. S. Osborne. II Elec Eng 62:290-3 JI '43
- Conserving the use of critical materials; developing scrap-saving methods as a means of supporting the war effort; General motors corporation. B. D. Kunkle. II Mech Eng 65:267-73 Ap '43
- Conserving vital materials for war. J. Horn. II diags Gen Elec R 46:385-9, 449-54 JI-Ag '43
- Directory of materials. Machine Design 15: 157-214 O '43 [reprints pa 25c]
- Fused quartz; a growing engineering material. W. M. Johnson. II Chem Ind 53:515-16 O '43
- Mad materials mix-up. A. A. Bates. Metals & Alloys 17:95-6 Ja '43
- Reference table of new materials and finishes of 1942. F. P. Peters, comp. Metals & Alloys 17:101-14 Ja '43
- Yield tests show six ways to save materials. J. G. Brown. diags Food Ind 15:55-7+ S '43

See also

- | | |
|------------------------|------------------------|
| Airplanes—Materials | Paper making materials |
| Automobiles— | Plastic materials |
| Materials | Raw materials |
| Building materials | Refractory materials |
| Ceramic materials | Road materials |
| Electric industries— | Shrinking—Materials |
| Materials | Soap materials |
| Glass making materials | Strength of materials |
| Granular materials | Tanning materials |
| Insulating materials | |
| Mechanical handling | |
| Paint materials | |

MATERIALS, Purchasing of. See Purchasing

MATERIALS, Strength of. See Strength of materials

MATERIALS control. See United States—War production board—Controlled materials plan

MATERIALS handling. See Handling of materials; Mechanical handling

MATERNAL welfare

Distribution of health services in the structure of state government; maternity-child health activities by state agencies. J. W. Mounin and E. Flook. Pub Health Rep 57:1791-1821 N 27 '42

Maternity care for wives of men in military service. East Underw 44:13+ JI 9 '43

MATHEMATICAL association of America
Twenty-sixth summer meeting. Science 98: 104 JI 30 '43

MATHEMATICAL economics. See Economics, Mathematical

MATHEMATICAL instruments

Use of a mechanical synthesizer to solve trigonometric and certain types of transcendental equations, and for the double summations involved in Patterson contours. S. L. Brown and L. L. Wheeler. bibliog II diags J Ap Phys 14:30-6 Ja '43

Use of the mechanical multiharmonograph for graphing types of functions and for solution of pairs of non-linear simultaneous equations. S. L. Brown and L. L. Wheeler. II diags R Sci Instr 13:493-5 N '42

See also

- Calculating machines Integrators
- Differential analyzers Slide rule
- MATHEMATICAL physics**
Approximate mathematical methods of applied physics as exemplified by application to Saint-Venant's torsion problem. T. J. Higgins. bibliog (72 titles) J Ap Phys 14: 469-80 S '43
- Calculations of the scattering of mesons by the matrix method. S. T. Ma. bibliog Phys R 62:403-11 N 1 '42
- Fundamental equations of electron motion (dynamics of high speed particles). L. A. MacColl. bibliog Bell System Tech J 22: 153-77 JI '43
- Mathematics of the physical properties of crystals. W. L. Bond. Bell System Tech J 22:1-72 Ja '43

Sir Joseph Larmor and modern mathematical physics. G. D. Birkhoff. Science 97:77-9 Ja 22 '43

See also

- | | |
|------------------------|-----------------------|
| Aerodynamics | Impact |
| Dynamics of a particle | Light, Scattering of |
| Elasticity | Magnetism |
| Electricity | Potential, Theory of |
| Gases | Sound |
| Hydrodynamics | Statistical mechanics |
| | Thermodynamics |

MATHEMATICAL statistics

Comment on Deming's Classification of problems of inference. L. A. Salter, jr. Am Stat Assn J 37:540-2 D '42

New industrial frontier, the applied mathematician. F. P. Huddle. II Sci Am 169:211-13+ N '43

Opportunities in mathematical statistics, with special reference to sampling and quality control. W. E. Deming. Science 97:209-14 Mr 5 '43

See also

- Frequency distribution (statistics)
- Statistical methods

MATHEMATICAL tables and aids to computation (periodical)

New quarterly publication of the Division of physical sciences of the National research council. Science 97:216 Mr 5 '43

MATHEMATICIANS

New industrial frontier, the applied mathematician. F. P. Huddle. II Sci Am 169:211-13+ N '43

Pure and applied mathematics. R. Oldenburger. bibliog J Eng Educ 33:432-7 Ja '43

See also

- | | |
|--------------------|--------------------|
| Bolza, Oskar | Osgood, William |
| Archibald, Raymond | Fogg |
| C. | White, Henry Seely |

MATHEMATICS

Implications involved in mathematical advances. G. A. Miller. Science 98:38-9 JI 9 '43

New industrial frontier, the applied mathematician. F. P. Huddle. II Sci Am 169:211-13+ N '43

Next decimal place; war's reliance upon mathematics spurs a renaissance in mathematical studies. G. W. Gray. Tech R 45: 481-2+ JI '43

Pure and applied mathematics. R. Oldenburger. bibliog J Eng Educ 33:432-7 Ja '43

See also

- | | |
|------------------------|----------------------|
| Aeronautics | Groups, Theory of |
| Bessel's functions | Least squares |
| Calculus | Mathematical physics |
| Charts (calculating) | Matrices |
| Decimals | Mechanics |
| Differential equations | Probabilities |
| Fourier's series | Statistical methods |
| Functions | Topology |
| Graphic methods | Vector analysis |

Bibliography

Pure mathematics in Russia; list of papers, Jan. to July, 1942, in the Comptes rendus (Doklady) de l'Academie des sciences de l'URSS. O. Neugebauer. Science 97:178 F 19 '43

Dictionaries

Mathematics dictionary. G. James and R. C. James, eds. rev ed 273p, 46p \$3 Digest press, Van Nuys, Calif. '43

Study and teaching

Mathematics in aeronautical teaching and research. A. Klemin. J Eng Educ 33:388-91 Ja '43

Project of the Mathematics division, S.P.E.E. J. W. Cell. J Eng Educ 33:643-5 Ap '43

What mathematical college training industry expects from young engineers. A. R. Stevenson, jr. J Eng Educ 33:670-5 My '43

MATHEWSON, Champion Herbert, 1881-

Portrait. Iron Age 152:54 O 28 '43

Sketch. por Min & Met 23:588-9 D '42; Same cond. Explosives Eng 21:38-9 Mr '43

MATHIESON alkali works, Inc.

Income statement, 1940-1942. Comm & Fin Chr 157:642 F 15 '43

MATRICES

Calculations of the scattering of mesons by the matrix method. S. T. Ma. bibliog Phys R 62:403-11 N 1 '42

Treatment of network problems by means of matrices; abstract. G. A. Usunoff. Wire-less Eng 19:525-6 N '42

MATTER

Extreme properties of matter. C. Darwin. Engineering 155:105-6, 136-7, 144-5 F 5-19 '43; Excerpt and summary. Engineer 175:54, 65-7 Ja 15-22 '43

See also

Adsorption	Ions
Atoms	Molecules
Brownian movements	Physics
Chemistry	Quantum theory
Colloids	Radioactivity
Compressibility	Solids
Diffusion	Solution (chemistry)
Dissociation	Specific gravity
Elasticity	Transmutation
Electrons	(chemistry)
Gases	Viscosity
Gravitation	Wave mechanics
Hardness	

MATTOON, Illinois

Main street front; a report on an American community after one year of war. il Fortune 26:114-19+ D '42

MATTRESSES

Rebuilt mattress. Business Week p66-7 D 19 '42

MATTRESSES (hydraulic engineering)

Problems of land drainage. E. Latham. Engineering 156:44-5 Jl 16 '43

MAUNA LOA

1942 eruption of Mauna Loa, Hawaii. G. A. Macdonald. maps Am J Sci 241:241-56, pl 1-2 Ap '43

Some characteristics of the summit eruption of Mauna Loa, Hawaii, in 1940. P. E. Schulz. diag map Geol Soc Bul 54:739-46, pl 1 Je '43

MAVOR, Sam, 1863-1943

Sketch. Engineer 175:489 Je 18 '43; por Engineering 155:494 Je 18 '43

MAXIMUM demand meters. See Demand meters**MAXON, Lou Russell, 1900-**

OPA's new broom. Business Week p17-18 Mr 20 '43

MAYBURY, Sir Henry Percy, 1864-1943

Sketch. por Engineer 175:54 Ja 15 '43; Engineering 155:54 Ja 15 '43

MAYER, Charles L., awards

Charles L. Mayer awards of the National science fund. Science 96:489-90 N 27 '42
Presentation of the first Charles L. Mayer award. Science 97:504-5 Je 4 '43

MAYER, Oscar, and company

Debentures offered. Comm & Fin Chr 158: 1475 O 11 '43
Registers with SEC. Comm & Fin Chr 158: 1280 S 27 '43

MAYONNAISE**Analysis**

Mayonnaise and salad dressing yolk content. F. J. Cahn and A. K. Epstein. Ind & Eng Chem Anal ed 15:281-2 Ap 15 '43
Yolk nomograph for mayonnaise and salad dressing. D. S. Davis. Ind & Eng Chem Anal ed 15:595 S 15 '43

MEAD corporation

Low-priced stocks for large percentage gains. Mag of Wall St 71:634-5 Mr 20 '43

MEADOL

Lignin esters of mono- and dibasic aliphatic acids. H. F. Lewis and others. bibliog Ind & Eng Chem 35:1113-17 O '43

New derivatives of lignin; esters of mono- and dibasic aliphatic acids, from Meadol prepared from soda black liquor. E. B. Brookbank and others. Paper Tr J 116:27-8 Ap 1 '43; Same. Pulp & Pa of Can 44:805-6 O '43; Same cond. Paper Ind 25:436+ Jl '43

MEASLES

Occurrence of whooping cough, chickenpox, mumps, measles and German measles in 200,000 surveyed families in 28 large cities,

with list of references. S. D. Collins, R. E. Wheeler and R. D. Shannon. 40p U.S. National inst. of health, Washington; pa 10c Supt. of doc. '43

MEASUREMENT

Instruments for measuring and controlling process variables. diags Chem & Met Eng 50:108-24 My '43

Management problems of measurement in the inspection function. J. M. Juran. Advanced Management 8:86-91+ Jl '43

Measurement of small quantities; abstracts. E. H. Rayner. Electrician 130:548-50 My 28 '43; Elec R (Lond) 132:715-16 My 28 '43
Measuring intercept sphericity of sand grains. G. Rittenhouse. diag Am J Sci 241:109-16 F '43

Metrology. S. R. Williams. il diag Instruments 15:500-2, 504 D '42

Three-wire measurements of screw threads; reference book sheet. J. F. Heaton. Am Mach 87:121, 123 S 2; 121, 123 S 16 '43

Use of effective gage length in elongation measurement. W. J. Hamburger and E. R. Kaswell. il diag Rayon 24:579-84 N '43

See also

Area measurement	Radio measurements
Astronomical measurements	Sound—Measurement
Calorimeters and calorimetry	Statistical methods
Color measurement	Stream measurement
Colorimeters and colorimetry	Surveying
Electric measurements	Tanks—Measurement
Gages	Temperature—Measurement
Gas flow	Thermometers and thermometry
Gas measurement	Time measurement
Magnetic measurements	Vibration—Measurement
Measuring instruments	Viscosity—Measurement
Mensuration	Water flow
Meters	Water meters
Micrometers	Weights and measures
Optical measurements	Wood measurement
Photometry	Wool—Measurement
Pressure measurement	X rays—Measurement
Pyrometers and pyrometry	

MEASUREMENT, Magnetic. See Magnetic measurements**MEASURING instruments**

Measurement and control of process variables; Chem & Met report. J. C. Peters, T. R. Olive and others. il diags Chem & Met Eng 50:97-144 My '43 [reprints 50c]

Measuring and inspection instruments. il Engineering 156:227 S 17 '43

Measuring the Coulomb and viscous components of friction. C. Kennedy. Instruments 15:404-6, 408-10 O '42

Methods and equipment for the inspection of machine gun parts and assemblies. C. G. Nelson. il Instruments 15:10-13 D '42

See also

Dilatometers	Oscillographs
Electric instruments	Pressure gages
Flow meters	Rule (instrument)
Gages	Slide rule
Micrometers	

MEASURING instruments, Electric

Electric thickness gages speed production. H. P. Kuehni. il Instruments 16:15 Ja '43

Electrical tube gauge. E. Fawcett. il diags Engineering 156:301-2 O 15 '43

Inspecting apparatus for small parts; Sigma signal indicator. il(p490) Engineering 155: 487 Je 18 '43

Magnetostriiction made visible. S. C. Leonard. bibliog il diags Gen Elec R 45:637-41 N '42; Abstract. Electronics 16:162+ Ap '43

Reactance-type gages. il diag Electronics 16: 158+ N '43

MEASURING instruments, Optical

Locating work center by optical instrument. il diags Ry Mech Eng 117:289-90 Je '43

Measurement and influence of fiber length. J. d'A. Clark. diags Paper Tr J 115:38-40 D 24 '42

Microscopic precision tools. I. H. Such. il Steel 113:98-100+ S 13 '43

MEASURING instruments, Optical—Continued
Mirrors do it; armor-plate width measured from a distance. E. D. Wilson. *il Sci Am* 168:224 My '43; Same. *Blast F & Steel Pl* 31:533 My '43

Optical problems in design of comparator. F. J. Acton. *il diags Machine Design* 15: 81-4 O '43

Precision measurement; developments by E. H. Jones (machine tools) ltd. *il Automobile Eng* 33:123-5 Mr '43

Rifle sighting done with mirrors, saves time and ammunition. *il Sci Am* 169:30-1 Jl '43

Venwick contour projector. Engineering 155: 13 Ja 1 '43; *il Automobile Eng* 32:490-1 N '42

See also
Stroboscopic instruments

MEAT

Allied meat purchases. *Economist* 145:409 S 18 '43

Auxiliary meat; ammunition, travel, and time problems of 1943 sportsman cut civilian meat supply. *Business Week* p46+ F 27 '43

Boneless meat, new weapon for U.S. fighters; Armour & co. *il Mod Packaging* 16:66-70 Ja '43

Bunnies ride high; rabbits as meat. *Business Week* p55-6 Mr 20 '43

By-products of the meat-packing industry. H. H. Young. *Chem & Eng N* 20:1660, 1664 D 25 '42

Caribou meat may supplement Canadian food rations. *For Comm W* 11:32 Je 12 '43

Making the most of your meat ration. E. W. Gardner, Jr. *Consumers' Research Bul* 11: 17-18 Mr '43

Nation's food; meat as food; the effect on meat of cooking and processing. L. C. Baker. *bibliog Chem & Ind* 61:458-60 N 7, '42

Office of economic stabilization orders meat labels continued. *Ind Stand* 14:238 Ag '43

Our meat supply. S. Bull. *il Consumers' Research Bul* 12:16-17 N '43

Problem of fat in meat. S. Bull. *il Consumers' Research Bul* 12:21-3 S '43

To stretch meat. *Business Week* p22+ Ap 17 '43

Value of meat in the diet. B. W. Gardner, Jr. *diags Consumers' Research Bul* 11:15-17 Ja; 13-15 F '43

War meat board to divide national supply. *Comm & Fin Chr* 157:2194 Je 10 '43

See also

Bacon Mutton

Beef Packing houses

Cookery—Meat Pork

Fish as food Sausages

Horse meat Whale meat

Rationing

Coupon rationing of meat in effect in Canada. *For Comm W* 11:17 Je 12 '43

Meat: do civilians come last? *Business Week* p15-16 Ap 10 '43

Meat, fat, and cheese firms compete for red point stamps; Armour, Crisco, Kraft, and other firms publish menus, etc. *il Ptr Ink* 203:23-4 Ap 2 '43

Meat lid clamped. *Business Week* p14-15 Mr 13 '43

Rationing of meat in Canada. *Monthly Labor R* 57:39-40 Jl '43

Some problems in rationing meats. J. J. Kaplan. *R Econ Stat* 24:159-65 N '42

Storage

Air circulation problems in holding rooms and beef and hog chill rooms. A. L. Byfield. *diag Refrig Eng* 45:417-18 Je '43

MEAT, Canned. *See Canned meat*

MEAT, Dried

Dehydration of meat. H. R. Kraybill. *il diag Ind & Eng Chem* 35:46-50 Ja '43

Dried meat. E. C. Bate-Smith, C. H. Lea and J. G. Sharp. *diags Soc Chem Ind J* 62:100-4 Jl '43

Dried meat; the growth of moulds on dried meat. T. J. R. Macara. *Soc Chem Ind J* 62:104-6 Jl '43

Dried meat; the water relations of air-dried, pre-cooked beef and pork. R. Gane. *Soc Chem Ind J* 62:139-40 S '43

Drying of meat and eggs; abstract. J. R. Vickery. *Chem & Ind* 62:84 F 27 '43

Drying of meats; rate of dehydration of uncooked cured ground meats. E. C. Ritchell, E. L. Piret and H. O. Halvorson. *il Ind & Eng Chem* 35:1189-95 N '43

See also

Pork, Dried

MEAT, Frozen

Quick freezing of meats in South America. M. T. Zarotschenzeff. *il plan Refrig Eng* 46: 88-91 Ag '43

Storing fruits, vegetables, and meat in a freezer-locker. E. W. Gardner, Jr. *bibliog Consumers' Research Bul* 12:14-18 Jl '43

MEAT, Smoked

Meat, air-conditioned; electric heat provides answer to problem at Haag brothers, Inc. *il Gen Elec R* 46:352 Je '43; Same. *Elec W* 119:2166+ Je 26 '43; Same. *Heat & Ven* 40:57 Ag '43

See also

Smokehouses

MEAT, Substitutes for

Meat extenders. *Business Week* p36+ N 21 '42

MEAT cutting

Problem of fat in meat. S. Bull. *il Consumers' Research Bul* 12:21-3 S '43

MEAT industry and trade

Another result of black markets; flow of meat by-products to various industries is curtailed. *Barron's* 23:9 Ap 5 '43

Beef mystery; how can eastern buyers outbid Chicago for live steers under OPA ceilings? *Business Week* p17 Je 19 '43

Black markets. *Business Week* p123 Je 19 '43

Brake on beef; Vinson tries out nonrigid floors and ceilings, plus sliding-scale subsidies, on live cattle. *Business Week* p14-15 O 30 '43

Cattle and confusion. *il Fortune* 27:88-91+ Ap '43

Co-op in meat; Cincinnati dealers getting together to slaughter their own. *Business Week* p100-1 Jl 31 '43

Meat industry considers present-day problems at American meat institute meeting. *Food Ind* 15:108 N '43

Meat packers' current earnings outlook. *Barron's* 23:7+ Jl 26 '43

Self-service meats. *il Mod Packaging* 16:48-50+ F '43

Swift salesmen learn to handle harried dealers with kid gloves. *Sales Management* 52:70+ Mr '43

There's beef now, but cattle mess hasn't been solved. *il Business Week* p17-18 Jl 17 '43

See also

Beef

Meat, Dried

Packing industry

Pork products

Poultry

Advertising

Armour scores a bull's-eye with its meat ration meals campaign. J. E. Weber. *il Sales Management* 52:25-6+ Jl 15 '43

Meat industry opens promotion. *il Ptr Ink* 201:78 D 4 '42

Meat industry plans offensive on the protein front. *Ptr Ink* 205:56 O 15 '43

Regulation

Cincinnati meat packers close plants because of OPA price regulations. *Comm & Fin Chr* 157:2387 Je 24 '43

Enough meat? industry wants controls abolished. *Business Week* p 14 S 11 '43

Meat handling under government regulations criticized by American meat institute. *Comm & Fin Chr* 158:31 Jl 1 '43

Relief for meat packers deferred. *Barron's* 23:14 F 22 '43

WFA issues plan to license meat. *Food Ind* 15:94 S '43

Why meat shortages vary; how the OPA disrupts meat selling. S. G. Thompson. *Barron's* 23:3 Ja 25 '43

Statistics

Meats, 1938-1941. Survey of Cur Business 1942 Sup p123-4 [supplemented in monthly numbers]

MEAT industry and trade—Continued**Argentina**

Canned-meat production in Argentina, 1940-1942. For Comm W 9:24-5 N 21 '42
 Estimated meat surplus. For Comm W 12:23 J1 17 '43

Canada

Canadian meat consumption, 1938-1941. For Comm W 9:29 D 19 '42
 Meat and products; Canadian consumption, 1935-1941. For Comm W 10:34 F 27 '43
 Meat consumption, Canada, 1941. For Comm W 11:30 Ap 17 '43
 Meat situation. For Comm W 12:23 J1 17 '43

Chile

Chile's mutton industry. For Comm W 12:26 Ag 7 '43

Cuba

Cuban beef industry. For Comm W 12:7+ Ag 14 '43

Mexico

Beef situation. For Comm W 11:27 My 8 '43

New York (state)

Ten NY meat packing plants closed because of price ceilings. Comm & Fin Chr 157: 2178 Je 10 '43

New Zealand

Improved situation in New Zealand. For Comm W 10:21 F 6 '43

Norway

Norway's acute meat problems. For Comm W 11:30 My 22 '43

Panama

Meatless days inaugurated in Panama. For Comm W 12:25 Ag 14 '43

United States

Mystery deepens; livestock isn't coming to yards; country slaughter and bootlegging suspected. Business Week p17-18 F 13 '43
 New meat crisis. Business Week p32+ N 21 '42

Uruguay

Meat production in Uruguay, 1941 and 1942. For Comm W 10:26 Mr 27 '43

MEAT loaf

All-America package competition award; Basic food materials, inc.; paper meat loaf pan. II Mod Packaging 16:93+ Ap '43

MECHANICAL analogies. See Electric circuits—Mechanical analogies**MECHANICAL draft**

Boiler output rise by draft changes. J. Cassie. diags Elec W 119:476+ F 6 '43
 Charging induced draft kilns. V. J. Azbe. Rock Prod 45:72-3+ D '42
 Design of medium sized chimneys for forced draft. W. T. Miller and N. Arnold. Heat & Ven 40:26-7 Mr '43
 How to determine forced draft air requirements. E. M. Sims. chart(p108) Power Pl Eng 46:94 F '42; Discussion (Forced draft requirements get Joe steamed up). 46:86-8 Ag; 104, 106+ N '42; 47:97-8 F '43
 Performance and selection of mechanical-draft cooling towers. J. Lichtenstein. biblog diag A S M E Trans 65:779-87 O '43

See also

Blowers

Fans, Mechanical

MECHANICAL drawing

Rendering and reproduction methods for graphic illustrations. J. Gonzales and R. R. Wiese. II diags Product Eng 14:664-7 O '43

See also

Drafting room practice

Machinery—Design Perspective

Engineering drawing

MECHANICAL engineering

Frictional phenomena; technical applications of external friction of solids. A. Gemant. biblog diags J Ap Phys 14:510-21 O '43

Mechanical-electrical design of power plants co-ordinated. N. J. Walker and B. E. Hagy. Elec W 119:1615-17 My 15 '43

Mechanical performance of metals. J. F. Young and J. B. Lambert. Gen Elec R 46: 619-20 N '43 (to be cont)
 Progress in railway mechanical engineering, 1941-1942. II diag Mech Eng 65:21-30 Ja '43
 Review of recent progress in heat transfer. C. H. Lander. biblog II diags Inst Mech Eng J & Proc 148:Proc 81-112 Ja '43; Discussion. 149:Proc 117-32 Je '43

See also

Aeronautic engineering

Aeronautics

Automobiles

Balancing of machinery

Boilers

Chemical engineering

Electric engineering

Fuel

Hydraulic machinery

Locomotives

Lubrication and lubricants

Machine shop practice

tice

also American society of mechanical engineers

Machine tools

Machinery

Machinery—Design

Marine engineering

Mechanical handling

Mechanical models

Motor trucks

Packing

Power (mechanics)

Power transmission

Pumping

Springs (mechanism)

Standardization

Steam engines

Tolerance

Trucks

Bibliography

Additions to the library. Inst Mech Eng J & Proc 148:112-14 D '42 [cont monthly]

Reviews of books and notes on books received in the Engineering societies library. Published in monthly numbers of Mechanical engineering

Exhibitions

See also National exposition of power and mechanical engineering

Study and teaching

Educational reconstruction and its impact on training for mechanical engineering. Engineering 156:195-8 S 3 '43; Same, Engineer 176:185-7, 212-13 S 3-10 '43; Same, Inst Mech Eng J & Proc 149:Proc 186-92 O '43; Abstracts, Electrician 131:279 S 17 '43; Elec R (Lond) 133:367-8 S 17 '43

Mechanical engineering education. Engineer 175:126-7 F 12 '43

Survey of type and content of course material in mechanical engineering laboratory instruction. F. L. Schwartz. J Eng Educ 33:446-53 Ja '43

See also Machine shop practice—Study and teaching; Steam engineering—Study and teaching

Tables, calculations, etc.

Design office problem in the estimation of the torsional resonance characteristics of small marine Diesel-propulsion units. R. W. S. Mitchell. diag Inst Mech Eng J & Proc 149:Proc 133-42 S '43

Graphical analysis of stresses in three-dimensional loading. C. R. Freberg and E. N. Kemler. II Product Eng 13:714-17 D '42

New five-bar and six-bar linkages in three dimensions. M. Goldberg. biblog II diags A S M E Trans 65:649-56; Discussion. 656-61 Ag '43

Polar moment of inertia I_p and polar section modulus Z_p of solid circular sections; data sheets. R. Parkes. Mach 49:205 J1 '43

Simple method for calculating hydraulic coupling performance. R. E. Bruckner. II diags Product Eng 13:698-703 D '42

See also

Vibration—Measurement

MECHANICAL engineering laboratories

Survey of type and content of course material in mechanical engineering laboratory instruction. F. L. Schwartz. J Eng Educ 33:446-53 Ja '43

MECHANICAL engineers

Mechanicians in 1847. Engineer 175:113-14 F 5 '43

MECHANICAL engineers—Continued

Stationary license, passport to sea duty;
Training division of U.S. Maritime service.
il Power 87:222-4 Ap '43

See also

Ricardo, Harry Ralph
also American society of mechanical engineers

MECHANICAL equipment of buildings

Five sides to a pentagon; heating, plumbing, air conditioning, refrigeration, ventilating;
War department building. il Dom Eng 161: 56-7+ My; 66-7 Je '43

Heating, air conditioning and lighting the Pentagon building. il diags Arch Rec 93: 67-70 Ja '43

Information and filter centers keep tab on all aircraft in sky; heating, ventilating, and cooling problems. S. R. Lewis. il Heating-Piping 15:89-90 F '43

Mechanical equipment for factories as reported by technical specialists of Albert Kahn associated architects & engineers. il diags plans Arch Rec 93:53-66 F '43

Office and loft buildings air conditioning; time-saver standards. il plan Arch Rec 93: 82 Ap '43

Prefabricated house; mechanical core. il Arch Forum 78:62-4 Ja '43

See also

Air conditioning equipment	Hot water supply
Cooling equipment	Lighting
Electric wiring, interior	Pipe fitting
Elevators	Plumbing
Heating	Pneumatic conveying
	Power plants
	Steam fitting
	Ventilation

MECHANICAL fans. See Fans, Mechanical**MECHANICAL handling**

A.C.E. tricycle may be used as a crane, stacker, platform hoist, power shovel and light tractor. il diags Mech Handling 30: 449-54 O '43

Alternative bearings for mobile storage units. R. S. Weatherley. il Mech Handling 30:387-8 J '43

Assembly line production of aerial ammunition; factory for Mechanical handling systems, Inc. il Arch Rec 94:59-61 Ji '43

Avengers by Eastern. H. Chase. il plan Aviation 42:168-73+ J '43

Directory of equipment for handling parts and materials. Aero Digest 43:281, 283-4 Ag '43

Finishing lifters and telescopes at Economy engineering company. H. Deutscher. il Metal Finishing 41:121 F '43

Forging of the 7.2 in. shell; Canadian car and foundry company. Mech Handling 29: 222 N '42

Handling trolleys for assembly of aircraft. il Mech Handling 30:59-60 F '43

High-production X-ray made possible by built-in materials handling system. W. D. Crelley. il Steel 113:89+ O 25 '43

How handling helped us beat space limitations; Propeller division, Nash-Kelvinator corporation. C. Wood. il Factory Management 101:93-6 O '43

How the production of air-foam rubber is controlled at the Goodyear factory. H. C. Jenks and J. Grotzinger. flow chart il Rubber Age 52:128-32 N '42

Labor conservation ideas wins \$25 war bond; device for handling and storing bus springs. il diag Bus Transportation 22:43-5 Ji '43

Laid out for non-stop war production; Fedders fabrication of machine-gun metallic belt links. il Factory Management 101: 93-6 Ji '43

Load grab hooks the big ones; accelerates handling of steel tubing. il Steel 113:256+ O 11 '43

Materials handling. il Factory Management 101:97-112 Ji '43

Materials handling facilities aid in plant conversion; American central mfg. corp. il Steel 112:112-14+ Ap 26 '43

Materials handling in pulp and paper plants. E. Southworth. il Paper Tr J 117:31-4 Ji 1 '43; Abstract. Paper Ind 25:422+ Ji '43

Mechanised foundry. il Elec R (Lond) 132: 205-9 F 12 '43

Minor faults cause failure. E. Ingham. diags

Mech Handling 30:205-7 My '43

Modern chip handling. A. M. Perrin. plan Metal Prog 43:566-7 Ap '43; Same. Mech Handling 30:345-6 Ag '43

Modern methods of handling and storing dies and fixtures. B. C. Brosheer. il Am Mach 87:83-91 O 28 '43

Modern sintering plan handles fine ores and flue dust; Youngstown sheet & tube co. il Steel 112:102, 105+ Mr 1 '43

Moving timbers in a fabricating yard. il plan Eng N 130:428-9 Mr 25 '43

New equipment; material handling. il Iron Age 150:62-9 D 17 '42; 151:55-8 Ap 29 '43

Plant stretcher; castings cooled on flat cars to save floor space; Cooper-Bessemer corp. R. S. Warren. il Steel 112:71-2 Ja 11 '43

Press output upped by special built-in materials handling system; Douglas aircraft company. il Steel 113:99-100 Ji 28 '43

Review of power and mechanical equipment; mechanical transmission, materials handling. il Power 86:938-41 Mid-D '42

Revolution in mass production; full utilization of machines that move materials will determine the shape of our postwar industry. il diags Fortune 27:130-5+ F '43

Select layout and handling that suit your product. il Factory Management 101:146-53 Ag '43

Skid, pallet handling system; Union metal mfg. co. W. Shea. il Steel 112:52, 54 Ja 25; 114: 117+ F 1 '43

Swing arm improves effectiveness of fork truck. G. H. Schwab. il Steel 112:123-4 Je 14 '43

Teaming handling devices with women; Wright aeronautical corporation. H. E. Linsley. il Am Mach 87:109-11 O 28 '43

30th buyers reference number; plant service equipment. il Am Mach 87:361-5 Ja 21 '43

Tray-lift steps-up hosiery output. il Rayon 23:685 N '42

Two men and mechanical handling aids turn out 12,000 parts per shift; Consolidated Vultee aircraft corp. revolving table hydraulic press. il Steel 112:96 My 31 '43

War accelerates technical progress. Steel 112:281-2+ Ja 4 '43

What do you know about materials handling? H. W. Neff. il Mech Handling 30:434-8 O '43

What you should know about principles of materials handling; transportation techniques. A. S. Knowles. Steel 113:79-80 Ag 30; 99 S 27 '43

See also

Ash handling	Lumber handling
Assembling methods	Mine haulage
Cableways	Mine hoisting
Coal handling	Motor trucks, Industrial
Coal loading machines	Oil handling
Conveying machinery	Packaging machinery
Cranes, derricks, etc.	Paper handling
Electric trucks, Industrial	Pneumatic conveying
Freight handling	Sand and gravel plants
Grain handling	Sand handling
Gravel handling	Sheet metal handling
Hoisting machinery	Trucks
Loading and unloading	Wire handling

Bibliography

Abstracts. Published in monthly numbers of Mechanical handling and conveying

Safety measures

Mechanical equipment; handling materials. il Nat Safety N 47:70-2+ Mr '43

MECHANICAL models

Transparent plastic models facilitate design and research. il Automotive & Aviation Ind 87:44+ D 1 '42

See also

Airplane models

MECHANICAL movements

Detecting small mechanical movements; vacuum tube circuit for detecting mechanical movements as small as a millionth of an inch, by converting them into capacitance changes. J. C. Frommer. diags Electronics 16:104-5 Ji '43

MECHANICAL movements—Continued

- Mechanical movements and their design. F. Grover. diags Inst Mech Eng J & Proc 147:Proc 199-204 O '42; Discussion. il diag 148:Proc 33-4 N '42
- Provides intermittent drive; patent assigned to the Sheridan iron works. diags Machine Design 14:136-+ N '42
- Transmission linkages for multiplying short motions. diags Product Eng 13:726-7 D '42

See also

- Gearing Pulleys
Links and link motion Reversing mechanism
Machinery, Kinematics of

MECHANICS

- Importance of graphical solution of problems in mechanics. L. M. Sahag. diags J Eng Educ 33:502-7 Mr '43
- Mechanical properties of metals. A. C. Vivian. diag Engineering 156:78-80, 118-20 Jl 23, Ag 6 '43
- Periodic processes in free pseudo-linear oscillatory systems. B. V. Bulgakov. diag Franklin Inst J 235:591-616 Je '43
- Refresher on principles of mechanics for instrument men. S. R. Williams. il diags Instruments 16:126-8+ Mr '43
- Refresher on vibratory motion for instrument men. S. R. Williams. il Instruments 16:597-601 O '43

See also

- | | |
|--------------------------|-----------------------|
| Acceleration | Machinery |
| Aerodynamics | Mathematical physics |
| Aeronautics | Mechanical movements |
| Deformations (mechanics) | Moments of inertia |
| Elasticity | Physics |
| Engineering | Power (mechanics) |
| Falling bodies | Springs (mechanism) |
| Fluids | Steam engines |
| Friction | Strains and stresses |
| Gases | Strength of materials |
| Hydraulics | Thermodynamics |
| Hydrodynamics | Torsion |
| Hysteresis (mechanics) | Vibration |
| Liquids | Viscosity |
| Load (mechanics) | Wave mechanics |

Electric analogies

- Analogy in engineering. A. W. Ashton. diags Inst E E J 90 pt 1:120-4 Mr '43
- Analysis of longitudinal motions of trains by the electrical analog. L. A. Pipes. bibliog diags J Ap Phys 13:780-6 D '42
- Applications and limitations of mechanical-electrical analogies, new and old. J. Miles. bibliog diags Acoustical Soc Am J 14:183-92 Ja '43
- Electrical circuit analysis of torsional oscillations. L. A. Pipes. bibliog diags J Ap Phys 14:352-62 Jl '43
- Electro-mechanical analogy in oscillation theory. R. G. Manley. diags Roy Aeronautical Soc J 47:22-6 Ja '43

Examinations

- Progress report on study of achievement tests. J. O. Draffin. J Eng Educ 33:228-34 N '42

MECHANICS (persons)

- Evening training classes for refrigeration service mechanics; Washington vocational high school, Pittsburgh. K. W. Krummell. Refrig Eng 45:171+ Mr '43
- General Motors training program. Iron Age 150:50, 52 D 31 '42
- Is a Miss as good as a male? Connecticut railway and lighting company's experience with women mechanical workers. E. F. Theisinger. il Bus Transportation 22:31-5 Je '43
- Making opportunity knock; Pasadena city lines taps source of potential Diesel mechanics. Bus Transportation 22:49 Je '43
- Mechanic problem; outline of training program. il Bus Transportation 22:34-6 F '43
- White-collar hobby mechanics fill shop posts; Arthur C. Badger metal products co. Iron Age 151:89 Ap 1 '43

See also

- Airplane mechanics
Automobile mechanics

MECHANICS, Analytic

- Transient analysis of linear systems. M. F. M. Osborne. bibliog J Ap Phys 14:180-4 Ap '43

See also

- | | |
|--------------|--------------------|
| Acceleration | Hydrodynamics |
| Elasticity | Moments of inertia |

MECHANICS, Applied*See also*

- Mechanical engineering

MECHANICS, Statistical. *See* Statistical mechanics**MECHANICS educational society of America**

- M.E.S.A. kicks up; Matt Smith's independent union gets into row at Briggs works. Business Week p91-2 N 14 '42

MEDALS

- Award of the Nicholas Appert medal to Dr Prescott. Science 97:396 Ap 30 '43
- Awards of the American society of civil engineers. Science 97:85 Ja 22 '43
- Franklin institute; medal day proceedings. Franklin Inst J 236:199-214 Ag '43
- Harry Miller Pfleger; Franklin institute awards the Henderson medal for achievements in development of steel castings. Ry Mech Eng 117:213 My '43; Same abr. Ry Age 114:839-40 Ap 24 '43
- I.E.S. medal. il Illum Eng 38:400-1 S '43
- James Watt international medal; presented to A. G. M. Michell by A. Robertson; reply by S. M. Bruce. Engineering 155:94-5 Ja 29 '43; Same cond. Engineer 175:93-4 Ja 29 '43

- Medal day of the Franklin institute, Philadelphia; list of medalists. Science 97:350 Ap 16 '43

- Medals of the National academy of sciences. Science 97:429-35 My 14 '43

- Presentation of the James Watt international medal to A. G. M. Michell. Inst Mech Eng J & Proc 149:Proc 3-6 Ap '43

- TAPPI medal presented to Harry Fletcher. R. B. Wolf. Paper Tr J 116:123-4 F 18 '43

- Two newly established medals of the American society for metals. Science 98:259 S 17 '43

See also

- | | |
|---------------------------------|----------------------------|
| Edison electric institute medal | Lamme, Benjamin G., medals |
| Franklin medal | Olney medal |
| Fritz, John, medal | Perkin medal |

Manufacture

- Jewelry firm finds essential war task in medal making. Sales Management 52:50 F 15 '43

MEDIATION board, National. *See* National mediation board**MEDICAL advertising**

- Can your copy support these Army medical department aims? il Ptr Ink 205:81-2+ O 1 '43

- Is the F.T.C. covering too much territory? H. Mock. Ptr Ink 205:28, 32+ O 29 '43

See also

- | | |
|-----------------------------------|------------------------------------|
| Advertising—Physicians, Appeal to | Medicines, Proprietary—Advertising |
| Drug trade—Advertising | |

MEDICAL and pharmaceutical chemistry. *See* Chemistry, Medical and pharmaceutical**MEDICAL botany.** *See* Botany, Medical**MEDICAL buildings***See also*

- Blood donor centers

MEDICAL care. *See* Medical service**MEDICAL care agencies.** *See* Medical service—Socialization**MEDICAL centers***See also*

- Health centers

MEDICAL colleges

- Effect of the war on medical colleges. H. Bayne. Special Lib 34:255-7 Jl-Ag '43

- Survey of medical colleges. Science 98:401-2 N 5 '43

MEDICAL colleges—Continued

Teaching of tropical medicine in medical schools. Science 96:532 D 11 '42

See also

Dental colleges
Illinois university
—College of medicine

MEDICAL education

Post-graduate industrial medicine; Long Island college of medicine's second course. Ind Med 12:612 S '43

See also

Medical colleges

MEDICAL examinations. *See Insurance, Life*

—Medical examinations; Physical examinations

MEDICAL instruments and apparatus

Drug sundries and the rubber shortage; abstract. W. J. O'Brien. Rubber Age 53:60-1 Ap '43

Medical science joins hands with electronics. W. E. Gilson. bibliog II Electronics 16:144-5+ Mr '43

Plastics in medicine; many new uses are being developed. Sci Am 169:22 Jl '43

Therapeutic radionics. S. R. Winters. II diags Radio N 30:17-19+ Jl '43

See also

Cardiograph	Hypodermic syringes
Dental instruments and apparatus	Kymograph
Electrotherapeutics—Apparatus and instruments	Surgical instruments and apparatus

MEDICAL jurisprudence

See also

Hearing—Testing

MEDICAL laboratories

See also

Abbott laboratories
Pharmaceutical laboratories

MEDICAL libraries

Handbook of medical library practice. J. Doe, ed. 609p \$5 American library assn, 520 North Michigan av, Chicago '43

Libraries and the nutrition program. A. M. McCann. Special Lib 34:271-2 Jl-Ag '43

Publicity for the medical library; St Luke's hospital, New York. H. Lemcke. bibliog Special Lib 33:335-6 N '42

Wartime problems in the West. E. Moyers. Special Lib 34:248-9 Jl-Ag '43

MEDICAL museums

See also

Royal college of surgeons, London—Museum

MEDICAL research

Chemistry and development of atabrine and plasmochin. A. E. Sherndal. II Chem & Eng N 21:1154-8 Jl 25 '43

Contributions of the Medical corps of the army to the Public health laboratory. E. E. Hume. Science 97:293-300 Ap 2 '43

Grant to the National research council from the Johnson and Johnson research foundation. Science 98:339-40 O 15 '43

Karl Landsteiner. M. Heidelberger. Science 98:233-4 S 10 '43

Lewis Cass Ledyard, jr. fellowship of the Society of the New York hospital. Science 98:236 S 10 '43

Medical fellowships of the National research council. Science 98:35 Jl 9 '43

Medical research in some aspects of aircraft design. W. E. Russell, J. R. Erwin and H. R. DeHaven. J Aeronautical Sci 10:227-31 Jl '43

Research and therapeutics. A. E. Smith. Science 98:161-4 Ag 20 '43

Virus recovered from patients with primary atypical pneumonia. F. L. Horsfall, jr. and others. bibliog Science 97:289-91 Mr 26 '43

See also

Cold (disease) Pharmaceutical research
Ophthalmological research
also National research council; United States—Public health service; Wellcome foundation

MEDICAL service

Future of medical practice. J. G. Searle. Oil Paint & Drug Rep 143:50 My 10 '43

Location and movement of physicians, 1923 and 1938; age distribution in relation to county characteristics. J. W. Mountin, E. H. Pennell and V. Nicolay. Pub Health Rep 58:483-90 Mr 19 '43

Location and movement of physicians, 1923 and 1938; effect of local factors upon location. J. W. Mountin, E. H. Pennell and V. Nicolay. Pub Health Rep 57:1945-53 D 18 '42

Location and movement of physicians, 1923 and 1938; turnover as a factor affecting state totals. J. W. Mountin, E. H. Pennell and V. Nicolay. Pub Health Rep 57:1752-61 N 20 '42

Low-income group prefers to pay own way, report shows. Nat Underw (Life ed) 47:3 My 7 '43

Medical care planners discuss national program. Oil Paint & Drug Rep 144:7+ O 11 '43

Medical care plans. M. Fishbein. Oil Paint & Drug Rep 144:58+ O 11 '43

National conference on planning for war and post-war medical services meeting, New York, March 15. Science 97:281 Mr 26 '43

Nothing in Beveridge plan for this nation. M. Fishbein. Weekly Underw 143:1209+ Je 5 '43; Same abr. East Underw 44:42 Je 4 '43; Same abr. Nat Underw (H. & A. conference no) 47:9-10 Je 4 '43

Patient load of physicians in private practice; a comparative statistical study of three areas; Maryland, District of Columbia, Georgia. A. Ciocco and I. Altman. Pub Health Rep 58:1329-51 S 3 '43

Paying for illness. Economist 144:685 My 29 '43

Planning of medical services in Australia. bibliog Int Labour R 47:731-45 Je '43

Recommendations for the care of the medically indigent formulated by committee on medical economics of Medical society of county of New York. Science 98:56-7 Jl 16 '43

Report of the Medical planning commission, Great Britain. Int Labour R 47:57-61 Ja '43

Supply of physicians. Science 96:sup9 N 20 '42

War and the distribution of physicians. G. St. J. Perrott and B. M. Davis. bibliog Pub Health Rep 58:1545-54 O 15 '43

See also

Hospitals	Workmen's compensation—Medical care
Insurance, Health	World war, 1939—
Physical examinations	Medical and sanitary affairs

Group plan

A.M.A. conviction upheld by high court. Oil Paint & Drug Rep 143:3+ Ja 25 '43; East Underw 44:29 Ja 22 '43

Kaiser medical problem. J. H. Fitzgibbon. Ind Med 12:42-4 Ja '43

New group medical care plan is offered in N.Y. Nat Underw 47:18 Ja 14 '43

Wartime industrial services; with special comment on Permanente foundation, California physicians' service and Procurement and assignment service. Ind Med 12:174-7 Mr '43

Fraudulent plans

Unlicensed medical plan's head jailed. Nat Underw 47:26 Ag 26 '43; Same. Nat Underw (Life ed) 47:5 Ag 27 '43

Socialization

Central medical service? Economist 144:96-7 Ja 23 '43

MEDICAL service, Cost of

Medical care for farm workers in California and Arizona. W. Goldner. Monthly Labor R 55:957-9 N '42

Medical profession urged to cut fees. R. T. McIntire. Oil Paint & Drug Rep 144:4+ O 11 '43

See also

Insurance, Health

MEDICAL service, Industrial

Active health program. W. L. Weaver. II Safety Eng 84:41-2 D '42

MEDICAL service, Industrial—Continued

- Appraisal of industrial medical facilities in Lyeonking county. W. S. Johnson. *Ind Med* 11:598-600 D '42
- Bottlenecks and progress in industrial medicine. R. T. Legge. *Ind Med* 11:530-1 N '42
- Carry on health and safety activities. *Il Factory Management* 101:134-44 Ag '43
- Combating health hazards. F. E. Poole. *Il Factory Management* 101:101-3 Ja '43
- Congress on industrial health; abstracts of papers. *Ind Med* 12:81-97 F '43
- Co-operation between chemist and doctor in factory welfare. F. S. Fowweather. *Chem & Ind* 61:524-6 D 26 '42
- Cray Valley industrial association. *Ind Med* 12:558-9 Ag '43
- Emergency sickness and immediate care. H. Bartle. *Ind Med* 12:606+ S '43
- General Motors medical conference, Detroit, April 9. H. W. Anderson and others. *Ind Med* 12:265-80 My '43
- Health program in terms of results; Consolidated Edison company, New York. J. J. Wittmer. *Ind Med* 12:9-11 Ja '43
- Industrial health program of the organized medical profession; abstract. S. J. Seeger. *Ind Med* 12:22 Ja '43
- Industrial health units; considerations and designs for the smaller installations. W. L. Ritter and J. W. Dugger. *plans Ind Med* 12:650-4 O '43
- Industrial medical conference; abstracts of papers at the post-graduate industrial medical and surgical conference, Detroit, April 8; reported by C. O. Sappington. *Ind Med* 12:324-33 My '43
- Industrial medical facilities in Pennsylvania; county by county survey. J. Shilen. *Ind Med* 12:379-81 Je '43
- Industrial medical practice; history and background. W. I. Clark. *Ind Med* 11:511-13 N '42
- Industrial medical service. *Il Nat Safety* N 47:154+ Mr '43
- Industrial medical service. H. J. Whitacre. *Ind Med* 12:480+ JI '43
- Industrial medicine. A. J. Amor. *Ind Med* 12:693-4+ O '43
- Industrial ophthalmology and otolaryngology. G. F. Harkness. *bibliog Il Ind Med* 12:658-62 O '43
- Industrial physician and his relation to absenteeism. J. J. Wittmer. *Ind Med* 12:284 My '43
- Man salvage; vocational rehabilitation in Connecticut. E. P. Chester. *Nat Safety* N 47:34, 36 Ja '43
- Mechanical equipment for factories; medical departments. F. A. Fairbrother. *Il plan Arch Rec* 93:65-6 F '43
- Medical care for small industries; Group health cooperative, Inc. *Safety Eng* 85:49 My '43
- Medical control of industrial exposure to toxic chemicals. J. H. Foulger. *bibliog diags charts Ind Med* 12:214-25 Ap '43
- Medical facilities and service for small plants. A. H. Whittaker. *Il Ind Med* 11:514-17 N '42
- Medical precautions and treatments associated with the chemical industry. T. W. Nale. *Ind Med* 12:505-9 Ag '43
- Medical program at the time of a devastating flood; Caterpillar tractor co. H. A. Vonachen. *Il Ind Med* 12:438-40 JI '43
- Medical program for aviation. R. A. McFarland. *Harvard Business R* 22 no 1:93-127 [O] '43
- Medical service for wartime industry. H. Earnhart. *Nat Safety* N 48:34+ S '43
- Nurse's records. I. M. Poole. *Safety Eng* 85:47-8 My '43
- Plant medical work in wartime. *Management R* 32:14-15 Ja '43
- Plant physician and safety engineer and cooperation between them. C. Leggo. *Ind Med* 12:645-7 O '43; Same. *Safety Eng* 86:100-3 O; 56-8 N '43
- Public health and industry. N. Millman. *Ind Med* 12:378-9 Je '43
- Routine serologic testing of 15,000 employees of the home office of the Metropolitan life insurance company. C. R. Rein and M. G. Stephens. *Ind Med* 12:364-7 Je '43
- Some common causes of sick absences and their prevention. J. J. Wittmer. *Il Concrete (mill sec)* 51:111-12 Ja '43; Same. *Ind Med* 12:23-4 Ja '43
- Surgical emergencies in industries. B. R. Beltran. *Ind Med* 12:431-4 JI '43
- Surgical management of industrial injuries. J. J. Moorhead. *Ind Med* 12:140-2 Mr '43
- Syphilis; an approach, in industry. E. G. Baxter. *Ind Med* 12:419-21 Je '43
- Trends in treatment of industrial injuries. H. H. Rubin. *bibliog Nat Safety* N 48:34+ N '43
- War on health hazards; Wright field. Z. T. Wirtschafter. *Il Nat Safety* N 48:18-19+ JI '43
- Wartime industrial medical services. H. P. Ebrinton, W. C. Dreesen and V. M. Trasko. *Ind Med* 12:522-30 Ag '43
- Wartime industrial services; with special comment on Permanent foundation, California physicians' service and Procurement and assignment service. *Ind Med* 12:174-7 Mr '43
- What the industrial nurse can do about tuberculosis. F. E. MacInnis. *Nat Safety* N 46:34+ D '42
- Workers' health; employee welfare developments at Morris motors, ltd. *Il Automobile Eng* 33:160 Ap '43
- Workmen's compensation laws and industrial medicine. W. H. Pillsbury. *Ind Med* 11:534-8 N '42

See also

- | | |
|----------------------------|--------------------------------|
| Dental service, Industrial | Hygiene, Industrial |
| Diseases, Industrial | Nurses and nursing, Industrial |
| Dispensaries, Industrial | Physical examinations |
| Hospitals, Industrial | |

Clinical laboratories

- Clinical laboratory in industrial medical practice. F. V. Kowals. *Ind Med* 12:274-6 My '43

History

- History in the making; industrial medicine in the terms of now. *map Ind Med* 12:569-75 S '43

Study and teaching

- Post-graduate course in industrial medicine; Long Island college of medicine. *Science* 98:193 Ag 27 '43

Canada

- Good neighbor looks to health; medical service in Canadian industries. F. M. Jones. *Il Safety Eng* 86:91-2+ O '43
- Industrial health in Canada; new health centre opened at Lever House. *Il Ind Med* 12:285-9 My '43
- Industrial medicine; Canadian national railways and Trans-Canada air lines. E. Dwyer. *bibliog Ind Med* 12:686, 688+ O '43

Great Britain

- Birth of an industrial health service. *Ind Med* 12:640, 642 S '43

Turkey

- Industrial medicine and hygiene. C. Kiper. *Il Ind Med* 11:520-1 N '42

MEDICAL service, Rural

- FSA program for migratory group. *Nat Underw* 47:19 Je 24 '43; Same. *Nat Underw (Life ed)* 47:4 Je 25 '43

MEDICAL societies

- Responsibility of medical societies in the war industry production effort. *Ind Med* 11:553+ N '42

MEDICAL statistics

- Selective service's medical statistics program. O. H. Folk. *Am Stat Assn J* 37:425-9 D '42

See also

- | | |
|----------------------|----------------------|
| Diseases—Statistics | Mortality—Statistics |
| Hospitals—Statistics | |

MEDICAL supplies industry

- Epidemics loom; conference on planning for war and post war medical services. *Business Week* p34+ Mr 27 '43

MEDICINAL plants. See Botany, Medical

MEDICINE

Recollections of a street corner pump and the progress of sixty years; some boys of Louisville. Y. Henderson. Science 98:25-8 J1 9 '43

Relationship of the chemist to medicine. V. du Vigneaud. Chem & Eng N 21:298-300 Mr 10 '43

Science in 1942. Science 97:sup12 Ja 15 '43

Study of medicine and the changing order; committee organized by the New York academy of medicine. Science 97:371-2 Ap 23 '43

See also

Anesthetics
Antiseptics
Bacteriology
Chemistry, Medical
and pharmaceutical
Diseases
Drugs
Hospitals
Hygiene
Hygiene, Industrial
Infectious diseases

Medical service
Mental diseases
Nurses and nursing
Physicians
Public health
Serumtherapy
Shock
Stains and staining,
Vital
Surgery
Therapeutics

Bibliography

Handbook of medical library practice. J. Doe, ed. 609p \$5 American library assn., 520 North Michigan av, Chicago '43

Study and teaching

Teaching of tropical medicine. H. L. Alexander, R. A. Moore and W. B. Wood, Jr. Science 98:39-40 J1 9 '43

District of Columbia

Patient load of physicians in private practice; a comparative statistical study of three areas; Maryland, District of Columbia, Georgia. A. Ciocco and I. Altman. Pub Health Rep 58:1329-51 S 3 '43

Georgia

Patient load of physicians in private practice; a comparative statistical study of three areas; Maryland, District of Columbia, Georgia. A. Ciocco and I. Altman. Pub Health Rep 58:1329-51 S 3 '43

Maryland

Patient load of physicians in private practice; a comparative statistical study of three areas; Maryland, District of Columbia, Georgia. A. Ciocco and I. Altman. Pub Health Rep 58:1329-51 S 3 '43

Russia

See also Russia—Army—Medical and sanitary affairs

MEDICINE, Military

Contributions of the Medical corps of the army to the Public health laboratory. E. E. Hume. Science 97:293-300 Ap 2 '43

Front-line medicine; restores more of wounded to useful life than in any previous war. il Fortune 28:124-8, 142+ J1 '43

Medical packs help reduce war casualties. D. Guernsey. il Mod Packaging 16:51-4+ Ag '43

Military medicine; symposium at meeting of American drug manufacturers association. Oil Paint & Drug Rep 143:52B Mr 10 '43

Visit to the U.S.S.R. of British surgeons. Science 98:295 O 1 '43

See also

United States—Army
—Medical and
sanitary affairs

World war, 1939—
Medical and sani-
itary affairs

MEDICINE, Preventive

See also

Bacteriology
Hygiene
Immunity

Physical examina-
tions
Public health ad-
ministration

MEDICINES, Proprietary

Carter on the pan; Federal trade commission says Little Liver Pills don't benefit the liver. Business Week p90 Je 12 '43

FTC on the pan; proprietary drug trade, takes labeling woes to Congress and to courts. Business Week p90+ My 29 '43

See also

Marmola
also, Proprietary association of America

Advertising

Tracing of retail sales shows Lydia Pinkham how to advertise; selecting media; copy testing. il Sales Management 52:57-8+ Mr 1 '43

MEDITERRANEAN sea

See also

Fisheries—Mediterranean sea

MEEHANITE

Cast cutters boost milling capacity; combination of meehanite bodies and brazed tips. W. C. Whittum. il diag Am Mach 87:92-4 J1 22 '43

Cast dies for forging shells. P. Attenborough. diags Metals & Alloys 18:287-91 Ag '43

Castings for ships and marine engines. C. E. Herington. il Marine Eng 47:150-3 D '42

Heat treatment effect on the torsion impact properties of meehanite. C. R. Austin and M. M. Lipnick. diags Iron Age 152:54-5 O 7 '43

Iron castings replace forgings for highly stressed parts. il diags Product Eng 14:161-4 Mr '43

MEEKOCERAS limestone. See Thaynes formation

MEGAPHONES, Electronic. See Loud speaking apparatus

MELAMINE

Solubility of melamine in water. R. P. Chapman, P. R. Averell and R. R. Harris. diag Ind & Eng Chem 35:137-8 F '43

MELAMINE resins

Development of melamine-formaldehyde resins in combination with certain fillers; abstract. J. L. Rodgers, jr. Mod Plastics 20:51-4+ J1 '43

Engines have brains; 18 cylinders of aircraft engine controlled by distributor housing molded of mineral-filled melamine. il Mod Plastics 20:51-4+ J1 '43

Melamine again; for buttons and high wet-strength paper. il Sci Am 167:280-1 D '42

Melamine resins for wet strength paper. il Mod Packaging 17:88-9 S '43

Use of melamine resins for beater wet strength. C. S. Maxwell. Paper Tr J 116: 39-42 My 13 '43

Wet strength resin for stock addition; abstract. R. Kumler. Paper Ind 25:425-6 J1 '43; Same. Chem Age (Lond) 49:191-2 Ag 21 '43

MELANTHIGENIN

Melanthigenin and its identity with hederagenin. Z. Mustafa and G. Soliman. Chem Soc J p70-1 F '43

MELCARTH, Edward

Road to Russia; truck-driving artist's record of a crucial construction job. Fortune 28: 150-4 N '43

MELLON institute of industrial research. See Pittsburgh university. Mellon institute of industrial research

MELONS

Melons pick up. Business Week p72 J1 24 '43

MELTING points

Aliphatic beta monoglycerides. B. F. Dautbert, H. H. Fricke and H. E. Longenecker. bibliog Am Chem Soc J 65:1718-20 S '43

Easily constructed precision melting point apparatus. E. O. Holmes, Jr. diags J Chem Educ 20:239-40 My '43

Electrically heated melting point apparatus. E. Dowdard and M. Russo. il diag Ind & Eng Chem Anal ed 15:219-21 Mr 15 '43

Modified Hershberg melting-point apparatus. M. M. Graff. il Ind & Eng Chem Anal ed 15:638 O 15 '43

Phase transformations of normal paraffins. C. G. Gray. bibliog Inst Pet J 29:226-34 Ag '43

Polymorphism of phosphoric oxide. W. L. Hill, G. T. Faust and S. B. Hendricks. bibliog il Am Chem Soc J 65:794-802 My '43

MELTING points—Continued

Premelting anomalies of some long chain normal paraffin hydrocarbons. A. Van Hook and L. Silver. *bibliog J Chem Phys* 10:686-90 N '42
 Useful temperature data; charts. R. S. Burpo, Jr., comp. *Metals & Alloys* 17:781-2 Ap '43

MELTON

Finishing 16-oz. navy meltons. D. Welsh. *il Textile World* 93:89-90 Je '43
 Manual of military fabrics; 32 oz. melton overcoating fabric covered by army specification no. 8-53-A. *il Textile World* 93:88-9 Ag '43

MEMBRANES

Diffusion of solubilized dyes in water and through membranes. R. B. Dean and J. R. Vinograd. *bibliog J Phys Chem* 46:1091-8 D '42

Evaluating torsional stresses by membrane analogy. J. Marin. *bibliog il diags Machine Design* 15:118-23+ Je '43

Some physical properties of living matter. C. H. Norris. *bibliog J Phys Chem* 46:1111-17 D '42

See also

Films
 Osmosis

MEMPHIS, Tennessee**Industries**

Memphis celebrates its industrial growth. A. M. Field. *il Manuf Rec* 112:34-5 F '43
 Memphis tackles its postwar development program. *Am Business* 13:13, 33 O '43

Politics and government

Manipulation in Memphis. *Economist* 145: 235-6 Ag 21 '43

MENA, Arkansas

Field notes from the farm country. *Fortune* 27:229-30 Je '43

MENADIONE. See Methyl naphthoquinone**MENASCO manufacturing company**

Menasco manufacturing company; manufacture of airplane engines and shock absorbers. W. G. Wood. *il Aeronautical Eng R* 1:85 N '42

MENDEL'S law

Hardy-Weinberg law. C. Stern. *Science* 97: 137-8 F 5 '43

MENDING materials

Any pots to mend today? *Consumers' Research Bul* 11:22-4 Ap '43

Rating

Mending and patching the new way. *il Consumers' Research Bul* 11:12-14 Mr '43

MENGEL company

Thumbnail stock appraisal. *Mag of Wall St* 71:178 N 28 '42

MENHADEN oil

Menhaden oil composition; abstract. W. H. Baldwin and L. E. Parks. *Soap & San Chem* 19:58 Ag '43

MENINGITIS

Comparison of rabbit and horse serums in meningococcus infections. S. E. Branham. *bibliog Pub Health Rep* 58:478-83 Mr 19 '43
 Herpes simplex virus recovered from the spinal fluid of a suspected case of lymphocytic choriomeningitis. C. Armstrong. *bibliog Pub Health Rep* 58:16-21 Ja 1 '43
 Influenza and meningitis. *Science* 96:sup 12 D 25 '42

Meningitis in training camps; abstract. H. M. Thomas, Jr. *Science* 98:sup12 O 8 '43

Mouse protective values of antimeningococcus serum in comparison with precipitation in immune serum agar plates. M. Pittman. *Pub Health Rep* 58:139-42 Ja 22 '43

Statistics

Prevalence of meningococcus meningitis in the United States during 1942 and first 9 weeks of 1943. *Pub Health Rep* 58:491-2 Mr 19 '43

MEN'S furnishing goods

See also

Clothing trade

MEN'S socks. See Hosiery**MEN'S suiting fabrics**

Men's wear fabrics for 1943. H. E. Reed. *il Textile World* 92:31 D '42

MEN'S suits

Life-history of the zoot suit. D. Adams. *il Textile World* 93:79-80 Ja '43

Making an ingredient a major selling factor; use of Botany label on men's suits; sold direct to retailers. *il Ptr Ink* 203:25-6 My 21 '43

Rating

Man's suit tested; Ripley clothes. *Consumers' Research Bul* 12:13 Ji '43

MENSTRUATION

Menstrual exercises; absenteeism decrease and work efficiency increase. A. C. Dick, H. E. Eiling, Jr., and Mrs H. N. Macy. *Ind Med* 12:583-90 S '43

Nethacetin in the management of primary dysmenorrhea. C. J. Fair. *Ind Med* 12: 201-2 Ap '43

MENSURATION

Calculation of areas, volumes, surfaces reduced to simple terms. *Water Works & Sewerage* 90:sup271-3 Je '43

Mensuration for sheet metal workers. *diags Sheet Metal Worker* 33:27-9+ N '42; Correction. 33:43 D '42

Proposal for the extension of our system of mensuration. E. C. Bingham. *J Ap Phys* 14:196-8 Ap '43

See also

Circles
 Gages
 Measurement
 Measuring instruments
 Surveying
 Weights and measures

MENTAL diseases

Health officer's place in the management of mental illness. S. W. Hamilton. *Pub Health Rep* 58:979-84 Je 25 '43

Medical shock machine used in the treatment of certain mental disorders. P. Traugott. *il diags Electronics* 16:166+ N '43

Mental health in later maturity. *bibliog il Pub Health Rep* Sup 168:1-147; pa 20c Supt. of doc. '42

See also

Psychological clinics

MENTAL hygiene

Approach to the mental hygiene-public health problem; Division of mental hygiene, Oregon state board of health. G. B. Haugen. *Pub Health Rep* 58:1211-14 Ag 6 '43

Mental health in later maturity. *bibliog il Pub Health Rep* Sup 168:1-147; pa 20c Supt. of doc. '42

See also

Personality
 Psychological clinics

MENTAL hygiene, Industrial

Mental health of workers. M. Brown. *Ind Med* 12:143-50 Mr '43

Mental misfits. M. Brown. *Nat Safety N* 47: 22-3+ F '43

Psychiatry in personnel work. L. G. Giberson. *Ind Med* 12:164+ Mr '43

Role of psychiatry in absences; abstract. M. Brown. *Ind Med* 12:26-7 Ja '43

See also

Fatigue
 Malingering

MENTAL tests. See Ability tests**MENTHOL**

Synthetic menthol manufacture; deleterious effect of isomers; abstract. W. E. Huggett. *Chem Age (Lond)* 48:186 F 6 '43

Analysis

Viscometric method for determining free menthol in peppermint oil. L. J. Swift and M. H. Thornton. *bibliog Ind & Eng Chem Anal ed* 15:422-3 Ji 15 '43

MENTHONE

Influence of addenda on the inversion of l-menthone with acids in benzene; the effect of solvents in chemical reactions. A. Weissberger. *Am Chem Soc J* 65:242-5 F '43

Inversion of l-menthone and the reaction of diazoacetic ester with the chloroacetic acids. A. Weissberger. *bibliog Am Chem Soc J* 65:245-6 F '43

MENTHONE—Continued

Inversion of menthone with hydrogen chloride in benzene. A. Weissberger and D. S. Thomas, Jr. *Am Chem Soc J* 65:402-3 Mr '43
Inversion of menthone with trichloroacetic acid in aprotic solvents. A. Weissberger. *bibliog Am Chem Soc J* 65:102-10 Ja '43

MENTHYL mandelates

Separation of diastereoisomerides by selective adsorption on optically inactive material. M. M. Jamison and E. E. Turner. *Chem Soc J* p611-12 O '42

MERCANTILE buildings

See also

Commercial buildings Store buildings
Department stores Warehouses

MERCANTILE properties, inc.

Bonds offered. *Comm & Fin Chr* 157:1946 My 24 '43

MERCAPTALATION

Application of the mercaptalation assay to synthetic starch. M. L. Wolfrom, C. S. Smith and A. E. Brown. *bibliog Am Chem Soc J* 65:255-9 F '43

MERCAPTANS

Critical analysis of sweetening processes and mercaptan removal. J. Happel, S. P. Cauley and H. S. Kelly. *bibliog Oil & Gas J* 41: 136, 139-40+ N 12 '42; Same. *Am Pet Inst Proc* 23(3):67-77; Discussion. 77 '42
Series of α,ω-dimercaptans. W. P. Hall and E. E. Reid. *bibliog Am Chem Soc J* 65: 1466-8 Ag '43

MERCAPTO compounds

Effects of inorganic electrolytes on the liberation of —SH in proteins. N. F. Burk. *bibliog J Phys Chem* 47:104-18 F '43
Enzyme systems containing active sulphydryl groups; role of glutathione. E. S. G. Barron and T. P. Singer. *Science* 97:356-8 Ap 16 '43

MERCAPTOACETIC acid

Monothiolglycol; reagent for protein investigations. H. S. Olcott. *Science* 96:454 N 13 '42

MERCERIZING

Mercerizing, a new approach. A. C. Tate. *il Textile World* 93:84-5+ Ap '43
Mercerizing cotton piece goods. *Textile World* 93:119 JI '43
Mercerizing wool mixtures. *Textile Col* 65: 299 JI '43
Silky appearance in textile materials. *Textile Col* 65:345-8 Ag '43
Tiger stripes in army socks; frequently traced to mercerization. *diags Textile World* 93:97 S '43

MERCHANDIZING

Challenge of change! V. Lebow. *Ptr Ink* 204: 17-18+ S 24 '43
Firestone pushes multiple lines to insure survival of retail stores. D. Martin. *il Sales Management* 51:24-5 D 15 '42
How Para built a merchandising program for shower curtains; modern design, modern materials, smart packaging, sound display, and retail sales training. *il Sales Management* 52:28, 30 Ja 15 '43
Inventory control regulations. *Sheet Metal Worker* 34:49-52 F '43
Merchandising problem of the moment: what to do with trade-name when war alters quality? 20 advertisers and advertising agencies answer to P.I. inquiry. F. LaClave. *il Ptr Ink* 203:13-15+ Je 4 '43
Move fast, change rapidly, seek new lines to sell; merchandising philosophy of J. K. Gill company. Portland, Ore. *il Am Business* 13:16-13 S '42
New highway diverted traffic, so roadside stand went mail-order; Russell C. Nicoll's Valerie Jean date shop, Thermal, California. *il Ptr Ink* 202:47, 54 Mr 26 '43
Policies that built a \$2,500,000 costume jewelry business in 3 years; R. M. Jordan and co. *il Sales Management* 52:73-5 Ag 15 '43
Profit planning for the small business. C. J. Whipple. *il Am Business* 13:13-16+ Je '43
Sales jump when Armour shows dealers how to push dairy products. W. J. Simmons. *il Sales Management* 51:21-2 D 1 '42
Spice makers pull promotion assets out of wartime food turmoil. E. M. Kelley. *il Sales Management* 52:84+ N 1 '43

That was 1942; a startling and eventful year in the history of merchandising. *Ptr Ink* 202:15-16+ F 5 '43

See also

Advertising
Buying habits
Cancellation of orders
Catalogs
Chain stores
Christmas business
Delivery of goods
Department stores—
Management
Display of merchandise
Exhibits, Traveling
Fashion
Gas industry—Merchandizing
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Jobbers
Mail order business
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Retail trade—Store management
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Salesmanship
Self service stores
Special sales

MERCHANT marine

See also

Free ports and zones
Insurance, Marine
Maritime law

Law

See Maritime law

Argentina

Success of Argentina's state merchant fleet. *For Comm W* 11:20 Ap 24 '43

Belgium

Rates of pay and working hours of seafarers; conditions in Belgium, Great Britain, the Netherlands, and Norway. *Int Labour R* 48: 23-42 JI '43

Canada

State monopoly; Dominion plans to run its international airlines and may operate ships. *Business Week* p106-7 My 22 '43

Chile

Chile acquires merchant ships to replace liners sold to United States. *For Comm W* 13:15 N 6 '43

France

French merchant navy. *Economist* 144:10 Ja 2 '43

Great Britain

Britain's merchant fleet; illustrations. *Engineer* 175:274, 294-5 Ap 2-9 '43
Britain's merchant fleet; statement by General council of British shipping. *Engineer* 175:138-9 F 12 '43
Plan for the training of personnel for the British merchant navy. *Int Labour R* 48: 369-73 S '43
Postwar shipping. *Economist* 144:213-14 F 13 '43
Rates of pay and working hours of seafarers; conditions in Belgium, Great Britain, the Netherlands, and Norway. *Int Labour R* 48: 23-42 JI '43
War-time British merchant ships. *il Engineering* 155:267-8, 270 Ap 2 '43

Ireland

Merchant navy for Eire. *Economist* 144:760 Je 12 '43

Netherlands

Netherlands merchant marine's operations. *For Comm W* 11:43 Ap 17 '43
Rates of pay and working hours of seafarers; conditions in Belgium, Great Britain, the Netherlands, and Norway. *Int Labour R* 48:23-42 JI '43

Norway

Norway's merchant marine renders notable services. *il For Comm W* 11:33 My 1 '43
Rates of pay and working hours of seafarers; conditions in Belgium, Great Britain, the Netherlands, and Norway. *Int Labour R* 48: 23-42 JI '43

South Africa

South African merchant fleet. C. M. Hoffe. *Engineer* 175:11 Ja 1 '43

MERCHANT marine—Continued

United States

- American merchant marine conference, New York, Oct. 15-16. Marine Eng 47:112-14 N '42
- Charting a postwar course for the American merchant marine. H. L. Vickery. Marine Eng 47:116-17+N '42
- 15-million-ton post-war fleet. E. S. Land. Marine Eng 48:172-5 Je '43
- Fight over ships; speed of postwar fleet. Business Week p 18 Ag 28 '43
- Legislation proposed to clarify Merchant marine act. Marine Eng 48:213 O '43
- Maritime commission studying combined ship-air operations. Aviation N 1:22 Ag 9 '43
- Maritime day observed throughout Nation. il Marine Eng 48:170-1+ Je '43
- Merchant fleet vital to welfare of America. J. L. Luckenbach. Weekly Underw 149:208+ J1 31 '43
- Merchant ship production in 1942; tabulation by companies. E. S. Land. Marine Eng 48:119 Ja '43
- Merchant shipping of the U.S. in wartime. il For Comm W 13:5-10, 30-1 O 2 '43
- Observers discuss difficulties that may be encountered in merchant marine plans. Weekly Underw 149:768 O 9 '43
- Planning the post-war merchant marine; American merchant marine institute, inc. presents ten-point program. Marine Eng 48:176-7 S '43
- Sea projects speed training of marine engineer officers. E. S. Hochuli. il Power 87:78-81 F '43
- Steamship industry's war and post-war problems. R. P. Stewart. Barron's 23:9+ Je 28 '43
- Tempest in ships; owners of seized vessels rebel against basis of charter rates paid by government. Business Week p30+ Je 26 '43
- USA calls for more experienced merchant seamen. Marine Eng 48:187 J1 '43
- U.S. Chamber of commerce views post-war shipping. Marine Eng 48:185 O '43
- U.S. transferring 150 to 200 merchant ships to Great Britain. Churchill discloses. Comm & Fin Chr 158:613 Ag 12 '43
- Urges maintenance of strong merchant marine in post-war years. F. E. Hasler. Comm & Fin Chr 157:426 Ja 28 '43
- Urges need for education regarding adequate merchant marine. A. M. Tode. Weekly Underw 149:896+ O 23 '43
- Use of Diesel engines in post-war marine service. R. Cramer, jr. il diags Marine Eng 48:207-9 O '43
- War job of the merchant marine. F. J. Taylor. Marine Eng 48:176-7 Je '43
- War problems of the merchant marine. E. S. Land. Marine Eng 47:114-16 N '42

See also

- | | |
|---|---------------------|
| Ship subsidies | United States— |
| Shipping—United States | Maritime commission |
| also United States merchant marine academy, Kings Point, New York | |
- MERCHANT** marine academy, Kings Point, New York. See United States merchant marine academy, Kings Point, New York
- MERCHANTS**
- What of soldier merchants? little trouble reported with drafted retailers. Credit & Fin Management 45:28+ Ap '43
- MERCHANTS** association of New York city. See Commerce and industry association of New York, inc.
- MERCK** and company
- Merck & co. charged with illegality in E. Merck pact. Oil Paint & Drug Rep 144:3+N '43
- MERCK** institute for therapeutic research
- Tenth anniversary. Science 97:417 My 7 '43; Chem & Eng N 21:784 My 25 '43; Oil Paint & Drug Rep 143:3+ My 3 '43
- MERCURATION**
- Influence of the 6-nitro-group on the halogenation, nitration, mercuration, and diazo-coupling of 6-nitro-1-naphthylamine and of some related naphthalides. H. H. Hodgson and H. S. Turner. Chem Soc J p391-4 Ag '43

MERCURY

- Attachment and detachment of dropping mercury under various conditions. I. M. Kolthoff and G. J. Kahan. il Am Chem Soc J 64:2553-7 N '42
- Continuum in the 1849A region in the afterglow spectrum of mercury. A. Wattenberg and H. W. Webb. Phys R 64:39-40 J1 1 '43
- Home-made still purifies mercury. diag Elec W 119:1974 Je 12 '43
- Mercury-balance pressure regulator. A. J. Bailey. bibliog diags Ind & Eng Chem Anal ed 15:283-4 Ap 15 '43
- Mercury bombs save precious metal in fluorescent lamps. Sci Am 167:281-2 D '42
- Mercury photosensitized reactions of ethylene at high temperatures. D. J. LeRoy and E. W. R. Steacie. bibliog J Chem Phys 10:676-82 N '42
- Minor metals, 1942. H. M. Meyer. Eng & Min J 144:75 F '43
- Pure mercury. E. Wichers. R Sci Instr 13:502-3 N '42; Same cond. Chem & Eng N 20:11-12 S 10 '42
- Solubility of metals in mercury; abstract. C. H. Prescott, jr. Metals & Alloys 17:626 Mr '43
- Some Transvaal minerals. Chem Age (Lond) 48:401-2 Ap 10 '43
- Structure of liquid mercury. J Ap Phys 14:465 S '43
- Structure of liquid mercury. J. A. Campbell and J. H. Hildebrand. bibliog J Chem Phys 11:330-3 J1 '43
- See also
- Amalgams
- Electric lamps, Mercury vapor
- Polarography

Analysis

- Detection and semiquantitative estimation of group I cations. S. S. Leikind, E. Maurmeyer and M. Cutler. Ind & Eng Chem Anal ed 14:871 N 15 '42
- Determination of mercury in rubber by the Volhard method; separation of iodine. C. L. Luke. bibliog diag Ind & Eng Chem Anal ed 15:597-9 S 15 '43
- Mercury vapor measurement; a radioactive method. C. Goodman, J. W. Irvine, jr. and C. F. Horan. bibliog diags J Ind Hygiene 25:275-81 S '43
- Microdetermination of mercury in organic compounds. H. W. Eckert. bibliog Ind & Eng Chem Anal ed 15:406-7 Je 15 '43
- Radioactive mercury in mercury-vapor measurements. J. W. Irvine, jr. and C. Goodman. bibliog diag J Ap Phys 14:496-8 S '43
- Some allyl nitrophenyl thiosemicarbazides and their analytical properties. A. W. Scott and J. T. Andrews. Am Chem Soc J 64:2873-4 D '42
- Specific tests for mercury with dithizone membrane papers. A. Steigmann. Soc Chem Ind J 62:43-4 Mr '43

Isotopes

- Radioactive isotopes of mercury. G. Friedlander and C. Wu. bibliog Phys R 63:227-34 Ap 1 '43
- Radioactive mercury in mercury-vapor measurements. J. W. Irvine, jr. and C. Goodman. bibliog diag J Ap Phys 14:496-8 S '43
- MERCURY** arc electric lamps. See Electric lamps, Mercury vapor
- MERCURY** arc rectifiers. See Electric rectifiers
- MERCURY** bromide
- Electromotive force of the mercurous bromide electrode. W. R. Crowell, R. W. Mertes and S. S. Burke. bibliog diag Am Chem Soc J 64:3021-3 D '42
- MERCURY** chlorides
- Determination of tin with mercuric chloride. J. G. Fairchild. bibliog Ind & Eng Chem Anal ed 15:625-6 O 15 '43
- Simple and efficient calomel half cell. F. L. Hahn. diag Science 98:140 Ag 6 '43
- MERCURY** compounds
- Iodomercurates. M. Meyer. J Chem Educ 20:145-6 Mr '43
- Merfenelopes; a new reagent for controlling slime in the manufacture of food papers; toxicity of phenyl mercuric compounds. H. R. Murdock. bibliog Paper Ind 25:634-S '43; Same. Pulp & Pa of Can 44:877-8 N '43

MERCURY electrode. See Polarography

MERCURY fulminate

Soap which indicates the presence of mercury fulminate. H. S. Mason and I. Botvinick. *bibliog Pub Health Rep* 58:1183-6 J1 30 '43

MERCURY industry and trade

Mercury remains on the strategic list. G. Gould. *il Min Cong J* 29:35-7 F '43

MERCURY metallurgy

Overcoming difficulties in feeding ore into a quicksilver furnace. W. Bradley. *il diags Min Cong J* 29:28-30 Je '43

Rotating pipe makes good calcine conveyor; solves burned rock disposal problem at mercury mine. W. Bradley. *il Eng & Min J* 144:74-5 Ap '43

MERCURY mines and mining

Arkansas

Arkansas travelogue; mining is being rejuvenated. E. Just. *il Eng & Min J* 143:63-4 D '42

Quicksilver deposits near the Little Missouri river, Pike county. D. Gallagher. *diag maps U S Geol S Bul* 936-H:189-219, pl 23-35; pa 55c Supt. of doc. '42

Unusual hanging wall shot; Arkansas quicksilver mines. R. L. Klotz, jr. *il diag plan Explosives Eng* 21:21-5 Ja '43

California

Chromite and quicksilver deposits of the Del Puerto area, Stanislaus county. H. E. Hawkes, jr., F. G. Wells and D. P. Wheeler, jr. *plans maps U S Geol S Bul* 936-D:79-110, pl 10-11; pa 30c Supt. of doc. '42

New Almaden mine, the first chemical industry in California. H. M. Leicester. *bibliog il J Chem Educ* 20:235-8 My '43

New Almaden today. J. B. Huttli. *il Eng & Min J* 144:59-61 Mr '43

Quicksilver deposits of the Parkfield district. E. H. Bailey. *U S Geol S Bul* 936-F:143-69, pl 17-20; pa 35c Supt. of doc. '42

Nevada

Wild Horse quicksilver district, Lander county. C. H. Dane and C. P. Ross. *maps U S Geol S Bul* 931-K:259-78, pl 45-7; pa 25c Supt. of doc. '42

MERCURY nitrate

Mercury cracking test; abstract. R. G. Johnston. *Metals & Alloys* 18:608 S '43

MERCURY ores

Some concepts on the geology of quicksilver deposits in the United States. C. P. Ross. *map bibliog (40 titles) Econ Geol* 37:439-65 S '42; Discussion. J. Pollock. 38:149-53 Mr '43

See also

Cinnabar

MERCURY poisoning

Safe limits on mercury and chromates in air work places. P. A. Neal and F. H. Goldman. *il Ind Stand* 14:79-80 Mr '43; Abstract. *Nat Safety N* 47:38 Je '43

MERGERS. See Business consolidations

MERRILL Lynch, Pierce, Fenner and Beane
Financial statement. *Comm & Fin Chr* 157:658 F 18 '43

MERULIUS lacrymans. See Wood—Decay

MERWINITE

Compound merwinite ($3\text{CaO} \cdot \text{MgO} \cdot 2\text{SiO}_2$) and its stability relations within the system $\text{CaO} \cdot \text{MgO} \cdot \text{SiO}_2$ (preliminary report). E. F. Osborn. *bibliog diags Am Cer Soc J* 26:321-32 O 1 '43

MESITYL group

Quinoxaline formation and the ortho effect. R. C. Fuson and others. *bibliog Am Chem Soc J* 65:1028-9 Je '43

MESITYL oxide

Solvents in industry. *Metal Finishing* 41:192-3 Mr '43

MESITYLENE

Kinetics of aromatic halogenation; bromination. P. W. Robertson, P. B. D. de la Mare and W. T. G. Johnston. *Chem Soc J* p276-9 Je '43

Thermodynamics and molecular structure of benzene and its methyl derivatives; the vibration frequencies of toluene, *o*-, *m*- and *p*-xylenes and mesitylene. K. S. Pitzer and D. W. Scott. *bibliog Am Chem Soc J* 65:817-24 My '43

MESONS. See Mesotrons

MESOTRONS

Absorption of the hard component of the cosmic radiation. M. E. Rose. *bibliog Franklin Inst J* 236:9-45 J1 '43

Cloud-chamber and counter studies of cosmic rays underground. V. C. Wilson and D. J. Hughes. *bibliog il diags Phys R* 63:161-71 Mr 1 '43

Cloud-chamber track of a decaying mesotron. R. P. Shutt, E. DeBenedetti and T. H. Johnson. *il Phys R* 62:552-3 D 1 '42; Same. *Franklin Inst J* 235:637-40 Je '43

Experimental determination of the disintegration curve of mesotrons. B. Rossi and N. Nereson. *bibliog diags Phys R* 62:417-22 N 1 '42

Further measurements on the disintegration curve of mesotrons. N. Nereson and B. Rossi. *diag Phys R* 64:199-201 O 1 '43

Intensity of cosmic rays at low altitude and the origin of the soft component. K. Greisen. *bibliog diags Phys R* 63:323-33 My 1 '43

Meson theory of the magnetic moment of proton and neutron. J. M. Jauch. *bibliog Phys R* 63:334-42 My 1 '43

Mesotron mass and heavy tracks on Mt Evans. C. E. Nielsen and W. M. Powell. *bibliog il Phys R* 63:384-5 My 1 '43

Nature of the primary particles responsible for cosmic-ray phenomena. W. F. G. Swann. *Phys R* 63:210-11 Mr 1 '43

Spin of the mesotron from burst measurements. R. E. Lapp. *Phys R* 64:265-6 O 1 '43

Strong coupling mesotron theory of nuclear forces. R. Serber and M. S. Dancoff. *Phys R* 63:143-61 Mr 1 '43

Theory of a mixed pseudoscalar and a vector meson field. W. Pauli and S. Kusaka. *Phys R* 63:400-16 Je 1 '43

Theory of cosmic-ray mesons. J. Hamilton, W. Heitler and H. W. Peng. *bibliog Phys R* 64:78-94 Ag 1 '43

Variation of mesotron intensity with altitude and latitude, together with allied phenomena, and the bearing of these matters on the nature of the primary particles. W. F. G. Swann. *Franklin Inst J* 236:1-7, 111-39 J1-Ag '43

Scattering

Calculations of the scattering of mesons by the matrix method. S. T. Ma. *bibliog Phys R* 62:403-11 N 1 '42

Relativistic theory of excited spin states of the proton and the neutron. V. L. Ginsburg. *bibliog Phys R* 63:1-12 Ja 1 '43

METABOLISM

Absorption and excretion of fluoride; the metabolism at high levels of intake. W. Machle and E. J. Largent. *bibliog J Ind Hygiene* 25:112-23 Mr '43

Candy vs. thirst. *Business Week* p66 Je 19 '43

Citric acid cycle; sugar and fat-breakdown in tissue metabolism. F. L. Breusch. *bibliog Science* 97:490-2 My 28 '43

Effect of urinary cortin-like material on carbohydrate metabolism. B. N. Horwitt and R. I. Dorfman. *bibliog Science* 97:337 Ap 9 '43

Energy cost of standing in horses. C. F. Winchester. *Science* 97:24 Ja 1 '43

Enzyme systems containing active sulfhydryl groups; role of glutathione. E. S. G. Barron and T. P. Singer. *Science* 97:356-8 Ap 16 '43

Ether and metabolism in the cerebral cortex. F. N. Craig. *bibliog Science* 98:63-9 J1 18 '43

Graphic representation of intermediary metabolism. O. S. Rask. *J Chem Educ* 20:373-6 Ag '43

Mechanism of insulin action: observations with radioactive phosphorus. J. Sacks. *Science* 98:388-9 O 29 '43

Transmethylation as a metabolic reaction. V. du Vigneaud. *Chem & Eng N* 21:524 Ap 10 '43

See also

Nutrition

METACHROME dyeing. See Dyes and dyeing
—Metachrome process

METAL cleaning

Adapting certain type vapor degreasers for cleaning small parts. B. D. Ostrow. *il Metal Finishing* 41:486-7 Ag '43
Brushing wheels break bottlenecks in weld joint preparation and weld cleaning. *il Steel* 113:107, 110+ Ag 2 '43

Chemicals that aid in aircraft production. R. Sanders. *il diags* S A E J 51:23-30 Ja '43

Clean inside, too; flushing oil system; Kearney & Trecker corp. C. H. Hochmuth. *il Steel* 113:98+ Ag 16 '43

Cleaning and finishing cartridge cases. A. J. Lehman. *il Iron Age* 152:40-2 O 21 '43

Cleaning and pickling. 1942. V. A. Lamb. *bibliog Metals & Alloys* 17:86-7 Ja '43

Cleaning machine gun belt links; illustrations with text. *Iron Age* 152:74-5 O 28 '43

Cleaning 20 and 155 mm. shells. S. G. Hawley. *il Iron Age* 151:42-5 Ja 21 '43

Cleaning welded metal surfaces; nickel, monel and inconel. K. M. Spicer. *il Sheet Metal Worker* 34:27-9 Je '43

Compressed air in industry. E. F. Bramin. *il Steel* 112:100+ Mr 8 '43

Evaluation of metal cleaners. H. Strow. *il Metals & Alloys* 18:503-5 S '43

Finishing warplugs; cleaning and pretreatment of aluminum. F. W. Faulhaber. *il Metal Finishing* 41:113-14, 116-19 F '43

Flyash blast cleans metal surfaces. S. H. Coleman. *il Power* 87:50 Ja '43

Kolene metal cleaning and tinning process for bearings; bonding high-lead babbitt to cast iron and to steel. *il Automotive & Aviation Ind* 89:40+ S 15 '43

Metal cleaning before processing. K. D. Kahn. *il Iron Age* 152:62-5 S 9 '43

Metal cleaning solutions; what they are, how to use them and why. E. W. Mitchell and M. T. Zinty. *Am Mach* 87:105-7 My 13 '43

Preparation of arc welded machinery for finishing. W. J. Brooking. *il Metal Finishing* 41:671-4 O '43

Preparing metal surfaces before finishing; abstract. E. C. Rinker. *Iron Age* 152:67-8 JI 15 '43

Processing layouts for metal cleaning. C. W. Smith. *diags Am Mach* 87:101-4 JI 22; 97-8 Ag 5; 97-8 Ag 19 '43

Proposed methods of chemical analysis of industrial metal cleaning compositions. *diags Am Soc T M Proc* 42:407-22 '42

Quick positive test to show when metal surfaces are chemically clean. C. Nielsen. *Steel* 113:106, 108+ O 4 '43

Rate of saponification in metal cleaning, a preliminary study; abstract. R. Twynning and E. M. Baker. *Iron Age* 152:67 JI 15 '43

Removing scale and sludge by chemical treatment. L. W. Lee and E. C. Hardy. *il diags Steel* 113:106+ N 1 '43

Simple cleaning tanks for small-lot metal washing. E. W. Mitchell and M. T. Zinty. *diags Am Mach* 87:94-6 My 27 '43

Swarf washing and oil-recovery plant. *il diags Engineering* 155:46-7 Ja 15 '43

30th buyers reference number. *il Am Mach* 87:340-3 Ja 21 '43

What makes a metal-cleaning program. R. W. Mitchell and M. T. Zinty. *il Am Mach* 87:86-8 Ap 29 '43

See also

Castings—Cleaning	Sand blast
Pickling (metals)	Steel—Cleaning

Bibliography

Annotated bibliography of aluminum cleaning. J. C. Harris and R. B. Mears. *il Metal Finishing* 41:348-51, 423-5, 498-9 Je-Ag '43

METAL cleaning, Electrolytic

Automatic processing plant; descaling of metals; oxidation from atmosphere. *diags Chem Age (Lond)* 47:533-4 D 12 '42

METAL coating

Alloy-sprayer coats new work, regalanizes old material, patches weld-burned areas. *il Steel* 113:116+ JI 19 '43

Alternative materials; developments of electrical interest for panels and screening; metal-treated boards and fabrics, Metrelite; Nuprint panels. *Electrician* 130:270 Mr 12 '43

Applications of metallizing in water works practice. J. S. Stevens. *Am Water Works Assn J* 35:53-7 Ja '43

Critical metal conservation by spraying; Riverbend mill of Price brothers & company; with cost data. J. Frisch. *il diags Pulp & Pa of Can* 44:307-10 Mr '43

Development of the hot spraying of powdered materials. W. E. Ballard. *il diags Chem & Ind* 62:190-4 My 22 '43

\$85,000 conservation idea; parts reclaimed by metallizing. W. A. Duvall. *il diags Bus Transportation* 21:568-9 D '42

Electric bonding saves vital war material by metallizing. L. E. Kunkler. *il Oil & Gas J* 42:66, 69-70 Je 17 '43

Extruding coatings on welding electrodes. H. Chase. *il Iron Age* 151:67-9 F 11 '43

Here's how to keep 'em running; metal spraying valuable in rejuvenating worn equipment; Public service coordinated transport. *il Steel* 113:91-2 Ag 16 '43

How to conserve our supplies of cadmium; substitution of other coatings; improved plating practice. K. G. Soderberg. *il Steel* 113:202-4 O 11 '43

How to recondition worn pump shafts and rods. *il diags Welding J* 22:248-9 Ap '43

Increasing black liquor pump life. W. W. Krauss. *il Paper Ind* 25:511-12 Ag '43

Low-temperature spraying of metals. *il Iron Age* 151:81 Je 10 '43

Metal spray keeps 'em Dieseling; Chicago motor coach co. *il Bus Transportation* 22:46-7 F '43

Metal spraying now extended to all flat and irregular surfaces; Fuse-bond process. C. K. Wilson. *il Steel* 112:98+ My 10 '43

Metal spraying solves a finishing problem; manufacture of Speed nuts. E. C. Overstreet. *il Metal Finishing* 41:634-6 O '42

Metallizing as a method of water works maintenance. C. E. Palmer. *il Water Works & Sewerage* 89:391-6 S '42; Same cond. *Am Water Works Assn J* 34:1374-80 S '42; Same cond. *Water & Sewage* 80:20+ D '42; 81:16-18+ Ja '43; Abstract. *Eng'N* 129:102 JI 16 '42

Metallizing crankshafts in an engine lathe. W. B. Meyer. *il diags Diesel Power* 21:121-4 F '43; Same abr. *Welding J* 22:426-9 Je '43

Metallizing for better maintenance. L. E. Kunkler. *il diags Aviation* 42:231, 233, 235+ Ja '43

Metallizing in the refinery. J. E. Young. *Pet Eng (Ref annual)* 14:225-7 JI 1 '43

Metallizing kills turbine tip losses. *il Elec W* 120:1532 O 30 '43

Metallizing repairs turbine shaft. *il diags Elec W* 118:2134 D 26 '42

Metallizing restores press ram; abstract. G. E. Morgan. *diags Power* 87:466 JI '43

Modern shop eases mechanical-mining maintenance; Superior coal co. *il Coal Age* 48:80-1 Ap '43

Motor shaft trued by spray metallizing. *il diags Elec W* 118:1810+ N 28 '42

Preparation of hardened surfaces for metallizing; fuse-bond process. W. C. Reid. *il diags Iron Age* 151:62-5 F 18 '43

Preparation of metal coatings for microscopic examination. W. R. Meyer. *il Metal Finishing* 41:627-30+ O '43

Protecting refinery equipment by sprayed metal coatings. *il Nat Pet N* 35 pt 2:R102-4 Mr 3 '43

Protective metal coatings for foundry patterns. *il Iron Age* 151:66 My 6 '43

Railroads extend use of metallizing. *il diags Am Mach* 86:1354-6 N 26 '42

Reclaiming Kirksite dies in aircraft manufacture; metal spraying. *il Steel* 111:66+ D 28 '42

Reclaiming worn sheaves. F. L. Spangler. *il Oil & Gas J* 41:55 F 11 '43; Same. *Roads & Sts* 86:86-7 F '43; Same. *Safety Eng* 85:11-12 F '43; Same. *Mfn Cong J* 29:34 Je '43; Same cond. *Steel* 113:100+ Ag 16 '43

Reclaiming worn spindles with metallizing. *il diags Rayon* 24:611-12 N '43

Reclamation by metal spraying. *il Ry Mech Eng* 117:272-3 Je '43

Reconditioning used equipment by metal-coating worn parts. C. K. Stipp. *il Oil & Gas J* 41:65, 67-9 Mr 18 '43

METAL coating—Continued

- Reducing scrap piles and maintenance costs; reclamation of parts of machinery by metal spraying. *Il diag Power Pl Eng* 47: 92-4 Ag '43
- Repair worn parts and surfaces by welding and metallizing. H. Filippi. *Brick & Clay Rec* 102:22 Ap '43
- Repairing worn ways on engine lathes by metallizing. C. A. Shaffer. *Mach* 49:218+ JI '43
- Selecting metallic coatings for machine parts. R. K. Lotz. *Il Machine Design* 15:87-90+ O '43
- Sprayed metal saves material; American sugar refining co. *Il Power* 87:115-17 F '43
- Spraying defective metal parts. J. E. Hubel. *Il Foundry* 71:191-2 O '43
- Systematic identification of the common metallic coatings. H. Nechamkin and A. Sanders. *Ind & Eng Chem Anal ed* 14:913-14 N 15 '42
- Technique of metallizing to protect equipment from wear and corrosion. J. E. Young. *Il Nat Pet N* 35 pt 2:R185-7 Ap 7 '43
- Worn compressor shaft metallized in place. *Il diag Comp Air M* 48:7118-19 Ag '43; Same cond. *Roads & Bridges* 81:62+ S '43

See also

- | | |
|----------------------|------------------|
| Electroplating | Metal protection |
| Enamel and enameling | Pipe coating |
| Galvanizing | Plating |

Testing

- Coating-thickness tests; composite of abstracts. *Metals & Alloys* 16:1160+ D '42

METAL coloring

- Black finishes for ferrous and non-ferrous parts; Oxidine finishes and Jetal process. *Iron Age* 151:58 Je 24 '43
- Language and application of colors to metals. E. Engel. *Metal Finishing* 41:488-90 Ag '43
- Novelties in electroplating; multicolored electroplates from ammonium molybdate solutions; abstract. O. P. Watts. *Iron Age* 152: 56+ O 21 '43
- Observations on black nickel. E. Schore. *Metal Finishing* 41:77-9 F '43

See also

- Aluminum—Coloring
- Metals, Non-ferrous
- Blackening
- Steel—Blackening

METAL construction*See also*

- Sheet metal work,
- Architectural
- Steel construction

METAL cutting

- Friction cutting; metals and other materials; bandsaw operated at extremely high speeds. A. A. Schwartz. *Il Steel* 113:104-5 N 8 '43
- Getting the best results from cutting tools; symposium on cutting of metals at annual meeting of American society of mechanical engineers. *Mach* 49:163-5 Ja '43
- How to salvage chips and oil; why it pays. W. Heymann. *diags Factory Management* 101:124-6 F '43
- Large radii cut without special tools. E. D. Rothrock. *diags Am Mach* 87:96-8 My 13 '43
- Low-expansion alloy made free-machining. *Il Steel* 112:90+ Je 28 '43
- Low-expansion alloy made free-machining; Invar. *Il Iron Age* 151:57 My 20 '43
- Machinability and output; abstract. O. W. Boston. *Metals & Alloys* 18:578+ S '43
- Machinability of metals. A. M. Portevin. *Metal Prog* 44:107-8 JI '43
- Machinability ratings and cutting fluid recommendations; Independent research committee on cutting fluids, American society of tool engineers. *Automotive & Aviation Ind* 88:48, 50, 52 Ap 15 '43
- Machinability ratings of metals and cutting fluid recommendations. O. W. Boston and others. *Metal Prog* 44:622-4, 624A O '43
- Machining aluminum. R. L. Templin. *Il diags Automotive & Aviation Ind* 87:38-42 N 15 '42
- Machining and forming 14ST aluminum alloy. *diag Iron Age* 152:65-7 N 11 '43

- Machining. 1942. H. Ernst and M. E. Merchant. *Metals & Alloys* 17:58-9 Ja '43
- Machining of magnesium. A. M. Lennie. *diags Am Mach* 87:86-8 Mr 4; 88-90 Mr 18; 82-4 Ap 1 '43

- Metal cutting with abrasive wheels. W. B. Heinz. *Il A S M E Trans* 65:21-6; Discussion. 26-9 Ja '43

- Methods for cutting aircraft sheet metal; reference book sheet. *Il diags Am Mach* 87: 109, 111 S 30; 141, 143 O 14 '43

- Pneumatic cutter shears 2,500 rivets a day. S. D. Gardner. *Il diags Am Mach* 87:109 JI 22 '43

- War accelerates technical progress. *Steel* 112: 332-4+ Ja 4 '43

- Working of cast copper-base alloys; machining and finishing operations. *diags Am Mach* 87:133-40 O 14 '43

See also

- | | |
|---------------------|----------------------|
| Broaching | Machine work |
| Cutting tools | Milling |
| Drilling and boring | Milling cutters |
| (metal working, | Oxyacetylene cutting |
| etc.) | Saws, Metal working |
| Gear cutting | Screw machines |
| Lubrication and | Steel cutting |
| lubricants (cutting | Thread cutting |
| and grinding) | Tool steel |
| Machine tools | |

Tables, calculations, etc.

- Machining allowances for seamless tubing; reference book sheet. *diags Am Mach* 87: 125, 127 Ag 19 '43

- Machining aluminum. *Aviation* 41:183, 185 D '42

- Recommended tool angles, feeds, speeds, etc. for machining with cemented-carbide tools; data sheets. C. G. Williams. *Mach* 49:163 D '42; 137 Ja; 185 F '43

- Take a healthy chip; calculations of feeds. F. J. Wintersdorff. *Am Mach* 87:87-9 Ag 5 '43

- Tool bit design; data for the machining of various materials. *diags Aviation* 42:173, 175 Mr '43

METAL drawing

- Carbide dies for steel shell cases. E. Glen. *Il diags Metals & Alloys* 17:538-8 Mr '43

- Deep-drawing helps to build Flying Fortresses. B. K. Bucey. *Il Mach* 49:186-91 JI '43
- Deep drawing tests; abstract. *Metals & Alloys* 17:852+ Ap '43

- Drawn box shapes of various aluminum alloys. T. H. Hazlett. *Il Product Eng* 14:517-20 Ag '43

- Drawn cylindrical shapes of various aluminum alloys. T. H. Hazlett. *Il diag Product Eng* 14:425-8 JI '43

- Heat treatment; processes connected with the extrusion and drawing of light alloys. *Il Elec R (Lond)* 133:397-401 S 24 '43

- Huge press draws cowl ventilators for Liberty fleet. A. R. Boone. *Il Steel* 112:104, 106+ Mr 15 '43

- Improved method reduces costs and boosts output in drawing chromium-molybdenum steel; Walter Kidde & co. production of high-pressure cylinders for carbon dioxide and oxygen. I. H. Such. *Il Steel* 113:90-1+ N 1 '43

- New development in cold drawing of steel. *Il Automotive & Aviation Ind* 89:96 JI 15 '43

- Phosphate coatings aid metal drawing. A. Durer and others. *Iron Age* 152:59-60 S 30 '43

- Power presses; die cushion size and ring holding pressure required; tonnage capacity. *Aviation* 41:161, 163 N '42

- Progressive die is oil-operated; drawing rear brake drum web. H. Chase. *diags Am Mach* 87:89-91 Mr 4 '43

- Properties of rubber as used in metal drawing and pressing. L. J. Brown. *diags Steel* 113:130, 132+ JI 19; 80, 82, 105-6 JI 26 '43

- Steel cartridge cases for 37-mm. shell. C. L. Patterson and H. R. Turner. *Il diags Am Mach* 87:113-24 JI 22 '43

- Steel cartridge cases; wartime developments to have far-reaching influence on future deep-drawing practice. H. R. Turner. *Steel* 112:46-8+ Ja 18 '43

- Stress-strain measurements in the drawing of cylindrical cups. E. L. Bartholomew, Jr. *Il diag Am Soc for Metals Trans* 31:582-93; Discussion. 593-8 S '43

METAL drawing—Continued

Technical developments in high-production sheet metal forming. W. Schroeder and T. H. Hazlett. *il* diags S A E J 51:170-92 My '43

Test for measuring drawability of deep-drawing steels; abstract. F. W. Boulger and F. B. Dahle. *Iron Age* 152:73-4 Ag 5 '43

Two-stage drawing of cylindrical cups. H. W. Swift. *diags Engineering* 156:137-40, 178-80, 199-200, 219-20 Ag 13, 27-S 10 '43

See also

Wire drawing

Metal finishing

Advantages and limitations of black-oxide coatings. M. Weisberg and E. A. Parker. *il* *Product Eng* 14:294-7 My '43; Correction. 14:455 J1 '43

Bearing and tool damage by galling. E. L. Hemingway. *il* *Iron Age* 152:54-60 J1 15 '43

Cleaning and finishing cartridge cases. A. J. Lehman. *il* *Iron Age* 152:40-2 O 21 '43

Coated abrasive gadgets speed finishing operations. *il* *Iron Age* 151:48-51 F 25 '43

Coating by the electric spray method. H. Ransburg. *Metal Finishing* 40:621-3 N '42; Same. *Steel* 112:126+ Je 7 '43

Concentricity testing fixture. *diags Mach* 50:174-5 S '43

Conveyors save space in aircraft plant; finishing operations. F. M. Bates. *il* *diags Metal Finishing* 41:58-9 Ja '43

Effects of residual stress on the fatigue of metals. J. O. Almen. *il* *diags Product Eng* 14:348-52 Je '43; Abstract. *Iron Age* 151:63-4 My 27 '43

Equipment for solving burring problems; abstracts of American electroplaters' society papers. *Iron Age* 152:61-2+ J1 1 '43

Fatigue of metals as influenced by design and internal stresses. J. O. Almen. *il* *diags Metal Prog* 43:209-15+, 737-40; 44:254-61, 435-40 F, My, Ag-S '43; Same cond. *Automotive & Aviation Ind* 88:28-32+ F 1: 28-31+ F 15 '43; Same cond. *Steel* 112:88-9+ Mr 8; 112, 146-9 Ap 5 '43

Finding a new foreman for the metal finishing department. F. V. Faulhaber. *Metal Finishing* 41:491-2 Ag '43

Finishing aluminum parts for military aircraft. *Product Eng* 14:99-100 F '43; Same. *Metal Finishing* 41:257-9 Ap '43

Finishing equipment. *il* *Iron Age* 152:78 O 7 '43

Finishing metals by band filing. H. J. Chamberland. *il* *Iron Age* 151:54-6 Mr 4 '43

Finishing of filters. C. Cleveland. *il* *Metal Finishing* 40:687 D '42

Foster general-purpose super-finishing machines. *il* *Automobile Eng* 32:529-30 D '42

Glycerine usage in metal treatment. G. Lefingwell and M. A. Lesser. *bibliog Metal Finishing* 41:272-4 My '43

Good finish despite war restrictions; Cincinnati Bickford tool company. G. H. Robertson. *il* *Am Mach* 87:104-5 O 28 '43

Grinds tools to give rough finish. *il* *diags Factory Management* 101:144 Ja '43

International superfinishing machine. *il* *Steel* 111:154-5 D 7 '42

Machine-finish allowances for castings. N. F. Hindle. *Metals & Alloys* 17:1213 Je '43

Mechanical finishing of aluminum alloys; tabulation. *Aviation* 41:185 D '42

Metal finishing of aircraft; abstract. E. R. Irwin and J. Teres. *Metals & Alloys* 17:1034+ My '43

New equipment. *il* *Iron Age* 150:48-53 D 24; 48-9 D 31 '42; 152:68-70 J1 22; 56-8 J1 29 '43

New trails in surface finishing aircraft engine parts. *Steel* 113:102, 104+ J1 5 '43

Ohio superfinishing machine. *il* *Engineering* 156:226 S 17 '43

Plating and finishing. 1942. R. M. Burns. *Metals & Alloys* 17:85 Ja '43

Polishing, buffing and burring compounds are playing a vitally important part in the war program. H. J. McAleer. *il* *Metal Finishing* 41:144-5 Mr '43

Polishing with glue-abrasive mixtures. J. F. Siefen. *il* *Iron Age* 151:56-7 Mr 18 '43

Possible substitutes for metal finishing materials; list. *Metal Finishing* 41:354-5, 432-3 Je-J1 '43

Preparation of surfaces for hard chromium plating. A. W. Logozzo. *il* *Metal Finishing* 41:15-18 Ja '43

Radiant gas heat in baking, curing and drying operations. C. P. Mann. *il* *diag Gas Age* 92:21-3+ S 9 '43; Excerpts. *Iron Age* 152:58-9 J1 22 '43

Reference table of new materials and finishes of 1942. F. P. Peters, comp. *Metals & Alloys* 17:101-14 Ja '43

Roto finishing processes. *Metal Finishing* 40:661 D '42

Shot blasting to increase fatigue resistance. J. O. Almen. *bibliog il* *diags S A E J* 51:248-68 J1 '43; Same cond. *Iron Age* 151:65-9+ Je 10 '43; Same cond. *Machine Design* 15:124-9+ Je '43; Same cond. *Mech Eng* 65:553-58 Ag '43; Excerpts. *Aero Digest* 42:217-18, 223+ Je '43

Smoothing out the rough spots; power-driven brushes. V. E. Brink. *il* *Comp Air M* 48:7170-1 O '43

Stripping lacquer protects fine finishes in process and assembly; Protektol. *il* *Iron Age* 151:61 F 11 '43

Super-finishing machine. *il* *Engineer* 176:83 J1 9 '43

Surface finish and the function of parts. G. Schlesinger. *diags Engineer* 175:434-6, 454-6, 466-7 My 28-Je 11 '43; Same cond. *Engineering* 155:458-60, 478-80, 498-9 Je 4-13 '43; Discussion. *Engineer* 175:429-30 My 28 '43; *Engineering* 155:434, 454-5, 464-5 My 28-Je 11 '43

Surface finish of journals. R. W. Dayton, H. R. Nelson and L. H. Milligan. *bibliog il* *diags Mech Eng* 64:718-26 O '42; Discussion. 65:367-72 My '43

Surface finishing methods for aircraft engines. F. M. Reck. *il* *Aero Digest* 42:213, 215+ Je '43

Surface protection of magnesium. S. H. Bar-masel. *il* *Iron Age* 151:44A-44D Ap 22 '43

Technical developments of 1942. N. Hall and G. B. Hogaboom, jr. *Metal Finishing* 41:3-9 *bibliog* (204 references, p8-9) Ja '43

30th buyers reference number. *il* *Am Mach* 87:338-45 Ja 21 '43

War accelerates technical progress. *Steel* 112:316-18+ Ja 4 '43

Wartime finish of machinery and plant. *Engineer* 175:366-7 My 7 '43

Weld finishing; abstract. E. G. West. *Metals & Alloys* 18:884+ O '43

Working of cast copper-base alloys; machining and finishing operations. *diags Am Mach* 87:133-40 O 14 '43

See also

Bonderizing

Grinding

Lacquer and lacquer-

ing

Metal cleaning

Metal coating

Metal coloring

Metal protection

Pickling (metals)

Polishing

Sand blast

Shot blasting

Tumbling barrels

Dictionaries

Dictionary of metal finishing chemicals. *Metal Finishing* 41:23-4 Ja '43 [will be cont. regularly until the dictionary is complete]

Patents

Patents. Published in monthly numbers of *Metal finishing*

Standards

Development of standards for army ordnance finishes. M. R. Norton. *bibliog il* *Mech Eng* 64:703-17 O '42; Discussion. 65:285-7 Ap '43

Surface finishes on machined parts; their inspection and comparison. W. Mikelson. *bibliog il* *diags Steel* 112:62, 64, 67 Ja 25 '43; Same. *Gen Elec R* 46:185-8 Mr '43; Same cond. *Iron Age* 150:56-8 S 10 '42

METAL foils

Effect of oblique incidence on the conditions for single scattering of electrons by thin foils. G. Goertzel and R. T. Cox. *diag Phys R* 63:37-40 Ja 1 '43

Electron polarization. C. G. Shull, C. T. Chase and F. E. Myers. *bibliog diag Phys R* 63:29-37 Ja 1 '43

Foil's big bid; Reynolds metals co. prepares for revolution in packaging materials. *il* *Business Week* p18 Ja 16 '43

METAL foils—Continued

Mechanical properties of metal foils. B. Chalmers and P. W. Seddon. *Metal Prog* 44: 424+ S '43; *Abstract. Elec R (Lond)* 131: 816 D 25 '43

See also
Columbium foil

METAL handling

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Sheet metal handling

METAL powders

Designing powder metal machine parts. C. Carmichael. *il Machine Design* 15:124-7+ N '43

Inflammability and explosibility of metal powders. I. Hartmann, J. Nagy and H. R. Brown. pls U S Bur Mines Rep of Invest 3722:1-44 '43

Kux automatic press for powdered metal. *il Iron Age* 151:55 F 4 '43

Metal time-saver; briquetting and sintering of ferrous powders and alloys. *Business Week* p55-6 Je 26 '43

Micro-hardness tester, new tool in powder metallurgy. R. Steinitz. *il Metals & Alloys* 17:1183-7 Je '43

Plastics and plasticity. E. V. Crane. *Iron Age* 152:84-5 Ag 12 '43

Powder hardness can now be measured on single metal grains. *Sci Am* 169:182-3 O '43

Powder metallurgy; abstract. W. D. Jones. *Chem Age (Lond)* 47:553 D 19 '42

Powder metallurgy; abstracts. W. D. Jones. *Chem & Ind* 62:78-81 F 27 '43; *Engineering* 155:224, 244-5 Mr 19-26 '43

Powder metallurgy and its relation to the electroplating industry; abstract. J. F. Kuzmick. *Iron Age* 152:70-1 Jl 8 '43

Powder metallurgy center holds no fears for outlook after war. *Iron Age* 151:96 Je 3 '43

Powder metallurgy; Chrysler corp.'s Amplex division. F. M. Reck. *il Aero Digest* 42:170, 173-4 Ja '43

Powder metallurgy; fundamentals in production of moulded parts for engineering purposes. O. W. Ellis. bibliog *il Can Chem & Process Ind* 27:382-6+ Jl '43

Powder metallurgy, 1942. F. C. Kelley. *Metals & Alloys* 17:38-9 Ja '43

Powder metallurgy; round-up of important industrial factors. *Sci Am* 169:29-30 Jl '43

Powder metallurgy; symposium. *Metals & Alloys* 17:1046+ My '43

Powder metallurgy used for war production; magnets, lam, filaments; Westinghouse electric and manufacturing company. P. R. Kalscher. *Marine Eng* 48:212 Je '43

Powder metals find wide use. *il Am Mach* 87: 83-6 Je 24 '43

Powdered metal facings for clutches and brakes. M. S. Adler, R. B. Aufmuth and F. J. Lowey. *il Product Eng* 14:218-21 Ap '43

Wartime developments in powdered metal parts. *il diags Product Eng* 14:472-5 Ag '43

See also
Aluminum, Powdered
Iron, Powdered

Bibliography

Powder metallurgy; a review of its literature. C. B. Carpenter. rev ed 55p pa 50c Colorado school of mines, Golden, Colo. '41

METAL products

Powder metals find wide use. *il Am Mach* 87: 83-6 Je 24 '43

See also
Castings
Forgings

METAL protection

All-America package competition award; Adel precision products corp. cellophane bags for protecting shipments of metal parts. *il Mod Packaging* 16:114+ Ap '43

Cathodic protection of metals in ice plants. R. W. Warner and A. J. McCrocklin, jr. (*Engineering research ser.* 36) 30p Bur. of engineering research, Univ. of Texas, Austin '43

Chemicals that aid in aircraft production. R. Sanders. *il diags S A E J* 51:23-30 Ja '43

Corrosion and paint; abstract and discussion. T. P. Hoar. *Chem Age (Lond)* 47:470-1 N 28 '42

Corrosion of sludge digester parts corrected by application of cathodic protection. G. A. Parkes. *il diags Water Works & Sewerage* 90:sup250-4 Je '43

Cylinder and ring life with porous chromium-plated rings. T. C. Jarrett. *il Mech Eng* 65:633-5 S '43

Engineering fundamentals of aircraft finishing. A. L. Johnson and J. J. Oudhoff. *il Aero Digest* 43:171-3+ S '43

Hard chrome plating for wear resistance and salvage. S. H. Brams. *il Iron Age* 151:56-7+ F 4 '43

How critical war materials were saved at Atlanta; renovation and rustproofing applied to two filter plants. P. Weir. *il Water Works & Sewerage* 90:189-95 Je '43

Importance of phosphate treatment and paint in rustproofing. G. H. Pimbley. *Metal Finishing* 41:473-4+, 536-7+ Jl-Ag '43

Indium surface-alloys resist corrosion and wear. *il Product Eng* 14:630-2 O '43

Iridite process; method of protecting zinc and cadmium surfaces against corrosion. *Metal Finishing* 41:578 S '43; *Steel* 113:124 O 4 '43

Iron and steel corrosion prevention; fixing zinc in powder form to chemically prepared surface. V. C. J. Nightingall. *Iron Age* 152:64 S 2 '43

Making metal last with paint. *il Sheet Metal Worker* 34:33-4 O '43

Metal finishing of aircraft; abstract. E. R. Irwin and J. Teres. *Metals & Alloys* 17: 1034+ My '43

New finish for metal; Chicago vitreous enamel product co. develops Armor-Vit. *il Cer Ind* 40:77-8 Ap '43; *Steel* 112:150-1 Ap 12 '43

New phosphate coatings with unusual corrosion resistance. G. Jernstedt. *il Electrochem Soc Trans* 83 (preprint 30):323-35 Ap '43; *Abstract. Steel* 113:95-6 D 27 '43

Organic finishes in the war. C. A. Lankau. *il Metal Finishing* 41:397-8+ Je '43

Packaging materials required for preservation; army-navy aeronautical specifications. D. R. Weedon. *il Paper Tr J* 117:29-32 N 11 '43; *Same cond. Paper Ind* 25:774, 776-+ O '43

Phosphate coatings conserve critical materials and speed up production. W. K. Cusick. *Metal Finishing* 41:184-5 Mr '43

Rust-inhibiting wax coatings. W. Bridgeman. *il Steel* 112:122+ Ap 5 '43

Rust resistant finish for metal; Armor-Vit, essentially an alkali alumina silicate. *il Iron Age* 152:50 Jl 22 '43

Rustproof coatings; electro-deposited finishes on iron and steel components. H. Silman. *Automobile Eng* 33:195-8 My '43

Slushing type rust preventives. S. L. Bishkin. bibliog *il diags Nat Pet N* 35 pt 2: R225-6+ My 5 '43

Small tools; results of the Macrome treatment. *Automobile Eng* 33:169 Ap '43

Stripping lacquer protects fine finishes in process and assembly; Protektol. *il Iron Age* 151:61 F 11 '43

Surface protection of magnesium alloys; abstract and discussion. N. Parkinson and J. W. Cuthbertson. *Engineering* 156:274 O 1 '43

Synthetic coatings protect engine parts; Resistoflex coated containers. *il Aviation* 41:169 D '42

Temporary transparent coating to protect finished surfaces; Protektol. *Mach* 49:204-5 D '42

See also
Aluminum—Protection
Bonderizing
Chromium plating
Corrosion and anti-corrosives
Electroplating
Enamel and enameling
Galvanizing

Lead coating
Magnesium—Protection
Metal coating
Paint, Protective
Pipe coating
Pipe lines—Protection
Steel—Protection
Zinc—Protection

Electrolytic process

Boiler scale prevention; electrical treatment of feed water; Kirkaldy and Agfil systems of metal protection. H. Seymour. *Electrician* 129:525-7 N 13 '42

METAL spinning

Controlled tube-closure process. *il Steel* 112: 88-9 F 15 '43

Induction heater speeds tube forming; cooler for transformer. W. Scott. *il Iron Age* 152: 58-9 S 23 '43

Spinning brass primer tubes; Wolverine tube division, Calumet and Hecla consolidated copper co. H. A. Knight. *il Metals & Alloys* 18:298-301 Ag '43

Spinning high explosive bomb casings; combination of automatically controlled spinner and Tocco induction heating; Wheeling steel corp. *il Iron Age* 151:71 Je 17 '43

Tubular parts simplified by tube spinning process. *il diags Product Eng* 14:153-5 Mr '43

Wolverine announces details of tube spinning process. *Iron Age* 151:58-60 Ja 28 '43

Wolverine spun end process. *il Automotive & Aviation Ind* 88:39 F 15 '43

METAL spraying. See Metal coating

METAL trade

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Aluminum industry and trade	Metal workers
Copper industry and trade	Metals—Prices
Hardware industry and trade	Metals, Non-ferrous
Iron industry and trade	Scrap metal
Lead industry and trade	Sheet metal trade
Manganese industry and trade	Steel industry and trade
Mercury industry and trade	Tin industry and trade
	Tin plate
	Zinc industry and trade

Directories

Where to buy; manufacturers of metals and metal working equipment. *Metal Prog* 44: B9-B50 sec 2 J1 '43

Finance

Changing status of the metals; position of leading stocks. S. Devlin. *il Mag of Wall St* 72:526-9, 543 Ag 21 '43

Dubious post-war prospect weighs heavily on non-ferrous metal stocks; position of leading stocks. *Mag of Wall St* 71:596-7+ Mr 6 '43

Statistics

Ferro-alloy metals, 1942. *Eng & Min J* 144: 72-3 F '43

Minor metals, 1942. *Eng & Min J* 144:74-5 F '43

See also

Metals, Non-ferrous—Statistics

Canada

Canada rated as greatest base metal exporting country in world. *Iron Age* 152:136+ J1 8 '43

Government aid increases metals output to supply other nations. *Steel* 112:88 Mr 15 '43

Value of Canadian output, 1941 and 1942. *For Comm W* 10:28-9 Mr 27 '43

Great Britain

Interrelation of the non-ferrous metal industries in England and the United States. C. G. Fink. *Chem & Ind* 61:444-5 O 31 '42

United States

Interrelation of the non-ferrous metal industries in England and the United States. C. G. Fink. *Chem & Ind* 61:444-5 O 31 '42

1942; creditable industrial performance; 1943 brings new and untried emergencies. T. W. Lippert. *flow chart il Iron Age* 151:48-65, 65A-65E Ja 7 '43

Post-war planning in the metal industries. H. A. Knight. *il Metals & Alloys* 18:802-8 O '43

Postwar products planning and raw materials sources. C. E. Williams. *Min & Met* 24: 268-70 Je '43; Same, with *il Chem & Eng N* 21:1035-40 J1 10 '43

METAL-washing machines. See Washing machines (for metal parts)

METAL waste

How to salvage chips and oil; why it pays. W. Heymann. *diags Factory Management* 101:124-6 F '43

Modern chip handling. A. M. Perrin. *plan Metal Prog* 43:566-7 Ap '43

See also

Scrap metal

Slag

Tailings

METAL work

Engineering file facts; comparison of high production methods for small parts. R. S. Burpo, Jr., comp. *Metals & Alloys* 17:343 F '43

Hot working temperatures; chart. K. Rose, comp. *Metals & Alloys* 18:817 O '43

Plastics and plasticity; plastic working of metals and non-metallic materials. E. V. Crane. *Iron Age* 152:34-40 J1 29; 64-9+ Ag 5; 80-5 Ag 12; 54-9 Ag 19; 60-5 Ag 26 '43

Questions and answers for power engineers; construction materials and details; heat treatments and processes. A. Higgins. *Pow-er* 87:482-4 J1 '43

War accelerates technical progress. *il Steel* 112:265-348 Ja 4 '43

Wartime engineering achievements. *il Metals & Alloys* 18:764-808 O '43

See also

Aluminum work	Metal cutting
Brass founding	Metal drawing
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Machine shop prac-	Tin plate
tice	Tubes, Steel—Manu-
Machine tools	facture
Metal coloring	Welding

Bibliography

Metallurgical engineering digest; important developments in the world of metals. Published in monthly numbers of *Metals and alloys*

What's new in manufacturers' literature; metals, metal work, equipment, etc. *Metal Prog* 43:130+ Ja '43 [cont monthly]

Patents

Help yourself to patents seized from foreign nations; representative lists of some applications of value to metal and metalworking industries. *Iron Age* 152:115-16+ J1 8 '43

METAL work, Architectural

See also

Copperwork, Archi-	Sheet metal work,
tectural	Architectural

METAL workers

Facts for new mill men. J. E. Bryans. *Can Min J* 64:13-14 Ja '43

Recruiting and training of inspectors; National metal congress report. L. L. Wyman. *Metal Prog* 42:893-4 N '42

Recruiting of Italian metalworkers for Germany, 1941. *Monthly Labor R* 56:42 Ja '43

Wage policy for the metal producing and metalworking industry. J. W. Roberts. *Steel* 111:54-5+ N 30 '42

Wages in lead and zinc mines and mills in the Tri-State area, June 1943. E. M. Olsen. *Monthly Labor R* 57:558-63 S '43

See also

Foundries—Em-	Machine works—Em-
ployees	ployees
Machine shops—Em-	Steel workers
ployees	

METAL working industries

Wartime engineering achievements. *il Metals & Alloys* 18:764-808 O '43

See also

Foundries
Machinery industry
Sheet metal trade

METAL working industries—Continued**Directories**

Stampings, forgings, die castings, machine finishes producers. Machine Design 15:204-14 O '43

United States

War accelerates technical progress. *il Steel* 112:265-348 Ja 4 '43
 Windows of Washington; year's developments summarized. *il Steel* 112:226-7, 230, 233+ Ja 4 '43

METAL working machinery

Pressing and welding; general-purpose machines in the production of sea-mine cases. *il Elec R (Lond)* 133:35-9 J 9 '43
 SEC issues report on metal machinery mfg. Comm & Fin Chr 157:486 F 4 '43

See also

Filing machines	Rolling mills
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METAL working plants**See also**

Foundries	Metallurgical plants
Iron works	Rolling mills
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Employees**See Metal workers****Equipment**

Blast cleaning equipment; its care and maintenance. D. C. Turnbull. *il Iron Age* 150:36-9 D 31 '42
 Carburiizing compounds reconditioned automatically. S. H. Brams. *il diag Iron Age* 150:67-9 N 26 '42
 Handles billets and forgings by lift-truck-skid system; Wyman-Gordon co. G. E. Stringfellow. *il Steel* 111:83-4+ D 28 '42
 Manufacturers' literature. Published in monthly numbers of Metals and alloys
 Materials handling facilities aid in plant conversion; American central mfg. corp. *il Steel* 112:112-14+ Ap 26 '43
 More gas than ever used in war plant; L. J. Mueller furnace co. F. J. Nunlist. *il Am Gas Assn Mo* 25:206-7 My '43
 New equipment; finishing. *il Iron Age* 150:48-53 D 24; 42-9 D 31 '42
 Ramsey plant at Fruitport notable for its modern equipment; manufacture of aviation piston rings. *il Automotive & Aviation Ind* 87:34-7 D 1 '42
 35 miles of compressed air help beat the promise; Addressograph-multigraph corp. *il Steel* 113:125-6 J 12 '43
 30th buyers reference number. *il diags Am Mach* 87:99-428 Ja 21 '43
 20 mm. shell cases; use of carbide dies and several unusual machines; Stoner mfg. co. W. A. Phair. *il diag Iron Age* 151:41-5 Ap 1 '43
 Where to buy; manufacturers of metals and metal working equipment. Metal Prog 44: B9-B50 sec 2 J 1 '43

Management

Finding a new foreman for the metal finishing department. F. V. Faulhaber. Metal Finishing 41:491-2 Ag '43
 Get a scrap-salvage manager in every metal producing and metalworking plant. H. E. Fleming. *il Steel* 111:72-4 N 23 '42
 Plant engineering and the consulting laboratory. E. L. Cady. *il Metals & Alloys* 18: 66-9 J 1 '43

METALLOG

Color test for some highly reactive organo-metallic compounds. H. Gilman and L. A. Woods. bibliog Am Chem Soc J 65:33-4 Ja '43

Condensations by sodium; metalation of benzene, toluene and xylene; the orienting influence of sodium and the influence of alkyl groups on metalation. A. A. Morton, E. L. Little, Jr. and W. O. Strong, jr. bibliog Am Chem Soc J 65:1339-46 J 1 '43

Di-metalation of 9-phenylcarbazole. H. Gilman and C. G. Stuckwisch. bibliog Am Chem Soc J 65:1729-33 S '43

Metalation of thianthrene and dibenzo-*p*-dioxin. H. Gilman and C. G. Stuckwisch. bibliog Am Chem Soc J 65:1461-4 Ag '43
 Organostrontium compounds. H. Gilman and others. bibliog Am Chem Soc J 65:268-70 F '43

METALLIC films. See Films, Metallic

METALLIZING. See Metal coating

METALLOGRAPHIC specimens

Improved clamp for sheet metal specimens. J. E. Burke. *diag Metal Prog* 44:431 S '43
 Preparation of metal coatings for microscopic examination. W. R. Meyer. *il Metal Finishing* 41:627-30+ C '43
 Progress in engineering knowledge during 1942; plastic replicas of snowflakes and metallographic specimens. P. L. Alger and J. Stokley. *il Gen Elec R* 46:91-3 F '43

Mounting

Trouble-free mounting press for mounting metallographic samples in bakelite. H. M. Shannon. *diag Metal Prog* 42:1050 D '42

METALLOGRAPHY

Constitution of the iron-tin alloys. O. E. Romig. bibliog *il Metal Prog* 42:899-904 N '42

Influence of crystal size and orientation upon the mechanical properties of metals in the cast condition. L. Northcott. Metal Prog 43:586+ Ap '43

Interpretation of electron micrographs of silica surface replicas. R. D. Heidenreich. bibliog *il J Ap Phys* 14:312-20 J 1 '43

Metallographic examination of plant equipment. M. M. Rubin. bibliog *il Paper Tr J* 116:31-8 Je 10 '43

Metallography by electron microscope. D. Harker and V. J. Schaefer. *il Metal Prog* 43: 68-9 Ja '43

Metallography of commercial magnesium alloys. J. B. Hess and P. F. George. bibliog *il Am Soc for Metals Trans* 31:423-45; Discussion. 445-58 Je '43

Method of recording macro-structures; contact ink impression used as negative for production of positive print on sensitized paper. G. A. Cottell. *il Engineering* 155:81-3 Ja 29 '43

Nature of pure metals. J. F. Young. *il diags Mech Eng* 65:795-801 N '43

Practical metallography, 1942. J. R. Vilella. *il Metals & Alloys* 17:119-20 Ja '43

Propagation of order in crystal lattices. J. Ashkin and W. E. Lamb, jr. bibliog *Phys R* 64:159-78 S 1 '43

Seeing metals at high magnification. C. S. Barrett. *il Machine Design* 15:138-40 N '43

Strain-hardening and recrystallization. C. H. Mathewson. *diags Iron Age* 152:54-8 O 28 '43

Study of inverse segregation suggests new method of making certain alloys. M. L. Samuels, A. R. Elsea and K. Grube. bibliog *il diags Am Soc for Metals Trans* 31:459-82; Discussion. 482-6 Je '43

Surface replicas containing dye for use in the light microscope. V. J. Schaefer. *il Metal Prog* 44:72-4 J 1 '43

Versatile metallographic polishing process. M. Ferguson. *il Metal Prog* 43:743-4 My '43

See also

Alloys	Metallographic specimens
Aluminum—Metallography	Metals—X ray inspection
Copper—Metallography	Steel—Metallography
Iron—Metallography	

METALLURGICAL analysis

Chemical requirements and chemical analysis. G. E. F. Lundell. bibliog Am Soc T M Proc 42:34-47 '42

Determination of ferrous iron in difficultly soluble materials. G. E. Seil. bibliog *diags Ind & Eng Chem Anal ed* 15:189-92 Mr 15 '43

Determination of small amounts of molybdenum in tungsten and molybdenum ores. F. S. Grimaldi and R. C. Wells. bibliog *Ind & Eng Chem Anal ed* 15:315-16 My 15 '43

METALLURGICAL analysis—Continued

- Determination of tin with mercuric chloride. J. G. Fairchild. *bibliog Ind & Eng Chem Anal* ed 15:625-6 O 15 '43
- Determining elements in minerals by the contact-print method. G. Gutzeit. *il Eng & Min J* 143:57-60 N '42
- Identifying mixed white metals. *il Metals & Alloys* 16:906 N '42
- Importance, composition, and analysis of Bolivian tin concentrates. S. Kallmann. *bibliog Ind & Eng Chem Anal* ed 15:166-74 Mr 15 '43
- Sampling for spectrographic analysis. H. H. Simmons. *il Metals & Alloys* 17:1221 Je '43
- Spectrographic measurements. B. Mulvey. *Gen Elec R* 45:643 N '42
- Substitute for cinchonine in the tungsten assay; rhodamine B. J. T. Oats. *Eng & Min J* 144:72 Ap '43
- Systematic identification of the common metallic coatings. H. Nechamkin and A. Sanders. *Ind & Eng Chem Anal* ed 14:913-14 N 15 '42
- Thermoelectric tester for checking the composition of metals. B. A. Rogers and others. *pls U S Bur Mines Rep of Invest* 3690: 1-6 '43
- Use of phosphate for separation of cobalt from iron. V. North and R. C. Wells. *bibliog Ind & Eng Chem Anal* ed 14:859-60 N 15 '42

See also

- | | |
|-------------------------|------------------------|
| Alloys—Analysis | Iron—Analysis |
| Aluminum—Analysis | Lead—Analysis |
| Bearing metals—Analysis | Manganese—Analysis |
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| Crushing machinery | |

METALLURGICAL furnaces. *See* Electric furnaces, Metallurgical; Furnaces, Metallurgical**METALLURGICAL laboratories**

- British open new laboratory. V. Delpont. *il Foundry* 71:102-3 Ag '43
- Plant engineering and the consulting laboratory. E. L. Cady. *il Metals & Alloys* 18: 66-9 Jl '43
- Research on cast iron; British cast iron research association laboratory. *il Engineering* 155:445, 450 Je 4 '43

METALLURGICAL plants

- Converting a gold mining enterprise for the war program; Golden cycle corporation supplying zinc, lead and other essential products. M. E. Shoup. *il Min Cong J* 29: 38-40 Ap '43
- First magnesium poured at Dow's sixth plant. F. J. Van Antwerpen. *il Chem & Eng N* 21:546-7 Ap 25 '43
- More magnesium; new Michigan plant begins production. *il Steel* 112:80-1 Ap 19 '43
- New Dow magnesium plant. S. H. Brams. *il Iron Age* 151:64+ Ap 15 '43
- New magnesium plant now in production. *il Aero Digest* 42:313+ My '43
- Rigid-frame concrete industrial plant; magnesium-alloying plant; fireproofing secured by eliminating windows. A. F. Plant and S. J. Deitrick. *il diags Eng N* 131:334-8 Ag 26 '43
- Three plants in one; Reynolds metals co. aluminum plant. J. A. Lee. *flow sheet il Chem & Met Eng* 50:145-50 My '43

See also

- | | |
|----------------|----------------|
| Blast furnaces | Smelting works |
| Iron works | Steel works |
| Ore treatment | |

Electric equipment

- Copper refining; processes and plant. *il Elec R (Lond)* 132:443-7 Ap 2 '43
- Magnetic separation comes into its own. R. L. Manegold. *il Eng & Min J* 144:86-3 Ag '43
- Novel automatic control system; concentrators of Utah copper co. *diag Eng & Min J* 144:86 Jl '43

Employees*See* Metal workers**Equipment**

- Bagdad; Arizona's latest porphyry copper. J. B. Huttli. *il diags plan Eng & Min J* 144: 64-6 Je '43
- Differential-density cone at Mascot gets coarser feed. *flow sheet Eng & Min J* 144: 50+ Ja '43
- How refractories are used in gigantic installation at Basic magnesium, inc. F. A. McCann. *il Brick & Clay Rec* 103:51-4 S '43
- How to make an automatic montejus. W. S. Weeks and G. C. Holmes. *diags Eng & Min J* 144:34-6 O '43
- Mine equipment, 1942. R. H. Ramsey. *Eng & Min J* 144:112-13 F '43
- Modern mill treats the Combined Metals ore. J. B. Blow. *il Min Cong J* 29:24-5 Ap '43
- Morenci expands to meet war demand. J. B. Huttli. *flow sheet il Eng & Min J* 144:60-3 Jl '43
- New heavy-media mill at Leadville. E. Just. *il diag Eng & Min J* 144:68-9+ S '43
- New type concentrator cuts chromite dressing costs. J. B. Huttli. *il diags Eng & Min J* 144:68-70 O '43
- Oregon chrome sands yield to magnetic separation. J. B. Huttli. *flow sheets il Eng & Min J* 144:62-5 S '43
- Outline of priority procedures for mines, smelters, and suppliers, corrected to Dec. 6, 1942. *Eng & Min J* 143:66 D '42
- Plastic pipe for rectifiers; Saran pipe and fittings on heat exchangers and rectifying units at Dow magnesium corp. plant. *il Chem & Met Eng* 50:116 Jl '43
- Reclaiming tin from scrap brass; large scale operation an essential. A. G. Arend. *il Chem Age (Lond)* 49:11-14 Jl 3 '43
- Rough milling followed by central milling prolongs life of Wisconsin lead-zinc district. R. E. Morgan. *flow sheet il Eng & Min J* 144:76-9 Je '43
- Silver frees copper to make more metallic magnesium. *il Chem & Met Eng* 50:164 My '43
- Why and how of Basic Magnesium. R. H. Ramsey. *il Eng & Min J* 144:61-7 O '43; Same abstr. *Chem & Met Eng* 50:98-101+ O '43
- Zinc refining steps ahead; American smelting and refining co. new electrolytic plant in Texas. R. H. Ramsey. *il Eng & Min J* 144:62-7 Ag '43

See also

- | |
|-------------------------|
| Classifiers |
| Converters |
| Furnaces, Metallurgical |

Power

- Some electrical supply aspects of ferro-alloy manufacture. H. A. Sieveking. *bibliog diags Inst E E J* 90 pt 2:65-72 F '43

Safety measures

- Safety at the Arthur and Magna mills of the Utah copper company. R. L. Erickson. *il Min Cong J* 29:16-19 Jl '43

Waste

- Rotating pipe makes good calcine conveyor; solves burned rock disposal problem at mercury mine. W. Bradley. *il Eng & Min J* 144:74-5 Ap '43

METALLURGICAL research

- Bank of metallurgical engineering know-how. Z. Jeffries. *il Metals & Alloys* 18:764-7 O '43
- Co-operative research in the metal industries. H. Moore. *Engineering* 155:295-6, 315-16 Ap 9-16 '43
- Progress in engineering knowledge during 1942. P. L. Alger and J. Stokley. *il Gen Elec R* 46:95-7 *bibliog*(133) F '43
- Sir William Chandler Roberts-Austen. S. W. Smith. *Engineer* 175:194-6 Mr 5 '43
- Study of inverse segregation suggests new method of making certain alloys. M. L. Samuels, A. R. Elsea and K. Grube. *bibliog il diags Am Soc for Metals Trans* 31:459-82; Discussion. 482-6 Je '43

METALLURGICAL research—Continued

War metallurgy group completes 150 reports on technical problems; chart and list. *Steel* 112:76-7 F 15 '43

See also

Aluminum research Ore testing
Corrosion research Steel research
Iron research

METALLURGISTS

Metals specifications and metallurgical morale in this war. C. H. Mathewson. *Min & Met* 24:234-5 My '43

See also

Rawdon, H.

METALLURGY

Achievements in metal production. E. F. Cone. *il Metals & Alloys* 18:768-70 O '43

Application of superalloys in metallurgy; abstract. *Automobile Eng* 33:237 Je '43

Bank of metallurgical engineering know-how. Z. Jeffries. *il Metals & Alloys* 18:764-7 O '43

Engineering file facts. R. S. Burpo, jr., comp. *Metals & Alloys* 17:340-3 F '43

Extraction of metals from ores. C. R. Hayward. *J Chem Educ* 20:29-32 Ja '43

German metallurgy in wartime. W. J. Kroll. *Eng & Min J* 144:50-1 S; 82-3+ O '43

Metallurgy at war. W. A. Phair. *Iron Age* 151:118-25+ Ja 7 '43

Nonferrous physical metallurgy, by the staff of the Nonferrous division, Battelle memorial institute. *il Min & Met* 24:102-6 F '43

Ore concentration and milling. 1942. T. B. Counselman. *il Min & Met* 24:59-62 F '43

Our debt to the metallurgist. L. W. Law. *Engineer* 176:264-5 O 1 '43

Pirrotechnia of Brinuccio. C. A. Browne. *Science* 97:163-4 F 12 '43

Secondary tin and lead; the metallurgy of refining. G. E. Behr. *bibliog Chem Age* (Lond) 48:605-8 Je 5 '43

Strategic materials from low-grade and complex domestic ores. R. R. Sayers. *il Chem Ind* 51:842-6 D '42

Uncommon metals. 1942. V. H. Gottschalk. *Eng & Min J* 144:108-9 F '43

War accelerates technical progress. *il Steel* 112:265-348 Ja 4 '43

Yellow Pine mine, producing combination of tungsten, antimony, and gold. J. D. Bradley, J. A. Mecia and R. E. Baker. *il diags Eng & Min J* 144:60-6 Ap '43

See also

Alloys
Aluminum metallurgy
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Chemistry, Technical
Copper metallurgy
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Electrodeposition of metals
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Refractory materials
Sintering
Slag
Smelting
Steel metallurgy
Tallings
Tin metallurgy
Tungsten metallurgy
Zinc metallurgy

Bibliography

Among the newer books. Published in monthly numbers of Mining and metallurgy

Current Institute papers. Published in Mining and metallurgy

Metallurgical engineering digest; important developments in the world of metals. Published in monthly numbers of Metals and alloys

Some books worth owning. *Metal Prog* 43:573-6 Ap '43

Powder metallurgy

See Metal powders

Study and teaching

United States lecturers in Brazil. *Science* 98:127 Ag 6 '43

Why mineral technology schools should offer courses in low- and high-temperature chemistry. R. B. Sosman. *Min & Met* 24:355 Ag '43

METALS

Action, expected soon on move to build critical metal supply. *Steel* 112:90-1 Je 14 '43

Chemical separation of the isotopes of hydrogen by the addition of metals and compounds of metals to water, acids and bases; relative efficiencies of specific reactions; the effects of certain factors other than temperature. H. L. Johnston and C. O. Davis. *bibliog diag Am Chem Soc J* 64:2613-20 N '42

Conservation of critical materials. H. Hill and H. B. Zackrisson. *Civil Eng* 13:83-4 F '43

Conservation of metals in cannery machines. *Metal Prog* 43:408 Mr '43

Conservation of steelmaking raw materials. C. M. Parker. *diags Welding J* 21:747-55 N '42

Continuing need for the conservation of resources. H. Cooney. *Mech Eng* 65:786-8 N '43; Excerpts. *Ind Stand* 14:281-3 O '43

Decomposition of ethylene and carbon monoxide on metallic catalysts. A. R. McKinney. *J Phys Chem* 47:152-63 bibliog(p163) F '43

Electrification and luminescence phenomena accompanying desorption of gases from metals. J. W. McBain and C. I. Glassbrook. *bibliog Am Chem Soc J* 65:1908-9 O '43

Engineering file facts. R. S. Burpo, jr., comp. *Metals & Alloys* 17:340-3 F '43

Foreign minerals for the war program. A. M. Bateman. *Eng & Min J* 144:59 Ap '43

Iron, steel and nonferrous metals listed by tradenames, by products and by principal constituents. *Machine Design* 15:158-85 O '43

Laws governing the growth of films on metals. U. R. Evans. *bibliog Electrochem Soc Trans* 83 (preprint 10):129-36 Ap '43

Mechanical performance of metals. J. F. Young and J. B. Lambert. *Gen Elec R* 46:619-20 N '43 (to be cont)

Mechanical properties of metals. A. C. Vivian. *diag Engineering* 156:78-80, 118-20 Ji 23, Ag 6 '43

Metal food for Mars; status of our strategic metal supply. *il Steel* 112:102-4 Ap 19 '43

Metal substitution list. W. L. Nelson. *Oil & Gas J* 42:48 My 13 '43

Metallurgical engineering digest; important developments in the world of metals. Published in monthly numbers of Metals and alloys

Metals shortages easing sharply. *Barron's* 23:6+ N 1 '43

National metal congress; abstracts of papers read at meetings of the American society for metals and American welding society. *Automotive & Aviation Ind* 89:42-3+ N 1 '43

Nature of pure metals. J. F. Young. *il diags Mech Eng* 65:795-801 N '43

Plastics and plasticity; plastic working of metals and non-metallic materials. E. V. Crane. *il diags Iron Age* 152:34-40 Ji 29; 64-9+ Ag 5; 80-5 Ag 12 '43

Ploughing and adhesion of sliding metals. F. P. Bowden, A. J. W. Moore and D. Tabor. *il diags J Ap Phys* 14:80-91 F '43

Proxy metallurgy. D. L. Colwell. *il Min & Met* 24:142-5 Mr '43

Questions and answers for power engineers; construction materials and details; heat treatments and processes. A. Higgins. *Power* 87:482-4 Ji '43

Reference table of new materials and finishes of 1942. F. P. Peters, comp. *Metals & Alloys* 17:101-14 Ja '43

Relative corrodibility of some common metals and alloys; tabulation. J. Strauss, comp. *Metal Prog* 44:800 O '43

Shrink fit tolerances for various metals and needs. *il Product Eng* 14:214-16 Ap '43

Special metals in the electrical industry. F. R. Hensel and J. W. Wiggs. *il Elec Eng* 62:296-302 Ji '43

METALS—Continued

Study of the products obtained by the reducing action of metals upon salts in liquid ammonia solution; the reduction of complex cyanides. J. W. Eastes and W. M. Burgess. *Am Chem Soc J* 64:2715-16 N '42
Study of war metals. *Science* 97:sup6+ Ja 29 '43

Substitutions widen design horizons. I. H. Such. *il Machine Design* 15:128-32+ Ag '43
Uncommon metals, 1942. V. H. Gottschalk. *Eng & Min J* 144:108-9 F '43

See also

Alloys
Aluminum
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Strontium
Tantalum
Thallium
Thorium
Tin
Titanium
Tungsten
Welding
White metals
Zinc

Aging

Aluminum alloy casting properties improved by aging. J. Hubel. *il Foundry* 71:134+ Mr '43

Cold treatment of metals; refrigerating apparatus used in producing shrink fits, in hardening processes and in retarding aging in aluminum rivets. W. A. Phair. *il Iron Age* 151:41-2 F 25 '43

Elevated temperature aging of 24S aluminum alloy. P. P. Mozley. *J Aeronautical Sci* 10:180-4 Je '43

Precipitation reaction in aged cold-rolled 1 per cent cadmium-copper; its effects on hardness, conductivity, and tensile properties. R. H. Harrington and L. E. Cole. *iblog il Am Soc for Metals Trans* 31:651-69; Discussion. 669-74 S '43

Prescriptions for head cracks in 24ST rivets; laboratory tests of strengths, corrosion resistance, heat treatments, and aging. E. C. Hartmann, C. F. Westcott and M. W. Brennecke. *il Aviation* 42:139-43+ N '43

Refrigerating aluminum alloy rivets and parts. B. J. Fletcher. *flow chart il Metals & Alloys* 17:1178-82 Je '43

Super-aluminum alloys for aircraft structures. K. R. Jackman. *diags Aviation* 42:168-9+ S; 156-7, 159, 161+ O '43

Analysis

Extraction and colorimetric estimation of certain metals as derivatives of 8-hydroxyquinoline. T. Moeller. *iblog Ind & Eng Chem Anal ed* 15:346-9 My 15 '43

Qualitative semimicro-analysis with reference to Noyes and Bray's system: the aluminum group. C. C. Miller. *Chem Soc J* p72-4 F '43

Scrap sorting, nondestructive and rapid. W. L. Nelson. *il Oil & Gas J* 42:55-6 O 28 '43

Systematic polarographic metal analysis; characteristics of arsenic, antimony, bismuth, tin, lead, cadmium, zinc, and copper, in various supporting electrolytes. J. J. Lingane. *bibliog Ind & Eng Chem Anal ed* 15:583-90 S 15 '43

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also subdivision Analysis under names of Metals, e.g. Copper—Analysis

Bibliography

Manufacturers' literature. Published in monthly numbers of Metals and alloys

Cleaning

See Metal cleaning

Cold treatment

See Metals, Cold treatment of

Coloring

See Metal coloring

Detection

Crime detection; metal spotters. R. P. Turner. *Radio N* 30:21-2 S '43

Frequency modulated metal-treasure locator. G. M. Bettis. *il diags Radio N* 28:22-4+ O '42

Surgical applications for electronic metal locator. *diag Electronics* 16:114 My '43

Non-ferrous

See Metals, Non-ferrous

Polishing

See Polishing

Prices

Administration of premium price plan. J. L. Maury. *Min Cong J* 23:30-1+ D '42

Market prices. Published in weekly numbers of Steel

Price control of metals. D. H. Wallace. *Min Cong J* 28:27-9 D '42

What the price plan recognizes. J. S. Sumner. *Min Cong J* 28:29-30 D '42

Specifications

Metals specifications and metallurgical morale in this war. C. H. Mathewson. *Min & Met* 24:234-5 My '43

Stockpiling

See Minerals—Stockpiling

Temperature effects

Behavior of magnesium as a structural material. *il Product Eng* 14:430-5 Jl '43

Impact resistance and tensile properties of metals at subatmospheric temperatures. H. W. Gillett. *Welding J* 22:sup375 Ag '43

Increase of performance of hot work tools. W. Hauffer. *Iron Age* 152:44-8 S 2 '43

Investigate cast iron in elevated temperature operation; War metallurgy committee. *Foundry* 71:75+ Ja '43

Measurement of stresses in parts and structures. R. G. Anderson. *il Product Eng* 14:712-16 N '43

Plasticity of cold metals. J. B. Friedmann. *Metal Prog* 43:71 Ja '43

Rupture tests at 200 degrees cent. on some copper alloys. E. R. Parker and C. Ferguson. *il Am Soc for Metals Trans* 31:699-714; Discussion. 714-15 S '43

Study malleable castings properties for military applications. O. W. Simmons, P. C. Rosenthal and C. H. Lorig. *diags Foundry* 71:102-4+ O; 122-5+ N; 106-8+ D '43

Thermal rating of overhead line wire. M. Zucker. *bibliog il Elec Eng* 62:Trans 501-7 Jl '43

See also

Creep of metals
Steel—Testing—
Temperature effects

Testing

Crack detector uses ultra-violet, also detects contamination. *Sci Am* 168:200 My '43

Detecting cracks with black light. *Iron Age* 150:69 N 26 '42

METALS—Testing—Continued

Detection of cracks; use of ultra-violet light and fluorescent material. *il Chem Age (Lond)* 48:17 Ja 2 '43

Fluorescent penetrant method of detecting discontinuities. T. de Forest. *il Am Soc for Metals Trans* 31:739-48 S '43; Abstract. Automotive & Aviation Ind 88:80 Ap 15 '43; Discussion. *Am Soc for Metals Trans* 31:748-52 S '43

Footprints in metal parts indicate distribution and amount of stresses; use of Stresscoat. *il Steel* 113:86 S 27 '43

Mechanical testing. 1942. R. L. Templin. *il Metals & Alloys* 17:117-18 Ja '43

Necessity for making full scale tests. J. B. Friedmann. *Metal Prog* 43:244 F '43

Significance of mechanical test properties of metals. H. O'Neill. *Engineering* 156:18-20, 38-40, 56-8 Jl 2-16 '43; Discussion. 156:15-16, 34-5 Jl 2-9 '43

Some mechanical properties of plastics and metals under sustained vibrations; mild steel, duralumin, laminated plastics, polymethyl methacrylate. B. J. Lazan. *bibliog il diags A & M E Trans* 65:37-98; Discussion. 98-104 F '43

War against flaws. *Fortune* 28:62+ O '43

See also

Electric testing

Fatigue in metals

Hardness—Testing

Magnetic testing

Metals—Temperature effects

Metals—Wear

Metals, Non-ferrous

—Testing

Notched bar testing

Steel—Testing

Testing machines

Wear

Bearing and tool damage by galling. E. L. Hemingway. *il Iron Age* 152:54-60 Jl 15 '43

Engine wear and its measurement in the study of lubrication; abstract. A. G. Cattanéo, W. Gasser and W. N. Malott. *Oil & Gas J* 42:132+ Je 24 '43

Hardness vs. wear resistance. J. R. Spence. *il Welding J* 22:179-81 Mr '43

High-temperature wear resistance; abstract. W. Rädcker. *Metals & Alloys* 17:1060 My '43

McKee metal wear gage. *il Instruments* 16:83 F '43

Wear of metals and alloys; abstract. J. W. Donaldson. *Metals & Alloys* 16:1144+ D '42

See also

Cylinders (engines, etc.)—Wear

X ray inspection

High-production X-ray made possible by built-in materials handling system. W. D. Creley. *il Steel* 113:89+ O 25 '43

Light metal sand practice, inspection; abstracts. A. E. Cartwright. *diags Iron Age* 151:172-3 My 6 '43; *Metals & Alloys* 18:160+ Jl '43

Location of flaws by double-exposure radiography. J. Rigbey. *Am Soc for Metals Trans* 31:599-608; Discussion. 609-12 S '43

Macro 100 industrial maintenance unit; X-ray inspection of alloys and steel. *il Chem Age (Lond)* 48:296 Mr 13 '43

Radiography as an inspection tool; panel discussion. T. A. Triplett and others. *il Metal Prog* 43:226-34 F '43

Radiography of aircraft castings. R. Taylor. *Aero Digest* 42:238, 240+ Ap '43

Radiography of light alloys. R. C. Woods and V. C. Cetrone. *il Iron Age* 151:52-8 Mr 25 '43

Rapid gamma-ray inspection technique; use of calcium tungstate screens. R. C. Woods. *il diags Metals & Alloys* 17:764-6 Ap '43

Some applications of X-ray inspection to production problems. D. M. McCutcheon. *il Am Soc T M Proc* 42:1023-44; Discussion. 1045 '42

Structure of rolled and annealed aluminum as revealed by X-rays; abstract and discussion. E. E. Spillet. *Engineering* 156:294 O 8 '43

Tension-compression device for quantitative X-ray diffraction evaluation of strain in metals and a calibrated series of aluminum alloys. G. L. Clark, G. Pish and R. Seabury. *bibliog il diags J Ap Phys* 14:284-90 Je '43

Testing with X-ray counting tubes. *diags Iron Age* 151:70-1+ Je 10 '43

Trends in the technique of industrial radiography. H. E. Seemann. *il diags Engineer* 174:492-5 D 18 '42

X-ray inspection of castings; Army air forces' requirements. R. Katz. *il Metal Prog* 44:89-94 Jl '43

X-ray technique aids development work at the Campbell-Wyant-Cannon foundry. *il Automotive & Aviation Ind* 87:46+ D 15 '42

See also

Welding—X ray inspection

METALS, Clad*See also*

Alclad

Steel, Clad

Steel, Stainless clad

METALS, Cold treatment of

Additional notes on the cold treatment of metals. *il Iron Age* 151:66-7 Je 17 '43

Chilling prevents bearing surface damage. *il Iron Age* 150:68 D 3 '42

Cold treatment of metals; refrigerating apparatus used in producing shrink fits, in hardening processes and in retarding aging in aluminum rivets. W. A. Phair. *flow sheet il diags Iron Age* 151:37-43 F 25 '43

Deepfreeze Cascade industrial chilling machine. *il Mach* 49:186 Je '43

Low temperature refrigeration requirements in war production. C. L. Olin. *il Refrig Eng* 45:83-5 F '43

Refrigerants used for expansion fits. H. Smith. *Elec W* 118:1798+ N 28 '42

Refrigerating aluminum alloy rivets and parts. B. J. Fletcher. *flow chart il Metals & Alloys* 17:1178-82 Je '43; Correction. 18:65 Jl '43

Refrigeration used in making airframe parts; cold treatment of aluminum. Hudson motor car company. *Refrig Eng* 45:342 My '43

Sub-zero refrigeration of high alloy steels; abstract. G. B. Berlien. *Iron Age* 152:44 O 21 '43

Sub-zero temperatures for shrink fits. H. A. Knight. *il Metals & Alloys* 18:50-4 Jl '43

Sub-zero temperatures in industry. G. F. Forsthoefel. *flow chart il Refrig Eng* 46:164-7 S '43

Utilizing subzero temperatures in design. J. W. Greve. *il Machine Design* 15:94-8 O '43

METALS, Cold working of

Cartridge brass; cold working and annealing. L. E. Gibbs. *il Metal Prog* 44:243-8+ Ag '43

Chromium-manganese stainless irons. J. M. Parks. *il Metals & Alloys* 17:539-43 Mr '43

Design of cold headed parts. H. Chase. *il diags Metals & Alloys* 18:292-7 Ag '43

Effect of cold-work and heat-treatment on 24ST aluminum alloy. B. Mitchell. *bibliog il J Aeronautical Sci* 10:36-90 Mr '43

Impact extrusion and cold pressing of airplane parts; with punch and die diagrams. P. Koenig. *il S A E J* 51:415-19 N '43; Same cond. Automotive & Aviation Ind 89:38-40 O 15 '43

Precipitation reaction in aged cold-rolled 1 per cent cadmium-copper; its effects on hardness, conductivity, and tensile properties. R. H. Harrington and L. E. Cole. *bibliog il Am Soc for Metals Trans* 31:651-69; Discussion. 669-74 S '43

Structure of a metal during deformation. D. Harker. *diags J Chem Phys* 10:692 N '42

Super-aluminum alloys for aircraft structures; effect of cold work. K. R. Jackman. *bibliog il Aviation* 42:157-8+ Ag '43

Torsional damping capacity of solid magnesium-alloy rods as affected by cold-working. A. U. Kutsay and A. J. Yorgiadis. *bibliog il diags J Aeronautical Sci* 10:303-10 O '43

Width of X-ray diffraction lines from cold-worked tungsten and α -brass. C. S. Smith and E. E. Stickley. *bibliog Phys R* 64:191-8 O 1 '43

See also

Steel, Cold working of

METALS, Effect of temperature on. See Metals

—Temperature effects

METALS, Heat resisting*See also*

Alloys, Heat resisting
Steel, Heat resisting

METALS, Molten

Distribution equilibria between molten metals and molten salts, with reference to the stability of intermetallic compounds in the molten state. E. Heymann, R. J. L. Martin and M. F. R. Mulcahy. *bibliog J Phys Chem* 47:473-84 O '43

METALS, Non-ferrous

After the war, what—in the mining industry? cartelization seems unavoidable if Atlantic charter is to be fulfilled. O. W. Roskill. *Il Eng & Min J* 144:62-6 My '43
Attempt to head off metal troubles; Senate bill would provide for stockpiling of post-war surpluses. *Barron's* 23:7 JI 26 '43

Cycle of non-ferrous metals; recovery of prevailing types of scrap; classification of scrap. O. Einerl and F. Neurath. *Chem Age (Lond)* 48:267-72, 371-4 Mr 6, Ap 3 '43

Foundry metallurgy in the castings industry. J. W. Bolton. *Foundry* 71:184-92 Ag; 101+ S '43

Heat treatment of non-ferrous alloys, 1942. A. S. Henderson and B. W. Gonser. *Metals & Alloys* 17:77-8 Ja '43

Interrelation of the non-ferrous metal industries in England and the United States. C. G. Fink. *Chem & Ind* 61:444-5 O 31 '42

Latest list of AMS (aeronautical material specifications) steels and nonferrous alloys. *Steel* 113:92, 94, 96+ Ag 9 '43

Methods of brazing nonferrous joints. *Il Marine Eng* 48:218+ Je '43

Non-ferrous alloys for airframes and engines; tables. J. B. Johnson. *Aero Digest* 42:169-71 My '43

Non-ferrous centrifugal castings; abstract. H. B. Zuehlke. *Metals & Alloys* 17:366+ F '43

Nonferrous metallurgists hear about zinc, lead, aluminum, magnesium, and nickel. *Min & Met* 24:162 Mr '43

Nonferrous metals capacity expanded; most for war use. *Steel* 112:428-30 Ja 4 '43

Non-ferrous metals, 1942. J. I. Butzner. *Il Iron Age* 151:140-7+ Ja 7 '43

Nonferrous physical metallurgy, by the staff of the Nonferrous division, Battelle memorial division. *Il Min & Met* 24:102-6 F '43

Non-ferrous secondary metals. F. W. Willard. *Il Metals & Alloys* 17:752-9 Ap '43

Non-ferrous section, National metal congress report. F. N. Rhines. *Metal Prog* 42:890-2 N '42

Non-ferrous smelting and refining in Canada for 1942. *Can Chem & Process Ind* 27:452 Ag '43

OPA forms branch for non-ferrous metals. *Oil Paint & Drug Rep* 142:5+ D 14 '42

Rapid identification of non-ferrous scrap; abstract. *Roy Aeronautical Soc J* 47:sup11-13 Ja '43

Rare and precious metals, 1942. W. P. Sykes. *Il Min & Met* 24:56-8 F '43

Relative characteristics of non-ferrous casting techniques. *Iron Age* 151:70-2 F 11 '43

Saving non-ferrous metals. C. S. Cole. *Metals & Alloys* 17:96-8 Ja '43

Which form of non-ferrous casting? H. Chase. *Il Metals & Alloys* 18:496-502 S '43

See also

Aluminum	Lead
Beryllium	Magnesium
Brass	Platinum metals
Bronze	Silver
Copper	Tin
Gold	Zinc

Blackening

Blackening of non-ferrous metals; abstract. W. R. Meyer. *Iron Age* 152:55-6 JI 22 '43

Prices

Annual average metal prices, 1898-1942; tabulation. *Eng & Min J* 144:70 F '43

Average monthly quotations in 1942. *Steel* 112:365 Ja 4 '43

Metal prices; annual averages 1897 to 1931, monthly averages 1932 to 1942; chart. *Eng & Min J* 144:71 F '43

Non-ferrous prices. Published in weekly numbers of *Iron Age*

Statistics

Lots of metal. *Business Week* p89-90 Ja 16 '43

Minor metals, 1942. *Eng & Min J* 144:74-5 F '43

Nonferrous metals and products, 1938-1941. Survey of *Cur Business* 1942 Sup p142-4

Testing

Detecting surface flaws in non-ferrous and non-magnetic materials; Zyglo fluorescent penetrant method. G. Ellis. *Il Iron Age* 150:56-9 D 17 '42

Fluorescent method detects leaks in process vessels; Zyglo. F. Catlin. *Il Chem & Met Eng* 50:116 Ag '43

METALS, Powdered. *See* Metal powders

METALS, Rare earth. *See* Rare earth metals

METALS reserve company

Attempt to head off metal troubles; Senate bill would provide for stockpiling of post-war surpluses. *Barron's* 23:7 JI 26 '43

Developing strategic metal production for war. C. B. Henderson. *Min Cong J* 28:32-3+ D '42

Metals reserve co. revises domestic chrome and manganese price schedules to simplify purchasing policy. *Eng & Min J* 144:91 Je '43

Metals Reserve has diversified mining interests. C. B. Henderson. *Min Cong J* 29:18+ Mr '43

METAMORPHISM

Metamorphism of extrusives by basic intrusives in the Keweenaw of Minnesota. G. M. Schwartz. *bibliog Geol Soc Bul* 54:121-25, pl 1-2 Ag '43

Quartz veins in the Ouachita mountains of Arkansas and Oklahoma (their relations to structure, metamorphism, and metalliferous deposits). H. D. Miser. *bibliog maps Econ Geol* 38:91-118 Mr '43

Regional metamorphism of coal in southeastern West Virginia. E. T. Heck. *maps Am Assn Pet. Geologists. Bul* 27:1194-1225 *bibliog* (p 1223-5) S; Discussion. 1225-7 '43

Structure and metamorphism of early Precambrian rocks between Gordon and Great Slave lakes, Northwest Territories. J. F. Henderson. *bibliog maps Am J Sci* 241:430-46 JI '43

METAPHOSPHORIC acid

Extraction of ascorbic acid from plant materials; relative suitability of various acids. J. D. Ponting. *bibliog Ind & Eng Chem Anal ed* 15:389-91 Je 15 '43

METEORITES

Deformation of rock strata by explosions. L. L. Nettleton. *Science* 96:515 D 4 '42; Discussion. J. D. Boon. 97:42-3 Ja 8 '43

Meteorite from Vermont. C. G. Doll. *Science* 96:494 N 27 '42

Meteorites and an earth-model. R. A. Daly. *Geol Soc Bul* 54:401-55 *bibliog* (p452-5) Mr '43

See also

Tektites

METEOROLOGICAL instruments*See also*

Barometers	Thermometers and
Radio meteorographs	thermometry

METEOROLOGICAL research*See also*

Radio meteorographs

METEOROLOGY

Meteorology and climatology; review of five recent books. C. W. Thornthwaite. *Science* 97:580-3 Je 25 '43

Primary rôle of meteorology in flood flow estimating. M. Bernard. *maps Am Soc C E Proc* 69:105-44 *bibliog* (p141-2) Ja '43; Discussion. *bibliog* 69:443-5, 597-608, 1006-12, 1309-16, 1480-2 Mr-Apr, Je, O-N '43

See also

Air	Magnetism, Terrestrial
Atmosphere, Upper	trial
Auroras	Rain and rainfall
Floods	Solar radiation
Fog	Sunspots
Humidity	Tornadoes
Insolation	Weather forecasting
Lightning	

METEOROLOGY—Continued

Study and teaching

- Meteorological officers in the Army air forces. Science 36:489 N 27 '42
 Meteorological training for the Army air forces. Science 37:179 F 19 '43

Terminology

- Glossary of meteorological terms. M. Bernard. Am Soc C E Proc 69:142-4 Ja '43

METEOROLOGY, Aeronautic

- Better weather forecasts for hemisphere flying. W. A. M. Burden. Il For Comm W 12: 3-4+ JI 24 '43
 Communications; branch of CAA operates communication system and wire service for Weather bureau. E. Sibley. Il map Radio N 29:112-15+ Je '43
 Cruise control for flying efficiency; effects of atmospheric conditions. R. D. Speas, J. T. Farrah and S. Hinton. Aviation 42:207, 209, 211+ Ag '43
 Eleventh annual meeting of the Institute of the aeronautical sciences; review of technical papers. A. Klemm. Aeronautical Eng R 2:23+ Ap '43
 Meteorological characteristics of thunderstorms. G. N. Brancato. Il diags Aviation 41:101-3+ O; 101-3, 331-2+ N '42
 Thunderstorm characteristics and flight procedures. J. A. Browne. diags Aeronautical Eng R 1:5+ D '42

See also

Radio meteorographs

METEOROLOGY, Military

- Meteorology; Signal corps general development laboratory. O. C. Maier. Il Radio N 28:94-7 N '42

METEORS

- Earth's atmosphere and the constitution of the planets; meteors and the earth's upper atmosphere. F. L. Whipple. Rs Mod Phys 14:139 Ap-JI '42
 Temperature in shock waves and the possible connection with the luminosity of meteors; abstract. H. Muraour. Roy Aeronautical Soc J 47:209-10 My '43

METER readers

- Girl meter readers as a help in the war effort. C. E. Johansen. Am Gas Assn Proc 1942: 123-4; Same. Am Gas Assn Mo 25:31-2 Ja '43
 Meterettes on the job in Kansas City. Il Gas Age 91:24 F 11 '43
 Motor-bikes from push-bikes for meter readers and servicemen. R. C. Fullerton. Il diags Edison Elec Inst Bul 11:251-2 Ag '43

METER reading

- Bi-monthly or quarterly meter reading and related billing plans to conserve rubber, automotive equipment and manpower. H. B. Hardwick. Edison Elec Inst Bul 10: 393-5 N-D '42
 Customer accounting; wartime survey of meter reading and billing changes. J. J. Natale. Am Gas Assn Mo 25:311-13 JI-Ag '43
 Experience with longer meter-reading periods. Elec W 119:1288-90 Ap 17 '43
 List of bi-monthly and quarterly meter reading schemes. Edison Elec Inst Bul 10:396-7 N-D '42
 Meter reading and billing; practices under war conditions. H. J. Johnson and others. Il Am Gas Assn Proc 1942:93-117
 New plan of bi-monthly meter reading with monthly billing. E. C. Gordon. Am Gas Assn Mo 25:111-12 Mr '43
 Publicity sent to customers advising them of changes in meter-reading plans. O. Ullery. Il Gas Age 90:27-9+ D 17 '42
 Quarterly reading common in Wisconsin. Elec W 119:2168 Je 26 '43
 Report shows both customer and company approval of meter reading and billing changes. Edison Elec Inst Bul 11:129-32 My '43
 REA experience with postcard readings. R. B. Craig. Elec W 119:2008 Je 12 '43
 Will bi-monthly billing help the utility manpower problem. D. Robertson. Elec W 119: 601-3 F 20 '43

METERS

Piping arrangements for meter installation; diagrams. Power Pl Eng 47:110 F '43

See also

- | | |
|-----------------|---------------|
| Current meters | Meter reading |
| Dynamometers | Micrometers |
| Electric meters | Oil meters |
| Flow meters | Orifices |
| Friction meter | Steam meters |
| Gages | Viscosimeters |
| Gas meters | Water meters |
| Manometers | |

METHACRYLATES

See also

- Methallyl methacrylates
 Methyl methacrylate

METHACRYLIC acid

- Synthesis of methacrylic acid. T. White. Chem Soc J p238-9 My '43

METHALLYL acetoxyisobutyrate

- Preparation of allyl and methallyl methacrylates by the thermal decomposition of allyl and methallyl α -acetoxyisobutyrate. C. E. Rehberg, C. H. Fisher and L. T. Smith. bibliog Am Chem Soc J 65:1003-6 Je '43

METHALLYL acrylate

- Pyrolysis of lactic acid derivatives; preparation of allyl and methallyl acrylates. C. H. Fisher, C. E. Rehberg and L. T. Smith. bibliog Am Chem Soc J 65:763-7 My '43

METHALLYL chloride

- Sulfonation of methallyl chloride; mobility of the olefinic linkage in unsaturated sulfonic acids. C. M. Suter and F. G. Bordwell. Am Chem Soc J 65:507-17 Ap '43

METHALLYL methacrylates

- Preparation of allyl and methallyl methacrylates by the thermal decomposition of allyl and methallyl α -acetoxyisobutyrate. C. E. Rehberg, C. H. Fisher and L. T. Smith. bibliog Am Chem Soc J 65:1003-6 Je '43

METHANE

- Activation energy of the reaction $\text{CH}_3 + \text{HBr} = \text{CH}_3 + \text{Br}$ and the carbon-hydrogen bond strength in methane. H. C. Andersen and G. B. Kistiakowsky. bibliog J Chem Phys 11:6-10 Ja '43

Alternative fuels. Automobile Eng Extra no 32:432 N 5 '42

Degasification of coal seams at a profit; developments in horizontal drilling offer means of obtaining large quantities of gas. L. Ranney. diags Min & Met 24:13-15 Ja '43

Empirical equation for thermodynamic properties of light hydrocarbons and their mixtures; mixtures of methane, ethane, propane, and *n*-butane. M. Benedict, G. B. Webb and L. C. Rubin. bibliog J Chem Phys 10:747-58 D '42

Natural coal gas in West Virginia. P. H. Price and A. J. H. Headlee. bibliog map Am Assn Pet Geologists Bul 27:529-37 Ap '43

Phase equilibria in hydrocarbon systems; methane-decane system. H. H. Reamer and others. bibliog Ind & Eng Chem 34:1526-31 D '42

Phase equilibria in hydrocarbon systems; volumetric behavior of methane. R. H. Olds and others. Il Ind & Eng Chem 35: 922-4 Ag '43

Sewage-sludge digestion; methane fermentation. Winnipeg plant. D. L. McLean. Il plan Water & Sewage 81:13-14, 36-8 Ag '43

Surface tensions of methane-propane mixtures. C. F. Weinberg and D. L. Katz. bibliog Il diags Ind & Eng Chem 35:239-46 F '43

Universal fuel; suggested statutory supply for transport, industry and homes; potentialities of methane. C. Ridley. Automobile Eng 33:187-90 My '43

Viscosities of the methane-propane system. L. B. Bicher, Jr. and D. L. Katz. bibliog diags Ind & Eng Chem 35:764-61 JI '43

See also

Chlorofluoromethanes

METHANOL

- Conductivity of sulfuric acid in methanol at 25°. E. W. Kanning, E. G. Bobalek and J. B. Byrne. *bibliog Am Chem Soc J* 65:1111-16 Je '43
- Destructive distillation of bagasse. D. F. Othmer and G. A. Fernstrom. *bibliog il diag Ind & Eng Chem* 35:312-17 Mr '43
- Destructive distillation of lignocellulose. R. Katzen, R. E. Müller and D. F. Othmer. *bibliog diag Ind & Eng Chem* 35:302-5 Mr '43
- Drying oils from liquid fats; fractionation by solvent extractions. A. W. Kleinsmith and H. R. Kraybill. *bibliog Ind & Eng Chem* 35:674-6 Je '43
- Film formation by pure liquids. C. W. Foulk and J. E. Barkley. *bibliog diag Ind & Eng Chem* 35:1013-16 S '43
- Infra-red and Raman spectra of polyatomic molecules; methyl-*d*₃-alcohol-*d* and methyl-*d*₅-alcohol. H. D. Noether. *J Chem Phys* 10: 693-9 D '42
- Liquid-liquid phase equilibria of the system cyclohexane-methyl alcohol in the presence of various salts as third components. E. L. Eckfeldt and W. W. Lucasse. *bibliog J Phys Chem* 47:164-83 F '43
- Lyotropic order and the effects of sodium salts on the miscibility of cyclohexane and methyl alcohol. E. L. Eckfeldt and W. W. Lucasse. *bibliog J Phys Chem* 47:183-9 F '43
- Methanol subjected to complete alkylation. *Oil Paint & Drug Rep* 143:3+ Ja 11 '43
- Nuclear alkylation of aromatic bases; the action of methyl alcohol on *m*-toluidine hydrochloride. R. W. Cripps and D. H. Hey. *Chem Soc J* p14-15 Ja '43
- Oil company's chemicals-from-natural gas refinery makes formaldehyde, methanol and related compounds. flow chart il *Nat Pet N* 35 pt 2:R72-3 F 3 '43
- Spectroscopic evidence of intermolecular transfer of protons. D. Williams and W. D. Stallcup. *Am Chem Soc J* 64:2684-6 N '42

Statistics

- Methanol, 1938-1941. Survey of Cur Business 1942 Sup p102 [supplemented in monthly numbers]

METHIONINE

- Preparation of methionine and tryptophan-free casein hydrolysates. A. A. Albanese. *bibliog Science* 98:46 JI 9 '43

METHODOLOGY

See also

- Scientific methods

METHOXIDES

See also

- Sodium methoxide

METHOXY group

- Qualitative test for methoxy and other alkoxy groups; compounds encountered in pharmacology and toxicology. W. C. Tobie. *bibliog Ind & Eng Chem Anal ed* 15:433-4 JI 15 '43
- Quantitative determination of methoxyl and ethoxyl groups. L. M. Cooke and H. Hibbert. *bibliog Ind & Eng Chem Anal ed* 15: 24-5 Ja 15 '43

METHOXYACETOPHENONE

- Oxidation potentials of methoxyacetophenones. R. H. Baker and J. G. Schafer. *bibliog Am Chem Soc J* 65:1675-6 S '43

METHOXYBENZOHYDROL

- Alkyl-oxygen fission in carboxylic esters; derivatives of *p*-methoxybenzylhydrol. M. P. Balfe and others. *Chem Soc J* p605-11 O '42

METHOXYCHLOROAMINOACRIDINES

- N*-substituted 2-methoxy-6-chloro-9-aminoacridines. J. H. Burckhalter and others. *Am Chem Soc J* 65:2012-15 O '43

METHOXYDIBENZOYLMETHANE

- Properties of *p*-methoxydibenzoylmethane. R. P. Barnes and A. Brandon. *bibliog Am Chem Soc J* 65:1070-2 Je '43

METHOXYDIPHENYL ether

- Gattermann reaction in the mono-methoxydiphenyl ethers. H. E. Ungnade and E. F. Orwoll. *bibliog Am Chem Soc J* 65:1736-9 S '43

METHOXYL group. See Methoxy group**METHYL**

- Ionization and dissociation by electron impact; the methyl and ethyl radicals. J. A. Hipple and D. P. Stevenson. *bibliog diag Phys R* 63:121-6 F 1 '43

METHYL acetone. See Butanone**METHYL acrylate**

- Lactic method for making methyl acrylate studied. *Oil Paint & Drug Rep* 144:7+ S 13 '43
- Synthesis of cinnamic acids from methyl acrylate or acrylonitrile and diazonium salts. C. F. Koelsch. *Am Chem Soc J* 65:57-8 Ja '43

See also

- Methyl methacrylate

METHYL alanine

- Growth effects of α -methyl homologs of pantothenic acid and β -alanine. M. A. Pollack. *bibliog Am Chem Soc J* 65:1335-9 JI '43

METHYL alcohol. See Methanol**METHYLANILINE point**

- N*-methylaniline point of viscous petroleum oils. B. W. Geddes, L. Z. Wilcox and E. H. McArdle. *bibliog Ind & Eng Chem Anal ed* 15:487-9 Ag 15 '43

METHYL benzylamine

- α,β -Unsaturated aminoketones; reaction of piperidine and *N*-methylbenzylamine with bromine derivatives of benzalacetone and benzalacetophenone. N. H. Cromwell and I. H. Witt. *Am Chem Soc J* 65:308-12 Mr '43

METHYL bromide

- Infra-red spectrum of polyatomic molecules; methyl-*d*₃-chloride and methyl-*d*₃-bromide. H. D. Noether. *bibliog J Chem Phys* 10: 664-8 N '42

- Methyl bromide is versatile. *Franklin Inst J* 235:650 Je '43

- Radioactive exchange and adsorption of methyl bromide with several inorganic bromides. G. B. Kistiakowsky and J. R. Van Wazer. *diag Am Chem Soc J* 65:1829-34 O '43

Physiological effect

- Methyl bromide; local and mild systemic toxic effects. R. M. Watrous. *il Ind Med* 11:575-9 D '42

METHYL butadiene

- Hyperconjugation in methyl butadienes as shown by dipole moments. N. E. Hannay and C. P. Smyth. *Am Chem Soc J* 65:1931-4 O '43

METHYL butane

- Studies in stereochemistry; the preparation of *d*-1-deutero-2-methylbutane and the study of its optical rotation. H. C. Brown and C. Groot. *Am Chem Soc J* 64:2563-6 N '42

METHYL cellosolve

- Effects of repeated exposure of rats to vapors of monoalkyl ethylene glycol ethers. H. W. Werner and others. *bibliog J Ind Hygiene* 25:374-9 O '43

METHYL chalcone

- Influence of methyl chalcone of hesperidin on the toxicity of mapharsen in rabbits. D. H. Goldstein, A. Stolman and A. E. Goldfarb. *bibliog Science* 98:245-6 S 10 '43

METHYL chloride

- Charging Freon-12 systems with methyl chloride or sulfur dioxide. *Refrig Eng* 46:245 O '43

- Infra-red spectrum of polyatomic molecules; methyl-*d*₃-chloride and methyl-*d*₃-bromide. H. D. Noether. *bibliog J Chem Phys* 10: 664-8 N '42

- Liquid methyl chloride; properties, uses, transportation. K. S. Willson and others. *il diag Chem & Eng N* 21:1254-61 Ag 10 '43

- Methyl chloride, an expedient substitute. H. G. Brandt. *diag Refrig Eng* 46:301-4 N '43

- Things to remember when using methyl chloride in place of Freon-12. *il Heating-Piping* 15:521-4 O '43

METHYL cholanthrene

- Enhancement of leukemogenic action of methylcholanthrene by pre-irradiation with X-rays. J. Furth and M. C. Boon. *bibliog Science* 98:138-9 Ag 6 '43

METHYL crotonaldehyde

Studies in the polyene series; the employment of 3-(2'-6'-trimethylcyclohexenyl)-1-methylcrotonaldehyde for the synthesis of vitamin A and analogues. I. M. Heilbron and others. *Chem Soc J* p727-33 D '42

METHYL cyclohexane

Physiological response of rabbits to cyclohexane, methylcyclohexane, and certain derivatives of these compounds. J. F. Trezon, W. E. Crutchfield, Jr. and K. V. Kitzmiller. *bibliog diags J Ind Hygiene* 25:199-214, 323-47 Je, O '43

Pure hydrocarbons from petroleum; vapor-liquid equilibria of close-boiling hydrocarbons. J. Griswold. *bibliog Ind & Eng Chem* 35:247-51 F '43

METHYL cyclopentane

Pure hydrocarbons from petroleum; vapor-liquid equilibrium of methylcyclopentane-benzene and other binary aromatic systems. J. Griswold and E. E. Ludwig. *bibliog Ind & Eng Chem* 35:117-19 Ja '43

System *n*-hexane-methylcyclopentane-aniline. B. deB. Darwent and C. A. Winkler. *bibliog diags J Phys Chem* 47:442-54 Je '43

METHYLCYCLOPENTANE carboxylic acids

See also

Naphthenic acids

METHYL decalone

Introduction of the angular methyl group; the preparation of *cis*- and *trans*-9-methyl-decalone-1. W. S. Johnson. *bibliog Am Chem Soc J* 65:1317-24 JI '43

METHYL diphenylfuran

Halogen compounds derived from 4-methyl-2,5-diphenylfuran. R. E. Lutz and C. E. McGinn. *Am Chem Soc J* 64:2583-5 N '42

METHYL dipropyl carbinol

Condensation of methyl dipropyl carbinols with phenol in the presence of aluminum chloride. R. C. Huston and C. R. Meloy. *bibliog Am Chem Soc J* 64:2655-7 N '42

METHYL docosaheptaenoate

Courses of autooxidation reactions in polyisoprenes and allied compounds; observations on fish-oil acids. E. H. Farmer and D. A. Sutton. *Chem Soc J* p122-5 Mr '43

METHYL ether

Donor-acceptor bonding; an electron diffraction investigation of the structure of dimethyl ether-boron trifluoride. S. H. Bauer, G. R. Finlay and A. W. Laubengayer. *bibliog Am Chem Soc J* 65:839-95 My '43

Donor-acceptor bonding; ethers of boron trifluoride. A. W. Laubengayer and G. R. Finlay. *bibliog Am Chem Soc J* 65:884-9 My '43

Nitrosation of phenols; the three cresols and their methyl ethers; some semicarbazide reactions. H. H. Hodgson and E. A. C. Crouch. *Chem Soc J* p221-3 My '43

METHYL ethyl ketone. See Butanone**METHYL group**

Introduction of the angular methyl group; the preparation of *cis*- and *trans*-9-methyl-decalone-1. W. S. Johnson. *bibliog Am Chem Soc J* 65:1317-24 JI '43

Thermodynamics and molecular structure of benzene and its methyl derivatives. K. S. Pitzer and D. W. Scott. *bibliog diags Am Chem Soc J* 65:803-29 My '43

Ultraviolet absorption spectra of nitrogenous heterocycles; the blocking effect of methyl groups on the ultraviolet absorption spectra of some hydroxypurines and pyrimidines. J. R. Loofbourrow, M. M. Stinson and M. J. Hart. *bibliog Am Chem Soc J* 65:148-61 F '43

METHYL heptene

Raman spectra of hydrocarbons; 2-methyl-1-heptene and 6-methyl-1-heptene. F. F. Cleveland. *J Chem Phys* 11:227-30 My '43

METHYL hydrindanone

cis- and *trans*-8-methyl-1-hydrindanone. W. E. Bachmann and S. Kushner. *bibliog Am Chem Soc J* 65:1963-7 O '43

METHYL iodide

Activation energy of the reaction $\text{CH}_3 + \text{HBr} \rightarrow \text{CH}_4 + \text{Br}$ and the carbon-hydrogen bond strength in methane. H. C. Andersen and G. B. Kistiakowsky. *bibliog J Chem Phys* 11:6-10 Ja '43

Near infra-red absorption spectrum of methyl iodide. R. T. Lagemann and H. H. Nielsen. *bibliog J Chem Phys* 10:668-71 N '42

Quantitative determination of methoxyl and ethoxyl groups. L. M. Cooke and H. Hibbert. *bibliog Ind & Eng Chem Anal ed* 15:24-5 Ja 15 '43

METHYL isobutyl ketone. See Hexone**METHYL isocyanide**

Molecular structure of methyl isocyanide. W. Gordy and L. Pauling. *Am Chem Soc J* 64:2952-3 D '42

METHYL leucine

Quantitative investigations of amino acids and peptides; equilibria between amino acids and formaldehyde; leucine and *N*-methylleucine. E. H. Frieden, M. S. Dunn and C. D. Coryell. *J Phys Chem* 47:10-20 Ja '43

METHYL magnesium iodide

Action of methylmagnesium iodide on methyl α -phenylcinnamate and a synthesis of 1,1-dimethyl-2-phenylindene. C. F. Koelsch and P. R. Johnson. *Am Chem Soc J* 65:565-7 Ap '43

METHYL maltoside

Stability of β -methylmaltoside toward hot alkali. T. J. Schoch, E. J. Wilson, Jr. and C. S. Hudson. *bibliog Am Chem Soc J* 64:2871-2 D '42

METHYL-D-MANNOSE

Crystalline 4-methyl-D-mannose and some of its derivatives. W. T. Haskins, R. M. Hann and C. S. Hudson. *bibliog Am Chem Soc J* 65:70-3 Ja '43

METHYL methacrylate

Copolymerization of styrol and methylmethacrylate. India Rubber W 107:604+ Mr '43

Heat-resistant plastic; abstract. G. N. Kuettel. *Chem Ind* 53:86 JI '43

Improved heat-resistant methacrylate. G. M. Kuettel. *II Mod Plastics* 20:98-100+ Je '43

Improvements in the methyl methacrylates. *II Am Gas J* 159:30-1 O '43

Predrying molding powers. W. E. Rahm, M. L. Macht and G. M. Kuettel. *II Mod Plastics* 20:86-7+ My '43

Testing

Some mechanical properties of plastics and metals under sustained vibrations; mild steel, duralumin, laminated plastics, polymethyl methacrylate. B. J. Lazan. *bibliog II diags A S M E Trans* 65:87-98 F '43; Same cond. *Mod Plastics* 20:83-8+ N '42; Discussion. *A S M E Trans* 65:98-104 F '43

METHYL naphthalene

Catalytic oxidations of naphthalene series. R. N. Shreve and R. W. Welborn. *bibliog II diags Ind & Eng Chem* 35:279-83 Mr '43

Monosulfonation of 2-methylnaphthalene. R. N. Shreve and J. H. Lux. *bibliog II Ind & Eng Chem* 35:306-12 Mr '43

Synthesis of 1-methylnaphthalene. O. Grummitt and A. C. Buck. *bibliog Am Chem Soc J* 65:295-6 F '43

METHYL naphthoate

Nitration of methyl α -naphthoate and related compounds. C. F. Koelsch and D. O. Hoffman. *Am Chem Soc J* 65:989-90 My '43

METHYL naphthoquinone

Crystalline bisulfite addition compounds of menadione. F. Abbondi and others. *Am Chem Soc J* 65:1776 S '43

Water-soluble derivatives of menadione. A. R. Menotti. *bibliog Am Chem Soc J* 65:1209-11 Je '43

METHYL naphthoquinone sulfonic acid

Synthesis of 2-methyl-1,4-naphthoquinone-8-sulfonic acid. A. Bendich and E. Chargaff. *bibliog Am Chem Soc J* 65:1568-9 Ar '43

METHYL oleate

Course of autooxidation reactions in polyisoprenes and allied compounds; the isolation and constitution of photochemically-formed methyl oleate peroxide. E. H. Farmer and D. A. Sutton. *Chem Soc J* p119-22 Mr '43

METHYL pantothenic acid

Growth effects of α -methyl homologs of pantothenic acid and β -alanine. M. A. Pollack. *bibliog Am Chem Soc J* 65:1335-9 JI '43

METHYL pentane

Heats of vaporization of some hexanes. J. F. Lemons and W. A. Felsing. bibliog diag Am Chem Soc J 65:46-8 Ja '43

METHYL phenanthrene

Phenanthrene derivatives; acetylation and succinylation of 3-methylphenanthrene. W. E. Bachmann and G. D. Cortes. bibliog Am Chem Soc J 65:1329-34 Jl '43

METHYL phenylcinnamate

Action of methylmagnesium iodide on methyl α -phenylcinnamate and a synthesis of 1,1-dimethyl-2-phenylindene. C. F. Koelsch and P. R. Johnson. Am Chem Soc J 65:565-7 Ap '43

METHYL pseudourea

Raman spectrum of O-methyl isourea hydrochloride. J. T. Edsall. bibliog Am Chem Soc J 65:1814-15 O '43

METHYL salicylate

Effect of various chemical agents affecting permeability of the mucosa on the formation of ulcers. R. L. Driver, G. S. Dozier and H. C. Denham. bibliog Science 98:158-9 Ag '43

Salicylic acid and salicylate. flow sheet il Chem & Met Eng 50:132-5 Ag '43

Prices

Methyl salicylate price is celled. Oil Paint & Drug Rep 144:5+ S 27 '43

METHYL tetraphenylpropene

Thermal decomposition of the dibromide of β -methyl- $\alpha,\alpha,\gamma,\gamma$ -tetraphenylpropene. C. F. Koelsch and R. V. White. Am Chem Soc J 65:1639-40 Ag '43

METHYL vinylacetylene

Constitution of piryrene; chemical evidence. H. Sargent, E. R. Buchman and J. P. Farquhar. bibliog Am Chem Soc J 64:2692-3 N '42

Constitution of piryrene; electron diffraction investigation. R. Spurr and V. Schomaker. Am Chem Soc J 64:2693-6 N '42

METHYL vinyl ketone

Preparation and polymerisation of methyl vinyl ketone. T. White and R. N. Haward. diag Chem Soc J p25-31 Ja '43

METHYLAMINE

Steric strains and the anomalous base strengths of the methylamines. H. C. Brown and H. Bartholomay, jr. J Chem Phys 11:43 Ja '43

METHYLATION

Intermolecular forces and chain configuration in linear polymers; the effect of N-methylation on the X-ray structures and properties of linear polyamides. W. O. Baker and C. S. Fuller. bibliog pl diags Am Chem Soc J 65:1120-30 Je '43

Nuclear methylation of phenols by means of methanolic sodium methoxide. J. W. Cornforth, R. H. Cornforth and R. Robinson. Chem Soc J p682-4 N '42

Preparation of certain 3-substituted indoles. R. H. Cornforth and R. Robinson. Chem Soc J p680-2 N '42

Studies on agar-agar; mode of attachment and configuration of the l-galactose residues isolated as 2:4-dimethyl-3:6-anhydro- β -methyl- γ -galactoside by methylation of the hydrolysis products of methylated agar. E. G. V. Percival and T. G. H. Thomson. Chem Soc J p750-5 D '42

METHYLENE

Evidence for the presence of CH_2 molecules in comets. G. Herzberg. il Rs Mod Phys 14: 195-7 Ap-Jl '42

METHYLENE blue

Dimeric and other forms of methylene blue: absorption and fluorescence of the pure monomer. G. N. Lewis and others. Am Chem Soc J 65:1150-4 Je '43

Gleimsa stain of quite constant composition and performance, made in the laboratory from eosin and methylene blue. R. D. Lillie. Pub Health Rep 58:449-52 Mr 12 '43

Methylene blue and other indicators in general acids; the acidity function. G. N. Lewis and J. Bigeleisen. bibliog Am Chem Soc J 65:1144-50 Je '43

METHYLENE chloride

Inflammability of methylene chloride-oxygen-nitrogen mixtures. G. W. Jones, R. E. Kennedy and F. E. Scott. diags U S Bur Mines Rep of Invest 3727:1-7 '43

Methylene chloride; in the extraction and determination of vitamin A and oil in soupfin shark livers. F. C. Tompkins and R. A. Bolomey. bibliog Ind & Eng Chem Anal ed 15:437-9 Jl 15 '43

Analysis

Determination of volatile halogenated hydrocarbons in blood. H. E. Moran. bibliog diag J Ind Hygiene 25:243-8 Je '43

METHYLENE dioxybenzene

Studies in the veratrole and methylenedioxybenzene series. R. T. Arnold and F. Bordwell. bibliog Am Chem Soc J 64:2983-6 D '42

METHYLENE dioxyphenylisopropylamine

β -3:4-Methylenedioxyphenylisopropylamine. J. Elks and D. H. Hey. Chem Soc J p15-16 Ja '43

METHYLENE group

Chemistry of acrylonitrile; cyanoethylation of active hydrogen groups. H. A. Bruson and T. W. Riener. Am Chem Soc J 65:23-7 Ja '43

METRIC system

Metric system and Latin-American friendship. O. E. Kraft. il Dun's R 51:14-16 Ja '43

METROPOLITAN districts

Land-use control in the urban fringe of Portland, Oregon. F. Arpke, map J Land & Pub Util Econ 18:463-80 N '42

Manufacturing in metropolitan districts. C. E. Haring, map Adv & Sell 36:38+ Ja '43

New metropolitan districts as sales strategy for 1943. C. E. Haring. Adv & Sell 35: 22+ D '42

Population figures for metropolitan areas. Adv & Sell 36:77 Je '43

U.S. population shifts resulting from the war. P. M. Hauser, il Am Gas Assn Mo 25:87-90+ Mr '43; Same cond. Sales Management 52:40, 42+ F 1 '43; Abstract. Business Week p19-20 F 13 '43

Where are the customers now? a comprehensive study of migration in wartime. L. J. McCarthy. Ptr Ink 202:21-2, 26, 66-7 F 12 '43

See also

Water districts

METROPOLITAN life insurance company

Metropolitan field's war work told in book. East Underw 44:5 Ag 20 '43

Metropolitan holdings of government bonds now \$1,750,000,000; financial statement of 1942 operations. East Underw 44:1+ F 26 '43

Metropolitan's history, subject of a new book, by L. I. Dublin. Weekly Underw 148: 708+ Mr 27 '43; East Underw 44:9 Mr 19 '43

1943 significant in Metropolitan history; 75th anniversary. East Underw 44:7 Mr 26 '43; Nat Underw (Life ed) 47:3+ Mr 26 '43; Ins Field (Life ed) 72:8-9 Mr 26 '43

No holds barred; legal barrier to Manhattan's vast postwar housing project, Stuyvesant Town, hurdled. Arch Forum 78:50 Je '43

One way to invest; Metropolitan Life plans to build another housing project. Business Week p103+ My 8 '43

Parkchester 2 for 194X. il Arch Forum 72: 66+ My '43

Proposed postwar housing project; Stuyvesant Town housing project, New York. il plan Arch Rec 93:16 Je '43

75th anniversary commemorated; family of thirty million. Comm & Fin Chr 157:1319 Ap 8 '43

METROPOLITAN microchemical society

Activities of the Metropolitan microchemical society. L. K. Yanowski. Chem & Eng N 21:301 Mr 10 '43

METROPOLITAN opera company

Selling opera is big business. A. Stahr. Adv & Sell 36:56+ Ap '43

MEXICAN painting. See Painting, Mexican**MEXICANS in the United States**

Across the border: southern California citrus growers see 100% harvest with Mexican workers. Business Week p85+ Jl 31 '43

Borrowed help. il Business Week p19 S 11 '43

MEXICANS in the United States—Continued
Rules for admission of Mexican workers as railroad track laborers. Monthly Labor R 57:240-1 Ag '43

Temporary migration of Mexican workers to the United States. Int Labour R 48:375-7 S '43

MEXICO

Businessman's primer: introducing Mexico. C. Oglesby. il Ptr Ink 204:19-21+ Ag 27 '43

President has signed Mexican claims bill. Comm & Fin Chr 156:2316 D 31 '42

See also

Cement industry and trade—Mexico	Rayon industry—Mexico
Cost of living—Mexico	Roads—Mexico
Insurance, Social—Mexico	Rubber industry and trade—Mexico
Labor laws and legislation—Mexico	Tin mines and mining—Mexico
Mines and mineral resources—Mexico	Tobacco industry and trade—Mexico
Money—Mexico	Trade unions—Mexico
Railroads—Mexico	Wages—Mexico

Commerce

Diplomacy problems Coca Cola met in opening the Mexican market. F. D. Gonda. il Sales Management 52:56+ Mr 15 '43

Latin-American ties tighten. Business Week p36+ My 8 '43

Economic conditions

Blacklist impact; Mexican economy thrown out of gear by U.S. controls. Business Week p48 F 13 '43

Buenos amigos; boom in Mexican business. Business Week p16-18 Ap 24 '43

Mexico, Central America and Cuba from an investment standpoint. V. L. Horoth. il Mag of Wall St 72:18-20+ Ap 17 '43

Mexico is forging ahead. J. V. Noel. Bankers M 146:435-6 My '43

Mexico: one year at war. Fortune 28:120-1+ Ag '43

Mexico's activity mounts. il For Comm W 10:3-5+ Ja 2 '43

Mexico's money flood. R. P. Crawford. Barron's 23:74- O 11 '43

News by countries. For Comm W 10:17-19 Ja 30; 11:23-32 My 1; 21-4 Je 12; 12:14-17 Jl 31; 26-8 Ag 21; 20-2 S 11; 13:24-5 O 23 '43

Review of the economic situation. Comm & Fin Chr 158:315 Jl 22 '43

Economic policy

Economic co-operation between Mexico and the United States. Int Labour R 48:622-3 N '43

Mexico's economy; Mexican-American commission for economic cooperation submits broad recommendations. C. Cloyes. il For Comm W 12:3-4+ Ag 21 '43

Expropriation policy

Mexican agreement on seized oil properties. Comm & Fin Chr 158:1490 O 14 '43

Mexico accepts terms of payment for oil properties of American nationals. H. D. Ralph. Oil & Gas J 42:40 O 7 '43

Mexico settles up with Sinclair, Jersey Standard. Nat Pet N 35:3-4 O 6 '43

Foreign relations

United States

Mexico: one year at war. Fortune 28:120-1+ Ag '43

Mexico's economy; Mexican-American commission for economic cooperation submits broad recommendations. C. Cloyes. il For Comm W 12:3-4+ Ag 21 '43

President on inspection tour of camps visits President Camacho of Mexico. Comm & Fin Chr 157:1490 Ap 22 '43

US and Mexico form economic committee. Comm & Fin Chr 157:1690 My 6 '43

See also

Mexico—Expropriation policy

Industries and resources

Mexican commission. Comm & Fin Chr 158:1024 S 9 '43

Mexican trade trainees in U.S. earn as they learn. E. S. Hanson. il For Comm W 10:10+ Ja 30 '43

Mexico trade scholars in the U.S. il Chem & Eng N 21:378 Mr 25 '43

Mexico's banana business experiencing revival. D. M. Crawford and A. J. Mullen. il For Comm W 12:6-9 Jl 17 '43

Mexico's program; joint commission urges industrial expansions. Business Week p46+ Jl 24 '43

Mexico's war production. Economist 144:44-5 Ja 9 '43

Postwar fizzle? Business Week p50+ S 18 '43

MIAMI

Water supply

Experimental treatment plant at Miami. A. B. DeWolf. diags Am Water Works Assn J 35:1085-9 Ag '43

MIAMI university, Coral Gables, Florida

Marine biological laboratories; laboratory recently opened by University of Miami at Belle Isle. T. Barbour. Science 98:141-3 Ag 13 '43

MIAZZA, James F., Jr.

Big storm proves it again; Jim Miazza and the adjusting Miazzas. F. C. Crowell, Jr. por(cover) Ins Field (Fire ed) 72:6 Ag 19 '43

MICA

Federal agency stimulates production of strategic mica. il Eng & Min J 143:62 D '42

Grinding North Carolina mica. flowsheet il Eng & Min J 144:73-5 My '43

Mica control. Economist 144:536-7 Ap 24 '43

Mica deposit in central Australia; in New Zealand. For Comm W 11:30 Ap 3 '43

Mica deposits of Georgia; abstract. G. Peyton. Econ Geol 38:169 Mr '43

Mica for war; bonanza finds at Eau Claire, Ont. D. C. McLaren. il Eng & Min J 144:68-9 Ag '43

Mica trade association. Chem Age (Lond) 48:677 Je 26 '43

Mica window Geiger counter tube for measuring soft radiations. D. H. Copp and D. M. Greenberg. diag R Sci Instr 14:205-6 Jl '43

'43; Same cond. Electronics 16:190+ O '43

Mica mica from the western hemisphere. Elec Eng 61:607-9 D '42

Muscovite mica; payment of premium prices. Can Min J 64:207 Ap '43

New standard on glass-bonded mica radio insulators. diags Ind Stand 14:239 Ag '43

North Carolina's booming mica industry. B. Sharpe. il Manuf Rec 111:30-1 N '42

Pneumoconiosis among mica and pegmatite workers. T. F. Vestal, J. A. Winstead and P. V. Jollet. bibliog il Ind Med 12:11-14 Ja '43

Sorting flake mica. J. M. Crowe. Chem Ind 51:869 D '42

Spatial asymmetry of Cerenkov radiation as a function of electron energy. H. O. Wyckoff and J. E. Henderson. bibliog diags Phys R 64:1-6 Jl 1 '43

Spotlight turned on mica shortage by new development. Franklin Inst J 236:231-2 Ag '43

Strategic mica; mining activities in North Carolina. C. H. Vivian. il Comp Air M 47:690-3 D '42

Strategic mica; with glossary of terms. G. R. Gwinn. U S Bur Mines Information Circ 7258:1-21 '43

United States finding new mica sources in other Americas. For Comm W 10:24 Mr 27 '43

WPB studies war uses for stained mica. Elec Eng 62:511-12 N '43

See also

Muscovite

Prices

Mica prices. Rock Prod 46:120 Je '43

MICA, Substitutes for

Mica replacement; Pollectron. Sci Am 169:11-12 Jl '43

Synthetic plastic material; Pollectron. Science 97:sup12 My 7 '43

MICARTA

Machining laminated phenolic plastics. F. P. Hunsicker. il Mach 49:197-200 D '42

MICARTA—Continued

Micarta bearings employed for propeller shafts. Mach 49:197 Ap '43

Micarta inserts for automatic screw machine clutches. *il* Iron Age 150:66 N 26 '42

Plastic bearings. *il* Chem & Eng N 21:560 Ap 25 '43

MICE

Strain of endemic typhus fever virus isolated from house mice (*mus musculus musculus*). G. D. Brigham and E. G. Pickens. *bibliog* Pub Health Rep 58:135-6 Ja 22 '43

MICELLES

Studies on high molecular weight aliphatic amines and their salts; transference numbers of some primary amine hydrochlorides in aqueous solution and their significance in the interpretation of the micelle theory. C. W. Hoerr and A. W. Raiston. *bibliog* Am Chem Soc J 65:976-83 My '43

Surface tension of micelle-forming solutions. A. E. Alexander. *bibliog* J Chem Phys 10:691 N '42

MICHAEL reaction

Study of some Michael reactions. C. F. Koelsch. *Am Chem Soc J* 65:437-9 Mr '43

MICHELL, Anthony George Maldon, 1870-

James Watt international medal; presented to A. G. M. Michell by A. Robertson; reply by S. M. Bruce. *Engineering* 155:94-5 Ja 29 '43; Same cond. *Engineer* 175:93-4 Ja 29 '43

Presentation of the James Watt international medal. *Inst Mech Eng J & Proc* 149:Proc 3-6 Ap '43

MICHIGAN

Recreation livelihood area; northern Wisconsin and upper Michigan. G. S. Wehrwein and H. A. Johnson. *bibliog* map J Land & Pub Util Econ 19:193-206 My '43

See also

Chicory	Petroleum industry
Iron mines and	and trade—Michigan
mining—Michigan	
Mines and mineral	Sewerage—Michigan
resources—Michigan	

MICHIGAN, Lake

No emergency action required to meet Chicago water needs; city can check threatened pollution within the limits on lake diversion set by the U.S. Supreme court. *Eng N* 131:309 Ag 26 '43

MICHIGAN alkali company. See Wyandotte chemicals corporation

MICHIGAN central railroad

High assets behind a rail bond. J. H. Sheppard. *Barron's* 23:10 O 4 '43

MICHIGAN university

Assets. *Science* 97:110-11 Ja 29 '43
Grant to the University of Michigan from the National foundation for infantile paralysis. *Science* 97:528-9 Je 11 '43

MICHOACAN, Mexico

Birth of a new volcano. in Michoacan. E. Ordoñez. *il* Min & Met 24:314-15 Jl '43

MICRO SWITCH corporation

How Micro Switch attains its objective; sales grew in relation to amount of product information given in advertising copy. J. J. Lawler. *il* Ind Marketing 28:22-5+ My '43

MICROANALYSIS

Absorption tube tares in carbon and hydrogen microdetermination. W. M. MacNevin and J. E. Varner. *bibliog* Ind & Eng Chem Anal ed 15:224-5 Mr 15 '43

Analytical patterns in the study of mineral and biological materials; autoradiograph contact print, electrographic print, etc. H. Yagoda. *bibliog* (70 references) *il* *diags* Ind & Eng Chem Anal ed 15:135-41 F 15 '43

Apparatus in micro-volumetric analysis; research brings variety of inventions. D. L. Masters. *bibliog* *diags* Chem Age (Lond) 48:439-42 Ap 24 '43

Colorimetric method for the determination of sodium. E. A. Arnold and A. R. Pray. *Ind & Eng Chem Anal ed* 15:294-6 Ap 15 '43

Detection of metallic driers in varnishes and oils by spot test analysis. J. V. Atkinson. *bibliog* Paint Oil & Chem R 106:10, 22-3 Jl 1 '43

Determination of aluminum in biological material. J. Cholak, D. M. Hubbard and R. V. Story. *bibliog* Ind & Eng Chem Anal ed 15:57-60 Ja 15 '43

Determination of microquantities of certain proteins; colorimetric method. D. Pressman. *bibliog* Ind & Eng Chem Anal ed 15:357-9 My 15 '43

Determination of nicotinic acid; modifications in the microbiological method. W. A. Krehl, F. M. Strong and C. A. Elvehjem. *bibliog* Ind & Eng Chem Anal ed 15:471-5 Jl 15 '43

Determining magnesium in plants and soils; adaptation of the 8-hydroxyquinolate micro-method. M. E. Weeks and J. R. Todd. *bibliog* Ind & Eng Chem Anal ed 15:297-9 Ap 15 '43

Diffusion micromethod for nitrogen. R. C. Hawes and E. R. Skavinski. *bibliog* *diags* Ind & Eng Chem Anal ed 14:917-21 N 15 '42

Estimation of the sulfonamides; a rapid and accurate micromethod. S. W. Lee, N. B. Hannay and W. C. Hand. *bibliog* Ind & Eng Chem Anal ed 15:403-6 Je 15 '43

Ground glass for spot testing in solvent extractions. A. Edeler. *Ind & Eng Chem Anal ed* 15:282 Ap 15 '43

Iodoform microtest for the higher alcohols and ketones. F. H. Stodola. *bibliog* Ind & Eng Chem Anal ed 15:72-3 Ja 15 '43

Iodometric semimicroprocedure for determination of arsenic in sodium cacodylate and cacodylic acid. V. Levine and W. M. McNabb. *Ind & Eng Chem Anal ed* 15:76-7 Ja 15 '43

Microdetermination of arsenic in biological material. J. A. Sultzberger. *bibliog* *diag* Ind & Eng Chem Anal ed 15:408-10 Je 15 '43

Microdetermination of carbon in steels; modification of the standard carbon-hydrogen train. E. W. Balls, H. A. Liebhafsky, and E. H. Winslow. *diags* Ind & Eng Chem Anal ed 15:68-9 Ja 15 '43

Microdetermination of hydroxyl content of organic compounds; acetic anhydride-pyridine mixture as reagent. J. W. Petersen, K. W. Hedberg and B. E. Christensen. *bibliog* Ind & Eng Chem Anal ed 15:225-6 Mr 15 '43

Microdetermination of lead by dithizone with an improved lead-bismuth separation. K. Bambach and R. E. Burke. *bibliog* Ind & Eng Chem Anal ed 14:904-7 N 15 '42

Microdetermination of magnesium with the polarograph. C. Carruthers. *bibliog* Ind & Eng Chem Anal ed 15:412-14 Je 15 '43

Microdetermination of mercury in organic compounds. H. W. Eckert. *bibliog* Ind & Eng Chem Anal ed 15:406-7 Je 15 '43

Microdetermination of volatile matter in coal and coal products. M. Neuworth and W. R. Kirner. *bibliog* Ind & Eng Chem Anal ed 15:359-60 My 15 '43

Microextraction and microtitration of fatty acids. D. Stetten, Jr. and G. F. Grail. *diag* Ind & Eng Chem Anal ed 15:300 Ap 15 '43

New technique for the ultimate micro-analysis of organic compounds. R. Belcher and C. E. Spooner. *diags* Chem Soc J p313-16 Jl '43

Photographically interesting fine chemicals as specific spot test reagents. A. Steigmann. *Soc Chem Ind J* 62:42-3 Mr '43

Qualitative analysis of microgram samples; separation, estimation, and identification of the more common ions of the hydrogen sulfide group. A. A. Benedetti-Pichler and M. Cefola. *bibliog* *il* Ind & Eng Chem Anal ed 15:227-30 Mr 15 '43

Quantitative chemical microdetermination of twelve elements in plant tissue. R. Q. Parks and others. *bibliog* Ind & Eng Chem Anal ed 15:527-33 Ag 15 '43

Quantitative micro-estimation of antibodies in the sera of man and other animals. M. Heidelberger and C. F. C. MacPherson. *bibliog* *Science* 97:405-6 Ap 30 '43; *Correction*. 98:63 Jl 16 '43

Rapid and accurate micro method for the estimation of the sulfonamides. S. W. Lee, N. B. Hannay and W. C. Hand. *Science* 97:359-60 Ap 16 '43

Removal of interfering anions in semimicro qualitative analysis. L. J. Curtman and S. Krakauer. *J Chem Educ* 20:399-400 Ag '43

MICROANALYSIS—Continued

- Review of organic microchemistry. L. T. Hallett. *il diags Ind & Eng Chem Anal ed* 14:956-63 bibliog (378 references, p990-3) D 15 '42
- Semimicroanalysis of saline soil solutions. R. F. Reitemeyer. *bibliog Ind & Eng Chem Anal ed* 15:393-402 Je 15 '43
- Semimicrodetermination of chlorine, bromine, and iodine in organic compounds. E. W. Peel, R. H. Clark and E. C. Wagner. *bibliog Ind & Eng Chem Anal ed* 15:149-51 F 15 '43
- Spot plate for drop tests. F. W. West. *il Ind & Eng Chem Anal ed* 15:476 JI 15 '43
- Spot reaction experiments. F. Feigl. *J Chem Educ* 20:137-41, 174-8, 240-3, 298-301 Mr-Je '43
- Spot test for chromium. W. O. Philbrook. *il Metal Prog* 42:1035-7 D '42
- Spot test for manganese in steel. *Metal Prog* 43:746-7 My '43
- Ultramicromethod for sodium employing the polarograph. C. Carruthers. *bibliog Ind & Eng Chem Anal ed* 15:70-1 Ja 15 '43

Study and teaching

- Teaching of microchemistry; Pregl analysis and chemical microscopy. J. A. Kuck. *bibliog il diags J Chem Educ* 19:574-83 D '42

MICROBAROGRAPH. See Barograph**MICROBIOLOGY. See Microorganisms****MICROCHEMISTRY**

- Determination of boiling points of pure organic liquids; a micromethod for use with reduced pressures. C. R. Garcia. *bibliog diags Ind & Eng Chem Anal ed* 15:648-9 O 15 '43
- Microchemistry of pulp fibers; the significance of fiber ballooning in the pulping process. W. M. Harlow. *bibliog il Paper Tr J* 117: 27-9 JI 8 '43
- Review of organic microchemistry. L. T. Hallett. *il diags Ind & Eng Chem Anal ed* 14:956-93 bibliog (378 references, p990-3) D 15 '42
- Use of semimicro technic in elementary organic chemistry. N. D. Cheronis and others. *bibliog il diags J Chem Educ* 20:431-7, 488-96 S-O '43

See also

- Microanalysis
also Metropolitan microchemical society

MICROELECTROPHORESIS. See Electrophoresis**MICROFILM reading machines**

- Microfilm reading machines. D. H. Litchfield and M. A. Bennett. *bibliog Special Lib* 34:15-20, 45-50, 81-8, 123-30, 157-64, 379-84 Ja-My, S '43

MICROFILM records

- After-treatment of microfilm records. F. Luther. *Am Phot* 37:28-9 F '43
- How Western Electric safeguards its records. *il Am Business* 13:14-15 F '43
- Photography in accounting. D. S. Potts. *diags N A C A Bul* 24:433-40 D 15 '42
- Planning a microfilm installation; abstract. G. W. Oliver, Jr. *Management R* 32:332-3 S '43

MICROFILMS

- Army microfilm-mail technique. A. J. Lockrey. *il Am Phot* 36:24-5 D '42
- Insure your letters, use V-mail. *il Inland Ptr* 111:43 Ag '43
- Microfilm records of the Linnean collections and manuscripts. E. D. Merrill. *Science* 97: 110 Ja 29 '43
- Microfilms in libraries. E. Lancaster-Jones. *Assn of Sp Lib & Inf Bur Proc* 1942:34-7; Discussion. 64-7
- Microfilms; various uses. *Engineering* 154:412 N 20 '42
- WIP broadcast on microfilm. D. H. Litchfield. *Special Lib* 33:364-7 D '42

See also

- Microfilm reading machines

Bibliography

- Union list of microfilms; supplement 1 (1942). 244p pa 43 Philadelphia bibliographical center and Union lib. catalogue. Committee on microphotography, Philadelphia '43

Standards

- Microfilm standards. F. Bobb. *Special Lib* 33:325-8 N '42

MICROLINEOMETER

- Microlineometer; crystal-controlled frequency standard and square-wave generator. E. F. Travis. *il diags Gen Elec R* 46:345-8 Je '43

MICROMERITICS. See Particles**MICROMETERS**

- Limit dial for micrometer speeds inspection. F. L. Fahy. *diags Instruments* 16:24 Ja '43
- Micrometer stop block for planer head. *il diags Ry Mech Eng* 117:43 Ja '43

MICROORGANISMS

- Catalysts, ancient and modern. A. J. V. Underwood. *Chem & Ind* 61:476-8 N 21 '42
- Control of micro-organisms and aquatic vegetation in lakes and streams. L. F. Warwick. *bibliog il Water Works & Sewerage* 90:267-72 JI '43
- Microbe as a biological system; abstract. S. A. Waksman. *Am Water Works Assn J* 35: 1353-4 O '43
- Microbiology of textile fibers. W. S. Marsh. *Am Dyestuff Rep* 31:563; Discussion. 563-9 N 23 '42

See also

- | | |
|---------------------------|----------|
| Bacteria | Mildew |
| Fermentation | Plankton |
| Fungi | Viruses |
| Microscope and microscopy | |

MICROORGANISMS, Pathogenic

- Cultivation from granuloma inguinale of a microorganism having the characteristics of Donovan bodies in the yolk sac of chick embryos. K. Anderson. *Science* 97:560-1 Je 18 '43

See also

- Coccidioides

MICROPHONES

- Bomb scoring made more accurate by microphone method. *il Sci Am* 168:128-9 Mr '43
- Contemporary problems in television sound. C. L. Townsend. *il Inst Radio Eng Proc* 31:3-4 Ja '43
- Microphones, how to use them. W. Moody. *il diags Radio N* 29:38-9+ Ja '43
- Polydirectional microphones; abstract. H. F. Olson. *diags Electronics* 16:278+ Mr '43
- Rochelle salt crystal devices of low impedance; Monobar unit. R. W. Tibbetts. *il diags Electronics* 16:88-90+ Ap '43
- Selected problems in architectural acoustics; problems pertaining to recording studios and conditions of microphone pickup. M. Rettinger. *Inst Radio Eng Proc* 31:18-22 Ja '43
- Signal corps microphone, war model. *il diags Mod Plastics* 21:72-3 S '43

See also

- | | |
|-------------------------|---------------------------------|
| Loud speaking apparatus | Radio broadcasting |
| Radio apparatus | Sound—Recording and reproducing |

MICROPHOTOGRAPHY

- Microfilms in libraries. E. Lancaster-Jones. *Assn of Sp Lib & Inf Bur Proc* 1942:34-7; Discussion. 64-7

See also

- Microfilm records
Microfilms
Photomicrography

MICRORADIOGRAPHY. See Radiography**MICROSCOPE and microscopy**

- Development of the microscope objective. A. H. Bennett. *bibliog diags Opt Soc Am J* 33:123-8 Mr '43
- Dispersion of pigments and fillers for microscopical examination. L. B. Miller. *il Paper Tr J* 116:39-42 Ja 7 '43
- Efficiencies, for particle determination, of the Electrotor meter, the ultramicroscope, and the settlement counter. S. C. Blacktin. *Soc Chem Ind J* 61:161-2 O '42
- Glyoxal, a non-irritating aldehyde suggested as substitute for formalin in histological fixations. L. F. Wicks and V. Suntzeff. *Science* 98:204 Ag 27 '43
- Locating holes with gage-blocks and microscope. D. V. Stevens. *il Mach* 49:210 D '42

MICROSCOPE and microscopy—Continued

Micro-hardness tester, new tool in powder metallurgy. R. Steinitz. *il Metals & Alloys* 17:1183-7 Je '43

New methods for preparing surface replicas for microscopic observation. V. J. Schaefer. *il Phys R* 62:495-6 N 1 '42

Number of fibers per gram of pulp and its relation to fiber dimensions. J. H. Graff. *diags Paper Tr J* 117:25-31 O 21 '43

Optical crystallographic studies with the polarizing microscope; axial dispersion with change of sign; other dispersion measurements. W. M. D. Bryant. *bibliog il Am Chem Soc J* 65:96-102 Ja '43

Optical crystallographic studies with the polarizing microscope; ellipsoidal dispersion in the picrates of various amines. J. Mitchell, Jr. and W. M. D. Bryant. *bibliog il Am Chem Soc J* 65:128-37 F '43

Phosphorescence microscope. *Science* 98:sup8 O 22 '43

Principal characteristics of the important textile fibers. W. von Bergen. *il Mech Eng* 65:183-7 Mr '43

Quantitative analysis of linen in part linen fabrics. W. Krauss. *bibliog il Rayon* 23:653-4, 713-14 N-D '42

Surface replicas containing dye for use in the light microscope. V. J. Schaefer. *il Metal Prog* 44:72-4 J1 '43

Taylor, Taylor and Hobson toolmakers' microscope. *il Automobile Eng* 32:497-8 N '42

TAPPI microscopy committee report, 1942. F. W. Bentzen. *bibliog(56 titles) Paper Tr J* 116:26-9 Ja 14 '43

Use of the microscope in particle size analysis. G. L. Fairs. *bibliog diags Chem & Ind* 62:374-8 O 2 '43

See also

Electron microscope	Photomicrography
Metallography	Stains and staining
Microanalysis	(microscopy)
Microchemistry	

See Electron microscope
Lighting

Cool light for dissecting microscopes. R. L. Patton. *diags Science* 98:392 O 29 '43

Variable angle surface illuminator for microscopic inspection of surface texture of materials. J. H. Graff. *il diags Paper Tr J* 115:97-100 N 26 '42

MICROSCOPIC slides

Polyvinyl alcohol; a medium for mounting and clearing biological specimens. W. G. Downs. *Science* 97:539-40 Je 11 '43

Use of creosote in mounting fleas and other arthropods on slides. I. Fox. *Science* 96:478 N 20 '42

MICROVOL. See Gases—Apparatus

MID-CONTINENT airlines, inc.
Ten years' progress. E. E. Jacobs. *il Aero-nautical Eng R* 1:97 N '42

MID-CONTINENT petroleum corporation
Thumbnail stock appraisal. *Mag of Wall St* 71:422 Ja 23 '43

MIDDLE age

See also
Old age

MIDDLE EAST. See Near East

MIDDLE EAST supply center. See World war, 1939—Supplies

MIDDLE WEST

See also
Great Plains region

Industries and resources

Chem & Met report on resources and resourcefulness of the Middle West. *il maps Chem & Met Eng* 49:77-107 N '42

MIDDLE WEST corporation

Annual report. *Comm & Fin Chr* 157:2350 Je 21 '43

Brief articles on holding companies. O. Ely. *Pub Util* 31:365-6 Mr 18 '43

Integration plan. *Comm & Fin Chr* 157:819 Mr 1 '43

Kansas unit sold. *Comm & Fin Chr* 157:1561 Ap 26 '43

Sale of Kansas electric power co. stock. *Comm & Fin Chr* 158:1072 S 13 '43

SEC extends time to revise subsidiaries. *Comm & Fin Chr* 158:773 Ag 23 '43

Values in Middle West corporation. W. T. Hyde, Jr. *Barron's* 23:5 Mr 1 '43

MIDGES

Overcoming a bloodworm (chironomid) problem; Canton, N. C. J. C. Rickards. *il diags Pub Works* 74:11-12+ F '43

MIDLAND bank limited

Midland bank (London) profits for year 1942. *Comm & Fin Chr* 157:928 Mr 11 '43

Statement circulated to shareholders. R. McKenna. *Economist* 144:120-1 Ja 23 '43

MIDLAND united company

Debt liquidation plan approved. *Comm & Fin Chr* 156:2134 D 14 '42

Hearing on plan of reorganization. *Comm & Fin Chr* 157:996 Mr 15 '43

Liquidation of M.U. securities corp. *Comm & Fin Chr* 158:291 J1 19 '43

MIDLAND utilities company

New plan offered. *Comm & Fin Chr* 158:1280 S 27 '43

Petition studied by U.S. court; master offers settlement of claims. *Comm & Fin Chr* 157:256 Ja 18 '43

MIDLAND Valley railroad

Debt adjustment plan. *Comm & Fin Chr* 157:1272 Ap 5 '43

Seeks extension of bonds and modification of indebtedness. *Comm & Fin Chr* 157:346-7 Ja 25 '43

MIDWEST power conference

Conference, Chicago, April 8-9. Power 87:326-7+ My '43; *Elec W* 119:1303-4 Ap 17 '43; *Power Pl Eng* 47:84, 110, 112 My '43

MIGRANT problem

FSA program for migratory group. *Nat Underw* 47:19 Je 24 '43; Same. *Nat Underw (Life ed)* 47:4 Je 25 '43

MIGRATION

See also

Immigration and emigration

MIGRATION of industry. See Industry—Migration

MIGRATION of workers

Effect of war-induced migration on urban communities. R. K. Lamb. *il Civil Eng* 13:89-92 F '43

Internal migration and the war. H. S. Shryock, Jr. *maps Am Stat Assn J* 38:16-30 Mr '43

Labor migration; brand new market for life insurance. T. J. V. Cullen. *il Spectator (Life ed)* 149:9-13 D '42

War and Main street; migration of workers and military casualties will have long term effects on population. C. Vogel. *Barron's* 23:6 N 8 '43

MIKHAILOVITCH, Draja, 1893?-1943

Fratricide in Yugoslavia; Partisan-Mihailovich schism widens into a split among allies. S. Pribichevich. *Fortune* 27:148-53, 162, 164+ Je '43

MILDEW

Destruction of rayon by mildew organisms. W. S. Marsh and A. E. Duske. *il Rayon* 24:185-7, 242-4 Ap-May '43

Determining the deterioration of cellulose caused by fungi. G. A. Greathouse, D. E. Klemme and H. D. Barker. *bibliog il Textile Col* 65:168-75 Ap '43

Finishing of army ducks with special reference to mildewproofing. E. C. Bertolet. *Am Dyestuff Rep* 32:214-19, 226-7 My 10 '43

Fungi, molds and mildews in textiles. E. Hardy. *il Rayon* 24:138-40 Mr '43; Same *abr. Textile Col* 65:256, 262+ Je '43

Impact of war-time requirements on post-war finishes; presented for the A.A.T.C.C. Rhode Island section by H. S. Travis. *Am Dyestuff Rep* 31:634-7+ D 7 '42

Mildewproofed cotton fabrics. J. E. Goodavage. *Am Dyestuff Rep* 32:265-70 Je 7 '43; *Abstract. Textile World* 93:92-3 Je '43

Modern mildew proofing. P. E. N. Cillium. *Textile Col* 65:359-65+ Ag '43

New process prevents mildew damage in textiles; Puratized process. *Rayon* 24:609-10 N '43

Resistance of textiles to micro-organisms. *Can Chem & Process Ind* 27:480+ Ag '43

MILDEW—Continued

- Resistance of various textile fibers to mildew. N. E. Borlaug. *Il Rayon* 24:416-18, 475-6 Ag '43
 Soil suspension method for testing mildew resistance of treated fabrics. M. S. Furry and M. Zametkin. *bibliog Il Am Dyestuff Rep* 32:395-8 S 13 '43

MILITARY aeronautics. See Aeronautics, Military

MILITARY airplanes. See Airplanes, Military

MILITARY and naval service insurance. See Insurance, Military and naval service

MILITARY architecture

See also

- | | |
|--------------------|-------------------------|
| Armories | Naval training stations |
| Barracks | |
| Military buildings | |

MILITARY areas

- Large U.S. area used for war purposes. *Comm & Fin Chr* 158:1715 O 28 '43

MILITARY art and science

See also

- | | |
|-----------------------|-------------------------------|
| Aeronautics, Military | Radio communication, Military |
| Camouflage | Smoke screens |
| Chemical warfare | Transportation, Military |
| Grenades | |
| Logistics | War |
| Military occupation | World war, 1939—Strategy |
| Ordnance | |

MILITARY automobiles. See Automobiles, Military

MILITARY aviators. See Aviators, Military

MILITARY balloons. See Balloons, Military

MILITARY buildings

- Clay products are doing a big job on military and housing projects. *plans Brick & Clay Rec* 102:27-8 Ja '43

- Concrete structures house men and materials of war; buildings erected for army and navy. *Il Concrete* 51:10-11, 20+ S '43

- Embury's odyssey; U.S. military construction in the area around Eritrea. *Il Arch Forum* 78:4 F '43

- Frame buildings for a western cantonment designed to resist earthquake stresses. D. H. McCreery. *Il diag Civil Eng* 13:269-71 Je '43

- Heating for the navy; military building on the West coast. *Il Dom Eng* 161:52-3 Mr '43

- Magazine separation determines plan of ordnance depot. A. C. Polk. *Il Civil Eng* 13:26-8 Ja '43

- Military huts and structures at American installations in Britain. W. G. Bowman. *Il diag Eng N* 131:608-15 O 21 '43

- Navy camp built from non-critical materials; Camp Bainbridge. *Il diag Eng N* 130:124-7 Ja 28 '43

- Roofing of army buildings. *Franklin Inst J* 236:192-3 Ag '43

- Special expedients speed construction of naval air training station. *Il Eng N* 130:792-7 Je 3 '43

- Utility building; Navy department galvanized steel semi-circular building. *Arch Rec* 94:90+ Ag '43

See also

- | | |
|-----------------|-------------------------|
| Armories | Military training camps |
| Barracks | |
| Camps, Military | |

Heating and ventilation

- Air conditioning goes to war. M. Ingels. *Il Heating-Piping* 15:20-4 Ja '43

- Army fuel consumption studies of 1941-42. L. C. McCabe, S. Konzo and R. E. Biller. *Il map Heating-Piping* 15:38-45 Ja '43

- Fuel and heating program at army cantonments. L. C. McCabe. *Il Heating-Piping* 15:228-30 My '43

MILITARY camps. See Camps, Military; Military training camps

MILITARY communication. See Communication, Military; Radio communication, Military

MILITARY education

- Armed services announce list of training schools. *Eng N* 130:169+ F 11 '43

Army and navy announce details of college training programs. *Elec Eng* 62:37-9 Ja '43

Army specialized training program. A. L. H. Rubin. *J Eng Educ* 33:588-629 Ap '43

Army specialized training program; basic curricula with specialization. H. Beukema. *J Eng Educ* 34:50-111 S '43

Current status of army specialized training program. H. Beukema. *J Eng Educ* 34:50-62 S '43

Recent developments in army and navy college training programs. H. T. Heald. *J Eng Educ* 33:496-601 Mr '43

School for statesmen. H. Beukema. *Fortune* 27:108-9+ Ja '43

Training technical leaders for war; army specialized training program and the navy college training program. H. Beukema; J. W. Barker. *Elec Eng* 62:89-95 Mr '43

See also

- | | |
|----------------------|---------------------------------------|
| Military engineering | Military training |
| —Study and teaching | Moving pictures in military education |

MILITARY engineering

- African construction front. W. G. Bowman. *Il Eng N* 131:454-9 S 23 '43

- Air conditioned trailer for engineers building advance bases. *Il Refrig Eng* 46:119 Ag '43

- Army engineer work in foreign fields. *Il Eng N* 130:213-15 F 11 '43

- Army engineers pave the way. *Il Comp Air M* 48:7115-17 Ag '43

- Engineer operations in a theater of war. E. Reybold. *Civil Eng* 13:401-2 S '43

- Mud, straw, bally poles and brick; use of native materials and methods in building of barracks, mess halls, warehouses and hospitals along Persian transportation arteries to Russia. W. G. Bowman. *Il Eng N* 131:668-73 N 4 '43

- Stabilized earth blocks for protective construction. R. G. Hennes. *Il diag Washington U Eng Exp Sta Bul* 111:1-24 '43 (pa 25c)

- Weapon maintenance in battle. E. E. MacMorland. *Mech Eng* 65:773-4+ N '43

See also

- | | |
|------------------------------|--------------------------|
| Military buildings | Roads, Military |
| Motor trucks, Military | Transportation, Military |
| Ordnance | Water supply for armies |
| Radio apparatus—Military use | |

Study and teaching

- Army engineer school teaches war building. T. H. Evans. *Il Eng N* 129:820-1 D 10 '42

- Army specialized training program. A. L. H. Rubin. *J Eng Educ* 33:588-629 Ap '43

- Engineer troop training in England. W. G. Bowman. *Il Eng N* 131:394-6 S 9 '43

- Training army engineers for general construction abroad; Camp Claiborne. V. T. Boughton. *Il Eng N* 131:29-36 J1 1 '43

- Training officers and men at Fort Belvoir. E. H. Marks. *Il Civil Eng* 13:3-7 Ja '43

MILITARY engineers

- Army engineers in the E.T.O. W. G. Bowman. *Il Eng N* 131:428-30 S 16 '43

- Chief, Service of supply, European theatre of operations; Maj. Gen. John C. H. Lee. *Eng N* 131:431+ S 16 '43

- Combat engineers in the Marine corps. G. E. Tomlinson. *Il Eng N* 130:416-19 Mr 25 '43

See also

- | |
|--------------------|
| United States—Army |
| —Engineer corps |

MILITARY fabrics

- Coated fabrics for variety of military uses. *Il Textile World* 93:92-3 S '43

- Disappearing marine; ponchos of water-repellent cloth bonded with polyvinyl butyral resin filler. *Il Mod Plastics* 20:68 Je '43

- Japs try hemp for soldier's garments. *For Comm W* 13:25 O 2 '43

- Meeting changing conditions. R. W. Jacoby. *Am Dyestuff Rep* 32:192-8; Discussion. 198-9 Ap 26 '43

- Reducing time of vat dyeing with textone. A. L. Dubeau, E. G. Fenrich and G. P. Vincent. *Am Dyestuff Rep* 32:175-6 Ap 13 '43

MILITARY fabrics—*Continued*

Speeding-up weave change-overs; looms for civilian work shifted to military fabric production. H. E. Wenrich. *il diag Textile World* 93:76-7 My '43

Textiles at war; Textron war products exhibit; rayon and nylon featured exclusively. *il Rayon* 24:573 N '43

See also

Army fabrics

MILITARY fireworks

Signal flares and smoke bombs; Canada's major fireworks company turns to war production. *il Can Chem & Process Ind* 27: 58-60 F '43

MILITARY geography**Bibliography**

Bibliography of military geology and geography; first supplement. M. Siegrist; E. T. Platt, comps. *il Geographical soc. of America*, 419 W. 117th st, New York '43

MILITARY geology. *See* Geology, Military

MILITARY hygiene

Sewage plant operation taught with a model; train engineers and operators in the operation of army sewage treatment plants. *flow diag il Eng N* 131:146-8 JI 15 '43

See also

Military training camps—Sanitation Water supply for armies

MILITARY insurance. *See* Insurance, Military and naval service

MILITARY market

Comfort components for combat areas; candy and gum, tobacco, and toilet articles. *il Mod Packaging* 14:44 F '43

How does your package strike the soldier? J. Galub. *il Adv & Sell* 36:24 Je '43

Will he switch brands when he comes marching home? M. Beuick. *il Ptr Ink* 204:18-19+ JI 30 '43

See also

Advertising—Soldiers, Appeal to Post exchanges

MILITARY medicine. *See* Medicine, Military

MILITARY meteorology. *See* Meteorology, Military

MILITARY money. *See* Money, Military

MILITARY morale. *See* Morale

MILITARY motor trucks. *See* Motor trucks, Military

MILITARY motor vehicles. *See* Motor vehicles, Military

MILITARY occupation

Allies evolve trade controls; joint British-American economic board in North Africa. *Business Week* p44+ Ag 14 '43

Amgot; Allies' task of administration as they invade. *Economist* 145:103 JI 24 '43

Blacklisting task grows; liberated territories pose problems in control of Axis nationals' funds and those of collaborationists. *Business Week* p50+ Ag 21 '43

Invasion to nip civilians; allied armies will have to replace rail, power, farm, and many other types of equipment. *Business Week* p62+ Je 12 '43

Peacemaking: a process. *Fortune* 27:supp 8-11 Ap '43

Prepare to occupy; need for mature, coordinated and flexible policy. *il Fortune* 27:90-5+ F '43

See also

Money, Military

MILITARY pensions. *See* Pensions, Military

MILITARY photography. *See* Photography, Military

MILITARY police. *See* Police, Military

MILITARY posts

Army camp banking at Fort Custer. *il Bank-ing* 35:48 F '43

Banking's H.Q.; War department's bank facility program; pictures. *Banking* 35:39-40 Ja '43

Over-the-counter and off-the-knee; service for war workers and men in uniform. J. J. McCann. *il Banking* 35:32-4+ D '42

United States Army motion picture service; symposium. C. Welpley and others. *Soc Motion Picture Eng J* 40:3-63 Ja '43

Water supply practice in army training centers. L. H. Kessler, V. B. Sundstrom and A. O. Tomek. *il Am Water Works Assn J* 35:1009-50 Ag '43

See also

Military training camps
Post exchanges

Power

Army and civilian utilities pool facilities for emergencies; maintenance of the army, naval and maritime establishments for duration of war. D. A. Sullivan. *Elec W* 120:630-2 Ag 21 '43

MILITARY psychology. *See* Psychology, Military

MILITARY radio operators. *See* Radio operators, Military

MILITARY railway service

Army railroading in northern Africa. *Ry Age* 114:1093-4 My 29 '43

Military Railway and Transportation corps officers train at Fort Slocum, N.Y. *Ry Age* 114:276-8 Ja 30 '43

715th railway operating battalion. *il Ry Age* 114:508-9 Mr 13 '43

728th railway battalion in training at Clovis; illustrations. *Ry Age* 115:206-7 JI 31 '43

727th railway battalion receives citation. *Ry Age* 115:216-17 JI 31 '43

What army railroaders are doing and how they are trained. D. E. Brisbane; F. E. Cheshire. *Ry Age* 115:677-81 O 30 '43

MILITARY roads. *See* Roads, Military

MILITARY service

Geologists in war service. K. Bryan. *Science* 98:300 O 1 '43

Keeping-in-touch printing is a new market! printing which helps our boys adjust themselves to military life and arranges for their return to civilian life. C. V. Morris. *il Inland Ptr* 110:31-4 F '43

New York contracting organizations sponsor army recruiting dinner; recruiting men from construction industry for construction regiments. *Eng N* 130:854 Je 10 '43

Our servicemen and economic security. R. H. Skilton, ed. *bibliog Ann Am Acad* 227: 1-157 My '43

Roosevelt gives McNutt full control over manpower, voluntary enlistments ended. *Comm & Fin Chr* 156:2065+ D 10 '42

Selective service's medical statistics program. O. H. Folk. *Am Stat Assn J* 37:425-9 D '43

Technical men and the forces. G. A. T. Burdett. *Electrician* 130:389-90 Ap 16 '43

What should become of a salesman's accounts when he enters the armed forces? W. C. Haff. *Comm & Fin Chr* 158:18 JI 1 '43

See also

Conscientious objectors United States—
Military railway Army—Specialist
service corps
Military training Women's reserves

Credit aspects

Consumer credit and the Soldiers' and sailors' civil relief act. M. R. Neifeld. *Ann Am Acad* 227:43-50 My '43

Revised Soldiers' and sailors' relief act. *Credit & Fin Management* 44:28-9+ D '42

What of soldier merchants? little trouble reported with drafted retailers. *Credit & Fin Management* 45:28+ Ap '43

Insurance aspects

Accident policy should be held by service man. *Nat Underw* 47:28 Ag 5 '43

Advices service men to retain insurance. *East Underw* 44:17 Ap 16 '43

Army allotment system: how it functions. *Ins Field (Life ed)* 72:6-7 Je 25 '43

Claim settlements; power of attorney form by Aetna fire group. *Spectator (Property ed)* 8:32 Mr 4 '43

Draft change to have little immediate effect; business on upswing. *Nat Underw (Life ed)* 47:3+ Ap 16 '43

MILITARY service—Insurance aspects—*Cont.*
How law works under U.S. service relief act.
G. J. Baldwin and J. K. Clark, Jr. East
Underw 44:6 Ja 1 '43
Institute and NALU prepare soldiers' and
sailors' life insurance inventory card.
Weekly Underw 147:1392 D 12 '42; Nat
Underw (Life ed) 46:8 D 11 '42
Insurance protection under Soldiers' and sail-
ors' civil relief act. F. T. Hines. Ann Am
Acad 227:69-75 My '43
Life insurance policy during wartime. C. A.
Kline. Ann Am Acad 227:76-82 My '43
N.A.L.U. is making soldiers' service bureau
nationwide. Nat Underw (Life ed) 47:1+
Ap 23 '43
Penn Mutual Life establishes War service
bureau. Nat Underw (Life ed) 47:3+ My 7
'43; East Underw 44:4 My 7 '43
Penn Mutual's war service booklet. East Underw
44:3 Ag 6 '43
Refunds to servicemen allowable in Tennessee.
Ins Field (Fire ed) 72:10 Je 24 '43
Reinstatement plan agreed upon; will restore
non-cancellable policies after demobiliza-
tion. Nat Underw 46:15+ N 26 '42; Same.
Nat Underw (Life ed) 46:2 N 27 '42
Revise procedure for handling war death
claims. Nat Underw 47:17+ Ja 21 '43; Same.
Nat Underw (Life ed) 47:1 Ja 22 '43
Selling potential draftees. G. W. Payne. Ins
Field (Life ed) 71:18-19 D 18 '42
Soldiers' and sailors' civil relief. G. J. Bald-
win. East Underw 43:11-12 N 13 '42; Same.
Ins Field (Life ed) 71:6+ D 4 '42
Suggests interview with each selectee. J. S.
Myrick. East Underw 44:7 F 19 '43
Two billion annually handled by war agency;
premiums on servicemen's policies. East
Underw 44:13 My 7 '43
Why servicemen should retain personal ac-
cident policies. H. Prevost. East Underw
44:32 Ji 16 '43
See also
Insurance, Life— Insurance, Military
War death claims and naval service

Labor problems
Accounting manpower. J Account 75:524-9 Je
'43
Aircraft industry officials doubt WMC order
will solve problem. S. Hershey. Aviation N
1:7 Ag 23 '43
Battles on the home front. W. Gates. Mag of
Wall St 71:573-5+ Mr 6 '43
Brig.-Gen. Rose in defending fathers draft
looks for further handicaps in manpower
situation. Comm & Fin Chr 158:1311 S 30
'43
British manpower-control experience. T. K.
Hitch. Survey of Cur Business 23:16-24 F
'43
Collective bargaining and re-employment of
veterans. R. P. Brecht. Ann Am Acad 227:
94-103 My '43
Company policies affecting employees in
service. H. F. Browne. Ann Am Acad
227:25-27 My '43
Compulsory transfer of manpower in Canada.
Monthly Labor R 56:1095 Je '43
Deferees escape scorn under plant committee
method; Lycoming division of the Aviation
corp. Iron Age 151:96+ Ap 8 '43
Deferment for bank men. W. Powers. Bank-
ing 36:27+ Ji '43
Deferments: how to get them; ODT issues
instructions and forms for oil truckers on
draft replacement schedule plan; text and
examples. Nat Pet N 35:26, 28-30 My 12 '43
Don't draft our student engineers! II Aero
Digest 41:171-2, 177+ D '42
Draft deferments in essential branches of
oil industry. Nat Pet N 35:7+ My 19 '43
Draft gets down to business. Business Week
p 15-17 D 19 '42
Engineer's position in the manpower pro-
gram. T. K. Miles. Inst Radio Eng Proc
31:514-17 S '43
Essential activities listed to facilitate job
stabilization. Steel 112:57-8+ Mr 1 '43
Essential war production endangered by draft
according to Conference board. Comm & Fin
Chr 158:136 Ji 8 '43
Features of new WMC plan listed. Iron Age
152:122+ S 9 '43
Furlough to mines; army to release 4,500
men to copper, moly, and zinc pits. Busi-
ness Week p64+ Ag 7 '43

Germany at war; problem of reserves. Econ-
omist 144:300 Mr 6 '43
Government revises system of drafting key
workers; individual-plant manning tables.
Elec W 118:1621 N 14 '42; Same. Power
86:926b-926c D '42
Hottest issue is whether big army can be
supported without national service law. E.
Blair. Barron's 23:4 F 1 '43
How to hold essential men. F. C. Whitmore.
Chem & Eng N 21:751 My 25 '43
How to prepare replacement schedules. Man-
agement R 32:12-13 Ja '43
Industry's workers assigned higher status
in new policy. Oil & Gas J 41:22-3 D 17
'42
Key utility men will be held where they are
needed. H. Corey. Pub Util 30:695-702 N 19
'42
Labor stopgap; WMC's revision of draft
deferment rules. Business Week p14-15 Ag
21 '43
Manning table control of draft urged to
maintain labor force. Iron Age 150:108+
N 19 '42
Manning table plan lists jobs. Foundry 70:
159 D '42; Same. Steel 111:67-8 N 16 '42
Manning tables give employers blueprint for
solving draft problems. II Steel 111:46-8,
143-4+ D 14 '42; Same. Am Water Works
Assn J 35:127-33 Ja '43
Manning tables more important as defer-
ments become restricted. Steel 111:42-3 N
23 '42
Manpower; a summary of the British expe-
rience. E. H. Biddle. Am Water Works
Assn J 34:sup 1-2+ D '42
Manpower and selective service problems;
abstract. F. E. Niles. Water Works &
Sewerage 90:297 Ag '43
Manpower board revises essential utility jobs.
Elec W 119:457-8 F 6 '43
Manpower commission advice. L. B. F. Ray-
croft. Personnel J 22:2-11 My '43
Manpower picture one of replacement and job
control. F. J. McSherry. Coal Age 48:82-4
F '43
Manpower policy. Economist 145:392 S 18 '43
Manpower program. W. C. Rose. Min Cong J
29:35-7 Je '43
Manpower ruling seen to hold vital men in
plants; aircraft workers forbidden to enlist
in armed forces. Aero Digest 41:365+ D
'42
Measures for maintaining employment in es-
sential activities; revised list of 35 essential
industries and activities. Monthly Labor R
56:1092-3 Je '43
Meeting manpower shortages in vital refinery
jobs. II Nat Pet N 35 pt 2:R51-5 F 3 '43
Men or planes? West coast manufacturers
offer the services their choice. Business
Week p73-4 Ag 14 '43
Metal mining and the selective service;
manning tables will be used. H. A. Rich.
Min Cong J 28:36-8 D '42
Military-service and war-job clauses in union
agreements. H. Cannon. Monthly Labor R
55:1147-55 D '42
NAM opposes labor draft as harmful to pro-
duction; offers alternative program. Comm
& Fin Chr 157:1393 Ap 15 '43
National service law is next; report to ex-
ecutives. Business Week p34+ O 9 '43
Nation's manpower problem. W. H. Spencer.
Am Inst Banking Bul 25:10-12 Ji '43
New draft policy to place emphasis on oc-
cupation and age, instead of dependents.
E. Blair. Barron's 22:4 N 16 '42
New rules for inducing men into armed
forces issued by WMC. Comm & Fin Chr
158:713-14 Ag 19 '43
Non-deferrable jobs defined by WMC. Comm
& Fin Chr 157:579 F 11 '43
Occupational deferment for accountants. O.
H. Ritenour. Am Gas Assn Mo 25:94-5 Mr
'43
Occupational deferment of chemists and
chemical engineers; amended data and
recommendations. Chem & Eng N 21:1206-9
Ji 25 '43
Occupational deferment of water works em-
ployees. Am Water Works Assn J 35:372-80
Mr '43
Official decisions and releases; accounting
manpower; official texts. J Account 76:359-
64 O '43

MILITARY service—Labor problems—Continued

- Oil industry should benefit from changes in selective service rules. *il Oil & Gas J* 42:32-3 Ag 19 '43
- Oil marketing and the draft; petroleum distribution employs not essential in WMC's eyes. *Nat Pet N* 35:7-8 Mr 31 '43
- Pre-induction training and manpower. *Trusts & Estates* 76:430-1 My '43
- President orders WMC to control deferments for federal workers. *Comm & Fin Chr* 157:1217 Ap 1 '43
- Problem no. 1 on home front. *Steel* 113:83-5 S 20 '43
- Promoting letter-writing to men in service. *il Ptr Ink* 204:108 S 17 '43
- Queries answered on manpower problems. *Iron Age* 152:104+ Ag 26 '43
- Re-employment of ex-servicemen in public positions. C. L. Jamison. *bibliog Ann Am Acad* 227:104-10 My '43
- Refinery manpower; job definitions pose problem in seeking deferments. *Nat Pet N* 35:13 My 5 '43
- Regulations relating to war manpower; critical occupations. *Monthly Labor R* 57:704-11 O '43
- Replacement schedules. *il Factory Management* 101:79-80 Ja '43
- Replacement schedules; importance to bus line operators. C. W. Stapleton. *Bus Transportation* 22:42-3 Je '43
- Results count; bomber performance is credited with draft moratorium for plane plants. *Business Week* p16-17 Ag 14 '43
- Selective service revisions. *Chem & Eng N* 21:679-83, 307 My 10, Je 10 '43
- Selective service system issues bulletin on critical occupations in gas industry; complete text; subject: heating, power, water supply and illuminating services, and repair and hand trade services. *Gas Age* 91:27-30 F 25 '43
- Senate votes military deferment for farmers. *Comm & Fin Chr* 157:1220 Ap 1 '43
- Status of technical manpower in the chemical industry; report. H. M. Harker. *Chem & Eng N* 21:84-5 Ja 25 '43
- Suppose the printing industry is declared essential? what should be the procedure of a printer? H. R. Wallace. *Inland Ptr* 111:25-7 My '43
- Technical manpower. H. N. Davis. *Am Inst Chem Eng Trans* 38:B229-B236 D '42
- Technical manpower and selective service. A. B. Newman. *il Chem Ind* 52:591-3 My '43
- Discussion. R. B. Semple. 52:725 Je '43
- Urge pulpwood be declared essential work; Canadian newspapers advocate government take prompt steps. *Paper Tr J* 117:10 O 28 '43
- Use of accountants in war; statement presented before Senate subcommittee on technological mobilization. *J Account* 76:27-34 Jl '43
- War department plan for relieving mine labor shortage is completed. *Eng & Min J* 144:83 S '43
- War manpower commission approved list of essential occupations; group 30—heating, power, water supply and illuminating services. *Am Water Works Assn J* 35:528-36 Ap '43
- War manpower commission approves interim plan on construction workers draft. *Eng N* 129:827-8 D 17 '42
- WMC clarifies essential jobs in oil industry. *Nat Pet N* 35:9-10 Ag 18 '43
- WMC lists essential industries and activities. *Oil Paint & Drug Rep* 144:3+ Ag 16 '43
- War work or war front new draft order. *Comm & Fin Chr* 157:489 F 4 '43
- See also*
Manning tables

Protective legislation

- Administration of the Soldiers' and sailors' civil relief act. G. Monsman. *Ann Am Acad* 227:35-42 My '43
- Consumer credit and the Soldiers' and sailors' civil relief act. M. R. Neifeid. *Ann Am Acad* 227:43-50 My '43
- Effect upon duties of fiduciaries in administering estates where beneficiaries are in military service. F. W. Hill, jr. *Trusts & Estates* 77:266-8 S '43
- Give decisions under relief act. *Nat Underw* 46:15 N 26 '42

- Government moves in; soldiers' and sailors' aid may be means of expansion of social security. B. C. Clarke. *Ins Field* (Life ed) 72:3-9 Ag 6 '43
- Insurance protection under Soldiers' and sailors' civil relief act. F. T. Hines. *Ann Am Acad* 227:69-75 My '43
- Jobs after the war; reemployment of veterans. *Factory Management* 101:88-92 Jl '43
- Moratoria and the Soldiers' and sailors' civil relief act. R. H. Skilton. *bibliog Ann Am Acad* 227:28-34 My '43
- MBA advisory service for armed forces. *Comm & Fin Chr* 156:2071 D 10 '42
- MBA surveys effect of war on mortgages of men in the service. *Comm & Fin Chr* 158:29 Jl 1 '43
- 1942 amendment to the Soldiers' and sailors' civil relief act. Bankers M 145:44-6 N '42
- Provisions made for absentee agents; NALA surveys state actions. *Ins Field* (Fire ed) 72:10-11 Ja 28 '43; *Excerpts. East Underw* 44:22 Ja 29 '43
- Relief act and trust administration. A. W. LeGassick. *Trusts & Estates* 76:449-50 My '43
- Revised Soldiers' and sailors' relief act. Credit & Fin Management 44:28-9+ D '42
- Serviceman and the mortgage market. E. M. Fisher. *Ann Am Acad* 227:51-7 My '43
- Servicemen's civil relief act increased loan delinquencies. ABA survey shows. *Comm & Fin Chr* 158:432 Jl 29 '43
- Soldier and real estate leases. M. Bodfish. *Ann Am Acad* 227:58-61 My '43
- Soldiers' and sailors' civil relief. G. J. Baldwin. *East Underw* 43:11-12 N 13 '42; *Same. Ins Field* (Life ed) 71:6+ D '42
- Soldiers' and sailors' civil relief act, accommodation parties, form of waiver. *Banking* 35:46 D '42
- Soldiers' and sailors' wills. E. P. Griffin. *Trusts & Estates* 77:263 S '43
- Substitute fiduciaries for fiduciaries in war service. F. D. Stone. *Trusts & Estates* 77:269-70 S '43
- To protect mortgagors in military service. *Comm & Fin Chr* 157:1778 My 13 '43
- Trustees in military service not entitled to stay of proceedings. *Trusts & Estates* 76:92 Ja '43
- U.S. Supreme court rules against automatic stay. Credit & Fin Management 45:30 O '43
- Veterans administration program; provisions for rehabilitating disabled servicemen and maintenance of dependents. H. L. McCoy. *East Underw* 44:3+ Ag 27 '43

*See also***Soldiers—Sufrage****Welfare work**

- Thrice armed; utility aids and encourages employees in armed services; families aided. *Elec West* 89:35-6 N '42
- See also* United service organizations for national defense

MILITARY service, Compulsory

- Army suspends draft of men 38 and over. *Comm & Fin Chr* 156:2066 D 10 '42
- Back in the pool; 38-to-45's. *Business Week* p97+ Mr 13 '43
- Cancels draft deferments for federal employees. *Comm & Fin Chr* 156:1894 N 26 '42
- Draft guide; army about to taper off but navy coming up. *Business Week* p17-18 Jl 3 '43
- Draft revolt; Congress may ban work or fight law. *Business Week* p14 F 27 '43
- Drafting of fathers not yet authorized. P. V. McNutt. *Comm & Fin Chr* 157:1119 Mr 25 '43
- Employer's part in occupational deferment. *Management R* 31:411-14 D '42
- Father Draft delayed under new plan to equalize calls. *Nat Pet N* 35:10 Ag 11 '43
- Fighting fathers. *Trusts & Estates* 77:321-2 O '43
- It's work or fight; WMC order compels workers to shift into essential lines. *Business Week* p14 F 6 '43
- New draft policy to place emphasis on occupation and age, instead of dependents. E. Blair. *Barron's* 22:4 N 16 '42
- New draft regulations to call all men 18 to 38 by end of year; revised classes. *Comm & Fin Chr* 157:1401 Ap 15 '43

MILITARY service, Compulsory—Continued

- Nondeferable occupations for men. Monthly Labor R 56:468-9 Mr '43
- Plight of mining, metallurgical, and petroleum engineering education; effect of selective service system. E. A. Holbrook. Min & Met 24:275-6 Je '43
- President denies government is haven for draft dodgers, presents figures on deferments. Comm & Fin Chr 158:1820 N 4 '43
- President signs 18-19 draft bill; Congress rejects clause restricting training to year. Comm & Fin Chr 156:2070 D 10 '42
- President to ask rise in draft age to 65 to prevent future work stoppages. Comm & Fin Chr 158:28 Jl 1 '43
- Pre-war fathers to be deferred pending draft of others in national pool. Comm & Fin Chr 158:610 Ag 12 '43
- Selective service. Chem & Eng N 21:27-9 Ja 10 '43

See also

Manning tables

MILITARY service, Women's. See Women's army corps; Women's reserves

MILITARY supplies

- Combatant plastics; applications in the armed forces of the United Nations. H. B. Marshall. Il diag Can Chem & Process Ind 27: 67-9 F '43
- How the army and navy packs for protection. Il Mod Packaging 16:66-70 Je '43
- 1943 packaging exposition hits all-time record; military exhibits. Il Mod Packaging 16:64-5 My '43
- Para-packs. Il Mod Packaging 16:55-7+ Je '43

See also

Arms—Commis-

sariat

Rubber goods,

Military

United States—Army

—Equipment and

supplies

World war, 1939—

Supplies

MILITARY surgery. See Surgery, Military

MILITARY tanks. See Tanks, Military

MILITARY telegraph

- Wire communications; Signal corps training and equipment. R. O. Franzen. Il Radio N 28:102-5+ N '42

MILITARY telephone

- Through a frozen hell on time; construction of carrier line to Fairbanks, Alaska. H. Corey. Pub Util 32:399-405 S 30 '43
- Wire communications; Signal corps training and equipment. R. O. Franzen. Il Radio N 28:102-5+ N '42

MILITARY tractors. See Tractors, Military

MILITARY training

- Army's first concern; prevention of casualties, accidental and combat. E. A. Lovett. Nat Safety N 48:14-15+ N '43
- Fort Belvoir: camouflage headquarters. Il Arch Forum 77:2, 4 N '42
- Military Railway and Transportation corps officers train at Fort Slocum, N.Y. Ry Age 114:276-8 Ja 30 '43
- Officers at quartermaster school experienced in refrigeration. N. Horton. Il Refrig Eng 46:95 Ag '43
- Skilled men for the services. Economist 145: 502 O 9 '43
- Split-second recognition, a new allied weapon; identification of planes, ships, and armored land vehicles at speeds up to 1/100 of a second. Il Aviation 42:119+ Jl '43
- Training film activities of the U.S. army; symposium. bibliog Il diag Soc Motion Picture Eng J 41:205-62 S '43
- Training military technicians; Fort Knox training soldiers to maintain, repair, and fight with tanks and armored vehicles. S. G. Henry. Il S A E J 51:sup17-22 Mr '43
- Wright Field training film production laboratory. H. C. Brecha. Soc Motion Picture Eng J 39:348-52 D '42
- See also Ordnance school, Aberdeen proving ground
- MILITARY training camps**
- Army uses electronic bugler; public address system at Camp Wood. K. R. Porter. Il Radio N 29:22-4+ Ap '43
- Good neighbor, Denver showing how city and army camp can get on peacefully and profitably. Business Week p80+ Jl 24 '43

- Radio-telephones for military police, Scott Field, Ill. Il Radio N 29:17+ My '43
- Road construction on western cantonments. D. H. McCreery. Il diag Civil Eng 13:101-3 F '43
- Set for tomorrow; army camps show how to train the army's, and tomorrow's, drivers. W. Cutter. Il Safety Eng 86:64, 66 O '43
- Training center for the Women's army auxiliary corps; views, plans, and construction outline. Arch Forum 77:80-3 N '42
- Training centers constructed on a beach resort site; training schools and stations for the U.S. Coast guard, the U.S. Maritime service and a medical center for the U.S. Public health service. Il diag Eng N 131:382-7 S 9 '43
- Wets wash woos; liquor industry moving to correct conditions near big camps. Business Week p70 D 12 '42

See also

Barracks

Naval training stations

Heating and ventilation

- Army fuel consumption studies of 1941-42. L. C. McCabe, S. Konzo and R. E. Biller. Il map Heating-Piping 15:38-45 Ja '43

Power supply

- Estimating electric loads for military-training bases, federal housing, and other wartime projects. H. M. Potts. Elec Eng 62: Trans 246-54 My '43

Recreation

See United States—Army—Recreation

Sanitation

- Army tries garbage disposal by grinding. R. N. Clark and A. Heifetz. Il Pub Works 74: 21+ Mr '43
- Brick arches for tank walls; sewage digester and clarifier tanks at eastern army camps. G. Albert. Il diag Eng N 131:260-2 Ag 12 '43
- High-degree treatment for camp sewage. H. F. Porter. Il diag Eng N 130:38-42 Ja 14 '43
- Improvised sewage treatment at an army camp. H. F. Porter. diag plan Pub Works 74:14-17+ Je '43
- Landfill disposal wins army favor. Il diag Eng N 129:851-3 D 17 '42
- Sewage treatment at air-training schools in western Canada. R. A. McLellan. flow sheets Il diag plans Water & Sewage 81: 13-19+ My '43
- Sewage treatment at army posts. L. H. Kessler and J. T. Norgaard. Eng N 129:714 N 19 '42
- Sewage treatment for the R.C.A.F. by trickling filters. G. G. Reid. Il Water & Sewage 80:29+ N '42
- Two-stage biofiltration sewage-treatment plant for an army camp. A. H. Jessup. Il diag Civil Eng 13:168-70 Ap '43
- Waste disposal in army cantonments; abstract. J. L. Vincenz. Water Works & Sewerage 90:57 F '43
- Water supply practice in army training centers. L. H. Kessler, V. B. Sundstrom and A. O. Tomek. Il Am Water Works Assn J 35:1009-50 Ag '43
- Wood inhoff tanks serve an army camp. Il diag Eng N 130:490-2 Ap 8 '43
- See also United States—Army—Medical and sanitary affairs

MILITARY transportation. See Transportation, Military

MILITARY trucks. See Motor trucks, Military

MILITARY uniforms. See Uniforms, Military

MILK

- Condensed and evaporated milk, fluid milk, dry skim milk, 1938-1941. Survey of Cur Business 1942 Sup p116-17 [supplemented in monthly numbers]
- Oxidized flavor in milk; ascorbic acid, glutathione, and hydrogen peroxide as mechanisms for the production of oxidized flavor; abstract. F. C. Olson and W. C. Brown. Food Ind 15:119 Mr '43

See also

Butter

Casein

Cheese

Dairying

Whey

MILK—Continued

Analysis

- Iodometric determination of nitrogen in milk. E. R. Ling. Soc Chem Ind J 61:194-6 D '42
 Moisture determination. C. M. O'Malley. bibliog Food Ind 15:115 Je '43
 Rate of bacterial filtration and butterfat concentration in fresh milk during cooling. J. E. Nicholas, R. C. Montgomery and T. G. Anderson. Refrig Eng 45:334-5 My '43
 Refractometric determination of casein in skim milk. J. G. Brereton and P. F. Sharp. bibliog Ind & Eng Chem Anal ed 14:872-4 N 15 '42

Bacteriology

- Bacteriological aspects of milk processing and distribution; abstract. A. T. R. Matlack. Chem & Ind 62:283 JI 24 '43
 Rate of bacterial filtration and butterfat concentration in fresh milk during cooling. J. E. Nicholas, R. C. Montgomery and T. G. Anderson. Refrig Eng 45:334-5 My '43
 Seven ways to beat bacteria in a dry milk plant. P. S. Prickett. il Food Ind 15:73-4+ Ag '43
 Simple multiple-loop method speeds bacterial counts. A. Moldavan. il diags Food Ind 15:56-7 Je '43

Pasteurization

- Electric pasteurizer. J. L. Hall. bibliog il diags Elec Eng 62:60-3 F '43
 Short-time pasteurization of milk. C. O. Ball. bibliog il Ind & Eng Chem 35:71-84 Ja '43

Preservation

- Keeping qualities of milk. J. E. Nicholas and T. G. Anderson. Refrig Eng 44:370-1+ D '42
 Removal of oxidizing factors makes dry whole milk keep. C. D. Dahle and D. V. Josephson. bibliog il Food Ind 15:76-7 N '43

MILK, Chocolate

- Relation of chocolate milk to total fluid milk consumption of factory workers. G. Hadary. J Business 16:70-3 Ja '43
 Relation of chocolate milk to total fluid milk consumption of urban families; survey in South Bend to supplement Wisconsin studies. G. Hadary. bibliog J Business 16:115-23 Ap '43
 Research discovers new stabilizer; extract of quince seed. G. Hadary. il Food Ind 15:76-7 F '43

Advertising

- Borden wins national distribution for Hemo in less than six months; chocolate flavored malt drink. R. C. Fyne. il Sales Management 52:74+ O 1 '43

MILK, Compressed. See Milk, Dried—Compression

MILK, Condensed

- Condensed and evaporated milk, 1938-1941. Survey of Cur Business 1942 Sup p116 [supplemented in monthly numbers]

MILK, Dried

- Dried milks standards tentatively set. Oil Paint & Drug Rep 143:5 My 31 '43
 Removal of oxidizing factors makes dry whole milk keep. C. D. Dahle and D. V. Josephson. bibliog il Food Ind 15:76-7 N '43
 Seven ways to beat bacteria in a dry milk plant. P. S. Prickett. il Food Ind 15:73-4+ Ag '43
 Sweetened milk powder; patent. Food Ind 15:129 S '43
 See also
 Milk, Remade

Color

- Influence of moisture on browning of dried whey and skim milk. H. Dobb, Jr., A. Willmann and P. F. Sharp. bibliog il Ind & Eng Chem 34:1460-8 D '42

Compression

- Compressing spray-dried milk to save shipping space. B. H. Webb and C. F. Hufnagel. il Food Ind 15:72-4 S '43

Prices

- Powdered milk prices are set. Oil Paint & Drug Rep 143:47 Ja 4 '43

Transportation

- Vacuumizing rigid metal containers. il Mod Packaging 16:80 JI '43

MILK, Evaporated

- Borden company; 23 companies fined in milk trust case. Comm & Fin Chr 158:1343 O 4 '43
 Milk trust fines levied. Business Week p85-6 O 9 '43

MILK, Irradiated

- Vitamin upset; invalidation of ultraviolet irradiation patents. Business Week p67-8 JI 17 '43

MILK, Powdered. See Milk, Dried

MILK, Reconstructed. See Milk, Remade

MILK, Remade

- Military milk; mixing water, a powder, and Avoset. Business Week p50 D 26 '42

MILK cans

Cleaning

- Acid detergents in food sanitation. M. E. Parker. il Ind & Eng Chem 35:100-5 Ja '43

MILK containers

- Chicago's paper milk container battle aired in advertisements. Ptr Ink 202:19 Ja 8 '43
 Forming and filling machine; forming, wax coating, filling and capping paper milk bottle. il Mod Packaging 16:90 JI '43
 Paper containers speed wartime milk delivery. Nat Safety N 47:84 Ap '43

See also

Milk cans

MILK cooling

- How to build a concrete milk-cooling tank. diags Am Bld 64:45+ N '42
 Rate of bacterial filtration and butterfat concentration in fresh milk during cooling. J. E. Nicholas, R. C. Montgomery and T. G. Anderson. Refrig Eng 45:334-5 My '43

MILK delivery

- How big fleet owners meet truck problems; Borden, Sheffield and Heinz. il Food Ind 15:64-5 S '43
 Milk route peace? plan to get ODT's 25% cut in mileage started in New York. Business Week p112-13 N 21 '42
 Union defies ODT on skip-a-day deliveries. Comm & Fin Chr 157:2083 Je 3 '43

See also

Milk wagon drivers

MILK houses

- Farm market, structures in demand. diags plans Am Bld 65:52-3+ Je '43
 Sanitary milk house. il diag plan Am Bld 65:50 Ag '43
 Walk-through type barn and milk house. il diag plan Am Bld 65:51 F '43

MILK plants

Lighting

- Researches on industrial lighting; report on lighting in the fluid milk division of the dairy industry. il diags Illum Eng 37:561-78 N '42

Sanitation

- Seven ways to beat bacteria in a dry milk plant. P. S. Prickett. il Food Ind 15:73-4+ Ag '43

MILK powder. See Milk, Dried

MILK products

See also

Dairy products

MILK supply

- Milk ration next? Business Week p79-80 N 14 '42
 Milk rations seen. Business Week p52+ Je 12 '43

- Production and processing of dairy products. W. C. Waite. Ann Am Acad 225:206-9 Ja '43

- Production, marketing and supply of milk; abstract. J. L. Davies. Chem & Ind 62: 283 JI 24 '43

See also

Milk containers

MILK supply—Continued**Laws and regulations**

- Bars delivery of pints and half-pints of milk. Comm & Fin Chr 157:503 F 4 '43
- Filled milk law held valid, proof as to whether product comes within statute's prohibition. Florida Supreme court. Pub Health Rep 58:375-6 F 26 '43
- Filled milk law upheld; Kentucky Court of appeals. Pub Health Rep 58:463-4 Mr 12 '43
- Milk battle lost? Wickard applies pressure to the distribution system. Business Week p64+ F 6 '43
- Milk; inspection, city ordinance provision held invalid. Pub Health Rep 58:295-6 F 12 '43
- Milk ordinance provisions upheld; California Supreme court. Pub Health Rep 57:1919-22 D 11 '42
- Report on market-milk supplies of public health service milk ordinance communities. Pub Health Rep 58:320-4 F 19 '43

Canada

- Canada's 1943 milk-production goal. For Comm W 11:29 Ap 17 '43

Great Britain

- Clean milk at last? Economist 145:71-2 JI 17 '43
- Less milk. Economist 143:630 N 21 '42
- Milk policy. Economist 145:138 JI 31 '43
- Milk records scheme. Economist 143:713+ D 5 '42

MILK trade

- Relation of chocolate milk to total fluid milk consumption of factory workers. G. Hadary. J Business 16:70-3 Ja '43
- Relation of chocolate milk to total fluid milk consumption of urban families; survey in South Bend to supplement Wisconsin studies. G. Hadary. bibliog J Business 16:115-23 Ap '43

See also

- Milk delivery
- Milk wagon drivers

Advertising

- Borden's Elsie enlists for victory on Nation's home front. Sales Management 52:23 Mr 15 '43

Regulation*See Milk supply—Laws and regulations***Chicago**

- Chicago's paper milk container battle alread in advertisements. Ptr Ink 202:19 Ja 8 '43

Great Britain

- Distribution of milk. Economist 144:786 Je 19 '43
- Future of milk. Economist 143:795-6 D 26 '42
- High cost of milk. Economist 145:196-8 Ag 14 '43
- Milk distribution. Economist 144:524 Ap 24 '43
- Milk prices and distribution costs. Economist 144:471-2 Ap 10 '43

Michigan

- Big milk losses; milk marketing control in Michigan defeated. Business Week p78 N 14 '42
- Milk war in court. Business Week p40 Ja 9 '43

New York (state)

- Co-op stratagem; New York league would institute private milk subsidy. Business Week p70+ Mr 27 '43

United States

- Dairy dilemma; milk subsidies favored by WFA and OPA. Business Week p19-20 S 18 '43
- Milk ration next? Business Week p79-80 N 14 '42

MILK wagon drivers

- Benefits ease dismissal. Business Week p101 O 9 '43
- Drivers rebel; organizational drive of teamsters union hits snag in Port Huron. Business Week p80+ Je 5 '43
- Women are efficient on milk route trucks; abstract. R. Gayley. S A E J 51:sup18-19 Je '43

MILKING machines

- Rotolactor. Mech Handling 30:155 Ap '43

MILKWEED

- Extraction and value of rubber-like material from native grown plants. N. H. Grace. Can Chem & Process Ind 27:389-90 JI '43
- Milkweed goes to war; substitute for kapok in life preservers. T. J. McInerney. Barron's 23:15 Ag 30 '43
- Milkweed instead of kapok; abstract. B. Berkman. Textile Col 65:45 Ja '43
- Weeds to rescue; milkweed and cattails answer demand for kapok. Business Week p55-6+ D 5 '42

MILKY way

- Composition of our galaxy systems of stars. Science 98:sup10 O 15 '43
- Milky way in constellation of Cepheus. A. M. Risley. Science 98:sup10 JI 9 '43

MILLER, Walter M. 1881-

- Given honorary degree as doctor of engineering. por Oil & Gas J 41:56 My 6 '43

MILLETTIA ferruginea Hochst

- Occurrence of rotenone and related substances in the seeds of the berbere tree; procedure for the separation of deguelin and tephrosin. E. P. Clark. Am Chem Soc J 65:27-9 Ja '43

MILLIAMMETERS

- Locates cable fault with milliammeter. A. A. Schulke. diags Power 87:620-1 S '43
- Rectifier milliammeters. T. A. Ledward. diag Electrician 130:239-40 Mr '43

MILLINERY

- High hat year. Business Week p66 N 28 '42

MILLINERY stabilization commission

- Stabilization of millinery industry, 1936-41. Monthly Labor R 56:22-5 Ja '43

MILLING

- Armor plate milling. K. B. Kaiser. il diags Am Mach 87:116-20 Je 24 '43
- Armor plate milling. W. F. Ploch. Am Mach 87:157-8 JI 8 '43
- Cam milling made sure. D. E. Carpenter. il diags Am Mach 87:110-11 My 13 '43
- Concave surfaces can be milled; proper setting of milling cutters. C. Havranek. diags Am Mach 87:97 Je 24 '43
- Hi-cycle and Hyper milling on aircraft parts; Vega aircraft corporation. C. H. Bodner. il Am Mach 87:103-6 Je 10 '43
- High speed milling in aircraft production; data on milling of alloy steel and of aluminum. il diags table Iron Age 152:74-83 O 14 '43
- Leveler holds turbine blade for milling. B. Litzman. diag Am Mach 86:1439-40 D 10 '42
- Milling operations on ship turbine blades. L. Spray. il diags Mach 49:154-7 Mr '43
- Republic develops method for continuous milling of rod ends. il diag Aero Digest 42:196 Je '43
- Take a healthy chip; calculations of feeds. F. J. Wintersdorff. Am Mach 87:87-9 Ag 5 '43
- Toolroom milling practice. H. A. Frommelt. il Am Mach 87:90-1 S 2; 102-3 S 16; 84-5 S 30; 94-6 O 28 '43

MILLING cutters

- Cast cutters boost milling capacity; combination of meehanite bodies and brazed tips. W. C. Whittum. il diag Am Mach 87:92-4 JI 22 '43
- Cutter adapter speeds slot milling. R. Santoro. il Am Mach 87:102 JI 8 '43
- Effect of tooth clearance on milling cutter performance. S. C. Bliss. diags Mach 50:182-4 N '43
- Grinding milling cutters with resinoid bonded wheels. J. E. Rogers. il Iron Age 152:34-9 O 21 '43
- High-speed milling; properly loading milling cutters produces amazing results. A. A. Schwartz. il Steel 113:76-8 O 25 '43
- How to run a milling machine. il diag Am Mach 87:109-11 My 27 '43
- Milling cutters that increased production. K. L. Ford. diags Am Mach 87:88 S 30 '43
- New milling method uses Firthite sintered carbide tipped inserted blades. il Blast F & Steel Pl 30:1292-3 N '42
- Plan-O-Mill produces large multiple thread milling cutter. il Am Mach 87:121 O 28 '43

MILLING cutters—Continued

Radius-grinding fixture for forming ends of milling cutter teeth. diags Mach 49:159-60 Ja '43

Reconditioning milling cutters. P. M. Matthews. il Mach 49:206-10 D '42
Surface grinding worm thread cutters. R. J. Thimineur. il Iron Age 152:76 O 28 '43
Vega's experience with carbide milling cutters. R. G. Owen. il diags Mach 49:152-9+ JI '43

MILLING machinery. See Crushing machinery

MILLING machines

Bremace down cut milling machine with twin lead-screws. il Mach 49:187 My '43; Am Mach 87:133 My 27 '43; Steel 112:136-7 Je 7 '43

Cleveland horizontal production milling machine. il Mach 49:188 My '43

Horizontal knee-type milling machine. il Engineering 155:326 Ap 23 '43

How to run a milling machine. il Am Mach 87:105-8 My 27 '43

Kearney and Trecker knee-type horizontal and vertical milling machines. Engineering 154:515 D 25 '42

Kendall and Gent horizontal plano-milling machine. il Engineering 154:407-8, 410 N 20 '42; Engineer 174:407 N 13 '42

LeMaire special hollow mill for turbine blades. il Am Mach 87:113 F 4 '43

Lombard milling machine. il Steel 112:88+ Ja 25 '43

Machining curved surfaces; portable milling machine. diag Elec R (Lond) 133:351 S 10 '43

Modern Tool produces Hydraulpro milling machine. il Am Mach 87:114 S 30 '43

Modern Tool radius miller. il Am Mach 86:1531 D 24 '42

New equipment. il Iron Age 151:58-60 F 4 '43

Onsrud automatic contour-milling machine built to handle long work. il Mach 49:177-8 Mr '43; Am Mach 87:121 Mr 4 '43

Ship engine parts make a milling machine; Joshua Hendy iron works. il Am Mach 87:96-7 S 16 '43

Slotting attachment for milling machines. il Engineering 156:286 O 8 '43

Snyder automatic machine for milling slots in aircraft cylinder heads. il Mach 49:212+ Ag '43

Snyder double end spline milling machine. il Automotive & Aviation Ind 89:46+ O 15 '43

Snyder produces a semi-automatic machine to weigh and balance-mill connecting rods. il Am Mach 87:133 JI 8 '43

Solving new production problems on standard automatic machines. H. L. Pope. il diags Aero Digest 42:176, 179-80 Ja '43

Control

Control for machining variable surfaces. W. Groen. diag Machine Design 15:116 Ap '43

Milling machine electronically controlled. il diag Electronics 16:110+ F '43

Fixtures

Blocks chamfered in push-through fixture. E. H. Girardot. diag Am Mach 87:99 Ag 5 '43

Cam action provides quick clamping. F. Scriber. diag Am Mach 87:113 O 14 '43

Cam milling made sure. D. E. Carpenter. il diags Am Mach 87:110-11 My 13 '43

Dividing head replaced by automatic indexing fixture. G. F. Groschke and R. J. Thimineur. il Am Mach 87:93 My 27 '43

Indexing fixture eliminates handling time. G. H. Groschke. il Am Mach 87:106 O 28 '43

Milling fixture with air-operated clamp. diags Mach 49:193 F '43

Milling machine vise with swivel jaw. P. E. Veras. diags Mach 49:187-8 D '42

Multiple milling fixture for cutting special bevel-gear pinion. G. F. Groschke. il Mach 50:168-9 O '43

Manufacture

Description of welded construction used in a thread miller bed for milling propeller blades. P. W. Martin. il Welding J 22:323-6 My '43

Self-aligning door hinge saves assembly time. il diags Product Eng 14:147 Mr '43

MILLIONAIRES

Wraps are off; Marshall Field, III, to step into full control of vast fortune. Business Week p16-17 S 18 '43

See also

Capitalists and financiers

MILLS, Ball. See Ball mills

MILLS, Tube. See Tube mills

MILLS-NIXON effect

Mills-Nixon effect and its bearing on the benzene valency problem; abstract. H. D. Springall. Chem & Ind 62:149 Ap 17 '43

MILWAUKEE

Milwaukee in this war and last time. Economist 144:391 Mr 27 '43

Rapid transit

Milwaukee proves it pays to modernize. R. H. Pinkley. il Mass Transportation 39:315 S '43

Water supply

Milwaukee water rate case ends with important decision. Water Works & Sewerage 90:136 Ap '43

MILWAUKEE gas light company

4% return on sound utility bond. A. Jansen. Barron's 23:10+ JI 12 '43

MIND and body

Unity of mind and body; abstract. W. E. Ritter. Science 98:sup12 JI 16 '43

MINE accidents

Mining a dangerous industry; mine and other industrial accident rates compared. Min & Met 24:8 Ja '43

National safety competition of 1942. W. W. Adams and T. D. Lawrence. U S Bur Mines Rep of Invest 3723:1-44 '43

Nine bells; an act of God. G. Gedge. Can Min J 64:578-9 S '43

Safety does pay dividends; specific examples of indirect costs of accidents. G. Gedge. Can Min J 64:369-71 Je '43

Safety sermonettes; first aid. W. B. Paton. Can Min J 64:156-8 Mr '43

Safety sermonettes; peep at underground cause lists. W. B. Paton. Can Min J 64:445-7 JI '43

Sentinels of safety awarded for 1942. Nat Safety N 48:109-10 Ag '43

Some haulage and hoisting hazards in western mines. E. H. Denny and H. B. Humphrey. U S Bur Mines Information Circ 7228:1-12 '42

Wartime safety competition breaks records; 18th annual safety contest for the Sentinels of safety trophies; with list of winners and honorable mention awards. W. W. Adams. il map Explosives Eng 21:119-23, 140-4 JI '43

See also

Coal mines and mining—Accidents and explosions

Coal mines and mining—Safety measures

Electricity in mining

—Safety measures

Mine hoisting—Safety measures

Mining engineering

—Safety measures

Statistics

Metal- and nonmetal-mine accidents in the United States during the calendar year 1940 (excluding coal mines). W. W. Adams and M. E. Kolhos. U S Bur Mines Bul 450:1-51; pa 10c Supt. of doc. '42

MINE air

Disaster barricade that uses compartments to keep afterdamp from trapped men. J. A. Scollon. diag Coal Age 48:72-3 Mr '43

How air can be dried by water before it enters mine. Coal Age 48:76+ O '43

How moisture that destroys some mine roofs is removed by sprinkling with water. Coal Age 48:70 JI '43

See also

Mine ventilation

MINE buildings

Coming up from the mine; modern change house. il Nat Safety N 47:14-15 F '43

Fires in surface mining and milling structures. D. Harrington and J. H. East, Jr. U S Bur Mines Information Circ 7250:1-9 '43

Mather mine; comfort facilities for miners. il Heat & Ven 40:54-5 Ap '43

MINE bulkheads, Concrete

Underground air receiver in coal seam; no. 3 mine of the Northwestern improvement company. T. Murphy. *il diags Comp Air M* 47:6915-17 D '42

MINE cars

Big cars and good service boost efficiency. *Coal Age* 48:73-9 My '43

Colliery transport cars. *Engineering* 155:107 F 5 '43

Loader and 14 cars get output at Greenbrier truck mine. *il plan Coal Age* 47:60-2 D '42

Mine car maintenance hoist uses brake cylinder. *il Coal Age* 48:98 O '43

Pillars recovered with crawler loader and shuttle cars. I. A. Given. *il plan Coal Age* 47:53-5 N '42

Retarder prevents shock and damage to mine cars. *plan Coal Age* 48:86 Mr '43

Safety and comfort feature special Isabella man-trip cars. S. M. Cassidy. *il Coal Age* 47:51-2 N '42

Some information on automatic coupling of mine cars. L. C. Bisey and E. J. Gleim. *diags U S Bur Mines Information Circ* 7245:1-6 '43

Wearmouth Colliery man-riding cars. *il diags Mech Handling* 30:172-4 Ap '43

MINE construction

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Mine buildings Mine roofs

Mine doors Mine shafts

MINE costs. *See* Mining costs**MINE doors**

Positive dual-action air door used in Resurrection mine. D. L. Myers. *diags Eng & Min J* 144:76-7 My '43

MINE drainage

New Leadville drainage tunnel to boost zinc output. *diag map Eng & Min J* 144:66-7, 88 S '43

See also

Mine pumping
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MINE dust

Stemming in metal mines; progress report 5; comparison of dust and gases produced from blasting charge of dynamite in drill holes, in bombs, and in mud-cap shots. J. A. Johnson and W. G. Agnew. *U S Bur Mines Rep of Invest* 3673:1-10 '42

See also

Coal dust

Silicosis

MINE equipment

Alloy steel has advantages in rock drilling; controlled oil-hardening required. C. G. Kemsley. *il diag Eng & Min J* 144:82-3 Ag '43

Butte mines stress maintenance and salvage as vital under war conditions. S. Veazey, Jr. and H. M. Courtney. *il Eng & Min J* 144:61-4 Mr '43

Diesel engines underground; effect of sulfur content of fuel on composition of exhaust gas. L. B. Berger and others. *U S Bur Mines Rep of Invest* 3713:1-13 '43

Emergency steels for wartime mining, wood pipe and other alternate materials. *il Min Cong J* 29:34-5, 38+ Mr '43

Mechanization trends gaining in metal and non-metallic mining. L. E. Young. *il Min Cong J* 29:42-5 F '43

Metal mining, 1942. J. A. Carpenter. *il Min & Met* 24:56-8 F '43

Mine equipment, 1942. R. H. Ramsey. *Eng & Min J* 144:112-13 F '43

Mining practices, 1942. S. A. Trengove. *Eng & Min J* 144:96-7 F '43

Outline of priority procedures for mines, smelters, and suppliers, corrected to Dec. 5, 1942. *Eng & Min J* 143:66 D '42

Shipment of equipment to foreign mines affected by new WPB ruling. *For Comm W* 11:41-2 Ap 10 '43

Some hints on maintenance and conservation frequently overlooked. *il Min Cong J* 29:26-30 Ap '43

See also

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Rock drills

MINE examination

Estimating ore by the polygon method. T. T. Read. *diags Eng & Min J* 144:84-5 Ag '43

MINE explosions

See also

Coal mines and mining—Accidents and explosions

MINE fans. *See* Fans, Mine**MINE filling**

Granulating slag at Noranda mines for backfilling. R. C. Rowe. *il Can Min J* 64:490-1 Ag '43

MINE fires

Fires in surface mining and milling structures. D. Harrington and J. H. East, Jr. *U S Bur Mines Information Circ* 7250:1-9 '43

Safety sermonettes; fire. W. B. Paton. *Can Min J* 64:23-5 Ja '43

See also

Coal mines and mining—Fires and fire protection
Inflammable mixtures

MINE foremen

Dishonest mine foreman. J. J. Rutledge. *Explosives Eng* 20:324-6 N '42

Foremen for Lewis. *Business Week* p83-4 Mr 6 '43

Mine foreman and mine development. J. J. Rutledge. *Explosives Eng* 20:367-8 D '42

Mine foreman and the check-up. J. J. Rutledge. *Explosives Eng* 21:55-6 Mr '43

Mine foreman and the discharge. J. J. Rutledge. *Explosives Eng* 21:139+ J1 '43

Mine foreman or superintendent who has lost his punch. J. J. Rutledge. *Explosives Eng* 21:26-7 Ja '43

State-board questions. Published in monthly numbers of *Coal age*

Up-grading coal miners in Indiana; vocational instruction to prepare foreman to do better job. W. S. Harris. *Min Cong J* 29:39-40 Mr '43

When a mine foreman is discharged. J. J. Rutledge. *Explosives Eng* 21:193-4 S '43

MINE gases

Stemming in metal mines; progress report 5; comparison of dust and gases produced from blasting charges of dynamite in drill holes, in bombs, and in mud-cap shots. J. A. Johnson and W. G. Agnew. *U S Bur Mines Rep of Invest* 3673:1-10 '42

See also

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MINE haulage

Plan your wartime power distribution system to conserve copper; electric haulage. L. W. Birch. *il Min Cong J* 29:33-6 Ag '43

Service haulage mine tie study. A. R. Joyce and C. C. Hagenbuch. *il diag Min Cong J* 29:57-8 My '43

Shuttle cars latest step in Oliver modernization. R. C. Oliver and I. A. Given. *il diags plan Coal Age* 48:60-3 Je '43

Some haulage and hoisting hazards in western mines. E. H. Denny and H. B. Humphrey. *U S Bur Mines Information Circ* 7228:1-12 '42

Strip haulage tuned to new conditions at Streamline. *il Coal Age* 48:89-91 My '43

Strip mine haulage. C. W. Woosley. *Min Cong J* 29:34-5 J1 '43

See also

Cableways Mine hoisting

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MINE hoisting

Friction hoist formerly in use in mines of Nova Scotia. *diag Can Min J* 64:365 Je '43

Small air hoists increase vital mineral output; uses of small slushing units in square-set and stull-timbered stopes. R. V. Pierce and R. N. Bryan. *il diags Comp Air M* 48:6971-7 Mr '43

MINE hoisting—Continued

Some haulage and hoisting hazards in western mines. E. H. Denny and H. B. Humphrey. U S Bur Mines Information Circ 7228:1-12 '42

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Mine shafts

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Rope life boosted by care in inspection and lubrication. F. Young. il Coal Age 47:64-5 N '42

MINE hoisting, Electric

Buffalo Ankerite gold mines; engineering problems. E. C. Keeley. diag plans Can Min J 63:697-712 N '42

Electrical practice in American zinc co.'s mines. J. H. Edwards. il Eng & Min J 143:62-5 N '42

Mine hoist motor serves as generator and brake. il Rock Prod 46:30 F '43

Mine hoist skip spotting switch. J. Blenkiron. diag Eng & Min J 144:76 S '43

Off-peak operation of a mine hoist; analysis and study of power use. D. H. Noy. diag Can Min J 64:434-6 JI '43

2,200-hp. hoist survives storage and fire before use. il Coal Age 48:76-8 Ap '43

MINE inspection

Federal coal mine inspection has its first anniversary. D. Harrington. map Min Cong J 29:77-82 F '43

Federal coal mine inspection, 1944, as reported by U.S. Bureau of mines. Min Cong J 29:53 Ag '43

Federal inspection program stresses greater service. Coal Age 48:140-1 Ag '43

Federal inspection starts to move in promoting safety. R. R. Sayers. Coal Age 48:107-9 F '43

First organization and work of the Coal-mine inspection division, Bureau of mines. U S Bur Mines Information Circ 7243:1-138 '43

Tentative inspection standards for anthracite mines. U S Bur Mines Information Circ 7231:1-42 '43

1211 coal mines in 24 states inspected by Bureau men. Coal Age 48:133-4 Je '43

MINE inspectors' institute of America

Annual meeting, 34th, Columbus, May 24-25. Coal Age 48:137-47 Je '43

MINE locomotives. See Locomotives, Mine**MINE management**

Control. J. J. Rutledge. Explosives Eng 21: 88, 98 My '43

Growing zinc supply from Pioche, Nevada. R. L. Dean. il diag Min Cong J 29:18-22 Ap '43

Industrial democracy at work; labor-management committees prove their worth. Eng & Min J 144:60-1 Ag '43

Some hints on maintenance and conservation frequently overlooked. il Min Cong J 29:26-30 Ap '43

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Coal mines and mining—Management
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MINE models

Coal-seam valleys revealed by relief model of workings; Beckley seam in Raleigh county, West Virginia. il Coal Age 48:67 O '43

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Foremen for Lewis. Business Week p83-4 Mr 6 '43

MINE pumping

Faster shaft sinking possible with air lift. S. F. Shaw. bibliog diag Eng & Min J 144:70-2 Ag '43

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MINE pumping, Electric

Application of electricity in mine pumping. G. B. Alvey and N. Tetlow. il diag Inst E E J 90 pt 2:138-54 Je '43; Abstracts. Electrician 129:667-8 D 18 '42; Elec R (Lond) 131:748 D 11 '42; Discussion. Inst E E J 90 pt 2:155-7, 476-7 Je, D '43

Central pump station serves Butte mines. M. McCanna. il diag Comp Air M 48:7143-5 S '43

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Auxiliary pump assures certain and efficient operation; Packer collieries nos. 2, 3 and 4 of the Locust coal co. H. F. Brecker. diag Coal Age 47:63-4 D '42

Deepwell unit takes over from six other pumps; Purglove coal mining co. il Coal Age 48:85 Ap '43

Maintaining the vertical turbine pump. I. A. Oliver. Eng & Min J 144:84 Ap; 79-80 My; 80-1+ Je '43

Pump know-how improves operation and saves on repairs. F. F. MacWilliams. Coal Age 48:77-8 Je '43

MINE rescue work

Historic scrap metal; last of a beam engine that saved twelve lives. il Chem Age (Lond) 49:115 JI 31 '43

MINE roofs

Channel irons for roof control; St Joseph Lead finds them effective at the Leadwood mine. W. W. Weigel. il diag Eng & Min J 144:70-2 My '43

Conserving labor by preventing roof falls. F. G. Smith. Min Cong J 29:32 JI '43

How moisture that destroys some mine roofs is removed by sprinkling with water. Coal Age 48:70 JI '43

In room two-thirds of roof is in compression; semi-umbrella increases roof security. R. D. Hall. diag Coal Age 48:84-5 Je '43

Mine roof sealing to prevent slate falls. il diag Min Cong J 29:43-6 Ap '43

Mines usually have two roofs, an upper and a lower. Coal Age 48:73 Mr '43

Room roof subjected to complex of stresses, being not a beam but a very thick slab. R. D. Hall. diag Coal Age 48:88, 90 Ag '43

Should sprags be used in undercut of coal to keep mine roof from falling? diag Coal Age 48:76 O '43

Why mine roof does not bend or break down near edges of supporting coal pillars. diag Coal Age 48:86-7 Ap '43

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Balancing air flow to get the benefits of split currents; using a booster fan; making new openings or sinking new shafts. J. H. Dickerson. diag Coal Age 48:92-4 My '43

Buffalo Ankerite gold mines; engineering problems. E. C. Keeley. diag plans Can Min J 63:697-712 N '42

Fan started and doors closed to warm shaft bottom; Federal No. 1 mine, Koppers Coal division. plans Coal Age 48:100 O '43

Faster shaft sinking possible with air lift. S. F. Shaw. bibliog diag Eng & Min J 144:70-2 Ag '43

Shaft escapeway made by round tube integral with lining; Federal no. 1 mine, Koppers coal division. diag Coal Age 48: 72-3 Ag '43

Tropical mine shaft; La Luz mines limited, Nicaragua. W. J. Roberts. il diag Comp Air M 48:6943-5 Ja '43

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Mine hoisting
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MINE shops

Gold mining and shipbuilding; program of Wartime merchant shipping limited in eastern Canada's gold mine machine shops. R. C. Rowe. il Can Min J 64:627-40 O '43

Modern shop eases mechanical-mining maintenance; Superior coal co. il Coal Age 48:79-81 Ap '43

Preventive maintenance on the iron range; repair shop of Butler bros. A. J. Wiseley. il Min Cong J 29:20-2 Ag '43

MINE subsidences

Anthracite cave commission studies subsidence insurance. Coal Age 48:120 Mr '43

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Coal mining practice in Saskatchewan. K. E. Gustafson. diag Can Min J 64:206-7 Ap '43

Engineering practice at Cochenour Willans. R. W. Richardson. diag maps Can Min J 64: 417-25 JI '43

MINE surveying—Continued

Laying off branch roads at forty-five and sixty degrees without using a transit. diags Coal Age 48:85 Je '43

Structure chart for solving geological and mining problems. H. R. Bramel. Eng & Min J 144:82-3 Jl '43

See also

Borehole surveying Drilling and boring
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termination of

MINE taxation

Tax picture, present and future. H. B. Fernald. Min Cong J 29:83-6+ F '43

MINE temperature

Mine temperatures are quite irregular but mount 16 deg. toward south. Coal Age 48:78 O '43

MINE ties

Service haulage mine tie study. A. R. Joyce and C. C. Hagenbuch. Il diag Min Cong J 29:57-8 My '43

MINE timber

Does depth influence rate of decay in mine timber? merulius lacrymans as destructive agent. C. W. Fritz. Can Min J 63:719-20 N '42

Handling timbers on mine cars safely and easily. Il Eng & Min J 144:91 O '43

Study of decay of mine timber. J. N. Scudder, H. E. DeKay, Jr. and A. L. Toenges. U S Bur Mines Rep of Invest 3710:1-14 '43

Timber is scarce. Business Week p53 N 6 '43

Timber treatment a conservation measure. Eng & Min J 144:91 Ag; 74-5 S '43

Timber treatment pays out in southern West Virginia. Il Coal Age 48:58-60 Jl '43

Treated timber at Isabella mine; Weltron coal company. Il Min Cong J 29:12-14 Ja '43

MINE timbering

It pays to use dry props as they are stronger. Coal Age 48:72 Jl '43

Mitchell slice stoping as practiced at Butte. L. F. Bishop. Il diags Min Cong J 29:38-44 S '43

Safe practices underground at Hollinger; scaling and timbering loose ground. G. Gedge. Il Can Min J 64:142-6 Mr '43

Safety sermonettes; wooden safety. W. B. Paton. Can Min J 63:793-5 D '42

Small air hoists increase vital mineral output; uses of small slushing units in square-set and stull-timbered stopes. R. V. Pierce and R. N. Bryan. Il diags Comp Air M 48:6971-7 Mr '43

See also

Mine roofs

MINE tracks

Construction costs for service haulage tracks. diags Min Cong J 29:44-7 Je '43

Double switchback solves war-time haulage; Red Jacket coal corp. Il diag Coal Age 48:121 F '43

Labor economies in track construction. C. C. Hagenbuch. Min Cong J 29:33 Jl '43

See also

Mine ties

MINE transportation

Aerial tramway is transportation link at Fond Creek. J. H. Dickerson. Il plan Coal Age 47:65-7 D '42

Coal mining practice in Saskatchewan. K. E. Gustafson. diags Can Min J 64:205-6 Ap '43

See also

Mine cars Mine hoisting
Mine haulage Mine tracks

MINE ventilation

Air surveys indicate air and power savings. J. H. Dickerson. Coal Age 48:82-4 Ap '43

Balancing air flow to get the benefits of split currents; using a booster fan; making new openings or sinking new shafts. J. H. Dickerson. diags Coal Age 48:92-4 My '43

Coal mining practice in Saskatchewan. K. E. Gustafson. diag Can Min J 64:204-5 Ap '43

Conveyor ventilation requires ample air and positive movement. J. H. Dickerson. plans Coal Age 48:67-9 Mr '43

Four air instruments and part that each plays in coal-mine ventilation. diags Coal Age 47:97-9 D '42

Installing ventilation at Falconbridge; use of exhausting fan; cost data. D. E. Macdonell. Il diags plan Can Min J 64:131-41 Mr '43

Right fan location can save money and help ventilation. J. H. Dickerson. plans Coal Age 47:58-60 N '42

Split air currents promote safe, low-cost mine ventilation. J. H. Dickerson. diag Coal Age 48:65-7 Ja '43

Ventilation problems. plans Coal Age 48:80+ S '43

Ventilation survey methods. R. Mancha. Il Min Cong J 29:87-8 F '43

See also

Fans, Mine

MINE waste

Multiple purpose river development; storage of hydraulic mining debris in reservoir; Narrows development on Yuba river; Pacific gas and electric company. H. V. Lutge and E. F. Maryatt. Il diags plans Elec West 90:60-4 Ap '43

See also

Coal mines and mining—Waste disposal

MINE water*See also*

Mine pumping Petroleum—Water problem
Mine pumping, Electric

MINERAL industries

Industrial minerals, 1942. P. M. Tyler. Eng & Min J 144:110-11 F '43

See also

Aggregates	Phosphates
Asbestos	Potash
Coal trade	Quarries and quarrying
Feldspar	Rock products industry
Iron industry and trade	Salt
Limestone	Silicates
Metal trade	Sodium nitrate
Metallurgy	Stone, Crushed
Mines and mineral resources	Sulfur industry and trade
Mining industry and finance	United States—Mines, Bureau of
Petroleum industry and trade	

Finance

America's natural resources; with table giving twenty selected mineral and oil producers largely dependent on domestic reserves. Il Mag of Wall St 72:342-4+ Jl 10 '43

Statistics

Mineral production in 1942 breaks all records. Il Manuf Rec 112:20-1+ Ja '43

Alaska*See also*

Mines and mineral resources—Alaska

Canada

Canada's mineral production for 1942. Can Chem & Process Ind 27:20 Ja '43

Canada's minerals. Economist 144:211 F 13 '43

See also

Mining industry and finance—Canada

Egypt

Nonmetallic minerals production in Egypt, 1941. For Comm W 9:19 D 26 '42

Middle western states

Resources and manpower of the 14 middle-western states. maps Chem & Met Eng 49:85-100 N '42

North Carolina

North Carolina, a story of great achievement; minerals. Il Manuf Rec 112:59-64 O '43

Peru

Mining activity in Peru, 1942. For Comm W 10:29-30 Mr 13 '43

MINERAL Industries—Continued

United States

Challenge to educators in the mineral industries. E. Steidle. Eng & Min J 144:55-7 Mr '43

Extension of the reciprocal trade agreements act. J. D. Conover. Min Cong J 23:31-3 Je '43

Nonmetallic industrial minerals, 1942. O. Bowles. Il Min & Met 24:85-90 F '43

RFC reports vast activities in stimulating mineral output. C. B. Henderson. Eng & Min J 143:84+ D '42

Wanted: aggressive leadership in mineral industries education. E. Steidle. Min & Met 24:145+ Mr '43

Why stockpiles? E. Just. Eng & Min J 144:72-3, 124 J1 '43

See also

Mines and mineral resources—United States

Yugoslavia

Nazi exploitation of Croatian mines. For Comm W 11:30 My 15 '43

MINERAL lands

Federal control of all mineral deposits on public lands. Eng & Min J 144:48-50 S '43

Tenure arrangements in Oklahoma oil fields. R. D. Davidson and K. Wernimont. bibliog J Land & Pub Util Econ 19:40-58 F '43

See also

Mine examination
Mines and mineral resources
Oil lands

MINERAL wool

Pipe insulation for low temperatures. diags Dom Eng 161:69+ Ja '43

Preventing building condensation. F. B. Rowley, A. B. Algren and C. E. Lund. diag Sheet Metal Worker 33:46 N '42

Research contributes to war production; National gypsum co. M. H. Baker. Rock Prod 46:62-3 J1 '43

Standards

Mineral wool; loose, granulated, or felted form, in low-temperature installations. diags U S Nat Bur Stand Commercial Standard CS105-43:1-21; pa 5c Supt. of doc. '43

Testing

Tests of steam-pipe insulation; rock wool, glass wool and corrugated asbestos. E. A. Allcut. bibliog Il diags A S M E Trans 65:407-17; Discussion. 417-19 J1 '43

MINERALOGICAL analysis

Analytical patterns in the study of mineral and biological materials; autoradiograph, contact print, electrographic print, etc. H. Yagoda. bibliog(70 references) Il diags Ind & Eng Chem Anal ed 15:135-41 F 15 '43

Determining elements in minerals by the contact-print method. G. Gutzeit. Il Eng & Min J 143:57-60 N '42

Effect of chemical impurities on scheelite fluorescence. R. Greenwood. bibliog Econ Geol 38:56-64 Ja '43

Hydrothermal study of equilibria in the system alumina-water. A. W. Laubengayer and R. S. Weisz. bibliog Il Am Chem Soc J 65:247-50 F '43

Manganese oxide minerals; a preliminary report. M. Fleischer and W. E. Richmond. Il Econ Geol 38:269-86 Je '43

Nature of Georgia kaolins; evidence of mineralogical analysis. L. Mitchell and E. C. Henry. bibliog Am Cer Soc J 26:113-19 Ap 1 '43

Rare element prospecting in pegmatites. T. T. Quirke and H. E. Kremers. bibliog Econ Geol 38:173-87 My '43

Spectrochemical determination of silicon, iron, and aluminum in mineral powders with a high voltage direct current arc. H. I. Oshry, J. W. Ballard and H. H. Schrenk. bibliog Il diags Opt Soc Am J 32: 672-80 N '42

Spectrographic analysis of New England granites and pegmatites. J. A. Shimer. bibliog maps Geol Soc Bul 54:1049-66 Ag '43

See also

Clay—Analysis

MINERALOGY

Economic paleontology and mineralogy; an appraisal. H. L. Driver. Am Assn Pet Geologists Bul 27:335-47 J1 '43

Leached derivatives of arsenopyrite and chromite. R. Blanchard. Il Econ Geol 37: 596-626 N '42

Packing in ionic minerals. H. W. Fairbairn. diags Geol Soc Bul 54:1305-74 bibliog(pl373-4) S '43

Petrology and silicate technology. N. L. Bowen. bibliog diags Am Cer Soc J 26: 285-301 S 1 '43

See also

Coal
Crystallography

Feldspar

Geology

Metals

Meteorites

Minerals

Mines and mineral

resources

Ore deposits

Rocks

Talc

Tektites

MINERALS

Aluminum chief nonferrous metal problem among critical and noncritical mineral products. Min & Met 24:276 Je '43

Assuring adequate supplies of minerals: some primary considerations. T. S. Lovering. For Comm W 12:13 J1 3 '43

British non-ferrous minerals; quartz, sandstone, sand. W. H. Reynolds. Chem Age (Lond) 48:549-52 My 22 '43

Contrasts in grinding characteristics of mineral products. G. D. Coe and W. H. Coghill. U S Bur Mines Rep of Invest 3704: 1-11 '43

Crystalline compounds observed in water treatment. C. E. Imhoff and L. A. Burkhardt. bibliog(40 references) Il Ind & Eng Chem 35:873-82 Ag '43

Fe-Ni-S system; an introduction with new data on the crystallization of pyrrhotite and pentlandite. J. E. Hawley, G. L. Colgrove and H. F. Zurbrigg. bibliog Il Econ Geol 38:335-83 Ag '43

Foreign minerals for the war program. A. M. Bateman. Eng & Min J 144:59 Ap '43

Helium indexes for several minerals and rocks. N. B. Keevil. Am J Sci 241:680-93 N '43

Industrial minerals, 1942. P. M. Tyler. Eng & Min J 144:110-11 F '43

Inspection and analysis of formation samples. L. C. Uren. diag Pet Eng 14:53, 55-6, 58 Ag '43

Manganese oxide minerals; a preliminary report. M. Fleischer and W. E. Richmond. Il Econ Geol 38:269-86 Je '43

Metamorphism of extrusives by basic intrusives in the Keweenaw of Minnesota. G. M. Schwartz. bibliog Geol Soc Bul 54: 121-25, pl 1-2 Ag '43

Mineral deposits; training armed forces in recognition or identification of ores. J. J. Wolford. Science 98:261 S 17 '43

Mineral matter in coal. G. C. Sprunk and H. J. O'Donnell. bibliog Il U S Bur Mines Tech Pa 648:1-67; pa 15c Supt. of doc. '42

Mineral survey for piezo-electric materials; with list of minerals. W. L. Bond. Bell System Tech J 22:145-52 J1 '43

Nonmetallic industrial minerals, 1942. O. Bowles. Il Min & Met 24:85-90 F '43

Packing in ionic minerals. H. W. Fairbairn. diags Geol Soc Bul 54:1305-74 bibliog(pl373-4) S '43

Partial list of fluorescent rocks and minerals from the Rocky Mountain region of the United States. Can Min J 63:712 N '42

Report of the Nonmetals division, fiscal year 1942. O. C. Ralston and A. G. Stern. bibliog pls map U S Bur Mines Rep of Invest 3675:1-39 '42

Some standard thermal dehydration curves of minerals. P. G. Nutting. U S Geol S Professional Pa 197-E:197-217; pa 5c Supt. of doc. '43

Sticky-surface concentration of gravel size minerals. J. Dasker, J. Norman and O. C. Ralston. bibliog diags Can Min J 63:781-4 D '42

MINERALS—Continued

United States turns to South America for many critical minerals. C. W. Wright. *il Min & Met* 23:590-3 D '42

See also

Aggregates
Apatite
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Asphalt
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Petroleum
Phosphates
Potash
Quartz
Rocks
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Silicates
Sulfur
Talc
Vermiculite

Prices

Nonmetalliferous ores and concentrates ceiled.
Oil Paint & Drug Rep 143:7+ F 22 '43

Stockpiling

How the mining industry views stockpiling. Eng & Min J 144:80-1 Ag '43
Postwar accumulation of mineral stock piles. C. K. Leith. *Min & Met* 24:194-5 Ap '43
Postwar hedge; metals producers backing plan for government stockpiles. *Business Week* p50 S 26 '43
Raw materials for the next war; why the United States should accumulate all needed metals and minerals. W. O. Hotchkiss. *Min & Met* 24:224-6 My '43
Stock-piling for peace; symposium in favor of accumulating emergency supplies of metals and minerals. *Min & Met* 24:273-4 Je '43
Support, opposition to Scrugham bill expressed at Senate hearings; measure provides for storing strategic materials at government expense after war ends. *Steel* 113:77 JI 5 '43
Why stockpiles? E. Just. Eng & Min J 144: 72-3, 124 JI '43

Testing

Directions for laboratory mineral sizing. J. Dasher, bibliog U S Bur Mines Information Circ 7224:1-16 '42

MINERS

Food rationing descends upon the mining industry. R. S. Goodhart. *il Min Cong J* 29:48-50 My '43
Food rations for miners. E. H. Robie. *Min & Met* 24:446-7 O '43
Furlough to mines; army to release 4,500 men to copper, moly, and zinc pits. *Business Week* p64+ Ag 7 '43
Manpower drain; nonferrous metal mines. *Business Week* p76+ Ja 30 '43
Metal mining and the Selective service; manning tables will be used. H. A. Rich. *Min Cong J* 28:36-8 D '42
Mine pay hiked; Commission's approval of wage boosts in nonferrous field. *Business Week* p106-8 Ap 17 '43
Minerals boss; WPB's appointment of Howard Young. *Business Week* p89-90 F 6 '43
U.S. war advertising sells workers, industry by industry. G. A. Nichols. *il Ptr Ink* 202: 16-18+ F 12 '43
War department plan for relieving mine labor shortage is completed. Eng & Min J 144:83 S '43
Wartime productivity in mining industries. C. S. Gody. *Monthly Labor R* 57:255-7 Ag '43
See also
Coal miners
Copper miners
Mine foremen
Mine officials union of America
Mining towns
Tin miners
Zinc miners

Diseases and hygiene

Sporotrichosis on the Witwatersrand; abstract. C. J. du Toit. *J Ind Hygiene* 25: sup100-1 My '43

See also

Coal miners—Diseases and hygiene
Sulfur miners

Training

See Mining schools and education

Germany

Reform of miners' pensions in Germany. *Int Labour R* 48:391-3 S '43

Idaho

Wage scale in the Northwest; Coeur d'Alene mining district. *Min & Met* 24:200 Ap '43

Ontario

Labour situation at Sudbury. J. C. Browning. *Can Min J* 63:721 N '42

MINES, Military

See also

Mines, Submarine
MINES, Photography of. *See* Photography of mines

MINES, Submarine

Pressing and welding; general-purpose machines in the production of sea-mine cases. *il Elec R (Lond)* 133:35-9 JI 9 '43

MINES and mineral resources

Abstracts of papers presented at the 23d annual meeting of Society of economic geologists in conjunction with the American institute of mining and metallurgical engineers, New York, Feb. 15-17, 1943. *Econ Geol* 38:80-9 Ja '43
Federal and state bureaus and officials concerned with mineral resources; U.S. and Canada. *Min & Met* 24:121-3 F '43
Mineral control for peace. C. K. Leith. Eng & Min J 144:93-4 JI '43
Minerals' share in the war; presidential address before thirtieth Indian science congress, Calcutta, 1943. D. N. Wadia. *Science* 98:351-6 O 22 '43
Presidential address; the post graduate years. W. Cullen. *Chem & Ind* 62:258-62 JI 10 '43
Raw materials solvency; United nations co-operation has assured supplies. W. L. Batt. *Min & Met* 24:308-9 JI '43
World mineral reserves shrinking. *Barron's* 23:7 My 3 '43

See also

Aluminum
Antimony
Asbestos
Clay
Coal
Coal mines and mining
Copper mines and mining
Geology
Gold mines and mining
Graphite
Hydraulic mining
Iron mines and mining
Iron ores
Lead mines and mining
Lignite
Manganese mines and mining
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Prospecting
Quarries and quarrying
Silver mines and mining
Sulfur
Talc
Tantalum
Tin mines and mining
Tungsten
Tungsten mines and mining
Zinc mines and mining

Bibliography

Among the newer books. Published in monthly numbers of Mining and metallurgy

Lost mines

Lost mines; two examples. R. C. Rowe. *Can Min J* 64:431-3 JI '43

Afghanistan

Mineral resources of Afghanistan. *For Comm W* 13:23 O 30 '43

MINES and mineral resources—*Continued*

Africa

African mineral resources. Science 98:sup 10-11 S 10 '43

Alaska

Arctic mineral domain; photographs by Bradford Washburn. Explosives Eng 20:327-30 N '42

Chromite deposits of Red Bluff bay and vicinity, Baranof island, Alaska. P. W. Guild and J. R. Balseley, Jr. maps U S Geol S Bul 936-G:171-87, pl 21-2; pa 20c Supt. of doc. '42

Nickel-copper deposit at Funter bay, Admiralty island, Alaska. J. C. Reed. maps U S Geol S Bul 936-O:349-61, pl 51-2; pa 15c Supt. of doc. '42

Nickel-copper deposit at Snipe bay, Baranof island, Alaska. J. C. Reed and G. O. Gates. diag map U S Geol S Bul 936-M:321-30, pl 48; pa 10c Supt. of doc. '42

Nickel-copper deposits on the west coast of Chichagof island, Alaska. W. T. Pecora. maps U S Geol S Bul 936-I:221-43, pl 36-7; pa 20c Supt. of doc. '42

Occurrences of molybdenum minerals in Alaska. P. S. Smith. U S Geol S Bul 926-C:161-210, pl 12; pa 15c Supt. of doc. '42

See also

Gold mines and mining—Alaska

Argentina

Mineral deposits in Argentina; abstract. J. D. Singewald, Jr. Min & Met 23:593 D '42

Arkansas

Arkansas travelogue; mining is being rejuvenated. E. Just. il Eng & Min J 143:63-5 D '42; 144:46-9 Ja '43

See also

Manganese mines and mining—Arkansas

Mercury mines and mining—Arkansas
Petroleum—Arkansas

Australia

Australia, 1942. P. G. Tait. Eng & Min J 144:91-2+ F '43

Engineers and the British empire; Australian natural resources. M. Smith. il Engineer 176:240-2 S 24 '43

Bolivia

Tungsten from Bolivia. R. B. Hall. il Comp Air M 48:7073-8 Jl '43

Brazil

Brazil will make steel in a Brazilian plant from Brazilian minerals. C. Longenecker. il plan Blast F & Steel Pl 31:1129-40 O '43

Brazil's minerals bridge gap in United nations' supply line. il Steel 112:94-5 My 17 '43

Layered or banded chromite at Campo Formoso, Bahia, Brazil. W. D. Johnston, Jr. and H. Capper A. de Souza. bibliog il maps Econ Geol 38:287-97 Je '43

United States turns to South America for many critical minerals. C. W. Wright. il Min & Met 23:590-3 D '42

British Columbia

Kootenay region. T. A. Rickard. bibliog il Can Min J 64:285-95 My '43

Review of the mining industry in British Columbia for 1942. H. G. Nichols. il Can Min J 64:63-6 F '43

California

Introduction to cretaceous of California. O. P. Jenkins. maps Am Assn Pet Geologists Bul 27:249-61 Mr '43

See also

Chromium mines and mining—California
Manganese mines and mining—California
Mercury mines and mining—California
Petroleum—California
Petroleum industry and trade—California

Canada

Canada, 1942. J. B. DeMille. Eng & Min J 144:85-7 F '43

Canada's mineral industry in 1942. W. H. Losee. Can Min J 64:58-62 F '43

Dominion high in metal output. C. D. Howe. Steel 112:37 Je 21 '43

See also

Gold mines and mining—Canada
Mining industry and finance—Canada
Mineral industries—Canada

China

China's mineral output. Chem Age (Lond) 48:603 Je 5 '43

China's position in the world of minerals. Chung Yu Wang. Min & Met 24:401-2 S '43

Tungsten deposits of southern Kiangsi, China. K. Hsu. bibliog il diags maps Econ Geol 38:431-74 S '43

Colorado

Creede comes back; mining of lead, zinc and other metals. il Comp Air M 47:6909-13 D '42

Fluorspar helps wage war; Kramer mines, inc. R. Fleming. il Comp Air M 48:7160-3 O '43

Tissue for tool steel; tungsten ore mining by Wolf Tongue mining company. T. L. Wells. il Explosives Eng 20:351-6 D '42

Twice-used ores; lead and zinc to be extracted from dumps of old silver mines. il Business Week p30 My 8 '43

Vanadium deposits of Colorado and Utah; a preliminary report. R. P. Fischer. pls fold maps U S Geol S Bul 936-F:363-94; pa 30c Supt. of doc. '42

See also

Gold mines and mining—Colorado
Oil shales—Colorado

Cuba

Chrome resources of Cuba. T. P. Thayer. diags maps U S Geol S Bul 935-A:1-74, pl 1-20; pa \$1 Supt. of doc. '42

Florida

See also

Phosphate rock—Florida

Georgia

Talc from north Georgia. A. H. Hubbell. flow sheets. il Eng & Min J 143:45-9 N '42

See also

Clay—Georgia

Great Britain

British non-ferrous minerals; fluorspar. W. H. Reynolds. Chem Age (Lond) 48:343-5 Mr 27 '43

British non-ferrous minerals; quartz, sandstone, sand. W. H. Reynolds. Chem Age (Lond) 48:549-52 My 22 '43

British non-ferrous minerals; the exploitation of domestic resources. W. D. Reynolds. Chem Age (Lond) 48:197-9 F 13 '43

Idaho

Discoveries of vanadium in Idaho, Wyoming to make U. S. largely self-sufficient. il Steel 112:43+ F 22 '43

Yellow Pine mine, producing combination of tungsten, antimony, and gold. J. D. Bradley, J. A. Meia and R. E. Baker. il diags Eng & Min J 144:60-6 Ap '43

Illinois

See also

Petroleum industry and trade—Illinois

Kansas

See also

Petroleum—Kansas
Salt mines and mining—Kansas

Kenya Colony

Kenya's mineral resources; developing opportunities for private enterprise. Chem Age (Lond) 48:537 My 15 '43

Maine

See also

Beryl

MINES and mineral resources—Continued

Manitoba

Manitoba chromium find. J. P. de Wet. Can Min J 63:721-2 N '42

Mining in Manitoba in 1942. J. P. de Wet. il diags map Can Min J 64:74-80 F '43

Tin in Manitoba; discovery of metal in commercial quantities still being sought. J. D. Bateman. il Can Min J 64:273-8 My '43

Mexico

Geology and mineralization of the San Antonio mine, Santa Eulalia district, Chihuahua. W. P. Hewitt. bibliog maps Geol Soc Bul 64:173-204, pl 1-2 F '43

Mexico, 1942. C. W. Vaupell. Eng & Min J 144:88 F '43

Mining activities in Mexico during Nov. and Dec. of 1941; abstract. Chem & Met Eng 50:196 Ap '43

Michigan

Search for minerals in the Michigan upper peninsula. Science 97:573 Je 25 '43

Upper peninsula mineral resources conference. Science 96:510 D 4 '42

See also

Iron mines and mining—Michigan

Missouri

Bravoite from a new locality. C. A. Rasor. bibliog il Econ Geol 38:399-407 Ag '43

See also

Manganese mines and mining—Missouri

Nevada

Bristol silver mines co. producer of base metals. H. S. Coleman. il Min Cong J 29: 48-9 Jl '43

See also

Mercury mines and Zinc mines and mining—Nevada

New England

Rare alkalis in New England. F. L. Hess and others. bibliog il diags map U S Bur Mines Information Circ 7232:1-51 '43

New Hampshire

Big Mine produces four non-metallic minerals. Eng & Min J 144:80 Ap '43

New Mexico

Geology and ore deposits of the Magdalena mining district. G. F. Loughlin and A. H. Koschmann. bibliog diags fold maps U S Geol S Professional Pa 200:1-168, pl 1-38; pa \$2 Supt. of doc. '42

See also

Zinc mines and mining—New Mexico

New York (state)

New source of titanium; MacIntyre mine. Fortune 27:46+ Mr '43

See also

Iron ores—New York (state)

Nicaragua

See also
Gold mines and mining—Nicaragua

Nigeria

Wolfram in Nigeria. Can Min J 64:583-4 S '43

North Carolina

Federal agency stimulates production of strategic mica. il Eng & Min J 143:62 D '42

Muscovite in the Spruce Pine district, North Carolina. T. L. Kesler and J. C. Olson. map U S Geol S Bul 936-A:1-38, pl 1; pa 35c Supt. of doc. '42

North Carolina's booming mica industry. B. Sharpe. il Manuf Rec 111:30-1 N '42

Olive for market in the spruce pine region of North Carolina. Eng & Min J 143:55 N '42

Strategic mica. C. H. Vivian. il Comp Air M 47:6902-8 D '42

Tin-spodumene belt of the Carolinas; a preliminary report. T. L. Kesler. fold maps U S Geol S Bul 936-J:245-69 bibliog(p248-50); pa 50c Supt. of doc. '42

See also

Clay—North Carolina

Northwest Territories, Canada

Rare metals give Yellowknife new importance. Eng & Min J 144:70 O '43

Nova Scotia

Nova Scotia mineral industry during 1942. L. D. Currie. Can Min J 64:89 F '43

Oklahoma

Oklahoma mineral conference held. Oil Paint & Drug Rep 142:7+ D 28 '42

See also

Petroleum—Oklahoma

Ontario

Brucite in limestone near Wilkinston. I. C. Brown. bibliog il Econ Geol 38:408-19 Ag '43

Early development of Ontario mining. J. G. McMillan. il Can Min J 64:561-4 S '43

Mica for war; bonanza find at Eau Claire, Ont. D. C. McLaren. il Eng & Min J 144: 68-9 Ag '43

Mining in Ontario, 1942. J. C. Browning. Can Min J 64:81-3 F '43

See also

Gold mines and mining—Ontario

Pennsylvania

See also

Coal—Pennsylvania
Petroleum—Pennsylvania

Quebec

Mining in Quebec during 1942. J. B. DeMille. il Can Min J 64:84-8 F '43

Mining of asbestos. T. A. Rickard. bibliog il map Can Min J 64:359-65 Je '43

Paragenesis of the ore of the Normet mine, Abitibi county. H. M. Putman. il Econ Geol 38:313-22 Je '43

South Africa

Asbestos and its products. Chem Age (Lond) 49:213-16 Ag 28 '43

Fluorspar; recent production in South Africa. Chem Age (Lond) 48:185-6 F 6 '43

See also

Gold mines and mining—Transvaal
Platinum mines and mining—South Africa

South America

South America, 1942. J. B. Huttl. Eng & Min J 144:89-90 F '43

United States turns to South America for many critical minerals. C. W. Wright. il Min & Met 23:590-3 D '42

Bibliography

Bibliography of economic geology of South America. J. T. Singewald, jr. Geol Soc Special Pa no 50:1-159 Ag '43

South Carolina

Sillimanite in South Carolina. L. L. Smith. Eng & Min J 144:75 Ag '43

Topaz deposits near the Brewer mine, Chesterfield county. C. Fries, jr. map U S Geol S Bul 936-C:59-78, pl 6-9; pa 30c Supt. of doc. '42

Spain

Spain's treasure chest. F. W. Cannaday. map Eng & Min J 144:59-61 S '43

Tennessee

Barytes; a non-metallic product of eastern Tennessee. A. H. Hubbell. il Eng & Min J 144:63-5 Ja '43

See also

Phosphate rock—
Tennessee
Zinc mines and mining—Tennessee

MINES and mineral resources—Continued

Texas

Caliche deposits on southern High Plains. R. Sidwell. map Am J Sci 241:257-61 Ap '43

See also

Petroleum—Texas

Transvaal

Some Transvaal minerals. Chem Age (Lond) 48:401-2 Ap 10 '43

See also

Gold mines and mining—Transvaal

United States

America's natural resources; new perspectives on many industries depend on raw materials reserves. H. F. Travis. il Mag of Wall St 72:342-4+ J1 10 '43

Annual report of the Mining division, fiscal year 1942. C. F. Jackson. pls U S Bur Mines Rep of Invest 3664:1-51 '42

Developing strategic metal production for war. C. B. Henderson. Min Cong J 28:32-3+ D '42

Exploration for war minerals through fiscal year 1942; with list of Bureau of mines publications relating to exploration for war minerals, July 1, 1939 to June 30, 1942. M. Mosier and A. C. Johnson. U S Bur Mines Rep of Invest 3676:1-44 '43

Metal food for Mars; status of our strategic metal supply. il Steel 112:102-4 Ap 19 '43

Metal mining industry holds war conference. il Min Cong J 28:14-26+ D '42

Metals to win the war; what to look for and where. G. M. Fowler. map Eng & Min J 143:50-2 N '42

Miscellaneous metals and minerals production. R. J. Lund. Min Cong J 28:34+ D '42

National fuel policy. R. W. Weidenhammer. maps J Land & Pub Util Econ 19:127-40 My '43

United States, 1942. E. Just. Eng & Min J 144:82-4+ F '43

See also

Coal mines and mining—United States
Copper mines and mining—United States
Dolomite

Iron mines and mining—United States

Mineral industries—United States

Minerals—Stockpiling

Mining industry and finance—United States
Petroleum—United States

Potash industry and trade—United States

Raw materials
United States—Mines, Bureau of

Utah

Vanadium deposits of Colorado and Utah; a preliminary report. R. P. Fischer. pls fold maps U S Geol S Bul 936-P:363-94; pa 30c Supt. of doc. '42

Virginia

Titanium resources of Virginia. Eng & Min J 143:52 N '42

See also

Manganese mines and mining—Virginia

Tin mines and mining—Virginia

Washington (state)

Geology and ore deposits of the Metaline quadrangle. Cannon. C. F. Park, Jr. and R. S. Cannon, Jr. biblog fold maps U S Geol S Professional Pa. 202:1-81, pl 1-34; pa \$1.50 Supt. of doc. '43

Tin and tungsten deposits at Silver Hill, Spokane county. L. R. Page. maps U S Geol S Bul 931-H:177-203, pl 32-6; pa 30c Supt. of doc. '42

See also

Manganese mines and mining—Washington (state)

Wyoming

Discoveries of vanadium in Idaho, Wyoming to make U. S. largely self-sufficient. il Steel 112:43+ F 22 '43

MINIMUM wage

Floor is 40c; last of workers soon will come under federal wage minimums; with table showing how business adopted base. Business Week p90-2+ N 6 '43

40-cent minimum for home workers in embroidery industry. Monthly Labor R 57:791 O '43

Minimum-wage legislation in Haiti, 1942. V. Chapin. Monthly Labor R 56:593 Mr '43

Minimum-wage rates in Mexico, 1942 and 1943. Monthly Labor R 56:153-5 Ja '43

Progress of state minimum-wage legislation in 1942. L. Stitt and L. Sullivan. Monthly Labor R 56:442-9 Mr '43

See also

Wages—Law

MINING claims. See Mineral lands

MINING costs

Proposed methods and estimated costs of mining oil shale at Rulison. Colo. E. D. Gardner and C. N. Bell. diags map U S Bur Mines Information Circ 7218:1-59 '42; Excerpts. Oil & Gas J 41:47, 49 Ja 14 '43

United nations' newest source of iron; Brazil's Itabira hematite deposits. A. Malozemoff. Eng & Min J 144:58-9 Ja '43

See also

Gold mines and mining—Costs

MINING education. See Mining schools and education

MINING engineering

Buffalo Ankerite gold mines; engineering problems. E. C. Keeley. diags plans Can Min J 63:697-712 N '42

Converting a gold mining enterprise for the war program; Golden cycle corporation supplying zinc, lead and other essential products. M. E. Shoup. il Min Cong J 29:38-40 Ap '43

Engineering practice at Cochenour Willans. R. W. Richardson. diags maps Can Min J 64:417-25 J1 '43

Mining practices, 1942. S. A. Trengove. Eng & Min J 144:96-7 F '43

Steep Rock; roads, bridges, earth and rock moving, pumping—then an iron mine. il map Roads & Bridges 81:42-8+ S '43

Treasury tunnel extension to tap Black Bear zinc. il maps Eng & Min J 144:78-80 O '43

See also

Blasting
Coal mines and mining
Copper mines and mining
Drilling and boring (earth and rocks)

Electricity in mining

Gold mines and mining

Hydraulic engineering

Iron mines and mining

Mine equipment

Mine haulage

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Mines and mineral resources

Mining machinery

Mining methods

Mining schools and education

Prospecting

Quarries and quarrying

Rock drills

Tin mines and mining

Tunnels and tunneling

Zinc mines and mining

Bibliography

Current Institute papers. Published in Mining and metallurgy

Power

Carbon dioxide guards critical generators; Phelps-Dodge mine and reduction-works power plant at Morenci, Arizona. P. W. Eberhardt. il diags Power 87:738-9 N '43

See also

Coal mines and mining—Power

Electricity in mining

Mine pumping, Electric

Safety measures

Good records for safety first achieved at Combined Metals. D. T. Sullivan. Min Cong J 29:23 Ap '43

Personal contact promotes safety; Minnesota iron mines. A. J. Wiseley. il Safety Eng 86:18-20 J1 '43

Presidential address; the post graduate years. W. Cullen. Chem & Ind 62:258-62 J1 10 '43

MINING engineering—Safety measures—Cont.

Public address system in safety work at Perron gold mines. E. Ross. Can Min J 64:512-13 Ag '43

Safe practices underground at Hollinger; scaling and timbering loose ground. G. Gedge. il Can Min J 64:142-6 Mr '43

Safety in underground blasting methods. B. S. Richards. il Min Cong J 29:26-9 S '43

Safety sermonettes (cont.). W. B. Paton. Can Min J 63:726-8, 793-5; 64:23-5, 90-2, 156-8, 228-30, 301-4, 366-8, 445-7, 509-12 N '42-Ag '43

Safety sermonettes; rhyme and reason. W. B. Paton. Can Min J 64:656-8 O '43

Scaling; experience and intelligent use of tools will save lives. C. S. Green. Can Min J 64:5-7 Ja '43

Sentinels of safety trophy presented to Grasselli mine. il Explosives Eng 20:338-9 N '42

Stenches for emergency warnings in metal mines. D. Harrington and J. H. East, jr. diags U S Bur Mines Information Circ 7246:1-7 '43

Work of the Safety division, fiscal year 1942. 4pls U S Bur Mines Rep of Invest 3698:1-140 '43

See also

Coal mines and min- Mine hoisting—
ing—Safety meas- Safety measures
ures Mine inspection

Study and teaching

See also

Mining schools and education

MINING engineers

Coal mining technicians. Economist 145:535 O 16 '43

Plight of mining, metallurgical, and petroleum engineering education; effect of selective service system. E. A. Holbrook. Min & Met 24:275-6 Je '43

See also

Mining schools and education

MINING industry and finance

After the war, what—in the mining industry? cartelization seems unavoidable if Atlantic charter is to be fulfilled. O. W. Roskill. il Eng & Min J 144:62-6 My '43

Tariff, reciprocal trade and mining. E. Just. Eng & Min J 144:76-8+ Ap '43

See also

Coal trade	Mine taxation
Copper industry and trade	Mineral industries
Iron industry and trade	Mines and mineral resources
Mercury industry and trade	Mining costs
Metal trade	Silver industry and trade

Securities

Dubious post-war prospect weighs heavily on non-ferrous metal stocks; position of leading stocks. Mag of Wall St 71:596-7+ Mr 6 '43

British Columbia

Kootenay region. T. A. Rickard. bibliog il Can Min J 64:285-95 My '43

Canada

Canada, 1942. J. B. DeMille. Eng & Min J 144:85-7 F '43

Chile

Expanded basic industry is government's aim. Eng & Min J 144:129-31 Ag '43

Nicaragua

See also

Gold mines and mining—Nicaragua

Transvaal

See also

Gold mines and mining—Transvaal

United States

How to obtain a government mining loan. Eng & Min J 144:62 Ja '43

RFC must follow the law in loans to mining companies. C. B. Henderson. Eng & Min J 144:67-9 Je '43

Wartime productivity in mining industries. C. S. Gody. Monthly Labor R 57:255-7 Ag '43

See also

Mine taxation

MINING—law

See also

Mine taxation

Mineral lands

Petroleum laws and regulations

MINING machinery

Mechanization trends gaining in metal and non-metallic mining. L. E. Young. il Min Cong J 29:42-5 F '43

Mine operators and manufacturers cooperate for better mining. J. W. Haddock. Min Cong J 29:75-6 F '43

Scheduling of mining machinery set up. Coal Age 48:132+ Ap '43

See also

Coal mining machinery

Electricity in mining

Excavating machinery

Hoisting machinery

Mine haulage

Mine hoisting

Rock drills

Shoveling machines

Repair

Preventive maintenance on the iron range; repair shop of Butler bros. A. J. Wisecley. il Min Cong J 29:20-2 Ag '43

MINING methods

Andean gold; fifty years of successful operation by South American development company. E. I. LaBeaume. il maps Explosives Eng 21:169-71, 196-7 S '43

Channel irons for roof control; St Joseph Lead finds them effective at the Leadwood mine. W. W. Weigel. il diag Eng & Min J 144:70-2 My '43

Growing zinc supply from Pioche, Nevada. R. L. Dean. il diag Min Cong J 29:18-22 Ap '43

Metal mining, 1942. J. A. Carpenter. il Min & Met 24:56-8 F '43

Mitchell slice stoping as practiced at Butte. L. F. Bishop. il diags Min Cong J 29:38-44 S '43

Proposed methods and estimated costs of mining oil shale at Rulison, Colo. E. D. Gardner and C. N. Bell. diags map U S Bur Mines Information Circ 7218:1-59 '42

Safe practices underground at Hollinger; scaling and timbering loose ground. G. Gedge. il Can Min J 64:142-6 Mr '43

Scraper set-up for working a wide face effectively. diag Eng & Min J 144:90 O '43

Small air hoists increase vital mineral output; uses of small slushing units in square-set and stull-timbered stopes. R. V. Pierce and R. N. Bryan. il diags Comp Air M 48:6971-7 Mr '43

Stemming in metal mines, Progress report 6; relative advantages and disadvantages of different types of stemming and no stemming when used with 40 percent ammonia gelatin dynamite at the Mount Weather testing adit. J. A. Johnson and W. G. Agnew. pl U S Bur Mines Rep of Invest 3693:1-38 '43

Stemming in metal mines, Progress report 7; blasting with no stemming only 72 percent efficient compared with results obtained when two cartridges of sand stemming per hole were used with 40-percent ammonia gelatin dynamite at the Mount Weather testing adit. W. G. Agnew. U S Bur Mines Rep of Invest 3725:1-19 '43

Tissue for tool steel; tungsten ore mining by Wolf Tongue mining company. T. L. Wells. il Explosives Eng 20:351-6 D '42

What is the proper draw-point spacing for block caving? with cost data. P. B. Bucky, J. W. Stewart and S. Boshkov. il diags Eng & Min J 144:70-5+ Je '43

Yellow Pine mine, producing combination of tungsten, antimony, and gold. J. D. Bradley, J. A. Mecia and R. E. Baker. il diags Eng & Min J 144:60-6 Ap '43

Zinc mining revived at the Prince. il diags Min Cong J 29:54-5 My '43

See also

Blasting

Coal mines and mining—Methods

Copper mines and mining

Hydraulic mining

MINING methods—See also—Continued

Iron mines and mining Mine haulage
Lead mines and mining Mine hoisting
Mercury mines and mining Mining engineering
Quarries and quarrying

Stripping operations

Copper mining and the Utah copper mine. R. S. Lewis. *il Elec Eng* 62:473-9 N '43
Development in the methods of mining and treating iron ores. *il Blast F & Steel Pl* 31:85-6 Ja '43
Electric power distribution for open-pit mines and quarries. J. E. Borland. *il diags Min Cong J* 29:23-34 Ja; 42-9 Mr '43
Iron ore output in Utah increasing. *il Min Cong J* 29:31-2 Ap '43
Operating the Grau chrome mine. A. O. Hall. *il Min Cong J* 29:16-17 Mr '43
Unusual procedure at an iron mine. *il Eng & Min J* 144:62 Mr '43
Winter stripping on the Mesabi range. J. H. Wilson. *il Explosives Eng* 21:128-9, 152-3 Jl '43
Yellow Pine mine, strategic metal bonanza. H. D. Bailey. *il map Comp Air M* 48:7189-92 N '43
See also Coal mines and mining—Stripping operations

MINING schools and education

Challenge to educators in the mineral industries. E. Steidle. *Eng & Min J* 144:55-7 Mr '43
Future development and education in mining foreshadowed at Pittsburgh coal mining institute meeting, May 28. *Coal Age* 48:123-4 Jl '43
Mineral industry education, 1942. A. F. Greaves-Walker. *Min & Met* 24:55 F '43
No further coal-mining scholarships but interest continues in the plan. G. H. Deike. *Min & Met* 24:83 F '43
Wanted: aggressive leadership in mineral industries education. E. Steidle. *Min & Met* 24:145+ Mr '43

MINING towns

Transformation of a coal mining town; Inland steel company's program; Wheelwright, Kentucky. L. M. Williams. *il Min Cong J* 29:37-40 Ag '43

MINNEAPOLIS, Minnesota**Sewerage**

Possible economies in sludge disposal practice; Minneapolis-St Paul plant; with cost data. G. J. Schroefer. *Am Soc C E Proc* 69:56-69 Ja '43; Discussion. 323-32 F '43
Sewage plant maintenance; Twin-Cities plant. S. J. Larsen. *il diag Water Works & Sewerage* 89:457-64 N '42
Ventilation features of the Minneapolis-St Paul sewage treatment plant. G. J. Schroefer. *il plans Water Works & Sewerage* 90:353-8 O '43

Social conditions

Wartime care of working mothers' children in Minneapolis. J. O. Louis. *Monthly Labor R* 57:107-8 Jl '43

MINNEAPOLIS and St Louis railroad

Plan modification asked. *Comm & Fin Chr* 158:675 Ag 16 '43
Reorganization to be carried through without borrowing. *Comm & Fin Chr* 157:1183 Mr 29 '43
Reorganization without RFC funds approved. *Comm & Fin Chr* 158:394 Jl 26 '43

MINNEAPOLIS-HONEYWELL regulator company

Annual report reveals company in new fields. *Comm & Fin Chr* 157:1462-3 Ap 19 '43
New blue chip, Minneapolis-Honeywell regulator company common stock. C. H. Platt. *il Mag of Wall St* 71:696-7+ Ap 3 '43
Peace-time leaders. *Mag of Wall St* 72:508 Ag 21 '43
Subsidiary sets up organization for post-war planning. *Comm & Fin Chr* 158:675 Ag 16 '43

MINNEAPOLIS, St Paul & Sault Ste Marie railway

Plan approved. *Comm & Fin Chr* 156:1777 N 16 '42
Railroad securities. *Comm & Fin Chr* 158:905+ S 2 '43

Reorganization approved by court. *Comm & Fin Chr* 157:2451 Je 28 '43

MINNESOTA**See also**

Iron ores—Minnesota

MIOCENE period. *See Paleontology—Miocene*

MIRRORS

Mirrors do it; armor-plate width measured from a distance. E. D. Wilson. *il Sci Am* 168:224 My '43; Same. *Blast F & Steel Pl* 31:538 My '43

Manufacture

Mirror making, art or industry? K. P. Gladney. *Glass Ind* 24:336-7+ Ag '43

MISBRANDING

Some important recent court decisions involving chemicals. L. T. Parker. *Chem Ind* 53:344 S '43

Veterinary medicinals false label drive set. *Oil Paint & Drug Rep* 144:3+ O 18 '43

MISHAWAKA, Indiana**Streets**

Low-cost oil aggregate paving; dust nuisance of 75 miles of gravel streets remedied. F. J. Miller. *il Pub Works* 74:11-13 My '43

MISPICKEL. *See Arsenopyrite*

MISPRINTS. *See Errors, Typographical*

MISSING persons

Missing principals, missing beneficiaries, and absent fiduciaries; the need for legislation. G. T. Stephenson. *bibliog Trusts & Estates* 77:224-7 S '43

MISSISSIPPI**Social conditions**

Case studies of nutrition; three Mississippi Negro families. D. Dickens. *Ann Am Acad* 225:55-6 Ja '43

MISSISSIPPI power and light company

Mississippi Power & Light 58, 1957, yield 4.60%. A. Jansen. *Barron's* 23:15 Mr 1 '43

MISSISSIPPI river

Canal to the sea; two new deepwater routes proposed to eliminate winding Mississippi River channel. *map Business Week* p32, 34 Ag 28 '43

Early contributions to Mississippi River hydrology. C. S. Jarvis. *Am Soc C E Proc* 68:421-44 Mr '42; Discussion. 68:1232-6, 1670-4; 69:545-61 S, N '42, Ap '43

Egg-beaters ply Ol' Man River, speeding products of oil to war; Diesel-propeller towboats on the Mississippi. F. Way, Jr. *il Nat Pet N* 35:26-7, 30, 32-3, 35 My 26 '43

Delta

Cotton allotments in the Mississippi Delta new-ground area. J. E. Mason. *J Land & Pub Util Econ* 18:447-57 N '42

MISSOURI & Illinois bridge and belt railroad
44-tonner turns in work report; practicality of Diesel-electric for a one-locomotive railroad demonstrated by the M. & I. B. & A. A. Lampert. *il Ry Age* 115:566-7 O 9 '43

MISSOURI electric power company

Oppose Missouri Electric sale to cooperative. *Elec W* 118:2113 D 26 '42
SEC approves sale to Sho-Me Power. *Comm & Fin Chr* 156:2134 D 14 '42

MISSOURI-Kansas-Texas railroad

Katy cutting debt down sharply. H. Van Ellis. *Barron's* 22:13 D 14 '42
Katy's most prosperous year. M. S. Sloan. *il Manuf Rec* 112:24-5+ F '43
Katy's report appears in pictures and colors. *Ry Age* 114:465 Mr 6 '43
Preliminary report covering 1942. *Comm & Fin Chr* 157:900 Mr 8 '43

MISSOURI Pacific railroad

Bondholders get compromise plan. *Comm & Fin Chr* 157:476 F 1 '43
Compromise plan agreed on. *Comm & Fin Chr* 158:291-2 Jl 19 '43
Court permits trustee to spend \$44,274,118 on retirement of bonds and interest payments. *Comm & Fin Chr* 158:1280 S 27 '43
Interest payments authorized by court; repayment of RFC loan denied. *Comm & Fin Chr* 156:1867 N 23 '42

MISSOURI Pacific railroad—Continued

- Mop compromise. *Business Week* p93-4 F 6 '43
- MOP sweetener; reorganization compromise. *Business Week* p102+ J1 24 '43
- Payment allowance appealed. *Comm & Fin Chr* 158:1640 O 25 '43
- Plan revised. *Comm & Fin Chr* 157:555 F 8 '43
- Propose new plan in reorganization. *Ry Age* 115:537+ O 2 '43
- Proposes retiring five bond issues. *Comm & Fin Chr* 158:1072 S 13 '43
- Railroad securities. *Comm & Fin Chr* 157:485 F 4 '43
- Reorganization plan filed. *Comm & Fin Chr* 158:1350 O 4 '43
- Trustee seeks right to pay interest. *Comm & Fin Chr* 156:1777 N 16 '42
- U.S. Circuit court is asked to send plan approved in 1940 to ICC for more study. *Comm & Fin Chr* 157:256 J 18 '43
- Values in Mop plan; earning power of prospective common measured. E. S. Brooks. *Barron's* 23:15 O 18 '43
- What are Missouri Pacific bonds worth? A. Jansen. *Barron's* 23:10+ Ag 2 '43

MISSOURI river

- Complete flood control system for the Missouri river is proposed. *Eng N* 131:447 S 23 '43
- Missouri River flood engulfs Omaha's airport. *Il Eng N* 130:535 Ap 22 '43
- Sharing the water; states drained by Missouri river organize to seek compact for protection of basin interests. *Business Week* p50-1 Je 26 '43

MITCHELLS and Butlers

- Annual general meeting, 55th, Birmingham. *Economist* 143:714 D 5 '42

MITOSIS. See Cell division (biology)**MIXERS**

- Agitation of finishing materials. J. E. Hyler. *Il Metal Finishing* 41:323-5 My '43
- See also
- | | |
|-----------------|-------------------------|
| Agitators | Proportioning equipment |
| Cake mixers | |
| Concrete mixers | |

Design

- New approach to continuous reactor design. A. Brothman, A. P. Weber and E. Z. Barish. *diags Chem & Met Eng* 50:111-14 J1; 107-10 Ag; 113-16 S '43

MIXING

- Constant pressure and flow ratio regulator for continuously mixing two gases. N. L. Heikes. *diags Ind & Eng Chem Anal ed* 15:133-4 F 15 '43
- Power consumption of propeller-type agitators. C. E. Stoops and C. L. Lovell. *bibliog il diags Ind & Eng Chem* 35:845-50 Ag '43
- Theory of the mixing of solid particles; abstract. P. M. C. Lacey. *Chem & Ind* 62:123 Mr 27 '43
- Volume of mixing and the thermodynamic functions of benzene-carbon tetrachloride mixture. S. E. Wood and J. P. Brusie. *bibliog diags Am Chem Soc J* 65:1891-5 O '43

- See also
- Concrete mixing
- Gas mixing

MIXTURES

- Calculating mixed acids to achieve acid equilibrium; Gibbs trilinear system. E. Berl and G. A. Sterbutzel. *Chem & Met Eng* 50:106-8 O '43
- Critical properties of volatile hydrocarbon mixtures. F. Kurata and D. L. Katz. *bibliog Am Inst Chem Eng Trans* 38:995-1021 D '42
- Equilibrium still for miscible liquids; data on ethylene dichloride-toluene and ethanol-water. C. A. Jones, E. M. Schoenborn and A. P. Colburn. *bibliog il diags Ind & Eng Chem* 35:666-72 Je '43
- Fluidity of mixtures which obey Bachinskii's law. F. Kottler. *bibliog J Phys Chem* 47:277-93 Mr '43

- Nature of molten salts and their mixtures. M. F. R. Mulcahy and E. Heymann. *bibliog J Phys Chem* 47:485-96 O '43

- Spectrophotometric method for the analysis of multicomponent mixtures and its infrared application. R. R. Brattain, R. S. Rasmussen and A. M. Cravath. *bibliog il diags J Ap. Phys* 14:418-28 Ag '43

- Statistical mechanics of binary mixtures. F. Kottler. *J Chem Phys* 11:153-5 Mr '43
- Student experiment and lecture demonstration; mixture versus compound. A. Scattergood. *J Chem Educ* 20:40 Ja '43

- Viscosity function; non-ideal systems. E. P. Irany. *bibliog Am Chem Soc J* 65:1392-3 J1 '43

- Volume of mixing and the thermodynamic functions of benzene-carbon tetrachloride mixture. S. E. Wood and J. P. Brusie. *bibliog diags Am Chem Soc J* 65:1891-5 O '43

- See also
- | | |
|---------------------------|---|
| Gasoline—Alcohol mixtures | Inflammable mixtures Solution (chemistry) |
|---------------------------|---|

MOBILE Bay, Battle of

- Damn the torpedoes! courage and quick decision lay back of Admiral Farragut's historic phrase. *Il Fortune* 26:130-1 D '42

MOBILIZATION, Industrial. See Industrial mobilization**MODEL houses.** See Houses, Model**MODEL towns**

- Town of Willow Run; civic center and proposed neighborhood units. *Il plans Arch Forum* 78:37-54 Mr '43

MODELING

- Sculpture, its practice and malpractice. A. D. Jacobson. *Am Cer Soc Bul* 22:37-9 F 15 '43

MODELS

- If Chicago were bombed—this could happen! model intended to convey picture of destruction. *Il Gas Age* 90:12-13 D 17 '42
- Models speed war production; helping to solve problems in design and equipment layout. H. E. Chesebro. *Il Gen Elec R* 46:271-3 My '43
- Plant layout in three dimensions. W. A. Burton. *Il Am Mach* 87:87-8 S 16 '43
- Wood models speed plane production. *Il Am Mach* 87:110-15 Je 24 '43

See also

- | | |
|------------------------|-------------------------------|
| Airplane models | Hydraulic models |
| Chemical plants—Models | Mechanical models |
| Coke ovens—Models | Sewage disposal plants—Models |

MODIFICATION centers, Airplane. See Airplane modification centers**MODULAR design.** See Building—Standards**MOFFAT, Jay Pierpont, 1896-1943**

- Sketch. *Comm & Fin Chr* 157:511 F 4 '43

MOHAIR

- Dielectric properties of animal fibers. J. Errera and H. S. Sack. *bibliog diags Ind & Eng Chem* 35:712-16 Je '43
- Mohair and cashmere fibers. A. C. Whitford. *Textile Col* 65:1-4 Ja '43

MOHAWK carpet mills, inc.

- Thumbnail stock appraisal. *Mag of Wall St* 72:685 O 2 '43

MOISSEIFF, Leon Solomon, 1872-1943

- Sketch. *Eng N* 131:372 S 9 '43
- Tributes. *Eng N* 131:450-1 S 23 '43

MOISTURE

- Dead-stop end point as applied to the Karl Fischer method for determining moisture. G. Wernimont and F. J. Hopkinson. *bibliog il Ind & Eng Chem Anal ed* 15:272-4 Ap 15 '43

- Improved electrometric apparatus for use with the Karl Fischer method for determination of water. C. D. McKinney, Jr. and R. T. Hall. *bibliog il diags Ind & Eng Chem Anal ed* 15:460-2 J1 15 '43

- Improvement needed in technic for testing food packages. T. A. Schwarz. *Food Ind* 15:68-9+ S '43

- Moisture determination. C. M. O'Malley. *bibliog Food Ind* 15:115 Je '43

- Protection against moisture vapor, a must for army packages. J. d'A. Clark. *Il Food ind* 15:75-8 Ap '43

MOISTURE—Continued

Saran film, its properties and wartime uses; moisture proof packaging. W. R. Dixon and H. L. Schaefer. *il Mod Packaging* 16:72-3+ JI '43

See also

Coal—Moisture content	Starch—Moisture content
Cotton yarn—Moisture content	Textile fabrics—Moisture absorption
Dampness in buildings	Textile fibers—Moisture content
Evaporation	Vegetables, Dried—Moisture content
Humidity	Water
Paper—Moisture content	Water vapor
Soil moisture	Windows—Frost and condensation

MOLASSES

Alcohol producers converting from grain to molasses. *Oil Paint & Drug Rep* 144:7+ Ag 23 '43

Cuban molasses deal with DPC dropped. *Oil Paint & Drug Rep* 144:3+ O 4 '43

Deterioration of molasses in storage; abstract. W. L. Owen. *Chem & Met Eng* 50: 178 Ap '43

Industrial alcohol from molasses. *Chem & Eng N* 21:1456 S 10 '43

Molasses elaboration; removal of calcium sulfate; recovery of non-sugars. G. T. Reich. *bibliog flow diag* *il diags Am Inst Chem Eng Trans* 38:1049-66 D '42; Same. *Can Chem & Process Ind* 27:2-6 Ja '43

Molasses: new dehydration and packaging methods. *For Comm W* 11:31 Je 12 '43

Molasses re-entering alcohol picture. *Chem Ind* 53:385 S '43

Remote factors that affect food plant policies; interlocking of food industries makes local difficulties of national consequence; wheat, molasses, yeast, sodium glutamate. R. S. McBride. *il Food Ind* 15:62-3 S '43

Solid molasses; dehydration cuts bulk by 40%. *Business Week* p62 Je 26 '43

MOLD resistant paper. *See Paper, Mold resistant*

MOLDED products

Advances in plastics during 1942; vinylidene chloride polymers. R. D. Lowry. *bibliog Mod Plastics* 20:123+ Ja '43

Apples in molded pulp trays. *il Mod Packaging* 16:40-1 JI '43

Birth of an army canteen. *il Mod Plastics* 20:71-3 Mr '43

Booster coil housing. *il diags Mod Plastics* 21:96-7+ S '43

Custom molders of plastics, directory. *Machine Design* 15:200-3 O '43

Engineering file facts; comparison of high production methods for small parts. R. S. Burpo, jr., comp. *Metals & Alloys* 17:343 F '43

Eyes of the tank; plastic lens holder for periscopes. *il Mod Plastics* 21:75-7 O '43

Fasteners for army insignia. *il diags Mod Plastics* 21:86 O '43

First aid carrier. *il diags Mod Plastics* 20: 53+ Ja '43

First year of war—and the next. *Mod Plastics* 20:43-7, 49-51+ Ja '43

Game that founded an industry. H. J. Luth. *il Mod Plastics* 20:71-3+ JI '43

Improved heat-resistant methacrylate. G. M. Kuettel. *il Mod Plastics* 20:98-100+ Je '43

Improvements in the methyl methacrylates. *il Am Gas J* 153:30-1 O '43

Injection-molded tag holders. *il Mod Plastics* 20:67+ Ap '43

Labels for leathernecks; molded plastic insignia for marines. *il Mod Plastics* 20:57-8+ Ap '43

Moulded cross-arms. R. B. Matthews. *diags Electrician* 130:313-14 Mr 26 '43

Molded dairy equipment. *il Mod Plastics* 21: 80 S '43

Molded parts for civilian gas mask; Tenite and Lumarith. *il diags Mod Plastics* 20: 63-7+ F '43

Navy training bayonet. *il Mod Plastics* 21: 70-1+ S '43

New army bugle. *il Mod Plastics* 21:86-7+ S '43

Night into day; portable fluorescent extension lamp illuminates interior installations in planes. E. F. Lougee. *il Mod Plastics* 21:83+ O '43

Phenolic-resin boards, properties and applications. C. A. Nash and E. W. Vaill. *il Product Eng* 14:638-40 O '43

Plastics for present and post-war products; survey of relative properties of different types of plastics, forms and combinations available; distinctive characteristics and typical applications. *il Product Eng* 14: insert 1-16 S '43

Plastics go a-fishing; polystyrene applied to fishing net floats and needles. *il Am Gas J* 159:26 O '43

Production of a structural board by gelatinization of wood wastes. S. Coppick and E. C. Jahn. *bibliog Paper Tr J* 117:23-5 JI 15 '43

Signal corps microphone, war model. *il diags Mod Plastics* 21:72-3 S '43

69+ 247—*See* L. J. Falkenhagen. *il Mod Plastics* 20:66-7 Je '43

Transport plane mast for antenna; cloth resin X-crepe. *il Mod Plastics* 20:57-8 JI '43

See also

Pipes, Plastic
Resin materials
Resinous products

Manufacture

Aircraft distributor head is maze of metal parts inserted in plastic. *il Steel* 113:84 O 25 '43

Allied plastics company manufactures plastic lenses for gas masks in room kept free from dust. *il Heat & Ven* 40:51-3 Ja '43

Are you working with plastics? advice on machining. J. Sasso. *il Am Mach* 86:1283-5, 1360-2 N 12-26 '42

Cold-molded plastics. J. Delmonte. *il Machine Design* 14:75-7 N '42

Design suggestions for molded phenolics. M. Maxwell. *diags Mod Plastics* 20:90-3+ Je '43

Designing plastic parts. W. S. Larson. *Machine Design* 15:192+ JI '43

Development of a cast resin stretch press die. L. J. Jaworski. *il Aero Digest* 42:230, 235 Ap '43

Fabricating plastic dies for acrylate sheets. K. J. Leeg. *il diags Aviation* 41:143, 145+ N '42

Forming acrylic resin sheets with plastic dies. K. J. Leeg. *il Iron Age* 152:68-70 S 9 '43

Handling thermoplastic materials. *il diags Mod Plastics* 20:80-2+ Ap '43

Making plywood with multidirectional pressure. J. S. Barnes. *bibliog il Mech Eng* 65:17-20 Ja '43

Moulded plastics. H. W. McCready. *diags Can Chem & Process Ind* 27:70+ F '43

Molded shell construction in plywood; Skydye method. A. Klemin. *il diags Aero Digest* 42:143, 158, 160+ Ja '43

Molding a bomb recorder frame. *il plan Mod Plastics* 20:74-6 Ja '43

New uses for phenolic resin board. *il Mod Plastics* 20:56-7+ Ja '43

Phenolic resin-pulp preforms. R. U. Haslanger and R. H. Mosher. *il Mod Plastics* 20:76-7+ JI '43

Plastic bodywork. W. Nichols. *il Automobile Eng* 33:361-5, 405-10 S-O '43

Plastics and the engineer. R. Hammond. *il diag Engineer* 174:413-14 N 20 '42

Producing trench mortar shell fuzes molded of cotton-flock-filled phenolic compound. W. S. Larson. *il Mod Plastics* 20:71-3+ Ja '43

Radio-frequency gun for spot-gluing wood; molded plywood parts. J. P. Taylor. *il diags Electronics* 16:106-11+ N '43

Solid shower heads. *il Mod Plastics* 20:64-5 My '43

Treads and wheels for hand trucks; Resinox. *il diags Mod Plastics* 20:70-2+ F '43

Vertical speed indicator. *il diag Mod Plastics* 21:100+ O '43

Wind-up of the helmet; third method of producing army helmet; molding irregular shapes from impregnated fabric. *il Mod Plastics* 20:49-52+ Ap '43

Working of plastics. *diags Am Mach* 87:97-108 S 30 '43

See also

Molding

MOLDED products—Continued**Testing**

Effects of continued heating on mechanical properties of molded phenolic plastics. T. S. Carswell, D. Telfair and R. U. Haslanger. bibliog A S M E Trans 65:325-8 My '43

Effects of continuous heat on phenolics. T. S. Carswell, D. Telfair and R. U. Haslanger. bibliog Mod Plastics 20:79-82+ F '43

Influence of temperature on the mechanical properties of molded phenolic materials. T. S. Carswell, D. Telfair and R. U. Haslanger. bibliog Am Soc T M Proc 42:944-53 '42; Same. Mod Plastics 19:65-9 JI '42; Discussion. Am Soc T M Proc 42:954-5 '42

MOLDED products, Effect of temperature on

Influence of temperature on the mechanical properties of molded phenolic materials. T. S. Carswell, D. Telfair and R. U. Haslanger. bibliog Am Soc T M Proc 42:944-53 '42; Same. Mod Plastics 19:65-9 JI '42; Discussion. Am Soc T M Proc 42:954-5 '42

MOLDED products, Mechanical

Aircraft tooling with plastics. il Engineer 175:127-30 F 12 '43

Automotive techniques in war; molded resin parts for war machines. il Mod Plastics 21:72-4+ O '43

Bearings of laminated phenolic materials. Automotive & Aviation Ind 38:45+ Ap 1 '43

Civilian incendiary bomb extinguisher. il diags Mod Plastics 20:73-6 D '42

Control sheaves for continuous take-ups; woodflour phenolic. il diags Mod Plastics 20:94-5+ Mr '43

Down-East handwheels for destroyers. W. E. Parsons. il Mod Plastics 20:61+ Ag '43

Handful of power; electric hand drill injection molded of cellulose acetate butyrate. il Mod Plastics 20:55+ JI '43

Housings for tapping attachments. il diags Mod Plastics 21:110-12 N '43

Making a good tool better; plastic parts for Precise 35 electric hand tool. R. Schumann. Am Gas J 159:22 O '43

Molded valves for oil well pumps. il diags Mod Plastics 20:83, 130 Ap '43

No blowouts for barrage balloons; plastic gas release valves. il diags Mod Plastics 21:69-71 O '43

Phenolic filter parts. il Mod Plastics 20:72-3 My '43

Phenolic materials for wartime demands; bearings. F. W. Vogt. diags Paper Tr J 117:28-30 JI 1 '43

Plastic punches are tough; Vega aircraft corporation. il Am Mach 87:83-6 F 4 '43; Same. Aero Digest 42:121+ F '43; Same. Iron Age 151:68-72 F 18 '43; Same. Automotive & Aviation Ind 88:40-2 F 1 '43

Plastic reduces cost of piercing dies; Vega aircraft corporation. R. Kennedy. il diags Am Mach 87:83-6 My 27 '43

Weight saving in pressure gages; Navy plastic gage case. il diags Mod Plastics 20:34-5+ D '42

See also

Bearings, Non-metallic
Punches, Plastic

MOLDING

Advances in plastics during 1942; molds and molding. F. B. Stanley. il Mod Plastics 20:89-90 Ja '43

Advent of injection molding. il diags Am Gas J 159:32-3 O '43

Blowing of plastics. diags Mod Plastics 21:96-7 O '43

Blowing process for thermoplastics. il Mod Plastics 20:46 D '42

Electrotypers find new methods; use of iron in shells and plastic in molding. G. C. Meston. Inland Ptr 11:37-8 S '43

Engines have brains; 18 cylinders of aircraft engine controlled by distributor housing molded of mineral-filled melamine. il Mod Plastics 20:51-4+ JI '43

Flexible pressure in veneer and plywood work. T. D. Perry. bibliog diags Mech Eng 65:417-24 Je '43; Same. Mod Plastics 20:73-7+ Ag '43; Same. Engineer 176:132-3, 155-6 Ag 13-20 '43; Same cond. Aero Digest 43:237, 239, 241-2+ JI '43; Discussion. Mech Eng 65:677-8 S '43

Heatronic molding. Chem & Eng N 21:765 My 25 '43; Same. il Iron Age 151:67 Je 17 '43; Same cond. Chem Ind 52:611 My '43

Heatronic molding. V. E. Meharg. il Mod Plastics 20:87-90 Mr '43

High-frequency heating speeds plastic molding. V. E. Meharg. Machine Design 15:103+ JI '43

Hydraulics in transfer molding. G. W. De Bell. diags Mod Plastics 20:88-9+ Je '43

Injection molding of nylon. R. B. Akin and J. E. Teagarden. flow sheet il diags Mod Plastics 21:115-20+ N '43

Jetison tanks for ferry service; urea-impregnated glass fiber cloth or canvas. il Mod Plastics 21:75-7+ S '43

Low-pressure molding of laminates. F. P. Wilson and N. D. Hanson. il Mod Plastics 20:57-60+ Ag '43

Measurement of workability of ceramic bodies for plastic molding processes. E. C. Henry. diags Am Cer Soc J 26:37-9 Ja 1 '43

Molded plastic-bonded veneers and wood in aircraft construction. R. J. Nebesar. il Mech Eng 65:197-201 Mr '43; Same. Mod Plastics 20:83-6+ F '43; Same abstr. Engineer 175:412-13 My 21 '43

Molded plywood aircraft. G. L. White. il Can Chem & Process Ind 27:441-3 Ag '43

Molding polyvinyl alcohol. C. B. Hess and J. W. Criss. Rubber Age 53:431-3 Ag '43

Molding vinyl copolymer dentures. A. W. Browne. il Mod Plastics 20:71-2 Ag '43

Molding with radio frequency. W. M. Witty. il diags Mod Plastics 20:83-5+ My '43

New application of heatronic molding. il Mod Plastics 21:106-7 N '43

Plastic bottles? new blowing method. il diags Mod Packaging 17:65-7 N '43

Plastics and plasticity. E. V. Crane. il diags Iron Age 152:80-5 Ag 12; 54-9 Ag 19; 60-5 Ag 26 '43

Post-forming thermosetting products; H. J. Heinz co. method for molding or post-forming phenol-formaldehyde laminated sheets. il Mod Plastics 20:70+ Ag '43

Predrying molding powers. W. E. Rahm, M. L. Macht and G. M. Kuettel. il Mod Plastics 20:86-7+ My '43

R-F heating speeds plastic molding. J. P. Taylor. bibliog il diags Electronics 16:102-7+ S '43

Thermoelastic forming of airplane parts. W. I. Beach. il Mech Eng 65:719-23 O '43

Transfer molding of phenolic material. C. A. Norris. il Mod Plastics 20:73-8 Ap '43; Same cond. Iron Age 151:47-51 My 20 '43

Utilizing molding and forming for aircraft plywood. J. Delmonte. il diags Machine Design 15:93-5 Je '43

See also
Paper, Laminated

MOLDING (metals). See Foundry practice; Molds (for casting)

MOLDING machines
Foundry work is important factor in Nation's war production; molding machines, Osborn manufacturing company. il Sci Am 167:255-6 D '42

Molding machine designed for women operators. il Iron Age 151:66 F 11 '43

30th buyers reference number. il Am Mach 87:314-16 Ja 21 '43

MOLDING machines (for plastics)
Future of the injection industry. Mod Plastics 20:90+ Ag '43

MOLDING sand. See Sand, Foundry

MOLDS (botany)
Another mould with anti-bacterial ability. M. I. Timonin. Science 96:494 N 27 '42

Anti-bacterial substances from moulds; puberulic acid, C₂₆H₄₀O₈ and puberulonic acid, C₂₆H₃₈O₈, metabolic products of a number of species of penicillium. A. E. Oxford, H. Raistrick and G. Smith. Chem & Ind 61:485-7 N 28 '42

Dried meat; the growth of moulds on dried meat. T. J. R. Macara. Soc Chem Ind J 62:104-6 JI '43

Enzymic degradation of cell wall substances. D. H. F. Clayton. bibliog Chem & Ind 62:298-300; Discussion. 300-1 Ag 7 '43

MOLDS (botany)—Continued

Fungal amylases as saccharifying agents in the alcoholic fermentation of corn. Lu Cheng Hao, E. I. Fulmer and L. A. Underkoffler. *bibliog diag Ind & Eng Chem* 35: 814-18 J1 '43; *Same abr. Chem Age (Lond)* 49:261-4 S 11 '43

Polarographic studies; mould metabolites and related quinones. J. E. Page and F. A. Robinson. *Chem Soc J* p133-5 Mr '43

See also

Fungi
Mildew
Penicillium

MOLDS (for casting)

Avoiding extremes in use of mold weights. J. A. Murphy. *Foundry* 71:169-70 Ag '43

Die-casting mold parts two ways. H. Thornton. *il Am Mach* 87:92-3 Ap 1 '43

Dries molds in continuous oven; Kaukauna machine corp. P. Dwyer. *il Foundry* 71: 88-91+ F '43

Investigation of the influence of mould friction on tearing in castings. J. H. Andrew and H. T. Protheroe. *diags Iron & Steel Inst J* 145:101-9, pl 17-19 no 1 '42

Molding large bronze propellers; Bartlett-Hayward co. P. Dwyer. *il diags Foundry* 71:90-3+ S; 112-14+ O '43

Use of Portland cement in making foundry molds. C. A. Sleicher. *Concrete (mill sec)* 51:228 S '43

Which form of non-ferrous casting? H. Chase. *il Metals & Alloys* 18:496-502 S '43

See also

Cores
Sand, Foundry
Steel ingots—Molds

Permanent molds

Study of the chemical, physical and mechanical properties of permanent mold gray iron. R. Schneidewind and E. C. Hoenicke. *il Am Soc T M Proc* 42:622-34; Discussion 635-8 '42

MOLDS (for ceramics)

Larger variety of utility ware pieces produced from fewer molds; diameters and heights standardized. *il Cer Ind* 40:72, 74 Je '43

MOLDS (for concrete)

Non-absorbent mold material for casting concrete beams. *Eng N* 131:411 S 9 '43

MOLDS (for glass)

Skin dry sand for large glass molds. *Foundry* 71:149-50 Ja '43

MOLDS (for plastics)

Chromium plating molds. A. W. Logozzo. *il Mod Plastics* 21:100, 146+ S '43

MOLECULAR association

Associating effect of the hydrogen atom; hydrogen bonds involving the sulphur atom; the S-H-N bond. G. Hopkins and L. Hunter. *Chem Soc J* p638-42 O '42

Solvent effects in association equilibria. A. Wassermann. *Chem Soc J* p621-3 O '42

Spectroscopic evidence of intermolecular transfer or protons. D. Williams and W. D. Stallcup. *Am Chem Soc J* 64:2684-6 N '42

See also

Polymerization

MOLECULAR compounds

Structure of molecular compounds; the crystal structure of *p*-iodoaniline-*s*-trinitrobenzene. H. M. Powell, G. Huse and P. W. Cooke. *Chem Soc J* p153-7 Ap '43

MOLECULAR distillation. See Distillation**MOLECULAR dynamics**

Forces between hydrogen molecules. H. Margenau. *Phys R* 63:385-6 My 1 '43

MOLECULAR rearrangements

Acyl migration in steroids. V. A. Petrow, O. Rosenheim and W. W. Starling. *Chem Soc J* p135-9 Mr '43

Fries rearrangement and subsequent isomerization. G. Baddeley. *Chem Soc J* p273-4 Je '43

Reactions of certain neopentyl systems with electrophilic reagents. P. Skell and C. R. Hauser. *bibliog Am Chem Soc J* 64:2633-5 N '42

Rearrangement of allyl groups in three-carbon systems; nitriles and an acid. D. E. Whyte and A. C. Cope. *bibliog Am Chem Soc J* 65:1999-2004 O '43

Rearrangement of allyl-type esters of β -keto acids. W. Kimel and A. C. Cope. *Am Chem Soc J* 65:1992-8 O '43

Rearrangement of phenyl allyl ethers; ethyl *p*-(γ , γ -dimethylallyloxy)-benzoate. W. M. Lauer and O. Moe. *bibliog Am Chem Soc J* 65:289-93 F '43

Rearrangement of phenyl allyl ethers; the isomeric ethyl *p*-(α - and γ -methylallyloxy)-benzoates. W. M. Lauer and P. A. Sanders. *Am Chem Soc J* 65:198-201 F '43

Ring enlargement of 2,4,4-triphenylcyclopentenedione. C. F. Koelsch and S. Wawzonek. *Am Chem Soc J* 65:755-7 My '43

Studies in the polyene series; a new anionotropic rearrangement; isomerisation of ethynylcarbinols from $\alpha\beta$ -unsaturated aldehydes. E. R. H. Jones and J. T. McCombie. *Chem Soc J* p261-4 Je '43

Studies in the polyene series; condensation of 3-methylpent-2-en-4-yne (1:2-dimethylvinylacetylene) with butaldehyde, crotonaldehyde, and citral; anionotropic rearrangements with vinylacetylenecarbinols derived from $\alpha\beta$ -unsaturated aldehydes. I. M. Heilbron and others. *Chem Soc J* p255-8 Je '43

Studies in the polyene series; the anionotropic rearrangement of the acetylenic glycol from crotonaldehyde. I. M. Heilbron, E. R. H. Jones and R. A. Raphael. *Chem Soc J* p268-70 Je '43

Studies in the polyene series; the condensation product of 1-hexyne with crotonaldehyde and its anionotropic rearrangement. I. M. Heilbron, E. R. H. Jones and R. A. Raphael. *Chem Soc J* p264-5 Je '43

Synthesis and rearrangement of some decahydro- and tetrahydronaphthalenediols. J. English, jr. and G. Cavaglieri. *bibliog Am Chem Soc J* 65:1085-9 Je '43

Thermal decomposition of quaternary ammonium phenolates, with reference to the Claisen rearrangement. D. S. Tarbell and J. R. Vaughan, jr. *bibliog Am Chem Soc J* 65:231-3 F '43

See also

Isomerization
Walden inversion

MOLECULAR refraction. See Refraction, Molecular

MOLECULAR volume

Molecular volume and structure. T. W. Gibling. *Chem Soc J* p661-6 N '42; 146-53 Ap '43

MOLECULAR weights

Calculations based on natural gas analysis. G. M. Stearns. *Oil & Gas J* 41:57 D 10 '42

Mean molecular weight of bitumens. W. Kirby. *Soc Chem Ind J* 62:58 Ap '43

Molecular weight of the adrenocorticotrophic hormone. E. Burner. *Am Chem Soc J* 65:1238 Je '43

Molecular weights and intrinsic viscosities of polyisobutylenes. P. J. Flory. *bibliog Am Chem Soc J* 65:372-82 Mr '43

Molecular weights of high polymers. M. L. Huggins. *bibliog diags Ind & Eng Chem* 35:980-6 S '43

Properties of rubber solutions and gels. M. L. Huggins. *bibliog Ind & Eng Chem* 35: 216-20 F '43

Studies on high molecular weight aliphatic amines and their salts; the behavior of various salts of dodecylamine in water, ethanol and benzene. C. W. Hoerr and A. W. Ralston. *bibliog Am Chem Soc J* 64: 2824-9 D '42

Study of the diffusion velocity of ovalbumin in relation to its molecular weight. L. Friedman and B. R. Ray. *bibliog diags J Phys Chem* 46:1140-50 D '42

Synthesis and properties of hydrocarbons of high molecular weight. J. N. Cosby and others. *bibliog il Am Pet Inst Proc* 22(3): 13-24 '41; 23(3):15-36 '42

Viscosities of polyester solutions; application of the melt viscosity-molecular weight relationship to solutions. P. J. Flory. *bibliog J Phys Chem* 46:870-7 N '42

Viscosity and molecular weight; the nitrate of wood carbohydrate. S. Coddick. *bibliog Paper Tr J* 117:25-9 Ag 12 '43

MOLECULAR weights—Continued

Viscosity of *n*-paraffin solutions; viscosity and structural relations of linear polymers. A. R. Kemp and H. Peters. *bibliog Ind & Eng Chem* 35:1108-12 O '43

See also

Atomic weights

Boiling points

Polymers

MOLECULES

Atomic and electronic distributions in liquid nitrogen, nitric oxide, and nitrous oxide. P. C. Sharrah. *bibliog J Chem Phys* 11:435-41 O '43

Average H—H₂ repulsive potential from collision cross section measurements. I. Andur. *J Chem Phys* 11:157-9 Ap '43

Color and constitution of polymethine dyes. K. F. Herzfeld and A. L. Sklar. *bibliog Rs Mod Phys* 14:294-302 Ap-Jl '42

Dielectric dispersion and absorption of water and some organic liquids. W. P. Conner and C. P. Smyth. *bibliog diag Am Chem Soc J* 65:382-9 Mr '43

Distance correlations and Bose-Einstein condensation. F. London. *bibliog J Chem Phys* 11:203-13 Ap '43

Effect of pH changes upon some of the properties of sodium thymonucleate solutions. C. F. Vilbrandt and H. G. Tennent. *Am Chem Soc J* 65:1806-9 O '43

Electronic spectra and structure of organic molecules; ultraviolet absorption spectra of substituted benzenes. H. Spomer. *il Rs Mod Phys* 14:224-31 Ap-Jl '42

Electronic structures and spectra of triatomic oxide molecules. R. S. Mulliken. *bibliog il diags Rs Mod Phys* 14:204-15 Ap-Jl '42

Equilibrium in hydrogen-water systems containing tritium. J. F. Black and H. S. Taylor. *diags J Chem Phys* 11:395-402 S '43

Experimental facts pertaining to the relationship between viscosity, molecular size, and molecular shape. M. A. Lauffer. *il Chem R* 31:561-86 *bibliog* (81 references, p585-6) D '42

Forces between hydrogen molecules. H. Margenau. *bibliog Phys R* 64:131-47 S 1 '43

Giant molecules and disease virus particles. F. Thone. *Science* 98:sup10 S 10 '43

Heat capacities of molecular lattices; some simple molecular solids. W. F. Brucksch, Jr. and W. T. Ziegler. *bibliog J Chem Phys* 10:740-3 D '42

Infrared and Raman spectra of polyatomic molecules; acetaldehyde and acetaldehyde. J. C. Morris. *bibliog J Chem Phys* 11:230-5 My '43

Infrared and Raman spectra of polyatomic molecules; cyclobutane. T. P. Wilson. *bibliog J Chem Phys* 11:369-78 Ag '43

Infrared and Raman spectra of polyatomic molecules; trideuteriomethane. T. P. Wilson. *bibliog J Chem Phys* 11:361-8 Ag '43

Infrared spectra as a tool in investigating molecular structure; abstract. G. B. B. M. Sutherland. *Chem & Ind* 62:95 Mr '43

Intermolecular forces and chain configuration in linear polymers; the effect of N-methylation on the X-ray structures and properties of linear polyamides. W. O. Baker and C. S. Fuller. *bibliog pl diags Am Chem Soc J* 65:1120-30 Je '43

Magneto-optic rotation; acetic and chloroacetic acids in polar and non-polar solvents. C. E. Waring, S. Steingiser and E. H. Hyman. *Am Chem Soc J* 65:1066-8 Je '43

Magneto-optic rotation; selenium oxychloride in aqueous solutions. C. E. Waring, S. Steingiser and H. H. Hyman. *Am Chem Soc J* 65:1068-70 Je '43

Mechanical properties of cellulose acetate as related to molecular chain length. A. M. Sookne and M. Harris. *bibliog J Research Nat Bur Stand* 30:1-14 Ja '43

Mechanical properties of polymeric materials. A. Tobolsky and H. Eyring. *bibliog J Chem Phys* 11:125-34 Mr '43

Molecular structure and plastic fibre formation. J. R. Whinfield. *bibliog Chem & Ind* 62:354-6 S 18 '43

Molecular structure of methyl isocyanide. W. Gordy and L. Pauling. *Am Chem Soc J* 64:2952-3 D '42

Molecular structure of rubber. H. P. Stevens. *Chem & Ind* 62:351 S 11 '43

Molecular volume and structure. T. W. Gibling. *Chem Soc J* p146-53 Ap '43

Nature of the covalent binding. T. Berlin and K. Fajans. *bibliog J Chem Phys* 10:691-2 N '42

Orientation of molecules produced photochemically in rigid solvents. G. N. Lewis and J. Bigeleisen. *Am Chem Soc J* 65:520-6 Ap '43

Photolysis of the δ -glycosides: α benzylfructofuranoside, β benzylfructopyranoside, and d and β phenyl benzyl and β phenylethyl glucosides; and the bearing of the data upon the transfer of energy within molecules. L. J. Heidt. *Franklin Inst J* 234:473-85 N '42

Properties of rubber solutions and gels. M. L. Huggins. *bibliog Ind & Eng Chem Soc* 35:216-20 F '43

Quantization of molecules. K. Fajans. *bibliog J Chem Phys* 10:759-70 D '42

Quantization of molecules, inter- and intramolecular forces. K. Fajans and T. Berlin. *Phys R* 63:309-12 Ap 1 '43; Correction. 63:399 Je 1 '43

Quantum yield of diacetyl fluorescence. G. M. Almy and P. R. Gillette. *bibliog diags J Chem Phys* 11:188-95 Ap '43

Raman effect; structural chemistry. G. Glockler. *il diags Rs Mod Phys* 15:156-65 Ap '43

Reversible photochemical processes in rigid media; the dissociation of organic molecules into radicals and ions. G. N. Lewis and D. Lipkin. *bibliog Am Chem Soc J* 64:2801-8 D '42

Sedimentation and diffusion behavior of certain nucleic acid preparations. H. G. Tennent and C. F. Vilbrandt. *bibliog Am Chem Soc J* 65:424-8 Mr '43

Spectra of dye molecules; absorption and resonance in dyes. L. G. S. Brooker. *Rs Mod Phys* 14:275-93 Ap-Jl '42

Spectra of simple molecules; the infrared spectra of triatomic molecules. E. F. Barker. *diags Rs Mod Phys* 14:198-203 Ap-Jl '42

Stabilization and binding of quantized radicals. K. Fajans. *J Chem Phys* 10:761 D '42

Statistical lengths of rubber-like hydrocarbon molecules. F. T. Wall. *bibliog J Chem Phys* 11:67-71 F '43

Structural effects of unsaturation and hyperconjugation in aldehydes, nitriles and chlorides as shown by their dipole moments in the vapor state. E. C. Hurdiss and C. P. Smyth. *bibliog Am Chem Soc J* 65:89-96 Ja '43

Structure of liquid carbon tetrachloride. E. E. Bray and N. S. Gingrich. *bibliog J Chem Phys* 11:351-4 Ag '43

Structure of synthetic chain polymers as shown by X-rays. C. S. Fuller and W. O. Baker. *bibliog il diags J Chem Educ* 20:3-10 Ja '43

Structure of the boron hydrides. H. C. Longuet-Higgins and R. P. Bell. *Chem Soc J* p250-5 Je '43

Structure of the protein molecule. D. G. Derwichian. *bibliog J Chem Phys* 11:236-46 My '43

Structures of dimethyl boron fluoride and methyl boron difluoride. S. H. Bauer and J. M. Hastings. *bibliog Am Chem Soc J* 64:2686-91 N '42

Theory of molecular size distribution and gel formation in branched-chain polymers. W. H. Stockmayer. *bibliog J Chem Phys* 11:45-55 F '43

I-Type doubling in linear polyatomic molecules. G. Herzberg. *bibliog Rs Mod Phys* 14:219-23 Ap-Jl '42

Viscosity of dilute solutions of long-chain molecules; dependence on concentration. M. L. Huggins. *bibliog Am Chem Soc J* 64:2716-18 N '42

Viscosity of dilute solutions of long-chain molecules; dependence on the solvent. M. L. Huggins. *bibliog J Ap Phys* 14:246-8 My '43

See also

Atoms

Chemical bonds

Crystallography

Isomerism

Molecular rearrange-

ments

Polarization, Dielec-

tric

Polymers

Stereochemistry

MOLECULES—Continued

Rotation

Asymmetric rotor; calculation and symmetry classification of energy levels. G. W. King, R. M. Hainer and P. C. Cross. *bibliog J Chem Phys* 11:27-42 Ja '43

Influence of hindered molecular rotation on the dielectric constants of water, alcohols, and other polar liquids. G. Oster and J. G. Kirkwood. *bibliog J Chem Phys* 11:175-8 Ap '43

Raman effect; hindered rotation. G. Glockler. *Rs Mod Phys* 15:145-56 Ap '43

Vibration

Determination of chlorine vibrations in dichlorobenzenes from intensities and polarizations of their Raman lines. G. Nordheim and H. Sponer. *J Chem Phys* 11:253-62 Je '43

Frequency spectrum of crystalline solids. E. W. Montroll. *J Chem Phys* 10:218-29; 11:481-95 Ap '42, O '43

Note concerning *l*-type doubling in linear polyatomic molecules. H. H. Nielsen and W. H. Shaffer. *bibliog J Chem Phys* 11:140-4 Mr '43

Raman effect; vibrations of polyatomic molecules. G. Glockler. *Rs Mod Phys* 15:118-38 Ap '43

Raman spectrum and molecular vibrations of nitric and deuteronic acids. O. Redlich and L. E. Nielsen. *bibliog Am Chem Soc J* 65:654-60 Ap '43

Ratio rule; an empirical rule for calculating the frequencies of isotopic groups in molecules. H. D. Noether. *bibliog J Chem Phys* 11:97-9 F '43

Thermodynamics and molecular structure of benzene and its methyl derivatives; vibration frequencies of benzene. K. S. Pitzer and D. W. Scott. *bibliog Am Chem Soc J* 65:814-17 My '43

Thermodynamics and molecular structure of benzene and its methyl derivatives; vibration frequencies of toluene, *o*-, *m*- and *p*-xylenes and mesitylene. K. S. Pitzer and D. W. Scott. *bibliog Am Chem Soc J* 65:817-24 My '43

Vibration-rotation energies of the linear X-Y-Z type molecule. A. H. Nielsen. *J Chem Phys* 11:160-3 Ap '43

Vibrational frequencies of the isotopic water molecules; equilibria with the isotopic hydrogens. W. F. Libby. *bibliog J Chem Phys* 11:101-9 Mr '43

MOLLUSKS, Fossil

Geology and biology of North Atlantic deep-sea cores between Newfoundland and Ireland; mollusca; echinodermata; miscellaneous fossils and significance of faunal distribution. H. J. Rehder; A. H. Clark; L. G. Henbest. *U S Geol S Professional Pa* 195-D:107-33, pl 20-3; pa 30c Supt. of doc. '42

Mesozoic and cenozoic arcidae from the Pacific slope of North America. P. W. Reinhart. *Geol Soc Special Pa* no 47:1-117, pl 1-15 *bibliog* (p87-95) '43

MOLTEN metals. See Metals, Molten

MOLTEN salts. See Salts, Molten

MOLYBDENITE

Occurrences of molybdenum minerals in Alaska. P. S. Smith. *U S Geol S Bul* 926-C:161-210, pl 12; pa 15c Supt. of doc. '42

MOLYBDENUM

Alpha iron lattice parameter as affected by molybdenum, and an introduction to the problem of the partition of molybdenum in steel. F. E. Bowman, R. M. Parke and A. J. Herzog. *bibliog Am Soc for Metals Trans* 31:487-95; Discussion. 495-500 Je '43

Determination of sodium in the presence of molybdenum. C. H. Hale. *bibliog Ind & Eng Chem Anal* 15:516-17 Ag '43

Effect of high electrostatic fields upon the vaporization and resistance of molybdenum filaments. W. P. Reid. *bibliog Phys R* 63:359-66 My '43

Effect of high electrostatic fields upon the vaporization of molybdenum. G. B. Estabrook. *bibliog diags Phys R* 63:352-8 My '43

Ferro-alloy metals, 1942. F. Betz, jr. *Eng & Min J* 144:73 F '43

Manganese, chromite, and molybdenum; private and government funds are being directed to production. *il Min Cong J* 29:26 F '43

Occurrence and production of molybdenum. J. W. Vanderwilt. *Colorado School of Mines (Golden) Quarterly* 37:1-78 *bibliog* (p64-78) O '42 (pa \$1.50)

Occurrences of molybdenum minerals in Alaska. P. S. Smith. *U S Geol S Bul* 926-C:161-210, pl 12; pa 15c Supt. of doc. '42

Treatment of molybdenum ores; some recent improvements. A. G. Arend. *il diag Chem Age (Lond)* 48:477-80 My '43

Analysis

Color reactions of 1,10-phenanthroline derivatives. M. L. Moss, M. G. Mellon and G. F. Smith. *Ind & Eng Chem Anal* ed 14:931-3 D '42

Concentration methods in spectrographic analysis; recovery of cobalt, nickel, molybdenum, copper, and zinc from plant materials and soil extracts by 8-hydroxyquinoline. E. O. Scott and R. L. Mitchell. *bibliog Soc Chem Ind J* 62:4-8 Ja '43

Determination of small amounts of molybdenum in tungsten and molybdenum ores. F. S. Grimaldi and R. C. Wells. *bibliog Ind & Eng Chem Anal* ed 15:315-16 My '43

Electrographic detection of molybdenum in steel alloys. J. A. Calamari, R. Hubata and P. B. Roth. *bibliog Ind & Eng Chem Anal* ed 15:71 Ja '43

Simplifies control analysis; method of determining molybdenum. C. G. Hummon. *Steel* 112:115 Je 21 '43

Spot test for molybdenum in steel. J. A. Duma and W. F. Everett. *Metals & Alloys* 17:788 Ap '43

MOLYBDENUM alloys

See also

Molybdenum steel

MOLYBDENUM blue

Composition and structure of molybdenum blue. F. B. Schirmer, Jr. and others. *bibliog il Am Chem Soc J* 64:2543-5 N '42

Elimination of fluoride interference in the molybdenum blue reaction. L. T. Kurtz. *bibliog Ind & Eng Chem Anal* ed 14:855 N '42

MOLYBDENUM compounds

See also

Cyanomolybdate

MOLYBDENUM oxides

Heat capacities and entropies of molybdenum and tungsten trioxides. H. Seltz, F. J. Dunkerly and E. J. DeWitt. *bibliog Am Chem Soc J* 65:600-2 Ap '43

MOLYBDENUM steel

Alpha iron lattice parameter as affected by molybdenum, and an introduction to the problem of the partition of molybdenum in steel. F. E. Bowman, R. M. Parke and A. J. Herzog. *bibliog Am Soc for Metals Trans* 31:487-95; Discussion. 495-500 Je '43

Creep resistance of superheater tube steels in tube and bar form. J. A. Jones and W. E. Bardgett. *diags Engineer* 176:6-8 J1 '43

Effect of deoxidation practice on creep strength of carbon-molybdenum steel at 850 and 1000 F. R. F. Miller. *bibliog il A S M E Trans* 65:309-14; Discussion. 314-16 My '43

Effect of normalizing on the properties of welds in carbon-molybdenum steel pipe. I. A. Rohrig, D. H. Corey and S. Crocker. *il Welding J* 22:sup521-7 O '43; Abstract. Heating-Piping 15:591 N '43

Effects of cooling rate on the properties of arc-welded joints in carbon-moly 0.50 plate. W. F. Hess. *il Welding J* 21:sup608-19 D '42

Elimination of the apparent hot brittleness of 0.50 molybdenum steel. C. L. Clark and J. W. Freeman. *il Am Soc for Metals Trans* 30:1284-99; Discussion. 1299-1302 D '42

Hardening high speed taps and dies in the electric salt bath. P. C. Farren. *il Metal Prog* 44:625-31 O '43

Iron Age NE steel; standard steel chart. J. I. Butzner, comp. *Iron Age* 151:supp My 6 '43

Moly-steel creep data released. *Elec W* 118:1979 D 12 '42

MOLYBDENUM sulfide. See Molybdenite

MOLYBDIC acid

Preparation of phosphomolybdic acid from phosphoric acid and pure molybdic acid. A. Linz. *Ind & Eng Chem Anal* ed 15:459 J1 15 '43

MOMENTS of inertia

Analysis of members with variable moments of inertia. Y. Nubar. *bibliog diag*s Aviation 42:153-4+ N '43

How to determine WR^2 by running a simple test. L. H. Berkley. *diag*s Product Eng 13: 704-6 D '42; Discussion. 14:181-2, 454-5 Mr, J1 '43

Moment distribution factors for tapered beams. H. B. Alvord and V. C. Trimarchi. *Aeronautical Eng R* 2:7, 9 Ja '43

Moment, of inertia, section modulus and radius of gyration of a rectangular section turned at any angle; reference book sheets. Product Eng 14:183-90 Mr '43

Polar moment of inertia I_p and polar section modulus Z_p of solid circular sections; data sheets. R. Parkes. *Mach* 49:205 J1 '43

Rectangular moments of inertia and section moduli; reference book sheet. Product Eng 14:61-2 Ja '43

MONAZITE

Monazite; extraction of thorium and cerium. L. Sanderson. *Can Chem & Process Ind* 27: 451-2 Ag '43; Same. *Can Min J* 64:208-9 Ap '43

Monazite sand. L. G. Houk. *U S Bur Mines Information Circ* 7233:1-19 '43

Monazite sands. *Science* 97:sup10 Je 11 '43

MONEL metal

Cleaning welded metal surfaces; nickel, monel and inconel. K. M. Spicer. *Il Sheet Metal Worker* 34:27-9 Je '43

Diffusion of air through monel metal. H. S. Coleman and H. L. Yeagley. *Il diag*s J Chem Phys 11:135-9 Mr '43

Engineering properties of monel; tabulations. *Metal Prog* 44:710 O '43

Flash welding of nickel and high-nickel alloy rod. W. F. Hess and A. Muller. *Il Welding J* 22:sup532-44 O '43

How to extend the life of monel dyehouse equipment. *Il Rayon* 24:44-6 Ja '43

Monel and nickel cast-iron pump has long life. W. L. Nelson. *Oil & Gas J* 42:70+ O 7 '43

Properties of monel products; Characteristics and properties of nickel and monel and inconel alloys; data sheets. *Mach* 49:169 Je '43

Tensile tests of arc-welded nickel and monel metal at low temperatures. O. H. Henry and J. Martinez. *diag*s Welding J 22:sup270-1 Je '43

MONEY

How to fight currency hoarding. R. S. Bradford. *Banking* 35:62-3 Mr '43

Managed currency in postwar period. R. McKenna. *Trusts & Estates* 76:118 F '43

Monetary, equilibrium, and business-cycle theory. W. F. Stolper. *R Econ Stat* 25:88-92 F '43

Quantity of money and the rate of interest. A. Smithies. *R Econ Stat* 25:69-76 F '43

Redundant currency vs gold measurements as builders of workable wages. E. S. Pillsbury. *Comm & Fin Chr* 157:235+ Je 24 '43

Stamp currency. P. Haensel. *Il Banking* 35: 30+ Ja '43

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Devaluation

Dollar devaluation does not devalue bond values. H. Spero. *Bankers M* 146:379-80, 382 My '43

Morgenthau drops request for extension of power to devalue dollar further. *Comm & Fin Chr* 157:1497+ Ap 22 '43

Stabilization fund bill with restricting amendment is approved by Congress. *Comm & Fin Chr* 157:1588 Ap 29 '43

Will we have to revalue the dollar? V. L. Horoth. *Mag of Wall St* 71:627-9+ Mr 20 '43

International aspects

Address analyzing Keynes and Morgenthau stabilization plans. E. M. Anderson. *Comm & Fin Chr* 157:1384-5, 1984-5 My 20-27 '43; Same. *Bankers M* 146:388-419 My '43; Excerpts. *Trusts & Estates* 76:501-2 Je '43; Discussion. *Comm & Fin Chr* 157:1886, 2065 My 20, Je 3 '43

Allies shape world recovery; Keynes and White plans for currency stabilization compared. G. B. Collingwood. *Mag of Wall St* 72:21+ Ap 17 '43

ABA will present plan for world currency stabilization. W. L. Hemingway. *Comm & Fin Chr* 157:1653+ My 6 '43

Bank of international operation; a world bank. C. S. Dewey. *Comm & Fin Chr* 157: 2357+ Je 24 '43; Discussion. 158:97+, 201+, 314 J1 8, 15, 22 '43

Basis for determining quotas for nations under White currency plan made public. *Comm & Fin Chr* 158:1919 N 11 '43

Belgium and Holland agree on post-war currency stabilization. *Comm & Fin Chr* 158: 1425 O 7 '43

Bratter to direct monetary standards inquiry into post-war reconstruction and stabilization. *Comm & Fin Chr* 158:1111 S 16 '43

Calls for post-war return of gold as basis for credit structure and no control of foreign exchange. J. S. Smith. *Comm & Fin Chr* 157:1214 Ap 1 '43

Canada proposes plan for international exchange union; substitute for British and U.S. currency stabilization programs. *Comm & Fin Chr* 158:201+ J1 15 '43

Canadian delegation confers in Washington on post-war currency plan. *Comm & Fin Chr* 157:1589 Ap 29 '43

Commodity reserve currency. *Economist* 145: 373 S 11 '43

Currency plans; debate in the House of Commons. *Economist* 144:614-15 My 15 '43

Currency plans; proposals of British and American governments. *Economist* 144:556-8 My 1 '43

Denies stabilization plan drawn to favor British at expense of United States. J. M. Keynes. *Comm & Fin Chr* 157:1874 My 20 '43

Do we need a stabilization plan? W. Ward. *Credit & Fin Management* 45:14-15+ N '43

Economic equipoise; British and American plans for stability of the exchanges. *Economist* 144:452-3 Ap 10 '43

Effective currency control of utmost importance in post-war reconstruction. J. T. Madden. *Comm & Fin Chr* 158:334 Ag 26 '43

Free dollar urged as alternative to Treasury and Keynes proposals. W. H. Aldrich. *Comm & Fin Chr* 157:1657, 1678 My 6 '43

Ghost of international bimetalism reappears. A. M. Sakolski. *Comm & Fin Chr* 158:1686+ O 28 '43; Reply. F. H. Brownell. 158:2207+ D 2 '43

Gold and stabilization of world currencies. V. L. Horoth. *Il Mag of Wall St* 72:615-17+ S 18 '43

Gold exportable without commercial liquidation. W. F. Hickernell. *For Comm W* 11: 3-6+ My 8 '43

Great Britain would be hit by Morgenthau stabilization plan. *Comm & Fin Chr* 157: 1886 My 20 '43

International bimetalism advocated; comments on White and Keynes stabilization plans. F. H. Brownell. *Comm & Fin Chr* 158:1304-5 S 30 '43

International currency. D. S. Iglehart. *Comm & Fin Chr* 157:1659+ My 6 '43

International currency; Keynes and White plans. *Comm & Fin Chr* 157:1211 Ap 1 '43

Jobs at stake in world trade plans; difference between American and British proposals. W. Von Tresckow. *Barron's* 23:3+ My 3 '43

Keynes on bancor; unitas and gold. *Economist* 144:652 My 22 '43

Keynes proposes international currency union, based on bancor. *Comm & Fin Chr* 157:1388-9 Ap 15 '43

MONEY—International aspects—Continued

Monetary pact signed by governments in exile; Netherlands, Belgium and Luxembourg. Comm & Fin Chr 158:1716 O 28 '43
 Monetary stabilization; the British and American plans. I. Wright. Comm & Fin Chr 157:2357+ Je 24 '43
 Morgenthau and Keynes stabilization plans. C. W. Phelps. Comm & Fin Chr 157:2173 Je 10 '43

Morgenthau outlines proposed post-war international currency stabilization plan. Comm & Fin Chr 157:1305+ Ap 8 '43

Outlook for adjusting post-war currency stabilization plans called optimistic. H. D. White. Comm & Fin Chr 158:928 S 2 '43
 Post-war currency. Economist 145:261-2 Ag 28 '43

Post-war currency plans. Economist 144:330-1 Mr 13 '43

Post-war exchange stabilization reviewed. F. Gist. Comm & Fin Chr 158:685, 695-6, 700 Ag 19 '43

Postwar international monetary stabilization; general observations of Canadian experts. Fed Res Bul 29:718-28 Ag '43

Postwar international monetary stabilization; plans submitted by United States and British experts. Fed Res Bul 29:501-21 Je '43

Postwar international monetary stabilization; Treasury department revised draft of preliminary plan for international stabilization fund of the United and associated nations. Fed Res Bul 29:827-40 S '43

Postwar plans for an international monetary authority. R. E. Freeman. Mech Eng 65:438-9 Je '43

Post-war problems; supports idea of international monetary plan to stabilize currencies; abstracts. R. H. Brand. East Underw 44:1+S 17 '43; Trusts & Estates 77:335-8 O '43
 Post-war thinking in Canada. Economist 145:142-3 Jl 31 '43

Proposals for international exchange stabilization; analysis of British, Canadian, French and United States plans. L. B. Jack. Int Labour R 43:157-73 Ag '43

Proposals for post-war currency stabilization. Nat City Bank p55-9 My '43; Excerpts. Trusts & Estates 76:425 My '43

Real currencies in a real world. G. C. Cox. Barron's 23:6 My 17 '43

Road to currency stabilization proposed by Guaranty trust company. Comm & Fin Chr 158:1313 S 30 '43

Tentative international monetary stabilization plan. M. Palyi. Comm & Fin Chr 158:589, 602-3 Ag 12 '43

Treasury plan for stabilizing currency of United Nations outlined by Morgenthau; text. Comm & Fin Chr 157:1300, 1303 Ap 8 '43

Treasury sticks to unitas. Business Week p106 Ag 21 '43

Treasury's plan for the stabilization of currencies. R. Léon. Comm & Fin Chr 157:1756+ My 13 '43

Treasury's revised currency program holds to gold basis. Comm & Fin Chr 158:829+ Ag 26 '43

Two new financial terms: unitas and bancor. H. D. Ralph. Burroughs Clearing House 27:19-20 My '43

Ways to Latin-American approach; question of international commerce and exchange. L. G. Legorreta. Comm & Fin Chr 158:1710+ O 28 '43

Why no joint stabilization plan? A. Perren. Comm & Fin Chr 158:902+ S 2 '43

Will we have to revalue the dollar? V. L. Horoth. Mag of Wall St 71:827-9+ Mr 20 '43
 World bank proposals; bancor or unitas? is the international gold standard outmoded? Fortune 28:138-9+ Ag '43

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Bank for international settlements
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Currency in circulation. Fed Res Bul 29:497-9 Je '43

Currency in circulation and salaries and wages, 1940-April 1943; chart. Survey of Cur Business 23:2 Je '43

Expansion of currency and bank credit in individual countries since 1938. Nat City Bank p71 Je '43

Inflow and outflow of bank cash, 1942-1943; graph. Business Week p13 N 6 '43

Money in circulation. Fed Res Bul 29:813-14 S '43

Money in circulation and salaries and wages, 1935-1942; chart. Barron's 23:8 Ja 25 '43
 New seasonal adjustment factors for money in circulation. Fed Res Bul 29:822-6 S '43

Africa, North

Franc fiasco. Business Week p48 Mr 13 '43

Money trouble; North African inflation eased by new franc rate. Business Week p31-2 D 26 '42

North African franc revalued. Economist 144:185 F 6 '43

Offensive pound; currency issued by British military authorities in French North Africa. Economist 143:629, 641 N 21 '42

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Barter superseding money in China. For Comm W 12:17 S 25 '43

Great Britain

British view; cheap money can be maintained post-war. D. Tyerman. Barron's 23:1 Je 7 '43

Coin holdings of the banks. Economist 145:120 Jl 24 '43

Coinage in 1942. Economist 145:10 Jl 3 '43
 Coinage in wartime. Economist 143:803-4 D 26 '42

Mr Churchill on money. Economist 144:399 Mr 27 '43

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Hawaiian currency. Bankers M 146:89-90 Ja '43

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Belligerent currencies in Italy. Economist 145:469 O 2 '43

Lira parity. Economist 145:246 Ag 21 '43

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Too much money. Business Week p42+ O 2 '43

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Dutch hold on to what is good. For Comm W 13:20 O 30 '43

Nazi's paper-money measures in the Netherlands. For Comm W 11:52 My 1 '43

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Replacement of Bank-of-France currency by Fighting-France bills. For Comm W 10:20 Mr 20 '43

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U.S. dimes now legal tender in El Salvador. For Comm W 13:12 N 6 '43

Sicily

Allied military currency introduced in Sicily by Treasury department. Comm & Fin Chr 158:608 Ag 12 '43

Queries regarding invasion money. W. E. Spahr. Comm & Fin Chr 158:516 Ag 5 '43

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Dollar in Switzerland. Economist 144:627 My 15 '43

United States

Banks asked to retire special silver certificates issued for American forces in combat areas. Comm & Fin Chr 157:363 Ja 28 '43

Cash to jingle; currency in circulation rises. Business Week p103+ Ap 10 '43

Current monetary situation. W. E. Spahr. Comm & Fin Chr 158:1589, 1597-8+ O 21 '43

Dollar as the index of victory. G. Riviere. Mag of Wall St 72:288-9+ Je 26 '43

Effect of war on currency and deposits. C. R. Whitley. Comm & Fin Chr 158:1488+ O 14 '43

Future of the American dollar; can our government keep it good? G. B. Collingwood. II Mag of Wall St 72:510-12, 540 Ag 21 '43

MONEY—United States—Continued

- Greenbackism. W. E. Spahr. Trusts & Estates 76:233 Mr '43
 Increase in currency in circulation. Fed Res Bul 28:1177-9 D '42
 Kinds of money in circulation, monthly, Oct. 1941-Nov. 1942. Fed Res Bul 29:57 Ja '43 [cont monthly]
 Managing managed-money. J. H. Wood. Comm & Fin Chr 157:2261, 2272-3 Je 17 '43
 Monetary statistics, 1938-1941. Survey of Cur Business 1942 Sup p72-3 [supplemented in monthly numbers]
 Paper currency, by denominations, and coin in circulation, monthly Oct. 1941-Nov. 1942. Fed Res Bul 29:57 Ja '43 [cont monthly]
 Relation between currency and bank deposits. Fed Res Bul 29:415-16 My '43

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- Allied military currencies; analysis of issuance and uses of such currencies as given in Treasury explanations. W. E. Spahr. Comm & Fin Chr 158:1405+ O 7 '43
 Allied military currency introduced in Sicily by Treasury department. Comm & Fin Chr 158:608 Ag 12 '43
 Allied military currency used in occupied countries. H. D. Ralph. Burroughs Clearing House 27:21 S '43
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 Invasion currency. H. Bratter. Il Banking 36:28+ N '43
 Invasion money used by allied troops in Sicily made legal tender there. Comm & Fin Chr 158:711 Ag 19 '43
 Legality of allied military currency questioned by Senators Clark and Lodge. Comm & Fin Chr 158:1519 O 14 '43
 Military lire. Economist 145:184 Ag 7 '43
 Queries regarding invasion money. W. E. Spahr. Comm & Fin Chr 158:516 Ag 5 '43
 Questions on allied military currency answered by Treasury. Comm & Fin Chr 158:1714 O 28 '43
 Treasury statement on invasion money shows clearly that it is fiat money. W. E. Spahr. Comm & Fin Chr 158:711 Ag 19 '43

MONEY market

- Money market, 1942. Economist 144:sup6 Mr 13 '43
 Reserve banks and the money market. Nat City Bank p 101-2 S '43
 Treasury finance and the money market. Fed Res Bul 29:587-93 Jl '43
 War loan drive and the money market. Fed Res Bul 29:369-77 My '43

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MONEY raising campaigns

- National war fund advertising ready. Il Ptr Ink 204:90+ S 24 '43
 National war fund campaign. Il Adv & Sell 36:132 O '43
 Red cross seeks advertising aid for its 1943 war fund campaign. Ptr Ink 202:148-9 F 5 '43
 Your city, too, may want to localize its campaign for some national cause; Hartford, Conn. ran its own USO copy. P. F. Frank. Il Ptr Ink 202:42-3 Ja 8 '43

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MONEY rates. See Interest

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MONOCHROMATORS

- Gates monochromatic light. Il R Sci Instr 14:224 Jl '43
 Monochromator using a large water prism. C. V. Cannon and O. K. Rice. bibliog diags R Sci Instr 13:513-14 D '42

MONOMOLECULAR films. See Films

MONOPOLIES

- A. & P.: monopoly; legal duel over Dallas indictment. Business Week p69-70 D 5 '42
 Citadel of monopoly; design for gilds. Economist 144:583 My 8 '43
 F.T.C. says contests promote monopoly; cites Brunswick-Balke-Collender company for 1937 sweepstakes. Ptr Ink 201:74 D 18 '42
 Monopolies in Palestine. Economist 145:112 Jl 24 '43
 Patent reform; incitement to monopoly. Economist 144:77-8 Ja 16 '43
 Patents, technology, and free enterprise. R. L. Bishop. Mech Eng 65:525-6 Jl '43
 Policy against monopoly. Economist 144:612-13 My 15 '43
 Renders opinion against Pullman; antitrust suit. Ry Age 114:831-2 Ap 24 '43
 Restoring freedom. Fortune 26:sup9-13 D '42
 U.S. sues to end fluorescent monopoly. Elec W News ed 118:2035 D 19 '42

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- Assembly line methods used at Douglas plant to prepare engines for installation. F. H. Hillman. Il Automotive & Aviation Ind 89:34-6+ Ag 15 '43
 Murray fabricates aircraft surfaces on moving assembly lines. F. M. Reck. Il Aero Digest 42:207, 215 Mr '43
 Overhead carriages provide efficient engine preparation. C. C. Whitlach. Il diag Am Mach 87:121-8 My 27 '43
 Overhead monorail or trolley conveyors. W. H. Atherton. Il diags Mech Handling 30:283-92 330-40 Jl-Ag '43
 Overhead railways speed bomber parts handling at Willow Run. E. H. Doerger. Il Steel 113:108-10 S 13 '43

MONSANTO chemical company

- Hidden growth of chemicals. Barron's 23:3 Mr 1 '43
 Monsanto assays products for their job potential after V day. F. J. Curtis. Sales Management 52:52+ F 15 '43
 News from the chemists' front. Barron's 23:25-6 S 20 '43
 Polling the employees. Fortune 27:72+ F '43

MONT Cenis tunnel

- Mont Cenis tunnel doomed hand drilling. C. H. Vivian. Il diags Comp Air M 48:6978-81 Mr '43

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 Leaders of American industry. por Mag of Wall St 71:485 F 6 '43

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- How to make an automatic montejus. W. S. Weeks and G. C. Holmes. diags Eng & Min J 144:84-6 O '43

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- Consumer union; Donald Montgomery, as U.A.W.'s consumer counsel. por Business Week p98-9 F 20 '43

MONTGOMERY, William, 1869-

- Marks 50 years as Acacia's head. por Nat Underw (Life ed) 47:6 F 26 '43; East Underw 44:18 F 26 '43; Spectator (Life ed) 150:66-7 Mr '43

MONTGOMERY Ward and company

- Accuses WLB of sabotaging bargaining system. Comm & Fin Chr 157:256 Ja 18 '43
 Base earnings. H. Lawrence. Barron's 23:5 Ap 5 '43
 Court finds for OPA in complaint alleging violations. Comm & Fin Chr 158:1350 O 4 '43
 Growth picture of identical (almost) twins; pictograph. Sales Management 52:48 Mr 15 '43
 NWLB vs. Ward. Business Week p94-5 N 14 '42
 President Roosevelt orders company to sign with CIO; Avery pledges obedience. Comm & Fin Chr 156:2226 D 21 '42

- MONTGOMERY Ward and company—Cont.**
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 Sues on union order. Comm & Fin Chr 158:1640 O 25 '43
 Thumbnail stock appraisal. Mag of Wall St 71:290 D 26 '42
 WLB sued on union order; Montgomery Ward & co. puts maintenance decree up to court. Comm & Fin Chr 158:1420 O 7 '43
 Ward's war order; mail order company loses another, and final, round of its fight to keep war agency out of dispute with union. Business Week p92 N 28 '42
- MONTHLY labor review**
 Subject index to volumes 12 to 51, Jan. 1921 to Dec. 1940. U S Bur Labor Statistics Bul 696:1-421; pa 40c Supt. of doc. '42
- MONTMORILLONITE**
 Action of some aqueous solutions on clays of the montmorillonite group. F. G. Nutting. U S Geol S Professional Pa 197-F:219-35; pa 10c Supt. of doc. '43
 Catalysts of the activated montmorillonite type. R. C. Davidson, F. J. Ewing and R. S. Shute. bibliog flow diagrs il diagrs Nat Pet N 35 pt 2:R318-21 J1 7 '43
 Cation and anion interchange with zinc montmorillonite clays. M. M. Elgabaly and H. Jenny. bibliog J Phys Chem 47:399-408 My '43
 Nature of colloidal clay as revealed by the electron microscope. E. T. Shaw. bibliog il J Phys Chem 46:1032-43 D '42
 Sorption of NH_3 on montmorillonitic clay. I. Cornet. bibliog diagrs J Chem Phys 11:217-26 My '43
- MONTREAL**
Railroads
 Canadian National opens new central station il plans map Ry Age 115:201-5, 234-8+ J1 31-Ag 7 '43
Rapid transit
 How mass transportation is conducted in Montreal. il Mass Transportation 39:21-9+ Ja '43
- MONTREAL curb market**
 Weekly record. Published in weekly Monday numbers of Commercial and financial chronicle
- MONTREAL stock exchange**
 Weekly record. Published in weekly Monday numbers of Commercial & financial chronicle
- MONTREAL university**
 New chemical laboratories of the Université de Montréal. R. Barre. il Can Chem & Process Ind 27:290-1 My '43
- MONTRESOR, John, 1736-1799**
 Pioneers in American city engineering. R. E. McFee. por Comp Air M 48:7198-9 N '43
- MOORE, Charles Edward**
 We can junk it or run it; how the high-flying Six companies boys of the West salvaged Joshua Hendy. por Fortune 28:120-3+ J1 '43
- MOORING masts.** See Airships—Mooring masts
- MOPS**
 Mopping up with thermoplastics. il Mod Plastics 20:59+ F '43
- MORAINES**
 Keewatin end moraines in Alberta, Canada. J. H. Bretz. bibliog fold map Geol Soc Bul 54:31-52, pl 1-2 Ja '43
- MORALE**
 Comics for morale. il Business Week p45 N 21 '42
 Morale function of the executive. L. H. Kurtz. J Eng Educ 33:260-79 N '42
See also
 Employment man- Incentives in indus-
 agement try
- MORATORIUM**
 Moratoria and the Soldiers' and sailors' civil relief act. R. H. Skilton. bibliog Ann Am Acad 227:28-34 My '43
- MORCOM, Clifford Bawden, 1885-**
 Vice-president of Aetna casualty & surety co. C. Axman. por East Underw 44:49+ Ap 30 '43
- MORDANTS.** See Dyes and dyeing—Mordants
- MOREELL, Ben, 1892-**
 Sketch. por Civil Eng 13:50-1 Ja '43
- MORGAN, D. M.**
 President of the Northern Life. East Underw 44:15 Mr 26 '43
- MORGAN, David Bruce, 1869-1943**
 Sketch. por East Underw 44:6 Mr 12 '43; Nat Underw (Life ed) 47:10 Mr 12 '43
- MORGAN, David W. R. 1892-**
 Sketch. por Mech Eng 65:609 Ag '43
- MORGAN, J. P., and company**
 Admitted to membership in Clearing house association. Comm & Fin Chr 158:1800 N 4 '43
 Public sale of J. P. Morgan stock in bank quickly oversubscribed. Comm & Fin Chr 157:1406 Ap 15 '43
 Thomas W. Lamont successor to J. P. Morgan. Comm & Fin Chr 157:1113+ Mr 25 '43
- MORGAN, John Pierpont, 1867-1943**
 Sketch. Trusts & Estates 76:376 Ap '43
 Sketch. H. D. Seibert. Comm & Fin Chr 157:1001+ Mr 18 '43
 Where there's a will. Trusts & Estates 76:371 Ap '43
- MORLEY fabrics.** See Woolen and worsted fabrics—Cotton mixtures
- MOROCCO**
Economic conditions
 French Morocco, a land of promise. P. M. Copp. il For Comm W 10:4-9 Ja 9 '43
 News by countries. For Comm W 9:11-12 N 14 '42
- MORPHOLINE**
 Aryl diazomorpholides. R. A. Henry and W. M. Dehn. Am Chem Soc J 65:479-80 Mr '43
 Ionization constant of morpholine in water. A. R. Ingram and W. F. Luder. Am Chem Soc J 64:3043-4 D '42
- MORRELL, John, and company**
 Debentures offered. Comm & Fin Chr 157:1848 My 17 '43
- MORRILL, Albino D. 1854-1943**
 Sketch. W. N. Hess. Science 98:210 S 3 '43
- MORRIS, Charles E.**
 Couldn't say no; Texan compounds vent pipe of concrete, asbestos, and mystery mineral to meet challenge. por Business Week p74-5 My 22 '43
- MORRIS, Philip, and company**
 Debentures offered. Comm & Fin Chr 157:997 Mr 15 '43
 Offering to stockholders. Comm & Fin Chr 157:920-1 Mr 1 '43
 Registers stock with SEC; to issue debentures. Comm & Fin Chr 157:644 F 15 '43
 Report for fiscal year. Comm & Fin Chr 157:2455 Je 28 '43
- MORRIS, Samuel Brooks, 1890-**
 Portrait. Am Water Works Assn J 35:front J1 '43
- MORROW, Lester William Wallace, 1889-1942**
 Sketch. por Elec W News ed 118:1709 N 21 '42
- MORSE, Samuel Finley Breese, 1791-1872**
 Hero as inventor. pors Fortune 27:146-7 Je '43
- MORTALITY**
 Mortality in England reported running lower. L. L. Dublin. Weekly Underw 149:480 S 4 '43
 Optimistic about future mortality. A. J. Robinson. Nat Underw (Life ed) 47:2+ O 29 '43
See also
 Insurance, Life—
 Tables
- Statistics**
 Births, infant mortality, maternal mortality; graphic presentation, 1940. maps tables U S Children's Bur Pub 288:1A-34A, 1B-34B '43
 Changes in mortality rates, 1930 to 1940. H. P. Dorn. Pub Health Rep 57:1858-68 D 4 '42
 Comparison of demographic rates assumed by the National resources committee with actual experience. R. J. Myers. Am Stat Assn J 38:201-9 Je '43
 Death rate. Science 97:sup10 My 14 '43
 Death-rate in Germany. Science 98:126 Ag 6 '43

MORTALITY—Statistics—Continued

- Diabetes fatalities. G. Hirschfeld. map Spectator (Life ed) 150:22-9 Ja '43
- Heart disease toll. G. Hirschfeld. map Spectator (Life ed) 149:44-51, 75 D '42
- Incidence of cancer in Philadelphia, Pa. 1938. H. J. Sommers. bibliog Pub Health Rep 57:1843-57 D 4 '42
- Influenza and pneumonia mortality in a group of 90 cities in the United States, August 1935-March 1943, with a summary for August 1920-March 1943. M. Gover. Pub Health Rep 58:1033-61 bibliog(p1049) JI 9 '43
- Morbidity and mortality from specific causes during 1942 and recent preceding years. Pub Health Rep 58:730-44 My 7 '43
- Mortality summary for large cities in the United States, 1942. Pub Health Rep 58:194-5 Ja 29 '43
- Provisional mortality rates for the first quarter of 1943. Pub Health Rep 58:1439-45 S 24 '43
- Reported whooping cough morbidity and mortality in the United States. C. C. Dauer. map Pub Health Rep 58:661-76 Ap 23 '43
- Tuberculosis mortality in the United States, 1939-41. J. Yerushalmy, H. E. Hilleboe and C. E. Palmer. Pub Health Rep 58:1457-82 O 1 '43

See also

Infant mortality—
Statistics

Suicide

MORTAR

- Brief history of lime, cement, concrete and reinforced concrete. J. O. Draffin. bibliog (114 titles) diags W Soc E J 48:14-47 Mr '43
- Mortar-coated piles resist hard treatment. II Eng N 130:425-7 Mr 25 '43

Testing

- Curing of masonry mortars. H. R. Staley. bibliog II Am Soc T M Proc 42:762-70; Discussion. 771-4 '42
- Effect of brick absorption characteristics upon mortar properties. F. O. Anderegg. bibliog II Am Soc T M Proc 42:821-30; Discussion. 831-6 '42
- Long-time volume changes in portland cement bars. A. H. White and H. S. Kemp. Am Soc T M Proc 42:727-41 '42; Same. Concrete (mill sec) 50:232-3, 249-51; 51:105-7 S-O '42, Ja '43; Discussion. Am Soc T M Proc 42:742-9 '42
- Measurement of brick bond; abstract. J. C. Pearson. Brick & Clay Rec 103:41 JI '43
- Results of cooperative tests on masonry mortars. Am Soc T M Proc 42:266-70 '42
- Some properties of heat-setting refractory mortars. R. A. Heindl and W. L. Pendergast. J Research Nat Bur Stand 30:303-10 Ap '43
- Theory and measurement of plasticity and workability of mortars. P. S. Roller. diags Am Soc T M Proc 42:760-60; Discussion. 761 '42
- Variations in the weight of mortar pots due to humidity. R. F. Adams. Am Concrete Inst J 14:217-18 Ja '43

MORTARS (ordnance)

- British use gray cast iron for trench mortar bombs; Institute of British foundrymen, cast iron subcommittee report. bibliog diags Foundry 71:107-8+ S '43
- Mortar shell. Lampco products inc. G. E. Sears. II diags Steel 113:74-5+ O 25; 92-4, 96, 98+ N 1 '43
- Producing trench mortar shell fuzes molded of cotton-flock-filled phenolic compound. W. S. Larson. II Mod Plastics 20:71-3+ Ja '43
- Trench mortar bombs pass critical inspection. P. Dwyer. II Foundry 71:66-9, 151-2 Ja '43

MORTGAGE bankers association

- Annual meeting, 30th, Chicago. Comm & Fin Chr 158:1318 S 30 '43
- MBA advisory service for armed forces. Comm & Fin Chr 156:2071 D 10 '42

MORTGAGE banks

See also

Home owners' loan corporation

MORTGAGE redemption policies. See Insurance, Life—Mortgage redemption policies**MORTGAGES**

- ABA issues home mortgage loan manual. Comm & Fin Chr 157:1393 Ap 15 '43
- Canadian mortgage companies report. J. Montagnes. Burroughs Clearing House 27:28+ My '43
- Cites FHA insured loans as attractive investment outlet; abstracts. L. D. Meredith. Comm & Fin Chr 158:1425 O 7 '43; East Underw 44:4 O 8 '43
- Course of mortgage lending. W. A. Marcus. Banking 35:49 D '42
- Federal housing administration, home mortgage insurance, estimated new mortgage loans by all savings and loan associations, and loans outstanding of agencies under the Federal home loan bank administration, 1938-1941. Survey of Cur Business 1942 Sup p27-8 [supplemented in monthly numbers]
- Get facts about mortgagor, says manual. M. Kane. II Banking 35:43 Mr '43
- Home is for keeps. M. Kane. II Banking 36:58+ N '43
- Home mortgage lending in 1943. J. F. Scott. Comm & Fin Chr 157:274 Ja 21 '43
- Home mortgage loan manual, by E. M. Fisher. Review, by M. Kane. Banking 35:40 F '43
- Life company holdings of FHA mortgages nearing a billion. East Underw 43:1+ D 18 '42
- MEA surveys effect of war on mortgages of men in the service. Comm & Fin Chr 158:29 JI 1 '43
- Mortgage investments in wartime. Trusts & Estates 75:507-8 N '42
- Mortgage lending down 24% in 1942. Comm & Fin Chr 157:846 Mr 4 '43
- Mortgage loan delinquencies. W. R. Bryant. Banking 35:31-2 F '43
- Mortgage market, today and after World war I; residential mortgages. P. M. Stoner. J Land & Pub Util Econ 19:224-30 My '43
- Mortgages as investments. R. W. Babson. Comm & Fin Chr 158:425+ JI 29 '43
- New real estate loans in prospect. G. Dumars. Bankers Mo 60:275 Je '43
- 1942 mortgage recording activity, first reversal of upward movement of recent years. Comm & Fin Chr 157:1107-8+ Mr 25 '43
- Non-farm home mortgage debt declined in 1942 for first time in five years. Comm & Fin Chr 158:1116 S 16 '43
- Private capital invested in housing will be protected; changes in mortgage financing. A. H. Ferguson. Comm & Fin Chr 157:1868 My 20 '43
- Progressive liberal local financing needed. Am Bld 65:90-1+ O '43
- Rating the neighborhood. M. Kane. Banking 35:52 Ap '43
- Real estate lending. H. Bruere. Bankers M 146:335-7 Ap '43
- Serviceman and the mortgage market. E. M. Fisher. Ann Am Acad 227:51-7 My '43
- Urges servicemen get sound mortgage advice. C. A. Mullenix. Comm & Fin Chr 158:305 JI 22 '43

See also

- | | |
|--|------------------------------------|
| Bonds, Real estate | Home ownership— |
| Chattel mortgages | Finance |
| Federal housing administration—Insured mortgage plan | Insurance, Fire—Mortgagee interest |

Foreclosures

- Foreclosures, non-farm real estate, 1938-1941. Survey of Cur Business 1942 Sup p28 [supplemented in monthly numbers]
- Non-farm foreclosures down sharply in 1942. Comm & Fin Chr 157:667 F 18 '43

Law

- Calls for overhauling obsolete mortgage and foreclosure laws. C. A. Mullenix. Comm & Fin Chr 157:1963 My 27 '43
- Leases as they affect mortgage investments. H. S. Campbell. East Underw 44:12 My 21 '43
- Unconditional and sole ownership; policy conditions as affected by existence of mortgages under laws of title and lien states. R. A. W Banta. East Underw 44:20 Mr 26 '43

MORTGAGES, Farm

Equitable Life offers Mid-West farmers new prepayment reserve loan service plan. *Comm & Fin Chr* 157:282 Ja 21 '43; *East Underw* 44:10 Ja 15 '43

Investing in farm mortgages today. R. P. Crawford. *Barron's* 22:9 D 28 '42

New rural credit system needed; mortgage bankers advocate farm mortgage insurance plan. *Am Bld* 65:116+ O '43

See also

Agricultural credit

MORTICIANS. See Undertakers

MORTON, Sir James, 1867-1943

Sketch. *por Chem & Ind* 62:385-6 O 9 '43

MOSAIC

See also

Terrazzo

MOSCOW**Subways**

Third section of Moscow subway completed. *For Comm W* 11:25 My 29 '43

MOSCOW foreign ministers conference, 1943.

See World war, 1939—Diplomatic history

MOSQUITOES

African mosquitoes. T. D. A. Cockerell. *Science* 96:537-8 D 11 '42

Growth measurements of anopheles quadrimaculatus larvae. F. L. Knowles. *Pub Health Rep* 58:136-9 Ja 22 '43

Insect control on aircraft. G. L. Dunnahoo. *il Soap & San Chem* 19:111+ F '43

Microclimate of diurnal resting places of anopheles quadrimaculatus. Say in the vicinity of Reelfoot lake. D. E. Eyles and L. K. Bishop. *Pub Health Rep* 58:217-30 F 5 '43

Transmission of plasmodium lophurae, an avian malaria parasite, by anopheles quadrimaculatus. H. S. Hurlbut and R. Hewitt. *Pub Health Rep* 57:1891-2 D 11 '42

Extermination

Itch-hours saved; Philadelphia's war on the mosquito. *Business Week* p64+ Ag 21 '43

Making mosquito surveys with a jeep and the PBV-5. W. M. Gordon. *Science* 97:555 Je 18 '43

Refrigerator charger becomes mosquito gun. *Refrig Eng* 45:105 F '43

War on the home front. H. E. C. Powers. *Chem & Ind* 62:397-8 O 16 '43

MOSS peat. See Peat**MOSSSES**

Mosses of Luray cavern, Virginia. W. B. Lang. *Science* 98:173-4 Ag 20 '43

See also

Carrageen

MOTHERAL, Annie Mather

One of America's foremost life actuaries. *por Weekly Underw* 148:1164 My 29 '43

MOTHERS' pensions

See also

Family allowances

MOTHPROOFING preparations

Chemical treatment of textiles; water and moth repellents; patents. *Chem Age (Lond)* 49:108 Jl 21 '43

Clothes moths and their practical control. M. H. Doner and E. G. Thomssen. *bibliog il Soap & San Chem* 19:102-5+ O '43

Moth products market. *Soap & San Chem* 19:109, 111, 113 S '43

Testing

New method for quantitative determination of moth damage to textile fibers. W. J. Hamburger and K. R. Fox. *il Am Dyestuff Rep* 32:357-60, 373-4 Ag 16 '43

MOTHS

Chemically modified wools of enhanced stability. W. B. Geiger, F. F. Kobayashi and M. Harris. *il Ind & Eng Chem* 34:1401-2 N '42; *Same. Am Dyestuff Rep* 32:99-104 Mr 1 '43

Clothes moths and their practical control. M. H. Doner and E. G. Thomssen. *bibliog il Soap & San Chem* 19:102-5+ O '43

Cooling, heating used to protect flying suits; storage of wool-and-fur suits. L. W. Clifford. *Refrig Eng* 44:321 N '42; *Same. Heat & Ven* 40:34 Mr '43

Fabric pests; tentative fabric pest deterrent tests as standardized by joint association committee. F. W. Fletcher. *Soap & San Chem* 18:117, 119, 121+ D '42

Tentative procedure for rearing and handling the webbing clothes moth. A. H. Goddin. *Soap & San Chem* 18:123 D '42

MOTION

See also

Acceleration

Kinematics

Machinery, Kinematics of

Mechanical movements

Rhythm

Velocity

MOTION pictures. See Moving pictures

MOTION study

Farm work simplification; application of motion study; Purdue farm work simplification laboratory. M. E. Mundel. *Mech Eng* 65:565-6 Ag '43

Find the one best way of manufacture. *il Factory Management* 101:154-63 Ag '43

Lessons in motion study turn up better methods. E. R. Whittaker. *il Factory Management* 101:107-8 My '43

Rhythm in time and motion study. C. Babbitts. *bibliog diags Advanced Management* 8:6-16+ Ja '43

Speeding war production by encouraging employees to improve their own operations; work simplification plan; Walter Kidde & co. *il Steel* 111:88-90 D 21 '42

Time and motion studies for chemists. J. B. Bjorksten. *bibliog(45 titles) il Chem & Eng N* 21:1324-9 Ag 25 '43

Time and motion study accepts new obligations. I. A. Sylvester. *il Factory Management* 101:97-101 O '43

Time-study procedure. R. A. Trumpis. *il Factory Management* 100:89-96 D '42

See also

Time study

MOTIVES

Importance of human beings; four main motives. H. A. Lyon. *Personnel J* 22:130-1 O '43

MOTOR boats

Air/sea rescue launches. *il Engineer* 175:250-1 Mr 26 '43

See also

Motor ships

MOTOR bus associations

Bus associations go to war too; list of associations, U.S. and Canada. *Bus Transportation* 22:84-6 Ja '43

War problems stressed at June meetings; Canadian transit association, New York State motor bus association, New Jersey motor bus association inc. and the Pennsylvania bus association. *Bus Transportation* 22:32-5 Jl '43

MOTOR bus brakes. See Brakes, Motor bus

MOTOR bus drivers

Los Angeles railway meets manpower shortage; women are being trained. *il Transit J* 86:432-3 D '42

Slacks or skirts? *il Bus Transportation* 22:38-9 Jl '43

So they took women and like 'em! Pacific Greyhound drivers. *il Bus Transportation* 22:23-5 Ap '43

What the well dressed Los Angeles woman driver will wear. *il Bus Transportation* 22:52-3 My '43

Women can't drive; like hell they can't, says San Diego railway. L. S. Flint. *il Bus Transportation* 21:511-13 N '42

Women serving navy yard as bus and truck drivers. *il Mass Transportation* 39:251 Jl '43

Training

Drivers; you've got to teach 'em; Rio Grande motorways. L. S. Flint. *il Bus Transportation* 22:30-2 O '43

Training bus drivers in wartime; Public service coordinated transport. W. F. Allen. *Mass Transportation* 39:252 Jl '43

MOTOR bus engines

Diesel buses can carry the load; Los Angeles railway corp. D. Rishel. *il Diesel Power* 21:234 Mr '43

Diesel experiences of B & W bus lines. *il Diesel Power* 21:296 Je '43

MOTOR bus engines—Continued

Substitute engine in 1930 bus. W. McConnell. *il Bus Transportation* 22:53 O '43

Cleaning

Getting rid of scale in engine water jackets. H. Stevens. *il diags Bus Transportation* 22:44-6 Je '43

Handy cleaning tank for engine parts. C. Halliburton. *il Bus Transportation* 22:54 Ap '43

Design

A.E.C. Regent RT type bus. *il diags Automobile Eng* 33:47-57 F '43

Exhaust

Gasoline engine exhaust odors; study of odors produced under conditions of deceleration. J. J. Mikita, H. Levin and H. R. Kichline. *diags S A E J* 51:12-19 Ja '43; Excerpts. *Automobile Eng* 33:239-40 Je '43; Abstract. *Automotive & Aviation Ind* 87:31 D 1 '42

Fuel

Bellay producer. *il diags Automobile Eng Extra* no 32:439-43 N 5 '42

Gas producer; P.S.V. type operated by Eastern national omnibus company. *diags Automobile Eng Extra* no 32:433-7 N 5 '42

Hamilton motors, ltd. producer-gas plant. *il diags Automobile Eng Extra* no 32:456-8 N 5 '42

Leeds Transport's producer gas program; producer gas units for Diesel engine buses. W. V. Morland. *Mass Transportation* 39:256 JI '43

Operating experiences with gas producers. K. W. Willans. *il Inst Mech Eng J & Proc* 147:Proc 205-13 O '42

Ignition devices

Keep 'em rolling idea wins \$25 war bond; ignition distributor protection; winner is H. T. Hurlock. Eastern Massachusetts street railway co. *il Bus Transportation* 22:52-3 Mr '43

Industrial uses

Old motor bus engines pump water. J. C. Albright. *il Power* 87:535-6 Ag '43

Lubrication

Positive crankcase ventilation; its effect on sludging and engine wear. *Bus Transportation* 22:36-7 Je '43

Repair

Correcting piston trouble; how two companies do it. T. L. Mino; R. M. Byrne. *diags Bus Transportation* 22:50-1 Ag '43

Those nasty cracks; cylinder blocks and heads; maintenance experts tell how they are solving problem. *il diags Bus Transportation* 22:53-5 F '43

White offers cold welding service. *il Bus Transportation* 22:87 S '43

Specifications

American gasoline engines; tabulation. *Automotive & Aviation Ind* 88:112-21 Mr 15 '43

Engine tune up specifications, 1943; tabulation. *Bus Transportation* 22:58-61 Je '43

Testing

Gasoline engine exhaust odors; study of odors produced under conditions of deceleration. J. J. Mikita, H. Levin and H. R. Kichline. *diags S A E J* 51:12-19 Ja '43; Excerpts. *Automobile Eng* 33:239-40 Je '43

Positive crankcase ventilation; its effect on sludging and engine wear. *Bus Transportation* 22:36-7 Je '43

MOTOR bus industry and trade

Bus production; interview with E. S. Pardoe by C. W. Stocks. *Bus Transportation* 22:42-3 S '43

Rides for civilians; WPB's bus authorization. *il Business Week* p86 JI 10 '43

Statistics

Buses delivered to local transport carriers in United States during 1942; tabulation. *Bus Transportation* 22:59-61 Ja '43

15,573, total bus output in '42. E. F. Theisinger. *Bus Transportation* 22:48-51 Ja '43

MOTOR bus insurance. See Insurance, Motor bus

MOTOR bus lines

Future of the intercity bus industry. A. F. Macdonald. *Bus Transportation* 22:36-7 JI '43

Intercity carriers. A. M. Hill. *Bus Transportation* 22:32-3 S '43

See also

Railroads—Motor Rapid transit
vehicle auxiliaries Trolley buses

Accidents

Accident prevention tools. T. Fitzgerald. *Mass Transportation* 39:312-13 S '43

See also

Motor bus lines—
Claims

Accounting

Look beyond the figures; accounting as an aid to operation. G. L. Horst. *il Bus Transportation* 22:28-9 F; 41-3 Mr '43

Advertising

What's cookin' in advertising. *il Bus Transportation* 22:54-5 Ag '43

Airplane auxiliaries

Air bus service planned by Greyhound. *il Bus Transportation* 22:54 JI '43

Burlington seeking air service rights; would operate helicopters. Ky Age 116:30-1 JI 8 '43

Helicopter air bus service planned by Greyhound corporation. *Comm & Fin Chr* 167:2262+ Je 17 '43

Helicopter plans spread throughout the United States. *Bus Transportation* 22:65 Ag '43

Baggage

Baggage loss liability; points that should help both companies and their employees avoid legal controversies. L. T. Parker. *Bus Transportation* 22:33-5 O '43

Banishing baggage bottle-necks. *il Bus Transportation* 22:42-5 F '43

Claims

Baggage loss liability; points that should help both companies and their employees avoid legal controversies. L. T. Parker. *Bus Transportation* 22:33-5 O '43

But judge, I didn't know the law! bus company liability can be avoided, revealed by leading court decisions of 1942. L. T. Parker. *Bus Transportation* 22:39-40 Ap '43

Post war claims plans should be made now. P. W. Klabunde. *Mass Transportation* 39:253-4 JI '43

Costs

Bus Transportation award winners for 1942; with cost data. *il Bus Transportation* 21:494-507 N '42

Capital expenditures in 1942. E. J. Murphy. *Mass Transportation* 39:102-3 Mr '43

Employees

Can we use women operators. *il Mass Transportation* 38:331-5 N '42

Cultivating maintenance manpower; Tanner motor tours. L. S. Flint. *il Bus Transportation* 22:30-1 JI '43

Is a Miss as good as a male? Connecticut railway and lighting company's experience with women mechanical workers. E. F. Theisinger. *il Bus Transportation* 22:31-5 Je '43

Labor situation; with tabulation of information as supplied by fifty-four companies. *il Bus Transportation* 22:52-5 Je; 50-1 JI '43

Making opportunity knock; Pasadena city lines taps source of potential Diesel mechanics. *Bus Transportation* 22:49 Je '43

Manpower. O. S. Beyer. *Bus Transportation* 22:40-1 S '43

Mechanic problem; outline of training program. *il Bus Transportation* 22:34-6 F '43

Putting over the know how; War manpower commission course for twenty key men of the Bee line. E. C. Giddings. *il Bus Transportation* 21:514-15 N '42

Remanning with women; Harrisburg Railways garage. E. F. Theisinger. *il Bus Transportation* 22:26-9 My '43

MOTOR bus lines—Employees—Continued

Share the profits; policy of the Albuquerque bus company. *Bus Transportation* 22:74-5 S '43

State laws and women workers. *M. Anderson. il Bus Transportation* 22:35-7 My '43

They did it before, they can do it again; women as bus line employees. *il Bus Transportation* 22:28-31 Ja '43

Together for victory; employees of Public service (N.J.) coordinated transport signed pledge of cooperation in war effort. *il Bus Transportation* 21:522-3 N '42

Training, key to the skilled help shortage; Apprentice and training service of the War manpower commission. *C. W. Stapleton. il Bus Transportation* 22:24-6 F; 38-40 Mr; 36-8 Ap; 42-3 Je '43

Training traffic manpower; National bus traffic association. *L. Markel and B. Ethridge. il Bus Transportation* 22:65-7 Ja '43

Transettes introduced to San Antonio public. *il Mass Transportation* 39:182 My '43

Women in the transit industry; abstract. *I. L. Lorenz. Mass Transportation* 39:175-+ My '43

Women operators in Washington, D.C. *A. Shapiro. Mass Transportation* 39:330-1 S '43

See also

Motor bus drivers

Equipment and supplies

Controlling order for bus parts; order L-158 of the War production board, as amended March 11. *Bus Transportation* 22:72c-72d My '43

Exhibit on paper. *il diags Mass Transportation* 39:333-44 S '43

How to get replacement parts and operating supplies. *Bus Transportation* 22:64-7 My '43

Information on WPB orders; questions concerning CMP regulation no. 5 and order P-142, answered by R. W. Caswell. *Bus Transportation* 22:52-3 J1 '43

What CMP means to local transportation. *M. Haas. Bus Transportation* 22:66-9 Je '43

See also

Motor buses

Fare collection

Turnstiles and tokens; modern methods of fare collection; Army directs bus facilities for civilian employees at Picatinny arsenal, New Jersey. *W. L. Cook. il plan Bus Transportation* 22:38-40 O '43

See also

Fare registers

Finance

First quarter operations for 1943. *C. W. Stocks. Bus Transportation* 22:50-3 Je '43

Outlook for motor transport, water carriers and pipe lines. *P. T. Sheldrick. il Mag of Wall St* 71:410-11+ Ja 23 '43

\$276,000,000; what the motor bus industry spent in 1942; tabulation. *Bus Transportation* 22:54 Ja '43

What the intercity buses did in 1942. *C. W. Stocks. Bus Transportation* 22:34-5 Ap '43

See also

Omnibus corporation
Public service co-
ordinated transport

Garages

Remanning with women; Harrisburg Railways garage. *E. F. Theisinger. il Bus Transportation* 22:26-9 My '43

Three-acre garage; Provincial transport company, Montreal. *il plan Bus Transportation* 21:538-42 D '42

Laws and regulations

Law on tickets. *L. T. Parker. il Bus Transportation* 21:548-9 D '42

Legislation in 1942. *I. Bowen. Bus Transportation* 22:46-7 S '43

Regulation by edict or cooperation; editorial. *C. W. Stocks. Bus Transportation* 22:23 J1 '43; Reply. *J. B. Eastman. 22:27-8 Ag '43*

Lost articles

Best policy; lost articles, if not claimed within thirty days, are awarded to the bus cleaners who found them; San Diego electric railway. *Bus Transportation* 22:41-2 J1 '43

Maintenance and repair

Atlas had it easy; wartime maintenance problems of various companies. *il Bus Transportation* 21:427-30, 467-9, 517-19, 550-2 S-D '42

Bus maintenance and operating suggestions. *R. Cass. il Mass Transportation* 39:210-12 Je '43

Bus Transportation award winners for 1942; with cost data. *il Bus Transportation* 21:494-507 N '42

Bushing salvage method wins \$25 war bond; winner is M. F. Craney, Eau Claire transportation company. *il Bus Transportation* 22:50-2 F '43

Cultivating maintenance manpower; Tanner motor tours. *L. S. Flint. il Bus Transportation* 22:30-1 J1 '43

\$85,000 conservation idea; parts reclaimed by metalizing. *W. A. Duvall. il diags Bus Transportation* 21:568-9 D '42

Here's how to keep 'em running; metal spraying valuable in rejuvenating worn equipment; Public service coordinated transport. *il Steel* 113:91-2 Ag 16 '43

How to ease your worst maintenance bottleneck; order parts a year in advance. *W. J. Walker. Mass Transportation* 39:283-4 Ag '43

Keep 'em rolling idea wins \$25 war bond; ignition distributor protection; winner is H. T. Hurlock, Eastern Massachusetts street railway co. *il Bus Transportation* 22:52-3 Mr '43

Metal spray keeps 'em Dieseling; Chicago motor coach co. *il Bus Transportation* 22:46-7 F '43

Monthly war bond winner; John Balducci, foreman, automotive shop, St Louis public service co. *il Bus Transportation* 22:50-2 O '43

Preventive maintenance and inspection procedure. *S A E J* 51:sup25-9 S '43

Preventive maintenance for the electrical system. *W. H. Crouse. il Bus Transportation* 22:38-41 Je '43

Preventive maintenance, what to do and when; S.A.E. group submits program. *Nat Pet N* 35:24, 26, 28, 30 Ap 14 '43

Procurement of essential automotive equipment and replacement parts requirements based on an interview by C. W. Stocks with W. J. Cumming. *Bus Transportation* 22:44-5 S '43

Short on everything but ability; San Diego railway maintenance. *L. S. Flint. il Bus Transportation* 22:37-40 Ja '43

Substitute engine in 1930 bus. *W. McConnell. il Bus Transportation* 22:53 O '43

13 ME flags; Bus Transportation maintenance efficiency awards. map *Bus Transportation* 22:24-5 O '43

Wartime inspection of P.C.C. cars. *N. H. Wilby. il Transit J* 86:446-8 D '42

Winners in maintenance contest; ideas for improvements in shop practices. *il diags Transit J* 86:410-13 N '42

See also

Motor bus engines— Motor bus lines—
Repair Shops
Motor buses—Repair

Bibliography

Ready reference of maintenance articles published in *Bus Transportation*, since January, 1940. *Bus Transportation* 21:552-3 D '42

Management

American transit association, Eastern conference on wartime transit problems, New York, May 5-7. *Bus Transportation* 22:42-5 My '43

Beating the bus shortage; Davenport, Rock Island and Moline area. *C. A. Du Bois. il Bus Transportation* 22:24-6 J1 '43

Color signals freshness in operating policies; buses and uniforms, San Antonio transit company. *il Bus Transportation* 22:50-1 Ag '43

Congested Chester, Pa. *G. J. MacMurray. il Bus Transportation* 22:26-8 O '43

MOTOR bus lines—Management—Continued

- Detroit sees it through. R. G. Silbar. *il Bus Transportation* 22:38-40 My '43
- Handling wartime traffic. B. Welbourn. *Bus Transportation* 22:64 Ja; 40-1 F; 48-9 Mr; 52-3 My '43
- How mass transportation is conducted in Montreal. *il Mass Transportation* 39:21-9+ Ja '43
- How mass transportation is conducted in Toronto. *il Mass Transportation* 39:61-72 F '43
- How mass transportation is conducted in Vancouver. *il map Mass Transportation* 39:136-43 Ap '43
- How mass transportation is conducted in Winnipeg. *il Mass Transportation* 39:109-16 Mr '43
- How Savannah handles 110 percent riding increase. *il Transit J* 86:444-5 D '42
- Look beyond the figures; accounting as an aid to operation. G. L. Horst. *il Bus Transportation* 22:28-9 F; 41-3 Mr '43
- Norfolk. . . no seats. W. L. Cook. *il Bus Transportation* 22:54-6 S '43
- 100% increase in traffic handled by Madison buses. *il Mass Transportation* 39:279-82 Ag '43
- Share the profits; policy of the Albuquerque bus company. *Bus Transportation* 22:74-5 S '43
- Springfield, Mass. where the whole town rides buses. E. F. Theisinger. *il Bus Transportation* 22:30-2 Mr '43
- Strategy for transit; overcoming wartime difficulties. *il Mass Transportation* 39:4-19 Ja '43
- Wartime bus transportation demands met by the Connecticut company. *il Mass Transportation* 39:207-9 Je '43
- Wartime Lynn. H. S. Knowlton. *il map Bus Transportation* 22:48-50 My '43

Military use

- Bus reserve units of Pacific greyhound lines training for emergency troop transport. *il Bus Transportation* 21:561-2 D '42
- What happened when Uncle Sam requisitioned three West Coast intercity fleets to move troops. *Bus Transportation* 21:560-1 D '42

Public relations

- Customers we'll keep! need for bus transportation to sow seeds of satisfaction in the mind of the public now. H. M. Hickey. *Bus Transportation* 22:53 My '43
- Girls tell Beco's story; Birmingham electric company. *il Bus Transportation* 21:521-2 N '42
- Transit industry and the modern competition. *il Mass Transportation* 39:177-80 My '43

Purchasing

- How to ease your worst maintenance bottleneck; order parts a year in advance. W. J. Walker. *Mass Transportation* 39:283-4 Ag '43

See also
Motor buses—Purchasing

Records

- Keeping track of tires. *il Bus Transportation* 22:32-3 Ap '43
- Simplified trip report; Jefferson transportation co. L. P. Wakefield. *il Bus Transportation* 22:64-5 Ja '43
- Yesterday's business, Los Angeles officials know it today. *il Bus Transportation* 22:30-2 F '43

Reports

- Annual reports grow less formidable; what transportation companies are doing to streamline reports. *il Bus Transportation* 22:41 My '43

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Service

- Check your bags! coin-operated parcel locker. *il Bus Transportation* 22:44-5 Mr '43
- Tranсетtes; San Antonio company's introduction of women to aid bus patrons. *il Bus Transportation* 22:54 Je '43

Shops

- Home-made lathe wins \$25 war bond. *il Bus Transportation* 22:56-7 Ag '43
- Improving shop efficiency. *Bus Transportation* 22:62-3 My '43
- Labor conservation ideas wins \$25 war bond; device for handling and storing bus springs. *il diag Bus Transportation* 22:43-5 JI '43
- Maintenance means production in Detroit's DSR shops; illustrations with text. *Bus Transportation* 22:24-7 Je '43
- Plowshares into swords; Greyhound reshapes a peacetime garage to fit a wartime need; illustrations with text. *Bus Transportation* 22:70-3 S '43
- Seven ideas win \$25 war bond; winner is T. W. Horn. *il Bus Transportation* 22:82-5 S '43
- This month's \$25 war bond goes to North Shore shopmen. *il Bus Transportation* 21:524-6 N '42
- Time and labor saving ideas from Tulsa; illustrations. *Bus Transportation* 21:566-7 D '42

Stations

- Kenmore station, Boston busway. plan *Bus Transportation* 22:35 Ag '43

Statistics

- Bus traffic continues to climb. C. W. Stocks. *Bus Transportation* 21:554-7 D '42
- Bus transportation 1943 survey. *il Bus Transportation* 22:41-7 Ja '43
- Census of service; tabulation. *Bus Transportation* 22:53 Ja '43
- Comparison of operating results, 1940, 1941 and 1942; tabulation. *Bus Transportation* 22:54 Ja '43
- First quarter operations for 1943. C. W. Stocks. *Bus Transportation* 22:50-3 Je '43
- Motor carriers set new record in 1942. C. W. Stocks. *Bus Transportation* 22:25-9 Mr '43
- School bus census; tabulation. *Bus Transportation* 22:52 Ja '43
- Second quarter operations for 1943. C. W. Stocks. *Bus Transportation* 22:63-7 S '43
- What the intercity buses did in 1942. C. W. Stocks. *Bus Transportation* 22:34-5 Ap '43

Taxation

- Disposition of state motor-carrier tax receipts, 1941; tabulated by states. *Pub Roads* 23:139 O '42
- Industry's biggest headache; the Revenue act of 1942. H. Schwartz. *Bus Transportation* 21:508-10 N '42

Terminals

- Check your bags! coin-operated parcel locker. *il Bus Transportation* 22:44-5 Mr '43
- Island-type bus terminal, Winston-Salem, N.C. *il diag plans Arch Rec* 92:47-50 D '42
- New buildings for 194X; railroad-bus terminal. *il diag plans Arch Forum* 72:129-31 My '43

See also
Motor bus lines—Stations

Ticket agents

- All out for agent training; Ohio, Cincinnati & Lake Erie transportation co. R. A. Sheep. *il Bus Transportation* 22:49-51 Mr '43

Tickets

- Law on tickets. L. T. Parker. *il Bus Transportation* 21:548-9 D '42

Traffic

- Beating the bus shortage; Davenport, Rock Island and Moline area. C. A. Du Bois. *il Bus Transportation* 22:24-6 JI '43
- Congested Chester, Pa. G. J. MacMurray. *il Bus Transportation* 22:26-8 O '43
- 47 buses carry employees of Aluminum company plant at Massena, N.Y. *il Bus Transportation* 22:52-3 S '43
- If staggered hours fail, what then? H. G. Morris. *Bus Transportation* 22:24-6 Ja '43
- Less service, more riding; bus transportation in Chicago. M. Joslyn. *il Bus Transportation* 22:27 Ja '43

MOTOR bus lines—Traffic—Continued

New Jersey's staggering problem. B. Welbourne. map Bus Transportation 22:34-6 Ja '43

Now they ride, and again they wait; that's wartime bus transportation in the Adirondack-New England area. il Bus Transportation 22:73-9 S '43

Off to war work they go; gaps in war transportation bridged by share-the-ride and bus service. P. M. Whelan. il Bus Transportation 22:34-7 Mr '43

Only 11% use buses; war-worker transportation; conference sponsored by National association of manufacturers. Bus Transportation 22:33 Mr '43

Rubber tired vehicles show phenomenal traffic increase; 10-year record of transit traffic in the United States by types of service, 1933 to 1942. E. J. Murphy. Mass Transportation 39:100-1 Mr '43

Traffic reaches new all-time peak. E. J. Murphy. Mass Transportation 39:94-5 Mr '43

Transit upsurge, trolleys and buses doing record business. Business Week p106-7+ My 29 '43

Victory coaches for war workers. R. G. Silbar. il Bus Transportation 22:38-40 Ag '43

War worker transportation in Schenectady. il map Transit J 86:396-3 N '42

Yesterday's business, Los Angeles officials know it today. il Bus Transportation 22:30-2 F '43

Winter operation

Cold wave coming; information on use of anti-freeze. il diags Bus Transportation 22:46-9 O '43

Old man winter's whiskers; how they trim 'em in Milwaukee; snow plow and ice-cutting equipment. il Bus Transportation 22:37 F '43

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Kenmore station, Boston busway. plan Bus Transportation 22:35 Ag '43

Chicago

Less service, more riding. M. Joslyn. il Bus Transportation 22:27 Ja '43

Connecticut

Wartime bus transportation demands met by the Connecticut company. il Mass Transportation 39:207-9 Je '43

Detroit

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Great Britain

British transport is on the job. il Bus Transportation 22:27-9 Jl; 29-31 Ag '43

War impact on British transportation. O. C. Power. Pub Util 30:739-40 N 19 '42

Indianapolis

How the bus is utilized in Indianapolis. il Mass Transportation 39:33-4 Ja '43

Jackson, Mississippi

Jackson city lines wins Bus Transportation maintenance award; with cost data. il Bus Transportation 21:506-7 N '42

Long Island, New York

Queens-Nassau wins Bus Transportation maintenance award; with cost data. il Bus Transportation 21:504-5 N '42

Lynn, Massachusetts

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Massachusetts

Eastern Massachusetts wins Bus Transportation maintenance award; with cost data. il Bus Transportation 21:496-7 N '42

New Jersey

New Jersey's staggering problem. B. Welbourne. map Bus Transportation 22:34-6 Ja '43

New Orleans

Teché lines, inc. wins Bus Transportation maintenance award; with cost data. il Bus Transportation 21:500-1 N '42

New York (state)

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Rhode Island

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San Antonio, Texas

San Antonio wins Bus Transportation maintenance award; with cost data. il Bus Transportation 21:498-9 N '42

San Francisco

Conquering the toughest bus operation in America; cable cars operating on route with seventeen percent grades in San Francisco replaced by buses. G. Griffith. il Mass Transportation 38:337-8 N '42

Springfield, Massachusetts

Springfield, where the whole town rides buses. E. F. Theisinger. il Bus Transportation 22:30-2 Mr '43

Tulsa, Oklahoma

Tulsa city lines wins Bus Transportation maintenance award; with cost data. il Bus Transportation 21:502-3 N '42

United States

Buses curbed. Business Week p27-8 N 21 '42

Conference in print. Bus Transportation 22:23-47 S '43

Highlights of 1942. E. Eckland. Bus Transportation 22:55-8 Ja '43

MOTOR bus lines, School

All buses frozen. Comm & Fin Chr 157:1319 Ap 8 '43

ODT's school bus policy. Bus Transportation 21:570 D '42

Over the hill to the schoolhouse; New York state school buses transporting war workers and farm laborers. B. H. Belknap. il Bus Transportation 22:46-7 My '43

Pretty and dependable too! North Carolina high school girls drive school buses. il Bus Transportation 21:547 D '42

School bus census; tabulation. Bus Transportation 22:52 Ja '43

Vigilant Virginia; action taken by Department of education to assure transportation to pupils. W. I. Dixon. il Bus Transportation 22:36-7 O '43

MOTOR bus lines in war

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Buses have done nobly. J. B. Eastman. Bus Transportation 22:30-1 S '43

Highway transport as army officers see it. Bus Transportation 22:42-3 Ag '43

Hop aboard, Buddy, the ride is on us; free rides for uniformed service men and women; Chicago motor coach company. J. Krueger. il Bus Transportation 22:56-7 Je '43

Letter from England. O. C. Power. il Bus Transportation 21:543 D '42

Maximum service, minimum mileage; handling of soldier leave business by Pacific electric railway. L. S. Flint. il Bus Transportation 22:39-41 Jl '43

ODT cuts bus service in seven cities. Bus Transportation 21:571-4 D '42

ODT 39; its effect on the passenger and the operator. il Bus Transportation 22:44-9 Ag '43

Together for victory; employees of Public service (N.J.) coordinated transport signed pledge of cooperation in war effort. il Bus Transportation 21:522-3 N '42

Turnstiles and tokens; modern methods of fare collection; Army directs bus facilities for civilian employees at Picatinny arsenal, New Jersey. W. L. Cook. il plan Bus Transportation 22:38-40 O '43

Wartime transportation in Quad cities; Tri-City system. il Mass Transportation 39:240-3 Jl '43

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MOTOR bus trailers

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MOTOR bus trailers—Continued

Bus transports men to work; Montgomery gravel co. and Roquemore gravel and slag co. B. Nordberg. *il* Rock Prod 45:59 D '42
Two more trailers. *il* Bus Transportation 22:27 F '43

MOTOR buses

Future of the intercity bus industry. A. F. Macdonald. *Bus Transportation* 22:36-7 JI '43

New transit equipment production restricted; statistics. E. J. Murphy. *Mass Transportation* 39:104-7 Mr '43

Public laughs at old vehicles, but still appreciates riding. *il* Mass Transportation 39:239-1 JI '43

Something cooking in bus development; prediction of improved design, materials, gasoline, etc. F. R. Fageol. *Mass Transportation* 39:146-7 Ap '43

Victory coaches for war workers. R. G. Silbar. *il* Bus Transportation 22:38-40 Ag '43
War babies vs standards. *il* Mass Transportation 39:11-12 Ja '43

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Axles

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Daimler C.W.G.5 bus. *il* *diags* Automobile Eng 33:3-9 Ja '43

Design thirty years ago; the L.G.O. "B" type omnibus. *diags* Automobile Eng 33:421 O '43

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New decorations for San Antonio buses by famous designer, Raymond Loewy. *il* Mass Transportation 39:222 Je '43

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Equipment

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Varnish in air control mechanism; what to do about it. J. W. Lane. *il* Bus Transportation 22:23-30 Je '43

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Gearing

Gear riveting; how to do it properly. *il* *diags* Bus Transportation 22:48-9 JI '43

Handstraps*See* Car straps**Heating and ventilation**

Butane-fired gas furnace heats huge intracamp bus. *il* Am Gas J 159:74 O '43

Laws and regulations

ODT freezes buses in present service; to head off a threatened black market in school buses. *Bus Transportation* 22:63-4 Ap '43

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How to order bus bodies under L-101. *Bus Transportation* 22:44-5 Ap '43

How to order integral buses. *Bus Transportation* 22:42-3 Ap '43

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Springs and suspension

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Torsional rod springs and how they are designed. H. E. Siml. *il* *diag* Product Eng 13:710-12 D '42

Steps

Watch your step; United electric railways, Providence, R.I. develops substitute for manufactured step treads. *il* Bus Transportation 22:76-7 S '43

MOTOR buses, Diesel-electric

Maintenance of electric drive and dynamic braking equipment. G. M. Woods. *il* Mass Transportation 38:360-2 D '42

MOTOR camps. See Tourist camps, hostels, etc.

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MOTOR cars (railroad)

Buda builds multi-gage motor cars. *il* Ry Age 115:3 JI '43

Fairmont multi-gage motor cars for army. *il* Ry Age 115:26 JI '43

Fuel figures without conversion; unit fuel and power consumption of locomotives and rail motor cars; tables. Ry Age 115:522-7 O '43
Missouri Pacific motorailer. *il* Ry Mech Eng 117:21-4 Ja '43

Railcar oil engines in the Argentine; methods of repair and overhaul. C. R. Parker. *il* *diags* Engineer 174:425-8, 437-9, 464-6, 483-5 N 20-D 11 '42

Susquehanna adds two-car train to streamliner service. *il* Ry Age 115:411-13 S 11 '43

See also

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Diesel-electric

Algerian railways; Diesel-electric units now available to allied forces. *il* Electrician 129:578 N 27 '42

MOTOR cycle engines

Motor cycle engines; possibilities in post-war developments. E. Turner. *diags* Automobile Eng 33:209-10 My '43

MOTOR cycles

Motor-bikes from push-bikes for meter readers and servicemen. R. C. Fullerton. *il* *diags* Edison Elec Inst Bul 11:251-2 Ag '43

MOTOR fuels. See Airplane engines—Fuel; Automobile engines—Fuel; Automotive fuel; Gasoline; Motor bus engines—Fuel; Motor truck engines—Fuel

MOTOR products corporation

Securities disturbing investors. J. S. Williams. *Mag of Wall St* 72:690 O 2 '43

Thumbnail stock appraisal. *Mag of Wall St* 72:311 Je 26 '43

MOTOR ships

Cargo liner Argentina equipped with variable-pitch propellers, diag Marine Eng 48:207-8 J1 '43

Developments in Diesel ships; symposium, il Power 86:970 Mid-D '42

Diesel ships circle globe; Maritime commission, C-1B standardized cargo vessels; marine engineers wanted, S. A. Tucker, il Power 87:2-4 Ja '43

Egg-beaters ply Ol' Man River, speeding products of oil to war; Diesel-propeller towboats on the Mississippi, F. Way, jr, il Nat Pet N 35:26-7, 30, 32-3, 35+- My 26 '43

Fast or less fast ships, J. R. Gebbie, Engineering 155:196 Mr 5 '43; Same, Engineer 175:196-7 Mr 5 '43; Same, Marine Eng 48:139-200 J1 '43

Henry S. Sturgis, Diesel towboat, il Marine Eng 48:200-2 O '43

Selandia, pioneer motorship sunk, il Marine Eng 48:150 Mr '43

Sohioan, triple-screw towboat, il Marine Eng 48:151-3+- Mr '43

Some types of propelling machinery available to shipowners, C. C. Pounder, diag Engineer 175:48-9+-, 77-80 Ja 15-22 '43

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MOTOR truck distributors. See Jobbers, Wagon

MOTOR truck drivers

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Deferments: how to get them; ODT issues instructions and forms for oil truckers on draft replacement schedule plan; text and examples, Nat Pet N 35:26, 28-30 My 12 '43

Teamsters balk, il Business Week p98 O 23 '43

Truckwomen o.k.'d; New York automotive session is told they do work well, Nat

Pet N 35:15 My 12 '43

Wages and hours of union motortruck drivers and helpers, June 1, 1942, Monthly Labor R 56:128-35 Ja '43

Women are efficient on milk route trucks; abstract, R. Gayley, S A E J 51:sup18-19 Je '43

Women established as truck drivers; abstract, M. A. Savin, S A E J 51:sup18 Je '43

Women serving navy yard as bus and truck drivers, il Mass Transportation 39:251 J1 '43

Training

Set for tomorrow; army camps show how to train the army's, and tomorrow's, drivers, W. Cutter, il Safety Eng 86:64, 66 O '43

Trucker manpower; training program prepared by ODT for oil truckers, Nat Pet N 35:38-41 My 26 '43

MOTOR truck engines

Karrier K.6, il diag Automobile Eng 33:387-91 O '43

Reduced maintenance costs follow rapid improvements in truck Diesels, T. Collins, il Diesel Power 21:494-6 Je '43

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Engine bearings; replacement; technique for installation or fitting; report of SAE subcommittee to Vehicle maintenance section, Division of motor transport, il diag S A E J 51:sup25-40 Ja '43

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Bellay producer, il diag Automobile Eng Extra no32:439-43 N 5 '42

British coal utilisation research association producer, diag Automobile Eng Extra no32:437-8 N 5 '42

British gazogenes producer; development from Gohin-Poulenc type, diag Automobile Eng Extra no32:444-6 N 5 '42

Charco gas engines in operation, Pulp & Pa of Can 44:745-6 S '43

Cowan producer, il diag Automobile Eng Extra no32:449-53 N 5 '42

Engine adjustments for wartime fuels, E. C. Paige, Am Gas Assn Proc 1942:421-4

Government producer unit, Mark VI, il diag Automobile Eng Extra no32:462-3 N 5 '42

Influence of engine adjustment and octane number on performance of commercial engines, D. F. Brenz, H. H. Maxfield and A. B. Culbertson, S A E J 51:198-209 Je '43

Same cond. Oil & Gas J 41:55, 57, 59-60+- F 18 '43; Excerpts, Nat Pet N 35:18 Ja 20 '43; Abstract, Automotive & Aviation Ind 88:108+- Ap 1 '43

Operating experiences with gas producers, K. W. Willams, il Inst Mech Eng J & Proc 147:Proc 205-13 O '42

Practical road transport operation with producer gas, J. E. Birchall, Engineer 174:392-4 N 13 '42

Pressure-charged producers, F. C. Sheffield, il diag Automobile Eng 33:31-6 Ja '43

Tests on transport producer-gas units, H. Heywood, il diag Inst Mech Eng J & Proc 149:Proc 34-47 bibliog(p46-7) Ap '43

Repair

Cold welding; report of subcommittee, maintenance methods coordinating committee, SAE transportation and maintenance activity, il diag S A E J 51:sup25-31 Ag '43

Specifications

American gasoline engines; tabulation, Automotive & Aviation Ind 88:112-21 Mr 15 '43

Superchargers

Pressure-charged producers, F. C. Sheffield, il diag Automobile Eng 33:31-6 Ja '43

MOTOR truck industry

Civilian trucks; WPB allocates materials, Business Week p52+- My 29 '43

More truck production needed; abstract, C. T. Euhf, Concrete 51:37 N '43

Only half a bite? WPB's truck authorizations, Business Week p26 S 18 '43

PIWC warns of truck shortage, Nat Pet N 35:28 S 8 '43

Post-war surpluses, S. H. Brams, Iron Age 152:78 S 16 '43

Trucks vex WPB; operators protest lack of new equipment, including parts and trailers, Business Week p26 Ap 10 '43

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Salesmen

White Motor sells for future with plant all out for war; training salesmen to sell service, E. Whitmore, il Am Business 13:7-9, 22, 24 F '43

Service

What happened when war wiped out \$17,000,000 of our annual volume; White Motors discover possibilities for volume and profit in service, H. D. Laidley, il Sales Management 52:18-21 J1 15 '43

White Motor sells for future with plant all out for war; training salesmen to sell service, E. Whitmore, il Am Business 13:7-9, 22, 24 F '43

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MOTOR truck parts

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Saving motor truck maintenance; loaded trucks hauled up incline at Cedar Bluff quarry by means of Barney car, E. Nordberg, il Rock Prod 45:50-1 N '42

Swing to trucks; manufacture of limited number of heavier vehicles, Business Week p32+- My 8 '43

Transport of cement in bulk, il Engineering 155:190 Mr 5 '43

Transportation units to fit the job; Andersen sand & gravel co, il Rock Prod 46:66, 68, 70+- S '43

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War demands force British to adapt trucks for bulk cement delivery. Eng N 131:40 JI 1 '43

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Bodies

Share the bodies; army spreads work on its truck mountings; wood bodies. Business Week p88 D 12 '42
Truck body of arc-welded design; Norwalk electric department. il Elec W 119:2000 Je 12 '43

Care

Care of idle trucks. Pulp & Pa of Can 44: 846 O '43

Chassis

Foden six-wheeler. il diags Automobile Eng 33:259-66 JI '43
Karrier K.6. il diags Automobile Eng 33:387-96 O '43

Cleaning

Removing lime scale from truck bodies. R. W. Mitchell. Rock Prod 46:88 O '43

Design

Lessons learned from World War II about designing for accessibility. E. S. Van Deusen. il S A E J 51:sup36-8, 53-5 JI '43

Equipment*See also*

Brakes, Motor truck
Tires, Motor truck

Laws and regulations

Army won't let ODT limit trucks. Ry Age 113:886-9 N 28 '42
Barriers remain; some states still retain stiff truck regulations. Business Week p34+ Ag 21 '43

Colorado truck crisis delayed on collection of fees on overloads. Nat Pet N 35:26 Ag 4 '43

Motor carrier laws, the difficulties and a remedy. E. W. Sawyer. Weekly Underw 149:585-7 S 18 '43

ODT establishes system for monthly check on truck operations. Nat Pet N 35:24 JI 14 '43
ODT orders clarified; A.G.A. committee reviews regulations for operators. Am Gas Assn Mo 25:53-4 F '43

Problems of Illinois truck act enforcement. Nat Underw 47:23 O 21 '43

Report of committee on operation of public utility motor vehicles. Am Gas Assn Proc 1942:417-21

Rules on car line's purchase of trucker; I.C.C. holds that Union Tank must be applicant when subsidiary is buyer. Ry Age 115:322-3 Ag 21 '43

States warned against revival of truck barriers. J. B. Eastman. Nat Pet N 35:26+ Ag 4 '43

Those state trade barriers, fact or fiction? E. F. Downs and S. J. Konenkamp. Pub Util 31:465-72, 539-47 Ap 15-29 '43

Truck speed: to be 35 or 45? PAW suggests that 45 m.p.h. is most efficient. Nat Pet N 35:24 F 17 '43

Trucking tape cut; liberalized legislation in states. Nat Pet N 35:32 JI 7 '43

Vivian's proclamation settles trucking dispute in Colorado; overweight and overlength trucks will continue to keep war materials and civilian supplies moving. Nat Pet N 35: 24 S 22 '43

War loads roll; ODT eases rules to hurry shipments. il Business Week p90 Mr 13 '43

War transportation; O.D.T. order 21 and its effect on public utility fleets. L. Edsall. Am Gas Assn Mo 24:401-3 N '42; Same. Am Gas Assn Proc 1942:269-71

Maintenance and repair

Contractors and other truck owners must immediately practice preventive maintenance. il Roads & Bridges 81:18-22, 62+ Ja '43

Highway to victory; wartime truck maintenance. W. J. Cumming. il S A E J 50:sup 15-17+ D '42

How to keep trucks rolling told by ODT. Food Ind 15:75-6 My '43

Keeping up Cincinnati's fleet; modern departmentalized shop. H. J. McKeever. il Roads & Sts 86:67-8 JI '43

Life of trucks and transport vehicles. E. Ingham. Mech Handling 30:442-5 O '43

Motor freight falters; replacement parts and labor more scarce. il Steel 112:65-7 Je 14 '43

Motor vehicle operations at the present time; Cincinnati gas and electric co. F. Heinlein. il Gas Age 91:41-3+ My 20 '43; Same. Am Gas J 158:34-5+ Je '43

National Biscuit makes trucks last longer. il Food Ind 15:79-80 Ap '43

New maintenance plan helps truck operators; Ethyl Corporation system. il Food Ind 15: 74-5 Ag '43

Preventive maintenance and inspection procedure. S A E J 51:sup25-9 S '43

Preventive maintenance, what to do and when; S.A.E. group submits program. Nat Pet N 35:24, 26, 28, 30 Ap 14 '43

Reclaiming worn parts; London, Midland & Scottish railway workshops; maintenance in connection with road transport. il Automobile Eng 33:165-8 Ap '43

Reclamation work on motor vehicles. London Midland and Scottish railway. il diag Engineering 155:245-6, 250 Mr 26 '43; Engineer 175:255-6 Mr 26 '43

SAE vehicle maintenance committees report techniques to army and ODT. S A E J 51: sup29-31+ O '43

Truck operation under present conditions. W. J. Cumming. Am Gas Assn Proc 1942:424-9

Utility fleet operators analyze wartime transportation problems. Am Gas Assn Mo 25: 275-6 Je '43

Wartime automotive maintenance. R. S. Williams. Am Pet Inst Proc 23(1):72-5 '42

Wartime replacement parts; with troubleshooting chart. R. Cass. il S A E J 51:269-76+ Ag '43

See also

Motor truck industry
—Service

Management

How big fleet owners meet truck problems; Borden, Sheffield and Heinz. il Food Ind 15: 64-5 S '43

Truck property sheets control repairs; numbering scheme indicates type, tonnage and age. il Food Ind 14:60-1 D '42

Wartime problems of petroleum carriers. J. F. Winchester. Am Pet Inst Proc 23(1):76-80 '42

Watch the details in truck operations. il Food Ind 15:72-3 JI '43

See also

Delivery of goods

Materials

NE (national emergency) alloy steels for truck parts. J. Sorenson. il Steel 112:72-3 Mr 29 '43

Substitute materials; have we gone the limit? J. G. Wood and R. F. Sanders. il S A E J 51:78-83+ Mr '43; Abstract. Automotive & Aviation Ind 88:36-7 F 1 '43

Records

Getting the most miles out of truck tires. il Food Ind 15:61-2 F '43

Springs and suspension

Care of leaf springs of transport vehicles. E. Ingham. Mech Handling 30:347-9 Ag '43

Steering gear

Steering with redwood wheels. il diag Mod Plastics 20:77-81+ Ja '43

Taxation

Disposition of state motor-carrier tax receipts, 1941; tabulated by states. Pub Roads 23:139 O '42

MOTOR trucks—Taxation—Continued

Gary tax fought; city seeks to pad street repair fund. *Business Week* p20+ S 11 '43

Transmission

Experience with NE (national emergency) alloy steels; gears for heavy duty automotive transmissions. S. L. Widrig. *Il Steel* 112:60-2 Ja 11 '43

Fuller eight-speed gear box. *diag Automobile Eng* 33:115-16 Mr '43

MOTOR trucks, Armored*See also*

Motor trucks, Military

MOTOR trucks, Industrial

Conserving rubber on industrial truck tires. *Iron Age* 151:51 My 20 '43

Fork trucks in the paper industry. R. E. Madden. *Il Paper Ind* 25:606-7 S '43

Handles foundry material by new method; truck and pallet system in foundry of Pontiac motor division. *Il Foundry* 70:113 D '42

How industrial truck design meets current needs. *Il diags Machine Design* 15:74-6+ Ja '43

Industrial truck care pays good dividends. A. E. Dorod. *Il Steel* 112:100+ Mr 1: 113+ Mr 8 '43; *Abstract. Nat Safety N* 46:18-19+ D '42

Industrial trucks need careful inspection. A. E. Dorod. *Foundry* 71:148 Ag '43

Material handling system pays for itself in 10 months; Oliver farm equipment co. *Il Iron Age* 152:64-5 Jl 15 '43

Materials handling in pulp and paper plants. E. Southworth. *Il Paper Tr J* 117:31-4 Jl 1 '43

Mechanical load handling equipment. E. W. Weaver. *Il diags Welding J* 22:619-23 Ag '43

New equipment; material handling. *Il Iron Age* 150:62-4 D 17 '42

Straddle trucks in shipyards. *Il Marine Eng* 47:135 N '42

Swing arm improves effectiveness of fork truck. G. H. Schwab. *Il Steel* 112:123-4 Je 14 '43

Trucks for improved storing methods. *Il Iron Age* 151:70 My 20 '43

Willamette Hyster pneumatic-tired lift truck. *Il Rock Prod* 46:76 Mr '43

See also

Electric trucks, Industrial

Wheels

Resin impregnated wood for truck wheels. *Mech Handling* 29:221 N '42

MOTOR trucks, Military

Army's amphibious truck; illustrations. *Automotive & Aviation Ind* 89:21 Jl 1 '43

Army's duck; truck that performs on water as well as land. *Il Business Week* p32 Je 19 '43

G.P. war truck, an interesting design built for the U.S. government. *Il diags Automobile Eng* 33:131-6 Ap '43

Military demand for heavy trucks still increasing. *Automotive & Aviation Ind* 89: 56+ O 15 '43

New amphibious truck is the army's most versatile vehicle. *Il Eng N* 131:313 Ag 26 '43

Seagoing hack. *Il Bus Transportation* 22:41 Ag '43

Share the bodies; army spreads work on its truck mountings; wood bodies. *Business Week* p98 D 12 '42

Transportation

Twenty-two thousand pound package; completely boxed mobile unit truck; machine shop on wheels for army. *Il Mod Packaging* 17:50-2 S '43

Two pack types used to export army truck shipments. E. L. Warner, jr. *Il Automotive & Aviation Ind* 88:17-19+ Je 1 '43

MOTOR trucks and bridges

Indiana highway bridges designed to carry two lanes of 40-ton trucks. *Il Eng N* 131: 193 Jl 29 '43

MOTOR trucks and roads

Amount and characteristics of trucking on rural roads. J. T. Lynch and T. B. Dimmick. *Il tables map Pub Roads* 23:213-46 Jl '43; *Abstract. Concrete* 51:2+ S '43

See also

Road traffic

MOTOR trucks in first aid work

Protection of civilians from vesicant agents.

T. F. Bradley and others. *Il diags Chem & Eng N* 21:373-5 Mr 25 '43

Use of mobile units in the first aid and medical treatment of gas casualties. J. T. Casaday. *Il diags J Chem Educ* 20:276-8 Je '43

MOTOR trucks in freight service

A.A.R. gives data on transport cost; memorandum as to capacities of freight cars and trucks. *Ry Age* 114:796 Ap 17 '43

Balk Lake haul; drivers stymie scheme to ferry trailers and save tires and gasoline. *Business Week* p 18 Je 12 '43

Britain tightens up on long-haul trucks. *Ry Age* 114:254 Ja 23 '43

1500-mile milk route shows transport trends. *Il Am Business* 13:30-1 Je '43

Motor freight falters; replacement parts and labor more scarce. *Il Steel* 112:65-7 Je 14 '43

Part of trucking in the war effort. H. D. Horton. *Il Manuf Rec* 112:32-3+ Mr '43

Perfect shipping by truck. T. V. Rodgers. *Il Manuf Rec* 112:36-7+ Ap '43

Road haulage scheme. *Economist* 144:338 Mr 13 '43

Serving forwarders is common carriage; I.C.C. accords that status to truckers handling such traffic exclusively. *Ry Age* 115: 352-3 Ag 28 '43

Those state trade barriers, fact or fiction? E. F. Downs and S. J. Koenekamp. *Pub Util* 31:465-72, 539-47 Ap 15-29 '43

Truck-trailers furnish maximum transportation. *Roads & Bridges* 81:126 Mr '43

Trucking steady. *Business Week* p86+ Mr 13 '43

Well-engineered trucking operation; Salley grocery co. Bernice, La. 300-mile haul. *Il map Food Ind* 15:72-3 N '43

West Coast war industries throb to pulse of Diesel truck and tanker. M. D. Pugh. *Il maps Diesel Power* 21:406-7 My '43

See also

Highway transportation
Railroads—Motor vehicle auxiliaries

Tank trucks

Transportation tax

Finance

Outlook for motor transport, water carriers and pipe lines. P. T. Sheldrick. *Il Mag of Wall St* 71:410-11+ Ja 23 '43

Pooling

Faster freight; city and suburban truck pool in Chicago opens terminal. *Business Week* p44 S 25 '43

Trucks pooled; Chicago carriers, lumping men and equipment for duration. *Business Week* p20+ Ag 7 '43

Rates

Rates under fire. *Business Week* p32+ My 29 '43

Truck-railroad rate conspiracy is alleged. *Ry Age* 114:1186-9 Je 12 '43

MOTOR trucks in lumbering

Pulpwood transportation in the South. A. Ernest. *Il Paper Ind* 25:499-501 Ag '43

MOTOR trucks in mining

Strip haulage tuned to new conditions at Streamline. *Il Coal Age* 48:89-91 My '43

MOTOR trucks in repair service

Carrier telephone saves distribution labor and travel; communicating with company's trucks serving rural areas; Potomac Edison company. Hagerstown, Md. W. C. Feaster. *Il diags map Elec W* 118:1602-5 N 14 '42

Farm appliance repair clinic; Wattmobile, traveling demonstration project of Cornell university extension service. M. H. Lloyd. *Il Elec W* 120:1048 S 18 '43

Service truck for civilian defence and regular public works maintenance. C. M. Pratt. *Il Pub Works* 74:28-9+ Jl '43

MOTOR trucks in repair service—Continued

Traveling showcase; service cars with glass sides to show parts and equipment; Wehby plumbing and heating co. *il* Dom Eng 162: 75 O '43

Truck adapted to use of air-operated tools; Rockland light & power company. E. M. Bush. *il* Elec W 120:808-10 S 4 '43

Twenty-two thousand pound package; completely boxed mobile unit truck; machine shop on wheels for army. *il* Mod Packaging 17:50-2 S '43

MOTOR trucks in war and army service

Anglo-American back-loading plan. Engineer 175:292 Ap 9 '43

Part of trucking in the war effort. H. D. Horton. *il* Manuf Rec 112:32-3+ Mr '43

Transport miracle in Persia. J. F. Chapman. *il* Business Week p48, 50+ O 30 '43

See also

Motor trucks, Military

MOTOR trucks on rails

Auto-Railer. *il* Engineer 174:498 D 18 '42

MOTOR vehicles

Civilian wartime motor vehicle problems. D. A. Fales. S A E J 50:sup36-7 D '42

Post-war transportation highway vehicles will be improved in many ways. R. F. Black. Sci Am 168:267 Je '43

Quiet, please! suppression of electrical interference in motored vehicles. W. Fernald. *il* diags Radio N 30:41-2+ JI '43

See also

Automobiles	Motor trucks
Diesel engines, Automotive	Railroads—Motor vehicle auxiliaries
Highway transportation	Road traffic
Motor buses	Tractors
Motor cars (railroad)	Trailers
	Trolley buses

Inspection

Production line inspection! Nat Pet N 35: 38-9 Ja 13 '43

Law

See also

Automobile laws and regulations	Motor trucks—Laws and regulations
Motor bus lines—Laws and regulations	Traffic regulations

Statistics

Distribution of the country's automobiles by states (end-of-the-year figures 1942-1941) tabulation. Automotive & Aviation Ind 88: 91 Mr 15 '43

4,000,000 less cars registered; report for first six months of 1943. Nat Pet N 35:25 S 29 '43

Motor vehicle registrations decrease 5½ per cent in 1942. Roads & Sts 86:52 Ag '43

Motor vehicles registered in Canada during the year 1942. Roads & Bridges 81:112+ JI '43

Number of tractors, trucks and passenger cars on farms, 1940; tabulation. Nat Pet N 35:35 My 12 '43

32 million motor vehicles registered in 1942. M. Ainsworth. Automotive & Aviation Ind 87:17-18+ N 15 '42

Total U.S. motor vehicle registrations by years, 1895-1942; tabulation. Automotive & Aviation Ind 88:91 Mr 15 '43

U.S. cars, trucks dip 5.5% in '42 but top '40 total; registrations by states. Nat Pet N 35: 29 Ag 11 '43

Taxation

Disposition of receipts from state imposts on highway users, 1941; tabulated by states. Pub Roads 23:140 O '42

Disposition of state motor-vehicle receipts, 1941; tabulated by states. Pub Roads 23:138 O '42

Federal and state automotive taxes; tables and charts. Automotive & Aviation Ind 88: 92-3 Mr 15 '43

Federal automotive taxes, fiscal year ending June 30, 1943, as compared with 1941-42. Automotive & Aviation Ind 89:48 S 1 '43

MOTOR vehicles, Effect of cold on. See Motor vehicles, Military—Testing**MOTOR vehicles, Military**

Canadian-built military vehicles; illustrations. Automotive & Aviation Ind 89:19 Ag 1 '43

Civilian automotive advisors keep army's wheels turning. E. L. Warner, jr. *il* Automotive & Aviation Ind 89:17-18+ Ag 15 '43

Constructional details of British Karrier-Humber. M. W. Bourdon. *il* Automotive & Aviation Ind 89:19+ Ag 15 '43

Daimler armored car. M. W. Bourdon. *il* diags Automotive & Aviation Ind 88:40-1+ Je 1 '43

Designing war equipment for accessibility. E. S. VanDeusen. *il* Machine Design 15:119-22 S '43

Development of vehicular equipment: Signal corps development agencies. J. D. O'Connell. *il* Radio 23:106-9+ N '42

Dust, a potent enemy of military vehicles. L. F. Overholt. Automotive & Aviation Ind 89:30 JI 15 '43

Dust problems in military vehicle operation. L. F. Overholt. *il* S A E J 51:381-4 O '43

Field modifications of ordnance vehicles. H. O. Mathews. S A E J 51:sup22-4, 39 Ag '43

Fuels and lubricants for U.S. army motorized ground forces. G. A. Round. *il* Nat Pet N 35 pt 2:R231-4, R236-7, R300 JI 7 '43; Excerpts. S A E J 51:sup33-6 Ag '43

Important technical topics discussed at SAE meetings in Cleveland and Detroit. J. Geschelein. Automotive & Aviation Ind 89: 40-3 JI 1 '43

Interchangeability of parts for army vehicles is next objective. E. L. Warner, jr. *il* Automotive & Aviation Ind 88:17+ F 15 '43

Lessons learned from World war II about designing for accessibility. E. S. Van Deusen. *il* S A E J 51:sup36-8, 53-5 JI '43

Ordnance field service; connecting link between producer and soldier. J. S. Hatcher. *il* S A E J 51:sup24-5, 51-2 JI '43

SAE group reports on methods and redesign to conquer dust. *il* S A E J 51:sup17 S '43

Training military technicians; Fort Knox training soldiers to maintain, repair, and fight with tanks and armored vehicles. S. G. Henry. *il* S A E J 51:sup17-22 Mr '43

W.E.B. Detroit! agenda of SAE's War engineering board run gamut of technology. V. H. Scales. *il* S A E J 50:sup 18-21, 25-9 D '42

War vehicles include more than tanks and transport trucks. Sci Am 168:153 Ap '43

Maintenance and repair

Blindfolded; how Uncle Sam's soldier-mechanics are taught to repair motor vehicles. F. A. Quackenbush. *il* Bus Transportation 22:30-4 My '43

Cooperation of vehicle manufacturers in army maintenance program. J. Kirk. S A E J 51: sup23-7 F '43; Abstract. Automotive & Aviation Ind 88:72+ F 1 '43; Discussion. S A E J 51:sup65-6 F '43

Lubricants for ordnance combat and motor-transport vehicles. R. E. Jeffrey, jr. S A E J 51:345-9, 368 O '43

SAE vehicle maintenance committees report techniques to army and ODT. S A E J 51: sup29-31+ O '43

Solder-welder a key figure in war effort. M. M. Forman. *il* Welding J 22:349-50 My '43

Manufacture

All half-trac assembly operations at White plant on mass production basis. J. Geschelein. *il* Automotive & Aviation Ind 89:36-8+ S 15 '43

Armour-plate welding; jig construction. *il* Elec R (Lond) 132:805-8 Je 18 '43

Welded armoured fighting vehicles. *il* Engineer 175:484-6 Je 18 '43

Testing

Cold conquest; research keeps military motors running. Sci Am 168:198 My '43

Military motor vehicles undergo SAE tests in nature's cold room; operating under winter or arctic conditions. S A E J 51:sup23-4 Mr '43

Torture-testing war equipment. G. M. Barnes. S A E J 51:sup21-3, 50 JI '43

Unique test building for army equipment; hot and cold rooms for testing mechanized equipment under conditions ranging from those of the tropics to the Arctic. *il* Eng N 131:400-2 S 9 '43

MOTOR vehicles, Military—Continued**Transportation**

Boxing for export; Yellow truck & coach co.
il Steel 112:108+ Mr 15 '43

MOTORS. See Airplane engines; Automobile engines; Diesel engines; Gas and oil engines; Motor bus engines; Motor truck engines

MOTORS, Electric. See Electric motors

MOULDING. See Molding

MOUNTAIN roads

Oregon highways open rugged country. il map Eng N 129:718-19 N 19 '42
Wolf Creek and Wilson River highways, Oregon. il Pub Works 73:13-14 N '42

MOUNTAINS

Quantitative study of isobaric equilibrium and gravity anomalies in the Hawaiian Islands. R. Gunn. Franklin Inst J 236:373-90 O '43

Seismological evidence for roots of mountains. B. Gutenberg. diags Geol Soc Bul 54:473-98, pl 1-3 bibliog(p495-8) Ap '43

Structure of central part of Sawtooth range, Montana. C. Deiss. diags maps Geol Soc Bul 54:1123-67, pl 1-9 bibliog(p 1165-7) Ag '43

See also

Avalanches Geology
Folds (geology) Volcanoes

MOUTH**Diseases**

Looking into industry's mouths; dental department will conserve manpower. E. H. Thomas. Nat Safety N 48:34, 36+ Ag '43

MOVABLE bridges. See Bridges, Movable

MOVING

Average family spends \$472 when moving into new home. Ptr Ink 203:29 Je 18 '43
Gypsies snagged; no vacant places to move into. Business Week p38+ My 1 '43

See also

Machinery—Moving
Radio broadcasting
stations—Moving

MOVING of pipe lines. See Pipe lines—Moving

MOVING of structures

Blast furnaces dismantled and moved. il Eng N 129:766-70 D 3 '42

Moves blast furnace to Mexico; Mississippi Valley iron company. R. R. Hetz. il Steel 112:98-100+ Je 28 '43

Moving a coal bridge. D. C. Tennant. il Civil Eng 12:677-8 D '42

MOVING picture actors**Salaries**

Stars can collect contract pay. Business Week p92 N 14 '42

MOVING picture cameras

Compact production unit for specialized film. O. W. Hungerford. Soc Motion Picture Eng J 41:332-4 O '43

High-speed camera used in studying motions in industry. Sci Am 169:222 N '43

Research camera. il Business Week p69 S 4 '43

MOVING picture films

Copper and sulfide in developers; fogging action; polarographic analysis. R. M. Evans, W. T. Hanson and P. K. Glascoe. bibliog Soc Motion Picture Eng J 40:88-96 F '43

Effect of developer agitation on density uniformity and rate of development. C. E. Ives and E. W. Jensen. bibliog il diags Soc Motion Picture Eng J 40:107-36 F '43

Effect of high-intensity arcs upon 35-mm film projection. E. K. Carver, R. H. Talbot and H. A. Loomis. il diags Soc Motion Picture Eng J 41:69-87 Jl '43

Factors affecting the accumulation of iodide in used photographic developers. R. M. Evans, W. T. Hanson, Jr. and P. K. Glascoe. Soc Motion Picture Eng J 40:97-106 F '43

Film distortions and their effect upon projection quality. E. K. Carver, R. H. Talbot and H. A. Loomis. il Soc Motion Picture Eng J 41:88-93 Jl '43

Film distribution; United States army films. J. D. Finn. Soc Motion Picture Eng J 41:251-4 S '43

Film utilization in the military training of our army. B. T. Wolff. Soc Motion Picture Eng J 41:255-62 S '43

Light-scattering and the graininess of photographic emulsions. A. Goetz and F. W. Brown. bibliog diag Soc Motion Picture Eng J 39:375-83 D '42

Motion picture industry and the War production board; problems in connection with film. C. M. Travis. Soc Motion Picture Eng J 40:273-6 My '43

Practical side of direct 16-mm laboratory work. L. Thompson. il Soc Motion Picture Eng J 41:101-18 Jl '43

Projection life of film. D. R. White and C. deMoos. Soc Motion Picture Eng J 41:297-9 O '43

Removal of hypo and silver salts from photographic materials as affected by the composition of the processing solutions. J. I. Crabtree, G. T. Eaton and L. E. Muehler. Soc Motion Picture Eng J 41:9-68 bibliog(p63-8) Jl '43

Report and recommendations of the Society of motion picture engineers on proposed mechanical methods for film conservation. Soc Motion Picture Eng J 40:74-82 F '43

16-mm commercial film laboratory. W. H. Offenhauser, Jr. bibliog Soc Motion Picture Eng J 41:157-82 Ag '43

Some characteristics of ammonium thio-sulfate fixing baths. D. E. Alnutt. bibliog Soc Motion Picture Eng J 41:300-28 O '43

Washing photographic films and prints in sea water. G. T. Eaton and J. I. Crabtree. bibliog Soc Motion Picture Eng J 40:380-91 Je '43

See also
Slide films

Standards

Some suggested standards for direct 16-mm production. L. Thompson. diags Soc Motion Picture Eng J 41:340-8; Discussion. 348-50 O '43

MOVING picture industry

Discussion of industry problems. E. Kuykendall. Soc Motion Picture Eng J 41:336-9 O '43

Motion pictures' post-war role. N. D. Golden. il For Comm W 13:5-7+ O 16 '43

Employees

Motion picture country house; San Fernando valley, Calif.; views, plans, and construction outline. Arch Forum 77:37-48 N '42

Finance

Investment audit of Paramount pictures. G. L. Merton. Mag of Wall St 72:190-1+ My 29 '43

Regulation

Motion picture anti-trust suit goes to trial. Barron's 23:7 Ja 11 '43

Movie tribunals; future of arbitration system rests with Thurman Arnold's successor. Business Week p38+ F 20 '43

Securities

Great era of expansion for selected movie companies; position of leading stocks. C. F. Morgan. Mag of Wall St 72:576-8+ S 4 '43

Movies face another prosperous year; position of leading stocks. Mag of Wall St 71:484+ F 6 '43

Which motion picture stocks? G. H. Baker. il Mag of Wall St 71:693-5+ Ap 3 '43

Argentina

Argentina expands its motion-picture business. E. F. Sylvester. il For Comm W 11:11+ My 8 '43

Brazil

Brazil's film production and imports, 1941 and 1942. il For Comm W 12:32 S 18 '43

Canada

Distribution of Canadian theaters. For Comm W 12:32 S 18 '43

Canary Islands

Theater showings in Canary Islands. For Comm W 11:27 Je 5 '43

MOVING picture industry—Continued

China

China's movie industry fighting, too. E. F. Sylvester. *il* For Comm W 12:16-18+ S 4 '43

Underground motion picture industry in China. T. Y. Lo. *il* Soc Motion Picture Eng J 39:341-7 D '42

Dominican Republic

U.S. supplies most of films to Dominican Republic. For Comm W 10:29 Mr 13 '43

Ecuador

Ecuador's 1942 film imports. For Comm W 11:32 'Ap 17 '43

Gold Coast, Africa

Government sponsoring building of theaters in Gold Coast. For Comm W 11:33-4 My 22 '43

Great Britain

Associated talking pictures, limited, annual general meeting, London. Economist 144:26-7 Ja 2 '43

Cinema empire. Economist 145:5-6 Jl 3 '43

No British film monopoly. Economist 145: 83 Jl 17 '43

See also Gaumont-British picture corporation

Guatemala

Films imported into Guatemala. For Comm W 11:31-2 Ap 10 '43

Mexico

On the way out? U.S. movies with Spanish subtitles yielding to domestic product. Business Week p44 O 16 '43

U.S. pictures favored in Mexico. For Comm W 10:29-30 Mr 6 '43

Mozambique

Few motion-picture theaters in Mozambique. For Comm W 11:33 My 29 '43

Near East

Movies in the Middle East. For Comm W 11:5+ My 29 '43

Peru

U.S. films popular in Peru. For Comm W 11:34 My 29 '43

Russia

Documentary, scientific, and military films of the Soviet Union. G. L. Irsky. Soc Motion Picture Eng J 39:353-7 D '42

Society Islands

Society islands import all films from U.S. For Comm W 11:34 Je 12 '43

South Africa

Theater attendance in South Africa. For Comm W 11:34 Je 12 '43

Sweden

Sweden's motion-picture industry. For Comm W 12:28-9 Ag 7 '43

U. S. movies hold lead in Sweden. *il* For Comm W 9:7+ N 14 '42

Turkey

Turkey's motion-picture industry. For Comm W 11:27-8 Je 5 '43

Turkey's movie screens. *il* For Comm W 10: 11 Ja 30 '43

United States

Big movie year. Business Week p37-8+ F 13 '43

Great era of expansion for selected movie companies; position of leading stocks. C. F. Morgan. Mag of Wall St 72:576-8+ S 4 '43

Motion picture industry and the War production board; problems in connection with film. C. M. Travis. Soc Motion Picture Eng J 40:273-6 My '43

Uruguay

United States films lead in Uruguay. For Comm W 10:28 Mr 27 '43

MOVING picture laboratories

Practical side of direct 16-mm laboratory work. L. Thompson. *il* Soc Motion Picture Eng J 41:101-18 Jl '43

16-mm commercial film laboratory. W. H. Offenhausser, Jr. bibliog Soc Motion Picture Eng J 41:157-82 Ag '43

MOVING picture machines

Light sources

Carbon arc projection of 16-mm film. W. C. Kalb. diags Soc Motion Picture Eng J 41:94-100 Jl '43

Effect of high-intensity arcs upon 35-mm film projection. E. K. Carver, R. H. Talbot and H. A. Loomis. *il* diags Soc Motion Picture Eng J 41:69-87 Jl '43

MOVING picture photography

Field camera problems; making army training pictures. R. L. Ramsey. *il* Soc Motion Picture Eng J 41:239-45 S '43

Practical side of direct 16-mm laboratory work. L. Thompson. *il* Soc Motion Picture Eng J 41:101-18 Jl '43

Reversing 16mm film. L. Reber. *il* Am Phot 37:26-9 D '43

Special photographic effects. F. M. Sersen. Soc Motion Picture Eng J 40:374-9 Je '43

Training film production problems. R. P. Fresnel. Soc Motion Picture Eng J 41:215-21 S '43

See also

Moving picture films

Bibliography

Current literature of interest to the motion picture engineer. Soc Motion Picture Eng J 40:64 Ja '43 [cont monthly]

Industrial applications

Flight-testing equipment for large aircraft. W. T. Dickinson. *il* diags S A E J 51:139-47 Ap '43

See also

Moving pictures in industry

Lighting

Illumination in motion picture production. R. G. Linderman, C. W. Handley and A. Rodgers. bibliog *il* Soc Motion Picture Eng J 40:333-67 Je '43

Scientific applications

Survey of problems in taking X-ray movies. Electronics 16:166+ My '43

MOVING picture photography, Amateur

Home processing movie film. G. Burnwood. *il* Am Phot 37:36-7 Ag '43

MOVING picture projection

Carbon arc projection of 16-mm film. W. C. Kalb. diags Soc Motion Picture Eng J 41: 94-100 Jl '43

Effect of high-intensity arcs upon 35-mm film projection. E. K. Carver, R. H. Talbot and H. A. Loomis. *il* diags Soc Motion Picture Eng J 41:69-87 Jl '43

Film distortions and their effect upon projection quality. E. K. Carver, R. H. Talbot and H. A. Loomis. *il* Soc Motion Picture Eng J 41:88-93 Jl '43

Maintaining projection standards in war time. L. B. Isaac. Soc Motion Picture Eng J 40:176-80 Mr '43

Motion picture projection booths; from data supplied by the Society of motion picture engineers; time-saver standards. diags Arch Rec 93:83-4 F '43

Paramount transparency process projection equipment. F. Edouart. Soc Motion Picture Eng J 40:368-73 Je '43

Projection life of film. D. R. White and C. deMoos. Soc Motion Picture Eng J 41:297-9 O '43

Projection of motion pictures. H. A. Starke. Soc Motion Picture Eng J 41:183-9 Ag '43

Theater engineering committee report; subcommittee on projection practice. Soc Motion Picture Eng J 40:72-4 F '43

MOVING picture projectors

General Electric television on film projector. E. D. Cook. *il* diags Soc Motion Picture Eng J 41:273-91 O '43

MOVING picture projectors—Continued

One-ray system for designing spherical condensers for moving picture equipment. L. T. Sachtleben, diags Soc Motion Picture Eng J 39:358-74 D '42

Resistance of glass to thermal shock; breakage of reflectors, condensers, and occasionally projection lenses from heat. C. D. Oughton, il Soc Motion Picture Eng J 41:351-7 O '43

Sound and projection equipment in War department theaters. G. L. Bub, il Soc Motion Picture Eng J 40:35-51 Ja '43

MOVING picture sound recording

M-G-M recorder and reproducer equipment units. W. C. Miller, il diags Soc Motion Picture Eng J 40:301-26 My '43

One-ray system for designing spherical condensers for moving picture equipment. L. T. Sachtleben, diags Soc Motion Picture Eng J 39:358-74 D '42

Practical side of direct 16-mm laboratory work. L. Thompson, il Soc Motion Picture Eng J 41:101-18 Jl '43

Recent developments in sound-tracks. E. M. Honan and C. R. Keith, bibliog diags Soc Motion Picture Eng J 41:121-35 Ag '43

Report of the committee on sound. Soc Motion Picture Eng J 41:292-6 O '43

Sound recording at the Signal corps photographic center. G. C. Misener, bibliog il diags Soc Motion Picture Eng J 41:226-38 S '43

Sound recording depends upon electronics. C. R. Keith, il Electronics 16:114-15 Mr '43

Sound recording of training films; Signal corps training film field unit no. 1. M. E. Gillette, il Radio N 28:98-100+ N '42

Variable-density film-recording system used at MGM studios. J. K. Hilliard, bibliog il diags Soc Motion Picture Eng J 40:143-75 Mr '43

MOVING picture studios**Equipment**

M-G-M recorder and reproducer equipment units. W. C. Miller, il diags Soc Motion Picture Eng J 40:301-26 My '43

MOVING picture theaters

Construction of War department theaters. C. Welpley, il Soc Motion Picture Eng J 40:4-23 Ja '43

New buildings for 194X: moving picture theater, il diags plans Arch Forum 72:113-15 My '43

Report of the theater engineering committee. Soc Motion Picture Eng J 40:71-87 F '43

Air conditioning

Heating, ventilating and air-conditioning War department theaters. M. D. Kiczales, il diag Soc Motion Picture Eng J 40:24-34 Ja '43

Equipment

Sound and projection equipment in War department theaters. G. L. Bub, il Soc Motion Picture Eng J 40:35-51 Ja '43

Heating and ventilation

Heating, ventilating and air-conditioning War department theaters. M. D. Kiczales, il diag Soc Motion Picture Eng J 40:24-34 Ja '43

Management

Administration of U.S. Army motion picture service. R. B. Murray, Soc Motion Picture Eng J 40:52-63 Ja '43

Safety measures

Theater engineering committee report; subcommittee on civilian defense in theaters. Soc Motion Picture Eng J 40:82-6 F '43

MOVING pictures

Compact production unit for specialized film. O. W. Hungerford, Soc Motion Picture Eng J 41:332-5 O '43

Copy lessons from the movies. J. Truscott, Adv & Sell 36:38+ Ag '43

See also

Moving pictures,
Talking
Slide films

Bibliography

Current literature of interest to the motion picture engineer. Published in monthly numbers of Journal of the Society of motion picture engineers

Documentary films

Documentary, scientific, and military films of the Soviet Union. G. L. Irsky, Soc Motion Picture Eng J 39:353-7 D '42

Editing

Multiple-film scene selector. H. W. Leasim, il Soc Motion Picture Eng J 41:246-50 S '43

Government use

Motion pictures and the war effort. J. G. Bradley, Soc Motion Picture Eng J 40:281-90 My '43

Produced by the United States army Signal corps, Motion picture production branch. H. T. Darracott, Soc Motion Picture Eng J 41:206-9 S '43

See also Moving pictures in military education

Military use

Operations of Army air force combat camera units in the theaters of war. R. Jester, Soc Motion Picture Eng J 41:136-40 Ag '43

Service films division of the Signal corps photographic center. E. Cohen, Soc Motion Picture Eng J 41:222-4 S '43

See also

Moving pictures in United States—Army military education —Motion picture
Moving pictures in service
naval education

Propaganda use

Motion pictures and the war effort. J. G. Bradley, Soc Motion Picture Eng J 40:281-90 My '43

Psychological aspects

Some psychological factors in training films. M. E. Gillette, Soc Motion Picture Eng J 41:210-14 S '43

Rating

Ratings of motion pictures. Consumers' Research Bul 11:28, 31 O '42 [cont monthly]

Setting and scenery

Hollywood goes subaqueous; tunnel scenes in moving picture. No time for love, il Comp Air M 48:7093 Jl '43

Paramount transparency process projection equipment. F. Edouart, Soc Motion Picture Eng J 40:368-73 Je '43

Standards

Maintaining projection standards in war time. L. B. Isaac, Soc Motion Picture Eng J 40:176-80 Mr '43

Motion picture standards in wartime. D. E. Hyndman, Soc Motion Picture Eng J 41:3-8 Jl '43

Some suggested standards for direct 16-mm production. L. Thompson, diags Soc Motion Picture Eng J 41:340-8; Discussion. 348-50 O '43

MOVING pictures, Colored

Illumination in motion picture production. R. G. Linderman, C. W. Handley and A. Rodgers, bibliog il Soc Motion Picture Eng J 40:333-67 Je '43

See also

Television—Color

MOVING pictures, Stereoscopic

Stereo-movies without camera accessories. G. L. Walls, Opt Soc Am J 32:693-4 N '42

MOVING pictures, Talking

Frequency modulation distortion in loud speakers. G. L. Beers and H. Belar, bibliog Soc Motion Picture Eng J 40:207-21 Ap '43

See also

Moving picture sound
recording

MOVING pictures in advertising

Jersey Zinc shows new film. Ptr Ink 201:22 D 25 '42

MOVING pictures in advertising—Continued

- Links war effort to state economy; motion picture in color, entitled Oklahoma gears for war. *il Elec W* 120:508 Ag 7 '43
- Movie—2nd public contact; publicizing the motion picture. The ominous arms case. *Dom Eng* 162:63 Ag '43
- New Jersey Zinc educational film has long range objectives. *W. Bassett. il Ind Marketing* 28:22-3+ O '43
- Okonite's motion picture practice; new color sound-film. *R. S. Hayes. il map Ind Marketing* 28:64+ Ag '43
- Plan to promote plumbing industry motion picture. *W. J. Lang. Dom Eng* 161:46+ F '43
- So much, for so little; plumbing industry motion picture. *Dom Eng* 161:67+ J '43
- Spot radio, movies, are basis of Carter Carburetor local dealer help program. *il Sales Management* 52:50+ Ap 15 '43
- With sound truck and 16mm film in Uruguay [Colombia]: an experience report; Sterling products international sales promotion. *J. D. Cathcart. il Sales Management* 52:68+ Ap 1 '43

See also
Slide films

MOVING pictures in education

- Application and distribution of 16-mm educational motion pictures. *F. W. Bright. Soc Motion Picture Eng J* 41:190-4 Ag '43
- CAA to produce color film series for use in trainee instruction. *Civil Aero J* 4:102 Ag 15 '43
- Documentary, scientific, and military films of the Soviet Union. *G. L. Irsky. Soc Motion Picture Eng J* 39:353-7 D '42
- Limitations of visual education. *H. J. Gilkey. J Eng Educ* 33:426-31 Ja '43
- Preflight films as an aid in aeronautics instruction; list. *Civil Aero J* 4:129 O 15 '43

See also
Moving pictures—
Documentary films
Moving pictures in
military education
Moving pictures in
naval education
Moving pictures in
safety education

Bibliography

- Bibliography of motion pictures for vocational and technical schools. *G. G. Weaver, comp.* 329p \$2.50 Hamilton co, 225 Lafayette st, New York

Catalogs

- Educational film catalog; supplement, July 1943. 24p Wilson, H.W. '43

MOVING pictures in employee training. See

Moving pictures in industry

MOVING pictures in industry

- Animated motion picture explains telephoto process. *L. S. Metcalfe. il Electronics* 16: 118+ My '43
- Cyclone combustion; moving picture aid to pilots in obtaining maximum performance from Wright aircraft engines. *il diags Aeronautical Eng R* 2:11-13, 15 Ja '43
- Foreman and the manpower problem; Pratt & Whitney division of United aircraft; motion picture used to supplement program of education in foremanship. *il Aero Digest* 43:154, 157+ S '43
- Movies and slidefilms speed wartime training of technicians. *L. S. Metcalfe. il Electronics* 16:98-9 Jl '43
- Plane films work; airplane production group pools training movies. *Business Week* p109 D 12 '42
- 16-mm commercial film laboratory. *W. H. Offenhauser, Jr. bibliog Soc Motion Picture Eng J* 41:157-82 Ag '43
- Sixteen-millimeter motion pictures and the war effort; General motors corp. *M. S. David. Soc Motion Picture Eng J* 40:296-300 My '43
- Steel's war story given stockholders by movie. *Ind Marketing* 28:54+ Je '43
- MOVING pictures in military education**
Motion picture in the service of the Army air forces. *L. Carr. Soc Motion Picture Eng J* 41:329-31 O '43
- Motion pictures in aircraft production. *N. Mathews. Soc Motion Picture Eng J* 40: 291-5 My '43

- Sound recording of training films; Signal corps training film field unit no. 1. *M. E. Gillette. il Radio N* 28:98-100+ N '42
- Training film activities of the U.S. army; symposium. bibliog *il diags Soc Motion Picture Eng J* 41:205-62 S '43
- Wright Field training film production laboratory. *H. C. Brecha. Soc Motion Picture Eng J* 39:348-52 D '42

MOVING pictures in naval education

- Developments in the use of motion pictures by the navy. *W. Exton, Jr. Soc Motion Picture Eng J* 41:141-5 Ag '43
- Navy's utilization of film for training purposes. *W. Exton, Jr. Soc Motion Picture Eng J* 39:333-40 D '42
- Problems in the production of U.S. navy training films. *O. Goldner. Soc Motion Picture Eng J* 41:146-56 Ag '43

MOVING pictures in safety education

- Accident prevention film helps conserve manpower. *L. S. Metcalfe. il Glass Ind* 24:297+ Jl '43
- First aid motion picture. *Safety Eng* 85:57 Ap '43
- Safety films. *L. S. Metcalfe. il Paper Ind* 24:1039+ Ja '43

MOWING machines

- Floating mower removes grass from irrigation ditches. *J. P. Burdett. il Eng N* 129:796 D 3 '42

MOZAMBIQUE

See also
Moving picture industry—Mozambique

MUCOPOLYSACCHARIDES. See

Polysaccharides

MUD

- Effect of river mud deposits on determination of B.O.D. of supernatant liquor. *W. A. Moore and C. C. Ruchhoff. Ind & Eng Chem Anal ed* 14:933-4 D 15 '42

MUD flow

- Alpine mudflows in Grand Teton national park, Wyoming. *F. M. Fryxell and L. Horberg. il map Geol Soc Bul* 54:457-72, pl 1-2 Mr '43

MUD fluids. See

Petroleum—Mud fluids

MUD jacking

- California steps up mudjacking; methods and costs. *T. H. Dennis. il Roads & Sts* 86:40-2 Ag '43
- Mudjacking in North Carolina. *B. W. Davis. il diags Roads & Sts* 86:43-4 Ag '43
- Preventing and correcting the pumping action of concrete pavement slabs. *diag Roads & Bridges* 81:29-30+ Ag '43

MUD-Mountain dam

- Permeability of Mud Mountain Dam core material. *A. S. Cary, B. H. Walter and H. T. Harstad. diag Am Soc C E Proc* 68: 1089-98 S '42; Discussion. 68:1843-6; 69: 615-18 D '42, Ap '43

MULES

- Money in mules. *Business Week* p30+ My 15 '43

MULLET

- Brine-salted mullet has unrealized possibilities. *C. F. Lee and L. Young. il Food Ind* 15:70-1+ N '43

MULLITE

- Equilibrium relationships on the liquidus surface in part of the $MnO-Al_2O_3-SiO_2$ system. *R. B. Snow. bibliog il diags Am Cer Soc J* 26:11-20 Ja 1 '43

MULLITE-corundum

- Substitution of topaz, domestic kyanite, and synthetic mullite-corundum for India kyanite. *T. N. McVay and H. Wilson. bibliog map Am Cer Soc J* 26:252-66 Ag 1 '43 (to be cont)

MULTIPLE fluid lines. See

Petroleum pipe lines

MULTIPLE shift operation. See

Hours of labor—Shift schedules

MULTIPLE stars. See

Stars, Multiple

MULTIVIBRATORS

- Microlineometer; crystal-controlled frequency standard and square-wave generator. *E. F. Travis. il diags Gen Elec R* 46:345-8 Je '43

MULTIVIBRATORS—Continued

Synchronized calibrator for sweep and gain in cathode-ray recording. S. A. Talbot. *bibliog diags R Sci Instr* 14:184-6 Je '43

MUMPS

Occurrence of whooping cough, chickenpox, mumps, measles and German measles in 200,000 surveyed families in 28 large cities, with list of references. S. D. Collins, R. E. Wheeler and R. D. Shannon. 40p U.S. National inst. of health, Washington; pa 10c Supt. of doc. '43

MUNICIPAL accounting

See also

Sewerage departments—Accounting

MUNICIPAL airports. *See* Airports, Municipal

MUNICIPAL auditoriums. *See* Auditoriums, Municipal

MUNICIPAL bonds

Changing function of a bank's municipal portfolio. J. A. White. *Comm & Fin Chr* 158:297-7 Jl 22 '43

Dispose of municipal bonds at good profit.

Nat Underw (Life ed) 46:1-4 N 13 '42

Down the drain; New York syndicate gets the nod on Detroit sewer bonds. *Business Week* p98-9 N 28 '42

Jersey City bonds show 10% price rise. *Comm & Fin Chr* 157:2375 Je 24 '43

Municipal bond sales continue. *Nat Underw* (Life ed) 46:1 D 18 '42

Municipal bond sales in December and for the year 1942. *Comm & Fin Chr* 157:300-1 Ja 25 '43

Municipal news; eight factors that explain present high prices. *Comm & Fin Chr* 158:21 Jl 1 '43

Ohio municipal comment. J. A. White. *Comm & Fin Chr* 157:1574-5 Ap 29 '43

Pennsylvania municipal. W. A. Schmidt. *Comm & Fin Chr* 158:906-7 S 2 '43

Pennsylvania municipal bonds; Philadelphia's voluntary refunding. *Comm & Fin Chr* 157:1200-1 Ap 1 '43

Review and forecast on municipal bonds. L. S. Leenthal. *Comm & Fin Chr* 157:392 Ja 28 '43

Tax exemption seems safe for 1943. J. D. Kelly. *Barron's* 23:28 Ja 11 '43

Tax shelter; state and municipal bonds hit all-time highs. *Business Week* p107-8 Jl 24 '43

Taxation of municipals. T. Graham. *Comm & Fin Chr* 156:1799 N 19 '42

Why municipal bonds are high. *Bankers Mo* 60:356+ Ag '43

Why Pennsylvania municipals enjoy high investment status. A. D. Sapp. *Comm & Fin Chr* 158:1786-7+ N 4 '43

MUNICIPAL buildings

Borough hall that beat the budget, Borough of Queens, City of New York. *il plans Arch Rec* 94:45-7 Ag '43

Multi-use municipal building; auditorium and City hall, Topeka, Kansas. *il plans Arch Rec* 94:51-3 Ag '43

New buildings for 194X; city hall. *il plans Arch Forum* 72:88-90 My '43

Vanport City has almost every kind of public and service building. *il plans Arch Forum* 79:60-2 Ag '43

See also

Health centers
Public buildings

Cost

Municipal building costs, New York city. *Eng N* 130:632 Ap 22 '43

MUNICIPAL contracts. *See* Contracts, Municipal

MUNICIPAL employees

Court action would stop employment of outside engineers by New York city; Civil service technical guild brings action. *Eng N* 131:124 Jl 15 '43

Credit counseling for employees of New York city. L. E. Yavner and H. Seidman. *Personnel J* 22:91-6 S '43

Detroit takes steps to solve manpower shortage. *Eng N* 129:739 N 26 '42

Municipal employment and pay rolls in large cities, 1929-38. M. F. Thurston. *Monthly Labor R* 56:1097-1108 Je '43

Union agreements with municipalities. J. Silver. *Monthly Labor R* 56:1165-70 Je '43

Wartime personnel problems; discussion at meeting of Canadian Institute on sewage and sanitation. *Water & Sewage* 80:67-8, 70+ N '42

See also

Firemen
Waterworks—Employees

MUNICIPAL engineering

Complicated municipal drainage problem in Sudbury, Ont.; flooding remedial measures; with cost data. N. B. MacRostie. *il Water & Sewage* 81:20-2+ Mr '43

Manhattan prepares for postwar construction. D. G. Edwards. *il map Civil Eng* 13:353-5 Ag '43

Municipal affairs and sanitation activities, 1942. E. J. Cleary. *il diag Eng N* 130:190-3 F 11 '43

Municipal services at lower cost through cooperative arrangements. *Eng N* 130:424 Mr 25 '43

Pioneers in American city engineering. R. E. McFee. *maps Comp Air M* 48:7198-9 N '43

Relocation of utility substructures; Chicago subway. J. B. Jackson. *il diag W Soc E J* 48:2-13 Mr '43

Taxation and municipal engineering. E. M. Beardslee. *Civil Eng* 13:351-2 Ag '43

Wartime priorities bring substitute materials in municipal services. *Eng N* 130:762 My 20 '43

See also

City planning
Grade crossing elimination
Municipal improvement
Pavements
Public works
Refuse collection
Refuse disposal
Sanitary engineering
Sewage disposal
Sewerage
Snow removal
Street lighting
Streets
Water purification
Water supply
Water supply engineering

MUNICIPAL engineers

Court action would stop employment of outside engineers by New York city; Civil service technical guild brings action. *Eng N* 131:124 Jl 15 '43

MUNICIPAL finance

Canadian municipal credit. *Economist* 145:87-8 Jl 17 '43

Financial programming; abstract. L. B. Cartwright. *Eng N* 129:731 N 19 '42

Local units empowered to establish post-war reserves. *Comm & Fin Chr* 157:2175 Je 10 '43

Municipal employment and pay rolls in large cities, 1929-38. M. F. Thurston. *Monthly Labor R* 56:1097-1108 Je '43

Municipal finance in the post-war world. C. H. Chatters. *Comm & Fin Chr* 158:792-4 Ag 26 '43

Municipal news; reduction of bonded debt during 1942. R. Mohaupt. *Comm & Fin Chr* 157:2175 Je 10 '43

Municipalities of 19 states permitted to establish post-war reserve. *Comm & Fin Chr* 158:420 Jl 29 '43

Ohio municipal comment; reduction in actual bonded debt, 1933-1943. J. A. White. *Comm & Fin Chr* 158:1298 S 30 '43

Short rations for local government. T. H. Reed. *Trusts & Estates* 75:550 D '42

Urges local debt reduction to alleviate realty burden. F. C. Moore. *Comm & Fin Chr* 158:1614 O 21 '43

See also

Electric plants, Municipal
Finance
Municipal taxation
also Finance (local subdivisions) e.g. Philadelphia—Philadelphia

MUNICIPAL government

Community plans peacetime jobs; lessons from Peoria's experience. *il Dun's R* 51:11-15+ Ag '43

How to prepare an organization chart; New York city issues manual outlining standard forms. J. Furia. *Ind Stand* 14:251-3 S '43

See also

Cities and towns
Municipal employees
Municipal finance
Municipal liability
Municipal taxation

MUNICIPAL improvement

Manhattan prepares for postwar construction. D. G. Edwards. *il map Civil Eng* 13:353-5 Ag '43

Municipal improvements for large war housing projects in Norfolk and Portsmouth, Virginia. H. W. Alexander *il diags plan Pub Works* 74:20-64 F '43

Philadelphia blueprints a program for civic post-war preparation. *Sales Management* 52:43-50 Ja 1 '43

Public works programs; Hammond, Ind. ready for postwar construction. C. A. Mason. *il Pub Works* 74:11-12+ Ag '43

Self-starting public works; Eugene, Oregon, plan. *Business Week* p107 S 11 '43

See also

City planning Special assessments
Housing Streets
Pavements

MUNICIPAL liability

City, as wharfinger, must exercise diligence to provide safe berth. *East Underw* 44:24 J1 30 '43

City liable for sinking in river by segment from demolished bridge. *East Underw* 44:34 F 26 '43

Claims against cities. A. X. Alpern. *East Underw* 44:34 Mr 26 '43

MUNICIPAL officials**Directories**

Directory of municipal road officials in Canadian cities, towns, counties and townships. *Roads & Bridges* 81:114-54 J1 '43

MUNICIPAL ownership

Employee has rights in utility property sales; transfer from private to government ownership. A. M. Cooper. *Pub Util* 32:135-41 Ag 5 '43

See also

Electric plants, Mu- Telephone—Municipal pal ownership
Electric utilities—
Municipal ownership

MUNICIPAL taxation

Gary tax fought; truckers fear epidemic of city levies. *Business Week* p20+ S 11 '43

Philadelphia's income tax brings heavy revenue. *Comm & Fin Chr* 157:360 Ja 23 '43

Postwar chest; Detroit's mayor wants city income tax for specified public works. *Business Week* p45 Je 19 '43

Wage tax cut; Philadelphia's 1 1/2% income levy cut to 1%. *Business Week* p20 D 26 '42

See also Taxation (local subdivisions) e.g. Taxation—New York (city)

MUNITION factories

American economy in 1942: plant and equipment. C. A. R. Wardwell and R. B. Bangs. *Survey of Cur Business* 23:7-8 Ja '43

Big TNT plant to close; lack of need of product due to changing requirements of armed forces. *Comm & Fin Chr* 157:2376 Je 24 '43

Building for war production. G. H. Miehs. *Illum Eng* 37:758-67; Discussion. L. C. Twitchell. 767-8 D '42

E is for excellence; winners of Army-Navy Award. *il Iron Age* 151:66-71+ Ja 7 '43

Eight army ordnance plants closed down. *Oil Paint & Drug Rep* 144:3 J1 26 '43

Five that were small; independent enterprises that have risen capably to the demands of war. *il Fortune* 27:129-39 Je '43

Good organization and local materials help speed construction. *il Eng N* 131:298-9 Ag 19 '43

Government-financed war facilities program more than 80% completed at mid-year. D. M. Nelson. *Comm & Fin Chr* 158:717 Ag 19 '43

How tool-design service organizations speed war production. H. E. Linsley. *Mach* 49:173 Ja '43

Industrial buildings to speed invasion; factory for fighter planes, assembly line production of aerial ammunition, plant for precision instruments. *il diags plan Arch Rec* 94:53-64 J1 '43

Industry ponders postwar disposition of facilities. *Steel* 113:141-3 O 11 '43

Laid out for non-stop war production; Fedders fabrication of machine-gun metallic belt links. *il Factory Management* 101:93-6 J1 '43

Mechanical handling systems; one-story factory to house ammunition division of Mechanical handling systems, inc. *il Factory Management* 101:367 Ap '43

Plant financing in a war economy; problem of new facility financing. M. D. Ketchum. *J Business* 16:28-50 Ja '43

Production plants to which the Army-Navy Award has been granted, July 1942 to February 28, 1943. *Automotive & Aviation Ind* 88:156+ Mr 15 '43

Small arms ammunition plants. *il diags plans Arch Forum* 77:61-92 D '42

War plant; views, plans, and construction outline. *Arch Forum* 77:52-8 N '42

War plant with glass walls; required maximum daylighting and 85 percent of the building at constant temperature and humidity. *il Eng N* 130:288-91 F 25 '43

War plants in peacetime. J. Jones. *Oil Paint & Drug Rep* 144:3+ J1 26 '43

Windowless ordnance plant. *il Arch Rec* 93: 68-9 Ap '43

See also

Automobile industry Shells (projectiles)
and trade—Munitions—Loading plants—
factories manufacture Tanks, Military—
Factories—Conversion Manufacture

Accidents

Canadian explosives plants establish new records. *Nat Safety N* 47:70 Je '43

Accounting

Practice in accounting for continuing expenditures arising from wartime production, compiled by the Research and technical service department, National association of cost accountants. *N A C A Bul* 24:925-49 sec 3 Ap 1 '43

Air conditioning

Air conditioning achievements in ordnance production. *il diags plans Heat & Ven* 40: 35-90 Je; 36-50 J1 '43

Importance of air conditioning to war effort; conversion to war work of existing refrigerating machines. *Heating-Piping* 15:400 Ag '43

Preparing the specifications for small arms munitions plants. J. J. Woolfenden. *il Heating-Piping* 15:282-6 Je '43

Electric equipment

Distribution design under difficult conditions; shell-loading plant. H. A. Lynette. *diags Elec W* 118:1770-2 N 28 '42

Employees

Absenteeism in Canadian war industries. *Monthly Labor R* 56:683-6 Ap '43

Aircraft council representative bolts down absentee problem; abstract. R. B. Smith. *Iron Age* 151:76+ Ap 1 '43

Automotive council seeks manpower shortage solution. S. Freeman. *Am Mach* 87: 124e-124f Mr 18 '43

Automotive production methods cut manpower requirements. E. L. Warner. *il Automotive & Aviation Ind* 87:17+ D 1 '42

Conversion of non-essential skills fills essential jobs. *il Am Mach* 87:87-9 J1 22 '43

Co-operation with U.S. agencies, schools may help solve problem; experience of American bantam car co. E. R. Prosser. *Steel* 111:40 D 23 '42

Dexterity tests for women workers. *il Am Mach* 86:1280-1 N 12 '42

Employees' suggestions are one of America's secret weapons. *Steel* 111:32-3, 36-7 N 30 '42

Food is ammunition; nutrition of workers. *il Nat Safety N* 47:7+ Mr '43

Government foots bill for inspections to keep war worker cars rolling. W. W. Weston. *il Nat Pet N* 35:18, 20 N 3 '43

Joint production committees in United States war plants. W. E. Chalmers. *Int Labour R* 47:22-45 Ja '43

Labor turnover presents major problem. *Steel* 113:75-6 Ag 23 '43

MUNITION factories—Employees—Continued
 Lag in war production may bring on some form of strict labor draft. E. Blair. *Barron's* 23:4 Ag 9 '43
 Listed skills, then trained; Hudson motor car company. R. J. Megargle. *il Factory Management* 101:116-20 O '43
 Make every minute count is slogan of Serval war workers. *Am Gas J* 158:38 Ja '43
 Manpower; employment in war factories expanded by more than 10,000,000 in year. *il Steel* 112:218-21+ Ja 4 '43
 Manpower requirements for 1943-44. Monthly Labor R 57:204-11 Ag '43
 Off to war work they go; gaps in war transportation bridged by share-the-ride and bus service. F. M. Whealan. *il Bus Transportation* 22:34-7 Mr '43
 Plus training system; Canton ordnance plant of Westinghouse electric and manufacturing co. F. D. Newbury and P. N. Love. *il Am Mach* 86:1349-51 N 26 '42
 Short shift pays; white-collar men adept on many part-time war jobs. *Business Week* p88-9 Ap 10 '43
 Split shift plan wins only limited acceptance in war plants. *il Steel* 112:56-9 Mr 15 '43
 Tested ways to reduce absenteeism. *il Factory Management* 101:82-90 Mr '43
 Three-way solution offered by WMC to reduce absenteeism. *Iron Age* 151:82 F 4 '43
 To smoke or not to smoke; how companies handle this problem. H. L. Nunn and others. *Am Business* 12:13, 24-5 N '42
 War work of the U.S. Women's bureau. Monthly Labor R 55:1170-84 D '42
 Woman workers in two wars. M. Robinson. Monthly Labor R 57:650-71 O '43
 Women in industry. C. H. Vivian. *il Comp Air M* 48:6950-5 F '43
 Women war workers; replies to questionnaire sent to New England industries. L. E. MacBrayne. *il Safety Eng* 84:28-30 N '42
 Women workers in some expanding wartime industries. New Jersey, 1942. D. K. Newman and C. Manning. U S Women's Bur Bul 197:1-44; pa 10c Supt. of doc. '43

See also

Women ordnance workers

Equipment

Automatic screw machines in war production; operations as performed on Acme-Gridley multiple-spindle automatics. *il diags Mach* 49:143-53 Mr '43
 Borg-Warner rehabilitates abandoned factory; now makes Oerlikon gun mounts for navy. J. Geschellin. *il Automotive & Aviation Ind* 88:10-13+ Mr 1 '43
 Boys anti-tank guns; made in Canada. *il diags Am Mach* 87:112-20 Mr 18 '43
 Cartridge tools made for long life; Lake City ordnance plant. *il Am Mach* 87:109-12 Jl 8 '43
 Conveyors aid cartridge manufacture; Lake City ordnance plant. *il diags Am Mach* 87:113-20 Je 10 '43
 Forging and heat-treating shot for anti-tank projectiles; Axelson mfg. co. R. M. Pease. *il diags Mach* 49:148-55 My '43
 Gadsden feeds the 105's. W. N. Howley. *il diags Am Mach* 87:101-16 Mr 4 '43
 Improved hydraulic presses for wartime requirements. G. H. Maude. *il diags A S M E Trans* 65:287-96 My '43
 Ordnance production number. L. H. Campbell and others. *il diags Mach* 49:133-96 Ap '43
 Two-piece case design, heavy bombs; Ralston steel co. *il Steel* 113:106-8+ N 8 '43
 War plants need much truckage. M. H. Dick. *il Ry Age* 114:40-2 Ja 2 '43

Heating and ventilation

Dickson gun plant. R. W. Tuer. plans Heat & Ven 40:56-61 Je '43
 Hudson naval ordnance plant; heated by central steam system with unit heaters. G. S. Whittaker and R. V. Mehaffey. *il Heat & Ven* 40:42-50 Jl '43
 Pontiac gun plant. G. S. Whittaker. *il Heat & Ven* 40:36-41 Jl '43
 Small arms munitions; design considerations for the heating and ventilating of plants. J. J. Woolfenden. *il diags Heat & Ven* 40:38-51 Je '43

Twin Cities ordnance plant. J. J. Woolfenden. *il Heat & Ven* 40:52-5 Je '43

Location

Regional distortions resulting from the war. E. C. Bratt and D. S. Wilson. maps Survey of Cur Business 23:9-15+ O '43

Management

Absent workers help Hitler; keeping workers consistently on the job. *il Am Mach* 87:90-2 My 27 '43
 Conserving the use of critical materials; developing scrap-saving methods as a means of supporting the war effort; General motors corporation. E. D. Kunkle. *il Mech Eng* 65:267-73 Ap '43
 Production and cost control in a small war plant. W. Flatow. *Iron Age* 152:70-2+ S 16 '43
 Subcontractors attain precision by well engineered program of setup and inspection; Stewart-Warner corp. H. E. Fleming. *il Steel* 112:104-5, 128+ Je 7 '43
 War time problems, planning, and performance; discussion. A. G. Ramsey and others. *Inst Mech Eng J & Proc* 148:Proc 57-65 D '42
 Wartime production; special requirements of control systems. *Automobile Eng* 33:414 O '43

Power

Meeting power demand during war. L. Elliott. *Mech Eng* 64:572-6 D '42
 Metering interchange and supply facilities; service to war production plant. H. M. Johnson. *diag Elec W* 119:1609-11 My 15 '43
 White House moves for cheaper war power supply. *Pub Util* 30:736-9 N 19 '42

Safety measures

Arms and the men; Army service forces, International security division. A. M. Krech. *Nat Safety N* 43:10-11+ Ag '43
 Army goes for safety; conservation of manpower in war industries. J. F. Jones. *il Safety Eng* 85:14, 16, 18 Je; 86:26-30 Jl '43
 Just before dawn; accident prevention on the third shift. C. E. Muir. *il Nat Safety N* 46:12-13+ D '42
 Pass the ammunition; safety program, Lowell ordnance plant. J. J. Harley. *Safety Eng* 85:36-8 Je '43
 Safety in army ordnance establishments. C. Field. *Mech Eng* 65:353-9 My '43; *Refrig Eng* 46:96-101+ Ag '43

Waste

Industrial waste disposal. F. W. Mohlman. *il diags Chem & Met Eng* 50:127-31 F '43
 Surveys of liquid wastes from munitions manufacturing. R. S. Smith and W. W. Walker. *Pub Health Rep* 58:1365-79, 1393-1412 S 10-17 '43
 Treatment of a defense plant waste. R. Eliassen and C. N. Sawyer. *il diag Water Works & Sewerage* 89:532-4 D '42

MUNITION workers. See Munition factories—Employees

MUNITIONS

Army supply program. L. D. Clay. *Fortune* 27:96-7+ F '43
 Army supply schedules are behind. B. B. Somervell; C. E. Wilson. *Comm & Fin Chr* 158:508 Ag 12 '43
 Easier to plan in 1943, due to more centralized control. B. K. Price. *il Steel* 112:210-15, 431-2 Ja 4 '43
 Hammers of war; drop forges; the bottleneck. *il Fortune* 27:98-103+ Mr '43
 Industry intensifies direct war matériel production. *il Steel* 112:222-5, 403-30 Ja 4 '43
 Metal food for Mars; status of our strategic metal supply. *il Steel* 112:102-4 Ap 19 '43
 Must not disclose production rates. *Comm & Fin Chr* 156:2168 D 17 '42
 Production moves in step with strategy changes. *il Steel* 112:60-3 Je 28 '43
 Sees need for 30% rise in arms output to meet 1943 goals. D. M. Nelson. *Comm & Fin Chr* 158:610 Ag 12 '43
 Study malleable castings properties for military applications. O. W. Simmons, F. C. Rosenthal and C. H. Lorig. *diags Foundry* 71:102-4+ O; 122-5+ N; 106-8+ D '43

MUNITIONS—Continued

War production programs to meet changing demands; Joint production survey committee. Oil Paint & Drug Rep 144:3+ O 4 '43

Wartime material conservation and production problems. W. H. Harrison. Elec Eng 62:53-4 F '43

What alls war output? Business Week p15-16 Ag 14 '43

See also

Explosives	United States—Army
Ordnance	—Equipment and
Priorities and allocations, Industrial	supplies

Manufacture

Castings' importance in munitions work amply demonstrated. Steel 112:425-6 Ja 4 '43

Die castings in war production. D. L. Colwell. il Machine Design 15:93-100 S '43

Foundries make major contributions to war production. il Foundry 71:70-1+ Ja '43

Function of specifications in conservation and substitution. A. F. Macconochie. il Steel 112:88-9+ F 1; 80-3+ F 8 '43

Gages in war production. H. B. Hambleton and D. A. Lenk. il Mach 49:125-8 Ja '43

Hope extended to small plants not making war goods. Steel 112:432+ Ja 4 '43

How to get the most out of carbide tools. M. F. Judkins. Mach 50:163-4 S '43

Industrial gas completes conversion to war production. B. H. Gardner. il Gas Age 91:37-8 Ja 14 '43

Lighting and war production. W. G. Darley. bibliog il Illum Eng 38:307-25 Je '43

Management know-how improves military equipment; General motors corp. il Steel 111:93, 124-6 N 16 '42

Organic finishes in the war. C. A. Lankau. il Metal Finishing 41:397-8+ Je '43

Proudly fly the war emblems that testify to achievement! railroad supplies industry make munitions. R. A. Doster. il Ry Age 114:32-6+ Ja 2 '43

Quality control of munitions; abstracts. G. D. Edwards. Metals & Alloys 17:206+ Ja '43; Metal Prog 43:426+ Mr '43

Regional machinery for controlling production; assuring better utilisation of equipment and labour. O. Lyttelton. Engineering 154:354-5 O 30 '42

Save time and materials; international exchange planned; suggestions received by labor-management committees in war plants. Steel 112:34-5 Ja 25 '43

Society of automotive engineers. War engineering production meeting. Detroit. Jan. 11-15. S A E J 51:sup28-34, 57-76 F '43; Iron Age 151:54, 56 Ja 21 '43; Am Mach 87:428h-428j Ja 21 '42

Steel castings for Canadian arms; abstract. G. L. White. Metals & Alloys 17:1018+ My '43

Trebling the output of munitions. Economist 145:213 Ag 14 '43

U.S. tooling up; cuts back plant, machinery programs. Steel 112:69 My 17 '43

Wartime developments in powdered metal parts. il diags Product Eng 14:472-5 Ag '43

We fight too; Canadian paper mill machine shops make munitions. F. E. Palmer. il Pulp & Pa of Can 43:369-87 N '42

Why Midwest makes more munitions. map Chem & Met Eng 49:82-3 N '42

Women engineers; examples of skilled work in war industries. il Elec R (Lond) 133:317-18 S 3 '43

See also

Automobile industry and trade—Munitions manufacture	Industrial mobilization
Factories—Conversion	Ordnance—Manufacture
Fuses—Manufacture	Rifles—Manufacture
Guns (ordnance)—Manufacture	Shells (projectiles)—Manufacture

Surplus problem

Army disposal policy for surplus property set. Oil Paint & Drug Rep 144:3+ JI 12 '43

Deal Congress in. Business Week p18-19 S 25 '43

Disposal of surplus goods. Banking 36:16+ O '43

Disposition of government property. C. E. Mack and J. M. Knox. Harvard Business R 22 no 1:54-62 [O] '43

Federal surplus property offered. Oil Paint & Drug Rep 144:3+ JI 26 '43

For un-stocking. Business Week p16-17 JI 10 '43

Freezing of surplus war property proposed in bill now before Congress. Eng N 131:426 S 16 '43

Government surplus materials and equipment. L. A. Stack. Credit & Fin Management 45:29-30 N '43

How should postwar surpluses be marketed? Ind Marketing 28:17-18+ O '43

Impact of war on advertising; problem of property disposal. Adv & Sell 36:36 N '43

Industry speculating on possible wholesale dumping on market. Steel 113:72 N 8 '43

Jones opposes operation by U. S. Steel 113:68-9 O 4 '43

Liquidation of surplus equipment seen as slow and involved. Am Mach 87:120c O 28 '43

Steel for sale; billion dollars' worth of finished metal and equipment, offered by WPB. Business Week p20 N 6 '43

Surplus war material problem is considered by Congress. Eng N 131:443-4 S 23 '43

Surplus war tools, piled up at Detroit, forecast problems at war's end. S. H. Brams. Iron Age 152:72+ JI 22 '43

Surplus worry; stocks of goods and materials left after the war. Business Week p14, 57 Je 13 '43

Tool deal aired; charges that items from Wright engine contract moved as scrap. Business Week p27 O 2 '43

U.S. must plan post war disposal of military transports. L. W. Pogue. Aviation N 1:37 Ag 2 '43

War surpluses and civilian goods, excess army and navy supplies. R. W. Babson. Comm & Fin Chr 158:1613+ O 21 '43

Who'll give me a bid? disposal of surplus goods as a partial means of lessening tax burden. H. Corey. Pub Util 32:201-9 Ag 19 '43

Transportation

Paper sinews of war. E. E. MacMorland. Paper Tr J 117:50, 52 S 30 '43; Same. Paper Ind 25:772+ O '43; Abstract. Chem & Eng N 21:1746+ O 25 '43

MUNITIONS Industry

America's new industrial empire; construction of war plants; problems of peacetime conversion. Index 23 no 3:45-58 [S] '43

Basis for postwar planning; one-fifth of a nation, government-owned. Business Week p52-8 Je 19 '43

President signs measure ending tax amortization privilege for war plants. Comm & Fin Chr 158:1619 O 21 '43

War miracle, 1944 output. Business Week p15-17 O 2 '43

Wartime guides for your business; how Document N, Plan DPC, Plan EPF, or Regulation V can help you finance contracts. W. H. Hillyer. Barron's 22:7 N 30 '42

Wartime industrial expansion and post-war reserves. Nat City Bank p 102-5 S '43

What earnings dislocations? from contract cancellations; from war production shifts. W. Gates. il Mag of Wall St 72:227-9+ Je 12 '43

See also

Defense plant corporation

Service

Battlefield sleuths; armament makers' technical observers. Business Week p78+ Ap 24 '43

Statistics

Production of munitions, 1940-March 1943; chart. Survey of Cur Business 23:4 My '43

Canada

All out for war. Business Week p106 Je 19 '43

Chemicals at war; Canada has geared explosives output to wartime pace. il Business Week p37-8 Ja 30 '43

MUNITIONS industry—Canada—Continued

Some figures on war production. For Comm
W 12:14-15 J1 3 '43

Russia

Output of arms. Economist 145:273 Ag 28 '43

Southern states

Deep South looks up; it sees an opportunity,
with northern aid, to join the Union. *il*
Fortune 28:94-100+ J1 '43

South's industrial roll of honor; Army-Navy
E awards and Maritime M awards. Manuf
Rec 112:41-5 S; 98 O '43

MUNSELL color system. See Color

MURAL painting and decoration

Ceramic tile for exterior mural selected for
permanence and color brilliance; National
broadcasting company building, San Fran-
cisco. *il* Cer Ind 40:54+ Mr '43

MURDOCH, William, 1754-1839
William Murdoch. W. Cullen. bibliog Chem
& Ind 62:201-3 My 29 '43

MURIATIC acid. See Hydrochloric acid

MURPHY, Frank, 1893-
Sketch. por(cover) Spectator (Life ed) 149:82
D '42

MURPHY, G. C., company
Income statement, 1940-1942. Comm & Fin
Chr 157:642 F 15 '43

MURPHY, Robert Cushman, 1887-
Presentation of the Daniel Giraud Elliot
medal for 1936. F. M. Chapman. Science
97:434 My 14 '43

MURPHY, Walter Joseph, 1899-
Murphy becomes editor of A.C.S. publica-
tions. por Chem Ind 52:73 Ja '43; Same.
Chem & Eng N 21:1 Ja 10 '43

MURPHY, Walter Patten, 1873-1942
Bequest for the endowment of the Technical
Institute of Northwestern university. Science
97:38-9 Ja 8 '43

Sketch. por Ry Age 113:1000 D 19 '42

MURRAY, Arthur, 1895-
Arthur Murray's advertising lessons; ad rules
for branch managers. P. James. Adv &
Sell 36:21-2, 63+ N '43

MURRAY, Margaret Kay, 1919-
Fathers and daughters in chemistry; Murray
system. por Chem & Eng N 21:548 Ap 25
'43

MURRAY, William Stanley, 1887-
Fathers and daughters in chemistry; Murray
system. por Chem & Eng N 21:548 Ap 25 '43

MURRAY corporation of America
More pay—more production; Murray corp. of
America proves it at the Ecorse plant. *il*
Fortune 28:138-40+ S '43

MUSCATINE, Iowa**Water supply**

Underground automatic continuous booster
pumping station. W. Molis. *il* plan Pub
Works 73:11-12+ N '42

MUSCLE

Contraction of denervated muscle produced
by d-tubocurarine. A. R. McIntyre and
R. E. King. Science 97:516 Je 4 '43

Entrance of chloride with potassium into
live rat muscle fibers. Cl-space error. W.
S. Wilde. bibliog Science 98:202-3 Ag 27
'43

Experimental burns; changes in the phos-
phorus content and moisture content of
muscle. J. O. Ely. diags Franklin Inst J 235:
416-24 Ap '43

MUSCLE biopsies. See Tissues—Analysis

MUSCOVITE

Muscovite in the Spruce Pine district, North
Carolina. T. L. Kesler and J. C. Olson.
map U S Geol S Bul 936-A:1-38, pl 1; pa
35c Supt. of doc. '42

MUSEUM exhibits

New display technique for Art of this cen-
tury, designed by Frederick J. Kiesler. *il*
diags Arch Forum 78:49-53 F '43

MUSEUM of science and industry, Chicago
Brick sidewalks in Chicago; old street re-
constructed by Museum of science and
industry. *il* Brick & Clay Rec 103:23 Ag
'43

MUSEUMS

Barnum began it; a postwar philosophy for
museums. A. C. Watson. Tech R 45:487-8+
J1 '43

Value of the museum. R. M. Hutchins. Sci-
ence 98:331-4 O 15 '43

See also

American museum of New York (city)—
natural history Galleries and muse-
ums
Art galleries and Rochester museum of
museums arts and sciences
Museum of science and industry, Royal college of sur-
Chicago geons, London—
Museum

Air conditioning

Rochester museum of arts and sciences air
conditioning equipment and heating plant
on roof. A. S. Crocker. *il* plan Heat &
Ven 40:33-7 Ag '43

Heating and ventilation

Heating and ventilating a Rochester mu-
seum. D. K. Smith. *il* plan Gas Age 92:
55-8 O 21 '43

MUSHROOMS

Methods for quick freezing and dehydrating
mushrooms. H. J. Brunell, W. B. Esselen,
jr. and F. P. Griffiths. bibliog *il* Food Ind
15:74-5+ N '43

Mushrooms arise; prove their nutritive value.
Business Week p65-6 Mr 20 '43

MUSIC**See also**

Tones

Acoustics and physics

Contributions of science to an appreciation
of music. A. Pepinsky. Franklin Inst J
235:361-92 Ap '43

Psychology

Attitudes toward types of industrial music.
W. A. Kerr. diags Acoustical Soc Am J 15:
125-30 O '43

Contributions of science to an appreciation
of music. A. Pepinsky. Franklin Inst J
235:361-92 Ap '43

Music in industry; results of test. H. Bur-
ris-Meyer. Mech Eng 65:31-4 Ja '43

MUSIC halls**See also**

Radio studios

MUSIC in industry

Attitudes toward types of industrial music.
W. A. Kerr. diags Acoustical Soc Am J
15:125-30 O '43

Guide to music in industry. R. L. Cardinell.
Factory Management 101:264+ O '43

Industrial music. Business Week p64+ Ap 3
'43

Industrial music and morale. D. D. Halpin. *il*
Acoustical Soc Am J 15:116-23 O '43

Music as a safety factor. E. Hough. Acousti-
cal Soc Am J 15:124 O '43

Music for workers. W. A. Kerr. Personnel
J 22:32-4 My '43

Music goes to work. E. W. Andrews. *il* Nat
Safety N 47:13+ My '43

Music in industry; results of test. H. Bur-
ris-Meyer. Mech Eng 65:31-4 Ja '43; Ex-
cerpts. Am Mach 86:1550-2 D 24 '42

Music in the factory. *il* Elec R (Lond) 132:
637-42 My 14 '43

Music in the plant. *il* Factory Management
101:97-104 F '43

Music while they work. E. Housman. *il* Ptr
Ink 204:18-19 Ag 6 '43

Music while you work; abstract. E. F.
Sylvester. Franklin Inst J 235:435-6 Ap '43

Programming music for industry. B. Selvin.
Acoustical Soc Am J 15:131-2 O '43

Statistical method in determining the effects
of music in industry. R. L. Cardinell.
Acoustical Soc Am J 15:133-5 O '43

MUSIC publishing

Sharps go flat; sheet music sales slump.
Business Week p66+ F 27 '43

MUSICAL instruments

Contributions of science to an appreciation of music. A. Pepinsky. Franklin Inst J 235:361-92 Ap '43

See also

Clarinet	Trumpets
Phonograph	Tuning
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MUSICAL instruments insurance. See Insurance, Musical instruments

MUSICAL instruments trade

Mexico

Musical-instrument manufacture in Mexico; opportunities for new enterprises? For Comm W 13:32 O 23 '43

MUSICIANS, American federation of. See American federation of musicians

MUSSELS

Shellfish debut. Business Week p62 Mr 20 '43

MUSSOLINI, Benito, 1883-

Mussolini resigns as Italian premier; King names Badoglio head of military government. Comm & Fin Chr 158:431 Jl 29 '43

MUSTARD gas

Action of war gases. C. D. Leake and D. F. Marsh. bibliog il J Chem Educ 20:341-3 Jl '43

Mustard gas in air; sensitivity of qualitative tests and a rough quantitative determination. W. Rieman, 3d, bibliog Ind & Eng Chem Anal ed 15:411-12 Je 15 '43

New reactions of 2,2'-dichlorodiethyl sulfide. J. B. Polya. Ind & Eng Chem Anal ed 15:360 My 15 '43

War problems in analysis and treatment; detection and removal of mustard gas and lewisite. A. M. Buswell and others. Am Water Works Assn J 35:1303-11 O '43

MUTAROTATION. See Optical rotation

MUTATION (biology)

Somatic mutations in the apple. J. K. Shaw and L. Southwick. Science 97:202 F 26 '43

MUTATORS. See Electric rectifiers

MUTTON

Quick freezing of meats in South America. M. T. Zarotschenzeff. il plan Refrig Eng 46: 88-91 Ag '43

MUTUAL aid societies. See Benefit societies

MUTUAL benefit societies. See Benefit societies

MUTUAL insurance. See Insurance, Mutual

MUTUAL life insurance company of New York

100 years old. East Underw 44:3, 8 Ja 29 '43; Ins Field (Life ed) 72:12-13 Ja 29 '43; Nat Underw 148:292-4 Ja 30 '43; Spectator (Life ed) 150:16-17 F '43

MYASTHENIA gravis

Nature of myasthenia gravis. C. Torda and H. G. Wolff. bibliog Science 98:224-5 S 3 '43

MYCALEX

Moulded parts from Mycalex. il Electrician 131:211 Ag 27 '43

MYDIATICS

Synthetic mydiatics. F. F. Blicke, C. E. Maxwell and H. M. Kaplan. bibliog Am Chem Soc J 64:428-33; 65:1967-70 F '42, O '43

MYOGRAPHS

Applications of electronics to physiology. W. E. Gilson. diags Electronics 16:87-8 Ja '43

MYOPIA

Modern living will make us a myopic nation. Sci Am 168:69 F '43

N

NAILS

Wire nails, Pittsburgh; prices, 1929-1942; tabulation. Steel 112:372 Ja 4 '43

NAME plates

Provides cycle and temperature control; marking plastics with indented-colored letters for nameplates. D. Putnam. il Machine Design 15:115 Ap '43

NAMES

See also

Airplanes, Military—	House organs—
Names	Names

NAMES, Business. See Business names

NAMES, Personal

Chip off the old block; surnames of bank officers. T. D. MacGregor. Banking 35:22 D '42

Names, Russian and other. K. Dunlap. Science 97:400-1 Ap 30 '43

Russian

Further note on Russian names. K. S. Chester. Science 98:302 O 1 '43

Russian names. A. Hrdlička. Science 97:243 Mr 12 '43

Transliteration of English names into Russian. V. Krotkov. Science 98:344-5 O 15 '43

Transliteration of Russian names. D. G. Nichols; R. M. Strong. Science 98:132-3 Ag 6 '43

NANAIMO, British Columbia

Water supply

Chlorinator installation under new federal regulation. il plan Water & Sewage 81:23+ Mr '43

NAPHTHA

Butadiene production under way at Southern California gas co. plant. H. L. Masser. flow chart Oil & Gas J 42:45-6+ O 28 '43

Classification of solvents and naphthas. W. L. Nelson. Oil & Gas J 41:134-5 Ap 15 '43

Cracking technology; calculations for reforming procedures. C. R. Wagner. Oil & Gas J 42:40, 42-3 N 4 '43

Cracking technology; reforming naphthas by thermal methods. C. R. Wagner. Oil & Gas J 42:62, 64+ O 28 '43

Naphtha or gasoline, which? Wisconsin dealer, hit by OPA, says it isn't gas he sells. Nat Pet N 35:7 Ag 13 '43

Phase equilibria at high temperatures. R. R. White and G. G. Brown. flow diag bibliog diags Ind & Eng Chem 34:1162-74 O '42; Same. Nat Pet N 34 pt 2:R374, R376-8, R380-1, R432-5 O 28, N 25 '42; Same. Pet Eng (Ref annual) 14:282-3, 286-92, 295-6 Jl 1 '43

See also
Gasoline

Analysis

Method for analyzing gasoline fraction of petroleum; with preliminary results on east Texas and Oklahoma crudes. F. D. Rossini and others. bibliog Oil & Gas J 41:106, 108, 111+ N 12 '42; Same. Am Pet Inst Proc 23(3):7-14 '42; Same. Pet Eng (Ref annual) 14:245-8, 250 Jl 1 '43

NAPHTHALENE

Catalytic oxidations of naphthalene series. R. N. Shreve and R. W. Welborn. bibliog il diags Ind & Eng Chem 35:279-88 Mr '43

Chlorinated naphthalenes and diphenyls. L. Greenburg. bibliog Ind Med 12:520-1; Discussion. 521-2 Ag '43

Conversion of lutein in a boric acid-naphthalene melt. L. Zechmeister and J. W. Sease. il Am Chem Soc J 65:1951-5 O '43

Dialkylation of naphthalene; the synthesis of 2,6-diphenylnaphthalene. C. C. Price and A. J. Tomisek. bibliog Am Chem Soc J 65:439-40 Mr '43

Kinetics of aromatic halogenation; the chlorination of hydrocarbons. P. B. D. de la Mare and P. W. Robertson. Chem Soc J p279-81 Je '43

Mixed heteropoly acid catalysts for the vapor phase air oxidation of naphthalene. H. T. Brown and J. C. W. Frazer. Am Chem Soc J 64:2917-20 D '42

Observations on the toxic effects resulting from exposure to chlorinated naphthalene and chlorinated phenyls with suggestions for prevention. H. Von Wedel, W. A. Holla and J. Denton. bibliog il Rubber Age 53: 419-26 Ag '43; Same abr. Chem Age (Lond) 49:592-4 D 18 '43

NAPHTHALENE—*Continued*

Sulfonation of naphthalene; application of partial-pressure distillation. D. F. Othmer, J. J. Jacobs, Jr. and W. J. Buschmann. bibliog diag Ind & Eng Chem 35:326-9 Mr '43

NAPHTHALENEDIOL

Synthesis and rearrangement of some decahydro- and tetrahydronaphthalenediols. J. English, Jr. and G. Cavaglieri. bibliog Am Chem Soc J 65:1085-9 Je '43

NAPHTHALIDES

Influence of the 6-nitro-group on the halogenation and nitration of 5-nitro-1-naphthylamine and of some related naphthalides. H. H. Hodgson and H. S. Turner. Chem Soc J p723-5 N '42

Influence of the 6-nitro-group on the halogenation, nitration, mercuration, and diazo-coupling of 6-nitro-1-naphthylamine and of some related naphthalides. H. H. Hodgson and H. S. Turner. Chem Soc J p391-4 Ag '43

NAPHTHENATES

Metallic naphthenates. Can Chem & Process Ind 27:400-1 Jl '43

NAPHTHENIC acid

Metallic naphthenates. Can Chem & Process Ind 27:400-1 Jl '43

Naphthenic acids and soaps; abstract. Inst Pet J 29:235A Je '43

Petroleum acids; naphthenic acids from California petroleum. W. O. Ney and others. bibliog diag Am Chem Soc J 65:770-7 My '43

NAPHTHOFUCHSONE

Quinoidation of triaryl compounds; hydroxynaphthylidiphenylcarbinols. L. C. Anderson and D. G. Thomas. bibliog Am Chem Soc J 65:234-8 F '43

NAPHTHOIC acid

Polymethylbenzoylnaphthoic acids. R. H. Martin. Chem Soc J p239-41 My '43

Synthesis of 4-hydroxy-2-naphthoic acids. R. D. Haworth, B. Jones and Y. M. Way. Chem Soc J p10-13 Ja '43

NAPHTHOL

Preparation of β -tetralone from β -naphthol and some analogous transformations. J. W. Cornforth, R. H. Cornforth and R. Robinson. Chem Soc J p689-91 N '42

Some derivatives of 2-propionyl-1-naphthol. C. M. Brewster and G. G. Watters. bibliog Am Chem Soc J 64:2578-80 N '42

NAPHTHOL AS

Method for the rapid identification of the arylamine residue in compounds of the naphthol AS series. E. J. Cross and P. W. Carlene. bibliog Soc Dyers & Col J 59:191-2 S '43

NAPHTHOQUINONE

Quinoidation of triaryl compounds; hydroxynaphthylidiphenylcarbinols. L. C. Anderson and D. G. Thomas. bibliog Am Chem Soc J 65:234-8 F '43

Synthesis of 2-methyl-1,4-naphthoquinone-8-sulfonic acid. A. Bendich and E. Chargaaff. bibliog Am Chem Soc J 65:1568-9 Ag '43

See also

Vitamins—Vitamin K

NAPHTHOQUINONES

Water-soluble compounds with antihemorrhagic activity. B. R. Baker and G. H. Carlson. bibliog Am Chem Soc J 64:2657-64 N '42

NAPHTHYLDIPHENYLCHLOROMETHANES

Quinoidation of triaryl compounds; bromonaphthylidiphenylchloromethanes. L. C. Anderson and D. Johnston. Am Chem Soc J 65:239-42 F '43

NAPHTHYRIDINE

New syntheses of heterocyclic compounds; 2-phenyl-3:4:6:7-dibenzo-1:5-naphthyridine. V. A. Petrov, M. V. Stack and W. R. Wrang. Chem Soc J p316-18 Jl '43

NAPPING of textiles

Hints on printing napped fabrics. M. Mackay. Textile World 93:89 O '43

NARCISSUS

Severity of narcissus basal rot increased by the use of synthetic hormones and nitrogen bases. N. W. Stuart and W. D. McClellan. Science 97:15 Ja 1 '43

NARCOTIC addicts. See Drug habit

NARCOTICS

Cannabis indica; some analogues and a water-soluble derivative of tetrahydrocannabinol. F. Bergel and others. Chem Soc J p286-7 Je '43

See also

Anesthetics Drug habit
Coca Marihuana
Demerol Opium

NARROW gage railroads. See Railroads—Narrow gage

NASHUA and Lowell railroad corporation

Control by Boston and Maine railroad. Comm & Fin Chr 158:987 S 6 '43

NASHVILLE, Chattanooga and St Louis railway

First 48/78. O. Ely. Mag of Wall St 71:362 Ja 9 '43

Report. Comm & Fin Chr 157:2153 Je 7 '43
Sound bond yielding 5.8%. Barron's 23:15 F 1 '43

NASHVILLE dome. See Geology—Tennessee

NATION planning

Britain's plans are bold. D. Haskell. il Arch Rec 93:49-56 Mr; 42-9 Ap '43

Congestion to go; President's committee on crowded areas. Business Week p29+ Jl 31 '43

National planning for town and country in Great Britain. Int Labour R 47:197-206 F '43

Science in national planning. J. S. Bates; R. K. Stratford. Can Chem & Process Ind 26:669-72, 674+ N '42; Same, pt 1 (Natural resources. J. S. Bates). Pulp & Pa of Can 44:359-62 Ap '43

See also

Land utilization
Regional planning

NATIONAL academy of sciences

Elections. Science 97:418-19 My 7 '43

Medal presentations. Science 97:429-35 My 14 '43
Mobilization of scientific resources. il J Ap Phys 14:374-7 Ag '43

War metallurgy committee

War metallurgy group completes 150 reports on technical problems; chart and list. Steel 112:76-7 F 15 '43

NATIONAL accident and health insurance company

40th milestone for Philadelphia company. East Underw 44:26+ Ag 20 '43

NATIONAL advertising. See Advertising, National**NATIONAL advisory committee for aeronautics.** See United States—National advisory committee for aeronautics**NATIONAL aircraft standards committee**

Annual meeting, 4th. New York, Nov. 9-13. Aviation 41:165, 351-2 D '42

Economic aspects of standardization. B. C. Boulton. S A E J 51:sup20-2, 44-7 Je '43

NASC develops standards for armed forces. Ind Stand 14:154 My '43

NATIONAL aircraft war production council

Aircraft companies form national council. R. E. Kay. Automotive & Aviation Ind 88:44+ My 1 '43

NATIONAL association of accident and health underwriters

A & H agents' board holds Chicago parley. Nat Underw 47:17+ Ja 21 '43; East Underw 44:34 Ja 29 '43

A. & H. underwriters form committees. Ins Field (Life ed) 72:7+ O 22 '43

Annual meeting, Pittsburgh, June 10-11. East Underw 44:32-3 Je 11; 32 Je 18 '43; Ins Field (Fire ed) 72:3-4+ Je 17 '43; Ins Field (Life ed) 72:3-4+ Je 18 '43; Nat Underw 47:19+ Je 17 '43; Weekly Underw 148:1339 Je 19 '43

NATIONAL association of broadcasters

Annual meeting, 21st, Chicago. Business Week p60 My 8 '43

NAB answers Mr Smith. N. Miller. Adv & Sell 35:23+ D '42

War conference. P. H. Erbes, jr. Ptr Ink 203:33+ My 7 '43

NATIONAL association of cost accountants

Officers and directors, 1943-44. N A C A Bul 24:1435-99 sec 3 Ag 15 '43

NATIONAL association of credit men

National officers and directors 1942-1943.
Credit & Fin Management 45:35 Ja '43
War credit congress, St Louis, May 25-27.
Credit & Fin Management 45:18-19 Je '43
Yesterday, today and tomorrow; why credit men need their association now. E. W. Lane. Credit & Fin Management 44:14-16+ D '42

NATIONAL association of home builders

Building associations merge; united front to tackle many industry problems. II Am Bld 65:41+ S '43
Home builders association plans vigorous expansion. Am Bld 65:108-9+ O '43
1943 objectives. Am Bld 65:84-5 Je '43
Peace, it's wonderful. Arch Forum 79:100 S '43

NATIONAL association of hosiery manufacturers

Annual meeting, 39th, New York, April 16.
Textile World 93:94-5 My '43

NATIONAL association of independent insurance adjusters

Annual meeting, 7th, Chicago, Sept. 17-18.
Nat Underw 47:3 S 23 '43; Weekly Underw 149:658+ S 25 '43

NATIONAL association of insecticide and disinfectant manufacturers

Annual meeting, 29th, New York, Dec. 7-8.
Soap & San Chem 18:101-4; 19:90-4 D '42-Ja '43; Chem Ind 51:882-4 D '42; Oil Paint & Drug Rep 142:7+ D 14 '42
Mid-year meeting, 29th, Cleveland, June 7-8.
Oil Paint & Drug Rep 143:3, 32C-32D Je 14 '43; Soap & San Chem 19:90-3 JI '43; Chem Ind 53:62 JI '43

NAIDM discusses regulations and shortages.
D. H. Killeffer. Chem & Eng N 21:974 Je 25 '43

NATIONAL association of insurance agents

Agents expand Washington energies; Sidney Smith initiates new program. East Underw 43:15 N 27 '42; Nat Underw 46:16 N 26 '42; Weekly Underw 147:1240+ N 28 '42
Annual convention, 48th, Pittsburgh, Oct. 10-13. East Underw 44:16-37 O 15 '43; Ins Field (Pittsburgh Conv Daily ed) 72:1-19 O 11; 1-19 O 12; 1-19 O 13 '43; Nat Underw 47:19+ O 14; 2+ O 21 '43; Spectator (Property ed) 9:36-8+ O 21 '43; Weekly Underw 149:826+ O 16 '43
Judge Miller is secretary; Bennett N.A.I.A. counsel; headquarters work realigned. Nat Underw 46:1+ N 12 '42; East Underw 43:17 N 13 '42; Weekly Underw 147:1121-3 N 14 '42

NAIA names committees for major activities.
Weekly Underw 147:1374 D 12 '42; Same abr. Nat Underw 46:2 D 10 '42

NAIA selects Averell Broughton to plan public relations program. East Underw 44:16 Ag 20 '43; Same abr. Nat Underw 47:7 Ag 19 '43

National board of state directors mid-year meeting, Tulsa, Okla. East Underw 44:1, 26-7, 30 F 19; 28-9, 42 F 26 '43; Ins Field (Fire ed) 72:3-6+ F 18 '43; Nat Underw 47:1+ F 18 '43; Spectator (Property ed) 8: 12-13+ F 18 '43

Public relations on the march; NAIA program forges ahead. W. A. Hamlin. Ins Field (Fire ed) 72:8-9 Ag 5 '43

Urges support of congressional bills; progress of National Association under new constitution. G. T. Warfield, Jr. East Underw 44:28 N 5 '43

Valedictory reviews NAIA progress. W. H. Bennett. Weekly Underw 147:1125+ N 14 '42

NATIONAL association of insurance brokers

Harry E. Moore to head brokers' organization; other officers. Weekly Underw 148: 981 My 8 '43

NATIONAL association of insurance commissioners

Annual meeting, 74th, Boston, June 6-9. East Underw 44:1+ Je 11; 20+ Je 18 '43; Ins Field (Fire ed) 72:3-5, 30-2 Je 10 '43; Ins Field (Life ed) 72:3-5+ Je 11 '43; Nat Underw 47:1+ Je 10 '43; Nat Underw (Life ed) 47:1, 22-4 Je 11 '43; Spectator (Property ed) 8:24-6+ Je 24 '43; Weekly Underw 148:1259, 1262-73 Je 12 '43

Commissioners new committee setup is completed. Nat Underw 47:11 Ag 5 '43; Nat Underw (Life ed) 47:5 Ag 6 '43
Committee changes. East Underw 44:12 Mr 5 '43

Gontrum succeeds Lloyd as NAIC chairman; executive committee meeting. Nat Underw 47:1+ Ap 15 '43; Nat Underw (Life ed) 47:1+ Ap 16 '43; Weekly Underw 148:841+ Ap 17 '43

Midyear convention, New York, Nov. 29-Dec. 1. East Underw 43:1+ D 4 '42; Ins Field (Fire ed) 71:7-8+ D 3 '42; Ins Field (Life ed) 71:5-6+ D 4 '42; Nat Underw 46:1+ D 3 '42; Nat Underw (Life ed) 46:1+ D 4 '42; Weekly Underw 147:1300-1+ D 5 '42

NATIONAL association of insurance women

Annual meeting, 4th, Milwaukee, June 16-19.
East Underw 44:19+ Je 18; 17 Je 25 '43; Ins Field (Fire ed) 72:15-17+ Je 24 '43; Nat Underw 47:5 Je 17; 3+ Je 24 '43; Weekly Underw 148:1341 Je 19 '43

NAIW is built on fellowship, loyalty and education. C. A. MacCubbin. Ins Field (Fire ed) 72:12 JI 29 '43

Officers all practical insurance women.
Weekly Underw 149:470 S 4 '43

NATIONAL association of investment companies

Annual election. Comm & Fin Chr 158:1503 O 14 '43

NATIONAL association of life underwriters

Annual convention, 54th, Pittsburgh, Sept. 13-15. East Underw 44:1+ S 17; 3 S 24 '43; Ins Field (Pittsburgh Conv Daily ed) 72:1-23 S 15; 1-23 S 16; 1-23 S 17 '43; Nat Underw (Life ed) Daily ed 47:3-40 S 15; 3-36 S 16; 3-32 S 17 '43; Nat Underw (Life ed) 47:3+ S 24 '43; Weekly Underw 149: 588-9+, 594 S 18 '43; Spectator (Life ed) 151:44-8 O '43

Benson, Reed elected trustees, by NALU. Ins Field (Life ed) 72:5 F 5 '43

Herb Hedges, Andrews and Hartshorn elected; other officers. Ins Field (Pittsburgh Conv Daily ed) 72:1+ S 17 '43; Nat Underw (Life ed) Daily ed 47:3+ S 17 '43

Mid-year meeting, Kansas City, Mo. March 25-26. East Underw 44:1+ Ap 2 '43; Ins Field (Life ed) 72:3-8, 17 Ap 2 '43; Nat Underw (Life ed) 47:1+ Mr 26; 1+ Ap 2 '43; Weekly Underw 148:760, 764-5 Ap 3 '43

Reports membership gain for fiscal year. Nat Underw (Life ed) 47:1 JI 30 '43; East Underw 44:6 JI 30 '43; Weekly Underw 149: 222 JI 31 '43

17 National Association officers visited 25 states on tours. East Underw 44:10 Mr 19 '43

NATIONAL association of manufacturers

Aims and aspirations. N. Sargent. Edison Elec Inst Bul 11:207-10 JI '43

Annual meeting, New York. Business Week p24, 26+ D 12 '42

NAM principles for U.S. post-war prosperity; sees economic progress through cooperation. Comm & Fin Chr 157:1209+ Ap 1 '43

N.A.M. raises sights to victory, with Crawford. Business Week p16 D 5 '42

Significant quotes from the N.A.M. war congress. Sales Management 51:26, 28, 32 D 15 '42

War congress of American industry; officers and directors of N.A.M. Steel 111:70-1 D 14 '42

NATIONAL association of master plumbers

Annual meeting, 61st, Chicago, June 7-10.
Dom Eng 162:62-3, 80 JI '43

NATIONAL association of mutual insurance agents

Annual convention, 12th, New York, Oct. 4-6.
East Underw 44:43+ O 8 '43; Nat Underw 47:2+ O 14 '43

NATIONAL association of mutual savings banks

Bassett heads Association of mutual savings banks; other officers. Comm & Fin Chr 157:1782 My 13 '43

- NATIONAL association of personnel directors**
Expands. Pub Util 32:444-5 S 30 '43
Personnel managers form new association.
Am Business 13:32-3 Je '43
- NATIONAL association of photo-lithographers**
War conference, Boston, Sept. 16-18, Inland
Ptr 112:53-4 O '43
- NATIONAL association of purchasing agents**
Annual meeting, 28th, New York, Steel 112:
58-9 My 31 '43; Oil Paint & Drug Rep 143:
3+ My 31 '43
- NATIONAL association of railroad and utilities**
commissioners
Annual meeting, St Louis, Elec W News ed
118:1708 N 21 '42
NARUC's proposed changes in power act
assailed, Elec W 120:1353 O 16 '43
War conference, Chicago, Sept. 14-16, Ry Age
115:458-60, 492-3 S 18-25 '43; Elec W News
ed 120:1087-8 S 25 '43; Pub Util 32:446-7 S
30 '43
What the state commissioners are thinking
about; opinions expressed at annual con-
vention. Pub Util 32:500-11 O 14 '43
- NATIONAL association of real estate boards**
Willmore named head of national realty as-
sociation. Comm & Fin Chr 156:2255 D 24
'42
- NATIONAL association of securities dealers**
Can the small dealers in securities be forced
out of business in defiance of the will of
Congress? Comm & Fin Chr 158:1781+ N
4 '43
Henry Riter, 3d, elected chairman of NASD;
other officers elected at annual meeting of
Board of Governors. Comm & Fin Chr 157:
268 Ja 21 '43
NASD blunder; maximum profit decree af-
fecting security transactions condemned.
A. M. Metz and E. A. Kole. Comm & Fin Chr
158:1869+ N 11 '43
\$1,000 fine, emphatic criticism administered
by NASD conduct committee in dealer
profits case. Comm & Fin Chr 156:1786 N 19
'42
SEC hearings on NASD right to discipline
members. Comm & Fin Chr 158:1296 S 30
'43
Securities business could not survive under
NASD rule limiting profits. Comm & Fin Chr
158:1685+ O 28 '43; Discussion, 158:
1871+, 1991+, 2101+, 2103+, 2205+, 2207+,
2415+, 2550, 2636, 2657 N 11, 18, 25, D 2,
16, 23, 30 '43
Security dealers now have increased duties
to investors; benefits to the public and se-
curities industry through self-regulation.
H. G. Riter, 3d. Comm & Fin Chr 157:561+
F 11 '43
War changes in NASD district committees.
Comm & Fin Chr 156:1875 N 26 '42
- NATIONAL association of sheet metal distribu-
tors**
Semi-annual meeting, Chicago, Oct. 18-21.
Sheet Metal Worker 33:56-7 N '42; Steel
111:32, 50 O 26 '42
Semi-annual meeting, New York, Oct. 18-20.
Steel 113:68+ O 25 '43; Sheet Metal Work-
er 34:59+ N '43
- NATIONAL association of shippers advisory
boards**
Annual meeting, St Louis, Oct. 15, Ry Age
115:643-6 O 23 '43
Shipper cooperation brings results. Il Ry Age
114:1046-8 My 22 '43
- NATIONAL association of surety bond pro-
ducers**
Contract bond agents perfect organization.
East Underw 44:27 Ja 23 '43; Nat Underw
47:16 Ja 28 '43
Form contract bond producers organization.
Nat Underw 47:15+ Ja 14 '43
Howe and Thompson in friendly disagree-
ment over new surety bond assn. East
Underw 44:33 F 19 '43
Surety bond producers publish constitution.
East Underw 44:31 F 19 '43
Surety bond producers set forth their stand.
East Underw 44:36+ F 12 '43; Nat Underw
47:20 F 11 '43
- NATIONAL association of transportation ad-
vertising**
Car cards score; sharp increase in transit
riding pulls space sales up. Business Week
p82+ S 4 '43
- NATIONAL association of waste material deal-
ers**
Annual meeting, 30th, Chicago, March 16-
17, Steel 112:34 Mr 22 '43
- NATIONAL association of wool manufacturers**
Annual meeting, New York, April 14, Textile
World 93:95 My '43
- NATIONAL automobile dealers association**
Future studied; National automobile dealers'
assn. decides Nugent plan. Business Week
p89-90 F 13 '43
- NATIONAL automobile underwriters associa-
tion**
Duxbury, president; other officers. East
Underw 44:24 Je 4 '43; Nat Underw 47:3
Je 3 '43; Weekly Underw 148:1186 Je 5 '43
- NATIONAL aviation corporation**
Significance seen in National's switch to
non-aviation holdings. R. Wilco. Aviation
N 1:28 Ag 23 '43
- NATIONAL banks. See Banks and banking.**
- National board of fire underwriters**
Annual meeting, 77th, New York, May 27.
East Underw 44:1, 17-18, 20-1, My 28; 17
Je 4 '43; Ins Field (Fire ed) 72:5+ My 27;
5+ Je 3 '43; Nat Underw 47:3+ Je 3 '43;
Spectator (Property ed) 8:21+, 32-3 Je 3
'43; Weekly Underw 148:1121+, 1125-6 My
29 '43
Committees appointed. East Underw 44:18
Je 18 '43
How National Board helps agents in prestige
building. H. K. Schaffler. East Underw
44:24 O 22 '43
- NATIONAL brands. See Advertising, National**
- NATIONAL broadcasting company**
NBC and CBS win high court review in al-
leged monopoly set-ups. Comm & Fin Chr
156:2308 D 28 '42
Noble buys Blue; RCA sells network, as re-
quired by FCC. Business Week p78+ Ag 7
'43
Radio chains lose in Supreme court. Comm
& Fin Chr 157:1947 My 24 '43
- NATIONAL bureau of casualty and surety un-
derwriters**
Hartford Steam Boiler, Employers leave
Bureau. East Underw 44:29 Ja 1 '43
Hartford Steam Boiler, Employers resign
from bureau. Nat Underw 46:13 D 24 '42
Perfect revamping of Boiler bureau; voting
basis. Nat Underw 47:19 F 4 '43
Re-elect officers at annual meeting. Weekly
Underw 148:1049 My 15 '43
- NATIONAL bureau of standards. See United
States—Standards, National bureau of**
- NATIONAL cash register company**
Annual report. Comm & Fin Chr 157:1561 Ap
26 '43
Peace-time leaders. Mag of Wall St 72:550+
Ag 21 '43
- NATIONAL characteristics, American**
Freedom or frustration? can Americans find
an answer in their own age-old traits?
C. Morris. Il Fortune 28:148-52+ S '43
- NATIONAL city bank of New York**
Annual report to shareholders. Bankers M
146:168-9 F '43
Annual report to shareholders. G. S. Rent-
schler. Comm & Fin Chr 157:187+ Ja 14
'43
What is this bank stock worth? K. L.
Trefftz. Barron's 23:13 Ap 26 '43
- NATIONAL committee for the conservation of
manpower in war industries**
You can't win, gambling on accidents. Il
Paper Ind 25:717-18+ O '43
- NATIONAL concrete masonry association**
Annual meeting, 23d, Chicago, Feb. 16-17.
Concrete 51:10+ Mr '43; Rock Prod 46:87-90
Mr '43
Convention program; history of the associa-
tion. Rock Prod 46:71+ F '43
- NATIONAL confectioners' association**
Shortages and substitutes discussed by candy
men. Food Ind 15:110 JI '43
- NATIONAL conference on planning for war
and post-war medical services**
Meeting, New York, March 15, Science 97:281
Mr 26 '43

- NATIONAL cotton council of America**
Annual meeting, Memphis, Jan. 25-26. Textile World 93:138 F '43
- NATIONAL council of American-Soviet friendship**
American-Soviet conference, Nov. 7; program. Science 98:403 N 5 '43
- NATIONAL council of industrial editors' associations**
Convention highlights importance of employee house publications. Ptr Ink 203:48+ My 28 '43
- NATIONAL crushed stone association**
Semi-annual meeting of the board of directors, Hot Springs, Va. July 30. Rock Prod 46:95 S '43
- NATIONAL dairy products corporation**
Annual report. Comm & Fin Chr 157:1085 Mr 22 '43
Another look. Mag of Wall St 72:656 S 18 '43
- NATIONAL distillers products corporation**
National Distillers hit by taxes. Barron's 23:6 JI 26 '43
Strategic habit stocks. J. C. Clifford. Mag of Wall St 72:542 Ag 21 '43
- NATIONAL district heating association**
Annual meeting, Pittsburgh, June 9-10. Heating-Piping 15:353-4 JI '43
- NATIONAL Dixie distributors, Inc.**
New officers. pors Nat Pet N 35:2 My 19 '43
- NATIONAL electrical manufacturers' association**
Spring meeting, Chicago. Elec W 119:1457-8 My 1 '43
- NATIONAL emergency steels.** See Steel—Standards
- NATIONAL exposition of power and mechanical engineering**
Exposition, 15th, New York; floor diagram and list of exhibitors. Mech Eng 64:sup43-8 D '42
15th National power show reflects wartime problems. Il Power Pl Eng 47:82-3 Ja '43
- NATIONAL federation of sales executives**
Chicago conference maps plans for 1943-44. Sales Management 52:32 JI 1 '43
Who is behind federated sales executives? Am Business 13:2 Ag '43
- NATIONAL fertilizer association**
Annual convention, 19th, Hot Springs, Va. June 21-23. Oil Paint & Drug Rep 143:3+ Je 28 '43; Chem & Eng N 21:1060-1 JI 10 '43; Chem Ind 53:78-9 JI '43
- NATIONAL fire and marine insurance company, Elizabeth, New Jersey**
Company analysis. Spectator (Property ed) 8:30-1 Ja 7 '43
- NATIONAL fire insurance company of Hartford**
National Fire will have casualty organization. Nat Underw 47:25+ O 28 '43
- NATIONAL fire protection association**
Annual meeting, 47th, Chicago. East Underw 44:28-9+ My 14 '43; Ins Field (Fire ed) 72:5+ My 13 '43; Nat Underw 47:1+ My 13 '43
- NATIONAL fire waste council**
Annual meeting, 20th, Washington, April 2. East Underw 44:1+ Ap 9 '43
U.S. Chamber of commerce battles fire waste; OCD joins movement. Weekly Underw 149:5+ JI 3 '43; East Underw 44:18 JI 2 '43
- NATIONAL fireproofing corporation, Pittsburgh**
R. A. Shipley heads National Fireproofing. Brick & Clay Rec 102:28 My '43
- NATIONAL foundation for infantile paralysis**
Grant to the University of Michigan. Science 97:528-9 Je 11 '43
Grants. Science 98:8-9 JI 2 '43
Work in 1943. Science 98:128 Ag 6 '43
- NATIONAL founders' association**
Elects new officers. Foundry 71:135-6 Ja '43
- NATIONAL fraternal congress of America**
Annual meeting, 57th, Cleveland, Sept. 28-30. Nat Underw (Life ed) 47:25-40 O 1; 29 O 8 '43; Weekly Underw 149:724+ O 2 '43
- NATIONAL fuel gas company**
Registers with SEC; Rockefeller foundation to reduce holdings. Comm & Fin Chr 157:1273 Ap 5 '43
Stock offered. Comm & Fin Chr 157:1561-2 Ap 26 '43
- NATIONAL gypsum company**
Another look. Mag of Wall St 71:299-300 D 26 '42
Research contributes to war production. M. H. Baker. Rock Prod 46:62-3 JI '43
Thumbnail stock appraisal. Mag of Wall St 72:654 O 2 '43
- NATIONAL health library**
National health library and the war. I. Towner. Special Lib 34:253-5 JI-Ag '43
- NATIONAL home builders' association.** See National association of home builders
- NATIONAL housing agency**
Basic data system of the National housing agency and its problem of obtaining source material under war conditions. F. L. Huesmann. Special Lib 34:204-11+ JI-Ag '43
Construction under CMP; NHA as a claimant agency. W. J. Casey. Arch Rec 93:7+ F '43
Conversion program. W. J. Casey. Arch Rec 92:8 D '42
Flays NHA record. E. Wilson. Am Bld 65:95+ O '43
NHA home conversion program gets under way; with list of cities approved, and names of persons in charge of each region. Il plans Am Bld 65:68-9, 87 Ja '43
NHA's war housing policy. J. B. Blandford. Jr. Il Am Bld 65:33+ Ap '43
WPB-NHA war housing policy; joint declaration. W. J. Casey. Arch Rec 93:7+ Ja '43
- NATIONAL industrial advertisers association**
Atlantic regional conference, New York. Ptr Ink 203:46 My 14 '43
Central regional conference, Cleveland, June 25. Ind Marketing 28:23-4+ JI '43
Midwest regional victory promotions conference, Chicago, Jan. 22. Ind Marketing 28:17-20+ F '43
Organization and objectives of NIAA for the ensuing year. F. L. Lackens. Il Ind Marketing 28:50, 54, 58 S '43
- NATIONAL industrial conference board**
Williams chairman; other officers. Comm & Fin Chr 157:2188 Je 10 '43
- NATIONAL industrial sand association**
Annual meeting, 8th, June 3-4. Rock Prod 46:54-5+ JI '43
Directors meeting, New York, Nov. 20. Rock Prod 46:104-5+ Ja '43
- NATIONAL industrial traffic league**
Meeting, New York, Nov. 20. Ry Age 113:886-9 N 28 '42
- NATIONAL inventors' council**
Mobilization of scientific resources. J Ap Phys 14:385-7 Ag '43
- NATIONAL labor relations board**
Activities of National labor relations board, 1941-42. Monthly Labor R 56:516-17 Mr '43
Authority to investigate validity of collective agreements. Monthly Labor R 57:471-2 S '43
Kaiser fights. Business Week p80 Ja 16 '43
NLRB change due. Business Week p119 N 21 '42
NLRB should be empowered to review union membership restrictions. R. A. Newman. Comm & Fin Chr 157:673 F 18 '43
Politics behind NLRB appointment. Business Week p38 Mr 13 '43
Shaping the law; industry commissions of NWLB regain authority under first interpretation of Connally-Smith act. Business Week p75-6 Ag 7 '43
- NATIONAL lead company**
Chemical firms indicted as world trust. Comm & Fin Chr 158:89 JI 5 '43
National Lead, du Pont indicted on titanium trust charges. Oil Paint & Drug Rep 144:7+ JI 5 '43
- NATIONAL machine tool builders' association**
Annual meeting, 42d, Chicago, Oct. 10-12. Steel 113:49-51+ O 18 '43; Am Mach 87:120d-120e O 28 '43; Mach 50:181 N '43

- NATIONAL malleable and steel castings co.**
Observes 75th anniversary. Foundry 71:152+ O '43
- NATIONAL maritime union**
National maritime union asks post-war social security for seamen at 4th biennial convention, New York. Comm & Fin Chr 158:339 JI 22 '43
- NATIONAL mediation board**
Leiserson, Schwartz appointed. Ry Age 114: 411-12, 477 F 20, Mr 6 '43
- NATIONAL metal congress**
Congress, 24th; foundry exhibits and discussions. Foundry 70:72-3+ D '42
Congress, 25th, Chicago, Oct. 18-22. Steel 113:39-44+ O 25 '43; Iron Age 152:50-3 O 28 '43
Increased war production, theme of National metals congress. Automotive & Aviation Ind 87:34-5+ N 1 '42
Plans for the twenty-fifth annual congress. Science 98:79-80 JI 23 '43
Program of October meeting. Science 98: 276-7 S 24 '43
Seven aspects of the National metal congress; reports. F. G. Norris and others. Metal Prog 42:879-98+ N '42
Technical program. Steel 113:228+ O 11 '43; Blast F & Steel P1 31:155-60 O '43; Iron Age 152:61+ O 14 '43; Metals & Alloys 18: 700+ O '43; Metal Finishing 41:624-6 O '43; Metal Prog 44:532-44 O '43; Automotive & Aviation Ind 87:36-7+ O 15 '43
- NATIONAL metal exposition**
List of exhibitors. Iron Age 152:63, 170+ O 14 '43; Metals & Alloys 18:721, 724 O '43; Steel 113:243-4, 246 O 11 '43
- NATIONAL metal trades association**
Annual meeting, 45th, Chicago, May 26-27. Iron Age 151:118-19 My 27 '43; Steel 112: 54-5 My 31 '43; Am Mach 87:124J Je 10 '43; Mach 49:207 JI '43
- NATIONAL Negro insurance association**
Annual meeting, 23d, Chicago. Nat Underw (Life ed) 47:3+ JI 23; 6+ JI 30 '43
- NATIONAL oil products company**
Thumbnail stock appraisal. Mag of Wall St 71:423; 72:196 Ja 23, My 29 '43
- NATIONAL paint, varnish and lacquer association**
Committee chairman listed. Oil Paint & Drug Rep 143:7+ Ap 12 '43
Convention-at-home; annual statutory meeting, 55th, Washington, Oct. 27-29. Oil Paint & Drug Rep 144:45-7 N 1 '43; Paint Oil & Chem R 106:7-10 N 4; 28E D 2 '43
- NATIONAL paper trade association**
Annual meeting, 40th, New York, Feb. 15-18. Paper Tr J 116:113-14 F 18 '43
- NATIONAL parks and reserves**
It's hard on parks. Business Week p32+ Je 19 '43
Visitors, automobiles, 1938-1941. Survey of Cur Business 1942 Sup p 100[supplemented in monthly numbers]
See also
Glacier national park
Grand Teton national park
- NATIONAL petroleum association**
Annual meeting, 41st, New York, Sept. 21-22. Nat Pet N 35:33+ S 29 '43; Oil & Gas J 42:22-3 S 30 '43; Oil Paint & Drug Rep 144:3+ S 27 '43
Semi-annual meeting, Cleveland, April 15-16. Nat Pet N 35:14-15 Ap 21 '43; Oil & Gas J 41:38-9 Ap 22 '43
- NATIONAL planning association**
Planning, but for what? E. R. Abrams. Pub Util 31:406-13 Ap 1 '43
Three-way postwar planners; report to executives. Business Week p42, 44+ JI 31 '43
- NATIONAL power and light company**
Annual report. Comm & Fin Chr 157:1947 My 24 '43
Another step in liquidation program. Comm & Fin Chr 158:676 Ag 16 '43
Descriptions of holding companies. Pub Util 32:166-7 Ag 5 '43
Files amendment to plan. Comm & Fin Chr 158:774 Ag 23 '43
Files dissolution amendments. Comm & Fin Chr 157:732 F 22 '43
- Gets another year for dissolution. Comm & Fin Chr 156:1868 N 23 '42
Plans to sell holdings of Houston common. Comm & Fin Chr 157:1273 Ap 5 '43
President says SEC order interferes with dissolution. Comm & Fin Chr 156:2308 D 28 '42
Requests bids for its holdings of Houston lighting & power co. Comm & Fin Chr 157: 1662 My 3 '43
SEC asks court to affirm order. Comm & Fin Chr 157:2351 Je 21 '43
Speeds dissolution plans. Pub Util 32:368-9 S 16 '43
Steps in liquidation. Comm & Fin Chr 157: 1463 Ap 19 '43
Would sell gas company. Comm & Fin Chr 157:556 F 8 '43
- NATIONAL provincial bank**
Statement by the chairman. C. F. Campbell. Economist 144:124-5 Ja 23 '43
- NATIONAL ready-mixed concrete association**
Annual meeting, Cleveland, Jan. 26-29. Rock Prod 46:42-9+ F '43
- NATIONAL refining company**
Financial condition. Comm & Fin Chr 156: 2147+ D 17 '42
- NATIONAL refrigeration war council**
Formation. Refrig Eng 45:87 F '43
- NATIONAL research council**
Committee on applied mathematical statistics of the National research council; membership. Science 97:157 F 12 '43
Committee on food composition and Committee on maintenance of pure genetic strains. Science 97:197 F 26 '43
Grant to the National research council from the Johnson and Johnson research foundation. Science 98:339-40 O 15 '43
Mobilization of scientific resources. J Ap Phys 14:373-9 Ag '43
National research fellowships in the natural sciences. Science 97:372-3 Ap 23 '43
Why the Kilgore bill? H. T. Stetson. Science 98:364-5 O 22 '43
- Division of geology and geography**
Report, 1941-1942. T. S. Lovering. Geol Soc Proc 1942:44-56 Ap '43
- Office of scientific personnel**
Personnel problems in geology. Science 98: 402 N 5 '43
- Sanitary engineering committee**
Committee on sanitary engineering of the National research council. Science 97:84-5 Ja 22 '43
- NATIONAL research council of Canada**
War work of Canadian national research council. Chem & Eng N 21:92 Ja 25 '43
- NATIONAL resources committee**
Comparison of demographic rates assumed by the national resources committee with actual experience. R. J. Myers. Am Stat Assn J 38:201-9 Je '43
- NATIONAL resources planning board**
Calls planning board scheme communistic. G. W. Dyer. por(p56) Weekly Underw 149:57+ JI 10 '43
Congress gives National resources planning board until Aug. 31 to liquidate. Comm & Fin Chr 158:140 JI 8 '43
Course of the N.R.P.B. Adv & Sell 36:20-1 Mr '43
End of a perfectionist's day. Business Week p7 Je 26 '43
National resources planning board report and the utilities. Pub Util 31:434-8 Ap 1 '43
NRPB reports on postwar used to prod Congress. Eng N 130:387+ Mr 18 '43
National resources planning board's plans. E. H. Robie. Min & Met 24:204-5 Ap '43
Nation's press cool toward NRPB report. Pub Util 31:503-7 Ap 15 '43
New deal plans industry control. Business Week, p15-17, 108-9 Mr 20 '43
Obituary. Arch Forum 79:41 JI '43
Place of social security in postwar planning. E. M. Burns. Special Lib 34:218-24+ JI-Ag '43
Planning board's idea would mean untimely end of private enterprise. R. A. Taft. Comm & Fin Chr 157:1977 My 27 '43

NATIONAL resources planning board—Cont.

Plans revamped; National resources planning board to delete all portions of report dealing with the upper Arkansas River valley. *Business Week* p37 Je 12 '43

Post-war programme for the United States. *Int Labour R* 47:450-65 Ap '43

President offers Congress post-war program and security, work and relief system. *Comm & Fin Chr* 157:1017, 1024-5 Mr 18 '43

Progress in social security; review of National resources planning board report, and Beveridge report. A. A. Bright, jr. *Mech Eng* 65:588-9 Ag '43

Resources board defends its plan in transportation study. R. J. Watkins. *Ry Age* 114:318-20; *Reply*, by Railway age. 320-2 F 6 '43

Social insurance expansion proposed. *East Underw* 44:3+ Mr 19 '43

Social-security proposals. *Monthly Labor R* 56:904-7 My '43

NATIONAL retail dry goods association

Wartime conference, New York, Jan. 11-15. *Sales Management* 52:33 F 1 '43

NATIONAL roster of scientific and specialized personnel

Mobilization of scientific resources. *J Ap Phys* 14:380-4 Ag '43

National roster and the engineer. K. Miles. *Am Cer Soc Bul* 22:174-7 Je 15 '43

Number of scientific men engaged in war work. L. Carmichael. *Science* 98:144-5 Ag 13 '43

See also

Chemists
Scientists

NATIONAL rural electric cooperative association

Annual meeting, St. Louis. *Elec W* 119:289 Ja 23 '43; *Pub Util* 31:306-7 Mr 4 '43

Co-op insurance strengthened out; no legal objection to new plan. *Elec W News* ed 120:308 S 11 '43

Co-ops advised to stay out of insurance business. *Elec W News* ed 119:1866 Je 5 '43

Insurance program of R.E.A. cooperatives. A. C. Moore. *Nat Underw* 47:11 My 27 '43

Master of the cookie jar; political sidelights on the REA-NRECA controversy. H. Corey. *Pub Util* 32:275-80 S 2 '43

New mutuals formed for REA cooperatives. *East Underw* 44:24 Ja 29 '43; *Nat Underw* 47:10 Ja 28 '43

Opinion discusses question of federal control over electric co-ops. *Pub Util* 32:170-4 Ag 5 '43

Rural electric co-ops get a trade association. L. D. Farrar. *Pub Util* 31:676-82 My 27 '43

REA co-ops may reclaim NRECA insurance funds. *Elec W News* ed 120:3-4 JI 3 '43

REA drops mutual cover scheme. *Weekly Underw* 149:57+ JI 10 '43; *Nat Underw* 47:15 JI 8 '43

REA head loses; Slattery stripped of power in feud with electric co-op. *Business Week* p27-8 JI 10 '43

REA insurance issue broadcast. R. Harkness. *Nat Underw* 47:5 Ag 19 '43

REA insurance scheme criticized. *Weekly Underw* 149:109+ JI 17 '43

What is the true origin of NRECA? J. King. *Pub Util* 32:3-14 JI 3 '43

What's behind the attack on NRECA? C. T. Ellis. *Pub Util* 32:76-81 JI 22 '43

NATIONAL safety council

Auditor's report. *Nat Safety N* 47:30-1 Ap '43

Charting the course. N. H. Dearborn. *Nat Safety N* 46:19+ N '42

Council adopts new constitution and by-laws. *Nat Safety N* 48:17 N '43

Council expands information service. *Nat Safety N* 46:54 N '42

Council is on the job. H. A. Drum. *Nat Safety N* 47:17 Ja '43

Council staff reorganized. *Nat Safety N* 48:16-17 JI '43

Executive committee, 1942-1943. *Nat Safety N* 47:40 F '43

Executive committee, 1942-43; portraits. *Nat Safety N* 46:14-15 D '42

General chairmen of National safety council section; portraits. *Nat Safety N* 47:17 F '43

Holmes marine chairman; other officers. *Weekly Underw* 147:1135 N 14 '42

Increased service for industrial members. W. S. Paine. *Nat Safety N* 48:75+ O '43

More power to community safety; new relationship between National safety council and local councils. *Nat Safety N* 47:20+ Ja '43

National safety congress and exposition, 31st. Chicago, Oct. 27-29. *Nat Safety N* 46:14-17 N '42; *Paper Ind* 24:839, 841-2+ N '42; *Safety Eng* 84:6-8+ N '42

National safety congress and exposition, 32d. Chicago, Oct. 5-7. Concrete (mill sec) 51: 239-41+ N '43; *Nat Safety N* 48:10-13 N '43; *Paper Ind* 25:751+ O '43; *Chem & Eng* N 21:1721-3 O 25 '43; *Rock Prod* 46:104-6+ N '43

National safety congress and exposition, 32d. Chicago, Oct. 5-7; program. *Nat Safety N* 48:2-29 pt2 S '43

Officers and executive committee, 1942-43. *Nat Safety N* 46:18 N '42

Officers, executive board, 1943-44; board of trustees; sectional officers. *pors Nat Safety N* 48:20-1, 28-9 N '43

Plan enlarged programs at council conferences. *Nat Safety N* 48:32+ Ag '43

Safety goes into battle. C. E. Adams. *Il Dun's R* 50:5-8 N '42

Sectional officers. *Nat Safety N* 47:58, 70 Ja '43

Shortening the road to victory. J. Stilwell. *Nat Safety N* 46:11+ N '42

Year of progress. J. Stilwell. *Nat Safety N* 48:16-17+ N '43

NATIONAL sand and gravel association

Annual meeting, Cleveland, Jan. 26-29. *Rock Prod* 46:42-9+ F '43

Directors meeting, New York, Oct. 1-2. *Rock Prod* 45:39+ N '42

Semi-annual meeting of the board of directors, Cincinnati, Aug. 19. *Rock Prod* 46:96-8 S '43

NATIONAL sanitary supply association

Meeting, Chicago, May 24-26. *Soap & San Chem* 19:129B-129C+ Je '43

NATIONAL science fund

Charles L. Mayer awards of the National science fund. *Science* 96:489-90 N 27 '42

First Charles L. Mayer award of the National science fund. *Science* 97:349 Ap 16 '43

NATIONAL security traders association

Annual meeting, 10th, Chicago. *Comm & Fin Chr* 158:781, 789-822 Ag 26 '43

Association's activities, Oct. 1, 1942 to April 15, 1943. W. P. Brown. *Comm & Fin Chr* 157:1491 Ap 22 '43

Officers, executive council, boosters. *pors Comm & Fin Chr* 158:789+ Ag 26 '43

NATIONAL steel corporation

Annual report. *Comm & Fin Chr* 157:1746 My 10 '43

NATIONAL supply company (Pa.)

Thumbnail stock appraisal. *Mag of Wall St* 71:179 N 28 '42

NATIONAL synthetic rubber corporation

New company formed to make synthetic rubber. *India Rubber W* 107:389 Ja '43

Organized. *Comm & Fin Chr* 156:2135 D 14 '42

NATIONAL war labor board

At stake in coal fight, 37 1/2c. *Business Week* p15-16 O 30 '43

Bache co. consents to WLB wage jurisdiction. *Comm & Fin Chr* 156:1786 N 19 '42

Contract at stake; NWLB weighing appeal from Cleveland decision which invalidates A.F.L.'s union shop at Trailer co. of America. *Business Week* p98-9 JI 24 '43

Decisions of National war labor board, Aug. and Sept. 1942. *Monthly Labor R* 56:59-67 Ja '43

Delegation of wage-approval power. *Monthly Labor R* 56:148-9 Ja '43

Dividing the load; dozen little NWLB's to be set up. *Business Week* p70+ Ja 23 '43

Engineers protest affiliation with sub-professionals; professional group intervenes in WLE case. *Civil Eng* 13:337-8 JI '43

It's up to NWLB; panel O.K.'s three most important demands of Chrysler workers. *Business Week* p96-7 Je 12 '43

Labor disputes and the War labor board; abstract. G. K. Munson. *Management R* 32: 97-9 Mr '43

Lewis' triumph. *Business Week* p14 My 29 '43

NATIONAL war labor board—Continued

- Maintenance-of-membership awards of National war labor board. F. Joiner and others. Monthly Labor R 57:524-33 S '43
- Model in lumber; West Coast lumber commission set up by NWLB; decentralization scheme. Business Week p80 Ja 30 '43
- Municipal news; War labor board has no power to intervene in disputes involving state and municipal agencies and their employees. Comm & Fin Chr 156:2240 D 24 '42
- National war labor board jurisdiction over all labor disputes. Monthly Labor R 56:882-3 My '43
- NWLB order; Board empowered to call in employer. Business Week p96+ JI 3 '43
- NWLB speaks up; first report to the Senate. Business Week p76+ My 15 '43
- Newspaper printing and publishing panel to make recommendations on wage and salary adjustments. Comm & Fin Chr 157:1022 Mr 18 '43
- Now comes pay showdown; case of 1,200,000 shipyard workers demanding 15c an hour. Business Week p15-16 JI 3 '43
- President authorizes War labor board to enforce sanctions against strikers. Comm & Fin Chr 158:832 Ag 26 '43
- Strange interlude; industry members of NWLB support checkoff and maintenance of membership. Business Week p88-9 My 8 '43
- Union raps NWLB. Business Week p103 Ap 24 '43
- Wage-stabilization policy of National war labor board. Monthly Labor R 55:1144-7 D '42
- Wages bracketed; employers see confusion in Labor board machinery for handling maladjustment cases. Business Week p86-8 JI 17 '43
- Wages; squaring the vicious circle. Fortune 27:79-81, 190+ My '43
- WLB authorizes 10 regional offices to settle labor disputes. Automotive & Aviation Ind 88:50+ Ja 15 '43
- WLB in action; abstract. K. G. Kramer. Management R 32:56-7 F '43
- WLB jurisdiction to cover wage disputes in non-war industries. Comm & Fin Chr 156:2061 D 10 '42
- WLB rules federal power supersede states' in wartime. Comm & Fin Chr 158:1124 S 16 '43
- WLB speeds handling of labor dispute cases. Comm & Fin Chr 157:199 Ja 14 '43
- WLB staff changes. Comm & Fin Chr 157:372 Ja 28 '43
- NATIONAL warm air heating and air conditioning association**
- Annual meeting, 29th, Cleveland, Dec. 8-9. Sheet Metal Worker 34:84, 86, 88-9+ Ja '43
- Mid-year meeting, Chicago, May 26. Sheet Metal Worker 34:48-9 Je '43
- NATIONAL wholesale druggists association**
- Annual meeting, 69th, New York, Oct. 5-7. Oil Paint & Drug Rep 144:35-6+ O 11 '43
- Special war meeting, Chicago, April 14-15. Oil Paint & Drug Rep 143:3+ Ap 26 '43
- NATIONAL wholesale hardware association**
- Semi-annual meeting, Chicago, Oct. 18-21. Sheet Metal Worker 33:56-7 N '42; Steel 111:32, 50 O 26 '42
- NATIONAL youth administration**
- Liquidation of NYA urged in Labor dept. Comm & Fin Chr 158:307 JI 22 '43
- NATIONALISM**
- Isolationist reaction? Fortune 27:116, 118 Ap '43
- NATIONS, Psychology of.** See Ethnopsychology
- NATURAL dyes.** See Dyes and dyeing—Natural dyes
- NATURAL gas.** See Gas, Natural
- NATURAL gasoline.** See Gasoline, Natural
- NATURAL gasoline association of America**
- Annual meeting, 22d, Dallas, April 14-16. Nat Pet N 35:16, 18+ Ap 21 '43; Oil & Gas J 41:40-3 Ap 22 '43
- NATURAL history**
- See also
- Biology
- Botany
- Geology
- Marine biology
- Paleontology
- Zoology

NATURAL history museums

- See also
- American museum of natural history
- Field museum of natural history
- NATURAL lighting.** See Daylight
- NATURAL resources**
- America's natural resources; new perspectives on many industries depend on raw materials reserves. H. F. Travis. Il Mag of Wall St 72:342-4+ JI 10 '43
- Changing status of the United States under raw materials shortages. L. Stern. Il Mag of Wall St 73:11-13+ O 16 '43
- Science in national planning. J. S. Bates. Can Chem & Process Ind 26:669-71 N '42; Same. Pulp & Pa of Can 44:359-62 Ap '43
- War role of a geological survey. A. Bevan. Science 97:478-80 My 28 '43
- Warfare and natural resources. H. B. Ward. Science 98:289-92 O 1 '43
- See also
- Agriculture
- Chemicals
- Coal
- Conservation of resources
- Forests and forestry
- Fuel
- Gas, Natural
- Geography, Economic
- Mines and mineral resources
- Oil lands
- Oil shales
- Ore deposits
- Peat
- Petroleum
- Raw materials
- Water supply
- NATURE**
- See also
- Wilderness areas
- NATURE (periodical)**
- Nature and the Macmillan company. Science 97:381 Ap 9 '43
- NATURE photography**
- Microscopic animal life from ponds and streams. J. G. Pratt. Il diag Am Phot 37:16-19 Je '43
- Nature photography in the spring. L. W. Brownell. Il Am Phot 37:40-2+ Mr '43
- Photographing the garden. V. McGarrett. Am Phot 37:4, 48+ Ag '43
- Winter work for the nature photographer. L. W. Brownell. Il Am Phot 37:42-4, 52-3 Ja '43
- See also
- Photography of animals
- Photography of birds
- Photography of clouds
- Photography of flowers
- Photography of insects
- Photography of plants
- NAUTICAL astronomy**
- See also
- Navigation
- NAUTICAL instruments**
- Electrical instrument production soars; Westinghouse meter division. T. Turner. Il Marine Eng 48:214 JI '43
- Flux navigator; enables WABC's personnel to reach island station in fog; magnetic field from power cable guides vessel. D. D. Jones. Il diags Electronics 16:74-7+ F '43
- See also
- Azimuth dial
- Direction finding apparatus
- Gyro compass
- Radio aids to navigation
- Sextant
- NAUTICAL training schools**
- Dedication of Merchant marine academy. Il Marine Eng 48:186-91 O '43
- Maritime school; West coast; views, plans, and construction outline. Arch Forum 79:55-9 S '43
- New York to construct first maritime school. Weekly Underw 149:1008+ N 6 '43
- NAVAHO Indians**
- Wind that talks; government radio network aids work among Navahos. C. Huff. Il Comp Air M 48:7120-1 Ag '43
- NAVAL air service.** See United States—Air service, Navy
- NAVAL air stations**
- Battle for airdromes; maps. Fortune 28:110-11 S '43
- Marginal drains provided for runways at a naval air station. W. W. Ohmstead. diags Civil Eng 13:434-5 S '43

NAVAL air stations—Continued

Patuxent River naval air station. E. M. Hockensmith. *il Aero Digest* 43:118-19+ *Jl* '43

See also

Hangars

NAVAL architecture

Economy in deck beam design. J. P. Fitzgerald. *Marine Eng* 48:197-8 *Jl* '43

Electric ships; location of machinery. A. C. Hardy. *Electrician* 129:547-8 *N* 20 '42

Model making as an aid to shipbuilding and planning. S. B. Besse. *il Marine Eng* 48:152-5 *F* '43

Reinvestigation of the practicability of the small displacement capital ship; abstract and discussion. W. E. Strobe and S. J. Dwyer. *diag plan Marine Eng* 48:156-9 *Ja* '43

Streamlining curves of form. L. K. Losee. *Marine Eng* 48:212-14 *Ag* '43

Subdivision of United States Maritime commission vessels. J. L. Bates and I. J. Wanless. *Marine Eng* 48:146-8; Discussion. 153-4 *Ja* '43

See also

Airplane carriers

Barges

Dredges

Freight ships

Marine engineering

Motor ships

Propellers

Ship propulsion

Shipbuilding

Ships

Ships, Concrete

Steamboats

Submarine boats

Tank ships

Torpedo boats

Towboats

Warships

Designs and plans

Streamlining the ore carrier. K. C. Thornton. *il diag plans Marine Eng* 48:180-97 *S* '43

NAVAL art and science*See also*

Armor plate

Marine engineering

Naval bases and

other headings be-

ginning Naval

Navigation

Navy yards and na-

val stations

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NAVAL bases

Britain to pay costs of land given U.S. for air bases. *Comm & Fin Chr* 158:608 *Ag* 12 '43

Derry navy base in North Ireland. W. G. Bowman. *il Eng N* 131:330-2 *Ag* 26 '43

Navy construction in theaters of operation. *il Eng N* 130:207-9 *F* 11 '43

Pacific island base. D. Burke. *Fortune* 28:86, 94, 209 *Ag* '43

See also

Naval air stations

Navy yards and na-

val stations

NAVAL battles

How naval battles are fought; the strategy and tactics of the war at sea. *il Sci Am* 168:100-3+ *Mr* '43

NAVAL education

Navy college training program. I. C. Crawford. *J Eng Educ* 33:630-8 *Ap* '43

Navy program. J. W. Barker. *il Elec Eng* 62:93-5 *Mr* '43

Navy's four year engineering course covers broad range of subjects. *Eng N* 130:525 *Ap* 15 '43

Recent developments in the navy college training program. J. W. Barker. *J Eng Educ* 34:63-72; Discussion. 72-9 *S* '43

Training navy men to operate destroyer escorts. R. C. Buell. *il Marine Eng* 48:210-11+ *Ag* '43

See also

Moving pictures in

naval education

Nautical training

schools

Navigation—Study

and teaching

NAVAL engineering. See Marine engineering

NAVAL engineers. See Marine engineers

NAVAL guns

Firing 14-inch guns on a battleship. *il Steel* 112:68 *My* 31 '43

Gun recoil; design of recoil mechanisms. A. F. Macconochie. *il diag Steel* 113:96-8 *Ag* 2 '43

Manufacture

Gun slides for the navy; Allis-Chalmers manufacturing company. *il Am Mach* 86:1520-1 *D* 24 '42

Pontiac gun plant. G. S. Whittaker. *il Heat & Ven* 40:36-41 *Jl* '43

NAVAL research

Thomas A. Edison's influence on the United States navy. H. G. Bowen. *Edison Elec Inst Bul* 11:133-5 *My* '43

NAVAL research laboratory

Naval research laboratories celebrates 20th anniversary. *Electronics* 16:202+ *Ag* '43

Our debt to Josephus Daniels. L. A. Hawkins. *Gen Elec R* 46:423 *Ag* '43

Twenty years of research by the navy. F. T. Sisco. *Min & Met* 24:406 *S* '43

NAVAL stations. See Naval air stations; Naval training stations; Navy yards and naval stations

NAVAL stores

From the pine; naval stores production. *il Sci Am* 169:202-4 *N* '43

Increased naval store yield from slash pine. J. M. Crowe. *Chem Ind* 51:725 *N* '42

Naval stores and compounding synthetic rubber. *India Rubber W* 109:149 *N* '43

Naval stores loan plan for 1943. *Oil Paint & Drug Rep* 143:7+ *Ja* 4 '43

Naval stores 1943 payment plan issued. *Oil Paint & Drug Rep* 142:7+ *N* 30 '42

Naval-stores trade today. G. Lytzen. *il For Comm W* 10:6-9, 17 *Ja* 2 '43

Pedigreed pine for naval stores production. H. L. Mitchell, C. S. Schopmeyer and K. W. Dorman. *Science* 96:559-60 *D* 18 '42

See also

Pitch

Rosin

Tar

Turpentine

Statistics

Naval stores, 1938-1941. Survey of Cur Business 1942 *Sup p104* [supplemented in monthly numbers]

NAVAL training stations

Naval training station: East coast; views, plans, and construction outline. *Arch Forum* 79:47-54 *S* '43

Navy camp built from non-critical materials; Camp Bainbridge. *il diag Eng N* 130:124-7 *Ja* 28 '43

Special expedients speed construction of naval air training station. *il Eng N* 130:792-7 *Je* 3 '43

Taking the concrete block plant to job; big naval training station. E. Johnson. *il Rock Prod* 46:73-5 *My* '43

Welfare building. Naval training station, Great Lakes, Ill.; views, plans, and construction outline. *Arch Forum* 78:55-60 *Mr* '43

Power supply

Estimating electric loads for military-training bases. Federal housing, and other wartime projects. H. M. Potts. *Elec Eng* 62:Trans 246-54 *My* '43

NAVAL uniforms. See Uniforms, Military

NAVAL warfare. See Naval art and science

NAVIES*See also*

Airplane carriers

Submarine boats

Warships

also subdivision Navy under names of countries, e.g.

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NAVIGATION

Astronomical navigation without mathematics. A. L. Mieville. *diags Roy Aeronautical Soc J* 47:273-83 *Ag* '43

Celestial navigation. E. B. Collins. *il Sci Am* 168:66-7 *F* '43

McMillen's spherographical system of celestial navigation. D. Brouwer and F. W. Keator. *diags Aero Digest* 42:116-18, 139-40+ *Ap* '43

See also

Buoys

Direction finding ap-

paratus

Maritime law

Motor ships

Nautical instruments

NEGROES—Employment—Continued

Integration of Negro workers, Management R 31:434-6 D '42

Negro employment in airframe plants.

Monthly Labor R 56:888-9 My '43

Negro plant pays; Simplex Radio's experiment. Business Week p96-7 O 16 '43

Negroes in a war industry; the case of shipbuilding. H. R. Northrup. bibliog J Business 16:160-72 JI '43

Occupational status of Negro railroad employees. Monthly Labor R 56:484-5 Mr '43

Opportunities for Negro women as dietitians. Monthly Labor R 57:104-5 JI '43

Race riots hurt. II Business Week p102+ Je 26 '43

Racial ills grow; conflict between whites and Negroes. Business Week p94 Je 12 '43

Social reform strengthens its antidiscrimination salient. L. D. Farrar. Pub Util 32: 619-25 N 11 '43

War labor board decision on wages of Negroes. Monthly Labor R 57:31-2 JI '43

Health and hygiene

Case studies of nutrition; three Mississippi Negro families. D. Dickins. Ann Am Acad 225:55-6 Ja '43

History

Teaching of Negro history in Chicago public schools. Monthly Labor R 56:721 Ap '43

Housing

For Baltimore's one-fifth: Joseph P. Day's housing project for Negro workers. Arch Forum 79:44-5 S '43

Negroes to occupy 12% of dwellings when federal housing program is completed. Comm & Fin Chr 157:1691 My 6 '43

Segregation

See also
Railroads—Negro passengers

Statistics

Two-fifths of Negro population now urban; pictograph. Sales Management 52:58 S 15 '43

NEGROES as policy holders. See Insurance, Life—Negroes as policy holders

NEIGHBORHOOD planning

Fundamentals of land planning; areas of agreement and disagreement on city and regional planning. M. L. Colean. Arch Forum 79:66-8+ O '43

Planned neighborhoods for 194X. II diagrs plans Arch Forum 79:65-142 O '43

Planning the postwar community. T. W. Mackesey and G. D. Clarke. II plan Arch Rec 93:73-82 Ja '43

Senator Wagner on land; a bill to encourage development of good neighborhood conditions in towns and cities by private enterprise with the collaboration of public enterprise. Arch Forum 79:37-8 JI '43

Study by governors and mayors of Wagner bill for redevelopment of blighted areas sought. Comm & Fin Chr 158:317 JI 22 '43

Town of Willow Run; civic center and proposed neighborhood units. II plans Arch Forum 78:37-54 Mr '43

See also
Shopping centers

NEILL, Charles Patrick, 1865-1942

Sketch. A. F. Hinrichs. Am Stat Assn J 38:110-11 Mr '43

NELSON, Donald Marr, 1888-

Portrait. Ry Age 115:131 JI 24 '43

War production board: is it? por Fortune 27: 90-7 Mr '43

NEMATODES

Relationship of vitamin A to resistance to *nippostrongylus muris*. J. Y. C. Watt and others. Science 97:381-2 Ap 23 '43

NEOCRYPTOXANTHOL

Carotenoids of yellow corn grain. J. W. White, Jr., F. P. Zscheile and A. M. Brunson. bibliog Am Chem Soc J 64:2603-6 N '42

NEOERGOSTEROL

Oxidative degradation of neoergosteryl acetate. R. P. Jacobsen. bibliog Am Chem Soc J 65:1789-92 O '43

NEOERGOSTERYL acetate

Oxidative degradation of neoergosteryl acetate. R. P. Jacobsen. bibliog Am Chem Soc J 65:1789-92 O '43

NEON

Coefficients of thermal diffusion of neon and argon and their variation with temperature. L. G. Stier. bibliog Phys R 62:543-51 D 1 '42

Geiger-Mueller counter pulse size. C. W. Miller. diag R Sci Instr 14:68-76 Mr '43

Viscosities of carbon monoxide, helium, neon, and argon between 80° and 300°K. coefficients of viscosity. H. L. Johnston and E. R. Grilly. bibliog J Phys Chem 46:948-63 N '42

NEOPENTYL bromide. See Bromodimethyl propane

NEOPENTYL compounds

Reactions of certain neopentyl systems with electrophilic reagents. P. Skell and C. R. Hauser. bibliog Am Chem Soc J 64:2633-5 N '42

NEOPHYL chloride

Formation of cyclopropanes from monohalides; some reactions of 1-chloro-2-methyl-2-phenylpropane (neophyl chloride). F. C. Whitmore, C. A. Weisgerber and A. C. Shabica, jr. bibliog Am Chem Soc J 65: 1469-71 Ag '43

NEOPRENE

Blends of Thiokol FA with neoprene GN. Hycar OR-15, and Perbunan 26. S. M. Martin, jr. and A. E. Laurence. II Ind & Eng Chem 35:986-91 S '43

Compounding neoprene latex. B. Dales, R. H. Walsh and H. H. Abernathy. India Rubber W 107:665-7; 108:146-7 Mr, My '43

Current importance of synthetic latices and a review of one of them (neoprene latex type 571). H. H. Abernathy. Rubber Age 52:125-7+ N '42

Effect of petroleum products on neoprene vulcanizates; effect of gasolines. D. F. Fraser. II Ind & Eng Chem 35:947-8 S '43

Electrical properties of neoprene. F. L. Yerzley. II Ind & Eng Chem 35:330-5 Mr '43; Excerpts. Electrician 131:207-8 Ag 27 '43

Neoprene. II Chem & Eng N 20:1363-5 N 10 '42

Neoprene; construction material for petroleum industry equipment. C. C. Pryor. II Pet Eng 14:27-30 D '42

Pumps and valves; new engineering materials replace basic standbys; neoprene products. R. Trautschold. II Rayon 23:681-4 N '42

Testing

Cut growth of Buna S compounds; method to determine rate. C. A. Carlton and E. B. Reinhold. II India Rubber W 108:141-2 My '43

NEPHELINES

Nephelized paragneisses of the Bancroft region, Ontario. W. K. Gummer and S. V. Burr. Science 97:286-7 Mr 26 '43

NEPHELITE syenite

Nepheline syenite in low-temperature vitreous wares. C. J. Koenig. II Ohio State U Eng Exp Sta Bul 112:1-36 '42 (pa 40c)

Vitrified cordierite bodies. L. E. Thiess. bibliog II Am Cer Soc J 26:99-102 Mr 1 '43

NEPS. See Cotton neps

NERVES

Loss of proprioceptive reflexes following retrograde degeneration. B. Campbell. Science 98:114-15 JI 30 '43

NERVOUS system

Acetylcholine and the physiology of the nervous system. J. F. Fulton and D. Nachmansohn. bibliog Science 97:569-71 Je 25 '43

Diseases

See also
Mental diseases

NESTS

Nest builders: hymenoptera. L. W. Brownell. II Am Phot 37:48+ N '43

NET fabrics

Role of textiles in camouflage. II Textile World 93:68-9 J1 '43

See also
Lace fabrics

NETHAMINE. *See* Ethylephedrine hydrochloride**NETHERLANDS**

Present status of Dutch accounts in the U.S.A. F. W. Eisner. Bankers M 145:442-3 N '42

See also
Cattle industry and trade—Netherlands

German occupation

Dutch pay dearly for privilege of being exploited by Nazis. For Comm W 9:18 D 12 '42

Financial occupation of Holland. Economist 144:496-7 Ap 17 '43

Industry and labour in Holland. Economist 144:425-6 Ap 3 '43

Occupied Netherlands writhes under Nazi orgy of verbodens. For Comm W 10:23 Ja 30 '43

NETHERLANDS INDIES

Netherlands Indies. A. Vandenbosch. Ann Am Acad 226:86-96 Mr '43

NETHERLANDS WEST INDIES. *See* West Indies, Netherlands**NETS**

Rope for high living; safety nets for building workers. II Safety Eng 86:11+ S '43

See also
Fishing nets

NETTLE fiber

Nettle fiber. F. I. Oakley. Textile Col 65:352+ Ag '43

Stinging nettles in papermaking; abstract. C. R. Metcalfe. Paper Ind 24:984 D '42

NETWORK analyzer. *See* Electric distribution—Tables, calculations, etc.**NEUTRA, Richard Joseph, 1892-**

Chairman of the California state planning board. por Arch Forum 72:174 My '43; Arch Rec 93:18 My '43

NEUTRALITY

Neutrals' part. Economist 145:229-30 Ag 21 '43

NEUTRINOS

Physics in 1942. T. H. Osgood. J Ap Phys 14:59-60 F '43

NEUTRONS

Diffusion length of C neutrons in water. G. R. Gamertsfelder and M. Goldhaber. Phys R 62:556-7 D 1 '42

Meson theory of the magnetic moment of proton and neutron. J. M. Jauch. bibliog Phys R 63:334-42 My 1 '43

Multiple production of penetrating particles by cosmic-ray protons and neutrons. W. E. Hazen. Phys R 64:257 O 1 '43

Relativistic theory of excited spin states of the proton and the neutron. V. L. Ginsburg. bibliog Phys R 63:1-12 Ja 1 '43

Scattering

Neutron polarization and ferromagnetic saturation. F. Bloch, M. Hamermesh and H. Staub. bibliog diags Phys R 64:47-56 Ag 1 '43

Scattering of neutrons by protons. L. Hulthén. bibliog Phys R 63:383 My 1 '43

NEVADA

See also
Geology—Nevada

Manganese mines and mining—Nevada

Mercury mines and mining—Nevada

Tungsten mines and mining—Nevada
Zinc mines and mining—Nevada

NEW ALBANY, Indiana**Water supply**

Cement lining of pipe in place at New Albany; with cost data. F. A. Schaefer. Am Water Works Assn J 35:781-5 Je '43

NEW BEDFORD, Massachusetts**Water supply**

Wartime operation of New Bedford's water works. Pub Works 74:36 Ag '43

NEW BRUNSWICK

See also
Forests and forestry
—New Brunswick

NEW businesses. *See* Business—New businesses**NEW CALEDONIA**

See also Rubber industry and trade—New Caledonia

NEW CASTLE, Pennsylvania

Laying a ghost; campaign to house war workers. Business Week p16 Ja 30 '43

NEW employees. *See* Employment management—New employees**NEW ENGLAND**

See also
Advertising—New England
Rain and rainfall—New England
Mines and mineral resources—New England

Industries and resources

New England in the war and in the postwar; Chem & Met regional survey. maps Chem & Met Eng 50:119-26 S '43

New England's industrial activities reestablished by war. W. H. Hillyer. Barron's 23:7 S 6 '43

NEW ENGLAND gas and electric association

SEC denies motion on claims, financial statement. Comm & Fin Chr 157:1085 Mr 22 '43

Trustees of Associated System bring actions to rescind 1930-32 acts, sums involved exceeded \$23,000,000. Comm & Fin Chr 157:347-8 Ja 25 '43

NEW ENGLAND gas association

Annual business conference, 17th, Boston, March 18. Gas Age 91:11-12+ Ap 8 '43; Am Gas Assn Mo 25:151 Ap '43

Annual business conference, 17th, Boston, March 18; abstracts of papers. Am Gas J 158:16-20+ Ap '43

NEW ENGLAND mutual life insurance company

99th annual report. G. W. Smith. East Underw 44:1, 6 F 19 '43

NEW ENGLAND power association

SEC orders company to divest itself of four subsidiaries. Comm & Fin Chr 157:1085-6 Mr 22 '43

NEW ENGLAND water works association

Annual meeting, Boston. Eng N 131:510 O 7 '43

Annual meeting, Boston, Sept. 28-29. Water Works & Sewerage 90:373-7, 408-10 O-N '43

Annual reports. N E Water Works Assn J 56:503-33 D '42

N.E.W.W.A. protests to W.P.B.; U-1 order too restrictive for safety; meeting, Boston, March 18. Water Works & Sewerage 90:137-9 Ap '43

Preliminary report of the committee on post war activities. N E Water Works Assn J 57:261-4; Discussion. 264-85 S '43

Proceedings of the Air raid precautions school for water works instruction of the New England water works association and the Office of civilian defense. N E Water Works Assn J 57:81-168 Je '43

NEW GUINEA

Climatic conditions in New Guinea. Science 97:sup8 Mr 19 '43

See also
World war, 1939—New Guinea

NEW HAMPSHIRE

See also
Floods—New Hampshire

NEW idea incorporated

Thumbnail stock appraisal. Mag of Wall St 72:90 My 1 '43

NEW JERSEY

See also
Land—New Jersey
Motor bus lines—New Jersey

NEW LONDON, Connecticut

Bridges

Balanced erection for New London bridge. *Il Eng N* 130:522-3 *Ap* 15 '43

NEW MEXICO

Pedro's land; Spanish-speaking people of New Mexico. *C. Holbrook. Il Comp Air M* 47:6890-4 *N* '42

Regional patterns of dietary deficiency; Spanish-Americans of New Mexico and Arizona. *C. A. Heller. Ann Am Acad* 226:49-51 *Ja* '43

See also

Geology—New Mex-

ico

Mines and mineral

resources—New

Mexico

Petroleum industry

and trade—New

Mexico

Rain and rainfall—

New Mexico

Zinc mines and min-

ing—New Mexico

NEW ORLEANS

See also

Motor bus lines—New

Orleans

Industries

Hub of new industrial South; war industries; A. J. Higgins, builder of boats and airplanes. *Il Steel* 113:88-92+ *Jl* 12 '43

Old city hums. *Il Business Week* p46+ *Je* 26 '43

See also

Higgins industries,

incorporated

NEW products. *See* Products, New

NEW YORK (city)

Court action would stop employment of outside engineers by New York city; Civil service technical guild brings action. *Eng N* 131:124 *Jl* 15 '43

New York a ghost town? phooey! G. Morris and S. P. Storer. *Il Sales Management* 52: 56+ *Ag* 1 '43

New York city in the postwar period. H. Held. *Harvard Business R* 21 no4:455-71 *[Jl]* '43

New York media combat story that metropolis is a ghost town. *Ptr Ink* 204:46 *Jl* 30 '43

Redevelopment project for New York; 98th Street crossway, demonstration in redevelopment. *Il plans Arch Forum* 79:123-9+ *O* '43

Toward post-war planning for Yorkville. R. Tough and S. M. Robison. *maps J Land & Pub Util Econ* 18:485-94 *N* '42

Bridges

Bridge bearings replaced under traffic; Bronx approach to the Macombs Dam bridge. *Il diags Eng N* 131:687-9 *N* 4 '43

Commerce

New York city leads in wholesale trade of Nation in 80 of 95 lines analyzed. *Comm & Fin Chr* 158:611 *Ag* 12 '43

Economic conditions

Hanes committee report cites continued loss of trade by New York city. *Comm & Fin Chr* 157:1476+ *Ap* 22 '43

Galleries and museums

Museum attendance and the war. *Science* 97:436 *My* 14 '43

See also

American museum of

natural history

Harbor

Survey indicates port functions efficiently. *Weekly Underw* 149:70 *Jl* 10 '43

Hospitals

Integrated hospital; summarizing studies being developed by Department of public works. I. Rosenfield. *plans Arch Rec* 93:63-4 *My* '43

Hotels

Post-war future of New York City hotels. *Comm & Fin Chr* 157:1959 *My* 27 '43

Industries

New York City's problem not too discouraging; pooling of skills would boost war effort. S. H. Barmasel. *Iron Age* 151:99-100 *My* 13 '43

Libraries

New trend in magazine reading shown by 300,000 library visitors; facts and thought-provoking articles favored by callers at New York's library. G. M. Flanagan. *Sales Management* 52:78+ *Ag* 1 '43

Public works department

Permanent samples exhibit aids New York City's Department of public works. *Il Eng N* 131:362-3 *S* 2 '43

Rapid transit

See also

Hudson and Manhat-

tan railroad

New York (city)—

Subways

Sewerage

Improved final settling tanks at Bowery Bay. R. H. Gould. *Il diags Civil Eng* 13:279-81 *Je* '43; Same, without *Il. Water Works & Sewerage* 90:133-6 *Ap* '43

Manhattan prepares for postwar construction. D. G. Edwards. *Il map Civil Eng* 13:353-5 *Ag* '43

Streets

Manhattan prepares for postwar construction. D. G. Edwards. *Il map Civil Eng* 13:353-5 *Ag* '43

Subways

Above and under ground; incidents from a long engineering experience around New York. J. H. Myers. *Il diag plan Civil Eng* 13:377-80 *Ag* '43

Lighting for safety; New York's subway stations. E. E. Dorting. *Il diags Illum Eng* 38:421-32 *S* '43

Modified dimout for New York subways; silver-bowl lamps keep within army requirements. E. C. Giddings. *Il Transit J* 86: 402-4 *N* '42

Tunnels

Narrows Tunnel project. *diags plan Engineer* 176:152-3 *Ag* 20 '43

Queens Midtown tunnel. O. Singstad. *Il diags maps Am Soc C E Proc* 69:361-97 *Mr* '43; Discussion. 69:783-4, 895-904, 1025-36, 1483-92 *My*-*Je*, *S*, *N* '43

Water supply

Lining inclined section of Delaware aqueduct. C. G. Hoerner. *Il diags plan Civil Eng* 13: 139-43 *Mr* '43

Turbine-driven pump under Fifth avenue regulates New York's water pressure. *Il diags Power* 87:459-61 *Jl* '43

NEW YORK (state)

See also

Geology—New York

(state)

Insurance, Unem-

ployment—New

York (state)

Insurance law—New

York (state)

Mines and mineral

resources—New

York (state)

Rain and rainfall—

New York (state)

Commerce, Division of

Review of basic social insurance literature. H. O. Oille. *Special Lib* 34:301-3 *Jl*-*Ag* '43

NEW YORK air brake company

War stocks with good peace prospects. *Mag of Wall St* 72:418-19 *Jl* 24 '43

NEW YORK & Harlem railroad

Minority stockholders offered exchange plan. *Comm & Fin Chr* 158:89-90 *Jl* 5 '43

New York central railroad offer for Harlem stock approved by stockholders. *Comm & Fin Chr* 158:1351 *O* 4 '43

Offer by New York Central for minority stock made effective. *Comm & Fin Chr* 158:1860 *N* 8 '43

NEW YORK board of trade

Drug, chemical and allied
trades section

DCAT elects Williams chairman; other officers. por Oil Paint & Drug Rep 142:3 D 14 '42
Elects executive committee. Oil Paint & Drug Rep 142:4+ N 23 '42

Insurance section

Annual meeting. 3d. Weekly Underw 147: 1472+ D 26 '42; East Underw 43:28 D 26 '42

NEW YORK botanical garden

Annual report. W. J. Robbins. Science 97: 323 Ap 9 '43

NEW YORK central railroad

Annual report. Ry Age 114:963 My 15 '43
Earns above \$7 a share—abnormal traffic created by war responsible. Comm & Fin Chr 157:348 Ja 25 '43
Equipment trusts offered. Comm & Fin Chr 157:1848-9, 2046 My 17, 31 '43
Extracts from annual report, 1942. Comm & Fin Chr 157:1768 My 13 '43
New York Central bonds up from lows. A. Jansen. Barron's 23:15-16 My 31 '43
Offer for Harlem stock approved by stockholders. Comm & Fin Chr 158:1351 O 4 '43
Offer for the outstanding minority stock of New York & Harlem railroad made effective. Comm & Fin Chr 158:1860 N 8 '43

NEW YORK, Chicago and St Louis railroad

Annual report. Comm & Fin Chr 157:1747 My 10 '43

Asks for bids on new equipment issue. Comm & Fin Chr 158:1736 N 1 '43

Nickel Plate strengthens its credit. M. Howe. Barron's 23:18-19 My 24 '43

President outlines roads difficulties—not feasible to pay dividends. Comm & Fin Chr 157:348 Ja 25 '43

Purchase of Wheeling & Lake Erie railway stock denied, not consistent with public interest. Comm & Fin Chr 158:1351-2 O 4 '43

Railroad securities. Comm & Fin Chr 157: 1285 Ap 8 '43

Railroad securities. Comm & Fin Chr 158: 785 Ag 28 '43

Securities disturbing investors. J. S. Williams. Mag of Wall St 71:529 F 20 '43

Stock deal defended. Comm & Fin Chr 158: 1281 S 27 '43

NEW YORK clearing house association

Elects new officials; annual report figures. Comm & Fin Chr 158:1510 O 14 '43

NEW YORK cotton exchange

Alliot elected president; other officers. Comm & Fin Chr 157:2181+ Je 10 '43

NEW YORK curb exchange

Curb amendment brings in more members. Comm & Fin Chr 156:2060 D 10 '42

Employees pay raised. Comm & Fin Chr 157: 2379 Je 24 '43

Expenses and income in 1942 for N.Y. Curb. Comm & Fin Chr 157:928 Mr 11 '43

Moffatt re-elected Curb exch. chairman; other officers. Comm & Fin Chr 157:658 F 18 '43

NASD to take SEC unlisted decisions to court; Association opposes new requests. Comm & Fin Chr 158:591+ Ag 12 '43

NY Curb amends rules on special offerings. Comm & Fin Chr 158:915 S 2 '43

Trading on New York exchanges. Published in weekly Thursday numbers of Commercial & financial chronicle

Weekly and yearly record. Published in weekly Monday numbers of Commercial & financial chronicle

NEW YORK fire insurance exchange

Skirrow is elected president; other officers. Weekly Underw 148:585 Mr 13 '43

NEW YORK, Lackawanna and western railway

Delaware, Lackawanna & western railroad would merge New York, Lackawanna & western. Comm & Fin Chr 157:2247-8 Je 14 '43

NEW YORK life insurance company

Assets, etc. Comm & Fin Chr 157:476 F 1 '43

NEW YORK, New Haven and Hartford railroad

Housatonic bondholders to seek payment. Comm & Fin Chr 157:2351 Je 21 '43

Interest payments. Comm & Fin Chr 156:2227 D 21 '43

New Haven plan modified by I.C.C. Ry Age 115:185+ Jl 24 '43

Plans to add air line to transportation system. Comm & Fin Chr 158:1072-3 S 13 '43

Railroad securities. Comm & Fin Chr 158:405 Jl 29 '43

Reorganization plan revised by ICC. Comm & Fin Chr 158:395 Jl 26 '43

Stockholders protest treatment. Comm & Fin Chr 156:2136 D 14 '42

What are New Haven bonds worth? A. Jansen. Barron's 23:18-19 Ap 26 '43

NEW YORK, Pennsylvania, New Jersey utilities company

Gets approval for purchase of \$5,356,956 of subsidiary's holdings. Comm & Fin Chr 158: 1769 N 1 '43

Sale approved. Comm & Fin Chr 158:1282 S 27 '43

NEW YORK state sewage works association

Annual meeting, 15th, New York, Jan. 21-22. Water & Sewage 81:40-2 F '43; Eng N 130:107 Ja 28 '43; Water Works & Sewerage 90:101-4 Mr '43

Spring meeting, Rochester, June 4-5. Water Works & Sewerage 90:282 Jl '43

NEW YORK stock exchange

Block sales of securities; liquidation through new secondary market and special offerings. E. Barry. Trusts & Estates 76:165-6, 168-9 F '43

John A. Coleman elected chairman of Board of governors; other officers. Comm & Fin Chr 157:1776 My 13 '43

Listings, 1942. Comm & Fin Chr 157:634-5 F 15 '43

Maintains strong financial position in '42 despite operating loss. Comm & Fin Chr 157:1023 Mr 18 '43

Monthly range of prices of railroad and miscellaneous stocks and bonds for 1942. Comm & Fin Chr 157:401-20 Ja 28 '43

NYSE annual shows drop in security business. Comm & Fin Chr 157:835 Mr 4 '43

NYSE governors favor revising procedure on special offerings and secondary distributions. Comm & Fin Chr 157:1383 Ap 15 '43

NYSE revises policy on stock dividends. Comm & Fin Chr 158:1704 O 28 '43

NYSE to continue 1% net commission charge. Comm & Fin Chr 157:2169 Je 10 '43

Schram asks NYSE members for views on admitting corporations to Exchange membership. Comm & Fin Chr 157:827+ Mr 4 '43

Shares listed, 1938-1941. Survey of Cur Business 1942 Sup p87 [supplemented in monthly numbers]

Special year. Business Week p72+ Ja 23 '43

Stock and bond sales, daily, weekly and yearly. Published in weekly Monday numbers of Commercial & financial chronicle

Trading on New York exchanges. Published in weekly Thursday numbers of Commercial & financial chronicle

What became of the stock market? and what of the SEC? W. Dodge. Fortune 26:126-8+ D '42

See also

New York curb exchange

Employees

NYSE stock exchange asks WLB for equal treatment in proposed raises for employees. Comm & Fin Chr 157:1687 My 6 '43

NYSE wage dispute certified to WLB by Secretary Perkins after conciliation failure. Comm & Fin Chr 157:50 Ja 7 '43

WLB gives all NYSE employees pay raises. Comm & Fin Chr 157:1966 My 27 '43

Rules

Low-priced stocks on cash basis NYSE rules. Comm & Fin Chr 157:1205 Ap 1 '43

NYSE cuts number of financial questionnaires. Comm & Fin Chr 156:2154 D 17 '42

When distributed rules amended by governors of NYSE. Comm & Fin Chr 157:2379 Je 24 '43

Ticker service

Ticker now signals opening of market. Comm & Fin Chr 157:485 F 4 '43

NEW YORK, Susquehanna and western railroad
Examiner proposes Susquehanna plan. Ry Age 115:389-90 S 4 '43
Reorganization plan. A. Jansen. Barron's 23: 12+ O 11 '43

NEW YORK telephone company
Comparative income account, 1939-1942. Comm & Fin Chr 157:1184 Mr 29 '43
Ordered to end write-offs. Comm & Fin Chr 157:2452 Je 28 '43

NEW YORK title and mortgage company
Prospects appear bright for holders of New York title and mortgage co. certificates. Comm & Fin Chr 157:2164 Je 10 '43

NEW YORK trust company
Bank stocks; New York trust company capital increased. E. A. Van Deusen. Comm & Fin Chr 157:1664 My 6 '43

Operating income of N.Y. Trust in 1942: annual report to stockholders. J. E. Bierwirth. Comm & Fin Chr 157:288-9 Ja 21 '43

What is this bank stock worth? K. L. Trefftz. Barron's 23:5 S 13 '43

NEW YORK university
War-training center of New York university. Science 97:111 Ja 29 '43

NEW YORK zoological society
New York zoological society. H. F. Osborn. Science 97:253-4 Mr 19 '43

Department of tropical research

Expedition exhibition of the New York zoological society. W. Beebe. Science 97:574 Je 25 '43

NEW ZEALAND

See also

Labor and laboring classes—New Zealand
Labor laws and legislation—New Zealand
Prices—Regulation—New Zealand

Commercial policy

Importation and distribution of all goods placed under Ministry of supply and munitions. For Comm W 11:16-17 Je 5 '43

Economic conditions

New Zealand in 1942. Economist 144:sup9-10 Mr 13 '43

News by countries. For Comm W 11:16-17 Ap 3 '43

Economic policy

Wage and price stabilization in New Zealand. Monthly Labor R 57:250-4 Ag '43

Industries and resources

Linen flax industry and its introduction to New Zealand. S. B. Barltrop. diags plan Inst Mech Eng J & Proc 148:Proc 162-9, pl 1-2 F '43

Public trust office

How war affects trustee business; experience of New Zealand's public trust office. Trusts & Estates 76:357-61 Ap '43

NEWBERRY, J. J., company
Tests validity of OPA price control act. Comm & Fin Chr 158:1640+ O 25 '43

NEWELL, Harry Edmund
Awarded James Turner Morehead medal. por Weekly Underw 148:273 Ja 30 '43

Fire protection engineer wins award. Nat Safety N 47:148-9 Mr '43

NEWFOUNDLAND

Oldest colony. Economist 144:787 Je 19 '43

See also

Paleontology—Newfoundland

Economic conditions

Employment and cost of living in Newfoundland. W. E. Cole, jr. Monthly Labor R 57: 499-501 S '43

News by countries. For Comm W 11:22-3 Ap 10; 12:22-3 S 18 '43

No change in Newfoundland. Economist 144: 209-10 F 13 '43

NEWPORT NEWS, Virginia

Water supply

Added water facilities for Newport News area. Eng N 130:521 Ap 15 '43
New filtration plant of Newport News. R. Newsom. II plans Water Works & Sewerage 89:501-10 D '42

NEWPORT NEWS shipbuilding and dry dock company
Securities disturbing investors. J. S. Williams. Mag of Wall St 71:233 D 12 '42

NEWS

See also

News letters
Newspapers—Government news

NEWS agencies

Tolls under fire; FCC studying income and cost figures of Press Wireless. Business Week p24+ O 16 '43

See also

Associated press

NEWS letters

Kiplinger, Washington's gloomy prophet. E. Whitmore. Am Business 13:10-12+ Mr '43

NEWSPAPER advertising. See Advertising mediums—Newspapers

NEWSPAPER advertising executives association

Annual convention, New York. Ptr Ink 203:32 Je 18 '43

NEWSPAPER libraries

Newspaper library and the army, navy and F.B.I. W. Alcott. Special Lib 34:308-10+ Jl-Ag '43

What can the newspaper library do to conserve zinc? L. S. Somers. Special Lib 34: 306-8 Jl-Ag '43

NEWSPAPER offices

New freedoms for the press; newspaper plant for La Crosse, Wis. Tribune. II plans Arch Rec 94:59-63 S '43

Newspaper plants. W. O. Kruse. Arch Rec 94:53 S '43

Equipment

New York daily news; rotogravure printing plant recovers ink-solvent, employing activated carbon adsorption method. T. F. J. Moffett. flow diag II Heat & Ven 40:33-6 Ap '43

Layout

Production line plant for news; building for Daily republican-times, Ottawa, Ill. II plans Arch Rec 94:64-6 S '43

NEWSPAPER publishers association, American. See American newspaper publishers association

NEWSPAPERS

Newspapers and newspaper advertising in wartime. J. R. McLaughlin. Special Lib 34:232-7 Jl-Ag '43

See also

Advertising, Soliciting of
Advertising mediums
—Newspapers
Associated press
Audit bureau of circulations

Freedom of the press
Newsprint paper
Periodicals
Printing, Practical
Publicity

also American newspaper publishers association; American society of newspaper editors

Advertising

Los Angeles papers in co-op campaign. Ptr Ink 201:24 N 13 '42
Typographic clinic; Boston Globe advertisement. G. M. Pagett. II Inland Ptr 111:49 S '43

Advertising mediums

See Advertising mediums—Newspapers

Advertising service

How retail advertisers regard newspapers' helpfulness. A. Coons. Ptr Ink 205:26+ N 12 '43

Circulation

Newspapers and retail gravitation determine trading area boundaries; results of study in Laurel, Md. and one in 20 Illinois towns. J. P. Converse. map Sales Management 52:21-3 O 15 '43

NEWSPAPERS—Continued

Comic strips

4500 newspaper pictures and their significance for advertisers. M. Harper, Jr. and V. M. E. Harper. *Il Adv & Sell* 36:27, 66 N '43

Employees

Newspaper printing and publishing panel to make recommendations on wage and salary adjustments. *Comm & Fin Chr* 157:1022 Mr 18 '43

Newspaper's right to dismiss delivery men upheld by arbitrators. *Comm & Fin Chr* 157:502 F 4 '43

WLB affirms award in Tribune-Guild case. *Comm & Fin Chr* 157:1023 Mr 18 '43

Finance

Post milepost; Denver newspaper financial facts. *Il Business Week* p70+ O 2 '43

Financial news

Survey shows large numbers of newspaper readers are interested in financial pages. *Comm & Fin Chr* 156:2316 D 31 '42

Foreign correspondents

See also

War correspondents

Government news

Davis criticizes news coverage from capital. *Comm & Fin Chr* 157:2387 Je 24 '43

Illustrations

4500 newspaper pictures and their significance for advertisers. M. Harper, Jr. and V. M. E. Harper. *Il Adv & Sell* 36:17-18 Je; 23-4 JI; 30, 32+ Ag; 20-1 S; 26-7 O; 27, 66 N '43

Prices

Chicago tribune, other papers raise price. *Comm & Fin Chr* 156:2332 D 31 '42

Half of US dailies forced to up prices. *Comm & Fin Chr* 156:2327 D 31 '42

Increased newspaper costs raise prices. *Comm & Fin Chr* 157:843 Mr 4 '43

Newspaper prices up throughout Nation. *Comm & Fin Chr* 157:490 F 4 '43

Reader interest

4500 newspaper pictures and their significance for advertisers. M. Harper, Jr. and V. M. E. Harper. *Il Adv & Sell* 36:17-18 Je; 23-4 JI; 30, 32+ Ag; 20-1 S; 26-7 O; 27, 66 N '43

Newspapers and newspaper advertising in wartime; newspaper reading habits. J. R. McLauchlin. *Special Lib* 34:233-5 JI-Ag '43

Survey shows large numbers of newspaper readers are interested in financial pages. *Comm & Fin Chr* 156:2316 D 31 '42

Service

ANPA pulpwood committee solicits funds for drive to stimulate stockpile. *Ptr Ink* 204:44 JI 2 '43

Newspapers termed vital to winning war; assails bureaucratic critics of press. C. A. Halleck. *Comm & Fin Chr* 157:926 Mr 11 '43

Story of the newspapers' scrap drive. G. T. Eager. *Il Adv & Sell* 36:15-16, 66, 68 Ja '43

Statistics

Increased newspaper prices had little effect on circulation. *Comm & Fin Chr* 157:1317 Ap 8 '43

Great Britain

Associated newspapers, limited, 38th annual ordinary general meeting, London. *Economist* 144:770-1 Je 12 '43

United States

Newspaper business; summary of its economic importance. *Index* 23 no 3:59-68 [S] '43

NEWSPRINT paper

Advertising does not waste newsprint, power; abstract. F. A. Burt. *Ptr Ink* 203:50 Ap 30 '43

ANA and 4-A recommend various ways of easing newsprint shortage problem. *Ptr Ink* 205:62+ O 15 '43

Canada announces rationing of newsprint. *Paper Tr J* 116:14 16 Ja 7 '43; *Excerpt*. *Comm & Fin Chr* 157:195 Ja 14 '43

Canada takes action on newsprint supply. *Paper Tr J* 117:7+ S 16 '43

Canada to meet third quarter newsprint quota; shipments after October 1 uncertain. *Comm & Fin Chr* 157:1783 My 13 '43

Compensation for allocated newsprint. *Pulp & Pa of Can* 44:43-4 Ja '43

Drying rates of newsprint, 1942. W. G. MacNaughton. *graphs Paper Tr J* 117:30-6 Ag 12 '43; *Excerpts*. *Paper Ind* 25:88+ Ap '43

New newsprint prorating plan announced; 25 Canadian newsprint mills under control of Administrator Weldon. *Paper Tr J* 116:7 Ja 21 '43

Newspaper industry advisory committee discusses newsprint problem. *Paper Tr J* 115:10-11 D 17 '42

Newspaper publishers must cut inventories. *Paper Tr J* 117:7 JI 22 '43

Newspaperman looks at newsprint. W. E. Wines. *Pulp & Pa of Can* 43:890-6 N '42

Newsprint engineering 50 years ago and now. A. H. White. *Il Paper Ind* 24:1123-5 F '43

Newsprint industry of national import. P. Kellogg. *Pulp & Pa of Can* (Convention no) 44:73-4 [F] '43

Newsprint papers; relationship between ink drying and paper properties. L. J. Morin. *Pulp & Pa of Can* 44:445-6 My '43

Newsprint pinch; Argentina wants U.S. and Canada to fill needs. *Business Week* p30+ F 27 '43

Newsprint stored in open in England. *Il Pulp & Pa of Can* 44:774 S '43

Paper formula; WPB's newspaper advisers apply tentative brakes. *Business Week* p 18-19 D 19 '42

Publishers anxious about newsprint supply. *Paper Tr J* 115:10 N 19 '42

Report of the newsprint committee, Canadian pulp and paper association; suction presses, pitch control, elasticity of newsprint. *Pulp & Pa of Can* (Convention no) 44:161-4 [F] '43

Report of the printability committee: Canadian pulp and paper association. *Pulp & Pa of Can* (Convention no) 44:200+ bibliog (p206+) [F] '43

Substitution of birch for spruce-balsam ground in the newsprint furnish. W. W. Holland. *Pulp & Pa of Can* (Convention no) 44:148-51 [F] '43

WPB calls for cut in newsprint orders; inventories reduced. *Comm & Fin Chr* 158:330 JI 22 '43

WPB cuts newsprint use to 1941 level. *Paper Tr J* 116:7, 21-2 Ja 7 '43; Same abr. *Comm & Fin Chr* 157:198 Ja 14 '43

WPB orders 5 per cent cut in newsprint. *Paper Tr J* 117:7+ JI 8 '43

WPB urging further economy in newsprint. *Comm & Fin Chr* 157:1980 My 27 '43

Wood pulp pinch; WPB takes full control of supplies, and Canada puts quotas on newsprint deliveries. *Business Week* p34 JI 10 '43

Prices

Canada takes exception to newsprint price. J. E. Langdon. *Paper Tr J* 116:7+ Mr 25 '43

Effects of newsprint price increase. *Barron's* 23:13 Mr 8 '43

New basic newsprint price to be \$58 a ton. *Paper Tr J* 117:7, 10 JI 29 '43

Newsprint price is increased to \$54 a ton. *Paper Tr J* 116:7 Mr 4 '43

OPA revises newsprint price regulation. *Paper Tr J* 115:7 N 12 '42

Price argument; Canada feels its lumber and newsprint industries are cramped by ceilings in U.S. *Business Week* p60+ Ja 9 '43

Rising costs limit newsprint profits. *Paper Tr J* 117:11 Ag 5 '43

Statistics

Newsprint, Canada and United States, 1938-1941. *Survey of Cur Business* 1942 Sup p151 [supplemented in monthly numbers]

Newsprint production for 1942 declines below record of preceding year. R. S. Kellogg. *Paper Tr J* 116:42, 44+ F 18 '43; Same, with additional graphs. *Pulp & Pa of Can* 44:265-8 F '43; Same abr. *Paper Ind* 24:1300 Mr '43

NEWSPRINT paper—Statistics—Continued

Potential 1944 paper supply situation; conditions and prospects in the United States associated with and affected by Canadian factors. E. W. Tinker. Pulp & Pa of Can 44:649-50+ Ag '43

Transportation

Critical cargoes carried on inland waters; water transportation system of the Ontario paper company. il map Pulp & Pa of Can 43:944-8+ D '42

NEWS print service bureau

Silver anniversary. Pulp & Pa of Can 44: 436-8 My '43

NEWTON, Carl Elbridge, 1898-

Carl E. Newton to run country's coal mines. por Ry Age 115:16-17 J1 3 '43

Get the coal! sole objective of lawyer turned railroader, who runs mines for the government. por(p40) Business Week p34+ Ag 28 '43

Portrait. Business Week p17 J1 3 '43

President of Chesapeake and Ohio railway co. por Barron's 23:4 F 8 '43

Successors named for G. D. Brooke. por Ry Age 113:1001-2 D 19 '42

NEWTON, Sir Isaac, 1642-1727

Aristotle, Newton, Einstein. E. T. Whittaker. Science 98:249-54, 267-70 S 17-24 '43

Isaac Newton and aerodynamics. T. von Kármán. J Aeronautical Sci 9:521-2+ D '42; Same. Engineer 175:149-50 F 19 '43

Library of Sir Isaac Newton to go to Trinity college, Cambridge. Science 98:128 Ag 6 '43

Newton's work in physics; an historical survey. H. Buckley. Engineering 155:83-4, 103-4 Ja 29-F 5 '43

Ode on Newton's theory of gravitation by Edmond Halley. A. Weinstein. Science 97: 69-70 Ja 15 '43

Scientist extraordinary; Newton's achievements, surveyed on his tercentenary. G. R. Harrison. por Tech R 45:73-4, 86+ D '42

Sir Isaac Newton. Engineering 154:491-2 D 18 '42

Tercentenary of the birth of Isaac Newton. Science 97:10 Ja 1 '43

Three hundredth anniversary of Newton's birth; confusion caused by difference between Julian and Gregorian calendar. M. Mott-Smith. Science 96:sup8 N 13 '42

NIACIN. See Nicotinic acid**NIAGARA falls**

Flow-control weir at Niagara falls. il diag map Engineering 156:241-4, 250 S 24 '43

Flow diversion at Niagara falls. N. Marr; C. G. Cline; H. C. Woods. il diag maps Civil Eng 13:321-4, 355-62, 403-6 J1-S '43

Long weir increases Niagara Falls power. il diag Eng N 130:744-6 My 20 '43

NIAGARA FALLS, New York**Bridges**

Rainbow arch bridge over Niagara gorge; symposium. il diag Am Soc C E Proc 69: 1160-1277 O '43; Discussion. 69:1626-9 D '43

NIAGARA FALLS power company

Circuit court affirms FPC order. Comm & Fin Chr 158:581 Ag 9 '43

Gets water rights with only partial fee to N.Y. state. Comm & Fin Chr 156:2308 D 28 '42

Granted stay of FPC order by U.S. court. Comm & Fin Chr 156:1178 N 16 '42

Reviews FPC case. Comm & Fin Chr 157:44 Ja 4 '43

State power rate attacked in court by company. Comm & Fin Chr 157:556 F 8 '43

NIAGARA Hudson power corporation

Amends plan. Pub Util 32:167-9 Ag 5 '43

Annual report. Comm & Fin Chr 157:1086 Mr 22 '43

Asks PSC to approve merger with subsidiaries. Comm & Fin Chr 158:1175 S 20 '43

Benefits of proposed merger outlined. Comm & Fin Chr 158:1281-2 S 27 '43

Company protests recommendation for revision of accounting by Niagara Falls power company. Comm & Fin Chr 158:1536 O 18 '43

Effect of Niagara Hudson plan. W. T. Hyde, jr. Barron's 23:5 J1 5 '43

Hearings on consolidation. Comm & Fin Chr 158:581 Ag 9 '43

Plan of reorganization and dissolution. Pub

Util 32:103-4, 105 J1 22 '43

Plan of reorganization filed with SEC. Comm & Fin Chr 158:90-1 J1 5 '43

Plans liquidation to comply with death sentence of SEC. Comm & Fin Chr 157:168 Ja 11 '43

Public service commission rejects consolidation plan. Comm & Fin Chr 158:293 J1 19 '43

Questions relating to original cost would delay merger. Comm & Fin Chr 158:1673 O 25 '43

Securities disturbing investors. J. S. Williams. Mag of Wall St 71:529+ F 20 '43

Two subsidiaries permitted to settle debts with stock. Comm & Fin Chr 157:44 Ja 4 '43

NIAGARA river**Power utilization**

Court rules for utility on Niagara water rights. Elec W News ed 118:2037 D 19 '42

NICARAGUA

Building the Inter-American highway; good progress in Nicaragua. A. N. Carter. il Eng N 131:275-6 Ag 12 '43

See also

Gold mines and mining—Nicaragua

Economic conditions

News by countries. For Comm W 10:17-18 F 13; 27-8 F 27; 17-18 Je 5; 11:24-5 Je 12; 12:28-9 Ag 21; 23-4 S 18; 13:20-1 O 16 '43

NICHOLS, Susan Percival, 1873-1942

Sketch. P. B. Sears. Science 97:322 Ap 9 '43

NICHOLS medal

Nichols medal address: role of Journal in furtherance of chemical research in America. Chem & Eng N 21:365-9 Mr 25 '43

NICKEL

Catalytic reduction by formic acid under pressure; a comparison of copper and nickel as catalysts. R. R. Davies and H. H. Hodgson. Chem Soc J p281-2 Je '43

Cleaning welded metal surfaces; nickel, monel and inconel. K. M. Spicer. il Sheet Metal Worker 34:27-9 Je '43

Complex ions; the magnetic moments of some complex ions of nickel and copper. C. D. Russell, G. R. Cooper and W. C. Vosburgh. bibliog Am Chem Soc J 65:1301-6 J1 '43

Distribution of galvanic corrosion; nickel-to-steel couple. H. R. Copson. diag Electrochem Soc Trans 84 (preprint 17):159-69 O '43

Engineering properties of "A" nickel; tabulations. Metal Prog 44:711 O '43

Fe-Ni-S system; an introduction with new data on the crystallization of pyrrhotite and pentlandite. J. E. Hawley, G. L. Colgrove and H. F. Zurbrigg. bibliog il Econ Geol 38:335-88 Ag '43

Flash welding of nickel and high-nickel alloy rod. W. F. Hess and A. Muller. il Welding J 22:sup532-44 O '43

Hydrogenolysis of sulfur compounds by Raney nickel catalyst. R. Mozingo and others. bibliog Am Chem Soc J 65:1013-16 Je '43

Modifications in NE steels necessitated by unexpected nickel content of scrap. Steel 111:27 D 28 '42; Same. Iron Age 150:69 D 31 '42; Same. Blast F & Steel Pl 31:73 Ja '43; Same cond. S A E J 51:sup52 Ja '43

Nickel contributes to the progress of the aviation industry. T. H. Wickenden. Aeronautical Eng R 1:121 N '42

Possible new sources of nickel. G. W. Pawel. Min & Met 24:277-8 Je '43

Properties of pure nickel. E. M. Wise and R. H. Schaefer. bibliog Metals & Alloys 16:424-8, 891-3, 1067-71 S, N-D '42

Solubility of hydrogen at low pressure in iron, nickel and certain steels at 400 to 600°. M. H. Armbruster. Am Chem Soc J 65:1043-54 Je '43

Time lag of impulse breakdown at high pressures. J. D. Cobine and E. C. Easton. bibliog J Ap Phys 14:321-31 J1 '43

See also

Coins

NICKEL—Continued

Analysis

Concentration methods in spectrographic analysis; recovery of cobalt, nickel, molybdenum, copper, and zinc from plant materials and soil extracts by 8-hydroxyquinoline. R. O. Scott and R. L. Mitchell. *bibliog Soc Chem Ind J* 62:4-8 Ja '43

Separation of iron from cobalt or nickel. R. J. DeGray and E. P. Rittershausen. *bibliog Ind & Eng Chem Anal ed* 15:26-7 Ja 15 '43

Testing

Tensile tests of arc-welded nickel and monel metal at low temperatures. O. H. Henry and J. Martinez. *diags Welding J* 22:sup270-1 Je '43

NICKEL, Powdered

Powder metals; dense nickel parts from metal powder. C. Hardy. *il Metal Prog* 44: 634-5 O '43

NICKEL alloys

Cleaning welded metal surfaces; nickel, monel and inconel. K. M. Spicer. *il Sheet Metal Worker* 34:27-9 Je '43

Flash welding of nickel and high-nickel alloy rod. W. F. Hess and A. Muller. *il Welding J* 22:sup532-44 O '43

Magnetic properties of solid solutions; the paramagnetic alloys of copper and nickel. A. R. Kaufmann and C. Starr. *bibliog Phys R* 63:445-50 Je 1 '43

Nickel alloy springs; abstract. B. B. Betty, E. C. MacQueen and C. Rolle. *Metals & Alloys* 17:190+ Ja '43

Nickel contributes to the progress of the aviation industry. T. H. Wickenden. *Aeronautical Eng R* 1:121 N '42

Properties of monel products; Characteristics and properties of nickel and monel and inconel alloys; data sheets. *Mach* 49: 169 Je '43

Properties of pure nickel alloys; effect of various elements. E. M. Wise and R. H. Schaefer. *il Metals & Alloys* 16:1067-71 D '42

Reductions with nickel-aluminum alloy and aqueous alkali; quantitative determination of halogens in organic compounds. E. Schwenk, D. Papa and H. Ginsberg. *Ind & Eng Chem Anal ed* 15:576-7 S 15 '43

Study of the deposition potentials and microstructures of electrodeposited nickel-zinc alloys. B. Lustman. *il Electrochem Soc Trans* 84 (preprint 6):47-59 O '43

See also

Chromium nickel Monel metal
steel Nickel steel
Invar

Analysis

Quantitative spectroscopy applied to some impurities in 70-30 cupro-nickel. W. D. France. *Opt Soc Am J* 32:681-5 N '42

Simple tests identify white metals. *il Iron Age* 150:45 N 19 '42

Study of the applicability of the pressed pellet electrode method to the spectrographic analysis of nickel alloys. C. J. Neuhaus. *il diag Opt Soc Am J* 33:167-74 Mr '43

NICKEL chromium molybdenum steel

Nickel-chromium-molybdenum steels recommended for wider use. *Steel* 113:53 O 25 '43

NICKEL chromium steel

Iron Age NE steel; standard steel chart. J. I. Butzner, comp. *Iron Age* 151:supp My 6 '43

See also

Chromium nickel
steel

NICKEL company of Canada, International. See International nickel company of Canada

NICKEL compounds

Spectroscopic studies of the simpler porphyrins; the absorption and fluorescence spectra of *ms*-tetra(3',4'-methylenedioxyphenyl) porphine of HCl number four and of its AgC₁₀H₈N₂, Zn, and Ni complex salts. V. M. Albers, H. V. Knorr and D. L. Fry. *bibliog J Chem Phys* 10:700-5 D '42

NICKEL dimethylglyoxime

Spot reaction experiments; protective layer effect of palladium dimethylglyoxime on nickel dimethylglyoxime. F. Feigl. *J Chem Educ* 20:298-9 Je '43

NICKEL hydroxide

Electrochemical oxidation of nickelous hydroxide; abstract. N. P. Fedotiev and V. V. Svechnikova. *Chem & Met Eng* 50:198-9 S '43

NICKEL industry and trade

Capacity of nickel industry increased 50,000,-000 pounds over 1940. R. C. Stanley. *Blast F & Steel Pl* 31:59 Ja '43

Nickel available for war needs; International nickel company of Canada, limited, in a review of industry for past year. R. C. Stanley. *Marine Eng* 48:126 Ja '43

See also International nickel company of Canada

NICKEL metallurgy

Electrometallurgy

Electric furnaces in nickel industry. A. G. Arend. *il Electrician* 130:225-7 F 26 '43

NICKEL mines and mining

Alaska

Nickel-copper deposits on the west coast of Chichagof Island, Alaska. W. T. Pecora. *maps U S Geol S Bul* 936-I:221-43, pl 36-7; pa 20c Supt. of doc. '42

Canada

Nickel output off; Sudbury, Ont. *Business Week* p54+ S 18 '43

Massachusetts

Nickel deposit near Dracut. W. H. Dennen. *bibliog il maps Econ Geol* 38:25-55 Ja '43

Ontario

Early development of Ontario mining. J. G. McMillan. *il Can Min J* 64:561-4 S '43

Nickel of Sudbury; historical account. T. A. Rickard. *bibliog il Can Min J* 63:785-92 A '42

NICKEL ores

Bravoite from a new locality. C. A. Raser. *bibliog il Econ Geol* 38:399-407 Ag '43

Nickel-copper deposit at Funter bay, Admiralty Island, Alaska. J. C. Reed. *maps U S Geol S Bul* 936-O:349-61, pl 51-2; pa 15c Supt. of doc. '42

Nickel-copper deposit at Snipe bay, Baranof Island, Alaska. J. C. Reed and G. O. Gates. *diag map U S Geol S Bul* 936-M:321-30, pl 48; pa 10c Supt. of doc. '42

Nickel deposit near Dracut, Massachusetts. W. H. Dennen. *bibliog il maps Econ Geol* 38:25-55 Ja '43

Origin of sulphides in the nickel deposits of Mount Prospect, Connecticut. E. N. Cameron. *diags Geol Soc Bul* 54:651-86, pl 1-7 *bibliog*(p679-80) My '43

Possible new sources of nickel. G. W. Pawel. *Min & Met* 24:277-8 Je '43

See also

Pentlandite

NICKEL oxides

Mechanics of enamel adherence; influence of cobalt and nickel oxides on metal precipitation at ground coat-iron interface. R. M. King. *bibliog diag Am Cer Soc J* 26:358-60 O 1 '43

Reactions of nickel(II), nickel(II,III), and iron(III) oxides in liquid ammonia. R. B. Holt and G. W. Watt. *Am Chem Soc J* 65:988-9 My '43

NICKEL Plate road. See New York, Chicago and St Louis railroad

NICKEL plating

Black nickel plating; abstract. W. E. Moline. *Iron Age* 152:68 Jl 8 '43

Interpretation of the mechanism of bright electroplating. J. A. Henricks. *bibliog Electrochem Soc Trans* 82 (preprint 22):237-56 O '42; Same. *Metal Finishing* 41:134-7, 202-6 Mr-Apr '43

Nickel plating fine wire; Hanover wire cloth co. J. H. Conolly. *il diags Iron Age* 151:50-1 Ap 1 '43

Observations on black nickel. E. Schore. *Metal Finishing* 41:77-9 F '43

NICKEL plating—Continued**Testing**

Salt spray vs. seawater testing; abstract. C. E. Heussner. *Metals & Alloys* 17:1062+ My '43

NICKEL steel

Determination of the solubility of hydrogen in iron and iron alloys. J. H. Andrew, H. Lee and A. G. Quarrell. *plan Iron & Steel Inst J* 146:181-92 no 2 '42

Experience with alloy steels in boilers. A. G. Trumbull. *Ry Mech Eng* 117:77-9 F '43

Iron Age NE steel; standard steel chart. J. I. Butzner, comp. *Iron Age* 161:supp My 6 '43

Nickel in railroad service. B. B. Morton. *bibliog Ry Mech Eng* 117:166-9 Ap '43

Obtaining maximum bolt strength. G. Sachs, P. S. Cole and R. A. Roth. *il diags Machine Design* 15:144-6 N '43

See also

Chromium nickel steel
Invar

NICKEL sulfate

Magnetic rotatory power of crystalline nickel sulphate in the short infra-red spectrum. S. Breen, J. N. Humphrey and L. R. Ingersoll. *bibliog diags Phys R* 64:75-7 Ag 1 '43

NICKEL sulfides

Fe-Ni-S system; an introduction with new data on the crystallization of pyrrhotite and pentlandite. J. E. Hawley, G. L. Colgrove and H. F. Zurrbrig. *bibliog il Econ Geol* 38:335-88 Ag '43

NICKELS (coins). See **Coins****NICKERSON, Joseph Franklin, 1861-1943**

Sketch. *por Refrig Eng* 46:357 N '43

NICOTINAMIDE

Derivatives of pyridine acids; N-(2-acylaminoethyl)-nicotinamides. E. M. Hodnett and V. E. Stewart. *bibliog Am Chem Soc J* 65:254-5 F '43

Analysis

Chemical differentiation between niacinamide and niacin in pharmaceutical products. D. Melnick and B. L. Oser. *Ind & Eng Chem Anal ed* 15:355-6 My 15 '43

Direct quantitative determination of nicotinamide in vitamin mixtures. F. W. Lamb. *bibliog Ind & Eng Chem Anal ed* 15:352-5 My 15 '43

Niacin-niacinamide differentiation in the microbiological assay procedure. L. Atkin and others. *Am Chem Soc J* 65:992 My '43

NICOTINE

Some chemical and pharmacological observations on low nicotine tobacco. H. B. Haag and P. S. Larson. *bibliog Science* 97:187-8 F 19 '43

Sources being sought as shortage develops. M. J. Copley, R. K. Eskew and J. J. Willaman. *Sci Am* 168:256 Je '43

Analysis

Improved steam-distillation apparatus. C. V. Bowen and W. F. Barthel. *diag Ind & Eng Chem Anal ed* 15:596 S 15 '43

NICOTINIC acid

Types of nutritional deficiency; niacin. D. T. Smith. *bibliog Ann Am Acad* 225:33-5 Ja '43

Analysis

Chemical differentiation between niacinamide and niacin in pharmaceutical products. D. Melnick and B. L. Oser. *Ind & Eng Chem Anal ed* 15:355-6 My 15 '43

Determination of nicotinic acid; modifications in the microbiological method. W. A. Krehl, F. M. Strong and C. A. Elvehjem. *bibliog Ind & Eng Chem Anal ed* 15:471-5 J 15 '43

Direct quantitative determination of nicotinamide in vitamin mixtures. F. W. Lamb. *bibliog Ind & Eng Chem Anal ed* 15:352-5 My 15 '43

Microbiological and chemical assay of nicotinic acid in B complex products. R. D. Greene, A. Black and F. O. Howland. *bibliog Ind & Eng Chem Anal ed* 15:77-8 Ja 15 '43

Niacin-niacinamide differentiation in the microbiological assay procedure. L. Atkin and others. *Am Chem Soc J* 65:992 My '43

NICOTYRINE

3,2'-Nicotyryne; insecticidal properties of certain azo derivatives. R. L. Frank, R. W. Holley and D. M. Wikholm. *bibliog Am Chem Soc J* 64:2835-8 D '42

NIGELLA sativa

Melanthigenin and its identity with hederagenin. Z. Mustafa and G. Soliman. *Chem Soc J* p70-1 F '43

NIGERIA

Plans for post-war development. *For Comm W* 13:14 N 6 '43

NIGHT clubs**Advertising**

Advertising gets some Billy Rose oomph. J. Stenbuck. *il Adv & Sell* 36:19+ S '43

NIGHT sky. See **Sky****NIGHT vision.** See **Eye—Accommodation and refraction****NIGHT work**

Just before dawn; accident prevention on the third shift. C. E. Muir. *il Nat Safety N* 46:12-13+ D '42

Pay differentials for night work under union agreements. C. Williams. *Monthly Labor R* 57:133-44 J 1 '43

Retailing and the night shift. M. K. Powers. *Adv & Sell* 36:56+ Mr '43

Who listens to nighttime radio? T. B. Ellsworth. *Adv & Sell* 36:17+ My '43

NINETEEN hundred and forty-two

Engineering News events of 1942; chronological summary. *Eng N* 130:180-1 F 11 '43

That was 1942; a startling and eventful year in the history of merchandising. *Ptr Ink* 202:15-16+ F 5 '43

Year of war. *il Ind & Eng Chem* 35:5-11 Ja '43

NIOBIUM. See **Columbium****NIPPOSTRONGYLUS muris.** See **Nematodes****NITRATES**

Metabolism of mononitroparaffins; the concentration of nitroethane, nitrite and nitrate in the blood of rabbits during exposure by inhalation and oral administration. E. W. Scott. *diag J Ind Hygiene* 25:20-5 Ja '43

Viscosity and molecular weight; the nitrate of wood carbohydrate. S. Coppick. *bibliog Paper Tr J* 117:25-9 Ag 12 '43

See also

Nitration Silver nitrate
Nitric acid Sodium nitrate
Nitrocellulose

Analysis

Determination of aliphatic nitrate esters; colorimetric method. H. Yagoda. *bibliog diag Ind & Eng Chem Anal ed* 15:27-9 Ja 15 '43

NITRATION

Calculating mixed acids to achieve acid equilibrium; Gibbs trilinear system. E. Berl and G. A. Sterbutzel. *Chem & Met Eng* 60:106-8 O '43

Derivatives of 1:2:4:5-tetrachlorobenzene; N-nitroamino-compounds. A. T. Peters, F. M. Rowe and D. M. Stead. *Chem Soc J* p372-3 Ag '43

Determining the density of mixed acids. C. McKinley. *Chem & Met Eng* 50:115-16 J 1 '43

Effect of paraffins on the nitration of toluene. W. L. Glowacki. *bibliog il diag Blast F & Steel Pl* 31:659-64, 771-5 Je-J 1 '43

Hydroxy- by-products in nitration; abstract. G. M. Bennett. *Chem & Ind* 62:149 Ap 17 '43

Improvements in concentrating sulfuric acid. M. J. Kalous. *diags Ind & Eng Chem* 35:387-9 Ap '43

Influence of the 5-nitro-group on the halogenation and nitration of 5-nitro-1-naphthylamine and of some related naphthalides. H. H. Hodgson and H. S. Turner. *Chem Soc J* p723-5 N '42

Influence of the 6-nitro-group on the halogenation, nitration, mercuration, and diazo-coupling of 6-nitro-1-naphthylamine and of some related naphthalides. H. H. Hodgson and H. S. Turner. *Chem Soc J* p391-4 Ag '43

NITRATION—Continued

Nitrated wood; fractionation and molecular magnitudes. S. Coppick and E. C. Jahn. *bibliog* *il* Ind & Eng Chem 35:890-4 Ag '43

Nitration of isatin. W. C. Sumpter and W. F. Jones. *bibliog* Am Chem Soc J 65:1802-3 O '43

Nitration of methyl α -naphthoate and related compounds. C. F. Koelsch and D. O. Hoffman. Am Chem Soc J 65:989-90 My '43

Nitration of β -polyalkylphenylisovaleric acids; β -[3,5-dimethylphenyl]-isovaleric acid. L. I. Smith and L. J. Spillane. Am Chem Soc J 65:282-9 F '43

Preparation of diazo-naphthols and nitration of 4-bromoaceto-1-naphthalide. H. H. Hodgson and S. Birtwell. Chem Soc J p321-2 JI '43

Quantitative determination of benzene in the presence of cyclohexane. R. L. Bishop and E. L. Wallace. *il* diag Ind & Eng Chem Anal ed 15:563-5 S 15 '43

Recent developments in nitroparaffins. H. B. Hass. *bibliog* diag Ind & Eng Chem 35: 1146-52 N '43

1:3:5:7-Tetranitronaphthalene and the isomeric tetranitro-derivatives obtained from 2:6-dinitronaphthalene by nitration. J. Chatt and W. P. Wynne. Chem Soc J p33-6 Ja '43

See also

Denitration**NITRIC acid**

Action of strong acid on various fibers. H. C. Haller. Am Dyestuff Rep 31:681-2 D 21 '42

Computations on the denitration of aqueous mixtures of sulphuric and nitric acids with steam. G. E. Stephenson. Soc Chem Ind J 62:17-20 F '43

Ionization of strong electrolytes; general remarks, nitric acid. O. Redlich and J. Bigel-eisen. *bibliog* Am Chem Soc J 65:1883-7 O '43

Modification of the Carius combustion tube to minimize losses by explosion: pressures attained on heating nitric acid to 300°C. C. L. Gordon. *bibliog* diag J Research Nat Bur Stand 30:107-11 F '43

Nitric acid and some reactions. Chem Age (Lond) 43:81-2 Ja 16 '43

Nitric acid pulping of whole cotton; properties of celluloses obtained. J. D. Fleming and F. K. Cameron. *bibliog* Ind & Eng Chem 35:819-21 JI '43

Nitric-hydrofluoric bath for removing welding flux from aluminum alloy parts. P. M. Craig. *il* Automotive & Aviation Ind 88: 19+ Mr 1 '43

Raman spectrum and molecular vibrations of nitric and deuteronic acids. O. Redlich and L. E. Nielsen. *bibliog* Am Chem Soc J 65:654-60 Ap '43

Specific heats of mixed acids at higher temperatures. J. J. Morgan, D. A. Bender and R. G. Capell. *bibliog* diags Chem & Met Eng 50:122-4 Je '43

See also

Nitration**Manufacture**

Production of concentrated nitric acid. A. H. Manning. flow sheets *il* diags Chem & Ind 62:98-104 Mr 13 '43; Abstract. Can Chem & Process Ind 27:128+ Mr '43

NITRIC oxide. See Nitrogen oxides

NITRIFYING bacteria. See Azotobacter

NITRILES

Rearrangement of allyl groups in three-carbon systems; nitriles and an acid. D. E. Whyte and A. C. Cope. *bibliog* Am Chem Soc J 65:1999-2004 O '43

Structural effects of unsaturation and hyperconjugation in aldehydes, nitriles and chlorides as shown by their dipole moments in the vapor state. E. C. Hurdie and C. P. Smyth. *bibliog* Am Chem Soc J 65:89-96 Ja '43

Tertiary alkyl primary amines, RR'R'CNH₂. H. R. Henze, E. B. Allen and W. B. Leslie. Am Chem Soc J 65:87-9 Ja '43

NITRITES

Metabolism of mononitroparaffins; the concentration of nitroethane, nitrite and nitrate in the blood of rabbits during exposure by inhalation and oral administration. E. W. Scott. *diag* J Ind Hygiene 25: 20-5 Ja '43

See also

Sodium nitrite**NITRO compounds**

Acid strengths of aliphatic nitro compounds. G. W. Wheland and J. Farr. Am Chem Soc J 65:1433 JI '43

p-Aminodimethylaniline; the *o*-chloro- and -nitro-derivatives. E. E. Ayling, J. H. Gorvin and L. E. Hinkel. Chem Soc J p755-8 D '42

Derivatives of 1:2:4:5-tetrachlorobenzene; *N*-nitroamino-compounds. A. T. Peters, F. M. Rowe and D. M. Stead. Chem Soc J p372-3 Ag '43

Derivatives of 1:2:4:5-tetrachlorobenzene; nitro- and amino-compounds. A. T. Peters, F. M. Rowe and D. M. Stead. Chem Soc J p233-5 My '43

Electrolytic reduction of trinitro aromatic compounds to triamines by use of a carrier catalyst. R. W. Lewis and O. W. Brown. *bibliog* Electrochem Soc Trans 84 (preprint 1):1-9 O '43

Influence of the 5-nitro-group on the halogenation and nitration of 5-nitro-1-naphthylamine and of some related naphthalides. H. H. Hodgson and H. S. Turner. Chem Soc J p723-5 N '42

Influence of the 6-nitro-group on the halogenation, nitration, mercuration, and diazo-coupling of 6-nitro-1-naphthylamine and of some related naphthalides. H. H. Hodgson and H. S. Turner. Chem Soc J p391-4 Ag '43

Nitration of β -polyalkylphenylisovaleric acids; β -[3,5-dimethylphenyl]-isovaleric acid. L. I. Smith and L. J. Spillane. Am Chem Soc J 65:282-9 F '43

Quinoxaline formation and the ortho effect. R. C. Fuson and others. *bibliog* Am Chem Soc J 65:1028-9 Je '43

Reduction of aromatic nitro compounds by sulfite waste liquor; abstract. I. A. Pearl and H. F. Lewis. Am Dyestuff Rep 32: 391 Ag 30 '43

Some allyl nitrophenyl thiosemicarbazides and their analytical properties. A. W. Scott and J. T. Andrews. Am Chem Soc J 64:2873-4 D '42

Utilization of aliphatic nitro compounds; nitrotriols (nitroglycerols) prepared from simple aldehydes. C. A. Sprang and E. F. Degering. Am Chem Soc J 65:628 Ap '43

See also

Nitroparaffins**Analysis**

Colorimetric determination of trinitrobenzene in dinitrobenzene. M. L. Moss and M. G. Mellon. *bibliog* Ind & Eng Chem Anal ed 14:861-2 N 15 '42

NITROBARBITURATES

Identification of organic bases by means of the optical properties of dilutates (nitro-barbiturates); aliphatic amines. E. M. Flein and E. T. Dewey. *bibliog* diags Ind & Eng Chem Anal ed 15:534-6 Ag 15 '43

NITROBENZALDEHYDE

Condensation of 2-furanacetic acid with *o*-nitrobenzaldehyde. E. D. Amstutz and E. R. Spitzmiller. Am Chem Soc J 65:367-9 Mr '43

NITROBENZENE

Catalytic activity of intermetallic compounds in the vapor-phase reduction of nitrobenzene. B. Berk and O. W. Brown. *bibliog* diag J Phys Chem 46:964-8 N '42

Film formation by pure liquids. C. W. Foulk and J. E. Barkley. *bibliog* diag Ind & Eng Chem 35:1013-16 S '43

Polymerization of styrene in the presence of nitrobenzene, 2,4-dinitrochlorobenzene and nitromethane. C. C. Price and D. A. Durham. *bibliog* Am Chem Soc J 65:757-9 My '43

See also

Trinitrobenzene

NITROBENZENE—Continued

Analysis

Photometric determination of benzene, toluene, and their nitro derivatives. H. D. Baernstein. *bibliog Ind & Eng Chem Anal* ed 15:251-3 Ap 15 '43

NITROBENZOIC acid

Electrolytic reduction of *p*-nitrobenzoic acid to *p*-aminobenzoic acid. P. H. Ravenscroft, R. W. Lewis and O. W. Brown. *bibliog Electrochem Soc Trans* 84 (preprint 2):11-17 O '43

NITROCELLULOSE

Permeability of transparent wrappings. C. R. Oswin. *bibliog Soc Chem Ind J* 62:45-8 Ap '43

Strength of nitrocellulose solvents; reprinted from *Ind & Eng Chem*, Feb. '38. A. K. Doolittle. *Metal Finishing* 41:45-50, 52 *bibliog* (p57) Ja '43

See also

Cordite

Explosives

NITRODIBENZOYLMETHANE

Properties of *m*-nitrodibenzoylmethane. R. P. Barnes and L. B. Dodson. *Am Chem Soc J* 65:1585-8 Ag '43

NITROETHANE

Dipole moment, induction and resonance in nitroethane and some chloronitroparaffins. E. C. Hurdiss and C. P. Smyth. *bibliog Am Chem Soc J* 64:2829-34 D '42

Metabolism of mononitroparaffins; the concentration of nitroethane, nitrite and nitrate in the blood of rabbits during exposure by inhalation and oral administration. E. W. Scott. *diag J Ind Hygiene* 25:20-5 Ja '43

Analysis

Analysis by infrared spectroscopy; a new method applied to mixtures of nitroparaffins. J. R. Nielsen and D. C. Smith. *bibliog Ind & Eng Chem Anal* ed 15:609-15 O 15 '43

NITROGEN

Absorption spectrum of N₂ in the extreme ultraviolet. R. E. Worley. *bibliog J Phys R* 64:207-24 O 1 '43

Adsorption method for the determination of the area of a solid without the assumption of a molecular area, and the area occupied by nitrogen molecules on the surfaces of solids. W. D. Harkins and G. Jura. *J Chem Phys* 11:431-2 S '43

Aggressors minus N and H; disarmament of our enemies by restrictions on nitrate and hydrogenation plants. M. G. Harris. *Fortune* 28:58+ N '43

Catalytic activity of activated nitrogenous carbons. P. F. Bente and J. H. Walton. *bibliog J Phys Chem* 47:133-48 F '43

Differences in the vapor pressures, heats of vaporization, and triple points of nitrogen (14) and nitrogen (15) and of ammonia and trideuteroammonia. I. Kirshenbaum and H. C. Urey. *bibliog diag J Chem Phys* 10:706-17 D '42

Dynamic viscosity of nitrogen. W. L. Sibbitt, G. A. Hawkins and H. L. Solberg. *bibliog diag A S M E Trans* 65:401-4; Discussion. 404-5 JI '43

Effect of active nitrogen and of certain nitrogen compounds on catalytic properties of carbon. P. F. Bente and J. H. Walton. *bibliog J Phys Chem* 47:329-37 Ap '43

Fertilizer; war should assure ample nitrogen supply. *Sci Am* 167:279+ D '42

Fertilizers and materials, 1942. *Chem & Met Eng* 50:106-7 F '43

Inflammability of methylene chloride-oxygen-nitrogen mixtures. G. W. Jones, R. E. Kennedy and F. E. Scott. *diag U S Bur Mines Rep of Invest* 3727:1-7 '43

Low temperature adsorption of nitrogen, oxygen, argon, hydrogen, *n*-butane and carbon dioxide on porous glass and on partially dehydrated chabazite. P. H. Emmett and T. W. DeWitt. *bibliog Am Chem Soc J* 65:1253-62 JI '43

New horizons in nitrogen. A. M. Smith. *II Chem & Eng N* 21:216-17+ F 25 '43

Physics in 1942. T. H. Osgood. *J Ap Phys* 14:66-8 F '43

Positive and negative point-to-plane corona in pure and impure hydrogen, nitrogen, and argon. G. L. Weissler. *bibliog diag Phys R* 63:96-107 F 1 '43

Pure natural nitrogen gas. W. B. Lang. *Science* 97:329-30 Ap 9 '43

Saturation characteristics for alpha-particles in purified gases. E. D. Klema and H. H. Barschall. *bibliog Phys R* 63:18-23 Ja 1 '43

Studies on overvoltage; cathodic and anodic polarization of a platinumized platinum cathode near the reversible value in nitrogen saturated acid solutions. A. L. Ferguson and M. B. Towns. *Electrochem Soc Trans* 83 (preprint 9):119-28 Ap '43

Surface tension of *n*-heptane and *n*-butane containing dissolved nitrogen. G. J. Reno and D. L. Katz. *bibliog Ind & Eng Chem* 35:1091-3 O '43

Time lag of impulse breakdown at high pressures. J. D. Cobine and E. C. Easton. *bibliog J Ap Phys* 14:321-31 JI '43

Analysis

Anhydrous copper sulfate in the Kjeldahl nitrogen determination. C. Beatty, 3d. *Ind & Eng Chem Anal* ed 15:476 JI 15 '43

Diffusion micromethod for nitrogen. R. C. Hawes and E. R. Skavinski. *bibliog diags Ind & Eng Chem Anal* ed 14:917-21 N 15 '42

Iodometric determination of nitrogen in milk. E. R. Ling. *Soc Chem Ind J* 61:194-6 D '42

Kjeldahl nitrogen determination; a rapid wet-digestion micromethod. L. P. Pepkowitz and J. W. Shive. *bibliog Ind & Eng Chem Anal* ed 14:914-16 N 15 '42

Rapid Kjeldahl digestion method using perchloric acid. L. P. Pepkowitz, A. L. Prince and F. E. Bear. *Ind & Eng Chem Anal* ed 14:856-7 N 15 '42

Rapid method for the determination of nitrogen in plant tissue. R. C. Lindner and C. P. Harley. *Science* 96:565-6 D 18 '42

Industrial applications

Compressed gas for transformers; nitrogen and Freon. R. T. Stafford. *II Elec W* 118:1634 N 14 '42

Nitrogen rejuvenates belted paper cable. G. K. Tashjian and C. H. Hunter. *Elec W* 119:1769 My 29 '43

Prevention of butadiene-air explosions by addition of nitrogen and carbon dioxide. G. W. Jones and R. E. Kennedy. *diag U S Bur Mines Rep of Invest* 3691:1-11 '43; Same *abr. Nat Pet N* 35 pt 2:R328-30 JI 7 '43

Isotopes

Differences in the vapor pressures and entropies of the liquid nitrogens. I. Kirshenbaum. *bibliog J Chem Phys* 10:717-22 D '42

Differences in the vapor pressures, heats of vaporization, and triple points of nitrogen (14) and nitrogen (15) and of ammonia and trideuteroammonia. I. Kirshenbaum and H. C. Urey. *bibliog diag J Chem Phys* 10:706-17 D '42

Isotope shifts in some lines of nitrogen. J. R. Holmes. *bibliog J Phys R* 63:41-6 Ja 1 '43

Use of N¹⁵ as a tracer element in chemical reactions; the mechanism of the Fischer indole synthesis. C. F. H. Allen and C. V. Wilson. *Am Chem Soc J* 65:611-12 Ap '43

NITROGEN, Liquid

Atomic and electronic distributions in liquid nitrogen, nitric oxide, and nitrous oxide. P. C. Sharrach. *bibliog J Chem Phys* 11:435-41 O '43

NITROGEN compounds

Configuration of tervalent nitrogen; bicyclic hydrazine derivative. E. L. Buhle, A. M. Moore and F. Y. Wiselogle. *bibliog Am Chem Soc J* 65:29-32 Ja '43

Heterocyclic nitrogen compounds and the stereochemistry of tervalent nitrogen. H. H. Hatt and E. F. H. Stephenson. *Am Chem Soc J* 65:1785-6 S '43

Liquid dielectrics; sixty-cycle power factors, conductivities, and polar contents of systems containing sulfur on nitrogen compounds in liquid paraffin. J. D. Piper and others. *bibliog Ind & Eng Chem* 34:1505-9 D '42

NITROGEN compounds—Continued

- Molecular volume and structure. T. W. Gibling. *Chem Soc J* p146-53 Ap '43
- New horizons in nitrogen. A. M. Smith. *il Chem & Eng N* 21:216-17+ F 25 '43
- Nitrogen and its compounds. C. H. Stone. *J Chem Educ* 20:200-2 Ap '43
- Nitrogen compounds in petroleum distillates; isolation and identification of a C_7H_7N base from California petroleum. H. L. Lochte, W. W. Crouch and E. D. Thomas. *bibliog diag Am Chem Soc J* 64:2753-5 D '42
- Nitrogen industry in 1942. E. B. Maxted. *Chem Age (Lond)* 48:49-50 Ja 9 '43
- Nitrogen outlook is favorable; abstract. E. Rowland. *Oil Paint & Drug Rep* 143:4+ Je 7 '43
- Stereochemistry of labile compounds. W. H. Mills. *Chem Soc J* p194-9 Ap '43
- Susceptibility of wood to decay; effect of urea and other nitrogen compounds. F. H. Kaufert and E. A. Behr. *bibliog il Ind & Eng Chem* 34:1510-15 D '42

See also

- | | |
|-----------------|--------------------------|
| Amino compounds | Nitrates |
| Ammonia | Nitro compounds |
| Azo compounds | Phosphonitride chlorides |
| Cyanines | |

Nomenclature

- Nomenclature of the nitrogen compounds of phosphorus and of sulfur. L. F. Audieth, R. Steinman and A. D. F. Toy. *bibliog Chem R* 32:99-108 R '43

NITROGEN dioxide. See Nitrogen oxides**NITROGEN in the body**

- Abnormal nitrogen metabolism in burns. F. H. L. Taylor and others. *Science* 97:423 My 7 '43

NITROGEN oxides

- Atomic and electronic distributions in liquid nitrogen, nitric oxide, and nitrous oxide. P. C. Sharrar. *bibliog J Chem Phys* 11:435-41 O '43
- Continuous nitric oxide test board. *Chem Ind* 53:96-7 Jl '43
- Effect of active nitrogen and of certain nitrogen compounds on catalytic properties of carbon. P. F. Bente and J. H. Walton. *bibliog J Phys Chem* 47:329-37 Ap '43
- Electric-gas treater for nitric-oxide removal. W. Churchill. *il Gas Age* 90:19-20 N 19 '42
- Magnetic susceptibility of oxygen and nitric oxide at low field strengths. A. Burris and C. D. Hause. *bibliog diag J Chem Phys* 11:442-5 O '43
- Method for handling cases gassed with nitrous fumes; value of blood platelet counts in assessing pulmonary irritation. A. J. Fleming. *Ind Med* 12:127-32 Mr '43
- Nitric oxide control. L. Shnidman. *bibliog diag Am Gas Assn Proc* 1942:272-7; Same. *Am Gas Assn Mo* 25:40-3 Ja '43
- Oxy-cellulose made by a new method. A. J. Hall. *diag Textile Col* 65:148-50 Ap '43
- Photo-colorimetric study of the oxidation of nitric oxide at low pressures. J. H. Smith. *bibliog Am Chem Soc J* 65:74-8 Ja '43

Analysis

- Determination of the oxides of nitrogen by the phenoldisulfonic acid method. R. L. Beatty, L. B. Berger and H. H. Schrenk. *diags U S Bur Mines Rep of Invest* 3687:1-17 '43
- Determination of the oxides of nitrogen in air. J. Cholak and R. R. McNary. *bibliog diag J Ind Hygiene* 25:354-60 O '43
- Nitrite field method for the determination of oxides of nitrogen except Na_2O and Na_2O_2 . F. A. Patty and G. M. Petty. *bibliog J Ind Hygiene* 25:361-5 O '43
- Quantitative determination of nitric oxide in manufactured gases. L. Shnidman and J. S. Yeaw. *bibliog il diags Am Gas Assn Proc* 1942:277-91; Discussion. 291-2

NITROGLYCERIN

- See also*
Cordite

Analysis

- Determination of aliphatic nitrate esters; colorimetric method. H. Yagoda. *bibliog diag Ind & Eng Chem Anal ed* 15:27-9 Ja 15 '43

Manufacture

- Surveys of liquid wastes from munitions manufacture; nitroglycerine wastes. R. S. Smith. *Pub Health Rep* 58:1409-12 S 17 '43

NITROMETHANE

- Infra-red and Raman spectra of polyatomic molecules; trideuteronitromethane. T. P. Wilson. *bibliog J Chem Phys* 11:361-8 Ag '43
- Polymerization of styrene in the presence of nitrobenzene, 2,4-dinitrochlorobenzene and nitromethane. C. C. Price and D. A. Durham. *bibliog Am Chem Soc J* 65:757-9 My '43

Analysis

- Analysis by infrared spectroscopy; a new method applied to mixtures of nitroparaffins. J. R. Nielsen and D. C. Smith. *bibliog Ind & Eng Chem Anal ed* 15:609-15 O 15 '43

NITRONAPHTHALENE

- Preparation of symmetrical azo-compounds, the positional influence of the nitro-group on the decomposition of nitronaphthalenediazonium sulphates by cuprous hydroxide, and an improved method for the production of 2-nitronaphthalene. H. H. Hodgson, E. Leigh and G. Turner. *Chem Soc J* p744-6 D '42

NITRONAPHTHYLAMINE

- Influence of the 5-nitro-group on the halogenation and nitration of 5-nitro-1-naphthylamine and of some related naphthalides. H. H. Hodgson and H. S. Turner. *Chem Soc J* p723-5 N '42
- Influence of the 6-nitro-group on the halogenation, nitration, mercuration, and diazo-coupling of 6-nitro-1-naphthylamine and of some related naphthalides. H. H. Hodgson and H. S. Turner. *Chem Soc J* p391-4 Ag '43

NITROPARAFFINS

- Industrial applications of the nitroparaffins. W. E. Scheer. *flow sheet Chem Ind* 52:473-6 Ap '43
- Ionization constants of aci and nitro forms of some nitroparaffins. D. Turnbull and S. H. Maron. *bibliog Am Chem Soc J* 65:212-18 F '43
- Nitroparaffins. H. B. Hass. *il Chem & Eng N* 20:1369-70 N 10 '42
- Nitroparaffins. H. B. Hass and E. F. Riley. *Chem R* 32:373-430 bibliog(420 references, p421-30) Je '43
- Nitroparaffins and their derivatives; their use in the chemical processing of textiles. H. Robinette. *Am Dyestuff Rep* 31:575-80 N 23 '42
- Nitroparaffins in specialty coatings; abstract. R. L. Ericsson. *Oil Paint & Drug Rep* 144:62-3 N 1 '43
- Recent developments in nitroparaffins. H. B. Hass. *bibliog diag Ind & Eng Chem* 35:1146-52 N '43
- Solvent uses of nitroparaffins. R. L. Ericsson. *bibliog il Ind & Eng Chem* 35:1026-30 O '43
- Surface tensions, densities and parachors of the aliphatic nitroparaffins. G. E. Boyd and L. E. Copeland. *bibliog Am Chem Soc J* 64:2540-3 N '42

Analysis

- Analysis by infrared spectroscopy; a new method applied to mixtures of nitroparaffins. J. R. Nielsen and D. C. Smith. *bibliog Ind & Eng Chem Anal ed* 15:609-15 O 15 '43

Physiological effect

- Metabolism of mononitroparaffins; the concentration of nitroethane, nitrite and nitrate in the blood of rabbits during exposure by inhalation and oral administration. E. W. Scott. *diag J Ind Hygiene* 25:20-5 Ja '43

NITROPHENANTHROLINE

- Spectrophotometric determination of iron with o-phenanthroline and with nitrophenanthroline. J. P. Mehlig and H. R. Hulett. *bibliog Ind & Eng Chem Anal ed* 14:869-71 N 15 '42

NITROPHENOL

- Polarographic investigations of hydrogen bonding; ortho- and para-nitrophenols. M. J. Astle and W. V. McConnell. *bibliog Am Chem Soc J* 65:35-8 Ja '43

NITROPROPANE

Analysis

Analysis by infrared spectroscopy; a new method applied to mixtures of nitroparaffins. J. R. Nielsen and D. C. Smith, *bibliog Ind & Eng Chem Anal* ed 15:609-15 O 15 '43

NITROSATION

Nitrosation of phenols; the three cresols and their methyl ethers; some semicarbazide reactions. H. H. Hodgson and E. A. C. Crouch, *Chem Soc J* p221-3 My '43

NITROSOACETONAPHTHALIDE

N-nitrosoaceto-1-naphthalide. H. H. Hodgson and E. Marsden, *Chem Soc J* p285 Je '43

NITROSOPHENOLS

Tautomerism of benzoquinone-*p*-nitrosophenol systems; 3-fluoro-4-nitrosophenol. H. H. Hodgson, *Chem Soc J* p89-90 Mr '43

NITROSO-R-SALT

Rapid photometric determination of cobalt in steels using nitroso-R-salt. F. W. Haywood and A. A. R. Wood, *bibliog Soc Chem Ind J* 62:37-9 Mr '43

NITROSORESORCINOL

Colorimetric determination of cobalt with o-nitrosoresorcinol. L. G. Overholser and J. H. Yoe, *Ind & Eng Chem Anal* ed 15:310-13 My 15 '43

NITROTETRONIC acid

Raman spectra of l-ascorbic acid; tetronic acid and related compounds. J. T. Edsall, and E. L. Sagall, *bibliog Am Chem Soc J* 65:1312-16 J1 '43

NITROTOLUENE

Analysis of butane-isobutane mixture. A. W. Francis, *bibliog Ind & Eng Chem Anal* ed 15:447-8 J1 15 '43; Same, *Nat Pet N* 35 pt 2:R418+ S 1 '43

See also

Trinitrotoluene

Analysis

Photometric determination of benzene, toluene, and their nitro derivatives. H. D. Baernstein, *bibliog Ind & Eng Chem Anal* ed 15:251-3 Ap 15 '43

NITROTRIOLS. See Nitro compounds

NITROUS oxide. See Nitrogen oxides

NOBLITT-SPARKS industries

Thumbnail stock appraisal. *Mag of Wall St* 72:197 My 29 '43

NOISE

Application of sound absorption to factory noise problems. H. J. Sabine and R. A. Wilson, *Acoustical Soc Am J* 15:27-31 J1 '43

Discussion of acoustic cells for airplane engine test buildings. D. Fitzroy, *diags Acoustical Soc Am J* 15:106-13 O '43

Filtered thermal noise; fluctuation of energy as a function of interval length. S. O. Rice, *Acoustical Soc Am J* 14:216-27 Ap '43

How to make piping noiseless. W. F. Schaphorst, *Am Dyestuff Rep* 32:170 Ap 12 '43

More about noise. E. Podolsky, *Ind Med* 11:592-3 D '42

Probable cause of noise in gyro instruments and a suggestion for its prevention. R. G. Ojers, *Instruments* 16:144+ Mr '43

Remedies for unpleasant noises; abstract. C. P. McCord and J. D. Goodell, *Science* 98: sup10+ N 5 '43

Sound; accurate measuring equipment. W. Mikelson, *Il Gen Elec R* 45:685-90 D '42

Sound attenuation in air ducts. B. G. Churcher and A. J. King, *Il diags Engineering* 156:221-2 S 17 '43

What noise does to health. E. Podolsky, *Ind Med* 11:533-4 N '42

What to do about noise. *Fortune* 28:14+ J1 '43

See also

Airplanes—Noise

Ear plugs

Machinery—Noise

Radio communication

—Interference

Radio receiving ap-

paratus—Noise

Soundproofing

Vacuum tubes—

Noise

NOLO contendere

Fair trade test; liquor firms enter pleas of nolo contendere in antitrust case to spur judicial clarification of Colorado trade law. *Business Week* p99-100 Ag 14 '43

NOMOGRAPHY

Chimney loss measurements without CO₂ meters; nomogram for determining losses by temperature measurements. R. H. Parsons, *Engineer* 175:165-6 F 26 '43

Computing areas of cylinders. *Can Min J* 64: 282 My '43

Extends nomogram use. C. P. Nachod, *Machine Design* 15:258+ O '43

Nomogram for calculating hardenability. C. K. Donoho and W. W. McCulloch, *Metal Prog* 44:440D S '43

Nomograph for apparent viscosity of sulfite stock. D. S. Davis, *bibliog Ind & Eng Chem* 35:1128 O '43

Nomograph for calculation of corrosion rates. L. D. Yates and E. P. Tait, *Metal Prog* 42:1059 D '42

Nomograph for P-V-T relations of gases below the critical point. G. W. Thomson, *Ind & Eng Chem* 35:895 Ag '43

Nomograph for pressure drop in isothermal flow of compressible fluids. G. W. Thomson, *Ind & Eng Chem* 34:1485 D '42

Nomograph for the estimation of the activation energies of unimolecular reactions. E. Warrick, *J Chem Educ* 20:134-5 Mr '43

Nomograph for the integration of streamflow records. P. B. Johnson, *Civil Eng* 13: 494-5 O '43

Nomograph for worsted spinners. M. C. Bishop, *Textile World* 93:85 O '43

Nomographic chart simplifies fluid flow calculations through hydraulic tubing, fold chart *Product Eng* 14:358 Je '43

Nomographs for the absorption factor equation. S. Chase, *Ind & Eng Chem* 34:1499-1501 D '42

Octane number nomographs. R. B. Cox and D. S. Davis, *Pet Refiner* 22:126-7 O '43

Specific heat and viscosity nomographs for calcium chloride brines. D. S. Davis, *Ind & Eng Chem* 34:1532 D '42

Vapor pressure nomograph for isomeric octanols. D. S. Davis, *Ind & Eng Chem* 35:232 F '43

Yolk nomograph for mayonnaise and salad dressing. D. S. Davis, *Ind & Eng Chem Anal* ed 15:595 S 15 '43

NONANE

Preparation of nonane and decane α,ω -dicarboxylic acids. W. P. Hall and E. E. Reid, *Am Chem Soc J* 65:1468 Ag '43

NON-CONDUCTORS. See Insulation (electric)

NON-FERROUS founders' society

Nonferrous foundrymen hold organizational meeting, St Louis, April 28. *Foundry* 71:208 Je '43

NON-FERROUS metals. See Metals, Non-ferrous

NON-FORFEITURE benefits. See Insurance, Life—Policies—Non-forfeiture benefits

NON-PARTISAN council to win the peace

Non-partisan council to win the peace to unify peace plans. *Comm & Fin Chr* 157: 1687 My 6 '43

NOREPOL. See Rubber, Substitutes for

NORFOLK, Virginia

See also

Housing—Norfolk, Virginia

Rapid transit

Norfolk . . . no seats. W. L. Cook, *Il Bus Transportation* 22:54-6 S '43

Water supply

Laying pipe underwater with a cradle; cast iron water main in river channel at Norfolk, *Il diags Eng N* 130:310-11 F 25 '43

Reservoir storage capacity enlarged to meet Norfolk water demands. *Il Eng N* 130:898 Je 17 '43

NORFOLK and western railway

Annual report. W. J. Jenks, *Comm & Fin Chr* 157:1363-4 Ap 12 '43

Annual report for 1942. *Ry Age* 114:744-5 Ap 10 '43; Same, *Comm & Fin Chr* 157:1297 Ap 8 '43

NORFOLK and western railway—Continued
 Russell Gray Henley, vice-chairman, Mechanical division. *Il Ry Mech Eng* 117:252-7 Je '43

NORFOLK southern railway
 Status of Norfolk Southern bonds. *Barron's* 23:15 My 10 '43

NORMA-HOFFMANN bearings corporation
 Ten years' progress. D. E. Batesole. *Il Aero-nautical Eng R* 1:131 N '42

NORMAL schools
 Normal school, Salvador, Bahia. *Il Arch Rec* 93:40-1 Ja '43

NORMANDIE, Salvage of. See *Salvage*

NORQUIST, Emanuel Elliot, 1874-
 Brave new world, F.O.B.; from Kansas City, Butler manufacturing co. ships ready-made airports of sheet metal, thinks of shipping practically everything. *Il Fortune* 28:124-7, 146+ Ag '43

NORRIS, George William, 1861-
 Roosevelt urges Norris to continue useful life. *Comm & Fin Chr* 157:70 Ja 7 '43

NORTH Africa. See *Africa, North*

NORTH AMERICAN aviation, inc.
 Annual report. *Comm & Fin Chr* 157:643 F 15 '43

Engineering history. R. H. Rice. *Aeronautical Eng R* 1:71 N '42

NORTH AMERICAN company
 Appeals court reserves decision on legality of utility death sentence. *Comm & Fin Chr* 156:1778 N 16 '42

Appeals to the Supreme court. *Pub Util* 31:563-4 Ap 29 '43

Blocked in court. *Business Week* p103-4 Jl 31 '43

Common dividend payable in Detroit Edison co. stock. *Comm & Fin Chr* 156:1868 N 23 '42

Common dividend payable in last of Detroit Edison co. stock; debt reduced. *Comm & Fin Chr* 157:732-3 F 22 '43

Constitutionality of death sentence upheld by court; decision affirms SEC orders on divestment of North American co. properties. *Elec W* 119:285-6 Ja 23 '43

Death sentence upheld by court. *Comm & Fin Chr* 157:258 Ja 18 '43

Description of holding company. O. Ely. *Pub Util* 31:497-8 Ap 15 '43

Distribution to common stockholders to be made in Pacific gas & electric co. common shares. *Comm & Fin Chr* 157:1849 My 17 '43

North American co.'s status. W. Andrews. *Barron's* 23:18 Ap 5 '43

North American's break-up plan introduces new wrinkle. *Comm & Fin Chr* 158:599-600 Ag 12 '43

Submits plan to break up system. *Comm & Fin Chr* 158:581 Ag 9 '43

System expands power supply 31% to meet war needs. *Comm & Fin Chr* 157:566 F 8 '43

\$3 preferred. O. Ely. *Mag of Wall St* 71:363 Ja 9 '43

To hold Union Electric stock. *Comm & Fin Chr* 157:643 F 15 '43

To reduce debt. *Comm & Fin Chr* 157:2255 Je 14 '43

Values in North American co. plan; division into five regional holding companies proposed. W. T. Hyde, Jr. *Barron's* 23:1+ Ag 9 '43

NORTH AMERICAN gas and electric company
 Liquidation. *Comm & Fin Chr* 157:2154 Je 7 '43

Ordered to dissolve. *Comm & Fin Chr* 157:643 F 15 '43

NORTH AMERICAN light and power company
 Dissolution move filed by utility. *Elec W News ed* 118:1708-9 N 21 '42

Gets SEC extension. *Comm & Fin Chr* 158:1175 S 20 '43

Gives SEC additional dissolution proposals. *Comm & Fin Chr* 156:1868 N 23 '42

Has jurisdiction to hear unliquidated claims. *Comm & Fin Chr* 157:477 F 1 '43

SEC jurisdiction claim upheld. *Comm & Fin Chr* 157:1184 Mr 29 '43

SEC prevents payment of \$154,000 interest. *Comm & Fin Chr* 157:44 Ja 4 '43

Utility contracts; North American's dividends help company divest itself of investments. *Business Week* p109-10 My 29 '43

NORTH ATLANTIC states highway officials.
 See Association of highway officials of the North Atlantic states

NORTH CAROLINA

See also

Clay—North Carolina Mines and mineral
 Iron ores—North resources—North
 Carolina Carolina

Industries and resources

Industrial development in the Carolinas. W. T. White. *Manuf Rec* 112:80-1+ O '43

North Carolina, a story of great achievement. *Il Manuf Rec* 112:51-79 O '43

NORTH CAROLINA academy of science
 Meeting, 42d, Durham, April 30-May 1. *Science* 97:513 Je 4 '43

NORTH CAROLINA cotton manufacturers association

Annual meeting, 36th, Charlotte, Nov. 12. *Textile World* 92:78-9 D '42

NORTH central states

New geography of American business; industrial diversity of North central area creates war boom, yet promises peacetime stability. W. H. Hillyer. *Barron's* 23:9 Ag 23 '43

NORTH continent utilities corporation
 Dissolution proposed. *Comm & Fin Chr* 157:1652 My 3 '43

Hearing on plan. *Comm & Fin Chr* 158:195 Jl 12 '43

To dispose of subsidiaries. *Comm & Fin Chr* 157:2047 My 31 '43

NORTH DAKOTA

See also

Land—North Dakota

NORTHEAST airlines, inc.
 Common stock offered. *Comm & Fin Chr* 158:989 S 6 '43

NORTHEAST boundary of the United States
 First governmental application of photography; Anthony daguerreotypes and northeastern boundary controversy between the United States and Great Britain. D. D. Nibbelink. *bibliog Il Franklin Inst J* 236:265-71 S '43

NORTHERN Indiana public service company
 Annual report. *Comm & Fin Chr* 157:1184 Mr 29 '43

Bonds offered. *Comm & Fin Chr* 158:677 Ag 16 '43

Files \$45,000,000 refunding plan. *Comm & Fin Chr* 158:91 Jl 5 '43

NORTHERN Ohio railway
 First distribution in respect of dividends. *Comm & Fin Chr* 156:1778 N 16 '42

NORTHERN Pacific railway
 Equipment trust certificates. *Comm & Fin Chr* 157:1274, 1947-8 Ap 5, My 24 '43

Northern Pacific's improving credit. M. Howe. *Barron's* 23:10-11 Jl 5 '43

Would issue notes. *Comm & Fin Chr* 157:1464 Ap 19 '43

NORTHERN railroad of New Jersey
 Stockholders lose appeal. *Comm & Fin Chr* 157:643 F 15 '43

NORTHERN states power company (Minnesota)

Seeks delay in debt payments. *Comm & Fin Chr* 157:44 Ja 4 '43

NORTHERN states power company of Delaware

Northern States Power A stock. *Comm & Fin Chr* 158:1702 O 28 '43

NORTHROP aircraft, inc.
 Ten years' progress. W. J. Cerny. *Il Aero-nautical Eng R* 1:73 N '42

NORTHWEST, Canadian
 New key to the North; Alcan highway. A. D. Rathbone. 4th. *Il map Sci Am* 168:262-4 Je '43

North Pacific planning project. *Science* 98:276 S 24 '43

NORTHWEST Carolina utilities, incorporated
 SEC approves liquidation. *Comm & Fin Chr* 156:1955-6 N 30 '42

NORTHWEST electric light and power association

Accounting, utilization are Northwest themes; Seattle and Portland round-table conferences. *Elec W* 119:2134-5 Je 26 '43

NORTHWEST electric light and power association—Continued

Engineering and operating section meeting, Seattle, Elec West 90:94 F '43
Sales group optimistic; Utilization section conference, Portland, June 11-12, Elec West 91:55-9 J1 '43

NORTHWEST TERRITORIES, Canada**History**

Captain Franklin's expedition; extracts from letters from J. Richardson, Can Min J 64: 351-2 Je '43

NORTH WEST utilities company

Liquidation plan filed with SEC. Comm & Fin Chr 157:1184 Mr 29 '43
SEC orders company to dissolve. Comm & Fin Chr 158:1175 S 20 '43

NORTHWESTERN national life insurance company

1942 reviewed. Comm & Fin Chr 157:169 Ja 11 '43

Northwestern National again tells '42 story on New Year's. Nat Underw (Life ed) 47:1+ Ja 8 '43

NORTHWESTERN university**Institute of technology**

Bequest for the endowment of the Technical institute. Science 97:38-9 Ja 8 '43
Northwestern technological institute. C. E. Watson, il J Eng Educ 33:489-95 Mr '43

NORTON, Charles Hotchkiss, 1851-1942

Sketch. por Mach 49:238 D '42

NORWALK, Ohio

American Main street at war; Norwalk, Ohio merchandising study. F. LaClave, il Ptr Ink 205:17-19+ N 12 '43

NORWAY**German occupation**

German exploitation meets increasing difficulties. For Comm W 11:20-1 My 8 '43
Intensified Nazi economic control. For Comm W 11:27-9 Je 26 '43
Labour conditions in occupied Norway. H. Palmström, Int Labour R 48:584-610 N '43
Nazi failure in Norway. Economist 145:269-70 Ag 28 '43
Nazi mobilization of Norwegian labor. For Comm W 11:12 Je 5 '43
Nazis riddle or shackle Norway's business. il For Comm W 11:7+ My 1 '43
Preventing Axis invaders from using assets (of conquered countries) located abroad. For Comm W 12:15 J1 10 '43
Terror in Norway. Economist 143:630 N 21 '42

Politics and government

Corporative Norway? Economist 143:766 D 19 '42

NOTARIES

See also

Checks—Protest

NOTCHED bar testing

Investigation of the static notched bar behavior of steel with reference to tri-axial stress and the technical cohesive strength. O. H. Henry and J. G. Farmer, bibliog il diags Welding J 22:sup150-62 Ap '43
Notch sensitivity of alloyed cast irons subjected to repeated and static loads. W. L. Collins and J. O. Smith, bibliog il diags Am Soc T M Proc 42:639-56; Discussion. 657-8 '42

Notched bar tensile tests on heat treated low alloy steels. G. Sachs and J. D. Lubahn, il diags Am Soc for Metals Trans 31:125-57 bibliog(51 titles, p156-7) Mr '43; Abstract. Machine Design 14:104-7+ D '42; Discussion. Am Soc for Metals Trans 31:158-60 Mr '43

NOTES receivable. See Promissory notes

NOVA SCOTIA

See also

Forests and forestry
—Nova Scotia
Gold mines and mining—Nova Scotia
Manganese mines and mining—Nova Scotia
Mines and mineral resources—Nova Scotia
Paper industry and trade—Nova Scotia

NOVAE. See Stars, New

NOVATION of indebtedness. See Debtor and creditor

NOYES, Jonathan Alvan, 1889-
Sketch. por(p609) Mech Eng 65:610 Ag '43

NOZZLES

Diesel nozzle for two fuels. O. T. Sygall, il diags Power 87:40 Ja '43
Diesel nozzles now tested for accurate delivery of oil. il Sci Am 167:282-3 D '42
Overfire air jets. R. B. Engdahl and W. C. Holton, bibliog diags A S M E Trans 65:741-51; Discussion. 751-4 O '43
Reinforcement of nozzles in pressure vessels; reference book sheet. E. L. Maguire. Product Eng 14:393-4 Je '43
Self-cleaning heat-treat nozzle. J. Whitely, il diags Metals & Alloys 17:126 Ja '43
Servicing fuel injection nozzles. P. H. Schweitzer, il diags Diesel Power 21:706-12 Ag '43
Spray nozzle performance in a cooling tower. L. M. K. Boelter and S. Hori, bibliog il diags Heating-Piping 15:259-66 My '43

NUCLEAR spin

Determination of the nuclear spin of Cl³⁷. E. F. Shrader, diags Phys R 64:57-9 Ag 1 '43

Spin inversion processes and nuclear spectroscopy. G. Beck and J. L. R. Martins. Phys R 62:554 D 1 '42

NUCLEIC acid

Effect of pH changes upon some of the properties of sodium thymonucleate solutions. C. F. Vilbrandt and H. G. Tennent. Am Chem Soc J 65:1806-9 O '43
Sedimentation and diffusion behavior of certain nucleic acid preparations. H. G. Tennent and C. F. Vilbrandt, bibliog Am Chem Soc J 65:424-8 Mr '43

NUCLEOSIDES

Experiments on the synthesis of purine nucleosides; a new and convenient synthesis of adenine. J. Baddiley, E. Lythgoe and A. R. Todd, Chem Soc J p386-7 Ag '43
Experiments on the synthesis of purine nucleosides; model experiments on the synthesis of 9-alkylpurines. J. Baddiley and others. Chem Soc J p383-6 Ag '43

NUFFIELD foundation

Nuffield foundation. Economist 144:235 F 20 '43

Nuffield foundation. Science 97:237 Mr 12 '43

NUGENT plan

Advance sale, postwar delivery, plan to enlist support of contractors in East; results of survey. Dom Eng 161:50-1+ Mr '43
Future studied; National automobile dealers' assn. decries Nugent plan. Business Week p89-90 F 13 '43

Installment plan; Nugent plan and houses. Arch Forum 78:35-6 F '43

Installment selling for post-war delivery. J. G. Frederick, Barron's 23:1 Mr 8 '43

Installment selling for post-war delivery opposed by NAM board. Comm & Fin Chr 157:1988 My 27 '43

Installment selling for post-war delivery; opposition by National association of manufacturers. Bankers M 146:515 Je '43

Lay-away orders for machinery; RCA plan. Mod Packaging 16:92+ My '43

Morgenthau opposes advance time buying. Comm & Fin Chr 157:66 Ja 7 '43

Nugent plan tried; RCA offers sound devices to theaters. Business Week p68 Mr 27 '43

Nugent post-war plan finds Washington shy. Elec W 119:234 Ja 23 '43

Nugent test due; terms on your postwar auto. Business Week p16 Ja 16 '43

OPA to adopt buy-in-advance plan for post-war deliveries. Ptr Ink 202:43 Ja 1 '43

Sales plan for war and post-war; Nugent plan includes sale of plumbing and heating equipment. il Dom Eng 161:34-9+ F '43

Sell now for post-war delivery. F. Salisbury. Sales Management 52:16 Ja 1 '43

Sell today, deliver tomorrow; war savings for consumer goods. C. E. Greenwood. Edison Elec Inst Bul 11:47 F '43

NUISANCES

See also

Air pollution
Noise
Public health
Smoke prevention
Trade waste

NUMBERING machines

Wartime hints about care and maintenance of typographic numbering machines. *Il Inland Ptr* 111:25-8 J1 '43

NUMBERING systems

Does your numbering system need revamping? unified system for numbering machine parts, subassemblies and catalog items; used by Taylor instrument company. R. T. Soule. *Il diag Machine Design* 15:113-16+ N '43

NUMBERS, Complex

Chart for determining square root of a complex number; transmission line and filter calculations; reference sheet. R. G. Nisile. *Electronics* 16:127-8 Ag '43

Complex numbers in electrical engineering laboratory. E. A. Hertzler. *diags J Eng Educ* 33:217-27 N '42

Inverse functions of complex quantities. H. B. Dwight. *bibliog Elec Eng* 61:Trans 350-3 D '42

NURSERIES

See also

Hospitals—Nurseries

NURSERIES (horticulture)

Garden center, San Francisco; commercial building improves residential neighborhood. *Il diags plans Arch Forum* 79:92-8 Ag '43

Seed and nursery industry in Shenandoah, Iowa, has wartime boom. *Fortune* 28:90 N '43

NURSERY schools

Cash, kind and care; nursery school education for all children. *Economist* 144:616-17 My 15 '43

How to convert store into nursery school for war workers' children. *plans Am Eld* 65:55 Je '43

NURSES and nursing

Nursing profession. *Economist* 144:228-9 F 20 '43

Student war nursing reserve. *Pub Health Rep* 58:915-17 Je 11 '43

What's past is prologue; academic qualifications of registered nurses as revealed by the 1941 national survey of registered nurses. H. Landau. *bibliog Pub Health Rep* 58:465-77 Mr 19 '43

See also

Hospitals

Nursing schools

Salaries

Income in selected professions; private duty nursing. E. F. Denison. *Survey of Cur Business* 23:25-8 S '43

Salaries of hospital staff nurses, October 1942. *Monthly Labor R* 56:986-8 My '43

NURSES and nursing, Industrial

Industrial nurse; supplement to Industrial medicine. *Ind Med* 11:559-70 N '42 [cont quarterly]

Industrial nursing personnel. *Ind Med* 12:48-9 Ja '43

Industrial nursing service; a suggested yardstick for judging its efficiency. W. L. Ritter and P. H. Walden. *Ind Med* 12:212-14 Ap '43

Newer opportunities in industrial nursing. C. Pharris. *Ind Med* 12:118-22 F '43

Nurse in industry; her functions and responsibilities. J. M. Johnson. *Ind Med* 12:386-90 Je '43

Optimum use of nursing service in the war effort. E. M. Barkley. *Ind Med* 12:564-5 Af '43

Preparation of the nurse for industrial hygiene and accident prevention. E. Gilsinger, J. S. Heydon and C. Don Modica. *Safety Eng* 86:56-8+ Ag '43

Routine in a small plant; a nurse's annual report. *Ind Med* 12:566-8 Ag '43

Standing orders for nurses in industry. *bibliog Ind Med* 12:696+ O '43

See also

Medical service, Industrial

NURSES and nursing, Public health

Public health nursing. E. McIver. (Public health rep supp 133) 18p U.S. Public health service, Washington; pa 10c Supt. of doc. '43

Salaries

Salaries of public health nurses, January 1942. *Monthly Labor R* 56:780-1 Ap '43

NURSES in industry. *See Nurses and nursing, Industrial*

NURSES' uniforms. *See Uniforms, Nurses'*

NURSING schools

Clay products for durability, quality, simplicity and truthfulness; Mercy hospital school of nursing. W. Koehl. *Il Brick & Clay Rec* 103:28-9 Ag '43

NUTRITION

Ascorbic acid values of fruits and vegetables for dietary surveys. M. Olliver. *Chem & Ind* 62:146-8 Ap 17 '43

Britain eats to fight; Lord Woolton, Food minister, has turned potential disaster into nutritional triumph. *Il Fortune* 27:82-7+ Ap '43

Calories in wartime. E. G. Ritzman. *J Chem Educ* 20:410-12 Ag '43

Comparative nutritive value of butter and some vegetable fats. H. J. Deuel, jr., E. Movitt and L. F. Hallman. *bibliog Science* 98:139-40 Ag 6 '43

Cooperative nutrition program in North Carolina. J. F. Kendrick. *bibliog Pub Health Rep* 58:797-803 My 21 '43

Dihydroxy-stearic acid and vitamin K deficiency. E. E. Lockhart, H. Sherman and R. S. Harris. *Science* 96:542-3 D 11 '42

Food and nutrition as related to the war. C. G. King. *Science* 97:129-31 F '43; *Same.* *Il Chem & Eng N* 21:150-1 F 10 '43

Food chemists in a nutrition programme. L. B. Pett. *Can Chem & Process Ind* 27:321-2 Je '43

Food for production. Q. O. Dodge. *bibliog Ind Med* 12:297-301 My '43

Food is ammunition; nutrition of workers. *Il Nat Safety N* 47:7+ Mr '43

Food rationing descends upon the mining industry. R. S. Goodhart. *Il Min Cong J* 29:48-50 My '43

Food situation, May, 1943. J. D. Black. *Harvard Business R* 21 no4:397-414 [J1] '43

General Foods quiz shows women want more facts on nutrition. *Sales Management* 52:25-7 F 1 '43

How industry is fighting hidden hunger. T. C. Desmond. *Il Factory Management* 101:94-7 Je '43

How New Orleans Public Service promotes nutrition conservation. D. Markstein. *Il Gas Age* 92:76, 78 O 21 '43

Information on nutrition in industry. *Ind Med* 12:172 Mr '43

Libraries and the nutrition program; round table discussion. F. Nelson and others. *Special Lib* 34:262-76 J1-Ag '43

Milling industry and national nutrition; abstract. R. S. Herman. *Chem & Met Eng* 50:173-5 Mr '43

National, provincial, and local nutrition programs in Canada. G. F. Amyot. *bibliog Pub Health Rep* 58:793-6 My 21 '43

Newer members of the E complex; their nutritional significance. C. A. Elvehjem. *bibliog Chem & Eng N* 21:853-7 Je 10 '43

Nutrition, a weapon to fight lost time; health and nutrition programs being conducted by industry. *Am Business* 12:30-2 N '42

Nutrition and food supply: the war and after. J. D. Black, ed. *Ann Am Acad* 225:1-221 Ja '43

Nutrition drive tightens its belt. *Il Business Week* p58 Ap 3 '43

Nutrition fund exceeds million. *Food Ind* 14:80 D '42

Nutrition in pregnancy. *Chem & Ind* 62:85-6 F 27 '43

Nutrition popular with men's groups; Wisconsin public service corporation demonstration lecture. *Il Elec W* 119:2012+ Je 12 '43

Nutritional aspects of food processing. P. E. Howe. *Ind & Eng Chem* 35:24-5 Ja '43

Nutritional hedge; no bar to extension of flour enrichment. *Business Week* p40 My 29 '43

Nutritional standards; abstract. F. G. Boudreau. *Science* 97:sup12 Mr 5 '43

Practical nutrition program for industry. W. A. Sawyer. *Ind Med* 12:278-80 My '43

NUTRITION—Continued

- Promoting nutrition to employees. R. G. Spence. *Il Factory Management* 101:90-2 Ja '43
- Proper nutrition an important factor in efficiency of workers. V. G. Heiser. *Il Concrete* (mill sec) 51:126-7 F '43
- Psychology and industrial nutrition programs; food in relation to mental processes. L. S. Selling. *Ind Med* 12:69-73 F '43
- Revolutionized nutrition; its impact upon world economics. M. C. Berry. *Special Lib* 34:257-61+ JI-Ag '43
- Role of the health department in the national nutrition program. W. H. Sebrell and W. Wilkins. *bibliog Pub Health Rep* 58:803-13 My 21 '43
- Soil and crop basis of better nutrition. L. A. Maynard. *bibliog Il Chem & Eng N* 21: 217-20 F 25 '43
- Some obstacles in the path towards an optimum diet. A. J. Carlson. *Science* 97:385-90, 412-16 Ap 30-May 7 '43
- Supplementary feeding in industry. H. W. Haggard. *J Ind Hygiene* 24:332-5 D '42
- Synthetic vitamins and their relation to defense. M. J. Rahrig. *bibliog J Chem Educ* 20:401-5 Ag '43
- Trends in agriculture in relation to nutrition. E. J. Russell. *Chem & Ind* 62:210-14 Je 5 '43
- Vitamin programs to reduce lost time. *Am Business* 12:23-4 D '42
- Vitamins go to war. *Il Business Week* p55-69 JI 10 '43; Correction. p68 Ag 21 '43
- Wartime nutrition program; southern California gas utilities home service departments. F. A. Herr. *Il Am Gas J* 158:16-18 My '43
- Winning with food; proper food facilities and nutrition education in industry. E. Perry. *Il Nat Safety N* 47:18-19+ F '43
- You are what you eat. N. Finch. *Il Elec West* 89:48-50 D '42

See also

- | | |
|------------|----------|
| Diet | Proteins |
| Food | Vitamins |
| Metabolism | |

NUTRITION education

- Advertisers pledge backing to new national nutrition program. *Ptr Ink* 203:33 Ap 9 '43
- Eat to beat the devil; Servel's industrial nutrition program. *Il Ind Med* 11:524-5 N '42
- Educational techniques in industrial nutrition. C. Kuh. *Ind Med* 12:210-11 Ap '43
- How the Illinois state department of public health library contributes to nutrition education. F. Nelson. *Special Lib* 34:262-3 JI-Ag '43
- Nutrition at work; Red cross educational program. M. B. Bakkie. *Il Am Gas Assn Mo* 26:107-8 Mr '43
- Nutrition campaign is launched; many advertisers to tie in. *Sales Management* 52: 62 Ap 15 '43
- Nutrition education programs. M. J. Bowman and C. A. Anderson. *Ann Am Acad* 225: 150-7 Ja '43
- Nutrition in industry has plenty rice bowl; Servel plan; interview with G. S. Jones. G. E. Stedman. *Il Gas Age* 90:22-4+ D 17 '42
- Nutrition in industry program. G. S. Jones, Jr. *Am Gas Assn Proc* 1942:133-6
- Organizing a nutrition program. J. H. Keele. *Elec W* 119:328+ Ja 23 '43
- Practical nutritional program for industry; abstract. R. S. Goodhart. *Ind Med* 12:29-30 Ja '43
- Servel sells nutrition. G. S. Jones, Jr. *Il Ptr Ink* 202:18-19, 42 Ja 1 '43
- Teach nutrition in Victory kitchen; Puget Sound power & light co. E. T. Rauch. *Elec W* 119:650+ F 20 '43
- Teaching wives to plan meals. *Il Factory Management* 101:93-4 Ja '43

NUTRITION foundation

- Five-year program of basic research. *Science* 96:490-1 N 27 '42
- Grants for the coming year. *Science* 97:258 Mr 19 '43
- Research studies. G. A. Sloan. *Science* 93: 237 S 10 '43

NUTRITION research

- Air conditioning helps army determine rations required under various climatic conditions; Laboratory of physiological hygiene; University of Minnesota. M. Eigen. *Il diag Heat & Ven* 40:21-5 Mr '43
- Amino acids; some essential, some not, to human beings. *Sci Am* 169:81 Ag '43
- Borden award in nutrition. H. A. Mattill. *Science* 98:380 O 29 '43
- Landmarks in the progress of the science of nutrition. C. A. Elvehjem. *Ann Am Acad* 225:10-16 Ja '43
- Observations on the biological value of a mixture of essential amino acids. A. A. Albanese and V. Irby. *Science* 98:286-8 S 24 '43
- Vitamin cures predicted; abstract. C. A. Elvehjem. *Science* 97:sup12 Ap 2 '43

NUTRITION society

- Eight scientific meeting to discuss trace elements in relation to health. *Chem & Ind* 61:463-5 N 7 '42

NUTS

- Spanish nut industry aided. *For Comm W* 13: 26 O 30 '43

See also

- | | |
|-------------|-------------|
| Almonds | Jojoba nuts |
| Cashew nuts | Peanuts |

NUTS (machinery). *See* Bolts and nuts**NUX vomica**

- India's nux vomica production. *For Comm W* 10:28 Mr 13 '43

NYASALAND

- Economic conditions. *For Comm W* 11:18-19 My 15 '43

NYLANDER, Olof O. 1864-1943

- Sketch. P. E. Raymond. *Am J Sci* 241:704-5 N '43

NYLON

- Are synthetics dooming the full-fashioned hosiery machine? J. W. Hughes; M. C. Miller. *Il Textile World* 93:74-8 Ag '43
- Details of nylon salvage program. *Rayon* 23: 640 N '42
- Dielectric properties of animal fibers; comparison with silk and nylon. J. Errera and H. S. Sack. *bibliog diag Ind & Eng Chem* 35:712-16 Je '43
- Flexible anti-snagging size for nylon knitting yarns patented. *Rayon* 24:359-60 JI '43
- Fluidity of nylon solutions in m-cresol: measurement of chemical damage in nylon textiles. J. Boulton and D. L. C. Jackson. *diag Soc Dyers & Col J* 59:21-6 F '43; Excerpt. *Textile World* 93:92 My '43
- From nylon stockings back to chemicals; a reverse synthesis. *Il Rayon* 24:63 F '43
- Hints on weaving nylon fabrics. *Il Textile World* 93:100-1 Je '43
- Improved formulations will expand post-war uses of nylon. *Il Product Eng* 14:599-600 S '43
- Injection molding of nylon. R. B. Akin and J. E. Teagarden. *flow sheet Il diag Mod Plastics* 21:115-20+ N '43
- Maximum price regulation no. 95 governing women's nylon hosiery. *Rayon* 23:643 N '42
- New developments and uses of nylon. G. P. Hoff. *Il Rayon* 24:345-6, 409-11 JI-Ag '43; Abstract. *Textile World* 93:81 JI '43
- New forms for nylon. *Il Mod Plastics* 20:64 Ag '43
- Nylon. E. K. Bolton. *Il Chem & Eng N* 20: 1365-6 N 10 '42
- Nylon blood and plasma filter. S. B. Rose. *diag Science* 98:92 JI 23 '43
- Nylon blood filters. *Chem Ind* 53:360 S '43
- Nylon fleeces. *Il Mod Plastics* 20:59 D '42
- Nylon in tires giving good service under severe conditions. *Il Sci Am* 169:78 Ag '43
- Nylon research laboratory gets Army-Navy award. *Rayon* 24:4 Jo '43
- Nylon yarn and its possibilities. G. Loasby. *Il Textile Inst J* 34:P45-63 Mr '43
- Parachutes and the new fabrics they require. *Il Textile World* 93:65-8 O '43
- Post-war uses seen for nylon plastic. *Il Iron Age* 152:53 N 11 '43
- Progress review on new uses for nylon. *Il Rayon* 24:457-8 S '43
- Properties of synthetic fibers; charts. *Textile World* 93:112-14 S '43
- Resistance of various textile fibers to mildew. N. E. Borlaug. *Il Rayon* 24:416-18 Ag '43

NYLON—Continued

- Reverse synthesis: nylon is reverted to original chemicals. *il* Sci Am 168:108 Mr '43
- Scrap drive now includes waste nylon. *Textile Col* 64:547 N '42
- Setting, dyeing and finishing nylon hosiery. H. H. Mosher. *Textile Col* 64:542-4 N '42
- Sources of barré and irregular cloth. H. E. Wenrich. *Rayon* 24:247-8 My '43
- Stainless steel heddles and reeds essential to war effort. *Rayon* 24:483 S '43
- Symposium of man-made fibers; nylon: development, physical properties, and present status. J. K. Hunt. *Textile Col* 65:10-12 Ja '43
- Tapered nylon now available to replace natural bristles. *Sci Am* 168:85 F '43

See also

Dyes and dyeing—
Nylon

Manufacture

Nylon research wins its war wings. *il* Chem & Met Eng 50:92-3 Ja '43

Testing

- Fatigue of fabrics. W. F. Busse and others. bibliog diag *J Ap Phys* 13:715-24 N '42
- Sweaters of the future; will they be all wool, Aralac, or nylon? *Consumers' Research Bul* 11:24-5 O '42
- Wearing qualities of rayon hose compared with silk and nylon hose. H. M. Fletcher. *Rayon* 24:537-8, 601-3 O-N '43
- Wearing qualities of similar brands of silk and nylon hose compared. G. M. Smith and H. M. Fletcher. bibliog *Rayon* 23:671-2, 722-4 N-D '42
- Winding-wire covering; various tests on modified nylon. H. C. Gee and J. F. Cowen. *il* Elec R (Lond) 133:134-6 JI 30 '43

NYLON screens. *See* Screens, Nylon

O**OAHU, Hawaii**

Soil avalanches on Oahu, Hawaii. C. K. Wentworth. *diags Geol Soc Bul* 54:53-64, pl 1-2 Ja '43

OAK

- Analysis of the factors responsible for raised grain on the wood of oak following sanding and staining. G. G. Marra. *il* diag A S M E Trans 65:177-84; Discussion. 184-5 Ap '43
- General electrophoretic pattern in extracts of pollens causing hay fever. H. A. Abramson, D. H. Moore and H. H. Gettner. *il* J Phys Chem 46:1129-39 D '42
- Lustreless finishes for wood. S. E. Beck. *Paint Oil & Chem R* 106:9-11 JI 15 '43
- Partial pyrolysis of wood. R. W. Merritt and A. A. White. *il* Ind & Eng Chem 35:297-301 Mr '43

OAK LAWN, Illinois**Water supply**

Water softening increases consumption at Oak Lawn. H. De Reuter. *plan Pub Works* 74:26 My '43

OAKLAND, California**Sanitary affairs**

City struggles with garbage disposal; program includes disposal of wet garbage to hogs and dry garbage to fill. *il* Eng N 130: 756-8 My 20 '43

OAKLAND terminal railway

Begins operations July 1. *Ry Age* 115:35 JI 3 '43

OAT straw. *See* Straw

OATS

- Improved oats; Iowa turns to hybrids. *Business Week* p24+ Ja 23 '43
- Oats, 1938-1941. Survey of Cur Business 1942 Sup p119 [supplemented in monthly numbers]

OBSERVATION towers

Observation post for Aircraft warning service. *il* diag Arch Forum 78:2 Ja '43

OBSERVATORIES, Astronomical. *See* Astronomical observatories

OBSIDIANITES. *See* Tektites

OBSELESCENCE*See also*

Depreciation
Machinery, Replacement of

OCCUPATION, Military. *See* Military occupation

OCCUPATIONAL diseases. *See* Diseases, Industrial

OCCUPATIONS

Conclusions based on 5,000 job placements of Maine youth. C. C. Robinson. *Monthly Labor R* 56:1122-3 Je '43

Conversion of non-essential skills fills essential jobs. *il* Am Mach 87:87-9 JI 22 '43

Health experts will be in greatest post-war demand. E. E. Crabb. *Sci Am* 168:268 Je '43

Nondeferable occupations for men. *Monthly Labor R* 56:468-9 Mr '43

Occupational classification. A. J. Cardell. *Personnel J* 22:54-7 Je '43

Regulations relating to war manpower; critical occupations. *Monthly Labor R* 57:704-11 O '43

See also

Ability tests	Radio workers
Aeronautic workers	Trust service
Job analysis	Woman—Occupations

Statistics

Economic status of the members of the American chemical society; committee report. *Chem & Eng N* 20:1563-74, 1635-43 D 10-25 '42

OCCUPATIONS, Choice of

Your place in the world of tomorrow. J. R. Roberts. *il* Franklin Inst J 235:577-90 Je '43

OCCUPATIONS, Dangerous

Young manpower; protection against occupational hazards. *il* Nat Safety N 47:52+ F '43

See also

Accidents, Industrial	Hygiene, Industrial
Coal miners	Miners
Diseases, Industrial	Poisons, Industrial

OCEAN*See also*

Coast changes	Red water
Marine biology	Sea water
Navigation	Sounding
Ocean bottom	Waves

OCEAN bottom

Geology and biology of North Atlantic deep-sea cores between Newfoundland and Ireland; mollusca; echinodermata; miscellaneous fossils and significance of faunal distribution. H. A. Rehder; A. H. Clark; L. G. Henbest. *U S Geol S Professional Pa* 196-D:107-33, pl 20-3; pa 30c Supt. of doc. '42

Geology and biology of North Atlantic deep-sea cores between Newfoundland and Ireland; organic matter content. P. D. Trask and others. *U S Geol S Professional Pa* 196-E:135-49, pl 1-2; pa 20c Supt. of doc. '42

See also

Canyons, Submarine

Sediment analysis

Geology and biology of North Atlantic deep-sea cores between Newfoundland and Ireland; selenium content and chemical analyses. G. Edgington and H. G. Byers. *U S Geol S Professional Pa* 196-F:151-5, pl 1-2; pa 15c Supt. of doc. '42

OCEAN travel*See also*

Steamboats

OCEANIA

French Oceania; tariffs and trade controls. *For Comm W* 9:12-13 N 14 '42

O'CONNOR, Basil, 1892-
Portrait. *East Underw* 44:13 Ja 15 '43

OCTADECANES

Premelting anomalies of some long chain normal paraffin hydrocarbons. A. Van Hook and L. Silver. *bibliog J Chem Phys* 10:686-90 N '42

OCTAHYDRODIHYDROXY phenanthrene

Structure of Skita's decahydro-9,10-dihydroxyphenanthrene. P. Levine. *Am Chem Soc J* 64:3046-7 D '42

OCTANE number

Empirical relation between octane number and molecular structure. A. Mibashan. *Pet Refiner* 22:89-90 JI '43

Octane number nomographs. R. B. Cox and D. S. Davis. *Pet Refiner* 22:126-7 O '43

Relation of octane number and base of crude oil. W. L. Nelson. *Oil & Gas J* 41:56 Ap 29 '43

See also

Gasoline—Anti-knock and anti-knock mixtures

OCTATETRAENE

Stereoisomeric diphenyloctatetraenes. L. Zechmeister and A. L. LeRosen. *bibliog diag Am Chem Soc J* 64:2755-9 D '42

OCTENE

Raman spectra of hydrocarbons; 1-octene, *cis*-+*trans*-2-octene, *trans*-3-octene, *trans*-4-octene, 4-octyne, and 1-octyne. F. F. Cleveland. *bibliog il diags J Chem Phys* 11:1-6 Ja '43

OCTYL alcohol

Vapor pressure nomograph for isomeric octanols. D. S. Davis. *Ind & Eng Chem* 35:232 F '43

O'DEA, Mark

Sketch. *por(p174) Marine Eng* 48:180-1 Ag '43

ODELL, Eliott

Minor Munchausen. L. Hemminger. *dors Adv & Sell* 36:28+ Mr '43

ODORS

Effect of Diesel fuel on exhaust smoke and odor. R. S. Wetmiller and L. E. Endsley, jr. *diags S A E J* 50:509-20 D '42

Gasoline engine exhaust odors; study of odors produced under conditions of deceleration. J. J. Mikita, H. Levin and H. R. Kichline. *diag S A E J* 51:12-19 Ja '43; *Excerpts. Automobile Eng* 33:239-40 Je '43; *Abstract. Automotive & Aviation Ind* 87:31 D 1 '42

Giant gas masks to remove plant odors. H. Sleik. *il Mod Packaging* 16:88+ Ja '43

Stenches for emergency warnings in metal mines. D. Harrington and J. H. East, jr. *diags U S Bur Mines Information Circ* 7246:1-7 '43

See also

Deodorizers	Water purification—
Sewage disposal—	Taste and odor re-
Odor removal	moval
Soap manufacture—	
Perfuming	

Measurement

Calculation of threshold odor. H. A. Thomas, jr. *bibliog il Am Water Works Assn J* 35:751-69 Je '43

OFFICE appliances

Coddle your business machines, they're equivalent to manpower! theme of IBM, Dictaphone, Remington Rand, and other office equipment makers. *il Sales Management* 51:24-6+, 30 D 1 '42

Preview of postwar office methods; Allotment division, Bureau of supplies and accounts, United States navy. *il Am Business* 13:28-32 S '43

Wood pays off; Standard Register saves metal. *Business Week* p92+ Mr 27 '43

See also

Accounting—Mechanical aids	Collating machines
Addressing machines	Office equipment
Calculating machines	Typewriters

OFFICE buildings

New buildings for 194X: office building. *il diags plans Arch Forum* 72:108-12 My '43

Office and loft buildings; considerations of their past, present and future; building types study; with time-saver standards. E. J. Kahn. *il diags plans Arch Rec* 93:73-82 Ap '43

Sao Paulo tower is righted with jacks. *il Eng N* 131:623 O 21 '43

See also

Insurance company buildings	Printing offices
Newspaper offices	Steel construction
Office lighting	Telephone company buildings

Air conditioning

Office and loft buildings air conditioning; time-saver standards. *il plan Arch Rec* 93:82 Ap '43

Pentagon building is 100% air conditioned; War department office building. *Refrig Eng* 44:396-7 D '42

World's largest office building; Pentagon. *il Dom Eng* 161:66-7 Je '43

Electric equipment

See also

Office lighting

Heating and ventilation

How to charge tenants for extra hour heating in multiple occupancy buildings. R. E. Hieronymus. *Heating-Piping* 15:135-7 Mr '43

Lighting

See Office lighting

Maintenance and repair

Maintenance work centers in basement service shops; Seattle's Metropolitan building co. properties. *il Am Bld* 65:56-7+ Ja '43

Protection

A.R.P. in office buildings; Metropolitan life insurance building in New York and du Pont and Nemours buildings in Wilmington. *il plans Arch Forum* 77:84-92 N '42

OFFICE buildings, Government

Army's Pentagon building; heating, air conditioning and lighting. *il plans Arch Rec* 93:63-70 Ja '43

Office building for Ministry of education and health, Rio de Janeiro. *il diags plans Arch Forum* 78:37-44 F '43

Pentagon building, Arlington, Virginia. *il plans Arch Forum* 78:37-52 Ja '43

OFFICE buildings, Industrial

Office building for Schuckl canning company plant at Sunnyvale, California; with views, plans, and construction outline. *Arch Forum* 79:60-3 JI '43

War plant administration building; views. *Arch Forum* 77:52-4 N '42

Heating and ventilation

How an air conditioned office building reduced its heating steam consumption; International harvester company. W. C. Heimbeck and M. Ehrlich. *il Heating-Piping* 15:189 Ap '43

Substation losses heat company office; Savannah electric & power company. *diag Elec W* 119:1496 My 1 '43

OFFICE equipment

Better production from present office equipment. *Am Business* 13:27-8 My '43

Blind spots in offices; machines, furniture, and arrangement tailored to fit the job. W. L. White. *il Am Business* 13:16-18 My '43

Government offices try Stricker plan; Ramspeck committee probing methods to reduce red tape. *il Am Business* 13:16-17 O '43

How to meet shortages of office materials; abstract. C. U. Stapleton. *Management R* 32:8-9 Ja '43

Office manager and the purchasing agent; why some offices never have the right equipment. *il Am Business* 13:24-6 Ag '43

See also

Holders (for printed matter)
Office appliances

OFFICE equipment industry

Coddle your business machines, they're equivalent to manpower! theme of IBM, Dictaphone, Remington Rand, and other office equipment makers. *il Sales Management* 51:24-6+, 30 D 1 '42

How six companies approach post-war planning. *Am Business* 13:28, 30-1 Ap '43

OFFICE equipment industry—Continued

Todd's new sales strategy maintains volume in face of machine freeze; plan built on payroll service. L. T. Thomasma, flow chart il Sales Management 52:25-6, 30 Jl '43

Securities

Appraising near and longer prospect for machinery, rail and office equipment, position of leading stocks. R. Colston. il Mag of Wall St 72:469-73+ Ag 7 '43

Good post-war outlook supports office equipment stocks; position of leading stocks. Mag of Wall St 71:538-9+ F 20 '43

OFFICE forms. See Forms and blanks, Business**OFFICE furniture**

See also

Chairs
Desks

OFFICE lighting

Cold cathode produces light canopy; aircraft office. G. C. Greenlund and C. Miller. il Elec West 91:55 S '43

Light for utility offices. il Elec West 90:46 Ja '43

OFFICE management

Advertising agencies plagued by office help shortage; fourteen points for helping overcome current stringencies. P. H. Erbes, jr. Ptr Ink 204:22, 91-3 Ag 27 '43

Application of research to the office. E. H. Conarroe. N A C A Bul 25:108-24 O 1 '43

Better production from present office equipment; production despite shortages of new office machines and trained personnel. Am Business 13:27-8 My '43

Blind spots in offices; machines, furniture, and arrangement tailored to fit the job. W. L. White. il Am Business 13:16-18 Mr '43

Controlling office production; abstract. H. L. Wylie. Management R 32:204-5 Je '43

Developing office supervisors; abstract. Management R 32:283-4 Ag '43

Experiment in meeting personnel losses in government agencies. E. H. Morgan. Advanced Management 8:56-9 Ap '43

Factory office systems. Engineer 175:150-1 F 19 '43

Government offices try Stricker plan; Ramspeck committee probing methods to reduce red tape. il Am Business 13:16-17 O '43

Meet the shortage; research committee of the National office management association recommendations. Banking 35:51-2+ Ja '43

Office economies without radical changes; Standard register company saves typewriters and cuts office costs. B. E. Klopfer. il Am Business 13:24-6, 38-9 S '43

Office manager and the purchasing agent; why some offices never have the right equipment. il Am Business 13:24-6 Ag '43

Outlines of some talks given at 24th annual conference of the National office management association, Detroit. Personnel J 22:130-9, 216-24 O, D '43

Simplified office supervision; schedule board for clerks calculating incentive pay. L. E. Isaacson. il Personnel J 21:217-22 D '42

See also

Accounting	Forms and blanks,
Billing	Business
Business conferences	Mail
Business management	Mailing lists
Card system in business	Office manuals
Commercial correspondence	Office workers
Credit departments	Orders
Executives	Payrolls
Files and filing (documents, etc.)	Taxation—Accounting
	Telephone in business

Quality control

Quality control applied to business administration. W. B. Rice. Am Stat Assn J 38: 228-32 Je '43

OFFICE management association, Life. See Life office management association**OFFICE manuals**

Preparation and use of office manuals. E. H. Conarroe. N A C A Bul 24:1193-1206 Je 1 '43

OFFICE records. See Forms and blanks, Business**OFFICE supplies**

P.I. survey reveals how commercial firms are saving paper: 34 methods. il Ptr Ink 204:32+ S 3 '43

See also

Bank equipment and Office appliances
supplies Office equipment

OFFICE workers

Blanket boost; Curtiss-Wright's plan for uniform pay rates in scattered cities. Business Week p87 S 13 '43

Clerical wages rise in New York area. Comm & Fin Chr 157:1888 My 20 '43

CIO launches big drive for white collar workers in steel industry. T. Campbell. Iron Age 152:97-8 N 4 '43

Earnings and hours of office employees. Monthly Labor R 57:347-8 Ag '43

Earnings of clerical workers in Illinois and New York factories, October 1942. Monthly Labor R 56:586-9 Mr '43

Government moves to stabilize office salaries. Am Business 13:17-18+ Je '43

How to set production standards. H. C. Penick. Personnel J 22:134-5 O '43

Lowered employment standards and post-employment training. Management R 32:114-15 Mr '43

More wage rates and job descriptions set for office workers; approvable white collar rates by W.L.B. for New York and northern New Jersey. Am Business 13:14-16 Ag '43

Office work in Houston, 1940. U S Women's Bur Bul 188-1:1-58; pa 10c Supt. of doc. '42

Office work in Kansas City, 1940. U S Women's Bur Bul 188-3:1-74; pa 15c Supt. of doc. '42

Office work in Philadelphia, 1940. U S Women's Bur Bul 188-5:1-102; pa 15c Supt. of doc. '42

Office work in Richmond, 1940. U S Women's Bur Bul 188-4:1-61; pa 15c Supt. of doc. '42

Orientation program for office employees. Management R 32:205-6 Je '43

Personality problems in the office. L. G. Gibson. Personnel J 21:239-43 Ja '43

Salaries of clerical workers in 20 cities, April 1943. Monthly Labor R 57:348-9 Ag '43

Slacks in the office? yes or no. il Am Business 13:22, 27 Ap '43

Students in half-time office jobs. F. C. Minaker. il Am Business 13:36-7 Ap '43

Time study and clerical incentive; abstract. H. B. Rogers. Management R 32:329-30 S '43

Wartime salary administration. R. P. Brecht. Personnel J 22:132-4 O '43

Weekly salaries of clerical workers in New York city, December 1942. Monthly Labor R 56:1200-1 Je '43

What to teach new employees. il Am Business 12:14-15 D '42

White collar workers forgotten. W. L. Morse. Comm & Fin Chr 157:2160 Je 7 '43

See also

Bank employees
Secretaries, Private

OFFICES

See also

Architects' offices
Newspaper offices

Printing offices

Accidents

Fifty office hazards. A. B. Roush. il Am Business 13:22-3 Jl '43

OFFICIAL agricultural chemists, Association of. See Association of official agricultural chemists**OFFSET printing. See Printing, Offset****OGDEN corporation**

Report shows progress in reorganization program. Comm & Fin Chr 155:582 Ag 9 '43

SEC order approving certain aspects of divestment plan. Comm & Fin Chr 157:2047-8 My 31 '43

To buy Laclede Power stock. Comm & Fin Chr 157:2154 Je 7 '43

OHIO

Politics and government

Ohio looks to '44; hopes to provide its eighth U.S. president. E. Janeway. *il* Fortune 27: 104-6+ F '43

OHIO ceramic industries association

Annual fall meeting, Columbus, Oct. 22-23. *Cer Ind* 41:60, 62, 64 N '43; *Brick & Clay Rec* 103:24-5 N '43

OHIO fiduciary research bureau

Fiduciary research bureau; abstract. R. S. Douglas. *Trusts & Estates* 76:195 F '43

OHIO oil company

Another look. *Mag of Wall St* 72:693 O 2 '43

Companies with record high earnings. J. C. Harrington. *Mag of Wall St* 71:527 F 20 '43

Prominent crude oil producer. H. Lawrence. *Barron's* 23:4 F 1 '43

OHIO river

Dredging coal seam from Ohio river; abstract. E. Drennan. *Coal Age* 48:106-7 Mr '43

OHIO River valley

New geography of American business; Pittsburgh region expands steel capacity, faces long-term depletion of coal, oil, gas reserves. W. H. Hilyer. *Barron's* 23:6+ JI 19 '43

OHM'S law

Graphic solutions of Ohm's law for a.c. networks. R. C. Paine. *diags Electronics* 16: 232+ Je '43

OIL. See Oils and fats; Petroleum

OIL, Gas. See Gas oil

OIL, Insulating

Conserving electrical insulating oil. T. H. Chisholm. *Pulp & Pa of Can* 44:809-12 O '43

Improved insulating oil reclamation. *il* *diags Elec W* 120:488+ Ag 7 '43

Insulating oil for cables. S. Beckinsale. *Inst E E J* 90 pt 2:3-14 F '43

Insulating oil in relation to circuit breaker failures. W. F. Cooper. *bibliog Inst E E J* 90 pt 2:23-8; *Discussion*. 53-64 F '43

Insulating oil reclamation. H. E. Rowe. *Elec W* 120:668, 852, 1034, 1206+ Ag 21-O 2 '43

Insulating oils; causes of deterioration in service. C. H. Pike. *Elec R (Lond)* 133: 51-2, 171-3 *bibliog* (p 173) JI 9, Ag 6 '43

Insulating oils re-refined safely, simply, soundly; with cost data. B. C. Stodeny. *flow diag plan Elec W* 120:992-4 S 18 '43

Liquid dielectrics; sixty-cycle power factors, conductivities, and polar contents of systems containing sulfur or nitrogen compounds in liquid paraffin. J. D. Piper and others. *bibliog Ind & Eng Chem* 34:1505-9 D '42

Maintenance of insulating oil. L. M. Limpus. *Elec W* 118:1464, 1652+, 1810, 1972, 2124; 119: 90, 313+, 483, 634+, 800+, 977 O 31 '42-Mr 20 '43

Maintenance of insulating oils in the field. L. H. Welch. *Inst E E J* 90 pt 2:29-34; *Discussion*. 53-64 F '43

Manufacture and testing of oils and oil-rosin saturants for use in electrical equipment. A. W. Thompson and J. C. Wood-Malloch. *Inst E E J* 90 pt 2:35-53 *bibliog* (p52-3); *Discussion*. 53-64 F '43

Mineral insulating oils; effect of additives on electrical and chemical stability. A. G. Assaf and J. C. Balsaugh. *bibliog il Ind & Eng Chem* 35:909-16 Ag '43

Mineral oils for transformers and switchgear. A. A. Pollitt. *bibliog Inst E E J* 90: pt 2:15-22; *Discussion*. 53-64 F '43

Testing

Manufacture and testing of oils and oil-rosin saturants for use in electrical equipment. A. W. Thompson and J. C. Wood-Malloch. *Inst E E J* 90 pt 2:35-53 *bibliog* (p52-3); *Discussion*. 53-64 F '43

Oil deterioration; testing and reconditioning. C. H. Pike. *Elec R (Lond)* 133:303-5 S 3 '43

Statistical comparison of the methods for the determination of the oxidation tendency of insulating oils. A. E. Flowers and S. A. Fruchtman. *Am Soc T M Proc* 42: 896-913 '42

Versatile oil-testing cell of novel design. T. Hazen. *il diag R Sci Instr* 14:141-3 My '43

OIL, Lubricating. See Lubricating oils

OIL, Transformer

Deacidification of transformer oil by activated alumina; abstract. J. L. Ferns. *Inst Pet J* 29:354A-5A S '43

Extra clamps stop oil leakage. N. J. Galuppo. *il Elec W* 120:330+ JI 24 '43

Maintaining level of oil in transformers. S. Bennon. *Elec W* 120:348+ JI 24 '43

Mineral oils for transformers and switchgear. A. A. Pollitt. *bibliog Inst E E J* 90 pt 2:15-22; *Discussion*. 53-64 F '43

Oil reclaiming system developed. *il Elec W* 120:662+ Ag 21 '43

Transformer acids and sludges trapped. T. W. Buttner and J. G. Martin. *diag Elec W* 119:1797 My 29 '43

Transformer upkeep for REA cooperatives; oil filtering. L. C. Groat. *il Elec W* 118: 1781 N 28 '42

Testing

Acid number of oil found by field test. H. L. Briggs. *Elec W* 119:1974+ Je 12 '43

How to take samples of transformer oil. *il* *Power* 87:701 O '43

Interfacial tension reveals oil sludging. G. W. Gerrell. *Elec W* 119:1466+ My 1 '43

Power transformer maintenance; oil-immersed units. M. H. Bates. *il Gen Elec R* 46:393-6 JI '43; *Same*. *Textile World* 93:106-8 Je '43

Transformer maintenance. M. H. Bates. *il* *Paper Tr J* 115:11, 14, 16-17 D 10 '42

OIL analysis

Analysis of commercial oil emulsions and wax dispersions. F. M. Biffen and F. D. Snell. *il Ind & Eng Chem Anal ed* 15:517-19 Ag 15 '43

Analysis of oils, fats and waxes used in industry. O. J. Schierholtz. *bibliog il diag Can Chem & Process Ind* 26:725-6+; 27: 42+ D '42-Ja '43

Detection of metallic driers in varnishes and oils by spot test analysis. J. V. Atkinson. *bibliog Paint Oil & Chem R* 106:10, 22-3 JI 1 '43

Determination of carotene in vegetable oils without saponification. E. Bickoff and K. T. Williams. *bibliog Ind & Eng Chem Anal ed* 15:266-8 Ap 15 '43

Determination of the saponification number of fats and oils; elimination of the blank. W. Rieman. *3d, Ind & Eng Chem Anal ed* 15:325-6 My 15 '43

Determination of wax in asphalt. R. L. Betts and H. D. Wirst. *bibliog diags Ind & Eng Chem Anal ed* 15:478-83 Ag 15 '43

Fixing and determining oil in feed water and boiler water. C. A. Noll and W. J. Tomlinson. *bibliog Ind & Eng Chem Anal ed* 15:629-32 O 15 '43

Investigation of the chemical constituents of distilled lime oil (citrus medica, L., var. acida, Brandis) (citrus aurantifolia, Swingle). E. S. Guenther and E. E. Langenau. *bibliog Am Chem Soc J* 65:959-63 My '43

Investigation of the oil of the seeds of cephalocroton cordofanus. A. J. Henry and D. N. Grindley. *Soc Chem Ind J* 62:60 Ap '43

N-methylaniline point of viscous petroleum oils. B. W. Geddes, L. Z. Wilcox and E. H. McArdie. *bibliog Ind & Eng Chem Anal ed* 15:487-9 Ag 15 '43

Physical-chemical method for determination of vitamins D in fish liver oils. D. T. Ewing and others. *bibliog Ind & Eng Chem Anal ed* 15:301-5 My 15 '43

Quantitative spectral analysis of fats. J. H. Mitchell, Jr., H. R. Kraybill and F. P. Zscheile. *bibliog Ind & Eng Chem Anal ed* 15:1-3 Ja 15 '43

Rapid determination of oil samples. S. Kiczales. *Soap & San Chem* 19:57-8 Mr '43

Thiocyanogen absorption of linseed oils; thiocyanogen absorption of linoleic and linolenic acids and composition of linseed oils. E. P. Painter and L. L. Nesbitt. *bibliog Ind & Eng Chem Anal ed* 15:123-8 F 15 '43

Viscometric method for determining free menthol in peppermint oil. L. J. Swift and M. H. Thornton. *bibliog Ind & Eng Chem Anal ed* 15:422-3 JI 15 '43

OIL analysis—Continued

Woburn iodine absorption method; use in combination with partial iodine values for the determination of diene numbers. J. D. von Mikusch and C. Frazier. *bibliog Ind & Eng Chem Anal* ed 15:109-13 F 15 '43

See also

Fish oil—Analysis

Lubricating oils—

Analysis

Petroleum—Analysis

OIL associations

Oil associations do their bit. *Nat Pet N*

35:4-5 Ja 6 '43

OIL bulk stations

Effective pipe-line terminal methods. P. Reed.

diag Oil & Gas J 41:61 Ap 22 '43

Report declares joint use of bulk plants would save little in District 4. *Nat Pet N* 35:38-9 Ag 4 '43

Statistics

Retail, bulk station mortality; districts 2 and 5 report on closings. *Nat Pet N* 35:11 My 26 '43

OIL burner industry

Oil burners are unfrozen. *Dom Eng* 162:61+ J1 '43

Advertising

Its product on ice, Timken sustains name through service and advertising. D. G. Baird. *il Sales Management* 52:22-4 Ap 1 '43

Statistics

Oil burners, 1938-1941. Survey of Cur Busines 1942 Sup p145 [supplemented in monthly numbers]

OIL burners

Efficient burning of refinery fuels. R. Reed. *Pet Eng (Ref annual)* 14:345-6, 348-50 J1 1 '43; Same cond. *Oil & Gas J* 41:39-43 Mr 11 '43

Improves oil combustion with photo-electric smoke alarm. B. Meyer. *diag Heating-Piping* 15:303 Je '43

Testing

Improved Penn State smokemeter. P. H. Schweitzer. *il diags Instruments* 15:346-50 S '42; Same cond. *Oil & Gas J* 41:182-3+ Ja 28 '43

OIL burning equipment

Chart for estimating fuel oil wasted; data sheet. *Heating-Piping* 14:729 D '42

Direct-fired air heaters designed for dehydration and chemical processes. R. M. Rush and B. B. Reilly. *il diags Mech Eng* 65: 511-14 J1 '43

How to show customers how much oil must be saved; chart and table answer question of fuel oil users. *Dom Eng* 161:70-1 Ja '43

Reducing fuel oil waste; table. O. M. Elliott and W. S. Hobbs. *Heating-Piping* 15: 31 Ja '43

Conversion to coal

See Coal burning equipment

Safety measures

Combustion hazards in heat-treating and other furnaces can be decreased by use of modern automatic safety equipment. T. A. Cohen. *diags Steel* 112:60, 62, 64 Ja 18 '43; Same. *Chem & Eng N* 21:302-3 Mr 10 '43; Same abr. *Metal Finishing* 41:109-11 F '43; Same abr. *Nat Safety N* 47:24-5+ Ja '43

OIL chemists' society, American. See American oil chemists' society**OIL circuit breakers. See Electric circuit breakers****OIL-coal mixtures. See Fuel, Colloidal****OIL companies**

Gasoline and gardens, too! oil companies promote victory gardens. *il Nat Pet N* 35: 29-30 Je 2 '43

Oil marketers must help farmers meet food production goals. *il Nat Pet N* 35:34-6 Ja 20 '43

U.S. launches farm maintenance program; industry's contact with farmer is key in broad campaign. *Nat Pet N* 35:40+ S 15 '43

What now of the oil jobber's future? W. C. Burns. *Nat Pet N* 35:36-8 S 22 '43

See also

Gasoline industry

Gasoline service sta-

tions

Lubricating oil in-

dustry

Oil bulk stations

Oil fuel industry

Oil industries

Petroleum industry

and trade

Shell oil company

Socony—Vacuum oil

company

Standard oil company

(N.J.)

Advertising

Easing the blow; how Charleston oil company's advertisements helped wipe out friction and delay in fuel oil rationing. *il Nat Pet N* 35:32-3 My 5 '43

Serving the farmer in war. *il Nat Pet N* 35: 34, 36-7 Ap 7 '43

Credit problem

Credit ban means just that. *Nat Pet N* 35: 10-11 F 24 '43

Employees

Commission agents get boost; NWLB raises commissions of Standard of Indiana agents. *Nat Pet N* 35:38-9 S 1 '43

Oil marketing and the draft; petroleum distribution employs not essential in WMC's eyes. *Nat Pet N* 35:7-8 Mr 31 '43

Oil men battle acute manpower problem in the labor paradise of Detroit. H. Taylor. *Nat Pet N* 35:19-20+ O 13 '43

Protect distributors' manpower; PAW drafts plan for bulk plants to acquire essential rating on a locally-needed basis. *Nat Pet N* 35:9 J1 14 '43

Equipment

Scrap: here's how Standard of New Jersey has organized for continuous drive. J. P. O'Donnell. *il Oil & Gas J* 41:58-9+ My 6 '43

Finance

Highlights from oil companies' 1942 annual reports. *Nat Pet N* 35:34+ Mr 31 '43

Net income of oil companies declines 22.9 per cent in first year of war. F. J. Sansone. *Oil & Gas J* 42:25-6 Je 3 '43

Oil jobber's floor nears ceiling. H. L. Thatcher. *Nat Pet N* 35:4-5 Mr 31 '43

Petroleum marketing; cost and cost reduction; Standard of New Jersey. R. T. Haslam, F. M. Surface and J. R. Riddell. *il Nat Pet N* 35:28-30 Mr 3; 32-4, 36 Mr 10; 28-30 Mr 17 '43

Study functional discounts; abstract. R. H. Collocott. *Nat Pet N* 35:26 Ap 28 '43

Management

How Shell increased distribution efficiency, cutting costs and saving manpower, materials. W. W. Weston. *il Nat Pet N* 35: 30-2+ Ag 18 '43

How Wisconsin jobber licks war problems; R. E. King of Diamond oil co. E. Lamm. *il Nat Pet N* 35:30, 32 J1 14 '43

Iowa farm delivery; methods and costs. W. T. Maakestad and F. Robotka. *diags Nat Pet N* 34:18, 20, 34, 36-9 D 16; 27-9 D 23; 32-4 D 30 '42

Jobber boosts gallonage despite war; Emerson oil co. E. Lamm. *il Nat Pet N* 35:32-4 Ag 11 '43

Kankakee jobber finds simple methods still solve complicated problems; Baron-Huot oil co. *il Nat Pet N* 35:37-9 Ag 25 '43

Petroleum marketing; cost and cost reduction; Standard of New Jersey. R. T. Haslam, F. M. Surface and J. R. Riddell. *il Nat Pet N* 35:28-30 Mr 3; 32-4, 36 Mr 10; 28-30 Mr 17 '43

Salesmen

How oil salesmen contribute to the war effort. C. R. Sullivan. *Nat Pet N* 35:6 Je 30 '43

Securities

See also Petroleum industry and trade—Securities

OIL companies, Cooperative. See Farmers' cooperative oil associations

OIL containers

All-America package competition award; Pennzoil company. *il Mod Packaging* 16: 100+ Ap '43

OIL containers—Continued

- All-America package competition award; Sun oil company fiberboard container for greases. *il Mod Packaging* 16:112+ Ap '43
 Clinic cures ailing steel drums. *il diag Nat Pet N* 35:26-7 Mr 24 '43
 Oil companies hunt containers; tin out for duration. *Nat Pet N* 35:11 Ag 25 '43
 Oil for the theatres of war. *il Mod Packaging* 16:45-8+ D '42
 Oil-products containers remain a problem. J. F. O'Donnell. *il Oil & Gas J* 41:25-6 F 4 '43
 Safe welding of oil drums. E. L. Fitzgerald. *Power Pl Eng* 47:95 Ag '43
 Socony-Vacuum announces use of paper container. *il Mod Packaging* 16:47 F '43

Cleaning

This saboteur can make welding repairs risky; explosive vapors linger in gasoline and oil containers; three cleaning methods. *diags Power* 87:399 Je '43

OIL delivery

- Bucket by bucket they get their fuel; unusual oil delivery plan at Cameron Valley, Va. *Nat Pet N* 34:38-9 N 11 '42
 How degree days can be used to space deliveries under rationing. *Nat Pet N* 35:27-30 Je 30 '43
 How Shell increased distribution efficiency, cutting costs and saving manpower, materials. W. W. Weston. *il Nat Pet N* 35:30-2+ Ag 18 '43
 Iowa farm delivery; methods and costs. W. Maakestad and F. Robotka. *diags Nat Pet N* 34:18, 20, 34, 36-9 D 16; 27-9 D 23; 32-4 D 30 '42

*See also***Tank trucks****OIL distillation***See also*
Petroleum distillation**OIL engines.** *See* Diesel engines; Gas and oil engines**OIL films**

Electrical method for studying oil film thickness; abstract. R. Poppinga. *diag Automotive & Aviation Ind* 89:44+ JI 1 '43

OIL filters

- Clean fuel is good insurance. *diag Diesel Power* 21:414 My '43
 Custom converter; Detroit wax paper co. supplies laminators and molders with materials. *il Mod Plastics* 20:51-4+ Je '43
 How a blotter filter press purifies oil. H. E. Roew. *Elec W* 120:352 S 4 '43
 Modern filter development as applied to fuel and lube oil systems of Diesel engines; abstract. C. A. Winslow. *S A E J* 51:sup26+ O '43
 Modern production system installed at new plant of Skinner purifiers, inc. *il Automotive & Aviation Ind* 89:43+ S 1 '43
 Oil filter improvements parallel engine development. C. A. Winslow. *Diesel Power* 21:329-30 Ap '43
 Oil filters; how they save engine wear; pointers in their selection and use. W. G. Burhans. *Roads & Svs* 86:76-7 Ja '43
 Save by reusing industrial oils; Hilco airline oil purifier. *il Comp Air M* 48:6968 F '43
 Transformer upkeep for REA cooperatives; oil filtering. L. C. Groat. *il Elec W* 118:1781 N 28 '42

OIL fires

- C.&E.I. tests Foamite equipment in putting out oil fire. *il Ry Age* 114:1319-20 Je 19 '43
 Ferro sulfide source of unexplained tank fires. D. V. Schonegevel. *Oil & Gas J* 41:34 F 4 '43
 Fire school teaches latest oil fire technique. *il Nat Pet N* 35:34-7 Je 9 '43
 Flaming tanker is salvaged by firemen of the fleet after fierce 37-hour battle. *il Nat Pet N* 35:17+ Ag 25 '43
 Methods of combating fires in oil-storage tanks. J. D. McNamey. *il Oil & Gas J* 41:33-5+ D 3 '42
 Note on oil fires. A. F. Dabell. *Inst Pet J* 28:297 D '42

PIWC fire school gives vital wartime protective training. *il Oil & Gas J* 42:57-60+ Ag 26 '43

Tank fires caused by bacteria; spirillum desulfuricans. *Oil & Gas J* 42:40 Je 10 '43

See also

Gasoline handling—
 Safety measures
 Oil tanks—Fire protection

Petroleum industry and trade—Fires and fire protection
 Petroleum refineries—Fires and fire protection

OIL flow

- Adsorptive forces active through glass. P. G. Nutting. *Science* 97:74-5 Ja 15 '43
 Contamination by successive flow in pipe lines; abstract. F. C. Fowler and G. G. Brown. *Chem & Met Eng* 50:180+ Je '43
 Determination of productive capacities of flow pipes on gas lift. S. F. Shaw. *diags Oil & Gas J* 42:47-8, 50, 53-4 Je 17 '43
 Effect of free convection on viscous heat transfer in horizontal tubes. D. Q. Kern and D. F. Othmer. *bibliog flow sheet diags Am Inst Chem Eng Trans* 39:517-52; Discussion. 552-5 Ag '43
 Flow of liquids under critical conditions. A. H. Nissan. *diags Inst Pet J* 28:257-73 N '42
 Laminar flow of oil-coal suspensions. F. J. Gradishar, W. L. Faith and J. E. Hedrick. *bibliog diags Am Inst Chem Eng Trans* 39:201-22 Ap '43; Abstract. *Chem & Met Eng* 50:147-8 Ja '43
 Nomographic chart simplifies fluid flow calculations through hydraulic tubing. *fold chart Product Eng* 14:358 Je '43
 Thixotropic behavior of oils. R. N. Weltmann. *bibliog Ind & Eng Chem Anal ed* 15:424-9 JI 15 '43

OIL fuel

- Coal or oil? which is more economical? W. F. Schaphorst. *chart Am Dyestuff Rep* 32:208 Ap 26 '43
 Conversion of glass furnaces from oil to gas and from gas to oil. G. Fitzgerald. *Am Cer Soc Bul* 22:65 Mr 15 '43
 Efficient burning of refinery fuels. R. Reed. *Pet Eng (Ref annual)* 14:345-6, 348-50 JI 1 '43; Same cond. *Oil & Gas J* 41:39-43 Mr 11 '43
 Heat fuel oil before using in open hearth furnace. *diag Foundry* 71:164-5 Mr '43
 Outlook for water gas manufacture; with particular attention to use of fuel oil and gasoline for enrichment. P. T. Dashiell. *Am Gas Assn Mo* 25:387-8 O '43
 This crisis in oil. *Business Week* p 17-18 D 26 '42
 Whither are we bound? refining processes of the future and how change in utilization of petroleum products will influence future manufacturing procedures. R. G. Lovell. *il Pet Eng* 14:37-40 Je '43

See also

Automobile engines—
 Fuel
 Boilers, Heating—Oil
 firing
 Coal liquefaction—
 Diesel engines—Fuel
 Fuel, Colloidal
 Gas and oil engines—
 Fuel
 Gasoline
 Liquid fuel
 Locomotives, Diesel—
 Fueling stations
 Motor truck engines
 —Fuel
 Oil burners
 Oil fuel industry
 Petroleum refineries
 —Fuel

Ash content

Reduction of ash content of residual oils with boric acid. E. T. Safe. K. F. Hayden and V. A. Kalichevsky. *bibliog diags Ind & Eng Chem Anal ed* 14:923-6 D 15 '42; Same. *Nat Pet N* 35 pt 2:R86-8 F 3 '43

Conservation

- Conversions lag; domestic users of fuel oil slow in shifting to coal. *Business Week* p37-8 N 14 '42
 FHA to guarantee loans for fuel-savings. *Bankers Mo* 60:278 Je '43
 Fuel oil to coal conversion suspended. *Comm & Fin Chr* 158:1921 N 11 '43
 Idea on fuel conservation; connecting coal burning water heater to oil-fired boiler. *il Dom Eng* 161:72-3 Mr '43
 Locomotive heats hydro plant; Safe Harbor plant. S. D. Althouse. *il Power* 87:328 My '43

OIL fuel—Conservation—Continued

Saving 70 per cent of fuel oil in lighting pulverized-coal-fired boilers. C. V. Jones and J. J. Harper. Power Pl Eng 47:114+ N '43

Will colloidal fuel stretch next winter's fuel-oil supply? diag Power 87:374-5+ Je '43

Manufacture

Additives for Diesel fuels. Nat Pet N 35 pt 2:R499-502 N 3 '43

Cost of blends to meet a gravity requirement. W. L. Nelson. Oil & Gas J 42:49 Je 3 '43

Problems involved in conventional refining of sour crudes. R. B. Waite and R. H. Aitken. flow diags Oil & Gas J 42:27-32, 35+ Ag 5 '43

Prices

Ceiling prices raised on heavy California crude and residual fuel oil. H. D. Ralph. Oil & Gas J 41:12+ Ap 1 '43

OPA issues amendment 79 on residual fuel oils. Nat Pet N 35:10-12 Mr 10 '43

Oil men hold gravity price ceilings will fail to stimulate fuel supply. Oil & Gas J 41: 35-7 Mr 11 '43

Refining efficiency threatened by static weight of frozen product prices. H. S. Norman. Oil & Gas J 42:214-15 J1 29 '43

Rationing

Allied answers charges of ration violation; hits complex system. Nat Pet N 35:15 Je 30 '43

Banking the fire; oil-to-coal conversion campaign slackened in solid-fuel crises. Business Week p17 My 8 '43

Boston prepares for seige; fuel oil crisis. Nat Pet N 34:4-5 D 30 '42

Breakdown in eastern supply may result in policy changes. H. D. Ralph. Oil & Gas J 41:15 D 24 '42

Consent decrees end OPA cases; State fuel co. and De Blois oil co. Nat Pet N 35:6 Ag 11 '43

Conversion policy; OPA lifts compulsory conversion on private dwellings. Nat Pet N 35:9 My 19 '43

Conversion requirement revoked; ration information. Sheet Metal Worker 34:32, 34+ Je '43

Destroying a business will not distribute oil; OPA charges against Philadelphia dealers. C. G. Morrill. Nat Pet N 35:12-13 J1 14 '43

Easier East Coast supply situation predicted after March by PIWC. Oil & Gas J 41: 14-15+ F 4 '43

Easing the blow; how Charleston oil company's advertisements helped wipe out friction and delay in fuel oil rationing. Nat Pet N 35:32-3 My 5 '43

Field study of comfort reactions of apartment dwellers under fuel oil rationing. S. Hamilton. il diag plan Heating-Piping 15: 311-18 Je '43

Fuel oil denied theatres for 10 days in 3 states. Comm & Fin Chr 157:489 F 4 '43

Fuel oil panel of six meets with OPA in harmony session. Nat Pet N 35:11-12 S 29 '43

Fuel oil rationing; how did it work out last year? with recent amendments. Heating-Piping 15:231-4 My '43

Fuel oil rationing; what changes should be made? with index of amendments. Heating-Piping 15:169-72 Ap '43

Fuel oil rations increased in 13 states. Comm & Fin Chr 156:2338 D 31 '42

Fuel rationing and the A, B, C and D's of insulation; with cost data. Dom Eng 160: 50+ D '42

Fuel rationing plan defended. Sheet Metal Worker 34:33 F '43

How degree days can be used to space deliveries under rationing. Nat Pet N 35:27-30 Je 30 '43

How much of my fuel should I have used? tables. Heating-Piping 15:410-12, 464 Ag-S '43

How much oil did rationing save? E. P. Heckel. Heating-Piping 15:338-9 J1 '43

How rations for fuel oil will be reissued by OPA. il Heating-Piping 15:292-4 Je '43

How to show customers how much oil must be saved; chart and table answer question of fuel oil users. Dom Eng 161:70-1 Ja '43

Less fuel oil for power. Comm & Fin Chr 157: 1319 Ap 8 '43

New fuel oil rationing program. Sheet Metal Worker 34:44 My '43

New fuel rationing plan. il Dom Eng 161: 51+ My '43

Nine years is top penalty in 2268 oil cases on OPA's trial list. Nat Pet N 35:11 S 15 '43

OPA defends enforcement setup; Dean denies protests led to panel call. Nat Pet N 35:7-8 J1 28 '43

OPA offers bail-out to fuel suppliers for legal shortages. Nat Pet N 35:40 N 3 '43

Oil fuel ration tables. Sheet Metal Worker 33:53-5 N '42

Oil men get view of ration plan; next winter's procedure outlined by OPA. Nat Pet N 35: 5-6 Je 16 '43

Oil men give rationing views. Nat Pet N 35: 11 Mr 31 '43

Oil situation; methods by which the limited stocks of fuel oil will be allocated. Heat & Ven 39:55-6 N '42

Opportunities for heating and plumbing contractors in fuel rationing. Dom Eng 160: 42-4+ N '42

Period 4 oil coupon cut in 6 northeastern states. Comm & Fin Chr 157:493 F 4 '43

Rationing brings conservation business. il Dom Eng 160:40-2+ D '42

Rationing fuel oil for commercial buildings. L. W. Mauger. il Heating-Piping 15:73-5 F 43

Second draft of OPA's proposed plan for 1943-44 fuel oil rationing. Nat Pet N 35: 34, 36+ Ap 28 '43

Steuart co. disputes OPA coupon audit; briefs to be filed. Nat Pet N 35:11 S 22 '43

Thermal zone changes made in fuel oil rationing plan. Comm & Fin Chr 157:2187 Je 10 '43

This is the answer; chart to assist customers to stay within their rations. Dom Eng 162: 37, 90-1 O '43

What temperature can be maintained under fuel oil rationing program. J. K. Peebles, Jr. Heating-Piping 15:127 Mr '43; Discussion. 15:156+ S '43

Why fuel oil is rationed as it is. J. Dean. Heating-Piping 15:33 Ja '43

Sulfur content

Diesel engines underground; effect of sulfur content of fuel on composition of exhaust gas. L. B. Berger and others. U S Bur Mines Rep of Invest 3713:1-13 '43

Testing

Effect of Diesel fuel on exhaust smoke and odor. R. S. Wetmiller and L. E. Endsley, Jr. diags S A E J 50:509-20 D '42

Influence of Diesel fuel properties on engine deposits and wear. G. H. Cloud and A. J. Blackwood. il S A E J 51:408-14, 419-20 N '43; Same cond. Diesel Power 21:1032-6+ N '43

Stability of furnace oil. A. B. Hersberger, H. C. Cowles and B. Zieher. bibliog il Ind & Eng Chem 35:1104-7 O '43

Transportation

Congress discusses eastern oil supply. Ry Age 114:407-8 F 20 '43

Synthetic rubber fuel tank; Mareng cells. il Sheet Metal Worker 33:25 N '42

Wartime transition of petroleum transport; chart showing daily deliveries into 17 Atlantic Seaboard states, 1941-1943. Automotive & Aviation Ind 88:46 Ap 1 '43

See also

Tank trucks

OIL fuel industry

Fuel prospects for the coming winter. map Sheet Metal Worker 34:38, 40 Ag '43

Intercompany bulk plant use for heating oils practical in some cities, committee finds. Nat Pet N 35:44-5 N 3 '43

Less critical fuel-oil situation in prospect. J. P. O'Donnell. Oil & Gas J 42:26 J1 8 '43

Advertising

Hit invasion of capital's fuel oil market; Sinclair advertising in Washington papers brings protest. il Nat Pet N 35:4-5+ J1 28 '43

OIL fuel industry—Continued**Laws and regulations**

Hadlick protests closed panel meetings. Nat Pet N 35:13-14 J1 14 '43
 War orders for the industry; official text of important orders. Nat Pet N 34:13-15 D 30 '42; 35:10-11 Ja 6; 10-11 Ja 20; 9-10 F 10; 11-11 Ap 7; 12 My 6; 14+ My 12; 11-12 Je 2; 14-16 Je 9; 11-12 Je 23; 11-12+ Je 30 '43

Statistics

Food processing requires oil, too; estimated fuel requirements of food processing industries (1943). Nat Pet N 35:30 Je 9 '43
 Heating oil demand in district no. 1; tabulation. Sheet Metal Worker 33:52 N '42

Boston

Boston prepares for seige; fuel oil crisis. Nat Pet N 34:4-5 D 30 '42
 Boston's peddler problem. Il Nat Pet N 35:30, 32 Ap 28 '43

Eastern states

May overhaul Directive 59; allocation of supplies by zones; month of March. map Nat Pet N 35:12, 14-15 Mr 17 '43
 P.I.W.C.'s report on East's supply. Nat Pet N 35:8-9 Ja 13 '43

OIL handling

Oil handling accomplished efficiently by specially designed system; Union drawn steel division of Republic steel corp. il diags Steel 111:71, 73 N 30; 132, 135-4 D 7 '42; Excerpts (pt.1). Dom Eng 160:50-1 N '42
 Rotary pumps for Diesel fuel. B. P. Hetler. diags Diesel Power 21:223-4 Mr '43
 What kind of fueling facilities for Diesel locomotives? Il Ry Age 114:763-6 Ap 17 '43

See also
 Oil bulk stations
 Tank cars

OIL heat institute (formerly Oil burner institute)

Annual meeting. New York, March 8-9. Dom Eng 161:72+ Ap '43
 Dealers form OHI group. Dom Eng 162:74+ J1 '43
 Unity achieved as revitalized O.H.I. pushes campaign to overcome war's handicaps. Nat Pet N 35:46-7 O 20 '43

OIL heating

Cell type oil heater performance. il diag Nat Pet N 35 pt 2:R518, R520-1 N 3 '43
 Cleaning gas distribution mains with hot oil circulation. F. O. Crawford. il Am Gas J 159:24 J1 '43
 Countercurrent multitubular heat exchangers; comparison of design methods; applied to cooling aniline and to cooling and heating oil. M. G. Larian. bibliog il Ind & Eng Chem 35:840-4 Ag '43
 Elements of cost in emulsion breakers. Oil & Gas J 41:75 Ap 22 '43
 Heat fuel oil before using in open hearth furnace. diag Foundry 71:164-5 Mr '43
 New design of fuel oil heaters conserves material. H. S. Card. il Welding J 22:513-14 J1 '43
 Special kettle setting simplifies temperature-cycle control; heating varnish oil. W. J. Shore. diag Chem & Met Eng 49:93-5 D '42

OIL industries

Continued large vegetable oil demand seen. Barron's 23:7 O 25 '43
 Essential oils and their production in the western hemisphere. E. Guenther. Chem Ind 51:867-8 D '42; Same. Oil Paint & Drug Rep 142:7+ D 21; 7 D 28 '42
 Fats and oils in wartime. Chem Age (Lond) 48:119-22 Ja 23 '43
 Fats, oils use in processing many inedible products banned. Oil Paint & Drug Rep 143:3+ Ja 11 '43
 Food for industry; fats and oils classified as edible; manufacturers are rationed. Il Business Week p80+ Mr 27 '43
 Oil and fat outlook. il Soap & San Chem 18:32-5+ D '42
 Outlook for vegetable oil mills. Barron's 23:6 S 6 '43
 Production of oil-bearing seeds in Algeria; lubricating oils produced in French Morocco, Turkey's production of oil seeds. For Comm W 9:27-8 N 21 '42

Strong demand for fats and oils. Barron's 23:6 Mr 15 '43

See also

Castor oil	Lubricating oil industry
Farmers' cooperative oil associations	Oil companies
Fish oil	Oil fuel industry
Gasoline industry	Oils and fats
Gasoline service stations	Olive oil
Kerosene	Petroleum industry and trade
Linseed oil	Textile oils
	Tung oil

Statistics

Fats and oils, 1942. Chem & Met Eng 50:118-19 F '43
 Oils, fats, and byproducts, 1938-1941. Survey of Cur Business 1942 Sup p105-9 [supplemented in monthly numbers]
 Oils, fats, and waxes, 1942. Oil Paint & Drug Rep 143:86-8 Ja 11 '43

Africa

Vegetable-oil prospects in French North and West Africa. W. N. Small. il For Comm W 10:8-9+ Ja 23 '43

Argentina

Argentina prohibits edible oils exports. Oil Paint & Drug Rep 143:7+ Je 14 '43
 Argentine edible oils; industry's growth amazing. W. N. Small. il For Comm W 10:6-7 Mr 6 '43
 Production in Argentina. For Comm W 11:32 Je 19 '43
 Vegetable-oil exports from Argentina, 1940-1942. For Comm W 11:33 Ap 10 '43

Brazil

Brazil's shark-liver-oil industry. For Comm W 11:27 Je 5 '43

Canada

Oil bearing and fibre crops in Canada, 1943. E. S. Archibald. Can Chem & Process Ind 27:387-9 J1 '43
 Production of vegetable oils, 1940 and 1941. For Comm W 9:32-3 D 5 '42

Chile

Chilean oilseed production. For Comm W 11:35-6 Je 12 '43

Cuba

Association of vegetable-oil producers established. For Comm W 10:14 F 13 '43

Great Britain

Oil supplies in United Kingdom, 1942. For Comm W 10:31 Mr 13 '43

Haiti

Haitian supplies of cooking lard and oil, 1937-38-1941-42. For Comm W 11:34 My 29 '43

India

India's oilseed market active. For Comm W 11:32-3 Je 19 '43

India's oilseeds. W. N. Small and N. Feld. il For Comm W 11:10-11+ Je 12 '43

Oilseed consumption and marketing. For Comm W 13:25-6 O 2 '43

Latin America

Economics of Latin American oils and fats. B. Levitt. Chem Ind 51:706-8 N '42; Abstract. Can Chem & Process Ind 26:705 D '42

Tung oil production being increased in Latin America. Oil Paint & Drug Rep 144:3+ Ag 2 '43

Morocco

Moroccan oil supplies; locally produced lubricants. Chem Age (Lond) 48:23 Ja 2 '43

Mozambique

Mozambique's exports, 1939 and 1940. For Comm W 10:24 F 13 '43

Puerto Rico

Puerto Rican fatty oils; expressed tropical almond (talisay) oil. C. F. Asenjo and J. A. Goyco. Am Chem Soc J 65:1417-18 J1 '43

OIL industries—Continued**Rumania**

Oilseed regulations in Rumania. For Comm W 13:23-4 N 6 '43

Rumania's production of oil-bearing crops, 1939-1942. For Comm W 12:27-8 J1 3 '43

South Africa

South Africa's fish-liver-oil industry. For Comm W 12:27-8 Ag 7 '43

Sweden

Sweden's increased oilseed production. For Comm W 11:33-4 Je 19 '43

Yugoslavia

Oilseed cultivation in Yugoslavia. For Comm W 11:34 Ap 17 '43

OIL lands

Analysis of oil property deals. Oil & Gas J 41:237 N 12 '43

Economic limit is highly variable and changing factor. Oil & Gas J 41:51 Ap 1 '43

Grab for acreage; lack of proven structures keeps oil land and lease men alert. Nat Pet N 34:20 D 23 '42

Suit for billion assails California oil title; controversy over ownership of mineral rights. Nat Pet N 35:4 Ag 25 '43

Tenure arrangements in Oklahoma oil fields. R. D. Davidson and K. Wernimont. bibliog J Land & Pub Util Econ 19:40-53 F '43

Value of nearly depleted oil-producing properties. Oil & Gas J 41:97 Ap 8 '43

See also

Oil reserves (United States navy)

Royalties

Abandonment by SEC of theory of mark-up; re-sale price of oil royalties. A. M. Metz and E. A. Kole. Comm & Fin Chr 158:322 J1 22 '43

OIL leases. See Oil lands**OIL measurement**

Capacity chart for horizontal cylindrical fuel oil tanks. Power Pl Eng 47:104 Mr '43

How to keep track of oil consumption; chart. W. L. Fleisher. Sheet Metal Worker 34:82 Ja '43

See also

Oil meters

OIL meters

Results of tests on volumeters for liquid hydrocarbons. R. J. S. Pigott, E. E. Ambrosius and E. W. Jacobson. A S M E Trans 65:350-2 My '43

Volumeter practice in the petroleum industry. E. E. Ambrosius and E. W. Jacobson. Am Pet Inst Proc 23(4):49-53 '42; Same. Oil & Gas J 41:209-10+ N 12 '42

OIL pipe lines**See also**

Gasoline pipe lines
Petroleum pipe lines

OIL pipes

Application of new piping requirements in refineries and gasoline plants. A. D. Sanderson. il Nat Pet N 35 pt 2:R34-5 Ja 6 '43; Same abr. Heating-Piping 14:157-8 Mr '42

Distribution system for slushing oils; Union drawn steel division of the Republic steel corporation. Comp Air M 43:6963 F '43

New method for computing pipe wall thickness provided in revised code. S. Crocker. diags Nat Pet N 35 pt 2:R36-8, R40 Ja 6 '43

Oil handling accomplished efficiently by specially designed system; Union drawn steel division of Republic steel corp. il diags Steel 111:71, 73 N 30; 132, 135+ D 7 '42; Excerpts (pt.1). Dom Eng 160:50-1 N '42

Standard refinery piping practice is prescribed in new code. Nat Pet N 35 pt 2: R32 Ja 6 '43

See also

Locomotives, Diesel—
Fueling stations
Petroleum pipe lines

OIL pumps

Molded valves for oil well pumps. il diags Mod Plastics 20:83, 130 Ap '43

Rotary pumps for Diesel fuel. B. P. Hetler. diags Diesel Power 21:223-4 Mr '43

Suction conditions for hot-oil pumps. W. L. Nelson. Oil & Gas J 42:234 J1 23 '43

Through trouble to improvement; oil pumps and governors. H. L. Guy. diags Inst Mech Eng J & Proc 147:Proc 216-20, pl 1 O '42

See also

Diesel engines—Fuel
feeding
Petroleum—Pumping
Pumps, Fuel

OIL purification**See also**

Oil filters
Oil reclamation
Oil refining
Petroleum refining

OIL reclamation

Absorption oil in the cycling plant. J. A. Grimshaw. il Pet Eng 14:82 D '42

American Airlines' materials laboratory gets paying results. il diag Aviation 42:235, 237+ Mr '43

Efficient disposal of swarf; Fischer bearings works. il plan Mech Handling 30:21-4 Ja '43

How to salvage chips and oil; why it pays. W. Heymann. diags Factory Management 101:124-6 F '43

Improved insulating oil reclamation. il diags Elec W 120:488+ Ag 7 '43

Insulating oil reclamation. H. E. Rowe. Elec W 120:668, 862, 1034, 1206+ Ag 21-O 2 '43

Insulating oils re-refined safely, simply, soundly; with cost data. B. C. Studeny. flow diag plan Elec W 120:992-4 S 18 '43

Maintenance of insulating oil; re-refinement process. L. M. Limpus. Elec W 119:90 Ja 9 '43

Oil deterioration; testing and reconditioning. C. H. Pike. Elec R (Lond) 133:303-5 S 3 '43

Oil reclaiming system developed. il Elec W 120:662+ Ag 21 '43

Reclaiming cutting oil from the air with a Precipitron. il Iron Age 151:43 F 25 '43

Reclamation work on motor vehicles. London Midland and Scottish railway. il diag Engineering 155:245-6, 250 Mr 26 '43; Engineer 175:255-6 Mr 26 '43

Recovery of lubricating oil on a small scale. Engineer 176:170 Ag 27 '43

Re-refining of aircraft-engine oils. G. K. Brower. flow chart S A E J 51:130-8 Ap '43; Same cond. Nat Pet N 35 pt 2:R172, R174-9 Ap 7 '43; Abstract. Automotive & Aviation Ind 88:24+ Mr 1 '43

Salvaging and reconditioning palm oil. M. Reswick. il diag Steel 111:72-4 D 28 '42

Swarf washing and oil-recovery plant. il diag Engineering 155:46-7 Ja 15 '43

Youngstown Miller purifier for Diesel engine oil. il diag Ry Mech Eng 117:192-3 Ap '43

See also

Oil filters

OIL refining

Hardened edible oils. H. R. Mitchell. flow sheet diags Chem Age (Lond) 48:471-5, 495-9 My 1-8 '43

Manufacture and testing of oils and oil-rosin saturants for use in electrical equipment. A. W. Thompson and J. C. Wood-Mallock. Inst E E J 90 pt 2:35-53 bibliog(p52-3); Discussion. 53-64 F '43

Paint oil processing; review of methods, products and applications. H. Mattil. Can Chem & Process Ind 27:395-6 J1 '43

Re-refining of aircraft-engine oils. G. K. Brower. flow chart S A E J 51:130-8 Ap '43; Same cond. Nat Pet N 35 pt 2:R172, R174-9 Ap 7 '43

Solvent extraction; removing undesirable constituents from oils; abstract. H. ter Meulen. diag Chem Age (Lond) 48:131-2 Ja 23 '43

See also

Lubricating oils—
Manufacture
Oil filters
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OIL reserves (United States navy)

Biddle recommendations on Elk Hills deal go to President soon; text of statement by Standard oil company of California. Nat Pet N 35:28 Je 16 '43

Collier says Elk Hills contract was inimical to company interest. Oil & Gas J 42:18 J1 22 '43

OIL reserves (United States navy)—Cont.

Delay on Elk Hills; inquiry into navy's agreement with California Standard is postponed to fall. Nat Pet N 35:21-2 J1 14 '43

Navy cancels contract on Elk Hills reserve. Oil & Gas J 42:88 Je 24 '43; Comm & Fin Chr 158:136 J1 8 '43; Nat Pet N 35:7 J1 7 '43

Negotiate new contract on Elk Hills land. Nat Pet N 35:28 J1 21 '43

New Elk Hills contract looms. Nat Pet N 35:34+ S 15 '43

Standard of California and Navy defend propriety of Elk Hills contract. Oil & Gas J 42:34+ Je 17 '43

To probe Elk Hills contract. Nat Pet N 35:20+ Je 23; 9 Je 30 '43

OIL sands

Alberta's oil-impregnated sands provide huge petroleum reserve. flow sheet il Nat Pet N 35 pt 2:R337-94, R412-13 S 1 '43

Canada backs development of Alberta oil sands. il Nat Pet N 35 pt 2:R477 O 6 '43

Oil from Canadian sands. L. Bourne. il Sci Am 169:71-3 Ag '43

Technique of testing large cores of oil sands. F. B. Plummer and P. F. Tapp. bibliog diags Am Assn Pet Geologists Bul 27:64-84 Ja '43

See also

Bituminous sand

Bibliography

Pore structure of oil sand. (Petroleum bibliography no. 13) 11p pa Tulsa pub. lib. Technical dept, Tulsa, Okla. '43 (type-written)

OIL seals

Oil seals; leather and synthetic rubber. diags Automobile Eng 33:291-3 J1 '43

OIL separators

Automatic waste oil skimmer. il Pet Refiner 22:95-6 O '43

See also

Oil filters

Oil reclamation

OIL shales

Oil from coal and shale deposits. Business Week p50+ J1 31 '43

Shale oil, other substitutes and the petroleum shortage. B. H. Weil. il Nat Pet N 35 pt 2:R348-9 Ag 4 '43

Synthetic-fuel plans approved; hearings before Senate committee. H. D. Ralph. Oil & Gas J 42:34-5 Ag 12 '43

War booms interest in shale oil. il Nat Pet N 35:20 Mr 10 '43

What you can use; materials suitable for various purposes in processing industries; shale oil. Oil Paint & Drug Rep 143:52 Je 28; 144:32C J1 5 '43

Distillation

Oil shale and shale oil. B. H. Weil and W. Weinrich. bibliog il Oil & Gas J 41:48+ Ap 22; 73, 75-6, 79 Ap 29 '43

Australia

Lend-lease assistance sought by Australia to boost production in shale oil fields. Nat Pet N 35:20 O 27 '43

Colorado

Proposed methods and estimated costs of mining oil shale at Kulison, Colo. E. D. Gardner and C. N. Bell. diags map U S Bur Mines Information Circ 7218:1-59 '42; Excerpts. Oil & Gas J 41:47, 49 Ja 14 '43

Estonia

Rock, the locomotive fuel of Esthonia. A. C. Selke. Pub Util 31:292 Mr 4 '43

Sweden

Engineer proposes to extract oil direct from shale beds in Naerke district of Sweden. Comp Air M 47:6922 D '42

United States

Oil shale and shale oil. B. H. Weil and W. Weinrich. bibliog il Oil & Gas J 41:48+ Ap 22; 73, 75-6, 79 Ap 29 '43

Vast oil reserve; West has billions of barrels locked in shale. Business Week p28-9 S 11 '43

OIL storage

Adequate fuel-oil storage is good Diesel-plant insurance. G. C. Boyer. diags Power 87:310-11 My '43

Pour-point stability of treated oils under winter storage conditions. C. E. Hodges and A. B. Boehm. il diag Oil & Gas J 42:103-6 Je 24 '43

See also

Locomotives, Diesel Oil bulk stations
—Fueling stations Oil tanks

Fire protection

See Oil tanks—Fire protection

OIL stoves

Factors producing carbon monoxide from camp stoves. P. F. Scholander, L. Irving and G. A. Edwards. bibliog J Ind Hygiene 25:132-6 Mr '43

OIL tankers. See Tank ships**OIL tanks**

Concrete tanks for fuel oils. Am Concrete Inst J 14:311-12 F '43

Factors governing selection of lease storage tanks. Oil & Gas J 41:73 F 11 '43

Navy builds prestressed concrete tanks. R. B. Garrabrant. il Eng N 180:135-7 Ja 28 '43

Oil helps farmer produce more food; need tanks to store gasoline and tractor fuel. il Nat Pet N 35:34+ Je 23 '43

100,000-barrel concrete tanks for fuel oil built by prestressing reinforcing rods. il diags Nat Pet N 35 pt 2:R20 Ja 6 '43

Salvaging, rebuilding storage tanks. il Nat Pet N 34 pt 2:R404-6 N 25 '42

Storage tank fittings. il Mod Plastics 20:72 My '43

Wooden tanks for sour crude save money. Oil & Gas J 41:77 Mr 18 '43

See also

Tank barges

Tank cars

Tank ships

Tank trucks

Fire protection

Methods of combating fires in oil-storage tanks. J. D. McCamey. il Oil & Gas J 41:33-5+ D 3 '42

Portable precast concrete stairway of unusual design protects fire wall. H. Nelson. il diag Oil & Gas J 42:144 S 23 '43

Protection

Corrosion protection of storage tanks; gunite lining, galvanized and aluminum roofs, etc. F. L. Newcomb, E. S. Dixon and C. F. Kelly. il diags Am Pet Inst Proc 23(3):38-58 '42; Excerpts. Nat Pet N 34 pt 2:R397-403 N 25 '42; Abstract. Oil & Gas J 41:263 N 12 '42

Cost of protective coating at lease tanks versus replacement. Oil & Gas J 42:91 O 21 '43

Lining fuel storage tanks with synthetic rubber sheet. J. W. Crosby. il Rubber Age 53:240-1 Je '43

Oil-resistant linings for concrete tanks. Eng N 130:800 Je 3 '43

Synthetic rubber linings for concrete fuel storage tanks. il Chem & Eng N 21:580, 582-3 Ap 25 '43

Standards

Proposed API tentative specification for wooden tanks. diag Am Pet Inst Proc 23(4):229-34 '42

Report of A.P.I. committee on the standardization of tanks for oil storage. Am Pet Inst Proc 23(4):220-8 '42

OIL testing

See also

Lubricating oils—

Testing

Oil fuel—Testing

Viscosity—Measure-
ment

OIL to coal conversion. See Coal burning equipment

OIL transportation

See also

Oil containers

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Tank ships

Tank trucks

OIL wells. See Petroleum—Well drilling

OILINESS. See Lubrication and lubricants

OILS, Cutting. See Lubrication and lubricants (cutting and grinding)

OILS, Lubricating. See Lubricating oils

OILS, Sulfonated. See Sulfonated oils

OILS, Textile. See Textile oils

OILS and fats

Aging of oil; abstract. A. J. Drinkberg and K. V. Ryashentsev. *Chem & Met Eng* 50: 191-2 Ag '43

Analysis of oils, fats and waxes used in industry. O. J. Schierholtz. *bibliog il diag Can Chem & Process Ind* 26:725-6+ D '42

Animal, neatsfoot, red oils allocated. *Oil Paint & Drug Rep* 143:5+ My 31 '43

Autoxidative behavior of vegetable and animal fats; abstract. C. Golumbic. *Food Ind* 15:126 Ag '43

BEW procurement program for foreign products told. *Oil Paint & Drug Rep* 143:3 Je 21 '43

Chemicals from fats. A. W. Ralston. *il Chem & Eng N* 21:3-6 Ja 10 '43

Cocoa as oilseed. *Economist* 143:715 D 5 '42
Comparative nutritive value of butter and some vegetable fats. H. J. Deuel, Jr., E. Movitt and L. F. Hallman. *bibliog Science* 98:139-40 Ag 6 '43

Custom-built fats. H. W. Vahlteich. *bibliog il Chem & Eng N* 21:1238-42 Ag 10 '43

Determination of the stability of oils and fats. N. D. Sylvester, L. H. Lampitt and A. N. Ainsworth. *bibliog il diag Soc Chem Ind J* 61:165-9 N '42

Dihydroxy-stearic acid and vitamin K deficiency. E. E. Lockhart, H. Sherman and R. S. Harris. *Science* 96:542-3 D 11 '42
Economics of Latin American oils and fats. B. Levitt. *Chem Ind* 51:706-8 N '42; Abstract. *Can Chem & Process Ind* 26:705 D '42

Examination of the fatty oil from Buffalo gourd seed. J. W. Wood and H. A. Jones. *Am Chem Soc J* 65:1783 S '43

Fats and oils allocations for final quarter. *Oil Paint & Drug Rep* 144:7 O 4 '43

Fats and oils in war time. *Chem Age (Lond)* 48:119-22 Ja 23 '43

Fats and oils on all fronts. C. E. Lund. *il For Comm W* 11:6-7+ My 29 '43

Fats, oils carryover allowed by WFA. *Oil Paint & Drug Rep* 144:5+ J1 19 '43

Fortification of oil, fat, and flour; stability of added carotene and effect of antioxidants. P. W. Morgal, L. W. Byers and E. J. Miller. *bibliog Ind & Eng Chem* 35: 794-7 J1 '43

German supplies of edible fats. R. Crone. *For Comm W* 13:8-9+ N 6 '43

Hardened edible oils, hydrogenation methods. H. R. Mitchell. *il diag Chem Age (Lond)* 48:471-5, 495-9 My 1-8 '43

Investigation of the oil of the seeds of cephalocroton cordofanus. A. J. Henry and D. N. Grindley. *Soc Chem Ind J* 62:60 Ap '43

Laboratory deodorizer for fats and oils. A. E. Bailey and R. O. Feuge. *diag Ind & Eng Chem Anal ed* 15:280-1 Ap 15 '43

More soap oils. *Business Week* p28+ J1 17 '43

Natural fats as lubricants. E. M. Kipp. *bibliog Mech Eng* 65:809-11 N '43

New fats and oils sources developing. *Chem Ind* 53:80-1 J1 '43

Oil and fat outlook. *il Soap & San Chem* 18: 52-5+ D '42

Oil chemists discuss results of research. *Oil Paint & Drug Rep* 144:3+ O 11 '43

Oil isomerization. F. Battline. *bibliog Paint Oil & Chem R* 105:13-16 My 6 '43

Oils at stake; wartime supply of vegetable oils and fats. *Business Week* p50 N 28 '42
Oils from abroad. *Business Week* p105-6 J1 17 '43

Oilseeds production spurred by bonus. *Oil Paint & Drug Rep* 143:3+ F 1 '43

Problem of fat in meat. S. Bull. *il Consumers' Research Bul* 12:21-3 S '43

Production and consumption of fats and oils. K. Brandt. *Ann Am Acad* 225:210-15 Ja '43

Rubber substitutes from fatty oils; Norepol, Vulprene and Sulprene. R. T. Nazzaro and W. Abramowitz. *Rubber Age* 52:483-6 Mr '43

Soap fat use declines. *Soap & San Chem* 19: 43 J1 '43

Stability of fats and oils. *Paint Oil & Chem R* 105:20 Mr 25 '43

Stabilization of fats and fatty foods. H. S. Mitchell and H. C. Black. *bibliog Ind & Eng Chem* 35:50-2 Ja '43

Styrax and oil of styrax. E. Guenther. *bibliog il Soap & San Chem* 19:33-5+ O; 34-6+ N '43

Supply of fats and oils becomes more plentiful. *Food Ind* 15:105-6 N '43

Thixotropic behavior of oils. R. N. Weltmann. *bibliog Ind & Eng Chem Anal ed* 15:424-9 J1 15 '43

Vegetable oils survey. *Can Chem & Process Ind* 27:264 My '43

See also

Acids, Fatty	Oil, Insulating
Castor oil	Oil fuel
Cedar oil	Ointments
Chaulmoogra oil	Oiticica oil
Coal liquefaction	Oleomargarine
Coconut oil	Olive oil
Copaiba oil	Orange oil
Cottonseed oil	Palm oil
Creosote	Peppermint oil
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Drying oils	Rancidity
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Essential oils	Sardine oil
Fat	Sesame oil
Fish oil	Shark liver oil
Gas and oil engines—	Soybean oil
Fuel	Sulfonated oils
Gas oil	Sunflower seed oil
Gasoline	Tall oil
Guanábana seed oil	Tallow
Lard	Textile oils
Lime oil	Tung oil
Linseed oil	Viscosity
Lubricating greases	Whale liver oil
Lubricating oils	Whale oil
Lubrication and lubricants	

Analysis

See Oil analysis

Conservation

Akron Soap fat salvage plan. *il Soap & San Chem* 19:28-9 J1 '43

Fats and oils stockpiling in government war plans. J. Jones. *Oil Paint & Drug Rep* 144: 3+ J1 12 '43

Fats and oils stockpiling in government war plans; excerpt from statement by Vice-president Wallace. *Oil Paint & Drug Rep* 144:3+ J1 5 '43

Fats, oils control tightened by Department of agriculture. *Oil Paint & Drug Rep* 143: 7+ Mr 29 '43; *Business Week* p82-4 Ap 3 '43

Fats salvage collections showing steady gain. *Oil Paint & Drug Rep* 143:7+ Mr 15 '43

Limited supply of oils and fats forces European consumers to develop substitute materials. *Chem & Met Eng* 50:184-7 Mr '43

Mineral oil ban in foods considered. *Oil Paint & Drug Rep* 144:3+ J1 26 '43

Physiological effects

Destruction of red blood cells after fat ingestion. V. Johnson, J. Longini and L. W. Freeman. *Science* 97:400 Ap 30 '43

Prices

Chemicals, oils, and drugs price records, 1935, 1937, 1939, 1941-42. *Oil Paint & Drug Rep* 143:54 Ja 11 '43

Rationing

Fats, oils industrial users subject to ration. *Oil Paint & Drug Rep* 143:7+ Mr 29 '43

Fats, oils rationing covers industrial users. *Oil Paint & Drug Rep* 143:7 Mr 15 '43

Food for industry; fats and oils classified as edible; manufacturers are rationed. *il Business Week* p80+ My 27 '43

Rationing pains. *Business Week* p30-2 Ap 17 '43

Statistics

Fats and oils consumption by industries, first quarter, 1943. *Oil Paint & Drug Rep* 143: 47 Je 21 '43

OILS and fats—Statistics—Continued

Fats and oils, 1942. *Chem & Met Eng* 50:118-19 F '43

Fats to the front; lend-lease and military needs will shorten further supplies of fats and oils for civilians and industry. *Business Week* p28-9+ F 13 '43

Oils, fats, and waxes. Published in weekly numbers of Oil, paint and drug reporter
Oils, fats, and waxes, 1942. *Oil Paint & Drug Rep* 143:86-8 Ja 11 '43

See also

Oil industries—Statistics

OILWELL drilling contractors, American association of. See American association of oil-well drilling contractors

OINTMENTS

Dermatitis prevention. *Soap & San Chem* 19: 67 O '43

Film of protection; applications to guard skin against industrial irritants. C. A. Weslager. *Il Nat Safety N* 47:22+ Je '43

New superior base for ointments. *Sci Am* 168:16 Ja '43

Prevention of dermatitis; simplicity and effectiveness of barrier creams. *Chem Age (Lond)* 48:223 F 20 '43; Abstract. *Soap & San Chem* 19:59 Ap '43

Protective creams; abstract. *Soap & San Chem* 19:59 JI '43

OITICICA oil

Industrial applications of chemicals and related materials. *Oil Paint & Drug Rep* 143: 34 My 31 '43

OKIE, Frederick W. 1907-

Rail officer gets army merit award; Transportation corps engaged in battle for abandoned ammunition trains. *Ry Age* 114:917 My 8 '43

OKLAHOMA

See also

Land tenure—Okla-	Petroleum industry
homa	and trade—Okla-
Petroleum—Okla-	homa
homa	

OKLAHOMA gas and electric company

Plan approved by SEC. *Comm & Fin Chr* 158: 1861 N 8 '43

OKRA

Jute and manila fibers; hibiscus esculente (okra) as substitute. A. C. Whitford. *Textile Col* 64:526 N '42

OLD age

Mental health in later maturity. bibliog *Il Pub Health Rep Sup* 168:1-147; pa 20c Supt. of doc. '42

See also

Age and employment
Pensions, Industrial

OLD age homes

Motion picture country house, San Fernando valley, Calif.; views, plans, and construction outline. *Arch Forum* 77:37-48 N '42

OLD age pensions

Beveridge report, with special reference to pensions and workmen's compensation. H. Lesser. *Gas J (Lond)* 241:435-6 Ap 7 '43

Characteristics of applicants for old-age and survivors insurance. *Monthly Labor R* 57: 488-93 S '43

Pensions for water works men; abstract. W. W. Brush. *Water Works & Sewerage* 89:472 N '42

See also

Insurance, Social
Pensions, Industrial

Finance

Old-age security and the war; pension fund deficit. G. B. Robinson. *J Account* 76:318-30 O '43

OLDER workers. See Age and employment; Old age

OLEAN, New York**Water supply**

Review of the Olean flood in relation to the mutual aid and civilian protection programs. A. D. Drake and F. O'B. Nehin. *Am Water Works Assn J* 34:1743-54 D '42

OLEANOLIC acid

Sapogenins; the position of the carboxyl group in oleanolic and glycyrrhetic acids. G. A. R. Kon and W. C. J. Ross. *Chem Soc J* p741-4 D '42

OLEFINS

Absorption spectra of a series of dienes. E. P. Carr, L. W. Pickett and H. Stütcken. bibliog *Rs Mod Phys* 14:260-4 Ap-JI '42

Addition of hydrogen fluoride to halo-olefins. A. L. Henne and E. P. Plueddemann. bibliog *Am Chem Soc J* 65:1271-2 JI '43

Addition of metals to some phenylated olefins in liquid ammonia solution. H. Gilman and J. C. Ballie. *Am Chem Soc J* 65:267-8 F '43

Cadmium (¹⁰⁹Pd) photosensitized reactions of the lower olefins. D. J. LeRoy and E. W. R. Steacie. bibliog *J Chem Phys* 10:633-5 N '42

Codimer for aviation gasoline produced in revamped catalytic poly plant. *Il Nat Pet N* 35 pt 2:R156+ Ap 7 '43

Coordination of silver ion with unsaturated compounds; *cis*- and *trans*-2-pentene. H. J. Lucas, R. S. Moore and D. Pressman. bibliog *Am Chem Soc J* 65:227-9 F '43

Cobordination of silver ion with unsaturated compounds; mixtures of trimethylethylene and cyclohexene. H. J. Lucas, F. W. Billmeyer, Jr. and D. Pressman. bibliog *Am Chem Soc J* 65:230-1 F '43

Hydrogen fluoride as a condensing agent; the addition of an alkyl chloride to the double bond. J. H. Simons and A. C. Meunier. *Am Chem Soc J* 65:1269-71 JI '43

Ketone synthesis; the condensation of acid anhydrides with olefins. A. C. Byrns and T. F. Doumani. bibliog *Il diag Ind & Eng Chem* 35:349-53 Mr '43

Polymerization of mixtures of olefins and diolefins in presence of metallic sodium. V. N. L'vov. *Oil & Gas J* 42:38-9+ JI 8 '43

Reaction between ethylene derivatives and the halogens. S. V. Anantakrishnan and R. Venkataraman. bibliog (122 references)

Synthesis of olefin hydrocarbons by catalytic condensation and dehydration of alliphatic aldehydes. V. I. Komarevsky and T. H. Kritchevsky. *Am Chem Soc J* 65: 547-8 Ap '43

See also

Cyclohexene
Ethylene
Propylene

OLEIC acid

Course of autoxidation reactions in polyisoprenes and allied compounds; the isolation and constitution of photochemically-formed methyl oleate peroxide. E. H. Farmer and D. A. Sutton. *Chem Soc J* p119-22 Mr '43

Mechanism of the oxidation of oleic and elaidic acids and their methyl esters by hydrogen peroxide in acetic acid; further observations on the configurations of the 9:10-dihydroxy-stearic acids. G. King. *Chem Soc J* p57-8 Ja '43

Rates of evaporation of water through compressed monolayers on water. I. Langmuir and V. J. Schaefer. bibliog *Il Franklin Inst J* 235:119-62 F '43

Manufacture

Stearic acid, red oil and glycerine. flow sheet *il Chem & Met Eng* 50:132-5 S '43

OLEOMARGARINE

Butter ration value. *Science* 98:sup12 O 15 '43

Custom-built fats. H. W. Vahlteich. bibliog *Il Chem & Eng N* 21:1238-42 Ag 10 '43

Margarin oils supply may change formulas. *Oil Paint & Drug Rep* 143:4 My 24 '43

Margarine push; drive to repeal old U.S. imposts. *Business Week* p88+ O 23 '43

Margarine scores; war doubles production; state legislatures consider cutting taxes. *Business Week* p44+ Ap 3 '43

Margarine's day. *Business Week* p20 Ja 16 '43

Margarine's spot; housewives spend ration points on meat, butter only. *Business Week* p84 My 1 '43

Advertising

Problem: how can a war-promoted product keep its new customers? Nucoa advertising. *il Ptr Ink* 202:56-7+ Ja 22 '43

OLEOMARGARINE—Advertising—Continued

Swift makes bid in national media for growing margarine business. *il* *Ptr Ink* 205:47 O 1 '43

OLEORESINS. See Gums and resins**OLIVE oil**

California olive oil exploits opportunity to win U.S. market. *Sales Management* 52:26 Je 1 '43

Olive-oil production in Greece. *For Comm W* 11:34 My 29 '43

Possibilities of peanut, pecan and safflower seed oils as supplements for olive oil; abstract. W. G. Bickford, G. E. Mann and K. S. Markley. *Food Ind* 15:144 J1 '43

Tempest in cruet. *Business Week* p64+ D 19 '42

Virgin olive oil ad. claims hit. *Oil Paint & Drug Rep* 144:3+ J1 12 '43

Prices

Olive oil ceiling rolled back by OPA. *Oil Paint & Drug Rep* 143:5+ F 15 '43

OLIVER farm equipment company

Another look. *il* *Mag of Wall St* 71:356-7; 72: 194 Ja 9, My 29 '43

OLIVES

Spain's 1942 olive crop. *For Comm W* 9:15-16 Je 26 '42

OLIVINE

Fertilizer by fusion of rock phosphate with olive. J. H. Walthall and G. L. Bridger. *bibliog Ind & Eng Chem* 35:774-7 J1 '43

Olivine for market in the spruce pine region of North Carolina. *Eng & Min J* 143:55 N '42

Olivine; properties, production, etc.; directory of buyers and producers. G. R. Gwinn. *bibliog U S Bur Mines Information Circ* 7239:1-11 '43

OLNEY, Louis A. 1874-

American contemporaries. N. A. Johnson. *por Chem & Eng N* 21:1620 O 10 '43

OLNEY medal

Olney medal. *Am Dyestuff Rep* 32:478 N 8 '43

OMAHA, Nebraska

Field notes from the farm country. *Fortune* 27:121 Je '43

OMNIBUS corporation

Listing of additional stock. *Comm & Fin Chr* 157:643 F 15 '43

Omnibus corporation. *Pub Util* 30:792-4 D 3 '42

ONAN, Dave W.

Ninety per cent guts; D. W. Onan & sons, Minneapolis. *por Fortune* 27:136-7 Je '43

O'NEILL, Frank J. 1876-

Prepares to retire at year end. *por Nat Underw* 47:19+ Je 17 '43

ONIONS

Onion production, Chile. *For Comm W* 13: 17 O 9 '43

Onion production in East Canary Islands. *For Comm W* 12:37 Ag 21 '43

Seed

Onion-seed production, Argentina. *For Comm W* 11:26 Ap 3 '43

ONIONS, Dried

Dehydrator uses new technics; potato and onion dehydration, Simplot plant. L. V. Burton. *flow sheet il plan Food Ind* 15:59-63+ N '43

ONTARIO*See also*

Geology—Ontario
Iron ores—Ontario

Mines and mineral resources—Ontario

Hydroelectric power commission

Ontario hydro-electric power; 35th annual report of the Hydro-electric power commission of Ontario; abstracts. *il Electrician* 131: 353-4 O 8 '43; *Elec R (Lond)* 133:478 O 8 '43

ONTARIO good roads association

Annual meeting, 41st, Toronto, Feb. 24-25. *Roads & Bridges* 41:33-6+ Mr '43

OPACIFIERS

Effect of opacifiers on fused viscosity of feldspathic glazes. J. R. Beam. *bibliog il diags Am Cer Soc J* 26:205-12 J1 1 '43

OPACITY*See also*

Paper—Opacity

OPAL glass. See Glass, Opal**OPEN and closed shop**

Decisions involving National labor relations act; closed shop and state public policy. *Monthly Labor R* 56:730-1 Ap '43

Extent of union recognition. *Management R* 32:61-3 F '43

Florida legislature votes ban on closed-shop contracts. *Comm & Fin Chr* 157:1689 My 6 '43

Toward a national wartime labor policy; the union-security issue. E. B. McNatt. *bibliog J Business* 16:64-9 Ja '43

OPEN hearth furnaces

Basic open-hearth refractories and maintenance; abstract. *Metals & Alloys* 18:840+ O '43

Heat fuel oil before using in open hearth furnace. *diag Foundry* 71:164-5 Mr '43

Review of basic open-hearth practice at an Australian plant. R. L. Knight. *diags Blast F & Steel Pl* 31:1148-51, 1190 O '43

Steel tapped from furnaces in Homestead expansion. *il Blast F & Steel Pl* 31:795 J1 '43

Supervision of bottom makeup results in increased output. J. Hysong. *Steel* 111:76+ N 23 '42

See also

Open hearth process

Charging

Briquetting machine supplies charge and feed ore in cubes. J. D. Knox. *il diags Steel* 112:82-4+ Ja 11 '43

Turnings charged with pusher boxes. *il Iron Age* 151:44-5+ Ap 29 '43

Design

Factors affecting open hearth design. A. H. Leckie. *bibliog Steel* 113:84, 87+ J1 26 '43

Lining

Amorphous graphite in the open-hearth. R. J. Zemanek. *il diags Steel* 111:86-7, 89 N 23 '42

Basic open hearth, modern plant and practice. J. A. Davies. *Blast F & Steel Pl* 31: 1064, 1066 S '43

Discussion on open-hearth furnace refractories. *Iron & Steel Inst J* 145:307-22 no 1 '42; *Abstract. Engineering* 153:505 Je 26 '42

Linings of large basic open-hearth tilting furnaces. A. Jackson. *Iron & Steel Inst J* 146:9-16 no 2 '42; *Same. Engineering* 154: 216-17, 224-5 S 11-18 '42; *Same. Blast F & Steel Pl* 31:318-19 Mr '43; *Discussion. Iron & Steel Inst J* 146:16-19 no 2 '42

Magnesite refractories. J. H. Chesters. *bibliog il diag Iron Age* 151:46-51 Je 3; 75-81 Je 10 '43

Maintenance of the furnace linings in large basic open-hearth tilting furnaces by the use of chrome ore, magnesite and serpentine. A. Jackson. *Engineering* 156:265 O 1 '43

New kink in repairing open-hearth bottoms. J. D. Sawyer. *il diag Steel* 112:116-18+ Mr '43

Refractories employed in the construction of open hearth furnaces at Port Kembla, Australia. *Blast F & Steel Pl* 31:812-13 J1 '43

Steel plant refractories; abstract. C. A. Brashares. *Metals & Alloys* 17:1232+ Je '43

OPEN hearth process

Amorphous graphite in the open-hearth. R. J. Zemanek. *il diags Steel* 111:98-9, 101 N 16; 86-7, 89 N 23 '42

Determining open hearth residuals by routine spectrographic analysis. J. T. Rozsa. *il diag Iron Age* 151:58-62 Mr 11 '43

Development of research and quality control in a modern steel mill. L. F. Reinart. *il diags Blast F & Steel Pl* 31:409-18, 522-8+ Ap-May '43

Effect of light scrap on open hearth practice. E. H. Reyer. *il Blast F & Steel Pl* 31:205-7 F '43

OPEN hearth process—Continued

- Ingot of rimmed steel made by the basic open-hearth process. D. Binnie. Iron & Steel Inst J 146:283-94, pl 17-24 no 2 '42; Excerpts. Iron Age 151:65 F 18 '43; Discussion. Iron & Steel Inst J 146:363-86 no 2 '42
- Manufacture of NE 1330 steel by the practical open hearth melter. McKune paper. E. G. Wigfield. Blast F & Steel Pl 31:513-15+ My '43; Excerpt. Iron Age 151:72-4 My 6 '43
- National open hearth steel committee and blast furnace and raw materials committee of the American institute of mining and metallurgical engineers; 26th conference, program. Blast F & Steel Pl 31:sup20+ Ap '43
- Openhearth men discuss their wartime problems. H. J. Forsyth. Metal Prog 43:901-3+ Je '43
- Open hearth practice undergoes some modifications in 1942. L. E. Lindemuth. il Blast F & Steel Pl 31:74-5 Ja '43
- Open-hearth slag control for manganese. C. F. Quest. A. E. Martin and T. L. Joseph. Metals & Alloys 17:767-9 Ap '43
- Open-hearth steel making, 1942. L. F. Reinartz. il Metals & Alloys 17:51-3 Ja '43
- Oxygen concentrations linked with acid open hearth process. Iron Age 150:44 D 3 '42
- Problems of total operation in steelmaking; abstract. W. C. Marshall and F. G. Norris. Iron Age 151:57-8 F 25 '43
- Recent trends in steel manufacture. G. A. V. Russell. Blast F & Steel Pl 30:1264-70, 1369-76 N-D '42
- Recent work with the quick-immersion thermocouple in the steelworks of Sheffield; comparison of thermocouple and optical pyrometer on acid open-hearth furnace. F. H. Schofield. Iron & Steel Inst J 145:235-43 no 1 '42
- Review of basic open-hearth practice at an Australian plant. R. L. Knight. diag Blast F & Steel Pl 31:1012-6, 1148-51, 1190 S-O '43; Abstracts and discussions. Engineer 175:404-5 My 21 '43; Engineering 155:443 Je 4 '43
- Sintering practice for open hearth ores; abstract. L. F. Reinartz. Iron Age 151:57 F 25 '43
- Slag control through blast furnace tuyeres; abstract. C. G. Hogberg. Metals & Alloys 17:1010 My '43
- Steel to be made at Kaiser Fontana plant early in May; with layout plans. Blast F & Steel Pl 31:sup38+ Ap '43
- Utilisation of phosphatic open-hearth slag. F. E. Lathe and others. bibliog Soc Chem Ind J 62:24-31 F '43
- War problems dominate Open hearth conference. Iron Age 151:72-6+ My 6 '43
- Wartime conference of open hearth steel and blast furnace and raw materials committees largest in history. Min & Met 24:287-8 Je '43
- Welded ladles help increase steel output. G. R. Reiss. il Steel 112:112, 115 My 17 '43
- Why determine FeO? F. G. Norris. Blast F & Steel Pl 31:sup41-2+ Ap '43

See also

Open hearth furnaces

- OPEN pit mining.** See Mining methods—Stripping operations

OPERA**Advertising**

Selling opera is big business. A. Stahr. Adv & Sell 36:56+ Ap '43

- OPERATING rooms.** See Hospitals—Operating rooms

OPHTHALMOLOGICAL research

Ophthalmological research at the University of Oxford. Science 98:318-19 O 8 '43

OPHTHALMOLOGY

Some aspects of the eye as an image-forming mechanism. K. N. Ogle. diags Opt Soc Am J 33:506-12 S '43

OPIUM

Opium and coca derivatives controlled. Oil Paint & Drug Rep 143:4 My 31 '43

See also

Papaverine

OPIUM poppies

Opium poppies bill sent to President. Oil Paint & Drug Rep 142:3+ D 7 '42

OPTICAL anisotropy. See Anisotropy**OPTICAL dispersion.** See Dispersion of rays**OPTICAL glass.** See Glass, Optical**OPTICAL illusions**

Optical illusions from train windows. C. D. Leake. Science 97:423-4 My 7 '43

OPTICAL instruments

Construction of Tiselius electrophoresis cells. G. G. Wright and S. M. Swingle. Science 97:564 Je 18 '43

Flux calculations in optical systems. A. C. Hardy. diags Opt Soc Am J 33:71-4 F '43

Magnifying inspection device aids output. il Factory Management 101:230 Mr '43

Optical oscillograph. K. J. DeJuhasz. il diags Automobile Eng 32:483-7 N '42

Precision packs for optical instruments. il Mod Packaging 16:35-9+ J1 '43

See also

- | | |
|--------------------------------|------------------------|
| Densitometers | Periscopes |
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| Flashers | Prisms |
| Glass, Optical | Refractometers |
| Lenses | Sextant |
| Measuring instruments, Optical | Spectrograph |
| Microscope and microscopy | Spectrophotometers |
| Monochromators | Siroscopic instruments |
| Moving picture projectors | Telescope |

Manufacture

Air conditioning aids in artillery optical equipment manufacture; Bausch & Lomb. Heat & Ven 40:46 Ag '43

Controlled humidity steps up production of army gun sights. Glass Ind 24:116 Mr '43

Testing

Measurement of transmission and contrast in optical instruments. D. B. McRae. diags Opt Soc Am J 33:229-43 bibliog(p242-3) Ap '43

OPTICAL measurements

Determination of optical constants of metals by reflectivity measurements. J. R. Collins and R. O. Bock. il R Sci Instr 14:135-41 My '43

Fresnel reflection of diffusely incident light. D. B. Judd. bibliog J Research Nat Bur Stand 29:329-32 N '42

See also

Measuring instruments, Optical

OPTICAL methods

Methods for specifying quartz crystal orientation and their determination by optical means. W. L. Bond. diags Bell System Tech J 22:224-62 J1 '43

Surface hardness of metals; measuring method involving reduction of optical reflectivity after sand impact. il diag Iron Age 152:43-5 S 30 '43

OPTICAL properties

Configuration of starch and the starch-iodine complex; optical properties of crystalline starch fractions. R. E. Rundle and D. French. bibliog il Am Chem Soc J 65: 553-61 Ap '43

Identification of organic bases by means of the optical properties of diluturates (nitrobarbiturates); aliphatic amines. E. M. Plein and B. T. Dewey. bibliog diags Ind & Eng Chem Anal ed 15:534-6 Ag 15 '43

Optical crystallographic studies with the polarizing microscope; axial dispersion with change of sign; other dispersion measurements. W. M. D. Bryant. bibliog il Am Chem Soc J 65:96-102 Ja '43

Polymorphism of phosphoric oxide. W. L. Hill. G. T. Faust and S. B. Hendricks. bibliog il Am Chem Soc J 65:794-802 My '43

Propagation of radiation in a scattering and absorbing medium. E. O. Hulburt. Opt Soc Am J 33:42-5 Ja '43

See also

- | | |
|--------------------|--------------------------|
| Absorption of rays | Paper—Optical properties |
| Fluorescence | Refractive index |

OPTICAL pyrometers. See Pyrometers and pyrometry

OPTICAL rotation

Attempted asymmetric syntheses involving the Grignard reagent in optically active solvents. D. S. Tarbell and M. C. Paulson. *bibliog Am Chem Soc J* 64:2842-4 D '42

Complex mutarotation of *d*-galactose. R. E. Rundle and B. C. Hendricks. *bibliog J Phys Chem* 47:364-9 Ap '43

Contribution to the theory of racemism. C. S. Hudson. *Am Chem Soc J* 65:1239-40 Je '43

Derivatives of the aldehydrol form of sugars; rotatory power. M. L. Wolfrom and R. L. Brown. *bibliog Am Chem Soc J* 65:951-3 My '43

Further observations on the optically active α -dimethylallyl alcohols. M. P. Balfe and others. *Chem Soc J* p348-51 Ag '43

Influence of addenda on the inversion of *l*-menthone with acids in benzene; the effect of solvents in chemical reactions. A. Weissberger. *Am Chem Soc J* 65:242-5 F '43

Inversion of *l*-menthone and the reaction of diazoacetic ester with the chloroacetic acids. A. Weissberger. *bibliog Am Chem Soc J* 65:245-6 F '43

Inversion of menthone with hydrogen chloride in benzene. A. Weissberger and D. S. Thomas, jr. *Am Chem Soc J* 65:402-3 Mr '43

inversion of menthone with trichloroacetic acid in aprotic solvents. A. Weissberger. *bibliog Am Chem Soc J* 65:102-10 Ja '43

Magnetic rotatory power of crystalline nickel sulphate in the short infra-red spectrum. S. Breen, J. N. Humphrey and L. R. Ingersoll. *bibliog diags Phys R* 64:75-7 Ag '43

Magneto-optic rotation: acetic and chloroacetic acids in polar and non-polar solvents. C. E. Waring, S. Steingiser and H. H. Hyman. *Am Chem Soc J* 65:1066-8 Je '43

Magneto-optic rotation; selenium oxychloride in aqueous solutions. C. E. Waring, S. Steingiser and H. H. Hyman. *Am Chem Soc J* 65:1068-70 Je '43

Methods for resolution of enantiomorphs; chromatographic adsorption. H. B. Hass, T. de Vries and H. H. Jaffé. *bibliog Am Chem Soc J* 65:1486-8 Ag '43

Mutarotation of β -*D*-altrose. N. K. Richtmyer and C. S. Hudson. *bibliog Am Chem Soc J* 65:740-1 Ap '43

New methods for the resolution of enantiomorphs; liquid-liquid extraction. E. Shapiro and R. F. Newton. *diags Am Chem Soc J* 65:777-9 My '43

Optical rotation and atomic dimension: the four optically active 2-halogenopentanes. D. H. Brauns. *bibliog J Research Nat Bur Stand* 31:83-106 Ag '43

Optically active acyl peroxides; preparation, decomposition, and use as catalysts for vinyl polymerization. C. S. Marvel, R. L. Frank and E. Prill. *bibliog Am Chem Soc J* 65:1647-52 Ag '43

Pantothenic acid; optical rotation as a measure of stability. D. V. Frost. *bibliog Ind & Eng Chem Anal* 15:306-10 My '43

Physical properties of terpenes; the system α - and β -pinene. R. E. Fugitt, W. D. Stallcup and J. E. Hawkins. *bibliog Am Chem Soc J* 64:2978-81 D '42

Reactions and enolization of cyclic diketones; 3-*t*-butyl-1,2-diketohydrindene. C. F. Koelsch. *bibliog Am Chem Soc J* 65:1640-3 Ag '43

Reactions of organometallic compounds with alkyl halides; the action of sodium ethyl on ($\rightarrow$)-2-bromooctane. N. G. Brink, J. F. Lane and E. S. Wallis. *bibliog Am Chem Soc J* 65:943-9 My '43

Ring structures and mutarotations of the modifications of *D*-galacturonic acid. H. S. Isbell and H. L. Frush. *bibliog J Research Nat Bur Stand* 31:33-44 Jl '43

Separation of diastereoisomerides by selective adsorption on optically inactive material. M. M. Jamison and E. E. Turner. *Chem Soc J* p611-12 O '42

Stability of racemates; mandelic acid and some of its derivatives. W. R. Angus and R. P. Owen. *Chem Soc J* p227-30 My '43

Stereochemistry of coordination number eight; optical activity of potassium tetraoxalato-uranium-IV. L. E. Marchi and J. P. Reynolds. *bibliog Am Chem Soc J* 65:333-5 Mr '43

Stereochemistry of labile compounds. W. H. Mills. *Chem Soc J* p194-9 Ap '43

Studies in stereochemistry; the preparation of *d*-1-deutero-2-methylbutane and the study of its optical rotation. H. C. Brown and C. Groot. *Am Chem Soc J* 64:2563-6 N '42

See also

Dispersion of rays

OPTICAL society of America

Annual meeting, 28th, Pittsburgh, October 7-9. *Science* 97:574-5 Je 25 '43

Proceedings of the 27th annual meeting; with abstracts of papers. *Opt Soc Am J* 32:737-46 D '42

Proceedings of the winter meeting, New York, March 5-6. *Opt Soc Am J* 33:344-52 Je '43

Colorimetry committee

Historical background and evolution of the colorimetry report. L. A. Jones. *bibliog Opt Soc Am J* 33:534-43 O '43

OPTICAL trade

See also

Spectacles

OPTICS

Optics for photocell hobbyists. G. Dexter. *il diags Radio N* 29:22-3+ Mr '43

See also

Absorption of rays	Photochemistry
Collimation	Photometry
Color	Polarization (light)
Condensers (optics)	Prisms
Diffraction	Radiation
Dispersion of rays	Reflection (optics)
Fluorescence	Sight
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Luminescence	Television
Magneto-optics	Visibility
Measuring instruments, Optical	

OPTICS, Electron. See Electron optics

OPTICS, Geometrical

Theory of the Schmidt telescope. J. D. Sygne. *bibliog diags Opt Soc Am J* 33:129-36 Mr '43

OPTICS, Photographic. See Photographic optics

OPTICS, Physiological

Magnification and brightness of images on the retina. F. Benford. *diag Opt Soc Am J* 33:245 Ap '43

Specification of foveal adaptation. P. Moon and D. E. Spencer. *bibliog diags Opt Soc Am J* 33:444-66 Ag '43

Synchronized calibrator for sweep and gain in cathode-ray recording. S. A. Talbot. *bibliog diags R Sci Instr* 14:134-6 Je '43

See also

Color blindness	Optical illusions
Color sense	Sight
Eye	Visibility

ORANGE (color)

Mechanism of formation of orange II alumina color lakes. A. Voet. *bibliog J Phys Chem* 47:191-6 Mr '43

ORANGE juice

Boxed juice? vitamin-preserving plan for dehydrating citrus fruits. *Business Week* p58 Ja 23 '43

What darkens packaged orange juice. E. L. Moore, W. B. Esselen, jr. and C. R. Fellers. *Mod Packaging* 16:90, 92+ Ja '43

ORANGE oil

From caravan to corner drug store; production in French Guinea. E. M. Schwarzauber. *il For Comm W* 10:16-17 F 27 '43

ORANGEADE powders

Storage of synthetic citrus powders; caramelization by citric or tartaric acid and various sugars at high temperatures. W. E. Isaac. *il Ind & Eng Chem* 35:470-4 Ap '43

ORANGES

Brazil's orange industry. *For Comm W* 11:30-1 Je 12 '43

Contrary fruit; orange trees put marketers in hole. *Business Week* p36 Ja 9 '43

ORANGES—Continued

Production of sweet oranges in Spain; exports, 1941-42, by country of destination. For Comm W 9:16 D 26 '42
Spain's production and export of oranges. For Comm W 10:25-6 Mr 20 '43

Prices

Orange rollback. Business Week p98+ S 18 '43

ORCHIDS

Better orchids by air conditioning of greenhouse. il diags Sheet Metal Worker 34:42, 44, 46 S '43

Growth of orchid seeds after dehydration from the frozen state. R. D. Svihla and E. Osterman. Science 98:23-4 Jl 2 '43

ORDERS

Accurate order-filling of rationed goods. E. A. Dench. Credit & Fin Management 45:28-9 Je '43

Alloy steel time cycles. Aero Digest 42:258, 260 Ap '43

Case of the disputed acknowledgment. Chem Ind 53:122 Jl '43

Lay-away orders for machinery; RCA plan. Mod Packaging 16:92+ My '43

Time cycles important in ordering alloy steels; charts. Automotive & Aviation Ind 88:27 My 1 '43

ORDERS, Cancellation of. See Cancellation of orders

ORDNANCE

Army ordnance probes secrets of enemy weapons. A. F. Macconochie. il Steel 113: 80-2, 84+ S 27 '43

Bringing plastics into the picture for ordnance requirements; abstract. E. T. McBride. Mod Plastics 20:62 F '43

Conservation of critical materials by redesign. J. B. Nealey. Mach 49:165-7 D '42

Design of Nazi ordnance matériel. il diags Product Eng 14:255-9 My '43

Expediting army ordnance approvals. T. J. Little. il Machine Design 15:117+ Je '43

Metalurgency; army ordnance. il Mach 49: 139-53 D '42

Ordnance inspection, 1942. J. J. Target. Metals & Alloys 17:116-17 Ja '43

Ordnance redesigns, 1942. J. B. Nealey. il Metals & Alloys 17:92-4 Ja '43

Reference table of alternates and substitutes; ordnance equipment and parts. F. P. Peters, comp. Metals & Alloys 16:1089-90 D '42

Simpler war; simplification of ordnance requirements. Business Week p32 Ja 9 '43

See also

Guns (ordnance)	United States—Army
Machine guns	—Ordnance and
Mortars (ordnance)	ordnance stores
Naval guns	

Maintenance and repair

Lubricants for ordnance combat and motor-transport vehicles. R. E. Jeffrey, jr. S A E J 51:345-9, 368 O '43

Weapon maintenance in battle. E. E. MacMorland. Mech Eng 65:773-4+ N '43

Manufacture

Air conditioning achievements in ordnance production. il diags plans Heat & Ven 40:35-90 Je; 36-50 Jl '43

Army turns to trifles; General Campbell invites ideas on improved design and manufacturing methods. J. Haydock. il Am Mach 86:1277-9 N 12 '42

Automotive design techniques in mass production of ordnance. il diags Product Eng 14:467-71, 546-9 Ag-S '43

Battlelocks; army ordnance; citations for labor and material saving designs. il diags Mach 49:145-68 F '43

Cast ordnance parts redesigned for fabrication as welded stampings. diags Product Eng 14:206-7 Ap '43

Composite stampings relieve critical shortages. G. W. Birdsall. diags Machine Design 14:113-15+ D '42

Conservation through the use of stampings in ordnance. K. Rose. il Metals & Alloys 18:778-83 O '43

Development of standards for army ordnance finishes. M. R. Norton. bibliog il Mech Eng 64:703-17 O '42; Discussion. 65:285-7 Ap '43

Diversification of war products at Minneapolis-Moline plant. J. Geschelin. il Automotive & Aviation Ind 89:18-24+ N 1 '43

Malleable iron castings in ordnance. J. H. Frye. il Steel 113:94-6+ Ag 23 '43; Same. Foundry 71:102-4+ S '43

Malleable iron fills wartime needs. C. Carmichael. il Machine Design 14:96-8+ D '42

Ordnance inspection of castings. A. C. Richmond. il Iron Age 151:41-4 Ap 22 '43

Ordnance production gaging. R. A. Bowman. diags Instruments 15:514-16; 16:94-102, 130-6, 192-5+, 343-51, 668-9+ D '42, F-Ap, Je, N '43

Ordnance production number. L. H. Campbell and others. il diags Mach 49:133-96 Ap '43

Plus training system; Canton ordnance plant of Westinghouse electric and manufacturing co. F. D. Newbury and P. N. Love. il Am Mach 86:1349-51 N 26 '42

Precision castings for ordnance and aircraft; jewelry manufacturers make small parts by lost wax centrifugal casting process. J. D. Wolf. il Metals & Alloys 18:784-8 O '43

Pressed metal; a speed-up factor in ordnance. il Iron Age 152:90 S 30 '43

Safety in army ordnance establishments. C. Field. Mech Eng 65:353-9 My '43; Refrig Eng 46:95-101+ Ag '43

Savings due to using pressed metal in war production. Mach 50:158 S '43

Scientific management applied to subcontracting; helps step up war production at Link-belt ordnance co. R. Trautschold. il Steel 112:74-5 F 22 '43

Substitute steels for ordnance; with charts showing end-quench hardenability curves of NE steels. Metal Prog 42:856-7 N '42

Trends in use of castings in ordnance. M. H. Davis. il Foundry 71:129+ Je '43

Welded weapons in war. S. B. Ritchie. il Welding J 22:893-901 N '43

Testing

Arctic armament; tests under conditions of extreme cold, shed light on fuels and lubricants. Business Week p78+ Ap 3 '43

Testing ordnance at 40 below. A. F. Macconochie. il Steel 113:94-5+ O 4 '43

Torture-testing war equipment. G. M. Barnes. S A E J 51:sup21-3, 50 Jl '43

ORDNANCE department. See United States—Ordnance department

ORDNANCE school, Aberdeen proving ground Ordnance department training. B. B. Abrams. il Mech Eng 65:233-6 Ap '43

ORDNANCE workers, Women. See Women ordnance workers

ORDOVICIAN period. See Geology, Stratigraphic—Ordovician; Paleontology—Ordovician

ORE analysis. See Metallurgical analysis

ORE crushing. See Crushing; Ore treatment

ORE deposits

Brucite in limestone near Wilkinson, Ontario. I. C. Brown. bibliog il Econ Geol 38:408-19 Ag '43

Bureau of mines adopts new method for classifying ore reserves. Min Cong J 29:33 Je '43

Diamond drilling the manganese deposits of Nova Scotia. E. Walker. diags Can Min J 64:487-9 Ag '43

Estimating ore by the polygon method. T. T. Read. diags Eng & Min J 144:84-6 Ag '43

Geology and ore deposits of the Chichagof mining district, Alaska. J. C. Reed and R. E. Coats. il diags maps U S Geol S Bul 929:1-148, pl 1-33 [13 pls in separate pocket]; p \$3.25 Supt. of doc. '41

Geology and ore deposits of the Magdalena mining district, New Mexico. G. F. Loughlin and A. H. Koschmann. bibliog diags fold maps U S Geol S Professional Pa 200: 1-168, pl 1-38; p \$2 Supt. of doc. '42

Geology and ore deposits of the Meteline quadrangle, Washington. C. F. Park, jr. and R. S. Cannon, jr. bibliog fold maps U S Geol S Professional Pa 202:1-81, pl 1-34; p \$1.50 Supt. of doc. '43

Geology of the Garnet-Cunningham area. V. B. Meen. Can Min J 63:723-4 N '42

ORE deposits—Continued

- Gold ores of the Little Long Lac area, Ontario. H. S. Armstrong. bibliog il Econ Geol 38:204-52 My '43
- Ground water and hydrothermal deposits. C. H. Behre, jr. and R. M. Garrels. bibliog Econ Geol 38:65-9 Ja '43
- Hydrothermal replacement in deep seated iron ore deposits of the Lake Superior region. H. M. Roberts and M. W. Bartley. diags maps Econ Geol 38:1-24 bibliog (p23-4) Ja '43
- Laboratory evidence concerning the interpretation of asymmetrical crystals. E. Armstrong. diags Econ Geol 38:533-5 S '43
- Measured, indicated, and inferred ore classified. Min & Met 24:454 O '43
- Mining geology; intensive study of ore occurrence demanded by wartime needs. C. D. Hulin. il Min & Met 24:51-5 F '43
- Mining geology, 1942. C. H. Behre, jr. Eng & Min J 144:94-5 F '43
- Nickel deposit near Dracut, Massachusetts. W. H. Dennen. bibliog il maps Econ Geol 38:25-55 Ja '43
- Origin of Chilean nitrate deposits. J. T. Singewald, jr. bibliog Econ Geol 37:627-39 N '42
- Origin of sulphides in the nickel deposits of Mount Prospect, Connecticut. E. N. Cameron. diags Geol Soc Bul 54:651-86, pl 1-7 bibliog (p679-80) My '43
- Paragenesis of some gold and copper ores of southwestern Oregon. W. R. Lowell. bibliog il map Econ Geol 37:557-95 N '42
- Paragenesis of the ores of the Normet mine, Abitibi county, Quebec. H. M. Putman. il Econ Geol 38:313-22 Je '43
- Quartz veins in the Ouachita mountains of Arkansas and Oklahoma (their relations to structure, metamorphism, and metalliferous deposits). H. D. Miser. bibliog maps Econ Geol 38:91-118 Mr '43
- Rock alteration at the San Antonio mine; relation of different types of alteration to ore deposition. J. G. Bragg. il Can Min J 64:553-6 S '43
- Some concepts on the geology of quicksilver deposits in the United States. C. P. Ross. map bibliog (40 titles) Econ Geol 37:439-65 S '42; Discussion. J. Pollock. 38:149-53 Mr '43
- Supergene magnetite. J. S. Brown. bibliog il Econ Geol 38:137-48 Mr '43
- Vanadium deposits of Colorado and Utah; a preliminary report. R. P. Fischer. pls fold maps U S Geol S Bul 936-P:363-94; pa 30c Supt. of doc. '42

See also

- | | |
|-------------|-----------------------------|
| Copper ores | Manganese ores |
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ORE handling

- Belt conveying at the Morenci ore reduction plant. J. H. Johansen. il diags plan Min & Met 23:286-9 My '42; Same. Mech Handling 30:156-61 Ap '43
- Overcoming difficulties in feeding ore into a quicksilver furnace. W. Bradley. il diags Min Cong J 29:28-30 Je '43

ORE sampling

- How to obtain accuracy in sampling. C. De-mond. Rock Prod 46:78-9+ Mr; 65-6+ My '43
- Sampling of zinc skimmings; an essential preliminary to analysis. D. J. Bullivant. il diags Chem Age (Lond) 49:341 O 2 '43

ORE testing

- Batch testing for heavy-media separations; apparatus and procedure for laboratory sink-and-float work. C. E. Wuensch. diag Eng & Min J 144:58-9 Mr '43
- Improved flotation test cell. J. B. Clemmer and B. H. Clemmons. il diags Eng & Min J 144:72-3 Mr '43
- Streak identification for alumina ores. Can Min J 63:725 N '42

ORE transportation

- Escanaba bubble; new ore docks to be halted. Business Week p19-20 Mr 6 '43

See also

- Iron ores—Transportation

ORE treatment

- Development in the methods of mining and treating iron ores. flow sheet il Blast F & Steel Pl 31:86-7 Ja '43
- Fluorspar helps wage war; Kramer mines, inc. R. Fleming. il Comp Air M 48:7160-3 O '43
- Iron ore beneficiation, 1942. L. J. Erck. Eng & Min J 144:100-1 F '43
- Manganese investigations; ore-dressing studies of eastern manganese ores. W. A. Calhoun and others. U S Bur Mines Rep of Invest 3684:1-11 '43
- Meaty A.I.M.E. program arranged by milling methods committee; reported by A. F. Taggart. Min & Met 24:152-3 Mr '43
- Methods and costs of concentrating hübnertite ores at the Ima tungsten mine, Lemhi county, Idaho. C. M. Dice. flow sheet U S Bur Mines Information Circ 7230:1-14 '43
- Mineral dressing, 1942. R. Schuhmann, jr. Eng & Min J 144:98-100 F '43
- Ore concentration and milling, 1942. T. B. Counselman. il Min & Met 24:59-62 F '43
- Reserves probed; iron ore mines jointly are financing research on low-grade ores. Business Week p65-7 S 4 '43
- Studies of subscreen sizing; grinding and grinding efficiencies. I. M. Six. bibliog il Can Min J 64:147-65 Mr '43
- Tailings re-treatment plant produces flux for lead smelter; Bunker Hill & Sullivan company recovers siderite. J. B. Huttli. flow sheet Eng & Min J 143:56-+ N '42
- Treatment of molybdenum ores; some recent improvements. A. G. Arend. il diag Chem Age (Lond) 48:477-80 My 1 '43
- Tungsten ores and concentrates. Can Min J 64:164-6 Mr '43

See also

- | | |
|----------------------------------|-----------------------------|
| Classifiers | Gold metallurgy |
| Copper metallurgy | Iron metallurgy |
| Crushing | Leaching |
| Crushing machinery | Lead metallurgy |
| Cyanide process | Magnetic separation of ores |
| Electrometallurgy | Metallurgical plants |
| Electrostatic separators | Metallurgy |
| Electrostatic separation of ores | Screening |
| Flotation process | Sintering |

OREGON*See also*

- Geology—Oregon
- Gold mines and mining—Oregon
- Roads—Oregon

ORES*See also*

- | | |
|----------------|-----------------------------|
| Arsenopyrite | Metals |
| Copper ores | Mines and mineral resources |
| Geology | Ore deposits |
| Gold ores | Ore treatment |
| Iron ores | Tin ores |
| Lead ores | Tungsten ores |
| Manganese ores | Zinc ores |
| Metallurgy | |

ORGANIC chemistry. See Chemistry, Organic**ORGANIZATION in industry**

- Centralized organization speeds industrial plant building program; Westinghouse electric & mfg. co. G. Parkman. Eng N 129:794-5 D 3 '42
- Growth of wartime aircraft organization. E. W. Walker. Aero Digest 42:247, 249, 251+ Je '43
- How Vega engineering simplifies production methods. R. A. Trumpis and N. Irwin. il Automotive & Aviation Ind 88:20-1+ Je 15 '43
- Organization and control of mass production. E. A. Boyan. diags Factory Management 101:97-112 S '43
- Our maintenance is geared to wartimes; Aluminum company of America. W. S. Rearick. il Factory Management 101:123-5 Ja '43
- Staff organization for control. J. K. Loudon. Advanced Management 8:17-22+ Ja '43
- Ten years' progress in management; administrative organization. L. S. Fish. A S M E Trans 65:214-15 Ap '43
- Ten years' progress in management; defunctionalization of industry. H. H. Farquhar. A S M E Trans 65:218-21 Ap '43

ORGANIZATION in industry—Continued

We must study organization. H. W. Healy.
Gas J (Lond) 241:374 Mr 24 '43

See also

Advertising department	Employment management
Credit departments	Engineering departments
Efficiency, industrial	Factory management
Employment departments	Industrial management

ORIENTATION (architecture)

See also

Solar heating

ORIENTATION (chemistry)

Orientation of molecules produced photochemically in rigid solvents. G. N. Lewis and J. Bigeleisen. *Am Chem Soc J* 65:520-6 Ap '43

ORIENTATION (crystals). See Crystallography**ORIFICES**

Adjustable orifices for aircraft engine testing; air flow-fuel flow tests. J. P. Green. *il diag Aviation* 42:175-6 Je '43

Calculation of orifice meter coefficients. J. W. J. Bercher. *Pet Eng* 14:105-6, 109 F '43

Fundamental principles of orifice meters. L. K. Spink. *il diag Gas Age* 91:11-15+ Mr 25 '43

Measuring the flow of fluids; use of orifices and manometers. W. Goodman. *diags Heating-Piping* 16:413-18, 461-4, 525-8, 596-8 Ag-N '43

Speeding up measurements of air flow to aircraft engines and carburetors; adjustable orifices. J. P. Green. *il diags Instruments* 16:54-8+ F '43

ORIGIN, Indication of

These labels on exported items are selling friendship for U.S.; OWI fostering their use. M. Beuck. *Ptr Ink* 204:26+ S 3 '43

ORNITHODOROS

American Q fever; experimental transmission by the argasid ticks *ornithodoros moubata* and *O. hermsi*. G. E. Davis. *Pub Health Rep* 58:934-7 Je 25 '43

Ornithodoros ticks as a medium for the transportation of disease agents. R. R. Parker. *bibliog Pub Health Rep* 57:1963-6 D 25 '42

Relapsing fever: the tick *ornithodoros turicata* as a spirochetal reservoir. G. E. Davis. *Pub Health Rep* 58:839-42 My 28 '43

Tick *ornithodoros rudis* as a host to the rickettsiae of the spotted fevers of Colombia, Brazil, and the United States. G. E. Davis. *bibliog Pub Health Rep* 58:1016-20 Jl 2 '43

ORNITHODOROS parkeri

Experimental transmission of the spotted fevers of the United States, Colombia, and Brazil by the argasid tick *ornithodoros parkeri*. G. E. Davis. *bibliog Pub Health Rep* 58:1201-8 Ag 6 '43

ORNITHOLOGISTS' union, American. See American ornithologists' union**ORO, Ecuador**

Revival in El Oro. J. M. Clark. *il map For Comm W* 12:5-8+ Ag 21 '43

ORRVILLE, Ohio**Water supply**

Surface washing of filters at Orrville. J. E. Specht. *Am Water Works Assn J* 35:568-70 My '43

ORSAT apparatus

Flue-gas analysis; the Orsat apparatus; its value in fuel economy. *il Chem Age (Lond)* 47:530-2 D 12 '42

ORTHOGONAL functions. See Functions, Orthogonal**ORTHO-TOLIDINE. See Tolidin****OSAGE orange**

Isolation of lupel from the osage orange (*maclura pomifera* Raf.). L. J. Swift and E. D. Walter. *bibliog il Am Chem Soc J* 64:2539-40 N '42

OSAJIN

Structures of osajin and pomiferin. M. L. Wolfson and others. *Am Chem Soc J* 65:1434-5 Jl '43

OSBORN, Cyrus R. 1897-

Elected vice-president of General motors corporation in direct charge of Diesel locomotive activities. *por Ry Age* 115:240 Ag 7 '43

Promoted to vice-presidency of General Motors. *por Diesel Power* 21:837 S '43

OSCILLATIONS

Electrical circuit analysis of torsional oscillations. L. A. Pipes. *bibliog diags J Ap Phys* 14:352-62 Jl '43

Electro-mechanical analogy in oscillation theory. R. G. Manley. *diags Roy Aeronautical Soc J* 47:22-6 Ja '43

How to prevent oscillations in large inertia fan drives; Pennsylvania Turnpike tunnels. E. O. Marty, S. F. Henderson and F. Richardz. *il diag Heating-Piping* 15:80-1 F '43

Periodic processes in free pseudo-linear oscillatory systems. B. V. Bulgakov. *diag Franklin Inst J* 235:591-616 Je '43

See also

Vibration

OSCILLATIONS, Electric

Equivalent circuits for oscillating systems and the Riemann-Christoffel curvature tensor. G. Kron. *bibliog diags Elec Eng* 62:Trans 25-32 Ja '43

Magnetic fundamental oscillation of the cylindrical cavity with circular cross section; abstract. F. Borgnis. *Wireless Eng* 20:344-5 Jl '43

Methods of obtaining a time-linear voltage rise in saw-tooth oscillations; abstract. Johannsen. *Wireless Eng* 20:96-7 F '43

New analytical method for solving van der Pol's and certain related types of non-linear differential equations, homogeneous and non-homogeneous. J. Shohat. *J Ap Phys* 14:40-8 Ja '43

Self-excited oscillations of capacitor-compensated long-distance transmission systems. R. B. Bodine, C. Concordia and G. Kron. *bibliog diags Elec Eng* 62:Trans 41-4 Ja '43

OSCILLATORS

Analytical demonstration of Hartley oscillator action. F. A. Record and J. L. Stiles. *diags Inst Radio Eng Proc* 31:281-7 Je '43

Automatic frequency-controlled oscillator and amplifier for driving mechanical vibrators. B. V. Potter. *diags U S Bur Mines Rep of Invest* 3702:1-10 '43; Same. *R Sci Instr* 14:207-15 Jl '43; Abstract. *Electronics* 16:194+ N '43

Cylindrical cavity resonators containing several dielectric media. *J Ap Phys* 14:363 Jl '43

Efficient ultra-violet generator; oscillator circuit used in conjunction with electrodeless quartz tube. S. W. Edwards. *il diags Radio N* 30:44-5 N '43

Electrical transducer circuit for use with capacity pick-up devices. E. V. Potter. *diags U S Bur Mines Rep of Invest* 3685:1-7 '43; Same. *R Sci Instr* 14:130-5 My '43; Abstract. *Electronics* 16:150+ Jl '43

Frequency-modulated resistance-capacitance oscillator. C. K. Chang. *diags Inst Radio Eng Proc* 31:22-5 Ja '43

Oscillator and detector demonstrator for war radio training classes. H. C. Lawrence. *diags Radio N* 30:35-6+ S '43

Oscillator or inverter circuit; hydraulic analog; electronic circuit; applications. *il diags Product Eng* 14:650 O '43

Phase-shift generators; theory of the c.w. amplifier with retroaction; derivation of conditions for generation of sinusoidal oscillations; design of a phase-shift note-frequency oscillator of high frequency-stability and freedom from harmonics; abstract. G. Willoner and F. Thekla. *Wireless Eng* 20:349-50 Jl '43

Phase-shift oscillator design charts. W. W. Kunde. *diag Electronics* 16:132-3 N '43

Positive grid or retroacting field oscillators. R. I. Sarbacher and W. A. Edson. *il diags Electronics* 16:108-11+ Ag '43

Practical ultra-high-frequency oscillators. R. Ricketts. *diags Radio N* 29:28-9+ Ap '43

Radio frequency generators. W. Moody. *diags Radio N* 28:40-1 O '42

Spark gap circuits used in induction heating units. *il diag Electronics* 16:126+ Jl '43

OSCILLATORS—Continued

- Stability in high-frequency oscillators. R. A. Heising. diags *Inst Radio Eng Proc* 31:595-600 N '43
- Stabilized oscillator. F. E. Terman. diags *Electronics* 16:130+ F '43
- Switch type audio oscillator. R. P. Turner. diags *Radio N* 29:34-5+ My '43
- Synchronized calibrator for sweep and gain in cathode-ray recording. S. A. Talbot. bibliog diags *R Sci Instr* 14:184-6 Je '43
- Tubes employing velocity modulation. R. I. Sarbacher and W. A. Edson. bibliog diags *Inst Radio Eng Proc* 31:439-52 Ag '43
- Ultra-high frequency oscillations of cylindrical cavity resonators containing two and three dielectric media. D. Middleton. bibliog diags *Phys R* 63:343-51 My 1 '43
- Ultrashort electromagnetic waves; generation. I. E. Mouromtseff. bibliog *il diags Elec Eng* 62:206-15 My '43
- V-H-F receiver oscillator design. S. Y. White. *Electronics* 16:96-7+ J1 '43
- Valve-oscillator theorem. E. Williams. diags *Wireless Eng* 20:489-91 O '43
- Variable-frequency bridge-type frequency-stabilized oscillators. W. G. Shepherd and R. O. Wise. bibliog diags *Inst Radio Eng Proc* 31:256-68 Je '43

See also

Magnetron

OSCILLATORS, Crystal

- High harmonics of quartz crystals control vhf oscillator circuits; abstract. I. E. Fair. diags *Electronics* 16:176+ Ag '43
- Mathematics of the physical properties of crystals. W. L. Bond. *Bell System Tech J* 22:1-72 Ja '43
- Microlineometer; crystal-controlled frequency standard and square-wave generator. E. F. Travis. *il diags Gen Elec R* 46:345-8 Je '43
- Quartz crystal applications. C. F. Booth. *Inst E E J* 90 pt 3:27 Mr '43
- Quartz crystal applications. W. P. Mason; W. L. Bond. *il diags Bell System Tech J* 22:178-262 J1 '43
- Quartz crystal cuts for oscillator plates. L. A. Elbl. *il diags Electronics* 16:110-12+ J1 '43
- Quartz oscillators and resonators in the region from 50 to 300 kc/s; abstract. R. Bechmann. *Wireless Eng* 20:404-5 Ag '43; Same cond. *Electronics* 16:212+ N '43
- Radio to measure moisture content of soil; crystal-controlled oscillator unit. S. R. Winters. *il diags Radio N* 30:23+ S '43

OSCILLOGRAPHS

- Du Mont high frequency oscillograph. *il R Sci Instr* 14:24 Ja '43
- Electric brain remembers what happens in a rectifying circuit. W. E. Pakala. *il Sci Am* 169:25-6 J1 '43
- Garceau velograph. *il Electronics* 15:137 D '42
- Instrument analyzes governor performance. A. F. Schwendner. *il Elec W* 119:1814+ My 29 '43
- Latest in magnetic oscillographs. K. R. Geiser and J. E. Hancock. *il diags Gen Elec R* 46:289-94 My '43
- Marked oscillograph tracings. R. W. Ahlquist. *il diags Gen Elec R* 46:179-82 Mr '43
- Optical oscillograph. K. J. DeJuhasz. *il diags Automobile Eng* 32:483-4 N '43
- Oscillographic measurements in spot welding research. R. A. Wyant. bibliog *il Instruments* 16:478-9+ Ag '43
- Portable recording oscillograph and accessory. *il Electronics* 16:183+ F '43

Films

- Typewriting on film records saves time. W. C. Curl. *il Elec W* 120:323-4 J1 24 '43

OSCILLOGRAPHS, Cathode ray

- Adaptor unit for basic oscilloscope. G. Dexter. *il diags Radio N* 30:40-1+ S '43
- B-H curve tracer for lamination samples; magnetic material used in transformers and chokes. R. Adler. *il diags Electronics* 16:128-31+ N '43
- Calibration of camera shutters with the cathode-ray oscillograph. T. H. Bullock. *il diags Electronics* 16:106-9+ J1 '43
- Cathode-ray oscillograph applied to long-time switching transients. G. W. Dunlap and N. Rohats. *il diags Elec Eng* 62:Trans 231-4 My '43

Chemical analysis with a cathode-ray oscilloscope. T. S. G. Jones. bibliog diags *Electronics* 16:154+ Ap '43

- Electrical method for studying oil film thickness; abstract. R. Poppinga. diags *Automotive & Aviation Ind* 89:44+ J1 1 '43
- Electronic apparatus for vibration testing. R. O. Fehr and C. Shabtach. *il diags Electronics* 16:94-6 Je '43
- Electronic beam control. S. R. Winters. *il diags Radio N* 29:18-19+ Ja '43
- Electronic circuit for studying hunting. M. J. DeLerno and R. T. Bassett. *il diags Elec Eng* 61:603-6 D '42
- Fundamental a.c. circuit demonstrator; electronic switch to be used in conjunction with cathode-ray oscilloscope. S. A. Procter. diags *Radio N* 30:35-7 O '43
- Hammer test for welded pressure vessels; an investigation. C. O. Dohrenwend. *il diags Welding J* 22:sup507-21 O '43
- High-speed cathode-ray oscillography. J. H. Bryant and M. Newman. diags *Engineering* 155:241-2 Mr 26 '43
- Industrial applications of the oscilloscope. G. Dexter. diags *Radio N* 30:40-1+ N '43
- Insulation testing of electric windings. C. M. Foust and N. Rohats. bibliog *il diags Elec Eng* 62:Trans203-6 Ap '43
- Measurement of torsional vibrations. R. Stansfield. diags *Inst Mech Eng J* & *Proc* 148:Proc 175-93 Mr '43; Same abr. *Engineering* 154:178-80, 198-200 Ag 28-S 4 '42; Same abr. *Engineer* 174:77-9, 101-2 J1 24-31 '42; Discussion. *Engineering* 154:74 J1 24 '42
- Measuring coil characteristics without an impedance bridge. E. D. Brailsford. diags *Electronics* 16:86-8+ My '43
- Microlineometer; crystal-controlled frequency standard and square-wave generator. E. F. Travis. *il diags Gen Elec R* 46:345-8 Je '43
- New frequency-comparison circuit for the cathode-ray tube. G. H. Rawcliffe. diags *Inst E E J* 89 pt 3:191-4 D '42
- Oscillograph speeds up training of electrical instrument mechanics. M. D. Jackman. *il Instruments* 16:64-5 F '43
- Pressure of exploding gunpowder is recorded with oscillograph. *il Electronics* 16:186+ Ag '43
- Radio-frequency capacitometer; cathode-ray-tube instrument for precise radio-frequency measurement of capacitance and inductance. F. J. Moles. *il diags Gen Elec R* 46:457-9 Ag '43
- Radio-frequency-operated high-voltage supplies for cathode-ray tubes. O. H. Schade. *il diags Inst Radio Eng Proc* 31:158-63 Ap '43
- Rapid non-destructive material testing with the cathode-ray oscilloscope. W. A. Knoop, Jr. diags *Instruments* 16:14-15 Ja '43
- Recording unit for strain and timing functions; dynamic performance of heavy machines recorded by combination of electronic and photographic equipment. J. H. Meier. *il diags Electronics* 16:79-83+ Ap '43
- Servicing resistance welding controls. B. L. Weller. *il diags Electronics* 16:78-81+ Ja '43
- Signal converter; thermionic discharge tube for production of time base deflection potentials of a cathode-ray tube. P. Nagy and M. J. Gaddard. bibliog *il diags Wireless Eng* 20:273-99 Je '43
- Study of voltage transients in arc-furnace circuits. J. B. Hodum and J. E. Rice. bibliog *il diags Elec Eng* 62:Trans 556-62 Ag '43
- Surge testing. C. M. Foust. bibliog *il Gen Elec R* 45:629-32 N '42
- Tracing valve characteristics, using the cathode-ray oscillograph. G. Bocking. bibliog diags *Wireless Eng* 19:556-63 D '42
- Wide-band oscilloscope for problems in television and other fields. E. D. Cook. *il diags Inst Radio Eng Proc* 31:410-19 Ag '43

OSGOOD, William Fogg, 1864-1943
 & Sketch. J. L. Coolidge, G. D. Birkhoff and E. C. Kemble. *Science* 98:339-400 N 5 '43

OSMOSALT. See Wood preservation

OSMOSIS

- Electrical drainage of fine soils; electro-osmotic process. Roads & Bridges 80:99 D '42

OSMOSIS—Continued

Osmotic properties of solutions of some typical colloidal electrolytes. J. W. McBain and O. E. A. Bolduan. *Bibliog J Phys Chem* 47:94-103 F '43

See also

Water purification—
Electroosmosis process

OSMOTIC coefficients

Activity and osmotic coefficients of sodium chlorate by an isopiestic method. J. H. Jones. *bibliog Am Chem Soc J* 65:1353-4 J1 '43

OSMOTIC pressure

Molecular weights and intrinsic viscosities of polyisobutylenes. P. J. Flory. *bibliog Am Chem Soc J* 65:372-82 Mr '43

Molecular weights of high polymers. M. L. Huggins. *bibliog diags Ind & Eng Chem* 35:980-6 S '43

Osmotic pressure. E. C. Craven. *Chem & Ind* 62:86-7 F 27 '43

Osmotic pressure and viscosity measurements with cellulose acetate fractions. A. Bartovics and H. Mark. *bibliog Am Chem Soc J* 65:1901-6 O '43

Osmotic pressures of polyvinyl chloride solutions by a dynamic method. R. M. Fuoss and D. J. Mead. *bibliog diags J Phys Chem* 47:59-70 Ja '43

OSNABURG

Role of textiles in camouflage. *il Textile World* 93:68-9 J1 '43

OSTRACODA, Fossil

Bearing of foraminifera and ostracoda on lower cretaceous Fredericksburg-Washita boundary of north Texas. F. E. Lozo, jr. *bibliog il diags maps Am Assn Pet Geologists Bul* 27:1060-80 Ag '43

Non-marine ostracoda from the lower Pennsylvanian in the southern Appalachians, and their bearing on inter-continental correlation. H. W. Scott and C. H. Summerston. *bibliog Am J Sci* 241:653-75, pl 1-2 N '43

OSTWALD color system. See Color**OTTAWA, Ontario****Water supply**

Disinfection of mains at Ottawa. H. R. Stockwell. *il Water & Sewage* 81:19 Ag '43

OTTOMAN bank

Annual general meeting of shareholders, London. *Economist* 144:25-6 Ja 2 '43

OUACHITA mountains

Quartz veins in the Ouachita mountains of Arkansas and Oklahoma (their relations to structure, metamorphism, and metalliferous deposits). H. D. Miser. *bibliog maps Econ Geol* 38:91-118 Mr '43

OUTBOARD, marine and manufacturing company

Stocks with three-way profit prospects. *Mag of Wall St* 71:710 Ap 3 '43

Thumbnail stock appraisal. *Mag of Wall St* 71:291; 72:197 D 26 '42, My 29 '43

OUTDOOR fireplaces. See Fireplaces, Outdoor**OUTDOOR power plants.** See Power plants, Outdoor**OUTDOOR steam plants.** See Steam plants, Outdoor**OVALBUMIN.** See Albumin**Ovens**

Dries molds in continuous oven; Kaukauna machine corp. P. Dwyer. *il Foundry* 71:88-91+ F '43

L.T. air circulated constant temperature oven. R. E. Brock. *il Chem & Ind* 62:138-9 Ap 10 '43

Thermostatic equipment. *Chem Age (Lond)* 48:452 Ap 24 '43

See also

Coke ovens
Kilns

OVER-the-counter marketing. See Securities—Over-the-counter marketing**OVERALLS**

Issues own ration stamps to allot restricted output to dealers; Oshkosh B'Gosh. *il Ptr Ink* 202:94+ Mr 26 '43

OVERCOATING. See Coating fabrics**OVERDRAFTS**

90 clearing houses now return checks the next day. *map Bankers Mo* 60:197-9+ My '43

Set-off against special account. C. R. Rosenberg, jr. *Burroughs Clearing House* 27:30 J1 '43

OVERHEAD expense

Distribution of overhead costs in companies handling both normal and war contracts. S. W. Specthrie. *N A C A Bul* 24:425-32 D 15 '42

Establishing control of factory overhead. R. W. Herr. *N A C A Bul* 24:1399-1415 Ag 15 '43

Keep your overhead under your thumb today. A. C. Klechlin. *Inland Ptr* 111:43-5 S '43

Overhead of Pennsylvania contractors. *Sheet Metal Worker* 34:17 F '43

See also

Cost accounting

OVERPASSES. See Streets—Intersection**OVERTIME**

Compensation of salaried employees for overtime. *Monthly Labor R* 57:239-40 Ag '43

Elimination of overtime payments from gross hourly earnings. L. M. Solomon, T. P. Kanninen and J. M. Sherman. *Monthly Labor R* 55:1053-6 N '42

Exempts 75% overtime from compensation premiums. *East Underw* 44:36 My 28 '43

48-hour week; increase in costs. *Nat City Bank* p27 Mr '43

48-hour week pay rise called ruinous for some retail stores. *Comm & Fin Chr* 157:1399 Ap 15 '43

48-hour week; step-by-step program of National bank of Detroit. E. J. Fallor. *il Burroughs Clearing House* 27:13-16+ Ap '43

How to simplify computing overtime wages. W. C. Hubbell. *il Bankers Mo* 60:260-1+ Je '43

New compensation wartime wage program approved. *Nat Underw* 47:34 Ag 26 '43

Overtime pay for government employees. *Monthly Labor R* 56:359-61 F '43

Overtime pay of government employees. *Monthly Labor R* 56:1203-4 Je '43

Overtime work saves money. C. R. Kennett. *Bankers Mo* 60:78-9 F '43

President signs federal overtime pay bill; 48-hour week and elimination of non-vital work. *Comm & Fin Chr* 157:72 Ja 7 '43

Quality control applied to business administration. W. B. Rice. *Am Stat Assn J* 38:228-32 Je '43

Reviews overtime pay requirements under wage-hour and Public contracts laws. L. M. Walling. *Comm & Fin Chr* 157:841+ Mr 4 '43

Ruling of Secretary of labor on seventh-day double time. *Monthly Labor R* 56:591 Mr '43

OVERVOLTAGE

Fundamentals of science relating to electroplating. *Metal Finishing* 41:215-16 Ap '43

Polarization at oxidation-reduction electrodes; the ferrocyanide-ferricyanide electrode. W. R. Carmody and J. J. Rohan. *Electrochem Soc Trans* 83 (preprint 11):137-45 Ap '43

Studies on overvoltage; a study of decomposition potentials; cathodic and anodic polarization of a platinized platinum cathode near the reversible value in hydrogen saturated acid solutions. A. L. Ferguson and M. B. Towns. *Electrochem Soc Trans* 83 (preprint 8):105-17 Ap '43

Studies on overvoltage; cathodic and anodic polarization of a platinized platinum cathode near the reversible value in nitrogen saturated acid solutions. A. L. Ferguson and M. B. Towns. *Electrochem Soc Trans* 83 (preprint 9):119-28 Ap '43

OVERVOLTAGE (electric lines)

Abnormal overvoltages caused by transformer magnetizing currents in long transmission lines. H. A. Peterson and T. W. Schroeder. *bibliog diags Elec Eng* 62:Trans 32-40 Ja '43

Cause and control of some types of switching surges. T. W. Schroeder. *bibliog diags Elec Eng* 62:Trans 696-700 N '43

OVERVOLTAGE (electric lines)—Continued

Correlation of system overvoltages and system-grounding impedance. bibliog Elec Eng 62:Trans 17-24 Ja '43

Overvoltage protection of current-transformer secondary windings and associated circuits. R. H. Kaufmann and G. Camilli. il diags Elec Eng 62:Trans 467-72 Jl '43

Study of voltage transients in arc-furnace circuits. J. B. Hodtun and J. B. Rice. bibliog il diags Elec Eng 62:Trans 556-62 Ag '43

Switching overvoltage hazard eliminated in high-voltage oil circuit breakers. L. F. Hunt, E. W. Boehne and H. A. Peterson. bibliog il diags Elec Eng 62:Trans 98-106 F '43

OWENS-ILLINOIS glass company

Competitive position. C. Macdonald. Barron's 22:20 N 30 '42

Profits level off. Barron's 23:6 Jl 26 '43

OWNERS', landlords' and tenants' public liability insurance. See Insurance, Owners', landlords' and tenants' public liability

OXALATES

Some yttrium-group oxalates. J. K. Marsh. Chem Soc J p40-1 Ja '43

OXALIC acid

Extraction of ascorbic acid from plant materials; relative suitability of various acids. J. D. Ponting. bibliog Ind & Eng Chem Anal ed 15:389-91 Je 15 '43

Separation of iron from cobalt or nickel. R. J. DeGray and E. P. Rittershausen. bibliog Ind & Eng Chem Anal ed 15:26-7 Ja 15 '43

OXFORD university

Ophthalmological research at the University of Oxford. Science 98:318-19 O 8 '43

OXIDASES

Antibacterial effect of enzymatic xanthine oxidation. F. Lipmann and C. R. Owen. bibliog Science 98:246-8 S 10 '43

Lipoid oxidase studies; a method for the determination of lipoxidase activity. R. J. Sumner. bibliog Ind & Eng Chem Anal ed 15:14-15 Ja 15 '43

Unsaturated fat oxidase; distribution, function and histochemical identification in plant tissues. D. S. Van Fleet. bibliog Am Chem Soc J 65:740 Ap '43

OXIDATION

Automatic processing plant; descaling of metals; oxidation from atmosphere. diags Chem Age (Lond) 47:533-4 D 12 '42

Catalysis in the oxidation of lubricating oil. R. G. Larsen and F. A. Armfield. bibliog il Ind & Eng Chem 35:581-8 My '43

Catalytic oxidations of naphthalene series. R. N. Shreve and R. W. Welborn. bibliog il diags Ind & Eng Chem 35:279-88 Mr '43

Chemical utilization of natural gas and natural gasoline hydrocarbons by oxidation. H. Linford. bibliog il Nat Pet N 35 pt 2:R15-19 Ja 6 '43; Same. Pet Eng 14:89, 91-2, 94-4 Ja '43; Same cond. Oil & Gas J 41:71, 73-4 N 12 '42

Chemicals, solvents by natural-gas oxidation. R. J. Daugherty. il Oil & Gas J 41:36 Ja 21 '43

Coal oxidation. W. Fuchs, T. S. Polansky and A. G. Sandhoff. bibliog il Ind & Eng Chem 35:343-5 Mr '43

Determination of surface oxidation of bituminous coal. J. A. Radspringer and H. C. Howard. bibliog diags Ind & Eng Chem Anal ed 15:566-70 S 15 '43

Determination of total sulfur in rubber and rubberlike materials. L. E. Cheyney. bibliog Ind & Eng Chem Anal ed 15:164-5 Mr 15 '43

Effect of active nitrogen and of certain nitrogen compounds on catalytic properties of carbon; oxidation of hydroquinone and potassium urate. P. F. Bente and J. H. Walton. bibliog J Phys Chem 47:329-37 Ap '43

Effect of oxidation on reactivity and swelling of Illinois coals. O. W. Rees and W. F. Wagner. bibliog Ind & Eng Chem 35:346-8 Mr '43

Estimation of carbonyl groups in chromic anhydride oxystarch and oxycellulose by means of hydroxylamine. E. K. Gladding and C. B. Purves. bibliog diags Paper Tr J 116:26-31 Ap 8 '43

Factors determining the course and mechanisms of Grignard reactions; the oxidation of Grignard reagents, effect of metallic catalysts. M. S. Kharasch and W. B. Reynolds. Am Chem Soc J 65:501-4 Ap '43

Hydrolysis and catalytic oxidation of cellulosic materials; characterization of cellulose. R. F. Nickerson. bibliog il Ind & Eng Chem 34:1480-5 D '42

Kinetics of oxidation of cellulose with periodic acid. G. Goldfinger, H. Mark and S. Siggia. bibliog Ind & Eng Chem 35:1083-6 O '43

Kinetics of the reaction between ascorbic acid and oxygen in the presence of copper ion. E. Silverblatt, A. L. Robinson and C. G. King. bibliog Am Chem Soc J 65:137-41 F '43

Lead tetracetate oxidations in the sugar group; the rates of oxidation of trehalose, levoglucosan, α -methyl-L-sorbose, polygalitol and stryctol in glacial acetic acid. R. C. Hockett, M. T. Dienes and H. E. Ramsden. bibliog Am Chem Soc J 65:1474-7 Ag '43

Lead tetracetate oxidations in the sugar group; triphenylmethyl ethers of β -methyl-D-arabinopyranoside and of α -methyl-L-fucopyranoside; the determination of their structures. R. C. Hockett and D. F. Mowery. Jr. bibliog Am Chem Soc J 65:403-9 Mr '43

Mechanism of the oxidation of oleic and elaidic acids and their methyl esters by hydrogen peroxide in acetic acid; further observations on the configurations of the 9:10-dihydroxystearic acids. G. King. Chem Soc J p37-8 Ja '43

Mixed heteropoly acid catalysts for the vapor phase air oxidation of naphthalene. H. T. Brown and J. C. W. Frazer. Am Chem Soc J 64:2917-20 D '42

Oxidation-corrosion of lubricating oils. C. L. Pope and D. A. Hall. bibliog il diags Nat Pet N 35 pt 2:R279-81 Je 2 '43

Oxidation of adrenaline. F. Bergel and A. L. Morrison. Chem Soc J p48 F '43

Oxidation of amino acids by hydrogen peroxide in formic acid. G. Toennies and R. P. Homiller. bibliog Am Chem Soc J 64:3054-6 D '42

Oxidation of ball clays. G. A. Bole. bibliog Am Cer Soc Bul 21:276-7 N 15 '42

Oxidation potential of the chromocyanide-chromocyanide couple and the polarography of the chromium cyanide complexes. D. N. Hume and I. M. Kolthoff. bibliog Am Chem Soc J 65:1897-1901 O '43

Oxidation potentials of methoxyacetophenones. R. H. Baker and J. G. Schafer. bibliog Am Chem Soc J 65:1675-6 S '43

Oxidation products of α -cholestenyl acetate. O. Wintersteiner and M. Moore. bibliog Am Chem Soc J 65:1513-16 Ag '43

Oxidative degradation of neoergosteryl acetate. R. P. Jacobsen. bibliog Am Chem Soc J 65:1789-92 O '43

Photo-colorimetric study of the oxidation of nitric oxide at low pressures. J. H. Smith. bibliog Am Chem Soc J 65:74-8 Ja '43

Photo-reactions; photo-oxidation of non-labile thioketones in sunlight. A. Schönberg and A. Mostafa. Chem Soc J p275-6 Je '43

Preparation of aldehydes by the disruptive oxidation of the ethylene linkage. R. R. Davies and H. H. Hodgson. Soc Chem Ind J 62:90-2 Je '43

Preparation of aldehydes, ketones, and acids by ozone oxidation. A. L. Henne and P. Hill. Am Chem Soc J 65:752-4 My '43

Recent advances in fur dyeing. H. Weisskopf. Am Dyestuff Rep 32:163-4 Mr 29 '43

Revision of the oxidation potentials of the orthophenanthroline- and dipyrilidyl-ferrous complexes. D. N. Hume and I. M. Kolthoff. bibliog Am Chem Soc J 65:1895-7 O '43

Simple demonstration of the oxidation of ammonia to nitric acid. S. S. Hauben and R. S. Siegel. diags J Chem Educ 20:166 Ap '43

OXIDATION—Continued

Statistical comparison of the methods for the determination of the oxidation tendency of insulating oils. A. E. Flowers and S. A. Fruchtman. *Am Soc T M Proc* 42: 896-913 '42

Steroids with double bonds between quaternary carbon atoms; the oxidation of a-ergosteryl acetate. H. E. Staveland and G. N. Bollenback. *bibliog Am Chem Soc J* 65: 1285-9 J '43

Test for oxidation characteristics of steam-turbine oils is proposed. *Nat Pet N* 35 pt 2: R437-8 S 1 '43

Transition state theory of the formation of thin oxide films on metals. E. A. Gulbransen. *diags Electrochem Soc Trans* 83 (preprint 4):53-65 Ap '43

Vinyl alcohols; oxidative cleavage. R. C. Fuson and others. *bibliog Am Chem Soc J* 64:2886-8 D '42

See also

Combustion
Corrosion and anti-corrosives

Autoxidation

Autoxidation of ascorbic acid. R. W. Peterson and J. H. Walton. *bibliog Am Chem Soc J* 65:1212-17 Je '43

Course of autoxidation reactions in polyisoprene and allied compounds; the oxidation of rubber in the presence of acetic acid or acetic anhydride. G. F. Bloomfield. *Chem Soc J* p356-60 Ag '43

Course of autoxidation reactions in polyisoprenes and allied compounds. E. H. Farmer, D. A. Sutton and A. Sundralingam. *diags Chem Soc J* p119-33 Mr '43

Detection of an intermediate step in the autoxidation of hydroquinone; aerial fogging of photographic emulsions. T. H. James. *bibliog il J Chem Phys* 11:183-7 Ap '43

Oxidation processes; the autoxidation of ascorbic acid. A. Weissberger, J. E. LuValle and D. S. Thomas, Jr. *bibliog Am Chem Soc J* 65:1934-5 O '43

Oxidation processes; the effect of reducing agents on the autoxidation of some photographic developing agents. A. Weissberger, D. S. Thomas, Jr. and J. E. LuValle. *bibliog Am Chem Soc J* 65:1489-95 Ag '43

OXIDATION, Electrolytic

Electrolytic oxidation of thiosulfate in ethylene glycol solution. S. Glasstone, V. V. Barr and B. O. Heston. *bibliog Electrochem Soc Trans* 84 (preprint 10):79-86 O '43

Studies in electrolytic oxidation; the electrolytic oxidation of formaldehyde. A. Hickling and F. Rodwell. *diag Chem Soc J* p90-9 Mr '43

Surface protection; light metals; German data on the electrolytic oxidation of aluminum alloys. *il Iron Age* 150:64-8 D 3 '42

OXIDES

Electronic structures and spectra of triatomic oxide molecules. R. S. Mulliken. *bibliog il diags Rs Mod Phys* 14:204-15 Ap-Jl '42

Elimination of sorption-desorption hysteresis in hydrous oxide gels; tantalum pentoxide, stannic oxide, and titanium dioxide. H. B. Weiser, W. O. Milligan and W. C. Simpson. *bibliog J Phys Chem* 46:1051-9 D '42

Reactions of cobalt(III), cobalt(II), and iron(II) oxides in liquid ammonia. T. E. Moore and G. W. Watt. *bibliog Am Chem Soc J* 64:2772-5 D '42

Surface area of oxide coated cathodes by adsorption of gas at low pressures. L. A. Wooten and C. Brown. *diag Am Chem Soc J* 65:113-18 Ja '43

See also

Alumina
Ethers
Iron oxides
Lime

Magnesia
Nitrogen oxides
Peroxides
Silica

OXIDIMETRY

Cerate and periodate oxidimetry; perchlorate-cerate and periodate ions as oxidants in the determination of organic compounds. G. F. Smith and F. R. Duke. *Ind & Eng Chem Anal ed* 15:120-2 F 15 '43

OXIDOSTEARIC acid

Stereochemical relationships of the 9:10-oxidostearic acids and the 9:10-dihydroxystearic acids. D. Atherton and T. I. Hilditch. *Chem Soc J* p204-8 My '43

OXIMETERS

Oximeter, an instrument for measuring continuously the oxygen saturation of arterial blood in man. G. A. Millikan. *il diags R Sci Instr* 13:434-44 O '42; Abstract. *Electronics* 16:130-4 Ja '43

OXYACETYLENE apparatus

Cleaning gas welding and cuttings tips. *Iron Age* 151:68 My 20 '43; *Marine Eng* 48:234 Ap '43; *Steel* 112:151-2 Ap 12 '43; *Safety Eng* 85:40 My '43

Don'ts for acetylene operators. *il Roads & Sts* 86:78 J '43

Maintenance procedure for gas welding and cutting apparatus. F. Waldo. *il Iron Age* 151:44-7 F 25 '43; Same. *Blast F & Steel* Pl 31:208-10 F '43

Multi-flame jig facilitates the brazing of tool bits to shanks. *il Mach* 49:139-41 Ja '43

Organizing facilities to promote production welding in shipyards. G. V. Slotman. *il plans Marine Eng* 47:128-37 D '42

Special torch tip for lead burning. *il Elec W* 120:676-7 Ag 21 '43

Safety measures

Precautions for preventing personal injury to welding and cutting operators. H. F. Reinhard. *il Welding J* 22:624-5 Ag '43; Same cond. *Sheet Metal Worker* 34:30-1 S '43; Same abr. *Safety Eng* 86:20-1 O '43
Welding and cutting safety. J. M. Robbins. *il Safety Eng* 85:16-7 My; 26-30 Je; 86: 34-6 J '43

OXYACETYLENE cutting

Advantages of square tubing; National cylinder gas company flame-cutting machines. *il diag Product Eng* 14:418-21 J '43

Assembly-line plate cutting at West Coast shipyards. G. V. Slotman. *il Marine Eng* 48:167-74 Mr '43

Cantilever bar increases flame-cutting output. *il Steel* 113:116 S 6 '43; *Iron Age* 152: 47 Ag 26 '43

Conservation and effective use of equipment and supplies for welding and cutting. H. Ulmer. *Welding J* 21:823-6 D '42

Craft of demolition; safe practice with acetylene and explosives. J. Langley. *il Chem Age (Lond)* 48:525-6 My 15 '43

Flame cutting applications greatly expanded by improvised setups. F. Waldo. *il Steel* 113:82-3 O 18 '43

Flame cutting; use of oxy-acetylene on rolled armour plate. *Automobile Eng* 33:211-13 My '43

Gas cutting in shipbuilding. R. F. Helmkamp. *il Welding J* 21:827-33 D '42; Excerpts. *Marine Eng* 47:156 N '42

Gas cutting in steel mills. S. D. Baumer. *il Welding J* 21:836-8 D '42

How to utilize most effectively the flame cutting of parts for arc welding. W. J. Brooking. *il diags Steel* 112:96, 98-9 Je 21; 102-3-4 Je 25 '43

Improved methods of machine flame-cutting. H. E. Rockefeller. *il diags Welding J* 22: 93-9 F '43

Investigation of the lateral distortion produced in mild steel plates by oxyacetylene cutting. C. C. Osgood. *il diags Welding J* 22:sup308-16 J '43

Kinks for the cutting operator. R. S. Babcock. *il diags Welding J* 22:439-40 Je '43

Multi-torch increases oxyacetylene cutting. *il Eng N* 131:412-13 S 9 '43

One-piece press stand made by flame cutting and welding. H. E. Berg. *il Welding J* 22: 601-2 Ar '43

Oxy-acetylene welding and cutting. 1942. A. K. Seeman. *il Metals & Alloys* 17:81 Ja '43

Pipe bevels flame-cut automatically. I. Chapman and G. Allen. *diag Am Mach* 87:114-15 O 14 '43

Planning for production welding and cutting in a modern shipyard. W. E. Bowen. *il plan Welding J* 22:904-11 N '43

Plumbism resulting from oxyacetylene cutting of painted structural steel. I. R. Tabershaw, B. P. W. Ruotolo and R. P. Glenson. *bibliog J Ind Hygiene* 25:189-91 My '43

OXYACETYLENE cutting—Continued

Producing serrated angle beams; specially designed oxy-acetylene cutting machine. S. O. Jones. *il Marine Eng* 48:163-4 Mr '43
Redesigned tip speeds flame cutting. G. K. Dieffenbacher. *diags Am Mach* 87:102 My 27 '43

Salvage is the answer to scarcity of replacement parts; use of oxyacetylene welding and cutting. R. B. Aitchison. *il Welding J* 22:5-9 Ja '43

Welding and cutting in gas-plant maintenance. V. Forgett and F. Waldo. *il Gas Age* 91:9-11+ F 11 '43

OXYACETYLENE flame

Flame conditioning steel mechanically. L. H. Such. *il Steel* 113:112+ N 8 '43

Flame cutting and hardening ag tank sprocket production. *il Mach* 49:182-3 D '42

Flame hardening tank turret ring races. T. E. Lloyd. *il Iron Age* 151:64-5 Mr 25 '43

Flame-priming method of preparing steel surfaces for painting. E. W. Deck. *bibliog il diags Iron Age* 150:80-2 O 22; 44-8 O 29 '42; Same. *Metal Finishing* 41:186-8, 249-52 Mr-Apr '43

Flame shrinking galvanized plates without generating obnoxious fumes. A. Lake. *il Steel* 112:108-9+ Ap 19 '43

New developments in flame hardening. S. Smith. *il Welding J* 22:21-3 Ja '43

Ordinance flame hardening. S. Smith. *il Welding J* 22:911-19 N '43

Oxyacetylene flame straightening. L. Grover. *il diags Eng N* 131:21-4 Jl 1 '43

Plate shrinker; galvanized metal plates shrunk without burning, and fumes. *Business Week* p78+ F 20 '43

Railroad shop flame hardening. S. Smith and J. G. McIlhiney. *il diags Ry Mech Eng* 117:422-5 S '43

Railroads' use of flame hardening processes. F. C. Haase. *il Ry Mech Eng* 116:511-14+; 117:18-20, 24 D '42-Ja '43

Restoring a corroded penstock; oxyacetylene flame-priming to remove rust and scale before applying protective paint. *il Power Pl Eng* 47:86-7 Je '43

Straightening heat-treated parts by torch spotting. G. B. Berlien. *il Steel* 112:112+ Ap 12 '43

Warpage corrected by flame. C. W. Hale. *diags Am Mach* 87:91 Ap 15 '43

OXYACETYLENE welding

Avoid fatigue; correct manner of holding blowpipe and welding rod. H. H. Griffith. *il Welding J* 22:72 S '43

Bright-way units welded—reused. *il Elec W* 120:1392+ O 16 '43

Conservation and effective use of equipment and supplies for welding and cutting. H. Ullmer. *Welding J* 21:823-6 D '42

Design of joints for arc and gas welding processes; joints which may be used in marine construction; diagrams. *Welding J* 21:758-66 N '42

Functions of a welding flux. H. H. Griffith. *il Welding J* 22:429-30 Je '43

High speed tube welding; automotive torque tubes. G. V. Slottman. *il diags Iron Age* 150:59-66 N 26 '42

How to conserve rods and flux. *diags Sheet Metal Worker* 33:23+ N '42

New quarry drills from worn-out steel. *Eng N* 129:732 N 19 '42

One-piece press stand made by flame cutting and welding. H. E. Berg. *il Welding J* 22:601-2 Ag '43

Operation of the pressure welding process. P. Reed. *il Oil & Gas J* 41:35, 45 D 17 '42

Organizing facilities to promote production welding in shipyards. G. V. Slottman. *il plans Marine Eng* 47:128-37 D '42

Oxyacetylene pressure welding. C. F. Keel. *il diags Welding J* 22:sup212-13 My '43

Oxy-acetylene welding and cutting. 1942. A. K. Seeman. *il Metals & Alloys* 17:81 Ja '43

Preparation for welding. *diags Sheet Metal Worker* 34:29-32 Mr '43

Pressure welding of heavy tubing; aircraft landing gear struts. W. G. Wood. *il Iron Age* 152:56-8 S 23 '43

Repairing construction equipment by welding. *il Roads & Sts* 85:54-6 D '42

Salvage is the answer to scarcity of replacement parts; use of oxyacetylene welding and cutting. R. B. Aitchison. *il Welding J* 22:5-9 Ja '43

Silicon loss between the rod and the deposited metal in oxyacetylene welding of cast iron. R. M. Allen, F. F. Dennis and G. Swartz. *Welding J* 22:sup179-81 Ap '43
Small tool reclamation; abstract. A. Havens. *Metals & Alloys* 17:394+ F '43
Welding wrought iron, high carbon steel and cast steel. H. R. Morrison. *il Welding J* 22:418-20 Je '43

Castolin eutectic process

Low temperature joining for production and repair. R. S. Burpo, Jr. *il Metals & Alloys* 18:513-17 S '43

Tool salvaging by low-temperature joining; with cost data. B. Laune. *Welding J* 22:423-5 Je '43

Safety measures

Safe practice in repairing tanks. *diags Sheet Metal Worker* 34:26-9 Ap '43; Abstract. *Chem Age (Lond)* 48:425-6 Ap 17 '43

Study and teaching

How to learn basic pipe welding; illustrated instructions; study sheets. *Power* 87:274-5, 343-4, 415-16, 485, 555-6 Ap-Ag '43

Proposed code of minimum requirements for instruction of welding operators; Part B-1, oxyacetylene welding of steel-aircraft. *il diags Welding J* 22:522-44 Jl '43

Training with the aid of the picture screen. L. S. Metcalfe. *il Welding J* 22:120 F '43

Testing

Fatigue strength of welded aircraft joints. T. V. Buckwalter and O. J. Horger. *bibliog il diags Welding J* 21:sup25-39 N '42

Methods of testing welds. H. V. Inskeep. *il diags Welding J* 22:889-92 N '43

Swiss fatigue tests of oxyacetylene welded aircraft tubing. M. Heiz. *Welding J* 22:sup62 F '43

OXYCELLULOSE

Estimation of carbonyl groups in chromic anhydride oxystarch and oxycellulose by means of hydroxylamine. E. K. Gladding and C. E. Purves. *bibliog diags Paper Tr J* 116:26-31 Ap 8 '43; Same cond. *Paper Ind* 25:306-9 Je '43

Oxycellulose made by a new method. A. J. Hall. *diag Textile Col* 65:148-50 Ap '43

OXYGEN

Absorption of gases at low temperature and pressure on smooth silver. M. H. Armbruster. *bibliog Am Chem Soc J* 64:2545-53 N '42

Absorption of oxygen by glutathione in alkaline solutions; kinetics of the reaction at pH 13. M. B. Young and H. A. Young. *Am Chem Soc J* 65:1681-7 S '43

Direct replacement of oxygen in hydantoins and barbiturates by sulfur. H. R. Henze and P. E. Smith. *bibliog Am Chem Soc J* 65:1090-2 Je '43

Effect of oxygen on the fluorescence of certain hydrocarbons. J. A. Miller and C. A. Baumann. *bibliog il Am Chem Soc J* 65:1540-6 Ag '43

Inflammability of methylene chloride-oxygen-nitrogen mixtures. G. W. Jones, R. E. Kennedy and F. E. Scott. *diags U S Bur Mines Rep of Invest* 3727:1-7 '43

Low temperature adsorption of nitrogen, oxygen, argon, hydrogen, *n*-butane and carbon dioxide on porous glass and on partially dehydrated chabazite. P. H. Emmett and T. W. Dewitt. *bibliog Am Chem Soc J* 65:1253-62 Jl '43

Magnetic susceptibility of oxygen and nitric oxide at low field strengths. A. Burris and C. D. Hause. *bibliog diag J Chem Phys* 11:442-5 O '43

Microelectrodes for measuring local oxygen tension in animal tissues. P. W. Davies and F. Brink, Jr. *bibliog il diag R Sci Instr* 13:524-33 D '42

Oxygen under pressure in carbon monoxide poisoning; effect on dogs and guinea pigs. E. End and C. W. Long. *bibliog J Ind Hygiene* 24:302-6 D '42

Phosphorescence of adsorbed triphenylamine and its quenching by oxygen. J. Franck and P. Pringsheim. *bibliog J Chem Phys* 11:21-7 Ja '43

Reaction of gases on the surface of a single crystal of copper. A. T. Gwathmey and A. F. Benton. *bibliog il J Phys Chem* 46:969-80 N '42

OXYGEN—Continued

Reversible oxygen electrode. W. G. Berl. bibliog Electrochem Soc Trans 83 (preprint 19):231-48 Ap '43

Thermal hydrogen-oxygen reaction; measurements in large vessels. O. Oldenberg and J. E. Morris. J Chem Phys 11:247 My '43

See also

Oxidation Water—Heavy oxygen
Oxides water
Ozone

Analysis

Determination of active oxygen in the presence of barium and lead. M. Fleischer. Ind & Eng Chem Anal 15:31-2 Ja 15 '43

Determination of dissolved oxygen. R. C. Adams and others. il diag Can Chem & Process Ind 27:422, 424, 426+ Jl '43

Determination of low concentrations of oxygen in gas. J. A. Shaw. Ind & Eng Chem Anal 14:891-2 N 15 '42

Rapid analysis of oxygen in molten iron and steel; abstract. G. Derge. Iron Age 151:59 F 25 '43

Industrial applications

See also
Oxyacetylene flame

Isotopes

Investigation of the mechanism of chemical reactions with heavy oxygen. A. E. Brodsky and others. bibliog J Chem Phys 11:342 Jl '43

Use of the exchange between carbon dioxide, carbonic acid, bicarbonate ion, and water for isotopic concentration. A. F. Reid and H. C. Urey. bibliog J Chem Phys 11:403-12 S '43

Manufacture

Electrolysis of water; plant for the production of pure hydrogen and oxygen. il Chem Age (Lond) 47:535-6 D 12 '42

OXYGEN, Liquid

Conduction of electricity in highly insulating liquids. C. Pao. bibliog diags Phys R 64: 60-74 Ag 1 '43

OXYGEN apparatus

Contributions of the Puritan compressed gas corporation to aeronautical progress. G. W. Larson. il Aeronautical Eng R 1:137 N '42

Oxygen masks for the Army air force. Science 96:531 D 11 '42; Sci Am 168:72+ F '43

OXYGEN cutting

Hancock oxygen cutting machine. Automobile Eng 33:207 My '43

Machine cutting for assembly line fabrication. C. O. Adams. il Welding J 22:776-9 O '43

See also

Oxyacetylene cutting
Oxypropane cutting

OXYGEN deficiency

Oxygen makes the flyer; testing naval flying cadets for high altitude flight. F. Tupper, jr. il Aero Digest 42:88-90+ Ja '43

Oxygen requirements at high altitudes. W. A. Wildhack. bibliog J Aeronautical Sci 9:543-7 D '42

OXYPROPANE cutting

War speeds propane cutting progress. G. E. Stedman. il Steel 111:80-2+ D 14 '42

OXYSTARCH. See Starch**OYSTERS**

Old starfish-clam question. A. M. Reese. Science 96:513-15 D 4 '42

Oysters are in. il Business Week p83-4 O 23 '43

To guard oysters; Wildlife service would set aside separate areas for seed and market oysters. Business Week p24 Jl 3 '43

OZONE

Molecular structure of ozone. W. Shand, jr. and R. A. Spurr. bibliog Am Chem Soc J 65:179-81 F '43

Preparation of aldehydes, ketones, and acids by ozone oxidation. A. L. Henne and P. Hill. Am Chem Soc J 65:752-4 My '43

Production, concentration, and decomposition of ozone by ultraviolet lamps. A. W. Ewell. bibliog il J Ap Phys 13:759-67 D '42

Some factors influencing the toxicity of ozone to fungi in cold storage. R. D. Watson. bibliog diag Refrig Eng 46:103-6 Ag '43

See also

Water purification—
Ozone treatment

OZONE treatment. See Water purification—Ozone treatment

OZONIZERS

Electric characteristics of the ozonator discharge. T. C. Manley. bibliog il diags Electrochem Soc Trans 84 (preprint 14): 127-38 O '43

P

PT airplanes. See Airplanes, Training

PT boats. See Torpedo boats

PAGE, Stephen, 1892-

Portrait. Business Week p15 Mr 6 '43

PACIFIC coast

See also Steel industry and trade—Pacific coast

Industries and resources

Kaiser integrates; recent purchases point to postwar industrial empire of great magnitude on Coast. Business Week p86-7 Ja 16 '43

New geography of American business. W. H. Hillyer. map Barron's 23:3 My 31 '43

Out West, where a new industrial market booms. E. R. Halperin. Ind Marketing 28: 19-21 My '43

Pacific rim market offers large possibilities for West Coast aircraft plants in post-war era. A. H. Allen. il Steel 112:87-8 My 17 '43

Postwar market of the West. E. R. Halperin. maps Ind Marketing 28:32-4 Jl '43

War work zooms in western states; shipbuilding, aircraft and steel push Coast areas to new highs. E. R. Halperin. il Ind Marketing 28:29-32+ Je '43

West's industry expansion. il map Steel 113: 82-5 Ag 16; 86-9+ Ag 23; 58-61 Ag 30; 98-101 S 6; 90-3+ S 13; 114-17 S 20; 72-5+ S 27; 88-90 O 4 '43

PACIFIC coast electrical association

Fall meeting, Fresno, Oct. 22-23. Elec West 89:45-53 N '42; Elec W 118:1456-7 O 31 '42
Meetings, Los Angeles, June 2 and San Francisco, June 9. Elec West 91:60-5 Jl '43

PACIFIC coast gas association

Annual meeting, 50th, Los Angeles, Sept. 22-23. Am Gas J 159:49-50, 53-4 O '43; Gas Age 92:17-19 O 7 '43

PACIFIC employers insurance company

Company analysis. Spectator (Property ed) 8:34-5 D 24 '42

PACIFIC gas and electric company

Pacific gas & electric co. helps dealers step up repair services. il Sales Management 51: 58-9 D 1 '42

Power standoff; Ickes' Shasta contract. Business Week p20 O 16 '43

PACIFIC mutual life insurance company

California high court upholds Pacific Mutual vote trust. Nat Underw 47:7 Jl 1 '43; Same. Nat Underw (Life ed) 47:2 Jl 2 '43

Caminetti seeks to reopen voting trust issue. Nat Underw 47:17+ Ag 5 '43; Same. Nat Underw (Life ed) 47:3+ Ag 6 '43

Pacific Mutual stockholders take positive action. Nat Underw 47:15 F 25 '43; Same. Nat Underw (Life ed) 47:7 F 26 '43

PACIFIC Northwest libraries. See Libraries—Northwest, Pacific**PACIFIC southern investors, Inc.**

Merger of American capital corp. proposed. Comm & Fin Chr 157:2453-4 Je 28 '43

PACIFISM

See also

Peace

PACKAGE design

Are women tired of pastels? il Mod Packaging 16:56-7+ F '43

Award winners. 12th annual all-America package competition. il Mod Packaging 16: 81-148 Ap '43

PACKAGE design—Continued

- Banana flakes in cones. *il Mod Packaging* 16:54-5 Mr '43
 Designing to sell. *il Sales Management* 52:60 Ja 1 '43 [cont monthly]
 Future package design will be no guesswork. D. W. White. *il Mod Packaging* 17:62-4 N '43
 How a design is born; Mary Dunhill shell design for cosmetics and perfume. *il Mod Packaging* 17:78-9 N '43
 How does your package strike the soldier? J. Galub. *il Adv & Sell* 36:24 Je '43
 How Lightfoot Schultz put gift appeal into a line of soap. *il Sales Management* 52:54 Ap 15 '43
 Modern Packaging defers the all-America competition. *Mod Packaging* 16:46-7 Ag '43
 Prize packages in 5 & 10 competition. *il Sales Management* 52:28 F 15 '43
 Seeds must sell themselves by pictures on packets. *il Mod Packaging* 16:67-8+ Ag '43
 Share-the-ride-plan for Ralston cereals. *il Mod Packaging* 16:62-3 F '43
 Showcase garden; Revlon's containers. *il Mod Packaging* 16:52-3+ JI '43
 Stationery in wartime. *il Mod Packaging* 16:52+ Mr '43
 Tailored for custom made shoe polish. *il Mod Packaging* 16:58-9+ D '42

See also

Package goods—Gift packages

PACKAGE goods

- A.M.A. 1943 packaging exposition hits all-time record. *il Mod Packaging* 16:63-78 My '43
 Comfort components for combat areas; candy and gum, tobacco, and toilet articles. *il Mod Packaging* 16:64 F '43
 GI looks at a PX. R. A. Latimer. *il Mod Packaging* 16:56-7 My '43
 Package fashion notes: Rills are out, silhouettes simpler. *il Ftr Ink* 201:80+ D 4 '42
 Packaging progress. C. W. Browne. *il Mod Packaging* 16:75-8 Ap '43
 Patterns for package planning. *Mod Packaging* 16:48-50+ Ag; 54-7+ S '43
 Small packages of lime for victory gardens. *il Rock Prod* 46:42-3 Ap '43
 Users tighten their belts. *il Mod Packaging* 16:44-8 Ja '43
 War messages on packages, bottles and grocery bags. *il Mod Packaging* 16:58+ Mr '43

See also

- | | |
|---------------------------|---------------------|
| Bottled goods | Containers |
| Bundle shippers' | Food packages |
| service, Cambridge, Mass. | Package design |
| Candy trade | Packaging |
| Canned food | Packaging machinery |
| Cigarets | Toilet goods |

Advertising

- Share-the-ride-plan for Ralston cereals. *il Mod Packaging* 16:62-3 F '43

Design

See Package design

Gift packages

- Gift supplies, not out but scarce. *il Mod Packaging* 16:46-9+ My '43

Protection

- How the army and navy packs for protection. *il Mod Packaging* 16:66-70 Je '43
 Science in packaging; effect of temperature and humidity; abstract. C. A. Southwick, jr. *Mod Packaging* 16:73-4 My '43

See also

Packing for shipment

Standards

- Do standards stifle individualism? J. Gaillard. *il Mod Packaging* 16:37-9+ Mr '43
 Standard sizes for retail packages would simplify buying; abstract. R. W. Smith. *Ind Stand* 14:234 Ag '43
 Writing standards that work. J. Gaillard. *il Mod Packaging* 16:153-5 Ap '43

PACKAGE wrappers

- Tests in the selection of package wrappers; abstract. E. E. Ghiselli. *Management R* 32:224 Je '43

PACKAGING buildings. See Building—Standards PACKAGING

A.M.A. 1943 packaging exposition hits all-time record. *il Mod Packaging* 16:63-78 My '43

And peace came, and the merchant knew not his strange new wares. L. B. Colby. *Sales Management* 52:18-20 Je 1 '43

Availability of containers will depend on contents; machinery, dehydration discussed at Packaging institute session. *Ptr Ink* 201:82+ N 13 '42

Bulk packaging of chemicals; wartime trends, postwar possibilities; shift to multiwall paper bags. *il diags Chem & Met Eng* 50:117-24 O '43

Crisco's transition. *il Business Week* p72 Je 19 '43

Food dehydration and air conditioning; packaging; reference section. *Heat & Ven* 39:49-50 D '42

Food packaging for overseas use. R. R. Melson. *il Ind & Eng Chem* 35:16-19 Ja '43

How cigarette companies save cellophane. *il Mod Packaging* 17:74 S '43

How far can bulk packaging go? *il Mod Packaging* 16:39-43+ F '43

How the army and navy packs for protection. *il Mod Packaging* 16:66-70 Je '43

Incendiary bomb protection with packaged sand. L. S. Flint. *il Rock Prod* 45:34-6+ N '42

Keeping ahead of packaging crises. J. K. Evans. *il Food Ind* 15:72-3 Ap '43

Makeshift packaging line; iodine swab; Lambert pharmaceutical co. *il Mod Packaging* 17:90-1+ S '43

Mechanization of paper packaging. C. Stevens. *il Paper Tr* 115:31-2 D 10 '42

Package problems confronting quick-frozen food industry. A. B. Brackett. *Paper Tr* J 116:36-9 Mr 18 '43; Same. *il Mod Packaging* 16:74-6, 100 Mr '43; Same cond. *Paper Ind* 25:300+ Je '43

Packaging. R. W. Lahey. *Chem & Eng N* 21:486-7+ Ap 10 '43 [cont semi-monthly]

Packaging catalog, 1943. 634p \$2.50 Packaging catalog corp, 122 E. 42d st, New York '43

Packaging problems of the Army air force. E. Schmidt. *Paper Ind* 25:300 O '43

Packaging requirements for dehydrated vegetables. A. L. Pitman, W. Rabak and H. Yee. *bibliog il Food Ind* 15:49-52+ Ja '43

Packaging trends. A. H. Warth. *bibliog il Ind & Eng Chem* 35:43-6 Ja '43

Packing and storing dehydrated vegetables. *il Mod Packaging* 16:52-7 Ja '43

Para-packs. *il Mod Packaging* 16:55-7+ Je '43

Patterns for package planning. *Mod Packaging* 16:48-50+ Ag; 54-7+ S '43

Performance specs versus material specs. R. R. Melson. *il Mod Packaging* 17:84-5 S '43

Plans for the new technical section of Modern packaging. C. A. Southwick, jr. *il Mod Packaging* 16:76-7+ F '43

Postwar horizons; future planning must be a continuing study of people's wants, adaptable to changing values. *il Mod Packaging* 17:51-7 N '43

Résumé of wartime conference proceedings. *il Mod Packaging* 16:65-96 D '42

Rivets, cool and collected. *il Mod Packaging* 17:92-4 O '43

Romanoff caviar company finds packaging of bouillon cubes easy in air conditioned room. A. A. Giannini. *il plan Heat & Ven* 40:62-3 Ja '43

Salt lines begin 1,000 feet under; Jefferson Island salt co. of Louisville, Ky. R. A. Latimer. *il Mod Packaging* 16:112-15+ D '42

Science in packaging; effect of temperature and humidity; abstract. C. A. Southwick, jr. *Mod Packaging* 16:73-4 My '43

Self-service meats. *il Mod Packaging* 16:48-50+ F '43

7,000,000 pounds of spinach. A. F. Joy. *il Mod Packaging* 17:98-100 O '43

Standardization of insecticide packages. W. E. Braithwaite. *Soap & San Chem* 19:97, 99 Ag '43

Summer pies in winter; frozen rhubarb. *il Mod Packaging* 16:58-9+ Ag '43

TAPPI. army-navy requirements conference. *il Mod Packaging* 17:96-8, 100, 102+ N '43

PACKAGING—Continued

These food plants converted to do special war job; cereal, confectionery, dairy and sugar-grinding plants converted packaging lines to supply cartons of dried eggs. T. F. Cass, Jr. *il Food Ind* 14:43-6 D '42
Unit principles for Medical corps packs. *il Mod Packaging* 17:34-5+ O '43
We must share the shortages, or else! C. W. Browne. *Mod Packaging* 16:41-3 Ag '43

See also
Bottling Packing for shipment
Containers Paper boxes
Packaging materials Sealing compositions

Patents

U.S. patent digest. Published in monthly numbers of Modern packaging

PACKAGING institute

Annual meeting. New York, Nov. 5-6. *Mod Packaging* 16:65-96 D '42

PACKAGING machinery

All-America package competition award; New Jersey machine corp., machinery for handling and packaging cartridges. *il Mod Packaging* 16:87+ Ap '43

All-America package competition award; Package machinery company loading of cartridges into clips and cartons. *il Mod Packaging* 16:88, 128+ Ap '43

All-America package competition award; Standard-Knapp corp. machinery for wax coating ration kits and for handling cartridges. *il Mod Packaging* 16:89+ Ap '43
Heat sealing; techniques and mechanics. F. S. Leinbach. *il Mod Packaging* 16:91-4+ Je '43

Lay-away orders for machinery; RCA plan. *Mod Packaging* 16:92+ My '43

Machines turn out weapons. *il Mod Packaging* 16:49-50 Ja '43

Package transfer mechanism. W. M. Halliday. *diags Mech Handling* 30:107-9 Mr '43
Packaging institute discussion. *Mod Packaging* 16:77-82 D '42

Standard packaging machines are doing the wartime job. *il Food Ind* 15:74+ Ap '43
Vacuumizing rigid metal containers. *il Mod Packaging* 16:80 JI '43

See also
Bag closing machines
Labeling machines
Wrapping machines

Control

Phototube control of packaging machines. W. D. Cockrell. *il diags Electronics* 16:94-9+ O '43

PACKAGING materials

Award winners, 12th annual all-America package competition. *il Mod Packaging* 16:81-148 Ap '43

Cellulose acetate sheeting; its properties and applications. A. F. Caprio. *bibliog il Mod Packaging* 16:81-5+ Ag '43

Container situation; glass bottles, closures, and paper packaging needs for insecticides and disinfectants. E. F. Bertrand. *Soap & San Chem* 19:111+ Ja '43

Continuous-thread paper closure. *il Mod Packaging* 16:63+ Ja '43

Dehydrated vegetables high in vitamins, call for proper packaging; optimum vitamin contents of eight vegetables. *Sci Am* 167:284 D '42

Foil's big bid; Reynolds metals co. prepares for revolution in packaging materials. *il Business Week* p13 Ja '43

Food packages keep pace with wartime restrictions. E. Shaw. *il Food Ind* 15:64-7 Ap '43

Frozen foods containers and container materials. J. G. Woodroof and W. DuPree. *bibliog il Refrig Eng* 45:75-81+ F '43

Gift supplies, not out but scarce. *il Mod Packaging* 16:46-9+ My '43

Heat sealing; agents, their application and evaluation. F. S. Leinbach. *il Mod Packaging* 16:85-8+ My '43

Heat sealing; techniques and mechanics. F. S. Leinbach. *il Mod Packaging* 16:91-4+ Je '43

Lining and laminants for fibre containers; canisters and drums. E. R. Brown. *Mod Packaging* 16:78+ Mr '43

Materials are available to meet packaging problems. G. Hightower. *il Food Ind* 15:65-71 Ap '43

More about laminations. *il Mod Packaging* 16:80-3+ D '42

Outlook for containers and closures as revealed in panel discussion at T.G.A. convention. *Mod Packaging* 16:54-5, 96, 98+ JI '43

Package problems confronting quick frozen food industry. A. B. Brackett. *Paper Tr J* 126:38-9 Mr '43; Same. *il Mod Packaging* 16:74-6, 100 Mr '43; Same cond. *Paper Ind* 25:300+ Je '43

Packaging boxed; new container styles. *il Business Week* p68+ N 21 '42

Packaging catalog. 1943. 634p \$2.50 Packaging catalog corp, 122 E. 42d st, New York '43

Packaging delivers the goods; protection against heat, cold, and humidity, mildew, insects and vermin. S. M. Spencer. *il Sci Am* 169:217-19 N '43

Packaging institute discussion; closures. *Mod Packaging* 16:87-91 D '42

Packaging institute discussion; government viewpoint. *Mod Packaging* 16:73-7 D '42

Packaging materials. C. L. Sheldon. *Chem & Eng N* 21:600+ Ap 25 '43; Same abr. *Mod Packaging* 16:68-9; Discussion. 69-70 My '43

Packaging materials required for preservation; army-navy aeronautical specifications. D. R. Weedon, Jr. *Paper Tr J* 117:29-32 N '43; Same cond. *Paper Ind* 25:774, 776+ O '43; Excerpts. *Mod Packaging* 17:97 N '43

Packaging medical supplies for the army. J. D. Studley. *Paper Tr J* 117:27-8 N 11 '43; Same cond. *Paper Ind* 25:797-9 O '43; Abstract. *Mod Packaging* 17:100+ N '43

Paper has some new packaging jobs. C. W. Browne. *Paper Tr J* 115:31-8 D 17 '42

Paperboard answers many packaging problems; A.M.A. conference. F. Laclave. *Pir Ink* 205:58+ Ap 23 '43

Performance specs versus material specs. R. R. Melson. *il Mod Packaging* 17:84-5 S '43

Permeability of transparent wrappings. C. R. Oswin. *bibliog Soc Chem Ind J* 62:45-8 Ap '43

Pressure-sensitive tape on the battle-front. *il Mod Packaging* 16:40-2+ Mr '43

Suppliers tackle shortages. *il Mod Packaging* 16:38-43 Ja '43

What the Quartermaster corps expects from paper products. R. R. Melson. *Paper Tr J* 117:32-4 N 11 '43; Same cond. *Paper Ind* 25:784+ O '43; Abstract. *Mod Packaging* 17:97-8 N '43

See also
Cellophane
Paper board
Phlofin

Saran
Wrapping materials
Wrapping paper

Testing

Improvement needed in technic for testing food packages. T. A. Schwarz. *Food Ind* 15:68-9+ S '43

New tester for bottle cap liners. J. D. Charlton and C. L. Lovell. *il diags Mod Packaging* 16:86, 88+ F '43

Packaging requirements for dehydrated vegetables. J. R. Sanborn and G. J. Tucker. *Paper Tr J* 116:27-33 Ap 29 '43; Excerpts. *Paper Ind* 25:545-50 Ag '43

You can help to standardize testing methods. C. A. Southwick, Jr. *Mod Packaging* 17:86-7 S '43

PACKARD motor car company

Annual report. *Comm & Fin Chr* 157:1465 Ap 19 '43

Engineering advances which benefit the aviation industry; Packard airplane and PT boat engines. J. G. Vincent. *Aeronautical Eng R* 1:86 N '42

How Packard plans to tackle reconversion. G. T. Christopher. *il Am Business* 13:10-12 Ag '43

Post-war industrial problems and prospects; Packard's outlook. W. Von Tresckow. *Barron's* 23:9 Je 14 '43

Sees ways to speed transition for post-war economy; reconversion in advance to hasten production. G. T. Christopher. *Comm & Fin Chr* 157:2161+ Je 10 '43

PACKING

- Drip-point grid tower packings: gas-film transfer coefficients; abstract. M. C. Molstad, J. F. McKinney and R. G. Abbey. *Chem & Met Eng* 50:181-2 J '43
- Formula for exact packing ring length. *diag* Pet Refiner 22:78 Mr '43
- Gas absorption in a Stedman packed column. R. E. White and D. F. Othmer. *bibliog* *diags* *Am Inst Chem Eng Trans* 38:1067-87; Discussion. 1987-9 D '42
- Hot boxes a perennial problem. C. B. Smith. *Ry Age* 114:395-7 F 20 '43; Excerpt. *Ry Mech Eng* 117:120-1 Mr '43
- How to pack a stuffing box; helpful hints for handling packings; data sheet. *Power* 87:491 J '43
- Lubrication and hot boxes. D. A. Reavis. *Ry Mech Eng* 117:400-2+ S '43; Same cond. *il Ry Age* 115:305-8 Ag 21 '43
- Methods and efficiency of disinfecting jute packing. *Pub Works* 74:18+ Je '43
- Packing gives good service when you give it a break. *diags* *Power* 87:187-9 Mr '43
- Packing problems on high-pressure high-temperature pumps. H. Hornschuch. *il diags* *Power* 87:225-6+ Ap '43
- Performance of drip-point grid tower packings; abstract. M. C. Molstad, J. F. McKinney and R. G. Abbey. *Chem & Eng N* 21:754-5 My 25 '43
- Pumps and packings; they need attention. F. D. Mosher. *Power Pl Eng* 47:106, 108+ Mr '43
- Rayon rope seals in the power of vital hydraulic machines. *Rayon* 23:672 N '42
- Seal oil systems for refinery centrifugal pumps reviewed. I. Taylor. *il diags* *Nat Pet N* 35 pt 2:R113-16 Mr 3 '43; Same. *Pet Refiner* 22:70-4 Mr '43
- Studies of liquid holdup in packed towers. E. W. Jesser and J. C. Elgin. *bibliog* *diags* *Am Inst Chem Eng Trans* 39:277-98 Je '43
- Unusual stuffing box problems encountered in acid pumping. W. E. Pratt. *bibliog* *diags* *Chem & Met Eng* 50:109-13 Ap '43

See also

Gaskets
Stuffing boxes

PACKING for shipment

- Antitrust insurance for airplane engines. A. M. Hoffmann. *il Comp Air M* 48:6941-2 Ja '43
- Army packing in Britain. *Management R* 32:305-6 Ag '43
- Batteries for the battlefield; packaging method. *il Mod Packaging* 17:70-1+ S '43
- Boxing for export; Yellow truck & coach co. *il Steel* 112:108+ Mr 15 '43
- Crating the P-40 for export shipment. *il Aero Digest* 42:222, 224, 227+ Ja '43
- Dehydration to prevent corrosion; moisture-proof wrappings and silica gel for metal parts. *il Mod Packaging* 16:69-72+ Mr '43
- Experience shipping planes will aid postwar freight. *bibliog* *il Mod Packaging* 17:65-9+ O '43
- Export packing—is yours adequate? A. E. Sanderson. *il For Comm W* 10:11+ Mr 13 '43
- Hands off; Republic aircraft products packaging micro-finished aircraft engine parts. *il Mod Packaging* 17:54-5+ N '43
- How the army and navy packs for protection. *il Mod Packaging* 16:66-70 Je '43
- Is faulty packing increasing freight claims? *il Mod Packaging* 17:70-3 O '43
- Lesson learned; packaging steel for export. *For Comm W* 11:34 My 8 '43
- Navy supply lines. E. G. Morsell. *Paper Tr J* 117:47-50 S 30 '43; Same cond. *Paper Ind* 25:772 O '43; Excerpt. *Chem & Eng N* 21:1746 O 25 '43
- New package dehydrator; granular silica gel used in packaging guns, planes, and machinery. H. H. Wilkinson. *il Chem & Eng N* 21:1054-5 J1 10 '43; Same. *Marine Eng* 48:220+ Ag '43
- 1943 packaging exposition hits all-time record; military exhibits. *il Mod Packaging* 16:64-5 My '43
- Ordnance packaging procedure seen enlarging post-war commerce. *il Iron Age* 151:70, 72 Mr 18 '43
- Overseas shipments of millions of war service items test packaging. *Steel* 112:85 Mr 1 '43

- Packaging aircraft engines and parts for shipment. *il Steel* 113:70+ O 18 '43
- Packaging delivers the goods; protection against heat, cold, and humidity, mildew, insects and vermin. S. M. Spencer. *il Sci Am* 169:217-19 N '43
- Packaging goods for export. *il For Comm W* 11:12-13+ My 29 '43
- Packaging medical supplies for the army. J. D. Studley. *Paper Tr J* 117:27-8 N 11 '43; Same cond. *Paper Ind* 25:797-9 O '43; Abstract. *Mod Packaging* 17:100+ N '43
- Packings altered; specification for crating and wrapping war goods. *Business Week* p18-19 Mr 20 '43
- Paper has some new packaging jobs. C. W. Browne. *Paper Tr J* 115:31-3 D 17 '42; Abstract. *Paper Ind* 24:713-14 O '42
- Paper products as a factor in Chemical Warfare Service packaging. T. P. Steinmetz. *Paper Tr J* 117:31-3 D 9 '43; Same cond. *Paper Ind* 25:788+ O '43
- Perfect shipping by air. P. H. Cummings. *il Manuf Rec* 112:33+ Ap '43
- Perfect shipping, the packing; materials sent outside the country. *il Manuf Rec* 112:38-9+ Ap '43
- Precision packs for optical instruments. *il Mod Packaging* 16:35-9+ J1 '43
- Problems in the packaging of signal equipment. W. F. Campbell. *Paper Ind* 25:796 O '43
- Shipping aircraft presents new packaging problems. L. C. Ray. *il Aero Digest* 43:137-8, 141, 143 J1 '43
- Shredded bank notes and excelsior preferred; Taylor instrument companies. *il Mod Packaging* 16:64-6 Ag '43
- Silica gel prevents engine corrosion. *il Iron Age* 152:45 J1 29 '43
- Strange cargo; Charles Yaccobellis, Long Island city deals in live leeches. *il diag* *Mod Packaging* 17:88 N '43
- Twenty-two thousand pound package; completely boxed mobile unit truck; machine shop on wheels for army. *il Mod Packaging* 17:50-2 S '43
- Two pack types used to export army truck shipments. E. L. Warner, jr. *il Automotive & Aviation Ind* 88:17-19+ Je 1 '43
- War communication systems in boxes; Western electric co. expert packers. *il Mod Packaging* 17:76-80 O '43
- War material must be properly packed for shipment. *Mach* 43:200 D '42
- War-time packaging of glass electronic tubes; Tung-Sol lamp works. K. P. Moorehead. *diags* *Glass Ind* 24:260+ Je '43
- What armed forces want. *Mod Packaging* 16:76-7 My '43
- Wood for war. M. R. Merryfield. *il Mod Packaging* 16:41-5+ My '43

See also

Baling (textiles) Packaging machinery
Barrels Shipment of goods
Containers (for shipping)

PACKING houses

- Model food plant designed; hog cutting plant as part of course in sanitation. A. E. Abrahamson. *plans* *Food Ind* 15:57-9+ O '43
- Quick freezing of meats in South America. M. T. Zarotschenzeff. *il plan* *Refrig Eng* 46:88-91 Ag '43
- By-products**
- By-products of the meat-packing industry. H. Young. *Chem & Eng N* 20:1660, 1664 D 25 '42
- Determination of blood in packing-house by-products. R. Reiser and G. S. Fraps. *Ind & Eng Chem Anal ed* 14:851-3 N 15 '42
- Employees**
- In lieu of raises; portal-to-portal pay issue being revived by C.I.O. packing-house workers. *Business Week* p101 J1 24 '43
- Swift employees turn in 17,588 ideas in '42; 3,044 are accepted. *Sales Management* 52:56-8 Ap 15 '43

Heating and ventilation

- Air circulation problems in holding rooms and beef and hog chill rooms. A. L. Byfield. *diag* *Refrig Eng* 45:417-18 Je '43

PACKING houses—Continued**Waste**

New vacuum flotation process aids liquid waste disposal. A. J. Fisher. *il* *diags* Food Ind 15:87-9+ J1 '43

PACKING index. See Crystallography**PACKING industry**

Eyes West! midwestern packers coaxing ICC to revise freight rates. *Business Week* p44+ O 30 '43

Speeding the meat; elimination of backhauls. *Business Week* p32+ F 20 '43
Turn-over as a collection gauge; methods of Oscar Mayer & co. J. E. Walsh. *Credit & Fin Management* 45:15-16 F '43

See also

Armour and company of Illinois	Meat, Dried
Canned food	Meat industry and trade
Cudahy packing company	Pork products
	Sausages

Finance

Packers' recovery; financial woes of Armour & co. seem finally to be about cleaned up. *Business Week* p102-3 O 9 '43

Securities

Appraising the once-a-year reports from the meat packing industry. O. Ely. *il* *Mag* of Wall St 71:414-15+ Ja 23 '43

Meat packers; short and long term prospects. J. C. Clifford. *il* *Mag* of Wall St 72:680-2+ O 2 '43

PADUCAH, Kentucky**Water supply**

Pioneering by the Paducah water works. L. R. Howson. *Am Water Works Assn J* 35: 770-4 Je '43; Abstract. *Water Works & Sewerage* 89:520 D '42

PAGE, Archibald, 1875-

I.E.E. presentations. *por* *Electrician* 130:458-9 My 7 '43

PAGON, William Watters, 1885-

Sketch. *por*(p46) *Civil Eng* 13:47 Ja '43

PAIN

Variability in the pain threshold. L. H. Lanier. *Science* 97:49-50 Ja 8 '43

PAINT

Camouflage paints and their application to road and building surfaces. L. G. Gabriel. *Chem & Ind* 62:3-6 Ja 2 '43; Abstract. *Am Concrete Inst J* 14:459-60 Ap '43; Same. *Roads & Bridges* 81:86 My '43

Conservation of linseed oil in interior paints. A. C. Goetz. *Paint Oil & Chem R* 105:11+ Je 3 '43

Determination of specific gravity of dry paint pigments. I. Baker and G. Martin. *Ind & Eng Chem Anal* ed 15:279 Ap 15 '43

Dip coater; an instrument for making uniform films by the dip method. H. F. Payne. *bibliog* *il* *diags* *Ind & Eng Chem Anal* ed 15: 48-56 Ja 15 '43

Effect of binder on hiding power of enamels. A. Lightbody and D. H. Dawson. *bibliog* *Ind & Eng Chem* 34:1452-6 D '42

Exposure behaviour and colour matching problems with bitumen emulsion camouflage paint. J. A. Rawlinson and L. G. Gabriel. *Soc Chem Ind J* 62:111-12 J1 '43

Glass-beaded paint for blackout traffic control. R. A. Mitchell. *il* *Eng N* 129:720-1 N 19 '42

Heat reflecting paint has camouflage properties; illustrations. Heat & Ven 39:56 D '42
How to mix oil-saving lead-oil paint. *Am Bld* 65:83 My '43

Imitation stone paints. *Paint Oil & Chem R* 104:12+ D 3 '42

Industrial paint coatings; abstract. W. H. Lutz. *Iron Age* 152:66-7 J1 15 '43

Infra-red camouflage. L. E. Bowles. *il* *Aero Digest* 42:159-60, 162+ F '43

Infrared camouflage; paints emerge from the panel stage. D. B. Williams and C. H. Wastie. *il* *Can Chem & Process Ind* 27:500-1 S '43

Paint as a material of war. A. I. Totten, jr. *Paint Oil & Chem R* 105:12-14 My 20 '43

Paints for the household in wartime. *il* *Consumers' Research Bul* 11:15-19 O '42
Paints; present and postwar. B. Price. *il* *Arch Rec* 93:81-4 Je '43

Plumbism resulting from oxyacetylene cutting of painted structural steel. I. R. Tabershaw, B. P. W. Ruotolo and R. P. Gleason. *bibliog* *J Ind Hygiene* 25:189-91 My '43

Possible available substitutes for linseed oil in camouflage paints. A. O. Allen. *Paint Oil & Chem R* 105:14 Je 17 '43

Progress in the paint industry during 1942. *Paint Oil & Chem R* 105:10-12 F 25; 9, 24-6 Mr 11; 9-10, 26-9 Mr 25; 24+ Ap 8 '43

Queer uses for paint. *Paint Oil & Chem R* 105:14 My 20 '43

Resin emulsion paints, their nature, advantages and production. W. H. Butler. *Paint Oil & Chem R* 105:10-12, 14 Ja 14 '43

Rheology of paints. *Paint Oil & Chem R* 105:14 Mr 25 '43

Suggestions for conserving oils in civilian paint products. J. A. Lutz. *Paint Oil & Chem R* 105:10-11 Je 17 '43

Technical developments, postwar; abstract. H. A. Gardner. *Oil Paint & Drug Rep* 144: 45 N 1 '43

See also

Driers	Pigments
Lacquer and lacquering	Titanium oxides
Linseed oil	Tung oil
Paint factories	Varnish and varnish-ing
Paint materials	White lead
Painting, Industrial	

Defects

Ghosting of paints. W. G. Armstrong. *Paint Oil & Chem R* 106:10, 12+ S 23 '43

Drying

Factory process heating; Moffats, Ltd. *il* *Elec R (Lond)* 132:603-5 My 7 '43

Finishing by infra-red. *il* *Factory Management* 101:145 O '43

Finishing warplanes. F. V. Faulhaber. *il* *Metal Finishing* 41:173-6 Mr '43

Infra-red drying; results obtained in drying of paints. *il* *Elec R (Lond)* 133:205-6 Ag 13 '43

Infra-red lamp heating for paint drying and other industrial-heating applications. F. E. Rowland. *Engineering* 154:424 N 27 '42;

Same cond. *il* *Electrician* 129:575-7 N 27 '42; Abstract. *Elec R (Lond)* 131:655 N 20 '42

Painting speed increased 400 per cent; Propeller division plants of Nash-Kelvinator corp. *il* *Steel* 112:111 Je 21 '43

Radiant heat for paint drying. L. W. Andrews. *Chem Age (Lond)* 49:111-14 J1 31 '43

Radiant heat; the application of gas-generated infra-red rays. L. W. Andrews and E. A. C. Chamberlain. *Automobile Eng* 33: 326-9 Ag '43; Same. *Gas J (Lond)* 242:110, 115, 140, 145+ J1 28-Ag 4 '43; Same. *Engineering* 156:245-6, 298-300 S 24, O 8 '43; Discussion. *Gas J (Lond)* 242:201-2+ Ag 18 '43

Durability

Durability of lusterless enamels. S. E. Beck. *il* *Ind & Eng Chem* 35:594-5 My '43

House paints and climatic variations, by Pittsburgh club. *Oil Paint & Drug Rep* 144: 50+ N 1 '43

See also

Paint, Protective

Light reflection

Infrared reflectance and radiance absorption, by New England club. *Oil Paint & Drug Rep* 144:65 N 1 '43

Practical factory reflectometer. E. H. Addison and R. A. Peterson. *il* *diags* *Paint Oil & Chem R* 105:9-12 My 6 '43

Predicting infrared reflectance of camouflage finishes. *il* *Paint Oil & Chem R* 104:10-12+ D 17 '42

Manufacture

Colour control in the paint works; abstract. E. R. Wells. *Chem Age (Lond)* 48:247 F 27 '43

Conservation of linseed oil in paints. E. F. Hickson. *Metal Finishing* 41:467-9 J1 '43

Conserving linseed oil in house paints. J. F. Brooker. *Paint Oil & Chem R* 105:10+ Je 3 '43

PAINT—Manufacture—Continued

Conserving oils in paints. P. H. Faucett.
Paint Oil & Chem R 105:9-10 Ap 22 '43

See also

Paint factories
Paint materials

Specifications

Adaptability of resins in present-day formulation problems; including federal specifications. E. Edelstein. Paint Oil & Chem R 105:12-14+ Ap 8 '43
Army specifications. C. R. Cornthwaite. Oil Paint & Drug Rep 144:65+ N 1 '43
Coldwater paint specification drafted. Oil Paint & Drug Rep 143:5 F 1 '43
Revision of specification T-1215A; camouflage, ready-mixed oil type. D. H. Parker. Paint Oil & Chem R 105:18+ Je 3 '43
Rutile titanium dioxide in specification paints. D. H. Dawson. Paint Oil & Chem R 105:12 Mr 11 '43
Surface coatings specifications and requirements for war. A. I. Totten, jr. Paint Oil & Chem R 105:9+ F 25 '43; Same. *il* Chem & Eng N 21:370-2 Mr 25 '43; Same. Metal Finishing 41:403-5 Je '43

Standards

Paint simplification cut suggested for Sept.
1. Paint Oil & Chem R 106:10-11 Ag 26 '43

Testing

A.S.T.M. paint group shapes variety of test methods. Oil Paint & Drug Rep 143:3+ Mr 8 '43
Asphalt-polybutene paints. H. C. Evans, D. W. Young and R. L. Holmes. *il* Ind & Eng Chem 35:481-8 Ap '43
Lead phthalate in red lead-alkyd resin paints. J. J. Taylor. Paint Oil & Chem R 105:12 Mr 25; 10-11 My 20 '43
Lustreless finishes for wood. S. E. Beck. Paint Oil & Chem R 106:9-11 Jl 15 '43
Measuring dry hiding power, by New York club. Oil Paint & Drug Rep 144:49-50 N 1 '43
Organization of a systematic test fence program. E. W. McMullen and E. J. Ritchie. bibliog *il* diags Ind & Eng Chem 35:161-71 F '43
Paint finishes; preparing sample panels for test. E. J. Dunn, jr. and C. H. Baier. diags Automobile Eng 32:531-2 D '42
Progress in the paint industry during 1942. Paint Oil & Chem R 105:24+ Ap 8 '43
Thickness of paint films applied with a straight edge spreader. *il* diags Metal Finishing 41:677-80 O '43
Three traffic paint tests approved by A.S.T.M. Paint Oil & Chem R 106:12 Jl 15 '43; Same abr. Oil Paint & Drug Rep 144:5+ Jl 19 '43

See also

Paint, Protective—
Testing
Paint research

Transportation

Everything for paints but metal; Pabco containers. J. K. Novins. *il* Mod Packaging 16: 48-9+ Mr '43
Five gallons of liquid in corrugated board. *il* Mod Packaging 17:86-7 N '43
Steel containers for paints. Chem & Eng N 21:1738 O 25 '43

PAINT, Anti-fouling

Anti-fouling compositions. Can Chem & Process Ind 27:453 Ag '43

Antifouling paints; test procedures and general observations. G. H. Young, G. W. Gerhard and W. K. Schneider. bibliog *il* Ind & Eng Chem 35:432-6 Ap '43

Corrosion and fouling of ships. G. D. Bengough and V. G. Shephard. Engineering 155:358-60, 378-80, 416-17 Ap 30-My 7, 21 '43; Excerpts. Engineer 175:327-9 Ap 23 '43; Discussion. Engineering 155:354-5, 363-4 Ap 30-My 7 '43; Engineer 175:331-2 Ap 23 '43

Heavy metal compounds as toxic agents. G. H. Young and W. K. Schneider. *il* Ind & Eng Chem 35:436-8 Ap '43

Navy announces new shipbottom paint. Paint Oil & Chem R 106:29 Jl 29 '43; Same. Marine Eng 48:218+ Ag '43

What you can use; materials that are suitable for various purposes in processing industries; ship paints. Oil Paint & Drug Rep 143:25 My 24; 66 My 31 '43

PAINT, Fluorescent. See Paint, Luminous

PAINT, Luminous

Fluorescent and phosphorescent paints. G. F. A. Stutz. *il* Illum Eng 37:798-806 D '42

PAINT, Protective

American water works association tentative recommended practice; repainting elevated steel tanks and water storage tanks (with notes on repairs). Am Water Works Assn J 35:933-9 Jl '43

Bridge paint maintenance. T. H. Dennis. *il* diags Eng N 130:368-72 Mr 11 '43

Corrosion and fouling of ships. G. D. Bengough and V. G. Shephard. Engineering 155:358-60, 378-80, 416-17 Ap 30-My 7, 21 '43; Discussion. 155:354-5, 363-4 Ap 30-My 7 '43

Corrosion and paint; abstract and discussion. T. P. Hoar. Chem Age (Lond) 47: 470-1 N 28 '42

Finishes for plywood in the aircraft industry. R. B. Anderson. bibliog Mech Eng 65:506-10 Jl '43

Flame-priming method of preparing steel surfaces for painting. E. W. Deck. bibliog *il* diags Iron Age 150:80-2 O 22; 44-8 O 29 '42; Same. Metal Finishing 41:186-8, 249-52 Mr-Apr '43

Heat resisting and stoving finishes. R. L. Frost. bibliog Chem & Ind 62:306-10; Discussion. 309 Ag 14 '43

How zinc saves steel from rusting; metal protective paints containing zinc pigments. F. C. Schmutz and G. W. Ashman. *il* Eng N 131:682-6 N 4 '43

Importance of phosphate treatment and paint in rustproofing. G. H. Finley. Metal Finishing 41:473-4, 536-7, Jl-Ag '43

Interior coatings for drinking water tanks. E. C. Haines. Oil Paint & Drug Rep 144: 54+ N 1 '43; Same. Paint Oil & Chem R 106:105 N 4 '43

Maintenance of elevated tanks. J. M. Perryman. *il* Water Works & Sewerage 89:513-14 D '42

Making metal last with paint. *il* Sheet Metal Worker 34:33-4 O '43

New anti-corrosive and anti-fouling ship bottom paint. *il* Marine Eng 48:208 Ja '43

Organic finishes in the war. C. A. Lankau. *il* Metal Finishing 41:397-8+ Je '43

Preparation of arc welded machinery for finishing. W. J. Brooking. *il* Metal Finishing 41:671-4 O '43

Protective coatings; A.S.T.M. symposium. Can Chem & Process Ind 27:194-5 Ap '43

Protective painting of structural steel. Iron & Steel Inst J 145:87-100, pl 13-16 no 1 '42

Protective painting of submerged steel; hydraulic turbine headgates. Gatinau power company. Engineering 156:167-8 Ag 27 '43

Restoring a corroded penstock; oxyacetylene flame-priming to remove rust and scale before applying protective paint. *il* Power Pl Eng 47:86-7 Je '43

Surface coatings specifications and requirements for war. A. I. Totten, jr. Paint Oil & Chem R 105:9+ F 25 '43; Same. *il* Chem & Eng N 21:370-2 Mr 25 '43; Same. Metal Finishing 41:403-5 Je '43

Sweden's new fire-resistant paint. For Comm W 11:36 My 29 '43

Zinc oxide; manufacture and applications in protective coatings. H. E. Outcault. Can Chem & Process Ind 27:118-21 Mr '43

See also

Corrosion and anti- Metal protection
corrosives Paint, Anti-fouling

Testing

Fire-retardant paints for steel surfaces, by New York club. Oil Paint & Drug Rep 144:52+ N 1 '43

Marine corrosion; first report of a joint committee of the Iron and steel institute and the British iron and steel federation. Engineer 175:415-16 My 21 '43

Report of A.S.T.M. subcommittee VII on accelerated tests for protective coatings. Am Soc T M Proc 42:294-8 '42

PAINT and varnish production clubs, Federation of. See Federation of paint and varnish production clubs

PAINT brushes

- About brushes and brushing. J. M. Trenton. *Jl Metal Finishing* 41:54-5 Ja '43
 Bristleless paint brush. *Chem & Met Eng* 50:205 My '43
 Care and conservation of brushes. *Jl Metal Finishing* 41:318-21+ My '43
 Devoe salvages millions of used paint brushes to lick brittle famine. *il Sales Management* 52:20-3 Ja 1 '43
 Reclamation of hardened used paint brushes. W. B. Gertz. *Metal Finishing* 41:191 Mr '43
 Tapered nylon now available to replace natural bristles. *Sci Am* 168:85 F '43

PAINT factories**Employees**

- Investigation into the effects of continued exposure to the vapor of volatile solvents. E. M. Killick and R. S. F. Schilling. *biblog J Ind Hygiene* 24:307-14 D '42

Safety measures

- Sight, sound and experience; safety program. Sherwin-Williams company. C. Fish. *il Nat Safety* N 48:64-5+ O '43

PAINT industry and trade

- Advisory committee discusses industry problems; summary of proposed revision of order M-139. *Paint Oil & Chem R* 106:11 J 29 '43
 Advisory committee meeting discussions reported by President Trigg. *Paint Oil & Chem R* 105:18+ My 6 '43
 Business side of paint's postwar planning. E. S. Phillips. *Oil Paint & Drug Rep* 144:45-6 N 1 '43
 Future for paint; abstract. N. A. Bennett. *Chem Age (Lond)* 49:362 O 9 '43
 Paint as a material of war. A. I. Totten, jr. *Paint Oil & Chem R* 105:12-14 My 20 '43
 Paint cans short; lack of kraft and jute for containers. *Business Week* p66+ O 30 '43
 Paint colors simplification proposed. *Oil Paint & Drug Rep* 144:5+ Ag 16 '43
 Paint conditions beyond the horizon. P. O. Blackmore. *Oil Paint & Drug Rep* 144:64-5 N 1 '43
 Progress in the paint industry during 1942. *Paint Oil & Chem R* 105:10-12 F 25; 9, 24-6 Mr 11; 9-10, 26-9 Mr 25; 24+ Ap 8 '43
 War paint; picture still good. *Business Week* p54 J 24 '43

Advertising

- Paint firm advertising seeks to ease West coast housing crisis; W. P. Fuller sponsors posters carrying a direct appeal and a local tie-in. *il Sales Management* 52:57-8 F 15 '43

Exhibitions

- Paint use in war production effort exhibited by N.P.V.L.A. *il Oil Paint & Drug Rep* 144:7 O 25 '43

Regulation

- Protective coating oils use restricted by WPB. *Oil Paint & Drug Rep* 143:3+ Je 21 '43

Securities

- Peace prospects for paint stocks. S. Devlin. *Mag of Wall St* 72:678-9 O 2 '43

Statistics

- Paint and varnish, 1942. *Chem & Met Eng* 50:115 F '43
 Paint sales, 1933-1941. Survey of Cur Business 1942 Sup p110 [supplemented in monthly numbers]
 Paint, varnish, lacquer sales, monthly, 1940-1942. *Oil Paint & Drug Rep* 143:39 F 8 '43
 Paint, varnish, lacquer sales, monthly, 1942. *Oil Paint & Drug Rep* 143:121 Ja 11 '43
 Plastic, coldwater paint sales, 1941 and 1942. *Oil Paint & Drug Rep* 143:40 F 8 '43
 Plastic, coldwater paint sales for 1942. *Oil Paint & Drug Rep* 143:37 Mr 22 '43

Africa, British East

- Domestic production in British East Africa. *For Comm W* 10:24 F 13 '43

Great Britain

- Chemists and industrial control; concentration plans in allied industries; paint and gas industries. *Chem Age (Lond)* 47:555-6 D 19 '42

PAINT materials

- Adaptability of resins in present-day formulation problems, including federal specifications. E. Edelstein. *Paint Oil & Chem R* 105:12-14+ Ap 8 '43
 Chemicals and the paint industry. J. W. Reynolds. *Oil Paint & Drug Rep* 144:46-7 N 1 '43
 Conserving linseed oil by substitution. *Oil Paint & Drug Rep* 144:56 N 1 '43
 Conserving oils in paints. P. H. Faucett. *Paint Oil & Chem R* 105:9-10 Ap 22 '43
 Effect of binder on hiding power of enamels. A. Lightbody and D. H. Dawson. *biblog Ind & Eng Chem* 34:1452-6 D '42
 More synthetic resins in Nazis' paints. *For Comm W* 9:17 D 28 '42
 Oils for finishing materials. S. T. Dingman. *il Metal Finishing* 41:597-600+ S '43
 Paint oil processing; review of methods, products and applications. H. Mattil. *Can Chem & Process Ind* 27:395-6 J 1 '43
 Paint raw material outlook evaluated. E. T. Trigg. *Paint Oil & Chem R* 106:12-13 J 1 '43
 Paint, varnish, and lacquer materials, 1942. *Oil Paint & Drug Rep* 143:82-6 Ja 11 '43
 Paints: present and postwar. B. Price. *il Arch Rec* 93:81-4 Je '43
 Petroleum products. H. the paint industry. *Paint Oil & Chem R* 105:24 My 6 '43
 Plastics and soap combined in water-base paints. *Iron Age* 151:57 Je 17 '43
 Progress in the paint industry during 1942. *Paint Oil & Chem R* 105:10-12 F 25; 9, 24-6 Mr 11; 9-10, 26-9 Mr 25; 24+ Ap 8 '43
 Raw material outlook as fall season opens. E. T. Trigg. *Paint Oil & Chem R* 106:11-12+ S 9 '43
 Soap's role in the plastics industry. G. Leflingwell. *biblog Mod Plastics* 21:87-8+ O '43
 Some functions of segregated oils in the paint industry. P. H. Faucett. *Paint Oil & Chem R* 106:9-10 S 9 '43
 Survey of paint raw material situation with comments on OPA and WPB orders. E. T. Trigg. *Paint Oil & Chem R* 105:10-11, 14-15+ F 11 '43
 Synthetic developments with fats and oils; abstract. J. E. Good. *Oil Paint & Drug Rep* 144:56+ N 1 '43
 What you can use; materials suitable for various purposes in processing industries; ship paints. *Oil Paint & Drug Rep* 143:25 My 24; 66 My 31 '43

See also

Carbon black
 Driers
 Drying oils
 Linseed oil
 Pigments
 Tall oil

Titanium oxides

Tung oil

Varnish and varnish-

ing

White lead

Zinc oxides

Prices

- Synthetic resins and other branded paint materials (manufacturers' list prices). *Oil Paint & Drug Rep* 143:31-3 F 1 '43 [cont monthly]

Statistics

- Paint, varnish, lacquer materials. Published in weekly numbers of *Oil, paint and drug reporter*

PAINT research

- Effect of binder on hiding power of enamels. A. Lightbody and D. H. Dawson. *biblog Ind & Eng Chem* 34:1452-6 D '42
 Federation of paint and varnish production clubs third technical symposium. *Oil Paint & Drug Rep* 144:49-50+ N 1 '43; *Paint Oil & Chem R* 106:11-12+ N 4 '43
 Organization of a systematic test fence program. E. W. McMullen and E. J. Ritchie. *biblog il diags Ind & Eng Chem* 35:161-71 F '43
 Paint brushability studied by N.Y. group. *Oil Paint & Drug Rep* 142:44 N 16 '42
 Paint technicians discuss drying oils and war program. *Oil Paint & Drug Rep* 143:7, 40+ My 17 '43
 Petroleum drying oil in exterior paint. E. W. McMullen. *Paint Oil & Chem R* 105:30-1 Je 3 '43
 Possible available substitutes for linseed oil in camouflage paints. A. O. Allen. *Paint Oil & Chem R* 105:14 Je 17 '43

PAINT research—Continued

Substitutes for linseed oil in exterior paints. Oil Paint & Drug Rep 143:5+ Mr 8 '43; Same. Paint Oil & Chem R 105:14+ Mr 11 '43

PAINT spraying

Automatic spray painting; the Glenn L. Martin co. il Steel 111:82, 85 N 23 '42; Same cond. Heat & Ven 39:48-9 N '42
B.E.N. paint sprayer. il Mech Handling 30: 30-1 Ja '43

Coating by the electric spray method. H. Ransburg. Metal Finishing 40:621-3 N '42; Same. Steel 112:126+ Je 7 '43

Electronic control conserves paint. il diag Product Eng 14:621 O '43

Eliminating moisture from a paint spray compressed air line; problem. Power Pl Eng 47:85 Jl '43; Solutions. diag 47:93-6 S '43

Finishing lifters and telescopes at Economy engineering company. H. Deutscher. il Metal Finishing 41:121 F '43

Finishing warplanes; Glenn L. Martin company. F. V. Faulhaber. il Metal Finishing 40:681-4, 686; 41:113-14, 116-19, 173-6 D '42, F-Mr '43

Ford masks engine parts on a conveyor; make ready of aluminum and magnesium castings for spray painting. il Am Mach 87:75-7 S 30 '43

High temperature spraying of paints; heating units using hot water and steam. il Iron Age 152:73 Jl 8 '43

Portable unit for spray painting. il Ry Mech Eng 117:86 F '43

Precision coating of shell cases; spraying equipment applies thin coating of phenolic varnish. R. H. Smutzer. il Am Mach 87: 80-1 Ap 1 '43

Recovery of coating overspray; abstract. J. J. Zolad. Metals & Alloys 17:1268+ Je '43

Recovery of paint overspray. S. D. Perlman. il Paint Oil & Chem R 105:16+ F 11 '43; Same cond. Aero Digest 43:269+ N '43; Abstracts. Chem & Eng N 21:297 Mr 10 '43; Am Mach 87:148 Je 24 '43

Remodeling a spray booth. R. L. Grayford. diag Sheet Metal Worker 34:38-9+ Ja '43

Salvaging waste paint. il Comp Air M 48: 7094 Jl '43

Spray gun fluid pressure conversion chart. Metal Finishing 41:685 O '43

Spray painting without booths; International Diesel electric co. il diag Sheet Metal Worker 34:21-2 Je '43

Spraying questionnaire. il diag Metal Finishing 41:531-3, 602-4 Ag-S '43

Safety measures

Ventilating paint spraying departments of bomber assembly plants. il Dom Eng 160: 51 N '42

PAINTERS, Industrial**Diseases and hygiene**

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Paint spraying—
Safety measures

PAINTING

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Mural painting and
decoration

Paint

PAINTING, Factory. See **Factories—Painting**

PAINTING, Industrial

Ghosting of paints. W. G. Armstrong. Paint Oil & Chem R 106:10, 12+ S 23 '43

Industrial paint coatings; abstract. W. H. Lutz. Iron Age 152:66-7 Jl 15 '43

See also

Airplanes—Painting

Bridge painting

Factories—Painting

Lacquer and lacquer-

ing

Machinery—Painting

Paint

Paint, Protective

Paint spraying

Plaster and plaster-

ing—Painting

Roads—Painting

Ships—Painting

Varnish and varnish-

ing

Water tanks, Steel—

Painting

Estimates

How to estimate oil paint and labor cost. Am Bld 65:30-1 Mr '43

How to figure painting jobs quickly. H. F. Lotz. Am Bld 65:60+ My; 58-9+ Je '43

PAINTING, Mexican

Mexico's modern art is part of the revolution; with reproductions in color. Fortune 28:118-19, 122-3 Ag '43

PAINTING, Structural

See also

Bridge painting

Ships—Painting

PAINTINGS

Ad men merchandise masterpieces to the masses; Tomorrow's masterpieces, inc. organized to sell work of established artists thru department stores. E. M. Housman. il Ptr Ink 205:24-5+ N 12 '43

PALEOBOTANY

See also

Algae, Fossil

Grasses, Fossil

Tertiary

Tertiary prairie grasses and other herbs from the high plains. M. K. Elias. Geol Soc Special Pa no 41:1-176, pl 1-17 bibliog(p147-52) '42

Appalachian region

Lower Pennsylvanian species of mariopteris eremopteris, diplothemna, and aneimites from the Appalachian region. D. White. U S Geol S Professional Pa 197-C:85-140, pl 8-39; pa 20c Supt. of doc. '43

India

Paleobotany in India. T. D. A. Cockerell. Science 97:222 Mr 5 '43

Wisconsin

Study of the plant microfossil succession in the bottom deposits of Crystal Lake, Vilas county, Wisconsin, and the peat of an adjacent bog. L. R. Wilson and A. T. Cross. bibliog Am J Sci 241:307-15 My '43

PALEOCLIMATEOLOGY

Fossil marmot from New Mexico and its climatic significance. C. E. Stearns. bibliog map Am J Sci 240:867-78 D '42

Soil phenomena as evidence of climatic changes. K. Bryan and C. C. Albritton, jr. Am J Sci 241:469-90 bibliog(p489-90) Ag '43

PALEOECOLOGY

Stratigraphical analysis and environmental reconstruction. T. G. Payne. flow diag bibliog diag map Am Assn Pet Geologists Bul 26:1697-1770, pl 1 N '42

PALEOGEOGRAPHY

Big Snowy group; lithology and correlation in the Northern Great Plains. E. S. Perry and L. L. Sloss. bibliog il diag maps Am Assn Pet Geologists Bul 27:1287-1304 O '43

See also

Glacial lakes

PALEONTOLOGICAL society

Proceedings of the thirty-fourth annual meeting of the council, New York, December 30, 1942. H. E. Vokes. Geol Soc Proc 1942:255-63 Ap '43

PALEONTOLOGISTS

Workers in vertebrate paleontology outside North America. Geol Soc Proc 1942:277-88 Ap '43

PALEONTOLOGY

Abstracts of the Paleontological society, December meeting at Ottawa (canceled); Pacific Coast branch meeting at California Institute of technology in April. Geol Soc Bul 53:1827-39 pt 2 D '42

Economic paleontology and mineralogy; an appraisal. H. L. Driver. Am Assn Pet Geologists Bul 27:938-47 Jl '43

Mesozoic and cenozoic arcidae from the Pacific slope of North America. P. W. Reinhart. Geol Soc Special Pa no 47:1-117, pl 1-15 bibliog(p87-95) '43

See also

Apes, Fossil

Cephalopoda, Fossil

Corals, Fossil

Crinoidea, Fossil

Graptolites

Mollusks, Fossil

Paleobotany

Vertebrates, Fossil

Bibliography

Bibliography of Charles Schuchert. C. O. Dunbar. Geol Soc Proc 1942:229-40 Ap '43

PALEONTOLOGY—Bibliography—Continued

Bibliography of fossil vertebrates, 1934-1938. C. L. Camp, D. N. Taylor and S. P. Welles. Geol Soc Special Pa no 42:1-663 '42

Cambrian

North American pleospongia. V. J. Okulitch. diags maps Geol Soc Special Pa no 48:1-112, pl 1-18 bibliog(p87-9) '43

Carboniferous

Studies on carboniferous insects from Commeny, France; introduction and families protagridae, meganeuridae, and campylopteridae. F. M. Carpenter. diags Geol Soc Bul 54:527-54, pl 1 bibliog(p553-4) Ap '43

Cretaceous

Bearing of foraminifera and ostracoda on lower cretaceous Fredericksburg-Washita boundary of north Texas. F. E. Lozo, Jr. bibliog il diags maps Am Assn Pet Geologists Bul 27:1060-80 Ag '43

Devonian

Devonian of Western Australia. C. Teichert. map Am J Sci 241:69-94, 167-84 bibliog(p181-4) F-Mr '43

Growth-rate of a Devonian reef-coral (prismatophyllum). H. Paul. bibliog pl Am J Sci 241:579-82 S '43

Eocene

Eocene stratigraphy in western Santa Ynez mountains, Santa Barbara county, California. F. R. Kelley. bibliog diags maps Am Assn Pet Geologists Bul 27:1-19, pl 1 Ja '43

Miocene

Miocene fishes of southern California. L. R. David. il diags maps Geol Soc Special Pa no 43:1-193, pl 1-16 bibliog(p183-5) '43

New salamander from the upper miocene beds of San Jacinto county, Texas. E. H. Taylor and C. J. Hesse. diags Am J Sci 241:185-93 Mr '43

Ordovician

Black River stratigraphy and faunas. F. P. Young, Jr. bibliog Am J Sci 241:209-40 Ap '43

New Ordovician cystidean echinoderms from Oklahoma. R. S. Bassler. Am J Sci 241:694-703, pl 1 N '43

Ozarkian and Canadian cephalopods; brevicones. E. O. Ulrich, A. F. Foerste and A. K. Miller. diags Geol Soc Special Pa no 49:1-240, pl 1-70 bibliog(p158-64) '43

Trichinocrinus, a new camerate crinoid from lower Ordovician (Canadian?) rocks of Newfoundland. R. C. Moore and L. R. Laudon. diag Am J Sci 241:262-8, pl 1-2 Ap '43

Two more Ordovician well-core graptolites, Crane county, Texas. C. E. Decker. bibliog il Am Assn Pet Geologists Bul 26:1771-5 N '42

Paleozoic

Bibliographic and faunal index of paleozoic palmatozoan echinoderms. R. S. Bassler and M. W. Moody. Geol Soc Special Pa no 45:1-734 bibliog(p127-730) '43

Evolution and classification of paleozoic crinoids. R. C. Moore and L. R. Laudon. Geol Soc Special Pa no 46:1-153, pl 1-14 bibliog(p118-29) '43

Paleozoic revision in Vermont. C. G. Doll. bibliog Am J Sci 241:57-64, pl 1 Ja '43

Pennsylvanian

Non-marine ostracoda from the lower Pennsylvanian in the southern Appalachians, and their bearing on inter-continental correlation. H. W. Scott and C. H. Summerison. bibliog Am J Sci 241:653-75, pl 1-2 N '43

Permian

Bradyodont sharks in the Permian of western Australia. C. Teichert. bibliog map Am J Sci 241:543-52, pl 1-3 S '43

Pleistocene

Some paleontological inferences as to the life-habits of the australopithecines. L. C. Elseley. Science 98:61-2 J1 16 '43

Pliocene

Occurrence of the pliocene antelope, ilingoceros, in Nevada. E. L. Furlong. Science 97:262 Mr 19 '43

Pre-cretaceous

Precretaceous of Colombia. D. Trumpy. bibliog diags pl map Geol Soc Bul 54:1281-1304 S '43

Australia

Bradyodont sharks in the Permian of western Australia. C. Teichert. bibliog map Am J Sci 241:543-52, pl 1-3 S '43

Devonian of Western Australia. C. Teichert. map Am J Sci 241:69-94, 167-84 bibliog(p181-4) F-Mr '43

California

Camel, horse and bison associated with human burials and artifacts near Fresno. G. W. Hewes. Science 97:328-9 Ap 9 '43

Eocene stratigraphy in western Santa Ynez mountains, Santa Barbara county. F. R. Kelley. bibliog diags maps Am Assn Pet Geologists Bul 27:1-19, pl 1 Ja '43

Eocene stratigraphy of Chico Martinez Creek area; Kern county. J. F. Curran. maps Am Assn Pet Geologists Bul 27:1361-86 bibliog (p1385-6) O '43

Miocene fishes of southern California. L. R. David. il diags maps Geol Soc Special Pa no 43:1-193, pl 1-16 bibliog(p183-5) '43

Stratigraphy and paleontology of Santa Maria district. W. P. Woodring, M. N. Bramlette and K. E. Lohman. bibliog diags map Am Assn Pet Geologists Bul 27:1335-60 O '43

Colombia

Pre-cretaceous of Colombia. D. Trumpy. bibliog diags pl map Geol Soc Bul 54:1281-1304 S '43

Colorado

Cretaceous-tertiary boundary in the Denver basin, Colorado. R. W. Brown. map Geol Soc Bul 54:65-86, pl 1-2 bibliog(p84-6) Ja '43

France

Studies on carboniferous insects from Commeny, France; introduction and families protagridae, meganeuridae, and campylopteridae. F. M. Carpenter. diags Geol Soc Bul 54:527-54, pl 1 bibliog(p533-4) Ap '43

Idaho

Thaynes formation, Bear Lake valley. B. Kummel, Jr. bibliog diags map Am J Sci 241:316-32 My '43

Latin America

Turtles and the origin of the fauna of Latin America. G. G. Simpson. bibliog Am J Sci 241:413-29 J1 '43

New Mexico

Fossil marmot from New Mexico and its climatic significance. C. E. Stearns. bibliog map Am J Sci 240:867-78 D '42

New York (state)

Black River stratigraphy and faunas. F. P. Young, Jr. fold maps Am J Sci 241:141-66, pl 1-2, 209-40 Mr-Apr '43

Brachiopoda of the High Point sandstone of New York. M. A. Stainbrook. Am J Sci 240:879-90, pl 1-2 D '42

Newfoundland

Trichinocrinus, a new camerate crinoid from lower Ordovician (Canadian?) rocks. R. C. Moore and L. R. Laudon. diag Am J Sci 241:262-8, pl 1-2 Ap '43

North America

Folsom mystery; its solution is largely contingent on the solution of another mystery; relation of northern bison to fossil type. L. C. Elseley. il Sci Am 167:260-1 D '42

North American pleospongia. V. J. Okulitch. diags maps Geol Soc Special Pa no 48:1-112, pl 1-18 bibliog(p87-9) '43

Ozarkian and Canadian cephalopods; brevicones. E. O. Ulrich, A. F. Foerste and A. K. Miller. diags Geol Soc Special Pa no 49:1-240, pl 1-70 bibliog(p158-64) '43

PALEONTOLOGY—Continued**Oklahoma**

New Ordovician cystidean echinoderms from Oklahoma. R. S. Bassler. *Am J Sci* 241: 694-703, pl 1 N '43

Texas

Bearing of foraminifera and ostracoda on lower cretaceous Fredericksburg-Washita boundary of north Texas. F. E. Lozo, jr. *bibliog il diags maps Am Assn Pet Geologists Bul* 27:1060-80 Ag '43

New form of phytosaur pelvis from the Dockum, triassic, beds of Crosby county. E. C. Case. *il Am J Sci* 241:201-3 Mr '43

New salamander from the upper miocene beds of San Jacinto county. E. H. Taylor and C. J. Hesse. *diags Am J Sci* 241:185-93 Mr '43

Texas skeleton. C. N. Ray. *Science* 98:344 O 15 '43

Two more Ordovician well-core graptolites, Crane county. C. E. Decker. *bibliog il Am Assn Pet Geologists Bul* 26:1771-5 N '42

Vermont

Brachiopod from mica schist, South Stratford, Vermont. C. G. Doll. *bibliog Am J Sci* 241:676-9, pl 1 N '43

Paleozoic revision in Vermont. C. G. Doll. *bibliog Am J Sci* 241:57-64, pl 1 Ja '43

PALEOPEDELOGY (term)

Introduction to paleopedology. C. C. Nikiforoff. *Am J Sci* 241:194-200 Mr '43

PALEOZOIC period. See Geology, Stratigraphic—Paleozoic; Paleontology—Paleozoic**PALESTINE**

See also

Railroads—Palestine

Economic conditions

Changes in Arab economy. *Economist* 144: 760-1 Je 12 '43

Inflation in 3 countries of the Middle East. K. C. Dougall. *For Comm W* 12:12-15+ S 18 '43

Palestine in 1942. *Economist* 144:sup13-14 Mr 13 '43

Economic policy

New method of price and commodity control. *For Comm W* 11:21 My 8 '43

Palestine's new economic controls. R. J. Barr. *For Comm W* 10:11+ F 13 '43

Labor, Department of

Establishment of Department of labor in Palestine. L. C. Pinkerton. *Monthly Labor R* 56:912 My '43

Labor department created. *For Comm W* 11: 23 Ap 10 '43

PALISADES of the Hudson

Bomb shelters in Hudson Palisades proposed. *Comp Air M* 48:6956-7 F '43

PALLADIUM

Application of palladium- and platinum-polyvinyl alcohol-vanadium catalysts. L. D. Rampino and F. F. Nord. *bibliog Am Chem Soc J* 65:429-31 Mr '43

Calibration of the platinum-13 per-cent.-rhodium-platinum thermocouples over the liquid-state temperature range. C. R. Barber. *il diag Engineering* 155:187-8, 205 Mr 5-12 '43

Formal electrode potentials of palladium in aqueous hydrochloric and perchloric acid solutions; stability of chloropalladate ion. D. H. Templeton, G. W. Watt and C. S. Garner. *bibliog Am Chem Soc J* 65:1608-12 Ag '43

Palladium; distribution, recovery characters and uses. L. Sanderson. *Can Min J* 64: 575-6 S '43

Palladium will find increased use in jewelry. *Sci Am* 168:61 F '43

Physiological effect

Physiologic properties of palladium and its compounds. S. F. Meek, G. C. Harrold and C. P. McCord. *bibliog Ind Med* 12: 447-8 Jl '43

PALLADIUM alloys

Influence of the transition from ferromagnetism to paramagnetism on catalytic activity. G. Cohn and J. A. Hedvall. *bibliog J Phys Chem* 46:841-7 N '42

PALLADIUM compounds

Reduction of potassium cyanopalladate (II) by potassium in liquid ammonia; a zerovalent compound of palladium. J. J. Burbage and W. C. Fernelius. *bibliog Am Chem Soc J* 65:1484-6 Ag '43

PALLADIUM dimethylglyoxime

Spot reaction experiments; protective layer effect of palladium dimethylglyoxime on nickel dimethylglyoxime. F. Feigl. *J Chem Educ* 20:298-9 Je '43

PALLADIUM plating

Palladium and its plating baths. G. C. Lambros. *il Metal Finishing* 41:73-6 F '43

Palladium electroplating; abstract. M. A. Klochko and Z. S. Medvedeva. *Chem & Met Eng* 50:188 Mr '43

PALLETS

Handles foundry material by new method; truck and pallet system in foundry of Pontiac motor division. *il Foundry* 70:113 D '42

Skid, pallet handling system; Union metal mfg. co. W. Shea. *il Steel* 112:52, 54 Ja 25; 114, 117+ F 1 '43

PALM oil

Salvaging and reconditioning palm oil. M. Reswick. *il diag Steel* 111:72-4 D 28 '42

Stocks of palm oil accumulate in Liberia. *For Comm W* 11:31 My 8 '43

PALMER, Edgar, 1881-1943

Sketch. *Oil Paint & Drug Rep* 143:49 Ja 18 '43

PALMS

Mediterranean doom palm serves multiple purposes. *For Comm W* 12:20 S 25 '43

See also

Saw palmetto

PAMPHLETS

See also

Advertisements—
Books and booklets

Bibliography

Free and inexpensive learning materials; 1942 supplement. L. Denham. (Bul. 84) 50p pa 25c George Peabody college for teachers, Curriculum laboratory, 2000 21st av, S, Nashville, Tenn. '42

PANAMA

Panama concessions voted. *Comm & Fin Chr* 157:1696 My 6 '43

See also

Darien
Insurance, Social—
Panama

Economic conditions

News by countries. Published in Foreign commerce weekly

War's effect on Panama's economy. W. H. H. Scott. *il For Comm W* 11:15-19, 44-5 Je 26 '43

Foreign relations**United States**

Panama concessions voted by U.S. Senate. *Comm & Fin Chr* 156:2163 D 17 '42

PAN AMERICAN airways

Airways opening; competitive trends in foreign air service. *Business Week* p32+ Mr 27 '43

PAA owns 20% stock of Guatemala line. *Aviation* N 1:29 O 4 '43

Pan American Airways system; ten years' progress. W. L. Van Dusen. *il Aeronautical Eng R* 1:99 N '42

Stringing air bases across Africa. *il Comp Air M* 47:6897 N '42

To move Los Angeles terminal. *Comm & Fin Chr* 157:1465 Ap 19 '43

PAN AMERICAN conferences

See also

Inter-American con- Pan American sani-
ference on social tary conference
security

PAN AMERICAN highway

All-American highway; Alaska highway forms important link. *map Roads & Bridges* 80:40+ N '42

Army reports on Pan-American highway. E. C. Kelton; H. E. Spickard. *il map Civil Eng* 13:515-21 N '43

PAN AMERICAN highway—Continued

Bridge to link Honduras and El Salvador on Inter-American highway. *For Comm W* 10: 14 Ja 16 '43

Building the Inter-American highway. A. N. Carter. *il map Eng N* 131:209-22, 269-76, 339-46 J1 29, Ag 12, 26 '43

Colombia plans Pan American highway link to the Caribbean. *For Comm W* 10:18 Ja 9 '43

Cuscatlan bridge in El Salvador. C. K. McCracken; H. D. Hussey. *il diags Civil Eng* 12:661-6 D '42

Engineering aspects of today's progress on the Inter-American highway. E. W. James. *il map For Comm W* 13:11-13+ O 2 '43

Highways in Central America benefit the whole continent. E. W. James. *Roads & Bridges* 81:100+ S '43

Highways to strategic materials; completed portions of Pan-American highway can help the United Nations' war effort. E. W. James. *il map Sci Am* 168:110-12 Mr '43

Inter-American highway; completion between Mexico and Costa Rica. *Roads & Bridges* 81:109+ O '43

Inter-American highway diary. A. N. Carter. *map Eng N* 130:852-3, 859, 866, 868, 914-15: 131-5, 115 Je 10-J1 8 '43

Lifeline of the Americas; completion of Pan American highway would relieve present shipping hazards and aid the war program. E. W. James. *il map Roads & Bridges* 80:33-5+ D '42

\$93,000,000 worth of highway; abstract. E. W. James. *map Nat Pet N* 35:26 My 5 '43

North to Fairbanks—south to Rio. R. B. Hall. *il map Comp Air M* 47:6877-83 N '42

Pan American highway is key to wartime transportation. E. W. James. *il Oil & Gas J* 41:31, 34+ D 31 '42; Same, with maps. *For Comm W* 9:3-9 D 5 '42; Same. *Explosives Eng* 20:358-64 D '42

Pioneer in Darien; completion of Pan American highway. R. Tewkesbury. *il map For Comm W* 11:11-12+ Ap 17 '43; Same, with additional *il Explosives Eng* 21:80-3, 94 My '43; Excerpt. *Concrete* 51:8 Je '43

Rapid progress on road through Central America. E. W. James. *Eng N* 130:457 Ap 1 '43

Texas to Panama by road-rail; efforts aimed at this objective being pushed. E. W. James. *il map For Comm W* 10:12-13+ Mr 13 '43

PAN AMERICAN sanitary conference

Eleventh conference. Rio de Janeiro, September, 1942. *Int Labour R* 47:95-7 Ja '43

PAN AMERICANISM

Closer hemisphere cooperation seen in price control. *For Comm W* 12:17 S 11 '43

Food for the Americas; hemisphere view of problems, readjustments, and objectives. J. C. McClintock. *il For Comm W* 10:3-5+ F 20 '43

FDR greets republics on Pan American day. *Comm & Fin Chr* 157:1599 Ap 29 '43

Good-neighbor policy is needed; South American textile situation. J. J. Reutlinger. *il Textile World* 93:76-7 Mr '43

Good neighbors co-operate; joint approach of government and private enterprise in United States and other American republics required to foster sound economic hemispheric development. W. P. Machold. *Steel* 112:52-3 My 24 '43

Hemisphere betterment, health and sanitation. A. R. Dreisbach. *il For Comm W* 9: 4-5+ N 21 '42

Hemisphere solidarity in a world at war. N. A. Rockefeller. *il Eng & Min J* 144:58 Ap '43

Inter-American development; cooperative activity shapes future trends. W. F. Macchold. *For Comm W* 11:3+ My 22 '43

Inter-American health plan. *il For Comm W* 11:8-9+ My 29 '43

Inter-American relations setup aims to spur economic growth. *Steel* 113:71 J1 5 '43

Inter-American system suggested as guide for international organization in post-war period. *Comm & Fin Chr* 157:1781 My 13 '43

Mexican trade trainees in U.S. earn as they learn. E. S. Hanson. *il For Comm W* 10:10+ Ja 30 '43

Pan-American jurists propose world order. *Comm & Fin Chr* 156:1984 D 3 '42

Reciprocal accords ease wartime stresses. J. C. Rovensky. *For Comm W* 10:18-19 F 27 '43

Unity of Americas basis for future world association. S. Welles. *Comm & Fin Chr* 157:1595 Ap 29 '43

Ways to Latin-American approach. L. G. Legorreta. *Comm & Fin Chr* 158:1710+ O 28 '43

What is ahead in the Americas? J. C. Rovensky. *Comm & Fin Chr* 158:1200-1+ S 23 '43

See also

Latin America

PANCREAS

Insulin safeguard; avoid wastage of glands. *Business Week* p78-9 Je 19 '43

PANEL system. See Hot water heating—Panel system

PANELS, Prefabricated. See Buildings, Prefabricated

PANHANDLE eastern pipe line company Debentures offered. *Comm & Fin Chr* 157: 2454 Je 28 '43

Settlement proposed. *Comm & Fin Chr* 157: 557 F 8 '43

PANHANDLE producing and refining company War changeover; oil concern arranges to turn itself into a diversified investment company. *Business Week* p109 O 16 '43

PANIC (psychology). See Fear

PANS. See Kitchen utensils

PANTOGRAPH

New York central puts clearance matters on highly efficient basis; establishes central bureau and builds new clearance car. *il Ry Age* 114:1080-2+ My 29 '43

PANTOTHENIC acid

Existence of an alkali-stable derivative of pantothenic acid in biological materials. A. L. Neal and F. M. Strong. *Am Chem Soc J* 65:1659-60 Ag '43

Growth effects of α -methyl homologs of pantothenic acid and β -alanine. M. A. Pollack. *bibliog Am Chem Soc J* 65:1335-9 J1 '43

Pantothenic acid; optical rotation as a measure of stability. D. V. Frost. *bibliog Ind & Eng Chem Anal* ed 15:306-10 My 15 '43

Production of pantothenic acid deficiency in mice with pantoyl-taurine. E. E. Snell and others. *bibliog Science* 97:168 F 12 '43

Role of folic acid and biotin in the utilization of pantothenic acid by the rat. L. D. Wright and A. D. Welch. *bibliog Science* 97:426-7 My 7 '43

Analysis

Microbiological determination of pantothenic acid. A. L. Neal and F. M. Strong. *bibliog Ind & Eng Chem Anal* ed 15:654-7 O 15 '43

PANTOYL-taurine

Production of pantothenic acid deficiency in mice with pantoyl-taurine. E. E. Snell and others. *bibliog Science* 97:168 F 12 '43

PAPAIN

Digestion of beef by papain; abstract. G. Y. Gottschall and M. W. Kies. *Food Ind* 15: 107-8 Ja '43

PAPAVERINE

Synthetic papaverine in national formulary. *Oil Paint & Drug Rep* 144:3+ S 13 '43

PAPER

Developments in the graphic arts, 1942. M. S. Kantrowitz. *Paper Tr J* 116:35-6 My 27 '43

New developments and trends in the paper industry; abstract. R. J. Zaumeyer. *Paper Ind* 25:396+ J1 '43

Paper patterns save vital materials; General electric company. *il Iron Age* 151:62 F 25 '43

Paper sinews of war. E. E. MacMorland. *Paper Tr J* 117:50, 52 S 30 '43; Same. *Paper Ind* 25:772+ O '43; Abstract. *Chem & Eng N* 21:1746+ O 25 '43

Publication studying WPB paper allotment. *Ptr Ink* 202:68 Ja 15 '43

PAPER—Continued

Will a shortage of paper shackle printing in U.S.? F. McVoy. Inland Ptr 110:28 N '42

See also

Crepe paper Toilet paper
Drawing paper Tracing paper
Dyes and dyeing— Wall board
Paper Waste paper
Filter paper Wood pulp
Newsprint paper Wrapping paper
Paper board

Analysis*Bibliography*

Chemical testing methods literature review. B. L. Browning. Paper Tr J 116:31-2 Mr 18 '43

Bacteriology*See also*

Paper making—Bacteria control

*Bibliography**See also*

Paper making—Bibliography

Brightness

Most pleasing white papers from unbleached sulphite pulps. A. K. Ames. Pulp & Pa of Can (Convention no) 44:123-30 [F] '43

Color

Carbon black in the paper industry; manufacture of black paper. L. H. Cohan. Il Paper Tr J 115:42, 44+ N 26 '42

Most pleasing white papers from unbleached sulphite pulps. A. K. Ames. Pulp & Pa of Can (Convention no) 44:123-30 [F] '43
Reddening of unbleached sulphite pulp. A. K. Ames. Pulp & Pa of Can (Convention no) 44:131-4+ [F] '43

Study of dyestuff absorption by fillers and their effect upon the color of filled papers. O. Kress and P. Trucano. bibliog Paper Tr J 117:31-8 S 2 '43

See also

Dyes and dyeing—Paper

Conservation

Advertising does not waste newsprint, power; abstract. F. A. Burt. Ptr Ink 203:50 Ap 30 '43

Appeal to President for cooperation by government branches in paper conservation. Comm & Fin Chr 158:1923 N 11 '43

Brown kraft for the duration for hosiery envelopes. Il Mod Packaging 16:47 Jl '43

Editorial values retained as publishers make paper stretch. E. A. Malloy. Ptr Ink 204:26, 30 S 24 '43

Graphic arts victory committee publishes guide to paper conservation. Ind Marketing 28:146 S '43

How limited paper supplies are conserved by British printers. Inland Ptr 112:66 O '43

How paper orders affect the local community. C. L. Saxby. Mod Packaging 16:80 Mr '43

How the British have adapted themselves to paper scarcity; effect on publications, advertising, the graphic arts, packaging and some commodities. C. F. Greeves-Carpenter. Ptr Ink 205:33-4+ N 12 '43

It's time to save paper; abstract. Management R 32:168-9 My '43

L-241, multiplies work of printers; quota setting brings up questions. Inland Ptr 110:35-6 Mr '43

Magazine publishers must use less paper; full text of directive order. Paper Tr J 116:8-9 Ja 7 '43

Mr Lupton answers the copy chasers on paper conservation. Il Ind Marketing 28:92, 94 S '43

Paper and container conservation and reclamation within the Navy department. F. G. Barber. Paper Tr J 117:83-4 N 25 '43; Same abr. Paper Ind 25:782+ O '43

Paper is scarce, conserve it. Food Ind 15:84 Ag '43

Paper limitation orders issued. Inland Ptr 110:57 Ja '43

P.I. survey reveals how commercial firms are saving paper: 34 methods. Il Ptr Ink 204:32+ S 3; 205:37 O 8 '43

Publishers make plans to meet 10% paper cut. Ptr Ink 202:44 Ja 29 '43

Pulp situation tighter in spite of printers' savings. A. G. Fegert. Inland Ptr 111:21-3 Je '43

Salesman's corner; printing salesmen must learn to sell more printing to the pound of paper. F. Rundell. Inland Ptr 110:38-9 Mr '43

So you won't lack paper, conserve it. Il Factory Management 101:105-6 My '43

WPB postpones second cut of 10 per cent in use of paper. Ptr Ink 202:62+ F 26 '43

War-time problems in books and binding. B. M. Headicar. Assn of Sp Lib & Inf Bur Proc 1942:40-2; Discussion. 67

We must share the shortages, or else! C. W. Browne. Mod Packaging 16:41-3 Ag '43

See also

Advertising mediums—Space rationing
Newsprint paper

Curling

Measuring the degree of curl of paper. F. T. Carson and V. Worthington. pl diag J Research Nat Bur Stand 30:113-21 F '43

Dirt content*See also*

Paper making—Dirt problem

Durability

Photochemical stability of papers. H. F. Launer and W. K. Wilson. bibliog J Research Nat Bur Stand 30:55-74 Ja '43; Same. Paper Tr J 116:28-36 F 25 '43; Excerpts. Paper Ind 25:84+ Ap '43

Dyeing

See Dyes and dyeing—Paper

Manufacture

See Paper making

Military use

Camas has gone to the war; paper packaging of war supplies. Paper Tr J 116:13 Ap 1 '43

Moisture content

Instrumentation studies; penetration of papers by water vapor. Il diags Paper Tr J 116:11-15 Ap 8; 10-13 Je 10; 16-19 Je 17; 117:12-15 Jl 1 '43

See also

Paper drying

Opacity

Optical characteristics of paper as a function of fiber classification. S. R. Parsons. bibliog Paper Tr J 115:34-42 D 17 '42

Optical properties

Optical characteristics of paper as a function of fiber classification. S. R. Parsons. bibliog Paper Tr J 115:34-42 D 17 '42

Permeability

Air permeability of paper; TAPPI tentative standard T 460 m-43. Paper Tr J 117:27-8 S 16 '43

Improvement of electrical circuit in the News penetration tester. D. D. Cameron and W. C. Kenyon. diags Paper Tr J 116:28-30 My 6 '43; Same cond. Paper Ind 25:644+ S '43

Instrument for measuring the liquid permeability of paper and porous materials. W. H. Lane. diag Paper Tr J 117:26-7 Jl 15 '43; Same cond. Paper Ind 25:70+ Ap '43

Instrumentation studies; penetration of papers by water vapor. Il diags Paper Tr J 116:11-15 Ap 8; 10-13 Je 10; 16-19 Je 17; 117:12-15 Jl 1 '43

Packaging requirements for dehydrated vegetables. J. R. Sanborn and G. J. Hucker. Paper Tr J 116:27-33 Ap 29 '43

PAPER—Permeability—Continued

- Printing-ink permeation of paper; castor-oil test; TAPPI tentative standard T 462 m-43. Paper Tr J 116:24 Je 17 '43
- Relationship between air permeability and oil permeability of paper. W. H. Lane. bibliog Paper Tr J 117:28-32 Jl 15 '43; Excerpts. Paper Ind 25:78+ Ap '43
- TAPPI water vapor permeability testing session. Mod Packaging 17:102+ N '43; Paper Tr J 117:64+ S 30 '43

Prices

- OPA issues new paper price regulation. Paper Tr J 116:7+ Je 3 '43
- OPA issues new price on coarse papers. Paper Tr J 116:10-11 Ap 1 '43
- Set new ceiling prices on toilet tissue and paper towels. Paper Tr J 116:11-12 N 19 '42
- Sets ground wood paper ceilings. Paper Tr J 117:20 N 4 '43

See also

Paper, Government

Printing properties

- Comparison of calender treatments; patent coated paperboard treated with solutions of chlorinated starch, tapioca starch, and polyvinyl alcohol. A. Yraola. Paper Tr J 116:33-4 My 27 '43
- Further experimental study of beater practice in the manufacture of offset papers. C. G. Weber, M. B. Shaw and M. J. O'Leary. J Research Nat Bur Stand 30:267-79 Ap '43; Same. Paper Tr J 117:35-40 S 23 '43
- Graphic arts committee report, 1942. M. S. Kantrowitz. Paper Tr J 116:25-7 Ja 21 '43
- Ink drying as affected by various paper stocks. M. J. Lecky. Paper Tr J 116:29-32 My 20 '43; Same cond. Paper Ind 25:800+ O '43
- Newsprint papers; relationship between ink drying and paper properties. L. J. Morin. Pulp & Pa of Can 44:445-6 My '43
- Printing-ink permeation of paper; castor-oil test; TAPPI tentative standard T 462 m-43. Paper Tr J 116:24 Je 17 '43
- Relation of ink to paper. H. J. Wolfe. II Paper Tr J 116:32-4 Mr 25 '43; Same cond. Paper Ind 25:200-1 My '43
- Relation of paper to printing on multicolor high-speed presses. L. W. Claybourn. Paper Tr J 116:25-6 Ap 29 '43; Excerpts. Paper Ind 25:312+ Je '43
- Relationship between air permeability and oil permeability of paper. W. H. Lane. bibliog Paper Tr J 117:28-32 Jl 15 '43; Excerpts. Paper Ind 25:78+ Ap '43
- Report of the printability committee; Canadian pulp and paper association. Pulp & Pa of Can (Convention no) 44:200+ bibliog(p206+) [F] '43

Standards

- Standards committee TAPPI report, 1942. Paper Tr J 116:23-4 Ap 22 '43
- War time government specifications for paper and envelopes. M. S. Kantrowitz and R. H. Simmons. Paper Tr J 116:36-8 Mr 4 '43; Same. Paper Ind 24:1296, 1298 Mr '43

Strength

- Effect of acetylation on water-binding properties of cellulose; relation between physical properties and hygroscopicity. W. H. Aiken. bibliog Ind & Eng Chem 35:1206-10 N '43
- Effects of various cooking conditions on the bleachability and strength characteristics of kraft pulp. E. H. Hill. Paper Tr J 116:32-4 Ap 8 '43
- Instrumentation studies; measurement of the tensile strength of paper. II Paper Tr J 116:10-12 F 11; 13-14 Mr 4 '43
- Measurement and influence of bonding between paper fibers. J. d'A. Clark. bibliog diags Paper Tr J 116:29-35 F 4 '43
- Melamine again, for buttons and high wet-strength paper. II Sci Am 167:280-1 D '42
- Melamine resins for wet strength paper. II Mod Packaging 17:38-9 S '43
- Metaphosphate increases the washing efficiency of chemical pulps. E. R. Leng and E. T. Laurin. Paper Tr J 116:33-6 My 20 '43; Excerpts. Paper Ind 25:802+ O '43

Microchemistry of pulp fibers; the significance of fiber ballooning in the pulping process. W. M. Harlow. bibliog II Paper Tr J 117:27-9 Jl 8 '43

- Review of the literature on wet strength paper. T. T. Collins, Jr. bibliog(96 references) Paper Ind 25:263-9 Je '43
- Ultimate strength of pulp fibers and the zero-span tensile test. J. d'A. Clark. diags Paper Ind 25:73-4+ Ap '43
- Use of melamine resins for beater wet strength. C. S. Maxwell. Paper Tr J 116:39-42 My 13 '43
- Waterproof paper products vs. paper strength; effect of rosin. J. A. DeCew. Paper Tr J 116:16 F 4 '43
- Wet-strength paper now commercially practical for many purposes. Sci Am 169:162 O '43
- Wet strength resin for stock addition; abstract. R. Kumler. Paper Ind 25:425-6 Jl '43; Same. Chem Age (Lond) 49:191-2 Ag 21 '43

Testing

- Air permeability of paper; TAPPI tentative standard T 460 m-43. Paper Tr J 117:27-8 S 16 '43
- Developments in the physical testing of paper, 1942. B. W. Scribner. bibliog Paper Tr J 116:23-4 Mr 11 '43
- Factors influencing apparent density and its effect on paper properties. J. d'A. Clark. bibliog diags Paper Tr J 116:31-8 Ja 7 '43
- Flammability of treated paper and paperboard; TAPPI suggested method T 461 sm-43. Paper Tr J 117:28 S 16 '43
- Foining hand sheets for physical tests of pulp; revision of TAPPI standard T 205 m-40. bibliog diags Paper Tr J 115:25-31 D 31 '42
- Improvement of electrical circuit in the News penetration tester. D. D. Cameron and W. C. Kenyon. diags Paper Tr J 116:28-30 My 6 '43; Same cond. Paper Ind 25:644+ S '43
- Instrumentation studies; measurement of the tensile strength of paper. II Paper Tr J 116:10-12 F 11; 13-14 Mr 4 '43
- Instrumentation studies; penetration of papers by water vapor. II diags Paper Tr J 116:11-15 Ap 8; 10-13 Je 10; 16-19 Je 17; 117:12-15 Jl 1 '43
- Internal tearing resistance of paper. Mod Packaging 16:120+ D '42
- Measurement and influence of bonding between paper fibers. J. d'A. Clark. bibliog diags Paper Tr J 116:29-35 F 4 '43
- Measuring the degree of curl of paper. F. T. Carson and V. Worthington. pl diags J Research Nat Bur Stand 30:113-21 F '43
- Photochemical stability of papers. H. F. Launer and W. K. Wilson. bibliog J Research Nat Bur Stand 30:55-74 Ja '43; Same. Paper Tr J 116:28-36 F 25 '43
- Relationship between air permeability and oil permeability of paper. W. H. Lane. bibliog Paper Tr J 117:28-32 Jl 15 '43
- Report of the committee on physical and chemical standards; Canadian pulp and paper association; new developments in testing methods. Pulp & Pa of Can (Convention no) 44:164-7 [F] '43
- Selecting engineering department papers. H. A. Perkins and D. H. Hunter. II Machine Design 15:69-71 Ja '43
- Substitution of birch for spruce-balsam ground in the newsprint furnish. W. W. Holland. Pulp & Pa of Can (Convention no) 44:148-51 [F] '43
- TAPPI paper testing committee report, 1942. B. W. Scribner. Paper Tr J 116:25 Ja 14 '43
- Ultimate strength of pulp fibers and the zero-span tensile test. J. d'A. Clark. diags Paper Ind 25:73-4+ Ap '43
- Variable angle surface illuminator for microscopic inspection of surface texture of materials. J. H. Graff. II diags Paper Tr J 115:97-100 N 26 '42
- Volume of the total solids in paper; abstract. P. Klemm. Paper Ind 25:674 S '43
- Wire and felt sides of paper; revision of TAPPI suggested method T 445 sm-42. R. G. Macdonald. Pulp & Pa of Can 44:452 My '43

See also

- | | |
|--------------------|---------------------|
| Paper—Strength | Paper board—Testing |
| Paper, Insulating— | Paper research |
| Testing | |

PAPER—Continued**Transportation**

See also
Newsprint paper—
Transportation

Uses

Paper lug cap on glass tobacco jar. *il Mod Packaging* 16:53+ F '43
Plastics and plasticity; paper compounded with synthetic resins. E. V. Crane. *il Iron Age* 152:57-9 Ag 19 '43
Pulp and paper industry makes impressive record in meeting war demands. S. Taylor. *Paper Tr J* 116:84, 86+ F 18 '43
Technologist in war products development. J. G. Strange. *Paper Tr J* 116:24-5 Mr 11 '43

See also
Paper—Military use

Water resistance

Resistance of sized paper and paperboard to water at elevated temperatures. P. W. Codwise. *Paper Tr J* 116:30-3 Mr 4 '43

See also
Paper, Waterproof

Wet strength

See Paper—Strength

PAPER, Building

Comparative resistance to vapor transmission of various building materials. L. V. Teesdale. *Heating-Piping* 14:736-42 D '42

PAPER, Coated

Coated paper; its origin, development, and purposes. W. B. Wheelwright. *il dlags Paper Ind* 24:936-40 D '42

See also
Paper coating

PAPER, Crepe. See Crepe paper

PAPER, Drawing. See Drawing paper

PAPER, Effect of light on

Photochemical stability of papers. H. F. Launer and W. K. Wilson. *bibliog J Research Nat Bur Stand* 30:55-74 Ja '43; Same. *Paper Tr J* 116:28-36 F 25 '43; Excerpts. *Paper Ind* 25:80+ Ap '43

PAPER, Effect of temperature on

Gases evolved by the thermal decomposition of paper. E. J. Murphy. *bibliog Electrochem Soc Trans* 83 (preprint 17):217-28 Ap '43

PAPER, Filter. See Filter paper

PAPER, Flameproofed. See Fireproofing of paper

PAPER, Government

Government paper awards. *Paper Tr J* 116:16+ My 20; 13-15 Je 3 '43

Government printing office and the war. A. E. Giegengack. *Paper Tr J* 117:35-7 O 28 '43; Same cond. *Paper Ind* 25:909-10+ N '43

Government using 25% less paper. *Ptr Ink* 205:84 N 12 '43

Joint committee announces paper awards. *Paper Tr J* 117:105-6+ S 30 '43

Open bids for U.S. printing office paper. *Paper Tr J* 117:7, 14-17 S 23 '43

Open paper bids for six months' supply for Government printing office. *Paper Tr J* 115:66, 68, 71-5 N 26 '42

Open paper bids for U.S. printing office. *Paper Tr J* 116:7, 18, 21-4 My 27 '43

To centralize buying in Printing office; Representative Boren introduces bill. *Paper Tr J* 117:7+ N 4 '43

War time government specifications for paper and envelopes. M. S. Kantrowitz and R. H. Simmons. *Paper Tr J* 116:36-8 Mr 4 '43; Same. *Paper Ind* 24:1296, 1298 Mr '43

PAPER, Greaseproof

Greaseproof papers. *Chem & Met Eng* 50:211 My '43

Specialty papers under stricter control; glassine, greaseproof and vegetable parchment papers. *Paper Tr J* 117:17 JI 29 '43

PAPER, Gummed

Adhesiveness of gummed paper tape; TAPPI tentative standard T 463 m-43. *Paper Tr J* 116:23 Je 17 '43

Hints for printing on the gummed side. *Inland Ptr* 111:50 Ag '43

PAPER, Insulating

Chemical changes affecting the stability of cellulose insulation. F. M. Clark. *Electrochem Soc Trans* 83 (preprint 6):81-96 Ap '43

Cuff-folding paper insulation device. L. G. Walker. *il Elec W* 120:332 JI 24 '43

Impregnated paper for submarine cable. R. J. Wiseman. *il Elec W* 120:1348-9 O 16 '43

Oil-impregnated-paper high-voltage condenser bushings for circuit breakers and transformers. H. J. Lingal, H. L. Cole and T. R. Watts. *bibliog dlags Elec Eng* 62:Trans 269-75 Je '43

Testing

Gases evolved by the thermal decomposition of paper. E. J. Murphy. *bibliog Electrochem Soc Trans* 83 (preprint 17):217-28 Ap '43

PAPER, Laminated

Custom converter; Detroit wax paper co. supplies laminators and molders with materials. *il Mod Plastics* 20:51-4+ Je '43

Fabricating plane parts from laminated paper plastic; McDonnell aircraft corporation. *il Aviation* 41:138 N '42

Fibre cans on tin lines. *il Mod Packaging* 16:89+ My '43

Function of War products development section; 3,000 or 4,000 tons of metal conserved. J. G. Strange. *Paper Tr J* 116:25 My 6 '43

Laminated paper plastics for aircraft. *il Machine Design* 15:87 Mr '43

Lamination of weatherproof solid fiberboard with starch and resin adhesives. J. E. Killinger. *Paper Tr J* 117:25-30 N 4 '43

Lining and laminants for fibre containers; canisters and drums. E. R. Brown. *Mod Packaging* 16:78+ Mr '43

More about laminations. *il Mod Packaging* 16:50-3+ D '42

Paper laminates for molding. H. J. Luth. *il Mod Plastics* 20:91+ Mr '43

Planes of paper. *il Mod Plastics* 20:82+ D '42

PAPER, Mold resistant

Fungicides and germicides in the pulp and paper industry. D. K. Ballman and F. B. Smith. *il Paper Ind* 25:143-8 My '43

PAPER, Newsprint. See Newsprint paper

PAPER, Tracing. See Tracing paper

PAPER, Waste. See Waste paper

PAPER, Waterproof

Use of waxes and wax emulsions in the waterproofing of kraft papers. R. B. Killingsworth. *Paper Ind* 25:526 Ag '43

Waterproof paper products vs. paper strength; effect of rosin. J. A. DeCew. *Paper Tr J* 116:16 F 4 '43

See also
Paper board—Water resistance

PAPER, Waxed

Base paper for waxed bread wrappers; orders. *Pulp & Pa* of Can 44:44 Ja '43

Packaging requirements for dehydrated vegetables. J. R. Sanborn and G. J. Hucker. *Paper Tr J* 116:27-33 Ap 29 '43

WPB restricts wax papers. *Paper Tr J* 117:90 S 30 '43

Waxed paper under dollars ceiling. *Paper Tr J* 116:17 F 4 '43

PAPER associations

Paper week devoted to the war emergency. *Paper Tr J* 116:101-2+ F 18 '43

Wartime subjects highlight annual meetings of paper week. *Paper Ind* 24:1232, 1234 Mr '43

See also

National paper trade association	Technical association of the pulp and paper industry
Specialty flexible container manufacturers institute	

PAPER bags

All-America package competition award; Bemis bro. bag company, paper bags for liquids and sand. *il Mod Packaging* 16:83+ Ap '43

All-America package competition award; Shellmar product company paper-and-cellophane pouch for soup mixes. *il Mod Packaging* 16:86+ Ap '43

PAPER bags—Continued

Bulk packaging of chemicals; wartime trends, postwar possibilities; shift to multiwall paper bags. *il* *diags* Chem & Met Eng 50:117-24 O '43

Can paper replace lute bags for raw sugar? *il* *Mod Packaging* 16:73+ Mr '43

Limits use of paper bags. Paper Tr J 117:14 S 9 '43

Multiwall bags, properties and modern uses. *il* *Mod Packaging* 17:79-82 S '43

New multiwall paper bags protect products in outdoor storage. R. W. Lahey. *il* Chem & Eng N 21:1556, 1558+ S 25 '43

New way to close coffee bags; by corrugating the tops. *il* *Mod Packaging* 16:77 Mr '43

Paper bags sizes and weights. Pulp & Pa of Can 43:977 D '42

Paper shipping sacks. R. W. Lahey. Chem & Eng N 21:971 Je 25 '43

St Regis builds bag plant. Paper Tr J 117:28 O 28 '43

Standardization of bags ordered. Paper Tr J 116:18 Mr 4 '43

See also

Specialty flexible container manufacturers institute

Prices

OPA revises bag prices. Paper Tr J 115:76 N 26 '42

PAPER bags (shopping)

Grocery bags carry wartime slogans. Sales Management 52:49 F 15 '43

PAPER board

Bristols and their uses. Pulp & Pa of Can 43:994 D '42

Fiber cans, alternates for metal containers. R. P. Bigger. *il* Chem & Eng N 21:1436-9 S 10 '43

Fiber cans as substitute packages in wartime. R. P. Bigger, F. H. Bopp and T. E. Dobbins. Paper Tr J 116:33-5 Mr 4 '43; Same. Pulp & Pa of Can 44:660-2 Ag '43; Same cond. Paper Ind 24:1286+ Mr '43

Folding carton and fiberboard substitutes for metal containers. J. D. Malcolmson. Paper Tr J 115:21-2 O 8 '42; Same. Pulp & Pa of Can 44:263-4 F '43

Function of War products development section. J. G. Strange. Paper Tr J 116:24-7 My 6 '43

Shipping container shortage; glass industry's most urgent problem. Glass Ind 24:381-2, 391+ S '43

Soybeans used to produce laminated board; abstract. G. H. Brothier. Science 97:599 Ja 29 '43

See also

Paper boxes

Wall board

Analysis

Instrument to measure minute changes in specific inductive capacity of cardboard and hence to determine its water content. S. D. Gardiner. *diag* Soc Chem Ind J 62:75-6 My '43

Manufacture

Acclimatization of bacteria to disinfectants used in the paper and paperboard industry. J. W. Appling and B. F. Shema. *il* Paper Tr J 117:101-4 S 30 '43; Same cond. Paper Ind 25:906, 908-9 N '43

Factors affecting smoothness of paperboard. K. C. Melenbacher. Paper Tr J 117:32-4 J 1 29 '43; Same cond. Paper Ind 25:304-6 Je '43

Groundwood stock blending. E. Overstrom. Pulp & Pa of Can (Convention no) 44:88-90 [F] '43

Lamination of weatherproof solid fiberboard with starch and resin adhesives. J. E. Killinger. Paper Tr J 117:25-30 N 4 '43

Study of stock preparation in paperboard mills. W. H. de Montmorency. *il* Pulp & Pa of Can (Convention no) 44:107-19 [F] '43

Utilization of cornstalks in the manufacture of paper and paperboard. S. D. Wells and R. L. Steller. *bibliog* flow sheet *il* *diags* Paper Tr J 116:45-51 Ap 15 '43

See also

Paper board mills

Moisture content

Instrument to measure minute changes in specific inductive capacity of cardboard and hence to determine its water content. S. D. Gardiner. *diag* Soc Chem Ind J 62:75-6 My '43

Prices

OPA gives new paper board determinations. Paper Tr J 117:7 O 28 '43

Testing

Comparison of calender treatments; patent coated paperboard treated with solutions of chlorinated starch, tapioca starch, and polyvinyl alcohol. A. Yraola. Paper Tr J 116:33-4 My 27 '43; Excerpts. Paper Ind 25:642+ S '43

G.E. announces new box board tester. *il* Paper Tr J 117:33 S 16 '43

Tests on fiber containers; the Beach puncture tester. S. D. Wells, A. B. Kaplan, and L. R. Ayers. *bibliog* Paper Tr J 116:29-38 Ap 1 '43

See also

Paper board, Corrugated—Testing

Water resistance

Development of weatherproof solid-fiber and corrugated shipping containers designed for overseas shipment. E. R. Hankins. Paper Tr J 116:27-9 Mr 4 '43; Abstract. Paper Ind 24:1292+ Mr '43

Resistance of sized paper and paperboard to water at elevated temperatures. F. W. Codwise. Paper Tr J 116:30-3 Mr 4 '43

See also

Paper, Waterproof

PAPER board, Corrugated

Development of weatherproof solid-fiber and corrugated shipping containers designed for overseas shipment. E. R. Hankins. Paper Tr J 116:27-9 Mr 4 '43; Abstract. Paper Ind 24:1292+ Mr '43

Five gallons of liquid in corrugated board. *il* *Mod Packaging* 17:86-7 N '43

Steel stitched cartons for wire. *il* *Mod Packaging* 16:72 Ag '43

Testing

Flat crush test. P. Drewsen. *il* Paper Tr J 116:39-42 Mr 18 '43

Tests on fiber containers; the Beach puncture tester. S. D. Wells, A. B. Kaplan, and L. R. Ayers. *bibliog* Paper Tr J 116:29-38 Ap 1 '43

Theory of box compressive resistance in relation to the structural properties of corrugated paperboard. J. R. Little. *il* *diags* Paper Tr J 116:31-4 Je 17 '43; Same cond. Paper Ind 25:68+ Ap '43

PAPER board industry

Paperboard freed; WPE order lifts bans on production. Business Week p77-8 Mr 6 '43

WPE orders allocation of container board. Paper Tr J 116:10 Mr 11 '43

Statistics

Census of pulp mills and of paper and paperboard mills for 1941. Paper Tr J 116:13-15 Ja 14 '43

Paperboard, 1938-1941. Survey of Cur Business 1942 Sup p152 [supplemented in monthly numbers]

Paper board output in 1942 declines 9 per cent below record year. G. Whiting. Paper Tr J 116:48+ F 18 '43

Canada

Canada freezes container board for month. Paper Tr J 117:10 N 4 '43

PAPER board mills

Cleaning house in a paperboard mill. W. Dahl. Paper Ind 25:611 S '43

Equipment

Current operating problems and developments in a paperboard mill. F. S. Cryslar. Paper Ind 25:530+ Ag '43

PAPER board mills—Continued**Heating and ventilation**

Make heating and ventilating survey at insulite plant of M. & O. paper co.; Engineering experiment station, University of Minnesota. F. B. Rowley, R. C. Jordan and C. E. Lund. *il Paper Tr J* 115:9-11 D 31 '42

Safety measures

Hazards in paperboard mills and converting plants. S. S. Knisely. *il Paper Ind* 24:1031-4 Ja '43

PAPER box factories

Printing plant for paper cartons; Ace carton corporation. *il Arch Rec* 94:68-71 O '43

Safety measures

Hazards and their elimination in the corrugated and solid fiber box industry. D. E. Maynard. *Paper Ind* 24:360-2 N '42

Hazards in paperboard mills and converting plants. S. S. Knisely. *il Paper Ind* 24:1031-4 Ja '43

PAPER box industry

See also Folding paper box association of America

PAPER boxes

All-America package competition award; E. J. Kelly co. ink in paper containers. *il Mod Packaging* 16:99+ Ap '43

Development of weatherproof solid-fiber and corrugated shipping containers designed for overseas shipment. E. R. Hankins. *Paper Tr J* 116:27-9 Mr 4 '43; *Abstract. Paper Ind* 24:1292+ Mr '43

How to properly store paper packing cartons. *Cer Ind* 39:70 D '42

Method to obtain buoyancy of paper shipping cases. T. J. Nelson. *diags Paper Tr J* 116:34 My 6 '43

Paper boxes for frozen eggs. *il Mod Packaging* 16:96-7 Je '43

Paper boxes simplification; abstract. W. E. Braithwaite. *Oil Paint & Drug Rep* 143:67 My 17 '43

Paper cigar box. *il Mod Packaging* 16:49 JI '43

Rusted cans in V-boxes. *Mod Packaging* 17:53 S '43

Theory of box compressive resistance in relation to the structural properties of corrugated paperboard. J. R. Little. *il diags Paper Tr J* 116:31-4 Je 17 '43; Same cond. *Paper Ind* 25:68+ Ap '43

WPB saves paper to replace cans. *Ptr Ink* 202:40 Ja 15 '43

Testing

Tests on fiber containers; the Beach puncture tester. S. D. Wells, A. B. Kaplan, and L. R. Ayers. *bibliog Paper Tr J* 116:29-38 Ap 1 '43

PAPER chemicals

American chemical society holds 106th meeting; abstracts of papers bearing on pulp and paper industry. *Paper Ind* 25:804, 806+ O '43

Glycerine keeps pace with paper progress. G. Leffingwell and M. A. Lesser. *bibliog Paper Ind* 25:44-5 Ap '43

Nonfibrous raw materials report, 1942. E. N. Poor. *Paper Tr J* 117:31-6 Ag 5 '43

Review of the literature on wet strength paper. T. T. Collins, jr. *bibliog* (96 references) *Paper Ind* 25:263-9 Je '43

Substitutes for nonfibrous chemical raw materials. E. N. Poor. *Paper Ind* 25:380-1 JI '43

Prices

Papermaking chemicals supply adequate with prices stable in 1942. *Paper Tr J* 116:66+ F 18 '43

PAPER coating

Comparison of calender treatments; patent coated paperboard treated with solutions of chlorinated starch, tapioca starch, and polyvinyl alcohol. A. Yraola. *Paper Tr J* 116:33-4 My 27 '43

Flow properties of coating clays at high rates of shear. K. A. Arnold. *il Paper Tr J* 117:28-34 Ag 26 '43; *Excerpts. Paper Ind* 25:64+ Ap '43

Plastics and the paper industry; plastics applied to paper and paperboard. R. V. V. Nicholls. *Pulp & Pa of Can* (Convention no) 44:144-5 [F] '43

Structural viscosity studies of coating clay compositions; instrument for measuring and distinguishing thixotropy, dilatancy, plasticity, and Newtonian flow. G. H. Sheets. *bibliog il diags Paper Tr J* 116:28-36 Ja 21 '43

PAPER coloring. See Dyes and dyeing—Paper

PAPER containers

All-fibre can with lap-seam. *Paper Tr J* 116:17 My 6 '43

Army and navy requirements conference; exhibits, papers. *Paper Ind* 25:726+ O '43

Army and navy requirements conference held by TAPPI, Chicago, Sept. 21-24. *Paper Tr J* 117:47-50+ S 30 '43

Award winners. 12th annual all-America package competition. *il Mod Packaging* 16:32-6+, 90-4+, 96-7+, 99+, 102-4+, 110-12+ Ap '43

Banana flakes in cones. *il Mod Packaging* 16:54-5 Mr '43

Camas has gone to the war; paper packaging of war supplies. *Paper Tr J* 116:13 Ap 1 '43

Chicago's paper milk container battle aired in advertisements. *Ptr Ink* 202:19 Ja 8 '43

Coast firm makes millions of moisture-proof paper containers. *Sales Management* 52:46-7 My 1 '43

Conservation of metal and rubber by cellulose sheetings. A. F. Wendler. *Paper Tr J* 115:34-6 D 3 '42

Developments and trends in new paper products. R. J. Zaumeyer. *Paper Tr J* 117:25-8 JI 1 '43

Display makers switch to drum manufacture. *il Mod Packaging* 16:77+ Je '43

Fibre can for moisture protection. *Mod Packaging* 17:104+ N '43

Fiber cans, alternates for metal containers. R. P. Bigger. *il Chem & Eng N* 21:1436-9 S 10 '43; *Abstract. Chem Ind* 52:608 My '43

Fiber cans as substitute packages in wartime. R. P. Bigger, F. H. Bopp and T. E. Dobbins. *Paper Tr J* 116:33-5 Mr 4 '43; Same. *Pulp & Pa of Can* 44:660-2 Ag '43; Same cond. *Paper Ind* 24:1286+ Mr '43

Fish packers like fibre containers. *il Mod Packaging* 16:44-6+ JI '43

Five gallons of liquid in corrugated board. *il Mod Packaging* 17:86-7 N '43

Folding carton and fiberboard substitutes for metal containers. J. D. Malcolmson. *Paper Tr J* 115:21-2 O 8 '42; Same. *Pulp & Pa of Can* 44:263-4 F '43

Forming and filling machine; forming, wax coating, filling and capping paper milk bottle. *il Mod Packaging* 16:90 JI '43

Lining and laminants for fibre containers; canisters and drums. E. R. Brown. *Mod Packaging* 16:78+ Mr '43

Nationwide drive is on for more pulp. R. L. Van Boskirk. *Mod Packaging* 17:45+ S '43

New design of paper container. *il Paper Ind* 24:1012 Ja '43

Paint cans short; lack of kraft and jute for containers. *Business Week* p66+ O 30 '43

Paper and container conservation and reclamation within the Navy department. F. G. Barber. *Paper Tr J* 117:83-4 N 25 '43; Same abr. *Paper Ind* 25:782+ O '43

Paper containers speed wartime milk delivery. *Nat Safety N* 47:84 Ap '43

Paper development within Navy department. *Paper Tr J* 116:36 My 6 '43

Paper has some new packaging jobs. C. W. Browne. *Paper Tr J* 115:31-3 D 17 '42; *Abstract. Paper Ind* 24:713-14 O '42

Requirements of protective papers for ordnance overseas packaging. H. T. Holbrook. *Paper Ind* 25:794-6 O '43

Socony-Vacuum announces use of paper container. *il Mod Packaging* 16:47 F '43

Substitution and conservation; use of paper and paper products. R. J. Zaumeyer. *Paper Tr J* 117:31-4 N 4 '43; Same cond. *Paper Ind* 25:112-16 N '43

PAPER containers—Continued

Types of paper dispensers for powders. *Il*
Mod Packaging 16:58-61+ Je '43

See also

Paper bags

Paper boxes

also Specialty flexible container manufacturers institute

Prices

OPA gives new paper board determinations.
Paper Tr J 117:7 O 25 '43

PAPER cutting machines

Pneumatic clamp makes hard work easy;
paper cutter in printing plant of Ingersoll-
Rand company. R. D. Fisher. *Il* Comp Air
M 48:6966 F '43

PAPER drying

Apparatus for drying webs of paper regen-
erated from cellulose derivatives; patent.
Paper Ind 24:1178 F '43

Drainage and steam for paper machine driers.
R. O'Donoghue, bibliog diagrs Paper Tr J
117:31-6 J1 22 '43; Same cond. Paper Ind 25:
638+ S '43

Drying rates of newsprint, 1942. W. G. Mac-
Naughton, graphs Paper Tr J 117:30-6 Ag
12 '43; Excerpts. Paper Ind 25:88+ Ap
'43

PAPER fabrics. *See* Paper textiles

PAPER finishing

See also

Paper coating

Paper sizing

PAPER handling

Fork trucks in the paper industry. R. E.
Madden. *Il* Paper Ind 25:606-7 S '43

Mechanization of paper packaging. C.
Stevens. *Il* Paper Tr J 115:31-2 D 10 '42

PAPER hanging

How to hang wallpaper. *Il* Consumers' Re-
search Bul 12:13-17 S '43

PAPER industry and trade

Future outlook in pulp-paper trade. W. L.
Neubrecht and A. C. Schumacher. Paper Ind
25:294, 296+ Je '43

How to do business with the navy. R.
Paegre. Paper Ind 25:780+ O '43

Outlook for paper industries. G. Agassiz.
Barron's 23:4 S 20 '43

Paper and pulp requirements. A. G. Wake-
man. Paper Ind 24:1272-3 Mr '43

Paper industry has won confidence at Wash-
ington. E. W. Tinker. Pulp & Pa of Can
44:449-50 My '43

Paper is critical; lack of woods labor blamed
in report. Business Week p19-20 O 30 '43

Paper market mix-up fostered by conflicting
official stories. Inland Ptr 111:37 Ap '43

Paper ranked high as essential industry by
Association officials. Paper Tr J 115:31, 78-
83 N 26 '42

Paper situation. Survey of Cur Business 23:
8-9 J1 '43

Paper supply uncertainty causes rush of
buying. Inland Ptr 110:24-6 N '42

Politics gets into paper picture as shortage
is investigated. Inland Ptr 111:41-2 My '43

Public relations looks in on the paper indus-
try. W. Colwell. Paper Ind 24:1129+ F '43

Publishing faces a third year of war. M. K.
Dutton. Paper Tr J 117:84-6 S 30 '43

Pulp and paper industry in war and peace.
W. L. Neubrecht and A. G. Schumacher.
Survey of Cur Business 22:10-18 D '42

Woodsmen essential; increasing shortage of
printing and other papers. Inland Ptr 111:
31-2 Ag '43

See also

Newsprint paper Paper mills

Paper board industry Paper textiles

Regulation

Summary of government orders affecting
paper in the war effort. L. M. Lamm. Paper
Tr J 116:90, 92, 96 F 18 '43

WPB cuts paper; Canada joins in shallow
alice. Business Week p82+ N 14 '42

WPB issues new order controlling paper.
Paper Tr J 116:7, 16 Ja 14 '43

Service

See also

Paper—Military use

Statistics

Census of pulp mills and of paper and paper-
board mills for 1941. Paper Tr J 116:13-15
Ja 14 '43

Community dependency in United States on
paper and pulp industry. Paper Tr J 116:48
N 26 '42

Paper and printing, 1938-1941. Survey of Cur
Business 1942 Sup p149-52 [supplemented in
monthly numbers]

Paper output in 1942 is 16,522,000 tons. M.
C. Dobrow. Paper Tr J 116:35-8 F 18 '43

Potential 1944 paper supply situation; condi-
tions and prospects in the United States
associated with and affected by Canadian
factors. E. W. Tinker. Pulp & Pa of Can
44:649-50+ Ag '43

Pulp and paper industry hit new mark. Pulp
& Pa of Can 44:730-4, 783 S '43

Pulp and paper, 1941. Chem & Met Eng 50:
123 F '43

See also

Newsprint paper—
Statistics

Argentina

Argentina's imports, 1942. For Comm W 13:29
O 30 '43

Newsprint pinch; Argentina wants U.S. and
Canada to fill needs. Business Week p80+
F 27 '43

Canada

Canada announces rationing of newsprint.
Paper Tr J 116:14, 16 Ja 7 '43

Canada integrates its paper industry to meet
the war emergency. C. L. Sibley. Paper Tr
J 116:72+ F 18 '43

Canada takes action on newsprint supply.
Paper Tr J 117:7+ S 16 '43

Canada takes exception to newsprint price.
J. E. Langdon. Paper Tr J 116:7+ Mr 25 '43

Canadian paper industry faces crisis; prob-
lem of woods labor cause of serious situa-
tion. E. H. Smith. Pulp & Pa of Can 44:
791-4 O '43; Abstract. Paper Tr J 117:7,
14 O 14 '43

Compensation fund set for newsprint mills.
Paper Tr J 116:7 F 25 '43

Engineers and the British empire; Canadian
lumber, pulp, and paper industries. M.
Smith. *Il* Engineer 176:160-1 Ag 27 '43

Important events of 1942. Pulp & Pa of Can
44:241-2 F '43

Industry of national importance; origin and
development of the Great Lakes paper
company limited. R. A. Wheatley, flow
sheet, *Il* diagrs map Pulp & Pa of Can 44:
559-73 J1 '43

Labor problems enter newsprint industry;
Quebec and the Maritime provinces. Paper
Tr J 117:108 S 30 '43

New newsprint prorating plan announced.
Paper Tr J 116:7 Ja 21 '43

Newsprint industry of national import. P.
Kellogg. Pulp & Pa of Can (Convention
no) 44:73-4 [F] '43

No agreement on wages reached at meeting;
Canadian conference between management
and unions. Paper Tr J 117:8 O 7 '43

Paper industry asks cooperation of govern-
ment. Pulp & Pa of Can 44:696 Ag '43

Pulp and paper industry hit new mark. Pulp
& Pa of Can 44:730-4, 783 S '43

Pulp gets tighter. Business Week p54+ Ag
21 '43

Second front of the pulp and paper compa-
nies of Canada. Pulp & Pa of Can 44:794-
7+ O '43

Urge pulpwood be declared essential work;
Canadian newspapers advocate government
take prompt steps. Paper Tr J 117:10 O 28
'43

See also Canadian pulp and paper as-
sociation

China

Free China's paper industry. C. R. Budd. *Il*
For Comm W 11:13-15+ Ap 17 '43; Same.
Paper Ind 25:172+ My '43

Latin America

Paper production mounts in the other Ameri-
cas. C. R. Budd. *Il* For Comm W 9:14-17
D 5 '42

PAPER industry and trade—Continued**New Brunswick**

Pulp and paper making in the Maritimes. J. N. Stephenson. *il Pulp & Pa of Can* 44: 687, 689-90 Ag '43

Northwestern states

Future of the industry in the Pacific Northwest. F. D. Mosher. *il Paper Ind* 25:719-21+ O '43

Nova Scotia

Pulp and paper making in the Maritimes. J. N. Stephenson. *il Pulp & Pa of Can* 44: 681, 683-5 Ag '43

Peru

Growth of industry in Peru. *For Comm W* 11:34 Ap 17 '43

Sweden

Impressions of a recent visitor to Sweden. G. Godwin. *Pulp & Pa of Can* 44:583-4 JI '43

United States

Committee would class paper as essential. *Paper Tr J* 117:9+ Ag 19 '43
Materials; abstract. J. L. Ritchie. *Paper Ind* 25:394+ JI '43

New developments and trends in the paper industry; abstract. R. J. Zaumeyer. *Paper Ind* 25:396+ JI '43

Raw materials; pulp, pulpwood and de-inked papers. E. W. Tinker. *Paper Tr J* 116:42+ Je 24 '43; Same. *Pulp & Pa of Can* 44:589-90 JI '43; Abstract. *Paper Ind* 25:392+ JI '43

U.S. pulp and paper industry in the national defence programme. F. C. Clark. *Chem & Ind* 61:441-2 O 31 '42

War and the paper industry. T. S. Shore. *Paper Tr J* 115:22-3 D 24 '42

Uruguay

Poplar paper; Uruguay works on plan to get newsprint from its own trees. *Business Week* p62 Ja 9 '43

PAPER laboratories

New research laboratory; Kalamazoo vegetable parchment company. *il Paper Ind* 24: 1130-1 F '43

Paper laboratory at Tacoma. *Paper Tr J* 116:9 Mr 11 '43

PAPER making

Abridgement of papers at TAPPI annual meeting, New York, Feb. 16-19. *Paper Ind* 23:1260+; 24:74+; 180+, 306-17, 430, 432+, 534-41, 636-8+; 762-4+, 974-9, 1068-76, 1162-6+ Mr-O, D '42-F '43

Abridgement of papers at TAPPI annual meeting, New York, Feb. 15-18, 1943. *Paper Ind* 24:1282-6+; 25:64+, 180+, 300+, 430+, 536+, 638+, 800+ Mr-O '43

Abridgement of papers at TAPPI fall meeting, Boston, Sept. 29-Oct. 1. *Paper Ind* 24: 742+, 870-80, 968+, 1060-6, 1156-61 O '42-F '43

Aspects of war-time paper manufacture with special reference to food wrappings; abstract. J. Grant. *Chem & Ind* 62:113-14 Mr 20 '43

Canadian pulp and paper association, Technical section annual meeting, Montreal, Jan. 27-29. *Paper Ind* 24:1142, 1144, 1146 F '43; *Can Chem & Process Ind* 27:74 F '43

Carbon black in the paper industry; manufacture of black paper. L. H. Cohan. *il Paper Tr J* 115:42, 44+ N 26 '42

Current operating problems and developments. F. S. Cryslar. *Paper Tr J* 117:35-6 JI 8 '43

Effect of acetylation on water-binding properties of cellulose; rag stock. J. C. Bletzinger. *bibliog il Ind & Eng Chem* 35:474-80 Ap '43

Effect of acetylation on water-binding properties of cellulose; relation between physical properties and hygroscopicity. W. H. Aiken. *bibliog Ind & Eng Chem* 35:1206-10 N '43

Efficient reuse of process water. H. A. Morrison. *Paper Ind* 25:190+ My '43

Grinding of hardwoods. E. R. Schafer and J. C. Pew. *bibliog Paper Tr J* 116:25-32 Ja 28 '43

Groundwood stock blending. E. Overstrom. *Pulp & Pa of Can (Convention no)* 44:88-90 [F] '43

How pulps affect quality of paper; will quality of book papers suffer as more ground wood is used? W. B. Wheelwright. *Inland Ptr* 111:28-9 My '43

Industry of national importance; origin and development of the Great Lakes paper company limited. R. A. Wheatley, flow sheet *il diags map Pulp & Pa of Can* 44: 559-78 JI '43

Microchemistry of pulp fibers; the significance of fiber ballooning in the pulping process. W. M. Harlow. *bibliog il Paper Tr J* 117:27-9 JI 8 '43

Old stand-by, soap; its use in paper making. G. Leffingwell and N. Radin. *bibliog Paper Ind* 24:1035-6 Ja '43

Papermaking abstracts; abstracts of articles and books relating to the manufacture and technology of pulp, paper, paperboard and paper products; comp. by TAPPI com. on abstracts and bibliography. v 1 pts 1-2 150p; 149-270p pa ea \$2; to members gratis Technical assn. of the pulp and paper industry, 122 E. 42d st, New York '41-'42

Paper prevents bottlenecks, theme of TAPPI annual meeting. *Paper Ind* 24:1242+ Mr '43; *Pulp & Pa of Can* 44:310-19 Mr '43

Paper processing aid; Nopco 2211; J. M. Crowe. *Chem Ind* 62:55 Ja '43

Performance of evaporators. J. P. Rubush and G. E. Seavoy. *il diags Paper Tr J* 116:25-30 Je 17 '43; Same cond. *Paper Ind* 25:544, 546-8 Ag '43

Report of the newsprint committee, Canadian pulp and paper association; suction presses, pitch control, elasticity of newsprint. *Pulp & Pa of Can (Convention no)* 44:161-4 [F] '43

Utilization of cornstalks in the manufacture of paper and paperboard. S. D. Wells and R. L. Steller. *bibliog flow sheet il diags Paper Tr J* 116:45-51 Ap 15 '43; Excerpts. *Paper Ind* 24:1288+ Mr '43

See also

Cellulose	Paper making materials
Digesters (paper making)	Paper mills
Dyes and dyeing—Paper	Paper research
Paper board	Paper sizing
Paper chemicals	Paper textiles
Paper drying	Pulpstones
Paper making machinery	Sulfite liquor
	Wood pulp

Bacteria control

Acclimatization of bacteria to disinfectants used in the paper and paperboard industry. J. W. Appling and B. F. Shema. *il Paper Tr J* 117:101-4 S 30 '43; Same cond. *Paper Ind* 25:906, 908-9 N '43

Effect of small additions of bleach liquor on the bacterial content of sulphite pulp. J. W. Appling and B. F. Shema. *Paper Tr J* 116:131-2 F 18 '43; Abstract. *Paper Ind* 24:1298+ Mr '43

Fungicides and germicides in the pulp and paper industry. D. K. Ballman and F. B. Smith. *il Paper Ind* 25:143-8 My '43

Beating

Dyeing paper in the beater. J. R. Roberts. *il Paper Ind* 24:941-3 D '42

Further experimental study of beater practice in the manufacture of offset papers. C. G. Weber, M. B. Shaw and M. J. O'Leary. *J Research Nat Bur Stand* 39:267-79 Ap '43; Same. *Paper Tr J* 117:35-40 S 23 '43
Laboratory processing of pulp; ball-mill method; Kollergang method; TAPPI suggested method T 224 sm-43 and T 225 sm-43. *bibliog diags Paper Tr J* 117:23-7 S 9 '43

Matching shades in the beater. J. R. Roberts. *il Paper Ind* 24:1040-1 Ja '43

Nature of hydration and fiber bonding; modified hypothesis regarding beating. J. d'A. Clark. *bibliog il Paper Ind* 25:507-10 Ag '43

Some interrelationships of pulp properties. J. d'A. Clark. *bibliog il diags Pulp & Pa of Can (Convention no)* 44:91-102 [F] '43

Use of melamine resins for beater wet strength. C. S. Maxwell. *Paper Tr J* 116: 39-42 My 13 '43

PAPER making—Continued

Bibliography

- Index, Technical section, Paper trade journal volume 115, July to December, 1942. C. J. West, comp. Paper Tr J 116:31-5 Ja 14 '43
- Index, Technical section, Paper trade journal, volume 116, January to June, 1943. C. J. West. Paper Tr J 117:37-9 Ag 19 '43
- Review of the literature on wet strength paper. T. T. Collins, jr. bibliog (96 references) Paper Ind 25:263-9 Je '43

Bleaching

- Bleaching rag stock with chlorite activated by hypochlorite. J. E. Brennan, J. D. MacMahon and G. P. Vincent. Paper Tr J 115:25-6 N 19 '42
- Effect of small additions of bleach liquor on the bacterial content of sulphite pulp. J. W. Appling and B. F. Shema. Paper Tr J 116:131-2 F 18 '43; Abstract. Paper Ind 24:1298+ Mr '43
- Effects of various cooking conditions on the bleachability and strength characteristics of kraft pulp. E. H. Hill. Paper Tr J 116:32-4 Ap 8 '43; Excerpts. Paper Ind 25:312 Je '43
- Explosion of rotary bleacher takes heavy toll. *il Locomotive* 44:236-9 O '43
- pH factor in the hypochlorite bleaching of wood pulp; single-stage treatment of sulphite pulp. F. Casciani and G. K. Storin. Paper Tr J 115:33-40 N 12; 27-31 N 19 '42
- pH in pulp bleaching. F. Casciani. Paper Ind 25:426+ JI '43
- Influence of cooking and bleaching upon the chain length distribution of the carbohydrate fraction in pulpwood. J. E. Atchison. bibliog Paper Tr J 116:23-34 Je 3 '43; Same cond. Paper Ind 24:1282-6 Mr '43
- Metaphosphate increases the washing efficiency of chemical pulps. E. R. Lang and E. T. Laurin. Paper Tr J 116:33-6 My 20 '43; Excerpts. Paper Ind 25:802+ O '43

By-products

- Minor by-products of the pulp industry. L. E. Wise. bibliog Paper Ind 24:1223-7 Mr '43
- New derivatives of lignin; esters of mono- and dibasic aliphatic acids, from Meadol prepared from soda black liquor. E. B. Brookbank and others. Paper Tr J 116:27-8 Ap 1 '43; Same cond. Paper Ind 25:436+ JI '43
- Tall oil; by-product of the kraft pulping process; patents. L. E. Wise. Paper Ind 24:822-6 bibliog (p831) N '42
- Tall oil for the war effort. J. M. Wafer, A. Pollak and R. Hastings. flow sheet diag map Paper Tr J 117:26-31 JI 22 '43; Same cond. Paper Ind 25:196+ My '43
- Tall oil in soap. R. Hastings, A. Pollak and J. M. Wafer. bibliog *il Soap & San Chem* 19:24-7, 70 My '43
- Tall oil recovery. F. J. Cirves. diag Paper Ind 25:149-51 My '43
- Wood alcohol; McCormick's newsprint firm employs wood pulp waste. *Business Week* p94-5 Je 26 '43
- See also
Sulfite liquor

Chlorination

- Conservation in and by chlorination; abstract. R. B. Martin. Paper Ind 25:76-8 Ap '43
- Special chlorination unit based on the Celdecor-Pomilio process for bleached straw pulp. *il Paper Tr J* 115:32-4 N 26 '42
- See also
Paper making—
Bleaching

Dirt problem

- Some observations on pulpwood types and their preparation in relation to pulp cleanliness. L. J. Rioux and M. Barsalou. Pulp & Pa of Can (Convention no) 44:120-2+ [F] '43

Fillers

- Dispersion of pigments and fillers for microscopical examination. L. B. Miller. *il Paper Tr J* 116:39-42 Ja 7 '43
- Study of dyestuff absorption by fillers and their effect upon the color of filled papers. O. Kress and P. Trucano. bibliog Paper Tr J 117:31-8 S 2 '43

Freeness testing

- Freeness of pulp; TAPPI tentative standard T 227 m-43. diags Paper Tr J 116:25-8 My 20 '43

History

- Coated paper; its origin, development, and purposes. W. B. Wheelwright. *il diags Paper Ind* 24:936-40 D '42
- Instruments in the paper industry; control attachments of last century's paper machine; letter and enclosures by W. G. MacNaughton. diags Pulp & Pa of Can 44:259-62 F '43

Patents

- Papermaking patents in the United States. J. Atkins, comp. Published in monthly numbers of Paper industry and paper world
- Review of the literature on wet strength paper. T. T. Collins, jr. bibliog (96 references) Paper Ind 25:263-9 Je '43
- United States patents on papermaking, fourth quarter, 1942. C. J. West, comp. Paper Tr J 116:25-8 F 4 '43
- United States patents on papermaking; first quarter, 1943. C. J. West, comp. Paper Tr J 116:33-6 Ap 29 '43
- United States patents on papermaking, second quarter, 1943. C. J. West, comp. Paper Tr J 117:23-6 JI 29 '43
- United States patents on papermaking, third quarter, 1943. C. J. West, comp. Paper Tr J 117:33-5 O 28 '43

Slime problem

- Conservation in and by chlorination; industrial water supplies. R. B. Martin. Paper Tr J 116:31-2 My 6 '43
- Fungicides and germicides in the pulp and paper industry. D. K. Ballman and F. B. Smith. *il Paper Ind* 25:143-8 My '43
- Merfenelopes; a new reagent for controlling slime in the manufacture of food papers; nontoxicity of phenyl mercuric compounds. H. R. Murdock. bibliog Paper Ind 25:634+ S '43; Same. Pulp & Pa of Can 44:877-8 N '43

Study and teaching

- Education in the pulp and paper industry; Joint vocational education committee of the pulp and paper industry of Canada and the United States. R. B. Wolf. Paper Tr J 117:38-40 O 28 '43

Sulfate process

- Comparison of southern and northern kraft pulps. O. Kress and F. T. Ratliff. bibliog Paper Tr J 117:31-5 O 21 '43; Excerpts. Paper Ind 25:318-19 N '43
- Cooking process; action of aqueous solutions of pure sodium hydrosulfite on aspen wood. R. L. Hossfeld, R. A. Gortner and F. H. Kaufert. bibliog diag Ind & Eng Chem 35: 717-20 Je '43
- Effect of chemical-wood ratio in pulping Douglas fir by the sulphate process. J. S. Martin and M. W. Bray. Paper Tr J 117:29-33 S 16 '43
- Effect of sulphate mill wastes on fish life. J. A. Extrom and D. S. Farnier. *il Paper Tr J* 117:27-32 JI 29 '43
- Effects of various cooking conditions on the bleachability and strength characteristics of kraft pulp. E. H. Hill. Paper Tr J 116:32-4 Ap 8 '43; Excerpts. Paper Ind 25:312 Je '43
- Heat utilization in sulphate mills; use of flash steam from the digester blow to heat hot water for pulp washing. H. T. Baker. Paper Tr J 117:32-4 JI 15 '43; Abstract. Paper Ind 25:551-2 Ag '43
- Importance of a recovery unit as steam generating equipment in the pulp mill. F. H. Rosencrans. Paper Tr J 116:35-8 Je 24 '43; Same cond. Paper Ind 25:652+ S '43
- Instrumentation in kraft pulp mills. A. J. Philip. flow diag *il diags Pulp & Pa of Can* 44:367-77 Ap '43
- Pipe and tube materials survey in sulphate pulp process. S. B. Jones. flow diag Paper Tr J 116:41-4 Ap 15 '43; Same abr. Paper Ind 25:180+ My '43
- Pulping of extracted yellow pine wood chips. O. Kress and R. H. Mosher. bibliog Paper Tr J 117:29-34 O 7 '43

PAPER making—Sulfate process—Continued.
Tall oil; by-product of the kraft pulping process; patents. L. E. Wise. Paper Ind 24:322-6 bibliog(p831) N '42

Bibliography

List of references of articles dealing with kraft pulp and paper. Pulp & Pa of Can (Convention no) 44:160-1 [F] '43

Sulfite process

Benjamin Chew Tilghman, and the origin of the sulfite process for delignification of wood. M. Phillips. bibliog J Chem Educ 20:444-7 S '43

Better than blowpits, use of tanks. J. S. Bates. Pulp & Pa of Can 44:655 Ag '43
Developments in the sulphite process during 1941 and 1942. A. J. Corey. bibliog Pulp & Pa of Can (Convention no) 44:168-70+ [F] '43

Effect of small additions of bleach liquor on the bacterial content of sulphite pulp. J. W. Appling and B. F. Shema. Paper Tr J 116:131-2 F 13 '43; Abstract. Paper Ind 24:1298+ Mr '43

Effect of sodium thiosulphate in the sodium sulphite pulping process. K. A. Kobe and J. M. Hanson. Paper Tr J 117:25-6 JI 8 '43

Further comparison of sodium- and calcium-base sulphite acids; effect of decreasing time to maximum temperature with corresponding reduction in total cooking time. M. O. Schur and E. G. Ingalls. Paper Tr J 117:34-8 S 16 '43; Excerpts. Paper Ind 25:438 JI '43

pH factor in the hypochlorite bleaching of wood pulp; single-stage treatment of sulphite pulp. F. Casciani and G. K. Storin. Paper Tr J 115:33-40 N 12; 27-31 N 19 '42

Instruments in the pulp and paper industry. J. N. Franklin. Pulp & Pa of Can 43:950-2; 44:304-6 D '42, Mr '43

Most pleasing white papers from unbleached sulphite pulps. A. K. Ames. Pulp & Pa of Can (Convention no) 44:123-30 [F] '43

Nomograph for apparent viscosity of sulfite stock. D. S. Davis. bibliog Ind & Eng Chem 35:1128 O '43

Powell River improves sulphite mill. F. H. Fullerton. il Pulp & Pa of Can 44:433-6 My '43

Pressure drop data as applied to pulp suspensions. J. Cooper, jr. bibliog Paper Tr J 115:32-6 N 19 '42

Reddening of unbleached sulphite pulp. A. K. Ames. Pulp & Pa of Can (Convention no) 44:131-4+ [F] '43

Some observations on pulpwood types and their preparation in relation to pulp cleanliness. L. J. Rioux and M. Barsalou. Pulp & Pa of Can (Convention no) 44:120-2+ [F] '43

Sulphite acid testing; the Palmrose iodate and the Winkler tests. D. R. McMasters. bibliog Paper Tr J 117:30-5 JI 8 '43

Sulphite blow heat and gas recovery. J. N. Swartz. il diag Pulp & Pa of Can (Convention no) 44:139-42 [F] '43

Troublesome compounds and reactions of sulphur encountered in the sulphite process. C. F. B. Stevens. bibliog diags Paper Tr J 117:25-30 Ag 5 '43

Wood influence on pulp quality. H. J. Ostrowski. Pulp & Pa of Can 44:807-9 O '43

PAPER making machinery

Care of modern mechanical water removal equipment on paper machines synchronized to the war effort. O. C. Cordes. il Paper Ind 24:862-6 N '42

Care of the wire. A. McCaffery. il Paper Ind 25:601-5+ S '43

Drainage and steam for paper machine driers. R. O'Donoghue. bibliog diags Paper Tr J 117:31-6 JI 22 '43; Same cond. Paper Ind 25:638+ S '43

Tissue machines. J. E. Goodwillie. Paper Ind 25:528+ Ag '43

See also

Electric driving—Paper mills
Paper cutting machines
Paper drying

Bearings

Composition bearing applications in industry. J. A. Petho and F. W. Vogt. diags Paper Tr J 115:31-5 D 24 '42; Excerpts. Paper Ind 24:1153-60 F '43

Phenolic materials for wartime demands; bearings. F. W. Vogt. diags Paper Tr J 117:28-30 JI 1 '43; Same cond. Paper Ind 25:662+ S '43

Control

All-Vac steam control system for paper machine driers. diag Paper Ind 25:92 Ap '43
Instruments in the paper industry; control attachments of last century's paper machine; letter and enclosures by W. G. MacNaughton. diags Pulp & Pa of Can 44:259-62 F '43

Design

Adaptation of welded steel to the paper machine. R. S. Conabee. il diags Welding J 22:504-12 JI '43

Cylinder machine vat-circle width. J. B. Gough. diags Paper Tr J 117:28-34 S 9 '43; Same. Pulp & Pa of Can 44:934-41 D '43; Same cond. Paper Ind 25:536+ Ag '43

PAPER making materials

American chemical society holds 106th meeting; abstracts of papers bearing on pulp and paper industry. Paper Ind 25:804, 806+ O '43

Artificial silk as a paper-making material. Pulp & Pa of Can 44:447 My '43

Casein substitutes. Paper Ind 25:472+ Ag '43

Nature of fiber staining by iodine stains. H. W. Rowe. bibliog Paper Tr J 116:26-34 Mr 11 '43; Abstract. Paper Ind 24:873-7 N '42

Plastics and the paper industry; plastics applied to paper and paperboard. R. V. V. Nicholls. Pulp & Pa of Can (Convention no) 44:144-5 [F] '43

Pulping of annual plants; abstract. H. F. Müller and W. Overbeck. Paper Ind 25:323 Je '43

Sodium chlorite as pulping agent, applicable to rye straw, esparto, potato stalks, and to other annual crops; abstract. A. W. Sohn and F. Reiff. Paper Ind 25:444 JI '43

Special chlorination unit based on the Celdec-Pomillo process for bleached straw pulp. il Paper Tr J 115:32-4 N 26 '42

Stinging nettles in papermaking; abstract. C. R. Metcalfe. Paper Ind 24:984 D '42

Use of melamine resins for beater wet strength. C. S. Maxwell. Paper Tr J 116:39-42 My 13 '43

Utilization of cornstalks in the manufacture of paper and paperboard. S. D. Wells and R. L. Steller. bibliog flow sheet il diags Paper Tr J 116:45-51 Ap 15 '43; Excerpts. Paper Ind 24:1288+ Mr '43

Water hyacinth in Indian paper manufacture; abstract. M. A. Azam. Paper Ind 24:886 N '42

Wet strength resin for stock addition; abstract. R. Kümmer. Paper Ind 25:425-6 JI '43

See also

Cellulose	Rags
Paper chemicals	Rubber latex
Paper making—Fillers	Straw
Papers	Waste paper
Paper pulp	Wood pulp
Paper sizing	Wood waste
Pine	

Prices

Maximum price schedules check excessive rise in papermaking materials. W. R. Hicks. Paper Tr J 116:38, 40 F 18 '43

Testing

Dispersion of pigments and fillers for microscopical examination. L. B. Miller. il Paper Tr J 116:39-42 Ja 7 '43

See also

Wood pulp—Testing

Bibliography

Fibrous raw materials testing committee report 1942; literature survey. B. E. Lauer. Paper Tr J 116:32-4 Mr 18 '43

PAPER mills

Industry of national importance; origin and development of the Great Lakes paper company limited. R. A. Wheatley. flow sheet il diags map Pulp & Pa of Can 44:559-78 J '43

Wood in pulp and paper mill construction. F. W. Gottschalk. il Paper Ind 25:36-40 Ap '43

See also
Electric driving— Water supply for
Paper mills paper mills
Paper board mills
Paper making

Accidents

Accidents loom in manpower problem of paper and pulp industry. R. K. Ferguson. Paper Tr J 115:60-2 N 26 '42

Accidents major problem in paper industry. D. B. Chant. Pulp & Pa of Can 44:496-8+ J '43

Data on the 1942-1943 paper industry safety contest. Paper Ind 25:760+ O '43

Diffuser tank room accident in a kraft pulp mill. Pulp & Pa of Can 44:288 F '43

1942-43 paper and pulp industry accident experience; abstract. F. W. Braun. Paper Ind 25:754+ O '43

Review of 1941-42 paper and pulp accident experience. F. W. Braun. Paper Ind 24:860 N '42

See also
Digesters (paper making)—Failures

Electric equipment

Amplidyne-electronic equipment increases versatility of paper machine. G. V. Kullgren. il Paper Tr J 115:57 N 26 '42

Features of adjustable-speed electric drives to meet the requirements of the paper industry. R. R. Baker. il diags Paper Tr J 116:26-32 Mr 25 '43; Same cond. Paper Ind 25:80-2+ Ap '43

Motor maintenance prevents breakdowns. W. R. Harris and W. W. McCullough. il Paper Ind 25:269-73 Je '43

Rototrol provides operating advantages in the pulp and paper industry. W. R. Harris. il diags Paper Tr J 115:35-6, 35+ N 26 '42

Side shifts of paper corrected in roll-winding machine. il diags Electronics 16:144+ Ap '43

Wartime modifications of industrial maintenance and operating practice. F. L. Davis. il diags Paper Tr J 117:30-5 O 14 '43

See also
Electric driving—
Paper mills
Paper mills—Power

Employees

Buying shares in Canada; methods in use at pulp and paper mills. Pulp & Pa of Can 44:402-4+ Ap '43

Community dependency in United States on paper and pulp industry. Paper Tr J 115:48 N 26 '42

Female labor in the paper converting industry. W. E. Strong. Paper Ind 24:859-60 N '42

Heroines of industry; women man machines at Cornwall. D. Ross-Ross. il Pulp & Pa of Can 44:798-800 O '43

Labor problems enter newsprint industry; Quebec and the Maritime provinces. Paper Tr J 117:108 S 30 '43

No agreement on wages reached at meeting; Canadian conference between management and unions. Paper Tr J 117:3 O 7 '43

Paper mill wages in Wisconsin up sharply in four years. Paper Tr J 117:8 Ag 12 '43

Pulp and paper men in uniform; list of men in the armed forces and vital war sections. Pulp & Pa of Can 44:3-12, 243-58+, 337-8, 399-400 Ja-Apr '43

Selective service system announces essentiality of paper and pulp. Paper Tr J 116:12 My 27 '43

Strike at Price Bros. co. mills is settled. Paper Tr J 116:7+ Ap 22 '43

Women chemists in the paper industry. L. Hans. Paper Ind 25:33-5 Ap '43

Women in the paper industry. Paper Ind 25:117-18 My '43

Women serve on the home fronts. R. A. Wheatley; J. D. B. Howard. il Pulp & Pa of Can 44:719-29 S '43

Women workers in pulp and paper mills; experience of Pacific mills limited. R. H. R. Young. il Pulp & Pa of Can 44:639-48 Ag '43

Equipment

Application and maintenance of pumping equipment associated with water treating equipment. A. T. Nielsen. Paper Tr J 116:42-4 My 27 '43; Same cond. Paper Ind 25:309-10 Je '43

Consistency control and metering systems. Pulp & Pa of Can 43:974-5 D '42

Control instruments in pulp and paper production. D. DeMers. il Paper Ind 25:375-8 J '43

Corrosion test data; guide to the selection of substitute materials. R. T. Barnes, Jr., J. W. Wing and T. E. Lagerstrom. il diags Pulp & Pa of Can (Convention no) 44:135-8+ [F] '43

Fork trucks in the paper industry. R. E. Madden. il Paper Ind 25:606-7 S '43

Grewin-Karlberg free acid tower; abstract. R. Karlberg. Paper Ind 25:812 O '43

Importance of a recovery unit as steam generating equipment in the pulp mill. F. H. Rosenkrantz. Paper Tr J 115:35-8 Je 24 '43; Same cond. Paper Ind 25:652+ S '43

Instrumentation in kraft pulp mills. A. J. Philip. flow diag il diags Pulp & Pa of Can 44:367-77 Ap '43

Instruments in the pulp and paper industry. J. N. Franklin. Pulp & Pa of Can 43:306-10, 434-5+, 695-7, 817-20+, 950-2; 44:304-6, 441-4, 499-500, 530, 653-5 Mr, My, Ag, O, D '42, Mr, My-Je, Ag '43

Materials for manufacture, operation, and maintenance in wartime. J. L. Ritchie. Paper Tr J 116:79-83 Je 24 '43

Materials handling in pulp and paper plants. E. Southworth. il Paper Tr J 117:31-4 J '43; Abstract. Paper Ind 25:422+ J '43

Metallographic examination of plant equipment. M. M. Rubin. bibliog il Paper Tr J 116:31-8 Je 10 '43

Newsprint engineering 50 years ago and now. A. H. White. il Paper Ind 24:1123-5 F '43

Paper mill equipment; industry faces many problems. A. Hyer. Paper Tr J 117:22 S 16 '43

Paper mill operating experiences with accelerator softeners and clarifiers. A. C. Emb-shoff. il diags Paper Tr J 116:43-8 My 13 '43; Abstract. Paper Ind 25:202+ My '43

Performance of evaporators. J. P. Rubush and G. E. Seavoy. il diags Paper Tr J 116:25-30 Je 17 '43; Same cond. Paper Ind 25:544, 546-8 Ag '43

Pipe and tube materials survey in sulphate pulp process. S. B. Jones. flow diag Paper Tr J 116:41-4 Ap 15 '43; Same abr. Paper Ind 25:180+ My '43

Powell River improves sulphite mill. F. H. Fullerton. il Pulp & Pa of Can 44:433-6 My '43

Salvage of materials at Kalamazoo vegetable parchment company. R. S. Clark. Paper Tr J 116:89-90 Je 24 '43; Same abr. Pulp & Pa of Can 44:813-14 O '43

Self-priming and other pumps for pulp and paper processes. N. A. Pedersen. Paper Tr J 117:33-5 S 23 '43

Suggestions for saving critical materials; revised summary of methods of and conservation of and substitution for critical materials compiled by Engineering committee, Technical section, C.P. & P.A. Pulp & Pa of Can 44:16-26 Ja '43

Waste sulphite liquor recovery. M. W. Davis. flow diags Pulp & Pa of Can 44:656-9 Ag '43

See also
Digesters (paper making) Paper making machinery

Fuel

Fuel problems in war time. E. F. Burns. diags Paper Tr J 115:102-8 N 26 '42

Heating and ventilation

See also
Paper board mills—
Heating and ventilation

PAPER mills—Continued

Lighting

How to obtain optimum lighting efficiency. J. J. Neidhart. *il Paper Ind* 25:608-10 S '43

Maintenance and repair

Critical metal conserved by spraying; Riverbend mill of Price brothers & company; with cost data. J. Frisch. *il diags Pulp & Pa of Can* 44:307-10 Mr '43

Increasing black liquor pump life. W. W. Krauss. *il Paper Ind* 25:511-12 Ag '43

Maintenance of steam heater sections. W. K. Metcalfe. *Paper Ind* 25:658+ S '43

Paper mill maintenance benefited by arc welding. R. Edman. *il Paper Ind* 25:387 JI '43

Pump maintenance. F. D. Mosher. *il Paper Ind* 24:126-8 F '43

Wartime modifications of industrial maintenance and operating practice. F. L. Davis. *il diags Paper Tr J* 117:30-5 O 14 '43

Management

Current operating problems and developments. F. S. Cryslar. *Paper Tr J* 117:35-6 JI 8 '43

Eliminating waste in fine paper mills. H. M. Grasset. *Paper Ind* 24:1219-22 Mr '43

Heat insulation, its relation to mill efficiency. R. C. Pariett. *Paper Ind* 24:1166-6+ F '43

Making the suggestion system work; Hammer-mill paper company. W. A. Gleason. *Paper Ind* 24:821 N '42

Materials handling in pulp and paper plants. E. Southworth. *il Paper Tr J* 117:31-4 JI 1 '43; Abstract. *Paper Ind* 25:122+ JI '43

Slidefilms for foreman training. L. S. Metcalfe. *il Paper Ind* 25:274-5 Je '43

Power

Ingenious conversion saves oil; Scott paper co. pulverizer equipment blows powdered coal through pipeline to former oilfired boilers. *diags Power* 87:13+ Ja '43

Power plant operation and maintenance. G. H. Suhs. *Paper Tr J* 117:35-6 JI 1 '43; Same cond. *Paper Ind* 25:664+ S '43

Safety measures

Accidents, our greatest waste. A. E. H. Fair. *Pulp & Pa of Can (Convention no)* 44:103-6 [F] '43

Getting employees to work safely. L. Bardsley. *il Paper Ind* 24:819-21 N '42

National safety council, Paper and pulp section, annual congress; with papers. *Paper Ind* 24:841-2, 844-6, 848-50, 853-62 N '42

Safety films. L. S. Metcalfe. *il Paper Ind* 24:1039+ Ja '43

Safety shoes in the paper industry. H. G. Lamb. *il Paper Ind* 25:378-80 JI '43

Workable safety program. B. H. Metternich. *Paper Ind* 25:155 My '43

You can't win, gambling on accidents; work of National committee for the conservation of manpower in war industries. *il Paper Ind* 25:717-18+ O '43

See also

Paper board mills—
Safety measures

Waste

Effect of sulphate mill wastes on fish life. J. A. Extrom and D. S. Farnier. *il Paper Tr J* 117:27-32 JI 29 '43

Efficient reuse of process water. H. A. Morrison. *Paper Ind* 25:190+ My '43

Eliminating waste in fine paper mills. H. M. Grasset. *Paper Ind* 24:1219-22 Mr '43

Importance of a recovery unit as steam generating equipment in the pulp mill. F. H. Rosencrants. *Paper Tr J* 116:85-8 Je 24 '43; Same cond. *Paper Ind* 25:652+ S '43

New derivatives of lignin; esters of mono- and dibasic aliphatic acids, from Meadol prepared from soda black liquor. E. B. Brookbank and others. *Paper Tr J* 116:27-8 Ap 1 '43; Same. *Pulp & Pa of Can* 44: 805-6 O '43; Same cond. *Paper Ind* 25:436+ JI '43

Report of the fine papers committee, Canadian pulp and paper association; replies to questionnaire on broke handling; with discussion. *Pulp & Pa of Can (Convention no)* 44:154-8 [F] '43

Report of the waste committee; Canadian pulp and paper association. *bibliog Pulp & Pa of Can (Convention no)* 44:195-7 [F] '43

Tall oil for the war effort. J. M. Wafer, A. Pollak and R. Hastings. *flow sheet diags map Paper Tr J* 117:26-31 JI 22 '43; Same cond. *Paper Ind* 25:196+ My '43

Tall oil recovery. F. J. Cirves. *diag Paper Ind* 25:149-51 My '43

See also

Paper making—By-products
Sulfite liquor

Water supply

See Water supply for paper mills

Canada

Pulp and paper men in uniform; list of men in the armed forces and vital war sections. *Pulp & Pa of Can* 44:3-12, 243-58+, 337-8, 399-400 Ja-Apr '43

We fight too; Canadian paper mill machine shops make munitions. F. E. Palmer. *il Pulp & Pa of Can* 43:869-87 N '42

Northwestern states

Pulpwood supply for Pacific Northwest mills. R. W. Cowlin. *il map Paper Ind* 25:713-16 O '43

Quebec

Early days at Grand'Mere. H. B. O'Neill. *il Pulp & Pa of Can* 43:941-3 D '42

PAPER money

Printing

Women print currency. *Inland Ptr* 110:23 N '42

Great Britain

Large bank notes to go. *Economist* 144:559 My 1 '43

PAPER patents. See Paper making—Patents

PAPER products

Dennison emergency supply chute. *Paper Tr J* 117:29 JI 8 '43

Developments and trends in new paper products. R. J. Zaumeyer. *Paper Tr J* 117:25-8 JI 1 '43

Function of War products development section. J. G. Strange. *Paper Tr J* 116:24-7 My 6 '43

Paper products as a factor in Chemical Warfare Service packaging. T. P. Steinmetz. *Paper Tr J* 117:31-3 D 9 '43; Same cond. *Paper Ind* 25:788+ O '43; Abstract. *Mod Packaging* 17:98 N '43

Substitution and conservation; use of paper and paper products. R. J. Zaumeyer. *Paper Tr J* 117:31-4 N 4 '43; Same cond. *Paper Ind* 25:912-16 N '43

TAPPI exhibit at Commodore visualizes paper at the battle front. *Paper Tr J* 116:119-22 F 18 '43

Technologist in war products development. J. G. Strange. *Paper Tr J* 116:24-5 Mr 11 '43

Towels get aid. *Business Week* p39-40 S 18 '43

What the Quartermaster corps expects from paper products. R. R. Melson. *Paper Tr J* 117:32-4 N 11 '43; Same cond. *Paper Ind* 25:784+ O '43; Abstract. *Mod Packaging* 17: 97-8 N '43

See also

Paper containers
Paper textiles

PAPER pulp

Nitric acid pulping of whole cotton; properties of celluloses obtained. J. D. Fleming and F. K. Cameron. *bibliog Ind & Eng Chem* 35:819-21 JI '43

Pressure drop data as applied to pulp suspensions. J. Cooper, jr. *bibliog Paper Tr J* 115:32-6 N 19 '42

See also

Wood pulp

Testing

Forming handsheets for physical tests of pulp; revision of TAPPI standard T 205 m-40. *bibliog diags Paper Tr J* 115:25-31 D 31 '42

PAPER pulp—Testing—Continued

Freeness of pulp; TAPPI tentative standard T 227 m-43. diags Paper Tr J 116:26-8 My 20 '43

Measurement and influence of fiber length. J. d'A. Clark. bibliog diags Paper Tr J 115:36-42 D 24 '42

PAPER research

Further experimental study of beater practice in the manufacture of offset papers. C. G. Weber, M. B. Shaw and M. J. O'Leary. J Research Nat Bur Stand 30: 267-79 Ap '43; Same. Paper Tr J 117:35-40 S 23 '43

Nature of hydration and fiber bonding. J. d'A. Clark. il diags Paper Ind 25:382-6, 507-10 bibliog(p510) Jl-Ag '43

Properties of lignin esters. J. J. McNair and E. C. Jahn. bibliog Paper Tr J 117: 29-33 Ag 19 '43

Public relations looks in on the paper industry. W. Colwell. Paper Ind 24:1129+ F '43

Some interrelationships of pulp properties. J. d'A. Clark. bibliog il diags Pulp & Pa of Can (Convention no) 44:91-102 [F] '43

TAPPI discusses wartime problems and research. Oil Paint & Drug Rep 143:7+ F 22 '43

TAPPI microscopy committee report, 1942. F. W. Bentzen. bibliog(56 titles) Paper Tr J 116:26-9 Ja 14 '43

Technical departments meet war problems. F. H. Frost. Paper Tr J 115:100-1 N 26 '42

Ten years of fundamental research in the pulp, paper, and paperboard industry. H. F. Lewis. Paper Tr J 115:32-6 D 31 '42

Textiles from paper. J. C. Sherman. il Paper Ind 24:1036-8 Ja '43

Ultraviolet light, its action on cellulose and protein sizes; abstract. M. de Buccar. Paper Ind 25:444 Jl '43

PAPER sizing

Aid in sizing; Mersize. J. M. Crowe. Chem Ind 53:357-8 S '43

Resistance of sized paper and paperboard to water at elevated temperatures. F. W. Codwise. Paper Tr J 116:30-3 Mr 4 '43

Some aspects of starch chemistry in relation to tubsizing. R. W. Kerr. bibliog il Paper Tr J 115:30-4 D 3 '42

Spectrophotometric analyses of starches. R. W. Kerr and O. R. Trubell. bibliog Paper Tr J 117:25-8 O 7 '43

Tub-sizing difficulties. W. G. Hendrich. Paper Tr J 115:29-30 D 10 '42

Wartime sizing problems in England; abstract. Paper Ind 24:886 N '42

See also

Paper coating

PAPER textiles

Textiles from paper. J. C. Sherman. il Paper Ind 24:1036-8 Ja '43

See also

Paper yarn

PAPER towels

Set new ceiling prices on toilet tissue and paper towels. Paper Tr J 115:11-12 N 19 '42

PAPER waste. See Waste paper**PAPER yarn**

Paper yarn manufacture; abstract. R. Bauer. Paper Ind 25:97 Ap '43

Textiles from paper. J. C. Sherman. il Paper Ind 24:1036-8 Ja '43

PAPRIKA

Spain's paprika crop, 1942-43. For Comm W 12:33 S 4 '43

War boosts production of domestic paprika; California industry. J. H. Collins. il Food Ind 15:83 Ag '43

PARACHORS

Molecular volume and structure. T. W. Gibling. Chem Soc J p146-53 Ap '43

Parachors and radii. K. Sun and A. Silverman. bibliog J Phys Chem 47:50-9 Ja '43

Surface tensions, densities and parachors of the aliphatic nitroparaffins. G. E. Boyd and L. E. Copeland. bibliog Am Chem Soc J 64:2540-3 N '42

PARACHUTE fabrics

Development of Eastman high impact acetate rayon as parachute material. il Rayon 24: 599-600 N '43

Parachute cloth and shrouds production; pictures. Manuf Rec 112:38-9 Mr '43

Parachutes and the new fabrics they require. il Textile World 93:65-8 O '43

PARACHUTE troops

Para-packs. il Mod Packaging 16:55-7+ Je '43

PARACHUTES

Compact parachute. il Business Week p88 Jl 10 '43

Parachute descent and time-reserve at great heights; abstract. O. Gauer and others. Roy Aeronautical Soc J 47:sup357-8 Jl '43

Parachutes in tropics protected by air conditioning. Heat & Ven 40:58 Jl '43

PARACHUTES, Cargo

Dennison emergency supply chute. Paper Tr J 117:29 Jl 8 '43

Parachute delivery of vitally needed small parts. il Aero Digest 43:219 Jl '43

Para-packs. il Mod Packaging 16:55-7+ Je '43

PARACON. See Rubber, Artificial

PARACOMMARONE-indene resins. See Resinous products

PARAFFIN

Biological effects of a toxic and a sensitizing substance isolated from paraffin oil extract of dead tubercle bacilli. N. Choucroun. bibliog Science 98:327-9 O 8 '43

Liquid dielectrics; sixty-cycle power factors, conductivities, and polar contents of systems containing sulfur or nitrogen compounds in liquid paraffin. J. D. Piper and others. bibliog Ind & Eng Chem 34:1505-9 D '43

Production of secondaries in paraffin by primary cosmic-ray particles. M. Schein, M. Iona, jr. and J. Tabin. diag Phys R 64:253-4 O 1 '43

Testing

Proposed method of test for oil content of paraffin wax. diags Am Soc T M Proc 42: 313-16 '42

PARAFFINS

Chemical utilization of natural gas and natural gasoline hydrocarbons by oxidation. H. Linford. bibliog il Nat Pet N 35 pt 2: R15-19 Ja 6 '43; Same. Pet Eng 14:89, 91-2, 94-5 Ja '43; Same cond. Oil & Gas J 41:71, 73-1 N 12 '42

Composition of paraffin waxes from the Fischer-Tropsch water-gas synthesis. H. Koch and G. Ibing. bibliog il diags Pet Refiner 22:89-96 S '43

Constants of some hydrocarbons in the gasoline boiling range. C. E. Boord. bibliog Oil & Gas J 41:188+ N 12 '42

Correlating fluid viscosity. A. S. Smith and G. G. Brown. bibliog Ind & Eng Chem 35:705-11 Je '43

Effect of paraffins on the nitration of toluene. W. L. Glowacki. bibliog il diag Elast F & Steel Pl 31:659-64, 771-5 Je-Jl '43

Paraffin hydrocarbons; correlation of physical properties. A. W. Francis. bibliog Ind & Eng Chem 35:442-9 Ap '43

Phase transformations of normal paraffins. C. G. Gray. bibliog Inst Pet J 29:226-34 Ag '43

Premelting anomalies of some long chain normal paraffin hydrocarbons. A. Van Hook and L. Silver. bibliog J Chem Phys 10:686-90 N '42

Properties of normal paraffin hydrocarbons; chart. Pet Refiner 22:108 Ap '43

Viscosity of *n*-paraffin solutions; viscosity and structural relations of linear polymers. A. R. Kemp and H. Peters. bibliog Ind & Eng Chem 35:1108-12 O '43

Viscosity of solutions in branched-chain paraffins. E. H. McArdle and A. E. Robertson. Ind & Eng Chem Anal ed 15:484-7 Ag 15 '43

See also

Butane

Ethane

Methane

Nitroparaffins

Propane

PARAGENESIS. See Ore deposits**PARAGUAY**

Paraguay's bilingual character. For Comm W 11:22 Je 19 '43

See also

Wages—Paraguay

PARAGUAY—Continued**Commerce**

Santos, free port for Paraguayan trade. M. B. MacKrell. *il For Comm W* 10:10-11 F 20 '43

Economic conditions

News by countries. *For Comm W* 11:18 Ap 3; 25 Je 12; 13:14-15 N 6 '43

PARALYSIS

See also

Infantile paralysis

PARAMECIUM

Effect of propionic acid and of Na propionate on paramécie. H. E. Potts. *Franklin Inst J* 236:99-100 J1 '43

Quieting paramécium for class study. J. B. Buck. *Science* 97:494 My 28 '43

Quieting paramécium for the elementary student. D. A. Marsland. *Science* 98:414 N 5 '43

PARAMOUNT pictures, inc.

Calls \$3,000,000 debentures; consolidated income account, 1939-1942. *Comm & Fin Chr* 157:2049-50 My 31 '43

Dismissal of suit upheld; pays all bank loans. *Comm & Fin Chr* 157:1274 Ap 5 '43

Investment audit. G. L. Merton. *Mag of Wall St* 72:190-1+ My 29 '43

Peace-time leaders. *Mag of Wall St* 72:509 Ag 21 '43

To redeem 50% of first preferred stock outstanding. *Comm & Fin Chr* 157:259 Ja 18 '43

PARASITES

See also

Bacteria

Ticks

Trichina and trichinosis

Worms, Intestinal and parasitical

PARATHYROID gland

Does the parathyroid hormone influence phosphatase activity? T. R. Wood and W. F. Ross. *bibliog Am Chem Soc J* 64:2759-60 D '42

PARATYPHOID fever

Paratyphoid fever; an epidemiological study; abstract. W. Savage. *Am Water Works Assn J* 35:631-2 My '43

PARCEL post

Postal problem. *Business Week* p34+ Je 26 '43

Restrictions removed on parcel post to Latin America and the Caribbean. *For Comm W* 12:15 S 25 '43

PARICUTIN

Mexico's new volcano. W. Davis. *Science* 97: sup8 My 21 '43

PARKER, James Wentworth, 1886-

Portrait. *Mech Eng* 65:57 Ja '43

PARKER, Russell Johnston, 1897-

Sketch. *por Explosives Eng* 21:4-5 Ja '43

PARKER rust-proof company

Companies favored by research. *Mag of Wall St* 73:33 O 16 '43

Thumbnail stock appraisal. *Mag of Wall St* 72:91 My 1 '43

PARKING. See Automobile parking**PARKWAYS**

Traffic and the neighborhood plan. G. D. Clarke and M. Rapuano. *diags plans Arch Forum* 79:130-2 O '43

PARLIAMENTARY and scientific committee

British parliamentary and scientific committee. *Science* 97:280 Mr 26 '43

PARLIN, Charles Coolidge, 1872-1942

Appreciation. H. H. Kynett. *por Ptr Ink* 202:30+ F 12 '43

PAROLE

C-H-B salvages "scrap manpower" to save huge tomato pack; California conserving co. takes men out of jail under parole. *il Sales Management* 52:25, 28, 30 Ja 1 '43

PARSHALL flume

Gaging and sampling Louisville's sewage. C. F. Johnson. *il diags Civil Eng* 13:97-100 F '43

Model prototype conformity; Parshall flume models. F. W. Blaisdell. *diags Am Soc C E Proc* 69:746-56 My '43

Simplified flow recorder for Parshall flumes; Wellsville sewage treatment plant. J. D. Slough. *il Water Works & Sewerage* 90: 285-6 Ag '43; Correction. 90:333 S '43

PART time employment

Boys at work; combining job with high school study. *Business Week* p86+ Je 5 '43

Britain's experience with part-time labor; abstract. R. Mander. *Management R* 32:58-60 F '43

Half-shift plan taps new manpower reservoir; two-man teams of white collar workers divide turns; Warner & Swasey co. *il Steel* 111:22-3 N 30 '42

Industry's experience with part-time workers. *Management R* 32:295-6 Ag '43

Part-time employment of women in wartime. U S Women's Bur Special Bul 13:1-17 '43; pa 10c Supt. of doc.

Problems in conducting a cooperative training program. A. C. Mossin. *J Retailing* 19:56-63 Ap '43

Split-shift plan adds man-hours to war effort. *il Factory Management* 101:105 Je '43

Split shift plan wins only limited acceptance in war plants. *il Steel* 112:56-9 Mr 15 '43

Voluntary labour in British munitions plant. *Economist* 144:565-6 My 1 '43

See also

College students—

Employment

PARTICIPATING policies. See Insurance, Life

—Participating policies

PARTICLES

Course of instruction in micromeritics. J. M. Dalla Valle. *J Chem Educ* 20:557-61 N '43

Criteria of dust determination; effects of particle-deposition technique. S. C. Blacktin. *Chem Age (Lond)* 48:575-9 My 29 '43

Critical analysis of Stokes' law as a basis for the determination of particle size of clays and nonplastic materials. R. M. King. *bibliog Am Cer Soc Bul* 21:258-60 N 15 '42

Directions for laboratory mineral sizing. J. Dasher. *bibliog U S Bur Mines Information Circ* 7224:1-16 '42

Dispersion of pigments and fillers for microscopical examination. L. B. Miller. *il Paper Tr J* 116:39-42 Ja 7 '43

Effect of graphite particle size in the inoculation of gray cast iron. H. R. Dahlberg. *bibliog il Foundry* 71:125, 128, 130+ Ag '43

Efficiencies, for particle determination, of the Electroton meter, the ultramicroscope, and the settlement counter. S. C. Blacktin. *Soc Chem Ind J* 61:161-2 O '42

Flotation process; effect of size on the behavior of galena particles. A. M. Gaudin, R. Schuhmann, Jr. and A. W. Schlechten. *bibliog diags J Phys Chem* 46:902-10 N '42

Measurement of the fineness of powdered materials. P. J. Rigden. *bibliog il diags Chem & Ind* 62:393-6 O 16 '43

Measuring intercept sphericity of sand grains. G. Rittenhouse. *diag Am J Sci* 241:109-16 F '43

Particle shape and the behavior of clay as revealed by the electron microscope. R. P. Humbert. *il Am Cer Soc Bul* 21:260-3 N 15 '42

Particle-size determinations. G. A. Loomis. *bibliog Am Cer Soc Bul* 21:257 N 15 '42

Particle size distribution; sedimentation methods. H. E. Schwyer. *diags Rock Prod* 45: 56, 94-6 N '42

Particle-size studies; properties of finely divided materials. H. E. Schwyer. *il Chem R* 31:295-317 bibliog(p316-17) O '42

Photographic sedimentation apparatus for measuring particles; abstract. C. J. Stairmand and W. F. Carey. *Concrete (mill sec)* 51:204 J1 '43

Relation of shape to the passage of grains through sieves. G. Rittenhouse. *bibliog Ind & Eng Chem Anal ed* 15:153-5 F 15 '43

Sedimentation analysis; an improved manometric method. F. R. Jones and C. G. Barlow. *diags Soc Chem Ind J* 62:129-32 S '43

Some applications of the high resolving power of the electron microscope. H. Green and E. F. Fullam. *il J Ap Phys* 14:332-40 J1 '43

Stochastic problems in physics and astronomy; probability methods in stellar dynamics. S. Chandrasekhar. *diags Rs Mod Phys* 15:1-89 bibliog(p87-9) Ja '43

PARTICLES—Continued

Use of the microscope in particle size analysis. G. L. Fairs. bibliog diags Chem & Ind 62:374-8 O 2 '43

Variation of mesotron intensity with altitude and latitude, together with allied phenomena, and the bearing of these matters on the nature of the primary particles. W. F. G. Swann. Franklin Inst J 236:1-7, 111-39 J1-Ag '43

Viscometric estimation of particle dimensions; miscellar changes involved in the heat-bodding of tung oil. J. P. Hollihan and D. R. Briggs. bibliog J Phys Chem 47:30-9 Ja '43

See also

Cloud chambers	Electrophoresis
Colloids	Granular materials
Dispersion	Powders
Dust	Sand
Dynamics of a particle	Sediments
	Suspensions

PARTICLES, Alpha. See Alpha rays

PARTICLES, Nuclear. See Electrons; Neutrons; Neutrons; Protons; Radioactivity

PARTITION (chemistry)

Identification of organic acids by partition between ethyl ether and water. O. C. Dermer and V. H. Dermer. bibliog Am Chem Soc J 65:1653-4 Ag '43

Partition function for liquids from the harmonic oscillator model. F. A. Matsen and G. M. Watson. bibliog diag J Chem Phys 11:343-8 Ag '43

PARTITIONS

Demountable glass block partitions for stores, offices, homes. il Am Bld 64:44 N '42

Folding partitions; time-saver standards. diags Arch Rec 93:85-6 Mr '43

How to build partitions of non-critical materials. diags Am Bld 65:50 F '43

PARTNERSHIP

By-passing technicalities helps partnership sales. R. W. Wilkinson. Nat Underw (Life ed) 47:5 J1 16 '43

Family partnerships; trends in decisions. M. Eisner. J Account 76:71-2 J1 '43

Partnership pitfalls; guarding against unanticipated liabilities. F. E. Sugden. Elec R (Lond) 132:265-6 F 19 '43

Wills from partnership trusts; opportunity for coordinating estate and obtaining new business. W. R. Spinney. Trusts & Estates 75:565-8 D '42

See also

Corporation law

Accounting

Balance-sheet treatment of partnership taxes. J Account 75:364 Ap '43

Taxation

Current problems in income tax procedure; income tax status of family partnerships. T. G. Thurston. J Account 75:241-6 Mr '43

Family partnership may save taxes. L. J. Freeman. Barron's 23:9 My 17 '43

PASTEURELLA pestis

Growth of pasteurella pestis on a casein digest medium. L. D. Smith and R. L. Phillips. Franklin Inst J 235:536-45 My '43

Treatment of pasteurella pestis infection in mice; abstract. R. L. Phillips and L. H. Barnes. Franklin Inst J 235:94-7 Ja '43

PASTEURELLA tularensis. See Tularemia

PASTEURIZATION of milk. See Milk—Pasteurization

PASTEURIZERS, Electric

Electric pasteurizer. J. I. Hall. bibliog il diags Elec Eng 62:60-3 F '43

PASTURES*See also*

Grasses

PATCHING. See Mending materials

PATENT laws and legislation

Is patent law sound? Chem Age (Lond) 47:393-4 N 7 '42

Patent reform; encouragement of enterprise. Economist 144:110-11 Ja 23 '43

Patent reform; incitement to monopoly. Economist 144:77-8 Ja 16 '43

Predictable experimental discoveries unpatentable. F. E. Drummond. Chem & Eng N 21:1146 J1 25 '43

See also

Copyright

Trade marks

Government employees' inventions

Government claims all new Interior department patents. Oil & Gas J 41:27 D 3 '42

Great Britain

Developments of the patent situation; wartime difficulties. S. T. Madeley. Chem Age (Lond) 48:347-9 Mr 27 '43

Extension of patents; court decisions during 1942. Elec R (Lond) 132:338-9 Mr 5 '43

Patent law changes. F. J. Tebbutt. Chem Age (Lond) 47:585-6 D 26 '42

United States

Agitation for patent reform calls for action by engineers. Product Eng 14:313-14 My '43

American patent system. W. H. White, jr. Pet Eng 14:81-8 N '42

American patent system; report of National patent planning commission. il Chem & Eng N 21:1041-3 J1 10 '43; Same. Nat Pet N 35 pt 2:R427-32 S 1 '43; Same cond. Elec Eng 62:423-4 S '43

America's patent law. J. W. Anderson. Instruments 16:104-11 F '43

How revise the patent system? R. B. Fiske. Power Pl Eng 47:59 Mr '43

Inventions, patents, and the engineer. W. E. Crawford. Elec Eng 62:10-16 Ja '43; Discussion. F. W. Harris. 62:186-8 Ap '43

Modifications and additions to patent laws recommended; summary of findings and recommendations. Iron Age 152:134 J1 8 '43

More patent reform. Product Eng 14:64 F '43

Patent law reform. Oil Paint & Drug Rep 144:4- S 20 '43

Patent pronouncement; report of the National patent planning commission. Product Eng 14:484-6 Ag '43

Patent reform; report of National patent planning commission. Business Week p32- Je 26 '43

Patent rights and the patent system. F. Penn. Pet Eng 14:89-90 N '42

Patents data proof bill passes House. Oil Paint & Drug Rep 144:3- N 8 '43

Patents today. D. I. Mayne. il Chem & Eng N 21:287-93 Mr 10 '43

Pride of America. A. A. Potter. Mech Eng 65:133-4 F '43; Discussion. K. A. Mayr. 65:211-12 Mr '43

Proposed patent changes and the small manufacturer. E. H. Ackley. Pet Eng 14:94-6 N '42

Pulse of opinion, a patent forum. R. B. Fiske; E. C. Kunz. Chem Ind 52:30-3+ Ja '43

Report of American ceramic society committee on patents. Am Cer Soc Bul 22:193-4 Je 15 '43

Report on the American patent system. A. A. Potter. Mech Eng 65:564 Ag '43

Research and patents. R. E. Wilson. il Ind & Eng Chem 35:177-85 F '43; Same abr. Nat Pet N 35 pt 2:R126-7 Mr 3 '43; Same cond. Tech R 45:307-9, 320-1, 371-2+ Ap-May '43; Excerpts. Oil & Gas J 41:25-6 Ja 14 '43

Retain patent system, correct abuses, investigating committee recommends. A. L. Foster. Oil & Gas J 42:43-4 Ag 12 '43

Shall courts or Congress chart patent law? G. V. Woodling. il diags Machine Design 15:100-3 My '43

War time innovations in patent law. V. A. Scher. Rayon 24:459-60 S '43

When does good engineering constitute invention? G. V. Woodling. diags Machine Design 15:111-14 S '43

Where is patent furor heading? G. V. Woodling. il diags Machine Design 15:51-4 Ja '43

PATENT medicine. See Medicines, Proprietary

PATENTS

American engineer and the war effort; American patent system and National patent planning commission. A. A. Potter. Mech Eng 65:251-2+ Ap '43; Same. W Soc E J 48:57-9 Je '43

PATENTS—Continued

- American patent system; report of National patent planning commission. *Il Chem & Eng N 21:1041-5 JI 10 '43*; Same. *Nat Pet N 35 pt 2:R427-32 S 1 '43*; Same cond. *Elec Eng 62:423-4 S '43*
- Avoiding patent pitfalls. R. F. Wild. *Electronics 15:73-7 D '42*
- Ex-Cell-O wins; no infringement of Barnes' basic patents on control devices. *Business Week p27-8 JI 3 '43*
- Government action seeks to void Cold metal process co.'s patents of the Steckel mill. *Steel 113:66 Ag 2 '43*
- Importance of invention to the Nation. H. A. Toulmin, Jr. *Chem Ind 51:696-9 N '42*
- Inventions, patents, and the engineer. W. E. Crawford. *Elec Eng 62:10-16 Ja '43*
- Discussion. F. W. Harris. *62:186-8 Ap '43*
- Library versus laboratory research. A. G. Connolly. *J Chem Educ 20:531-3 N '43*
- Patents and the petroleum industry. *Pet Eng 14:81-96 N '42*
- Patents at stake; Dept. of justice seeks to win cancellation in cold rolling process, alleging fraud. *Business Week p56+ O 2 '43*
- Patents, technology, and free enterprise. R. L. Bishop. *Mech Eng 65:525-6 JI '43*
- Patents today. D. I. Mayne. *Il Chem & Eng N 21:287-93 Mr 10 '43*
- Patents up to date; some useful presentday hints. F. J. Tebbutt. *Chem Age (Lond) 49:167-8 Ag 14 '43*
- Pulse of opinion, a patent forum. R. B. Fiske; E. C. Kunz. *Chem Ind 52:30-3+ Ja '43*
- Research and patents. R. E. Wilson. *Il Ind & Eng Chem 35:177-85 F '43*; Same abr. *Nat Pet N 35 pt 2:R126+ Mr 3 '43*; Same cond. *Tech R 45:307-9, 320+, 371-2+ Ap-My '43*
- Should patents wait for peace? F. E. Hane. *Rayon 24:103-4 F '43*
- See also*
- Acoustic patents
 - Aeronautics—Patents
 - Automobiles—Patents
 - Chemical patents
 - Color photography—Patents
 - Dye patents
 - Electrochemistry—Patents
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 - Inventions
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 - Petroleum refining—Patents
 - Resinous products—Patents
 - Rubber—Patents
 - Rubber, Artificial—Patents
 - Television apparatus—Patents
 - Textile patents
 - Trade marks
 - Trade secrets

Enemy ownership*See Enemy property***International aspects**

- Five postwar trade problems. A. E. Taylor. *Harvard Business R 21 no1:158-61 [Ja] '43*

Licensing

- Alien-owned patents. *Science 96:sup 10 D 18 '42*
- Alien properties now aid U.S. in production of chemicals and other war materials. *Il Chem Ind 52:734-7 Je '43*
- APC amends rules for licensing patents. *Oil Paint & Drug Rep 143:5+ Ja 18 '43*
- Alien property custodian offers enemy patents to American industry. *Heating-Piping 15:sup103-4+ F '43*
- APC to lease vested patents. *Oil Paint & Drug Rep 142:3+ D 14 '42*
- Cross-licensing eliminated by A.P.C. for seized patents use. *Oil Paint & Drug Rep 143:3 Ap 26 '43*
- Foreign patents offered to U.S. industry. *Elec Eng 62:277 Je '43*
- Fortunes go begging; business has practically disregarded millions of dollars' worth of alien patents and copyrights. K. E. Ettinger. *Ptr Ink 204:17-19 Ag 13 '43*
- 41,000 enemy patents seized; how to get license. *Iron Age 151:101 My 13 '43*
- Free patents; enemy inventive rights, seized by government thrown open to industry. *Business Week p 19-20 D 19 '42*
- Help yourself to patents seized from foreign nations; representative lists of some applications of value to metal and metalworking industries. *Iron Age 152:115-16+ JI 8 '43*

- Patents at work. *Water Works & Sewerage 90:219-20 Je '43*
- Patents of enemy and enemy-occupied countries are available to American industry. *Dom Eng 161:48+ F '43*
- Patents pending; relatively few licenses asked under enemy patents. *Business Week p44+ Ag 21 '43*
- Patents seized from enemy countries will be made available to industry. *Comm & Fin Chr 156:2163 D 17 '42*
- Proposed patent changes and the small manufacturer. E. H. Ackley. *Pet Eng 14:94-6 N '42*
- Research and patents; lack of understanding of patent monopoly is the greatest danger to American system. R. E. Wilson. *Tech R 45:307-9, 320+ Ap '43*
- Want new ideas? Try patents seized by U.S. government; with list. *Iron Age 152:95-6+ N 4; 97+ N 11 '43*

PATERSON, New Jersey*See also*

- Electric utilities—
- Paterston, New Jersey

PATHOGENIC bacteria. See Bacteria, Pathogenic**PATHOGENIC fungi. See Fungi, Pathogenic****PATHOLOGICAL museums***See also*

- Royal college of surgeons, London—
- Museum

PATHOLOGY*See also*

- Bacteria, Pathogenic
- Diseases
- Fungi, Pathogenic
- Immunity
- Inflammation
- Medicine
- Physiological chemistry
- Protozoa, Pathogenic
- Therapeutics

PATIENTS' libraries. See Hospital libraries**PATROL, Aerial. See Air patrol****PATTERN making**

- Lumber for patternmaker and foundryman. *E. T. Kindt. Foundry 71:159-63 Mr '43*
- Make patterns by electrolytic process. A. K. Laukel. *Foundry 70:146-9 D '42*
- Makes patterns and nonferrous castings; Progress pattern- & foundry co. St. Paul. P. Dwyer. *Il Foundry 71:108-9+ Ag '43*
- Pattern production problems are considered; abstracts of A.F.A. annual meeting papers. *Foundry 71:177-8 Je '43*
- Plastic plates; foundry pattern bases made from paper mill waste liquor; Marathon paper mills Lignolite. *Business Week p66+ Ag 14 '43*

- Protective metal coatings for foundry patterns. *Il Iron Age 151:66 My 6 '43*

- Unusual foundry war problems; patterns; abstract. W. C. Perry. *Metals & Alloys 17:812 Ap '43*

See also

- Sheet metal work—
- Pattern making

PATTERNS (dress)

- These professors aren't unrealistic; home economists influence the buying habits of practically every literate American. F. Nye. *Ptr Ink 203:78+ Ap 23 '43*

PATTERSON, William Allan, 1899-

- Portrait. *Sci Am 168:88 F '43*

PATTON, James George, 1902-

- Patton mends his political fences. *por Business Week p22 O 30 '43*

PAUL, Robert William, 1869-1943

- Sketch. *por Engineer 175:271 Ap 2 '43*

PAUL, Russell Barnett

- Sketch. *por Min & Met 24:12 Ja '43*

PAVEMENTS

- Accurate paving required for blimp bases. *Eng N 131:405 S 9 '43*
- Cement grouting answers the need for emergency paved areas. *Il Concrete 51:15+ JI '43*
- Considerations in the construction of flight strips. F. E. Schnepfe. *Il diags Aero Digest 41:222, 225-6 D '42*; Same cond. *Civil Eng 13:93-6 F '43*; Abstract. *Roads & Bridges 81:25+ F '43*

PAVEMENTS—Continued

Road construction on western cantonments.
D. H. McCreery. *il* diags Civil Eng 13:
101-3 F '43

See also

Airports—Surfaces Roads
Bridges—Floors Streets

Cost

Airport improvements, Alexandria, Minn.;
unit prices. Eng N 131:224 JI 29 '43
Rail removal and resurfacing streets, Se-
attle, Wash.; unit prices. Eng N 130:246
F 11 '43
Street repaving, Cleveland; unit prices.
Eng N 131:642 O 21 '43

Design

American association of state highway offi-
cials groups discuss problems of pavement
design. Eng N 130:73-4 Ja 14 '43
Flexible pavement design discussion fea-
tures Highway research board meeting.
Eng N 130:144-6 Ja 28 '43

Foundations

Constructing an airport on Florida sands;
marl added to sand for runway founda-
tion. C. H. Moneyenny. *il* Pub Works
73:11-13 D '42
Design of flexible pavement foundations. T.
A. Middlebrooks. diags Roads & Sts 86:
44-8 Mr '43
Heavy-duty asphaltic runways. B. E. Gray.
il Civil Eng 13:265-8 Je '43
Speed in spite of 86 rainy days; airport
paving job. *il* diags Roads & Sts 86:37-43
Mr '43
Test runway gives data on base thickness
requirements. *il* Eng N 130:430-3 Mr 25
'43

Maintenance and repair

Salvaging rigid-type pavements. *il* Roads
& Bridges 81:31-2+ Ag '43

Resurfacing

Resurfacing Winchester ave., Ashland, Ky.
C. M. Ferguson. *il* Pub Works 74:19+ O '43

PAVEMENTS, Asphalt

Asphalt pavement on State street, Chicago.
V. Nicholson. *il* Roads & Sts 86:64-6 Mr
'43
Asphalt paving job successfully completed in
midwinter; Burlington, Vermont. G. C.
Stanley. *il* Roads & Sts 86:51 S '43
Constructing an airport on Florida sands;
marl added to sand for runway foundation.
C. H. Moneyenny. *il* Pub Works 73:11-13
D '42
Heavy-duty asphaltic runways. B. E. Gray.
il Civil Eng 13:265-8 Je '43

Cost

Street paving, Baltimore; unit prices. Eng N
131:494 S 23 '43
Street paving, Milwaukee; unit prices. Eng N
131:642 O 21 '43

Maintenance and repair

Asphalt street concrete-patched in freezing
weather. *il* Roads & Sts 86:54 My '43

PAVEMENTS, Bituminous

Airfield paved with local materials. *il* Eng
N 130:390-1 Mr 18 '43
How flight strips are being built. *il* diags
Eng N 130:128-32 Ja 25 '43
Low-cost oil aggregate paving in Mishawaka,
Indiana; dust nuisance of 75 miles of
gravel streets remedied. F. J. Miller. *il*
Pub Works 74:11-13 My '43
Lynchburg, Virginia, completes a municipal
airport. J. D. Wright. diags Pub Works 74:
13 JI '43
Mixed-in-place resurfacing in Whitman, Mass.
J. C. Boynton. *il* diags Pub Works 73:28 N
'42
700 acres of pavement; design and construc-
tion features of huge western air base.
H. J. McKeever. *il* diags Roads & Sts 86:
41-8 S '43
Speed in spite of 86 rainy days; airport
paving job. *il* diags Roads & Sts 86:37-43
Mr '43
Street improvements in Webster City, Iowa;
with cost data. H. A. Little. *il* diags Pub
Works 74:21-2 Ap '43

Utah's first flight strip. W. L. Anderson.
diags Roads & Sts 86:55 Ag '43

See also

Pavements, Asphalt
Roads, Bituminous

PAVEMENTS, Bituminous concrete

Annual road construction program in Pea-
body, Mass. F. J. McCarthy. *il* Pub Works
74:21 JI '43
Asphalt concrete paving on 2 to 1 slope
rolled with aid of tractor. *il* Eng N 130:
561 Ap 22 '43
Cold-weather paving of asphaltic roads. W.
R. Macatee. *il* Roads & Bridges 81:23+ F
'43
Resurfacing Winchester ave., Ashland, Ky.
C. M. Ferguson. *il* Pub Works 74:19+ O '43

Testing

Test runway gives data on base thickness
requirements. *il* Eng N 130:430-3 Mr 25 '43

PAVEMENTS, Concrete

Bases for bombing from Britain. W. G.
Bowman. *il* diags plan Eng N 131:253-9 Ag
12 '43
Canada's largest Pacific airport. W. P. Brag-
gins. *il* Roads & Bridges 81:33-40, 68+ S
'43
Canadian war-time concrete pavements. En-
gineering 155:446 Je 4 '43
Cement-grout effectively ends maintenance
problem; Norfolk & western railroad con-
crete driveways and storage platforms.
West Roanoke yard and engine facilities.
H. F. Smith. *il* Eng N 130:818 Je 3 '43
Concrete for railway bridge decks, with rails
directly attached. Am Concrete Inst J 14:
218-19 Ja '43
Concrete pavement in low temperatures. En-
gineering 156:16-17 JI 2 '43
Concrete pavements in wartime. D. O.
Robinson. *il* Roads & Bridges 81:25-7+ Ap
'43
Concrete paving in near-zero weather; run-
ways for airport. *il* Eng N 130:547-50 Ap
22 '43
Effect of calcium chloride admixture on
strength of concrete cured at low tempera-
tures. H. W. Russell. Roads & Sts 86:45-8
JI '43
15,000 sq. yd. concrete daily at southern air-
port. *il* Roads & Sts 85:29 D '42
Heavy-traffic plain concrete pavement utilizes
resin-treated cement; Vinsol. *il* diags Con-
crete 50:33 D '42
How District of Columbia uses dark con-
crete, made with emulsified carbon black.
H. C. Whitehurst. *il* Roads & Sts 86:53 JI
'43
Influence of sands, cements, and manipula-
tion upon the resistance of concrete to
freezing and thawing. W. C. Hansen. Am
Concrete Inst J 14:105-23 N '42; Discussion.
14:supl24-124+ Je '43
Million-yard winter paving job on large eastern
airbase. *il* diags Roads & Sts 86:35-40
My '43
Pioneer highway tunnels modernized for
service; Liberty tunnels at Pittsburgh.
il diags Eng N 131:326-9 Ag 26 '43
Place million yards of air-base pavement
in six cold-weather months. *il* Concrete 51:
10-11 My '43
Practical method provides water spray for
curing concrete pavement slabs. H. F.
Clemmer. *il* Concrete 50:8+ D '42
Pump delivers concrete for Dubuque bridge
deck. *il* Eng N 129:880-1 D 24 '42
700 acres of pavement; design and construc-
tion features of huge western air base.
H. J. McKeever. *il* diags Roads & Sts 86:
41-8 S '43
Simplified methods of building paved sea-
plane slipways; Prepack concrete. C. P.
Disney. *il* diags Roads & Bridges 81:15-
16+ Ja '43
Special block for parkway paving along
Long Island railroad right of way. *il* Con-
crete 51:18 S '43
Stresses in the corner region of concrete
pavements. M. G. Spangler. *il* diags Iowa
Eng Exp Sta (Ames) Bul 157:1-96 bib-
liog(p95-6) '42; Excerpts. Roads & Bridges
81:88 Ap '43; Concrete 51:33-5 My '43

PAVEMENTS, Concrete—Continued

Winter construction methods followed at bomber base. *il* Concrete 51:2-5 O '43

See also

Bridges—Floors Pavements, Bituminous concrete
Concrete-wood slabs Roads, Concrete
Floors, Concrete

Cost

Airport paving, New Jersey; unit prices. Eng N 129:824 D 10 '42

Design

Concrete pavements without steel. L. E. Andrews. *il* diags Civil Eng 13:224-6 My '43

Design of concrete pavements with a minimum of steel; committee of Highway research board recommendations. diags Roads & Bridges 81:34-7, 62+ My '43

Structural design of concrete pavements; experimental study of the Westergaard analysis of stress conditions in concrete pavement slabs of uniform thickness. L. W. Teller and E. C. Sutherland. bibliog *il* diags Pub Roads 23:167-212 Ap '43

Wartime construction of concrete pavements. diags Pub Works 73:17-20 D '42

Joints

Concrete pavements without steel. L. E. Andrews. *il* diags Civil Eng 13:224-6 My '43

Design of concrete pavements with a minimum of steel; committee of Highway research board recommendations. diags Roads & Bridges 81:34-7, 62+ My '43

Liquid asphalt ends pumping action at joints in concrete road slabs. *il* Eng N 131:333 Ag 26 '43

Preventing and correcting the pumping action of concrete pavement slabs. Roads & Bridges 81:29-30+ Ag '43

Wartime construction of concrete pavements. diags Pub Works 73:17-19 D '42

Maintenance and repair

Thumb-nail summary of concrete pavement patching practice. *il* diags Roads & Sls 86:43-4 Jl '43

Scaling

Linseed oil stops scaling of concrete pavement. Eng N 131:543 O 7 '43

Linseed oil treatment against scaling. H. D. Metcalf. *il* Roads & Sls 86:54 S '43

Testing

Project report on a study of methods of measurement of the length of cores drilled from concrete structures. *il* diags Am Soc T M Proc 42:249-59 '42

PAVEMENTS, Soil-cement

Built landing mat a half-mile square of soil-cement construction. *il* Concrete 51:4-6+ Mr '43

126 acre soil-cement landing mat for navy planes. *il* Roads & Sls 86:35-9 F '43

Paving with soil and cement. M. D. Catton. *il* Comp Air M 48:7184-8 N '43

Soil-cement pavement for desert airbase. *il* Eng N 129:921-5 D 31 '42

Soil-cement runways of Duluth municipal airport. I. W. Ward. *il* Pub Works 74:12-14 O '43

Soil cement stabilization. Engineer 176:128-9 Ag 13 '43; *il* (p 170) Engineering 156:165 Ag 27 '43

Step-by-step photos of street job; Burlington, Vermont. G. C. Stanley. Roads & Sls 86:51-3 Je '43

PAVEMENTS, Steel

Interlocked steel planks make landing field. *il* diags Product Eng 13:695 D '42

Steel highways; Connecticut truck highway, experimental installation of a steel roadway strip. *il* Mech Eng 65:sup24-5 N '43

Steel landing mats; conveyors help turn them out by the square mile. G. R. Reiss. *il* Steel 113:112-14+ Ag 9 '43

Steel landing mats for airplane runways. G. G. Greulich. *il* Civil Eng 13:431-3 S '43

PAY-as-you-go tax. See Income tax—Collection

PAY days

What happens when the ghost walks for 810,430 war workers in 19 cities; pay dates and how, when, and how quickly, the housewife spends the money. P. Sallsbury. Sales Management 52:16-18 My 1 '43; Abstract. Management R 32:298-9 Ag '43

PAYMENT

Informal extensions of time for payment. C. R. Rosenberg, Jr. Burroughs Clearing House 28:30 N '43

See also

Acceptances, Trade Insurance—Premiums, Payment of
Checks Insurance, Life—Premiums, Payment of
Collecting of accounts Insurance, Wage payment plans
Debtor and creditor Instalment plan

PAYROLL checks. See Checks

PAYROLL deductions. See Wage deductions

PAYROLLS

Factory employment and payrolls, by industries (without seasonal adjustment) monthly, Aug. and Sept. 1941, and May-Sept. 1942. Fed Res Bul 29:82-3 Ja '43 [cont monthly]

Indexes of employment and pay rolls in non-manufacturing industries; revised and new series, monthly, 1939-Jan. 1942. Survey of Cur Business 23:31 Je '43

Indexes of wage-earner employment and of weekly wages in manufacturing industries, monthly, 1941; revised series. Survey of Cur Business 23:28 Mr '43

Indexes of wage-earner employment and of weekly wages in manufacturing industries; revised series, monthly, 1939-1941. Survey of Cur Business 22:23-4 D '42

New indexes of factory employment and payrolls; with monthly figures, 1939-1942. Fed Res Bul 29:13-14 Ja '43

Pay rolls in manufacturing industries, 1938-1941. Survey of Cur Business 1942 Sup p48-50 [supplemented in monthly numbers]

Pay rolls in nonmanufacturing industries, 1938-1941. Survey of Cur Business 1942 Sup p52 [supplemented in monthly numbers]

Payrolls, states and cities, 1938-1941. Survey of Cur Business 1942 Sup p51 [supplemented in monthly numbers]

Trend of employment and unemployment. Published in Monthly labor review

See also

Pay days
Wage deductions
Wage payment plans

Accounting

Employees' payroll allotment plan. J Account 75:169-70 F '43

Employers' payroll accounting under the Victory tax. J. A. Crafts. J Account 75:16-20 Ja '43

Ford Motor's modernized payroll methods. R. G. French. *il* Am Business 13:18-20+ Mr '43

How to simplify computing overtime wages. W. C. Hubbell. *il* Bankers Mo 60:260-1+ Je '43

How Westinghouse handles 5,000 war bonds daily. *il* Am Business 13:20-1 Ap '43

Manual payroll system for present-day needs. F. D. Burk. N A C A Bul 24:591-7 Ja 15 '43

Payroll audit work subject to many changes due to war. Nat Underw 47:18 Mr 25 '43

Punched-card system of payroll and labor cost accounting. F. A. MacCauley. *il* N A C A Bul 24:685-702 F 15 '43

Simplified office supervision; schedule board for clerks calculating incentive pay. L. E. Isaacson. *il* Personnel J 21:217-22 D '42

That Victory tax; employers expect withholding levy to be taken in stride. Business Week p22+ N 28 '42

Victory tax deductions. Am Business 13:22-3 Ja '43

See also

Labor cost—Accounting
Wage deductions

Records

Flexible payroll system; experience of Square D company of Detroit. *il* Am Business 13:20-3 Ag '43

PAYROLLS—Records—Continued

- Improved payroll methods in the office; abstract. B. V. Tornborgh. Management R 32: 242-3 J1 '43
- Payrolls on time; modernized equipment in shipbuilding firm of McCloskey and company. L. H. Houck. *il Am Business* 13:12-13 F '43
- Preview of postwar office methods; allotment division. Bureau of supplies and accounts, United States navy. *il Am Business* 13:28-32 S '43
- Simple pay deduction process; checkbook permits depositor to segregate deductions withheld. F. W. Hetzel. *il Banking* 35:26+ Ap '43
- Todd's new sales strategy maintains volume in face of machine freeze; plan built on payroll service. L. T. Thomasma. flow chart *il Sales Management* 52:25-6, 30 J1 '43

PEA aphids

- Thiocyanate compounds for pea aphid control. H. F. Wilson and E. J. Campan. *il bibliog Soap & San Chem* 19:105, 107+ F '43

PEA tree

- Ukrainian pea-shrub seed: new source of food? For Comm W 13:31 O 23 '43

PEABODY, Massachusetts**Streets**

- Annual road construction program. F. J. McCarthy. *il Pub Works* 74:21 J1 '43

PEACE

- Advertising and the postwar world; advertising as means of communication between all peoples will make for peace. H. A. Batten. *Adv & Sell* 36:13-14, 62+ J1 '43

- American legion favors U.S. cooperation for world peace; report of Legion's foreign relations committee. Comm & Fin Chr 158: 1330 S 30 '43

- Basis for permanent peace and methods of preventing aggression subject of forum. J. T. Shotwell and others. Comm & Fin Chr 158:9+ J1 '43

- Churchill proposes new world organization of European and Asiatic councils to preserve peace. Comm & Fin Chr 157:1128 Mr 25 '43

- Effects of economic-military alliance with Great Britain. V. L. Horoth. *il Mag of Wall St* 73:8-10+ O 16 '43

- Favors organized international co-operation to keep peace, by force, if necessary. C. Hull. Comm & Fin Chr 158:1086+ S 16 '43

- How far can we go in organizing peace? H. H. Burton. Comm & Fin Chr 158:1294, 1312 S 30 '43

- Hugh Gibson warns against haste in establishment of post-war peace organization. Comm & Fin Chr 158:1327 S 30 '43

- Hull sees hope for maintenance of peace. Comm & Fin Chr 157:424 Ja 28 '43

- Mineral control for peace. C. K. Leith. Eng & Min J 144:93-4 J1 '43

- Peace through world trade; National broadcasting company symposium. T. Lamont; E. A. Johnston; T. J. Watson. Comm & Fin Chr 158:1, 19 J1 '43

- Political principles must be base for economic reconstruction. N. Angell. Comm & Fin Chr 157:1983 My 27 '43

- Postwar; industrial conference board address; collective defense; economic illiteracy a stumbling block. N. Angell. Mech Eng 65:592-4 Ag '43

- President says United nations must continue together in post-war to keep world peace. Comm & Fin Chr 157:195 Ja 14 '43

- Principles of democracy first, basis of lasting peace. H. A. Wallace. Comm & Fin Chr 158:1109+ S 16 '43

- Reconstituting the League of nations. J. E. Johnsen, comp. Ref Shelf v 16, no 7:1-304 *bibliog* (p277-304) '43 (\$1.25)

- Rhode Island mass meeting favors U.S. participation in planned peace. Comm & Fin Chr 158:1115 S 16 '43

- Seven state legislatures propose post-war world body to preserve peace. Comm & Fin Chr 157:2091 Je 3 '43

- To preserve international peace. H. T. Newcomb. Comm & Fin Chr 157:578-9 F 11 '43

- Total peace is the only answer. A. T. Lauterbach. For Comm W 10:13 Mr 20 '43

- Urges post-war alliance between U.S. and Britain for world peace. W. Churchill. Comm & Fin Chr 158:1015 S 9 '43

- Wanted: adequate basis for a just and lasting peace. N. Thomas. Comm & Fin Chr 158:1295+ S 30 '43

- World court, police force essential to maintain peace. S. Welles. Comm & Fin Chr 157:2081+ Je 3 '43

- World peace plans. J. E. Johnsen, comp. Ref Shelf v 16, no 5:1-281 *bibliog* (p250-81) '43 (\$1.25)

- World trade, when peace comes. W. C. Taylor. *il For Comm W* 11:3-4, 27 My 29 '43

See also

- | | |
|---------------------------------------|-------------------------------------|
| International co-operation | Reconstruction (World war, 1939-) |
| International relations | War |
| Non-partisan council to win the peace | World war, 1939—Peace and mediation |
| Police, International | |

Bibliography

- Plans for the organization of international peace, 1306-1789; a list of thirty-six peace proposals. R. Hirsch, comp. N Y Pub Lib Bul 47:569-80 Ag '43

PEACE river, British Columbia

- Origin of Peace River canyon. H. H. Beach and J. Spivak. *bibliog map Am J Sci* 241: 366-76 Je '43

PEACHES

- Large fruit cuts canning costs. L. O. Van Blaricom. *il Food Ind* 15:58-9 Je '43

- Peachless Georgia. Business Week p50+ Je 12 '43

- Preserving fruits with SO₂ to aid lend-lease program; Good jams can be made from SO₂-treated fruits; peaches, strawberries and youngberries. J. G. Woodroof and S. R. Cecil. *il Food Ind* 15:59-61 My; 67-8+ Je '43

Diseases

- Macrochemical reaction for the detection of peach mosaic. A. O. Simonds and E. W. Bodine. Science 97:587-8 Je 25 '43

PEANUT butter

- Flowsheet for production of peanut butter. Food Ind 15:70 Ag '43

Rating

- Peanuts, they are legumes. Consumers' Research Bul 11:5-7 Mr '43

PEANUT flour

- Nutritive value of cotton, peanut, and soy seeds. T. F. Zucker and L. Zucker. *bibliog Ind & Eng Chem* 35:868-72 Ag '43

PEANUT meal

- Challenge to food technologists; oil-seed meals offer opportunity for preparing high-protein foods. *il Food Ind* 15:53 Ap '43

Prices

- Cottonseed, soybean, peanut meals celled. Oil Paint & Drug Rep 144:7+ Ag 9 '43

PEANUT oil

- Industrial applications of chemicals and related materials. Oil Paint & Drug Rep 142:60 N 30 '42

- Peanut oil output reserve of 25% ordered. Oil Paint & Drug Rep 143:4 F 15 '43

PEANUTS

- Big peanut crop. Business Week p51-2 J1 10 '43

- Lowly peanut, its contribution to oils and fats. Manuf Rec 112:24+ Mr '43

- Paraguay's 1943 peanut crop. For Comm W 12:26 J1 31 '43

- Peanut crop distribution discussed. Oil Paint & Drug Rep 144:7+ Ag 9 '43

- Peanut protein textile fiber, a possibility. Rayon 24:112 Mr '43

- Peanuts pay off; incentive bonus applied to peanut raising. Business Week p87+ Ja 30 '43

- Peanuts, they are legumes. Consumers' Research Bul 11:5-7 Mr '43

PEANUTS, Salted

- Flowsheet for production of salted peanuts. Food Ind 15:70 Ag '43

PEARL essence

- Pearl essence. Metal Finishing 41:123-4 F '43

PEARL HARBOR, Battle of. See World war, 1939—Hawallian Islands

PEARLITE

Interlamellar spacing of pearlite. G. E. Pellissier and others. bibliog il diags Am Soc for Metals Trans 30:1049-81; Discussion. 1081-6 D '42

Tensile properties of pearlite, bainite, and spheroidite. M. Gensamer and others. il diag Am Soc for Metals Trans 30:983-1019; Discussion. 1019-20 D '42

PEARLS

Margarita's pearls: big crop, poor market. For Comm W 11:32 Je 26 '43

PEARS, Dried

Brief summaries of grade standards. Food Ind 15:112-13 Ja '43

PEAS

Color of canned peas. J Chem Educ 20:453-4 S '43

Effect of sodium bicarbonate on the thiamine content of peas. H. J. Deuel, Jr. and others. Science 97:50-1 Ja 8 '43

Protection of natural green pigment in the canning of peas. J. S. Blair and T. B. Ayres. bibliog il Ind & Eng Chem 35:85-95 Ja '43

See also

Chick peas

PEAS, Dried

Beans or peas? WFA backs peas. Business Week p78+ O 16 '43

PEAS, Frozen

Factors influencing the texture of peas preserved by freezing; abstract. M. M. Boggs, H. Campbell and C. D. Schwartz. Food Ind 15:122-3 F '43

Spending your ration points on frozen vegetables. il Consumers' Research Bul 11:5-8 My '43

PEAT

Flotation of peaty alluvial soils. S. C. Happ. pl Am J Sci 241:629-39 O '43

Formation of moss peat beneath translucent pebbles in semi-arid regions of the Great Plains. B. H. Williams. Science 97:441-2 My 14 '43

Peat has possibilities as an emergency fuel. Heat & Ven 39:65 D '42

Peat moss in Canada. Can Chem & Process Ind 27:196 Ap '43

Peat production and utilization in Sweden. For Comm W 13:14 O 9 '43

Power from turf; abstract. J. A. Kenny. Elec R (Lond) 131:721 D 4 '42

Study of the plant microfossil succession in the bottom deposits of Crystal Lake, Vilas county, Wisconsin, and the peat of an adjacent bog. L. R. Wilson and A. T. Cross. bibliog Am J Sci 241:307-15 My '43

PEAT bogs

Peat salvage and reclamation of bog area; explosives displace swamp materials. O. F. Burbank. il diag Civil Eng 13:425-6 S '43

PECAN oil

Possibilities of peanut, pecan and safflower seed oils as supplements for olive oil; abstract. W. G. Bickford, G. E. Mann and K. S. Markley. Food Ind 15:144 Jl '43

PECTATES

Use of fibrous sodium pectate as a substitute for agar in bacteriological gels. R. M. McCready, H. S. Owens and W. D. Maclay. Science 97:428 My 7 '43

PECTINS

Chemists adapt pectins to new industrial uses. C. W. Kaufman, E. R. Fehlberg and A. G. Olsen. il diag Food Ind 14:57-8+ D '42; 15:58-60 Ja '43

Enzymic degradation of cell wall substances. D. H. F. Clayson. bibliog Chem & Ind 61:516-18 D 19 '42

Making apple syrup, glycerine, and sugar substitute. flow sheet Chem & Met Eng 50:104+ Ag '43

Preparation of D-galacturonic acid from pectin. E. Rietz and W. D. Maclay. Am Chem Soc J 65:1242-3 Je '43

Research finds substitute for bacteriological agar. W. E. Baier and T. C. Manchester. bibliog il Food Ind 15:94-6 Jl '43

Sunkist research men test new citrus by-products. Sales Management 52:41-2 Ja 15 '43

PEDDLERS and peddling

NYC peddling law is held unconstitutional. Comm & Fin Chr 157:1598 Ap 29 '43

PEDESTRIANS

Avoid liability for injuries to pedestrians. L. T. Parker. Am Gas J 157:26-8 D '42
Compensation for pedestrians? Economist 143:602 N 14 '42

PEELE, Robert, 1858-1942

Appreciation. T. T. Read. por Eng & Min J 144:73 Ja '43

Appreciation. A. L. Walker. por Min & Met 24:44-5 Ja '43

PEELING

Value of brine peeling tested; method tried at USDA laboratory. diags Food Ind 15:51-2 Je '43

See also

Potatoes—Peeling

PEGMATITES

Possible age of allanite from Whiteface mountain, Essex county, New York. J. P. Marble. Am J Sci 241:32-42, pl 1-3 Ja '43

Rare element prospecting in pegmatites. T. T. Quirk and H. E. Kremers. bibliog Econ Geol 38:173-87 My '43

Spectrographic analysis of New England granites and pegmatites. J. A. Shimer. bibliog maps Geol Soc Bul 54:1049-66 Ag '43

PELAGONIC acid

New fatty acids; azelaic and pelargonic acid developed commercially through accelerated war research. L. D. Myers. Soap & San Chem 19:37 N '43

PELLAGRA

Decrease in pellagra and beriberi; enriched white bread and flour. J. Stafford. Science 93:sup5-9 Jl 30 '43

Types of nutritional deficiency; niacin. D. T. Smith. bibliog Ann Am Acad 225:33-5 Ja '43

PELLETIER, Pierre Joseph, 1788-1842

Men who gave us quinine. Chem Ind 53:341 S '43

PELLEY, John Jeremiah, 1878-

Portrait. Ry Age 115:134 Jl 24 '43

PENARANDA, Enrique, 1892-

Bolivian President concludes U.S. visit. Comm & Fin Chr 157:2160 Je 7 '43

PENATIN

Purification and properties of the second antibacterial substance produced by penicillium notatum. W. Kocholaty. Science 97:186-7 F 19 '43

PENCILS

Limited production of pens and pencils. For Comm W 10:25-6 Ja 9 '43

Pencils tighten. Business Week p60-1 Ja 2 '43

Manufacture

How lead pencils are made. G. H. Vivian. il diags Comp Air M 48:6925-31 Ja '43

PENDULUM

Optimum performance of pendulum-type torsional vibration absorber. A. H. Shieh. diags J Aeronautical Sci 9:337-40 Jl '42; Discussion. R. G. Manley. 10:38-9 Ja '43

Overhaul procedure, pendulum assembly of horizon and bank and climb unit. R. B. Kees. il Instruments 15:523+ D '42

PENETRATING agents

New penetrating vehicles and solvents. F. Herrmann, M. B. Sulzberger and R. L. Baer. Science 96:451-2 N 13 '42

See also

Wetting agents

PENETROMETERS

Penetrometer method for determining the flow properties of high viscosity fluids. W. W. Pendleton. bibliog diags J Ap Phys 14:170-80 Ap '43; Correction. 14:551 O '43

PENETROMETERS—Continued

Viscosity of coal-tar residues; comparison of viscosity measurements and A.S.T.M. penetration tests. W. P. Fair, jr. and E. W. Volkmann. *bibliog Ind & Eng Chem Anal ed* 15:240-2 Ap 15 '43

PENICILLIN

Abstracts on penicillin and other antibiotic substances. M. E. Whalley. 71p pa \$1 National research council of Canada, Ottawa '43

Antibacterial substances; penicillin; contribution from the Research division, Chas. Pfizer & co. *bibliog il Chem & Eng N* 21: 1430-4+ S 10 '43

Esters of penicillin. K. Meyer, G. L. Hobby and E. Chaffee. *bibliog Science* 97:205-6 F 26 '43

Inoculated penicillin dressing. G. H. Robinson and J. E. Wallace. *Science* 98:329-30 O 8 '43

Large-scale production of penicillin. C. E. Clifton. *Science* 98:69-70 JI 16 '43; Same. *Oil Paint & Drug Rep* 144:7 JI 26 '43

Miracle drug. *Business Week* p52+ Je 5 '43

More penicillin for army; Pfizer and Lederle laboratories expand facilities. *Chem & Eng N* 21:1586 S 25 '43

Penicillin. *J Chem Educ* 20:326 JI '43

Penicillin advisers to WPB appointed. *Oil Paint & Drug Rep* 144:3+ S 27 '43

Penicillin and gonorrhea. *Science* 97:sup10 Je 4 '43

Penicillin development purpose of two meetings; plant expansions approved. *Oil Paint & Drug Rep* 144:3+ S 20 '43

Penicillin; history, culture, extraction, assay, chemical and clinical properties. C. C. Lucas. *bibliog il Can Chem & Process Ind* 27:529-32, 534, 536+ S '43

Penicillin; limited production. *Science* 98:192 Ag 27 '43

Penicillin magic. *Ind & Eng Chem* 35:sup8 O '43

Penicillin stride; successful crystallization of drug's sodium salt. *Business Week* p64+ O 23 '43

Penicillin's twins. *Business Week* p62+ S 18 '43

Potent penicillin. M. F. Ashley-Montagu. *il Tech R* 46:17-19 N '43

Production of penicillin; abstract. A. N. Richards. *Science* 97:sup10 My 28 '43

Push for penicillin; many advocate forcing producers to share scientific information. *Business Week* p28+ S 4 '43

Speed in vacuum; dehydrating penicillin may be expedited by diffusion pump. *Business Week* p66 N 6 '43

Sterility test for penicillin. C. A. Lawrence. *bibliog Science* 98:413-14 N 5 '43

Treatment of gas gangrene; abstract. L. R. Hac and A. C. Hubert. *Science* 98:sup12 JI 2 '43

Tremendous plant expansion under way for penicillin production. *Chem & Eng N* 21: 1456 S 10 '43

Winthrop increases production of penicillin. *Chem Ind* 53:248 Ag '43

Bibliography

Penicillin; annotated bibliography (no. 1-81) with detailed subject index. Winthrop chemical co, 170 Varick st, New York 13 '43

PENICILLIUM

Anti-bacterial substances from moulds; puerbolic acid, $C_8H_8O_6$ and puberulonic acid, $C_8H_8O_6$, metabolic products of a number of species of penicillium. A. E. Oxford, H. Raistrick and G. Smith. *Chem & Ind* 61: 485-7 N 28 '42

Purification and properties of the second antibacterial substance produced by penicillium notatum. W. Kocholaty. *Science* 97:186-7 F 19 '43

PENN central light and power company 4½% yield 4.15%. *Barron's* 23:10+ S 27 '43

PENN mutual life insurance company Annual policyholders' meeting held at home office. *East Underw* 44:1, 3-4+ Ja 8 '43

PENNEY, J. C., company Annual report. *Comm & Fin Chr* 157:1465 Ap 19 '43

Another look. *Mag of Wall St* 71:357-8 Ja 9 '43

Another look. *Mag of Wall St* 72:493 Ag 7 '43

J. C. Penney's earning power. H. Lawrence. *Barron's* 23:6 Ap 5 '43

Thumbnail stock appraisal. *Mag of Wall St* 72:251 Je 12 '43

PENNIES. See Coins

PENNROAD corporation Annual report. *Comm & Fin Chr* 157:1088 Mr 22 '43

PENNSYLVANIA

Why Pennsylvania municipals enjoy high investment status. A. D. Sapp. *Comm & Fin Chr* 158:1786-7+ N 4 '43

Working the dole; Pennsylvania finds war work for its relievers. *Business Week* p88 D 19 '42

See also

Coal mines and mining—Pennsylvania
Petroleum—Pennsylvania
Roads—Pennsylvania

PENNSYLVANIA casualty company

Penna. Casualty now in strengthened position. *East Underw* 44:36-7 N 5 '43

PENNSYLVANIA-central airlines corporation Files with CAB. *Comm & Fin Chr* 158:775 Ag 23 '43

PCA requests 100 cities in 23 states; files its seadrome application. *Aviation N* 1:18 S 13 '43

Projects Seadrome route to Europe. *Comm & Fin Chr* 158:990 S 6 '43

PENNSYLVANIA electric company

Bonds offered. *Comm & Fin Chr* 158:990 S 6 '43

Hearing on application. *Comm & Fin Chr* 158:582 Ag 9 '43

Plans \$4,000,000 issue. *Comm & Fin Chr* 158: 678 Ag 16 '43

PENNSYLVANIA grade crude oil association Annual meeting, 20th, Pittsburgh, June 25

Nat Pet N 35:23-4 Je 30 '43; Oil & Gas J 42:26-7 JI 1 '43

PENNSYLVANIA, Ohio & Detroit railroad

Bonds authorized. *Comm & Fin Chr* 158:490-1 Ag 2 '43

Bonds offered. *Comm & Fin Chr* 157:2454; 158:91, 196 Je 28, JI 5, 12 '43

ICC denies rehearing on bond issue. *Comm & Fin Chr* 158:582 Ag 9 '43

PENNSYLVANIA railroad

Annual report, 96th. *Comm & Fin Chr* 157: 1185 Mr 29 '43

Asks bids on equipments; formal judgment entered in Pennroad litigation. *Comm & Fin Chr* 157:557 F 8 '43

Equipment trusts offered. *Comm & Fin Chr* 157:644 F 15 '43

Liability to Pennroad corp. *Comm & Fin Chr* 157:348-9 Ja 25 '43

PENNSYLVANIA Turnpike. See Roads—Pennsylvania

PENNSYLVANIAN period. See Paleontology—Pennsylvania

PENROSE medal

Presentation of Penrose medal to Charles Kenneth Leith. *Geol Soc Proc* 1942:57-62 Ap '43

PENS

Limited production of pens and pencils. *For Comm W* 10:25-6 Ja 9 '43

PENSION trusts

Actuaries scan field of pension trusts. *Nat Underw (Life ed)* 47:5-6 Je 11 '43

Advantages of trustee-managed pension trusts. L. G. Hanmer, W. E. Duncel. *Trusts & Estates* 76:341-2 Ap '43

Annuities favored for pension trusts. I. Bender. *Nat Underw (Life ed)* 47:11 Ap 2 '43

Appeal of pension trusts. D. B. Flugelman. *East Underw* 44:86+ pt 2 O 1 '43

Approach on pension trusts. H. G. Pratt. *East Underw* 44:5 F 12 '43

Are employees expendable? pension security for today's employees. L. G. Hanmer. *Trusts & Estates* 76:137-42 F '43

Blended pension plan is outlined. M. M. Goldstein. *Nat Underw (Life ed)* 47:6 O 29 '43

Cautions in accepting employee trusts. H. Henretta. *Trusts & Estates* 76:519-20 Je '43

PENSION trusts—Continued

- Current trends in employes' plans. M. M. Goldstein. East Underw 43:12+ D 11 '42
- Doubt persistency of much pension trust business. Nat Underw (Life ed) 46:3 D 25 '42
- Employees' pension trusts and annuity plans under section 162, Revenue act of 1942. M. Kurtz. J Account 75:124-30 F '43
- Harris Trust analyzes effect of new federal tax law on pension trusts. Nat Underw (Life ed) 46:23 D 4 '42
- How I expect to get business in 1943. D. B. Flugelman. Weekly Underw 148:403-4 F 13 '43
- Marshall Field & co. sets up retirement program for 16,000. Nat Underw (Life ed) 47:1+ O 29 '43
- New field for qualified agents. S. M. Hollander. Spectator (Life ed) 151:27-9+ Ag '43
- New pension trust division opened by Equitable, N.Y. Nat Underw (Life ed) 47:3 J1 30 '43
- New pension trust regulations; a symposium. M. Elrod, Jr. and others. J Account 76:302-8 O '43
- No need to run from pension business. S. A. Monroe. Nat Underw (Life ed) 47:2+ My 28 '43
- One year term insurance cost; short term premium angle of Treasury department's recent pension trust regulations. P. H. Evans. East Underw 44:7 Ag 13 '43
- Past service credits under pension trusts. East Underw 44:11 Ag 27 '43
- Pension audit bureau is set up in New York. Nat Underw (Life ed) 47:3 S 24 '43
- Pension planning co. holds seminar. East Underw 44:9 O 29 '43
- Pension trust business for banks; new law opens door for aggressive institutions. L. G. Hanmer. Trusts & Estates 75:473-7 N '42
- Pension trust plan of National linen service. East Underw 44:10 Je 4 '43
- Pension trust plan to meet post-war needs. M. M. Goldstein. East Underw 44:3 N 5 '43
- Pension trust plans of Equitable society. Spectator (Life ed) 151:28-30 S '43
- Pension trust pointers. R. J. Lawthers. Nat Underw (Life ed) 46:23 D 4 '42
- Pension trust writing being corrected. M. A. Linton. Weekly Underw 149:749-50+ O 9 '43; Same. Nat Underw (Life ed) Conv no 47:3, 9-13 O 7 '43; Abstract. East Underw 44:4 O 8 '43; Discussion. F. B. Wilde; W. T. Grant. Nat Underw (Life ed) Conv no 47:3, 15-17 O 7 '43
- Pension trusts. C. J. Weber. East Underw 44:3 Ag 20 '43
- Pension trusts; types, fees and publicity. bibliog Trusts & Estates 76:251-3 Mr '43
- Pensions subject to withholding tax. T. C. Weinberg. Nat Underw (Life ed) 47:1+ N 5 '43
- Possibilities in pension trust field not exhausted. G. Simons. Nat Underw (Life ed) 47:3+ Ag 27 '43
- Present consideration of pension plans by insurance companies. C. W. Tye. J Account 76:436 N '43
- Promoting pension trusts. Trusts & Estates 76:343-4 Ap '43
- Revenue ruling made on pension trust subject. East Underw 44:6 Ja 1 '43
- Round table pension trust talk. D. Maduro. East Underw 44:4 S 24 '43
- Seek formula to fix insurance cost in pensions. Nat Underw (Life ed) 47:3 Ag 20 '43
- Selling pension plans. M. I. Scott. Ins Field (Life ed) 72:16-17 Mr 12 '43
- Some firms not waiting for O. K. on pension plans. Nat Underw (Life ed) 47:3+ Ag 27 '43
- Some questions raised by pension trusts. O. W. Perrin. East Underw 44:3+ Je 25 '43; Same. Nat Underw (Life ed) 47:2+ Je 25 '43; Same. Spectator (Life ed) 151:59-61 J1 '43
- Stresses skilled techniques as essential in pension trust sales; abstracts. H. Josephson. East Underw 44:11 Mr 26 '43; Nat Underw (Life ed) 47:23 Mr 26 '43
- Tips on pension trust selling technique. H. D. Josephson. Nat Underw (Life ed) 47:3 Ja 22 '43

- Treasury shows integration of pensions, social security. Nat Underw (Life ed) 47:2+ S 3 '43
- Trusteeship and insurance in pension planning; combination serves the client best. L. G. Hanmer. Trusts & Estates 77:143-6 Ag '43
- Urges cooperation of life, trust companies on pension cases. Nat Underw (Life ed) 47:2+ J1 9 '43
- Urges pool for handling pension trust business. S. A. Boyd. Nat Underw (Life ed) 47:3+ Je 25 '43

Income tax deductions

- Holds pension trusts are deductible funds; War department statement. East Underw 44:5+ O 8 '43; Nat Underw (Life ed) 47:15 O 8 '43
- Industry group issues second pension trust memorandum. Nat Underw (Life ed) 47:2+ S 24 '43; Same. East Underw 44:16 S 24 '43; Same. Ins Field (Life ed) 72:6-7+ S 24 '43
- More on pension trust regulations; information and unofficial conclusions of special committees. Ins Field (Life ed) 72:14-15 O 15 '43
- New regulations on pension plans. G. Simons. Trusts & Estates 77:131-7 Ag '43
- New Treasury regulations and pension plans. G. Simons. East Underw 44:3+ J1 23; 9+ J1 30 '43
- 1942 corporation income tax laws; pension trust aspects. P. W. Cook. East Underw 44:17 Ap 2 '43
- North America to expand its pension plan. Nat Underw 47:4 S 30 '43; Same. Nat Underw (Life ed) 47:14 O 1 '43
- Owner and officer participation in pension trust plan. F. O. McKenzie. East Underw 44:34+ pt 2 O 1 '43
- Pattern on pension trusts established; abstracts. W. F. Haldeman. Nat Underw (Life ed) 47:10 O 8 '43; East Underw 44:13 O 8 '43
- Pension trust memorandum is issued by insurance groups. Nat Underw (Life ed) 47:2+ S 10 '43; Same. Ins Field (Life ed) 72:6-8+ S 10 '43; Abstract. East Underw 44:1+ S 10 '43
- Pension trust regulations issued; text of regulations. Nat Underw (Life ed) 47:1-2, 18-20+ J1 16 '43; Same abr. East Underw 44:4, 13-15 J1 16 '43
- Pension trust regulations released. P. G. Evans. Comm & Fin Chr 158:425+ J1 29 '43
- Pension trusts. P. A. King. East Underw 44:3 Ag 20 '43
- Praises soundness of pension trust regulations. H. D. Josephson. Nat Underw (Life ed) 47:3+ J1 30 '43
- Small test being employed on pension trusts. R. F. Spindell. Nat Underw (Life ed) 47:3+ Ag 6 '43
- Social purpose of the pension trust. L. Thompson. East Underw 44:82 pt 2 O 1 '43
- Study significance of new pension trust rules. Nat Underw (Life ed) 47:1+ J1 16 '43; Correction. 47:11 Ag 13 '43
- Taft moves to nullify pension trust rules. Nat Underw (Life ed) 47:1+ Ag 6 '43; Same abr. Comm & Fin Chr 158:525 Ag 5 '43
- Third memorandum on pension trust rules. Nat Underw (Life ed) 47:7-8 O 8 '43

PENSIONS*See also*

- | | |
|----------------------|------------------|
| Annuities | World war, 1939— |
| Old age pensions | Compensation of |
| Pensions, Industrial | war victims |

PENSIONS, Industrial

- Are employes expendable? pension security for today's employees. L. G. Hanmer. Trusts & Estates 76:137-42 F '43
- Central Hanover bank & trust co., handling of pension and retirement plans. East Underw 43:8 D 4 '42
- Choosing a pension plan. J. H. Storrie. Trusts & Estates 76:437-41 My '43
- Defining pension plans. Trusts & Estates 77:36-7 J1 '43
- Employe retirement plans; Journal of commerce presents review of methods available. Nat Underw (Life ed) 47:2+ J1 23 '43; East Underw 44:7+ J1 16 '43

PENSIONS, Industrial—Continued

- Employees' pension trusts and annuity plans under section 162, Revenue act of 1942. M. Kurtz. J Account 75:124-30 F '43
- Equitable plan for employees' retirement becomes effective. East Underw 44:1+ J1 16 '43; Nat Underw (Life ed) 47:3 J1 23 '43
- Future of pension plans. H. C. Kwasha. Nat Underw (Life ed) 47:2+ Ap 2 '43
- Increase in number of private pension plans reveals growing interest of industry. Pub Util 32:177-80 Ag 5 '43
- Marshall Field & co. sets up retirement program for 16,000. Nat Underw (Life ed) 47:1+ O 29 '43
- New York Trust has plan with Equitable. East Underw 43:10 D 25 '42
- North America to expand its pension plan. Nat Underw 47:4 S 30 '43; Same. Nat Underw (Life ed) 47:14 O 1 '43
- Pension, bonus, and profit-sharing plans. E. B. Gardner and C. J. Weber. 92p Chase national bank, Pine st, New York '43
- Pension plans; employee-benefit trend only in its infancy. M. M. Goldstein. East Underw 44:14 Ap 2 '43
- Pensions in ILGWU contract. Nat Underw (Life ed) 47:7 J1 2 '43
- Retirement system as manpower insurance. J. E. Hughes. Banking Law J 60:619-22 Ag '43
- Selling pension plans. M. I. Scott. Ins Field (Life ed) 72:16-17 Mr 12 '43
- Treasury shows integration of pensions, social security. Nat Underw (Life ed) 47:2+ S 3 '43
- What's happening to private pension plans? abstract. E. D. Hackett. Management R 32:112-13 Mr '43

See also
Insurance, Life—
Agents—Pensions
Pension trusts

Accounting

- Pension plans. V. H. Stempf. N A C A Bul 24:521-31 Ja 1 '43

PENSIONS, Military

- Military pensions. A. G. Buehler. Ann Am Acad 227:128-35 My '43
- Soldier and sailor trust funds. C. C. Luhnnow. Trusts & Estates 75:557-9 D '42
- War pensions. Economist 144:390 Mr 27 '43
- War pensions. Economist 144:812-14; 145:9, 39, 72 Je 26-J1 17 '43
- War pensions tribunals. Economist 144:550 My 1 '43

PENSIONS, Old age. See Old age pensions**PENSTOCKS**

- Destruction test of a 66-in. forged steel penstock pipe. Welding J 22:sup361 Ag '43
- Maintenance practices for penstocks and flow lines. J. M. Spaulding. Elec W 120:463-5 Ag 7 '43
- Plant restored with salvaged penstock; emergency repairs of Washington water power station. N. W. Humphrey. Il Elec West 89:42-3 N '42
- Restoring a corroded penstock; oxyacetylene flame-priming to remove rust and scale before applying protective paint. Il Power Pl Eng 47:86-7 Je '43
- Steel-penstock erection at a western hydroelectric project. L. G. Christofferson. Il plan Civil Eng 13:409-12 S '43
- Welding innovations for high dams; arc welding as applied to penstocks. G. L. Yetter. Il Elec West 90:65-7 Ap '43

PENTABROMOPHENOL

- Preparation of pentabromophenol and bromanil from phenol. M. Kohn. J Chem Educ 20:117 Mr '43

PENTACENE

- New synthesis of the pentacene ring system. C. F. H. Allen and J. W. Gates, jr. bibliog Am Chem Soc J 65:1502-3 Ag '43

PENTACHLOROPHENOL

- Observations on the fate of pentachlorophenol in the animal organism. W. Machle, W. Deichmann and G. Thomas. bibliog J Ind Hygiene 25:192-4 My '43

- Pole yard adapted to pentachlorophenol. Il Elec W 118:1818 N 28 '42

PENTAERYTHRITOL

- More synthetic resins from rosin. J. R. Calhoun. flow chart Il Chem & Met Eng 50: 109-11 O '43

PENTAERYTHRITOL tetranitrate**Analysis**

- Determination of aliphatic nitrate esters; colorimetric method. H. Yagoda. bibliog diag Ind & Eng Chem Anal ed 15:27-9 Ja 15 '43

PENTAGALLATES

- Chemical constitution and the tanning effect; pentagallates of glucose and mannose. A. Russell, W. G. Tebbens and W. F. Arey. Am Chem Soc J 65:1472-4 Ag '43

PENTAGON building. See United States—War department—Buildings**PENTALYN. See Pentaerythritol****PENTANE**

- Butane and pentane content of petroleum products. W. L. Nelson. bibliog Oil & Gas J 42:58, 60 Ag 12 '43

- Optical rotation and atomic dimension: the four optically active 2-halogenopentanes. D. H. Brauns. bibliog J Research Nat Bur Stand 51:33-106 Ag '43

PENTANOL. See Amyl alcohol**PENTAPHEN**

- Nonchlorinated compounds derived from monochloropentanes. C. K. Hunt. bibliog flow sheets Il Ind & Eng Chem 35:1048-52 O '43

PENTENE

- Coordination of silver ion with unsaturated compounds; *cis*- and *trans*-2-pentene. H. J. Lucas, R. S. Moore and D. Pressman. bibliog Am Chem Soc J 65:227-9 F '43

PENTENOIC acid

- Normal addition of hydrogen bromide to 3-butenic, 4-pentenic and 5-hexenoic acids in hexane. A. Michael and H. S. Mason. bibliog Am Chem Soc J 65:683-6 Ap '43

PENTLANDITE

- Fe-Ni-S system; an introduction with new data on the crystallization of pyrrhotite and pentlandite. J. E. Hawley, G. L. Colgrove and H. F. Zurrbrigg. bibliog Il Econ Geol 38:335-88 Ag '43

PENTOSANS

- Pentosans in pulp; TAPPI tentative standard T 223 m-43. Paper Tr J 117:29-30 S 2 '43

PENTOSES**See also**

Ribose

PENTRATE process. See Steel—Protection**PEOPLES gas light and coke company**

- Income account, 1939-1942. Comm & Fin Chr 157:1088-9 Mr 22 '43

PEOPLES light and power company

- Declarations filed with SEC. Comm & Fin Chr 157:2455 Je 28 '43

- SEC orders new action on integration program. Comm & Fin Chr 158:583 Ag 9 '43

- Segregation plan approved. Comm & Fin Chr 158:1770 N 1 '43

PEORIA, Illinois**Industries**

- Community plans peacetime jobs; lessons from Peoria's experience. Il Dun's R 51: 11-15+ Ag '43

- Peoria plans for post-war. L. K. Urquhart. Factory Management 101:94-6+ My '43

PEPPER

- India's pepper crop. For Comm W 10:28 Mr 6 '43

PEPPER war benefits bill. See World war, 1939—Compensation of war victims**PEPPERMINT**

- Belladonna, digitalis, aconite, peppermint held essential war crops. Oil Paint & Drug Rep 143:3+ My 3 '43

- Peppermint acreage drops 8% for 1943. Oil Paint & Drug Rep 143:7 Je 28 '43

PEPPERMINT oil

- Mint oil plant ready in California. Oil Paint & Drug Rep 144:3+ J1 12 '43

PEPPERMINT oil—Continued

- Mint oil supply problem studied. Oil Paint & Drug Rep 144:5+ O 25 '43
 Mint oils estimate off 60 percent. Oil Paint & Drug Rep 144:3 S 8 '43
 Peppermint crisis; freeze order threatens supply for candy, medicines, etc. Business Week p34+ S 25 '43
 Peppermint oil supplies frozen by WFA order. Oil Paint & Drug Rep 144:7 S 20 '43
 Relieve mint oil shortage. Soap & San Chem 19:45 N '43

Analysis

- Viscometric method for determining free menthol in peppermint oil. L. J. Swift and M. H. Thornton. bibliog Ind & Eng Chem Anal ed 15:422-3 JI 15 '43

Prices

- Mint oil price ceilings leveled up. Oil Paint & Drug Rep 143:5 Mr 1 '43
 Peppermint oil ceiling. Oil Paint & Drug Rep 144:3+ S 27 '43

PEPPERS

- Ascorbic acid content of sweet peppers. V. A. Beckley and V. E. Notley. Soc Chem Ind J 62:14-16 Ja '43

See also

Paprika

PEPSI-COLA company

- Pepsi-Cola beat; company achieves wide distribution, despite sugar ban. Business Week p86-8 S 11 '43
 Service men's centers. il plans Arch Forum 77:38-43 D '42

PEPSIN

- Effect of various chemical agents affecting permeability of the mucosa on the formation of ulcers. K. L. Driver, G. S. Dozier and H. C. Denham. bibliog Science 98:163-9 Ag 13 '43

- Heats of organic reactions; the digestion of β -lactoglobulin by pepsin. G. Haugaard and R. M. Roberts. Am Chem Soc J 64:2664-71 N '42

PEPSITENSIN

- Destruction of hypertensin and pepsitensin by an aminopeptidase obtained from yeast. R. Croxatto and H. Croxatto. bibliog il Science 96:519-20 D 4 '42

PEPTIC ulcers. See Stomach—Diseases**PEPTIDES**

- Carbanic acid peptides; a new type of peptide and a new possible source of ammonia from proteins. A. H. Corwin and C. I. Damerel. bibliog Am Chem Soc J 65: 1974-84 O '43

- Hydrolysis of d-peptides. G. E. Pickford. bibliog Science 98:14-15 JI 2 '43

- Quantitative investigations of amino acids and peptides. E. H. Frieden, M. S. Dunn and others. bibliog il J Phys Chem 47: 10-30 Ja '43

- Thermal data; heats of combustion and free energies of some compounds containing the peptide bond. H. M. Huffman. bibliog J Phys Chem 46:885-91 N '42

PEPTONES

- Chemical and bacteriological studies on peptones; abstract. A. E. Hook and F. W. Fabian. Food Ind 15:148 N '43

PERCHLORATES**Analysis**

- Analytical reactions involving ignition with manganous nitrate. M. J. Preising, O. F. Stonek, and J. H. Reedy. bibliog Ind & Eng Chem Anal ed 14:875-7 N 15 '42

PERCHLOROTERCERATE

- Cerate and periodate oxidimetry; perchlorotercerate and periodate ions as oxidants in the determination of organic compounds. G. F. Smith and F. R. Duke. Ind & Eng Chem Anal ed 15:120-2 F 15 '43

PERCHLOROETHYLENE. See Tetrachloroethylene**PERCHLORIC acid**

- Cerate and periodate oxidimetry; perchlorotercerate and periodate ions as oxidants in the determination of organic compounds. G. F. Smith and F. R. Duke. Ind & Eng Chem Anal ed 15:120-2 F 15 '43

- Formal electrode potentials of palladium in aqueous hydrochloric and perchloric acid solutions; stability of chloropalladate ion. D. H. Templeton, G. W. Watt and C. S. Garner. bibliog Am Chem Soc J 65:1608-12 Ag '43

- Perchloric acid method for determination of silicon in ferrosilicon. L. Waldbauer and S. O. Rue. bibliog Ind & Eng Chem Anal ed 15:131 F 15 '43

- Rapid Kjeldahl digestion method using perchloric acid. L. P. Pepkowitz, A. L. Prince and F. E. Bear. Ind & Eng Chem Anal ed 14:856-7 N 15 '42

PERE MARQUETTE railway

- Debt reduction being pursued to strengthen financial position. Comm & Fin Chr 157: 1465-6 Ap 19 '43

- Improved standing for Pere Marquette bonds. A. Jansen. Barron's 23:10+ N 8 '43

- Railroad securities. Comm & Fin Chr 157: 1477, 1957 Ap 22, My 27 '43

- Summary of 1942 operations. Comm & Fin Chr 157:1487 Ap 22 '43

PERFUMERY

- Are women tired of pastels? il Mod Packaging 16:56-7+ F '43

- How a design is born; Mary Dunhill shell design for cosmetics and perfume. il Mod Packaging 17:78-9 N '43

- If you're giving her perfume. Consumers' Research Bul 12:22-4 N '43

- Perfume industry of France. For Comm W 12:26 S 25 '43

- Synthetic perfumes perfected by Du Pont; abstract. G. B. Bradshaw. Chem Ind 53: 114 JI '43

- Thank synthetics; chemical flavorings and aromatics have averted wartime squeeze on food and perfume industries. Business Week p60+ Ag 21 '43

See also

- Soap manufacture—
 Perfuming

Advertising

- Conservation need changes consumer buying habit; Shulton ad to conserve your toilet water. il Ptr Ink 204:74 JI 9 '43

PERFUSION apparatus

- Improved apparatus for liver perfusion. H. H. Rostorfer, L. E. Edwards and J. R. Murlin. diag Science 97:291-2 Mr 26 '43

PERICLASE

- High temperature resistivity measurements on compressed granular refractory materials. G. H. Fetterley. il diag Electrochem Soc Trans 83 (preprint 2):5-18 Ap '43

PERIODIC acid

- Cerate and periodate oxidimetry; perchlorotercerate and periodate ions as oxidants in the determination of organic compounds. G. F. Smith and F. R. Duke. Ind & Eng Chem Anal ed 15:120-2 F 15 '43

- Kinetics of oxidation of cellulose with periodic acid. G. Goldfinger, H. Mark and S. Siggia. bibliog Ind & Eng Chem 36:1083-6 O '43

PERIODIC system

- Electron configuration as the basis of the periodic table. W. F. Luder. bibliog charts J Chem Educ 20:21-6 Ja '43

PERIODICALS

- American libraries and foreign periodicals. Science 97:36-7 Ja 8 '43; Same. Special Lib 34:94-5 Mr '43

- Editorial values retained as publishers make paper stretch. E. A. Malloy. Ptr Ink 204: 26, 30 S 24 '43

- Fawcett suspends 36 magazines to save paper; ad space apportioned; many practices will be changed. Ptr Ink 202:14 Ja 22 '43

- Magazine publishers must use less paper; full text of directive order. Paper Tr J 116: 8-9 Ja 7 '43

- Magazines in wartime. R. Robinson. Special Lib 34:242-3+ JI-Ag '43

- New magazines cannot get paper allotment. Comm & Fin Chr 157:1966 My 27 '43

- Streamlining production and distribution of current periodical articles. Z. Troy. Special Lib 34:287-92 JI-Ag '43

PERIODICALS—Continued

Wanted, an acceptable measurement of magazine coverage. E. R. Smith. *il Ptr Ink* 203:69-71 My 28; 29-31+ Je 4 '43

See also

Advertising mediums	Employees' magazines
Periodicals	House organs
Audit bureau of circulations	Libraries—Periodical collections
Business periodicals	Newspapers
Chemistry—Periodicals	Trade journals

Bibliography

Books and printing; a selected list of periodicals, 1800-1942. C. F. Ulrich and K. Kúp. 244p pa \$5 William Edwin Rudge, Woodstock, Vermont '43

See also

Education—Periodicals—Bibliography

Union lists

Proposed union catalogue of periodicals in British libraries. T. Besterman. *Assn of Sp Lib & Inf Bur Proc* 1942:30-4, 63; Discussion. 63-4

Union list of serials in libraries of the United States and Canada. W. Gregory, ed. 2d ed 3065p Wilson, H. W. '43

Circulation

Wartime gains of magazine circulations. G. K. Greiner. *Adv & Sell* 36:32+ N '43

Directories

Catholic press directory, 1942. 160p \$1.50; pa \$1 Joseph F. Wagner, 53 Park pl, New York '42

Ulrich's periodicals directory; a classified guide to a selected list of current periodicals. C. F. Ulrich, ed. Inter-American ed 314p \$10 R. R. Bowker co, 62 W. 45th st, New York '43

Foreign language editions

Traveling Digest; well intrenched on foreign soil, Reader's Digest casts a postwar eye on enemy countries. *Business Week* p52 O 9 '43

History

Sales management turns the clock back twenty-five years. P. Salisbury. *Sales Management* 52:22-4 O 1 '43

Indexes

Economic geology; index to volume XXXVII. *Econ Geol* 37:649-60 D '42

Subject index to the Monthly labor review, volumes 12 to 51, Jan 1921 to Dec. 1940. U S Bur Labor Statistics Bul 696:1-421; pa 40c Supt. of doc. '42

Thirty years of poetry: a magazine of verse; index to volumes 1-60 October 1912-September 1942. 399p \$7.50 Poetry, 232 East Erie st, Chicago '43

Bibliography

Check list of cumulative indexes to individual periodicals in the New York public library. D. C. Haskell, comp. 370p \$6 New York public library, New York '42

Marketing

Magazines' distribution system same as Cal-laway's post-war scheme. B. A. Mackinnon. *Ptr Ink* 204:20 S 24 '43

Printing

Small plants, too, can profit by selling house-organ contracts; New Mexico, a state-sponsored publication. F. Kutniewsky. *il Inland Ptr* 111:27-8 Ap '43

Reader interest

New trend in magazine reading shown by 300,000 library visitors; facts and thought-provoking articles favored by callers at New York's library. G. M. Flanagan. *Sales Management* 52:78-4 Ag 1 '43

Periodical reading habits of university students. V. Georges. *J Business* 16:204-6 J1 '43

Typography

Crowell-Collier adopts a type developed by London Times. *il Inland Ptr* 111:51-2 S '43

Great Britain

Proposed union catalogue of periodicals in British libraries. T. Besterman. *Assn of Sp Lib & Inf Bur Proc* 1942:30-4, 63; Discussion. 63-4

PERIODICALS, Sponsored. See Advertising mediums—Periodicals, Sponsored

PERIODICITY

Evidence for periodicity in short time series. T. L. Kelley. *Am Stat Assn J* 38:319-26 S '43

Periodic processes in free pseudo-linear oscillatory systems. B. V. Bulgakov. *diag Franklin Inst J* 235:591-616 Je '43

Study of cycles. *Am Stat Assn J* 38:248-9 Je '43

PERISCOPES

Eyes of the tank; plastic lens holder for periscopes. *il Mod Plastics* 21:75-7 O '43

Periscope inspects inside of a boiler tube. W. J. de Mauriac. *il diag Elec W* 119:1148 Ap 3 '43

Seeing-eye for gas main interiors; locating suspected dust deposits. D. J. Miller. *il diag Am Gas J* 159:17-18+ J1 '43

Zinc and plastics replace aluminum and bronze in Canadian tank periscope. *il Product Eng* 14:413 J1 '43

PERKIN medal

Perkin medal. *Ind & Eng Chem* 35:177 F '43

PERKIN reaction

Mechanism of formation of leuco-triphenyl-methane dyes, and an analogy in the Perkin reaction. R. R. Davies and H. H. Hodgson. *bibliog Soc Dyers & Col J* 59:196-8 S '43

PERMEABILITY

How permeability is determined. G. M. Stearns. *diag Oil & Gas J* 42:249, 251 S 23 '43

Inspection and analysis of formation samples; determination of fluid content and permeability of core samples by quantitative laboratory tests. L. C. Uren. *diags Pet Eng* 14:62+ bibliog(134 titles, p70, 72) My '43

Oil-bearing rock permeability. G. M. Stearns. *Oil & Gas J* 42:69 S 16 '43

Permeability of flexible materials. L. W. Elder. *il Mod Packaging* 16:69-71 J1 '43

Permeability of porous solids to gases and liquids. L. Grunberg and A. H. Nissan. *bibliog diags Inst Pet J* 29:193-225 Ag '43

Permeability of transparent wrappings. C. R. Oswin. *bibliog Soc Chem Ind J* 62:45-8 Ap '43

Selective acidizing and permeability determination by an electrical method; interface locator. D. G. Hedley and P. E. Fitzgerald. *diag Oil & Gas J* 41:37-8 F 18 '43

Specific surface measurements on compact bundles of parallel fibers. R. R. Sullivan. *bibliog J Ap Phys* 13:725-30 N '42

Specific surface of powders; a modification of the air-permeability method for rapid routine testing. P. J. Rigen. *diag Soc Chem Ind J* 62:1-4 Ja '43

Technique of testing large cores of oil sands. F. B. Plummer and P. F. Tapp. *bibliog diags Am Assn Pet Geologists Bul* 27:64-84 Ja '43

See also

Building materials—	Textile fabrics—Per-
Permeability	meability
Paper—Permeability	

PEROXIDASES

Peroxidase test for blanching requires careful application. H. J. Phaff and M. A. Joslyn. *bibliog il Food Ind* 15:50-2 Mr '43

Quantitative field test for estimation of peroxidase. W. B. Davis. *Ind & Eng Chem Anal ed* 14:952-3 D 15 '42

Recent advances in fur dyeing. H. Weisskopf. *Am Dyestuff Rep* 32:163-4 Mr 29 '43

PEROXIDES

Course of autoxidation reactions in polyisoprenes and allied compounds; the peroxidation of rubber. E. H. Farmer and A. Sundralingam. *diags Chem Soc J* p125-33 Mr '43

Effect of carbon treatment on fish liver oils; vitamin A destruction and peroxide formation. L. O. Buxton. *bibliog Ind & Eng Chem* 34:1486-9 D '42

PEROXIDES—Continued

Mechanism of the thermal decomposition of diacyl peroxides in dilute solution in organic solvents; abstract and discussion. A. E. Oxford. *Chem & Ind* 62:54 F 6 '43

Optically active acyl peroxides; preparation, decomposition, and use as catalysts for vinyl polymerization. C. S. Marvel, R. L. Frank and E. Prill. *bibliog Am Chem Soc J* 65:1647-52 Ag '43

Peroxides in isopropanol. C. E. Redemann. *Am Chem Soc J* 64:3049 D '42

Trivalent carbon; unsymmetrical hexaaryl-dimethylperoxides. E. L. Buhle, Sister Mary Louis Whalen and F. Y. Wiselogle. *bibliog Am Chem Soc J* 65:584-6 Ap '43

See also

Hydrogen peroxide

PERPETUITIES (law)

Rule not violated if possession is postponed beyond permissible period. *Trusts & Estates* 76:564-5 Je '43

PERSIA

See also

Building—Persia
Engineering—Persia

Transportation—
Persia

Economic conditions

News by countries. *For Comm W* 11:15-16 Ap 3 '43

PERSONAL effects insurance. See Insurance, Personal effects

PERSONAL injuries

Children bitten by rats; action against owners of adjoining premises. *Pub Health Rep* 58:1427-8 S 17 '43

See also

Damages
Employers' liability
Negligence

Workmen's compensation

PERSONAL property insurance. See Insurance, Inland marine—Policies—Personal property floater

PERSONALITY

Personality problems in the office. L. G. Giberson. *Personnel J* 21:239-43 Ja '43

PERSONALITY tests

Psychology pays; Detroit company pretests women; psychological, mechanical aptitude and emotional tests. *Business Week* p52+ F 20 '43

Skill, intelligence and temperament. D. G. Humm. *Personnel J* 22:80-90 S '43

Temperament in industry. D. G. Humm and G. W. Wadsworth, Jr. *Personnel J* 21:314-22 Mr '43

PERSONNEL departments. See Employment departments

PERSONNEL executives. See Employment managers

PERSONNEL management. See Employment management

PERSONNEL service in education

Adjustments of young people; Stephens College women. C. J. Marsh. *Personnel J* 21:231-8 Ja '43

PERSPECTIVE

Perspective illustration as applied to aircraft design and production. A. M. Fitzpatrick. *Il diags Aeronautical Eng R* 2:23, 25, 27+ Je '43

Theory and technique of perspective projection; use in airplane factories. G. F. Bush. *Il diags Aviation* 42:118-20, 125+ Ja; 150-1, 153 Mr; 171-2, 174+ Ap; 194, 197+ My '43

PERU

See also

Chemical industries—
Peru
Coffee trade—Peru
Electric apparatus
industry—Peru
Finance—Peru
Fisheries—Peru
Insurance law—Peru

Paper industry and
trade—Peru
Petroleum industry
and trade—Peru
Public health—Peru
Steel industry and
trade—Peru

Economic conditions

Arequipa region; basic economic picture of southern Peru. J. G. Dwyre. *Il For Comm W* 11:8-11+ My 1 '43

News by countries (cont). *For Comm W* 9: 18 N 21 '42; 10:18-19 Ja 16; 21-2 Mr 6; 11: 23-4 Ap 10; 18-19 Je 5; 12:14-16 Jl 17; 18-20 Ag 14; 24-5 S 18 '43

Industries and resources

Big doings in the Andes. J. F. Chapman. *Il Business Week* p19-20+ D 12 '42

Peru's progress takes shape under stimulus of war. T. J. Pursley. *Il For Comm W* 10:3-6 F 13 '43

Rotenone production in the Amazon valley. E. C. Higbee. *Il For Comm W* 12:8-9+ Jl 24 '43

PERU, Indiana**Sewerage**

Scrubbing sewage gas; experiences with dry and wet methods. H. E. Norris. *Il diags Water Works & Sewerage* 90:61-4 F '43

PEST control preparations

Chemicals in pest control. *Can Chem & Process Ind* 27:192+ Ap '43

War time problems of the pest control operator. W. O. Buettner. *Soap & San Chem* 19:101, 103 My '43

PESTS

Chemicals in pest control. *Can Chem & Process Ind* 27:192+ Ap '43

See also

Cockroaches
Food—Insect infestation

Insects, Injurious and
beneficial
Ratproofing

PET milk company

Growth company in food business. H. Lawrence. *Barron's* 22:13 D 7 '42

PETERSON, Franklin P.

Given Hanlon award. *por Oil & Gas J* 41: 42 Ap 22 '43

PETERSON, Otto Wallace, 1880-

Sketch. *por Explosives Eng* 21:166-7 S '43

PETRILLO, James Caesar, 1892-

NAB answers Mr Smith. N. Miller. *Adv & Sell* 35:23+ D '42

Peanuts to Petrillo. *Business Week* p93-4 O 23 '43

Petrillo and Decca reach agreement. *Ptr Ink* 204:53 S 24 '43

Petrillo dispute certified to WLB. *Ptr Ink* 204:50 Jl 9 '43

Portrait. *Business Week* p28 Ja 23 '43

Score by Petrillo; concludes deal with Decca. *Business Week* p100-1 S 25 '43

Words and music; transcription boycott. *por Business Week* p81-2+ Jl 24 '43

PETROFABRICS. See Rocks**PETROLEO internacional (periodical)**

Announcing Petroleo internacional. *Oil & Gas J* 41:51 My 6 '43

First issue of journal's new Latin-American affiliate. *Oil & Gas J* 42:15 S 2 '43

PETROLEUM

Graphic story of petroleum. *J Chem Educ* 20:385-9 Ag '43

Petroleum; past, present, and future. P. K. Frolich. *bibliog Il maps Ind & Eng Chem* 35:1131-8 N '43

Role of microorganisms in the transformation of organic material into petroleum. *bibliog Am Pet Inst Proc* 23(4):123-6 '42

Victory twins, electricity and oil. H. E. Dralle. *Il diag Elec Eng* 62:393-400 S '43

See also

Bituminous materials
Gas, Natural
Gasoline
Kerosene
Liquefied petroleum
gas
Liquid fuel
Oil flow

Oil fuel
Oil lands
Oil shales
Petroleum distillation and other
headings beginning
Petroleum

also American institute of mining and metallurgical engineers—Petroleum division

Acidation of wells

Acid deepening of wells. L. Courter. *Il Oil & Gas J* 42:58+ Je 17 '43

Cost analysis; acid treatment. *Oil & Gas J* 42:63 S 30 '43

Mud acid; its theory and application to oil and gas wells. P. J. Lehnhard. *bibliog Pet Eng (Ref annual)* 14:82+ Jl 1 '43

New conception of acidizing. C. E. Clason. *Pet Eng* 14:51, 55, 57 My; 76, 78, 80 Je; 88, 90, 92+ Jl '43

PETROLEUM—Acidation of wells—*Continued*
 Selective acidizing and permeability determination by an electrical method; interface locator. D. G. Hefley and P. E. Fitzgerald. *diag Oil & Gas J* 41:37-8 F 13 '43; Abstract. *Science* 98:supl0 Ag 6 '43

Analysis

- Analyses of crude oil from some fields in Kansas. E. C. Lane and E. L. Garton. *U S Bur Mines Rep of Invest* 3688:1-95 '43
 Analyses of crude oils from some fields of Texas. E. C. Lane. *U S Bur Mines Rep of Invest* 3699:1-52 '43
 Analysis of Trinidad crude oils. F. Morton and A. R. Richards. *bibliog pls diag Inst Pet J* 29:55-74 F '43
 Determination of inorganic salts in crude oils. E. P. Rittershausen and R. J. DeGray. *Ind & Eng Chem Anal ed* 14:947-8 D 15 '42
 Evaluating aviation-gasoline content of crude oil. W. L. Nelson. *Oil & Gas J* 42:52-3 My 13 '43
 Flash point of kerosenes, evaluation from crude oil. W. L. Nelson. *Oil & Gas J* 42: 70 S 9; 80 O 21 '43
 Investigation of U.S.S.R. crude oils. G. D. Gal'pern and I. A. Musaev. *Pet Eng* 15: 98+ O '43
 Method for analyzing gasoline fraction of petroleum; with preliminary results on east Texas and Oklahoma crudes. F. D. Rossini and others. *bibliog Oil & Gas J* 41:106, 108, 111+ N 12 '42; Same. *Am Pet Inst Proc* 23(3):7-14 '42; Same. *Pet Eng (Ref annual)* 14:245-8, 250 Jl 1 '43

See also

Hydrocarbons—Analysis

Bibliography

- Abstracts. Published in monthly numbers of *Journal of the Institute of petroleum*
 List of publications, September, 1942. 22p
 California department of natural resources, Division of oil and gas, Ferry bldg, San Francisco '42
 Secondary recovery. (Petroleum bibliog. 9) 41p
 pa 10c Tulsa pub. lib, Technical dept, Tulsa, Okla. '42

Chemical treatment of wells

- Chemical treatment of wells in Trinidad. S. P. Kings. *Pet Eng* 15:174, 176, 178 O '43

Chemistry

- AEC of chemical derivatives from petroleum. R. L. Wakeman and B. H. Weil. *il Nat Pet N* 34 pt 2:R412-16. R418; 35 pt 2:R22-5, R28-31, R60-5, R107-12, R161-4, R166-7, R170-1, R213-15, R220-1, R264-5, R268, R270 N 25 '42; Ja 6, F 3, M 3, Ap 7, My 5, Je 2 '43
 Additive physical properties in hydrocarbon mixtures. R. M. Deanesly and L. T. Carleton. *bibliog J Phys Chem* 46:859-70 N '42
 Advancing front of petroleum chemicals. R. K. Stratford. *flow charts il Chem Ind* 53: 489-93 O '43
 American chemical society annual meeting, Detroit, April 12-16; abstracts of papers. *Oil & Gas J* 41:127-9 Ap 15 '43; *Pet Refiner* 22:124, 126+ My; 178+ Je '43
 American chemical society, Petroleum division, Pittsburgh, Sept. 6-10; abstracts of papers. *Oil & Gas J* 42:63-5 S 16 '43; *Pet Refiner* 22:140+ S '43
 Chemical trends in the petroleum industry. J. C. Walker. *il Oil & Gas J* 41:23-5 Ja 21 '43; *Excerpt. Nat Pet N* 35 pt 2:R84 F 3 '43
 Chemistry and the petroleum industry. A. E. Dunstan. *Inst Pet J* 29:163-89, pl 1-13 Jl '43
 Chemistry of diisobutylene formation. R. Kauffman. *bibliog Oil & Gas J* 41:60+ F 11 '43
 Cyclization of hydrocarbon mixtures. S. J. Green. *bibliog il diag Inst Pet J* 28:179-208 S '42
 Exploring the dark continent of heavy hydrocarbon structure. *Oil & Gas J* 42:61 S 30 '43
 Marine microorganisms which oxidize petroleum hydrocarbons. C. E. Zobell, C. W. Grant and H. F. Haas. *Am Assn Pet Geologists Bul* 27:1175-93 *bibliog(p* 1191-3) S '43

- Nitrogen compounds in petroleum distillates; isolation and identification of a $C_{10}H_{17}N$ base from California petroleum. H. L. Lochte, W. W. Crouch and E. D. Thomas. *bibliog diag Am Chem Soc J* 64:2753-5 D '42
 Personalities in chemistry. Gustav Egloff. A. D. McFadyen. *Chem Ind* 53:349-50 S '43
 Petroleum acids; aliphatic acids from California petroleum. W. A. Quebedeaux and others. *bibliog Am Chem Soc J* 65:767-70 My '43
 Petroleum acids; naphthenic acids from California petroleum. W. O. Ney and others. *bibliog diag Am Chem Soc J* 65:770-7 My '43
 Petroleum as a source of the aromatic hydrocarbons. A. W. Trusty. *bibliog Pet Refiner* 22:83-7 Ap '43
 Petroleum in the chemical industry. J. E. Walker. *Chem Age (Lond)* 48:261-6, 285-90, 317-23 Mr 6-20 '43
 Petroleum solvents. E. M. Toby, Jr. *il Ind & Eng Chem* 35:1043-7 O '43
 Photochemistry in petroleum technology; abstract. J. De Ment. *Inst Pet J* 28:409A-410A O '42
 Polymerization of mixtures of olefins and diolefins in presence of metallic sodium. V. N. L'vov. *Oil & Gas J* 42:38-9+ Jl 8 '43
 Possibilities of the petrochemical industry are now developing. W. L. Nelson. *il Oil & Gas J* 42:38-4+ My 13 '43
 Preparation of 1,3-butadiene from petroleum and its fractions. S. V. Lebedev and others. *bibliog diag Oil & Gas J* 41:61, 63, 65, 67 F 11; 76, 78-9, 81 F 25 '43
 Pure hydrocarbons from petroleum; vapor-liquid equilibria of close-boiling hydrocarbons. J. Griswold. *bibliog il Ind & Eng Chem* 35:247-51 F '43
 Pure hydrocarbons from petroleum; vapor-liquid equilibrium of methylcyclopentane-benzene and other binary aromatic systems. J. Griswold and E. E. Ludwig. *bibliog Ind & Eng Chem* 35:117-19 Ja '43
 Quantitative analysis by mass spectrometry. O. L. Roberts. *il diag Pet Eng* 14:109-11, 114+ My '43
 Revolution in oil; war, and postwar; report to executives. *il Business Week* p51-60 Ap 17 '43
 Synthesis and properties of hydrocarbons of high molecular weight. J. N. Cosby and others. *bibliog il Am Pet Inst Proc* 22(3): 13-24 '41; 23(3):15-36 '42

Concessions

- See also
 Mexico—Expropriation policy

Conservation

- Coordination of conservation practices in the various states; activities of the Interstate oil compact commission. E. H. Dahlgren. *Oil & Gas J* 41:118+ N 12 '42
 Intelligent utilization of natural resources. R. E. Miller. *Oil & Gas J* 41:65-7 Ap 15 '43; Same. *Pet Refiner* 22:114, 116 My '43
 Petroleum substitutes study by government argued. *Oil Paint & Drug Rep* 144:3+ Ag 9 '43
 Present allocation practices. D. R. McKeithan. *Oil & Gas J* 41:154+ N 12 '42
 Statutes pertaining to oil and gas conservation in the state of Arkansas and orders having special reference to the Magnolia field. In *U S Bur Mines Rep of Invest* 3720: 99-115 '43
 Texas order penalizes failure to return salt water to oil-producing horizon. *Oil & Gas J* 41:20 N 26 '42
 Wanted: a national fuel-gas policy. F. X. Welch. *Pub Util* 32:531-9 O 28 '43

See also

- Petroleum industry and trade—Regulation
 Petroleum supply

Cracking

- See Petroleum distillation

Dehydration

- Construction and operation of a water-treatment and disposal plant. *flow diag il Oil & Gas J* 42:29-32 Jl 8 '43

PETROLEUM—Dehydration—Continued

Elements of cost in emulsion breakers. Oil & Gas J 41:75 Ap 22 '43

Emulsions

Elements of cost in emulsion breakers. Oil & Gas J 41:75 Ap 22 '43

Reducing refinery offstream time by desalting of crudes. N. Williams. flow diag Oil & Gas J 41:149, 161 N 26 '42

Evaporation losses

Portable pressure-gravity test unit checks evaporation losses. N. Williams. il diags Oil & Gas J 42:43-4 My 13 '43

See also

Petroleum—Stabilization

Gas mixtures

Bottom-hole choke reduces gas-oil ratio in K.M.A. wells. H. F. Simons. il diags Oil & Gas J 42:39-40+ S 30 '43

Interpretation of laboratory analytical and volumetric data in terms of field measurements; abstract. B. H. Sage, R. H. Olds and W. N. Lacey. diag Oil & Gas J 42:134+ Je 24 '43

Oil-well pumping practices; effect of presence of gas on performance of sucker-rod pumps. J. Zaba. bibliog Oil & Gas J 42:57, 59 S 16 '43

Prediction of the shrinkage of crude oils. D. L. Katz. bibliog Oil & Gas J 41:179-80, 182, 184+ N 12 '42

Study of reservoir fluids by surface recombination experiments; abstract. H. H. Botset and M. Muskat. Oil & Gas J 42:78+ My 20 '43

See also

Petroleum—Stabilization

Geology

Anse la Butte dome, St Martin Parish, Louisiana. F. W. Bates and J. B. Wharton, jr. bibliog diags maps Am Assn Pet Geologists Bul 27:1123-56 Ag '43

Best places to seek new supplies of oil; abstract. A. R. Denison. Oil & Gas J 42:30-1 My 13 '43

Bowers field, Montague county, Texas. A. B. Brown. diags maps Am Assn Pet Geologists Bul 27:21-37 Ja '43

Calculating the true thickness of a folded bed. G. D. Hobson. Am Assn Pet Geologists Bul 26:1827-32 D '42

Classification of oil reservoirs. H. R. Lovely. Am Assn Pet Geologists Bul 27:224 F '43

Classification of sedimentary rocks related to kind of oil reservoir. W. V. Howard. Oil & Gas J 42:70-1+ Je 3 '43

Compaction and some oilfield features. G. D. Hobson. bibliog diags Inst Pet J 29:37-54 F '43

Derivation of reservoir rocks. W. V. Howard. diags Oil & Gas J 42:158-60+ Je 24 '43

Development and use of engineering geology. P. Weaver and others. maps diags Am Assn Pet Geologists Bul 26:1795-1826 D '42

Discovery thinking. A. I. Levorsen. diags maps Am Assn Pet Geologists Bul 27:887-928 Ji '43; Excerpts. Oil & Gas J 41:38-9, 42, 45-6 Ap 8 '43

Economic paleontology and mineralogy; an appraisal. H. L. Driver. Am Assn Pet Geologists Bul 27:938-47 Ji '43

Geologic background of oil production in the Illinois basin. E. F. Hake. Oil & Gas J 41:82, 84+ Mr 11 '43

Geology of Northwest Wilmington and Torrance fields, California. W. R. Cabene and A. L. Hunter. map Oil & Gas J 41:70, 72, 74 Ja 14 '43

Geology of Wasson field, Yoakum and Gaines counties, Texas. W. T. Schneider. diags maps Am Assn Pet Geologists Bul 27:479-523 Ap '43

Importance of west Texas Ordovician in national picture still not clear. H. F. Simons. map Oil & Gas J 42:30-1 Je 10 '43

Inspection and analysis of formation samples. L. C. Uren. diag Pet Eng 14:53, 55-6, 58 Ag '43

Lithification processes and early oil formation in sediments. W. V. Howard. il Oil & Gas J 42:92-4 Je 17 '43

More sedimentary petrography needed for exploration and development programs. W. V. Howard. Oil & Gas J 42:38 My 27 '43

Oil zones of the United States. maps Oil & Gas J 41:68a-68b Mr 13; 88b-88c Ap 8; 80b-80c Ap 29; 68a-68b My 20; 42:64b-64c Je 10; 48b-48c Ji 1; 40b-40c Ji 22; 68b-68c Ag 12; 36b-36c S 2; 56b-56c S 30; 52b-52c O 14; 64b-64c O 28 '43

Petroleum geology of the Del Valle field, Los Angeles county, California. L. P. Stockman. diags Oil & Gas J 41:95-7 Ap 29 '43

Porosity limit with depth. H. W. Bell. Oil & Gas J 42:66; Discussion. W. V. Howard. 66-7 Ji 8 '43

Porosity of oil-bearing rocks. G. M. Stearns. Oil & Gas J 42:55 Ag 5 '43

Possibilities of the Smackover limestone in Arkansas. C. H. Thigpen. map(p88-9) Oil & Gas J 41:85+ F 11 '43

Regional geologic studies for oil and natural gas. H. D. Miser. Am Assn Pet Geologists Bul 27:1387-8 O '43

Stratigraphic type oil fields and proposed new classification of reservoir traps. C. W. Sanders. diags Am Assn Pet Geologists Bul 27:539-50 Ap '43

Stratigraphical analysis and environmental reconstruction. T. G. Payne. flow diag bibliog diags map Am Assn Pet Geologists Bul 26:1697-1770, pl 1 N '42

Stratigraphy and paleontology of Santa Maria district, California. W. P. Woodring, M. N. Bramlette and K. E. Lohman. bibliog diags map Am Assn Pet Geologists Bul 27:1335-60 O '43

Stratigraphy and structure of Moose Mountain area, Alberta. D. H. MacNeill. maps Am Assn Pet Geologists Bul 27:38-50, pl 1 Ja '43

Structural conditions of oil and gas accumulation in Rocky Mountain region, United States. C. E. Dobbin. bibliog diags maps Am Assn Pet Geologists Bul 27:417-78 Ap '43

Structure of central Tennessee. C. W. Wilson, jr. and K. E. Born. bibliog diags maps Am Assn Pet Geologists Bul 27:1039-59 Ag '43

Subsurface study of Jennings field, Acadia Parish, Louisiana. C. B. Roach. diags maps Am Assn Pet Geologists Bul 27:1102-22 Ag '43

Time of origin and accumulation of petroleum. F. M. Van Tuyl and B. H. Parker. Colorado School of Mines (Golden) Quarterly 36:1-180 Ap '41 (pa \$2)

Typical oil-field structures; regional high; Panhandle and Hugoton fields, Texas, Oklahoma and Kansas. diags map Oil & Gas J 41:38-9 N 19 '42

See also

Salt domes

International aspects

See Petroleum industry and trade—International aspects; World war, 1939—Petroleum supply

Mining process

Horizontal drilling from bottom of shaft in Pennsylvania field. H. L. Schultheis. il Oil & Gas J 42:49, 51+ O 14 '43

Probe for crude with horizontal wells; Venango development corp. in Pennsylvania drills from bottom of oil mine. E. Lamm. Nat Pet N 35:35-6 Ji 7 '43

Mud fluids

Chemical influences in drilling mud evaluated by viscosity measurements. A. W. McCray. il diag Pet Eng 14:66+ Ja '43

Deeper Venezuelan drilling poses special mud problems. F. Colahan. il Oil & Gas J 41:71, 73-4 D 31 '42

Electrical logging in oil-base drilling fluid. W. A. Sawdon. diag Pet Eng 14:124, 126 Je '43

Electrical logging through thick salt zones; replacing salt-laden drilling fluid with fresh-water mud. J. A. Kornfeld. map diag Pet Eng 14:90, 92, 94 Ag '43

Hydrophilic organic colloids in drilling muds; abstract. G. R. Gray. Chem & Met Eng 50:182 Ap '43

Mud acid; its theory and application to oil and gas wells. P. J. Lehnhard. bibliog Pet Eng (Ref annual) 14:82+ Ji 1 '43

PETROLEUM—Mud fluids—Continued

- Mud conditioning in Embarras field. H. F. Simons. *il plans Oil & Gas J* 41:39-40 Mr 4 '43
- Oil-base muds to spur drilling. *Nat Pet N* 35:30 N 3 '43
- Resistance to water loss in drilling muds. W. A. Sawdon. *Pet Eng* 14:115-16+ J1 '43
- Review of recent advances in drilling-mud control; colloidal chemistry of clays and shales. P. E. Chaney. *bibliog Oil & Gas J* 41:31-2+ N 12 '42; Same. *Pet Eng (Ref annual)* 14:47-50+ J1 '43
- Sodium silicate mud used to drill deep shale and salt-water zone. C. C. Pryor. *il Pet Eng* 14:108, 110, 112 Je '43
- Troubles from salt sections, hard formations, impede Embarras drilling. H. F. Simons. *il map Oil & Gas J* 41:57-9 Mr 11 '43

Bibliography

- Mud laden fluids. (Petroleum bibliog. 12) 28p
Tulsa pub. lib. Technical dept, Tulsa, Okla. '43

Paraffin problem

- Removal of paraffin accumulations in the University field; paraffin scraper. B. C. Craft and R. F. Nichols. *diags Oil & Gas J* 41:124+ My 6 '43

Patents

- Government claims all new Interior department patents. *Oil & Gas J* 41:27 D 3 '42
- Inventions in the oil industry. J. A. Schley. *Pet Eng* 14:91-3 N '42

See also

- Petroleum refining

—Patents**Pressure maintenance**

- See Petroleum—Production methods*

Pressure measurement

- Application of subsurface pressure data in gas-lift work. G. M. Stearns. *Oil & Gas J* 42:55 J1 '43
- Depth pressure measurements. G. M. Stearns. *Oil & Gas J* 41:142 My 6 '43
- Determination of oil-well capacities from liquid-level data. C. C. Rodd. *Pet Eng (Ref annual)* 14:117-18, 120-2 J1 '43
- Evaluation of effective displacement pressures for petroleum oil-water silica systems. F. C. Benner, C. G. Dodd and F. E. Bartell. *bibliog diags Oil & Gas J* 41:199-200, 203-4+ N 12 '42
- Flowing-pressure gradients. G. M. Stearns. *Oil & Gas J* 42:79 Je 17 '43
- Prediction of the shrinkage of crude oils. D. L. Katz. *bibliog Oil & Gas J* 41:179-80, 182, 184+ N 12 '42
- Standard depth pressure gages. G. M. Stearns. *diags Oil & Gas J* 42:143-4 Je 24 '43
- Static-pressure gradients. G. M. Stearns. *Oil & Gas J* 42:69 Je 10 '43
- Subsurface pressure gages. G. M. Stearns. *il diags Oil & Gas J* 42:83, 85-6 My 27; 59-60 Je 3 '43
- Subsurface well pressures. G. M. Stearns. *diag Oil & Gas J* 41:141 My 6 '43
- Use of a subsurface pressure gage on formation tests. *diag Oil & Gas J* 42:95 My 20 '43
- Use of pressure build-up. *Oil & Gas J* 42:71 Je 10 '43

Prices

- Ceiling prices raised on heavy California crude and residual fuel oil. H. D. Ralph. *Oil & Gas J* 41:12+ Ap 1 '43
- Crude ceilings may yield. H. S. Norman. *Oil & Gas J* 42:208-9 J1 29 '43
- Crude oil prices. Published irregularly in *National petroleum news*
- Crude oil prices and conservation. J. D. Gill. *Pet Refiner* 22:143-6 J1 '43; Excerpts. *Oil & Gas J* 42:20+ J1 '43
- Facts demand price increases—P.I.W.C. recommendations. *Nat Pet N* 35:3, 17-19 F 10 '43
- Higher ceiling only way to avert crude shortage, committee finds. P. Reed. *Oil & Gas J* 41:16-17 Ap 1 '43
- How much for oil? OPA turns thumbs down on price rise. *Business Week* p43-4 Ap 24 '43

- How the price of crude influences exploration. W. V. Howard. *Oil & Gas J* 41:30+ Ja 7 '43
- Ickes again urges crude rise; 2nd letter to OPA. *Nat Pet N* 35:9-10 Je 23 '43
- Ickes' price recommendation spikes House hearings; with text of recommendations and of memo by S. T. Pike. *Nat Pet N* 35:7-9 Ap 21 '43
- Immediate increase of 25 cents demanded by Industry council. H. D. Ralph. *Oil & Gas J* 41:30-1 F 11 '43
- Industry awaiting action on crude advance recommended by Ickes; full text of administrator's price memorandum. *Oil & Gas J* 41:28-30+ Ap 22 '43
- More conclusive cost data needed to unseat OPA policy on oil. H. S. Norman. *Oil & Gas J* 41:12+ F 4 '43
- New OPA regulations are designed to simplify rules for crude price ceilings. *Oil & Gas J* 42:33 Ag 19 '43
- New slant on oil; subsidize wildcat wells. *Business Week* p27-9 My 22 '43
- OPA denies necessity for crude oil hike; with reply by R. Brown. *Nat Pet N* 35:19-20 F 10 '43
- Oklahoma study shows need for higher crude prices to push secondary recovery. *il Nat Pet N* 34:37-40 D 2 '42
- Operators critical of selected-field pricing program suggested by OPA. H. S. Norman. *Oil & Gas J* 42:30-1 Ag 12 '43
- Prices of crude oil in the principal fields of the United States; Jan. 1939-Jan. 1943; tabulation. *Min & Met* 24:96 F '43
- Rejection of crude-oil advance confirmed by Vinson's decision; excerpts from decision. H. D. Ralph. *Oil & Gas J* 42:15, 18, 21 N 4 '43
- Text of OPA labor advisory committee statement hitting crude rise. *Nat Pet N* 35:40 Ag 18 '43
- White House counters crude rise. *Nat Pet N* 35:7-8 Ag 11 '43

Production costs

- Alternate casing programs. *Oil & Gas J* 41:75 Mr 18 '43
- Calculation of well-repair expense. E. H. Short, jr. *Oil & Gas J* 42:25-6+ J1 22 '43
- Cost analysis; acid treatment. *Oil & Gas J* 42:63 S 30 '43
- Cost analysis; marginal wells. *Oil & Gas J* 42:55 N 4 '43
- Cost comparison; two lifting methods. *Oil & Gas J* 42:57 Je 3 '43
- Cost records indispensable in well-reconditioning work. *Oil & Gas J* 42:73 S 9 '43
- Determining cost of gas lift. *Oil & Gas J* 42:51 J1 8 '43
- Disposal line cost comparison; salt-water disposal. *Oil & Gas J* 42:47 J1 22 '43
- Economics of water flooding. D. P. Oak. *il Oil & Gas J* 42:49-51 My 20 '43; Same. *Pet Eng (Ref annual)* 14:145-7 J1 1 '43
- Engine replacement economics. *Oil & Gas J* 42:93 My 20 '43
- Estimated costs of mining oil shale in Colorado. E. L. Gardner and C. N. Bell. *Oil & Gas J* 41:47, 49 Ja 14 '43
- Factors in artificial lift costs. *Oil & Gas J* 42:83 J1 15 '43
- Increased profits made possible by reduced withdrawal rates. *Oil & Gas J* 41:137 Ap 15 '43
- Job design as applied to the pumper's daily routine. H. G. Thuesen and M. R. Lohmann. *il Oil & Gas J* 41:115-18 Ja 7; 36-8 Ja 14 '43
- Production rates and profits. *Oil & Gas J* 42:247 S 23 '43
- Report on production costs shows wide disparity among fields. H. D. Ralph. *Oil & Gas J* 41:54-5 Ja 28 '43
- Water and production costs; calculating methods. *Oil & Gas J* 42:45 S 2 '43

Production estimates

- Calculation of future recovery. *Oil & Gas J* 42:93 Ag 26 '43
- Determination of oil-well capacities from liquid-level data. C. C. Rodd. *Pet Eng (Ref annual)* 14:117-18, 120-2 J1 '43
- Determination of productivity index in a flowing well. G. M. Stearns. *Oil & Gas J* 42:77-8 My 13 '43

PETROLEUM—Production estimates—Cont.

- Estimating future oil recovery. Oil & Gas J 42:73 Ag 19 '43
- Kansas drawdown productivity tests cut well costs and equipment needs. N. Williams. Oil & Gas J 41:119-20+ Ja 7 '43
- Magnolia oil field, Columbia county, Ark.; derivation and application of material-balance equations. A. B. Cook. diag charts U S Bur Mines Rep of Invest 3720:75-99 '43
- Oil-bearing rock permeability. G. M. Stearns. Oil & Gas J 42:69 S 16 '43
- Prediction of productivity from core analysis. G. M. Stearns. Oil & Gas J 42:77-8 O 14 '43
- Prediction of the shrinkage of crude oils. D. L. Katz. bibliog Oil & Gas J 41:179-80, 182, 184+ N 12 '42
- Technique of testing large cores of oil sands. F. B. Plummer and P. F. Tapp. bibliog diags Am Assn Pet Geologists Bul 27:64-84 Ja '43
- Well histories aid in estimating oil reserves. F. K. Beach. Pet Eng 14:69-70+ S '43
- Production methods**
- Air-drive experiments on long horizontal consolidated cores. H. Krutter and R. J. Day. Oil & Gas J 41:64+ F 25 '43
- Application of heat increases production in Wyoming field. F. V. Eaton. Oil & Gas J 41:88+ Ap 22 '43
- Application of subsurface pressure data in gas-lift work. G. M. Stearns. Oil & Gas J 42:55 Jl 1 '43
- Bottom-hole choke reduces gas-oil ratio in K.M.A. wells. H. F. Simons. il diags Oil & Gas J 42:39-40+ S 30 '43
- Challenge to petroleum engineers; added supplies of oil must come from present domestic recovery techniques. D. R. Knowlton. Min & Met 24:272-3 Je '43
- Combination gas-lift and repressuring plant used in Payton, Texas, pool. H. F. Simons. il Oil & Gas J 42:32-4 Jl 1 '43
- Completion methods in eastern Venezuela. W. A. Sawdon. il Pet Eng 15:190 O '43
- Completion practices in Northwest Wilmington area, California. W. R. Cabene and A. L. Hunter. diag Oil & Gas J 41:179, 181 Ja 28 '43
- Determination of productive capacities of flow pipes on gas lift. S. F. Shaw. diags Oil & Gas J 42:47-8, 50, 53-4 Je 17 '43
- Development and control of oil reservoirs. S. E. Buckley and R. C. Craze. il Oil & Gas J 42:55-70 My 13 '43
- Directional redrilling of piercement type dome to increase recovery. J. Zaba. diags Oil & Gas J 41:31-3 Ja 14 '43
- Dual completions as a means of increasing oil supply in Kansas. N. Williams. il Oil & Gas J 41:53-4 Ja 21 '43
- East Texas bottom-hole pressure showing strain of heavier withdrawals. H. F. Simons. Oil & Gas J 42:10-11 S 2 '43
- East Texas future directly related to return of water to Woodbine sand. H. F. Simons. il Oil & Gas J 41:175-8 Ja 28 '43
- East Texas salt-water-disposal project may set pattern for future. H. F. Simons. il map Oil & Gas J 41:38-41 F 4 '43
- Economics of water flooding. D. P. Oak. il Oil & Gas J 42:49-51 My 20 '43; Same. Pet Eng (Ref annual) 14:145-7 Jl 1 '43
- Economics in dual completions by reduced steel requirements; with cost data. Oil & Gas J 41:65 F 18 '43
- Efficiency of Bradford water floods can be greatly increased. H. M. Ryder. Oil & Gas J 41:29-32+ Ja 21 '43
- Engineering features of the Shuler field and unit operation. H. H. Kaveler. Oil & Gas J 41:44 F 18 '43
- Evaluation of effective displacement pressures for petroleum oil-water silica systems. F. C. Benner, C. G. Dodd and F. E. Bartell. bibliog diags Oil & Gas J 41:199-200, 203-4+ N 12 '42
- Experiment in the operation of improvised compressor units; automobile engine as compressor for air or gas injection. F. Squires. il diag Oil & Gas J 42:62, 64+ Jl 15 '43
- Factors affecting expansion of Kansas water-flooding. P. Reed. il Oil & Gas J 41:62+ Mr 18 '43
- First triple-zone completion in Texas successfully made in Lake Creek field. E. H. Short, Jr. il diag Oil & Gas J 42:76+ O 21 '43
- Flowing versus pumping operations in water flooding. T. Lawry. il Oil & Gas J 42:52, 55-6 My 20 '43; Same. Pet Eng (Ref annual) 14:149-50, 152 Jl 1 '43
- Formation gas used to lift oil in west Texas. H. F. Simons. diag Oil & Gas J 41:65 Ap 29 '43
- Gas repressuring at Glenn pool. K. B. Barnes and J. F. Sage. diags map Oil & Gas J 42:45-8, 65+ My 27 '43
- Gravel loading of formation increases production of Jal field wells. H. F. Simons. diags Oil & Gas J 42:39-40 Je 10 '43
- Gun-perforated well completions. B. C. Craft. Pet Eng 14:112, 114+ N '42
- Gun perforating for multizone control in California; abstract. T. H. Wallace. diag Oil & Gas J 42:66 O 28 '43
- Newest techniques; text in English and Spanish. il Oil & Gas J 41:157+ D 31 '42
- North Texas operators turning to water flooding to increase oil recovery. H. F. Simons. il map Oil & Gas J 42:35-6, 39 Je 3 '43
- Oil recovery by under-pressuring. F. R. Cozzens. Pet Eng 14:72 N '42
- Oil well reviver; method of heating dead fields to renew flow. Business Week p85 F 27 '43
- Oklahoma study shows need for higher crude prices to push secondary recovery. il Nat Pet N 34:37-40 D 2 '42
- Policies and results of water flooding in Kansas. P. Reed. il Oil & Gas J 41:31-2+ D 3 '42
- Possible application of secondary recovery methods in California. abstract. C. L. Moore. Oil & Gas J 42:65-6 O 28 '43
- Practices devised for Chanute water flooding. P. Reed. il Oil & Gas J 42:122-4 Je 24 '43
- Pressure drop and water disposal problems of Arkansas fields. Oil & Gas J 42:251-2 Jl 29 '43
- Principle of the safety cylinder as an explosion preventer in air-gas compression. F. Squires. il diags Oil & Gas J 41:83-4+ Ap 8 '43
- Problem of increasing recovery. E. G. Trost. Pet Eng (Ref annual) 14:133-6 Jl 1 '43
- Rapid extraction methods may yield more oil in fields producing much water. S. F. Shaw. bibliog il Oil & Gas J 42:39-40+ Ag 5 '43
- Rate of withdrawal, its effect on water encroachment in the east Texas field. J. N. Miles. diags Pet Eng 14:33-6 D '42
- Reasons and methods for perforating tubing. H. F. Simons. il diag Oil & Gas J 42:53-4 O 14 '43
- Reconditioning practices in Mid-continent area entering into new era. L. E. Elkins and others. Oil & Gas J 41:41-3 F 18 '43
- Reconditioning wells in the Gulf Coast area. C. E. Reistle, Jr. and T. A. Huber. Pet Eng (Ref annual) 14:137-8 Jl 1 '43; Excerpts. Oil & Gas J 41:43 F 18 '43
- Remedial work in oil fields of the eastern area of the United States. W. N. Little. Pet Eng (Ref annual) 14:153-4+ Jl 1 '43; Excerpts. Oil & Gas J 41:40-1 F 18 '43
- Review of multiple-zone well completions. I. W. Alcorn and W. A. Alexander. diags Oil & Gas J 41:224-7 N 12 '42; Same. Pet Eng (Ref annual) 14:99-100+ Jl 1 '43
- Reworking and sidetracking Oklahoma City wells. N. Williams. il Oil & Gas J 41:33-4+ D 17 '42
- Role of connate water in the secondary recovery of oil. P. A. Dickey and R. B. Bossler. Oil & Gas J 41:39-40 F 18 '43
- Salt-water injection sustains east Texas. W. S. Morris. il Oil & Gas J 42:28-9+ S 30 '43
- Savings through use of stage separation. Oil & Gas J 42:91 My 20 '43
- Secondary recovery can salvage stripper well reserves in Illinois. F. Squires. W. H. Voskuil and A. H. Bell. Oil & Gas J 41:140-1+ Ja 7 '43
- Secondary recovery may have vital role in the war effort. P. D. Torrey. Pet Eng 14: 116D+ Ja '43

PETROLEUM—Production methods—Cont.

- Secondary recovery receiving greater attention. C. H. Rankin, bibliog *diags Pet Eng* 14:90+ My '43
- Some Kansas flooding practices. P. Reed, *il Oil & Gas J* 41:36-7 F 4 '43
- Study of secondary-recovery methods by the American petroleum institute. P. D. Torrey, *Am Pet Inst Proc* 23(4):78-9 '42
- Tepeate, six years later. E. O. Bennett and F. B. Haverfield, *diags Oil & Gas J* 41:68-9, 71, 75 Ap 15 '43; Same, *Pet Eng (Ref annual)* 14:337-40 J1 '43
- Tracer gas used to check repressuring progress. H. F. Simons, *diag Oil & Gas J* 41:36 N 19 '42
- Unitized pressure maintenance, Jones sand reservoir, Shuler field, Arkansas. G. R. Elliott, *diags map Oil & Gas J* 42:53-4+ Je 10 '43
- Use of materials in secondary recovery. P. D. Torrey, *Oil & Gas J* 41:114+ My 6 '43
- Wax distillate used to plug channels in pay zone. H. F. Simons, *il Oil & Gas J* 42:47 My 13 '43
- Wells in west Texas pool carried to depletion by gas lift. H. F. Simons, *il diag Oil & Gas J* 41:56-7+ Ap 22 '43

See also

- | | |
|------------------------------|-------------------------|
| Petroleum—Acidation of wells | Petroleum—Mud fluids |
| Petroleum—Mining process | Petroleum—Pumping |
| | Petroleum—Well drilling |

Patents

- Patents on production, *Inst Pet J* 28:423A-5A N '42

Production rate

- Efficient rate of production. H. H. Kaveler, *Pet Eng (Ref annual)* 14:112-15 J1 '43; Same *abr. Oil & Gas J* 42:58+ My 27 '43

Proration

- Analysis of income based on acreage allowable. *Oil & Gas J* 41:49 D 17 '42
- East Texas salt-water developments chief topic at state-wide proration hearing. H. F. Simons, *Oil & Gas J* 41:16 D 24 '42
- Progress in reservoir technology. M. Muskat, *Pet Eng* 14:67+ N '42

Prospecting

- Bacterial wildcat; detecting oil by means of gases present in samples of earth. *Business Week* p61 J1 24 '43
- California discovery-bonus plan intended to stimulate exploratory drilling program. L. P. Stockman, *Oil & Gas J* 42:39-40 J1 15 '43
- Discovery thinking. A. I. Levorsen, *diags maps Am Assn Pet Geologists Bul* 27:887-928 J1 '43; Excerpts, *Oil & Gas J* 41:38-9, 42, 45-6 Ap 8 '43
- Drilling decline continues with few prospective active areas. W. V. Howard, *Oil & Gas J* 42:131, 135 J1 29 '43
- Four attacks proposed to enhance oil exploration. E. DeGolyer, *Oil & Gas J* 41:13-14 D 24 '42
- How the price of crude influences exploration. W. V. Howard, *Oil & Gas J* 41:30+ Ja 7 '43
- Majors hunt oil. *Business Week* p18-19 N 6 '43
- More sedimentary petrography needed for exploration and development programs. W. V. Howard, *Oil & Gas J* 42:38 My 27 '43
- Newest techniques; text in English and Spanish. *il Oil & Gas J* 41:172+ D 31 '42
- Oil attracts new capital from producers of military supplies. W. V. Howard, *Oil & Gas J* 41:36 Mr 4 '43
- PAW reports to the industry; all methods of discovery are needed to reverse trend of petroleum reserves. W. B. Heroy, *Oil & Gas J* 42:105-6 J1 29 '43

- Petroleum exploration and development in wartime. E. DeGolyer, *il Min & Met* 24:188-90 Ap '43; Same, *Pet Eng (Ref annual)* 14:37, 39-40 J1 1 '43; Excerpts, *Oil & Gas J* 41:53 F 25 '43

- Some factors influencing the declining rate of crude-oil discoveries; the geologist's responsibilities in the present situation. L. F. McCollum, *Am Assn Pet Geologists Bul* 27:960-9 J1 '43

- Western Kentucky offers opportunity for prospecting. H. H. Nowlan, *maps Oil & Gas J* 41:90, 92 Ap 22 '43
- Wildcat drilling in 1942. F. H. Lahee, *maps Am Assn Pet Geologists Bul* 27:715-29 Je '43; Same *cond. Oil & Gas J* 41:40+ Ap 8 '43

Geophysical methods

- Geophysical activities in California. W. A. Sawdon, *il Pet Eng* 14:66 Mr '43
- Geophysical exploration at peak. *Oil & Gas J* 42:248 J1 29 '43
- Geophysical company stresses necessity of finding oil to reduce personnel losses; advertising and publicity campaign of Geophysical service, inc. H. F. Simons, *Oil & Gas J* 42:38-9 Je 17 '43
- Maintaining an adequate level of geophysical exploration. F. Goldstone, *Am Assn Pet Geologists Bul* 27:948-53 J1 '43; Same, *Oil & Gas J* 41:56, 52+ Ap 8 '43
- Scientific exploration for oil; electronics plays an important part. D. H. Gardner, *il Electronics* 16:136-7+ Mr '43

Pumping

- Analysis of optimum sucker-rod pumping; abstract. D. O. Johnson, *Oil & Gas J* 42:88 My 20 '43
- Analysis of pumping wells. F. B. Gordon, *Oil & Gas J* 41:44-5 D 17 '42
- Applying engineering methods to pumping wells. A. S. Ross, *bibliog diags Pet Eng* 14:124+ Je '43
- Benefits of slow pumping rates. N. Williams, *Oil & Gas J* 42:49-50+ Ag 19 '43
- Care lengthens service life of rods in Lagunillas field. W. B. Hopkins, *Oil & Gas J* 41:118+ D 31 '42
- Catwalk facilitates servicing of heavy-duty pumping unit. N. Williams, *il Oil & Gas J* 41:40 Ap 1 '43
- Control of pump repair costs. *Oil & Gas J* 42:81-2 Je 17; 53 J1 1; 53 J1 8 '43
- Correct spacing increases gas-lift efficiency. H. F. Simons, *diag Oil & Gas J* 42:78 O 7 '43
- Engine replacement economics. *Oil & Gas J* 42:93 My 20 '43
- Fitting pumping practices to individual wells yields best results. H. F. Simons, *diags Oil & Gas J* 42:41-2+ J1 15 '43
- Gas from Chapel Hill used for lifting east Texas oil. *diag Oil & Gas J* 41:48-9 N 19 '42
- Gas-lift technique employed in Trinidad wells. S. P. King, *diags Pet Eng* 14:84, 86, 88+ D '42
- Job design as applied to the pumper's daily routine. H. G. Thuesen and M. R. Lohmann, *il Oil & Gas J* 41:115-18 Ja 7; 36-8 Ja 14 '43
- Long-stroke pumping unit uses mine-hoist principle. N. Williams, *diags Oil & Gas J* 41:50 N 19 '42
- Oil-well pump stroke controls. K. Kelley, *il Pet Eng* 14:55-6 J1 '43
- Oil-well pumping practices. J. Zaba, *bibliog il diags Oil & Gas J* 42:29-31 J1 1; 34, 37+ J1 8; 67, 70+ J1 15; 34, 36-7 J1 22; 229-30+ J1 29; 49-50+ Ag 5; 69-70+ Ag 12; 60, 63, 65 Ag 19; 66, 69-70 Ag 26; 43-4 S 2; 60, 62 S 9; 57, 59 S 16; 242+ S 23; 51-3 S 30; 60, 63-4 O 14; 58, 60+ O 28; 51-3 N 4 '43
- Raising oil and water from wells by combination air-lift methods. S. F. Shaw, *Oil & Gas J* 41:51+ D 10 '42
- Records aid in cost reduction. *Oil & Gas J* 41:81 Ap 29 '43
- Reduction of sucker-rod expense. *Oil & Gas J* 42:81 My 27 '43
- Report of A.P.I. committee on the standardization of pumping equipment and engines. *Am Pet Inst Proc* 23(4):193-202 '42
- Servicing oil-well pumping equipment. L. E. Kesselman, *Pet Eng* 14:70, 72 J1 '43
- Slow start saves pumping cost. *Oil & Gas J* 42:141 Je 24 '43
- Slower pumping speeds may yield greater profits; with cost data. *Oil & Gas J* 41:83 Ap 29 '43
- Solution of pumping problem aided by use of tabular data. R. G. Lovell, *diags Pet Eng* 14:42, 44 D '42
- Stripper-well surface equipment. N. Williams, *il Oil & Gas J* 41:46+ Ja 14 '43

PETROLEUM—Pumping—Continued

Tables show pump condition. Oil & Gas J 41:137 My 6 '43

See also Petroleum pipe lines—Pumping stations

Pumping, Electric

Reduction of power cost by load distribution; electric power for field pumping. J. R. Ashley. Pet Eng 14:58, 60, 62 Jl '43

See also

Petroleum pipe lines
—Pumping stations,
Electric

Repressuring

See Petroleum—Production methods

Salt content

Determination of inorganic salts in crude oils. E. P. Rittershausen and R. J. DeGray. Ind & Eng Chem Anal ed 14:947-8 D 15 '42

See also

Petroleum refining—
Salt removal

Sampling

Study of reservoir fluids by surface recombination experiments; abstract. H. H. Botset and M. Muskat. Oil & Gas J 42:78+ My 20 '43

See also

Petroleum—Well
drilling—Sampling

Stabilization

Stabilization of crude oil; chronological account from 1926 to the present. F. L. Kallam. bibliog il Pet Refiner 22:93-101 F; 91-6 Mr '43

Statistics

Petroleum and petroleum products; production, etc.; tables. Automotive & Aviation Ind 88:79-81 Mr 15 '43

See also

Petroleum industry
and trade—Statistics
Petroleum supply

Bibliography

Index to American petroleum statistics. B. A. Osborne, comp. 8p pa. 50c Special Libraries assn, 31 E. 10th st, New York '43

Storage

See Petroleum storage

Stripper wells

Secondary recovery can salvage stripper well reserves in Illinois. F. Squires, W. H. Voskuil and A. H. Bell. Oil & Gas J 41:140-1+ Ja 7 '43

Stripper-well surface equipment. N. Williams. il Oil & Gas J 41:46+ Ja 14 '43
Survey of stripper wells made at Compact meeting. W. V. Howard. Oil & Gas J 41:10-12 D 24 '42

Sulfur content

Alloys best suited to resist sour crude corrosion at high temperatures. A. L. Foster. Oil & Gas J 42:33-4, 36-7 S 30 '43

Big increase in sour crude runs urged to meet PAW war needs. Nat Pet N 35:44-5 O 20 '43

California plant adapted to refine sulfur crude; road oil and asphalt main products; Bell oil & refining co. il Oil & Gas J 42:74 Je 17 '43

Facilities for processing sour crude needed to meet refinery program. Oil & Gas J 42:26-7, 38 O 14 '43

Full line of products from high sulfur crudes by conventional processing. Nat Pet N 35 pt 2:R442-4 O 6 '43

Neutralization, alloy steels used in handling sour crudes. J. P. O'Donnell. il Oil & Gas J 42:27-8+ Je 3 '43

Refining of west Texas crude. B. I. Scoggin and G. H. Burruss. bibliog Pet Refiner 22:83-90 O '43; Same cond. Nat Pet N 35:28-9, 44-7 O 13 '43; Same cond. Oil & Gas J 42:61-4+ O 21 '43

Refining west Texas crude. H. H. Wenzke. Oil & Gas J 42:43-4, 47, 73-5 O 14 '43

Testing

New edition of the I.P. standard methods for testing petroleum and its products. J. Cantor, E. P. Driscoll and A. Osborn. Inst Pet J 29:21-8; Discussion. 28-35 Ja '43
Standard temperature for specific gravity determination and volume correction. Inst Pet J 29:190-1 Jl '43

Transportation

Address on transportation problems. J. B. Eastman. Am Pet Inst Proc 23(1):31-4 '42
Barge rates set. Nat Pet N 35:26 Jl 21 '43

Barge shipments on inland waterways to be expanded. Oil & Gas J 41:88+ Ja 28 '43

Daily average by month of movement into district 1 by the several methods of transportation of petroleum and petroleum products for periods shown; tabulation. Nat Pet N 35:4 Mr 17 '43

Engineering development in the petroleum industry. C. Dalley. Inst Pet J 29:11-15 Ja '43

Evolution of transportation under war stress. S. A. Swensrud. il Nat Pet N 35:32, 34-7 Ap 21 '43

Extra rail costs; Trans-Florida canal would be cheaper. J. J. Mansfield. Nat Pet N 35:28 F 10 '43

Fresh-water shipyards race winter in government oil towboat program. il Nat Pet N 35:20+ S 22 '43

Group session on automotive transportation. Am Pet Inst Proc 23(1):69-80 '42

How transportation met war's challenge. Nat Pet N 35:18-19 Je 30 '43

Inland waterways gain importance in wartime movement of petroleum. H. D. Ralph. il Oil & Gas J 42:26-7+ S 30 '43

New record set in oil movement. il Ry Age 114:1140-2 Je 5 '43

New York central handles Big Inch oil; moves 125,000 loaded tank cars. il Ry Age 115:448-8+ S 18 '43

Norris City loads 1,049 cars in day. Ry Age 114:834+ Ap 24 '43

ODT projects East Coast oil deliveries at 1,611,000 barrels daily. il Oil & Gas J 41:41-2 Ap 29 '43

Oil-by-water program rolling. Nat Pet N 35:24 Jl 14 '43

Oil transport division expanded; ODT consolidates several divisions into new Division of petroleum and other liquid transport. Nat Pet N 35:24+ Mr 3 '43

Oil transport plans revealed. Nat Pet N 34:16 D 9 '42

Oil transportation transformed by war. J. R. Parten. Oil & Gas J 42:113 Jl 29 '43

Ok barge program; WPB gives approval. Nat Pet N 34:22 D 23 '42

Petroleum administration denies responsibility for unequal gasoline distribution. Business Week p27-8+ O 30 '43

PAW puts up fight for adequate oil trucks. Nat Pet N 35:24+ S 15 '43

Presents railroads an orchid; Eastman praises railroads' handling of petroleum traffic during floods. Nat Pet N 35:24+ Je 16 '43

Railroad oil movement near peak. J. J. Pelley. Ry Age 113:931+ D 5 '42

Tank trucks handle big war job. Nat Pet N 35:20+ Jl 21 '43

Transport woes ended. J. B. Eastman. Nat Pet N 35:22 S 15 '43

WMC says oil transportation is essential to the war effort. Nat Pet N 35:34+ F 10 '43

Wartime revolution in oil transport. Business Week p67 Ap 17 '43

What the river will be wearing; new towboat Sohioan, capable of pushing 10 10,000-barrel barges upstream at 4 m.p.h. il Nat Pet N 35:36 F 17 '43

See also

Petroleum pipe lines	Tank cars
Petroleum products—	Tank ships
Transportation	Tank trucks

Unit operation of pools

Unit plan regulations attacked. Nat Pet N 35:18 Je 9 '43

Unitized pressure maintenance, Jones sand reservoir, Shuler field, Arkansas. G. R. Elliott. diags map Oil & Gas J 42:53-4+ Je 10 '43

PETROLEUM—Continued**Water flooding**

See Petroleum—Production methods

Water problem

- Adsorptive forces active through glass. P. G. Nutting. Science 97:74-5 Ja 15 '43
- Benefits of slow pumping rates. N. Williams. Oil & Gas J 42:49-50+ Ag 19 '43
- Bottom-hole water shutoff. V. E. Baum. diags Oil & Gas J 42:219-20+ JI 29 '43
- Calculating water production from decline curves. Oil & Gas J 42:67 S 16 '43
- Cost analysis; water disposal. Oil & Gas J 42:81 O 7 '43
- Disposal line cost comparison; salt-water disposal. Oil & Gas J 42:47 JI 22 '43
- East Texas salt-water developments chief topic at state-wide proration hearing. H. F. Simons. Oil & Gas J 41:16 D 24 '42
- East Texas salt-water-disposal project may set pattern for future. H. F. Simons. il map Oil & Gas J 41:33-41 F 4 '43
- Effect of certain microorganisms on the injection of water into sand; abstract. F. B. Plummer and others. Oil & Gas J 42:78 My 20 '43
- Fingering and coning of water and gas in homogeneous oil sand; abstract. M. G. Arthur. Oil & Gas J 42:57 O 28 '43
- Magnolia oil field, Columbia county, Ark.; derivation and application of material balance equations. A. B. Cook. diag charts U S Bur Mines Rep of Invest 3720:75-99 '43
- New method of applying concrete saves time and material; gunite for salt water disposal pits and other oil field uses. H. F. Simons. il Oil & Gas J 41:34-5 Ja 21 '43
- Plastic plugbacks in east Texas. J. E. Bailey and C. E. Dimit. Oil & Gas J 42:52-3 O 28 '43
- Pressure drop and water disposal problems of Arkansas fields. Oil & Gas J 42:261-2 JI 29 '43
- Rate of withdrawal, its effect on water encroachment in the east Texas field. J. N. Miles. diags Pet Eng 14:33-6 D '42
- Recovery of chemicals from oil field brines awaits market for chloride compounds. il Nat Pet N 35 pt 2:R282-3 Je 2 '43
- Salt-water disposal in Kansas. N. Williams. il Oil & Gas J 41:29-30 Ap 1 '43
- Sodium silicate mud used to drill deep shale and salt water zone. C. C. Pryor. il Pet Eng 14:108, 110, 112 Je 43
- Subsurface disposal of salt water in the east Texas field; with cost data. W. S. Morris. bibliog il map Pet Eng 14:41-9+ JI '43
- Survey of subsurface brine-disposal systems in western Kansas oil fields. P. Grandone and L. Schmidt. map U S Bur Mines Rep of Invest 3719:1-20 '43
- Unitized water-disposal project works effectively and economically. N. Williams. il plan Oil & Gas J 42:127, 130+ Je 24 '43
- Water and production costs; calculating methods. Oil & Gas J 42:45 S 2 '43
- Water production creates corrosion problems in western Kansas. N. Williams. il Oil & Gas J 41:41-3 Mr 18 '43

Wax content

- Four-point stability of treated oils under winter storage conditions. C. E. Hodges and A. B. Boehm. il diag Oil & Gas J 42:103-6 Je 24 '43

Well casing

- Aircraft industry competing with oil for reclaimed casing and tubing; jigs from reclaimed pipes. R. N. Swanson. il Oil & Gas J 41:42-3 Ja 14 '43
- Alternate casing programs. Oil & Gas J 41:75 Mr 18 '43
- Casing salvage aids steel conservation. W. A. Sawdon. diags Pet Eng 14:100D, 102, 104 S '43
- Effect of casing perforations on well productivity. M. Muskat. diags Pet Eng (Ref annual) 14:124-6, 128, 130 JI 1 '43
- Effecting greater recovery of well casing. F. R. Cozzens. Pet Eng 14:133 F '43
- Experiments in substituting nonmetallic pipe for steel well casing. F. Squires. Oil & Gas J 41:38-9 F 18 '43
- Gun-perforated well completions. B. C. Craft. Pet Eng 14:112, 114+ N '42

- Hillside blowout necessitates ingenious repair method. C. R. Dale. il diag Pet Eng 14:33-6 Je '43
- New bullet design for gun perforating. W. A. Sawdon. il diags Pet Eng 15:206, 208 O '43
- Reduced investment results from use of small casing. Oil & Gas J 41:127 Ja 7 '43
- Repair of corroded casing strings in old Kansas wells. N. Williams. il Oil & Gas J 42:46-7 JI 8 '43
- Report of A.P.I. committee on the standardization of oil-country tubular goods. Am Pet Inst Proc 23(4):163-85 '42
- Savings with welded casing; with cost data. Oil & Gas J 41:49 Ja 21 '43
- Use of welded casing for surface and oil strings; with cost data. Oil & Gas J 41:57 Ja 14 '43

Cost

- Freight rates are important in determining casing costs. Oil & Gas J 41:227 D 31 '42

Well cementing

- Analysis of risk in cementing jobs; with cost data. Oil & Gas J 41:73 Ap 22 '43
- Calcium chloride in cement speeds setting time. H. F. Simons. Oil & Gas J 41:48, 50 F 18 '43
- Cementing through perforations; methods and equipment; c. p. cementer. F. A. Graser. diags Pet Eng 14:46+ Ap '43
- Cementing troubles start during drilling. H. F. Simons. il diags Oil & Gas J 42:65-7+ Ag 12 '43
- Hillside blowout necessitates ingenious repair method. C. R. Dale. il diag Pet Eng 14:33-6 Je '43
- Modern cementing methods reduce risk of loss. Oil & Gas J 41:55 D 10 '42
- Modern technique in oil-well cementing. P. E. Hilton. Oil & Gas J 41:57+ D 3 '42
- Multiple batch squeeze cementing. S. P. King. Pet Eng 14:74, 76 Mr '43
- Protection of surface hole in Lindsborg, Kansas, wells. N. Williams. il Oil & Gas J 41:45-7 Ap 29 '43
- Temperature surveys following cement jobs. G. M. Stearns. Oil & Gas J 42:85-6 JI 15 '43

Well cleaning

- Economics of cleaning out. Oil & Gas J 42:73 My 13 '43
- Payout of well cleanout jobs; cost data. Oil & Gas J 42:235 JI 29 '43
- Some tools and methods used in cleaning oil wells in California. G. B. Shea. 8pls U S Bur Mines Rep of Invest 3706:1-39 '43

Well control

- Bottom-hole choke combines automatic safety valve. J. O. Farmer. il diags Pet Eng 14:78, 80, 82 F '43

Well drilling

- All vital drilling functions are recorded by new instrument. H. F. Simons. il Oil & Gas J 41:123-5 Ap 15 '43
- Application of direct motor drive with use of electrical motor. N. Williams. il diags Oil & Gas J 41:31-4 F 4 '43
- Causes of crooked holes. G. M. Stearns. diag Oil & Gas J 42:93 O 21 '43
- Cementing troubles start during drilling. H. F. Simons. il diags Oil & Gas J 42:65-7+ Ag 12 '43
- Completion records aid conservation of strategic materials in wells. V. E. Baum. Oil & Gas J 42:46, 48+ JI 1 '43
- Correct setting may prevent surface-pipe troubles. Oil & Gas J 41:43 Mr 11 '43
- Crooked hole disadvantages. G. M. Stearns. diags Oil & Gas J 42:71-2 O 28 '43
- Deeper Venezuelan drilling poses special mud problems. F. Colahan. il Oil & Gas J 41:71, 73-4 D 31 '42
- Direct-current rigs for deep-drilling operations. R. A. J. Dawson. diags Pet Eng 14:33-6 Ag; 165-6, 169-70, 172 S; 15:168, 170, 172 O '43
- Direct-current rigs for deep drilling operations. R. A. J. Dawson. Oil & Gas J 41:129, 131, 133-5 My 6 '43; Same. Pet Eng (Ref annual) 14:62+ JI 1 '43

PETROLEUM—Well drilling—Continued

Directional redrilling of piercement type dome to increase recovery. J. Zaba. *diags Oil & Gas J* 41:31-3 Ja 14 '43

Drawworks of improved design for slim-hole rig. C. C. Pryor. *il Pet Eng* 14:29-32 F '43

Drilling decline continues with few prospective active areas. W. V. Howard. *Oil & Gas J* 42:131, 135 JI 29 '43

Drilling economies resulting from multiple completions. *Oil & Gas J* 41:91 F 25 '43

Drilling on land contrasted with barge drilling in semimarine field. *Oil & Gas J* 41:59 D 3 '42

Drilling-rig functions logged by automatic instruments. H. F. Simons. *Oil & Gas J* 41:41-3 D 10 '42

Elk Basin may outrank Salt Creek as largest reserve in Rockies. N. Williams. *il Oil & Gas J* 42:12-14+ N 4 '43

Engineering development in the petroleum industry. C. Dalley. *Inst Pet J* 29:4-7 Ja '43

Estimating risk in drilling well. *Oil & Gas J* 42:81 JI 15 '43

Example of directional drilling as applied to geology in Ellis county, Kansas. R. L. Clifton. *Am Assn Pet Geologists Bul* 27:87-9 Ja '43

Gas from upper sand used while drilling well; supplying fuel for engines. *il diag Oil & Gas J* 41:42 Mr 4 '43

How operators are fitting drilling equipment and practices to conditions. M. L. Cashion. *Oil & Gas J* 42:67-9 O 21 '43

Hydration-pressure relations in clays and heaving shale. H. H. Power, B. L. Towle and J. B. Plaza. *bibliog il diags Am Pet Inst Proc* 23(4):64-76 '42; Same. *Oil & Gas J* 41:215+ N 12 '42; Discussion. *Am Pet Inst Proc* 23(4):76-7 '42

Layout for a-c drilling rig. E. H. Lamberger. *plan Oil & Gas J* 42:48-9 N 4 '43

Municipal wildcat. Los Angeles to drill for oil on city property. *Business Week* p40+ Je 19 '43

Newest techniques; text in English and Spanish. *il Oil & Gas J* 41:142-3+ D 31 '42

Pipe wiper facilitates use of spinning line to break joint. *il Oil & Gas J* 41:67+ Ap 22 '43

Protection of surface hole in Lindsborg, Kansas, wells. N. Williams. *il Oil & Gas J* 41:45-7 Ap 29 '43

Radial oil wells; horizontal drilling of oil-bearing sands. *il Business Week* p60 O 30 '43

Removing overshot from fish. *il Oil & Gas J* 41:136 Ap 15 '43

Resistance to water loss in drilling muds. W. A. Sawdon. *Pet Eng* 14:115-16+ JI '43

Review of multiple-zone well completions. I. W. Alcorn and W. A. Alexander. *diags Oil & Gas J* 41:224-7 N 12 '42; Same. *Pet Eng (Ref annual)* 14:99-100+ JI 1 '43

Short steel bar cause of unexpected fishing job. H. F. Simons. *il Oil & Gas J* 42:73 Je 17 '43

Slim-hole drilling in Barnhart field in west Texas. H. F. Simons. *il map Oil & Gas J* 41:48, 53, 55 Mr 18 '43

Sodium silicate mud used to drill deep shale and salt water zone. C. C. Pryor. *il Pet Eng* 14:108, 110, 112 Je '43

Texas' deepest well drilled to depth of 14,378 ft. C. C. Pryor. *il Pet Eng* 14:33-6 Ap '43

Troubles from salt sections, hard formations, impede Embarras drilling. H. F. Simons. *il Oil & Gas J* 41:57-9 Mr 11 '43

Value of directional drilling to straighten hole shown by Wood County discovery. H. F. Simons. *il Oil & Gas J* 41:41-2 F 11 '43

Wartime regulations sharply reduce drilling operations during 1942. W. V. Howard. *Oil & Gas J* 41:72-3+ Ja 28 '43

Weighting acid with calcium chloride aids in freeing stuck tools. H. F. Simons. *il diag Oil & Gas J* 42:239, 241 S 23 '43

See also American Association of oil-well drilling contractors

Contracts

Damages for breach of contract to drill well. *Gas Age* 92:58+ O 21 '43

Cost

Cost of directional drilling. *Oil & Gas J* 41:57-8 Mr 4 '43

Patents

Patents on drilling. *Inst Pet J* 28:416A-18A N '42

Sampling

Absolute porosity of cores. G. M. Stearns. *diags Oil & Gas J* 42:75-6 Ag 19 '43

Air-drive experiments on long horizontal consolidated cores. H. Krutter and R. J. Day. *Oil & Gas J* 41:64+ F 25 '43

Application of core-analysis data. G. M. Stearns. *Oil & Gas J* 42:85-6 O 7 '43

Coring with reverse circulation. H. F. Simons. *il diags Oil & Gas J* 42:47-8, 51 S 9 '43

Determination of effective porosity. G. M. Stearns. *diag Oil & Gas J* 42:95, 97 Ag 26 '43

Graphical and mechanical determination of the true dip from magnetically orientable cores taken in crooked holes. G. D. Hobson. *diags Inst Pet J* 28:274-80 N 4 '42

How permeability is determined. G. M. Stearns. *diag Oil & Gas J* 42:249, 251 S 23 '43

Inspection and analysis of formation samples. L. C. Uren. *diags Pet Eng* 14:72, 74, 76 Ap; 62+ bibliog(134 titles, p70, 72) My; 51+ Je; 53, 55-6, 58 Ag '43

Oil-water saturation of cores. G. M. Stearns. *diag Oil & Gas J* 42:47 S 2 '43

Prediction of productivity from core analysis. G. M. Stearns. *Oil & Gas J* 42:77-8 O 14 '43

Preparing cores for analysis. G. M. Stearns. *diag Oil & Gas J* 42:65 S 30 '43

Technique of testing large cores of oil sands. F. B. Plummer and P. F. Tapp. *bibliog diags Am Assn Pet Geologists Bul* 27:64-84 Ja '43

Water content of core samples. G. M. Stearns. *Oil & Gas J* 42:75 S 9 '43

Well drilling, Indoor

Drilling well inside city limits made noiseless and safe; enclosed derrick. W. A. Sawdon. *il Pet Eng* 14:47-50 Mr '43

No smell, no noise; drilling begins in asbestos and rock wool covered derrick; Los Angeles. *il Nat Pet N* 35:22 F 10 '43

Shell soundproofs test well. L. P. Stockman. *il Oil & Gas J* 41:55-6, 59 F 25 '43

Well drilling, Subaqueous

Oil and gas in the Great Lakes and how they may be developed; abstract. H. E. Gross. *Oil & Gas J* 42:57 O 28 '43

Standard drilling equipment adapted to marine operation. W. A. Sawdon. *il plan Pet Eng* 14:33-4 F '43

Cost

Savings in barge drilling. *Oil & Gas J* 41:153 N 26 '42

Well liners

Flow into slotted liners and obstructed core samples; abstract. C. R. Dodson and W. T. Cardwell, Jr. *Oil & Gas J* 42:57 O 28 '43

Gravel loading of formation increases production of Jal field wells. H. F. Simons. *diags Oil & Gas J* 42:39-40 Je 10 '43

Well logging

All vital drilling functions are recorded by new instrument. H. F. Simons. *il Oil & Gas J* 41:123-5 Ap 15 '43

Drilling-rig functions logged by automatic instruments. H. F. Simons. *Oil & Gas J* 41:41-3 D 10 '42

Electrical logging in oil-base drilling fluid. W. A. Sawdon. *diag Pet Eng* 14:124, 126 Je '43

Electrical logging through thick salt zones; replacing salt-laden drilling fluid with fresh-water mud. J. A. Kornfeld. *map diag Pet Eng* 14:90, 92, 94 Ag '43

Electrical logging to determine character of formations. L. C. Uren. *bibliog Pet Eng* 14:46+ D '42

Hillside blowout necessitates ingenious repair method. C. R. Dale. *il diag Pet Eng* 14:33-6 Je '43

Interpretation of cable-tool drilling logs. J. F. Swain. *Am Assn Pet Geologists Bul* 27:997-1000 JI '43

Locating cased-off production by radioactivity logging. W. A. Sawdon. *il Pet Eng* 14:43-6 My '43

PETROLEUM—Well logging—Continued

- Natural potentials in well logging; abstract. W. D. Mounce and W. M. Rust, Jr. Oil & Gas J 42:77 My 20 '43
- Radioactivity and geochemical well logging. L. C. Uren. bibliog Pet Eng 14:50+ Ja '43
- Recent development in formation logging. L. C. Uren. Pet Eng 14:63, 66, 68+ F; 84, 86, 88 Mr '43
- Upper pay zones may be economically developed. Oil & Gas J 41:99 Ap 8 '43
- Use of electrode spacing in well logging. R. H. Zinszer. bibliog Pet Eng (Ref annual) 14:25-8, 30 Jl 1 '43

Well spacing

- Development and control of oil reservoirs. S. E. Buckley and R. C. Craze. Oil & Gas J 42:66+ My 13 '43
- New California regulations of interest to other operators. W. V. Howard. Oil & Gas J 41:94+ Ap 29 '43
- Physical variables influencing well spacing. L. C. Uren. bibliog(50 titles) Pet Eng 14:118+ S '43
- Progress in reservoir technology. M. Muskat. Pet Eng 14:65+ N '42
- Shallow Mid-continent fields granted closer well-spacing patterns; text of supplementary order. map Oil & Gas J 42:34-5+ My 27 '43
- Spacing restrictions are liberalized in a majority of California oil fields. Oil & Gas J 41:32 Ap 29 '43

Well surveying

- S.P. dipmeter. H. G. Doll. Oil & Gas J (Ref annual) 14:17-19, 22, 24 Jl 1 '43

Well temperature

- Additional applications of temperature gradients. G. M. Stearns. Oil & Gas J 42:237-8 Jl 29 '43
- Prediction of the shrinkage of crude oils. D. L. Katz. bibliog Oil & Gas J 41:179-80, 182, 184+ N 12 '42
- Subsurface well temperatures. G. M. Stearns. Oil & Gas J 42:55-6 Jl 8 '43
- Temperature effects; applications to problems of drilling and producing. G. M. Stearns. Oil & Gas J 42:51 Jl 22 '43
- Temperature surveys following cement jobs. G. M. Stearns. Oil & Gas J 42:85-6 Jl 15 '43

Well testing

- Analysis of pumping wells. F. B. Gordon. Oil & Gas J 41:44-5 D 17 '42
- Portable pressure-gravity test unit checks evaporation losses. N. Williams. Oil & Gas J 42:43-4 My 13 '43
- Selection of method should be based on economics. Oil & Gas J 41:45 D 24 '42
- Selective acidizing and permeability determination by an electrical method; interface locator. D. G. Hefley and P. E. Fitzgerald. diag Oil & Gas J 41:37-8 F 18 '43

Well tubing

- Combat corrosion in west Texas. H. F. Simons. Oil & Gas J 41:61, 63 F 25 '43
- Gun-perforation of tubing. W. A. Sawdon. diag Pet Eng 14:84, 86 F '43
- Reasons and methods for perforating tubing. H. F. Simons. Oil & Gas J 42:53-4 O 14 '43

Alberta

- Alberta's oil-impregnated sands provide huge petroleum reserve. flow sheet il Nat Pet N 35 pt 2:R387-94, R412-13 S 1 '43
- Canada backs development of Alberta oil sands. il Nat Pet N 35 pt 2:R477 O 6 '43
- Exploitation of Athabaska tar sands. Pet Eng 15:114+ O '43
- Oil from Canadian sands. L. Bourne. il Sci Am 169:71-3 Ag '43
- Stratigraphy and structure of Moose Mountain area. D. H. MacNeil. maps Am Assn Pet Geologists Bul 27:38-50, pl 1 Ja '43

See also
Petroleum industry
and trade—Alberta

Arabia

- Oil for the allies? recruiting campaign of California Arabian Standard to rehabilitate oil properties in Saudi Arabia. Business Week p76+ Ag 28 '43
- Oil from Arabia? Business Week p49-50 O 23 '43

Arkansas

- Magnolia oil field, Columbia county; petroleum-engineering study, by C. B. Carpenter and H. J. Schroeder; and Derivation and application of material-balance equations, by A. B. Cook. diag maps charts U S Bur Mines Rep of Invest 3720-1-115 '43
- Possibilities of the Cotton Valley formation in Arkansas. C. H. Thigpen. maps Oil & Gas J 41:62-4 F 4 '43
- Possibilities of the Smackover limestone in Arkansas. C. H. Thigpen. map(p88-9) Oil & Gas J 41:85+ F 11 '43

Brazil

- Production in Brazil. For Comm W 10:26-7 F 20 '43

California

- Bituminous sands and shales and partly depleted subsurface sands as sources of additional oil in California; abstract. G. B. Shea. Oil & Gas J 42:66-7 O 23 '43
- Geology of Northwest Wilmington and Torrance fields, California. W. R. Cabeen and A. L. Hunter. map Oil & Gas J 41:70, 72, 74 Ja 14 '43
- Geophysical activities in California. W. A. Sawdon. il Pet Eng 14:66 Mr '43
- Oil development activities in California, 1942. G. R. Kribbs. maps Am Assn Pet Geologists Bul 27:862-73 Je '43
- Petroleum acids; aliphatic acids from California petroleum. W. A. Quebedeaux and others. bibliog Am Chem Soc J 65:767-70 My '43
- Petroleum acids; naphthenic acids from California petroleum. W. O. Ney and others. bibliog diag Am Chem Soc J 65:770-7 My '43
- Petroleum geology of the Del Valle field, Los Angeles county. L. P. Stockman. diag Oil & Gas J 41:95-7 Ap 29 '43
- Stratigraphy and paleontology of Santa Maria district. W. P. Woodring, M. N. Bramlette and K. E. Lohman. bibliog diag map Am Assn Pet Geologists Bul 27:1335-60 O '43

See also

- Petroleum industry
and trade—California
- Petroleum laws and
regulations—California

Canada

- Oil-fields of western Canada. C. M. Hunter. bibliog Inst Pet J 29:75-83; Discussion. 84-8 Mr '43
- Production in western Canada. For Comm W 12:25-6 Jl 24 '43

China

- Production in China. For Comm W 11:31 Ap 3 '43

Colombia

- Shell opens potential oil field. map Oil & Gas J 42:32-3 My 27 '43

Colorado

- See also
Oil shales—Colorado
Petroleum industry
and trade—Colorado

Eastern states

- Developments in Appalachian area in 1942. maps Am Assn Pet Geologists Bul 27:835-53 Je '43

Florida

- Florida strike may mean Gulf field extends to Southeastern states. W. Pratt. map Nat Pet N 35:4-5 O 27 '43

Great Plains region

- Big Snowy group; lithology and correlation in the Northern Great Plains. E. S. Perry and L. L. Sloss. bibliog il diag maps Am Assn Pet Geologists Bul 27:1287-1304 O '43

PETROLEUM—Continued

Gulf Coast region

Subsurface stratigraphy and lithology of Tuscaloosa formation in southeastern Gulf Coastal Plain. A. C. Munyan, bibliog diags map Am Assn Pet Geologists Bul 27:596-607 My '43

See also Petroleum industry and trade—Gulf Coast region

Illinois

Developments in Eastern Interior basin in 1942. A. H. Bell, maps Am Assn Pet Geologists Bul 27:814-21 Je '43

Geologic background of oil production in the Illinois basin. B. F. Hake, Oil & Gas J 41:82, 84, 86 Mr 11 '43

Oil comeback. Business Week p40 Jl 31 '43

See also

Petroleum industry and trade—Illinois

Kansas

Analyses of crude oil from some fields in Kansas. E. C. Lane and E. L. Garton. U S Bur Mines Rep of Invest 3688:1-95 '43

Discovery well, Douglas pool, Butler county; log and drilling data. Oil & Gas J 41:61 Ja 14 '43

Discovery well, Lindborg south pool, McPherson county, Kansas; log and drilling data. Oil & Gas J 41:61 D 3 '42

Discovery well, Roxbury area, Salina county, Kansas; log and drilling data. Oil & Gas J 41:67 F 18 '43

Discovery well, Seward field, Stafford county; log and drilling data. Oil & Gas J 41:131 Ja 7 '43

Discovery well, Zurich field, Rooks county; log and drilling data. Oil & Gas J 41:139 My 6 '43

Example of directional drilling as applied to geology in Ellis county. R. L. Clifton. Am Assn Pet Geologists Bul 27:87-9 Ja '43

Kansas oil field brines analyzed for the recovery of magnesium. W. H. Schoewe. Nat Pet N 35 pt 2:R466-7+ O 6 '43

Typical oil-field structures; regional high; Panhandle and Hugoton fields, Texas, Oklahoma and Kansas. diags map Oil & Gas J 41:38-9 N 19 '42

See also

Petroleum industry and trade—Kansas

Kentucky

Western Kentucky offers opportunity for prospecting. H. H. Nowlan, maps Oil & Gas J 41:90, 92 Ap 22 '43

Latin America

Latin America urged to use U.S. facilities to find oil. J. D. Gill. Oil & Gas J 41:16 D 3 '42

Los Angeles

Municipal wildcat; Los Angeles to drill for oil on city property. Business Week p40+ Je 19 '43

Louisiana

Anse la Butte dome, St Martin Parish. F. W. Bates and J. B. Wharton, jr. bibliog diags maps Am Assn Pet Geologists Bul 27:1123-56 Ag '43

Discovery well, Holly Ridge pool, Tensas Parish, Louisiana; log and drilling data. Oil & Gas J 42:73-4 O 28 '43

Review of developments in 1942, Gulf coast of upper Texas and Louisiana. G. J. Smith. map Am Assn Pet Geologists Bul 27:730-8 Je '43

Subsurface study of Jennings field, Acadia Parish. C. B. Roach, diags maps Am Assn Pet Geologists Bul 27:1102-22 Ag '43

Tetpetate, six years later. E. O. Bennett and F. B. Haverfield. diags Oil & Gas J 41: 68-9, 71, 75 Ap 15 '43; Same. Pet Eng (Ref annual) 14:337-40 Jl 1 '43

Mexico

See also
Mexico—Expropriation policy
Petroleum industry and trade—Mexico

Michigan

Developments in Michigan in 1942. H. J. Harnden, maps Am Assn Pet Geologists Bul 27:822-34 Je '43

Mid-continent field

Developments in north Mid-continent in 1942. E. A. Koester. Am Assn Pet Geologists Bul 27:806-13 Je '43

Middle Western states

Developments in Eastern Interior basin in 1942. A. H. Bell, maps Am Assn Pet Geologists Bul 27:814-21 Je '43

Mississippi

Ownership of leases on undeveloped oil lands. Nat Pet N 35:26 Jl 28 '43

New Mexico

Developments in west Texas and southeastern New Mexico in 1942. R. I. Dickey and B. A. Ray. map Am Assn Pet Geologists Bul 27:747-70 bibliog(p751-2) Je '43

Northwest Territories, Canada

Fort Norman wells ready to deliver crude in large quantities for Alaska. Nat Pet N 35:43 O 20 '43

Gas for the march on Japan. H. G. Cochran. il map Can Min J 64:641-6 O '43

Imperial's position in Canol project disclosed by Gallagher statement. il Oil & Gas J 42:47-8 O 21 '43

Oklahoma

Developments in Oklahoma in 1942. J. L. Borden. map Am Assn Pet Geologists Bul 27:790-805 Je '43

Discovery well, Lake Shawnee pool, Pottawatomie county, Oklahoma; log and drilling data. Oil & Gas J 41:51-2 F 4 '43

Discovery well, Liberty pool, Noble county, Oklahoma; log and drilling data. Oil & Gas J 41:241-2 N 12 '42

Discovery well, North McLoud pool, Lincoln county, Oklahoma; log and drilling data. Oil & Gas J 42:95-6 O 21 '43

Discovery well of East Liberty pool, Noble county, Oklahoma; log and drilling data. Oil & Gas J 41:59-60 D 10 '42

Discovery well, unnamed pool, Payne county; log and drilling data. Oil & Gas J 41:71-2 Mr 11 '43

Method for analyzing gasoline fraction of petroleum; with preliminary results on east Texas and Oklahoma crudes. F. D. Rossini and others. bibliog Oil & Gas J 41:106, 108, 111+ N 12 '42; Same. Am Pet Inst Proc 23(5):7-14 '42

Oklahoma oil-field brines and their utilization. B. W. Logue. Oil & Gas J 41:49-50+ F 11 '43

Subsurface geology and oil and gas resources of Osage county; Burbank and South Burbank oil fields, townships 26 and 27 north, range 6 east, and townships 25 to 27 north, range 6 east. N. W. Bass, H. B. Goodrich and W. R. Dillard. bibliog fold maps in pocket U S Geol S Bul 900-J:321-42; pa 60c Supt. of doc. '42

Subsurface geology and oil and gas resources of Osage county; summary of subsurface geology with special reference to oil and gas. N. W. Bass. bibliog U S Geol S Bul 900-K:343-93, pl 13-20 [7 in pocket] pa 45c Supt. of doc. '42

Tenure arrangements in Oklahoma oil fields. R. D. Davidson and K. Wernimont. bibliog J Land & Pub Util Econ 19:40-58 F '43

Typical oil-field structures; regional high; Panhandle and Hugoton fields, Texas, Oklahoma and Kansas. diags map Oil & Gas J 41:38-9 N 19 '42

See also Petroleum industry and trade—Oklahoma

Bibliography

Bibliography of Oklahoma oil and gas pools. A. G. Skelton and M. B. Skelton, comps. (Bul. 63) 230p Oklahoma geological survey, Norman '42

PETROLEUM—Continued

Pennsylvania

Efficiency of Bradford water floods can be greatly increased. H. M. Ryder. Oil & Gas J 41:29-32+ Ja 21 '43

See also Petroleum industry and trade—Pennsylvania

Rocky Mountain region

Developments in Rocky Mountain region in 1942. R. M. Larsen. Am Assn Pet Geologists Bul 27:854-61 Je '43

Occurrences and types of crude oils in Rocky Mountain region. J. G. Crawford and R. M. Larsen. bibliog diagms tables Am Assn Pet Geologists Bul 27:1305-34 O '43

Structural conditions of oil and gas accumulation in Rocky Mountain region. C. E. Dobbin. bibliog diagms maps Am Assn Pet Geologists Bul 27:417-78 Ap '43

Rumania

Late reports reveal heavy damage to Rumanian plants. il Oil & Gas J 42:45 Ag 26 '43

Russia

Investigation of U.S.S.R. crude oils. G. D. Gal'pern and I. A. Musaev. Pet Eng 15: 98+ O '43

Texas

Analyses of crude oils from some fields of Texas. E. C. Lane. U S Bur Mines Rep of Invest 3699:1-52 '43

Analysis of oil production in the near-depleted Mexia-Powell fault-line fields of Texas. H. B. Hill and R. K. Guthrie. fold maps charts U S Bur Mines Rep of Invest 3712:1-83 '43

Analysis of oil production in the near-depleted Mexia-Powell fault-line fields of Texas; abstract. H. B. Hill and R. K. Guthrie. Oil & Gas J 42:82+ My 20 '43

Bowers field, Montague county. A. E. Brown. diagms maps Am Assn Pet Geologists Bul 27:21-37 Ja '43

Developments in east Texas in 1942. R. M. Trowbridge and T. J. Burnett. map Am Assn Pet Geologists Bul 27:782-9 Je '43

Developments in north and west-central Texas in 1942. map Am Assn Pet Geologists Bul 27:771-81 Je '43

Developments in south Texas in 1942. F. C. Owens and E. A. Taegel. map Am Assn Pet Geologists Bul 27:739-46 Je '43

Developments in west Texas and southeastern New Mexico in 1942. E. I. Dickey and B. A. Ray. map Am Assn Pet Geologists Bul 27: 747-70 bibliog(p751-2) Je '43

Discovery well, Archer City pool, Archer county; log and drilling data. Oil & Gas J 42:71-2 S 9 '43

Discovery well, Bend production, Hildreth pool; log and drilling data. Oil & Gas J 42:57-8 J 1 '43

Discovery well, North Magnolia City field, Jim Wells county; log and drilling data. Oil & Gas J 42:77-3 Ag 19 '43

Discovery well of Corbett ranch pool, west central Texas; log and drilling data. Oil & Gas J 42:59 Ag 5 '43

Discovery well of Mississippi lime production in Eliasville field, Stephens county; log and drilling data. Oil & Gas J 41:95-6 F 25 '43

Discovery well of unnamed pool (probably to be called Jermyn) in Jack county; log and drilling data. Oil & Gas J 41:55-6 Ap 1 '43

Discovery well, Porter pool, Karnes county; log and drilling data. Oil & Gas J 42: 83 O 7 '43

Discovery well, Stephens pool, north central Texas; log and drilling data. Oil & Gas J 42:99-100 Ag 26 '43

Discovery well, unnamed field, Clay county; log and drilling data. Oil & Gas J 42:79-80 Ag 12 '43

Discovery well, unnamed pool, Quitman area, Wood county, Texas; log and drilling data. Oil & Gas J 41:53-4 D 17 '42

Discovery well, unnamed pool, Wilbarger county, Texas; log and drilling data. Oil & Gas J 42:57 N 4 '43

Elasticity of reservoir rocks and fluids with special reference to the east Texas oil field; abstract. D. Donoghue. Oil & Gas J 42:73 My 20 '43

Geology of Wasson field, Yoakum and Gaines counties. W. T. Schneider. diagms maps Am Assn Pet Geologists Bul 27:479-523 Ap '43

Importance of west Texas Ordovician in national picture still not clear. H. F. Simons. map Oil & Gas J 42:30-1 Je 10 '43

Map plan for west Texas oil. Nat Pet N 35: 22 O 6 '43

Method for analyzing gasoline fraction of petroleum; with preliminary results on east Texas and Oklahoma crudes. F. D. Rosini and others. bibliog Oil & Gas J 41: 106, 108, 111+ N 12 '42; Same. Am Pet Inst Proc 23(3):7-14 '42

Problem of pre-Trinity deposits in south Texas. F. M. Getzendaner. maps Am Assn Pet Geologists Bul 27:1228-44 S '43

Refining of west Texas crude. B. I. Scoggin and G. H. Burruss. bibliog Pet Refiner 22: 83-90 O '43; Same cond. Nat Pet N 35:22-9, 44-7 O 13 '43; Same cond. Oil & Gas J 42:61-4+ O 21 '43

Refining west Texas crude. H. H. Wenzke. Oil & Gas J 42:43-4, 47, 73-5 O 14 '43

Review of developments in 1942, Gulf coast of upper Texas and Louisiana. G. J. Smith. map Am Assn Pet Geologists Bul 27:730-8 Je '43

Rich oil sand discovered with condensate at Katy field. Oil & Gas J 41:17 Ap 1 '43

Technique of testing large cores of oil sands. F. B. Plummer and P. F. Tapp. bibliog diagms Am Assn Pet Geologists Bul 27:64-84 Ja '43

Troubles from salt sections, hard formations, impede Embarras drilling. H. F. Simons. il Oil & Gas J 41:57-9 Mr 11 '43

Typical oil-field structures; regional high; Panhandle and Hugoton fields, Texas, Oklahoma and Kansas. diagms map Oil & Gas J 41:38-9 N 19 '42

West Texas crudes still shunned by war refineries. T. F. Smiley. Oil & Gas J 41: 76 Mr 25 '43

See also Petroleum industry and trade—Texas Petroleum laws and regulations—Texas

Trinidad

Analysis of Trinidad crude oils. F. Morton and A. R. Richards. bibliog pls diagms Inst Pet J 29:55-74 F '43

United States

Discovery thinking. A. I. Levorsen. diagms maps Am Assn Pet Geologists Bul 27:887-928 J 1 '43

Oil zones of the United States. maps Oil & Gas J 41:68a-68b Mr 13; 88a-88c Ap 8; 80b-80c Ap 29; 68a-68b My 20; 42:64b-64c Je 10; 48b-48c J 1; 40b-40c J 22; 68b-68c Ag 12; 36b-36c S 2; 56b-56c S 30; 52b-52c O 14; 64b-64c O 28 '43

See also Oil shales—United States Petroleum supply—United States Petroleum industry and trade—United States

Venezuela

See also Petroleum industry and trade—Venezuela

Wyoming

Discovery well, Tensleep production, Elk Basin field, Wyoming; log and drilling data. Oil & Gas J 42:67-8 S 30 '43

PETROLEUM administration for war. See United States—Petroleum administration for war

PETROLEUM coke

Cracking technology; causes of coke formation. C. R. Wagner. Oil & Gas J 42:66+ S 9 '43

New rules on petroleum coke exports included in WPB order. For Comm W 11:25 Ap 10 '43

Seek maximum yield of petroleum coke. il Nat Pet N 35 pt 2:R92 F 3 '43

PETROLEUM distillation

Alkylated cresols from refinery gases. W. Weinrich. *il plan Ind & Eng Chem* 35:264-72 Mr '43

Batch rectification; effect of fractionation and column holdup. R. Edgeworth-Johnstone. *bibliog il Ind & Eng Chem* 35:407-10 Ap '43

Bottoms from rerun pressure distillate converted to industrial oils. *il Oil & Gas J* 42:40, 43 Jl 1 '43

Cracking. J. B. Hill. *il Chem & Eng N* 20:1368-9 N 10 '42

Cracking technology. C. R. Wagner. *il diag Oil & Gas J* 42:27-8+ S 2; 66, 68-9 S 9; 53-5 S 16; 45, 47+ S 30; 73-4 O 7; 67-9 O 14; 62, 64+ O 28; 40, 42-3 N 4 '43

Eastern seaboard's first fluid catalytic cracking plant dedicated this week. *Oil & Gas J* 41:8 Ja 21 '43

Effect of catalysts in vapor phase cracking. P. P. Borisov and M. V. Gaverdovskaya. *bibliog Nat Pet N* 35 pt 2:R322-3 Jl 7 '43

Equilibrium flash vaporization of three petroleum fractions. W. C. Edmister, J. C. Reidel and W. J. Merwin. *bibliog flow diag il Am Inst Chem Eng Trans* 39:457-85; Discussion. 485-9 Ag '43

First commercial TCC unit goes on stream, adding new aviation-gasoline capacity. J. P. O'Donnell. *flow chart il Oil & Gas J* 42:30-1+ O 14 '43

First Thermofor catalytic cracking plant put on stream. *il Pet Refiner* 22:130, 132 O '43

Fluid catalyst process; catalytic cracking of petroleum. E. V. Murphree and others. *il diag Ind & Eng Chem* 35:768-73 Jl '43

Fluid catalytic cracking plant begins operations at Bayway. *il Chem & Met Eng* 50:132-3 F '43

Getting the most out of a fractionating tower. W. L. Nelson. *diag Oil & Gas J* 42:49 Je 10 '43

Hydrocarbons in petroleum; some results of A.P.I. research project 6. F. D. Rossini. *bibliog (80 titles) il diag Pet Eng* 14:41-2+ F '43

Jersey cracker; first fluid catalytic cracking plant in East. R. W. Gallagher. *il Nat Pet N* 35:15-16 Ja 20 '43

Methods of preparing butadiene. G. Egloff and G. Hulla. *bibliog Oil & Gas J* 41:41-4, 46-7 N 19; 124+ N 26; 36, 39-42+ D 3; 45-51 D 10; 36-40, 42-3 D 17; 35-7, 39 D 24 '42

Octane number of catalytic gasoline varied by operating methods. E. V. Murphree and others. *diag Oil & Gas J* 42:51, 53-5 Je 3 '43

Operating multidraw fractionating towers. W. L. Nelson. *diag Oil & Gas J* 41:31+ Ap 1 '43

Overall plate efficiency of commercial hydrocarbon fractionating columns as a function of viscosity. H. G. Drickamer and J. R. Bradford. *bibliog Am Inst Chem Eng Trans* 39:319-57 Je '43; Same. *Pet Refiner* 22:105-18 O '43; Same abr. *Nat Pet N* 35 pt 2:R378-82 Ag 4 '43; Discussion. *Am Inst Chem Eng Trans* 39:357-60 Je '43

Phase equilibria at high temperatures. R. R. White and G. G. Bohn. *flow diag bibliog diag Ind & Eng Chem* 34:1162-74 O '42; Same. *Nat Pet N* 34 pt 2:R376-8, R380-1, R432-5 O 28, N 25 '42; Same. *Pet Eng (Ref annual)* 14:282-3, 286-92, 295-6 Jl 1 '43

Problems involved in conventional refining of sour crudes. R. B. Waite and E. H. Aitken. *flow diag Oil & Gas J* 42:27-32, 35+ Ag 5 '43

Producing aviation gasoline by fluid catalytic cracking. *flow diag il diag Nat Pet N* 35 pt 2:R251-2, R254-5 Je 2 '43

Pure hydrocarbons from petroleum; composition of a commercial hexane. J. Griswold, C. F. Van Berg and J. E. Kasch. *bibliog Ind & Eng Chem* 35:854-7 Ag '43

Refinery practice for the operating man (cont.). *il diag Pet Eng* 14:72, 75, 78 D '42; 105, 108 Ja; 94, 96, 98 F; 78, 81 Mr; 90+ Ap; 142, 145, 148 My; 69-70, 72, 74 Je; 84, 86 Jl; 39-42 Ag; 108+ S; 15:162, 164+ O '43 (to be cont)

Reforming refinery still gases for market consumption. E. L. Bevan. *flow diag il Oil & Gas J* 42:52, 55-6, 59 Ag 19 '43

Stabilization of crude oil; chronological account from 1926 to the present. F. L. Kallam. *bibliog Pet Refiner* 22:93-101 F; 91-6 Mr '43

Thermofor catalytic cracking process. T. P. Simpson and others. *il flow diag Nat Pet N* 34 pt 2:R427-31 N 25 '42; Same. *Oil & Gas J* 41:96+ N 12 '42; Same. *Am Pet Inst Proc* 23(3):59-66 '42; Same. *Pet Eng (Ref annual)* 14:209-11, 213-14 Jl 1 '43; Abstract. *Chem & Met Eng* 49:156-9 D '42

Two improvements in the TCC process help its yield of aviation gasoline. *il Nat Pet N* 35 pt 2:R445 O 6 '43

War developments of the petroleum industry. E. V. Murphree. *il diag Ind & Eng Chem* 35:623-31 Je '43; Same. *Can Chem & Process Ind* 27:326-32 Je '43; Same. *Pet Eng (Ref annual)* 14:216-18, 220-3 Jl 1 '43; Same. *Chem Age (Lond)* 49:127-33 Ag 7 '43; Same. *Pet Refiner* 22:90-8, 116 Je '43

What takes place in catalytic cracking. P. H. Faust. *il Pet Refiner* 22:83-6 F '43

What takes place in thermal cracking. P. H. Faust. *il Pet Refiner* 22:66-8 Ja '43

See also

Gasoline—Manufacture

Oil shales—Distillation

Petroleum refining

Tables, calculations, etc.

Approximate capacity of topping tower. W. L. Nelson. *Oil & Gas J* 41:72 Ap 22 '43

Fractional distillation on binary mixtures; number of theoretical plates and transfer units. A. J. V. Underwood. *bibliog Inst Pet J* 29:147-56 F '43

Heat transfer coefficients for condensers. G. T. Atkins, jr. *bibliog il Oil & Gas J* 41:180, 183, 185-6+ Mr 25 '43

Pure hydrocarbons from petroleum; vapor-liquid equilibria of close-boiling hydrocarbons. J. Griswold. *bibliog il Ind & Eng Chem* 35:247-51 F '43; Discussion. 35:826 Jl '43

Thermal efficiency in topping plants. W. L. Nelson. *Oil & Gas J* 41:180-1 Ja 28 '43

PETROLEUM engineering

Abstracts of papers before Petroleum division, American institute of mining and metallurgical engineers, Los Angeles, Oct. 21-22. *Oil & Gas J* 42:57, 65-7 O 28 '43

Abstracts of papers presented before the spring meeting of Petroleum section, A.I.M.E., Dallas, May 7-8. *Oil & Gas J* 42:73+ My 20 '43

Application of recording fluid level gauge to oil production. L. C. Halpenny. *il Pet Eng* 14:133-4, 136 D '42

Challenge to the petroleum engineer; abstract. D. R. Knowlton. *Oil & Gas J* 42:31 My 13 '43

Consider contingencies before starting repair work. *Oil & Gas J* 41:225 I 31 '42

Development and control of oil reservoirs. S. E. Buckley and R. C. Craze. *il Oil & Gas J* 42:55-70 My 13 '43

Development and use of engineering geology. P. Weaver and others. *maps diag Am Assn Pet Geologists Bul* 26:1795-1826 D '42

Engineering development in the petroleum industry. C. Dalley. *Inst Pet J* 29:1-18 Ja '43

Engineering fundamentals. Published in weekly numbers of Oil and gas journal

First integrated refinery-cycling plant unit; four cycling plants, pipe line station, and refinery in south Texas coordinate operations. C. C. Pryor. *il Pet Eng* 15:122+ O '43

Geophysics, geochemistry, and the practical oil man. L. W. Blau. *Min & Met* 24:396-7 S '43

Hydration-pressure relations in clays and heaving shale. H. H. Power, B. L. Towle and J. E. Plaza. *bibliog il diag Am Pet Inst Proc* 23(4):64-76 '42; Same. *Oil & Gas J* 41:215+ N 12 '42; Discussion. *Am Pet Inst Proc* 23(4):76-7 '42

Interpretation of laboratory analytical and volumetric data in terms of field measurements; abstract. B. H. Sage, R. H. Olds and W. N. Lacey. *diag Oil & Gas J* 42:134+ Je 24 '43

Largest oil output with minimum use of materials is production engineers' war aim. C. H. Keplinger. *Min & Met* 24:92-3 F '43

PETROLEUM engineering—Continued

Magnolia oil field, Columbia county, Ark.; petroleum engineering study. C. B. Carpenter and H. J. Schroeder. diag maps charts U S Bur Mines Rep of Invest 3720:6-74 '43
Modern engineering methods are coping effectively with Cumberland problems. N. Williams. il map Oil & Gas J 42:39-42 S 16 '43

Newest techniques in drilling, production, transportation and refinery engineering; newest practices in exploration and in the manufacture of natural gasoline; text in English and Spanish. il Oil & Gas J 41:142-220 D 31 '42

PAW suggestions for operators. Oil & Gas J 41:48, 50 Mr 11 '43

Petroleum engineer and the developing politico-economic situation. J. D. Gill. Oil & Gas J 41:52 F 25 '43

Physical variables influencing well spacing. L. C. Uren. bibliog(50 titles) Pet Eng 14: 118+ S '43

Training nontechnical personnel to replace service-enlisted engineers. E. H. Short, jr. Oil & Gas J 42:51-2+ O 7 '43

See also

Petroleum—Production methods
Petroleum—Prospecting
Petroleum—Pumping
also American institute of mining and metallurgical engineers—Petroleum division

Accounting

Cost engineering. Published in weekly numbers of Oil and Gas Journal

Power

Additional engine equipment eliminates down time. Oil & Gas J 41:51 N 19 '42

Drawworks of improved design for slim-hole rig. C. C. Pryor. il Pet Eng 14:29-32 F '43

Engine replacement economics. Oil & Gas J 42:93 My 20 '43

Experiment in the operation of improvised compressor units; automobile engine as compressor for air or gas injection. F. Squires. il diag Oil & Gas J 42:62, 64+ JI 15 '43

Isothermal compression horsepower; Polytropic and adiabatic compression horsepower. G. M. Stearns. Oil & Gas J 41: 79-80 Mr 18 '43

Oil-well pumping practices; surface pumping equipment; prime movers. J. Zaba. bibliog Oil & Gas J 42:51-3 N 4 '43

See also

Electricity in the petroleum industry
Petroleum—Pumping, Electric
Petroleum pipe lines—Pumping stations, Electric
Petroleum refineries—Power

Tables, calculations, etc.

Aliphatic hydrocarbon densities; correlation in the critical region. T. G. Stevenin and J. G. Allen. bibliog Ind & Eng Chem 35:788-9 JI '43

Analysis of reservoir performance. R. E. Old, jr. bibliog Pet Eng (Ref annual) 14:139-40, 142-4 JI 1 '43

Determination of productive capacities of flow pipes on gas lift. S. F. Shaw. diag Oil & Gas J 42:47-8, 50, 53-4 Je 17 '43

Effect of casing perforations on well productivity. M. Muskat. diag Pet Eng (Ref annual) 14:124-6, 128, 130 JI 1 '43

Petroleum engineer's continuous tables. Published in monthly numbers of Petroleum engineer

Prediction of the shrinkage of crude oils. D. L. Katz. bibliog Oil & Gas J 41:179-80, 182, 184+ N 12 '42

See also

Petroleum—Pumping

PETROLEUM engineers

Plight of mining, metallurgical, and petroleum engineering education; effect of selective service system. E. A. Holbrook. Min & Met 24:275-6 Je '43

PETROLEUM equipment industries

Drill pipe orders deluge producers; pipelines helping to solve transportation problem. R. L. Hartford; J. M. Kurtz. il Steel 113:63-5, 156 S 13 '43

Nomads recognize their responsibility to the industry they represent; with membership lists of various chapters. J. A. Thomas. Oil & Gas J 41:131-2+ D 31 '42

Supply and demand in balance; government officials deny that orders deluge producers. Steel 113:66 O 4 '43

Supply companies' position as sponsors of development improved by OPA ruling. Oil & Gas J 42:82 JI 29 '43

Directories

Directory of export organizations. Oil & Gas J 41:136, 139-40, 245 D 31 '42

Equipment catalog; text in English and Spanish. il Oil & Gas J 41:144-221 D 31 '42

Securities

Oil well supply companies. H. Lawrence. Barron's 23:1+ My 24 '43

PETROLEUM geologists. See Geologists, Petroleum

PETROLEUM industry and trade

Joint use of production facilities and manpower. H. M. Stalcup. Oil & Gas J 42: 70+ My 27 '43

Reduction in oil production is caused entirely by warfare. J. P. O'Donnell. il Oil & Gas J 41:42-3+ D 31 '42

Revolution in oil; war, and postwar; report to executives. il Business Week p51-60 Ap 17 '43

Scientific advances in oil industry will solve many post-war problems. T. H. Barton. Comm & Fin Chr 158:708 Ag 19 '43

See also

Electricity in the petroleum industry
Gas oil
Gasoline industry
Lubricating oil industry
Oil fuel industry
Oil industries
Petroleum—Prices
Petroleum laws and regulations
Petroleum storage
Petroleum supply

also American institute of mining and metallurgical engineers—Petroleum division; American petroleum institute

Accidents

Fewer accidents reported by participants in safety contest. Oil & Gas J 41:51 Ja 14 '43

Accounting

Analysis of income based on acreage allowable. Oil & Gas J 41:49 D 17 '42

Cost engineering. Published in weekly numbers of Oil and Gas Journal

Information on operating costs returned to field office. Oil & Gas J 42:73-4 Je 10 '43

Costs

Comparison by capitalized cost. Oil & Gas J 41:333 Mr 25 '43

Freight rates are important in determining casing costs. Oil & Gas J 41:227 D 31 '42

Directories*See also*

Petroleum equipment industries—Directories

Employees

See Petroleum refineries—Employees; Petroleum workers

Equipment and supplies

A.P.I. activities and cooperation with the War production board in the simplification of steel specifications and steel conservation. C. A. Dunlop. Pet Eng (Ref annual) 14:75-6+ JI 1 '43

Analysis of equipment lists; economic selection. Oil & Gas J 41:75 F 11 '43

Changes in basic equipment regulation clarifies access to operating supplies; with text of amended P-98-b. Oil & Gas J 42:35, 45-8 My 20 '43

Completing and repairing wells with portable equipment. W. A. Sawdon. il diag Pet Eng 14:127-8, 130 Ag '43

PETROLEUM industry and trade—Equipment and supplies—Continued

Electric bonding saves vital war materials by metallizing. L. E. Kunkler. *Oil & Gas J* 42:66, 69-70 Je 17 '43

Equipment catalog; text in English and Spanish. *Oil & Gas J* 41:144-221 D 31 '42

Facts modify equipment restrictions. *Oil & Gas J* 41:33+ F 11 '43

57,000 tons of pipe turned to domestic operators. *Oil & Gas J* 41:37 Mr 11 '43

First experiences with CMP improve outlook for supplies. *Oil & Gas J* 41:46-7+ D 31 '42

Higher preference ratings assigned by re-issued P-98-b. *Oil & Gas J* 41:42-3 Ja 7 '43

How operators are fitting drilling equipment and practices to conditions. M. L. Cashion. *Oil & Gas J* 42:67-9 O 21 '43

How P-98-b procedure works. *Oil & Gas J* 42:44 Je 17 '43

How P-98-b works under CMP. F. A. Watts. *Oil & Gas J* 42:42-4, 116 My 27 '43

Information clinic shows how industry may acquire and use supplies under P-98-b. *Oil & Gas J* 42:19-20 Je 3 '43

Intensify oil's salvage drive. *Nat Pet N* 35:5-6 Ja 20 '43

Intraindustry supply sales are authorized by order P-98-c. *Oil & Gas J* 41:24 D 10 '42

Inventory reports needed to start supply redistribution of oil-industry tubular goods. *Oil & Gas J* 41:16-17 N 19 '42

Large saving made possible by equipment standardization. *Oil & Gas J* 41:59 N 19 '42

M-68 will result in drilling of 13,000 fewer wells in 1942. D. R. Knowlton. *Oil & Gas J* 41:76-7 N 12 '42; Same cond. *Am Gas Assn* Mo 24:433-4 D '42

Maintenance of A.P.I. oil field equipment standards. H. W. Ladd. *Pet Eng* (Ref annual) 14:41-2, 44-5 Jl 1 '43

Maintenance, repair and operating supplies are placed under new order; full text of order P-98-B. *Oil & Gas J* 41:30, 135-6 Ap 8 '43

Methods of basing prices of oil equipment and materials. *Oil & Gas J* 41:193 Ja 28 '43

Mexican equipment deal expected to center on materials for refineries. C. Vinson. *Oil & Gas J* 42:42-4 My 20 '43

NE (national emergency) alloy steels in the oil-well drilling and equipment industries. B. E. Wescott. *Steel* 112:66, 69 Ja 18 '43

Neoprene; construction material for petroleum industry equipment. C. C. Pryor. *Oil & Gas J* 42:27-30 D '42

Official text of important orders; new plan governs redistribution of surplus materials. *Nat Pet N* 35:10-12+ Jl 7 '43

Official text of important orders; P-98-b broadened to simplify CMP regulations for oil. *Nat Pet N* 35:10-12+ My 19 '43

PAW answers questions on revised P-98-b. *Nat Pet N* 35:38, 40 O 27 '43

PAW reports to the industry; controlled materials plan single source for oil-industry equipment. F. A. Watts. *Oil & Gas J* 42:108+ Jl 29 '43

Petroleum administrative order 11; new regulation on purchase, use of equipment. *Oil & Gas J* 41:24-5 Ap 1 '43

Photographic templates may be adopted in oil-industry fabricating shops. P. Reed. *Oil & Gas J* 42:40, 42+ S 2 '43

Portable rigs help meet California's demand for heavy oil. W. A. Sawdon. *Oil & Gas J* 41:128, 130, 132 Ap '43

Prices on reusable oil country tubular goods revised by OPA. *Oil & Gas J* 41:35 F 11 '43

Removal of paraffin accumulations in the University field; paraffin scraper. B. C. Craft and R. F. Nichols. *Diags Oil & Gas J* 41:124+ My 6 '43

Reports of central A.P.I. committees on the standardization of oil-field equipment. *Diags Am Pet Inst Proc* 23(4):128-234 '42

Role of clad-steel plate in petroleum industry war effort. M. J. Conway. *Diags Pet Eng* 14:103-4, 106 Je '43

Rope socket design effects economy. S. P. King. *Diags Pet Eng* 15:136 O '43

Serious equipment shortages plague oil field operations. *Oil & Gas J* 41:20+ N 11 '42

Steel for oil industry newest task facing War production board. *Iron Age* 151:91-2 Mr 18 '43

Use of materials in secondary recovery. P. D. Torrey. *Oil & Gas J* 41:114 My 6 '43

See also

Derricks, Oil well	Petroleum equipment industries
Drills, Oil well	Petroleum pipe lines
Petroleum—Pumping	Petroleum refineries
Petroleum engineering—Power	—Equipment

Finance

Analysis of equipment lists; economic selection. *Oil & Gas J* 41:75 F 11 '43

Calculating economic value of individual well. *Oil & Gas J* 41:155 N 26 '42

Capital flow and formation in the petroleum industry, 1934-41. J. E. Pogue and F. G. Coqueron. *Pet Eng* (Ref annual) 14:351-2, 354-7 Jl 1 '43; Excerpts. *Oil & Gas J* 41:33-4 F 18 '43; *Nat Pet N* 35:6+ F 17 '43

Crude oil producers in strong position. H. Lawrence. *Barron's* 23:34 Ja 11 '43

Favorable position of crude oil producers. H. Lawrence. *Barron's* 23:5 Mr 22 '43

Oil industry in transition. J. C. Clifford. *Oil & Gas J* 41:22 D 3 '42

Mag of Wall St 72:628-30 S 18 '43

Oil, winner and loser in this war. R. P. Crawford. *Barron's* 23:3 Ap 12 '43

Refinery revenue cut \$190,000,000 annually by restricted economy. J. P. O'Donnell. *Oil & Gas J* 41:22 D 3 '42

Study of maximum-profit and minimum-cost points. *Oil & Gas J* 41:67 Mr 11 '43

See also

Petroleum industry and trade—Costs	Petroleum industry and trade—Securities
------------------------------------	---

Fires and fire protection

Fires take toll, 1942. *Nat Pet N* 35:37 F 3 '43

Safeguarding fire fighting equipment from the work of the saboteur. P. W. Eberhardt; C. H. Lindsay; G. Blair. *Diag Nat Pet N* 35 pt 2:R117-18 Mr 3 '43

Wartime safeguards for petroleum; protection against subversive activities. F. A. Epps. *Pet Eng* 14:128, 130 S '43

See also

Petroleum refineries	—Fires and fire protection
----------------------	----------------------------

History

Fifty-year history of Carter oil co. closely parallels oil's growth. *Oil & Gas J* 41:50 My 6 '43

International aspects

Foreign oil and postwar planning. K. C. Schlater. *Pet Eng* 15:69-70 O '43

Foreign operations must be expanded. J. P. O'Donnell. *Oil & Gas J* 42:90, 97-8+ S 23 '43

Government ownership may become part of U.S. world petroleum policy. H. D. Ralph. *Oil & Gas J* 42:28 O 14 '43

Proposal for balanced world-petroleum program. J. E. Pogue. *Oil & Gas J* 42:86, 94 S 23 '43; Same. *Pet Eng* 15:108, 110 O '43

Royal Dutch oil co.'s operations and results. *For Comm W* 12:22 Ag 21 '43

Socony's world; the strategy of oil. *Oil & Gas J* 42:14-19+ F '43

Suspicion over objective of PRC may force disclosure of foreign-oil policy. H. D. Ralph. *Oil & Gas J* 42:42-3 O 21 '43

U.S. promotes foreign oil. *Nat Pet N* 35:3 O 6 '43

World oil industry has weathered impacts of a year's global war. H. S. Norman. *Oil & Gas J* 41:38-41 D 31 '42

World pooling of oil and transportation directed by PAW; eases load on U.S. *Nat Pet N* 35:3+ O 13 '43

See also

World war, 1939—	Petroleum supply
------------------	------------------

Records

Adequate records necessary for controlling expense. *Oil & Gas J* 41:47 F 4 '43

Completion records aid conservation of strategic materials in wells. V. E. Baum. *Oil & Gas J* 42:46, 48+ Jl 1 '43

Cost records indispensable in well-reconditioning work. *Oil & Gas J* 42:73 S 9 '43

Records aid in cost reduction. *Oil & Gas J* 41:81 Ap 29 '43

PETROLEUM industry and trade—Continued

Regulation

- Executive order establishing the Petroleum administration for war and defining its functions and duties; text. Oil & Gas J 41:22-4 D 10 '42; Same. Nat Pet N 34:9-10 D 9 '42
- Executive order prepared to give Ickes greater authority. H. D. Ralph. Oil & Gas J 41:16 N 19 '42
- Move slowly on Mid-West zoning. Nat Pet N 35:4-5 Ap 28 '43
- Official interpretations of war-oil orders. Nat Pet N 35:13 Ap 28; 12+ Je 23 '43
- Oil cartelized; orders compel pooling in Mid-west. Business Week p18-19 Ap 10 '43
- Present allocation practices. D. R. McKeithan. Oil & Gas J 41:154+ N 12 '42
- Seek new oil czar; Rivers committee favors legislation setting up new agency. Nat Pet N 35:26 JI 28 '43
- Survey of crude pooling. Oil & Gas J 41:23-4 Mr 11 '43
- To divide district 2 into supply-distribution zones. maps Nat Pet N 35:4-5 Ja 27 '43
- What new oil control move means; Secretary Ickes' authority still not complete. Barron's 22:20 D 7 '42
- What state legislatures are doing about oil. Nat Pet N 35:34 Mr 3 '43

See also

- Interstate oil compact commission United States—Petroleum administration for war regulations

Safety measures

- Bottom-hole choke combines automatic safety valve. J. O. Farmer. Oil & Gas J 41:78, 80, 82 F '43
- Good safety records aren't accidents; United gas pipe line co., Houston Gulf gas co., Union producing co., and United oil pipe line co. C. L. Hightower. Oil & Gas J 41:12-13+ Ap '43
- Oil's accident record less favorable in 1942-43 contest; war blamed; Petroleum section, National safety council, meeting, Chicago. Nat Pet N 35:4-5 O 13 '43
- Principle of the safety cylinder as an explosion preventer in air-gas compression. F. Squires. Oil & Gas J 41:83-4+ Ap 8 '43

Securities

- Appraising five oils priced at six to twenty-two times earnings. H. F. Travis. Mag of Wall St 71:702-4 Ap 3 '43
- Averages on oil securities reflect anticipated demand; high and low, by weeks, 1942. Oil & Gas J 41:103 Ja 28 '43
- Coal versus oil; with chart showing position of leading stocks. E. A. Krauss. Mag of Wall St 72:180-2+ My 29 '43
- How crude oil producers would benefit by price increase. H. Lawrence. Barron's 23:4 Ap 19 '43
- Investment audit of Tidewater oil. S. Devlin. Mag of Wall St 71:180-1+ N 28 '42
- Low-priced oils compared; facts about varying earnings, production and prospects. S. Devlin. Oil & Gas J 41:73-4+ O 30 '43
- Oil shares for inflation hedging. H. Lawrence. Barron's 22:20 D 21 '42
- Oils in war and peace; position of leading stocks. E. A. Krauss. Mag of Wall St 72:414-16+ JI 24 '43
- Rising earnings for crude oil producers. H. Lawrence. Barron's 23:5 My 31 '43
- War effects on the petroleum industry; position of leading oil stocks. Mag of Wall St 71:638-41 Mr 20 '43

Statistics

- Crude-oil production responds to rising war requirements by setting new peak. W. V. Howard. Oil & Gas J 42:93 JI 29 '43
- Drilling decline continues with few prospective active areas. W. V. Howard. Oil & Gas J 42:131, 135 JI 29 '43
- Estimated world production; 1941 and 1942 compared; tabulation. Can Min J 64:72 F '43
- Increase of 400,000 bbl. in daily demand seen in 1943. Oil & Gas J 41:25+ D 10 '42

- Petroleum and products, 1933-1941. Survey of Cur Business 1942 Sup p156-9 [supplemented in monthly numbers]
- Production increase halted; many changes in sources, transportation, and products. B. B. Zavoico. Min & Met 24:93-7 F '43
- Proven reserves. W. V. Howard. Oil & Gas J 41:64-71 Ja 28 '43
- Record crude production and high refinery runs required to meet huge military needs. L. J. Logan. Pet Refiner 22:124-6+ Ag '43
- Study reveals imperative need for increasing Nation's oil reserves. H. J. Struth. map Pet Eng 14:31-8, 40, 42 Ja '43
- Wartime regulations sharply reduce drilling operations during 1942. W. V. Howard. Oil & Gas J 41:72-3+ Ja 28 '43
- WEP schedule calls for 297,000 bbl. daily next 3 months. Oil & Gas J 42:17-18 Je 3 '43
- World consumption of petroleum and its substitutes in 1942; abstracts. V. R. Garfas, R. V. Whetsel and J. W. Ristori. Oil & Gas J 41:34-5 F 18 '43; Nat Pet N 35:32 F 24 '43; Chem & Met Eng 50:201-2 My '43

See also

- Gasoline industry—Statistics

Petroleum supply

Taxation

- New Venezuela oil law raises taxes sharply. Oil & Gas J 41:30 F 18 '43
- Oil operators will benefit by new tax regulation on intangible drilling costs; full text of the new ruling. Oil & Gas J 42:27-8 JI 8 '43
- Transport tax; regulations impose a 3% tax on oil transportation except by pipelines. Nat Pet N 35:26+ F 17 '43

See also

- Gasoline—Taxation

War measures

- Wartime safeguards for petroleum; protection against subversive activities. F. A. Epps. Pet Eng 14:128, 130 S '43

Alberta

- Alberta production for 1942 sets new record. Oil & Gas J 41:76+ Ja 21 '43
- Alberta's oil development in 1942. J. L. Irwin. Oil & Gas J 41:67-73 F '43
- Petroleum development in Canada. F. K. Beach. Oil & Gas J 41:54, 56, 59+ N '42

See also

- Petroleum—Alberta

Argentina

- Argentina's increasing oil production big war asset. Oil & Gas J 41:66, 68 D 31 '42
- Slim-hole rigs used in drilling new Challoco field. Oil & Gas J 41:80+ D 31 '42
- Value of Argentina's oil resources enhanced by reduced fuel imports. Oil & Gas J 41:34-5+ Ja 18 '43

Arkansas

- Annual review. Oil & Gas J 41:164, 166 Ja 28 '43
- Engineering features of the Shuler field and unit operation. H. H. Kaveler. Oil & Gas J 41:44 F 18 '43
- Pressure drop and water disposal problems of Arkansas fields. Oil & Gas J 42:251-2 JI 29 '43
- Semiannual review. Oil & Gas J 42:193-4 JI 29 '43
- Sixty-well program for Arkansas field approved. Oil & Gas J 42:30 S 9 '43
- Unitized pressure maintenance, Jones sand reservoir, Shuler field. G. R. Elliott. Oil & Gas J 42:53-4+ Je 10 '43

Bolivia

- Bolivia is expanding all phases of oil operations. Oil & Gas J 41:128 D 31 '42

California

- Annual review. L. P. Stockman. Oil & Gas J 41:118, 121-2 Ja 28 '43
- California discovery-bonus plan intended to stimulate exploratory drilling program. L. P. Stockman. Oil & Gas J 42:39-40 JI 15 '43
- California operators turn to old shallow fields for new oil. L. P. Stockman. Oil & Gas J 41:12-13 D 3 '42

PETROLEUM industry and trade—California—
Continued

Completion practices in Northwest Wilmington area. W. R. Cabeen and A. L. Hunter. *diag* Oil & Gas J 41:179, 181 Ja 28 '43
 Completions rise sharply in California heavy fields. L. P. Stockman. *il* Oil & Gas J 42: 18-19 J1 8 '43
 Expansion of refining facilities aggravates manpower shortage. L. P. Stockman. *il* Oil & Gas J 42:16-18 Ag 5 '43
 Future development of northwest Wilmington field. W. R. Cabeen and A. L. Hunter. *diag* map Oil & Gas J 41:60-1 F 4 '43
 Oil development activities in California, 1942. G. R. Kribbs. *maps* Am Assn Pet Geologists Bul 27:862-73 Je '43
 Pacific Coast petroleum industry under wartime conditions. P. J. Howard. *Oil & Gas J* 41:36 F 18 '43
 Portable rigs help meet California's demand for heavy oil. W. A. Sawdon. *il* *diag* Pet Eng 14:128, 130, 132 Ap '43
 Semiannual review. L. P. Stockman. *Oil & Gas J* 42:142, 145 J1 29 '43
 Wildcat drilling in California. W. A. Sawdon. *Pet Eng* 14:100, 102 Ja '43

See also

Petroleum—California
 Petroleum laws and regulations—California

Canada

Annual review. V. Lauriston. *Oil & Gas J* 41:169 Ja 28 '43
 Canadian government organizes company to assist oil operators. *Oil & Gas J* 42:30 My 27 '43
 Extensive development plans launched in northern Canada. L. P. Stockman. *Oil & Gas J* 41:103-4 D 31 '42
 Oil boom grows. *Business Week* p57 J1 3 '43
 Petroleum in Canada. F. K. Beach. *il* *Pet Eng* 15:80+ O '43
 Semiannual review. V. Lauriston. *Oil & Gas J* 42:198+ J1 29 '43
 U.S. companies active in Canada. *Nat Pet* N 35:20+ Mr 31 '43

Colombia

Colombian production hits peak in general South American rise. J. P. O'Donnell. *Oil & Gas J* 42:32 Ag 12 '43
 Colombia's Casabe field showing major caliber. E. Ospina-Racines. *il* *Oil & Gas J* 41: 60-1+ D 31 '42
 Colombia's production prospects. W. A. Sawdon. *map* *Pet Eng* 15:96 O '43
 Export restrictions depress production in Colombian fields. J. P. O'Donnell. *Oil & Gas J* 41:22 N 26 '42

Colorado

Oil and gas industry of Colorado. C. F. Barb. *il* fold map Colorado School of Mines (Golden) Quarterly 37:1-129 bibliog(p72-3, 90, 120-3) Ap '42 (pa 32)

Eastern states

District 1 problems. H. W. Dodge. *Nat Pet* N 35:33+ S 29 '43
 Remedial work in oil fields of the eastern area of the United States. W. N. Little. *Pet Eng* (Ref annual) 14:153-4+ J1 1 '43; *Excerpts*. *Oil & Gas J* 41:40-1 F 18 '43
 Semiannual review. *Oil & Gas J* 42:202+ J1 29 '43

Gulf Coast region

Gulf Coast refiners look to South America for crude. W. T. Ziegenhain. *Oil & Gas J* 41:23+ N 26 '42
 Reconditioning wells in the Gulf Coast area. C. E. Reistle, jr. and T. A. Huber. *Pet Eng* (Ref annual) 14:137-8 J1 1 '43; *Excerpts*. *Oil & Gas J* 41:43 F 18 '43

Illinois

Annual review. H. David. *Oil & Gas J* 41: 131, 134-5 Ja 28 '43
 Secondary recovery can salvage stripper well reserves in Illinois. F. Squires, W. H. Voskuil and A. H. Bell. *Oil & Gas J* 41: 140-1+ Ja 7 '43
 Semiannual review. J. McIntyre. *Oil & Gas J* 42:150+ J1 29 '43

Indiana

Semiannual review. *Oil & Gas J* 42:205-6 J1 29 '43

Kansas

Annual review. C. Hoot. *Oil & Gas J* 41: 147-8, 153 Ja 28 '43
 Auto-ordnance corp. has become one of Kansas' most active oil producers. N. Williams. *il* *Oil & Gas J* 41:34-5 Ja 7 '43
 Dual completions as a means of increasing oil supply in Kansas. N. Williams. *il* *Oil & Gas J* 41:53-4 Ja 21 '43
 Factors affecting expansion of Kansas waterflooding. P. Reed. *il* *Oil & Gas J* 41:62+ Mr 18 '43
 Kansas drawdown productivity tests cut well costs and equipment needs. N. Williams. *Oil & Gas J* 41:119-20+ Ja 7 '43
 Policies and results of water flooding. P. Reed. *il* *Oil & Gas J* 41:31-2+ D 3 '42
 Protection of surface hole in Lindsay wells. N. Williams. *il* *Oil & Gas J* 41:45-7 Ap 29 '43
 Salt-water disposal in Kansas. N. Williams. *il* *Oil & Gas J* 41:29-30 Ap 1 '43
 Semiannual review. C. Hoot. *Oil & Gas J* 42: 17-8, 181 J1 29 '43
 Survey of subsurface brine-disposal systems in western Kansas oil fields. P. Grandone and L. Schmidt. *map* U S Bur Mines Rep of Invest 3719:1-20 '43
 Water production creates corrosion problems in western Kansas. N. Williams. *il* *Oil & Gas J* 41:41-3 Mr 18 '43

Kentucky

Kentucky's new Burbank field producing 8,000 bbl. daily. W. R. Jillson. *map* *Oil & Gas J* 41:118+ D 17 '42
 Semiannual review. *Oil & Gas J* 42:204 J1 29 '43

Latin America

Larger market for Latin-American oil probable as U-boat victims decrease. J. P. O'Donnell. *il* *Oil & Gas J* 42:14+ J1 8 '43
 Latin America petroleum products demand per capita; tabulated by countries. *Oil & Gas J* 41:43 D 31 '42
 Latin-American oil has brilliant future. R. Sheldon. *il* *Oil & Gas J* 41:58-9+ D 31 '42

Louisiana

Annual review. *Oil & Gas J* 41:161-2, 164 Ja 28 '43
 Semiannual review. *Oil & Gas J* 42:169, 171, 193-4+ J1 29 '43

Mexico

Current status of Mexico's petroleum industry. J. J. Marsh. *il* *Pet Eng* 15:198, 200+ O '43
 Expansion planned for all phases of Mexican petroleum operations. *Oil & Gas J* 42:28 J1 15 '43
 Mexican equipment deal expected to center on materials for refineries. C. Vinson. *il* *Oil & Gas J* 42:42-4 My 20 '43
 Mexican petroleum industry. *il* *For Comm W* 12:9+ J1 3 '43
 RFC finances Mexican refinery. A. M. Petty. *Nat Pet* N 35:9 Ag 25 '43

See also

Mexico—Expropriation policy

Michigan

Annual review. *Oil & Gas J* 41:156 Ja 28 '43
 Semiannual review. *Oil & Gas J* 42:197+ J1 29 '43

Mid-continent field

Reconditioning practices in Mid-continent area entering into new era. L. E. Elkins and others. *Oil & Gas J* 41:41-3 F 18 '43
 Shallow Mid-continent fields granted closer well-spacing patterns; text of supplementary order. *map* *Oil & Gas J* 42:34-5+ My 27 '43

Mississippi

Semiannual review. *Oil & Gas J* 42:193-4+ J1 29 '43

New Mexico

Annual review. *Oil & Gas J* 41:117 Ja 28 '43
 Gravel loading of formation increases production of Jal field wells. H. F. Simons. *diag* *Oil & Gas J* 42:39-40 Je 10 '43
 Semiannual review. H. F. Simons. *Oil & Gas J* 42:136, 139-40 J1 29 '43

PETROLEUM industry and trade—Continued

Ohio

Semiannual review. Oil & Gas J 42:204-5 JI 29 '43

Oklahoma

Annual review. C. Hoot. Oil & Gas J 41:125-6, 128 Ja 28 '43

Cumberland field. Nat Pet N 35:19-20 Ap 7 '43

Gas repressuring at Glenn pool. K. E. Barnes and J. F. Sage. diags map Oil & Gas J 42:45-3, 65+ My 27 '43

Modern engineering methods are coping effectively with Cumberland problems. N. Williams. il map Oil & Gas J 42:39-42 S 16 '43

Oklahoma. City production is bolstered by active drilling. N. Williams. il Oil & Gas J 41:250 N 12 '42

Oklahoma study shows need for higher crude prices to push secondary recovery. il Nat Pet N 34:37-40 D 2 '42

Reworking and sidetracking Oklahoma City wells. N. Williams. il Oil & Gas J 41:33-4+ D 17 '42

Semiannual review. C. Hoot. Oil & Gas J 42:182, 184+ JI 29 '43

Pennsylvania

Closing of some Pennsylvania refineries probable because of crude shortages. J. P. O'Donnell. Oil & Gas J 42:36-7 My 20 '43

Horizontal drilling from bottom of shaft in Pennsylvania field. H. L. Schulteis. il Oil & Gas J 42:49, 51+ O 14 '43

Pittsburgh and the petroleum industry. A. H. Adams and B. H. Weil. il Chem & Eng N 21:1077-9 JI 10 '43

Probe for crude with horizontal wells; Venango development corp. in Pennsylvania drills from bottom of oil mine. E. Lamm. Nat Pet N 35:35-6 JI 7 '43

Too much gasoline, neutral oil, concern of Pennsylvania refiners. A. L. Foster. il Oil & Gas J 41:27-8 F 4 '43

Peru

Agua Caliente field in Peru could deliver oil via Amazon; Blue goose oil co. Oil & Gas J 41:107 D 31 '42

Rocky Mountain region

Annual review. T. R. Ingram. Oil & Gas J 41:167-8 Ja 28 '43

Elk Basin may outrank Salt Creek as largest reserve in Rockies. N. Williams. il Oil & Gas J 42:12-14+ N 4 '43

Semiannual review. T. R. Ingram. Oil & Gas J 42:187+ JI 29 '43

South Dakota

Drilling activity in South Dakota. Pet Eng 15:134 O '43

Southeastern states

Developments in southeastern United States in 1942. U. B. Hughes, J. B. Wheeler and R. M. Harris. map Am Assn Pet Geologists Bul 27:990-5 JI '43

Southern states

Petroleum and natural gas of the South. G. Egloff. map Manuf Rec 112:33+ My '43

Texas

Annual review. Oil & Gas J 41:113, 115, 117, 126, 137, 139-40, 142, 144, 149, 151-3, 153 Ja 28 '43

Combat corrosion in west Texas. H. F. Simons. il Oil & Gas J 41:61, 63 F 25 '43

Combination gas-lift and repressuring plant used in Payton, Texas, pool. H. F. Simons. il Oil & Gas J 42:32-4 JI 1 '43

Dikes to protect Cumberland field from flood waters of dam at Denison. il Oil & Gas J 41:35 Ap 22 '43

East Texas bottom-hole pressure showing strain of heavier withdrawals. H. F. Simons. Oil & Gas J 42:10-11 S 2 '43

East Texas future directly related to return of water to Woodbine sand. H. F. Simons. il Oil & Gas J 41:175-8 Ja 28 '43

East Texas salt-water-disposal project may set pattern for future. H. F. Simons. il map Oil & Gas J 41:38-41 F 4 '43

First triple-zone completion in Texas successfully made in Lake Creek field. E. H. Short, Jr. il diag Oil & Gas J 42:76+ O 21 '43

Formation gas used to lift oil in west Texas. H. F. Simons. diag Oil & Gas J 41:65 Ap 29 '43

North Texas operators turning to water flooding to increase oil recovery. H. F. Simons. il map Oil & Gas J 42:35-6, 39 Je 3 '43

Salt-water injection sustains east Texas. W. S. Morris. il Oil & Gas J 42:28-9+ S 30 '43

Semiannual review. H. F. Simons; T. F. Smiley. Oil & Gas J 42:136, 139-40, 147-8, 158, 161, 163-4, 166 JI 29 '43

Slim-hole drilling in Barnhart field in west Texas. H. F. Simons. il map Oil & Gas J 41:48, 53, 55 Mr 18 '43

Subsurface disposal of salt water in the east Texas field; with cost data. W. S. Morris. biblog il map Pet Eng 14:41-9+ JI '43

Texas' deepest well drilled to depth of 14,378 ft. C. C. Pryor. il Pet Eng 14:33-6 Ap '43

Texas operators report ability to increase production nearly 500,000 bbl. daily. Oil & Gas J 42:78-9 JI 29 '43

Texas producers capacity declared adequate for war. E. O. Thompson. Oil & Gas J 41:46 Ja 7 '43

Texas railroad commission report shows possible increment of 1,339,865 bbl. Oil & Gas J 41:48-9 F 25 '43

Texas railroad commission surveys possibility of increasing production. Oil & Gas J 42:52-3 Ag 26 '43

Wells in west Texas pool carried to depletion by gas lift. H. F. Simons. il diag Oil & Gas J 41:56-7+ Ap 22 '43

See also

Petroleum—Texas

Petroleum laws and

regulations—Texas

Trinidad

Chemical treatment of wells in Trinidad. S. P. King. Pet Eng 15:174, 176, 178 O '43

Gas-lift technique employed in Trinidad wells. S. P. King. diags Pet Eng 14:84, 86, 88+ D '42

Trinidad petroleum development company annual ordinary general meeting, London. Economist 143:554 O 31 '42

United States

Address. R. K. Davies. Am Pet Inst Proc 23(1):37-42 '42; Same cond. Oil & Gas J 41:24+ N 19 '42; Abstract. Nat Pet N 34:15-16+ N 18 '42

Address. H. L. Ickes. Am Pet Inst Proc 23(1):16-21 '42; Abstract. Nat Pet N 34:15 N 18 '42

Address on petroleum industry in wartime. W. R. Boyd, Jr. Am Pet Inst Proc 23(1):9-15 '42

Army promises closer coordination in procurement of oil supplies; War department's new fuel and lubricants division. H. D. Ralph. Oil & Gas J 42:14-15 JI 1 '43

Forecast of 22,300 new wells in 1944. F. A. Watts. Oil & Gas J 42:36, 42-3 O 7 '43

Future of the oil industry. R. W. Gallagher. Comm & Fin Chr 157:2163+ Je 10 '43

Higher prices, more lines, solution to oil dilemma, naval affairs group told. H. F. Simons. Oil & Gas J 42:24-5+ JI 1 '43

How the oil industry can contribute more to the winning of the war. H. F. Sinclair. Nat Pet N 35:15-16 F 24 '43

Independent oil men wield power. W. C. Platt. Nat Pet N 35:33-4 My 5 '43

Industry's war capacity. H. C. Wiess. Oil & Gas J 41:28-9 F 18 '43

It happened last year! day-by-day account of 1942's oil highlights. Nat Pet N 35:28, 30, 32-4 Ja 6 '43

New phase of the petroleum industry. B. T. Brooks. biblog il map Chem & Eng N 21:939-48 Je 25 '43

Oil and gas field development in United States, 1942; year book 1943 (review of 1942). v 13 E. C. Harman and E. J. Ralsch, eds. 789p \$7.50 National oil scouts & landmen's assn, P.O. box 425, Austin 8, Texas '43

Oil marketing's importance. R. K. Davies. Nat Pet N 35:5-7 F 24 '43

PETROLEUM industry and trade—United States—Continued

Oil's postwar outlook. J. P. O'Donnell. *Oil & Gas J* 41:22-4, 38 Mr 4 '43
Operators express views on OPA subsidization proposals. *Oil & Gas J* 42:34-6 My 13 '43

Patents and the petroleum industry. *Pet Eng* 14:81-96 N '42

Petroleum industry, 1942. H. P. Stolz and others. *Oil Min & Met* 24:91-101 F '43

Plea for higher crude prices, product compensation. C. L. Henderson. *Oil & Gas J* 41:18 Ap 1 '43

Production outlook in 1943. *Nat Pet N* 34:26 D 30 '42

Putting the finger on oil's own ills. J. B. Fisher. *Nat Pet N* 35:34, 36+ S 29 '43

See Venezuela oil imports as turning point; first shipments from the South American field since war. *Nat Pet N* 35:3-4 Ag 25 '43

Socoyn-Vacuun; fights the war from Kokomo (Ind.) to Kirkuk (Iraq). *Oil map Fortune* 28:110-15+ N '42; 27:114-19+ F '43

Truman committee insists on supplies for industry. H. D. Ralph. *Oil & Gas J* 41:20 D 17 '42

War and postwar problems of American industry. J. R. Suman. *Min & Met* 24:349-51 Ag '43

War problems of petroleum industry; address at Wisconsin meeting. H. Ickes. *Nat Pet N* 35:34-6 Ja 27 '43

Wartime changes in petroleum industry. R. J. Gonzalez. *Am Assn Pet Geologists Bul* 27:970-89 Jl '43

Year of war; Jersey Standard tells of own and oil industry's achievements since Pearl Harbor. *Oil Nat Pet N* 34:32+ D 16 '42

See also

Atlantic refining company

Petroleum—Prices

Petroleum industry and trade—Regulation

Petroleum supply—United States

also American petroleum institute

Foreign properties

Government-financed foreign-oil operations, objective of new agency. H. D. Ralph. *Oil & Gas J* 42:16 Jl 8 '43

Oil for the allies? recruiting campaign of California Arabian Standard to rehabilitate oil properties in Saudi Arabia. *Business Week* p76+ Ag 28 '43

Venezuela

Biggest oil producer created by merger of Lago and Creole petroleum corporations. M. Pescatello. *Barron's* 23:29-30 S 20 '43

Care lengthens service life of rods in Lagunillas field. W. B. Hopkins. *Oil & Gas J* 41:118+ D 31 '42

Completion methods in eastern Venezuela. W. A. Sawdon. *Oil Pet Eng* 15:190 O '43

Deeper Venezuelan drilling poses special mud problems. F. Colahan. *Oil & Gas J* 41:71, 73-4 D 31 '42

Merger of Creole and Lago companies would form largest Venezuela unit. J. P. O'Donnell. *Oil & Gas J* 41:33 Ap 29 '43

Special training for Venezuelan workers. W. A. Sawdon. *Oil Pet Eng* 15:192, 194 O '43

Venezuelan oil; first imports are here. *Business Week* p46+ S 18 '43

Venezuela's oil. *Economist* 144:691-2 My 29 '43

See also

Petroleum laws and regulations—Venezuela

West Indies

Peace and war in the Netherlands West Indies. H. N. Stark. *Oil map For Comm W* 10:9-11, 13+ F 27 '43

Wyoming

Application of heat increases production in Wyoming field. F. V. Eaton. *Oil & Gas J* 41:88+ Ap 22 '43

PETROLEUM industry war council

Davies asks PIWC's aid in farm program. *Nat Pet N* 35:30+ My 19 '43

Immediate increase of 25 cents demanded by Industry council. H. D. Ralph. *Oil & Gas J* 41:30-1 F 11 '43

PIWC oil's embassy at Washington. H. D. Ralph. *Oil & Gas J* 41:62-3 Ap 15 '43

PIWC questions necessity for severe curtailment. H. D. Ralph. *Oil & Gas J* 41:28+ Ap 8 '43

PIWC surveys outlook for supplying enlarged demand; with list of members. *Oil & Gas J* 41:58-9+ N 12 '42

PIWC's postwar planning organization is set up. *Oil & Gas J* 41:27 Mr 11 '43

Some PAW and PIWC actions harmful. R. B. Brown. *Oil & Gas J* 42:24 N 4 '43

Technical advisory committee praised for war services. W. R. Boyd, Jr. *Oil & Gas J* 42:28, 32, 34-5 S 16 '43; Same cond. *Nat Pet N* 35:28-9+ S 15 '43

PETROLEUM laboratories

Women take over men's plant jobs. *Oil Nat Pet N* 35 pt 2:R4-6 Ja 6 '43

Equipment

War-time specifications for I.P. thermometers. *diag Inst Pet J* 29:insert 1-11 S '43

PETROLEUM laws and regulations

See also

Petroleum—Proration

Petroleum industry and trade—Regulation

Arkansas

Statutes pertaining to oil and gas conservation in the state of Arkansas and orders having special reference to the Magnolia field. In U S Bur Mines Rep of Invest 3720: 99-115 '43

California

Drilling restrictions bottle up large reserve at Wilmington. L. P. Stockman. *maps Oil & Gas J* 41:104, 106, 109 F 25 '43

New California regulations of interest to other operators. W. V. Howard. *Oil & Gas J* 41:94+ Ap 29 '43

Spacing restrictions are liberalized in a majority of California oil fields. *Oil & Gas J* 41:32 Ap 29 '43

Stronger enforcement policy in California is outlined. L. P. Stockman. *Oil & Gas J* 41:20 D 24 '42

Suit for billion assails California oil title; controversy over ownership of mineral rights. *Nat Pet N* 35:4 Ag 25 '43

Colombia

Colombian activity may be helped by proposed law. *map Oil & Gas J* 41:38-9 Ap 29 '43

Dominican Republic

Dominican oil law contains features to encourage capital. *Oil & Gas J* 41:74 N 12 '42

Texas

East Texas salt-water developments chief topic at state-wide proration hearing. H. F. Simons. *Oil & Gas J* 41:16 D 24 '42

Etex water-oil ratio held invalid; file appeal. *Nat Pet N* 35:28 Jl 7 '43

Oil deficiencies discussed at Texas hearing. *Oil & Gas J* 41:11+ Ja 21 '43

Texas discovery, extension wells given high allowables. *Oil & Gas J* 42:53 Ag 26 '43

Texas operators discuss shortages, pipe lines and spacing at hearing. H. F. Simons. *Oil & Gas J* 41:46-7 F 25 '43

Texas order penalizes failure to return salt water to oil-producing horizon. *Oil & Gas J* 41:20 N 26 '42

Water-oil ratio order in east Texas attacked in injunction proceeding. *Oil & Gas J* 41:18 Ja 14 '43

United States

Chronology of important federal oil regulations. *Oil & Gas J* 41:106, 109-10, 112 Ja 28 '43

See also

Petroleum industry and trade—Regulation—United States

Venezuela

Impact of Venezuelan oil law may blanket western hemisphere. *Oil & Gas J* 41:24-5 Mr 18 '43

PETROLEUM laws and regulations—Venezuela

—Continued

New petroleum law enacted in Venezuela. H. P. Crawford. *il For Comm W* 12:5-7+ J1 10 '43

New Venezuela oil law raises taxes sharply. Oil & Gas J 41:30 F 18 '43

PETROLEUM patents. See Petroleum—Production methods—Patents; Petroleum—Well drilling—Patents; Petroleum refining—Patents

PETROLEUM pipe lines

Announce plans for new "Big Inch" oil pipe line. Eng N 130:153 F 4 '43

Arc welding accelerates laying of pipe lines. C. M. Taylor. *il Oil & Gas J* 42:196 S 23 '43

Bayou Pipe Line's contribution to war transportation celebrated. P. Reed. Oil & Gas J 42:20 Ag 5 '43

Big Inch arrives. *il Business Week* p14 J1 24 '43

Big-Inch completion due July 16. P. Reed. *il Oil & Gas J* 42:22-3 J1 8 '43

Big Inch; new monument to pipe-line engineers. R. K. Davies and others. *il Pet Eng* 14:107-9+ Mr '43

Big Inch operates. Nat Pet N 35:36 F 24 '43

Big-Inch pipe line, between Longview, Tex. and Norris City, Ill. C. H. Vivian. *il Comp Air M* 47:6884-6 N '42

Big Inch pipe line completed. Comm & Fin Chr 158:531 Ag 5 '43

Big Inch pipe line; with cost data. W. R. Finney and J. E. Adoue. *il plan map Min & Met* 24:440-5 O '43; Excerpts. Nat Pet N 35:26+ O 27 '43

Big Inch stands as monument to Nation's oil men. J. R. Parten and others. *il maps Oil & Gas J* 41:49-54+, 58+, 65-6+, 69-70, 74+, 79+, 94 Ja 7 '43

Building the world's biggest oil line. E. J. Cleary. *il map Eng N* 129:915-20 D 31 '42

California-Texas pipe line may be needed. W. A. Sawdon. *il Pet Eng* 14:106, 108, 110 Ap '43

Completion of Big Inch line to ease oil tension in East. Coal Age 48:122+ Ag '43

Constructing the large-diameter war emergency pipe line. F. H. Love. *il Pet Eng* 14:39-42 N '42

Contracts are let for eastern extension of 24-in. crude line. P. Reed. *il Oil & Gas J* 41:14 D 3 '42

Decision near on route of big products pipe line. H. D. Ralph. Oil & Gas J 41:26-7 Mr 4 '43

Design of batching scraper for crude-oil pipe lines; arc welding; with cost data. R. M. Carter. *diags Oil & Gas J* 41:30, 33-4 D 24 '42

Drill pipe orders deluge producers; pipe-lines helping to solve transportation problem. R. L. Hartford; J. M. Kurtz. *il Steel* 113:63-5 S 13 '43

East hopes Big Inch spells warmth. H. Ozanne. Nat Pet N 35:34, 36 J1 28 '43

Eastern pipe-line survey rushed to speed extension. J. P. O'Donnell. *il Oil & Gas J* 41:8-9 D 24 '42

Failure to furnish tank cars restricts WEP throughput. P. Reed. *il Oil & Gas J* 41:27 Ap 8 '43

Fifth break in branch of Big Inch stirs reports of inquiry. Nat Pet N 35:5 S 8 '43

First half of 1943 marked by great pipe-line achievements. P. Reed. *il Oil & Gas J* 42:124+ J1 29 '43

Floating scraper used on WEP lines. *il Oil & Gas J* 42:64 O 14 '43

Government's new pipe-line projects have industry-wide significance. P. Reed. map Oil & Gas J 41:20-1 F 4 '43

How pipe lines supply East coast. P. Reed. map Oil & Gas J 41:83, 87-8 Ja 28 '43

Ickes asks for steel to extend products line to East coast. H. D. Ralph. *il Oil & Gas J* 41:22+ Mr 11 '43

Laying war-emergency lines in the Gulf Coast area. E. N. Unruh. *il Oil & Gas J* 42:191 S 23 '43

Little Big Inch 59 percent complete. *il Nat Pet N* 35:24+ S 1 '43

Looping programs increase crude-oil flows eastward. Oil & Gas J 41:68 D 3 '42

Merger of northern group strengthens pipe-line systems. map Oil & Gas J 41:162 N 26 '42

Midwestern and Southwestern refiners split on pipe-line issue. Oil & Gas J 41:38+ F 25 '43

National pipe-line program for increasing shipments to East coast. H. D. Ralph. map Oil & Gas J 42:106-7+ S 23 '43

Newest techniques; text in English and Spanish. *il Oil & Gas J* 41:204+ D 31 '42

Oil piped to East reaches 360,000 b/d as Ickes hails war program's success. Nat Pet N 35:32+ O 13 '43

Operation of the pressure welding process. P. Reed. *il Oil & Gas J* 41:35, 45 D 17 '42

Pan American reversed line starts moving products north. *il Oil & Gas J* 41:71+ Mr 25 '43

PAW gives Big Inch schedule. Nat Pet N 35:24-5 Je 9 '43

PAW report shows status of 13 pipeline projects. Nat Pet N 35:24+ Mr 10 '43

PAW reports on status of 10 pipeline projects. Nat Pet N 35:26 Ja 27 '43

Pipe-bending methods on the WEP line. P. Reed. *il Oil & Gas J* 42:180+ S 23 '43

Pipe line of the future. W. R. Finney. *il Oil & Gas J* 42:104-5 S 23 '43

Pipeline progress. *il Nat Pet N* 35:32-3 Ja 13 '43

Pipe lines and war demands. J. R. Parten. Am Pet Inst Proc 23(4):31-5 '42; Excerpts. Nat Pet N 34:16+ N 11 '42; Oil & Gas J 41:30 N 12 '42

Products line extension to East coast approved by WPB, ending dispute. Oil & Gas J 41:26 Ap 8 '43

Project Five system starts deliveries to Helena, Ark. map Oil & Gas J 41:16 D 17 '42

Recent construction on the WEP line; illustrations. Oil & Gas J 41:44-5 F 11 '43

Report of A.P.I. committee on the standardization of oil-country tubular goods. Am Pet Inst Proc 23(4):163-5 '42

Report shows successful work on many pipe-line projects. Nat Pet N 34:26-7 N 25 '42

Second pipeline; WPB approves construction from Texas to Illinois. Nat Pet N 35:26 F 3 '43

Seven war pipeline projects finished. Nat Pet N 35:26+ J1 14 '43

Sinclair pumps oil to Capital. *il Nat Pet N* 35:22 Je 30 '43

Status of WEP program. P. Reed. *il Oil & Gas J* 42:88-9 J1 29 '43

Strategic pipe line constructed using minimum of new materials. F. H. Love. *il Pet Eng* 14:44, 46-7 Ja '43

Texas-New York oil pipe line. *il Engineering* 156:21-2, 30 J1 9 '43

Trenching rock ledges complicates WEP Mississippi River crossing. P. Reed. *il Oil & Gas J* 42:41-2+ My 13 '43

War emergency oil pipe line in America. *il Engineer* 175:508-11 Je 25 '43

WEP Big-Inch shipments still below capacity. P. Reed. Oil & Gas J 41:43 Ap 29 '43

WEP costs below estimates. P. Reed. Oil & Gas J 42:15 J1 22 '43

WEP operating plan disclosed. H. D. Ralph. *il Oil & Gas J* 41:39-40 F 25 '43

WEP river crossings. P. Reed. *il Oil & Gas J* 42:63, 65 Ag 26 '43

WEP schedule calls for 297,000 bbl. daily next 3 months. Oil & Gas J 42:17-18 Je 3 '43

Welding the Big Inch. *il Steel* 113:64-5, 96 Ag 30 '43

Costs

Pipe line will compete with ocean tankers; WEP system, with cost data. P. Reed. *il Oil & Gas J* 41:58, 62+ Ja 7 '43

Finance

Outlook for motor transport, water carriers and pipe lines. P. T. Sheldrick. *il Mag of Wall St* 71:410-11+ Ja 23 '43

Maintenance and repair

Breaks in Big Inch fixed by welded patches. Eng N 131:652 O 28 '43

Making repairs to loaded pipe lines. W. T. Pyott. *il Pet Eng* 14:37-8 Ap '43

Permanent repair to river crossing break in Big-Inch line. F. H. Love. *il Pet Eng* 14:55-6 S '43

Pipe-line terminal practices effect noteworthy economies. P. Reed. *diags Oil & Gas J* 41:85-6 Ap 8; 61 Ap 22 '43

PETROLEUM pipe lines—Maintenance and repair—Continued

Preventive maintenance by systematic pipe-line inspection. D. F. Van de Water. bibliog *Pet Eng* 14:74+ My '43
 Welding technique for pipe-line construction and repair. C. M. Taylor. *il* diags *Pet Eng* 14:162, 164, 166 Mr '43

Multiple fluid lines

Bayou attains high capacity in war emergency. H. H. Anderson, C. E. Dolhonde and L. J. Rittiner. *il* diag map *Oil & Gas J* 42:108-110, 113+ S 23 '43
 Contamination by successful flow in pipe lines. F. C. Fowler and G. Brown. *Am Inst Chem Eng Trans* 39:508-11 Ag '43; Same. *Nat Pet N* 35 pt 2:R486 O 6 '43
 Design of pump stations on the WEP 20-inch products line. P. Reed. *diag Oil & Gas J* 42:156+ S 23 '43
 Multiple-fluid pipe line; flowing oil and gas simultaneously. F. B. Haverfield. *il* diags *Pet Eng* 14:151-2, 155 Mr '43
 Oil line mixing can be economically determined in advance. *Sci Am* 169:134 S '43
 Operating features of project five El Dorado-Helena products line. P. Reed. *il* diags map *Oil & Gas J* 42:59-60+ 21 '43
 Plantation pipeline; its operation a model of efficiency. J. Collins. *il* map *Nat Pet N* 35:30-4 O 6 '43
 Some batching practices used by pipe lines. P. Reed. *il* *Oil & Gas J* 42:44-5 Je 10 '43

Protection

Control of pipe-line corrosion. G. R. Olson. *diags Pet Eng* 14:96+ Ag '43
 Corrosion problems discussed at pipe-line engineers conference. P. Reed. *Oil & Gas J* 41:27 Ap 1 '43

Pumping stations

Butane pump-station equipment. P. Reed. *il* *Oil & Gas J* 41:43 D 10 '42
 Maintenance of pumping station equipment. E. R. Spencer. *Pet Eng* 14:157, 159-60 Mr; 60, 63-4, 67 Ap; 85-6, 88 My '43
 Manifold built for needs of large pump station. P. Reed. *il* *diag Oil & Gas J* 41:151 N 26 '42
 Metal-clad gear in Big Inch stations. J. H. Metz and J. C. Hoyt. *il* *diag Elec W* 120:326 Jl 24 '42
 Operating features of project five El Dorado-Helena products line. P. Reed. *il* *diags map Oil & Gas J* 42:59-60+ O 21 '43
 Pipe-line pump station built with minimum use of critical materials. *il* *Oil & Gas J* 41:32-3 Ap 1 '43
 Portable power unit for pipe line pumping; Diesel unit. *il* *Pet Eng* 15:146 O '43
 Pump-station practices of crude-oil pipe lines. P. Reed. *il* *Oil & Gas J* 41:43-4+ Mr 4 '43
 Reversing flow through pipe-line system. F. H. Love. *il* *Pet Eng* 14:59-60 My '43
 Water conditioning for compressor and pipe-line stations. C. E. Erb. bibliog *Pet Eng* 14:190g-190h, 191-4 Mr '43

Pumping stations, Electric

Advanced design features WEP products-line control desks. M. A. Hyde. *il* *Oil & Gas J* 42:158+ S 23 '43
 Centrifugal pumps speed oil through Big Inch. *il* map *Power* 87:168 Mr '43
 Design of pump stations on the WEP 20-inch products line. P. Reed. *diag Oil & Gas J* 42:156+ S 23 '43
 Electric installations; War emergency pipe line. W. H. Stueve. *il* *Oil & Gas J* 41:65-6+ Ja 7 '43
 Electric motors for the War emergency pipe line. W. G. Taylor. *il* *Oil & Gas J* 41:74. 77 Ja 7 '43
 Electrical problems in constructing War emergency pipeline stations. W. H. Stueve. plan *Pet Eng* 14:133+ Mr '43
 Huge centrifugal pumps speed oil through Big Inch pipeline. H. P. Binder. *il* diags map *Power* 87:661-3+ O '43
 Main centrifugal pumps for WEP 24-inch line. P. Reed. *il* *Oil & Gas J* 41:38-9 Ja 21 '43
 New type automatic pump station. S. S. Smith. *il* diags *Pet Eng* 14:169, 172+ Mr '43

Pipe-line problems from the electrical viewpoint. W. G. Taylor. *il* *Pet Eng* 14:41+ Je 43

Power lines to serve Big Inch pipe line. A. E. Knowlton. *il* diags *Elec W* 120:244-7 Jl 24 '43
 Pumping equipment on world's largest diameter oil line. F. H. Love. *il* *diag Pet Eng* 14:39-41+ Ap '43
 Pumping stations of the WEP 24-inch crude line. P. Reed. *il* *Oil & Gas J* 42:178+ S 23 '43
 Purchased electric power helps Bayou line fill war assignment. E. L. Robinson. *il* *Oil & Gas J* 42:209-10 S 23 '43
 Relaying lines added for Big Inch pumps. H. A. P. Langstaff. diags *Elec W* 120:1032+ S 18 '43
 Stations; War emergency pipe line. *il* plan *Oil & Gas J* 41:69-70 Ja 7 '43

Regulation

See also
 Petroleum industry and trade—Regulation
 Petroleum laws and regulations

Terminals

Bayou attains high capacity in war emergency. H. H. Anderson, C. E. Dolhonde and L. J. Rittiner. *il* diag map *Oil & Gas J* 42:108-110, 113+ S 23 '43
 New York Central handles Big Inch oil; moves 125,000 loaded tank cars. *il* *Ry Age* 115:446-3+ S 18 '43
 Plantation pipeline; its operation a model of efficiency. J. Collins. *il* map *Nat Pet N* 35:30-4 O 6 '43
 Rotation system of tank-car loading used at WEP terminal. P. Reed. *il* *Oil & Gas J* 41:67+ Ap 29 '43

Canada

Far-northern pipeline construction presents transportation problems; involves extensive road building. *il* *Roads & Bridges* 81:38-9+ My '43

PETROLEUM products

Advancing front of petroleum chemicals. R. K. Stratford. flow charts *il* *Chem Ind* 53:489-93 O '43
 All resources pooled to produce aviation gasoline, toluene, and other war necessities. W. Miller. *il* *Min & Met* 24:97-9 F '43; Same abr. *Nat Pet N* 35 pt 2:R99-100 Mr 3 '43
 Butane and pentane content of petroleum products. W. L. Nelson. bibliog *Oil & Gas J* 42:58, 60 Ag 12 '43
 Chemical trends in the petroleum industry. J. C. Walker. *il* *Oil & Gas J* 41:23-5 Ja 21 '43; Excerpt. *Nat Pet N* 35 pt 2:R84 F 3 '43
 Chemistry and the petroleum industry. A. E. Dunstan. *Inst Pet J* 29:163-89, pl 1-13 Jl '43
 Color index; light-colored petroleum products. I. M. Diller and others. bibliog *Ind & Eng Chem Anal* ed 15:367-73 Je 15 '43
 Effect of petroleum products on neoprene vulcanizates; effect of gasoline. D. F. Fraser. *il* *Ind & Eng Chem* 35:947-8 S '43
 Effects of petroleum products on synthetic vulcanizates. R. E. Morris and others. *Rubber Age* 53:335-8 Jw '43
 Market products now and in 1900. *Oil & Gas J* 42:65+ Je 17 '43
 Methods of manufacturing synthetic-rubber intermediates. C. R. Wagner. diags *Oil & Gas J* 41:44+ N 26 '42
 Oil, an additional basic material for the British plastics industry. G. Tugendhat. *Inst Pet J* 29:89-97 Mr '43
 Oil-products containers remain a problem. J. P. O'Donnell. *il* *Oil & Gas J* 41:25-6 F 4 '43
 Petroleum derivatives. 1942. *Oil Paint & Drug Rep* 143:96 Ja 11 '43
 Petroleum in the chemical industry. J. E. Walker. *Chem Age (Lond)* 48:261-6, 285-90, 317-23 Mr 6-20 '43
 Petroleum products in the paint industry. *Paint Oil & Chem R* 105:24 My 6 '43
 Petroleum-refining methods available for wartime demands. J. F. Thornton and W. C. Dickerman, jr. *Pet Eng (Ref annual)* 14:205-7 Jl 1 '43
 Petroleum requirements of farms. W. J. Heggen. *il* *Nat Pet N* 35:22+ Mr 24 '43

PETROLEUM products—Continued

Petroleum solvents. E. M. Toby, Jr. *il Ind & Eng Chem* 35:1043-7 O '43

Petroleum specialty protects Lafayette's fittings and machinery. *Oil & Gas J* 42:56 Ag 26 '43

Petroleum type cresylics. B. W. Conn. *Soap & San Chem* 19:109+ JI '43

Plastics from petroleum. R. J. Moore. flow sheet *Oil & Gas J* 42:49+ JI 1 '43

Possibilities of the petrochemical industry are now developing. W. L. Nelson. *il Oil & Gas J* 42:38-49 My 13 '43

Raw materials for synthetic rubber intermediates. W. L. Nelson. *Oil & Gas J* 41:34-5+ N 26 '42

Refiners' exploring possible escapes from squeeze play. A. L. Foster. *il Oil & Gas J* 41:12-13 D 17 '42

Synthetic rubber from petroleum. G. Egloff. *il Rubber Age* 52:221-6 D '42; Same. *Pet Eng* 14:107-8+ D '42

Use of petroleum products in aircraft. F. D. Klein. *diag S A E J* 51:305-9 S '43; Same. *Nat Pet N* 35 pt 2:R473-6 O 6 '43

War developments of the petroleum industry. E. V. Murphree. *il diags Ind & Eng Chem* 35:623-31 Je '43; Same. *Can Chem & Process Ind* 27:326-32 Je '43; Same. *Pet Eng (Ref annual)* 14:216-18, 220-3 JI 1 '43; Same. *Chem Age (Lond)* 49:127-33 Ag 7 '43; Same. *Pet Refiner* 22:90-8, 116 Je '43; Abstract. *Nat Pet N* 35:22+ Ap 21 '43

Wartime changes depreciate value of gasoline. J. P. O'Donnell. *Oil & Gas J* 41:60 N 12 '42

Wartime farmer is big consumer of oil. *il Nat Pet N* 35:26-7 Je 2; 26, 28+ Je 9 '43

Whither are we bound? refining processes of the future and how change in utilization of petroleum products will influence future manufacturing procedures. R. G. Lovell. *il Pet Eng* 14:37-40 Je '43

See also

Butadiene	Lubricating oils
Gas oil	Naphthenic acids
Gasoline	Oil fuel
Hydrocarbons	Paraffin
Kerosene	Petroleum coke
Liquefied petroleum gas	Petroleum distillation
Lubricating greases	Petroleum refining
	Triptane

Analysis

N-methylaniline point of viscous petroleum oils. B. W. Geddes, L. Z. Wilcox and E. H. McArdle. *bibliog Ind & Eng Chem Anal ed* 15:487-9 Ag 15 '43

Prices

Ceilings hold most petroleum prices static despite pleas for relief. H. S. Norman. *Oil & Gas J* 41:101, 103 Ja 28 '43

OPA proposes new ceilings; letter covering schedules for southwest refiners. *Nat Pet N* 35:26 S 8 '43

OPA seeking uniform refinery prices on sales to East. *Nat Pet N* 35:8+ Ag 11 '43

Prices of the principal petroleum products. Jan. 1939-Jan. 1943; tabulation. *Min & Met* 24:96 F '43

Refinery, seaboard and tank wagon prices. Published in weekly numbers of National petroleum news

Specifications

Minimum specifications set up for eastern supplies. *Oil & Gas J* 41:244-5 N 12 '42

Statistics

Oil demand at new peak. C. O. Willson. *Oil & Gas J* 41:76-7+ Ja 28 '43

Production increase halted; many changes in sources, transportation, and products. B. B. Zavolco. *Min & Met* 24:93-7 F '43

Refined petroleum products, 1938-1941. Survey of Cur Business 1942 Sup p157-9 [supplemented in monthly numbers]

Testing

New edition of the I.P. standard methods for testing petroleum and its products. J. Cantor, E. P. Driscoll and A. Osborn. *Inst Pet J* 29:21-8; Discussion. 28-35 Ja '43

Transportation

Address on transportation problems. J. E. Eastman. *Am Pet Inst Proc* 23(1):31-4 '42

Daily average by month of movement into district 1 by the several methods of transportation of petroleum and petroleum products for periods shown; tabulation. *Nat Pet N* 35:4 Mr 17 '43

Delivery pooling; sample plan. *Nat Pet N* 34:20 D 9 '42

Egg-beaters ply Oil' Man River, speeding products of oil to war; Diesel-propeller towboats on the Mississippi. E. Way, Jr. *il Nat Pet N* 35:26-7, 30, 32-3, 35+ My 26 '43

Floods cut oil flow to East. *Nat Pet N* 35:36 My 26 '43

'43 DSC loss put at 100 million; with list of claims for excess cost of moving products. *Nat Pet N* 35:3+ S 29 '43

Keying oil transport to war. *Nat Pet N* 35:24 Je 2 '43

New record set in oil movement. *il Ry Age* 114:1140-2 Je 5 '43

ODT orders faster tank car movement. *Ry Age* 113:1005-6 D 19 '42

Official text of important orders; petroleum directive 65. *Nat Pet N* 35:9-11 Ap 7 '43

Oil gushes East. *il Business Week* p14-15 Mr 27 '43

Oil movement peak may yet be topped. *Ry Age* 113:789 N 14 '42

Pan American highway is key to wartime transportation. E. W. James. *il Oil & Gas J* 41:91, 94+ D 31 '42

PAW Foreign division juggling supplies to minimize dislocation. J. T. Duce. *Oil & Gas J* 41:76-8 D 31 '42

Petroleum industry developments and their effect on the gas industry; petroleum products for eastern district. E. H. Poe. *Am Gas J* 158:19-20 Ap '43

Pipe lines and war demands. J. R. Parten. *Am Pet Inst Proc* 23(4):31-5 '42; Excerpts. *Oil & Gas J* 41:80 N 12 '42

Rush boxed oil; tank-fitted gondolas for Louisiana-Massachusetts haul. *Nat Pet N* 35:22 Ap 14 '43

Tank car efficiency; ODT to require special permits for commodities not on essential list. *Nat Pet N* 35:32-3 JI 28 '43

Tankers take wing; York (Pa.) company asks permit to operate oil-carrying airplanes. *Nat Pet N* 35:30+ Ag 4 '43

Test box car carrying canvas bags filled with distillate. *il Nat Pet N* 34:26 N 11 '42

Transport tax; regulations impose a 3% tax on oil transportation except by pipelines. *Nat Pet N* 35:26+ F 17 '43

Transportation problems of the oil industry. S. Swensrud. *Oil & Gas J* 41:53 F 25 '43

Trucker outlook; ODT tells Chicago meeting that more regulation and troubles are in store. *Nat Pet N* 35:4 Mr 24 '43

War emergency cooperative association; a petroleum trucking plan that worked. L. A. Odom. *Nat Pet N* 34:34+ N 11 '42

PETROLEUM refineries

Associated's aviation-fuel plant nearing completion. *il Oil & Gas J* 42:33 S 9 '43

Baton Rouge symbol and forecast. *il Pet Refiner* 22:115-20 JI '43

Bud Robineau brings \$5,000,000 refinery to Chauvenet. *il Nat Pet N* 35:23-4 O 27 '43

Butadiene conversion projects involve outlay of \$51,000,000. E. K. Brown. *Oil & Gas J* 41:57+ Ja 21 '43

Butadiene from petroleum; Baton Rouge refinery of Standard oil co. of Louisiana. *il Chem & Met Eng* 50:104-6 JI '43

Butyl rubber production unique American development; Baton Rouge plant. J. A. Lee. flow sheet (p132-5) *il Chem & Met Eng* 50:102-3 JI '43

California plant adapted to refine sulfur crude; road oil and asphalt main products; Bell oil & refining co. *il Oil & Gas J* 42:74 Je 17 '43

Eastern seaboard's first fluid catalytic cracking plant dedicated this week. *Oil & Gas J* 41:8 Ja 21 '43

Fluid catalyst process; catalytic cracking of petroleum. E. V. Murphree and others. *il diags Ind & Eng Chem* 35:768-73 JI '43

Gulf Coast refiners look to South America for crude. W. T. Ziegenhain. *Oil & Gas J* 41:23+ N 26 '42

PETROLEUM refineries—Continued

- Housewarming; New Jersey Standard dedicates new fluid catalytic cracker. *il Nat Pet N 35:16 Ja 27 '43*
- Molecular magic at Baton Rouge. F. J. Van Antwerpen. flow sheets *il diag Chem & Eng N 21:950-9 Je 25 '43*
- Refiners exploring possible escapes from squeeze play. A. L. Foster. *il Oil & Gas J 41:12-13 D 17 '42*
- Refiners face serious shortage. A. L. Foster. *il Oil & Gas J 41:36-8 F 11 '43*
- Refiners' response to war makes technical history. V. B. Guthrie. *Nat Pet N 35:5-6 Je 30 '43*
- Refinery-conversion phase of rubber plans explained; abstracts. B. K. Brown. *Oil & Gas J 41:14-15, 28-9 Ja 14 '43; Nat Pet N 35:19-20, 22-4 Ja 13 '43*
- Refinery conversion program for manufacture of butadiene from petroleum; tabulation. *Nat Pet N 35:22 Ja 20 '43*
- Refinery runs of 4,100,000 barrels daily indicated to meet manufacturing schedule; July quotas by districts. H. D. Ralph. *il Oil & Gas J 42:26-7 JI 15 '43*
- Refining resources pooled to produce essential wartime products. W. Miller. *il Nat Pet N 35 pt 2:R99-100 Mr 3 '43*
- Standardized butadiene-from-oil plant goes on stream at Baton Rouge. *il Nat Pet N 35 pt 2:R314, R316 JI 7 '43*
- Storm damage quickly repaired; Shell reveals how Houston refinery was restored. *Nat Pet N 35:24 S 8 '43*
- Sun dedicates giant aviation gas unit. H. Ozanne. *il Nat Pet N 35:24, 26 N 3 '43*
- Thirty-two plants in big 100-octane program finished. *Oil & Gas J 42:59-60 N 4 '43*
- U.S. stake in 100-octane; RFC has financed 50 plants. *Nat Pet N 35:15 JI 28 '43*
- War-plant yields compared with Lake Charles refinery; report to the Gillette committee; abstracts. B. K. Brown. *Oil & Gas J 41:23, 91 Ja 14 '43; Nat Pet N 35:24+ Ja 13 '43*

See also
Gasoline—Manufacture
Lubricating oils—
Manufacture

Petroleum distillation
Petroleum refining

Air conditioning

- Cooling refinery air; determination of amount of mechanical refrigeration or ice required. W. F. Schaphorst. *chart Pet Eng 14:78 Ag '43*

Cleaning

- Tube cleaners, their application and maintenance. L. A. Kunzler. *il diags Pet Refiner 22:95-100 Ag '43*

Corrosion

- Alloys best suited to resist sour crude corrosion at high temperatures. A. L. Foster. *Oil & Gas J 42:33-4, 36-7 S 30 '43*
- Corrosion control in refinery pressure vessels by arc welded stainless steel linings; with cost data. W. W. McClew. *il diags Nat Pet N 35 pt 2:R10-14 Ja 6 '43*
- Full line of products from high sulfur crudes by conventional processing. *Nat Pet N 35 pt 2:R443-4 O 6 '43*
- Improving products from sour crudes. *bibliog Nat Pet N 35 pt 2:R339-41 Ag 4 '43*
- Neutralization, alloy steels used in handling sour crudes. J. P. O'Donnell. *il Oil & Gas J 42:27-8+ Je 3 '43*
- Practical design and economics of cathodic units applied in a refinery. D. Holsteyn. *diags Pet Refiner 22:107-10 Je '43*
- Problems involved in conventional refining of sour crudes. R. B. Waite and R. H. Aitken. flow diags *Oil & Gas J 42:27-32, 35+ Ag 5 '43*
- Refining of west Texas crude. B. I. Scoggin and G. H. Burruss. *bibliog Pet Refiner 22: 83-90 O '43; Same cond. Nat Pet N 35:28-9, 44-7 O 13 '43; Same cond. Oil & Gas J 42: 61-4+ O 21 '43*
- Sulfur removal from sour crudes reduces corrosion, improves product quality. A. L. Foster. *bibliog il Oil & Gas J 42:111-12, 115-16, 119 Je 24 '43*

Costs

- Cost of blends to meet a gravity requirement. W. L. Nelson. *Oil & Gas J 42:49 Je 3 '43*

- OPA studying refinery costs. H. D. Ralph. *il Oil & Gas J 41:33-4 Mr 18 '43*

Design

- Design of foundations for stacks and towers. V. O. Marshall. *il diags Pet Refiner 22:101-18 Ag '43; Discussion. S. Garnett. 22:128 O '43*

Directories

- Refineries operating in United States, arranged by states; Canada by provinces; Mexican refineries. *Oil & Gas J 41:231+ Mr 25 '43*

Electric equipment

- Automatic process control and cycle timers. E. M. Mills. *il diags Pet Refiner 22:119-22 O '43*
- Desalting crude oil by the Petroco electric process. flow diag *il plan Pet Eng 14:114+ Je '43; Same cond. Nat Pet N 35 pt 2:R307-8, R310-11 JI 7 '43*
- Maintaining electric motors and generators. E. H. Lamberger and W. W. McCullough. *il Pet Eng 14:190+ My; 82+ Je '43*
- Wartime standards for conserving motors, lighting installations in refineries. *Nat Pet N 35 pt 2:R286 Je 2 '43*

Employees

- Absenteeism, an old problem under a new name. N. D'Olive. *il Pet Refiner 22:114, 116 Ap '43*
- Board of governors directs Lion recreation club. M. Lismann. *il Pet Refiner 22:148+ Mr '43*
- Coin your ideas; prize winners contribute to refinery efficiency; Standard oil co. (New Jersey). diags *Oil & Gas J 42:62 Ag 12 '43*
- Employment of women in petroleum refineries. J. M. Silberman and C. G. Bernhard. *Monthly Labor R 57:197-203 Ag '43*
- Gas 'em up, to keep 'em flying; Sun Oil launches campaign to dramatize refinery worker's importance in war effort. *il Nat Pet N 34:24, 26, 28, 30 D 16 '42*
- How Continental oil co. trains women laboratory workers. *il Oil & Gas J 42:36-7 Je 17 '43*
- Meeting manpower shortages in vital refinery jobs. *il Nat Pet N 35 pt 2:R51-5 F 3 '43*
- Plant day at Norco. J. Davis. *il Pet Refiner 22:122, 126+ Je '43*
- Refinery manpower; job definitions pose problem in seeking deferments. *Nat Pet N 35:18 My 5 '43*
- Strike decision hits union's unlawful seizure; National labor relations board's decision in the Mid-continent refinery case. *Nat Pet N 35:8, 35 Ag 4 '43*
- They fill plant and warehouse jobs of men gone to war. *il Nat Pet N 35 pt 2:R101 Mr 3 '43*
- Womanpower in refineries surveyed. *il Nat Pet N 35:22+ Ag 4 '43*
- Women fill plant jobs. *il Nat Pet N 35 pt 2: R395-6, R398+ S 1 '43*
- Women take over men's plant jobs. *il Nat Pet N 35 pt 2:R4-6 Ja 6 '43*
- Workers trained in refinery crafts while in full-time plant jobs; Mid-continent petroleum corp. *il Nat Pet N 35 pt 2:R159-60 Ap 7 '43*

Equipment

- Advantages of large diameter crude still towers. E. F. Brummerstedt. *il diag Pet Refiner 22:91-2 O '43*
- Application of arc-welding in the maintenance of heat-transfer equipment; with cost data. W. H. Parlette. *il diags Pet Refiner 22:87-9 Ja '43*
- Buyers guide of refinery equipment. *Oil & Gas J 41:81-B91 Mr 25 '43*
- Care of centrifugal pumps. N. Williams. *il diag Oil & Gas J 41:45-7 F 18 '43*
- Cell type oil heater performance. *il diag Nat Pet N 35 pt 2:R518, R520-1 N 3 '43*
- Chemical descaling of refinery heat exchange equipment. *bibliog il Nat Pet N 35 pt 2: R152-4 Ap 7 '43*
- Chemical removal of scale is factor in speeding production. H. F. Simons. *bibliog plans Oil & Gas J 42:59-60, 63 My 20 '43*

PETROLEUM refineries—Equipment—Cont.

- Chemistry and the petroleum industry. A. E. Dunstan. *Inst Pet J* 29:163-89, pl 1-13 *Jl* '43
- Codimer for aviation gasoline produced in revamped catalytic poly plant. *Il Nat Pet N* 35 pt 2:R156-4 Ap 7 '43
- Construction of refinery boiler settings. J. T. Browning. *diags Pet Eng* 14:174, 177 My '43
- Cracking coil completes record run. J. P. O'Donnell. *il flow plan Oil & Gas J* 42:221-2 *Jl* 29 '43
- Design and construction of a 33-ft. diameter arc-welded vacuum fractionating tower. E. F. Brummerstedt. *il diags Nat Pet N* 35 pt 2:R74-6, R78-80, R82-3 F 3 '43
- Determining capacity of reciprocating steam pumps. W. L. Nelson. *Oil & Gas J* 41:83 F 25 '43
- Equipment reclamation saves materials in Kansas refinery. N. Williams. *Oil & Gas J* 42:66, 68-9 My 20 '43
- Expanded refinery aids war effort in California; Bell oil and refining company. W. A. Sawdon. *il diags Pet Eng* 14:168, 171 My '43
- Expeditors of equipment for petroleum war plants. *Nat Pet N* 35 pt 2:R158 Ap 7 '43
- 15 years of high temperature research on steels for the refining industry. C. L. Clark and A. E. White. *Nat Pet N* 35 pt 2:R402, R404 S 1 '43
- 5,000 tons of steel salvaged and reclaimed by one company; Phillips petroleum co. A. L. Foster. *il Oil & Gas J* 41:177-8 Mr 25 '43
- For refinery equipment; conserving critical items by electric welding. E. E. Kerns and others. *il diags Nat Pet N* 35 pt 2:R350-4 Ag 4 '43
- Fractionating tower fabricated from tank steel. E. Sterrett. *il Pet Refiner* 22:90-2 *Ja* '43
- Getting the most out of a fractionating tower. W. L. Nelson. *diag Oil & Gas J* 42:49 *Je* 10 '43
- High-vacuum rectifying column employing multiple redistillation. R. M. Schaffner, J. R. Bowman and J. Coull. *diag Nat Pet N* 35 pt 2:R272-4, R276 *Je* 2 '43
- Home-made welded pipe fittings conserve steel in wartime plant construction; with table of cost and weight of welded, screwed and flanged pipe fittings. *il Nat Pet N* 34 pt 2:R410 N 25 '42
- How to double your heat-exchanger surface. W. L. Nelson. *diag Oil & Gas J* 41:34-5 *Ja* 14 '43
- Metallizing in the refinery. J. E. Young. *Pet Eng (Ref annual)* 14:225-7 *Jl* 1 '43
- Method by which refining plants may accumulate scrap metals using sound business principles. G. M. Dent. *plan Pet Refiner* 22:67-9 Mr '43
- New processes require more powerful automatic-control equipment. J. B. McMahon. *diags Oil & Gas J* 41:90, 93-4, 96 Mr 25 '43
- New sweater improves yields, lowers costs. J. P. O'Donnell. *il Oil & Gas J* 42:28, 30-1 *Jl* 22 '43
- Operating multidraw fractionating towers. W. L. Nelson. *diag Oil & Gas J* 41:31-4 *Ap* 1 '43
- Overall plate efficiency of commercial hydrocarbon fractionating columns as a function of viscosity. H. G. Drickamer and J. R. Bradford. *bibliog Am Inst Chem Eng Trans* 39:319-57 *Je* '43; Same. *Pet Refiner* 22:105-18 O '43; Same abr. *Nat Pet N* 35 pt 2:R378-82 *Ag* 4 '43; Discussion. *Am Inst Chem Eng Trans* 39:357-60 *Je* '43
- Plant manufacture of HCl for use in isomerization. *flow diag il Oil & Gas J* 41:202-3-4 Mr 25 '43
- Practical design of foundations for vertical and horizontal vessels. J. A. Shjarback. *diags Nat Pet N* 35 pt 2:R459-60, R462-3-4 O 6 '43
- Practical methods for improving plant cooling water systems. *il Nat Pet N* 35 pt 2:R148-50 *Ap* 7 '43
- Present-day furnace design. H. O. Johanson. *Pet Eng (Ref annual)* 14:243 *Jl* 1 '43
- Procedure for fitting oil into CMP under discussion. *Oil & Gas J* 41:18 D 24 '42
- Protecting refinery equipment by sprayed metal coatings. *il Nat Pet N* 35 pt 2:R102-4 Mr 3 '43
- Quantitative analysis by mass spectrometry. O. L. Roberts. *il diag Pet Eng* 14:109-11, 114-4 My '43
- Rebuilding tubes and tube headers. *il Oil & Gas J* 42:53 N 4 '43
- Reclaiming alloy still tubes; with cost data. *il diags Nat Pet N* 35 pt 2:R210-12 *My* 5 '43
- Reclamation of cracking still furnace tubes; with cost data. L. V. Hile. *il diags Pet Refiner* 22:111-15 *Je* '43
- Refinery materials conservation; design, construction and repair. *Nat Pet N* 35 pt 2:R68-71 F 3 '43
- Refinery use of joint-sealing and anti-seize compounds. *Pet Eng* 14:132, 134 S '43
- Reforming refinery still gases for market consumption. R. L. Bevan. *flow diags il Oil & Gas J* 42:52, 55-6, 59 *Ag* 19 '43
- Renewing small gate valves. *il Pet Refiner* 22:105-6 S '43
- Retreating unit made integral part of new East Coast aviation-gasoline plant. J. P. O'Donnell. *il Oil & Gas J* 42:35 O 28 '43
- Seal oil systems for refinery centrifugal pumps reviewed. L. Taylor. *il diags Nat Pet N* 35 pt 2:R113-16 Mr 3 '43; Same. *Pet Refiner* 22:70-4 Mr '43
- Several 100-octane units given super materials' preference. H. S. Norman. *il Oil & Gas J* 41:32-3-4 *Ja* 7 '43
- Six ways to conserve heat exchangers in plant design and operation. *il Nat Pet N* 35 pt 2:R248, R250 *Je* 2 '43
- Special catalyst-handling equipment provided in HF alkylation plant. *bibliog flow diag il Nat Pet N* 35 pt 2:R243-4 *Je* 2 '43
- Stress analysis of all towers for methods for calculating stresses and required shell thicknesses for vessels used in refineries; towers designed for high winds or seismic forces. E. F. Brummerstedt. *bibliog il diags Nat Pet N* 35 pt 2:R539-40, R542-3 N 3 '43
- Suction conditions for hot-oil pumps. W. L. Nelson. *Oil & Gas J* 42:234 *Jl* 29 '43
- Sunray makes codimer and polymer gasoline in tandem units. *flow chart il Oil & Gas J* 42:32, 34-4 N 4 '43
- Tag means a valve outcast; maintenance and repair program. Whiting refinery of the Standard oil co. of Indiana. *il Nat Pet N* 35 pt 2:R514-16 N 3 '43
- Technique of metallizing to protect equipment from wear and corrosion. J. E. Young. *il Nat Pet N* 35 pt 2:R185-7 *Ap* 7 '43
- \$3,500,000 saved; program for conservation of materials of Phillips petroleum co. *il Nat Pet N* 35 pt 2:R375-7 *Ag* 4 '43
- Trends in centrifugal refinery pumps. K. P. Hurley and D. T. Whiting. *il Pet Eng (Ref annual)* 14:341-4 *Jl* 1 '43
- Tube heater-fractionating tower combination. R. G. Lovell. *il Pet Eng* 14:140-4 S '43
- Use of alternate steels is provided in 1942 pressure vessel code addenda. E. F. Brummerstedt. *Nat Pet N* 35 pt 2:R302-3, R356-7, R410, R414 *Jl* 7, *Ag* 4, S 1 '43
- Valve repair speeds war effort; oil company operates a salvage department. J. C. Albright. *il diag Power* 87:253-4 *Ap* '43
- Valves repaired by electric welding. E. E. Kerns. *il diags Metals & Alloys* 18:48-9 *Jl* '43
- Wartime maintenance and repair. *il Oil & Gas J* 41:102, 105-6 Mr 25 '43
- Wartime plant design. M. B. Miller. *Nat Pet N* 34 pt 2:R407-8 N 25 '42; Same. *Am Pet Inst Proc* 23(3):82-5 '42; Same cond. *Oil & Gas J* 41:51-2 N 19 '42
- Wartime repair of refinery pumps. *Nat Pet N* 35 pt 2:R245-6 *Je* 2 '43
- Wartime salvage and repair work adds much to Nation's steel supply; Lion oil refining co. *il Oil & Gas J* 42:71-2 O 21 '43
- War-time specifications for I.P. thermometers. *diag Inst Pet J* 29:insert 1-11 S '43
- Wartime standards are adopted for refinery still tubes. *Nat Pet N* 35 pt 2:R66-7 F 3 '43
- Water-cooled tube supports for oil tubes in heaters. *diags Nat Pet N* 35 pt 2:R155 *Ap* 7 '43
- Welded steel tube for condensers and heat exchangers. A. F. Zoll. *il diags Pet Eng* 14:35-7, 40 F '43

PETROLEUM refineries—Equipment—Cont.

X-ray analysis and chemical scale removal.
S. C. Morian. *il diag Pet Refiner* 22:72-5
Ja '43

Fires and fire protection

Ferro sulfide source of unexplained tank fires.
D. V. Schonegevel. *Oil & Gas J* 41:34 F 4
'43

Refinery fire-fighting equipment wooden-
wheeled. *il diags Oil & Gas J* 41:40-1 Ja 7
'43

Fuel

Efficient burning of refinery fuels. R. Reed.
Pet Eng (Ref annual) 14:345-6, 348-50 Jl 1
'43; Same cond. *Oil & Gas J* 41:39-43 Mr
11 '43

Survey of fuel consumption at refineries in
1941. G. R. Hopkins. U S Bur Mines Rep of
Invest 3703:1-2, pl 1-2 '43

Laboratories

How Continental oil co. trains women labora-
tory workers. *il Oil & Gas J* 42:36-7 Je 17
'43

Lighting

Proper lighting of the refinery. D. H. Tuck.
diags Pet Eng 14:62+ Ag '43

Protective lighting of oil refineries. R. M.
Swetland. *il Pet Refiner* 22:79-81 Mr '43

Power

Conserving steam to meet wartime load on
boilers. *il Nat Pet N* 35 pt 2:R105-6 Mr 3
'43

Estimating power required for pumps by
short-cut method. W. L. Nelson. *Oil & Gas
J* 41:43+ F 11 '43

Increased steam capacity versus the materials
problem. G. E. Anderson. *il Oil & Gas J*
41:79-81 Ap 8 '43

Induction motor-generator finds many uses in
refineries. W. H. Stueve. *il Oil & Gas J*
41:87-8 Ap 8 '43

Steam consumption of reciprocal pumps. W.
L. Nelson. *Oil & Gas J* 41:46 Mr 11 '43

Protection

Army's internal security program. H. G.
Reynolds. *Oil & Gas J* 41:79+ N 12 '42;
Same. *Am Pet Inst Proc* 23(1):55-7 '42;
Same abr. *Nat Pet N* 34 pt 2:R395-6 N 25
'42

Dogpower; Conoco trains man's best friend
to be saboteur's worst enemy. *il Nat Pet N*
35:19 Ja 6 '43

Industry's responsibility for facility security.
E. K. Brown. *Am Pet Inst Proc* 23(1):64-5
'42

Men and dogs guard Continental plants. *il
Pet Refiner* 22:104+ F '43

OSD facility security program. P. Bastedo.
Am Pet Inst Proc 23(1):58-60 '42

Protective lighting of oil refineries. R. M.
Swetland. *il Pet Refiner* 22:79-81 Mr '43

Trained dogs supplement refinery guard sys-
tem. *il Oil & Gas J* 41:44-5 D 31 '42

Safety measures

Application of new piping requirements in
refineries and gasoline plants. A. D. Sande-
rson. *il Nat Pet N* 35 pt 2:R34-5 Ja 6 '43

Army orders refinery safety work adapted
to wartime conditions. *Nat Pet N* 34 pt 2:
R391-3 N 25 '42

How the world's safety record for refineries
was made; Standard oil co. (Indiana) refin-
ery at Wood River, Ill. L. D. Palmer. *il
Oil & Gas J* 41:43-5 O 22 '42; Same cond.
Nat Safety N 47:14-15+ My '43

How to handle anhydrous hydrofluoric acid
safely. C. M. Fehr. *il Pet Refiner* 22:89-94
Ag '43; Same abr. *Oil & Gas J* 42:39-42
Jl 22 '43; Same abr. *Nat Pet N* 35 pt 2:
R364-7 Ag 4 '43

Meeting war-created problems in plant safety
programs; discussion. *Nat Pet N* 34:24+
D 2 '42

New method for computing pipe wall thick-
ness provided in revised code. S. Crocker.
diags Nat Pet N 35 pt 2:R36-8, R40 Ja 6 '43

Safety in the operation of HF alkylation
plants. R. Benson. *il diags Nat Pet N* 35
pt 2:R532-4, R536 N 3 '43; Same. *Pet Refiner*
22:116-20 D '43

Safety precautions in manufacturing butadi-
ene. C. E. Starr, Jr. *bibliog Nat Pet N* 35
pt 2:R521-2, R524-5 N 3 '43
Standard refinery piping practice is pre-
scribed in new code. *Nat Pet N* 35 pt 2:
R32 Ja 6 '43

Statistics

440,000 b/d additional capacity available in
U.S. refineries, survey reveals. *Nat Pet N*
35:30, 32+ O 20 '43

Waste

Automatic waste oil skimmer. *il Pet Refiner*
22:95-6 O '43

Bottoms from rerun pressure distillate con-
verted to industrial oils. *il Oil & Gas J*
42:40, 43 Jl 1 '43

Combustion of excess gas; automatic control
of boiler firing. R. A. Fox. *diags Oil & Gas
J* 41:109-10+ Mr 25 '43

Vacuum flotation; a new process for sewage
and industrial waste treatment. A. J.
Fischer. *il diags Eng N* 130:297-301 F 25
'43

PETROLEUM refineries, Cooperative

Cooperative refining movement aided by tax
position. C. O. Willson. *il Oil & Gas J* 41:
38-9 Ap 29 '43

Co-ops get stronger toehold in refining. *il Nat
Pet N* 35:13, 20+ Jl 28 '43

More co-op oil, N.C.R.A.'s purchase of Globe
Oil. *Business Week* p92 Jl 24 '43

PETROLEUM refining

All resources pooled to produce aviation
gasoline, toluene, and other war necessities.
W. Miller. *il Min & Met* 24:97-9 F '43; Same
abr. *Nat Pet N* 35 pt 2:R99-100 Mr 3 '43

Alloys best suited to resist sour crude cor-
rosion at high temperatures. A. L. Foster.
Oil & Gas J 42:33-4, 36-7 S 30 '43

Anhydrous HF, tomorrow's refining process
catalyst. A. L. Foster. *bibliog Oil & Gas J*
41:125-6 Ja 7 '43

Big increase in sour crude runs urged to
meet PAW war needs. *Nat Pet N* 35:44-5
O 20 '43

Catalysts of the activated montmorillonite
type. R. C. Davidson, F. J. Ewing and R.
S. Shute. *bibliog flow diags il diags Nat
Pet N* 35 pt 2:R318-21 Jl 7 '43

Chemistry and the petroleum industry. A. E.
Dunstan. *Inst Pet J* 29:163-89, pl 1-13 Jl '43

Engineering development in the petroleum
industry. C. Dalley. *Inst Pet J* 29:8-11 Ja
'43

Expansion of catalytic processing, year's
feature in refining. J. P. O'Donnell. *il Oil
& Gas J* 41:66-8 Mr 25 '43

Facilities for processing sour crude needed
to meet refinery program. *Oil & Gas J* 42:
26-7, 38 O 14 '43

Facts about and possibilities of alkylation
and isomerization processes. A. L. Foster.
il Oil & Gas J 41:77, 81+ Ap 15 '43

Front lines in refining. A. L. Foster. *Oil &
Gas J* 42:77 Je 17 '43

Full line of products from high sulfur crudes
by conventional processing. *Nat Pet N* 35
pt 2:R43-4 O 6 '43

High-octane aviation gasoline program con-
tinues to expand, flow sheets *il Chem &
Met Eng* 50:129-32 Je '43

How war has changed oil-gas ratio; chart.
Business Week p32 My 29 '43

Hydrogen fluoride, the catalyst. J. H. Sim-
mons. *bibliog il Pet Refiner* 22:83-9 Je; 83-7
Jl '43

Improvements in concentrating sulfuric acid.
M. J. Kalous. *Ind & Eng Chem* 35:889-90
Ap '43

Isomerization, a useful but as yet a little
used tool for the refiner. A. L. Foster. *il Oil
& Gas J* 41:66, 69, 71-2 F 25; 51-2 Mr 4 '43

Looking forward in refining. B. K. Brown.
Am Pet Inst Proc 23(3):78-81 '42; Abstract.
Nat Pet N 34:24+ N 18 '42

Lower end points, reform more to reduce
gasoline yield. A. L. Foster. *il Oil & Gas
J* 41:25-6, 29 D 24 '42

Mass spectrometry; new quantitative meth-
od for determining light hydrocarbons in
process control. *il diag Nat Pet N* 35 pt 2:
R258-62 Je 2 '43

Neutralization, alloy steels used in handling
sour crudes. J. P. O'Donnell. *il Oil & Gas
J* 42:27-8+ Je 3 '43

PETROLEUM refining—Continued

New uses for solvent processes. G. F. Fitzgerald. bibliog *Pet Refiner* 22:93-4 O '43
 Newest techniques; text in English and Spanish. *Oil & Gas J* 41:181+ D 31 '42
 Oil refining; the economics of operating in Great Britain. G. Tugendhat. *Automobile Eng* 33:59-60 F '43

PAW reports to the industry; refining closely coordinated. E. D. Cumming. *Oil & Gas J* 42:104+ JI 29 '43

Petroleum-refining methods available for wartime demands. J. F. Thornton and W. C. Dickerman, jr. *Pet Eng (Ref annual)* 14:205-7 JI 1 '43

Petroleum refining processes adapted to styrene manufacture. *il Pet Refiner* 22:121-3 JI '43

Phillips' Cycloversion process. *il Oil & Gas J* 41:41-2 Mr 4 '43

Reduction of ash content of residual oils with boric acid. B. T. Scafe. K. F. Hayden and V. A. Kalichevsky. bibliog diags *Ind & Eng Chem Anal ed* 14:923-6 D 15 '42; Same. *Nat Pet N* 35 pt 2:R36-8 F 3 '43

Refiners must help themselves. *Oil & Gas J* 41:30 Mr 4 '43

Refining of west Texas crude. B. I. Scoggin and G. H. Burruss. bibliog *Pet Refiner* 22:83-90 O '43; Same cond. *Nat Pet N* 35:28-9, 44-7 O 13 '43; Same cond. *Oil & Gas J* 42:61-4+ O 21 '43

Refining west Texas crude. H. H. Wenzke. *Oil & Gas J* 42:43-4, 47, 73-5 O 14 '43
 Refrigeration in the oil refining industry. A. Roe. *il Refrig Eng* 46:225-9 O '43

Too much gasoline, neutral oil, concern of Pennsylvania refiners. A. L. Foster. *il Oil & Gas J* 41:27-8 F 4 '43

War demand assures steady refinery operations. H. S. Norman. *Oil & Gas J* 41:78-80+ Ja 28 '43

War developments in the petroleum industry. E. V. Murphree. *il diags Ind & Eng Chem* 35:623-31 Je '43; Same. *Can Chem & Process Ind* 27:326-32 Je '43; Same. *Pet Eng (Ref annual)* 14:216-18, 220-3 JI 1 '43; Same. *Pet Refiner* 22:90-8, 116 Je '43; Abstract. *Nat Pet N* 35:22+ Ap 21 '43

War needs bring many changes in processing. C. R. Wagner. *il diags Oil & Gas J* 41:82-6, 133 Mr 25 '43

Wartime refining. H. S. Norman. *il Oil & Gas J* 42:121-2 JI 29 '43

Wartime refining processes in the postwar era; abstract. G. Egloff. *Nat Pet N* 35:32 S 29 '43

Wartime refining to bring changes in 1943. E. K. Brown. *il Nat Pet N* 34:18, 20-3 D 30 '42

Whither are we bound? R. G. Lovell. *il Pet Eng* 14:37-40, 67-8 Je-JI '43

See also
 Gasoline—Manufacture Petroleum—Stabilization
 Lubricating oils— Petroleum distillation
 Manufacture Petroleum refineries

Bibliography

NPN semi-annual subject index of refining technology articles, July-December, 1942. *Nat Pet N* 35 pt 2:R93-4 F 3 '43

NPN semi-annual subject index of refining technology articles, January-June, 1943. *Nat Pet N* 35 pt 2:R333-4 JI 7 '43

Science and technology; abstracts prepared in co-operation with the Petroleum Refiner by the Leslie laboratories. *Pet Refiner* 22:128+ Ja '43 [cont monthly]

Patents

Digest of United States patents. H. Heine-mann, comp. *Pet Refiner* 22:148+ F; 152+ Mr; 126+ JI; 148+ Ag '43

Globe upheld in patent suit. *Nat Pet N* 35:18 JI 7 '43

Patents on refining and refinery plant. *Inst Pet J* 28:430A-2A N '42 [cont monthly]

U.S. court probe hits Universal Oil Products patent suit; master charges fraud, asks new trial. *Nat Pet N* 35:5-6 O 27 '43

Salt removal

Crude desalting is must in good refining practice. A. L. Foster. *il Oil & Gas J* 42:225+ JI 29 '43

Desalting crude oil by the Petreco electric process. flow diag *il plan Pet Eng* 14:114+ Je '43; Same cond. *Nat Pet N* 35 pt 2:R307-8, R310-11 JI 7 '43

Reducing refinery offstream time by desalting of crudes. N. Williams. flow diag *Oil & Gas J* 41:149, 161 N 26 '42

Study and teaching

Refinery practice for the operating man (cont). *il diags Pet Eng* 14:72, 75, 78 D '42; 105, 108 Ja; 94, 96, 98 F; 78, 81 Mr; 90+ Ap; 142, 145, 148 My; 69-70, 72, 74 Je; 84, 86 JI; 39-42 Ag; 108+ S; 15:162, 164+ O '43 (to be cont)

Sulfur removal

Alloys best suited to resist sour crude corrosion at high temperatures. A. L. Foster. *Oil & Gas J* 42:33-4, 36-7 S 30 '43

Desulphurization of petroleum distillates with zinc hydroxide. K. A. Musatov and L. G. Krymova. *diag Pet Eng* 15:157-8+ O '43

Improving products from sour crudes. bibliog flow sheets *Nat Pet N* 35 pt 2:R339-45 Ag 4 '43

Problems involved in conventional refining of sour crudes. R. B. Waite and R. H. Aitken. flow diags *Oil & Gas J* 42:27-32, 35+ Ag 5 '43

Sulphur products from the aluminum-chloride complex obtained in refining high-sulphur gasolines. I. I. Tsyganok and L. A. Vanyukova. *Pet Eng* 14:75-6 JI '43

Sulfur removal from sour crudes reduces corrosion, improves product quality. A. L. Foster. bibliog *il Oil & Gas J* 42:111-12, 115-16, 119 Je 24 '43

Vapor recovery

Design for hydrocarbon absorption and stripping. W. C. Edmister. flow diag *Ind & Eng Chem* 35:837-9 Ag '43

Reforming refinery still gases for market consumption. R. L. Bevan. flow diags *il Oil & Gas J* 42:52, 55-6, 59 Ag 19 '43

See also
 Gasoline, Natural—
 Manufacture

Wax removal

New process increases recovery of high-melting-point wax. J. Salmond. flow diag *il Pet Eng* 14:180+ My '43

New sweater improves yields, lowers costs. J. P. O'Donnell. *il diags Oil & Gas J* 42:25, 30-1 JI 22 '43

Refining of high melting-point waxes. V. N. Jenkins. flow chart *il Oil & Gas J* 41:98-9, 101+ Mr 25 '43

Refrigeration in the oil refining industry. A. Roe. *il Refrig Eng* 46:226-8 O '43

PETROLEUM research

Contributions to research in oil from the American chemical society meeting. B. H. Weil. *Nat Pet N* 35 pt 2:R450-2, R454 O 6 '43

Evaluation of effective displacement pressures for petroleum oil-water silica systems. F. C. Benner, C. G. Dodd and F. E. Bartell. bibliog diags *Oil & Gas J* 41:199-200, 203-4+ N 12 '42

Hydrocarbons in petroleum; some results of A.P.I. research project 6. F. D. Rossini. bibliog(80 titles) *il diag Pet Eng* 14:41-2+ F '43

Permeability of porous solids to gases and liquids. L. Grunberg and A. H. Nissan. bibliog diags *inst Pet J* 29:193-225 Ag '43

PAW reports to the industry; research proves worth in affording necessary data. E. B. Swanson. *Oil & Gas J* 42:110 JI 29 '43

Polymerization of mixtures of olefins and diolefins in presence of metallic sodium. V. N. L'vov. *Oil & Gas J* 42:38-9+ JI 8 '43

Production research work governed largely by war conditions. P. E. Fitzgerald. *Min & Met* 24:99-100 F '43

Regional geologic studies for oil and natural gas. H. D. Miser. *Am Assn Pet Geologists Bul* 27:1387-8 O '43

Report of advisory committee on fundamental research on occurrence and recovery of petroleum. bibliog *Am Pet Inst Proc* 23(4):116-27 '42

Revolution in oil; war, and postwar; report to executives. *il Business Week* p61-60 Ap 17 '43

PETROLEUM research—Continued

Study of reservoir fluids by surface recombination experiments; abstract. H. H. Botset and M. Muskat. Oil & Gas J 42:78+ My 20 '43

Synthesis and properties of hydrocarbons of high molecular weight. J. N. Cosby and others. bibliog il Am Pet Inst Proc 22(3): 13-24 '41; 23(3):15-36 '42

Technical advisory committee praised for war services. W. R. Boyd, Jr. Oil & Gas J 42: 28, 32, 34-5 S 16 '43; Same cond. Nat Pet N 35:28-9+ S 15 '43

See also

Gasoline research
Petroleum laboratories

PETROLEUM reserves corporation

Government-financed foreign-oil operations, objective of new agency. H. D. Ralph. Oil & Gas J 42:16 JI 8 '43

Ickes and DeGolyer will head Petroleum reserve corporation. pers Oil & Gas J 42:44 Ag 26 '43

Mystery shrouds PRC oil aims. Nat Pet N 35:3 S 1 '43

Truman committee begins secret probe of PRC, foreign oil policy-shaper. Nat Pet N 35:10+ O 27 '43

PETROLEUM storage

Factors governing selection of lease storage tanks. Oil & Gas J 41:73 F 11 '43

See also

Oil tanks

Vapor recovery

Ingenious system recovers tank-generated vapors. il Oil & Gas J 42:57 S 30 '43

PETROLEUM supply

Added reserves: American petroleum institute committee report. Nat Pet N 35:19 Mr 3 '43

Army's oil front. Business Week p14 JI 10 '43

Availability of world's oil supply. E. O. Thompson. Oil & Gas J 42:39 O 28 '43

Crude petroleum; production and wells completed, 1939-June 1943; chart. Survey of Cur Business 23:2 S '43

Map world-wide supply plan. Nat Pet N 35: 5 JI 7 '43

Petroleum industry war council urges utilization of world oil. Nat Pet N 35:6 JI 21 '43

Petroleum; past, present, and future. P. K. Frolich. bibliog il maps Ind & Eng Chem 35:1131-8 N '43

Reserves in action. W. B. Heroy. Am Assn Pet Geologists Bul 27:954-9 JI '43

Some factors influencing the declining rate of crude-oil discoveries; the geologist's responsibilities in the present situation. L. F. McCollum. Am Assn Pet Geologists Bul 27: 960-9 JI '43

World consumption of petroleum and substitutes during 1942; abstract. V. R. Garfias, R. V. Whetsel and J. W. Ristori. Chem & Met Eng 50:201-2 My '43

World petroleum production, 1942; chart. Business Week p45 Ap 10 '43

World production reviving. J. P. O'Donnell. il Oil & Gas J 42:114, 118 JI 29 '43

World production slumps but revival this year is indicated. J. P. O'Donnell. Oil & Gas J 41:94+ Ja 28 '43

World's fuel resources. J. G. Bennett. Engineer 176:68-9 JI 23 '43

See also

Petroleum—Conser-
vation

World war, 1939—
Petroleum supply

Australia

Pooling modifies crisis in Australian supply problem. R. R. Pugh. Oil & Gas J 41:64 D 31 '42

Great Britain

Petroleum production in the British empire, 1932 to 1942 inclusive; tabulation. J. L. Irwin. Can Min J 64:73 F '43

Spain

Welles reports on oil sent to Spain. Comm & Fin Chr 157:1221 Ap 1 '43

Texas

Texas seeks index; commission will determine the immediate productive capacity. Oil & Gas J 42:33 JI 15 '43

United States

Acute position of crude-oil supply outlined before Compact commission. Sept. 24-25. Oil & Gas J 42:20-1 S 30 '43

Analysis of PAW reserve estimates confirms previous conclusions. W. V. Howard. il Oil & Gas J 41:26-7 F 11 '43

Best places to seek new supplies of oil; abstract. A. R. Denison. Oil & Gas J 42:30-1 My 13 '43

Big war oil demand still ahead; report of Lea oil investigating subcommittee. Nat Pet N 35:24+ JI 7 '43

Call up the reserves. W. B. Heroy. Am Pet. Inst Proc 23(4):16-19 '42

Challenge to petroleum engineers; added supplies of oil must come from present domestic pools through improved secondary recovery techniques. D. R. Knowlton. Min & Met 24:272-3 Je '43

Coal faces postwar readjustment; national fuel policy needed, to benefit both coal and oil industries. R. M. Weidenhammer. Min & Met 24:430-4 O '43

Council urges greater use of foreign oil for military and lend-lease requirements. Oil & Gas J 42:14-15 JI 22 '43

Crisis in crude oil? H. C. Wiess. Min & Met 24:388-91 S '43

Crude-oil production responds to rising war requirements by setting new peak. W. V. Howard. Oil & Gas J 42:93 JI 29 '43

Estimates of proved oil reserves in U.S.; table. Automotive & Aviation Ind 88:61 Mr 15 '43

512,000 barrel a day crude deficit seen; PIWC committee warns United nations. il Nat Pet N 35:32, 34+ S 8 '43

Fuel movement better, supplies short. Power 87:582-5 S '43

Industry's war assignments met completely. W. R. Boyd, Jr. Oil & Gas J 41:52 D 31 '42

Just how much oil have we anyhow? Business Week p58 Ap 17 '43

Large reserve decline shown by allocations to discovery year. W. V. Howard. Oil & Gas J 41:14-16 Ap 1 '43

Location of oil reserves big factor in supply deficiency. W. V. Howard. il Oil & Gas J 41:14-15+ N 19; 18-19 N 26 '42

Major fields called upon to supply disproportionate share of Nation's oil. W. V. Howard. Oil & Gas J 42:94, 96 JI 29 '43

Mines bureau plans oil search. Nat Pet N 35:19 My 26 '43

National fuel policy. R. M. Weidenhammer. maps J Land & Pub Util Econ 19:127-40 My '43

Nation's major fields. W. V. Howard. Oil & Gas J 41:171-2 Ja 28 '43

New phase of the petroleum industry. B. T. Brooks. bibliog il map Chem & Eng N 21: 939-48 Je 25 '43

Oil at crossroads. Business Week p28-9+ N 14 '42

Oil bonus to spur discoveries; district 5 announces plan to give higher allowables to discovery wells. Nat Pet N 35:21 JI 14 '43

Oil takes space; petroleum makes up half the tonnage going overseas. Business Week p28 JI 3 '43

Oil, winner and loser in this war; reserves adequate for demands, but long-term depletion exceeds discoveries. R. P. Crawford. Barron's 23:3 Ap 12 '43

Our future oil supply. J. E. Brantly. il Pet Eng 15:71-3, 76, 78 O '43

PAW enlarges oil well drilling program. Nat Pet N 35:26 JI 28 '43

PAW reports to the industry; era of abundant production fading. D. R. Knowlton. Oil & Gas J 42:103 JI 29 '43

PAW wants oil. Business Week p27-9 Ag 14 '43

Petroleum exploration and development in wartime. E. DeGolyer, il Min & Met 24:188-90 Ap '43; Excerpts. Oil & Gas J 41:13-14 D 24 '42; Abstract. Nat Pet N 35:30 F 24 '43

Petroleum geologist in the war. F. L. Aurin. Am Assn Pet Geologists Bul 27:929-37 JI '43; Excerpt. Oil & Gas J 41:37+ Ap 8 '43

PETROLEUM supply—United States—Cont.

- PIWC told of steep rise in oil demand as ability to produce falls behind. H. D. Ralph. Oil & Gas J 42:34+ S 9 '43
- Petroleum; past, present, and future. P. K. Frolich. bibliog il maps Ind & Eng Chem 35:1131-8 N '43
- Petroleum reserves of U.S.—new discoveries, 1942. Nat Pet N 35:21 F 10 '43
- Petroleum shortage in the United States. E. T. Brooks and L. C. Snider. bibliog il Chem & Eng N 21:69-72 Ja 25 '43; Same. Oil & Gas J 41:26-8 Ja 21 '43
- Postwar demand for U.S. crude. W. V. Howard. Oil & Gas J 42:78-80 Je 24 '43
- Production stays at peak level. W. V. Howard. Oil & Gas J 41:74-5 Ja 28 '43
- Productive capacity of district 2 falling, future estimates lowered. H. S. Norman. Oil & Gas J 41:74 Mr 25 '43
- Proven reserves. W. V. Howard. il maps Oil & Gas J 41:64-71 Ja 28 '43
- Proven reserves continue decline with important discoveries in 3 areas. W. V. Howard. map Oil & Gas J 42:90-2 Ji 29 '43
- Recent developments in fuels supply and demand. A. C. Fieldner. bibliog W Soc E J 43:127-47 S '43; Same. U S Bur Mines Information Circ 7261:1-27 '43; Abstract. Gas Age 91:40+ My 20 '43; Same. Am Gas Assn Mo 25:253 Je '43
- Reserve estimates; comparing A.P.I. and Oil and gas journal estimates. Oil & Gas J 41:69-70 Mr 4 '43
- Revisions account for higher A.P.I. reserves. Oil & Gas J 41:34 Mr 4 '43
- Secondary production depends on price rise, witnesses say; hearing before the House petroleum subcommittee. Oil & Gas J 41:15-16 D 3 '42
- Secondary recovery may have vital role in the war effort. P. D. Torrey. Pet Eng 14:116D+ Ja '43
- Shale oil, other substitutes and the petroleum shortage. B. H. Weil. il Nat Pet N 35 pt 2; E348-9 Ag 4 '43
- Some factors influencing declining rate of crude-oil discoveries. L. F. McCollum. Pet Eng (Ref annual) 14:32, 34-6 Ji 1 '43; Same abstr. Oil & Gas J 41:41+ Ap 8 '43
- Storage or imports must supply 400,000 bbl. daily shortage; abstract. R. E. Wilson. Oil & Gas J 42:18-19 Ji 1 '43
- Study reveals imperative need for increasing Nation's oil reserves. H. J. Struth. map Pet Eng 14:31-8, 40, 42 Ja '43
- Supply of hydrocarbons fully adequate for emergency needs. G. G. Oberfell and R. C. Alden. Oil & Gas J 41:36-7+ N 26 '42
- Survey of the Nation's oil reserves and needs. W. B. Heroy. Oil & Gas J 41:34 Ap 8 '43
- 10,000 wildcats, and then some; rate must rise more as productivity per discovery goes down. J. M. Lovejoy. Nat Pet N 35:26+ Ji 7 '43
- Thirty per cent rise in drilling recommended by production committees. H. S. Norman. Oil & Gas J 41:22 F 11 '43
- Vast oil reserve: West has billions of barrels locked in shale. Business Week p28-9 S 11 '43
- Venezuelan oil: first imports are here. Business Week p46+ S 18 '43
- Wildcat drilling in 1942. F. H. Lahee. maps Am Assn Pet Geologists Bul 27:715-29 Je '43; Same cond. Oil & Gas J 41:40+ Ap 8 '43
- See also
Oil shales
Petroleum—Stripper wells
- PETROLEUM waste**
Brine stabilization with sodium hexameta-phosphate. F. W. Jessen and J. L. Battle. bibliog il Ind & Eng Chem 35:650-4 Je '43
- Construction and operation of a water-treatment and disposal plant. flow diag il Oil & Gas J 42:29-32 Ji 8 '43
- Kansas oil field brines analyzed for the recovery of magnesium. W. H. Schoewe. Nat Pet N 35 pt 2:R466-7+ O 6 '43

Oklahoma oil-field brines and their utilization. B. W. Logue. Oil & Gas J 41:49-50+ F 11 '43

Subsurface disposal of salt water in the east Texas field; with cost data. W. S. Morris. bibliog il map Pet Eng 14:41-9+ Ji '43

Suggestions for prevention of pollution of waters by oil field wastes; abstract. Am Water Works Assn J 35:954-5 Ji '43

See also
Petroleum refineries
—Waste

PETROLEUM workers

- Deferments: how to get them; ODT issues instructions and forms for oil truckers on draft replacement schedule plan; text and examples. Nat Pet N 35:26, 28-30 My 12 '43
- Draft deferments in essential branches of oil industry. Nat Pet N 35:7+ My 19 '43
- Drilling-labor outlook aided by government-industry program. S. E. Hill. Oil & Gas J 42:47-8 O 7 '43
- Expansion of refining facilities aggravates manpower shortage in California. L. P. Stockman. il Oil & Gas J 42:16-18 Ag 5 '43
- Fourteen suggestions made for overcoming labor shortages. H. D. Ralph. il Oil & Gas J 41:20-2 F 13 '43
- How General Petroleum copes with labor shortage. il Oil & Gas J 42:30-1 S 16 '43
- How Standard of California is meeting the manpower problem. il Oil & Gas J 42:82-3 Je 24 '43
- Industry's workers assigned higher status in new policy. Oil & Gas J 41:22-3 D 17 '42
- Interpretations bring important changes in labor law applications. Oil & Gas J 42:46+ Ag 26 '43
- Job design as applied to the pumper's daily routine. H. G. Thuesen and M. R. Lohmann. il Oil & Gas J 41:115-18 Ja 7; 36-8 Ja 14 '43
- Manpower: where oil stands. Nat Pet N 35:3-5 My 12 '43
- Medical service statistics; Standard Oil's ten-year review. Ind Med 11:593-4 D '42
- Oil companies advised to file revised schedules for replacing fathers. Oil & Gas J 42:38 Ag 12 '43
- Oil for the allies? recruiting campaign of California Arabian Standard to rehabilitate oil properties in Saudi Arabia. Business Week p76+ Ag 28 '43
- Oil industry should benefit from changes in selective service rules. il Oil & Gas J 42:32-3 Ag 19 '43
- Problem for WMC; manpower shortage in production may force action. Nat Pet N 35:27-8 Ja 13 '43
- Safety vs. oomph; training women to take over jobs in the petroleum industry; abstract. A. J. Gorand. Nat Pet N 35:6 Mr 31 '43
- Special training for Venezuelan workers. W. A. Sawdon. il Pet Eng 15:192, 194 O '43
- Stanolind gears supervisor and employe training to war-accelerated needs. il Oil & Gas J 42:18-20 S 2 '43
- Training nontechnical personnel to replace service-enlisted engineers. E. H. Short, jr. Oil & Gas J 42:51-2+ O 7 '43
- Training programs touch all phases of operations; Standard oil company of New Jersey gives scholarships and training to South American employees. il Oil & Gas J 41:79+ D 31 '42
- Trucker manpower; training program prepared by ODT for oil truckers. Nat Pet N 35:38-41 My 26 '43
- War manpower commission and the petroleum industry; abstract. H. LeBlanc. Oil & Gas J 41:57+ My 6 '43
- WMC clarifies essential jobs in oil industry. Nat Pet N 35:9-10 Ag 18 '43
- Women efficient at many jobs formerly reserved to men. il Pet Refiner 22:118+ S '43
- See also
Petroleum refineries
—Employees
- PETROLOGY.** See Rocks
- PFIZER, Charles, and company**
1942 report. Comm & Fin Chr 157:1186 Mr 29 '43

- PFLAGER, Harry Miller, 1866-**
Franklin Institute awards the Henderson medal for achievements in development of steel castings. *por Ry Mech Eng* 117:213 My '43; Same *abr. Ry Age* 114:839-40 Ap 24 '43
- PHARMACEUTICAL chemistry.** See Chemistry, Medical and pharmaceutical
- PHARMACEUTICAL education, American foundation for.** See American foundation for pharmaceutical education
- PHARMACEUTICAL laboratories**
Laboratory building will aid war effort; constructed for E. R. Squibb & sons. *il Eng N* 129:756 D 3 '42
Laboratory for modern medicine; manufacturing plant for G. D. Searle & co. *il plans Arch Rec* 93:49-60 Je '43
Merck Institute marks tenth year. *Oil Paint & Drug Rep* 143:34- My 3 '43
Research in the service of medicine; new laboratories of G. D. Searle & co. *il(p* 1668-9) *Chem & Eng N* 20:1648 D 25 '42
- PHARMACEUTICAL libraries**
Libraries and the nutrition program from the standpoint of the pharmaceutical library. E. J. Heath. *Special Lib* 34:269-71 Jl-Ag '43
- PHARMACEUTICAL research**
Study of germicides and bactericides at the Ohio state university. *Science* 98:128 Ag 6 '43
- PHARMACOLOGY**
See also
Antispasmodics Chemotherapy
Chemistry, Medical Drugs
and pharmaceutical Mydratics
- PHARMACOPOEIAL standards, Canadian committee on.** See Canadian committee on pharmacopoeial standards
- PHARMACY**
See also
Chemistry, Medical
and pharmaceutical
Drugs
 Laws and legislation
 See also
Drugs—Laws and
 legislation
 Study and teaching
- Pharmacy foundation board to allocate funds in support of colleges of pharmacy. *Oil Paint & Drug Rep* 143:3 My 3 '43
- PHASE adjusters**
Phase shifter regulates figure 8 interconnection. L. P. Ferri and H. R. Vaughan. *il diags Elec W* 120:75-7 Jl 10 '43
Phase shifting devices. G. W. Stubbings. *Electrician* 130:467-8 My 7 '43
- PHASE rule and equilibrium**
Application of the phase rule to soap boiling; kettle wax in the ternary system soap-water-salt. J. W. McBain and W. W. Lee. *bibliog Ind & Eng Chem* 35:917-21 Ag '43
Binary systems involving ethylene chlorohydrin; vapor-liquid equilibria. H. B. Snyder and E. C. Gilbert. *bibliog Ind & Eng Chem* 34:1519-21 D '42
Determination of high pressure vapor-liquid equilibria; the vapor-liquid equilibrium of benzene-toluene. J. Griswold, D. Andres, and V. A. Klein. *bibliog diags Am Inst Chem Eng Trans* 39:223-40 Ap '43; Same. *Pet Refiner* 22:99-106 Je '43
Effect of temperature on liquid-liquid equilibrium; benzene-acetone-water system and dodecane-1,6-diphenylhexane-furfural system. S. W. Briggs and E. W. Comings. *il diags Ind & Eng Chem* 35:411-17 Ap '43
Equilibria in ethanol-water system at pressures less than atmospheric. A. H. Beebe, jr. and others. *Ind & Eng Chem* 34:1501-4 D '42
Equilibrium flash vaporization of three petroleum fractions. W. C. Edmister, J. C. Reidel and W. J. Merwin. *bibliog flow diag il Am Inst Chem Eng Trans* 39:457-85; Discussion. 485-9 Ag '43
Equilibrium of gaseous dibromoethylenes. R. M. Noyes and R. G. Dickinson. *Am Chem Soc J* 65:1427-9 Jl '43
- Equilibrium still for miscible liquids; data on ethylene dichloride-toluene and ethanol-water. C. A. Jones, E. M. Schoenborn and A. P. Colburn. *bibliog il diag Ind & Eng Chem* 35:666-72 Je '43
Ethanol-water system; vapor-liquid properties at high pressures. J. Griswold, J. D. Haney and V. A. Klein. *bibliog il diag Ind & Eng Chem* 35:701-4 Je '43
Liquid-liquid phase equilibria of the system cyclohexane-methyl alcohol in the presence of various salts as third components. E. L. Eckfeldt and W. W. Lucasse. *bibliog J Phys Chem* 47:164-83 F '43
Liquid-vapor equilibrium compositions in hydrogen chloride-*n*-butane system. J. H. Ottenweller, C. Holloway, jr. and W. Weinrich. *bibliog Ind & Eng Chem* 35:207-9 F '43
Phase behavior of lithium palmitate with water and with lithium chloride and water. M. J. Vold. *bibliog Am Chem Soc J* 65:465-9 Mr '43
Phase diagrams and the mass law. T. R. Briggs. *J Chem Educ* 20:484-7+ O '43
Phase equilibria at high temperatures. R. R. White and G. G. Brown. *flow diag bibliog diags Ind & Eng Chem* 34:1162-74 O '42; Same. *Nat Pet N* 34 pt 2:R374, R376-8, R380-1, R432-5 O 28, N 25 '42; Same. *Pet Eng. (Ref annual)* 14:282-3, 286-92, 295-6 Jl 1 '43
Phase equilibria in hydrocarbon systems; composition of dew-point gas in ethane-water system. H. H. Reamer and others. *bibliog il Ind & Eng Chem* 35:790-3 Jl '43
Phase equilibria in hydrocarbon systems; heat of solution of ethane and propane. R. A. Budenholzer, B. H. Sage and W. N. Lacey. *bibliog il diag Ind & Eng Chem* 35:1214-20 N '43
Phase equilibria in hydrocarbon systems; methane-decane system. H. H. Reamer and others. *bibliog Ind & Eng Chem* 34:1526-31 D '42
Phase equilibria in hydrocarbon systems; volumetric behavior of methane. R. H. Olds and others. *il Ind & Eng Chem* 35:922-4 Ag '43
Pure hydrocarbons from petroleum; vapor-liquid equilibria of close-boiling hydrocarbons. J. Griswold. *bibliog il Ind & Eng Chem* 35:247-51 F '43
Pure hydrocarbons from petroleum; vapor-liquid equilibrium of methylcyclopentane-benzene and other binary aromatic systems. J. Griswold and E. E. Ludwig. *bibliog Ind & Eng Chem* 35:117-19 Ja '43
Relative weights of phases present in a heterogeneous system at equilibrium. W. M. Spicer and J. S. Metcalf. *J Chem Educ* 20:199 Ap '43
Ternary liquid and binary vapor-liquid systems; a method of tie line interpolation for phase equilibrium relations. C. E. Dryden. *bibliog Ind & Eng Chem* 35:492-4 Ap '43
Ternary system; dioxane-ethanol-water. C. H. Schneider and C. C. Lynch. *bibliog Am Chem Soc J* 65:1063-6 Je '43
Triple point of water. W. Waring. *bibliog Science* 97:221-2 Mr 5 '43
Vapor-liquid equilibria for commercially important systems of organic solvents; binary systems ethanol-*n*-butanol, acetone-water and isopropanol-water. A. S. Brunjes and M. J. P. Bogart. *bibliog Ind & Eng Chem* 35:255-60 F '43
- PHELPS DODGE corporation**
Consolidated income account, 1940-1942. *Comm & Fin Chr* 157:1089 Mr 22 '43
- PHENACYLAMINE.** See Aminoacetophenone
- PHENANTHRAQUINONE.** See Phenanthrenequinone
- PHENANTHRENE**
Aromatic cyclodehydration; 9,10-dialkylphenanthrenes. C. K. Bradsher and S. T. Amore. *bibliog Am Chem Soc J* 65:2016-17 O '43
Phenanthrene derivatives; acetylation and succinoylation of 3-methylphenanthrene. W. E. Bachmann and G. D. Cortes. *bibliog Am Chem Soc J* 65:1329-34 Jl '43

PHENANTHRENEQUINONE

Reactions of phenanthraquinone and retenequinone with aldehydes and ammonium acetate in acetic acid solution. E. A. Steck and A. R. Day. *bibliog Am Chem Soc J* 65: 452-6 Mr '43

PHENANTHRENEQUINONIMINE

Reactions of retenequinonimine and phenanthraquinonimine with aldehydes; a new example of an aldol-type of condensation. C. W. C. Stein and A. R. Day. *bibliog Am Chem Soc J* 64:2567-9 N '42

Reactions of retenequinonimine and phenanthraquinonimine with Schiff bases; a new example of an aldol-type of condensation. C. W. C. Stein and A. R. Day. *bibliog Am Chem Soc J* 64:2569-73 N '42

PHENANTHROLINE

Color reactions of 1,10-phenanthroline derivatives. M. L. Moss, M. G. Mellon and G. F. Smith. *Ind & Eng Chem Anal ed* 14:931-3 D 15 '42

Colorimetric determination of copper with 1,10-phenanthroline. M. L. Moss and M. G. Mellon. *bibliog Ind & Eng Chem Anal ed* 15:116-18 F 15 '43

Colorimetric determination of iron with 2,2'-bipyridyl and with 2,2',2''-terpyridyl. M. L. Moss and M. G. Mellon. *bibliog Ind & Eng Chem Anal ed* 14:862-5 N 15 '42

Magnetic susceptibility of the brown ferric phenanthroline complex. L. Michaelis and S. Granick. *Am Chem Soc J* 65:481-2 Mr '43

Revision of the oxidation potentials of the orthophenanthroline- and diipyridyl-ferrous complexes. D. N. Hume and L. M. Kolthoff. *bibliog Am Chem Soc J* 65:1895-7 O '43

Spectrophotometric determination of iron with o-phenanthroline and with nitro-o-phenanthroline. J. P. Mehlig and H. R. Huett. *bibliog Ind & Eng Chem Anal ed* 14:369-71 N 15 '42

PHENANTHROXAZOLES

Reactions of retenequinonimine and phenanthraquinonimine with aldehydes; a new example of an aldol-type of condensation. C. W. C. Stein and A. R. Day. *bibliog Am Chem Soc J* 64:2567-9 N '42

Reactions of retenequinonimine and phenanthraquinonimine with Schiff bases; a new example of an aldol-type of condensation. C. W. C. Stein and A. R. Day. *bibliog Am Chem Soc J* 64:2569-73 N '42

PHENARSAZINE

Experimental skin sensitization with war gases. R. W. Linton. *Franklin Inst J* 235: 641-3 Je '43

PHENETHYLAMINE

Condensation of unsaturated amines with aromatic compounds; the preparation of β -substituted phenethylamines. A. W. Weston, A. W. Ruddy and C. M. Suter. *bibliog Am Chem Soc J* 65:874-7 Ap '43

Phenethylamines; dimethoxy and dihydroxy-phenyl-*n*-propylamines (β -methyl- β -phenethylamines). E. H. Woodruff. *bibliog Am Chem Soc J* 64:2859-62 D '42

PHENETYL urea. See Dulcin**PHENOL**

Catalytic ethylation of phenol; abstract. Z. P. Alexandrova. *Chem & Met Eng* 50:227-8 My '43

Condensation of methyl dipropyl carbinols with phenol in the presence of aluminum chloride. R. C. Huston and C. R. Meloy. *bibliog Am Chem Soc J* 64:2655-7 N '42

Design fundamentals for phenolics. J. A. Petho. *il diags Mod Plastics* 20:77-8+ D '42

Phenol shortage, substitutes studied by War board. *Oil Paint & Drug Rep* 142:3+ N 30 '42

Phenol shortages reflected in February allocations. *Oil Paint & Drug Rep* 143:3+ F 8 '43

Preparation of pentabromophenol and bromanil from phenol. M. Kohn. *J Chem Educ* 20:117 Mr '43

Preservation of phenol content in polluted river water samples previous to analysis. M. B. Ettinger, S. Schott and C. C. Ruchhoff. *bibliog Am Water Works Assn J* 35: 299-302 Mr '43

Raman spectra of L-ascorbic acid, tetronic acid and related compounds. J. T. Edsall and E. L. Sagall. *bibliog Am Chem Soc J* 65:1312-16 JI '43

Safe handling and storage of phenol. *il diags Chem Ind* 52:730-3 Je '43; *Excerpt. Chem Age (Lond)* 49:285-6 S 18 '43

Analysis

Determination of o-cresol in phenol by a cloud point method. W. Seaman, A. R. Norton and R. T. Foley. *bibliog Ind & Eng Chem Anal ed* 15:159-61 Mr 15 '43

Determination of phenol and m-cresol in coal distillation products by means of the Spekker photo-electric absorptiometer. T. S. Harrison. *Soc Chem Ind J* 62:119-23 Ag '43

Ultraviolet photometer for analysis of solutions. I. M. Klotz. *diag Ind & Eng Chem Anal ed* 15:277-8 Ap 15 '43

Manufacture

Phenol; Dow chemical co. *Chem & Eng N* 20:150 N 25 '42

Phenol recovery; wash oil employed in special process. K. Koepfel. *plan Chem Age (Lond)* 47:495-6 D 5 '42

PHENOL condensation products

Advances in plastics during 1942. L. M. Debing. *bibliog il Mod Plastics* 20:91-2 Je '43

Effects of continuous heat on phenolics. T. S. Carswell, D. Telfair and R. U. Haslanger. *bibliog Mod Plastics* 20:79-82+ F '43

Influence of temperature on the mechanical properties of molded phenolic materials. T. S. Carswell, D. Telfair and R. U. Haslanger. *bibliog Am Soc T M Proc* 42:944-53 '42; *Same. Mod Plastics* 19:65-9 JI '42; *Discussion. Am Soc T M Proc* 42:954-5 '42

Phenol resins and resin emulsions and their application to textiles. W. H. Butler. *il diags Am Dyestuff Rep* 32:128-33 Mr 15 '43

Phenolic materials for wartime demands; bearings. F. W. Vogt. *diags Paper Tr J* 117: 28-30 JI 1 '43

Soybean-modified phenolic plastics. L. L. McKinney and others. *Ind & Eng Chem* 35: 905-8 Ag '43

See also

Bakelite

PHENOLATES. See Phenoxides**PHENOLDISULFONIC acid**

Determination of the oxides of nitrogen by the phenoldisulfonic acid method. R. L. Beatty, L. B. Berger and H. H. Schrenk. *diags U S Bur Mines Rep of Invest* 3687:1-17 '43

PHENOLPHTHALEIN

Methylene blue and other indicators in general acids; the acidity function. G. N. Lewis and J. Bigeleisen. *bibliog Am Chem Soc J* 65:1144-50 Je '43

See also

Sodium tetraiodo-phenolphthalein

PHENOLS

Absorption spectra of some m-substituted phenols, and the influence of nucleophilic substituents on electronic mobility. H. H. Hodgson. *Chem Soc J* p380-2 Ag '43

Alkylated cresols from refinery gases. W. Weinrich. *il plan Ind & Eng Chem* 35:264-72 Mr '43

Color reaction for natural pigments and phenols. H. Tauber and S. Laufer. *Am Chem Soc J* 65:736-7 Ap '43

Dehydrating effect of disinfectants on egg-albumin solutions. A. Steigmann. *Soc Chem Ind J* 61:178-80 N '42

Determination of the phenols content of surface waters. R. D. Scott. *Am Water Works Assn J* 35:592-4 My '43

Electric moments of ortho-substituted phenols and anisoles; halogen derivatives. W. F. Anzilotti and E. C. Curran. *bibliog Am Chem Soc J* 65:607-11 Ap '43

Indirect phenol-aldehyde condensations. J. B. Niederl and J. S. McCoy. *bibliog Am Chem Soc J* 65:629-31 Ap '43

Interaction of p-cresol and other phenols with chloral and its hydrate. M. F. Balfe and W. C. Webber. *Chem Soc J* p718-20 N '42

New colour reactions of phenols. A. Steigmann. *Soc Chem Ind J* 61:180 N '42; *Abstract. Paint Oil & Chem R* 105:13 F 11 '43

PHENOLS—Continued

- Nitrosation of phenols; the three cresols and their methyl ethers; some semicarbazide reactions. H. H. Hodgson and E. A. C. Crouch. *Chem Soc J* p221-3 My '43
- Nuclear methylation of phenols by means of methanolic sodium methoxide. J. W. Cornforth, R. H. Cornforth and R. Robinson. *Chem Soc J* p682-4 N '42
- Separation of individual cresols and xylenols from their mixtures. D. R. Stevens. *biolog il Ind & Eng Chem* 35:655-60 Je '43
- Studies in the veratrole and methylenedioxybenzene series. R. T. Arnold and F. Bordwell. *biolog Am Chem Soc J* 64:2983-6 D '42
- Synthetic phenol disinfectants. J. Varley. *Soap & San Chem* 19:103-4 Ag '43; Same abr. *Oil Paint & Drug Rep* 143:32C-32D Je 14 '43

See also

Phenol
Phenylphenol**PHENOLSULFONIC acid**

- Assay of potassium *p*-phenolsulfonate, its pH range, and its ultraviolet absorption spectrum. E. E. Sager, M. R. Schooley and S. F. Acree. *J Research Nat Bur Stand* 31:197-204 O '43
- Second dissociation constant of *p*-phenolsulfonic acid and pH values of phenolsulfonate-chloride buffers from 0° to 60° C. R. G. Bates, G. L. Siegel and S. F. Acree. *biolog J Research Nat Bur Stand* 31:205-23 O '43

PHENOTHIAZINE

- Phenothiazine for cattle lice control. H. S. Telford, J. H. Longwell and J. A. Munro. *Science* 97:354 Ap 16 '43
- Vapor pressure of phenothiazine. O. A. Nelson and L. E. Smith. *diag Am Chem Soc J* 64:3035-7 D '42

PHENOTHIOXIN. See Phenoxathiin**PHENOXATHIIN**

- Chemistry of phenoxathiin and its derivatives. C. L. Deasy. *biolog Chem R* 32:173-94 Ap '43

PHENOXIDES

- Thermal decomposition of quaternary ammonium phenolates, with reference to the Claisen rearrangement. D. S. Tarbell and J. R. Vaughan, jr. *biolog Am Chem Soc J* 65:231-3 F '43

PHENOXTHIN. See Phenoxathiin**PHENOXY compounds**

- Acetylenic ethers; halogen derivatives of phenoxyacetylene. T. L. Jacobs and W. J. Whiteher. *biolog Am Chem Soc J* 64:2635-8 N '42
- Present status of plant hormones. P. W. Zimmerman. *il Ind & Eng Chem* 35:596-601 My '43

PHENOXYACETIC acid

- Acidic dissociation constants of phenoxyacetic acid and its derivatives. N. V. Hayes and G. E. K. Branch. *biolog Am Chem Soc J* 65:1555-64 Ag '43

PHENYLALANINE

- Chromatography as a means of separating amino acids. J. L. Wachtel and H. G. Cassidy. *biolog Am Chem Soc J* 65:665-8 Ap '43
- Remarks on the absorption spectra of phenylalanine and tyrosine in connection with the absorption in toluene and para-cresol. H. Sponer. *biolog J Chem Phys* 10: 672-6 N '42

PHENYLANTHRACENE

- Aromatic cyclodehydration; 9-alkyl- and 9-aryl-10-phenylanthracenes. C. K. Bradsher and E. S. Smith. *Am Chem Soc J* 65:451-2 Mr '43

PHENYLARSINE oxides

- Amide-substituted phenylarsine oxides and their derivatives; a group of compounds of possible utility in the treatment of syphilis. H. Eagle and others. *Am Chem Soc J* 65: 1236-7 Je '43

PHENYLARSONIC acid. See Benzenearsonic acid**PHENYLCARBAZOLE**

- Di-metalation of 9-phenylcarbazole. H. Gilman and C. G. Stuckwisch. *biolog Am Chem Soc J* 65:1729-33 S '43

PHENYLCELLOBIOSIDE

- Alkaline degradation of phenyl- β -lactoside, phenyl- β -cellobioside and phenyl- β -gluco- β -D-gulo-heptoside. E. M. Montgomery, N. K. Richtmyer and C. S. Hudson. *biolog Am Chem Soc J* 65:1848-54 O '43

PHENYLCHLOROFLUORENE

- Kinetics of the ammonolysis of 9-phenyl-9-chlorofluorene by liquid ammonia. P. M. Williamson, R. C. Anderson and G. W. Watt. *biolog Am Chem Soc J* 65:49-51 Ja '43

PHENYLCHLOROMETHYLTHIAZOLE

- Conversion of 2-phenyl-4-chloromethylthiazole to 2-phenyl-4-hydroxymethyl-5-chlorothiazole. E. H. Huntress and K. Pfister, 3d. *Am Chem Soc J* 65:1667-70 S '43

PHENYLDODECAHYDROPHENANTHRENE

- Friedel-Crafts reactions of 9-phenyl-dodecahydrophenanthrene-10-carboxylic acid. H. E. Eschinazi and F. Bergmann. *Am Chem Soc J* 65:1411-12 Ji '43

PHENYLETHYLAMINE

- Methods for resolution of enantiomorphs; chromatographic adsorption. H. B. Hass, T. de Vries and H. H. Jaffé. *biolog Am Chem Soc J* 65:1486-8 Ag '43

PHENYLGLYCOSIDES

- Alkaline degradation of phenylglycosides; a new method for determining the configuration of glycosides and sugars. E. M. Montgomery, N. K. Richtmyer and C. S. Hudson. *biolog Am Chem Soc J* 65:3-7 Ja '43

PHENYLGLYOXAL

- Course of reaction in the transformation of α,α -dibromoacetophenone to mandelic acid by means of aqueous alkali. E. B. Ayres and C. E. Hauser. *biolog Am Chem Soc J* 65:1095-6 Je '43

PHENYLHYDRAZINE

- Vapor pressure of phenylhydrazine as a function of the temperature. G. E. Williams and E. C. Gilbert. *biolog Am Chem Soc J* 64:2776-7 D '42

PHENYLHYDROXYPYRAZOLONE imide

- Investigation of pyrazole compounds; the synthesis of 1-phenyl-3-hydroxy-5-pyrazolone imide. A. Weissberger and H. D. Porter. *biolog Am Chem Soc J* 65:52-4 Ja '43

PHENYLINDENE

- Apparently anomalous bromination in the polyphenylindene series. C. F. H. Allen and J. W. Gates, jr. *biolog Am Chem Soc J* 65:419-22 Mr '43

PHENYLISOPROPYLAMINE

- β -3:4-Methylenedioxyphenylisopropylamine. J. Elks and D. H. Hey. *Chem Soc J* p15-16 Ja '43

PHENYLLACTOSIDE

- Alkaline degradation of phenyl- β -lactoside, phenyl- β -cellobioside and phenyl- β -gluco- β -D-gulo-heptoside. E. M. Montgomery, N. K. Richtmyer and C. S. Hudson. *biolog Am Chem Soc J* 65:1848-54 O '43

PHENYLMAGNESIUM bromide

- Factors determining the course and mechanism of Grignard reactions; analysis of gases formed during the reaction of phenylmagnesium bromide with organic halides in the presence of cobaltous halides. M. S. Kharasch, D. W. Lewis and W. B. Reynolds. *diag Am Chem Soc J* 65:493-5 Ap '43

- Factors determining the course and mechanisms of Grignard reactions; the effect of metallic halides on the reaction of Grignard reagents with aromatic acyl halides. M. S. Kharasch, W. Nudenberg and S. Archer. *biolog Am Chem Soc J* 65:495-8 Ap '43

PHENYL mercaptan. See Benzenethiol**PHENYL mercuric compounds.** See Mercury compounds**PHENYLPHENOL**

- Compound formation between the isomeric phenylphenols and pyridine. S. E. Hazlet and R. W. Morrow. *biolog Am Chem Soc J* 64:2625-8 N '42

PHENYLPHENYL acetate

- Chlorination of 4-phenylphenyl acetate in acetic acid. H. R. Schmidt, C. M. S. Savoy and J. L. Abernethy. *Am Chem Soc J* 65:296-7 F '43

PHENYLPHENYL benzenesulfonate

Halogenation of certain esters in the biphenyl series; the chlorination of 4-phenylphenyl benzoate and 4-phenylphenyl benzenesulfonate. C. M. S. Savoy and J. L. Abernethy. *Am Chem Soc J* 64:2719-20 N '42

PHENYLPHENYL benzoate

Halogenation of certain esters in the biphenyl series; the chlorination of 4-phenylphenyl benzoate and 4-phenylphenyl benzenesulfonate. C. M. S. Savoy and J. L. Abernethy. *Am Chem Soc J* 64:2719-20 N '42

PHENYLPHENYL bromoacetate

Bromination of 4-phenylphenyl bromoacetate. L. C. Hensley and S. E. Hazlet. *Am Chem Soc J* 65:987-8 My '43

PHENYLPYRAZOLONE

Investigation of pyrazole compounds; the acylation of 3-phenyl-5-pyrazolone and 3-anilino-5-pyrazolone. A. Weissberger and H. D. Porter. *bibliog Am Chem Soc J* 65: 1495-1502 Ag '43

PHENYLTHIOURETHANS

Sulfur studies; alkyl esters of phenylthiocarbamic acid. R. W. Bost and E. R. Andrews. *Am Chem Soc J* 65:900-1 My '43

PHENYLVALERIC acid

Iodinated organic compounds as contrast media for radiographic diagnoses; ethyl esters of iodinated straight and branched chain phenyl fatty acids. J. T. Plati, W. H. Strain and S. L. Warren. *bibliog Am Chem Soc J* 65:1273-6 JI '43

PHENYLENEDIAMINE

Calculation of the absorption spectrum of Wurster's salts. M. G. Mayer and K. J. McCallum. *bibliog Rs Mod Phys* 14:248-57; Discussion. R. S. Mulliken. 267-8 Ap-JI '42
Quinoxaline formation and the ortho effect. R. C. Fuson and others. *bibliog Am Chem Soc J* 65:1023-9 Je '43

Recent advances in fur dyeing. H. Weisskopf. *Am Dyestuff Rep* 32:1163-4 Mr 29 '43

PHILADELPHIA

Philadelphia blueprints a program for civic post-war preparation. *Sales Management* 52:48-50 Ja 1 '43

Poor Richard and blight. A. M. Greenfield. *Arch Forum* 79:42-3 JI '43

See also

Finance—Phila-

delphia

Labor and laboring

classes—Phila-

delphia

Retail trade—Phila-

delphia

Taxation—Philadel-

phia

Industries

Early Philadelphia sugar refiners and technologists. C. A. Browne. *bibliog il J Chem Educ* 20:522-30 N '43

Railroads

Fire ravages Pennsylvania's Broad Street trainshed area. *il Ry Age* 15:452-5 S 18 '43

Streets

Huge highway project. J. U. Shroyer. *il map Civil Eng* 13:370-2 Ag '43

Subways

Train timing: photo cell and film keep Philadelphia subway runs evenly spaced and on schedule. *Business Week* p40+ F 27 '43

Water supply

Background of Philadelphia's present water waste control program. M. J. McLaughlin. *il Pub Works* 74:20-2 O '43

Philadelphia bureau develops integrated chart system of water supply. M. J. McLaughlin. *plan Water Works & Sewerage* 90:358 O '43

PHILADELPHIA and Reading coal and iron company

\$5,650,000 distribution. *Comm & Fin Chr* 156: 2228 D 21 '42

PHILADELPHIA and western railway

Plan approved. *Comm & Fin Chr* 158:583 Ag 9 '43

Plan referred to SEC. *Comm & Fin Chr* 157: 1466 Ap 19 '43

SEC on reorganization: plan not feasible. *Comm & Fin Chr* 157:2050 My 31 '43

PHILADELPHIA, Baltimore & Washington railroad

Bonds sold privately. *Comm & Fin Chr* 158: 1861-2 N 8 '43

PHILADELPHIA company

Strong holding company bond. W. Andrews. *Barron's* 23:10 Je 28 '43

PHILADELPHIA electric company

New utility stock; Philadelphia Electric common appears conservatively valued. M. Pescatello. *Barron's* 23:5-1 JI 12 '43

Offers new stock on when issued basis. *Comm & Fin Chr* 157:1186 Mr 29 '43

Stock plan approved. *Comm & Fin Chr* 157: 1948 My 24 '43

U.G.I. dismemberment. *Comm & Fin Chr* 157: 1200 Ap 1 '43

PHILADELPHIA electric power company

Premium bond yielding 4.7%. *Barron's* 23:12 O 25 '43

PHILADELPHIA stock exchange

Weekly record. Published in weekly Monday numbers of Commercial & financial chronicle

PHILADELPHIA transportation company

Philadelphia transportation company. O. Ely. *Pub Util* 31:170-2 F 4 '43

PHILANTHROPY

See also

Carnegie corporation

Community trusts

PHILCO corporation

Annual report. *Comm & Fin Chr* 157:1466 Ap 19 '43

Arranges \$30,000,000 V loan. *Comm & Fin Chr* 157:644 F 15 '43

Companies favored by research. *Mag of Wall St* 73:33 O 16 '43

Stocks in a strategic position. G. L. Merton. *Mag of Wall St* 71:489 F 6 '43

PHILIP Morris and company. *See Morris, Philip, and company*

PHILIPPINE ISLANDS

Southeastern Asia and the Philippines. L. A. Mills, ed. *bibliog maps Ann Am Acad* 226: 1-150 Mr '43

United nations and the Philippines. S. Osmeña. *Ann Am Acad* 228:25-9 JI '43

Commerce

Outline of our recent political and trade relations with the Philippine Commonwealth. E. D. Hester. *bibliog Ann Am Acad* 226:73-85 Mr '43

Politics and government

FDR assails puppet rulers of Philippines. *Comm & Fin Chr* 158:1711 O 28 '43

Outline of our recent political and trade relations with the Philippine Commonwealth. E. D. Hester. *bibliog Ann Am Acad* 226: 73-85 Mr '43

President asks authority to permit Philippine independence before 1946. *Comm & Fin Chr* 158:1510 O 14 '43

President assures Philippines of independence after defeat of Japan. *Comm & Fin Chr* 158:715 Ag 19 '43

President declares Philippine government a pattern for future of other small nations; radio address commemorating anniversary of the Commonwealth. *Comm & Fin Chr* 156:1896 N 26 '42

PHILIPS incandescent lamp works company

Holland plants bombed. *Comm & Fin Chr* 156:2228 D 21 '42

Officers elected. *Comm & Fin Chr* 157:1563 Ap 26 '43

PHILLIPS petroleum company

Registers with SEC. *Comm & Fin Chr* 156: 2044 D 7 '42

PHILOSOPHY

Agenda for philosophers. C. W. Hendel. *il Fortune* 28:162-3+ N '43

Biologist looks at man. J. Huxley. *il Fortune* 26:138-41+ D '42

Freedom or frustration? can Americans find an answer in their own age-old traits? C. Morris. *il Fortune* 28:148-52+ S '43

See also

Free will and deter-

minism

Scholasticism

PHILOSOPHY, American

Native philosopher: William James. Fortune 27:114-15 Mr '43

PHONOGRAPH

Measurement of transcription-turntable speed variation. H. E. Roys. *il* diags *Inst Radio Eng Proc* 31:52-5 F '43

See also
Synchrophone

Pickup

Mechanical impedance bridge. A. M. Wiggins. *il* diags *Acoustical Soc Am J* 15:50-3 JI '43
Reduction of record noise by pickup design. A. D. Burt. *il* diags *Electronics* 16:90-3+ Ja '43

Self-adjusting pickup. R. B. Davis. *diags Radio N* 29:21+ Ap '43

Some recent developments in record reproducing systems; system employing the principles of frequency modulation. G. L. Beers and C. M. Sinnett. *diags Inst Radio Eng Proc* 31:138-46 Ap '43; Same. *Soc Motion Picture Eng J* 40:222-41 Ap '43

Record changers

Automatic record changers. Consumers' Research Bul 11:12 My '43

PHONOGRAPH records

All-America package competition award; RCA Victor division of the Radio corp. of America, children's records in small album units. *il* *Mod Packaging* 16:104+ Ap '43

Reduction of record noise by pickup design. A. D. Burt. *il* diags *Electronics* 16:90-3+ Ja '43

Some recent developments in record reproducing systems. G. L. Beers and C. M. Sinnett. *diags Inst Radio Eng Proc* 31:138-46 Ap '43; Same. *Soc Motion Picture Eng J* 40:222-41 Ap '43

Sound through magnetism. Fortune 28:6+ S '43

Words and music; transcription boycott. *Business Week* p81-2+ JI 24 '43

See also Radio broadcasting—Phonograph programs

Manufacture

Records in the making; illustrations with text. *Electronics* 16:118-19 N '43

Rating

Phonograph records. W. F. Grueninger. Consumers' Research Bul 11:26-7 O '42 [cont monthly]

PHOSGENE

Synthesis of triphosgene for war gas identification sets. F. C. Hickey and J. J. Hanley. *J Chem Educ* 20:229-30 My '43

PHOSPHATASES

Determination of thiamine in bread by the thiochrome method; a comparison of phosphatase-containing enzyme preparations. D. F. Clausen and R. E. Brown. *bibliog Ind & Eng Chem Anal ed* 15:100-1 F 15 '43

Development of a positive phosphatase test in refrigerated, pasteurized cream; abstract. F. W. Barber and W. C. Frazier. *Food Ind* 15:143 JI '43

Does the parathyroid hormone influence phosphatase activity? T. R. Wood and W. F. Ross. *bibliog Am Chem Soc J* 64:2759-60 D '42

PHOSPHATE rock

Eliminating phosphate wastes. B. Nordberg. *il* diags *Rock Prod* 46:48-51+ My '43

Fertilizer by fusion of rock phosphate with olive. J. H. Walthall and G. L. Bridger. *bibliog Ind & Eng Chem* 35:774-7 JI '43

New refractory compositions resistant to molten rock phosphate. G. R. Pole and A. W. Beinlich, jr. *bibliog il diag Am Cer Soc J* 26:21-37 Ja 1 '43

Phosphatization at Malpelo island, Colombia. D. McConnell. *bibliog Geol Soc Bul* 54: 707-15, pl 1-2 My '43

Africa, North

Phosphate rock in French North Africa. C. K. Horner. *il map For Comm W* 11:3-8+ Je 19 '43

Florida

Florida phosphate mining experiences; some noteworthy changes. E. T. Casler. *il Min Cong J* 29:51-2 F '43

New data on mining and pumping phosphate debris in Florida. F. B. Bowen. *Eng & Min J* 144:62 Mr '43

Phosphate resources of Florida. G. R. Mansfield. 8 fold maps [four in pocket] U S Geol S Bul 934:1-82; pa \$1 Supt. of doc. '42

Tennessee

Tennessee phosphate field sees changes; Virginia-Carolina's phosphate plant remodeled. A. H. Hubbell. flow sheet *il Eng & Min J* 144:68-71 Mr; 79-80 Ap '43

PHOSPHATES

Fertilizers and materials, 1942. *Chem & Met Eng* 50:106-7 F '43

Fluorine content of plants fertilized with phosphates and slag carrying fluorides. W. H. MacIntire and others. *bibliog il Ind & Eng Chem* 34:1469-79 D '42

pH values of certain phosphate-chloride mixtures, and the second dissociation constant of phosphoric acid from 0° to 60° C. R. G. Bates and S. F. Acree. *bibliog pls diags J Research Nat Bur Stand* 30:129-55 F '43
New phosphates. *Chem & Met Eng* 50:166 Je '43

Phosphate and potash war need supplied by domestic industry. J. A. Barr; E. T. Casler; R. B. Wittenberg. *il Min Cong J* 29:50-2 F '43

Phosphate coatings aid metal drawing. A. Durer and others. *Iron Age* 152:59-60 S '43; Abstract. *Metals & Alloys* 18:348 Ag '43

Phosphate fertilizers as possible source of phosphorus for animals. H. F. Fraser and others. *bibliog il Ind & Eng Chem* 35:1087-90 O '43

Phosphate fertilizing boosted as food production aid. *Oil Paint & Drug Rep* 144:7, 65 JI 12 '43

Phosphates finding new spheres of usefulness in the textile field. J. Wakelin. *Textile Col* 64:511-12+ N '42

Photometric determination of silica in the presence of phosphates. M. C. Schwartz. *bibliog Ind & Eng Chem Anal ed* 14:893-5 N 15 '42

Physical properties and chemical constitution; alkyl sulphides, disulphides, sulphites, sulphates, and orthophosphates. A. I. Vogel and D. M. Cowan. *Chem Soc J* p16-24 Ja '43

Superphosphate advisers named by WPB. *Oil Paint & Drug Rep* 144:66 Ag 16 '43

United Kingdom to get major part of North American concentrated phosphates. *Oil Paint & Drug Rep* 143:7+ Mr 22 '43

Use of phosphate for separation of cobalt from iron. V. North and R. C. Wells. *bibliog Ind & Eng Chem Anal ed* 14:859-60 N 15 '42

Useful life of pyro-, meta-, and tetraphosphates. R. A. Morgen and R. L. Swoope. *bibliog Ind & Eng Chem* 35:821-4 JI '43

Utilisation of phosphatic open-hearth slag. F. E. Lathe and others. *bibliog Soc Chem Ind J* 62:24-31 F '43

See also

Apatite	Potassium phosphates
Calcium phosphates	
Phosphate rock	Sodium phosphates

Analysis

Elimination of fluoride interference in the molybdenum blue reaction. L. T. Kurtz. *bibliog Ind & Eng Chem Anal ed* 14:855 N 15 '42

Manufacture

Fertilizer by fusion of rock phosphate with olive. J. H. Walthall and G. L. Bridger. *bibliog Ind & Eng Chem* 35:774-7 JI '43; Same cond. *Chem Age (Lond)* 49:257-60 S 11 '43

Phosphate washer reject successfully concentrated on moving conveyor belts; flotation equipment used in Coronet company's re-treatment plant. A. H. Hubbell. flow-sheet *il diags Eng & Min J* 143:51-4 D '42

PHOSPHATES—Manufacture—Continued

Superphosphate production; pictured flow-sheet of plant of the Davison chemical corporation, Baltimore. *Chem & Met Eng* 50: 132-5 Ap '43

Tennessee phosphate field sees changes; Virginia-Carolina's phosphate plant remodeled. A. H. Hubbell. flow sheet *II Eng & Min J* 144:68-71 Mr; 79-80 Ap '43

Prices

Superphosphate prices ceiled by OPA. Oil Paint & Drug Rep 143:4+ Mr 29 '43

Statistics

Superphosphates (bulk), 1938-1941. Survey of *Cur Business* 1942 Sup-p104 [supplemented in monthly numbers]

PHOSPHATIZING

Accelerated and retarded phosphatizing methods; abstract. W. Machu. *Iron Age* 150:60 D 10 '42

Chemical surface treatment for steel. F. C. Hirdler, jr. *II Automotive & Aviation Ind* 89:18-20+ S 15 '43; *Iron Age* 151:61-2+ Je 3 '43

Corrosion resistance of silver plated steel; phosphating the steel plating. P. J. Lo Presti. *II Electrochem Soc Trans* 84 (preprint 3):19-24 O '43; Abstract. *Iron Age* 152:72 N 11 '43

New phosphate coatings with unusual corrosion resistance. G. Jernstedt. *II Electrochem Soc Trans* 83 (preprint 30):323-35 Ap '43; Abstract. *Steel* 113:95-6 D 27 '43

New phosphating treatment revealed to electrochemists. F. J. Van Antwerpen. *Chem & Eng N* 21:710+ My 10 '43

Phosphate coatings conserve critical materials and speed up production. W. K. Cusick. *Metal Finishing* 41:184-5 Mr '43

PHOSPHOMOLYBDIC acid

Preparation of phosphomolybdic acid from phosphoric acid and pure molybdic acid. A. Linz. *Ind & Eng Chem Anal ed* 15:459 J1 15 '43

PHOSPHONIC acids

Improved method of preparation of bis-arylphosphonic acids. G. M. Kosolapoff. *Am Chem Soc J* 64:2382-3 D '42

PHOSPHONITRILE chlorides

Phosphonitrilic chlorides and their derivatives. L. F. Audrieth, R. Steinman and A. D. F. Toy. *Chem R* 32:109-33 bibliog (75 references, p132-3) F '43

Structure of the trimer of phosphonitrile chloride, $P_3N_3Cl_6$. L. O. Brockway and W. M. Bright. *Am Chem Soc J* 65: 1551-4 Ag '43

PHOSPHONIUM compounds

Tetra-aryl-phosphonium, -arsonium and -stibonium salts; the mechanism of their formation by the aluminum chloride reaction. D. R. Lyon and F. G. Mann. *Chem Soc J* p666-71 N '42

PHOSPHOR-bronze. See Bronze**PHOSPHORESCENCE. See Luminescence****PHOSPHORIC acid**

Alkylation of amines. J. H. Billman, A. Radike and E. W. Mundy. *bibliog Am Chem Soc J* 64:2977-8 D '42

pH values of certain phosphate-chloride mixtures, and the second dissociation constant of phosphoric acid from 0° to 60° C. R. G. Bates and S. F. Acree. *bibliog pls diags J Research Nat Bur Stand* 30:129-55 F '43

Preparation of phosphomolybdic acid from phosphoric acid and pure molybdic acid. A. Linz. *Ind & Eng Chem Anal ed* 15:459 J1 15 '43

Utilisation of phosphatic open-hearth slag; effect of rapid cooling on the solubility of phosphoric acid. F. E. Lathe. *bibliog Soc Chem Ind J* 62:24-8 F '43

Utilisation of phosphatic open-hearth slag; the availability of phosphoric acid as measured by yield and phosphorus recovery in barley and clover. L. E. Wright, A. Leahy and R. C. Turner. *Soc Chem Ind J* 62:28-31 F '43

PHOSPHORUS

Chlorine azide, ClN_3 ; properties, behavior toward liquid ammonia, pentane, metals, phosphorus. W. J. Frierson, J. Kronrad and A. W. Browne. *bibliog Am Chem Soc J* 65: 1696-8 S '43

Mechanism of insulin action; observations with radioactive phosphorus. J. Sacks. *Science* 98:388-9 O 29 '43

Phosphate fertilizers as possible source of phosphorus for animals. H. F. Fraser and others. *bibliog II Ind & Eng Chem* 35:1087-90 O '43

Smoke screens to baking powder. *Fortune* 28: 26 S '43

Utilisation of phosphatic open-hearth slag; the availability of phosphoric acid as measured by yield and phosphorus recovery in barley and clover. L. E. Wright, A. Leahy and R. C. Turner. *Soc Chem Ind J* 62:28-31 F '43

Analysis

Semimicrodetermination of phosphorus in organic compounds. M. D. Bachofer and E. C. Wagner. *bibliog Ind & Eng Chem Anal ed* 15:601-2 S 15 '43

Sulphur and phosphorus in copper; two methods of determination. D. J. Bullivant. *Chem Age (Lond)* 48:181-2 F 6 '43

PHOSPHORUS alloys*See also*

Iron alloys—Phosphorus alloys

PHOSPHORUS bromides

Role of neighboring groups in replacement reactions; retention of configuration in the reaction of the 3-bromo-2-butanols with phosphorus tribromide. S. Winstein. *bibliog Am Chem Soc J* 64:2791-2 D '42

PHOSPHORUS chlorides

Action of phosphorus pentachloride on non-symmetrically substituted acetones. A. Zaki and Y. Iskander. *Chem Soc J* p68-70 F '43

Crystal structure of phosphorus pentachloride. D. Clark, H. M. Powell and A. F. Wells. *Chem Soc J* p642-5 O '42

Reaction of glutarimides with phosphorus pentachloride; a new pyridine synthesis. W. W. Crouch and H. L. Lochte. *bibliog Am Chem Soc J* 65:270-2 F '43

PHOSPHORUS compounds

Corrosion by phosphorus compounds in boiler gases. H. J. Bush. *Inst Chem Eng Trans* 19:45-7 '41

Nomenclature of the nitrogen compounds of phosphorus and of sulfur. L. F. Audrieth, R. Steinman and A. D. F. Toy. *bibliog Chem R* 32:99-108 F '43

PHOSPHORUS in the body

Experimental burns; changes in the phosphorus content and moisture content of muscle. J. O. Ely. *diags Franklin Inst J* 235:416-24 Ap '43

PHOSPHORUS oxides

Action of phosphoric oxide on phenyl esters; the mechanism of the Fries reaction. A. Schönborg and A. Mustafa. *Chem Soc J* p79-80 F '43

Corrosion by phosphorus compounds in boiler gases. H. J. Bush. *Inst Chem Eng Trans* 19:45-7 '41

Polymorphism of phosphoric oxide. W. L. Hill, G. T. Faust and S. E. Hendricks. *bibliog II Am Chem Soc J* 65:794-802 My '43

PHOSPHORYL chloride

Behavior of phosphoryl chloride, thionyl chloride and suluryl chloride toward boron halides. A. B. Burg and M. K. Ross. *Am Chem Soc J* 65:1637-8 Ag '43

PHOSPHORYLASE

Application of the mercaptalation assay to synthetic starch. M. L. Wolfrom, C. S. Smith and A. E. Brown. *bibliog Am Chem Soc J* 65:255-9 F '43

PHOSPHORYLATION

Photosynthesis and phosphorylation. S. Ruben. *bibliog Am Chem Soc J* 65:279-82 F '43

PHOTOLUMETERS

Photometers. *II R Sci Instr* 14:224-5 J1 '43

PHOTOCHEMISTRY

- Electron transfer spectra and their photochemical effects. E. Rabinowitch. bibliog (84 references) diags Rs Mod Phys 14: 112-31 Ap-Jl '42
- Isolation of photosensitizing agents from buckwheat. S. H. Wender, R. A. Gortner and O. L. Inman. bibliog Am Chem Soc J 65:1733-5 S '43
- Mechanism of the photolysis of propionaldehyde. W. M. Garrison and M. Burton. bibliog J Chem Phys 10:730-9 D '42
- Mercury photosensitized reactions of ethylene at high temperatures. D. J. LeRoy and E. W. R. Steacie. bibliog J Chem Phys 10:676-82 N '42
- Orientation of molecules produced photochemically in rigid solvents. G. N. Lewis and J. Bigeleisen. Am Chem Soc J 65: 520-6 Ap '43
- Photochemical dimerization of *trans*-cinnamic acid. H. I. Bernstein and W. C. Quimby. bibliog Am Chem Soc J 65:1845-6 O '43
- Photochemical pinacolization. F. Bergmann and Y. Hirschberg. Am Chem Soc J 65:1429-30 Jl '43
- Photochemical reaction of hydrogen and chlorine: a lecture demonstration. C. M. Furgason and J. W. Moore. il J Chem Educ 20:41-2 Ja '43
- Photochemical studies; quantum yields during the photochemical decomposition of *n*-butyl methyl ketone. J. E. Wilson and W. A. Noyes, jr. bibliog Am Chem Soc J 65:1547-50 Ag '43
- Photochemical studies; the photochemical decomposition of *n*-butyl methyl ketone. W. Davis, jr. and W. A. Noyes, jr. Am Chem Soc J 64:2676-8 N '42
- Photochemistry in petroleum technology; abstract. J. De Ment. Inst Pet J 23:409A-410A O '42
- Photolysis of the *d*-glycosides: α benzylfructofuranoside, β benzylfructopyranoside, and α and β phenyl, benzyl and β phenylethyl glucosides; and the bearing of the data upon the transfer of energy within molecules. L. J. Heidt. Franklin Inst J 234:473-85 N '42
- Photo-oxidation of chlorophyll. S. Aronoff and G. Mackinney. bibliog Am Chem Soc J 65:956-8 My '43
- Photo-reactions; formation of benzpinacol by the action of acetone on benzhydrol in sunlight. A. Schöenberg and A. Mostafa. Chem Soc J p276 Je '43
- Photo-reactions; photo-oxidation of non-ionisable thioketones in sunlight. A. Schöenberg and A. Mostafa. Chem Soc J p275-6 Je '43
- Quantum yield of diacetyl fluorescence. G. M. Almy and P. R. Gillette. bibliog diags J Chem Phys 11:188-95 Ap '43
- Quenching of cadmium resonance radiation (3261A) by hydrocarbons and other gases. E. W. R. Steacie and D. J. LeRoy. bibliog J Chem Phys 11:164-71 Ap '43
- Reversible photochemical processes in rigid media: the dissociation of organic molecules into radicals and ions. G. N. Lewis and D. Lipkin. bibliog Am Chem Soc J 64: 2801-8 D '42
- Versatile apparatus for photolysis studies in the gas phase; acetone and iodine mixtures. S. W. Benson and G. S. Forbes. bibliog diags Am Chem Soc J 65:1399-1405 Jl '43
- See also
Light Photosynthesis
Paper, Effect of light Polymerization
on Spectrum
Photographic chem- Ultraviolet rays
istry X rays

PHOTOELASTICITY

- Edge effect is critical in photoelasticity. W. Leaf. il Machine Design 15:109-11 Mr '43
- Introduction to the theory of photoelasticity and its application to problems of stress analysis. R. E. Arthur. il diags Roy Aeronautical Soc J 47:263-72 Ag '43
- Light-beam modulation by photoelastic effect in glass. W. E. LeClair. diag Electronics 16:122+ My '43
- Methods of stress determination in engine parts. C. Lipson. il diags S A E J 51: 105-24 Ap '43

Photoelastic detection of strains. J. Delmonte and W. Dewar. il Mod Plastics 21:121-3 N '43

PHOTO-ELECTRIC absorptiometer. See Absorptiometer

PHOTOELECTRIC cells

- Electric eye in electronics. W. D. Stewart. il diags Radio N 28:6-9+ I '42
- Optics for photocell hobbyists. G. Dexter. il diags Radio N 29:22-3+ Mr '43
- Photoelectric phenomena. C. D. Prater. diags Radio N 30:26-9+ Jl '43
- Phototube circuit; hydraulic analog; electronic circuit; applications. il diags Product Eng 14:651 O '43
- Simple alarm systems for the home. diag Consumers' Research Bul 11:24-6 Mr '43
- Sixty years of electronics, 1883-1943; electron tubes for industry and communications; charts. Electronics 16:112a-112c Jl '43

See also

Electrodes	Selenium cells
Photometers, Photo-electric	Television apparatus
Polarographs	Vacuum tubes

Control uses

- Autographic load-elongation apparatus for fibers. A. M. Sookne and H. A. Rutherford. bibliog pls diags J Research Nat Bur Stand 31:25-31 Jl '43; Same. Rayon 24:342-3, 414-15 Jl-Ag '43; Abstract. Electronics 16:192+ O '43
- Automatic control of exposure in photofluorography. R. H. Morgan. diags Pub Health Rep 58:1533-41, pl 1-2 O 15 '43
- Electric eyes control tunnel traffic; mine of Utah copper co. Bingham, Utah. il Elec West 90:59 Mr '43
- Electronic curve tracer. P. Padva. il diag Electronics 16:87-90+ F '43
- Electronics applied to heat transfer tests; circuits employ Wheatstone bridge and photoelectric relay; units applicable to other measurement and control problems. R. V. Brown. il diags Electronics 16:113-15 Jl '43
- Electronics at work on quality control. V. B. Baker. il diags Mod Packaging 17:91-4+ N '43
- New devices for industry. W. Moody. diags Radio N 29:30-1+ F '43
- New servant for textile mills; electronic equipment. A. P. Mansfield. il diag Textile World 93:68-9 Mr '43
- Photoelectric contact printer control. C. J. Penner and C. Weiske. il diags Electronics 16:114-15+ S '43
- Photoelectric-controlled coal larry distributes fuel to hopper feeding boiler. il Electronics 15:84+ D '42
- Photo-electric eye guards against mishaps; attachment for press. il diag Product Eng 14:482 Ag '43
- Photoelectric flame failure safeguard applicable to oil, gas, or pulverized coal burners. il diag Heating-Piping 15:sup152+ N '43
- Photoelectric safety control for electric sewing machines protect the fingers of sightless workers. il diags Electronics 16:130+ Ag '43
- Photoelectric timer controls X-ray film exposure. diags Electronics 16:178+ Jl '43
- Phototube control of packaging machines. W. D. Cockrell. il diags Electronics 16:94-9+ O '43
- Production controls aid the war program. R. A. Powers. il diags Electronics 16:126-8 Mr '43
- Shovel leveling done automatically by electronic units; equipment controls pairs of jacks. W. E. Gildersleeve and D. Stoetzel. il diag Coal Age 47:56-8 N '42
- Side shifts of paper corrected in roll-winding machine. il diags Electronics 16:144+ Ap '43
- Super-sight with phototubes; printed designs arrive at particular point at particular instant; other industrial uses. J. Markus. il diags Sci Am 169:214-16 N '43
- Thermostatic control system. J. G. Roof. diags Electronics 16:166+ O '43

PHOTOELECTRIC cells—Continued**Industrial applications**

- Defense against sabotage, espionage is vital to war production effort; photoelectric equipment. R. E. Appel. *Il Steel* 112:90, 92+ F 1 '43
- Electronic circuit for studying hunting. M. J. DeLerno and R. T. Basnett. *il diags Elec Eng* 61:603-6 D '42
- Electronic detectives. S. Summers. *il diag Radio N* 28:40-1+ D '42
- Improvement of electrical circuit in the News penetration tester. D. D. Cameron and W. C. Kenyon. *diags Paper Tr J* 116:28-30 My 6 '43; Same cond. *Paper Ind* 25:644+ S '43
- Improves oil combustion with photo-electric smoke alarm. E. Meyer. *diag Heating-Piping* 15:303 Je '43
- Industrial applications involving electronic detection. A. Edelman. *il Electronics* 16:129-33+ Mr '43
- Intrusion alarms. C. E. Jackson. *il diags Radio N* 29:14-16+ My '43
- Photo-electric test table facilitates meter checking. T. Oakley. *il diags Elec W* 118:2102-3 D 26 '42
- Protection of property by electronic methods. P. M. Farmer. *il Electronics* 16:120-2+ Mr '43
- Steel making receives electronic science with open arms. O. H. Caldwell. *Sci Am* 168:60-1 F '43
- Traffic count printed hourly by photoelectric recorder. *diags Electronics* 16:130+ My '43

Measurement uses

- Calibrating stop values of lenses; photo-electric measurement. D. B. Clark. *diag Electronics* 16:186+ JI '43
- Color index; light-colored petroleum products. I. M. Diller and others. *bibliog Ind & Eng Chem Anal ed* 15:367-73 Je 15 '43
- Electronic load regulator for meter testing. B. E. Lenahan. *il diag Electronics* 16:116-17+ JI '43
- Electronics applied to heat transfer tests; circuits employ Wheatstone bridge and photoelectric relay; units applicable to other measurement and control problems. R. V. Brown. *il diags Electronics* 16:113-15 JI '43
- Grading of soft sugars; photoelectric reflectance measurements. T. R. Gillett and A. L. Holven. *bibliog il diags Ind & Eng Chem* 35:210-14 F '43
- How color comparators work. J. Keating. *diags Radio N* 30:41+ Ag '43
- Improved Penn State smokemeter. P. H. Schweitzer. *il diags Instruments* 15:346-50 S '42; Same cond. *Oil & Gas J* 41:182-3+ Ja 28 '43
- Meter substitutes. R. P. Turner. *diags Radio N* 30:39+ O '43
- New electronic eye to measure U.S. sunfall. *il Heat & Ven* 39:61 D '42; *Sci Am* 167:274+ D '42
- New methods of measuring the properties of cotton fibers; cotton fibrograph for length analysis. K. L. Hertel. *il Rayon* 24:529-31 O '43
- Null-reading photoelectric microdensitometer for use in turbidimetry and abridged spectrophotometry. J. G. Baier. *il bibliog il diags Ind & Eng Chem Anal ed* 15:144-8 F 15 '43
- Photoelectric colorimeter detects alcohol in breath; method of diagnosing moderate intoxication. L. A. Greenberg. *diag Electronics* 16:222+ Je '43
- Photoelectric densitometer. C. C. Smith. *diag Electronics* 15:79+ D '42
- Photoelectric fluorimeter. R. P. Krebs and H. J. Kersten. *il diag Ind & Eng Chem Anal ed* 15:132-3 F 15 '43
- Photoelectric grading of sugars. H. Seymour. *diags Electrician* 131:137-8 Ag 6 '43
- Photoelectric potentiometer recorder. D. F. Hang. *il diags Gen Elec R* 46:623-5 N '43
- Photoelectric relay for batch weighing, metering. *il diags Electronics* 16:112+ F '43

- Photoelectric smoke meter. *il diag Diesel Power* 21:408 My '43
- Phototube measures twist in rotating shaft; patent assigned to the Westinghouse electric & manufacturing co. *diag Machine Design* 15:196+ Ag '43
- Temperature measurement and control with solid photoelectric cells. M. E. Fogle. *il diag Electrochem Soc Trans* 83 (preprint 14):183-91 Ap '43

See also

Photometers, Photo-electric

Scientific applications

- Applications of electronics to physiology. W. E. Gilson. *bibliog diags Electronics* 16:86-9+ Ja '43
- Determining cloud depths; electronic photocell equipment; essential for safe aircraft flights. S. R. Winters. *diags Radio N* 30:44-5+ O '43
- Photoelectric manometer. W. E. Gilson. *il diag Electronics* 16:112+ Ap '43
- Recording blood flow in stomach with thermocouples and phototubes. *Electronics* 16:190+ JI '43

Testing

- Tungsten-in-quartz lamp and its applications in photoelectric radiometry. R. Stair and W. O. Smith. *bibliog diag pl J Research Nat Bur Stand* 30:449-59 Je '43

PHOTOELECTRIC photometers. See Photometers, Photoelectric

PHOTOELECTRICITY

- Photo-conductivity of lead chromate. J. E. Goldman and A. W. Lawson. *diags Phys R* 64:11-18 JI 1 '43

Photoelectric phenomena. C. D. Prater. *diags Radio N* 30:26-9+ JI '43

See also

Electric conductivity
Electric discharges
Photoelectric cells

PHOTOELECTRONS. See Electrons

PHOTOENGRAVING

- Developments in the graphic arts, 1942. M. S. Kantrowitz. *Paper Tr J* 116:38-9 My 27 '43

Half-tone engraving on copper electrotpe shells. *il Inland Ptr* 111:59 S '43

Theory of the half-tone process; the diffraction theory, calculation of the light distribution. J. A. C. Yule. *diags Franklin Inst J* 235:483-98 My '43

See also

Photomechanical processes

PHOTOFLASH lamps. See Electric lamps, Photoflash

PHOTOGRAPHERS

Notman's. E. S. Roberts. *il Am Phot* 37:36-7 O '43

PHOTOGRAPHIC chemistry

Early color theories. J. S. Friedman. *Am Phot* 37:44-5 My '43

Mechanical elimination of hypo from prints and enlargements. M. Toch. *Am Phot* 37:20 F '43; Discussion (Effect of squeezing on the removal of hypo from prints). G. T. Eaton and J. I. Crabtree. 37:12-13 Ag '43

Optical sensitizing of silver halides by dyes; the optical sensitizing properties of fluorescein dyes in relation to their spectral absorption and constitution. S. E. Sheppard, R. H. Lambert and R. D. Walker. *bibliog J Chem Phys* 11:263-75 Je '43

Photographic development as a catalyzed, heterogeneous reaction. T. H. James. *bibliog il J Chem Phys* 11:338-41 JI '43

Photographically interesting fine chemicals as specific spot test reagents. A. Steigmann. *Soc Chem Ind J* 62:42-3 Mr '43

Quantitative determination of hypo in photographic prints with silver nitrate. J. I. Crabtree, G. T. Eaton and L. E. Muehler. *bibliog Franklin Inst J* 235:351-60 Ap '43

Reactions of gelatin impurities which are important photographically. A. Steigmann. *Soc Chem Ind J* 61:162-4 O '42

PHOTOGRAPHIC chemistry—Continued

Removal of hypo and silver salts from photographic materials as affected by the composition of the processing solutions. J. I. Crabtree, G. T. Eaton and L. E. Muehler. Soc Motion Picture Eng J 41:9-68 bibliog(p63-8) J1 '43

See also

Dyes and dyeing,
Photographic
Photochemistry
Photographic emul-
sions

Photography—De-
veloping and de-
velopers
Photography—Fix-
ing

PHOTOGRAPHIC density

Improved procedure for the contact printing method of measuring photographic density. M. H. Sweet. bibliog il diags Opt Soc Am J 33:143-63 Mr '43
Spectral characteristics of optical wedges. M. H. Sweet. il diags Opt Soc Am J 33:194-208 Ap '43

PHOTOGRAPHIC emulsions

Dependence of intrinsic sensitivity on grain size. L. Silberstein. Opt Soc Am J 33:175-8 Mr '43
Detection of an intermediate step in the autoxidation of hydroquinone; aerial fogging of photographic emulsions. T. H. James. bibliog il J Chem Phys 11:183-7 Ap '43
High resolution emulsions. C. W. Miller. il Am Phot 36:16-17 D '42
Homemade chloride emulsion. T. T. Baker. Am Phot 37:12-13 Mr '43
Light-scattering and the graininess of photographic emulsions. A. Goetz and F. W. Brown. bibliog diag Soc Motion Picture Eng J 39:375-83 D '42
Method for removing microscopic fog from photographic plates. L. N. Liebermann and H. H. Barschall. il R Sci Instr 14:89-90 Ap '43
Photographic chemistry. J. S. Friedman. Am Phot 37:36-9 Mr '43
Size-frequency distribution in photographic emulsions. L. Silberstein. Opt Soc Am J 33:35-42 Ja '43
Some factors affecting the reduction of silver oxalate. T. H. James. bibliog J Chem Phys 10:744-6 D '42

PHOTOGRAPHIC films. See Moving picture films; Photography—Films**PHOTOGRAPHIC materials.** See Photography—Apparatus and supplies**PHOTOGRAPHIC optics**

Method of preparing strips with uniformly varying blackening. E. S. Barr and L. B. Scott. il R Sci Instr 13:533-4 D '42
Polarizers. H. C. McKay. Am Phot 37:43-4 Ag '43

PHOTOGRAPHIC paper

Hand-sensitized silver paper. H. V. Schieren. il Am Phot 37:22-3 J1 '43
Perfect print control with Varigam. L. S. Bake. Am Phot 37:36-8 Ap '43
Removal of hypo and silver salts from photographic materials as affected by the composition of the processing solutions. J. I. Crabtree, G. T. Eaton and L. E. Muehler. Soc Motion Picture Eng J 41:9-68 bibliog(p63-8) J1 '43

Standards

American recommended practice for dimensions of photographic paper (roll leaders and limit signals). Z38:1.4-1942. Opt Soc Am J 33:179 Mr '43
American standard dimensions of photographic papers. Z38.1.5-15, 1943. diags Opt Soc Am J 33:457-67 Ag '43

PHOTOGRAPHIC records

Measuring photographically to obtain test data on a locomotive of new design. F. H. Catlin. il Gen Elec R 46:503-4 S '43
Single posting and filmed records simplify operating technique. J. F. White. Bankers Mo 59:548-9 D '42

See also

Microfilm records
Records, Preservation
of

PHOTOGRAPHIC reproduction and projection

See also

Microfilms

PHOTOGRAPHIC reversal. See Photography—Reversal process**PHOTOGRAPHS**

\$200,000 for a photograph; Warmth of the winter sun, by F. R. Fraprie. il Am Phot 37:11 Ap '43
Use your photographs. O. W. Marvin. Am Phot 37:14 My '43

See also

Advertisements, Photography
Pictorial—Photo- War photographs
graphs

Coloring

Hand tinting for pleasure and profit. M. J. Pike. Am Phot 37:38-9 O '43

Enlarging

See Photography—Enlarging

Trimming, mounting, etc.

Dynamic symmetry improves photography. W. E. Burton. il diags Am Phot 37:8-11 F '43

PHOTOGRAPHY

Hyperfocal distance. B. A. Eddy. Am Phot 37:13 N '43
System for 35mm negatives. H. H. Bliss. Am Phot 36:26-7 D '42
When is photography creative? M. White. Am Phot 37:16-17 Ja '43
Why not character? H. W. Frith. il Am Phot 37:22-3 Ap '43

See also

Cameras
Color photography
Lantern slides
Make-up (photog-
raphy)
Microfilms
Moving picture
photography
Photographic chem-
istry
Photomicrography
Photomontage
Radiography
Slide films

Apparatus and supplies

Inexpensive stroboscope for high speed photography. S. Silverman and W. H. Warhus. il diags R Sci Instr 14:273-5 S '43
Kodachrome duplicating box. R. W. Hufnagle. il diag Am Phot 37:38-9 My '43
Pointaneter for close-ups. E. C. Dymond. il Am Phot 37:14-15 Ag '43
Redesigned equipment speeds film drying. il Product Eng 14:696 N '43
Simple optical bench. I. Kinszki. diags Am Phot 37:25 Ag '43
Vibrating developing table. H. Bade. il diag Am Phot 37:17 Mr '43
Viewer for color transparencies. A. Weber. il Am Phot 37:40 Je '43

See also

Cameras
Densitometers
Photographic paper

Competitions

Our 23rd annual competition. F. R. Fraprie. il Am Phot 37:28-23 S '43

Copying

Copying fine-art subjects. il diag Am Phot 37:22-3 My '43
Correct illumination for copying. A. L. McNeill. diags Am Phot 37:13 J1 '43
Eliminating glare spots in copying. C. W. Kendall. diags Am Phot 37:30-1 D '43
Making a copying stand. H. P. Strand. il diags Am Phot 37:40-1 Ap '43
Try copying. I. C. Cornog. il diag Am Phot 37:34-5 Mr '43

Developing and developers

Color development and fine grain. J. S. Friedman. Am Phot 37:36 J1 '43
Copper and sulfide in developers; fogging action; polarographic analysis. R. M. Evans, W. T. Hanson and P. K. Glasoe. bibliog Soc Motion Picture Eng J 40:88-96 F '43
Dual-purpose table of developing formulas. E. E. Ely. Am Phot 37:24-5 Ja '43
Effect of developer agitation on density uniformity and rate of development. C. E. Ives and E. W. Jensen. bibliog il diags Soc Motion Picture Eng J 40:107-36 F '43
Fact and theory; agitation. H. C. McKay. Am Phot 37:47-8+ My '43

PHOTOGRAPHY—Developing and developers—*Continued*

- Factors affecting the accumulation of iodide in used photographic developers. R. M. Evans, W. T. Hanson, Jr. and P. K. Glasco. Soc Motion Picture Eng J 40:97-106 F '43
- Gold toning with glycin development. P. Phyllides. Am Phot 37:22-4 Mr '43
- More about sulphite, and the induction period in development. T. H. James. Am Phot 37:24-6 S '43
- Oxidation processes; the effect of reducing agents on the autooxidation of some photographic developing agents. A. Weissberger, D. S. Thomas, Jr. and J. E. Lu Valle, bibliog Am Chem Soc J 65:1489-95 Ag '43
- Photographic development as a catalyzed, heterogeneous reaction. T. H. James, bibliog J Chem Phys 11:338-41 JI '43
- Simplified study of development. T. H. James. il Am Phot 37:18-19 N; 14-16 D '43
- Sulphite is necessary! T. H. James. Am Phot 37:12-13 My '43
- Tanning developer method for wash-off relief. T. C. Wright. Am Phot 37:40-1 Ag '43
- This thing we call physical development. T. H. James. il Am Phot 37:14-15 O '43
- Washing films and papers in sea water. G. T. Eaton and J. I. Crabtree, bibliog Am Phot 37:12-15 Je '43

Enlarging

- Case for the big enlargement. F. I. Jordan. Am Phot 37:32-3 Ja '43
- Enlarger switchboard. G. B. Myers, diag Am Phot 37:40 N '43
- Enlarging by test strips. F. R. Fraprie. Am Phot 37:23 Je '43
- Half-size or sketch enlargement. D. W. Pease. Am Phot 37:28-9 My '43
- Low cost enlarging unit. P. D. Fraser, diags Am Phot 37:26-7 Mr '43
- Perfect print control with Varigam. L. S. Bake. Am Phot 37:36-8 Ap '43
- Timing the enlargement. H. H. Bliss. Am Phot 37:39 N '43

Exhibitions

- Beginner's viewpoint on salons. D. D. Wagner. il Am Phot 37:14-16 N '43
- Question of print size. P. L. Anderson. Am Phot 36:22-3 D '42
- Salons as seen by a new juror. J. Wright. Am Phot 37:36-7 D '43
- What makes a salon print? F. I. Jordan. il Am Phot 37:8-11 Je '43

Exposure

- American standard method for determining photographic speed and speed number. Opt Soc Am J 33:479-86 Ag '43
- Comparison method for kodachrome exposures. D. M. Bender. il Am Phot 37:26-7 F '43
- Correct flash exposure at a glance. R. W. Luebke. il Am Phot 37:41 N '43
- Exposure for kodachrome. H. L. Woodward, Jr. Am Phot 37:12-14 Ja '43
- How exposure affects the picture. il diags Am Phot 37:12-15 F '43
- How film speeds are determined. il Am Phot 37:28-9 Je '43
- New standard defines ASA speed for photography. M. E. Russell. il Ind Stand 14:269-72 O '43

Films

- American standard dimensions for amateur roll film and backing paper, no. 1-9; Z38.1.7-15, 1943. diags Opt Soc Am J 33:459-67 Ag '43
- American standard dimensions for amateur roll film spools, no. 1-9; Z38.1.16-24, 1943. diags Opt Soc Am J 33:468-76 Ag '43
- Film gets rarer. Business Week p100+ Ag 21 '43
- How to economize with smaller photographic films. il Consumers' Research Bul 11:19-22 D '42
- New standards unify dimensions for amateur roll film. V. J. Moyes. il Ind Stand 14:231-4 Ag '43

See also

- Moving picture films
- Slide films

Rating

- American standard method for determining photographic speed and speed number. Opt Soc Am J 33:479-86 Ag '43
- Film is rerated. Business Week p70+ N 6 '43

Fixing

- Fixing-bath savings. P. A. Friedell. il Am Phot 37:22-3 Je '43
- Photographic reviews. J. S. Friedman. Am Phot 36:34-7 D '42; 37:42-4 F '43
- Some characteristics of ammonium thiosulfate fixing baths. D. B. Alnutt, bibliog Soc Motion Picture Eng J 41:300-28 O '43

Formulas, tables, etc.

- Short cut in low-ratio photography. A. R. Greenleaf. Am Phot 37:29 N '43

Government use

- First governmental application of photography; Anthony daguerreotypes and north-eastern boundary controversy between the United States and Great Britain. D. D. Nibelink, bibliog il Franklin Inst J 236: 265-71 S '43

History

- First governmental application of photography; Anthony daguerreotypes and north-eastern boundary controversy between the United States and Great Britain. D. D. Nibelink, bibliog il Franklin Inst J 236: 265-71 S '43

Industrial applications

- Illuminographic camera. F. Benford. il diags Opt Soc Am J 33:440-3 Ag '43
- Illuminographs; photographs for computing and analyzing illumination from extended sources. F. Benford. il diag Gen Elec R 46:494-6 S '43
- New methods for the evaluation and recording of piston-skirt deposits. H. R. Luck, T. A. Rogers and A. G. Cattaneo. il diags S A E J 51:38-44+ F '43; Same. Automobile Eng 33:321-5 Ag '43; Abstract. Automotive & Aviation Ind 87:32+ D 1 '42
- Photographic sedimentation apparatus for measuring particles; abstract. C. J. Stairmand and W. F. Carey. Concrete (mill sec) 51:204 JI '43
- Photo-template processes that lessen drafting work. il Product Eng 13:707-9 D '42
- Recording unit for strain and timing functions; dynamic performance of heavy machines recorded by combination of electronic and photographic equipment. J. H. Meier. il diags Electronics 16:79-83+ Ap '43
- Shoot the works! camera can help to correct unsafe conditions and furnish training material. L. Zale. il Nat Safety N 48:23+ S '43
- Spray analyzer; may help to cut gasoline bills; abstract. S. Gilman. il Sci Am 168:11 Ja '43
- Landscape**
- Infrared film for landscape. H. R. Pierce. il Am Phot 37:20-1 JI '43
- Pictorial aspect of snow. il Am Phot 36: 18-21 D '42

Latent image

- Photographic latent image; lattice energy and related quantities for a hypothetical silver bromide crystal having the cubic ZnS type of structure. M. L. Huggins, bibliog J Chem Phys 11:412-19 S '43
- Photographic latent image; outline of the theory. M. L. Huggins. bibliog diags J Chem Phys 11:419-26 S '43

Lighting

- Daylight for portraiture. A. Hammond. il diags Am Phot 37:8-12 N '43
- Light control. A. A. Goodman. diags Am Phot 37:40-1 JI '43
- More versatility for the kodaflector. M. Grant. il Am Phot 37:31 O '43
- Rembrandt lighting. D. M. Bender. Am Phot 37:26-7 O '43

See also

- Photographic optics
- Photography, Flash-light

PHOTOGRAPHY—Continued**Negatives**

Intensification and reduction. H. C. McKay. *Am Phot* 36:42-5 Ag '42; Discussion, H. L. Woodward. 37:34-6; Reply. 36-7 F '43
Paper negatives direct in the camera. P. R. Anderson. *il Am Phot* 37:16-19 F '43
Some factors influencing the choice of negative size. B. F. Miller. *Am Phot* 37:38-9 Je '43
Your negative. H. C. McKay. *Am Phot* 37:44-6+ D '43

Patents

See also

Color photography—
Patents

Plates

Glass plates to the photo-amateur's rescue. Consumers' Research Bul 12:18 Jl '43
Photographic plates sensitive to visible and invisible light. *Science* 98:sup8 O 22 '43
Use of iron lines as intensity standards. G. H. Dieke and H. M. Crosswhite. *Opt Soc Am J* 33:425-34 Ag '43

Portraits

Daylight for portraiture. A. Hammond. *il diags Am Phot* 37:8-12 N '43
Pan, ortho and lipstick. *il Am Phot* 37:38-40 F '43
Photographing the head. H. A. VonBehr. *il diags Am Phot* 37:8-10 Ap '43

Printing processes

Improved procedure for the contact printing method of measuring photographic density. M. H. Sweet. *bibliog il diags Opt Soc Am J* 33:143-63 Mr '43
Kallitype silver printing. H. V. Schieren. *Am Phot* 37:18-19 O '43
Monochrome carbo. V. McGarrett. *Am Phot* 37:4, 48+ F '43
Photoelectric contact printer control. C. J. Penher and C. Weiske. *il diags Electronics* 16:114-15+ S '43
Photoelectric integration of negatives. R. H. Lampkin, jr. *il Am Phot* 37:16-17 My '43
Print control with blurred positive masks. M. J. Johnson. *il Am Phot* 37:14-16 Mr '43
Printing economy. V. McGarrett. *Am Phot* 37:40-2+ O '43
Speeding up your printing. T. R. Edwards, jr. *Am Phot* 37:36-7 My '43
Washing photographic films and prints in sea water. G. T. Eaton and J. L. Crabtree. *bibliog Soc Motion Picture Eng J* 40:380-91 Je '43

Retouching

Beginning with the airbrush. J. P. Marshall. *il diags Am Phot* 37:12-13 Ap '43

Reversal process

Solarization with X-rays and visible light. A. May. *bibliog Opt Soc Am J* 33:81-8 F '43
Solarized negatives. D. Loving. *il Am Phot* 37:16-18 Ap '43

Scientific applications

Airflow visualization opens new avenues of research; use of photography and projection apparatus. E. J. Saxl. *bibliog il diags Aviation* 42:148-51+ Ap '43
Dielectric-recovery characteristics of large air gaps. G. D. McCann and J. J. Clark. *bibliog il diags Elec Eng* 62:Trans 45-52 Ja '43
Harmonic analysis by photographic method. A. W. Stratton and G. K. Terhune. *J Ap Phys* 14:535-6 O '43

See also

Photomicrography

Sensitometry

Improved procedure for the contact printing method of measuring photographic density. M. H. Sweet. *bibliog il diags Opt Soc Am J* 33:143-63 Mr '43
Spectral characteristics of optical wedges. M. H. Sweet. *il diags Opt Soc Am J* 33:194-208 Ap '43

Standards

American standard method for determining photographic speed and speed number. *Opt Soc Am J* 33:479-86 Ag '43

American standards. *diags Opt Soc Am J* 33:179-84 Mr '43

American standards for photography; dimensions of paper, films and spools. *Opt Soc Am J* 33:457-78 Ag '43
New standard defines ASA speed for photography. M. E. Russell. *il Ind Stand* 14:269-72 O '43
New standards unify dimensions for amateur roll film. V. J. Moyes. *il Ind Stand* 14:231-4 Ag '43

Studios and darkrooms

Modern darkrooms in a newspaper office. R. Vincent. *il Am Phot* 37:30 O '43

Themes

Photographs set to poetry. M. Wishengrad. *Am Phot* 37:31 S '43

PHOTOGRAPHY, Aerial

Aerial photography and its use in timber inventories. A. A. Smith. *Pulp & Pa of Can* 44:457-8 My '43
Alcan highway; reconnaissance and surveys. H. J. McKeever. *il maps Roads & Sts* 86:48-52 F '43
Loss of definition in aerial photographs due to translation of camera as affected by density of negative; abstract. M. Nagel. *Roy Aeronautical Soc J* 45:sup423 N '42
New items of value to combat flying; aerial-photo training device; new developer formula. S. R. Winters. *il Aero Digest* 43:216+ Ag '43
Strip camera; to revolutionize some phases of postwar aerial commercial photography. *Business Week* p60 S 18 '43

See also

Surveying, Aerial

Bibliography

Bibliography on the interpretation of aerial photographs and recent bibliographies on aerial photography and related subjects. G. C. Cobb. *Geol Soc Bul* 54:1195-1210 Ag '43

PHOTOGRAPHY, Amateur

American standard dimensions for amateur roll film and backing paper, no. 1-9; 233.1.7-15. 1943. *diags Opt Soc Am J* 33:569-67 Ag '43
Choosing a camera for a beginner. *il Consumers' Research Bul* 11:21-3 Mr; 9-12 Ap; 13-14 My '43

PHOTOGRAPHY, Architectural

Photographing New England churches. D. E. Nibelink. *il Am Phot* 37:34-5 Ja '43

PHOTOGRAPHY, Artistic

Pictorial instead of record. W. H. Billings. *il Am Phot* 37:18-19 Ag '43
Some essentials in pictorialism. A. Hammond. *Am Phot* 37:8-11 Jl; 34-7 S '43
Truth and the photographer. H. W. H. Lee. *Am Phot* 37:26-7 Ag '43
What makes a salon print? F. I. Jordan. *il Am Phot* 37:8-11 Je '43

PHOTOGRAPHY, Astronomical. *See Astronomical photography*

PHOTOGRAPHY, Color. *See Color photography*

PHOTOGRAPHY, Commercial

Business reporter and his camera. E. A. Hunger. *il Am Phot* 37:8-11 My '43
Specialized photo-markets. H. Kenyon. *il Am Phot* 37:39 Jl '43
Values in photographs. M. W. Macpherson. *il Am Phot* 37:26-8 N '43

See also

Advertisements, Pictorial—Photographs

PHOTOGRAPHY, Flashlight

Correct flash exposure at a glance. R. W. Luebke. *il Am Phot* 37:41 N '43
Four-microsecond flash unit for high speed photography. *il diags Electronics* 16:144+ O '43
General Electric high speed flashlight. *il R Sci Instr* 14:278-9 S '43
Homemade photoflash unit. B. L. Barcliff. *il Am Phot* 37:28-9 Ag '43
Synchronized flash with larger focal-plane shutters. J. W. Hazell. *Am Phot* 37:16-17 Ag '43
What makes the midget flash so mighty? D. Mohler. *diags Am Phot* 36:8-11 D '42

PHOTOGRAPHY, Infrared

Infra-red camouflage. L. E. Bowles. *Il Aero Digest* 42:159-60, 162+ F '43
Infra-red film for landscape. H. R. Pierce. *Il Am Phot* 37:20-1 JI '43

PHOTOGRAPHY, Instantaneous

Four-microsecond flash unit for high speed photography. *Il diags Electronics* 16:144+ O '43

PHOTOGRAPHY, Journalistic

Press illustration as a side line. M. M. Macpherson. *Am Phot* 37:36-7 Ja '43
Simple photographs, that sold! M. W. Macpherson. *Il Am Phot* 37:28-30 S '43

See also

Newspapers—Illustrations

PHOTOGRAPHY, Legal

Camera: a silent witness. A. M. Myers. *Il Am Phot* 37:20-2 Je '43

PHOTOGRAPHY, Military

Fighters with film; Army air forces' first motion picture unit. C. K. Manning. *Il Am Phot* 37:20-1 Ag '43
Infra-red camouflage. L. E. Bowles. *Il Aero Digest* 42:159-60, 162+ F '43
Photo by U.S. Army Signal corps. R. T. Schlosberg. *Il Radio N* 28:74-92+ N '42

See also

Moving pictures—

Military use

War photographs

PHOTOGRAPHY, Spark

Reducing cost of motor-car operation; spark photography in study of fuel injection. S. Gilman. *Roads & Bridges* 80:50 N '42

PHOTOGRAPHY, Stereoscopic

Monoview stereogram. H. C. McKay. *Am Phot* 37:50+ My '43
Shepherd grain size fracture standards; stereoscope photographs. G. K. Manning. *Metal Prog* 44:594 O '43
Stereo optics. H. C. McKay. *Am Phot* 37:50+ Ap '43
Stereo projection. H. C. McKay. *diags Am Phot* 37:44-5 Ag; 47-8+ S '43
Three dimensional photography. W. H. Barton, jr. *Il Am Phot* 36:42-3 D '42
True stereo. H. C. McKay. *Am Phot* 37:46+ O '43

PHOTOGRAPHY, Table top

New twist for table toppers. H. C. McKay. *Am Phot* 37:48 Ap '43

PHOTOGRAPHY in industry

See also

Advertisements, Pictures—Photographs	Photographic records
Moving pictures in industry	Photography—Industrial applications
	Slide films

PHOTOGRAPHY of animals

Back fence rhapsody. T. K. Hastings. *Il Am Phot* 37:19 Mr '43
Pet photography, not restricted! G. Engelhardt. *Il Am Phot* 37:8-12 D '43
Pets and the camera. J. B. Ehrhardt. *Il Am Phot* 37:32-3 F '43
River phantom; mink. H. H. Sheldon. *Il Am Phot* 37:20 Mr '43

PHOTOGRAPHY of birds

Feathered bathing beauties. T. W. Kilmer. *Il Am Phot* 37:15 My '43
Photographing game birds. L. W. Brownell. *Il Am Phot* 37:40-3 My '43

PHOTOGRAPHY of buildings. See Photography, Architectural**PHOTOGRAPHY of clouds**

Using clouds. W. S. Davis. *Il Am Phot* 37:17 JI '43

PHOTOGRAPHY of dancing

Photographing the dance. H. A. von Behr. *Il Am Phot* 37:8-10 Ja '43

PHOTOGRAPHY of explosions

Fast photos enable research scientists to study explosives. *Il Sci Am* 169:124 S '43

PHOTOGRAPHY of fires

Photographer goes to a fire! E. W. Kehl. *Am Phot* 37:41 F '43

PHOTOGRAPHY of flowers

Photographing marsh and swamp flowers. L. W. Brownell. *Il Am Phot* 37:42-5 JI '43

PHOTOGRAPHY of horses

Picturing horses. F. I. Jordan. *Il Am Phot* 37:8-11 Ag '43

PHOTOGRAPHY of infants

Photographing the baby. V. McGarrett. *Am Phot* 37:46-8 Mr '43
Photographing the young baby. D. Featherstonhaugh. *Il Am Phot* 37:26-7 My '43

PHOTOGRAPHY of insects

Camera as an aid to entomology. L. Wendell. *Il Am Phot* 37:30-1 N '43

PHOTOGRAPHY of mines

Photographing in a coal mine. A. Williams, jr. *Il Am Phot* 37:28-9 O '43

PHOTOGRAPHY of nature. See Nature photography**PHOTOGRAPHY of plants**

Completing the flower series with photographs of their fruits. L. W. Brownell. *Il Am Phot* 37:42-5+ S '43

PHOTOGRAPHY of stars. See Astronomical photography**PHOTO-LITHOGRAPHERS, National association of. See National association of photolithographers****PHOTOLITHOGRAPHY**

Photolithographic printing plates. *Il Mod Plastics* 20:52-3+ JI '43
Preparation of copy for offset. E. St John. *Inland Ptr* 112:54-6 O '43
Threats to litho industry named; abstract. W. E. Soderstrom. *Inland Ptr* 112:53 O '43

PHOTOMECHANICAL processes

Halftone densities. P. W. Dorst. *diags Opt Soc Am J* 33:436-9 Ag '43
New type of contact halftone screen. J. A. C. Yule, F. B. Johnston and A. Murray. *bibliog diags Franklin Inst J* 234:567-82 D '42

See also

Photoengraving

Photolithography

PHOTOMETERS

See also

Densitometers

Reflectometers

Spectrophotometers

PHOTOMETERS, Photoelectric

Apparatus for photoelectric titrations; application to dark-colored resins. R. H. Osborn, J. H. Elliott and A. F. Martin. *bibliog il diags Ind & Eng Chem Anal ed* 15:642-6 O 15 '43

Cobalt determination by photo-electric comparison. W. W. Clarke. *Iron Age* 150:45 D 3 '42

Illumination measurements; precautions with photo-cells of the rectifier type. G. Mogford. *diag Elec R (Lond)* 133:103-6 JI 23 '43

Light-scattering and the graininess of photographic emulsions. A. Goetz and F. W. Brown. *bibliog diag Soc Motion Picture Eng J* 39:375-83 D '42

Measuring faint light; application of selenium cells. T. T. Baker. *il diag Elec R (Lond)* 132:343-5 Mr 12 '43

Meter for color projection printing. G. M. Brock. *il diag Am Phot* 37:38-9 Ag '43

Photocell photometry of reflex reflectors. W. F. Little and A. E. Parker. *il diags Illum Eng* 37:789-94; Discussion, 795-7 D '42

Photoelectric photometer. P. W. Cunliffe. *bibliog diags Textile Inst J* 34:755-60 Ag '43

Photoelectric photometer for determining carbon disulfide in the atmosphere. S. Silverman. *bibliog il diags Ind & Eng Chem Anal ed* 15:592-5 S 15 '43

Photoelectric photometers; abstract. J. S. Preston. *Light & Lighting* 36:52-3 Ap '43

Significance of stray light in photoelectric filter photometers. M. N. States and J. C. Anderson. *bibliog il Opt Soc Am J* 32:659-66 N '42

Studies in filter photometry. M. C. Schwartz and L. W. Morris. *bibliog il diags Ind & Eng Chem Anal ed* 15:20-3 Ja 15 '43

Study on measurements of daylight; the influence of polarized light. H. H. Hausner. *bibliog il Illum Eng* 35:382-90 JI '43

Ultraviolet photometer for analysis of solutions. I. M. Klotz. *diag Ind & Eng Chem Anal ed* 15:277-8 Ap 15 '43

PHOTOMETRY

- Analytical representation of standard response curves. P. Moon and D. E. Spencer. bibliog Opt Soc Am J 33:89-103 F '43
- Discoloration methods of rating air filters. F. B. Rowley and R. C. Jordan. *il Heating-Piping* 15:487-94 S '43
- Distribution of light intensity within a scattering medium. R. R. Newton. bibliog J Ap Phys 14:481-6 S '43
- Flux calculations in optical systems. A. C. Hardy. diags Opt Soc Am J 33:71-4 F '43
- Light of the night sky. C. T. Elvey. bibliog *il Rs Mod Phys* 14:140-50 Ap-Jl '42
- Light units and terminology. Am Phot 37: 20-1 Ap '43
- Method of preparing strips with uniformly varying blackening. E. S. Barr and L. B. Scott. *il R Sci Instr* 13:533-4 D '42
- New methods of calculating illumination. P. Moon. bibliog (48 titles) diags Opt Soc Am J 33:115-22 F '43
- New photometric units adopted in Germany; abstract. W. Geiss. *Ilum Eng* 38:402-3 S '43; Same. Franklin Inst J 236:391-2 O '43
- Recommendations for a standard method for measuring and reporting illumination from artificial sources in building interiors. diags *Ilum Eng* 38:75-88 F '43
- Slotted cylindrical rotors for photometric calibration. J. E. Platt and others. diags R Sci Instr 14:85-8 Ap '43
- Studies in filter photometry. M. C. Schwartz and L. W. Morris. bibliog *il diags Ind & Eng Chem Anal ed* 15:20-3 Ja 15 '43
- Study of martensite formation by a photometric method. E. R. Saunders and J. F. Kahles. bibliog *il Am Soc for Metals Trans* 30:1139-53; Discussion. 1153-8 D '42
- Vision at low brightness-levels. A. H. Taylor. bibliog *il Ilum Eng* 38:89-98 F '43

See also

- | | |
|--------------------|---------------------|
| Color | Measuring instru- |
| Color measurement | ments, Optical |
| Electric lighting | Optical instruments |
| Light | Sight |
| Lighting—Tables, | Spectrophotometry |
| calculations, etc. | Street lighting |

PHOTOMICROGRAPHY

- Direct positives for micrographs. J. K. Fox and R. A. Smith. *il Metal Prog* 44:619-20 O '43
- Facts of vegetable dehydration revealed by microscope. R. M. Reeve. *il diag Food Ind* 14:51-4+ D '42
- Interpretation of electron micrographs of silica surface replicas. R. D. Heidenreich. bibliog *il J Ap Phys* 14:312-20 Jl '43
- Measuring decarburization. R. D. Chapman. *il Metal Prog* 44:621 O '43
- Method for removing microscopic fog from photographic plates. L. N. Liebermann and H. H. Barschall. *il R Sci Instr* 14:89-90 Ap '43
- Microscopic animal life from ponds and streams. J. G. Pratt. *il diag Am Phot* 37:16-19 Je '43
- Microscopic structure of hydrated portland cement. L. T. Brownmiller. bibliog *il Am Concrete Inst J* 14:193-210 Ja '43
- New methods for photographing the anterior eye. W. E. Poel and K. M. Hayden. (Public health rep supp 167) 4p 3pl U.S. Public health service, Washington; pa 10c Supt. of doc. '42
- Representative micrographs of copper-base alloys. *il Metal Prog* 44:636-9 O '43
- Simplified photomicrography with a hand camera. R. P. Loveland. diags Science 97: 24-6 Ja 1 '43
- Surface replicas containing dye for use in the light microscope. V. J. Schaefer. *il Metal Prog* 44:72-4 Jl '43

See also

- | | |
|---------------------|---------------------|
| Electron microscope | Photography— |
| Microfilms | Scientific applica- |
| Microscope and | tions |
| microscopy | |

PHOTOMONTAGE

- Back fence rhapsody. T. K. Hastings. *il Am Phot* 37:19 Mr '43
- Photomontage. E. P. Wightman. bibliog Am Phot 36:40-1 D '42

PHOTOSYNTHESIS

- Flash saturation and reaction periods in photosynthesis. F. F. Rieke and H. Gaffron. bibliog J Phys Chem 47:299-308 Ap '43
- Photosynthesis and phosphorylation. S. Ruben. bibliog Am Chem Soc J 65:279-82 F '43
- Tracer studies with radioactive hydrogen; some experiments on photosynthesis and chlorophyll. T. H. Norris, S. Ruben and M. B. Allen. bibliog Am Chem Soc J 64: 3037-40 D '42

See also

- Chlorophyll
Photochemistry

PHOTOTELEGRAPHY

- Animated motion picture explains telephoto process. L. S. Metcalfe. *il Electronics* 16: 118+ My '43
- Phototelegraphy; new service with Canada. *il Electrician* 131:176 Ag 20 '43
- Pictures by wire and radio. A. G. Cooley; L. Decker. *il Electronics* 16:112-13+ Mr '43
- Use of subcarrier frequency modulation in communication systems. W. H. Bliss. *il diags Inst Radio Eng Proc* 31:419-23 Ag '43

See also

- Radio facsimile
Television

PHOTOTHERAPY

See also

- Radiotherapy

PTHALIC anhydride

- Catalytic oxidations of naphthalene series. R. N. Shreve and R. W. Welborn. bibliog *il diags Ind & Eng Chem* 35:279-88 Mr '43
- Manufacture of phthalic anhydride in Canada. *il Can Chem & Process Ind* 27:7-8 Ja '43; Same. Chem Age (Lond) 48:301-2 Mr 13 '43
- Phthalic anhydride advisory group formed by W.P.B. Oil Paint & Drug Rep 142:3+ D 21 '42

PHYSICAL chemistry. See Chemistry, Physical and theoretical

PHYSICAL constants

- Constants of some hydrocarbons in the gasoline boiling range. C. E. Boord. bibliog Oil & Gas J 41:188+ N 12 '42
- Mathematics of the physical properties of crystals. W. L. Bond. Bell System Tech J 22:1-72 Ja '43
- Paraffin hydrocarbons; correlation of physical properties. A. W. Francis. bibliog Ind & Eng Chem 35:442-9 Ap '43
- Physical constants of purest zinc. bibliog Metal Prog 44:702 O '43
- Physical properties and chemical constitution; alkyl sulphides, disulphides, sulphites, sulphates, and orthophosphates. A. I. Vogel and D. M. Cowan. Chem Soc J p16-24 Ja '43
- Precision determination of h/e by means of the short wave-length limit of the continuous X-ray spectrum. *il J Ap Phys* 14:19-20 Ja '43
- Probable accuracy of the general physical constants. F. Benford. Phys R 63:212; Comments. R. T. Birge. 213 Mr 1 '43

See also

- | | |
|----------------------|------------------|
| Boiling points | Gravity |
| Dielectric constants | Melting points |
| Freezing points | Refractive index |
| Gravitation | Specific volume |

PHYSICAL examinations

- Observation on periodic examinations. T. H. Mitchell. map Ind Med 12:355-7 My '43
- Physical examination a benefit to workers and employers; abstract. R. L. Baldwin. Concrete (mill sec) 50:288 D '42; Same. Safety Eng 85:40 Ja '43
- Physical examination of children; abstract. K. L. Lenroot. Science 97:sup8+ My 21 '43
- Physical examination of new employees to meet war-time conditions. H. B. Bardwell. Edison Elec Inst Bul 11:225-6 Ag '43
- Physical examinations; entrance and return-to-service. G. P. Myers. Ind Med 11:579-81 D '42
- Physical examinations pay dividends; construction workers on ordnance plant. W. H. D. Hinchman. Eng N 130:372-3 Mr 11 '43; Same. Ind Med 12:153-4 Mr '43; Same cond. Nat Safety N 47:34, 36 Ap '43

PHYSICAL examinations—Continued

- Pre-employment and periodic examination; their major importance. J. H. Motz. Ind Med 11:525-8 N '42
- Routine serologic testing of 15,000 employees of the home office of the Metropolitan life insurance company. C. R. Rein and M. G. Stephens. Ind Med 12:364-7 Je '43
- Special types of examinations; justifying their cost. M. I. Hall. bibliog Ind Med 11:583-6 D '42
- Streamlined pre-placement physical examinations during wartime. J. J. Prendergast. Ind Med 12:423-5; Discussion. 425-6 JI '43
- Types and frequency of physical examinations. T. L. Hazlett. Ind Med 11:581-3 D '42
- Unusual findings in pre-employment examinations. W. S. Keate. Ind Med 12:582-4 S '43

See also

Aviators—Physical examinations
Hearing—Testing

Insurance, Life—
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Medical service, Industrial

PHYSICAL geography

See also

Coast changes
Earth
Earth movements
Earthquakes
Erosion
Geology

Geophysics
Lakes
Mountains
Rivers
Volcanoes
Water, Underground

British Columbia

Origin of Peace River canyon, British Columbia. A. H. Beach and J. Spivak. bibliog map Am J Sci 241:366-76 Je '43

Hawaiian Islands

Soil avalanches on Oahu, Hawaii. C. K. Wentworth. diags Geol Soc Bul 54:53-64, pl 1-2 Ja '43

Tunisia

Tunisia. Science 97:sup8+ F 12 '43

Wyoming

Alpine mudflows in Grand Teton national park. F. M. Fryxell and L. Horberg. il map Geol Soc Bul 54:457-72, pl 1-2 Mr '43

PHYSICAL instruments

Physics in chemical industry. A. J. Mee. bibliog Chem Age (Lond) 49:355-8 O 9 '43

Some physical procedures used in ceramic research. G. A. Bole and G. A. Loomis. il diags J Ap Phys 14:443-50 S '43

See also

Astronomical instruments
Balances
Chemical apparatus
Electric apparatus and appliances
Electric instruments

Integrators
Measuring instruments
Optical instruments
Pressure gages
Radio instruments
Sound—Apparatus
also names of instruments, e.g. Micrometers; Oscillographs; Spectrometers; Thermometers; Volumometer

PHYSICAL measurements

Dimensions of physical quantities. G. W. O. Howe. bibliog Wireless Eng 20:1-4 Ja '43

See also

Dimensional analysis
Doppler effect
Electric measurements
Magnetic measurements
Physical constants
Pressure gages

Pressure measurement
Radio measurements
Temperature—Measurement
Vibration—Measurement
Viscosity—Measurement

PHYSICAL research

Cyclotron. T. F. Wall. il diags Engineering 156:201-3, 223-5 S 10-17 '43

Internationalism in science. K. K. Darrow. Science 98:122-3 Ag 6 '43

Research in physics in the postwar period. G. P. Harnwell. R Sci Instr 14:231-6 Ag '43

PHYSICIANS

Affiliated hospital units for civilian defense. Science 98:169 Ag 20 '43

Fractures in peace and war; physicians facing problems for which many are ill prepared. R. H. Kennedy. Nat Safety N 46:34+ N '42

History in the making; industrial medicine in the terms of now. pors Ind Med 12:569-75 S '43

Incomes in selected professions; medical service. E. F. Denison and A. Slater. Survey of Cur Business 23:16-20 O '43

Location and movement of physicians, 1923 and 1938; age distribution in relation to county characteristics. J. W. Mountin, E. H. Pennell and V. Nicolay. Pub Health Rep 58:483-90 Mr 19 '43

Location and movement of physicians, 1923 and 1938; effect of local factors upon location. J. W. Mountin, E. H. Pennell and V. Nicolay. Pub Health Rep 57:1945-53 D 18 '42

Location and movement of physicians, 1923 and 1938; turnover as a factor affecting state totals. J. W. Mountin, E. H. Pennell and V. Nicolay. Pub Health Rep 57:1752-61 N 20 '42

Patient load of physicians in private practice; a comparative statistical study of three areas; Maryland, District of Columbia, Georgia. A. Ciocco and I. Altman. Pub Health Rep 58:1329-51 S 3 '43

Shortage of physicians. Science 97:sup12 Mr 26 '43

Supply of physicians. W. F. Draper; M. Fishbein. Oil Paint & Drug Rep 142:56 D 14 '42

Supply of physicians; abstract. A. Ciocco and I. Altman. Science 97:sup10 F 19 '43

War and the distribution of physicians. G. St J. Perrott and E. M. Davis. bibliog Pub Health Rep 58:1645-54 O 15 '43

Warime industrial services; with special comment on Permanent foundation, California physicians' service and Procurement and assignment service. Ind Med 12:174-7 Mr '43

What price glory? C. A. Mills. Science 96:380-1 O 23 '42; Reply. W. T. Vaughan. 97:183-4 F 19 '43

See also

Advertising—Physicians, Appeal to
Medical service

also names of physicians, e.g. Barker, Lewellys Franklin

PHYSICISTS

American institute of physics, third report of War policy committee, December 7, 1942; wartime training in physics. J Ap Phys 14:1-7 Ja '43

Education and training of physicists. Chem & Ind 62:233 Je 19 '43

Engineer or physicist? place in industry. P. Dunsheath. Engineering 154:474 D 11 '42

New occupational deferment procedure for physicists. R Sci Instr 13:511-12 D '42

Suggestions from the Office of scientific personnel of the National research council; physics and mathematics instructors. H. L. Dodge. Science 97:16-17 Ja 1 '43

Toward an improved professional spirit among industrial physicists. J Ap Phys 14:103 Mr '43

Training of physicists; post-war technical education. Electrician 130:593 Je 11 '43

War manpower situation in physics. H. L. Dodge. Science 97:243-4 Mr 12 '43

See also

Fermi, Enrico / Rayleigh, John Wil-
Goodspeed, Arthur / liam Strutt
Willis

also American institute of physics

PHYSICS

American association for the advancement of science; science, common sense and decency. I. Langmuir. Science 97:1-7 Ja 1 '43

Conference on physics to be held in Puebla, Mexico. Science 97:396-7 Ap 30 '43

Elementary particles of physics. J. D. Strathan. il diags Electronics 16:122-6+ Ag '43

Fundamental atomic physics. C. D. Prater. il diags Radio N 28:29-30, 62-3 D '42; 29:11-13+ F '43

Physics in 1942. T. H. Osgood. bibliog il J Ap Phys 14:53-68 F '43

Physics in war and peace. R. M. Sutton. Gen Elec R 46:479-80 S '43

PHYSICS—Continued

- Proceedings of the American physical society and of its Ohio section, Columbus meeting, April 30-May 1, 1943; abstracts of papers. *Phys R* 63:459-63 *Je* 1 '43
- Proceedings of the American physical society, Chicago meeting, Nov. 27-28, 1942; abstracts of papers. *Phys R* 63:58-66 *Ja* 1 '43
- Proceedings of the American physical society, Los Angeles meeting, Dec. 29; abstracts of papers. *Phys R* 63:133-41 *F* 1 '43
- Proceedings of the American physical society, New York meeting, Jan. 22-23; abstracts of papers. *Phys R* 63:215-26 *Mr* 1 '43
- Proceedings of the American physical society Stanford university meeting, July 10, 1943; abstracts of papers. *Phys R* 64:186-9 *S* 1 '43
- Proceedings of the American physical society, State College meeting, June 18-19, 1943; abstracts of papers. *Phys R* 64:41-5 *Ja* 1 '43
- Stochastic problems in physics and astronomy; probability methods in stellar dynamics. S. Chandrasekhar. *diags Rs Mod Phys* 15:1-89 *bibliog*(p87-9) *Ja* '43

See also

- | | |
|---------------------|-----------------------|
| Atoms | Light |
| Ballistics | Liquids |
| Chemistry | Magnetism |
| Chemistry, Physical | Mathematical physics |
| and theoretical | Mechanics |
| Collimation | Molecules |
| Compressibility | Optics |
| Cosmic rays | Particles |
| Diffusion | Photoelasticity |
| Doppler effect | Plasticity |
| Elasticity | Pressure |
| Electricity | Quantum theory |
| Electrons | Radiation |
| Evaporation | Radioactivity |
| Expansion (heat) | Reflection (optics) |
| Fluids | Relativity (physics) |
| Free energy | Sound |
| Friction | Statistical mechanics |
| Gases | Steam |
| Geodynamics | Strains and stresses |
| Geophysics | Temperature |
| Gravitation | Thermodynamics |
| Gravity | Thermometers and |
| Hydraulics | thermometry |
| Hydrodynamics | Velocity |
| Ionization, Elec- | Vibration |
| trollytic | Viscosity |
| Ionization, Gaseous | Wave mechanics |
| Ions | Weights and meas- |
| Kinematics | ures |
- also* American institute of physics

Bibliography

- Book reviews. *R Sci Instr* 14:298-321 *O* '43
- Current literature of physics. Published in monthly numbers of *Review of scientific instruments*
- Text-books of physics; brief review of ten new books. T. D. Cope. *Science* 97:556-7 *Je* 18 '43

Congresses

- Congress of physics, Puebla, Mexico, May 3-8. *Franklin Inst J* 236:81-2 *Ja* '43

History

- Aristotle, Newton, Einstein. E. T. Whittaker. *Science* 98:249-54, 267-70 *S* 17-24 '43
- Newton's work in physics; an historical survey. H. Buckley. *Engineering* 155:83-4, 103-4 *Ja* 29-F 5 '43

Industrial applications

- Physics in chemical industry. A. J. Mee. *bibliog Chem Age (Lond)* 43:355-8 *O* 9 '43
- Physics in industry. E. U. Condon. *J Ap Phys* 13:563-5 *N* '42

- Some physical procedures used in ceramic research. G. A. Bole and G. A. Loomis. *il diags J Ap Phys* 14:443-50 *S* '43

Philosophy

- See also*
- Uncertainty principle

Study and teaching

- American institute of physics, third report of War policy committee, December 7, 1942; wartime training in physics. *J Ap Phys* 14:1-7 *Ja* '43

- Educational problem of units. R. E. Doherty. *J Eng Educ* 33:470-4 *Ja* '43
- Suggestions from the Office of scientific personnel of the National research council. H. L. Dodge. *R Sci Instr* 14:29-30 *F* '43

PHYSICS, Mathematical. *See* **Mathematical physics**

PHYSIOGRAPHY. *See* **Geology; Physical geography**

PHYSIOLOGICAL apparatus

- Apparatus for concentrating serum. G. M. Needham and P. F. Dwan. *diag Science* 97:314 *Ap* 2 '43
- Applications of electronics to physiology. W. E. Gilson. *bibliog diags Electronics* 16:86-9+ *Ja* '43
- Gravity writing lever for respiratory tam-bours. H. R. Hulpieu and R. C. Welch. *diags Science* 96:590 *D* 25 '42
- Improved instrument for measuring capillary fragility. R. A. Waud and H. G. Skinner. *il Science* 98:115-16 *Ja* 30 '43
- Microelectrodes for measuring local oxygen tension in animal tissues. P. W. Davies and F. Brink, jr. *bibliog il diag R Sci Instr* 13:524-33 *D* '42
- Recording blood flow in stomach with thermocouples and phototube. *Electronics* 16:190+ *Ja* '43
- Simplified all-purpose gravity writing lever. H. R. Hulpieu. *il Science* 98:116 *Ja* 30 '43

See also

- | | |
|---------------|-----------------------|
| Cardiograph | Perfusion apparatus |
| Kymograph | Pulse rate indicators |
| Lie detectors | Respiratory ap- |
| Oximeters | paratus |

PHYSIOLOGICAL chemistry

- Mucopolysaccharides and related substances. M. Stacey. *bibliog Chem & Ind* 62:110-12 *Mr* 20 '43
- Recent advances in the chemistry of complement. L. Pillemer. *bibliog*(99 references) *Chem R* 33:1-26 *Ag* '43

See also

- | | |
|----------------------|-------------------|
| Anesthetics | Fat |
| Biological chemistry | Hormones |
| Blood—Analysis | Immunity |
| Blood—Coagulation | Metabolism |
| Carbohydrates | Nutrition |
| Cells | Oxygen deficiency |
| Chemistry, Medical | Poisons |
| and pharmaceutical | Proteins |
| Cholesterol | Urine |
| Enzymes | Vitamins |

PHYSIOLOGICAL laboratories

- Air conditioning helps army determine ratios required under various climatic conditions; Laboratory of physiological hygiene; University of Minnesota. M. Figen. *il diags Heat & Ven* 40:21-5 *Mr* '43
- Relationship of disease and weather studied at Northwestern university medical school in air conditioned room. H. Kreisman. *il diags Heat & Ven* 40:61-6 *F* '43

PHYSIOLOGICAL research

- Applications of electronics to physiology. W. E. Gilson. *bibliog diags Electronics* 16:86-9+ *Ja* '43
- Recent engineering developments in strato-chambers. J. G. Bergdoll, jr. *il diags Refrig Eng* 45:25-32; Discussion. 32-3 *Ja* '43

PHYSIOLOGY*See also*

- | | |
|-------------------|----------------------|
| Blood | Metabolism |
| Bones | Muscle |
| Brain | Nervous system |
| Cells | Nutrition |
| Diet | Old age |
| Electrophysiology | Temperature— |
| Fatigue | Physiological effect |
| Hygiene | Tissues |

PHYTOPATHOLOGICAL society, American. *See* **American phytopathological society**

PHYTOSAURIA

- New form of phytosaur pelvis from the Dockum, triassic, beds of Crosby county, Texas. E. C. Case. *il Am J Sci* 241:201-3 *Mr* '43

PIANO

- Mechanical movements and their design; mechanism in a piano action. F. Grover. *diag Inst Mech Eng J & Proc* 147:Proc 200-2 *O* '42

PIANO—Continued

Observations on the vibrations of piano strings. O. H. Schuck and R. W. Young. *bibliog* *il* diags *Acoustical Soc Am J* 15:1-11 *Jl* '43

Transportation

Mobile piano for overseas canteens. *il* *Mod Packaging* 17:76+ *S* '43

PIANO tuning

Observations on the vibrations of piano strings. O. H. Schuck and R. W. Young. *bibliog* *il* diags *Acoustical Soc Am J* 15:1-11 *Jl* '43

PICK-UP airplane. See *Air lines—Pick-up service*; *Airplanes—Pick-up equipment*

PICK-UP phonograph. See *Phonograph—Pickup*

PICKEN, Mary Brooks (Mrs Lynn Sumner) 1886-
Gallery; meet the Mrs. D. Dignam. *pors Adv & Sell* 36:28+ *Ja* '43

PICKERING, Nelson Winslow, 1887-
Resigns presidency of Farrel-Birmingham company; assigned to duty as commander of U.S. navy section base at New London. *por Paper Tr J* 116:15 *F* 11 '43

PICKETING

Decisions of state courts; peaceful picketing limited to lawful objective. *Monthly Labor R* 57:554-5 *S* '43

Picketing in dispute between rival unions held illegal by N.Y. Court of appeals. *Comm & Fin Chr* 157:925 *Mr* 11 '43

PICKLES

Discuss wartime pickle problems; National pickle packers association. *Food Ind* 15:80-1 *Mr* '43

Pickle packers report 1943 crop decline. *Food Ind* 15:106 *N* '43

Pickles and sauces; abstract. E. F. Eaton. *Chem & Ind* 62:133 *Ap* 3 '43

U.S. production of oil of dill. E. Guenther. *il* *Food Ind* 15:72-3 *Je* '43

See also
Cucumbers

Manufacture

Bacteriological changes in cucumber fermentation. J. L. Etchells and I. D. Jones. *bibliog* *il* *Food Ind* 15:54-6 *F* '43

Factors influencing the flavoring of pickles with whole spices and essential oils; abstract. F. W. Fabian and M. C. Van Wormer. *Food Ind* 15:129 *S* '43

Physical and chemical changes in cucumber fermentation. I. D. Jones and J. L. Etchells. *Food Ind* 15:62-4 *Ja* '43

Use of starters in genuine dill pickles; abstract. *Food Ind* 15:148-9 *N* '43

PICKLING

Research shows how vegetables can be preserved by brining; tests made with corn, peas, green string beans, green lima beans and okra. F. W. Fabian. *Food Ind* 15:65-6+ *My* '43

PICKLING (metals)

Cleaning and pickling, 1942. V. A. Lamb. *bibliog* *Metals & Alloys* 17:86-7 *Ja* '43

Glass pickling tanks. *il* *Blast F & Steel Pl* 31:436 *Ap* '43

Mechanical handling of annealing and pickling operations. *il* *Mech Handling* 30:343-4 *Ag* '43

Pickling of cartridge brass; abstract. H. A. H. Crowther and P. D. Liddiard. *Metals & Alloys* 17:1038-40 *My* '43

Pickling steel cartridge cases. A. J. Lehman. *il* *Steel* 113:98, 100 *Ag* 23 '43

Recovery of free acid from pickling liquors. H. W. Gehm. *Ind & Eng Chem* 35:1003-4 *S* '43

Submerged combustion; gas burners for heating pickling tanks. F. E. Lane. *Gas J (Lond)* 242:229-30 *Ag* 25 '43

Submerged combustion takes its place in the war industries. W. G. See. *Metal Finishing* 40:653-6 *D* '42

PICOLINE methiodide

Alpha-picoline methiodide as a reagent for bismuth. K. Whelan and F. J. Welcher. *bibliog* *J Chem Educ* 20:246-8 *My* '43

PICRATES

Optical crystallographic studies with the polarizing microscope; ellipsoidal dispersion in the picrates of various amines. J. Mitchell, Jr. and W. M. D. Bryant. *bibliog* *il* *Am Chem Soc J* 65:128-37 *F* '43

PICROTOXININ

Hydrogenation of tutin. S. N. Slater. *Chem Soc J* p50-1, 143-4 *F, Ap* '43

PICTURE collections. See *Libraries—Picture collections*

PICTURE transmission. See *Phototelegraphy*; *Radio facsimile*; *Television*

PICTURES

See also
Advertisements, Paintings
Pictorial, Photographs
Moving pictures, Posters
Newspapers—Il-
lustrations

PIECE work

What have management, labor and government to gain by work incentives? *Iron Age* 151:79-81 *Ap* 29 '43

See also
Rate setting, Wage payment plans
Time study, Wages

PIERCE, George Washington, 1872-
George Washington Pierce awarded the Franklin medal. *Inst Radio Eng Proc* 31:308-9 *Je* '43

PIERCE, John B., foundation
Victory house, development of the John B. Pierce foundation. *il* diags plans *Arch Forum* 78:51-4 *Ap* '43

PIERS**Fires and fire protection**

Action by company inspector ends bad risk to huge supply of cork. *East Underw* 44:16 *Ja* 15 '43

Awards granted pier operators for efforts to safeguard against fire hazards. *Weekly Underw* 149:767 *O* 9 '43

PIERS (foundations)

See also
Bridges—Foundations and piers

PIEZOELECTRIC crystals. See *Crystals*, *Piezoelectric*

PIEZOELECTRICITY

Mathematics of the physical properties of crystals. W. L. Bond. *Bell System Tech J* 22:1-72 *Ja* '43

Mineral survey for piezo-electric materials; with list of minerals. W. L. Bond. *Bell System Tech J* 22:145-52 *Jl* '43

Piezo electric pressure recorders of high natural frequency; vibration characteristics and protection against interference by inertia forces; abstract. W. Gohlke. *Roy Aeronautical Soc J* 47:sup555-7 *O* '43

Proposed standard conventions for expressing the elastic and piezoelectric properties of right and left quartz. W. G. Cady and K. S. Van Dike. *bibliog* diags *Inst Radio Eng Proc* 30:495-9 *N* '42

Quartz crystal applications. W. P. Mason; W. L. Bond. *il* diags *Bell System Tech J* 22:178-262 *Jl* '43

Rockelle salt crystal devices of low impedance; Monobar unit. R. W. Tibbetts. *il* diags *Electronics* 16:88-90+ *Ap* '43

Study of machinery vibration; piezoelectric instruments for measuring pressure and vibration. H. Seymour. *Electrician* 123:691-2 *D* 25 '42

PIEZOMETERS. See *Manometers*; *Pressure measurement*

PIG iron

Better coke for more pig iron production. A. C. Fieldner. *Blast F & Steel Pl* 30:1279-81+ *N* '42

Charcoal pig iron. R. H. Sweetser. *il* *Iron Age* 152:43-7 *Jl* 1 '43

Desulphurization with acid slags. R. Durrer and B. Marincek. *Iron Age* 150:40-1 *D* 31 '42

Increased pig-iron output through improved coke. L. D. Schmidt, W. C. Schroeder and A. C. Fieldner. *pl U S Bur Mines Rep of Invest* 3711:1-58 '43

Pig iron—Continued

Pig iron output increased through improved coke. L. D. Schmidt, W. C. Schroeder and A. C. Fieldner. *Blast F & Steel* 31:883-7, 902-3 Ag '43

Program to increase pig iron production. *Blast F & Steel* 31:448 Ap '43

Relationship of pig iron production to the war effort in 1942. W. A. Haven. *Blast F & Steel* 31:102-3 Ja '43

War production board's aid to industry in expediting production of coke and pig iron. S. Weiss. *Blast F & Steel* 30:1245-7 N '42

See also

Cast iron	Iron
Charcoal iron	Iron founding

Prices

Composite pig iron price by months, 1925-1942; tabulations. *Iron Age* 151:196, 198-9 Ja 7 '43

Monthly price averages for twelve years, 1929-1942; tabulation. *Steel* 112:367 Ja 4 '43

Pig iron. Published in weekly numbers of *Iron age*

Statistics

Pig iron, 1938-1941. Survey of *Cur Business* 1942 Sup p137 [supplemented in monthly numbers]

Pig iron output, 1942. S. H. Barmasel. map *Iron Age* 151:93-5+ Ja 7 '43

Pig iron output 7.5% above 1941. *Steel* 111:34-5 N 23 '42

Pig iron production, monthly, 1929-1942; tabulation. *Steel* 112:364 Ja 4 '43

United States pig iron production; monthly, 1901-1942; tabulation. *Iron Age* 151:160 Ja 7 '43

World production of pig iron and ferro-alloys by countries, 1929-1942; tabulation. *Steel* 112:357 Ja 4 '43

PIGEONS

Gourmets' plight; supply of squabs short. *Business Week* p20+ D 19 '42

PIGMENTS

Analysis of the thixotropy of pigment-vehicle suspensions; basic principles of the hysteresis loop. H. Green and R. N. Weltmann. *bibliog Ind & Eng Chem Anal ed* 15:201-6 Mr 15 '43

Anthochlor pigments; the pigments of coreopsis grandiflora. Nutt. T. A. Geissman and C. D. Heaton. *bibliog Am Chem Soc J* 65:677-83 Ap '43

Application of water dispersed pigment colors to textiles. F. G. La Piana. *Am Dyestuff Rep* 32:261-3; Discussion. 263-4 Je 7 '43

Breakdown of thixotropic structure as function of time. R. N. Weltman. *bibliog J Ap Phys* 14:343-50 Jl '43

Calculation of the color of pigmented plastics. J. L. Saunderson. *bibliog Opt Soc Am J* 32:727-36 D '42

Color reaction for natural pigments and phenols. H. Tauber and S. Laufer. *Am Chem Soc J* 65:736-7 Ap '43

Conversion of lutein in a boric acidnaphthalene melt. L. Zechmeister and J. W. Sease. *Am Chem Soc J* 65:1951-5 O '43

Determination of metallic copper and cuprous oxide in commercial cuprous oxide pigments. I. Baker and R. S. Gibbs. *bibliog Ind & Eng Chem Anal ed* 15:505-8 Ag 15 '43

Determination of specific gravity of dry paint pigments. I. Baker and G. Martin. *Ind & Eng Chem Anal ed* 15:279 Ap 15 '43

Dispersion of pigments and fillers for microscopical examination. L. B. Miller. *il Paper Tr J* 116:39-42 Ja 7 '43

Earth pigments; lead and zinc pigments. *Chem Ind* 53:412, 414 S '43

How zinc saves steel from rusting; metal protective paints containing zinc pigments. F. C. Schmutz and G. W. Ashman. *il Eng N* 131:682-6 N 4 '43

Infrared reflecting and fluorescent pigments on textiles for the armed forces. R. K. Jackson. *diag Am Dyestuff Rep* 32:259-60 Je 7 '43

Notes on pigments. S. T. Dingman. *Metal Finishing* 41:181-3 Mr '43

Pigment determination, by St Louis club. *Oil Paint & Drug Rep* 144:58+ N 1 '43

Pigment dispersion with surface-active agents. E. K. Fischer and C. W. Jerome. *bibliog il Ind & Eng Chem* 35:336-43 Mr '43

Pigmentation of postwar paints. D. H. Dawson and F. E. Bolton. *Oil Paint & Drug Rep* 144:63-4 N 1 '43

Pigments as applied to textiles. E. Sewell. *Rayon* 24:607-8 N '43 (to be cont)

Predicting infrared reflectance of camouflage finishes. *il Paint Oil & Chem R* 104:10-12+ D 17 '42

Problems in chromatography and in colloid chemistry illustrated by leaf pigments. H. H. Strain. *bibliog diags J Phys Chem* 46:1151-61 D '42

Progress in the paint industry during 1942. *Paint Oil & Chem R* 105:9-10, 26-9 Mr 25 '43

Rutile titanium dioxide in specification paints. D. H. Dawson. *Paint Oil & Chem R* 105:12 Mr 11 '43

Zinc oxide pigments; the surface area and catalytic activity. C. W. Siller. *bibliog il Am Chem Soc J* 65:431-4 Mr '43

See also

Anthocyanins	Lead oxides
Carbon black	Paint
Carotenoids	Titanium oxides
Chlorophyll	White lead
Cyanines	Xanthophylls
Dyes and dyeing	Zinc oxides
Lead chromate	

Manufacture

Modernizing chemical color manufacture; Reichhold chemicals, inc. J. R. Callahan. *flow sheets il Chem & Met Eng* 50:106-11 Je '43

Prices

Paint color pigments celled. *Oil Paint & Drug Rep* 143:4+ My 10 '43

PIGS. See Swine

PILE fabrics

Rayon in pile fabrics. C. H. Beaver. *diags Rayon* 24:595-6 N '43 (to be cont)

See also

Velour

Testing

Wear testing of carpets. H. F. Schiefer. *pls J Research Nat Bur Stand* 29:333-79 N '42

PILES and pile driving

Asbestos shingle coating protects wood piling. *Eng N* 130:670 My 6 '43

Electrolytic treatment averts pile infestation. *il diag Elec W* 119:2117-19 Je 26 '43

Long wharf constructed in five months. *il diags Eng N* 130:896-7 Je 17 '43

Marine borers on the Gulf coast. W. E. Wheat. *il Civil Eng* 12:679-81 D '42

Mortar-coated piles resist hard treatment. *il Eng N* 130:425-7 Mr 25 '43

Pile driving on steep slopes. R. F. Leggett. *il Eng N* 129:936 D 31 '42

Pressures on unsymmetrical pile groups. R. B. B. Moorman. *Civil Eng* 13:326-7 Jl '43

Pulled piles reveal effectiveness of asphalt-treated wrapping; protecting untreated piling from marine borers. *il Eng N* 130:480-1 Ap 8 '43

Salvaged creosoted piles good after 25 years. *Eng N* 130:677 My 6 '43

Steel-shell piles for unusual foundation; concrete filled pipes for coal dock. H. T. Immerman. *il diags Eng N* 130:801-3 Je 3 '43

Twin drydocks constructed under water. *il Eng N* 129:703-4 N 19 '42

See also

Foundations
Piers

PILOT plants. See Chemical plants—Experimental plants

PIMARIC acid

7-Pimaric acid content of longleaf and slash pine oleoresins. E. L. Davis and E. E. Fleck. *Ind & Eng Chem* 35:171-2 F '43

PINACOL

Effect of various chemical agents affecting permeability of the mucosa on the formation of ulcers. R. L. Driver, G. S. Dozler and H. C. Denham. *bibliog Science* 98:158-9 Ag 13 '43

PINACOLIZATION

Photochemical pinacolization. F. Bergmann and Y. Hirschberg. *Am Chem Soc J* 65:1429-30 J1 '43

PINE

British wood poles; tests on larch and Scots pine. *il diag Elec R (Lond)* 132:377-9 Mr 19 '43

From the pine; naval stores production. *il Sci Am* 169:202-4 N '43

Greensalt treatment for southern pine; abstract. C. M. Hill. *Elec W* 119:1136+ Ap 3 '43

Larch and Scots pine poles. *il diags Electrician* 130:77-80 Ja 22 '43

Lumber for patternmaker and foundryman. E. T. Kindt. *Foundry* 71:159-63 Mr '43

Lustrous finishes for wood. S. E. Beck. *Paint Oil & Chem R* 106:9-11 J1 15 '43

Nitrated wood; fractionation and molecular magnitudes. S. Coppick and E. C. Jahn. *bibliog il Ind & Eng Chem* 35:890-4 Ag '43

Pedigreed pine for naval stores production. H. L. Mitchell, C. S. Schopmeyer and K. W. Dorman. *Science* 95:559-60 D 18 '42

Pinaric acid content of longleaf and slash pine oleoresins. E. L. Davis and E. E. Fleck. *Ind & Eng Chem* 35:171-2 F '43

Pine plastic; resin and vegetable fibers. G. R. Stark. *Sci Am* 168:61-2 F '43

Pulping of extracted yellow pine wood chips. O. Kress and R. H. Mosher. *bibliog Paper Tr J* 117:29-34 O 7 '43; Excerpts. *Paper Ind* 25:916-18 N '43

Solvent refining of wood rosin. I. W. Humphrey. *bibliog(patents) il diag Ind & Eng Chem* 35:1062-7 O '43

Solvents from pine. R. C. Palmer. *il Ind & Eng Chem* 35:1023-5 O '43

Some observations on density and shrinkage of ponderosa pine wood. R. A. Cockrell. *bibliog il A S M E Trans* 65:729-38; Discussion. 738-9 O '43

Southern pine production. H. C. Berckes. *il Manuf Rec* 112:36+ Ag '43

Southern pine stump and pine oil. *Science* 97:sup10+ Mr 5 '43

Southern pine, western pine, West Coast woods, 1933-1941. Survey of Cur Business 1942 Sup p133-4 [supplemented in monthly numbers]

Southern pine, western pine, West Coast woods; revised series, monthly, 1933-1941. Survey of Cur Business 23:28 Mr '43

Tall oil in soap. R. Hastings, A. Pollak and J. M. Wafer. *bibliog il Soap & San Chem* 19:24-7, 70 My '43

Virginia's pulpwood supply. S. G. Hobart. *il Paper Ind* 25:259-62 Je '43

Wooden dividend; old stumps of pine trees yield chemicals. *il Business Week* p78+ F 27 '43

PINE needles

Vitamin C from evergreens. W. B. Dunham. *Science* 98:325 O 8 '43

Vitamin C in evergreen-tree needles. M. Donnelly. *Science* 98:132 Ag 6 '43; Discussion. B. Schick; C. Macnamara. 98:241-2 S 10 '43

PINE oil

Developments in terpene chemicals. R. C. Palmer. *bibliog il Ind & Eng Chem* 34:1028-34 S '42; Abstract. *Chem Age (Lond)* 47:397-9 N 7 '42

Pine oil outlook. F. U. Rapp. *Soap & San Chem* 18:104 D '42

PINENE

Physical properties of terpenes; the system α - and β -pinene. R. E. Fugitt, W. D. Stallcup and E. Hawkins. *bibliog Am Chem Soc J* 64:2978-81 D '42

PINK, Louis Heaton, 1882-

Luncheon honoring outgoing superintendent. *Nat Underw* 47:2+ Ja 21 '43; *Nat Underw (Life ed)* 47:1 Ja 22 '43; *East Underw* 44:4 Ja 22 '43; *Weekly Underw* 148:227 Ja 23 '43

Pink to head Associated hospital service of New York. *por Nat Underw (Life ed)* 46:3+ D 11 '42; *Nat Underw* 46:3B D 10 '42

PINTO beans.

See Beans

PIPE bending

Cold bending of pipe for fighting ships. J. Klein. *diag Heating-Piping* 15:590-1 N '43

Folds eliminated when bending copper tubes. H. Hodges. *il Am Mach* 87:80-2 S 30 '43

Homemade heavy-pipe bender. *il Power* 87:120 F '43

Ingenious pipe-bending machine. *il Comp Air M* 48:7200 N '43

Jig makes circular pipe bends. H. H. Carney. *diag Am Mach* 87:97 Mr 18 '43

Jig makes combination pipe bends. H. H. Carney. *diags Am Mach* 87:111 S 16 '43

Pipe-bending methods on the WEP line. P. Reed. *il Oil & Gas J* 42:180+ S 23 '43

Simplifies the bending of aircraft tubes. W. L. Gibbons. *il Am Mach* 87:90 Ap 29 '43

PIPE bends

Calculation of pipe bends. P. J. Mascaro. *diags Heating-Piping* 15:192 Ap '43

Elastic properties of curved tubes. I. Vigness. *bibliog A S M E Trans* 65:105-17; Discussion. 117-20 F '43

Formula for determining length of pipe in a reverse bend. *Pet Refiner* 22:82 F '43

Hoop stress in pipe bends under internal pressure; chart. H. W. Hamm. *Product Eng* 14:126 F '43

How to find length of pipe to make a reverse bend. S. Levine. *diag Eng N* 130:374 Mr 1 '43

Method for detailing pipe bends extending in two planes. *diags Pet Refiner* 22:107 J1 '43

Pipe for delivering concrete has renewable bend feature. *diag Eng N* 131:689 N 4 '43

Supplementary plane pipe bends. S. C. Zimman. *diags Heating-Piping* 15:86-8, 128-31 F-Mr '43

See also

Pipe elbows

PIPE coating

Acceptance and use of A.W.W.A. standard specifications for coal-tar enamel protective coatings for steel water pipe. D. Bronson and G. B. McComb. *il Am Water Works Assn J* 35:613-23 My '43

Proposed American standard specifications for coal-tar-dip coating for cast iron pipe and fittings. *il N E Water Works Assn J* 55:sup[2] 3-10 D '42

Testing

Performance data on enamel type pipe-line coatings. W. F. Rogers. *Pet Eng (Ref annual)* 14:162, 164, 166 J1 1 '43

PIPE coverings

Maintain insulation to save more heat. P. W. Swain and E. W. Feller. *diags Power* 86:881-3 D '42

Pipe insulation for low temperatures. *diags Dom Eng* 161:69+ Ja '43

Thickness of insulation required to prevent sweating on cold pipes; reference data. Heat & Ven 40:82a-82b My '43

See also

Pipe coating

PIPE cutting

Four sections of tubing cut off in one set-up. W. Karpusiewicz. *diag Am Mach* 87:111 O 14 '43

PIPE elbows

Jacketed elbow now welded; weight cut 40 percent. *il diags Product Eng* 13:694 D '42

Laying out rectangular ducts and fittings (cont.). O. W. Kothe. *diags Sheet Metal Worker* 33:28-30 D '42; 34:40-1+ Ja; 23-4 F; 24-5 Mr; 24-5 Ap; 24-6 My; 25-6+ Je; 22-3 J1; 30-1 Ag '43

See also

Pipe coating

PIPE fitting

Good support keeps pipe out of trouble. P. W. Swain and E. W. Feller. *diags Power* 86:878-80 D '42

Hot water tank hook-ups. W. F. Schaphorst. *diags Heat & Ven* 40:59 Ap '43

How should this exhaust steam water heater be piped? *diags Heating-Piping* 15:76-7 F '43; Discussion. 15:185-8 Ap '43

Long value life begins with good installation. P. W. Swain and E. W. Feller. *il diags Power* 86:864-5 D '42

Wrench clearances required for bolting-up pipe flanges. A. H. Korn. *diags Product Eng* 13:154-6 Mr '42; Abstract. *Power* 87:748 N '43

See also

Hot water heating

Pipe joints

Plumbing

Steam fitting

PIPE fittings

Home-made welded pipe fittings conserve steel in wartime plant construction; with table of cost and weight of welded, screwed and flanged pipe fittings. *il Nat Pet N 34 pt 2:R410 N 25 '42*

How to break piping bottlenecks; steel and its substitutes. G. W. Hauck. *il diags Pet Refiner 22:71-6 F '43*; Same cond. Heating-Piping 15:224-3 My '43; Same. Chem & Eng N 21:756-9 My 25 '43; Same cond. Power Pl Eng 47:88-90 My '43

Methods used to salvage and recondition old line pipe and fittings. S. Terrell. *Oil & Gas J 42:149-50 S 23 '43*

Repairing and extending high-pressure mains without shutdown. E. Niederer, jr. *il diags Gas Age 91:11-16+ F 25 '43*

Review of power and mechanical equipment; piping, fittings and valves. *il diags Power 86:356-8 Mid-D '42*

Save 95% of strategic materials with porcelain pipe and fittings. Illinois electrical porcelain co. *il Cer Ind 39:60+ D '42*

See also

Pipe flanges

Pipe joints

Valves

Advertising

Crane co. launches new program of selling for tomorrow. *il Ind Marketing 28:22-4+ Ja '43*

Standards

Pressure-temperature ratings raised for steel flanges, fittings, valves. *Nat Pet N 35 pt 2:R122-5 Mr 3 '43*

Report of A.P.I. committee on the standardization of oil-country tubular goods. *Am Pet Inst Proc 23(4):163-85 '42*

War standard for flanges; with diags and formulas. N. O. Smith-Petersen. Heating-Piping 15:176-8 Ap '43; Same, without diags and formulas. *Ind Stand 14:119-21 Ap '43*

War standard ratings for steel pipe flanges and fittings. *Am Gas J 159:29+ S '43*

War standard revises ratings of pipe flanges and fittings. N. O. Smith-Petersen. *il Ind Stand 14:189-90 Je '43*

PIPE flanges

Lumsden pipe flange grinding machine. *il Engineer 175:217 Mr 12 '43*; Engineering 155:207 Mr 12 '43

Pressure-temperature ratings raised for steel flanges, fittings, valves. *Nat Pet N 35 pt 2: R122-5 Mr 3 '43*

War standard for flanges; with diags and formulas. N. O. Smith-Petersen. Heating-Piping 15:176-8 Ap '43; Same, without diags and formulas. *Ind Stand 14:119-21 Ap '43*

War standard revises ratings of pipe flanges and fittings. N. O. Smith-Petersen. *il Ind Stand 14:189-90 Je '43*

Well-made flange joints ease maintenance work. P. W. Swain and E. W. Feller. *diags Power 86:858-9 D '42*

Wrench clearances required for bolting-up pipe flanges. A. H. Korn. *diags Product Eng 13:154-6 Mr '42*; Abstract. *Power 87: 748 N '43*

PIPE hangers

Good support keeps pipe out of trouble. P. W. Swain and E. W. Feller. *diags Power 86: 878-80 D '42*

Suspending seventeen hundred feet of sewer from a bridge. *diag Pub Works 74:39 My '43*

PIPE joints

American standard code for pressure piping; power, gas and air, oil, district heating, refrigeration, fabrication details, materials. *diags Welding J 22:182-7 Mr '43*

Automatic uniform rolling-in of small tubes. F. F. Fisher and E. T. Cope. *il diags A S M E Trans 65:63-9*; Discussion. 59-60 Ja '43

Field welding of steel water pipe. H. A. Price and G. H. Garrett. *il diags Am Water Works Assn J 35:1295-1302 O '43*

Gas main conditioning. Carboseal. M. N. Jensen. *Am Gas J 158:33-4 Ja '43*

Handbook of piping maintenance; joints. P. W. Swain and E. W. Feller. *il diags Power 86:855-60 D '42*

How to break piping bottlenecks; steel and its substitutes. G. W. Hauck. *il diags Pet Refiner 22:71-6 F '43*; Same cond. Heating-Piping 15:224-3 My '43; Same. Chem & Eng N 21:756-9 My 25 '43

How to make piping noiseless. W. F. Schap-horst. *Am Dyestuff Rep 32:170 Ap 12 '43*

Method of installing tie in large low pressure main. W. W. Gardner. *diags Gas Age 92:14+ JI 29 '43*

Methods and efficiency of disinfecting jute packing. *Pub Works 74:18+ Je '43*

Pipe soldering to save tin; metallic ribbon helps the fusion of shaped joints. *diag Chem Age (Lond) 47:505 D 5 '42*

Precast joints in split repair sleeves. W. Turner. *il Pub Works 74:36+ My '43*

Purpose of pipe dope. *Oil & Gas J 42:68 Ag 19 '43*

Refinery use of joint-sealing and anti-seize compounds. *Pet Eng 14:132, 134 S '43*

Report of A.P.I. committee on the standardization of oil-country tubular goods. *Am Pet Inst Proc 23(4):163-85 '42*

Steel-penstock erection at a western hydro-electric project. L. G. Christofferson. *il plan Civil Eng 13:409-12 S '43*

Unique pipe jointing. *diag Water Works & Sewerage 90:27 Ja '43*

Welding butt joints in power piping. R. C. Fitzgerald. *il diags Power Pl Eng 47:72-5 Ap '43*

See also

Pipe fittings

Pipe flanges

Piping (power plants)

Plumbing

Testing

Equivalent penetrameters in radiographic testing. R. J. Schier and G. E. Doan. *il Am Soc T M Proc 42:1166-8*; Discussion. 1169-70 '42

PIPE laying

Airport drainage on a rocky site. *il plan diag Eng N 130:28-30 Ja 14 '43*

Arc welding accelerates laying of pipe lines. C. M. Taylor. *il Oil & Gas J 42:196 S 23 '43*

Augusta, Georgia, lowers 30-in. cast iron water main by melting blocks of ice. *J. D. Twiggs. Refrig Eng 45:60 Ja '43*

Big Inch construction features. *il Pet Eng 14:126-6+ Mr '43*

Big-Inch pipe line, between Longview, Tex. and Norris City. *il C. H. Vivian. il Comp Air M 47:6384-6 N '42*

Building the world's biggest oil line. E. J. Cleary. *il map Eng N 129:915-20 D 31 '42*

Constructing the large-diameter war emergency pipe line. F. H. Love. *il Pet Eng 14:39-42 N '42*

Difficulties in laying Gulf Coast line. *il Pet Eng 14:148 Mr '43*

Field welding of steel water pipe. H. A. Price and G. H. Garrett. *il diags Am Water Works Assn J 35:1295-1302 O '43*

Good practice in laying concrete pipe. L. R. Howson. *Am Water Works Assn J 35:1255-62 O '43*

Laying war-emergency lines in the Gulf Coast area. E. N. Unruh. *il Oil & Gas J 42:191 S 23 '43*

Layout of pipe on curves. H. C. Buerkle. *diags Eng N 130:565 Ap 22 '43*

Modern equipment speeds pipe-line construction. M. E. Conkling. *il Oil & Gas J 42: 184 S 23 '43*

Operation of the pressure welding process. P. Reed. *il Oil & Gas J 41:35, 45 D 17 '42*

Outline of installation procedure for steel water pipelines. W. W. Hurlbut. *il diags Am Water Works Assn J 35:1281-94 O '43*

Pipe-bending methods on the WEP line. P. Reed. *il Oil & Gas J 42:180+ S 23 '43*

Pressure welding of pipe lines. A. L. Forbes, jr. *il Oil & Gas J 42:186, 189 S 23 '43*

Record time made in construction program of first leg of War emergency pipe line. P. Reed. *il Oil & Gas J 41:79, 81+ Ja 7 '43*

Relocation of compressor station calls for engineering ingenuity. *il Gas Age 90:11+ D 17 '42*

Repairing and extending high-pressure mains without shutdown. E. Niederer, jr. *il diags Gas Age 91:11-16+ F 25 '43*

Texas-New York oil pipe line. *il Engineering 156:21-2, 30 JI 9 '43*

PIPE laying—Continued

- Texas pipeline transplanted in Florida. *il* map Eng N 130:759-61 My 20 '43
- Trenching and laying sewer and water pipe. *il* diags Pub Works 74:11+ O '43
- War emergency oil pipe line in America. *il* Engineer 175:508-11 Je 25 '43
- Welding technique for pipe-line construction and repair. C. M. Taylor. *il* diags Pet Eng 14:162, 164, 166 Mr '43
- Welding the Big Inch. *il* Steel 113:64-5, 96 Ag 30 '43
- Wellpoints eliminate sheeting for sewer; with cost data. *il* plan Eng N 130:357-9 Mr 11 '43

See also

- | | |
|----------------------|--------------------|
| Culverts | Pipe joints |
| Electric conduits | Pipe lines |
| Gas distribution | Sewerage |
| Petroleum pipe lines | Water distribution |

PIPE laying, Subaqueous

- Constructing the Lirette-Mobile natural gas transmission line. W. B. Poor. *il* Mech Eng 65:9-13 Ja '43
- Gas pipe-line crossings under the Sacramento and San Joaquin rivers. J. A. Love. *il* Oil & Gas J 42:152-3+ S 23 '43
- Laying pipe underwater with a cradle; cast iron water main in river channel at Norfolk, Va. *il* diags Eng N 130:310-11 F 25 '43
- Pipeline crossing built by novel method. *il* Eng N 130:434-6 Mr 25 '43
- River crossing of submerged water main. *il* Engineering 155:467-8, 470 Je 11 '43
- Submarine main laid with floating rig, Charleston, S.C. *il* Eng N 131:475 S 23 '43
- Trenching rock ledges complicates WEP Mississippi River crossing. P. Reed. *il* Oil & Gas J 42:41-2+ My 13 '43

PIPE lines

- Air-inlet valve design for pipelines. A. W. Sweeten. diags charts Eng N 131:37-40 JI 1 '43
- Contamination by successive flow in pipe lines. F. C. Fowler and G. G. Brown. bibliog diags Am Inst Chem Eng Trans 39: 491-516 Ag '43; Same. Nat Pet N 35 pt 2: R478+ O 6 '43; Abstract. Chem & Met Eng 50:180+ Je '43
- Wheatley liquid hammer equalizer. *il* Chem & Met Eng 50:128-9 Ag '43

See also

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|-------------------------|--------------------------|
| Aqueducts | Pipe laying |
| Culverts | Piping (power plants) |
| Electric conduits | Sewerage |
| Gas, Natural—Pipe lines | Steam pipe lines |
| Gas distribution | Steam pipes |
| Gas pipes | Water distribution |
| Gasoline pipe lines | Water pipes |
| Petroleum pipe lines | Water supply engineering |
| Pipe bends | |

Bridge crossing

See Pipe lines—River crossing

Cleaning

See Pipes—Cleaning; Water pipes—Cleaning

Corrosion

- Control of pipe-line corrosion. G. R. Olson. diags Pet Eng 14:96+ Ag '43
- Corrosive effect of alternating currents on pipe lines. S. Thayer. Pet Eng 14:82 JI '43
- See also*
- | | |
|---|-----------------------|
| Corrosion and anti-corrosives—Underground corrosion | Gas pipes—Corrosion |
| | Pipe lines—Protection |

Design

- Isothermal and adiabatic flow of compressible fluids. C. E. Lapple. Am Inst Chem Eng Trans 39:385-427; Discussion. 427-32 Je '43
- Multiple-fluid pipe line; flowing oil and gas simultaneously. F. B. Haverfield. *il* diags Pet Eng 14:151-2, 155 Mr '43

Detection

See also

Water pipes—Detection

Maintenance and repair

- Cost factors of gas line repair. Oil & Gas J 42:49 JI 22 '43
- Solvent-treating method releases tight pipe-line valve stems. G. J. Hill. diags Pet Eng 14:145-6 N '42

Moving

- Relocation of utility substructures; Chicago subway. J. B. Jackson. *il* diag W Soc E J 43:2-13 Mr '43
- Texas pipeline transplanted in Florida. *il* map Eng N 130:759-61 My 20 '43

See also

Pipe lines, Portable

Protection

- Analysis of certain circuits in cathodic protection. G. N. Scott. *il* diags Am Pet Inst Proc 23(4):36-48 '42; Excerpt. Oil & Gas J 41:263 N 12 '42
- Cathodic protection interference. A. V. Smith. diags Gas Age 92:21-7+ Ag 26 '43; Same. Am Gas Assn Mo 26:421-7 O '43
- Cathodic protection of pipe lines. Franklin Inst J 235:623-4 Je '43
- Corrosion and cathodic protection simplified. G. R. Olson. diags Gas Age 92:25-30, 32 S 23 '43
- Current density related to current distribution. H. Gear. Pet Eng (Ref annual) 14: 182, 184-5, 187-8 JI 1 '43
- Determination of the current required for cathodic protection. K. H. Logan and others. bibliog *il* diags Pet Eng (Ref annual) 14:168+ JI 1 '43
- Electrical protection reduces upkeep cost of pipe lines. *il* Sci Am 169:76 Ag '43
- Neglect of pipe corrosion; impregnated wrapping. Chem Age (Lond) 48:294 Mr 13 '43
- New type casing protects pipe line at road crossings. *il* diag Pet Eng 14:40 D '42
- Practical design and economics of cathodic units applied in a refinery. D. Holsteyn. diags Pet Refiner 22:107-10 Je '43
- Preventing internal corrosion of pipe lines; sodium nitrite treatment for gasoline lines. A. Wachter and S. S. Smith. bibliog *il* diags Ind & Eng Chem 35:358-67 Mr '43
- Problems in connection with cathodic protection of bare pipe. W. H. Stewart. diags Oil & Gas J 42:68 My 27 '43
- Products pipe-line developments; removing and preventing corrosion scale; sodium nitrite inhibitor-injection. S. S. Smith. diags Am Pet Inst Proc 23(4):54-60; Discussion. 60-3 '42

See also

Petroleum pipe lines Water pipes—Protection

Pipe coating

River crossing

- Air pressure bag plots stream bed; taking soundings in connection with pipe-line crossing of Sacramento river. J. A. Oldham. *il* diag Elec W 120:1364 O 16 '43
- Blasting river crossings for pipe lines. R. Siegrist. *il* Explosives Eng 21:86+ My '43
- Constructing world's longest pipe-line suspension bridge; illustrations. Gas Age 91: 44-5 Ap 22 '43
- Construction of pipe-line bridges over Canadian river, Oklahoma. G. R. Lunt. *il* Pet Eng 14:196, 198, 200 Mr '43
- Corrugated pipe sewer carried across river on bridge. *il* diags Eng N 131:43 JI 1 '43
- Gas pipe-line crossings under the Sacramento and San Joaquin rivers. J. A. Love. *il* Oil & Gas J 42:152-3+ S 23 '43
- Natural gas crosses the Maumee river. R. S. Siegrist. *il* Explosives Eng 21:174-5 S '43
- Permanent repair to river crossing break in Big-Inch line. F. H. Love. *il* Pet Eng 14: 55-6 S '43
- Pipeline crossing built by novel method. *il* Eng N 130:434-6 Mr 25 '43
- River crossing of submerged water main. *il* Engineering 155:467-8, 470 Je 11 '43
- Suspending seventeen hundred feet of sewer from a bridge. diag Pub Works 74:39 My '43

PIPE lines—River crossing—Continued

Trenching rock ledges complicates WEP Mississippi River crossing. P. Reed. *il Oil & Gas J* 42:41-2+ My 13 '43
WEP river crossings. P. Reed. *il Oil & Gas J* 42:63, 65 Ag 26 '43

PIPE lines, Portable

Combat pipeline. *il Business Week* p95-6 Ag 7 '43
How the army gets water; portable pipelines. *il Water & Sewage* 81:15, 38-9 Ag '43

Lightweight spirally welded pipelines carry fluids to army. *il Steel* 113:71 Ag 23 '43
Lightweight tubing helps solve war fuel transportation problems for United States' forces in Africa. *il Steel* 112:72 My 10 '43

Little Inch of the battle zones. *il Oil & Gas J* 42:58-9 S 30 '43

Patriotic idea developed into vital link in allied chain of oil supply. *il Oil & Gas J* 42:25-6 Ag 5 '43; Same. *Pet Eng* 15:133-4 O '43; Same cond. *Heating-Piping* 15:467+ S '43

Portable pipeline hits Axis; invention carrying gasoline and water to battle fronts. *il Nat Pet N* 35:6-7 Ag 4 '43

PIPE lines, Subaqueous

See also

Pipe laying, Sub-aqueous Pipe lines—River crossing

PIPE lining

Proposed American standard specifications for coal-tar-dip coating for cast iron pipe and fittings. *il N E Water Works Assn J* 56:sup[2] 3-10 D '42

PIPE scrapers. See Scrapers, Pipe**PIPE threads**

Clean-cut threads make tight, long-lived joints. P. W. Swain and E. W. Feller. *il diags Power* 86:855-7 D '42

Trouble shooter for correcting pipe threading ills. *il diags Heating-Piping* 14:722-3 D '42

Standards

American standard for pipe threads is revised and enlarged. A. M. Houser and C. B. LePage. *diag Ind Stand* 14:47-8 F '43
Standards for pipe threads revised. *diag Nat Pet N* 35 pt 2:R331-2 Jl 7 '43

PIPER aircraft corporation

Engineering progress. W. C. Jamouneau. *il Aeronautical Eng R* 1:75 N '42

PIPERIDINE

α,β -Unsaturated aminoketones; reaction of piperidine and N-methylbenzylamine with bromine derivatives of benzalacetone and benzalacetophenone. N. H. Cromwell and I. H. Witt. *Am Chem Soc J* 65:308-12 Mr '43

PIPERONYLAMIDES

Fly spray kill; study of the synergistic action of N-substituted piperonylamides when incorporated in pyrethrum fly sprays. S. I. Gertler, J. H. Fales and H. L. Haller. *Soap & San Chem* 19:105+ Ap '43
Study new synergists. S. I. Gertler, J. H. Fales and H. L. Haller. *Soap & San Chem* 19:111 My '43

PIPERYLENE

Geometric isomers of piperylene. D. Craig. *bibliog Am Chem Soc J* 65:1006-13 Je '43

PIPES

Attenuation of electromagnetic fields in pipes smaller than the critical size. E. G. Linder. *bibliog Inst Radio Eng Proc* 30:554-6 D '42
Bus construction of welded wrought-iron pipe. J. A. Gerber. *il Elec W* 120:988-9 S 18 '43

Couldn't say no; Texan compounds vent pipe of concrete, asbestos, and mystery mineral. *il Business Week* p74-5 My 22 '43

57,000 tons of pipe turned to domestic operators. *Oil & Gas J* 41:37 Mr 11 '43

Making pipe bushings from standard pipe. *Water Works & Sewerage* 90:sup77 Je '43

Methods used to salvage and recondition old line pipe and fittings. S. Terrell. *Oil & Gas J* 42:149-50 S 23 '43

Pipe and tube materials survey in sulphate pulp process. S. B. Jones. *flow diag Paper Tr J* 116:41-4 Ap 15 '43; Same abr. *Paper Ind* 25:180+ My '43

See also

Air pipes Electric conduits
Culverts Gas pipes

Mechanical equip- Pipe lines
ment of buildings Piping
Petroleum—Well Piping (power plants)
casing Plumbing
Petroleum pipe lines Steam pipes
Pipe fittings Tubes
Pipe joints Water pipes
Pipe laying

Cleaning

Machine cleans pipe with steel grit. *il Oil & Gas J* 42:236 S 23 '43

See also

Water pipes—
Cleaning

History

History of piping. M. A. Hasselmann. *il diags Heating-Piping* 15:254-6, 300-3, 357-9, 477-9, 540-2 My-Jl, S-O '43

Leakage

Locating leaks in hidden pipes. chart Can Min J 64:493 Ag '43

Manufacture

Brazilian pipemaker operates four charcoal staks. G. A. Maigne. *il diags Steel* 112:68-70+ Ja 25 '43

Metal-forming machine; electric weld pipe mill. E. W. Allardt. *il Welding J* 22:319-21 My '43

See also

Pipe threads Pipes, Steel—Manu-
Pipes, Concrete— facture
Manufacture

Prices

Cast iron pipe at New York, net ton, monthly, 1929-1942; tabulation. *Iron Age* 151:203 Ja 7 '43

Cast iron pipe, Birmingham; prices, 1929-1942; tabulation. *Steel* 112:377 Ja 4 '43

Prices on reusable oil country tubular goods revised by OPA. *Oil & Gas J* 41:35 F 11 '43

Standards

American standard code for pressure piping; power, gas and air, oil, district heating, refrigeration, fabrication details, materials. *diags Welding J* 22:182-7 Mr '43

Application of new piping requirements in refineries and gasoline plants. A. D. Sanderson. *il Nat Pet N* 35 pt 2:R34-5 Ja 6 '43

New code for pressure piping brings safety requirements up-to-date. S. Crocker. *il Ind Stand* 14:13-16 Ja '43

New method for computing pipe wall thickness provided in revised code. S. Crocker. *diags Nat Pet N* 35 pt 2:R36-8, R40 Ja 6 '43

Report of A.P.I. committee on the standardization of oil-country tubular goods. *Am Pet Inst Proc* 23(4):163-85 '42

Schedule number system for pipe suppliants old standard weight and extra strong designations. S. Crocker. *Heating-Piping* 14:715-18 D '42

War standard for flanges; with diags and formulas. N. O. Smith-Petersen. *Heating-Piping* 15:176-8 Ap '43; Same, without diags and formulas. *Ind Stand* 14:119-21 Ap '43

Tables, calculations, etc.

Air-inlet valve design for pipelines. A. W. Sweeten. *diags charts Eng N* 131:37-40 Jl 1 '43

Chart of loss of head in feet per 1000 ft. of pipe; velocity in pipes. *Water Works & Sewerage* 90:sup276-7 Je '43

Contents of horizontal cylinders. J. Tarrant. chart *Water Works & Sewerage* 90:sup274-5 Je '43

Damping of large amplitude vibrations of a fluid in a pipe. R. C. Binder. *Acoustical Soc Am J* 15:41-3 Jl '43

Determination of productive capacities of flow pipes on gas lift. S. F. Shaw. *diags Oil & Gas J* 42:47-8, 50, 53-4 Je 17 '43

Direct calculation of gas pressure drop in pipes. A. S. Hall, jr. and R. C. Binder. *Power* 87:537-8+ Ag '43

Elastic properties of curved tubes. I. Vigness. *bibliog A S M E Trans* 65:105-17; Discussion. 117-20 F '43

PIPES—Tables, calculations, etc.—*Continued*

Flow of liquids under critical conditions. A. H. Nissan. *diags* *Inst Pet J* 28:257-73 N '42

Formula for determining length of pipe in a reverse bend. *Pet Refiner* 22:82 F '43

Heat transfer and pressure drop in annuli. E. S. Davis. *bibliog* A S M E *Trans* 65: 755-9; *Discussion*. M. Jakob. 760 O '43

How to size piping for steam, gases and vapors. E. N. Kemler. 14 charts *Heat & Ven* 40:52-4+ O '43

Linear expansion of pipe; reference data. *Heat & Ven* 40:84a-84b Ja '43

New method for computing pipe wall thickness provided in revised code. S. Crocker. *diags* *Nat Pet N* 35 pt 2:R36-8, R40 Ja 6 '43

Pipe friction chart, fairly rough and rough pipe; reference data. *Heat & Ven* 39:46a-46b N '42

Pressure drop data as applied to pulp suspensions. J. Cooper, jr. *bibliog* *Paper Tr J* 115:32-6 N 19 '42

Sizing small pipe columns. *Heat & Ven* 40: 72 F '43

Skimp pipe size for the duration; tables of economical pipe and gate valve size. W. Maddock. *Power* 37:470-1 JI '43

Stress in straight pipes and pipe bends under internal pressure; charts. H. W. Hamm. *Product Eng* 14:125-6 F '43

Testing*See also*

Pipes—Leakage

PIPES, Asbestos board

Fabrication of non-metallic ducts. *il diags* *Sheet Metal Worker* 34:23-4+ O '43

PIPES, Asbestos cement

Alternate material for duct construction. L. L. Narowetz, jr. *diags* *Heating-Piping* 15: 26-7 Ja '43; Same, without *diags*. *Sheet Metal Worker* 34:42-4 F '43; *Discussion*. *Heating-Piping* 15:85 F '43

Combat corrosion in wet Texas. H. F. Simons. *il Oil & Gas J* 41:61, 63 F 25 '43

Eternit & new cement-asbestos pipe, *il Water Works & Sewerage* 90:insert 121 Je '43

Experiments in substituting nonmetallic pipe for steel well casing. F. Squires. *Oil & Gas J* 41:38-9 F 18 '43

Fabricating special machine tools by welding; equipment used in machining Transite pipe made from scrap materials. J. M. Wiley. *il Pet Eng* 14:86, 88 Ap '43

Floor heating system in hangar conserves metal; nonmetallic ducts circulating warm air heated by steam. J. K. Fairbairn and J. D. Dillon. *il diags* *Heating-Piping* 15: 573-5 N '43

How to meet war time restrictions in heating and air conditioning design; nonmetallic ducts. T. W. Reynolds. *Heat & Ven* 40:60H F '43

Plane modification center of Bechtel, McCone & Parsons; asbestos-cement ductwork. R. M. Rush. *il Heat & Ven* 40:68-9 S '43

PIPES, Concrete

Big concrete pipe ducts speed war project; heating, power, water and other services; General electric company. *il Eng N* 129: 925-7 D 31 '42

Products and pipe fields surveyed by WPB. *maps* *Concrete* 51:24 Ag '43

War-time problems of pipe industry; American concrete pipe association convention. *Rock Prod* 46:92-3 Mr '43

See also

Sewer pipes, Concrete Water pipes, Concrete

Manufacture

All sizes 'up to 9 ft. diameter; Choctaw culvert and machinery co. W. B. Lenhart. *il Rock Prod* 46:84, 86-4 JI '43

Increases business by diversifying; Graystone concrete products co. makes varied line. R. S. Torgerson. *il Rock Prod* 45:66, 69 N '42

Machine-made specialties; Union concrete pipe co. *il Rock Prod* 45:60-2, 72-3 N '42

Radial system for pipe manufacture; Spokane concrete pipe co. *il Rock Prod* 46:118-4 Ja '43

PIPES, Fiber

Experiments in substituting nonmetallic pipe for steel well casing. F. Squires. *Oil & Gas J* 41:38-9 F 18 '43

Non-metal ducts; are they here to stay? *il diags* *Heat & Ven* 40:64-7 Ap '43

PIPES, Flexible

Flexible pipe. *Fortune* 27:38+ My '43

PIPES, Plastic

Choosing plastic tubing for specific purposes. *il Product Eng* 14:438-41 JI '43

Extruded saran pipe for industrial plants. *il Mod Plastics* 20:60-4 Ja '43

Plastic pipe and power; Saran pipe is being utilized in rectifying and heat exchange installations in electrolytic mass production of magnesium. *il Chem & Eng N* 21:1062-3 JI 10 '43

Plastic pipe for rectifiers; Saran pipe and fittings on heat exchangers and rectifying units at Dow magnesium corp. plant. *il Chem & Met Eng* 50:116 JI '43

Saran pipe and tubing; chemical resistance. *il Chem & Eng N* 20:1508-10 N 25 '42

Spotlight on plastics for plumbing and heating. J. C. Louer. *il Dom Eng* 161:44-6+ Ap '43

Tubing and tube fittings for aircraft and in other applications. W. M. White. *il diags* *Mod Plastics* 20:65-7+ Ag '43

See also

Water pipes, Plastic

PIPES, Porcelain

Save 95% of strategic materials with porcelain pipe and fittings; Illinois electrical porcelain co. *il Cer Ind* 39:60+ D '42

PIPES, Steel

Effect of normalizing on the properties of welds in carbon-molybdenum steel pipe. I. A. Rohrig, D. H. Corey and S. Crocker. *il Welding J* 22:sup521-7 O '43; *Abstract*. *Heating-Piping* 15:591 N '43

1000-pound bombs fabricated from seamless pipe; Commercial shearing & stamping co. G. R. Reiss. *il Steel* 112:76-7+ My 24 '43

Phases of Big Inch engineering. W. R. Finney. *il Pet Eng* 14:113+ Mr '43

Steel casing retools the Mustang; aircraft assembly fixtures from steel casing from oil fields. L. Pollock. *il Am Mach* 87:91-5 My 13 '43

Steel for oil industry newest task facing War production board. *Iron Age* 151:91-2 Mr 18 '43

See also

Tubes, Steel

Water pipes, Steel

Graphitization*See also*

Piping (power plants)

—Graphitization

Manufacture

Descaling pipe the modern way; use of Wheelabrator. A. M. Hoffmann. *il Comp Air M* 47:6918-19 D '42

Making the Big Inch pipe. F. H. Love. *il diags* *Pet Eng* 14:140, 143-4 Mr '43

Testing

Report on bursting test of fusion-welded pipe. *il diags* *Oil & Gas J* 42:45 JI 15 '43

Statement on elongation requirements for steel pipe. *Am Soc T M Proc* 42:95-9 '42

Weldability of (NE-8339) manganese molybdenum steel piping. R. W. Emerson. *il Welding J* 22:sup170-8 Ap '43; Same cond. *Steel* 113:88-9, 92, 95-6 JI 26 '43

PIPES, Tobacco

Pinch-hitter wins regular place in line-up; Breezewood pipe (domestic briar). *il Ptr Ink* 202:22-3 Ja 8 '43

PIPES, Wooden

New types of emergency wood pipe. *il Min Cong J* 29:35+ Mr '43

PIPETS

Particle size distribution; sedimentation methods. H. E. Schwyer. *diags* *Rock Prod* 45: 58, 94-6 N '42

PIPING

American standard code for pressure piping; power, gas and air, oil, district heating, refrigeration, fabrication details, materials. *diags* *Welding J* 22:182-7 Mr '43

PIPING—Continued

Applicable methods of inspection for pressure vessels and piping. W. D. Halsey. Welding J 22:821-2 O '43

Application of new piping requirements in refineries and gasoline plants. A. D. Sanderson. *il* Nat Pet N 35 pt 2:R34-5 Ja 6 '43

Big concrete pipe ducts speed war project; heating, power, water and other services; General electric company. *il* Eng N 129: 926-7 D 31 '42

Graphical method useful to the piping detailer. diag chart Pet Refiner 22:88 Ag '43

How to break piping bottlenecks; steel and its substitutes. G. W. Hauck. *il* diags Pet Refiner 22:71-6 F '43; Same cond. Heating-Piping 15:224-8 My '43; Same. Chem & Eng N 21:756-9 My 25 '43; Same cond. Power Pl Eng 47:88-90 My '43

How to size piping for steam, gases and vapors. E. N. Kemler. 14 charts Heat & Ven 40:52-4+ O '43

Industrial piping and pumping; illustrations with text. Dom Eng 162:70-1 S '43

Piping and cooling quenching fluids. F. F. Stevenson and N. U. Stryker. *il* Heating-Piping 15:16-19 Ja '43

Piping arrangements for meter installation; diagrams. Power Pl Eng 47:110 F '43

Piping connections for cooling stamping blocks by refrigeration. F. F. Stevenson. *il* Heating-Piping 15:91-2 F '43

Piping services at the new Bell telephone laboratory. F. L. Hunt. *il* diag Heating-Piping 15:217-19 My '43

Practical piping problems; importance of maintenance. F. D. Mosher. Heating-Piping 15:134 Mr '43

Prevention of steam and air leaks; J. I. Case. *il* Factory Management 101:180-1 Ag '43

Proper piping is important when cooling welding electrodes. A. L. Munson. *il* diags Heating-Piping 15:346-9 Jl '43

Standard refinery piping practice is prescribed in new code. Nat Pet N 35 pt 2: R32 Ja 6 '43

See also

Air pipes	Pipes
Oil pipes	Plumbing
Pipe bends	Ships—Piping
Pipe fitting	

History

History of piping. M. A. Hasselmann. *il* diags Heating-Piping 15:254-6, 300-3, 357-9, 477-9, 540-2 My-Jl, S-O '43

Identification

Color code for pipe lines. Power Pl Eng 47: 102+ Ja '43

Tube identification made simple by use of a standard business machine; printing part numbers on colored calendar tape used in identification of warplane tubing. *il* Sci Am 169:226-8 N '43

PIPING (power plants)

Ash sluice life quadrupled by turning. Elec W 119:297 Ja 23 '43

Bypass protects high-pressure boiler-feed pump. I. Karassik. diags Power 87:678-9+ O '43

Detailed layouts and accurate planning required for efficient piping installations. diags plans Heat & Ven 40:47-52 Ag '43

Handbook of piping maintenance. P. W. Swain and E. W. Feller. *il* diags Power 86:353-83 D '42

High-pressure stop and blow-down valves. diags Engineering 154:506 D 25 '42

Schedule number system for pipe suppliants old standard weight and extra strong designations. S. Crocker. Heating-Piping 14:715-18 D '42

Simple pipe arrangement for utilizing exhaust steam. W. F. Schaphorst. diag Am Gas J 159:14 Jl '43

Skimp pipe size for the duration; tables of economical pipe and gate valve size. W. Maddock. Power 87:470-1 Jl '43

Typical troubles with steam piping. C. C. Custer. diags Power Pl Eng 46:61-3 D '42

War standard for flanges; with diags and formulas. N. O. Smith-Petersen. Heating-Piping 15:176-8 Ap '43; Same, without diags and formulas. Ind Stand 14:119-21 Ap '43

Graphitization

Research on graphitization of piping is under way. Edison Elec Inst Bul 11:307-8 O '43

Welding

Gamma-ray radiography of welded high pressure power plant piping. E. W. Emerson. biblog *il* diags Am Soc T M Proc 42:1111-23; Discussion. 1130-3 '42

How to learn basic pipe welding; illustrated instructions; study sheets. Power 87:274-5, 343-4, 415-16, 485, 555-6 Ap-Ag '43

Welding butt joints in power piping. R. C. Fitzgerald. *il* diags Power Pl Eng 47:72-5 Ap '43

Welding for joints and all 'round maintenance. P. W. Swain and E. W. Feller. diags Power 86:860 D '42

PIPING (refrigerating plants)

Pipe insulation for low temperatures. diags Dom Eng 161:69+ Ja '43

PIRYLENE

Constitution of porylene; chemical evidence. H. Sargent, E. R. Buchman and J. P. Farquhar. biblog Am Chem Soc J 64:2692-3 N '42

Constitution of porylene; electron diffraction investigation. R. Spurr and V. Schomaker. Am Chem Soc J 64:2693-6 N '42

PISÉ

Mud mansions; Detroit co-op rammed-earth homes. *il* Business Week p63-4 D 12 '42

PISTOLS

Making a world-famous automatic pistol; Colt's patent fire arms mfg. co. E. P. Herrick. *il* diags Mach 49:123-37 D '42

PISTON rings

Compressor piston-ring leakage. diags Power 87:549-51+ Ag '43

Cylinder and ring life with porous chromium-plated rings. T. C. Jarrett. *il* Mech Eng 65:633-5 S '43

Engineering piston rings for high-speed Diesels. P. S. Lane and S. Nixon. diags S A E J 50:528-32 D '42

How to install one-piece rings on pistons; illustrated instructions. Power 87:773 N '43

Importance of compression rings in controlling oil consumption. M. O. Teeter. *il* S A E J 51:20-2 Ja '43; Same. Diesel Power 21:47-9 Ja '43; Same. Automobile Eng 33:185-6 My '43

Importance of piston rings in aircraft engine maintenance. P. S. Lane. *il* diag Aviation 41:205, 207+ N '42

Method to overcome piston ring seizure. F. Gossliud. diags Automotive & Aviation Ind 89:36 S 1 '43

Piston ring experiences at the Denton, Texas, municipal plant. *il* Diesel Power 21:803-5 S '43

Piston-ring scuffing as a criterion of oil performance. G. H. Keller. *il* diag S A E J 51:125-9 Ap '43

Piston rings and oil control in two-cycle high-output Diesel engines. F. G. Shoemaker and R. Allbright. S A E J 51:31-2 Ja '43

Railroad centralizes machine operations; packing rings for locomotive pistons. *il* diags Am Mach 87:100-2 Je 10; 96-8 Jl 8 '43

Ring design makes or breaks the engine. D. M. Smith and N. Wainwright. diags Aviation 42:171, 173-4+ Ag '43

SAE standardizing piston and ring nomenclature. diags S A E J 51:sup39 N '43

State of German research on wear, with special reference to the wear of cylinders and piston rings; abstract. R. Poppinga. Roy Aeronautical Soc J 46:sup416-17 N '42; Same. Automobile Eng 33:38 Ja '43

Manufacture

Diversity of rings for war machines. J. Geschelin. *il* Automotive & Aviation Ind 89:36-40+ Jl 15 '43

Make piston rings for war machines; Perfect circle co. P. Dwyer. *il* Foundry 71: 88-91+ Mr '43

PISTON rings—Manufacture—Continued

Piston rings of gray iron; a pictorial article. T. C. Jarrett. *Metals & Alloys* 17:1188-95 Je '43

Ramsey plant at Fruitport notable for its modern equipment; manufacture of aviation piston rings. *il Automotive & Aviation Ind* 87:34-7 D 1 '42

PISTON rods

Engine piston rod breaks. *Power* 87:146c+ F '43

PISTONS

Correcting piston trouble; how two companies do it. T. L. Mino; R. M. Byrne. *diags Bus Transportation* 22:60-1 Ag '43

New methods for the evaluation and recording of piston-skirt deposits. H. R. Luck, T. A. Rogers and A. G. Cattaneo. *il diags S A E J* 51:38-44+ F '43; Same. *Automobile Eng* 33:321-5 Ag '43; Abstract. *Automotive & Aviation Ind* 87:32+ D 1 '42

SAE standardizing piston and ring nomenclature. *diags S A E J* 51:sup39 N '43

See also

Piston rings

Manufacture

Pressed pistons; technique employed by Specialoid limited in forging light wrought alloys. *il Automobile Eng* 33:349-59. 397-404 S-O '43

Testing

Pressed pistons; control methods employed by Specialoid limited. *il Automobile Eng* 33:397-404 O '43

PITCH

Extinguishing magnesium fires with hard pitch derived from coal tar. H. R. Brown, I. Hartmann and J. Nagy. *pls U S Bur Mines Rep of Invest* 3672:1-17 '42

Viscosity of coal-tar residues; comparison of viscosity measurements and A.S.T.M. penetration tests. W. F. Fair, jr. and E. W. Volkmann. *bibliog Ind & Eng Chem Anal ed* 15:240-2 Ap 15 '43

Viscosity of pitches. W. F. Fair, jr. and E. W. Volkmann. *bibliog il Ind & Eng Chem Anal ed* 15:235-9 Ap 15 '43

PITCH as fuel

Burning of creosote-pitch mixtures. *diags Engineer* 175:352-4 Ap 30 '43

Burning of pitch creosote mixtures; discussion. *Gas J (Lond)* 241:524, 529 Ap 28 '43

PITTSBURGH

Pittsburgh, a center for industrial research. *il Chem & Eng N* 21:976-8 Je 25 '43

This is Pittsburgh. P. James. *il Adv & Sell* 36:23, 38, 40+ Ap '43

See also

Housing—Pittsburgh

Population—Pittsburgh

Bridges

Bringing a bridge up to date; Liberty bridge. *il diags Eng N* 130:798-800 Je 3 '43

Industries

Men vs. contracts; Pittsburgh employers appeal to WMC for reclassification. *Business Week* p105-6 Je 26 '43

New geography of American business; Pittsburgh region expands steel capacity, faces long-term depletion of coal, oil, gas reserves. W. H. Hillyer. *Barron's* 23:6+ JI 19 '43

Pittsburgh and the petroleum industry. A. H. Adams and B. H. Weil. *il Chem & Eng N* 21:1077-9 JI 10 '43

Pittsburgh, the glass center. F. W. Adams. *il Chem & Eng N* 21:1264-7 Ag 10 '43

Streets

Allegheny county improves Duquesne Way. *il diags plan map Eng N* 131:540-3 O 7 '43

Tunnels

Pioneer highway tunnels modernized for service; Liberty tunnels at Pittsburgh. *il diags Eng N* 131:326-9 Ag 26 '43

PITTSBURGH plate glass company

Prospects. *Barron's* 23:9 Ag 9 '43

PITTSBURGH railways company

Status of Pittsburgh Railways bonds. W. Andrews. *Barron's* 23:10+ Ag 23 '43

PITTSBURGH steel company

Annual report. *Comm & Fin Chr* 157:1364 Ap 12 '43

PITTSBURGH stock exchange

Weekly record. Published in weekly Monday numbers of Commercial & financial chronicle

PITTSBURGH university

Buhl foundation research fellowships at the University of Pittsburgh. *il Chem & Eng N* 21:361-3 Mr 25 '43

Wartime activities, 1942-43. W. A. Hamor. *Science* 97:445-7 My 14 '43

PITTSBURGH university. Mellon institute of industrial research

Mellon institute in wartime. *il Chem & Eng N* 21:467-78 Ap 10 '43

Technochemical lectures, 1943-44. *Science* 98:358 O 22 '43

PITTSBURGH company

Listing; merger. *Comm & Fin Chr* 157:170 Ja 11 '43

PITUITARY body

Corticotropin obtained by ultrafiltration of pituitary extracts. R. Tyslowitz. *Science* 98:225-6 S 3 '43

Isolation of adrenocorticotrophic hormone from sheep pituitaries. Choh Hao Li, M. E. Simpson and H. M. Evans. *Science* 96:460 N 13 '42

PITZER, Kenneth Sanborn, 1914-

Wins A.C.S. pure chemistry award. *Oil Paint & Drug Rep* 144:7 S 13 '43

PIVOTING

Pivoting. J. E. Morrison. *Instruments* 16:125 Mr '43

PIVOTS

Instrument pivots and bearings. M. F. Behar. *il diags Instruments* 16:262, 264, 266+ 340+ My-Je '43

PLACEMENT of workers. See Employment systems

PLAGIOCLASE twinning. See Feldspar

PLAGUE

Plague infection in California, Colorado, and Montana. *Pub Health Rep* 58:1421-2 S 17 '43

Plague infection reported in the United States during 1942. *Pub Health Rep* 58:640-5 Ap 16 '43

Positive plague and tularemia specimens reported in Canada during 1942. *Pub Health Rep* 58:616 Ap 16 '43

Report on the fleas *opisocrostis bruneri* (Baker) and *thrassius bacchi* (Roths.) as vectors of plague. F. M. Prince. *bibliog map Pub Health Rep* 58:1013-16 JI 2 '43

Species of fleas on rats collected in states west of the 102d meridian and their relation to the dissemination of plague. F. M. Prince. *bibliog Pub Health Rep* 58:700-8 Ap 30 '43

Twenty-year survival of virulent bacillus pestis cultures without transfer. E. Francis. *Pub Health Rep* 58:1379-82 S 10 '43

See also

Pasteurella pestis

PLANETARY gearing. See Gearing, Planetary

PLANETS

Anthropocentrism's demise; new discoveries lead to probability that there are thousands of inhabited planets in our galaxy. H. N. Russell. *Sci Am* 169:18-19 JI '43

Earth's atmosphere and the constitution of the planets; meteors and the earth's upper atmosphere. F. L. Whipple. *Rs Mod Phys* 14:139 Ap-JI '42

Electron-shell theory of planet-genesis. H. P. Gillette. *Roads & Sts* 86:50-1 Ap '43

Geochemistry of the atmosphere and the constitution of the terrestrial planets. R. Wildt. *bibliog Rs Mod Phys* 14:151-9 Ap-JI '42

See also

Earth

Satellites

PLANETS (extra-solar system)

Planet outside our solar system; abstract. K. A. Strand. *Science* 96:sup8 N 27 '42

PLANING machines

Cincinnati planer offers an improved machine. *il Am Mach* 87:130 S 16 '43

PLANNING machines—Continued

- Getting more production from planers. J. M. Walter. *Il diags Mach* 49:169-72 F '43
 Liberty makes a medium-duty, double housing planer. *Il Am Mach* 87:113 Ap 1 '43
 Micrometer stop block for planer head. *Il diags Ry Mech Eng* 117:43 Ja '43

PLANKTON

- Distribution of stream plankton in the Ohio River system; abstract. F. J. Brinley and L. J. Katzin. *Am Water Works Assn J* 35:319 Je '43
 Overcoming plankton difficulties at the Hamilton filtration plant. D. H. Matheson. *Il Water & Sewage* 81:38+ Ap '43
 Utilization of aquatic food resources; fresh water plankton. C. Juday. *Science* 97:456-8 My 21 '43

PLANNING

- Aircraft production analysis, key to assembly line efficiency. L. F. Dorman. *Il Aviation* 42:148-52+ N '43 (to be cont)
 Aircraft tool planning. (R. H. Luders. *Il Aviation* 42:144-5, 147+ Ap; 179, 181+ My '43
 Centralized planning for small plants; sub-contractors' system; Aircraft products & equipment corp. J. H. Stephens. *Il Aviation* 42:217+ Mr '43
 Curtiss-Wright's shop priority control system. W. J. Shepherd. *Aero Digest* 42:216, 219-20+ Mr '43
 Efficient production management achieved by careful controls. C. H. Speck. *Il Aero Digest* 42:184-6, 207-8 Ap; 173+ My '43
 Industrial planning. W. S. Landis. *Chem Ind* 51:342-5, 700-3 S, N '42
 Industry also plans; AD-ventures of Pvt. Enterprise; illustrations. *Banking* 35:30-1 F '43
 Long-term company planning; new importance to business. E. H. Schell. *Il Dun's R* 51:17-19+ Ja '43
 Meeting delivery dates by production planning. A. Lanzafame. *Il Aero Digest* 41:176, 178, 181-2 N '42
 Organization and control of mass production; planning flow of materials. E. A. Boyan. *Factory Management* 101:102-5 S '43
 Planning by memory, a mistake; statistical records are not enough. A. Gabor. *J Retailing* 13:89-91 O '43
 Production planning through time study analysis. B. F. Smith. *Aero Digest* 43:255+ Ag '43
 Tool and operation planning in an aircraft plant. W. E. Brainard. *Il Iron Age* 152:60-4 N 11 '43
 Urges progressive retirement of industries from war effort. W. D. Fuller. *East Underw* 44:26 My 28 '43
 War time problems, planning, and performance; discussion. A. G. Ramsey and others. *Inst. Mech Eng J & Proc* 148:Proc 57-65 D '42

See also

- | | |
|------------------------------------|-------------------------------|
| Advertising—Plan- | Factories—Re- |
| ning | conversion |
| Budget, Business | Factory management |
| City planning | Land utilization |
| Committee for economic development | National planning association |
| Economic planning | Regional planning Schedules |

Bibliography

- Post-war planning for industry. Cleveland Pub Lib Business Information Bur v 14 no 3:17-20 J1 '43

Postwar planning

- America's new industrial empire; problems of peacetime conversion. *Index* 23 no 3:51-8 [S] '43
 Blueprints of future should be based on tried and tested principles. *Comm & Fin Chr* 158:1814 N 4 '43
 Business budgeting with a view to conversion from wartime to peacetime conditions. V. R. Eechtel. *N A C A Bul* 24:1349-75 Ag 1 '43
 Carrier's approach to production, absenteeism and postwar planning. J. M. Bickel. *Ind Marketing* 28:36-7+ My '43
 Considerations in postwar planning; abstract. N. R. Whitney. *Management R* 32:91-2 Mr '43

- Cycles as an aid to postwar planning. E. R. Dewey. *Gen Elec R* 46:264-8 My '43
 Fenn college sponsors post-war course for Cleveland executives. *Sales Management* 52:60-1 Ap 1 '43
 Forty-two western communities pool postwar planning programs. *Sales Management* 52:61 N 1 '43
 Getting down to earth on post war plans. H. E. Thayer. *Chem & Met Eng* 50:106-8+ S '43
 Graybar sets up six committees to plan for post-war period. H. Metz. *Sales Management* 52:76+ Ap 15 '43
 How American Steel & Wire is organizing postwar planning; a sales research and development division. *Ind Marketing* 28:74+ Ag '43
 How should industrial firms plan their post-war growth? J. A. Murphy. *Il Adv & Sell* 36:19-20+ My '43
 How Washington can aid in your postwar planning. *Adv & Sell* 36:64, 66 Ag '43
 How we set up a V-day planning group; Dictaphone corporation. C. E. Hallenberg. *Il Am Business* 13:26-7 O '43
 Human side of industry's post-war management problems. H. A. Bedau. *Sales Management* 51:36, 38+ D 1 '42
 Industry plans the future. W. D. Teague. *Adv & Sell* 36:109-10+ F '43
 Is Joe Doakes a member of your post-war planning committee? D. Belding. *Sales Management* 52:40-2 My 1 '43
 Is too much of our post-war planning based on hope rather than reality? W. H. Lough. *Sales Management* 52:46, 48-9 Je 1 '43
 Kaiser gives industry eight plans for reconstruction, if it dares! suggests auto manufacturers and builders announce postwar models, take war bond payments; abstracts. *Ptr Ink* 201:82-3 D 11 '42; *Sales Management* 51:32 D 15 '42; *Trusts & Estates* 76:25-6 Ja '43
 Lessons learned from war production key Revere's post-war planning. M. Beuick. *Il Ptr Ink* 205:20-1+ N 5 '43
 Many industries seek a plan; post-war reconstruction in trade discussions. *Chem Age* (Lond) 47:429-30 N 14 '42
 Monsanto assays products for their job potential after V day. F. J. Curtis. *Sales Management* 52:52+ F 15 '43
 Outline for postwar planning. F. Jurascheck. *Ind Marketing* 28:19-20 Ap '43; *Excerptis*. *Management R* 32:261-3 J '43
 Pattern for setting up a practical postwar plan. Tite flex metal hose company. G. S. Pfouts. *Ind Marketing* 28:35-6+ Je '43
 Peoria plans for post-war. L. K. Urquhart. *Factory Management* 101:94-6+ My '43
 Philadelphia blueprints a program for civic postwar preparation. *Sales Management* 52:48-50 Ja 1 '43
 Plan postwar jobs—now. 32p Committee for economic development, Dept. of Commerce building, Washington, D.C. '43
 Planning ahead; small Buffalo tool firm soliciting orders for postwar delivery. *Business Week* p62+ J1 3 '43
 Planning for after the war. L. V. Burton. *Food Ind* 15:55-6 Ag; 51 S; 51 O '43
 Planning now for the business of peace. S. W. Seeley. *Adv & Sell* 36:44, 46 Ja '43
 Postwar planning. A. R. Stevenson, Jr. *Am Cer Soc Bul* 21:314-17 D 15 '42
 Postwar planning begins at home. *Pub Util* 31:638-42 My 13 '43
 Postwar planning by retailers. S. W. Reyburn. *J Retailing* 19:65-6+ O '43
 Post-war planning; challenge to industry. R. Manville. *Gas Age* 90:17-19+ D 31 '42
 Post-war planning in the metal industries. H. A. Knight. *Il Metals & Alloys* 18:302-8 O '43
 Postwar planning of Carrier employees. *Adv & Sell* 36:96 N '43
 Post-war planning set-up; Graybar Electric's seven sub-committees. T. Kenyon. *Ptr Ink* 204:65+ Ag 6 '43
 Postwar planning; we're doing it right now; Spriesch tool & mfg. co. J. J. Cheney. *Steel* 112:78-9 Je 21 '43
 Postwar planning within business concerns. W. S. Landis. *Chem & Met Eng* 50:105-7 Ap '43

PLANNING—Postwar planning—*Continued*

- Practical angle of postwar planning. Ind & Eng Chem 35:827 Ag '43; Same abr. Comm & Fin Chr 158:613 Ag 12 '43
- Product strategy for post-war: the sales executive's assignment. F. Manning. Sales Management 52:98+ S 15 '43
- Recommends individual post-war planning. L. du Pont. Comm & Fin Chr 157:2181, 2184-5 Je 10 '43
- Sales managers; take the initiative if your company is laggard in post-war planning. B. Bigelow. Ptr Ink 204:17-19+ S 10 '43
- Setting up a postwar planning committee. Management R 32:49-50 F '43
- Seven points to watch in postwar market planning. Servel, inc. L. Hill. Ind Marketing 28:41, 44 Je '43
- Significant shorts on post-war planning. Sales Management 52:51 Ja 1 '43
- Structure of post-war industry; the need for immediate planning. E. H. Gilpin. Chem Age (Lond) 48:201-3 F '43
- Thirteen mistakes to avoid in your post-war planning. B. Bigelow. Sales Management 52:36+ Ap 1 '43; Same cond. Management R 32:165-6 My '43
- Universal's V-day plan; a program for building post-war demand; Landers, Frary & Clark introduce a plan in national and business magazines to help dealers. Sales Management 52:44+ O 15 '43
- Will better products solve your post-war competition problem? F. Manning. Sales Management 52:40+ J 1 '43

Bibliography

- Bibliography of post-war planning information. Am Bld 65:118 O '43
- Research and post war planning; bibliography. pts 1-10 United Nations information office, 610 5th av. New York '42-'43

PLANNING, City. See City planning

PLANNING, Regional. See Regional planning

PLANT breeding

- Influence of the environment on the expression of hereditary factors in relation to plant breeding. S. H. Yarnell. Science 96:505-8 D 4 '42

PLANT cells and tissues

- Concept of cells held by Hooke and Grew. E. B. Matzke. Science 98:13-14 J 2 '43
- Differential inhibition between normal and tumor (crown gall) tissue in beet roots. M. Michaels, I. Levy and H. Hibbert. Science 98:89-90 J 23 '43
- Enzymic degradation of cell wall substances. D. H. F. Clayson. bibliog Chem & Ind 61: 516-18; 62:49-51, 298-300; Discussion. 300-1 D 19 '42, F 6, Ag 7 '43
- Unsaturated fat oxidase; distribution, function and histochemical identification in plant tissues. D. S. Van Fleet. bibliog Am Chem Soc J 65:740 Ap '43

See also

Photosynthesis

PLANT galls. See Galls (botany)

PLANT growth

- Auxin action. H. C. Eyster. Science 97:358-9 Ap 16 '43
- Fluorine content of plants fertilized with phosphates and slags carrying fluorides. W. H. MacIntire and others. bibliog il Ind & Eng Chem 34:1469-79 D '42
- Sprouting of sumac in dry storage. W. W. Diehl. Science 96:448-9 N 13 '42
- Synapsis and synergism as stimulating processes of plant development. A. E. Murneek and S. H. Wittwer. Science 98:384-5 O 29 '43

See also

Fertilizers

PLANT hormones. See Hormones, Plant

PLANT quarantine

- Our battle front at Hoboken; Plant quarantine inspection house. R. G. Skerrett. il Comp Air M 48:6996-7001 Ap '43

PLANTS

- Pulping of annual plants; abstract. H. F. Müller and W. Overbeck. Paper Ind 25:323 Je '43

See also

Botany
Botany, Medical

Dyes and dyeing—
Natural dyes

Grasses
Hormones, Plant
Paleobotany

Poisonous plants
Rubber plants and
planting

Chemical analysis

- Analysing plant leaves; a method of determining fertiliser requirements. W. Thomas, W. B. Mack and R. H. Cotton. Chem Age (Lond) 48:600-2 Je 5 '43
- Analysis of plant extracts for chlorophylls a and b using a commercial spectrophotometer. C. L. Comar. Ind & Eng Chem Anal ed 14:877-9 N 15 '42
- Ascorbic acid; rapid determination in fresh, frozen, or dehydrated fruits and vegetables. H. J. Loeffler and J. D. Ponting. bibliog Ind & Eng Chem Anal ed 14:846-9 N 15 '42
- Dehydrated spinach; changes in color and pigments during processing and storage. H. J. Dutton, G. F. Bailey and E. Kohake. bibliog il Ind & Eng Chem 35:1173-7 N '43
- Determination of furfural. I. J. Duncan. bibliog Ind & Eng Chem Anal ed 15:162-4 Mr 15 '43
- Determination of pure carotene in plant tissue; a rapid chromatographic method. M. E. Wall and E. G. Kelley. bibliog Ind & Eng Chem Anal ed 15:18-20 Ja 15 '43
- Determination of sugars in apple tissue; some modifications of the usual procedures. R. H. Leonard, R. C. Meade and R. B. Dustman. bibliog Ind & Eng Chem Anal ed 15:579-82 S 15 '43
- Determining magnesium in plants and soils; adaptation of the 8-hydroxyquinolate micro-method. M. E. Weeks and J. R. Todd. bibliog Ind & Eng Chem Anal ed 15:297-9 Ap 15 '43
- Extraction of ascorbic acid from plant materials; relative suitability of various acids. J. D. Ponting. bibliog Ind & Eng Chem Anal ed 15:389-91 Je 15 '43
- Lipoid oxidase studies; a method for the determination of lipoxidase activity. R. J. Sumner. bibliog Ind & Eng Chem Anal ed 15:14-15 Ja 15 '43
- Quantitative chemical microdetermination of twelve elements in plant tissue. R. Q. Parks and others. bibliog Ind & Eng Chem Anal ed 15:527-33 Ag 15 '43
- Rapid determination of soluble nutrients in soil and plant extracts by means of a photoelectric colorimeter. B. Wolf. bibliog diags Ind & Eng Chem Anal ed 15:248-51 Ap 15 '43
- Rapid method for the determination of nitrogen in plant tissue. R. C. Lindner and C. P. Harley. Science 96:565-6 D 18 '42

Diseases and pests

- Bacteria which cause disease in plants. W. J. Dowson. bibliog Chem & Ind 62:163-4 My 1 '43

- Root diseases of crop plants; abstract and discussion. S. D. Garrett. Chem & Ind 61:513 D 12 '42

See also

Galls (botany)
Peaches—Diseases
Plant quarantine

Fluorine content

- Fluorine content of plants fertilized with phosphates and slags carrying fluorides. W. H. MacIntire and others. bibliog il Ind & Eng Chem 34:1469-79 D '42

Nutrition

See also

Plant growth

PLANTS, Aquatic. See Aquatic plants

PLANTS, Effect of boron on

- Potassium and calcium factors in determining plant response to boron; abstract. J. W. Shive and E. Reeve. Can Chem & Process Ind 27:562 O '43

- Study boron rôle in plant life. Franklin Inst J 235:210-11 F '43

PLANTS, Effect of temperature on

- Role of night temperature in plant performance. R. H. Roberts. Science 98:265 S 17 '43

PLANTS, Fossil. See Paleobotany

PLASMA, Blood. See Blood

PLASMOCHIN

Antimalarial ammunition; synthetic drugs. R. E. Gruber. *il* Tech R 45:179-81, 190+ F '43

Chemistry and development of atabrine and plasmochin. A. E. Sherndal. *il* Chem & Eng N 21:1154-8 J1 25 '43; Abstract. Chem Age (Lond) 49:309-11 S 25 '43

PLASMEDIUM

Malarial cryptozoites. C. G. Huff, F. Coulston and W. Cantrell. Science 97:286 Mr 26 '43

PLASTER and plastering

Function of carbon dioxide in producing efflorescence on plaster and cement products. D. L. Bishop. bibliog pl J Research Nat Bur Stand 30:361-6 My '43

See also

Cement Mortar
Gypsum Mortar
Concrete

Painting

How to prepare plaster for paint. diag Am Bid 65:77 Ap '43

PLASTER casts

New plaster cast treatment of burns; abstract. S. M. Levenson and C. C. Lund. Science 98:sup12 O 8 '43

PLASTIC bomb racks. See Bomb racks, Plastic**PLASTIC coated fibers**

Plexon, plastic coated yarn; data on production, properties, uses. *il* Textile World 93: 79 Ag '43

PLASTIC industries

Don't worry about plastics; not a replace-all line. *il* Cer Ind 41:38-40 N '43

Education for peacetime performance. R. R. Dickey. Mod Plastics 20:62 My '43

First year of war—and the next. Mod Plastics 20:43-7, 49-51+ Ja '43

Function of postwar research. A. J. Norton. Mod Plastics 20:70+ J1 '43

Labor standards in the plastics industry. W. B. Smith. Mod Plastics 20:56+ Ap '43

Planning of science; plastics industry; abstract. H. Barron. Chem Age (Lond) 48: 175-6 F 6 '43

Plastics and allocation; abstract. C. Rector. Mod Plastics 20:64-5 Je '43

Plastics in peace-time; industry study. *il* Trusts & Estates 77:158, 160-5 Ag '43

Plastics, 1942. Chem & Met Eng 50:108-9 F '43

Plastics technical committees in the U.S. Mod Plastics 20:105-6+ Ag '43

Supply and use status of the important types of plastic materials; abstract. F. H. Carman. Mod Plastics 20:98A-98B Mr '43

Thermoplastic order M-154 revised. Mod Plastics 20:86A-86B Ap '43

Twisting plastics into realities. *il* Am Gas J 159:20-2 O '43

War-time conference in Toronto. Mod Plastics 20:62+ F '43

Whither plastic? C. Chapman. Chem & Ind 61:509-11 D 12 '42

See also

Clay industries
Molded products
Resinous products

Directories

Custom molders of plastics. Machine Design 15:200-3 O '43

Statistics

Cellulose plastic products, 1938-1941. Survey of Cur Business 1942 Sup p110

Australia

Wartime molding in Australia. J. F. Brooks. *il* Mod Plastics 20:54-7 D '42

Canada

Canada's plastics industry in wartime. H. McCann. *il* Mod Plastics 20:76-7+ Mr '43

Plastics at war; new developments in production, processing and application. *il* Can Chem & Process Ind 27:61-6 F '43

Plastics research aids production growth. S. J. Cook. Chem & Eng N 21:1180 J1 25 '43

Great Britain

British industrial plastics; abstract. K. Chance. Chem Age (Lond) 48:226-7 F 20 '43

British plastics; abstracts. S. M. Mohr. Electrician 130:211 F 26 '43; Elec R (Lond) 132:287 F 26 '43

Oil, an additional basic material for the British plastics industry. G. Tugendhat. Inst Pet J 29:89-97 Mr '43

Plastics and the investor. Economist 143: 772-3 D 19 '42

Plastics finance; trends of earnings and dividends. S. H. Withey. Chem Age (Lond) 49: 80-1 J1 24 '43

India

Possibilities of the plastics industry in India. S. S. Bhatnagar. Soc Dyers & Col J 58: 256-7 D '42

South Carolina

Plastics for South Carolina. F. E. Lawrence. *il* Manuf Rec 112:30-1+ Mr '43

PLASTIC materials

ABC of chemical derivatives from petroleum; synthetic resins and plastics. R. L. Wakeman and B. H. Weil. *il* Nat Pet N 34 pt 2: R413-16, R418 N 25 '42

Advances in plastics during 1942. G. M. Kline and others. *il* Mod Plastics 20:85-98+ bibliog(110 titles, p87-8) Ja '43; Excerpts. India Rubber W 107:573-5 Mr '43; Mech Eng 65: 245-7+ Ap '43

Aircraft applications of plastics. C. L. Fell. *il* Mod Plastics 20:89-90+ J1 '43

American chemical society meeting; abstracts of papers presented before Division of paint, varnish and plastics chemistry and other divisions. Mod Plastics 21:110-12+ O '43

A.S.M.E. conferences on synthetic rubber and plastics. India Rubber W 109:159-60 N '43

Arming the civilian against foe that creeps, crawls, flies, chews and bites. *il* Mod Plastics 20:69+ My '43

Bringing plastics into the picture for ordnance requirements; abstract. E. T. McBride. Mod Plastics 20:62 F '43

British plan for furniture; possibilities of plastics. G. Fejér. *il* Mod Plastics 20:70-2+ Ap '43

Choosing plastic tubing for specific purposes. *il* Product Eng 14:438-41 J1 '43

Coal by-products in the plastics industry. R. L. Wakeman. Blast F & Steel Pl 31: 217-19, 320-2 F-Mr '43

Coal's new horizons; hydrogenation outlook includes rubber and plastics. Coal Age 48: 61-2 Ap '43

Combatant plastics; applications in the armed forces of the United Nations. H. B. Marshall. *il* diag Can Chem & Process Ind 27: 67-9 F '43

Design and production with substitute materials; Vultee uses plywood and plastic material for basic trainers. S. E. Carpenter. *il* diag Aviation 42:112-15+ Mr '43

Design for tomorrow; plastics for lighting and house hardware. *il* diag Mod Plastics 20:92-3 Mr '43

Developments and trends in new paper products; plastics from pulp and paper. R. J. Zaumeyer. Paper Tr J 117:27 J1 1 '43

Dow goes down to the sea; magnesium and war are making it a major power. *il* Fortune 28:110-13+ D '42

Elastic plastics; abstract. J. R. Price. India Rubber W 108:154-5 My '43

Electrotypers find new methods; use of iron in shells and plastic in molding. G. C. Meston. Inland Ptr 111:37-8 S '43

Engineering aspects of plastics. H. Sang. *il* Aero Digest 43:163-5+ Ag '43

Flush valve made of plastics to save copper. *il* diag Product Eng 14:270-1 My '43

Game that founded an industry; billiard balls. H. J. Luth. *il* Mod Plastics 20:71-3+ J1 '43

Gasket material cut from high tensile fibrous sheet material impregnated with phenolic plastic. *il* Mod Plastics 20:78-9+ My '43

Goodyear research laboratory dedicated. *il* Mod Plastics 20:120, 122+ J1 '43

Handbook of plastics. H. R. Simonds, C. Ellis and M. H. Bigelow. 1082p bibliog (p1015-18) \$10 D. Van Nostrand co, 250 4th av, New York '43

Handling thermoplastic materials. *il* diag Mod Plastics 20:80-2+ Ap '43

PLASTIC materials—Continued

- Hazards of new materials brought in use by war. J. A. Neale. *Weekly Underw* 149:15 J1 3 '43
- How one designer is blueprinting the automobile of the future; George Walker, pioneer user of plastics. L. Stouffer. *il Sales Management* 52:24-6 F 15 '43
- How plastics have gone to war. F. H. Carman. *Mod Plastics* 20:48a-48b [insert] Ja '43
- Ignition points of plastic materials. J. Delmonte and M. A. Azam. *diags Mod Plastics* 20:88+ F '43
- Improved techniques promote expanded use of plastic parts; Consolidated aircraft corp. K. Woodson. *il Aero Digest* 41:126+ D '42
- Light metals and plastics vs. steel; potential competition over-emphasized. L. S. Hamaker. *il Steel* 113:57-9 N 1 '43
- Light-weight sextant improved by plastics and die-castings. *il diags Product Eng* 13: 689-91 D '42
- Modern designs from Chicago. L. Moholy-Nagy. *il Mod Plastics* 20:62-5+ D '42
- Molecular structure and plastic fibre formation. J. R. Whinfield. *bibliog Chem & Ind* 62:354-6 18 '43
- New phenolic plastic. J. M. Crowe. *Chem Ind* 52:342 Mr '43
- New plastic from redwoods. J. M. Crowe. *Chem Ind* 52:611 My '43
- New York's A.I.A., Architectural league and the American institute of decorators sponsor first joint meeting of plastics industry and designers. *Arch Forum* 79:4+ O '43
- Non-corrosive materials; plastics and resins in the textile mill. R. Trautschold. *il Rayon* 23:729-32 D '42
- Non-metallics on the march. H. R. Simonds. *Metals & Alloys* 17:99-100 Ja '43
- Oil, an additional basic material for the British plastics industry. G. Tugendhat. *Inst Pet J* 29:89-97 Mr '43
- Operation chart for plastics in army and navy items; reference book sheet. A. Sprung. *Product Eng* 13:745-6 D '42
- Peacetime values from a war technology; plastics. G. Egloff. *Science* 97:105-6 Ja 29 '43; *Same. Chem & Eng N* 21:145-6 F 10 '43; *Same. Inst Pet J* 29:141-2 My '43
- Pine plastic; resin and vegetable fibers. G. R. Stark. *Sci Am* 168:61-2 F '43
- Place of high acetyl cellulose acetate in the cellulosic family; abstract. M. Bentivoglio. *Mod Plastics* 21:98-9 N '43
- Plastic bodywork. W. Nichols. *il Automobile Eng* 33:361-5, 405-10 S-O '43
- Plastic coatings in the post-war era. J. B. Cleveland. *il Textile World* 93:59-64 My '43
- Plastic developments from redwood. H. F. Lewis. *il Mech Eng* 65:515-17 J1 '43; *Same cond. Mod Plastics* 20:91-2+ J1 '43
- Plastic forms rival steel in toughness; Thermo-Cast. *Sci Am* 168:254-5 Je '43
- Plastic plugbacks in east Texas. J. E. Bailey and C. E. Dimit. *Oil & Gas J* 42:52-3 O 28 '43
- Plastic predictions for building. *il diags Arch Forum* 79:6-8 S '43
- Plasticized wood for aircraft parts. F. W. Fink. *il Iron Age* 151:52-4 F 25 '43; *Same. Automotive & Aviation Ind* 88:21-2+ Je 1 '43
- Plastics. L. K. Arnold. *il diags Iowa State College Eng Extension Service (Ames) Bul* 117:1-44 bibliog(p43-4) '43
- Plastics. J. H. DuBois. rev ed 435p \$3.75 American technical society, 850 E. 58th st, Chicago '43
- Plastics and other nonmetallics listed by tradenames and by producers. *Machine Design* 15:188-203 O '43
- Plastics and plasticity; plastic working of metals and non-metallic materials. E. V. Crane. *il diags Iron Age* 152:34-40 J1 29; 64-9+ Ag 5; 80-5 Ag 12; 84-9 Ag 19; 60-5 Ag 26 '43
- Plastics and some of their qualities. W. F. Cullom. *Min & Met* 24:313 J1 '43
- Plastics and synthetic resins are playing an important role in World war II. *Chem Ind* 51:847+ D '42
- Plastics and the engineer. R. Hammond. *il diag Engineer* 174:413-14 N 20 '42
- Plastics and the paper industry. R. V. V. Nicholls. *bibliog Pulp & Pa of Can (Convention no)* 44:143-6+ [F] '43; *Same abr. Can Chem & Process Ind* 27:122-4 Mr '43
- Plastics and their application to aircraft construction. J. T. Zhibitsky. *Roy Aeronautical Soc J* 47:138-43 My '43
- Plastics at war; new developments in production, processing and application. *il Can Chem & Process Ind* 27:61-6 F '43
- Plastics for present and post-war products; survey of relative properties of different types of plastics, forms and combinations available, distinctive characteristics and typical applications. *il diags Product Eng* 14:insert 1-16 S '43
- Plastics for South Carolina. F. E. Lawrence. *il Manuf Rec* 112:30-1+ Mr '43
- Plastics for the railroads; with list of manufacturers and trade names. *il Ry Mech Eng* 117:453-5+ O '43
- Plastics from acetylene. J. I. Jones. *bibliog Chem & Ind* 62:66-71 F 20 '43
- Plastics from cellulose; abstract. P. F. Robb. *Paint Oil & Chem R* 105:18 Ap 8 '43
- Plastics group; a record of the first ten years. *Chem & Ind* 61:518-20 D 19 '42
- Plastics help conserve strategies; Curtiss-Wright corp. C. G. Trimbach. *il Machine Design* 15:116-18 S '43
- Plastics in aircraft construction. J. K. Northrop. *Iron Age* 151:56-7 Ap 8 '43
- Plastics in medicine; many new uses are being developed. *Sci Am* 169:22 J1 '43
- Plastics in radio production; discussion. *Inst E E J* 90 pt 3:26 Mr '43
- Plastics in war; abstract. G. M. Kline. *Mod Plastics* 20:93E Mr '43
- Plastics in wartime lighting; report by committee on illumination materials. M. H. Bigelow. *illum Eng* 38:106-8 F '43
- Plastics' parade; systematic survey of the growing group of synthetic products. A. F. Caprio. *il Sci Am* 169:163-6 O '43
- Plastics, practically speaking. R. F. Marshall. *il Arch Rec* 93:54-9+ Ap '43
- Plastics prognosis; abstracts. M. G. Milliken. *Mod Plastics* 20:82+ My '43; *Can Chem & Process Ind* 27:260+ My '43
- Plastics; their development and application, adaptability, tensile strength, heat resisting qualities and many other features. *il Am Gas J* 159:19-34 O '43
- Plastics used by the aviation industry; tabulation of their properties, principal applications and manufacturers. *Aero Digest* 43: 186-9, 232-3 J1 '43
- Points on plastics in aircraft engineering. J. Sasso. *il diags Aviation* 42:141-3+ Ap; 187, 189-90+ My; 178-80+ Je '43
- Porous castings; the use of plastic for plugging purposes. A. Rehbock. *Automobile Eng* 33:384 S '43
- Postwar prospects discussed at Goodyear laboratory dedication. *India Rubber W* 108: 471 Ag '43
- Postwar rôle of plastics. J. Delmonte. *Mod Plastics* 20:59+ Ap '43
- Practical use of plastics in building and constructional work. F. S. Snow; A. Caress; R. J. Schaffer. *Chem & Ind* 62:287-90 J1 31 '43
- Producing plastics from lignin. *India Rubber W* 107:302+ D '42
- Progress in engineering knowledge during 1942. P. L. Alger and J. Stokley. *il Gen Elec R* 46:93-4 bibliog(p133) F '43
- Properties of thermoplastics. T. S. Carswell and T. Alfrey. *table Machine Design* 15: 133-5 F '43
- R-F heating of plastics; symposium. *il Electronics* 16:194+ Je '43
- Recent progress in timber research. L. J. Markwardt. *il W Soc E J* 48:114-16 S '43
- Safety devices for aviation plants. D. S. Frederick. *il Mod Plastics* 20:48-9 F '43
- Sealing tube ends with plastic; Plastalloy process. *il Iron Age* 152:65 N 4 '43
- Soap's role in the plastics industry. G. Leffingwell. *bibliog Mod Plastics* 21:87-8+ O '43
- Soybean plastics. G. H. Brother. *il Chem & Eng N* 20:1511-12 N 25 '42
- Spotlight on plastics for plumbing and heating. J. C. Louer. *il Dom Eng* 161:44-6+ Ap '43

PLASTIC materials—Continued

Starch studies; possible industrial utilization of starch esters in coating, sizing, and adhesive industries. J. W. Mullen, 2d and E. Pacsu. bibliog flow sheets il Ind & Eng Chem 35:381-4 Mr '43

Steel, plastics and zinc used in combination die set. J. C. Wright. il diags Iron Age 151:68-70 Je 17 '43

Structural plastic; incorporating Vinsol with various cellulosic fibers. J. M. Crowe. Chem Ind 52:54-5 Ja '43

Synthetic plastics and the textile industry. P. B. Sarkar. Textile Col 64:530, 532-3 N '42

Thermoplastics for aircraft tools; Thermo-Cast. J. M. Church. il Mod Plastics 20:74-5+ My '43

Use of plastics in car construction; views of railroad men. Ry Mech Eng 117:320-1 JI '43

Want plastics? Business Week p70-2 My 22 '43

Whither plastics? C. Chapman. Chem & Ind 61:509-11 D 12 '42

Woody fibers and resin comprise new plastic; Fedralite. Product Eng 14:51 Ja '43

Working of plastics. diags Am Mach 87:97-108 S 30 '43

See also

Air hose, Plastic

Bakelite

Casein

Cellulose

Cellulose acetate

Cement

Clay

Color in plastic

materials

Ethyl cellulose

Gums and resins

Koroseal

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Methyl methacrylate

Molded products

Molding

Paper, Laminated

Pipes, Plastic

Plaskon

Plastic sheeting

Plasticizers

Printing plates,

Plastic

Punches, Plastic

Resinous products

Rubber

Rubber, Artificial

Rubber, Substitutes

for

Saflex

Saran

Shellac

Tubes, Plastic

Tygon

Analysis

Schematic procedure for identification of common commercial plastics. H. Nechamkin. Ind & Eng Chem Anal ed 15:40-1 Ja 15 '43; Same cond. Can Chem & Process Ind 27:97-8 F '43; Excerpt. Glass Ind 24:380 S '43

Blowing

Blowing of plastics. diags Mod Plastics 21:96-7 O '43

Plastic bottles? new blowing method. il diags Mod Packaging 17:65-7 N '43

Coloring

See Color in plastic materials

Electric properties

Aid to selecting plastics for electrical applications. il Product Eng 14:165-7 Mr '43

Chemical background for electrical properties of plastics. H. M. Richardson. diags Elec W 119:1291-4 Ap 17 '43

Electric cable insulation; the replacement of rubber by thermo plastics; abstract. H. Beck. Automobile Eng 33:97 Mr '43

Electrical application of new thermoplastics. T. S. Carswell and T. Alfrey, Jr. Elec W 119:1951-3 Je 12 '43

Organic plastics as insulating materials. J. Delmonte. bibliog il Elec Eng 62:19-23 Ja '43

Plastic arc-tracking. E. C. DeBaene. il Elec W 119:2044-5 Je 12 '43

Plastic insulations for conductors. E. D. Youmans. Elec W 120:457-9, 812-15 Ag 7, S 4 '43

Recent developments in organic plastics for electrical insulation. T. Hazen. bibliog Elec Eng 62:191-7 My '43

Fillers

Design suggestions for molded phenolics. M. Maxwell. diags Mod Plastics 20:90-3+ Je '43

Fillers in the plastics industry. W. C. Gangloff. il Chem Ind 53:512-14 O '43

Finishing

Filing flash and fins. il Mod Plastics 20:88 My '43

Standardized finishing fixtures. R. F. Maxfield. il Mod Plastics 20:73+ F '43

Joining

Electronic sewing machine. C. N. Hoyler. il diags Electronics 16:90-3+ Ag '43

Radio-frequency current welds thermoplastics in new electronic sealing machine. il diags Product Eng 14:411 JI '43

Radio sewing machine; high frequencies for fusing plastic parts. il Sci Am 169:26 JI '43; Rubber Age 53:269-70 Je '43

Sealing by electronics; mechanism that resembles a sewing machine. il Mod Packaging 16:78+ JI '43

Joining to metal

Reanite bonding process. il Rubber Age 53:426 Ag '43

Manufacture

Custom converter; Detroit wax paper co. supplies laminators and molders with materials. il Mod Plastics 20:51-4+ Je '43

Raw material supplies for plastics manufacture. R. H. Ball. il Chem & Eng N 21:73-6 Ja 25 '43; Abstract. India Rubber W 107:384 Ja '43

Patents

Advances in plastics during 1942; ethyl cellulose; with patent list. A. E. Young. il Mod Plastics 20:95-6 Ja '43

U.S. plastics patents. Published in monthly numbers of Modern plastics

See also

Resinous products— Rubber, Artificial—
Patents Patents

Standards

A.S.T.M. standards on plastics; specifications, methods of testing, nomenclature, definitions. 375p pa \$2 Am. soc. for testing materials, 260 S. Broad st, Philadelphia '43

Strength

Effects of continued heating on mechanical properties of molded phenolic plastics. T. S. Carswell, D. Telfair and R. U. Haslanger. bibliog A S M E Trans 65:325-8 My '43

Evaluation of high-strength plastics. H. Sang and P. M. Field. Mod Plastics 21:107-9+ O '43

Impact testing of plastics; energy considerations. D. Telfair and H. K. Nason. bibliog il Mod Plastics 20:85-8 JI '43

Mechanical properties of plastics at normal and subnormal temperatures. T. P. Oberg. R. T. Schwartz and D. A. Shinn. bibliog il Mod Plastics 20:87-100+ Ap '43

Toughness of molding materials. T. Hazen. Mod Plastics 21:103-6+ O '43

Study and teaching

Demonstrations on the preparation and molding of plastics; high-school chemistry. J. F. Castka. bibliog J Chem Educ 20:253-4 My '43

Temperature effects

Basic physical properties of laminates; reinforced with paper, glass and asbestos. P. M. Field. Mod Plastics 20:91-102, 126, 128+ Ag '43

Effects of continued heating on mechanical properties of molded phenolic plastics. T. S. Carswell, D. Telfair and R. U. Haslanger. bibliog A S M E Trans 65:325-8 My '43

Mechanical properties of plastics at normal and subnormal temperatures. T. P. Oberg. R. T. Schwartz and D. A. Shinn. bibliog il Mod Plastics 20:87-100+ Ap '43

Plastics face arctic cold, tropic heat! J. Delmonte. il Machine Design 15:83-6 Mr '43

Testing

Abrasion resistance of flexible vinyl plastics. F. W. Duggan. il diags Product Eng 14:44-9 Ja '43

Acid and alkali resistance of plastics. J. Delmonte. bibliog Mod Plastics 20:91-4+ D '42

PLASTIC materials—Testing—Continued

- Air conditioning a tool of the testing engineer. W. N. Findley. *il Heating-Piping* 35:421-2 Ag '43
- A.S.T.M. standards on plastics; specifications, methods of testing, nomenclature, definitions. 375p pa \$2 Am. soc. for testing materials, 260 S. Broad st, Philadelphia '43
- Basic physical properties of laminates; reinforced with paper, glass and asbestos. P. M. Field. *Mod Plastics* 20:91-102, 126, 128+ Ag '43
- Bearing strength of plastics and plywood. J. Bond. *il A S M E Trans* 65:9-12 Ja '43; Same. *Mod Plastics* 19:70-3+ JI '42; Discussion. *A S M E Trans* 65:12-14 Ja '43
- Creep and creep recovery in plasticized polyvinyl chloride. H. Leaderman. *bibliog Ind & Eng Chem* 35:374-8 Mr '43
- Deformation under load of rigid plastics. R. Burns. *Mod Plastics* 21:111-12 S '43
- Fatigue resistance of flexible plastic sheetings. F. W. Duggan and K. K. Fligor. *il diags Ind & Eng Chem* 35:172-6 F '43
- Impact testing of plastics; energy considerations. D. Telfair and H. K. Nason. *bibliog il Mod Plastics* 20:35-8 JI '43
- Long-time tension test of plastics. *diags Mod Plastics* 20:106+ Mr '43
- Mar. resistance of plastics. L. Boor. *bibliog il Am Soc T M Proc* 42:927-41 '42; Same cond. *Mod Plastics* 20:79-83 S '42; Discussion. *Am Soc T M Proc* 42:942-3 '42
- Mechanical tests of cellulose acetate. W. N. Findley. *il diags Mod Plastics* 20:99-105+ Mr '43; Same. *A S M E Trans* 65:479-87 JI '43
- Mechanical tests of cellulose acetate; creep. W. N. Findley. *il diags Am Soc T M Proc* 42:914-22 '42; Same. *Mod Plastics* 19:71-3+ Ag '42; Discussion. *Am Soc T M Proc* 42:923-6 '42
- Meeting of A.S.T.M. committee D-20. *Mod Plastics* 20:94+ JI '43
- Plastics tests are revealing new knowledge of these materials. *Sci Am* 168:158-9 Ap '43
- Repeated flexural stress (fatigue) test. *il diags Mod Plastics* 20:95-6, 132, 134, 136+ D '42
- Stress-strain characteristics of vinyl elastomers. M. C. Reed. *il Ind & Eng Chem* 35:429-31 Ap '43
- Tests of thermoplastics for electrical applications. E. K. Cliver. *il Elec W* 120:1342-4 O 16 '43
- Toughness of molding materials. T. Hazen. *Mod Plastics* 21:103-6+ O '43
- PLASTIC materials, Laminated**
- Advances in plastics during 1942. S. W. Place. *il Mod Plastics* 20:90-1 Ja '43
- Allyl-type cast resins and laminates. A. Pechukas, F. Strain and W. R. Dial. *Mod Plastics* 20:101-4+ Je '43
- Bearings of laminated phenolic materials. *Automotive & Aviation Ind* 88:45+ Ap 1 '43
- Boxes for bullets; phenolic laminated cloth. C. G. Trimbach. *il diags Mod Plastics* 20:59-61 My '43
- Composition bearing applications in industry. J. A. Petho and F. W. Vogt. *diags Paper Tr J* 115:31-5 D 24 '42
- Design fundamentals for phenolics. J. A. Petho. *il diags Mod Plastics* 20:77-8+ D '42
- Engineering properties of plastics. F. B. Fuller. *Mod Plastics* 20:95-7+ Je '43
- Fabricating plane parts from laminated paper plastic; McDonnell aircraft corporation. *il Aviation* 41:138 N '42
- Fiberglass reinforced plastics. T. S. Rogers. *il Mod Plastics* 21:88, 140, 142 S '43
- Laminated aircraft sub-assemblies. *il Mod Plastics* 21:81-2+ S '43
- Laminated plastics from paper. W. B. Darling. *Mod Plastics* 20:112 F '43
- Laminating by low-pressure method. J. D. Nelson. *Gen Elec R* 46:483-7 S '43
- Low pressure laminates for aircraft. P. Crosley. *3d. il Mod Plastics* 20:54-5+ Ja '43
- Low-pressure molding of laminates. F. P. Wilson and N. D. Hanson. *il Mod Plastics* 20:57-60+ Ag '43
- Machining laminated phenolic plastics. F. P. Hunsicker. *il Mach* 49:197-200 D '42
- Machining laminated phenolics. E. L. Wolfe. *il diags Mod Plastics* 20:92-3+ My '43
- New era in laminated plastics seen. *Iron Age* 152:146 JI 8 '43
- New series of thermosetting materials covers wide range; developed by Columbia chemical division of Pittsburgh plate glass company. *il Product Eng* 14:223-6 Ap '43
- Non-corrosive materials; plastics and resins in the textile mill. R. Trautschold. *il Rayon* 23:730-2 D '42
- Phenolic materials for wartime demands; bearings. F. W. Vogt. *diags Paper Tr J* 117:28-30 JI 1 '43; Same cond. *Paper Ind* 25:662+ S '43
- Physical properties of Fiberglas laminated plastics. C. W. Armstrong. *il diags Iron Age* 152:51-4 JI 22 '43; Abstract. *Machine Design* 15:133-3 N '43
- Physical properties of laminated plastics. R. W. Barber. *Mech Eng* 64:888-90 D '42
- Planes of paper. *il Mod Plastics* 20:82+ D '42
- Plastic-bonded cotton fiber. M. A. Goldman and G. A. Olsen. *il Mod Plastics* 20:100, 130+ My '43
- Plastic plates; foundry pattern bases made from paper mill waste liquor; Marathon paper mills Lignolite. *Business Week* p66+ Ag 14 '43
- Post-forming thermosetting products; H. J. Heinz co. method for molding or post-forming phenol-formaldehyde laminated sheets. *il Mod Plastics* 20:70+ Ag '43
- Properties of laminated phenolics. L. E. Caldwell. *il diags Mod Plastics* 20:82-7+ Ag '43
- Road map for navigators. *il Mod Plastics* 20:52+ Ja '43
- Ryertex design improves resin bonded marine bearings. *il diags Marine Eng* 43:222, 224 O '43; *Mod Plastics* 21:78-9 N '43
- Some mechanical properties of plastics and metals under sustained vibrations; mild steel, duralumin, laminated plastics, polymethyl methacrylate. B. J. Lazan. *bibliog il diags A S M E Trans* 65:87-98 F '43; Same cond. *Mod Plastics* 20:83-8+ N '42; Discussion. *A S M E Trans* 65:98-104 F '43
- Strength of gear wheels in laminated plastics; abstract. *Automobile Eng* 33:413 O '43
- Thermoelectric C-stage laminates; North American aviation, inc. E. F. Lougee. *il Mod Plastics* 20:69-71+ Je '43
- Thermoplastic forming of airplane parts. W. I. Beach. *il Mech Eng* 65:19-23 O '43
- Wind-up of the helmet; third method of producing army helmet; molding irregular shapes from impregnated fabric. *il Mod Plastics* 20:49-52+ Ap '43
- See also
Micarta
- Testing**
- Chemical resistance of laminates. C. J. Straka. *diags Mod Plastics* 20:80-4, 136+ JI '43
- Evaluation of high-strength plastics. H. Sang and P. M. Field. *Mod Plastics* 21:107-9+ O '43
- Mechanical properties of plastics at normal and subnormal temperatures. T. P. Oberg. R. T. Schwartz and D. A. Shinn. *bibliog il Mod Plastics* 20:87-100+ Ap '43
- PLASTIC materials, Transparent**
- Acrylics in aviation; Plexiglas. S. S. Frederick. *Aeronautical Eng R* 2:25 F '43
- Army astro domes; precision optical instruments of Plexiglas. *il Mod Plastics* 20:56+ F '43
- Bomber nose cone doubles as altitude test chamber for radio equipment. *il Aero Digest* 42:286 My '43
- Correct repair of transparent sections; Plexiglas, Lucite or Lumarith turrets, noses, observation domes, and tail cones. B. MacIntosh. *diags Aviation* 42:248 Mr '43
- Design methods and details for transparent aircraft inclosures. A. C. Foster. *il diags Product Eng* 14:260-3, 354-7 My-Je '43
- Expendable hypodermic syringe. *il Mod Plastics* 20:55+ Ap '43
- Improvements in the methyl methacrylates. *il Am Gas J* 159:30-1 O '43
- Mechanical properties of Plexiglas. *Aviation* 42:183, 185 N '43
- Methacrylate disk warns of ice formation. *il Mod Plastics* 20:47 D '42

PLASTIC materials, Transparent—*Continued*

- New series of thermosetting materials covers wide range; developed by Columbia chemical division of Pittsburgh plate glass company. *il* Product Eng 14:223-6 Ap '43
- Night into day; portable fluorescent extension lamp illuminates interior installations in planes. E. F. Lougee. *il* Mod Plastics 21:83+ O '43
- Permeability of transparent wrappings. C. R. Oswin. bibliog Soc Chem Ind J 62:45-8 Ap '43
- Plastic safety devices reduce accidents. D. S. Frederick. *il* Am Mach 87:100-1 F 18 '43
- Plastics fight for safety; face shields and machine guards. *il* Safety Eng 86:14 JI '43
- Plastics in future aircraft development; with particular reference to Plexiglas. *il* Am Gas J 159:29 O '43
- Plexiglass, properties and fabrication; abstract. Roy Aeronautical Soc J 47:sup415 Ag '43
- Plexiglas rule for alignment charts. G. M. Mast. *il* Electronics 16:200+ N '43
- Propeller blades shielded during test. *il* Aero Digest 43:247 S '43
- Redesigned dental surveyor. *il* Mod Plastics 21:94+ N '43
- Safety with transparent plastic guards. *il* Factory Management 101:82. 84 Ap '43
- Seeing through turbines. *il* Mod Plastics 20:59 JI '43
- Strength properties of Plexiglas. W. F. Bartoe. *il* diags Aviation 42:128-9, 131, 135 Ja; 140+ Mr '43
- Stripping lacquer protects fine finishes in process and assembly; Protektol. *il* Iron Age 151:61 F 11 '43
- Transparent armor; tough plastic used for gun turrets and bombardier compartments also protects aircraft workers. D. S. Frederick. *il* Nat Safety N 47:24-5 F '43
- Transparent enclosures in aircraft. O. E. Brown and W. H. Arata, jr. *il* diags Mod Plastics 21:89-93, 140 O '43
- Transparent plastic. C. R. 39. Chem Ind 51:725 N '42; Same. Nat Safety N 46:70 D '42; Same. Sci Am 168:124 Mr '43
- Transparent plastic models facilitate design and research. *il* Automotive & Aviation Ind 87:44+ D 1 '42

See also

Lucite
Lumarith

Manufacture

- Bomber noses now made in Knoxville; transformation from abandoned warehouse to model Plexiglas plant. *il* Manuf Rec 112:62-3+ S '43
- From auto bodies to bomber noses. S. D. Kirkpatrick, flow sheet *il* Chem & Met Eng 50:98-101 JI '43

Testing

- Laboratory for aircraft acrylics. *il* Mod Plastics 20:118 Mv '43
- Photoelastic detection of strains. J. Delmonte and W. Dewar. *il* Mod Plastics 21:121-3 N '43
- Testing transparent plane sections under operating conditions: Rohm & Haas plastics testing laboratory. *il* Aero Digest 42:295, 299 Ja '43

Ultraviolet ray transmission

- Protecting aviators from sunburn. Mod Plastics 20:112 F '43

PLASTIC pipes. See Pipes, Plastic

PLASTIC printing plates. See Printing plates, Plastic

PLASTIC punches. See Punches, Plastic

PLASTIC sheeting

- Cellulose acetate sheeting; its properties and applications. A. F. Caprio. bibliog *il* Mod Packaging 16:81-5+ Ag '43
- Fabricating plastic dies for acrylate sheets. K. J. Leeg. *il* diags Aviation 41:143, 145, 335-6 N '42
- Fatigue resistance of flexible plastic sheetings. F. W. Duggan and K. K. Fligor. *il* diags Ind & Eng Chem 35:172-6 F '43

PLASTIC soles. See Soles, Plastic

PLASTIC strainers. See Strainers, Plastic

PLASTIC surgery. See Surgery, Plastic

PLASTIC tubes. See Tubes, Plastic

PLASTIC water pipes. See Water pipes, Plastic

PLASTICITY

- Bending strength in the plastic range. F. P. Cozzone. diags J Aeronautical Sci 10:137-61 My '43
- Earth pressure and shearing resistance of plastic clay; symposium. K. Terzaghi, R. B. Peck and W. S. Housel. diags Am Soc C E Proc 68:857-950 Je '42; Discussion. 68:1216-24; 69:589-96, 733-6, 915-23 S '42, Ap-Je '43
- Evaluation of plastic properties of clay masses. R. Russell, jr. bibliog Am Cer Soc Bul 21:271-4 N 15 '42
- Frictional phenomena; C—solids; plastic flow of solids. A. Gemant. bibliog J Ap Phys 13:688-96, 732-44 N-D '42
- Measurement of workability of ceramic bodies for plastic molding processes. E. C. Henry. diags Am Cer Soc J 26:37-9 Ja 1 '43
- Plasticity and workability of ball clays. E. C. Henry. bibliog Am Cer Soc Bul 21:269-71 N 15 '42
- Plasticity control system can be adjusted to individual plant. *il* diags Brick & Clay Rec 103:32-3 JI '43
- Plasticity of cold metals. J. B. Friedmann. Metal Prog 43:71 Ja '43
- Plasticity ratio of concrete and its effect on the ultimate strength of beams. V. P. Jensen. bibliog diags Am Concrete Inst J 14:555-32 Je '43; Discussion. bibliog 14:sup584-584²² N '43
- Plastics and plasticity; plastic working of metals and non-metallic materials. E. V. Crane. *il* diags Iron Age 152:34-40 JI 29; 64-9+ Ag 5; 80-5 Ag 12; 54-9 Ag 19; 60-5 Ag 26 '43
- Theory and measurement of plasticity and workability of mortars. P. S. Roller. diags Am Soc T M Proc 42:750-60; Discussion. 761 '42
- Water of plasticity. J. W. Whittemore. Am Cer Soc Bul 21:268-9 N 15 '42

See also

Ceramic materials	Plastic materials
Clay	Plastometers
Elasticity	Viscosity

PLASTICIZERS

- ABC of chemical derivatives from petroleum. R. W. Wakeman and B. H. Weil. *il* Nat Pet N 35 pt 2:R112 Mr 3 '43
- Advances in plastics during 1942. J. M. DeBell. Mod Plastics 20:93-4 Ja '43
- Behavior of plasticizers in vinyl chloride-acetate resins. M. C. Reed. bibliog diags Ind & Eng Chem 35:896-904 Ag '43
- Derivatives of starch; plasticization studies of starch triacetate films. C. A. Burkhard and E. F. Degering. Rayon 23:676-8 N '42
- Fatigue resistance of flexible plastic sheetings. F. W. Duggan and K. K. Fligor. *il* diags Ind & Eng Chem 35:172-6 F '43
- Galex as a plasticizer for GR-S (Buna S) stocks. J. Panek. Rubber Age 53:35-6 Ap '43
- New plasticizers for vinyl resins and cellulose esters. D. W. Elam, H. M. Preusser and R. L. Page. Mod Plastics 20:95-7 My '43
- Plastac, a processing aid for butadiene-type rubbers. Rubber Age 52:498 Mr '43
- Ridbo 369, fortifying plasticizer for GR-S. C. R. Johnson. Rubber Age 54:40 O '43
- TP-90B, a new plasticizer for synthetic rubbers and elastomers; increases low temperature resistance. V. E. Perrine and T. J. Scheirer. *il* India Rubber W 109:153-4 N '43
- Thiokol TP-90; a low temperature plasticizer. Rubber Age 53:34 Ap '43
- PLASTICS industry, Society of the.** See Society of the plastics industry
- PLASTOMETERS**
- Improved procedure for testing with the Pusey and Jones plastometer. R. E. Morris and R. E. Harmon. *il* diags Rubber Age 53:139-40 My '43
- PLATE glass**
- Plate glass meets all tests as a refrigerator lining. *il* Cer Ind 40:36 F '43

PLATE glass—Continued

Manufacture

Pittsburgh, the glass center. F. W. Adams. *il Chem & Eng N* 21:1264-7 Ag 10 '43

Patents

Brancart plate glass patents. *Glass Ind* 24: 213-14 My '43
Pot melted plate glass. *diags Glass Ind* 24: 214 My '43

PLATE glass insurance. See Insurance; Plate glass

PLATES, Steel. See Steel plates

PLATING

Plating and finishing, 1942. R. M. Burns. *Metals & Alloys* 17:85 Ja '43

See also

Brass plating
Cadmium plating
Chromium plating
Copper plating
Electroplating
Galvanizing
Iron plating
Lead plating
Nickel plating
Silver plating
Zinc plating

PLATING departments

Equipment

50,000,000 plated rivets a day; Chicago rivet & machine company. H. Chase. *il Am Mach* 87:37-8 F 4 '43
Modern design in electroplating; N. A. Woodworth company. G. E. Stedman. *il Metal Finishing* 41:199-201+ Ap '43

PLATING machinery

Cooling barrel plating units. R. B. Eyre. *plan Metal Finishing* 41:493-4 Ag '43
How to choose electroplating equipment. A. Bregman. *il diags Iron Age* 150:50-5 D 17; 40-4 D 24 '42

PLATING racks

Racking in hard chrome plating; abstract. A. W. Logozzo. *Iron Age* 152:72-3 J1 8 '43
Synthetic plating insulations. J. McGee. *il Metal Finishing* 41:138-9 Mr '43

PLATING shops

Electric equipment

Automatic plating; application of materials handling. *il Elec R (Lond)* 133:3-8 J1 2 '43

Heating and ventilation

Handling fumes from an acid tank. R. L. Grayford. *diags Sheet Metal Worker* 34:22-3 Mr '43

PLATINUM

Accommodation coefficients of He, Ne, A, H₂, D₂, O₂, CO₂, and Hg on platinum as a function of temperature. L. B. Thomas and F. Olmer. *bibliog diags Am Chem Soc J* 65:1036-43 Je '43

Application of palladium- and platinum-polyvinyl alcohol-vanadium catalysts. L. D. Rampino and F. F. Nord. *bibliog Am Chem Soc J* 65:429-31 Mr '43

Calibration of the platinum/13 per-cent.-rhodium-platinum thermocouples over the liquid-steel temperature range. C. R. Barber. *Engineering* 155:187-8, 205 Mr 5-12 '43; Abstract. *Metal Prog* 43:593+ Ap '43
Colombia's platinum aids U.S. war production. *For Comm W* 10:25 F 13 '43
Platinum in commerce. C. Engelhard. *Metal Prog* 43:250 F '43

Studies on overvoltage; a study of decomposition potentials; cathodic and anodic polarization of a platinumized platinum cathode near the reversible value in hydrogen saturated acid solutions. A. L. Ferguson and M. B. Towns. *Electrochem Soc Trans* 83 (preprint 8):105-17 Ap '43

Studies on overvoltage; cathodic and anodic polarization of a platinumized platinum cathode near the reversible value in nitrogen saturated acid solutions. A. L. Ferguson and M. B. Towns. *Electrochem Soc Trans* 83 (preprint 9):119-23 Ap '43

See also

Platinum metals

PLATINUM compounds

Interchange of hydrogen isotopes with complex salts; kinetics of the interchange with platinumous and palladous tetrammines. J. S. Anderson and others. *diag Chem Soc J* p367-72 Ag '43

Stereochemistry of square complexes. D. P. Mellor. *diags Chem R* 33:137-83 bibliog(155 references, p180-3) O '43

PLATINUM metallurgy

Platinum metals. R. Gilchrist. *bibliog Chem R* 32:291-307 Je '43

PLATINUM metals

Minor metals, 1942. H. W. Davis. *Eng & Min J* 144:75 F '43

Platinum metals. R. Gilchrist. *Chem R* 32: 277-372 bibliog(813 references, p352-72) Je '43

See also

Palladium
Platinum

Analysis

Platinum metals. R. Gilchrist. *bibliog Chem R* 32:312-26 Je '43

PLATINUM mines and mining

South Africa

South African platinum. *Chem Age (Lond)* 48:15 Ja 2 '43

PLATINUM ores

South African platinum. *Chem Age (Lond)* 48:15 Ja 2 '43

PLATT, Elizabeth Towar, 1900-1943
Sketch. R. H. Brown. *Science* 98:210-11 S 3 '43

PLAYGROUNDS

Playground design and equipment; examples of work by the New York city Department of parks. *diags plans Arch Forum* 79:140-2 O '43

Equipment

Playground design and equipment; examples of work by the New York city Department of parks. *diags plans Arch Forum* 79:140-2 O '43

PLEIJEL'S theorem

Network theorem of Pleijel. G. W. O. Howe; J. H. Mole. *diags Wireless Eng* 20:472, 487 O '43

PLEOSPONGIA

North American pleospongia. V. J. Okulich. *diags maps Geol Soc Special Pa* no 48:1-112, pl 1-18 bibliog(p87-9) '43

PLEXIGLAS. See Plastic materials, Transparent

PLEXON. See Plastic coated fibers

PLIOFILM

Goodyear pliofilm now speeds making of templates. *Steel* 111:82 N 30 '42; Same. *Rubber Age* 52:153 N '42

Outbreak of dermatitis from airplane engine covers. L. Schwartz and S. M. Peck. *Pub Health Rep* 58:625-31, pl 1-2 Ap 16 '43

Plioform bags used to protect airplane engines in shipment. *Refrig Eng* 45:118 F '43
Plioform; its properties and future possibilities. *il Mod Packaging* 17:103-7 O '43

Shipping raincoat for P-40 bodies; use of plioform bags. *il Aviation* 42:163 O '43

PLOWING. See Tillage

PLUGS, Fusible. See Fusible plugs

PLUMBING

Draining and ventilating an underground garage. *il plan Dom Eng* 160:48-9 N '42

Lead, and its job in conservation; plumbers urged to use lead welding in place of soldering. *il Dom Eng* 161:61 Je '43

Mechanical equipment for factories; plumbing and sanitation. C. T. Roe. *il Arch Rec* 93:61-2 F '43

Plumbing and heating in a modern shipyard. *il Dom Eng* 161:53-5 Ja '43

Plumbing and water heating for Old Mexico; work on military hospital. *il Dom Eng* 161: 64-5 Je '43

Study in substitutes; plumbing and heating equipment; dormitory for ship builders. *il Dom Eng* 161:57-8+ Ap '43

War housing story; Quality homes at An-niston, Ala. *il Dom Eng* 162:74-5 O '43

War housing that's built to last; plumbing and heating equipment. Metropolitan Life insurance company's Parkmerced building project in San Francisco. *il Dom Eng* 161: 52-3 My '43

PLUMBING—Continued

Why's and how's of today's plumbing; installation techniques match speed of prefabricated construction. *il Dom Eng 160:46-7 N '42*
 Willow Run; sanitary system. *il Dom Eng 162:66-7 Ag '43*

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Bathrooms	Pipes
Drinking fountains	Plumbing fixtures
Drinking water systems	Plumbing shops
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Hot water supply	Sewerage
Mechanical equipment of buildings	Solder and soldering
Pipe fitting	Steam pipes
Pipe fittings	Water distribution
	Water pipes

Standards

New plumbing standards to keep drinking water pure. A. A. Kalinske and F. M. Dawson. *il diags Ind Stand 14:235-7 Ag '43*

PLUMBING fixtures

Modern plumbing fixtures. *il Mod Plastics 20:84+ Mr '43*
 Solid shower heads. *il Mod Plastics 20:64-5 My '43*
 Spotlight on plastics for plumbing and heating. J. C. Louer. *il Dom Eng 161:44-6+ Ap '43*
 Substitution of materials; plumbing and heating equipment. *Dom Eng 161:49 Ja '43*
 Two angles on alternate materials. *il Dom Eng 161:54-5+ My '43*

See also

Faucets
 Sanitary ware

PLUMBING shops

Letters; correspondence practices of John J. Fitzpatrick, plumbing and heating contractor. *Dom Eng 162:71+ O '43*
 Old-fashioned success story; Gladys E. Martin plumbing and heating co. *il Dom Eng 162:70 O '43*
 10,000 repair jobs; Hester plumbing & heating company, Birmingham, Ala. *il Dom Eng 160:51+ D '42*

Management

Eight methods of meeting labor shortages. A. Maier. *Dom Eng 160:52 N '42*
 He merchandises the repair business; Charles H. Carroll. *il Dom Eng 161:44-5 F '43*
 Solving wartime service problems; Wilshire district plumbers, Los Angeles. *il Dom Eng 161:50+ F '43*

PLUMBING supplies industry

Central supply association annual meeting, Chicago, Oct. 22-23. *Dom Eng 160:55-6+ N '42*
 Materials situation; with special reference to repair, maintenance and controlled materials plans. *Dom Eng 161:54+ Mr '43*
 Priority problem clinic. *Dom Eng 160:64 D '42*

Advertising

Consumer questionnaire is part of this down-to-earth post-war promotion; Crane co. program. *il Ptr Ink 203:20-2 My 23 '43*
 Josam blends headwork with footwork to crack a new market in wartime; Cleveland maker of valves, drains and related products breaks into marine field with a custom-built plan. W. S. Allen. *il Sales Management 52:48+ N 1 '43*
 Proud of its substitutes; Crane co. develops line of galvanized iron plumbing fittings and earthenware sinks and bath tubs. H. E. Fleming. *il Ptr Ink 204:18-20 Jl 23 '43*

PLUMBING trade

AA-5 for repair and maintenance; P-84 as amended supplies AA-5 rating for plumbing and heating; text. *Dom Eng 162:62-3+ S '43*
 ABC's of MPR no. 251 for plumbing and sheet metal contractors. Sheet Metal Worker 34:28-9 My '43
 Advance sale, postwar delivery, plan to enlist support of contractors in East; results of survey. *Dom Eng 161:50-1+ Mr '43*
 Civilian supply means plumbing and heating. *Dom Eng 161:49+ My '43*

Good news for the plumbing and heating industry; maintenance and repair order P-84, equipment order L-79 revised. Sheet Metal Worker 34:24-5+ S '43

Guide to price orders for plumbing, heating industry. *Dom Eng 160:48-9 D '42*
 Honor roll of industry's contractors. *Dom Eng 161:50-1 Ap; 59-60 My '43*
 Legal questions. *Dom Eng 161:96-9 Ja '43*
 New L-79 bodyguard for new P-84; text of order. *Dom Eng 162:64 S '43*
 1/3 of contractors do 90% of business. *Dom Eng 160:45+ D '42*
 Opportunities for heating and plumbing contractors in fuel rationing. *Dom Eng 160:42-4+ N '42*
 P-84 and L-79 interpreted. *Dom Eng 162:84, 93 O '43*
 Polio; second crusade of our industry. *il Dom Eng 162:58-9+ Jl; 59-61 Ag; 59-61, 84+ S; 64-6 O '43*

Post-war planning for the plumbing, heating and air conditioning industry. *Dom Eng 161:58+ My '43*
 Post-war planning for the plumbing, heating and air conditioning industry; analysis and information bulletin. *Dom Eng 161:41 F '43*

Post war planning in our industry. *il Dom Eng 160:46-7+ O; 54 N '42*

Questions and answers on CMP. *Dom Eng 161:58+ Ja '43*

Sales plan for war and post-war; Nugent plan includes sale of plumbing and heating equipment. *il Dom Eng 161:34-9+ F '43*
 Simplification of products and concentration of industry. *Dom Eng 161:48 Ja '43*
 Sixteen million major plumbing jobs wanted! data from 1940 census. *Dom Eng 161:52-3 Ap '43*

Traveling showcase; service cars with glass sides to show parts and equipment; Wehby plumbing and heating co. *il Dom Eng 162:75 O '43*

Two angles on alternate materials. *il Dom Eng 161:54-5+ My '43*

See also

Plumbing fixtures	Plumbing supplies
Plumbing shops	industry

Advertising

Movie—2nd public contact; publicizing the motion picture. The ominous arms case. *Dom Eng 162:63 Ag '43*
 Plan to promote plumbing industry motion picture. W. J. Lang. *Dom Eng 161:46+ F '43*
 Promotion to the public; Domestic Engineering advertising service. *il Dom Eng 162:55-7+ Ag '43*
 So much, for so little; plumbing industry motion picture. *Dom Eng 161:60+ Je '43*

Farm market

Food fights for freedom; plumbing contractor sells water systems to farmers as conservers of manpower and producers of more food. *il Dom Eng 162:72-4 S '43*
 Protect the basis for sanitation and production; water systems; service policy. H. E. Buch & sons co. *il Dom Eng 161:50-2+ Ja '43*
 Two ideas on electric farm water systems. *Dom Eng 161:62-3 Je '43*
 Victory for water systems; newly released order L-257. *Dom Eng 162:60 Jl '43*
 Water system rationing; selling pumps under Dept. of agriculture rule. *Dom Eng 160:59 D '42*
 Water systems and the food shortage; views on equipment shortage. *il Dom Eng 161:44-6 Mr '43*
 Water systems; merchandizing and repair services of Noble & Price plumbing co. *il Dom Eng 161:47-9 Ap '43*

Remodeling

Here's one good job; creating two small apartments out of one seven-room apartment. *il plans Dom Eng 160:40 N '42*
 Remodeling houses for war workers. *il plan Dom Eng 160:44-5+ D '42*
 Wanted, war housing; 650,000 remodel jobs ready for contractors. *il Dom Eng 160:38-9 N '42*

Statistics

\$1,000,000,000 market; statistics for 1942. *Dom Eng 161:85+ Ja '43*

PLYMOUTH oil company

Oil shares for inflation hedging. H. Lawrence. *Barron's* 22:20 D 21 '42
 Thumbnail stock appraisal. *Mag of Wall St* 72:91 My 1 '43

PLYWOOD

Aircraft from West coast timberlands. C. E. Rozema. *il Mod Plastics* 20:68-9, 134+ Ja '43
 American car and foundry company builds plywood refrigerator cars. *il Ry Mech Eng* 117:352+ Ag '43
 Bonded plywood, compressed, makes propellers, has other uses. *il Sci Am* 168:157-8 Ap '43
 Cargo planes of plywood save vital materials. *il diags Product Eng* 14:73-5 F '43
 Chilean company manufactures plywood. *For Comm W* 10:23 F 6 '43
 Comparative resistance to vapor transmission of various building materials. L. V. Teesdale. *Heating-Piping* 14:736-42 D '42
 Creep in aircraft plywoods. J. Delmonte and E. Watkins. *Aero Digest* 43:306-7+ J '43
 Design and production with substitute materials; Vultee uses plywood and plastic material for basic trainers. S. R. Carpenter. *il diags Aviation* 42:112-15+ Mr '43
 Design considerations for plywood structures. L. J. Marhoefer. *il diags Aviation* 41:114-17+ N; 146-9+ D '42; 42:150-1, 153+ Ja; 164-5, 167+ Ap '43
 Detachable gasoline tank of molded plywood. *il Aviation* 42:163 Ja '43
 Douglas fir plywood for aircraft. N. S. Perkins. *diags Aero Digest* 42:260+ Mr '43
 Dry-wall construction; time saver standards. H. R. Sleeper. *diags Arch Rec* 94:78-9 O '43
 Effect of openings in molded plywood structures; abstract. L. J. Marhoefer. *S A E J* 51:sup25 My '43
 Flying flyover garage; prefabricated of plywood and laminated strips bonded with urea-formaldehyde glue. *il Mod Plastics* 20:47 F '43
 Furniture city joins the air war; Grand Rapids factories make airplane parts and materials. *il Aero Digest* 42:145-8, 153-4+ Ap '43
 Gliders from the Wolverine state; use of plastic-bonded plywood. *il Mod Plastics* 20:62-6+ Ap '43
 Heat-conduction problems in presses used for gluing of wood. G. H. Brown. *diags Inst Radio Eng Proc* 31:537-48 O '43
 Heat transmission tables; values of U for walls, roofs, floors and ceilings using plywood; reference data. *Heat & Ven* 40:744-74b J '43
 High-density plywood. M. Finlayson. *bibliog A S M E Trans* 65:193-9 Ap '43
 Identification of plywood glues. B. J. Rendle and G. L. Franklin. *Soc Chem Ind J* 62:11-14 Ja '43
 Modeling postwar motor car bodies. *il Mod Plastics* 20:50+ F '43
 Modern designs from Chicago. L. Moholy-Nagy. *il Mod Plastics* 20:62-5+ D '42
 Molded plastic-bonded veneers and wood in aircraft construction. R. J. Nebesar. *il Mech Eng* 65:197-201 Mr '43; Same. *Mod Plastics* 20:83-6+ F '43; Same abr. *Engineer* 175:412-13 My 21 '43
 Moulded plywood aircraft. G. L. White. *il Can Chem & Process Ind* 27:441-3 Ag '43
 Moulded shell construction in plywood; Skydome method. A. Klemm. *il diags Aero Digest* 42:148, 153, 160+ Ja '43
 Mosquito bomber; study of design in wood. R. B. McIntyre. *il diags fold pl Product Eng* 14:583-8 N '43
 New plywood developments. *il Arch Forum* 79:8+ S '43
 New war planes for the United nations. *il Mod Plastics* 20:61-9+ Mr '43
 Palm reading the hand of Mars; future of plastics and plastic bonded plywood. *il Am Gas J* 159:27-8 O '43
 Paper laminates for molding. H. J. Luth. *il Mod Plastics* 20:91+ Mr '43
 Plastic bodywork; a detailed consideration of materials and their characteristics. W. Nichols. *il diags Automobile Eng* 53:405-10 O '43
 Plastic plywood airplanes. S. M. Fairchild. *il Manuf Rec* 112:28-9+ My '43
 Plastics and plywood. H. T. Moore and H. J. Vogler. *il diags Comp Air M* 48:1164-8 O '43

Plywood adhesives; characteristics and handling methods. *Aviation* 42:173, 175 Ja '43
 Plywood and hardwoods replace critical metals in new business machine. *il diags Product Eng* 14:337-8 Je '43
 Plywood easily handled in railway car construction. E. L. Krietemier. *Ry Mech Eng* 117:368-9 Ag '43
 Plywood for war; abstract. T. D. Perry. *Mod Plastics* 21:97-8 N '43
 Plywood in aircraft construction. G. A. Allward. *Mech Eng* 65:14-16 Ja '43
 Plywood plate girders for buildings. *il diags Eng N* 131:690-2 N 4 '43
 Plywood relieves metal shortages. *Barron's* 23:5 Ap 19 '43
 Plywood soars; gears for an expanded post-war market. *Business Week* p49+ Ja 2 '43
 Plywood treasure chest for Uncle Sam; for shipping smokeless gunpowder. *il Mod Packaging* 16:69 Ag '43
 Pneumatic clamping device for plywood skins. *il Automotive & Aviation Ind* 83:29 Je 1 '43
 Prefab sections create quick housing. *il plans Am Bld* 64:35+ N '42
 Problems affecting the use of wood in aircraft. R. W. Hess. *Mech Eng* 65:653-6+ S '43
 Problems in the use of plywood in airplane construction. A. Klemm. *Mech Eng* 65:105-9 F '43
 Problems in wood aircraft. I. C. Peterson. *bibliog diags S A E J* 51:369-80 O '43; Excerpts. *Machine Design* 15:115-19+ J '43
 Progress in aircraft plywood, 1941-1942. T. D. Perry. *bibliog diags Aeronautical Eng R* 2:7+ F '43; Abstract. *Mech Eng* 65:362-4 My '43
 Refrigerator cars of plywood. H. A. Dodge. *il Ry Age* 114:245-8 Ja 23 '43; Same. *Ry Mech Eng* 117:30-2 F '43
 Relative merits of materials used for lightweight structures. F. Platt. *il Product Eng* 14:67-72 F '43
 Resin-bonded plywood tubing. *il Mod Plastics* 21:81-2+ O '43
 Ryan develops plywood primary trainer for army. *il Automotive & Aviation Ind* 83:24-5, 54 Ja 1 '43
 Seaplane floats go to war. *il Mod Plastics* 20:84 Je '43
 Secret adhesive combines thermoplastic and thermosetting qualities. R. C. Peter. *Sci Am* 169:229 N '43
 Signal corps mast-raising; molded resin-bonded plywood. *il Mod Plastics* 20:79 D '42
 Use of glue in aircraft construction. J. T. Stephan. *bibliog il Aviation* 42:132-3+ Mr '43
 Use plywood form panels on outlet works of large flood-control dam. *il Concrete* 51:4+ Ap '43
 Utilizing molding and forming for aircraft plywood. J. Delmonte. *il diags Machine Design* 15:93-5 Je '43
 Wood panel serves for wartime metering. E. E. Kline. *il Elec W* 119:796 Mr 6 '43
 Wood pays off; Standard Register saves metal. *Business Week* p92+ Mr 27 '43
 Wood-plastics in mass production of aircraft. C. L. Bates and H. J. Block. *S A E J* 51:30 Ja '43
 Wood techniques developed in glider construction. *il Aviation* 41:108-12 S '42
 Wood, the most important raw material of the future. N. C. Brown. *Mech Eng* 65:182+ Mr '43

Manufacture

Cold heat to expedite plywood fabrication; passing high frequency electric current through wood sections polymerizes glue. C. S. Ricker. *flow diag il diags Aviation* 42:116-20+ Mr '43
 Dermatitis from resin glue in war industries. L. Schwartz, S. M. Peck and J. E. Dunn. *Pub Health Rep* 58:899-904, pl 1-2 Je 11 '43
 Electrostatic high-frequency heating makes possible many new designs. P. D. Zottu. *il diags Product Eng* 14:40-3 Ja '43
 Flexible pressure in veneer and plywood work. T. D. Perry. *bibliog diags Mech Eng* 65:417-24 Je '43; Same. *Mod Plastics* 20:73-7+ Ag '43; Same. *Engineer* 176:132-3, 155-6 Ag 13-20 '43; Same cond. *Aero Digest* 43:237, 239, 241-2+ J '43; Discussion. *Mech Eng* 65:677-8 S '43

PLYWOOD—Manufacture—Continued

High-frequency current speeds plywood manufacture. H. W. Young. *il Comp Air M* 48: 7031-2 My '43

High-frequency electric-field heating for non-metallic materials; Thermex process. T. R. Olive. *il diags Chem & Met Eng* 50:102-4 Ap '43

High-frequency heating in plywood manufacture. Engineering 156:116-17 Ag 6 '43

How plywood is produced. *il Eng N* 130:750-3 My 20 '43

Making plywood with multidirectional pressure. J. S. Barnes. *bibliog il Mech Eng* 65: 17-20 Ja '43

Radio-frequency gun for spot-gluing wood; molded plywood parts. J. P. Taylor. *il diags Electronics* 16:106-11+ N '43
Sweden uses new type of glue in plywood manufacture. *For Comm W* 9:30 N 28 '42

Specifications

Official plywood and veneer specifications. R. C. Perkins. *il Aero Digest* 42:273-4+ My '43

Standards

Douglas fir plywood. 5th ed *il diag U S Nat Bur Stand Commercial Standard* CS45-42: 1-25; pa 10c Supt. of doc. '43

Strength

Bearing strength of plastics and plywood. J. Bond. *il A S M E Trans* 65:9-12 Ja '43; Same. *Mod Plastics* 19:70-3+ JI '42; Discussion. *A S M E Trans* 65:12-14 Ja '43

Plywood design practice for maximum strength. *il diags Product Eng* 14:149-52 Mr '43

Strength characteristics of plastic-bonded plywood. G. B. Parsons. *bibliog diags A S M E Trans* 65:1-7 Ja '43; Same. *Mod Plastics* 19:74-9, 110, 112+ Ag '42; Same. *Aero Digest* 41:160, 162, 165+ JI; 140+ Ag '42

Strength of nailed plywood joints subjected to lateral loading. *diag Eng N* 130:691-3 My 6 '43

Testing

Aviation's engineering data book; cold bonding tests; varying conditions and materials. *Aviation* 42:209, 211 My '43

Behavior of plywood under repeated stresses. A. G. H. Dietz and H. Grinsfeld. *bibliog il diags A S M E Trans* 65:187-91; Discussion. 191 Ap '43

Delamination tests of plywood and a proposed specification. C. W. Mühlenbruch. *il A S M E Trans* 65:723-7 O '43

Mechanical properties of plastics at normal and subnormal temperatures. T. P. Oberg, R. T. Schwartz and D. A. Shinn. *bibliog il Mod Plastics* 20:87-100+ Ap '43

PNEUMATIC control

Air-operated accessories speed up power presses. R. E. Hearl. *il Am Mach* 86:1490-1 D 24 '42

Air pressure controls reversing drive; patent assigned to The Falk corp. *diag Machine Design* 15:170+ S '43

Application of pneumatic and air-hydraulic devices to machine tools; abstract. J. C. Cotner. *Iron Age* 152:47 O 21 '43

Home-made air cylinder. W. F. Schaphorst. *diag Chem Ind* 53:230 Ag '43

Maintains constant driven speed; patent assigned to General motors corp. *diags Machine Design* 14:138+ N '42

New processes require more powerful automatic-control equipment. J. B. McMahon. *diags Oil & Gas J* 41:90, 93-4, 96 Mr 25 '43

On-the-job adjustments of air-operated recorder-controllers. J. G. Ziegler. *il Instruments* 16:394-7, 594-6+ JI, O '43

Pneumatic controls speed cartridge machining. A. W. Lancaster. *il Product Eng* 13: 695-7 D '42

Pneumatic device launches floating dry docks. O. H. Pilkey. *diags Civil Eng* 13:546-7 N '43

Pneumatic pressure operates aircraft pump; patent assigned to the Wright aeronautical corp. *diags Machine Design* 15:174+ Je '43

Pneumatic vs electrical automatic control. E. L. Stilson. *il diags Chem & Met Eng* 50:137-9 My '43

Recovery-curve graphs for properly adjusting air-operated automatic controllers. E. L. Kumm. *Instruments* 16:398-9 JI '43

Varnish in air control mechanism; what to do about it. J. W. Lane. *il Bus Transportation* 22:28-30 Je '43

See also

Air compressors

Compressed air

PNEUMATIC conveying

Air mail shortens plant distances, speeds output. *il Factory Management* 101:114-15 Je '43

Conveying cement long distances by pneumatic methods. *il Concrete (mill sec)* 51: 238-9 N '43

Granary and pneumatic grain discharging plant. *il diags Mech Handling* 30:48-51 F '43

Move cement with air from silos to ships; loading plant of Permanente corporation. R. S. Torgerson. *il Rock Prod* 46:123-4 Ja '43

Moving cement into storage with air. *il Rock Prod* 45:52+ N '42

Special delivery service by pneumatic tube; Cleveland graphite bronze co. *il Factory Management* 100:82-3+ D '42

Theory and practice of pneumatic conveying. J. M. Dalla Valle. *diags Heat & Ven* 39: 28-32 N '42

Three-mile conveyor aids test work; Bethlehem steel company spectrographic laboratory, connected by conveyor systems to open hearth and electric furnace units. W. Barnett. *il Steel* 112:94+ Je 28 '43

PNEUMATIC machinery

Air hammers for forging; abstract. J. M. Weil and P. Hoffman. *Metals & Alloys* 17: 172+ Ja '43

Air-operated impact-type stamping machines. *il Comp Air M* 48:7097 JI '43

Avery pneumatic vibrator. *il diag Mech Handling* 30:412-14 S '43

Construction machinery co. develops pneumatic gun for placing concrete. *il Concrete* 51:34 S '43

Holden and Hunt compressed-air operated spot welding machines. *il Engineering* 155: 407 My 21 '43

Mont Cenis tunnel doomed hand drilling. C. H. Vivian. *il diags Comp Air M* 48:6978-81 Mr '43

Pneumatic clamp makes hard work easy; paper cutter in printing plant of Ingersoll-Rand company. R. D. Fisher. *il Comp Air M* 48:6966 F '43

Pneumatic clamping device for plywood skins. *il Automotive & Aviation Ind* 88:29 Je 1 '43

Saving man-hours with compressed air. R. N. Bryan. *il Comp Air M* 48:7014-15 Ap '43
Shaping metal with air under pressure; Southern engineering company. *il diags Comp Air M* 48:6962-3 F '43

Safety measures

Automatic trip air valves. *diags Engineer* 174:423 N 20 '42; *Engineering* 154:486-7 D 18 '42

PNEUMATIC separators. See Air separators**PNEUMATIC tools**

Bucking bar simplifies aircraft riveting. *il diags Product Eng* 14:78-9 F '43

Care and operation of hand held drills. *il Roads & Sts* 86:74, 76 JI '43

Correct pressure increases air-tool efficiency. D. A. Row. *diags Power* 87:121-2 F '43

Magnetic-base frame holds air drill on work. *il Comp Air M* 48:6967 F '43

Recommended arrangements for pneumatic tools; chart for use in determining suitable hose arrangements; data sheet. C. W. Gibbs. *Factory Management* 101:152 Mr '43

Smoothing out the rough spots; power-driven brushes. V. E. Brink. *il Comp Air M* 48: 7170-1 O '43

Speedy pneumatic method of bore gaging. A. Polk. *il Instruments* 16:22+ Ja '43

PNEUMATIC tools, Portable

Broomwade pneumatic tools. *il Mech Handling* 30:459-60 O '43

How to lengthen life of pneumatic tools. *Marine Eng* 47:170+ D '42

Power tools that go to the job. *il Factory Management* 101:137-8 Mr '43

PNEUMATIC tools, Portable—Continued**Safety measures**

Same old grind; inspection of portable air grinders. W. J. Thomsen. *il Safety Eng* 85:23-4 Je '43

PNEUMATICS*See also*

Aerodynamics Gases
Air flow Sound
Compressed air

PNEUMOCOCCI

Nation-wide study of the bacterial etiology of the pneumonias. A. S. Rumreich and others. map *Pub Health Rep* 58:121-35 Ja 22 '43

PNEUMOCOCCIOSIS. *See* Lungs—Dust diseases; Silicosis

PNEUMONIA

Atypical pneumonia. P. B. Beeson. *Ind Med* 12:487-8 Jl '43

Cinchona alkaloids in pneumonia; some ethers of apocupreine. R. S. Tipson, M. A. Clapp and L. H. Cretcher. *bibliog Am Chem Soc J* 65:1092-4 Je '43

Cold agglutinins (autohemagglutinins) in primary atypical pneumonias. O. L. Peterson, T. H. Ham and M. Finland. *Science* 97:167 F 12 '43

Inability to pass primary atypical pneumonia to human volunteers. D. H. Vance, T. Scott and H. C. Mason. *bibliog Science* 98:412-13 N 5 '43

Infectious agent from cases of atypical pneumonia apparently transmissible to cotton rats. M. D. Eaton and others. *Science* 96:518-19 D 4 '42

Influenza and pneumonia mortality in a group of 90 cities in the United States, August 1935-March 1943, with a summary for August 1920-March 1943. M. Gover. *Pub Health Rep* 58:1033-61 *bibliog*(p1049) Jl 9 '43

Nation-wide study of the bacterial etiology of the pneumonias. A. S. Rumreich and others. map *Pub Health Rep* 58:121-35 Ja 22 '43

Observations concerning the etiology of primary atypical pneumonia. H. M. Rose and E. Molloy. *bibliog Science* 98:112-14 Jl 30 '43

Protective antiserum against mouse pneumonitis virus. M. R. Hilleman and F. B. Gordon. *bibliog Science* 98:347-8 O 15 '43

Sickness absenteeism among industrial workers, final quarter of 1942, with a note on the occurrence of bronchitis and pneumonia, 1933-42. W. M. Gafafer. *Pub Health Rep* 58:677-9 Ap 23 '43

Virus obtained from a pneumonia of cats and its possible relation to the cause of atypical pneumonia in man. J. A. Baker. *Science* 96:475-6 N 20 '42

Virus recovered from patients with primary atypical pneumonia. F. L. Horsfall, Jr. and others. *bibliog Science* 97:289-91 Mr 26 '43

POCKET knives. *See* Knives

POQUE, Lloyd Welch, 1899-
Portrait. *Air Transport* 1:29 S '43

POINT-of-sale advertising. *See* Advertising, Point-of-sale

POINT rationing. *See* Rationing

POISON gas. *See* Gases, Asphyxiating and poisonous

POISON ivy

Toxic principle of poison ivy and other related plants. D. Wasserman and C. R. Dawson. *bibliog*(59 references) *J Chem Educ* 20:443-53 S '43

Toxic principles of poison ivy. H. S. Mason and L. Schwartz. *Am Chem Soc J* 64:3058 D '42

POISONOUS plants

Active principles of leguminous fish-poison plants; the reduction of elliptone. S. H. Harper. *Chem Soc J* p587-93 O '42

Active principles of leguminous fish-poison plants; the synthesis of dehydrotetrahydroelliptone and of dehydrotetrahydroelliptone. S. H. Harper. *Chem Soc J* p593-5 O '42

Active principles of leguminous fish-poison plants; the synthesis of furanocoumarins related to rotenone. S. H. Harper. *Chem Soc J* p595-8 O '42

Fragments of the imagination; tropical snakes and poisonous plants. E. D. Merrill. *Science* 97:41-2 Ja 8 '43

See also

Poison ivy

POISONS

Acute and chronic toxicity; public health aspects. G. Woodard and H. O. Calvery. *bibliog Ind Med* 12:55-9 Ja '43

Contribution to the toxicity of algae. R. E. Wheeler, J. B. Lackey and S. Schott. *bibliog Pub Health Rep* 57:1695-1701 N 6 '42

Cross-circulation as a method in the study of drug fixation and poisoning. T. Koppányi and C. R. Linegar. *Science* 96:562-3 D 18 '42

Detection of poisons in water supplies; abstract. O. M. Smith. *Water Works & Sewerage* 89:470-1 N '42

Evaluation of fungicides: a study in quantitative toxicology; bio-assay and the physico-chemical methods. H. Martin. *bibliog Soc Chem Ind J* 62:67-70; Discussion. 70-1 My '43

Observations on the fate of pentachlorophenol in the animal organism. W. Machle, W. Deichmann and G. Thomas. *bibliog J Ind Hygiene* 25:192-4 My '43

Toxic effects of atabrine and sulfadiazine in growing rats. C. I. Wright and R. D. Lillie. *Pub Health Rep* 58:1242-50 Ag 13 '43

Toxicity of rotenone to animals; a review and comparison of responses shown by various species of insects, fishes, birds, mammals, etc. L. K. Cutkomp. *bibliog Soap & San Chem* 19:107-4 O '43

Toxicity studies with the fungicide tetra-chloro-para-benzoquinone (spergon). T. H. McGavack and others. *bibliog il J Ind Hygiene* 25:98-111 Mr '43

See also

Actinomycin	Hydrocyanic acid
Arsenic	Insecticides
Benzene poisoning	Lead poisoning
Carbon monoxide poisoning	Methyl bromide
Curare	Methyl chloride
Food poisoning	Nicotine
Gases, Asphyxiating and poisonous	Paint, Anti-fouling
Gasoline poisoning	Selenium poisoning
	Sulfamic acid
	Tutin

POISONS, Industrial

Acute toxicity of vapors of several monoalkyl ethers of ethylene glycol. H. W. Werner and others. *bibliog diag J Ind Hygiene* 25:157-63 Ap '43

Carbon tetrachloride and health. W. H. Easton. *Safety Eng* 85:47-9 Ap '43

Chemical hazard; toxicity of the chlorinated naphthalenes and diphenyls. *Safety Eng* 85:41 Mr '43

Chronic toxicity of Aerosol-OT. A. E. Benaglia and others. *J Ind Hygiene* 25:175-80 My '43

Determining margins of safety; criteria for defining a harmful exposure. J. H. Sterner. *Ind Med* 12:514-18 Ag '43

Hazards and control of industrial toxic solvents. W. M. Pierce. *bibliog Chem & Met Eng* 49:85-7 D '42

Hot dip galvanizing; hazards. *Nat Safety N* 47:60 Ja '43

Investigation into the effects of continued exposure to the vapor of volatile solvents. E. M. Killick and R. S. F. Schilling. *bibliog J Ind Hygiene* 24:307-14 D '42

Medical control of industrial exposure to toxic chemicals. J. H. Foulger. *bibliog diag charts Ind Med* 12:214-25 Ap '43

Metallic poisons. J. M. McDonald. *il Safety Eng* 85:33-6 Ja; 41-3 F '43

Methyl bromide: local and mild systemic toxic effects. R. M. Watrous. *il Ind Med* 11:575-9 D '42

Observations on the toxic effects resulting from exposure to chlorinated naphthalene and chlorinated phenyls with suggestions for prevention. H. Vor. Wedel, W. A. Holla and J. Denton. *bibliog il Rubber Age* 53:419-26 Ag '43; Same *abr. Chem Age (Lond)* 49:592-4 D 18 '43

Occupational diseases levy a big toll; abstract. N. R. Bernz. *Concrete (mill sec)* 50:288 D '42; Same. *Safety Eng* 84:41 N '42

POISONS, Industrial—Continued

- Occupational hazards to young workers; radioactive substances. bibliog U S Children's Bur Pub 286:1-18; pa 10c Supt. of doc. '42
- Physiologic properties of indium and its compounds. C. P. McCord and others. bibliog *J Ind Hygiene* 24:243-54 N '42
- Physiological response of rabbits to cyclohexane, methylcyclohexane, and certain derivatives of these compounds. J. F. Treon, W. E. Crutchfield, jr. and K. V. Kitzmiller. bibliog *diags J Ind Hygiene* 25:199-214, 323-47 Je, O '43
- Recommended safe concentrations of common toxic substances used in industry; abstract. M. A. Snell. *Chem & Met Eng* 50:181 O '43
- Safety organization in the mill. J. F. Holmes. *Textile Col* 64:589-94+ D '42
- Some toxic reactions of common explosives. J. H. Eddy, jr. *Ind Med* 12:483-6 J '43
- Testing toxic atmospheres. N. R. Bernz. *il Heating-Piping* 15:518-20 O '43
- Tetryl; hazards and precautions. *Nat Safety* N 47:44, 46+ Ap '43
- Toluene and xylene. *Textile Col* 65:348-9 Ag '43
- Toxic gas in industry; American health service recommendations. *Chem Age (Lond)* 48:219-20 F 20 '43
- Toxic products and their control. A. C. Dick and L. S. Hrdina. *Ind Med* 12:519 Ag '43
- Toxicity of lead azide. L. T. Fairhall and others. bibliog *diag Pub Health Rep* 58:607-17 Ap 9 '43
- Toxicology of acrylonitrile (vinyl cyanide); determination of thiocyanates in blood and urine. A. H. Lawton, T. R. Sweeney and H. C. Dudley. bibliog *J Ind Hygiene* 25:13-19 Ja '43
- Toxicology of acrylonitrile (vinyl cyanide); studies of effects of daily inhalation. H. C. Dudley, T. R. Sweeney and J. W. Miller. *J Ind Hygiene* 24:255-8 N '42
- Trinitrotoluene (TNT); hazards and precautions. bibliog *Nat Safety* N 48:25-6+ Ag '43
- What the ventilating engineer should know about carbon tetrachloride. H. P. Quadland. *il Heat & Ven* 40:38-9 Mr '43

See also

- | | |
|--------------------------------|---------------------|
| Aniline poisoning | Lead poisoning |
| Benzene poisoning | Manganese poisoning |
| Carbon monoxide poisoning | Radium poisoning |
| Carbon tetrachloride poisoning | Selenium poisoning |
| Hydrogen sulfide | Trichloroethylene |
| | Trinitrotoluene |

POLAND**Foreign relations
Czechoslovakia**

- Polish-Czech difficulties. *Economist* 144:684-5 My 29 '43

Russia

- Crisis of confidence. map *Economist* 144:579-80 My 8 '43
- Polish-Soviet relations. *Economist* 144:463-4 Ap 10 '43
- Row in the back room. *Business Week* p94-6 My 22 '43
- Russia sustains relations with Polish regime. *Comm & Fin Chr* 157:1591 Ap 29 '43
- Russo-Polish dispute. *Economist* 145:3 J 3 '43

Politics and government

- Polish cross-roads. *Economist* 145:109-10 J 24 '43

POLAR regions

- Insolation in the polar atmosphere. A. Court. bibliog fold chart *Franklin Inst J* 235:169-78 F '43

POLARISCOPE

- Glass strain; method for determining and analyzing strains in electronic tubes and other glass forms. H. J. Nolte. *diags Gen Elec R* 46:275-80 My '43; Abstract. *Electrician* 131:31-3 J 9 '43

- Introduction to the theory of photoelasticity and its application to problems of stress analysis. R. E. Arthur. *il diags Roy Aeronautical Soc J* 47:263-72 Ag '43

POLARIZATION (light)

- Light-beam modulation by photoelastic effect in glass. W. E. LeClair. *diag Electronics* 16:122+ My '43

- New polarizer made from materials available in this country. *Sci Am* 167:276 D '42
- Polarized light used to study fluid flow. *Heating-Piping* 15:531 O '43
- Polarizers. H. C. McKay. *Am Phot* 37:43-4 Ag '43
- Study on measurements of daylight; the influence of polarized light. H. H. Hausner. bibliog *il Illum Eng* 38:382-90 J 1 '43

POLARIZATION, Dielectric

- Influence of hindered molecular rotation on the dielectric constants of water, alcohols, and other polar liquids. G. Oster and J. G. Kirkwood. bibliog *J Chem Phys* 11:175-8 Ap '43
- Molar polarizations in extremely dilute solutions. R. Davis, H. S. Bridge and W. J. Svirbely. bibliog *Am Chem Soc J* 65:857-62 My '43
- Solvent polarization error and its elimination in calculating dipole moments. I. F. Halverstadt and W. D. Kumler. bibliog *Am Chem Soc J* 64:2938-92 D '42

See also**Electric moment****POLARIZATION, Electrolytic**

- Polarization at oxidation-reduction electrodes; the ferrocyanide-ferricyanide electrode. W. R. Carmody and J. J. Rohan. *Electrochem Soc Trans* 83 (preprint 11):137-45 Ap '43
- Studies on overvoltage; a study of decomposition potentials; cathodic and anodic polarization of a platinized platinum cathode near the reversible value in hydrogen saturated acid solutions. A. L. Ferguson and M. B. Towns. *Electrochem Soc Trans* 83 (preprint 8):105-17 Ap '43
- Studies on overvoltage; cathodic and anodic polarization of a platinized platinum cathode near the reversible value in nitrogen saturated acid solutions. A. L. Ferguson and M. B. Towns. *Electrochem Soc Trans* 83 (preprint 9):119-23 Ap '43

POLARIZATION of rays

- Electron polarization. C. G. Shull, C. T. Chase and F. E. Myers. bibliog *diag Phys R* 63:29-37 Ja 1 '43
- Neutron polarization and ferromagnetic saturation. F. Bloch, M. Hamermesh and H. Staub. bibliog *diags Phys R* 64:47-56 Ag 1 '43

See also

- Depolarization
Polarization (light)

POLAROGRAPHY

- Photoelectric absorptiometer, the polarograph, and the spectrograph; a critical review. H. K. Whalley. *Chem & Ind* 61:495-7 D 5 '42

POLAROGRAPHY

- Acrolein determination in the presence of formaldehyde and acetaldehyde by the polarographic method. R. W. Moshier. bibliog *Ind & Eng Chem Anal* 15:107-9 F 15 '43

- Chemical analysis with a cathode-ray oscilloscope. T. S. G. Jones. bibliog *diags Electronics* 16:154+ Ap '43

- Copper and sulfide in developers; fogging action; polarographic analysis. R. M. Evans, W. T. Hanson and P. K. Glasoe. bibliog *Soc Motion Picture Eng J* 40:88-96 F '43

- Determination of pyrophosphate by precipitation with cadmium and polarographic measurement of cadmium in the precipitate. G. Cohn and I. M. Kolthoff. bibliog *Ind & Eng Chem Anal* 14:886-90 N 15 '42

- Deviations between observed and calculated polarographic diffusion currents. W. M. MacNevin and E. W. Ballis. bibliog *il diag Am Chem Soc J* 65:660-5 Ap '43

- Hydrogen electrode half-cell in polarography. J. P. Baumberger and K. Bardwell. bibliog *Ind & Eng Chem Anal* 15:639-41 O 15 '43

- Improved salt bridge for polarographic and potentiometric measurements. D. N. Hume and W. E. Harris. *diag Ind & Eng Chem Anal* 15:465 J 1 '43

- Microdetermination of magnesium with the polarograph. C. Carruthers. bibliog *Ind & Eng Chem Anal* 15:412-14 Je 15 '43

POLAROGRAPHY—Continued

- Oxidation potential of the chromocyanide-chromicyanide couple and the polarography of the chromium cyanide complexes. D. N. Hume and I. M. Kolthoff. *bibliog Am Chem Soc J* 65:1897-1901 O '43
- Polarographic analysis of copper and zinc in brass plate; a rapid control method. W. P. Tyler and W. E. Brown. *Ind & Eng Chem Anal ed* 15:520-3 Ag 15 '43
- Polarographic characteristics of stannous and cupric tartrate complexes and amperometric titration of tin with cupric ion in tartrate medium. J. J. Lingane. *bibliog Am Chem Soc J* 65:866-72 My '43
- Polarographic determination of formaldehyde in biological material; application to the determination of serine. M. J. Boyd and K. Bambach. *bibliog Ind & Eng Chem Anal ed* 15:314-15 My 15 '43
- Polarographic determination of lead in lead-bearing steels. G. Haim and W. C. E. Barnes. *bibliog Ind & Eng Chem Anal ed* 14:867 N 15 '42
- Polarographic determination of manganese as tri-dihydrogen pyrophosphatomanganate. I. M. Kolthoff and J. I. Watters. *bibliog Ind & Eng Chem Anal ed* 15:8-13 Ja 15 '43
- Polarographic investigations of hydrogen bonding; ortho- and para-nitrophenols. M. J. Astle and V. V. McConnell. *bibliog Am Chem Soc J* 65:35-8 Ja '43
- Polarographic studies; mould metabolites and related quinones. J. E. Page and F. A. Robinson. *Chem Soc J* p133-5 Mr '43
- Polarographically controlled syntheses, with particular reference to organic chemistry. J. J. Lingane, C. G. Swain and M. Fields. *bibliog diag Am Chem Soc J* 65:1348-53 J 1 '43
- Systematic polarographic metal analysis; characteristics of arsenic, antimony, bismuth, tin, lead, cadmium, zinc, and copper, in various supporting electrolytes. J. J. Lingane. *bibliog Ind & Eng Chem Anal ed* 15:583-90 S 15 '43
- Ultramicromethod for sodium employing the polarograph. C. Carruthers. *bibliog Ind & Eng Chem Anal ed* 15:70-1 Ja 15 '43
- POLE setting**
Explosives erect a pole line. J. L. Mattox. *il Explosives Eng* 20:138-41 My '42; Abstract. *Eng N* 130:811 Je 3 '43
- POLES**
See also
Electric lines—Poles and towers
Testing
Larch and Scots pine poles. *il diags Electrician* 130:77-80 Ja 22 '43
- POLETTI, Charles, 1903-**
Portrait. *Business Week* p42 JI 24 '43
- POLICE**
Let's prevent a new crime wave before it starts; importance of an efficient police department. V. W. Peterson. *il Bankers Mo* 60:343-5+ Ag '43
See also
Radio telephone—Police uses
- POLICE, International**
American legion opposes world police force. *Comm & Fin Chr* 158:524 Ag 5 '43
32 senators oppose world police proposal. *Comm & Fin Chr* 157:1636 My 6 '43
What is an international police force? P. Mallon. *Comm & Fin Chr* 157:1387 Ap 15 '43
- POLICE, Military**
Radio-telephones for military police. *Scott Field, Ill. il Radio N* 29:17+ My '43
- POLICE, Private**
See also
Railroads—Police
- POLICE, State**
Equipment
Mobile crime laboratory and emergency truck; Illinois state highway maintenance police. C. H. Nicholson. *il diags Radio N* 29:16-19+ Mr '43
Planning a V-H-F communications system; with details concerning the Massachusetts state police system. J. A. Doremus. *il plan map Electronics* 16:96-101+ S '43
- POLIOMYELITIS.** *See* Infantile paralysis

- POLISH** Institute of arts and sciences in America
Copenhagen celebration. *Science* 97:549 Je 18 '43
- POLISHING**
Double-thread broach burnishes parts. H. Fancher. *diags Am Mach* 87:96 Ap 29 '43
Effect of polishing on chemical durability of glass surfaces. A. E. Badger and L. G. Farber. *il Cer Ind* 40:34 F '43
How to design exhaust hoods; hoods for dust control; partial enclosures for grinding. J. M. Dalla Valle. *diags Heat & Ven* 40:63-6 Ag '43
Machining of magnesium; fire hazard with grinding and polishing work. A. M. Lennie. *diags Am Mach* 87:82-4 Ap 1 '43
Polishing, buffing and burring compounds are playing a vitally important part in the war program. H. J. McAleer. *il Metal Finishing* 41:144-5 Mr '43
Rapid polishing for the duration. C. Y. Clayton. *il Metal Prog* 44:98 JI '43
Speeds polishing of engine barrels. N. A. Zielke. *diags Am Mach* 87:88 Ja 7 '43
Time standards by formula on job-order operations; Corrigan, Osburne, & Wells. V. C. Stephens. *Factory Management* 101:95 F '43
Versatile metallographic polishing process. M. Ferguson. *il Metal Prog* 43:743-4 My '43
See also
Abrasives Sand blast
Grinding Shot blasting
Metal finishing
- POLISHING, Electrolytic**
Electrolytic polishing of metals. S. Wernick. *diag Chem & Ind* 62:238-41 Je 26 '43; Excerpts. *Automobile Eng* 33:549-50 D '43;
Discussion. *Chem & Ind* 62:241-3 Je 26 '43
Electrolytic polishing of zinc and brass. J. L. Rodda. *Min & Met* 24:323 JI '43
- POLISHING machines**
Machine repolishes worn meter jewels. *Elec W* 119:1148 Ap 3 '43
See also
Grinding machines
- POLISHING materials**
Diamond dust is recovered for hardest war industry jobs; used to polish tungsten carbide wire drawing dies; abstract. C. B. Shopmyer. *Franklin Inst J* 235:433 Ap '43
Metal polish formulas have war-time value. *Rayon* 24:204 Ap '43
Observations on polishes; new and substitute raw materials. G. S. Collingridge. *Chem Age (Lond)* 47:461-4 N 28 '42
War opens new markets for industrial product; Lea manufacturing co., Watbury, Conn. *il Ptr Ink* 202:38-9 Mr 5 '43
See also
Abrasives
Shoe polish
Silver polish
- POLISHING wheels**
Polishing with glue-abrasive mixtures. J. F. Siefen. *il Iron Age* 151:56-7 Mr 18 '43
- POLITICAL parties**
Canada
Canadian parties. *Economist* 145:398 S 18 '43
Great Britain
Party prospects. *Economist* 145:259-60 Ag 28 '43
See also
Communist party (Great Britain)
United States
See also
American labor party
- POLITICAL science**
Science and politics. *Chem & Ind* 62:343, 370, 379-80, 387-8 S 4, 25-O 9 '43
See also
Administration, Public
Civil service
Colonies
Commercial policy
Democracy
Economic policy
Government regulation of industry
Industry and state
International law
Law
Public opinion
Railroads and state
Socialism
State governments
Taxation

POLL tax

Anti-poll tax bill shelved by Senate. Comm & Fin Chr 156:2154 D 17 '42

POLLEN

General electrophoretic pattern in extracts of pollens causing hay fever. H. A. Abramson, D. H. Moore and H. H. Gettner. *J Phys Chem* 46:1129-39 D '42

POLYBUTENE. See Butene**POLYENES**

Coloured hydrocarbons; polyenes and cumulenes. G. S. Ranshaw. *Chem Age (Lond)* 47:417-20 N 14 '42

Studies in the polyene series; a new anionotropic rearrangement; isomerisation of ethynylcarbinols from $\alpha\beta$ -unsaturated aldehydes. E. R. H. Jones and J. T. McCombie. *Chem Soc J* p261-4 J '43

Studies in the polyene series; carbinols from propargyl acetal. I. M. Heilbron, E. R. H. Jones and H. P. Koch. *Chem Soc J* p735-7 D '42

Studies in the polyene series; condensation of 3-methylpent-2-en-4-yne (1:2-dimethylvinylacetylene) with butaldehyde, crotonaldehyde, and citral; anionotropic rearrangements with vinylacetylenecarbinols derived from $\alpha\beta$ -unsaturated aldehydes. I. M. Heilbron and others. *Chem Soc J* p265-8 J '43

Studies in the polyene series; the anionotropic rearrangement of the acetylenic glycol from crotonaldehyde. I. M. Heilbron, E. R. H. Jones and R. A. Raphael. *Chem Soc J* p268-70 J '43

Studies in the polyene series; the condensation product of 1-hexyne with crotonaldehyde and its anionotropic rearrangement. I. M. Heilbron, E. R. H. Jones and R. A. Raphael. *Chem Soc J* p264-5 J '43

Studies in the polyene series; the employment of 3-(2':6':16'-trimethylcyclohexenyl)-1-methylcrotonaldehyde for the synthesis of vitamin A and analogues. I. M. Heilbron and others. *Chem Soc J* p727-33 D '42

Studies in the polyene series; the preparation of ethynylcarbinols from $\alpha\beta$ -unsaturated aldehydes. E. R. H. Jones and J. T. McCombie. *Chem Soc J* p733-5 D '42

Synthesis of polyenes; a new synthesis of diethylstilbestrol. M. S. Kharasch and M. Kleiman. *bibliog Am Chem Soc J* 65:11-15 Ja '43

POLYGALITOL

Lead tetraacetate oxidations in the sugar group; the rates of oxidation of trehalose, levoglucosan, α -methyl-L-sorbosepyranoside, polygalitol and styracitol in glacial acetic acid. R. C. Hockett, M. T. Dienes and H. E. Ramsden. *bibliog Am Chem Soc J* 65:1474-7 Ag '43

Ring structure of polygalitol. N. K. Richtmyer and C. S. Hudson. *bibliog Am Chem Soc J* 65:64-7 Ja '43

Two syntheses of polygalitol (1,5-anhydro-D-sorbitol). N. K. Richtmyer, C. J. Carr and C. S. Hudson. *bibliog Am Chem Soc J* 65:1477-8 Ag '43

POLYMERIZATION

Acetylene polymer produced in electric discharge. G. Glockler and C. A. Hollingsworth. *diag Electrochem Soc Trans* 84(preprint 16):149-58 O '43

Copolymerization of styrol and methylmethacrylate. *India Rubber W* 107:604+ Mr '43

Formation of biradicals in the non-catalyzed polymerization of styrene. G. Goldfinger, H. Naidus and H. Mark. *Am Chem Soc J* 65:995-6 My '43

Influence of cooking and bleaching upon the chain length distribution of the carbohydrate fraction in pulpwood. J. E. Atchison. *bibliog Paper Tr J* 116:23-34 J '43; Same cond. *Paper Ind* 24:1282-6 Mr '43

Kinetics of copolymerization. H. Branson and R. Simha. *J Chem Phys* 11:297-8 J '43

Kinetics of polymerization reactions; first order initiation reaction. R. Ginell and R. Simha. *bibliog Am Chem Soc J* 65:706-15 Ap '43

Kinetics of polymerization reactions; second and combined first and second order initiation reactions; mutual stabilization of growing chains. R. Ginell and R. Simha. *bibliog Am Chem Soc J* 65:715-27 Ap '43

Optically active acyl peroxides; preparation, decomposition, and use as catalysts for vinyl polymerization. C. S. Marvel, R. L. Frank and E. Prill. *bibliog Am Chem Soc J* 65:1647-52 Ag '43

Photochemical dimerization of *trans*-cinnamic acid. H. I. Bernstein and W. C. Quimby. *bibliog Am Chem Soc J* 65:1845-6 O '43

Polymerization control. *diag Chem Ind* 53:90 JI '43

Polymerization of butadiene into synthetic rubber. *Oil & Gas J* 41:74 F 25 '43

Polymerization of gaseous hydrogen and deuterium fluorides. R. W. Long, J. H. Hildebrand and W. E. Morrell. *bibliog diags Am Chem Soc J* 65:182-7 F '43

Polymerization of mixtures of olefins and diolefins in presence of metallic sodium. V. N. L'vov. *Oil & Gas J* 42:38-9+ JI 8 '43

Polymerization of styrene in the presence of nitrobenzene, 2,4-dinitrochlorobenzene and nitromethane. C. C. Price and D. A. Durham. *bibliog Am Chem Soc J* 65:757-9 My '43

Polymerization of styrene in the presence of 3,4,5-tribromobenzoyl peroxide. C. C. Price and B. E. Tate. *Am Chem Soc J* 65:517-20 Ap '43

Polymerization of the free radicals of the Wurster dye type: the dimeric resonance bond. L. Michaelis and S. Granick. *bibliog Am Chem Soc J* 65:1747-55 S '43

Preparation and polymerisation of methyl vinyl ketone. T. White and R. N. Haward. *diag Chem Soc J* p25-31 Ja '43

Some remarks on the kinetics of vinyl derivative polymerization. A. Abere and others. *bibliog J Chem Phys* 11:379-86 Ag '43

Sunray makes codimer and polymer gasoline in tandem units. flow chart *Oil & Gas J* 42:32, 34+ N 4 '43

Tar elimination in pyroigneous acid; removal of tar-forming constituents by polymerization and condensation. D. F. Othmer and R. Katzen. *bibliog flow sheets Ind & Eng Chem* 35:288-96 Mr '43

Theory of molecular size distribution and gel formation in branched-chain polymers. W. H. Stockmayer. *bibliog J Chem Phys* 11:45-55 F '43

Unsaturation of butadiene and related polymers as determined by iodine chloride addition. A. R. Kemp and H. Peters. *bibliog Ind & Eng Chem Anal* 15:453-9 JI 15 '43

See also

Polymers**Patents**

Digest of United States patents. H. Heine-mann. *Pet Refiner* 22:148+ F '43

German patents relating to vinyl polymers (cont). M. Hoseh. *bibliog India Rubber W* 107:379-80, 473-4, 571-2+ Ja-Mr '43

POLYMERIZATION, Heat of

Heat of polymerization of some vinyl compounds. G. Goldfinger, D. Josefowitz and H. Mark. *Am Chem Soc J* 65:1432-3 JI '43

POLYMERS

Anomalies of elasticity and flow and their interpretation. R. Simha. *bibliog J Phys Chem* 47:348-63 Ap '43

Chemical background for electrical properties of plastics. H. M. Richardson. *diags Elec W* 119:1291-4 Ap 17 '43

Chemistry of the high polymers. H. Mark. *Science* 97:sup9 Ja 22 '43

Condensation co-polymers; abstract. G. S. Whitby. *Can Chem & Process Ind* 27:190 F '43

End group structure of polyvinyl alcohol. G. S. Marvel and G. E. Inskip. *bibliog Am Chem Soc J* 65:1710-14 S '43

Flow and recovery properties of viscose rayon yarn. J. J. Press. *bibliog(90 titles) J Ap Phys* 14:224-33 My '43

Gel formation in vinyl-divinyl copolymers. W. H. Stockmayer and H. Jacobson. *J Chem Phys* 11:393 Ag '43

POLYMERS—Continued

Intermolecular forces and chain configuration in linear polymers; the effect of N-methylation on the X-ray structures and properties of linear polyamides. W. O. Baker and C. S. Fuller. bibliog pl diags Am Chem Soc J 65:1120-30 Je '43

Kinetics of oxidation of cellulose with periodic acid. G. Goldfinger, H. Mark and S. Siggia. bibliog Ind & Eng Chem 35:1083-6 O '43

Mechanical properties of polymeric materials. A. Tobolsky and H. Eyring. bibliog J Chem Phys 11:125-34 Mr '43

Molecular weights and intrinsic viscosities of polyisobutylenes. P. J. Flory. bibliog Am Chem Soc J 65:372-82 Mr '43

Molecular weights of high polymers. M. L. Huggins. bibliog diags Ind & Eng Chem 35:980-6 S '43

Organic structure of linear polyesters and their rubber-like properties; abstract. C. S. Fuller and B. S. Biggs. Rubber Age 53:525 S '43

Solubility of sulphur in butadiene-styrene copolymer. I. Williams. India Rubber W 108:35-6 Ap '43

Statistical lengths of rubber-like hydrocarbon molecules. F. T. Wall. bibliog J Chem Phys 11:67-71 F '43

Stress-strain characteristics of vinyl elastomers. M. C. Reed. II Ind & Eng Chem 35:429-31 Ap '43

Structure of synthetic chain polymers as shown by X-rays. C. S. Fuller and W. O. Baker. bibliog II diags J Chem Educ 20:3-10 Ja '43

Structure of the polymer from urea and formaldehyde; abstract. C. S. Marvel, J. R. Elliott and H. Yuska. Mod Plastics 21:112-4 O '43

Theory of dissolution of gels. A. Tobolsky. bibliog J Chem Phys 11:290-3 Je '43

Theory of molecular size distribution and gel formation in branched-chain polymers. W. H. Stockmayer. bibliog J Chem Phys 11:45-55 F '43

Unsaturation of butadiene and related polymers as determined by iodine chloride addition. A. R. Kemp and H. Peters. bibliog Ind & Eng Chem Anal ed 15:453-9 Jl 15 '43

Vinylidene chloride polymers. R. C. Reinhardt. bibliog (59 references) II diags Ind & Eng Chem 35:422-8 Ap '43

Viscosities of polyester solutions; application of the melt viscosity-molecular weight relationship to solutions. P. J. Flory. bibliog J Phys Chem 46:870-7 N '42

Viscosity of *n*-paraffin solutions; viscosity and structural relations of linear polymers. A. R. Kemp and H. Peters. bibliog Ind & Eng Chem 35:1108-12 O '43

See also

Molded products Resinous products
Plastic materials Rubber, Artificial

POLYMETHINE dyes. See Dyes and dyeing—Chemistry

POLYMORPHISM

Polymorphism of arsenious oxide. J. H. Schulman and W. C. Schumb. bibliog diags Am Chem Soc J 65:878-83 My '43

Polymorphism of bismuth trioxide. W. C. Schumb and E. S. Rittner. bibliog Am Chem Soc J 65:1055-60 Je '43

Polymorphism of calcium carbide. M. A. Bredig. bibliog J Phys Chem 46:801-19 O '42

Polymorphism of phosphoric oxide. W. L. Hill, G. T. Faust and S. B. Hendricks. bibliog II Am Chem Soc J 65:794-802 My '43

POLYNOMIALS

Computation of polynomial functions by summation of finite differences. H. F. Bennett. Opt Soc Am J 33:519-26 S '43

POLYNOMIALS, Orthogonal. See Functions, Orthogonal

POLYSACCHARIDES

Chemistry of allergens; isolation and properties of an active protein-polysaccharidic fraction, CB-1A, from castor beans. J. R. Spies and E. J. Coulson. bibliog Am Chem Soc J 65:1720-5 S '43

Mucopolysaccharides and related substances. M. Stacey. bibliog Chem & Ind 62:110-12 Mr 20 '43

Polysaccharides of carrageen moss (*Chondrus crispus*); the linkage of the *d*-galactose residues and the ethereal sulphate. J. Buchanan, E. E. Percival and E. G. V. Percival. Chem Soc J p51-4 F '43

Polysaccharides of Iceland moss (*Cetraria islandica*); preliminary study of the hemi-celluloses. H. Granichstaden and E. G. V. Percival. Chem Soc J p54-8 F '43

See also

Arabogalactan Starch
Cellulose Sugars
Disaccharides Trisaccharides

POLYSTYRENE. See Styrene

POLYVINYL acetate. See Vinyl acetate

POLYVINYL alcohol. See Vinyl alcohol

POLYVINYL chloride. See Vinyl chloride

POMIFERIN

Structures of osajin and pomiferin. M. L. Wolfrom and others. Am Chem Soc J 65:1434-5 Jl '43

PONDEROSA pine. See Pine

PONTOON bridges. See Bridges, Pontoon

POOLEY, Henry Jeffries, 1877-1942

Sketch. W. Cullen. Chem & Ind 61:512 D 12 '42

POOLING of motor trucks. See Motor trucks in freight service—Pooling

POOR

See also

Cost of living Saving
Old age pensions Unemployment

POOR relief

Relief cost taxpayers \$25 billion, 1933-43. Comm & Fin Chr 157:1689 My 6 '43

See also

Old age pensions
Unemployment—
Relief measures

POPLAR

Poplar paper; Uruguay works on plan to get newsprint from its own trees. Business Week p62 Ja 9 '43

POPPY

See also

Opium poppies

POPULATION

Distortion map of world population distribution. Business Week p74 My 29 '43

Hardy-Weinberg law. C. Stern. Science 97:137-8 F 5 '43

See also

Birth rate

Migration of workers

Refugees

Statistics

Internal migration and the war. H. S. Shryock, jr. maps Am Stat Assn J 38:16-30 Mr '43

Marketing and sampling uses of population and housing data. A. R. Eckler and E. P. Staudt. Am Stat Assn J 38:87-92 Mr '43

Population of U.S. reaches 135,604,000. Comm & Fin Chr 157:1308 Ap 8 '43

Population shifts from April, 1940 to May 1, 1942; map and tables. Automotive & Aviation Ind 88:68-9 Mr 15 '43

Preliminary population estimates based on ration book applications. T. J. Woofter, jr. Am Stat Assn J 37:437-40 D '42

Sales Management survey of buying power, 1943; retail sales, effective buying income and other indices of buying power, with new 1942 population estimates, and census data on occupied dwellings, median rents, urban and farm residents. II maps Sales Management 52:11-322 My 10 '43

U.S. population shifts resulting from the war. P. M. Hauser. II Am Gas Assn Mo 25:87-90+ Mr '43; Same cond. Sales Management 52:40, 42+ F 1 '43; Abstract. Business Week p19-20 F 13 '43

War shifts the Nation's manpower; estimated civilian population from sugar ration cards. Business Week p42 D 26 '42

What wartime population shifts mean to markets. F. M. Hauser. II Adv & Sell 35:13-14 D '42

See also

Census Occupations—Statistics
Mortality—Statistics

POPULATION—Continued

Canada

Population of Canada, 1941, by provinces, electoral districts and sub-districts. (Bul. no.A-10) 75p pa. 50c Canada. Dominion bur. of statistics, Ottawa '42
Who are the Canadians? Economist 145:204-5 Ag 14 '43

Great Britain

Birthrate of Great Britain. Science 98:55 JI 16 '43
Happy families? problems of increased population. Economist 143:723-4 D 12 '42
Population debate. Economist 145:105-6 JI 24 '43

India

See also
Census—India

Pittsburgh

Pittsburgh excepts. Business Week p119 Ap 17 '43

United States

Age creeping up on us; population changes and shifts hold important implications for future of business. F. R. Wilson. Steel 112:76 Je 28 '43
Preview of the postwar generation, it will be smaller; but it can be demographically sounder. map Fortune 27:116-17+ Mr '43
War and Main street. C. Vogel. Barron's 23:6 N 8 '43
War forces population shifts; map. Business Week p42 Ag 7 '43
Where are the customers now? a comprehensive study of migration in wartime. L. J. McCarthy. Ptr Ink 202:21-2, 26, 66-7 F 12 '43

Wisconsin

Approach to the measurement of farm population pressure in Wisconsin. T. C. McCormick. Am Stat Assn J 38:165-77 Je '43

PORCELAIN

Hands up! porcelain proves best material for rubber glove forms. W. O. Young. il Cer Ind 40:72, 74 My '43

See also
Enamel and enamel- Glazes
ing Pottery

Manufacture

American ceramic society, meeting of White-ware division, Uniontown, Pa. Sept. 17-18; abstracts of papers on steatite. Cer Ind 41:60-3 O '43
Low expansion vitreous bodies are resistant to heat shock; powdered vitreous silica and powdered borosilicate glass substituted for potter's flint and feldspar. A. E. Badger. Cer Ind 40:49 Mr '43
Production methods are compared for five chinaware of the world. il Cer Ind 41:68, 70, 72-4 N '43

PORCELAIN, Insulating

Ball clay in electrical porcelain bodies. L. E. Thiess. il Am Cer Soc Bul 21:250-2 N 15 '42
Ceramic parts in design. il diags Machine Design 15:120-3 Ag '43
Insulator glazes; their influence on porcelain. E. Rosenthal. il diags Elec R (Lond) 131: 675-8 N 27 '42
Moisture impervious porcelain has new design possibilities; Prestite. R. L. Whitney. il Product Eng 13:722-5 D '42
Porcelain insulators for tree service. diags Elec W 119:2139 Je 26 '43
Testing ball clays for low-tension electrical insulators. A. J. Blume. Am Cer Soc Bul 21:252 N 15 '42

Manufacture

Air-operated controllers used to control tunnel kilns. il diags Cer Ind 41:34-5 Ag '43

PORCELAIN pipes. See Pipes, Porcelain

PORK

Effect of locker storage on the quality of pork. E. J. Young and J. A. McIntosh. bibliog Refrig Eng 45:100-3 F '43
Experiments in the cooking of garbage for the destruction of trichinae in pork scraps. W. H. Wright and J. Bozicevich. Pub Health Rep 58:396-404 Mr 5 '43

Relation of hydrogen-ion concentration to color developed in cured pork; abstract. P. C. Duisberg and R. C. Miller. Food Ind 15:127 My '43

Analysis

Fluorometric determination of riboflavin in pork products. W. J. Peterson, D. E. Brady and A. O. Shaw. bibliog Ind & Eng Chem Anal ed 15:634-6 O 15 '43

Cutting

Model food plant designed; hog cutting plant as part of course in sanitation. A. E. Abrahamson. plans Food Ind 15:57-9+ O '43

PORK, Dried

Big demand for dehydrated pork. Food Ind 14:73 D '42
Dried meat; the water relations of air-dried, pre-cooked beef and pork. R. Gane. Soc Chem Ind J 62:139-40 S '43

PORK and beans, Frozen. See Beans, Frozen

PORK products

Model food plant designed; hog cutting plant as part of course in sanitation. A. E. Abrahamson. plans Food Ind 15:57-9+ O '43

Analysis

Fluorometric determination of riboflavin in pork products. W. J. Peterson, D. E. Brady and A. O. Shaw. bibliog Ind & Eng Chem Anal ed 15:634-6 O 15 '43

Statistics

Pork, including lard, 1938-1941. Survey of Cur Business 1942 Sup p124 [supplemented in monthly numbers]

POROSITY

Absolute porosity of cores. G. M. Stearns. diags Oil & Gas J 42:75-6 Ag 19 '43
Determination of effective porosity. G. M. Stearns. diags Oil & Gas J 42:95, 97 Ag 26 '43
Methods of determining absolute porosity. G. M. Stearns. Oil & Gas J 42:77 Ag 12 '43
Porosity of oil-bearing rocks. G. M. Stearns. Oil & Gas J 42:55 Ag 5 '43
Technique of testing large cores of oil sands. F. B. Plummer and P. F. Tapp. bibliog diags Am Assn Pet Geologists Bul 27:64-84 Ja '43

POROUS materials

Instrument for measuring the liquid permeability of paper and porous materials. W. H. Lane. diags Paper Tr J 117:26-7 JI 15 '43
Same cond. Paper Ind 25:70-4 Ap '43
Liquid distribution in porous materials. R. K. Schofield. Chem Age (Lond) 48:313-15 Mr 20 '43
Permeability of porous solids to gases and liquids. L. Grunberg and A. H. Nissan. bibliog diags Inst Pet J 29:193-225 Ag '43
Specific surface measurements on compact bundles of parallel fibers. R. R. Sullivan. bibliog J Ap Phys 13:725-30 N '42

PORPHYRINS

Spectroscopic studies of the simpler porphyrins; the absorption and fluorescence spectra of *ms*-tetra(3', 4'-methylenedioxyphenyl)porphine of HCl number four and of its AgCH₃N, Zn, and Ni complex salts. V. M. Albers, H. V. Korr and D. L. Fry. bibliog J Chem Phys 10:700-5 D '42

PORT ARTHUR, Texas

Industries

Port Arthur activity reflects Texas' industrial gains. J. C. Watkins. il Manuf Rec 112:40+ Mr '43

PORT labor. See Longshoremen

PORT of New York authority

Municipal news; tax-exempt status of the instruments of the Port of New York authority. Comm & Fin Chr 157:1494 Ap 22 '43

Port authority reports 1942 operations. Comm & Fin Chr 157:211, 272 Ja 18-21 '43

PORTABLE buildings. See Buildings, Portable

PORTABLE conveying machinery. See Conveying machinery, Portable

PORTABLE electric tools. See Electric tools, Portable

PORTABLE grain elevators. See Grain elevators, Portable

PORTABLE houses. See Houses, Portable
PORTABLE pipe lines. See Pipe lines, Portable
PORTABLE power plants. See Power plants, Portable
PORTABLE refrigerators. See Refrigerators, Electric—Portable refrigerators
PORTABLE stairways. See Stairways, Portable
PORTABLE typewriters. See Typewriters, Portable

PORTERS

Must publish tariff for red cap service; decision in Dayton case. Ry Age 115:498 S 25 '43

PORTLAND, Maine

Water supply

War time problems in the Portland water district. F. J. Remy. N E Water Works Assn J 56:309-19 S '42

PORTLAND, Oregon

Land-use control in the urban fringe of Portland. F. Arpko. map J Land & Pub Util Econ 18:468-80 N '42

Rapid transit

Staggered hours just had to work. G. G. Steele. II Bus Transportation 22:32-4 Ag '43

PORTLAND and Ogdensburg railway

Main Central offers exchange to stockholders. Comm & Fin Chr 157:1039 Mr 22 '43

PORTLAND cement. See Cement**PORTLAND cement association**

McKevoy of Alpha now heads Portland cement association. Concrete (mill sec) 50: 285 D '42

PORTLAND electric power company

Portland Electric Power Co of 1950. Comm & Fin Chr 157:267+ J Ag 21 '43

PORTLAND general electric company

Sound utility bond; assets and earnings provide good coverage. W. Andrews. Barron's 23:10 Ag 9 '43

PORTLIGHTS. See Ships—Portlights**PORTRAITS**

See also
 Photography—
 Portraits

PORTS

Coast guard's program on port security. S. V. Parker. Am Port Inst Proc 23(1):61-3 '42

Engineers and the British empire; Australian ports. M. Smith. II Engineer 176:279-80, 298-300 O 8-15 '43

Engineers and the British empire; Canadian ports. M. Smith. II Engineer 176:140-3 Ag 26 '43

See also
 Free ports and
 zones
 also names of ports, e.g.
 Baltimore
 New York (city)
 San Francisco

PORTSMOUTH, Virginia

Sewerage

Wellpoints eliminate sheeting for sewer; with cost data. II plan Eng N 130:357-9 Mr 11 '43

PORTUGAL

See also
 Airports—Portugal

Economic conditions

Portugal in 1942. Economist 144:sup12-13 Mr 13 '43

Rationing in Portugal? Economist 144:497 Ap 17 '43

Foreign relations

United States

Spain and Portugal reassured by FDR. Comm & Fin Chr 156:1984 D 3 '42

PORTUGUESE language

Portuguese is worth learning! F. L. Peirce. For Comm W 11:10-11+ Je 26 '43

POSITRONS

See also
 Electrons

POST exchanges

Are PX credits safe? Credit & Fin Management 45:2 Mr '43

Army exchange keeps brands alive. R. C. Carll. II Mod Packaging 17:88-9+ O '43

Commission in the Army exchange service. J. W. Wingate. J Retailing 18:99-101+ D '42

GI looks at a PX. R. A. Latimer. II Mod Packaging 16:66-7 My '43

Let him buy it at the post exchange. Consumers Research Bul 12:5-7 N '43

Mac Dill field, Florida; architects in uniform produce a new post exchange. II diags

plans Arch Forum 78:55-60 Je '43

No post-war dumping of PX stocks. AMA told; stores can liquidate in 3 weeks. Ptr Ink 205:35 N 5 '43

PX mail order; camp and ship stores add catalog items for home folks. Business Week p28+ D 5 '42

Post exchanges, 1943. II Adv & Sell 36:54+ Mr '43

Will he switch brands when he comes marching home? M. Beuck. II Ptr Ink 204:18-19+ J1 30 '43

POST offices

New buildings for 194X; post office. II diags plans Arch Forum 72:30-1 My '43

POSTAL savings banks

Postal savings system. Published in Federal reserve bulletin

Savings deposits; U.S. postal savings, 1938-1941. Survey of Cur Business 1942 Sup p65 [supplemented in monthly numbers]

POSTAL service

See also

Air mail service	Parcel post
Mail trucks	Post offices

Money orders

Editor made an error; called post office money order a negotiable instrument.

Bankers Mo 60:349-50 Ag '43

Treasury rules amended on money orders for forces abroad. Comm & Fin Chr 158:1020 S 9 '43

Great Britain

Women in the post office. Economist 145:25 J1 3 '43

United States

Army microfilm-mail technique. A. J. Lockrey. II Am Phot 36:24-5 D '42

Big home office task to change addresses in P. O. requirements. East Underw 44:1+ Je 25 '43

Insure your letters, use V-mail. II Inland Ptr 11:43 Ag '43

Postal business, 1938-1941. Survey of Cur Business 1942 Sup p31 [supplemented in monthly numbers]

Zoning speeds mail deliveries; list of cities. Business Week p34 My 22 '43; Same. Manuf Rec 112:6 Je '43

POSTAL telegraph, inc.

Agreement reached upon terms of purchase of Postal system by Western Union. Comm & Fin Chr 157:1952 My 24 '43

FCC to investigate closures of offices. Comm & Fin Chr 158:679 Ag 16 '43

Giant communications trimvinate planned; Postal-Western merger foreshadows reshuffling of 'phone, telegraph and world services. O. J. Gingold. Barron's 23:3 Je 7 '43

Merger with Western Union approved by FCC. Comm & Fin Chr 158:1382 O 4 '43

Securities disturbing investors. J. S. Williams. Mag of Wall St 71:376-7 Ja 9 '43

Telegraph merger plan. O. J. Gingold. Barron's 23:1 My 17 '43

To vote on merger; transfer of assets to Western union telegraph co. Comm & Fin Chr 158:136 J1 12 '43

Wire merger due. Business Week p102-3 Ag 7 '43

POSTER stamps

Use these poster stamps to help win the war. II Sales Management 52:32, 32a Je 15 '43

POSTERS

Advertiser's war bond posters feature Bataan day. II Ptr Ink 202:22-4 Mr 26 '43

Do workers like posters? Carboloy questionnaire. II Factory Management 100:97 D '42

POSTERS—Continued

- Elsie helps the grocer. *il Mod Packaging* 16: 66 J1 '43
- Gold star poster tells powerful absenteeism story. *il Ptr Ink* 204:86 Ag 20 '43
- Heinz poster named year's best; P & G second and S.O. of Ohio third. *il Ptr Ink* 201:72 N 20 '42
- Paint firm advertising seeks to ease West coast housing crisis; W. P. Fuller sponsors posters carrying a direct appeal and a local tie-in. *il Sales Management* 52:57-8 F 15 '43
- Posters help balance nation's market basket; Del Monte buy-for-a-week plan. *il Mod Packaging* 16:77-8+ Ja '43
- Posters introduce workers within aircraft plant; show work being done by each group. B. K. Platt. *il Ptr Ink* 205:23 N 12 '43
- Posters teach food saving. *il Mod Packaging* 16:63 J1 '43
- Slug 'em or sell 'em? Reliance Electric sells rather than exhorts in employee posters. *il Ptr Ink* 203:30+ My 14 '43
- War brings new grouping of markets; war workers and service men; Hinds lotion and Camels posters. P. W. Combs. *il Ptr Ink* 203:52+ Ap 30 '43
- War develops poster art. *il Ptr Ink* 203:19 My 21 '43

POSTURE

- Better workplace, so more output, less fatigue; new chair and other changes aid sock inspector. E. J. Fitzgerald. *il Factory Management* 101:114-15 Mr '43
- Position counts; illustrations. *Safety Eng* 54: 10-11 D '42
- Women's effective war work requires good posture. M. T. Mettert. *il U S Women's Bur Special Bul* 10:1-6; pa 5c Supt. of doc. '43

POSTWAR business. See Business—Postwar business

POSTWAR planning. See Economic planning; Reconstruction (World war, 1939-)

POSTWAR planning of business. See Business—Postwar business; Planning—Postwar planning

POTASH

- American potash reserves. G. R. Mansfield. *bibliog il Ind & Eng Chem* 34:1417-21 D '42
- Further phase-equilibrium studies involving the potash compounds of Portland cement. W. C. Taylor. *bibliog, pl J Research Nat Bur Stand* 29:437-51 D '42; Same cond. Concrete (mill sec) 51:122-3, 141-2 F-Mr '43
- Potash. J. A. Barr. *Min Cong J* 29:52-3 F '43
- Potash, plant food and chemical tool box. F. Kutniewsky. *il diag Comp Air M* 48:7033-8 My '43
- Potash-supply changes. *For Comm W* 11:16 Ap 3 '43
- Potassic fine dust; fertiliser from ferro-manganese furnaces. M. Lerner. *Chem Age (Lond)* 48:644-5 Je 19 '43
- Raw materials for potash soaps. A. P. Fed-erline. *Soap & San Chem* 19:34-5+ Je '43
- Trend in potash mining indicates greater use of mechanized equipment. L. E. Young. *il Min Cong J* 29:53-4 F '43

Analysis

- Determination of potash in fertilizers or base goods in the absence of ammonium salts and organic matter. P. M. Shuey. *Ind & Eng Chem Anal* ed 15:633-4 O 15 '43
- Effect of ethanol concentration on purity of potassium chloroplatinate in determination of potash in fertilizers. H. L. Mitchell and O. W. Ford. *Ind & Eng Chem Anal* ed 15: 56 Ja 15 '43

Prices

- Potash price ceilings extended to imported. *Oil Paint & Drug Rep* 143:4 Je 14 '43

Texas

- Discovery and development of potash in Texas and New Mexico Permian. A. F. Woods. *Science* 98:260-1 S 17 '43

POTASH industry and trade

Statistics

- Fertilizers and materials, 1942. *Chem & Met Eng* 50:106-7 F '43

- Potash salts output, 1941 and 1942. *Oil Paint & Drug Rep* 143:63 My 31 '43

United States

- American potash reserves. G. R. Mansfield. *bibliog il Ind & Eng Chem* 34:1417-21 D '42
- Phosphate and potash war need supplied by domestic industry. J. A. Barr; L. E. Young; R. B. Wittenberg. *il Min Cong J* 29:52-4 F '43
- Wartime contribution of the American potash industry. J. W. Turrentine. *il Ind & Eng Chem* 34:1422-6 D '42

POTASSIUM

- Absorption spectra of potassium, rubidium, and caesium. H. R. Kratz and J. E. Mack. *Rs Mod Phys* 14:104 Ap-J1 '42
- Equilibria in a carbonaceous cation exchanger. H. F. Walton. *bibliog J Phys Chem* 47: 371-82 My '43
- Magnetic susceptibilities of metals dissolved in liquid ammonia. S. Freed and N. Sugarman. *bibliog diags J Chem Phys* 11:354-60 Ag '43
- New selective reagent for lithium; application to the rapid volumetric estimation of lithium in the presence of potassium and sodium. L. E. Rogers and E. R. Caley. *Ind & Eng Chem Anal* ed 15:209-11 Mr 15 '43

Analysis

- Analysis for potassium by its natural radioactivity. R. B. Barnes and D. J. Salley. *bibliog il Ind & Eng Chem Anal* ed 15:4-7 Ja 15 '43
- Carbon arc in oxygen for the spectrochemical determination of potassium. L. T. Steadman. *Phys R* 63:322 Ap 1 '43; Correction. 63:399 Je 1 '43
- Determination of alkalies in glass; denatured alcohols as substitutes for U.S.P. grain alcohol. P. A. Webster and R. M. Crane. *Ind & Eng Chem Anal* ed 15:36 Ja 15 '43
- Spectrographic limit of identification of potassium. D. P. Norman and W. W. A. Johnson. *bibliog Ind & Eng Chem Anal* ed 15: 152-3 F 15 '43

POTASSIUM antimonyl tartrate. See Tartar emetic

POTASSIUM bromide

- Conductance of aqueous solutions of potassium bromide at temperatures from 15° to 45°C, and the limiting mobility of bromide ion. H. E. Gunning and A. R. Gordon. *bibliog J Chem Phys* 11:18-20 Ja '43
- Thermodynamics of aqueous solutions of potassium bromide at 25° from e.m.f. measurements on cells with transference. E. A. Mac William and A. R. Gordon. *bibliog Am Chem Soc J* 65:984-5 My '43
- Transference numbers of potassium bromide in aqueous solution at 25°C. A. G. Keenan and A. R. Gordon. *bibliog J Chem Phys* 11:172-4 Ap '43

POTASSIUM carbonates

- Two-stage German process. *Chem Age (Lond)* 48:165 Ja 30 '43

See also

Potash

POTASSIUM chlorate

- Humidity measurements in presence of water-soluble salts. G. C. Williams and R. J. Williams. *bibliog Ind & Eng Chem* 35: 730-2 Je '43

- Use of chlorates in refining high sulphur gasolines. N. E. Vishnevskii. *Pet Eng* 14: 157+ My '43

POTASSIUM chloride

- Humidity measurements in presence of water-soluble salts. G. C. Williams and R. J. Williams. *bibliog Ind & Eng Chem* 35: 730-2 Je '43

- Iodine monochloride; the system potassium chloride-iodine monochloride. J. Cornog and E. E. Bauer. *bibliog Am Chem Soc J* 64:2620-4 N '42

- Isoopiestic measurements in dilute solutions; the system potassium chloride-sodium chloride at 25° at concentrations from 0.03 to 0.10 molal. A. R. Gordon. *bibliog diags Am Chem Soc J* 65:221-4 F '43

- Surface recombination of H atoms and OH radicals. W. V. Smith. *diags J Chem Phys* 11:110-25 Mr '43

POTASSIUM chloroplatinate

Effect of ethanol concentration on purity of potassium chloroplatinate in determination of potash in fertilizers. H. L. Mitchell and O. W. Ford. *Ind & Eng Chem Anal* ed 15: 56 Ja 15 '43

POTASSIUM chromate

Spot reaction experiments; reaction of potassium chromate and manganese dioxide with activated hydrochloric acid. F. Feigl. *J Chem Educ* 20:240-1 My '43

POTASSIUM compounds

Preparation of purified inorganic compounds for use in spectrographic standards. R. C. Hughes. *bibliog il Opt Soc Am J* 33:49-60 Ja '43

Stereochemistry of coordination number eight; optical activity of potassium tetraoxalato-uranium-IV. L. E. Marchi and J. P. McReynolds. *bibliog Am Chem Soc J* 65: 333-5 Mr '43

Wartime contribution of the American potash industry. J. W. Turrentine. *il Ind & Eng Chem* 34:1422-6 D '42

See also

Potash

POTASSIUM cyanide

Flash saturation and reaction periods in photosynthesis. F. F. Rieke and H. Gaffron. *bibliog J Phys Chem* 47:299-308 Ap '43

POTASSIUM dichromate

Preparation of aldehydes by the disruptive oxidation of the ethylene linkage. R. R. Davies and H. H. Hodgson. *Soc Chem Ind J* 62:90-2 Je '43

Use of inhibitors for aluminum chemical equipment. E. B. Mears and G. G. Eldredge. *il Electrochem Soc Trans* 83 (preprint 16): 201-15 Ap '43

POTASSIUM ferricyanide

Polarization at oxidation-reduction electrodes; the ferrocyanide-ferricyanide electrode. W. R. Carmody and J. J. Rohan. *Electrochem Soc Trans* 83 (preprint 11): 137-45 Ap '43

POTASSIUM ferrocyanide

Cause of the variation of the colour of crystals of commercial sodium and potassium ferrocyanide [cyanoferrate(II)]. H. E. Williams. *Chem Soc J* p223-7 My '43

Polarization at oxidation-reduction electrodes; the ferrocyanide-ferricyanide electrode. W. R. Carmody and J. J. Rohan. *Electrochem Soc Trans* 83 (preprint 11): 137-45 Ap '43

POTASSIUM halides

Fluorescence and phosphorescence of thallium-activated potassium-halide phosphors. P. Pringsheim. *bibliog il Rs Mod Phys* 14: 132-8 Ap-Jl '42

See also

Potassium bromide

Potassium chloride

Potassium iodide

POTASSIUM hydroxide

Solubility of potassium iodide in potassium hydroxide solutions at 20°. H. D. Kirschman and R. Pomeroy. *Am Chem Soc J* 65:1695-6 S '43

See also

Potash

POTASSIUM in the body

Entrance of chloride with potassium into live rat muscle fibers. Cl-space error. W. S. Wilde. *bibliog Science* 98:202-3 Ag 27 '43

POTASSIUM iodate

Analysis

Determination of iodate in the presence of bromate and chlorate. I. M. Kolthoff and D. N. Hume. *Ind & Eng Chem Anal* ed 15: 174-5 Mr 15 '43

POTASSIUM iodide

Activity coefficient of potassium iodide in sulfur dioxide from vapor-pressure measurements. W. G. Eversole and A. L. Hanson. *bibliog diag J Phys Chem* 47:1-9 Ja '43

Factors affecting the accumulation of iodide in used photographic developers. R. M. Evans, W. T. Hanson, Jr. and P. K. Glasoe. *Soc Motion Picture Eng J* 40:97-106 F '43

Kinetics of the reaction between copper and iodine in aqueous (potassium iodide) solution. L. L. Bircumshaw and M. H. Everdell. *pl diag Chem Soc J* p598-605 O '42

Reaction of some 2-(α -chloroalkyl)-benzimidazoles with potassium iodide in acetone solution. H. Skolnik, A. R. Day and J. G. Miller. *Am Chem Soc J* 65:1858-62 O '43

Solubility of potassium iodide in potassium hydroxide solutions at 20°. H. D. Kirschman and R. Pomeroy. *Am Chem Soc J* 65:1695-6 S '43

POTASSIUM nitrate

Coordination of silver ion with unsaturated compounds; mixtures of trimethylethylene and cyclohexene. H. J. Lucas, F. W. Billmeyer, Jr. and D. Fressman. *bibliog Am Chem Soc J* 65:230-1 F '43

Production of saltpeter in the South during the Civil war. S. Taber. *Science* 96:535-6 D 11 '42

Analysis

Ultraviolet photometer for analysis of solutions. I. M. Klotz. *diag Ind & Eng Chem Anal* ed 15:277-8 Ap 15 '43

POTASSIUM palladium cyanide

Reduction of potassium cyanopalladate (II) by potassium in liquid ammonia; a zerovalent compound of palladium. J. J. Burbage and W. C. Fernelius. *bibliog Am Chem Soc J* 65:1484-6 Ag '43

POTASSIUM periodate

New selective reagent for lithium; application to the rapid volumetric estimation of lithium in the presence of potassium and sodium. L. B. Rogers and E. R. Caley. *Ind & Eng Chem Anal* ed 15:209-11 Mr 15 '43

POTASSIUM permanganate

Preparation of aldehydes by the disruptive oxidation of the ethylene linkage. R. R. Davies and H. H. Hodgson. *Soc Chem Ind J* 62:90-2 Je '43

POTASSIUM phenolsulfonate

Assay of potassium *p*-phenolsulfonate, its pH range, and its ultraviolet absorption spectrum. E. E. Sager, M. E. Schooley and S. F. Acree. *J Research Nat Bur Stand* 31: 197-204 O '43

POTASSIUM phosphates

Some further observations on the interchange of heavy oxygen between water and certain inorganic oxy-anions. E. R. S. Winter and H. V. A. Briscoe. *Chem Soc J* p631-7 O '42

POTASSIUM sodium tartrate

Rochelle salt crystal devices of low impedance; Monobar unit. R. W. Tibbetts. *il diag Electronics* 16:88-90+ Ap '43

POTASSIUM stannate

Tin plating from the potassium stannate bath. M. M. Sternfels and F. A. Lowenheim. *bibliog il Electrochem Soc Trans* 83 (preprint 24):265-83 O '42; 84 (preprint 13): 111-25 O '43

POTASSIUM sulfates

Some further observations on the interchange of heavy oxygen between water and certain inorganic oxy-anions. E. R. S. Winter and H. V. A. Briscoe. *Chem Soc J* p631-7 O '42

Specific heats at low temperatures of anhydrous sulfates of iron, magnesium, manganese, and potassium. G. E. Moore and K. K. Kelley. *bibliog Am Chem Soc J* 64:2949-51 D '42

POTASSIUM tartrates

Estimation of colloidal properties of ferric oxide and iron oxide purifying material. F. Gibadlo. *Gas Age* 91:24-5+ My 6 '43

POTASSIUM thiogermanate

Preparation and properties of potassium thiogermanate and thiogermanic acid. H. H. Willard and C. W. Zuehlke. *Am Chem Soc J* 65:1887-9 O '43

POTASSIUM urate

Catalytic activity of activated nitrogenous carbons; oxidation of potassium urate. P. F. Bente and J. H. Walton. *bibliog il J Phys Chem* 47:133-48 F '43

Effect of active nitrogen and of certain nitrogen compounds on catalytic properties of carbon; oxidation of potassium urate. P. F. Bente and J. H. Walton. *bibliog J Phys Chem* 47:329-37 Ap '43

POTATO flour

Potato flour; abstract. A. Barker. Food Ind 15:146 J1 '43

POTATO starch

Application of the mercaptalation assay to synthetic starch. M. L. Wolfrom, C. S. Smith and A. E. Brown. bibliog Am Chem Soc J 65:255-9 F '43

Fractionation of starch by selective precipitation with butanol. T. J. Schoch. bibliog il Am Chem Soc J 64:2957-61 D '42

Molecular constitution of amylose and amylopectin of potato starch. W. Z. Hassid and R. M. McCready. bibliog Am Chem Soc J 65:1157-61 Je '43

Significance of the degradation of starch by Macerans amylase. R. W. Kerr. bibliog Am Chem Soc J 65:1183-93 F '43

Analysis

Multiple amylose concept on starch; the isolation of an amylose in crystalline form. R. W. Kerr and G. M. Severson. il Am Chem Soc J 65:193-8 F '43

Separation and quantitative estimation of amylose and amylopectin in potato starch. R. M. McCready and W. Z. Hassid. bibliog Am Chem Soc J 65:1154-7 Je '43

POTATOES

Fingaling spuds. Business Week p14 My 22 '43

Food plan falters; WFA, OPA at loggerheads over U. S. purchase and resale of crops. Business Week p20+ Ag 21 '43

Inca, Irish, and international. D. R. Crone. il For Comm W 12:6-8+ Ag 28 '43

1942 potato crops of Denmark, Finland, and Norway. For Comm W 11:32 My 22 '43

Potato crops. New Brunswick, Canada, 1935-1942. For Comm W 11:25 Je 5 '43

Potato poser; crop threatens to swamp storage facilities. Business Week p80+ O 9 '43

Potato production in Uruguay. For Comm W 10:22 F 6 '43

Spud compromise; WFA and OPA agree on combined system of loans and support prices. Business Week p24+ S 4 '43

Trouble in spuds; army's takeover of Idaho crop causes scarcity. Business Week p57 Ap 10 '43

See also

Sweet potatoes

Advertising

Maine wins markets and prestige in Super spuds campaign. Sales Management 52:66 Mr 1 '43

Analysis

Solanine; glycoside of the potato, its distribution in the potato plant. L. H. Lampitt and others. bibliog Soc Chem Ind J 62:48-51 Ap '43

Solanine, glycoside of the potato; its isolation and determination. H. S. Rooke and others. bibliog Soc Chem Ind J 62:20-4 F '43

Peeling

Chemical peeling. Sci Am 169:204 N '43

New caustic peeling method reduces waste, saves labor. L. C. Mazzola. diags Food Ind 15:53-4+ Ja '43

Statistics

White potatoes, 1938-1941. Survey of Cur Business 1942 Sup p117 [supplemented in monthly numbers]

POTATOES, Dried

Dehydrator uses new technics; potato and onion dehydration. Simplot plant. L. V. Burton. flow sheet il plan Food Ind 15:59-63+ N '43

Equilibrium moisture content of dehydrated vegetables. B. Makower and G. L. Dehority. bibliog il Ind & Eng Chem 35:193-7 F '43

Facts of vegetable dehydration revealed by microscope. R. M. Reeve. il diag Food Ind 14:51-4+ D '42

How potato shreds are made. flow diag il Food Ind 15:47-9 Mr '43

Potatoes baked, then dehydrated to avoid loss of product. O. E. Stenberg and H. Beresford. flowsheet il Food Ind 15:78-9 S '43

POTENTIAL, Electric

Activity coefficients of lead chloride determined from e. m. f. and solubility data at 25° in ethylene glycol-water solutions. A. B. Garrett, R. Bryant and G. F. Kiefer. Am Chem Soc J 65:1905-7 O '43

Activity coefficients of thallous chloride in ethylene glycol-water solutions determined by e.m.f. and solubility data at 25°. O. D. Black and A. B. Garrett. bibliog Am Chem Soc J 65:862-5 My '43

Change in potential of silver-silver chloride electrodes with time. E. R. Smith and J. K. Taylor. Am Chem Soc J 64:3053 D '42

Contact potential in electrostatic separation. F. Fraas and O. C. Ralston. bibliog diag U S Bur Mines Rep of Invest 3667:1-17 '42

Electromotive force of the mercurous bromide electrode. W. R. Crowell, R. W. Mertes and S. S. Burke. bibliog diag Am Chem Soc J 64:3021-3 D '42

Energy flow in electric systems; the Vi energy-flow postulate. J. Slepian. diags Elec Eng 61:Trans 835-41 D '42

Formal electrode potentials of palladium in aqueous hydrochloric and perchloric acid solutions; stability of chloropalladate ion. D. H. Templeton, G. W. Watt and C. S. Garner. bibliog Am Chem Soc J 65:1608-12 Ag '43

Natural potentials in well logging; abstract. W. D. Mounce and W. M. Rust, jr. Oil & Gas J 42:77 My 20 '43

New method for the determination of electrokinetic potential in the flow of a semi-conducting liquid through a single capillary. W. G. Eversole and W. W. Boardman. bibliog diags J Phys Chem 46:914-26 N '42

Oxidation potential of cerous-ceric perchlorates. M. S. Sherrill, C. B. King and R. C. Spooner. bibliog Am Chem Soc J 65:170-9 F '43

Potential of silver concentration cells with liquids of low dielectric constant. A. Gemant. bibliog diag J Chem Phys 10:723-30 D '42

Relation between ξ -potential and the electrical capacity of the double layer. W. G. Eversole and C. R. Estee. J Chem Phys 11:63-6 F '43

Reversible oxygen electrode. W. G. Berl. bibliog Electrochem Soc Trans 83 (preprint 19):231-48 Ap '43

Second dissociation constant of *p*-phenolsulfonic acid and pH values of phenolsulfonate-chloride buffers from 0° to 60°. C. R. G. Bates, G. L. Siegel and S. F. Acree. bibliog J Research Nat Bur Stand 31:205-23 O '43

Studies on overvoltage; a study of decomposition potentials; cathodic and anodic polarization of a platinized platinum cathode near the reversible value in hydrogen saturated acid solutions. A. L. Ferguson and M. B. Towns. Electrochem Soc Trans 83 (preprint 8):105-17 Ap '43

Study of the deposition potentials and microstructures of electrodeposited nickel-zinc alloys. B. Lustman. il Electrochem Soc Trans 84 (preprint 6):47-59 O '43

Thermodynamics of aqueous solutions of sodium chloride at temperatures from 15-45° from e.m.f. measurements on cells with transference. G. J. Janz and A. R. Gordon. bibliog Am Chem Soc J 65:218-21 F '43

Thermoelectromotive force. K. F. Herzfeld. Phys R 64:37-8 J1 '43

See also

Overvoltage
Piezoelectricity

POTENTIAL, Theory of

Numerical solution of the boundary value problem for the potential equation by means of punched cards. M. Kormes. R Sci Instr 14:248-50 Ag '43

Two-dimensional boundary value problems in potential theory. I. S. Sokolnikoff and R. D. Specht. J Ap Phys 14:91-5 F '43

POTENTIOMETERS

Photoelectric potentiometer recorder. D. F. Hang. il diags Gen Elec R 46:623-5 N '43

Testing wattmeters with one potentiometer. M. Underwood. diag Instruments 16:404 J1 '43

POTTER, Andrey Abraham, 1882-

Washington award for 1943. *E. G. Fox. W Soc B J* 48:51-4 *Je* '43

Washington engineering award to Dean Potter. *Elec W News* ed 119:689 *F* 27 '43

POTTERIES

Mildred Davis Keyser. *il Am Cer Soc Bul* 22: 1-5 *Ja* 15 '43

Electric equipment

Firing pottery; continuous electric kiln; Worcester royal porcelain co. *il Elec R (Lond)* 132:375-6 *Mr* 19 '43

Return recuperative electric kiln utilizes all heat input; transfer of heat in decorating kiln at the Hall china co. *il Cer Ind* 40: 43-4+ *F* '43

Equipment

All-welded decal drying system saves over \$3000 yearly; Royal china co. H. C. Hebenstreit. *il Cer Ind* 40:50-2 *Mr* '43

Modernization of plant equipment is vital to post-war plans; trend toward continuous processes. *il diag Cer Ind* 40:34-7 *Je* '43

Welding saves \$5300 a year; repairing and building new devices; Trenton potteries company, C. M. Rinck, *diags Factory Management* 101:139-40 *Mr* '43

POTTERS association, United States. See United States potters association

POTTERY

Ceramic containers answer to shortage problems of cosmetic manufacturers. *il Cer Ind* 41:76+ *Ag* '43

Garden of gods pottery produces unique ware according to specification only; Eric Hellman pottery fashioned by hand from Colorado clays. *il Cer Ind* 41:44 *Jl* '43

Nepheline syenite in low-temperature vitreous wares, C. J. Koenig. *il Ohio State U Eng Exp Sta Bul* 112:1-36 '42 (pa 40c)

Pottery war problems are main topics at United States potters association convention. *Cer Ind* 40:20-3 *Ja* '43

Proprietary products need containers, white-ware can be used. *Cer Ind* 41:46 *Jl* '43

Report of committee on research, American ceramic society. *Am Cer Soc Bul* 22:242-3 *Jl* 15 '43

Story of John Goodwin, pioneer potter. L. T. Cox. *Am Cer Soc Bul* 21:241-7 *N* 15 '42

Whiteware containers can help ease packaging situation. *Cer Ind* 40:31-2 *Je* '43

See also

Ceramic materials	Porcelain
Ceramics	Potteries
Clay	Sanitary ware
Clay products	Stoneware
Enamel and enamel- ing	Tableware
Glazes	Terra cotta
Kilns	Tiles

also American ceramic society

Decoration

Measurement of thickness of fired-on gold coatings on ceramic base materials. K. H. Ballard. *diag Ind & Eng Chem Anal* ed 14: 863-9 *N* 15 '42

Return recuperative electric kiln utilizes all heat input; transfer of heat in decorating kiln at the Hall china co. *il Cer Ind* 40: 43-4+ *F* '43

History

Story of John Goodwin, pioneer potter. L. T. Cox. *Am Cer Soc Bul* 21:241-7 *N* 15 '42

Manufacture

American ceramic society, meeting of White-ware division, Uniontown, Pa. Sept. 17-18; abstracts of papers on steatite. *Cer Ind* 41: 60-3 *O* '43

Ceramic chemistry; firing methods and pyrometry. A. B. Hollowood. *Chem Age (Lond)* 48:85-6 *Ja* 16 '43

Decorated miniatures produced by one-fire process. *il Cer Ind* 39:64+ *D* '42

Effect of kiln gases in the glaze firing of ware. J. H. Koenig. *Am Gas J* 158:41-5 *My* '43

Engineers speculate on change in whiteware processing. *Cer Ind* 41:68 *O* '43

Function of ball clay in vitreous bodies. E. Schramm. *Am Cer Soc Bul* 21:255; Discussion. 255-6 *N* 15 '42

Larger variety of utility ware pieces produced from fewer molds; diameters and heights standardized. *il Cer Ind* 40:72, 74 *Je* '43

Lotus ware, a contribution to information on this ware. A. S. Watts. *Am Cer Soc Bul* 22:56-7 *Mr* 15 '43

See also

Kilns—Firing
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Standards

Larger variety of utility ware pieces produced from fewer molds; diameters and heights standardized. *il Cer Ind* 40:72, 74 *Je* '43

Study and teaching

Making of Raku ware and its value in the teaching of beginner's pottery in America. W. Gilbertson. *diags Am Cer Soc Bul* 22: 41-4 *F* 15 '43

Testing

Tests on whiteware materials. W. H. Earhart and J. H. Koenig; B. C. Burgess; R. F. Geller. *Am Cer Soc Bul* 22:8-14 *Ja* 15 '43

POTTERY, Japanese

Making of Raku ware and its value in the teaching of beginner's pottery in America. W. Gilbertson. *diags Am Cer Soc Bul* 22: 41-4 *F* 15 '43

POTTERY industry

Pottery defrilled; prospects of American pottery industry for 1943. *Business Week* p27-8+ *Ja* 16 '43

What about pottery and glassware after the war? E. J. Deigen. *Glass Ind* 24:378-9+ *S* '43; Same. *Cer Ind* 41:25-7 *S* '43

Great Britain

British potters unable to fill fixed quotas. *Cer Ind* 40:68+ *Je* '43

Postwar production problems harass British potters. *Cer Ind* 41:74 *Ag* '43

POULTRY

Japanese help; to practice their skill of chicken-sexing. *Business Week* p58+ *D* 12 '42

See also

Eggs

Prices

OPA tries again; first set of price ceilings failed to hold. *Business Week* p82+ *My* 1 '43

Statistics

Poultry and eggs, 1938-1941. Survey of Cur *Business* 1942 *Sup* p124 [supplemented in monthly numbers]

POULTRY brooders, Electric

Chick brooder; unit designed for backyard poultrymen. *il Elec West* 90:83 *Ap* '43

Heat lamp brooders save the bacon and chicken. D. McGuire. *il Elec W* 120:1396+ *O* 16 '43

Home made brooder for wartime use. *diags Elec W* 120:136+ *Jl* 10 '43

Poultry equipment and kWh. use; California committee on relation of electricity to agriculture makes survey. J. R. Tavernetti. *il Elec West* 89:70-1 *N* '42

POULTRY food

Efficacy of a commercial dried liver meal as a riboflavin-rich protein supplement in chick rearing rations. R. H. Common and W. Bolton. *Soc Chem Ind J* 61:153-5 *O* '42

POULTRY houses

Insulated poultry house. *il diags plan Am Bld* 65:45 *Ag* '43

Poultry-house construction provides one contractor with good business. *diags plan Concrete* 51:14+ *Ja* '43

POULTRY industry and trade

Egg scramble; both chickens and eggs are in big demand. *Business Week* p19-20 *Ag* 7 '43

Sunny side up. *il Business Week* p46-8 *Mr* 20 '43

Argentina

Argentine poultry finding a growing welcome in the States. *il Business Week* p46+ *Jl* 3 '43

POULTRY industry and trade—Continued**Canada**

Increased production in Canada. For Comm W 11:30 Ap 10 '43

Chile

Production and exports of Chile. For Comm W 10:22 F 6 '43

POUNSFORD, Arthur Graham, 1891—Sketch. por Pulp & Pa of Can 44:718 S '43

POWDER, Smokeless. See Smokeless powder

POWDER magazines. See Explosives—Storage

POWDER metallurgy. See Metal powders

POWDERED aluminum. See Aluminum, Powdered

POWDERED iron. See Iron, Powdered

POWDERED nickel. See Nickel, Powdered

POWDERED soap. See Soap, Powdered

POWDERED wood. See Wood, Powdered

POWDERS

Absolute method for the determination of the area of a fine crystalline powder; New adsorption isotherm; Adsorption method for the determination of the area of a solid without the assumption of a molecular area. W. D. Harkins and G. Jura. J Chem Phys 11:430-2 S '43

Development of the hot spraying of powdered materials. W. E. Ballard. il diags Chem & Ind 62:190-4 My 22 '43

Electrostatic separator for fine powders. F. Fraas and O. C. Ralston. diags U S Bur Mines Rep of Invest 3677:1-7 '42

Helium densitometer for use with powdered materials. W. C. Schumb and E. S. Rittner. diag Am Chem Soc J 65:1692-5 S '43

Measurement of the fineness of powdered materials. P. J. Rigden. bibliog il diags Chem & Ind 62:393-6 O 16 '43

Removal of air from powders in density determination. E. L. Gooden. diag Ind & Eng Chem Anal ed 15:578-9 S 15 '43

Some observations on the use of powders in spectrochemical analysis; lead-tin solders. A. E. Ruehle and E. K. Jaycox. bibliog il Opt Soc Am J 33:109-12 F '43

Specific surface of powders; a modification of the air-permeability method for rapid routine testing. P. J. Rigden. diag Soc Chem Ind J 62:1-4 J '43

Types of paper dispensers for powders. il Mod Packaging 16:58-61+ Je '43

See also

Coal, Pulverized
Dust
Flour

Metal powders
Particles

POWER (mechanics)*See also*

Airplane factories—
Power
Airplanes—Auxiliary
power
Coal mines and
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Petroleum engineer-
ing—Power
Power cost
Power factor
Power plants
Power transmission
Pumping stations—
Power
Ship propulsion
Steam
Steel works—
Power
Textile mills—Power
Wind power
Windmills

Statistics

Shifts in installed horsepower in manufacturing. K. C. Stokes. Survey of Cur Business 23:24-32 Ja '43

POWER administration, Office of (proposed). See United States—Power administration, Office of (proposed)

POWER conservation. See Airplane engines—Testing—Power recovery

POWER contracts

Bonneville, FGE contract occupies Pepco hearing. Elec W News ed 119:849 Mr 13 '43
Contract signed on Shasta power. Elec W 120:1182 O 2 '43

FPC cuts Clark County PUD contract on Vancouver housing rate by \$41,800. Elec W 120:831 S 4 '43

New England energy interchange defended; Boston Edison-New England power agreement. Elec W 119:772 Mr 6 '43

Portland General electric co. files suit to force Bonneville power contract. Elec W News ed 119:1209 Ap 10 '43

Power contracts not subject to renegotiation. Elec W News ed 119:1715 My 22 '43

Power standoff; Ickes' Shasta contract with Pacific Gas & Electric. Business Week p20 O 16 '43

Savings on cheap power directive cited by Manly. Elec W 119:1967 Je 12 '43

Set 1,000 kw. minimum demand on U.S. contracts. Elec W News ed 118:1857 D 5 '42

See also Tennessee Valley authority—Power contracts

POWER cost

Electricity a small item in industry's costs; analysis of the 1939 census figures. Elec W 118:1782-3 N 28 '42

Let's compare compressed-air fuel costs. il Power 87:740-2 N '43

See also

Electric rates
Power factor

POWER factor

Capacitors improve generator service. il Elec W 118:1804 N 28 '42

Capacitors reduce tool plant power costs. H. M. Myers. Factory Management 101:144 Je '43

How kvar losses can be minimized. R. M. Sensintaffar. diags Elec W 119:1810 My 29 '43

How to apply capacitors. C. V. Fields. il Factory Management 101:135-6 Ja '43

Improved power factor adds power capacity. Power 87:143a-+ F '43

Installing power factor condensers. diag Engineer 174:462-3 D 4 '42

Locate static condensers at strategic points; with cost data. L. M. Duryee. Power Pl Eng 47:87-8 Ja '43

Power factor control helps shovel voltage. D. Stetzel. Elec W 120:844-5 S 4 '43

Power factor correction increases output of electrical equipment. E. H. Lamberger. diags Pet Eng 14:72-+ Ag '43

Power factor from line current; chart. Power 86:913 D 42

Power factor recorders have synchronous clocks. F. MacGahan. il Elec W 118:1816 N 28 '42

Reactive power magnetizes machine iron; generator power factor. R. V. Selander. Power 87:772-+ N '43

Rectifier circuit power factors, harmonics and wave shapes. R. D. Evans. diag Elec W 120:1345-8 O 16 '43

Role of capacitors in war work. R. E. Marbury. il Power Pl Eng 47:82-4 S '43

Safe capacitor selection for power-factor improvement. J. E. Barkle. il diag Power 87:230-2 Ap '43

Three-phase star-connected loads. G. W. Stubbings. Electrician 129:688-9 D 25 '42

What is the generator power factor? Power 87:338-9+ My '43

See also

Reactive power

POWER factor, Dielectric

Data on power factor measurements parallel with laminations for phenolic laminated sheet. Am Soc T M Proc 42:381-3 '42

Liquid dielectrics; sixty-cycle power factors, conductivities, and polar contents of systems containing sulfur or nitrogen compounds in liquid paraffin. J. D. Piper and others. bibliog Ind & Eng Chem 34:1505-9 D '42

Power factor; dielectric power-factor measurements; improved methods and equipment. H. W. Bousman. il Gen Elec R 45:625-7 N '42

Q-meter for power factor and dielectric constant. D. M. Hill. il diags Elec W 120:1365-+ O 16 '43

POWER of appointment

Amend Revenue act on powers of appointment. Comm & Fin Chr 156:2321 D 31 '42

June 30, 1943 deadline on release of powers of appointment; bibliography. Banking 35:57 Je '43

POWER of appointment—Continued

- Powers of appointment under the Revenue act of 1942. J. H. Alexander. J Account 76: 14-18 J1 '43
- Release of powers; New Jersey statute. Trusts & Estates 76:382 Ap '43
- Taxation of powers of appointment; abstract. E. N. Griswold. Trusts & Estates 76:196 F '43
- Taxes on powers of appointment. M. N. Fisher. Trusts & Estates 75:483-7 N '42
- What to do about powers of appointment? Trusts & Estates 76:53-4 Ja '43

POWER of attorney

- Bank not liable for defalcations of agent acting under power of attorney of depositor. J. A. Nobile. Banking Law J 60: 731-40 S '43
- Claim settlements; power of attorney form by Aetna fire group. Spectator (Property ed) 8:32 Mr 4 '43
- Continuing power of attorney. Trusts & Estates 76:389 Ap '43

POWER plant auxiliaries. See Electric driving —Power plant auxiliaries**POWER plant insurance.** See Insurance, Power plant**POWER plants**

- American society of mechanical engineers annual meeting; abstracts of papers. Power 86:965-72 Mid-D '42
- A.S.M.E. annual meeting; abstracts of power plant papers. Power Pl Eng 47:78-81 Ja '43
- American society of mechanical engineers; annual meeting; power plant papers. Elec W 118:1936-7 D '42
- ASME spring meeting; abstracts of power plant papers. Power Pl Eng 47:88+ Je '43
- Association of iron and steel engineers annual meeting, Pittsburgh, Sept. 28-30; abstracts of power plant papers. Power 87: 756-7+ N '43
- Midwest power conference, Chicago, April 8-9. Power 87:326-7+ My '43; Power Pl Eng 47:34, 110, 112 My '43
- Old chief; reminiscences of the human side of engineering (cont). Power 87:32, 114, 180, 236, 322, 378, 464, 518, 614, 680, 750 Ja-N '43
- Power teamwork for victory. P. W. Swain. Paper Tr J 115:29-32 N '42
- Questions and answers for power engineers. A. Higgins. diags Power 87:198-9+, 270-3, 340-2 Mr-May '43

See also

- | | |
|-----------------------------|-------------------------------|
| Boiler plants | Piping (power plants) |
| Coal handling | Steam plants |
| Coal mines and mining—Power | Textile mills—Power |
| Electric plants | Water supply for power plants |
| Hydroelectric plants | |
| Paper mills—Power | |

Accounting

- Engineering economics; application of interest tables. Elec R (Lond) 133:474 O 8 '43

Costs

- Capital costs are real. C. G. Weber. Power Pl Eng 47:102 Mr '43
- Chart for figuring the cost of oil to coal conversion. Power Pl Eng 47:100 J1 '43
- Coal cost check chart; data sheet. R. J. Buchanan. Power 87:133 F '43

Design

- Method of design of steel stacks and foundation. S. Levine. diags Pet Refiner 22: 104-5 Ap '43

Diesel engine auxiliaries

- Diesel stand-by plants in the telephone industry. T. H. Batt. il Diesel Power 21: 605-6 J1 '43

Diesel engine plants

- Adequate fuel-oil storage is good Diesel-plant insurance. G. C. Boyer. diags Power 87:310-11 My '43
- Diesel- and gas-engine maintenance; special section. L. N. Rowley. il diags Power 87:379-94 Je '43

Diesel performance here and abroad; American and British reports. Power 87:256-8 Ap '43

Forge shop finds Diesels to be economical and dependable; with cost data. il Diesel Power, 21:599-600 J1 '43

How to layout Diesel intake systems. G. Boyer. diags Power 87:111-13+ F '43

1940 oil-engine power cost report. Diesel Power, 20:392-4 D '42

Seven profitable years from Diesel operation; with cost data; Grand Rapids plating co. H. J. Barbour. il Diesel Power 21:31-3 Ja '43

Three-year-old Diesel takes 20,000 hr. of trouble-free operation in its stride; F. W. Stock & sons' flour mill. il Power 87:541-2 Ag '43

Toledo's water system can take it: daily pump capacity $\frac{1}{2}$ billion gallons. G. J. Van Dorp and E. M. Wilgus. il Power 87:364-6+ Je '43

Drawings

Uses for three-dimension pictorial drawings in engineering department of I-T-E circuit breaker co. J. A. C. Krips and W. S. Miller. diags Power Pl Eng 47:69-71 N '43

Efficiency

Engineering economies of product design. R. E. Smith. diag Blast F & Steel Pl 31:790, 792-4 J1 '43; Same cond. Concrete (mill sec) 61:187+ Je '43

Employees

Help on training operators. W. T. Mullen. Power Pl Eng 47:104 Ap '43

Keeping a power plant force on the job to win the war; employee training programs. J. A. Krug and others. il Power Pl Eng 47:56-75+ S '43

Responsibilities of the power-engineering staff; power service organization; charts. Power 87:587-90 S '43

Equipment

American engineering co. adds 400-kw unit to help carry war load. il diags plan Power Pl Eng 47:75-7 Ag '43

American institute of electrical engineers winter meeting; committee reports on power equipment. il Power 87:162-5+ Mr '43

Application of turbine-supervisory instruments to power-generating equipment. J. L. Roberts and H. M. Dimond. il A S M E Trans 65:803-7; Discussion. C. C. Frank. 807-8 O '43

CMP in full operation; what it means to the power engineer. Power Pl Eng 47:102, 104+ J1 '43

Drag scrapers offer safe, flexible solution to coal-storage problems. H. A. Roe. il diags Power 87:292-5, 444-5+ My, J1 '43

Effective use of wood waste cuts purchased power needs; Lane co., inc. il diags plan Power Pl Eng 47:58-62 F '43

Engine-driven emergency power plants; station WIEW. K. Troegen. il diag Inst Radio Eng Proc 31:15-18 Ja '43

Engineering economies of product design. R. E. Smith. diag Blast F & Steel Pl 31:790, 792-4 J1 '43; Same cond. Concrete (mill sec) 61:187+ Je '43

If you can't buy a new machine; see if a used-equipment dealer can rebuild or recondition one. il Power 87:618-19, 638a+ S '43

Ignitron for direct current power. W. E. Schwarz. il plan Power Pl Eng 47:76-9+ Mr '43

Mammoth utilities of unusual design installed at Port Neches plant. J. P. O'Donnell. il Oil & Gas J 42:49-50, 53-4 Ag 12 '43

Model power house of C. F. Braun & co. C. B. Bason. il Comp Air M 48:7055-9 Je '43

New catalogs, booklets, bulletins; 350 items covering equipment and supplies used by power engineers. Power 86:976-85, 986a-986+ Mid-D '42

1943 directory of manufacturers; buyers' guide of over 400 power products. Power 86:sup201-84 Mid-D '42

Old power plant carries war load; Washington terminal company. il Ry Age 115:5-7 J1 3 '43

POWER plants—Equipment—Continued

Packing gives good service when you give it a break. diags Power 87:187-9 Mr '43
 Power for the National Portland cement co. of Brazil. flow diag il plans Power Pl Eng 47:62-70 Mr '43

Power for the new Geneva, Utah, steel mill. il Power Pl Eng 47:110+ J1 '43

Power plant industry meets all war demands in 1942. il Power Pl Eng 47:82-6, 112 F '43

Production and maintenance equipment at the shows; the power show. il Chem & Met Eng 49:106-8 D '42

Questions and answers for power engineers; construction materials and details; heat treatments and processes. A. Higgins. Power 87:482-4 J1 '43

Review of power and mechanical equipment. il Power 86:930-60, 973-4 Mid-D '42

Steam engines going strong after 41 years of service; power plant in the Mutual life insurance building, New York. il Power 87:607-10 S '43

Trends in the use of new equipment. H. R. Vaughan. Power Pl Eng 47:76, 118, 120 Je '43

Why, when, what, where and how of flow meter installation. W. C. Bennett. il charts Power Pl Eng 46:88-9, 110 O; 97-8 N; 92-5 D '42; 47:91-2 Ja; 93 F '43

You can meet WPB regulations when buying material-handling equipment. W. G. Hudson. il Power 87:658-60 O '43

See also

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Boilers	Steam plants—Equipment
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Fires and fire protection

Carbon dioxide guards critical generators; Phelps-Dodge mine and reduction-works power plant at Morenci, Arizona. P. W. Eberhardt. il diags Power 87:738-9 N '43

To prevent fire keep your plant shipshape. il Power 87:668-9+ O '43

Fuel

Colloidal fuel substituted for oil fuel. J. F. Barkley, L. F. Burdick and A. B. Hersberger. il Nat Pet N 35 pt 2:R304-6 J1 '43; Same. Coal Age 48:51-3 J1 '43; Same. Power 87:512-13+ Ag '43; Same. Steel 113:98-9+ J1 12 '43; Same. Pet Refiner 22:113-16 S '43

Conversion from oil firing to coal firing. O. Craig. diags Power Pl Eng 47:76-9 Je; 66-8 J1 '43

Dew point of flue gases containing sulfur. J. S. Yeaw and L. Shnidman. bibliog Power Pl Eng 47:68-71 Ja; 69-71 F; 73-5 Mr '43

Experience shows 116-ft. deep coal pile practical. il diags Power 87:5-7 Ja '43

Let's compare compressed-air fuel costs. il Power 87:740-2 N '43

Modern boilers for steel-mill plants; designed to burn blast-furnace gas and supplementary fuels efficiently. M. H. Kuhnner. diags Power 87:650-7 O '43

Oil-to-coal conversions still necessary; Steam power and Fuel divisions of ASME, joint meeting. Power 87:320-1+ Mr '43

Power engineers find new means for boosting steam output. J. G. Coutant. il diag Blast F & Steel Pl 31:126, 128-9, 148-9, 152-3 Ja '43

Power salvaged by properly using otherwise waste coal; use of slurry and dust in one utility and three mine power plants. F. W. Richart. il diags Coal Age 48:65-9 Ag '43

Prevent fuel waste for war. J. F. Barkley. Power Pl Eng 47:75 Ap '43

Store coal now to meet coming production peak. C. R. Earle. il Power Pl Eng 47:60-2 J1 '43

Superheater response to fuel conversion. E. R. Kilsby. il diags Power Pl Eng 47:78-80 N '43

Use of mixtures of oil and coal in boiler furnaces. W. C. Schroeder. bibliog Mech Eng 64:793-8+ N '42; Discussion. 65:278-84 Ap '43

See also

Boilers—Firing

Gas engine plants

Annual American gas association gas engine power census. G. R. Walton. table Gas Age 90:26-7 N 19 '42; Same. Am Gas Assn Proc 1942:183

Diesel- and gas-engine maintenance; special section. L. N. Rowley. il diags Power 87:379-94 Je '43

Gas engine experience in sewage service at Madison, Wis.; with cost data. J. C. Mackin and W. H. Gottlieb. il map Power Pl Eng 47:60-4 Ap '43

Natural gas power for creamery refrigeration cuts operating costs by 50%; Knudsen creamery. J. Kearns. il Am Gas J 158:25-6 My '43

Position and development of the gas engine. J. Jones. diags Engineer 175:256-8, 276-7 Mr 26-Ap 2 '43; Discussion. 175:254-5 Mr 26 '43; Engineering 155:254, 263-4 Mr 26-Ap 2 '43

Project X; world's largest plant powered by internal-combustion engines; completed jointly by Aluminum company of America and Defense plant corporation. il Diesel Power 21:695-701 Ag '43

Use of sewage gas aids fuel conservation; Southerly plant of the Cleveland sewage disposal department. il Power Pl Eng 47:61 Ja '43

Gas turbine plants

Diesel makes exhaust gas, turbine supplies kilowatts; Sulzer brothers, Switzerland, report experience with supercharged 2-cycle oil engines. diags Power 86:888-9 D '42

Maintenance and repair

Handbook of piping maintenance. P. W. Swain and E. W. Feller. il diags Power 86:853-83 D '42

Hospital cleanliness pays dividends; Mount Sinai hospital. il Power 87:45-8 Ja '43

How to check up on condition of auxiliary equipment. Textile World 92:102-3 N '42

Power plant operation and maintenance. G. H. Suhs. Paper Tr J 117:35-6 J1 '43; Same cond. Paper Ind 25:664+ S '43

Reducing scrap piles and maintenance costs; reclamation of parts of machinery by metal spraying. il diag Power Pl Eng 47:92-4 Ag '43

Welding uses pounds to save tons. R. C. Fitzgerald. il Power 87:746-7+ N '43

See also

Electric generators—Pumps—Maintenance and repair

Management

Boss writes a letter; duties of an operator. A. L. Freeman. Diesel Power 21:37-8+ Ja '43

Protection

Bomb-proof construction of utilities. B. Maddock. diags Power Pl Eng 47:69-70 J1 '43

Industry's first line of defense, protective lighting. C. L. Amick. il diags Power Pl Eng 47:54-7 Ja '43

Insuring wartime protection of industrial power plants; abstract. A. G. Coulson. Concrete (mill sec) 51:170 My '43

Records

Off the record; accurate records are always of importance. L. E. Varner. Power Pl Eng 47:116, 118+ Ap '43

POWER plants, Outdoor

Outdoor plant, is it here to stay? C. R. Earle. il Power Pl Eng 47:78 My '43

Outdoor plant; is it here to stay? E. Madcock; H. M. Gilleman; S. L. Krechetsky. il Power Pl Eng 47:82-3 O '43

Outdoor stations are simpler. R. L. Reynolds. il Power Pl Eng 47:76-7 My '43

Some aspects of the outdoor power plant. R. H. Emerick. il Power Pl Eng 47:72-6 My '43

See also

Steam plants, Outdoor

POWER plants, Portable

Ingenious conversion to Diesel provides completely portable power unit; for pumping crude oil through trunk line. *il* Diesel Power 21:805 S '43

Portable Diesel-electric plants follow the navy. T. F. Perkinson. *il* Power 87:304-5 My '43

Portable power unit for pipe line pumping; Diesel unit. *il* Pet Eng 15:146 O '43

Small portable power plant for standby. *il* Elec W 120:338 Jl 24 '43

POWER pools. See Electric plants—Interconnection

POWER purchasing. See Electric plants—Isolated plants vs. purchased power; Power cost

POWER rates. See Electric rates

POWER recovery. See Airplane engines—Testing—Power recovery

POWER show. See National exposition of power and mechanical engineering

POWER transmission

Earnings in manufacture of mechanical power-transmission equipment, 1942. O. F. Brown. Monthly Labor R 56:109-18 Ja '43

Mavor and Coulson driving gear from belt conveyors. *il* diags Engineering 155:87-8, 90 Ja 29 '43

Mechanical power transmission equipment. *il* Factory Management 101:158 O '43

Power transmission efficiency. W. F. Schaphorst. diags Chem Ind 52:615 My '43

Review of power and mechanical equipment; mechanical transmission, materials handling. *il* Power 86:938-41 Mid-D '42

Rubber mill power transmission comparison; belt and electric power. diags India Rubber W 107:467 F '43

Solving the Diesel drive problem; symposium under joint sponsorship of Society of naval architects and marine engineers and American society of mechanical engineers. G. McConehy and others. *il* diags Machine Design 15:135-9 Ap '43

30th buyers reference number; plant service equipment. *il* Am Mach 87:366-7 Ja 21 '43

Winding machine has transmission drive. *il* Elec W 120:102 Jl 10 '43

See also

Bearings	Gearing
Belt	Hydraulic transmission
Chain gear	Joints, Universal
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Compressed air	Pulleys
Couplings	Speed variation
Electric driving	Torque converters
Electric lines	
Electric transmission	

Tables, calculations, etc.

Calculating pulleys for step-cone drives; data sheet. P. Grodzinski. Machine Design 15:137-8 Jl '43

Laying out the V-belt drive; Allis-Chalmers Econograph. G. A. Van Brunt. Factory Management 101:138-41 S '43

POWERS (law)

See also

Power of appointment

POZZUOLANA

Italian puzzuolanas are still being used. *il* Rock Prod 46:64+ S '43

Report of the Nonmetals division, fiscal year, 1942; pozzuolanic minerals. O. C. Ralston and A. G. Stern. U S Bur Mines Rep of Invest 3675:26-7 '42; Same. Concrete (mill sec) 51:162 Ap '43

Specifications for portland pozzuolanas. A. J. Blank. Rock Prod 46:67+ O '43 (to be cont)

PRATT, Joseph Hyde, 1870-1942

Memorial. J. L. Stuckey. por(pl) Geol Soc Proc 1942:201-15 bibliog(p204-15) Ap '43

PRECIOUS metals

Inspection of precious metals. *il* Light & Lighting 36:143 S '43

Rare and precious metals, 1942. W. P. Sykes. *il* Min & Met 24:66-8 F '43

See also

Gold	Platinum metals
Platinum	Silver

PRECIOUS stones

See also

Diamonds
Garnets

PRECIPITATES

Influence of age and surface conditions on the reactivity of certain precipitates. T. H. James. bibliog J Phys Chem 46:1068-76 D '42

PRECIPITATION

Absence of coprecipitation of barium ion with the chlorides of the silver group and the sulfides of the copper and tin groups in the presence of ammonium ion. L. Lehman and I. Mandel. bibliog J Phys Chem 47:264-6 Mr '43

Analytical separations by means of controlled hydrolytic precipitation. E. Gilchrist. J Research Nat Bur Stand 30:89-99 F '43

Coprecipitation of chromate with barium sulfate. W. B. Meldrum, W. E. Cadbury, Jr. and C. E. Bricker. bibliog Ind & Eng Chem Anal ed 15:560-2 S 15 '43

Separation of iron from cobalt or nickel. R. J. DeGray and E. P. Rittershausen. bibliog Ind & Eng Chem Anal ed 15:26-7 Ja 15 '43

Serological properties of simple substances; hapten inhibition of precipitation of antibodies and polyhaptenic simple substances. D. Pressman, D. H. Brown and L. Pauling. Am Chem Soc J 64:3015-20 D '42

Serological properties of simple substances; precipitation reactions between antibodies and substances containing two or more haptenic groups. L. Pauling and others. bibliog Am Chem Soc J 64:2994-3003 D '42

Serological properties of simple substances; the composition of precipitates of antibodies and polyhaptenic simple substances; the valence of antibodies. L. Pauling, D. Pressman and C. Ikeda. diags Am Chem Soc J 64:3010-14 D '42

Serological properties of simple substances; the effects of changed conditions and of added haptens on precipitation reactions of polyhaptenic simple substances. L. Pauling and others. Am Chem Soc J 64:3003-9 D '42

Serological properties of simple substances; the precipitation of polyhaptenic simple substances and antiserum homologous to the *p*-(*p*-azophenylazo)-phenylarsonic acid group and its inhibition by haptens. D. Pressman and others. bibliog Am Chem Soc J 65:728-32 Ap '43

Spot reaction experiments; detection of the beginning of precipitation reactions before the precipitate has become visible. F. Feigl. diags J Chem Educ 20:241-3 My '43

Studies on aging and coprecipitation; the distribution coefficient of arsenate between magnesium ammonium phosphate and solution. I. M. Kolthoff and C. W. Carr. J Phys Chem 47:148-52 F '43

See also

Electric precipitation

PRECIPITIN. See Antigens and antibodies

PREFABRICATED buildings. See Buildings, Prefabricated

PREFABRICATED home manufacturers association

First convention, Louisville. Arch Forum 77:34 D '42

PREFABRICATED houses. See Houses, Prefabricated

PREFERRED numbers

Preferred sizes; wire and sheet metal; advantages. H. W. Robb. bibliog Steel 111:76-8, 95-101 N 30 '42

PREFERRED stocks. See Stocks, Preferred

PREGNANCY

Mothers in industry; care for pregnant women. Safety Eng 85:37-8 Ja '43; Excerpts. Nat Safety N 47:98 Ja '43

Nutrition in pregnancy. Chem & Ind 62:85-6 F 27 '43

PREGNANDIOL

Conversion of desoxycorticosterone to pregnandiol-3 (a), 20 (a). W. R. Fish, B. N. Horwitt and R. I. Dorfman. Science 97:227-8 Mr 5 '43

PREGWOOD. See Wood products

PREMIUMS (merchandizing)

Premium users and their offers. *Ptr Ink* 203:54+ Mr 7 '43

See also

Advertising copy—
Premium offers

PRESCOTT, Samuel Cate, 1872-

Award of the Nicholas Appert medal to Dr Prescott. *Science* 97:396 Ap 30 '43

PRESERVATION of books. See Books—Conservation and restoration

PRESERVATION of food. See Canning and preserving; Food preservation

PRESERVATION of records. See Records, Preservation of

PRESERVATION of wood. See Wood preservation

PRESIDENTIAL campaigns

Can Roosevelt keep his new friends without losing his old ones? *Fortune* 27:100+ Je '43

Ohio looks to '44; hopes to provide its eighth U.S. president. E. Janeway. *il Fortune* 27:104-6+ F '43

Presidential race may become a campaign of the lesser evils. *Fortune* 28:92+ O '43

PRESIDENTIAL candidates

Fortune survey; labor's choice for '44. *Fortune* 27:10+ F '43

PRESIDENTS (United States)

Powers and duties

Problem of organizing for the chief executive. R. A. Feiss. *Advanced Management* 8:31-3 Ja '43

Term

Advocates 6-year president term. J. W. Bricker. *Comm & Fin Chr* 158:1024 S 9 '43

PRESS

See also

Associated press Periodicals
Freedom of the press Public opinion
Newspapers

PRESS tools

Hydraulic self-adjusting press tool. *il diags Engineering* 155:6-7 Ja 1 '43
Maintenance of press tools. H. R. Hageman. *diags Am Mach* 86:1216-17, 1286-7, 1436-7 O 29-N 12, D 10 '42

PRESS wireless, inc.

Tolls under fire; FCC studying income and cost figures of Press Wireless. *Business Week* p24+ O 16 '43

PRESSED metal

Pressed metal; a speed-up factor in ordnance. *il Iron Age* 152:90 S 30 '43

PRESSED metal institute

Pressed metal institute formed. *Diesel Power* 21:738-9 Ag '43; *Product Eng* 14:530 Ag '43

PRESSES

Air-operated accessories speed up power presses. R. E. Hearl. *il Am Mach* 86:1490-1 D 24 '42

Development in stretch presses. C. L. Fenn. *il Am Mach* 87:99-102 Ag 19 '43

Heat-conduction problems in presses used for gluing of wood. G. H. Brown. *diags Inst Radio Eng Proc* 31:537-48 O '43

Kux automatic press for powdered metal. *il Iron Age* 151:55 F 4 '43

New equipment. *il Iron Age* 152:65-8 S 2 '43

Power presses; die cushion size and ring holding pressure required; tonnage capacity. *Aviation* 41:161, 163 N '42

Press forming, 1942. F. G. Schranz. *il Metals & Alloys* 17:72-3 Ja '43

Pressing metal into service. *il Sci Am* 169:208-10 N '43

Selecting the proper dry press. *il Cer Ind* 40:66, 68 Je '43

Selection of stretch-press form blocks; with particular reference to laminated wood. C. L. Fenn. *il Am Mach* 87:83-6 Ag 5 '43

30th buyers reference number. *il Am Mach* 87:309-16 Ja 21 '43

See also

Dies
Hydraulic presses

Safety devices

Drill press safety rules. *Factory Management* 101:120+ Mr '43

Photo-electric eye guards against mishaps. *il diag Product Eng* 14:482 Ag '43

PRESSING machines

One-piece press stand made by flame cutting and welding. H. E. Berg. *il Welding J* 22:601-2 Ag '43

PRESSURE

Effect of pressure upon the dielectric constants of liquids. B. B. Owen and S. R. Brinkley, jr. *bibliog Phys R* 64:32-6 Jl 1 '43

Ethanol-water system; vapor-liquid properties at high pressures. J. Griswold, J. D. Haney and W. A. Klein. *bibliog il diag Ind & Eng Chem* 35:701-4 Je '43

Heat transfer and pressure drop in annuli. E. S. Davis. *bibliog A S M E Trans* 65:755-9; Discussion. M. Jakob. 760 O '43

Hydration-pressure relations in clays and heaving shale. H. H. Power, B. L. Towle and J. B. Plaza. *bibliog il diags Am Pet Inst Proc* 23(4):64-76 '42; Same. *Oil & Gas J* 41:215+ N 12 '42; Discussion. *Am Pet Inst Proc* 23(4):76-7 '42

Hydrostatically supported cloud chamber of new design for operation at high pressures.

T. H. Johnson, S. DeBenedetti and R. E. Shutt. *bibliog il diag R Sci Instr* 14:265-71 S '43

Liquid pressure in casting; abstract. E. Longden. *Metals & Alloys* 18:342+ Ag '43

Modification of the Carius combustion tube to minimize losses by explosion: pressures attained on heating nitric acid to 300° C. C. L. Gordon. *bibliog diag J Research Nat Bur Stand* 30:107-11 F '43

Nomograph for pressure drop in isothermal flow of compressible fluids. G. W. Thomson. *Ind & Eng Chem* 34:1485 D '42

See also

Compressibility	Steam plants—High
Dalton's law	pressure
Earth pressure	Strains and stresses
Load (mechanics)	Vacuum
Osmotic pressure	Vapor pressure
Piezoelectricity	Wind pressure

PRESSURE cookers

Canning the crop; record high of 275,000 pressure cookers. *Business Week* p36+ Je 5 '43

Houston Natural to offer free home canners. C. N. Tunnell. *Gas Age* 92:16+ Jl 1 '43

Pressure cookers for the asking; Natural gas corporation, Houston. K. Fellows. *il Am Gas Assn Mo* 25:299-300 Jl-Ag '43

St Louis women share pressure cookers. *Elec W* 120:684+ Ag 21 '43

Testing pressure cookers gains goodwill; West Texas gas company. *il Gas Age* 92:29 S 9 '43

PRESSURE gages

Accurate low-pressure gage. F. E. E. Germann and K. A. Gagos. *diag Ind & Eng Chem Anal ed* 15:285-6 Ap 15 '43

Air pressure bag plots stream bed; taking soundings in connection with pipe-line crossing of Sacramento river. J. A. Oldham. *il diag Elec W* 120:1364 O 16 '43

Calibration of a subsurface pressure gage. G. M. Stearns. *diag Oil & Gas J* 42:75 My 13 '43

Lateral pressure of sand. A. A. Fordham. *il diags Engineering* 155:341-2, 350 Ap 30 '43

Method of increasing the sensitivity of Bourdon gauges. S. Barnart and J. B. Ferguson. *diags R Sci Instr* 14:46-7 F '43

Standard depth pressure gages. G. M. Stearns. *diags Oil & Gas J* 42:143-4 Je 24 '43

Subsurface pressure gages. G. M. Stearns. *diags Oil & Gas J* 42:83, 85-6 My 27; 59-60 Je 3 '43

Use of a subsurface pressure gage on formation tests. *diag Oil & Gas J* 42:95 My 20 '43

Use of recording pressure gage saves water in ice plant. L. S. Lyon. *Power Pl Eng* 46:88 D '42

PRESSURE gages—Continued

Weight saving in pressure gages; Navy plastic gage case, 11 diags Mod Plastics 20:84-5+ D '42

See also
McLeod gages
Manometers
Steam gages

Manufacture

Earnings in manufacture of pressure and vacuum gages, August 1942, 10. B. Morris. Monthly Labor R 55:1021-3 N '42

Testing

Checking absolute pressure recording gages. C. A. Lee. diag Power Pl Eng 47:93 Ap '43
Testing scale for pressure instruments to 3' water. H. Ziebold. 11 diags Instruments 16: 122 Mr '43

PRESSURE measurement

Characteristics of airfoils in a cylindric axial-flow grid. J. R. Weske and F. E. Marble. biblog 11 diags J Aeronautical Sci 10:289-94 O '43

Damage from air blast; progress report 2. S. L. Windes. biblog pls U S Bur Mines Rep of Invest 3708:1-60 '43

Direct calculation of gas pressure drop in pipes. A. S. Hall, Jr. and R. C. Binder. Power 87:537-8+ Ag '43

Hydraulic structures; model-prototype conformity. J. E. Warnock and H. G. Doney, Jr. 11 diags Am Soc C E Proc 68:1269-94 O '42; Discussion. 69:316-20 F '43

Improved hydraulic presses for wartime requirements; Hydraulicgraph development. J. H. Maude. 11 A S M E Trans 65:291 My '43

Indexes for non-condensing turbine overhaul; how to detect faulty conditions by comparison of stage pressures, temperatures, flows and loads with values accepted for normal conditions. B. D. Harris. graphs Elec W 120:1514-18 O 30 '43

Instruments for measuring and controlling process variables. diags p(110) Chem & Met Eng 50:111-12 My '43

Measurement of velocity and pressure in three-dimensional flow. by F. E. Krissam; tr. and abstr. by E. F. Wilsey. diags Am Soc C E Proc 69:sup22-30 S '43

Measurements of pore-water pressure in silt and clay; use of the elastic-wire strain meter. K. Torzaghi. diags Civil Eng 13: 33-6 Ja '43

Plexo electric pressure recorders of high natural frequency; vibration characteristics and protection against interference by inertia forces; abstract. W. Gohlke. Roy Aeronautical Soc J 47:sup556-7 O '43

Pneumatic transmitter announced by Republic flow meters co. 11 Chem & Met Eng 50:128 Ag '43

Portable pressure-gravity test unit checks evaporation losses. N. Williams. 11 diags Oil & Gas J 42:43-4 My 13 '43

Pressure and consolidation measurements at a western earth-fill dam. E. L. Armstrong. 11 diags plan Civil Eng 12:682-4 D '42

Pressure losses in registers and stackheads in forced warm-air heating; a report of an investigation conducted by the Engineering experiment station, University of Illinois in cooperation with the National warm-air heating and air conditioning association. A. P. Kratz and S. Kozzo. 11 diags Ill U Eng Exp Sta Bul 342:1-58 '43 (pa 65c); Abstract. Sheet Metal Worker 34:48-50 J1; 53-6 Ag '43

Sedimentation analysis; an improved manometric method. F. R. Jones and C. G. Barlow. diags Soc Chem Ind J 62:129-32 S '43

See also
Manometers
Petroleum—Pressure measurement
Pressure gages

PRESSURE regulators

Automatic pressure-regulating manometer. R. Gilmont and D. T. Othmer. diags Ind & Eng Chem Anal ed 15:341-2 O 15 '43

Electronic circuits accurate automatic combustion control. K. D. Knoblock. diags Elec W 120:1163-70 O 2 '43

Gas pressure regulation for industrial service. C. C. Abbott. diags Am Gas J 158:11-15, 56+ My '43

Improved pressure-regulating device. B. R. Warner. 11 Ind & Eng Chem Anal ed 15: 637-8 O 15 '43

Mercury-balance pressure regulator. A. J. Bailey. biblog diags Ind & Eng Chem Anal ed 15:283-4 Ap 15 '43

Needs suction pressure control; Diesel-driven ammonia compressors. diags Power 87:766-8 N '43

New processes require more powerful automatic-control equipment. J. B. McMahon. diags Oil & Gas J 41:90, 93-4, 96 Mr 25 '43

Operating district gas regulators under water. E. Dutch. diags Am Gas J 157:18 D '42; Same. Gas Age 91:12-13 F 11 '43

Process laws in automatic-control circuits. J. G. Ziegler and N. B. Nichols. biblog diags A S M E Trans 65:433-40; Discussion. 140-4 J1 '43

Safety and relief valves for refrigerants. E. K. Falls. diags Refrig Eng 45:267-62; Discussion. 262-3 Ap '43

Turbine-driven pump under Fifth avenue regulates New York's water pressure. 11 diags Power 87:459-61 J1 '43

Valves won't regulate. diags Power 87:768-9+ N '43

PRESSURE vessels

Combustion explosions in pressure vessels. O. W. Maloney. Power Pl Eng 47:100 Ap '43

Corrosion control in refinery pressure vessels by arc welded stainless steel linings; with cost data. W. W. McClow. 11 diags Nat Pat N 35 pt 2:110-14 Ju '43

Reinforcement of nozzles in pressure vessels; reference book sheet. E. L. Maguire. Product Eng 14:393-4 Jo '43

Study of corrosion and erosion of unfired pressure vessels. A. J. Phillips. 11 Locomotive 44:133-42 Ja '43

Unusual type of storage vessel; spherical steel tank. diags Engineer 176:96-7 J1 80 '43

Use of alternate steels is provided in 1942 pressure vessel code addenda. E. F. Brummerstedt. diags Nat Pat N 35 pt 2:R302-3, R356-7, R410, R414 J1 7, Ag 4, S 1 '43

See also
Air compressors
Air receivers
Ammonia compressors
Autoclaves
Bollers
Chillers

Compressors
Digestors (paper making)
Dust collectors
Evaporators
Gas holders
Kiers

Cost

Cost of pressure vessels and pressure fractionating columns. F. C. Fowler and G. G. Brown. Am Inst Chem Eng Trans 39:241-54 Ap '43; Same. Pet Eng (Ref annual) 14:190, 192-4, 196 J1 '43

Design

Gasket-loading constants; review of those suggested in table UA-7 of the A.S.M.E. unfired pressure vessel code. D. B. Rosheim and A. R. C. Markl. tubos Mech Eng 65:647-8 S '43

New design practices recognized in pressure vessel code addenda. E. F. Brummerstedt. diags Nat Pat N 35 pt 2:R356-7 Ag 4 '43

Some considerations in the design of thick-wall pressure cylinders. C. W. Constock. biblog Am Inst Chem Eng Trans 39:299-312; Discussion. 312-18 Jo '43

Manufacture

Ammonia converter of welded 5% chromium steel. J. Schuyler. 11 diags Metal Prog 43: 218-23 R '43; Same cond. Nat Pat N 35 pt 2:R406, R408-9 S 1 '43

Fabrication of pressure vessels; abstract. S. H. Griffiths. Metals & Alloys 18:370+ Ag '43

Improved method reduces costs and boosts output in drawing chromium-molybdenum steel; Walter Kilde & co. production of high-pressure cylinders for carbon dioxide and oxygen. I. H. Such. 11 Steel 113:90-1+ N 1 '43

PRESSURE vessels—Continued**Safety measures**

Protection of pressure vessels with rupture discs. C. E. Huff. *il Refrig Eng* 46:312-15+ N '43

Testing

Applicable methods of inspection for pressure vessels and piping. W. D. Halsey. *Welding J* 22:821-2 O '43

Hammer test for welded pressure vessels; an investigation. C. O. Dohrenwend. *il diags Welding J* 22:sup507-21 O '43; *Correction*. 22:sup615 D '43

Spherical containers for transporting gas under high pressure; transportation of helium under 2000 lb. pressure in multiple-sphere tank cars, reprinted from *Mechanical engineering*, Dec. 1929. *il Welding J* 22:sup304-7 J '43

Tests of thin hemispherical shells subjected to internal hydrostatic pressure; reprint of University of Illinois Engineering experiment station bulletin 295. W. M. Wilson and J. Marin. *il diags Welding J* 22:sup214-20 My '43

PRETIBIAL fever

New disease in the army; abstract. W. B. Daniels and H. A. Grennan. *Science* 97:sup10+ Jc 11 '43

PRICE, Gwilym A. 1895-

Westinghouse vice-president. *por Comm & Fin Chr* 158:1085+ S 16 '43

PRICE cutting

Discount house; cut-rate retail establishment. F. M. Lehman. *J Retailing* 19:19-26 F '43

PRICE discrimination

Locality price differentials in the western retail grocery trade; Safeway stores. R. Cassidy, Jr. and E. T. Grether. *Harvard Business R* 21 no2:190-206 [Ja] '43

OPA procedure for seller hit by FTC order set. *Oil Paint & Drug Rep* 143:7 Ap 19 '43

Patman law

Cement is target; FTC's newest attack on basing-point systems. *Business Week* p92-4 J1 31 '43

F.T.C. hits multiple basing point delivered-price system; Cement institute. *Oil Paint & Drug Rep* 144:3+ J1 26 '43

PRICE fixing

Fair trade test; liquor firms enter pleas of nolo contendere in antitrust case to spur judicial clarification of Colorado trade law. *Business Week* p99-100 Ag 14 '43

Nine companies fined \$77,500 on charges of price-fixing. *Elec W* 119:668 F 20 '43

Rate-making practices assailed; Department of justice charges price-fixing in violation of Sherman antitrust act. *Ry Age* 114:1097-1100 My 29 '43

Truck-railroad rate conspiracy is alleged. *Ry Age* 114:1186-9 Je 12 '43

29 anthracite firms indicted on charges of price fixing. *Coal Age* 48:134+ F '43

PRICE fixing, Government

Price fixing, a will-o'-the-wisp. A. Gray. *Adv & Sell* 35:32+ D '42

PRICE fixing, Resale**See also**

Price cutting

PRICE policies

Cement is target; FTC's newest attack on basing-point systems. *Business Week* p92-4 J1 31 '43

Delivered-price systems under the anti-trust laws. G. H. Sage. *Ind Marketing* 27:22-3+ S; 32-3+ O; 72, 76+ N; 52, 59+ D '42; 28:66, 70+ F '43

Locality price differentials in the western retail grocery trade; Safeway stores. R. Cassidy, Jr. and E. T. Grether. *Harvard Business R* 21 no2:190-206 [Ja] '43

Price flexibility and the level of income. A. Bergson. *R Econ Stat* 25:2-5 F '43

Will your prices be in line? check production costs. L. B. Evans. *Ind Marketing* 28:78+ Ag '43

See also

Cost accounting
Discount, Cash
Price cutting

Price discrimination
Steel—Prices

PRICES

Indirect price increases. M. J. Ulmer. *Monthly Labor R* 55:903-12 N '42

Subsidies or higher prices? Trusts & Estates 76:103-4 F '43

With expanding government debt and higher taxes, looks for higher price levels in post-war era. G. G. Paton. *Comm & Fin Chr* 158:1605+ O 21 '43

See also

Advertising—Rates

Cost of living

Electric rates

Gas rates

Index numbers

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Inflation (finance)

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subjects, e.g.

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Farm produce

Gasoline

Money

Price cutting

Price policies

Public utilities—

Rates

Railroads—Rates

Wages

Prices under various

Newsprint paper

Stocks

World war, 1939-

History

Century of prices. H. M. Tremaine. *Mag of Wall St* 71:686-9+; 72:36-7+ Ap 3-17 '43

Regulation

ABC's of MPR no. 251 for plumbing and sheet metal contractors. *Sheet Metal Worker* 34:28-9 My '43

Administration of premium price plan. J. L. Maury. *Min Cong J* 28:30-1+ D '42

Administration's alternative to rollback program would have been to permit wage increases. E. Blair. *Barron's* 23:4 J1 5 '43

American economy in 1942: commodity prices and the cost of living. C. A. R. Wardwell and R. B. Bangs. *Survey of Cur Business* 23:18-20 Ja '43

Analysis of maximum price regulation 339; rayon hosiery. *Rayon* 24:171-2 Ap '43

And now, construction industry is licensed; new pricing formula set up under MPR-251. *Am Bld* 64:45, 75-7 D '42

Appraisal on prices. *Business Week* p 15-16 D 26 '42

Brake on beef; Vinson tries out nonrigid floors and ceilings, plus sliding-scale subsidies, on live cattle. *Business Week* p14-15 O 30 '43

British and American price control experience. H. Bratter. *Banking* 35:18 Je '43

Brookings study favors distribution of pricing powers among agencies. *Pub Util* 32:244 Ag 19 '43

Canner conflict; OPA plan for 1944 pack. *Business Week* p86+ O 30 '43

Case for subsidies in price control. J. Backman. *Barron's* 23:16 My 10 '43

Ceilings pierced; OPA allows 19 laundries to boost prices but holds down 29 competitors. *Business Week* p97 J1 31 '43

Ceilings pierced; sale of receivership assets at above-ceiling prices. *Business Week* p92 O 16 '43

Closer hemisphere cooperation seen in price control. *For Comm W* 12:17 S 11 '43

Combination of price roll-back with subsidies expected to appease labor unions. E. Blair. *Barron's* 23:4 My 10 '43

Comments on M.P.R. no. 339; rayon hosiery. G. A. Ulaub. *Rayon* 24:173-4 Ap '43

Company stores rated fairly high by OPA. *Coal Age* 48:124-5 Je '43

Congress acts in controversy over standards and labeling; OPA denied authority to require grade labeling of any commodity; statement of W. S. MacLeod before Boren subcommittee. *il Ind Stand* 14:205-10 J1 '43

Cosmetic pricing regulation. *Oil Paint & Drug Rep* 143:3+ My 17 '43

Costs under fire; OPA and WFA to drive down cost-of-living index by buying crops and selling at loss. *Business Week* p16-17 Ag 7 '43

Course of prices in 1943. *Nat City Bank* p3-4 Ja '43

Crisis on the home front; effects of new OPA price regulations and subsidies on retailing profits. L. Stern. *Mag of Wall St* 72:173-5+ My 29 '43

Crude oil prices and conservation. J. D. Gill. *Pet Refiner* 22:143-6 J1 '43; Excerpts. *Oil & Gas J* 42:20+ J1 1 '43

PRICES Regulation *Continued*

- Digest of OPA price regulations affecting construction. *Eng N* 130:614-47 Ap 22 '43
- Drug, cosmetic makers discuss packaged products with OPA. *Oil Paint & Drug Rep* 143:7-4 Ja 11 '43
- Effectiveness of price control. D. D. Humphrey. *Survey of Cur Business* 23:10-15-16 '43
- Emergency price control; text of Act to amend Act of 1942 and executive order. *Fed Res Bul* 28:1080-5 N '42
- European design; stability of living costs in Britain and Germany. *Business Week* p20-4 Mr 13 '43
- Example in butter; principle of fixed area price. *Business Week* p97-8 F 20 '43
- Executive order establishing new price-wage curbs. *Monthly Labor R* 56:376 My '43
- Export price regulations by OPA is revised. *Oil Paint & Drug Rep* 143:3-4 Ap 5 '43
- Gaps in the line; OPA's new formulas for brick and saddlery. *Business Week* p56-7 My 29 '43
- Gen. Max. wins; Circuit court upholds OPA; reduction in size of candy bar enjoined. *Business Week* p78-4 My 22 '43
- Guide to price orders for plumbing, heating industry. *Dom Eng* 160:48-9 D '42
- Haus court ruling in price fixing case. *Comm & Fin Chr* 156:2157 D 17 '42
- How ceiling proves no hit. *il Business Week* p15-16 J1 24 '43
- How government standardization obstructs progress; setting top prices on women's rayon hosiery; ignores cumulative contribution of product differences brought about by advertising. L. D. H. Weld. *Ptr Ink* 204: 21-2 J1 23 '43
- How standards are used in price and rationing control. W. S. MacLeod. *il Ind Stand* 14: 96-9 Mr '43
- Indexes of cost of controlled and uncontrolled goods and services. F. R. Rice. *Monthly Labor R* 56:104-8 Ja '43
- Innocent overcharges held no basis for injunction by OPA. *Comm & Fin Chr* 157: 1597 Ap 29 '43
- Job of price administrator. P. M. Brown. *Paper Tr J* 116:11-13 F 25 '43
- Kitchen gestapo; OPA to double its army of 25,000 volunteer price police. *Business Week* p75-6 S 4 '43
- Labels sneak in; prices set for canned grapefruit juice by grades. *Business Week* p18 Ja 30 '43
- Labor leaders call upon FDR for price roll-back or support of stabilization program will stop. *Comm & Fin Chr* 158:432 J1 29 '43
- Living costs since beginning of retail price control. M. J. Ulmer. *Monthly Labor R* 57:66-81 J1 '43
- Margin control system starts with pork next week; will replace GMPR. *Ptr Ink* 202:74 F 26 '43
- Maximum price regulation 220, on certain rubber commodities. *Rubber Age* 52:164-6-7 N '42
- Middlemen's sectors will be active; developments in the field of commodities. *Barron's* 23:11 Ja 11 '43
- More investigators to check ceiling prices. *Comm & Fin Chr* 157:1888 My 20 '43
- New controls needed to assure success of stabilization program, says Survey. *Comm & Fin Chr* 157:1689 Ap 29 '43
- New products pricing formula issued by OPA. *Oil Paint & Drug Rep* 143:5-4 My 31 '43
- New regulation for construction price control. *Roads & Sts* 56:46-47 N '42; *Dom Eng* 160: 41-4 N '42
- OPA amends 250 price orders to conform with price fixing standards. *Iron Age* 152: 108-4 S 23 '43
- OPA and price ceilings; efforts during 1942. *Oil Paint & Drug Rep* 143:44-4 Ja 11 '43
- OPA eases importers ceilings. *Oil Paint & Drug Rep* 144:4-4 Ag 23 '43
- OPA gets tough. *Business Week* p16-17 F 20 '43
- OPA price ceilings accorded law status in N.Y. state; violators subject to local action. *Comm & Fin Chr* 157:1689 My 6 '43
- OPA roll-back program only way to hold the line. D. H. Humphries. *Comm & Fin Chr* 157:2295 Je 17 '43
- OPA seeks to restore living costs to September 1942 levels. *Comm & Fin Chr* 158: 1019 S 9 '43
- OPA sets policy on private formulas. *Oil Paint & Drug Rep* 142:7-4 D 14 '42
- Out from under; OPA issues list of luxury items on which ceilings are removed. *Business Week* p81-2 My 1 '43
- Packaged drug price ceiling exempts crude botanicals. *Oil Paint & Drug Rep* 143:3-4 My 17 '43
- Pharmaceutical private formula price regulation interpreted. *Oil Paint & Drug Rep* 143:7 Je 21 '43
- Playing price control politics; administration wins on subsidies, but they can't be used for new rollbacks. *Business Week* p15-16 J1 17 '43
- Policing snagged; enforcement of ceilings slowed by limitations imposed by poor man's courts. *Business Week* p63 Ap 3 '43
- President Roosevelt bars further increases in prices and wages to prevent inflation. *Comm & Fin Chr* 157:1385-47 Ap 15 '43
- Price ceiling ruling. *Arch Forum* 77:33-4 D '42
- Price control facing most critical period with inflation danger becoming real. A. W. Zelmek. *Comm & Fin Chr* 158:214 J1 15 '43
- Price control for construction industry. *Sheet Metal Worker* 33:19-4 D '42
- Price control, hemisphere problem. S. E. Harris. *For Comm W* 11:12-13 My 15 '43
- Price control in outline. D. D. Humphrey. *Trusts & Estates* 76:23 Ja '43
- Price control in U.S., Britain and Canada. *Bankers M* 146:463-6 My '43
- Price control of metals. D. H. Wallace. *Min Cong J* 28:27-9 D '42
- Price control: one year. *Survey of Cur Business* 23:6-8 My '43
- Price control—what lies ahead? *Barron's* 22: 6 D 28 '42
- Price control worries in days of yore. A. Gray. *Dun's R* 51:12-13-4 S '43
- Price of price control. P. F. Cadman. *Credit & Fin Management* 44:17-18-4 D '42
- Price regulations. *Sheet Metal Worker* 34: 45-6-4 Ja '43
- Price vs. quality; big merchandisers, cited by OPA, assert MPR 330 won't work. *il Business Week* p92-3 S 25 '43
- Pricing systems through the years; chronology of ITC's major sorties. *Business Week* p92 J1 31 '43
- Problems of food price-fixing. *Nat City Bank* p20-3 F '43
- Problems of national price control. Q. F. Walker. *Comm & Fin Chr* 157:1668-9-4 My 6 '43
- Program to hold down cost of living. P. Brown. *Comm & Fin Chr* 157:1664 My 6 '43
- Quiz on OPA price regulations affecting retailers. *J Retailing* 19:45-50 Ap '43
- Rationing and price-fixing. R. W. Babson. *Comm & Fin Chr* 158:4-4 J1 1 '43
- Retailers urge OPA to make changes for effective price control. *Comm & Fin Chr* 157:1687 My 6 '43
- Roosevelt's Wadi el Akarit; hold-the-line order. *Business Week* p15-16 Ap 17 '43
- Seven angels in price control and rationing. W. Mitchell, Jr. *Trusts & Estates* 75:549 D '42
- Single ceilings; OPA trying out idea of Nation-wide uniform prices. *Business Week* p56 N 28 '42
- Stabilization of cost of living by wage and price control. *Monthly Labor R* 55:917-24 N '42
- Standards and labeling in controversy. *il Ind Stand* 14:140-5 My '43
- Statistical bronco; indecision over price ceilings. *Business Week* p84-4 O 16 '43
- Text of 2d revised maximum export price regulation, effective April 5. *For Comm W* 11:38-41 Ap 10 '43
- Their day in court; Dirksen bill would open U.S. district courts to appeals from OPA's price control rulings. *Business Week* p14-15 O 9 '43
- Up to housewives; OPA's community ceilings mean 1% off food prices if shoppers help. *Business Week* p97-8 My 15 '43
- Wage and price stabilization act must prevail. J. F. Byrnes. *Comm & Fin Chr* 158: 709-4 Ag 19 '43

PRICES—Regulation—Continued

War goods price adjustment policy set. Oil Paint & Drug Rep 143:3+ My 17 '43
 Wartime price control of copper, lead, zinc; premium price plan. J. D. Sumner. Min & Met 24:9-11 Ja '43
 What the price plan recognizes. J. S. Sumner. Min Cong J 28:29-30 D '42
 Why price control? P. F. Cadman. il Am Inst Banking Bul 25:16-17 Ja '43
 With respect to OPA; price-control is a necessary evil; abstract. C. Wilcox. Oil Paint & Drug Rep 143:52-3 My 31 '43

See also

Price discrimination
 Price fixing, Government

also United States—Price administration, Office of

Australia

Subsidies introduced into Australian price control. For Comm W 11:22 My 1 '43

Brazil

Establishment of price ceiling in Brazil, 1943. W. J. Donnelly. Monthly Labor R 56:610-11 Mr '43

Canada

Canada's price control works. K. R. Wilson. Rock Prod 45:76 N '42
 Canadian subsidies ease pressure on prices. J. Backman. il Dun's R 51:14-20+ Ap '43
 Canadian subsidy policy and price control. J. Backman. Trusts & Estates 77:199 S '43
 Ceilings eased; Canada lets primary prices rise. Business Week p72+ F 20 '43
 Effects of Canadian price ceiling. Monthly Labor R 55:1155-60 D '42
 Experience of last four years teaches Canada that changes are necessary in price control setup. K. R. Wilson. Inland Ptr 110:27-8 Ja '43
 Subsidies in British and Canadian price control. J. H. Barkmeier and W. R. Maroney. For Comm W 13:6-10 O 30 '43
 Wider subsidies; Ottawa plans to extend payments to meats. Business Week p82+ My 29 '43

China

New price-control procedure in Chungking. For Comm W 13:22 O 23 '43

Colombia

Price-control legislation in Colombia, 1943. Monthly Labor R 57:40-1 Jl '43

Germany

Controlling prices. Economist 143:545 O 31 '42
 German Europe; controlling prices. Economist 143:545 O 31 '42

Great Britain

British price control. N. Crump. Comm & Fin Chr 157:1498 Ap 22 '43
 Price control in Britain. Economist 145:145-6 Jl 31 '43
 Rationing and price control in Great Britain. J. Backman. Trusts & Estates 77:25 Jl '43
 Subsidies in British and Canadian price control. J. H. Barkmeier and W. R. Maroney. For Comm W 13:6-10 O 30 '43

Mexico

Cost of living and price regulation in Mexico. A. W. Patterson. Monthly Labor R 57:244-50 Ag '43

New Zealand

Stabilisation in New Zealand. Economist 144:269 F 27 '43
 Wage and price stabilization in New Zealand. Monthly Labor R 57:250-4 Ag '43

South Africa

South Africa's wartime price controls. R. J. Barr and M. Neilan. For Comm W 12:3-4+ Ag 7 '43

South America

Price control in South America. S. E. Harris. il For Comm W 13:12-13+ O 23 '43

Statistics

New index of retail prices, 1939-43. Survey of Cur Business 23:28 Ag '43

Price deflators for consumer commodities and capital equipment, 1929-42. H. Shavell. Survey of Cur Business 23:13-21 My '43
 Retail prices. Published in Monthly labor review
 Retail prices, wholesale prices, 1938-1941. Survey of Cur Business 1942 Sup p17-20 [supplemented in monthly numbers]
 Wholesale price indexes of chemicals, drugs, and all commodities, 1915-1943; chart. Chem & Eng N 21:1450 S 10 '43

See also

Cost of living—
 Statistics

Prices, Wholesale—
 Statistics

Brazil

Establishment of price ceiling in Brazil, 1943. W. J. Donnelly. Monthly Labor R 56:610-11 Mr '43

*Canada**See also*

Prices—Regulation
 —Canada

Colombia

Price-control legislation in Colombia, 1943. Monthly Labor R 57:40-1 Jl '43

Great Britain

British price control. N. Crump. Comm & Fin Chr 157:1498 Ap 22 '43
 Economist index number of wholesale prices and British wholesale prices; yearly averages, 1929-1942, monthly, 1942. Economist 144:sup27 Mr 13 '43
 Prices of non-food goods. Economist 144:600-1 My 8 '43
 Rise in prices since 1938. Economist 144:536 Ap 24 '43

India

India's price problems. Economist 143:800-1 D 26 '42

Mexico

Cost of living and price regulation in Mexico. A. W. Patterson. Monthly Labor R 57:244-50 Ag '43

Near East

Inflation in 3 countries of the Middle East. K. C. Dougall. For Comm W 12:12-15+ S 18 '43

United States

Current market quotations; chemicals and related materials (listed alphabetically by name of product, with indication of war-time status). Published in weekly numbers of Oil, paint and drug reporter

Price control; one year. Survey of Cur Business 23:6-8 My '43

Retail prices of food and coal, 1941. U S Bur Labor Statistics Bul 707:1-35; pa 10c Supt. of doc. '42

Supply and price situation, 1942. Fed Res Bul 29:7-12 Ja '43

See also United States—Price administration, Office of

PRICES, Wholesale*Statistics*

American economy in 1942: commodity prices and the cost of living; with figures for earlier years. C. A. R. Wardwell and R. B. Bangs. Survey of Cur Business 23:18-20 Ja '43

Average percentage monthly change in wholesale prices, May 1942-March 1943; chart. Survey of Cur Business 23:6 My '43

Daily wholesale price index of 30 basic commodities. Published in monthly numbers of Dun's statistical review; summary in Dun's review

Economist index number of wholesale prices and British wholesale prices; yearly averages, 1929-1942, monthly, 1942. Economist 144:sup27 Mr 13 '43

Indexes of wholesale prices in individual countries, 1939-1943; charts. Nat City Bank p70 Je '43

Price movements in principal countries; all commodities, 1926, 1930-1941, and monthly, Nov. 1941-Nov. 1942. Fed Res Bul 29:106 Ja '43 [cont monthly]

PRICES, Wholesale—Statistics—Continued

Weekly wholesale commodity price index of the National fertilizer association. Published in weekly Thursday numbers of Commercial & financial chronicle

Wholesale prices. Published in Monthly labor review

Wholesale prices; all commodities, farm products and foods, 1800-Jan. 1943; charts. Survey of Cur Business 23:2 Mr '43

Wholesale prices and the cost of living. Survey of Cur Business 23:11-12 Jl '43

Wholesale prices, December and year 1942. Monthly Labor R 56:383-90 F '43

Wholesale prices, groups of commodities in United States, Canada, United Kingdom, Germany, 1926, 1930-1941 and monthly Nov. 1941-Nov. 1942. Fed Res Bul 29:106 Ja '43 [cont monthly]

Wholesale prices, January-June 1942. U S Bur Labor Statistics Bul 718:1-52; pa 10c Supt. of doc. '42

Wholesale prices, 1938-1941. Survey of Cur Business 1942 Sup p18-20 [supplemented in monthly numbers]

Wholesale prices of all commodities for selected belligerent countries, 1939-Jan. 1943; chart. Survey of Cur Business 23:2 Ap '43

United States

Prices in two wars; chart. Business Week p 13 D 26 '42

Wholesale prices by groups of commodities, yearly 1929-1941, by months and by weeks, 1942. Fed Res Bul 29:90 Ja '43 [cont monthly]

PRIESTLEY, Joseph, 1733-1804

Rev. Dr. Joseph Priestley. A. Kent. Chem & Ind 62:71-2 F 20 '43

PRIMATES

See also

Gorillas

PRIME movers. See Diesel engines; Gas and oil engines; Steam engines; Steam turbines; Windmills

PRIMEVEROSE

Preparation of β -primeverose heptaacetate and β -vicianose heptaacetate. C. M. McCloskey and G. H. Coleman. bibliog Am Chem Soc J 65:1778-80 S '43

PRINCE, David Chandler, 1891-

Portrait. Business Week v32 Ja 2 '43

PRINCETON, New Jersey

Sanitary affairs

Eight years' operation of Princeton's incinerator; with cost data. I. R. Riker. il Pub Works 74:14-16+ F '43

Sewerage

Landscaping sewage treatment plants and sewers. I. R. Riker. il Pub Works 74:17-18+ O '43

Streets

Maintenance of bituminous concrete and oil penetration urban roads; borough of Princeton. I. R. Riker. il Pub Works 74:22-3+ Mr '43

PRINTERS

Earnings and hours in book and job printing, January 1942; hourly earnings. E. B. Harris and W. C. Linn. Monthly Labor R 56:785-801, 1024-41 O-N '42

Effect of a wage increase on printers' pay-rolls. Inland Ptr 110:26-7 N '42

Employers discuss manpower, wages; Printers national association. Inland Ptr 110:21-2 N '42

Employers move to keep workers from being forced into war plants. Inland Ptr 110:38 Mr '43

Employers weigh apprenticeship difficulties; discussion at Printers national association meeting. Inland Ptr 112:35-8 O '43

Handicapped workers can help beat labor shortage. H. R. Wallace. il Inland Ptr 112:61-3 O '43

Manpower is printers' most pressing problem. Inland Ptr 110:21-7 Ja '43

Printers to know; facts about, and a brief message from sixty leading printers to enrich 60th anniversary issue. pors Inland Ptr 112:45-52 O '43

Shortage of skilled workers demands new training methods; three sources available with which to replace experienced men. R. R. Karch. Inland Ptr 110:33-6 D '42

Suppose the printing industry is declared essential? what should be the procedure of a printer? H. R. Wallace. Inland Ptr 111:25-7 My '43

These exponents of one type now outstanding stylists; D. Silve and H. Lauck. R. N. McArthur. Inland Ptr 111:42 My '43

Union wages and hours in the printing trades, June 1, 1942. Monthly Labor R 56:558-84 Mr '43

See also

Women as printers
also International association of printing house craftsmen

Great Britain

Printers in Britain must supply 20,000 more war workers. Inland Ptr 111:45-6 Jl '43

See also British federation of master printers

PRINTERS national association

Annual meeting, French Lick, Indiana, Sept. 30-Oct. 1. Inland Ptr 112:35-8 O '43

Convention, Chicago. Inland Ptr 110:21-2 N '42

PRINTERS' rollers. See Rollers. Printers'

PRINTING

Beauty and the book. O. F. Ege. Special Lib 34:373-8 S '43

Developments in the graphic arts, 1942. M. S. Kantrowitz. bibliog (60 titles) Paper Tr J 116:35-42 My 27 '43

Pioneer printing among the Indians of Canada. J. T. Faris. il Inland Ptr 110:60 N '42

See also

Advertisements

Advertisements—

Typography

Book industry and

trade

Calendars

Christmas printing

Color printing

Electrotyping

Engravings—Print-

ing

House organs—

Printing

Ink

Paper

Paper money—Print-

ing

Photography

Posters

Printing offices

Printing trade

Proofreading

Publishing

Silk screen printing

Textile printing

Bibliography

Index to graphic arts printing processes. H. A. Steeves. N Y Pub Lib Bul 47:323-44 My '43

Design

Modern design and typography does a job; Libby, McNeill & Libby Kitchen chatter. L. Barfuss. il Inland Ptr 111:34-5 My '43

Exhibitions

Books-by-offset exhibit shows advances in this field. Inland Ptr 111:29-30 Je '43

Periodicals**Bibliography**

Books and printing; a selected list of periodicals, 1800-1942. C. F. Ulrich and K. Kip. 24p pa \$5 William Edwin Rudge, Woodstock, Vermont '43

Prize contests

Judges make their selections and pick the prize winners of the Inland Printer letter-head contest! il Inland Ptr 110:42-5 Mr '43

Terminology

Obliging Mr Bishop; two authorities define printing terms. C. E. Funk; D. Oliver. Ptr Ink 202:52 Ja 29 '43

PRINTING, Offset

Books-by-offset exhibit shows advances in this field. Inland Ptr 111:29-30 Je '43

Chicago printer decides to major in the off-set field; I. S. Berlin company consolidates equipment from two plants. A. G. Fegert. il Inland Ptr 111:25-9 S '43

PRINTING, Offset—Continued

Further experimental study of beater practice in the manufacture of offset papers. C. G. Weber, M. B. Shaw and M. J. O'Leary, J Research Nat Bur Stand 30:267-79 Ap '43; Same. Paper Tr J 117:35-40 S 23 '43

Preparation of copy for offset. E. St John. Inland Ptr 112:54-6 O '43

Templet duplication by dry offset printing; abstract. W. A. Collins and J. T. Barnes. Automotive & Aviation Ind 87:48 N 15 '42

PRINTING, Practical

Anilin inks and drying systems. F. E. Boughton. diag Inland Ptr 110:54-6 Mr '43

Anilin printing; a link in the chain of complete service. E. E. Boughton. Inland Ptr 110:73-6 D '42; 41-4 Ja '43

Hints for printing on the gummed side. Inland Ptr 111:50 Ag '43

Important facts about anilin rolls and fountains. F. E. Boughton. Inland Ptr 111:51-2 My '43

Ink drying as affected by various paper stocks. M. J. Leckey. Paper Tr J 116:29-32 My 20 '43; Same cond. Paper Ind 25:800+ O '43

Relation of paper to printing on multicolor high-speed presses. L. W. Claybourn. Paper Tr J 116:25-6 Ap 29 '43

See also

Advertisements—	Ink
Typography	Printing offices
Color printing	Printing plates
Electrotyping	Printing trade
Engravings—Print-	Proofreading
ing	Word division

Copy preparation

Preparing a manuscript for publication. J. Sasso. J Chem Educ 20:540-1 N '43

Remember costs in marking proof. E. N. Teall. Inland Ptr 111:32-3 My '43

Costs

Effect of a wage increase on printers' pay-rolls. Inland Ptr 110:26-7 N '42

Estimates

Better business management under price ceilings; confusion between mark-up and margin. A. C. Kiechlin. Inland Ptr 110:29-30 N '42

Layout

There's economy in rough layout. S. R. Johnson. Inland Ptr 111:36 Ag '43

See also

Advertisements—
Layout

Presswork

'Ghost streaks in inking. Inland Ptr 111:54 S '43

Instructing women workers in press feeding. E. St John. Inland Ptr 111:25-7 Ap '43

Motting a common worry; here are some helps. E. St John. Inland Ptr 110:33 N '42

Pressroom. E. St John. Inland Ptr 110:53-5 Ja '43 [cont monthly]

See also

Rollers, Printers'

PRINTING, Public*See also*

United States—
Government print-
ing office

PRINTING associations

See also International association of printing house craftsmen; International trade composition association

PRINTING house craftsmen, International association of. *See* International association of printing house craftsmen

PRINTING, ink. *See* Ink**PRINTING machinery**

Modernization still possible even though curbed by war. J. E. Bullard. Inland Ptr 111:33-5 Ap '43

Wartime hints about care and maintenance of typographic numbering machines. Inland Ptr 111:25-8 Jl '43

See also

Linotype
Printing presses

Control

Super-sight with phototubes; printed designs arrive at particular point at particular instant; other industrial uses. J. Markus. Inland Ptr 169:214-16 N '43

PRINTING machinery industry

American type foundry sets up delivery agreement for postwar orders. Ind Market- ing 23:74 O '43

Advertising

Shows printers how graphic arts can support wartime drives; Miehle printing press and mfg. co. Inland Ptr 112:48-50 Ap 1 '43

Service

Guide helps printers design ad pieces for war effort; Miehle printing press company. Inland Ptr 112:86+ Mr 26 '43

How to hold clinics that click! Mergenthaler linotype company helps operators and repair men keep machines going. W. B. Patterson. Inland Ptr 112:22, 88-9 Ag 20 '43

PRINTING offices

Success story in zincograph. Inland Ptr 111:47-8 S '43

Air conditioning

Makeshift air conditioning. Inland Ptr 112: 71-2 O '43

Electric equipment

How to make electrical motors and controls last throughout the war. Inland Ptr 111:37-41 Je '43

Employees

Instructing women workers in press feeding. E. St John. Inland Ptr 111:25-7 Ap '43

Manpower is printers' most pressing problem. Inland Ptr 110:21-7 Ja '43

Texas printer reports success with women workers. Rein company, of Houston. C. N. Tunnell. Inland Ptr 111:23-5 Ap '43

See also

Printers
Printing trade—
Salesmen

Equipment

New York daily news; rotogravure printing plant recovers ink-solvent, employing activated carbon adsorption method. T. F. J. Moffett. flow diag Inland Ptr 110:40-6 Ap '43

Maintenance and repair

Care and maintenance of printers' rollers. Inland Ptr 111:67-8, 70, 72 Ap '43

Management

Better business management under price ceilings. A. C. Kiechlin. Inland Ptr 110:69-70 O; 29-30 N; 42-4 D '42

14 tips on getting more efficiency out of women employees. L. S. Flint. Inland Ptr 110:23 Ja '43

Letterpress industry can solve its wartime problems. A. T. Metcalfe. Inland Ptr 110: 57-9 Mr '43

Plan the job before it goes to press. G. Greenberger. Inland Ptr 112:42-4 O '43

Plant superintendent is the key to profits in printing. M. G. Tucker. Inland Ptr 111: 19-21 Ag '43

Printers patriotic checking chart. Inland Ptr 110:62 N '42

Proper cut-filing system obviates press delays. H. Mann. Inland Ptr 110:62-4 D '42

Records

Directory for machine magazines. Inland Ptr 110:61 Ja '43

Job-scheduling board saves printer many delays. Inland Ptr 111:32 Jl '43

Safety measures

Women go to bat; safety program of W. B. Conkey company. L. Stemp. Inland Ptr 112: 86:15-16 O '43

PRINTING offices, Private

Brochure sets forth the private plant as an engineer finds it. Inland Ptr 110:59-60 Mr '43

PRINTING plates

Anilin printing plates developed from crude forms. F. E. Boughton. *il Inland Ptr* 110:41-4 Ja '43
 Electrotypers find new methods; use of iron in shells and plastic in molding. G. C. Meston. *Inland Ptr* 111:37-8 S '43
 New plastic-mold electros may change post-war copy handling. *Ptr Ink* 205:93 O 29 '43

PRINTING plates, Plastic

Insert printed from molded plastic plates; colored plate. *Inland Ptr* 110:28 Mr '43
 News of the Gulf; with plastic plates from U.S., army prints overseas editions of Times and Time in Iran. *Business Week* p56+ S 25 '43
 Photolithographic printing plates. *il Mod Plastics* 20:62-3+ J1 '43
 Plastic for copper found satisfactory and cheaper. *Business Week* p62+ My 1 '43
 Plastic lithographic printing plates made from polyvinyl alcohol resin. *Science* 97:sup12 Ap 2 '43
 Plastic printing plates manufactured by the Plastolith company from polyvinyl alcohol resin. *Sci Am* 169:12-13 J1 '43
 Results from new plastic plates equal to electrotypes. H. B. Hillman. *il Inland Ptr* 111:34-6 Je '43
 Thermosetting printing plates. *il Mod Plastics* 20:67-8+ My '43

PRINTING plates, Rubber

Anilin printing plates developed from crude forms. F. E. Boughton. *il Inland Ptr* 110:41-4 Ja '43

PRINTING presses

Will the press of the future make your machines obsolete? *il Inland Ptr* 111:50-2 J1 '43

See also

Rollers, Printers'

PRINTING processes, Photographic. *See* Photography—Printing processes

PRINTING rates. *See* Printing trade—Rates

PRINTING research

Electrotypers find new methods; use of iron in shells and plastic in molding. G. C. Meston. *Inland Ptr* 111:37-8 S '43

PRINTING trade

Chicago printer decides to major in the off-set field; I. S. Berlin company consolidates equipment from two plants. A. G. Fegert. *il Inland Ptr* 111:25-9 S '43

Craftsmen discuss war problems at convention, Memphis, Aug. 10-12. *Inland Ptr* 111:30-7 S '43

Graphic arts victory committee meets with officials to discuss essential printing. *il Inland Ptr* 111:36-7 Ap '43

Income tax must be considered throughout the year. A. C. Kiechlin. *Inland Ptr* 111:38-40 Ap '43

Keeping-in-touch printing is a new market! printing which helps our boys adjust themselves to military life and arranges for their return to civilian life. C. V. Morris. *il Inland Ptr* 110:31-4 F '43

Presentation of sponsored magazine. J. C. Gries. *il Inland Ptr* 110:33-6 Ja '43

Printing industry in immediate post-war period; abstract. S. H. Slichter. *Inland Ptr* 112:35-7 O '43

Professional treatment helps the sponsored magazine. J. C. Gries. *il Inland Ptr* 110:27-30 F '43

Shows printers how graphic arts can support wartime drives; Miehl printing press and mfg. co. *il Sales Management* 62:48-50 Ap 1 '43

Small plants, too, can profit by selling house-organ contracts; New Mexico, a state-sponsored publication. F. Kutnewsky. *il Inland Ptr* 111:27-8 Ap '43

Sponsored magazines; good business for wide-awake printers. J. C. Gries. *il Inland Ptr* 110:37-40 D '43

Trade groups get behind victory campaigns. *Inland Ptr* 110:23-4 N '42

Will a shortage of paper shackle printing in U.S.? F. McVoy. *Inland Ptr* 110:28 N '42

Will printing be concentrated? H. R. Wallace. *Inland Ptr* 110:29-32 D '42

Accounting

Better business management under price ceilings. A. C. Kiechlin. *Inland Ptr* 110:69-70 O; 29-30 N; 42-4 D '42

Computing profit on investment is proper method. A. C. Kiechlin. *Inland Ptr* 111:37-9 My '43

Depreciation records are highly important. A. C. Kiechlin. *Inland Ptr* 110:38-40 Ja '43

Keep your overhead under your thumb today. A. C. Kiechlin. *Inland Ptr* 111:43-5 S '43

Police your costing system with adequate control. A. C. Kiechlin. *Inland Ptr* 112:39-41 O '43

Reserves for war losses should be set up now. A. C. Kiechlin. *Inland Ptr* 111:31-3 Je '43

Watch out for inflation of the balance sheet; eight factors. A. C. Kiechlin. *Inland Ptr* 111:29-32 J1 '43

Advertising

Printer's own advertising. F. Rundell. *Inland Ptr* 110:58-9 F '43

Salesman's corner; advertising to meet new buying habits. F. Rundell. *Inland Ptr* 111:30-1 J1 '43

Salesman's corner; postwar buyers of printing, returned soldiers. F. Rundell. *Inland Ptr* 112:68 O '43

Typographic clinic; Poole printing co. folder. H. N. King. *il Inland Ptr* 111:46-7 Ap '43

Advertising service

Instructional material logical field for more wartime printing sales. J. M. Trytten. *il Inland Ptr* 110:34-5 F '43

Finance

Printers must reconsider operating ratios. A. C. Kiechlin. *Inland Ptr* 110:37-9 F '43

Rates

You can convince some customers that there's value in quality. J. C. Gries. *Inland Ptr* 111:24 J1 '43

Regulation

L-241, multiples work of printers; quota setting brings up questions. *Inland Ptr* 110:35-6 Mr '43

Restrictions on printing and how they are being met; ingenuity of industrial advertising. H. Kaufman. *Ind Marketing* 28:51, 54+ Ap; 72, 74+ My '43

Salesmen

Here's problem that confronts all printing salesmen; just how far should you go to keep the customer happy who insists on spoiling a good job? B. Wiley. *Inland Ptr* 111:42 Je '43

How are various types of selling standing up under war conditions? F. Rundell. *Inland Ptr* 111:29-31 Ap '43

Individualism is still big help in selling printing; case studies of twelve printers. A. G. Fegert. *Inland Ptr* 110:29-34 Mr '43

It will pay you to know what others are selling. J. C. Gries. *Inland Ptr* 111:24 Je '43

Salesman's corner. F. Rundell. *Inland Ptr* 110:56-7 Ja '43 [cont monthly]

Some valuable things I have learned about selling printing. J. C. Gries. *Inland Ptr* 111:31 My '43

Treat customer as an account rather than just another printing order. J. C. Gries. *Inland Ptr* 112:36-7 O '43

What a new advertising manager learned about space salesmen, printers, etc. A. Tyro. *Ptr Ink* 202:40+ Mr 12 '43; Reply. X. Perience. 203:70+ Ap 16 '43

Australia

Australian printers criticize government. *Inland Ptr* 111:46 J1 '43

Great Britain

British printers look ahead to post-war reconstruction. *Inland Ptr* 111:57-8 Je '43

How overseas printers carry on despite many war restrictions. *Inland Ptr* 110:36 F '43

See also

Printers—Great Britain

PRIORITIES and allocations, Industrial

Amendment no. 2 changes priorities regulation 11 on cancelling orders. Credit & Fin Management 45:20 Ja '43

Chemical allocations for January. Oil Paint & Drug Rep 143:7-+ Ja 25 '43 [cont month-ly]

Chemical allocations made for December. Oil Paint & Drug Rep 142:3-+ D 14; 3-+ D 21 '42

Chemicals allocated for November. Oil Paint & Drug Rep 142:3-+ N 23 '42

Expediting in wartime. S. Y. Johnson. Harvard Business R 21 no 3:344-57 [Ap] '43

Fats and oils allocations for final quarter. Oil Paint & Drug Rep 144:7 O 4 '43

How to get a priority. Electronics 16:73 Ja '43

How to order integral buses. Bus Transportation 22:42-3 Ap '43

Materials control in Great Britain; abstract. H. K. McCook. Management R 32:214-16 Je '43

New procedure for obtaining U.S. materials and equipment; Canadian series of application and authorization forms. W. E. Uren. Roads & Bridges 81:34, 54, 56-+ Ag '43

Priorities, allocations, prices; information on Controlled materials plan and Production requirements plan; indexes and digests of orders, forms and price schedules; personnel and directories of administrative bodies; revised as of May 4, 1943. Steel 112:1-48 sec 2 My 10 '43 [revisions and additions cont in weekly numbers]

Priorities problems. Elec W 119:453 F 6 '43 [cont twice a month]

Round up on construction control; Project requirements plan. Arch Rec 92:8 N '42

Simplified CMP and priorities guide. Iron Age 151:1-28 sec 2 Ap 29 '43

War materials control. Oil Paint & Drug Rep 143:42-+ Ja 11 '43

WPE consolidates materials functions. Oil Paint & Drug Rep 142:3-+ N 16 '42

WPE penalizes priorities violators. Oil Paint & Drug Rep 142:3-+ D 28 '42

Wartime guides for your business; how to obtain critical materials under FRP. W. H. Hillyer. Barron's 23:7 Ja 18 '43

Wartime guides for your business; meaning and use of priorities. W. H. Hillyer. Barron's 23:8 Ja 4 '43

Wartime guides for your business; streamlining your flow of materials. W. H. Hillyer. Barron's 23:11 F 8 '43

Wartime guides for your business; three major alternatives under present conditions. W. H. Hillyer. Barron's 23:9 F 15 '43

See also
Tires, Automobile—
Rationing
also United States—War production board—Controlled materials plan

Canada

New priorities procedures. Can Chem & Process Ind 27:449 Ag '43

New priority plan for Canada; modified Controlled materials plan. Roads & Bridges 81:48A, 48D F '43

Public utilities affected by new Canadian priorities scheme; Controlled materials plan as modified for use in Canada. Water & Sewage 81:16-18 F '43

PRISM spectrograph. See Spectrograph

PRISMS

Analysis of errors in a reflecting prism. P. W. Stevens. diags Opt Soc Am J 33:74-8 F '43

Binoculars in mass; Universal camera corp., New York city. il Fortune 27:134-5 Je '43

Hobby goes to war; amateur telescope makers make roof prisms for telescope sights. A. G. Ingalls. il Sci Am 168:202-5 My '43

Monochromator using a large water prism. C. V. Cannon and O. K. Rice, bibliog diags R Sci Instr 13:513-14 D '42

Prisms. C. G. Wates. diags Sci Am 168:48 Ja '43

Roof prisms; technical details. A. G. Ingalls. il Sci Am 168:238-40 My '43

PRISON industries

Convicts in war work; abstract. Management R 32:281 Ag '43

Prisoners at work; state prisons doing \$10,000,000 business in war goods. Business Week p38 S 11 '43

PRISON labor. See Convict labor

PRISONERS of war

Japanese executed captured American flyers, President reveals. Comm & Fin Chr 157: 1596 Ap 29 '43

Men of science-prisoners of war service of the Y.M.C.A. J. E. Raepfel. Special Lib 34:20-2 Ja '43

See also

World war, 1939—

Prisoners and pris-

ons

Employment

Army to use war prisoners for non-military projects. Eng N 130:849-+ Je 10 '43

Conditions of employment of prisoners of war. Int Labour R 47:169-96 F '43

Conditions of employment of prisoners of war. Monthly Labor R 56:391-5 My '43

Manpower boost; Axis prisoners to work on U.S. farms and on levee repairs. il Business Week p20-+ My 29 '43

Nazis hoe cotton in Texas camp. il Business Week p18 Je 19 '43

War prisoners, a problem in labor utilization. il Business Week p20 N 6 '43

PRISONERS of war, Returned**Rehabilitation**

Economic rehabilitation of prisoners of war in France. Int Labour R 48:434-46 O '43

PRISONS

Prison victory garden; New Mexico prison farm. C. Holbrook. il Comp Air M 48:6987 Mr '43

Refrigeration for a state prison; Wisconsin's state prison, Waupun. Refrig Eng 46:179 S '43

PRIVATE brands

Victory brand soap bobs up in Rex Tugwell's Puerto Rico. Ptr Ink 201:26 D 25 '42

What has happened to private label brands? I. Phillips. Ptr Ink 205:91 O 15 '43

See also

Advertising, Na- Sales policies
tional Trade marks
Marketing Trade names

PRIVATE printing plants. See Printing of-
fices, Private

PRIVATE schools

School in the Adirondacks; North country school, Lake Placid. il plans Arch Rec 92: 28-35 D '42

PRIZES

Recommendations of joint committee on rural sanitation, rural sewage disposal, Dec. 1942. diags Pub Health Rep 58:441-8 Mr 12 '43

PRIZE contests

Attendance contest for weekly prizes combats absenteeism. il Ptr Ink 203:29 Ap 23 '43

F.T.C. says contests promote monopoly; cites Brunswick-Balke-Collender company for 1937 sweepstakes. Ptr Ink 201:74 D 18 '42

Time for victory; Helbros watch co. in nationwide contest. Sales Management 52:26 Ap 1 '43

See also
Advertising—Prize Printing—Prize
contests tests

PRIZES. See Rewards, prizes, etc.

PROBABILITIES

Probability-integral of the t-function. U. R. Evans. Engineering 156:295 O 8 '43

Probability of obtaining potentially dangerous pools of human serum or plasma. H. A. Davis and G. R. Meneely. bibliog Science 96:468-70 N 20 '42

Statistical testing of business-cycle theories. T. Haavelmo. R Econ Stat 25:13-18 F '43

PROBABILITIES—Continued

Stochastic problems in physics and astronomy; probability methods in stellar dynamics, S. Chandrasekhar, *diags Rs Mod Phys* 15:1-39 bibliog(p87-9) Ja '43

See also

Business forecasting Least squares
Frequency distribution (statistics) Sampling (statistical methods)

PROBATE law

Chartered probate lawyer degree. *Trusts & Estates* 76:239 Mr '43

Drafting a model probate code. R. G. Patton. *Trusts & Estates* 77:264 S '43

Judicial council movement; its relation to trust and estate law. F. W. Grinnell. *Trusts & Estates* 76:289-92 Mr '43

Soldiers' and sailors' wills. E. P. Griffin. *Trusts & Estates* 77:263 S '43

State legislation affecting trusts and estates. E. R. Lewis. *Trusts & Estates* 77:237-45 S '43

Trust and probate decisions, 1942-1943. W. P. Reeve, 3d. *Trusts & Estates* 77:246-50 S '43

See also

Executors and administrators Inheritance tax Wills

Bibliography

Trust and probate literature, 1942-1943. P. P. Lacovara. *Trusts & Estates* 77:251-62 S '43

PROCAROTENE

Spectral characteristics and configuration of some stereoisomeric carotenoids including polyene and pro-y-carotene. L. Zechmeister and others. *bibliog Am Chem Soc J* 65:1940-51 O '43

PROCESS butter. *See* Butter, Renovated**PROCESSED limestone association**

Ohio producers promote use of agstone. *il Rock Prod* 46:59-60 My '43

PROCTER and Gamble company

Acquitted in trade secret case. *Comm & Fin Chr* 157:644-5 F '43; *Oil Paint & Drug Rep* 143:42 F '43

Battle of the suds; court directs acquittal of P. & G. *Business Week* p100-2 F '43

Suit started. *Comm & Fin Chr* 157:557 F '43

Three soap firms fined on price fixing charges. *Comm & Fin Chr* 156:2309 D '42

Upheld in Lever patent suit. *Oil Paint & Drug Rep* 143:7 Mr '43; *Comm & Fin Chr* 157:1089 Mr '43

PROCUREMENT and assignment service. *See* Physicians**PRODUCE trade**

Big butter-and-egg man; saga of Carl A. Swanson. *il Fortune* 28:122-5+ O '43

See also

Dairy products Fruit trade
Farm produce Grain trade
Food industry and trade Vegetables

also individual products, e.g. Butter; Eggs

PRODUCER gas. *See* Gas, Producer**PRODUCTION**

ATU production enquiry; reasons for and factors retarding production, April-September 1942. *Economist* 144:507 Ap '43

How to get production back on schedule. C. E. Wilson. *il Factory Management* 101:82-6 S '43

Industrial production nearing its peak? *Comm & Fin Chr* 157:2163+ Je '43

Innovations. Q. Lange. *R Econ Stat* 25:19-25 F '43

Measurement of capacity utilization of existing plant facilities. I. H. Siegel. *Am Stat Assn J* 37:430-6 D '42

Outlook for national product and national income in 1943. *Survey of Cur Business* 23:5 Mr '43

People in war production; digest, with commentary, of a British study. C. S. Stoccombe. *Personnel J* 22:154-71 N '43

Production for civilians. *Fed Res Bul* 29:288-9 Ap '43

Production for war and post-war. *il Factory Management* 101:81-184 Ag '43

Production function for Canadian manufacturers. P. Daly and P. H. Douglas. *Am Stat Assn J* 38:178-86 Je '43

Production paces the war. C. E. Wilson. *Mech Eng* 65:792-4 N '43

Revolution in mass production; full utilization of machines that move materials will determine the shape of our postwar industry. *il diags Fortune* 27:130-5+ F '43

Should we fear inflation—or deflation? productive power promises huge supplies after the war. J. Hirsch. *Barron's* 23:3 S '43
War miracle, 1944 output. *Business Week* p15-17 O 2 '43

See also

Economics Labor productivity
Efficiency, Industrial Labor requirements
Factory management for production
Industrial mobilization Manufactures Planning

Statistics

American economy in 1942: industrial production; with comparisons for earlier years. C. A. R. Wardwell and R. E. Bangs. *Survey of Cur Business* 23:8-11 Ja '43

Business indexes; industrial production; construction contracts, employment, etc.; index totals, 1919-1941, monthly Aug. 1939-Dec. 1942. *Fed Res Bul* 29:75 Ja '43 [cont monthly]

Estimates of national output. M. Hoffenberg and M. S. Lewis. *R Econ Stat* 25:107-13 My '43

Impact of the war upon smaller manufacturing plants. H. R. Bowen. *Survey of Cur Business* 23:19-24 Ji '43

Industrial production, by industries (adjusted and unadjusted indexes), Oct. 1941-Nov. 1942. *Fed Res Bul* 29:76-9 Ja '43 [cont monthly]

Industrial production, 1938-1941. *Survey of Cur Business* 1942 Sup p7-13 [supplemented in monthly numbers]

Industrial production, quarterly averages, 4th quarter, 1941-1943, 1st quarter, 1943; chart. *Survey of Cur Business* 23:4 My '43

National income and national product in 1942. M. Gilbert and G. Jaszsi. *tables Survey of Cur Business* 23:10-26 Mr '43

National product and income in the first half of 1943. G. Jaszsi. *Survey of Cur Business* 23:9-14 Ag '43

Production and manpower. *Survey of Cur Business* 23:3-5 Ji '43

Production for civilian and war use in selected nondurable-goods industries; 1941 and 1942; chart and tabulation. *Survey of Cur Business* 22:6-7 N '42

Production for civilian use of selected goods in 1942 and 1943, and goods which will not be produced in 1943; charts. *Survey of Cur Business* 23:6 F '43

Revised measure of industrial production. *Survey of Cur Business* 23:6-8 O '43

Revision of industrial production index. *Fed Res Bul* 29:940-84 O '43; Excerpts (tables). *Survey of Cur Business* 23:18-20 D '43

What Hitler missed; German production compared with United States and Great Britain. *Business Week* p111 Ag 14 '43

PRODUCTION committees. *See* Employees' representation in management**PRODUCTION control**

Bell's production methods and their advantages. O. L. Woodson. *il Aero Digest* 43:147+ Ji '43

Combined forms to save writing and improve control; Sheffield corporation, Dayton, Ohio. *il Am Business* 13:23-6 Ap '43

Constant-motion line speeds assembly, saves space; wing panels at Bell aircraft corporation. *il Factory Management* 101:122-3 S '43

Efficient production management achieved by careful controls. C. H. Speck. *il Aero Digest* 42:184-6, 207-8 Ap '43

How to reduce loom stoppages. A. R. Kandler. *diag Textile World* 93:106-7 F '43

Machine load board keeps plant in balance. E. J. Keenan. *il Factory Management* 101:82-3+ F '43

Monthly work schedules dramatized by unique production board; Marlite wall panels and Marstag molding. *il Marine Eng* 48:190-1 My '43

PRODUCTION control—Continued

- Plant procedure for expediting war production; Alden products company. *diags Electronics* 16:60-3+ *Ja* '43
- Production and cost control in a small war plant. *W. Flatow. Iron Age* 152:70-2+ *S* 16 '43
- Production board shows progress of orders. *il Factory Management* 100:104 *D* '42
- Production control; Consolidated Vultee aircraft corporation. *W. V. McClung. il Mech Eng* 65:727-31 *O* '43
- Production control of design changes. *J. D. Robbins. il Aero Digest* 42:215-16+ *F* '43
- Sixteen forms replaced by three in order system. *il Am Business* 13:32-3 *Ap* '43
- Special handling facilities and efficient production control system; wings for the Republic P-47 Thunderbolt fighter plane; *Servel inc. G. E. Stedman. il Steel* 113:124-6+ *N* 8 '43
- Use effective production control. *il Factory Management* 101:164-73 *Ag* '43
- Wartime production; special requirements of control systems. *Automobile Eng* 33:414 *O* '43

See also
 Factory management Machine shop management
 Schedules

PRODUCTION credit associations

- Half production credit associations lost money in 1942. *Comm & Fin Chr* 158:933 *S* 2 '43

PRODUCTION drives. See Incentives in industry**PRODUCTS, Certification of**

- Gas water heater ordinance requires A.S.A. approval in Los Angeles. *Am Gas J* 159:18 *Ag* '43

See also
 Grade marks

PRODUCTS, Diversified

See also
 Diversification in industry

PRODUCTS, Identification of

- Fabric house wins brand identity with dealers and consumers; Arlington Mills labels are carried after re-manufacture for their sales potency with consumers. *il Sales Management* 52:23-5 *S* 15 '43

Making an ingredient a major selling factor; use of Botany label on men's suits; sold direct to retailers. *il Ptr Ink* 203:25-6 *My* 21 '43

See also
 Labels

PRODUCTS, Improved

- Attention manufacturers! 115 specific suggestions for postwar product and home improvements. *A. P. Hirose. Adv & Sell* 36:15-16+ *S* '43

Cooler metal-less (almost) ice box beats materials shortage; has distribution in 7,000 stores in all 48 states and Alaska. *J. H. Ganzer. il Sales Management* 52:66+ *F* 15 '43

Product strategy for post-war: the sales executive's assignment. *F. Manning. Sales Management* 52:98+ *S* 15 '43

Ready or not, Mr Manufacturer, the public expects immediate post-war product changes; consumer survey. *il Ptr Ink* 203:16-18 *My* 21 '43

Two helicopters in every garage; better look for ways to improve the little homely gadgets. *T. H. Thompson. Sales Management* 52:28+ *O* 1 '43

Where to look for product improvement ideas. *M. K. Powers. Am Business* 13:13 *My* '43

Will better products solve your post-war competition problem? *F. Manning. Sales Management* 52:40+ *J* 1 '43

See also
 Design

Advertising

Can product-of-the-future advertising hold back V-day lust to buy? *il Ptr Ink* 204:15-16+ *J* 23 '43

PRODUCTS, Molded. See Molded products

PRODUCTS, New

And peace came, and the merchant knew not his strange new wares. *L. B. Colby. Sales Management* 52:18-20 *Je* 1; 39-40 *Ag* 1 '43

Chemical industry ready for peace; new products with unexploited markets available. *S. B. Self. Barron's* 23:17-19 *S* 20 '43

Consolidated tunes new products to wartime needs of housewives; manufacturer of trimmings is finding new markets for new products. *C. D. Carver. il Sales Management* 52:80+ *O* 1 '43

How your brand can develop new post-war business! *F. Manning. Ptr Ink* 205:23+ *N* 5 '43

Industrial product studies. *Trusts & Estates* 76:543-4 *Je* '43

Industry expands by solving its customers' problems. *J. A. Murphy. Adv & Sell* 36:50+ *Ag* '43

Marriageability of industrial products. *Trusts & Estates* 76:369-70 *Ap* '43

N.A.M. survey reveals products of future planned by industry. *Comm & Fin Chr* 158:930 *S* 2 '43

New post-war products will demand new selling methods. *J. J. Newman. Sales Management* 52:56-8 *Ja* 15 '43

New product, 3000 new jobs; *Servel* gas-operated air-conditioning unit. *L. Ruthenburg. Ptr Ink* 204:21+ *S* 3 '43

New products. Published in weekly numbers of *Business Week*

Plans for the future; some of the things *Du Pont* has been working on. *S. M. Spencer. il Am Inst Banking Bul* 25:3-5, 32 *Ap* '43

Postwar evolution to new high living standards seen by industry. *Comm & Fin Chr* 157:1579 *Ap* 29 '43

Products for postwar; new and substitute materials. *P. James. il Adv & Sell* 36:13-15+ *Mr* '43

Some observations on the industry's post-war planning; some companies will change to new products. *S. Sigga. Aero Digest* 42:368+ *Mr* '43

What's new? keeping up with the industrial revolution. *J. P. Woolley. Mag of Wall St* 72:141+ *My* 15 '43

See also

Products, Improved
 also names of new products, e.g.
 Aralac
 Pliofilm

Advertising

Have you a pre-postwar program? *J. A. Wales. il Ptr Ink* 204:23-5 *Ag* 13 '43

Names

Christening new products; plastics, rayon, neoprene, nylon. *Textile Col* 65:402 *S* '43

33 check points for finding a name for that new product. *P. H. Erbes, jr. Ptr Ink* 205:28, 32+ *O* 1; 33+ *O* 15 '43

Prices

New products pricing formula issued by OPA. *Oil Paint & Drug Rep* 143:5+ *My* 31 '43

PRODUCTS, Quality of. See Quality of products

PRODUCTS, Second-hand. See Products, Used

PRODUCTS, Secondary

See also

Quality of products

PRODUCTS, Used
 Department store opens swap shop. *Ptr Ink* 203:57 *Ap* 23 '43

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Automobile industry	Electric apparatus
and trade—Used	and appliances,
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ment, Used	Machine tool industry
	—Used machines

PROFESSIONAL education

See also

Engineering educa- Mining schools and
 tion education

PROFESSIONAL ethics

Meaning of professional. *N. W. Dougherty. Civil Eng* 13:251-2 *Je* '43

See also

Architectural ethics	Engineering ethics
Banking ethics	Professional service

PROFESSIONAL service

National learned society groups and the public interest. L. C. Karpinski. Science 97:422-3 My 7 '43

See also

Legal service
Medical service

PROFESSIONAL workers

Employment of professional and technical personnel in contract construction. Monthly Labor R 55:932-5 N '42

Federation of the professions. A. W. Cramp-ton. Engineer 176:88-9 JI 30 '43

See also

Accountants
Architects
Chemists

Engineers
Librarians

PROFESSIONS

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Accountants
Advertising as a pro-
fession
Architects
Engineers

Lawyers
Nurses and nursing
Physicians
Trust service

PROFILING machines

Urquhart, Lindsay and Robertson Orchar boring and profiling machine. il Automobile Eng 33:117-18 Mr '43

PROFIT

Computing profit on investment is proper method. A. C. Kiechlin. Inland Ptr 111:37-9 My '43

Corporate profits. Survey of Cur Business 23: 4-5 Je '43

Corporation profits, 1938-1941. Survey of Cur Business 1942 Sup p73-4 [supplemented in monthly numbers]

Earnings of leading corporations in 1941-42. Nat City Bank p43-7 Ap '43

Earnings of manufacturing companies in 1941-42. Nat City Bank p32-5 Mr '43

Economist profit figures. Economist 144:708; 145:154-5 My 29, JI 31 '43

Estimated corporate profits, before and after federal taxes; tables and charts. Auto-motive & Aviation Ind 88:86-7 Mr 15 '43

Excessive profits, an enigma? H. J. Landry. J Account 75:330-3 Ap '43

Fortune survey; who is to get the profits of business? Fortune 27:10 F '43

Half year's earnings; net income of leading corporations, 1942 and 1943. Nat City Bank p90-2 Ag '43

Higher earnings in 1943. W. Gates. Mag of Wall St 72:392-4+ JI 24 '43

Industrial profits, 1942; with comparisons, 1932-1941. Economist 144:sup6 Mr 13 '43

Innovations. O. Lange. R Econ Stat 25:19-25 F '43

Manufacturers' profit margins in thirties 40 per cent below those of twenties. Comm & Fin Chr 156:2170 D 17 '42

Net income of leading corporations, first quarter; comparisons with 1942. Nat City Bank p54 My '43

Profit motive. J. S. Hecht. Edison Elec Inst Bul 11:249-50 Ag '43

Profits still rise. Business Week p106-7+ N 6 '43

Profits under restraint; with computations for last quarter, 1942. Economist 144:241-2 F 20 '43

Recent trends in corporate profits. T. Smith and R. Sherman. Survey of Cur Business 23:23-8 Je '43

SEC shows chemical industry profit status. Chem Ind 53:548 O '43

Some whys and wherefores regarding dealer profits. Comm & Fin Chr 157:906+ Mr 11 '43

Standstill earnings; Economist new profits series, with figures for quarterly period ending, Sept. 30, 1942. Economist 143:639-40 N 21 '42

Third quarter earnings and annual figures, 1917-19, 1927-29, and 1941-43. Nat City Bank p122-4 N '43

Total corporate income during first half of 1943. Survey of Cur Business 23:5-7 S '43

Wage rates and living costs in a war economy; factors affecting the trend of living costs. M. S. Brody. J Business 16 pt2:24-6 JI '43

See also

Capitalism
Corporations—Fi-

Interest
Investments
Price policies
War profits

Excess profits tax

Income

PROFIT and loss statements

Accountants and accounts; specimen profit and loss account as a suitable minimum for publication. Economist 143:539-40; Editorial comment. 548-9 O 31 '42

Better business management under price ceilings; monthly profit-and-loss state-ments. A. C. Kiechlin. Inland Ptr 110:42-4 D '42

PROFIT sharing

End of a dream; Hapgood brothers' idea of taking workers into partnership winds up in court. Business Week p18-19 JI 31 '43

Profit sharing; answer to labor problems? W. Loeb. Barron's 23:16 My 3 '43

Share the profits; policy of the Albuquerque bus company. Bus Transportation 22:74-5 S '43

Washington National of Evanston, Ill. has profit sharing plan for employees, agents. Nat Underw (Life ed) 47:24 Ap 23 '43

See also

Bonus system
Cooperation
Employees as stock-
holders

Insurance, Life—
Participating poli-
cies

PROFIT sharing trusts. See Employees' trusts**PROFITEERING**

Another result of black markets; flow of meat by-products to various industries is curtailed. Barron's 23:9 Ap 5 '43

Black markets. Business Week p123 Je 19 '43

Ceiling-price gyps. Business Week p72+ Je 26 '43

Little things that make big black markets. L. Burnett. Adv & Sell 36:22+ Je '43

PROFITS and commissions insurance. See Insurance, Profits and commissions**PROGRESS**

Looking back to view the future. F. San-ford. Edison Elec Inst Bul 11:126-8 My '43

Return of the future; excerpts from Return of opportunity. S. C. Allyn and others. il Banking 36:53-64 S '43

See also

Inventions

PROJECTILES

Horizontal path along the earth's surface of a projectile or plane under constant tan-gential acceleration. W. S. Kimball. Frank-lin Inst J 236:67-79 JI '43

Linen bullet patches. V. F. Kimball. Textile Col 64:556 D '42

New bullet design for gun perforating. W. A. Sawdon. il diags Pet Eng 15:206, 208 O '43

Shot-put and the earth's rotation. P. Kirk-patrick. Science 97:138 F 5 '43

See also

Ballistics
Bombs, Aerial
Grenades
Ordnance

Rockets
Shells (projectiles)
Torpedoes

Manufacture

Automatic screw machines in war produc-tion; operations as performed on Acme-Gridley multiple-spindle automatics. il diags Mach 49:143-53 Mr '43

Forged projectile nose saves steel, time, cost; N. J. Bardell receives Chicago Tribune's diamond studded pin award for notable achievement. Steel 112:84 Ap 5 '43

Forging and heat-treating shot for anti-tank projectiles; Axelson mfg. co. R. M. Pease. il diags Mach 49:148-55 My '43

Grinding cartridge case and bullet jacket dies. F. B. Whittemore, jr. diags Steel 112: 76+ Mr 22 '43

Machining 37-millimeter armor-piercing shot; how Bullard Multi-Au-Matics have been adapted. H. L. Horton. il diags Mach 49: 156-60 My '43

PROJECTILES—Manufacture—Continued

Manufacturing boosters for high-explosive shells. J. B. Nealey. *il* *diags* *Mach* 49:129-35 Ja '43

Midwest ordnance plant uses refrigeration and gas heat to shock test 37-mm. shot. *il* *Heat & Ven* 39:52 N '42

Picatinny arsenal uses air conditioning to improve powder and shell performance. H. W. Macdonald, jr. *il* *diags* *Heat & Ven* 40:74-83 Je '43

Rating the machinability of bullet core steel. N. G. Meagley. *il* *Metal Prog* 44:67-71 JI '43

Steel clad with gilding metal for bullet jackets. T. C. Campbell. *il* *Iron Age* 151:33-4 Ja 14 '43

See also
Cartridge cases—
Manufacture

Testing

Measuring muzzle velocity. A. F. Macconochie. *il* *diags* *Steel* 113:206-8, 210+ O 11 '43

Thermal shock detects flaws in armor piercing shot. *il* *Iron Age* 151:38 Ja 14 '43

PROJECTION, Lantern. *See* *Lantern projection*

PROJECTION apparatus

Airflow visualization opens new avenues of research; use of photography and projection apparatus. E. J. Saxl. *bibliog* *il* *diags* *Aviation* 42:148-51+ Ap '43

Projection inspection of form tools. W. Stewart. *il* *Am Mach* 87:78-9 Ap 1 '43

Venwick contour projector. *Engineering* 155: 18 Ja 1 '43

See also
Light projection
Moving picture projection

PROLYCOPENE

Spectral characteristics and configuration of some stereoisomeric carotenoids including prolycopene and pro-*y*-carotene. L. Zechmeister and others. *bibliog* *Am Chem Soc J* 65:1940-51 O '43

PROMISSORY notes

Alleged payments on note. C. R. Rosenberg, jr. *Burroughs Clearing House* 27:29 Ap '43

Assignee of promissory note entitled to bring suit. *Banking Law J* 60:370-5 O '43

Consideration for joint note of husband and wife. C. R. Rosenberg, jr. *Burroughs Clearing House* 27:44 S '43

Holder of negotiable note entitled to payment irrespective of breach of contract by payee after acquiring note. *Banking Law J* 60: 577-80 JI '43

Indorsee's right to bring suit on note containing restrictive indorsement. *Banking Law J* 60:581-3 JI '43

Liability of accommodation indorser of note. *Banking Law J* 60:788-91 S '43

Liability of accommodation signers of note as sureties. J. A. Nobile. *Banking Law J* 60:746-52 S '43

Marginal notation extends note. C. R. Rosenberg, jr. *Burroughs Clearing House* 28:29 O '43

May prove contract for note. C. R. Rosenberg, jr. *Burroughs Clearing House* 27:29+ D '42

Memorandum releasing obligation on notes inoperative and ineffective. *Banking Law J* 60:776-9 S '43

Merely possession of unindorsed note insufficient to assert title. *Banking Law J* 60: 772-6 S '43

Note payable out of particular fund. C. R. Rosenberg, jr. *Burroughs Clearing House* 27:32 S '43

Proof of ability to pay not necessary in unconditional promissory note. *Banking Law J* 60:765-7 S '43

Statute of limitations affecting demand note. *Banking Law J* 60:646-8 Ag '43

Statute of limitations as applicable to renewal note under seal. *Banking Law J* 60: 801-3 S '43

PRONUNCIATION

NBC handbook of pronunciation. J. F. Bender, comp. 289p \$2.75 Thomas Y. Crowell company, 432 Fourth av, New York '43

PROOFREADING

Remember costs in marking proof. E. N. Teall. *Inland Ptr* 111:32-3 My '43

See also
Punctuation
Word division

PROPAGANDA

OWI given control of foreign propaganda. *Comm & Fin Chr* 157:1215 Ap 1 '43

See also
Public opinion
World war, 1939—
Propaganda

PROPAGANDA, Canadian

Canadian propaganda policy. *Economist* 144: 495-6 Ap 17 '43

PROPAMIDINE

Effect of propamidine on bacterial growth. H. I. Kohn. *bibliog* *Science* 98:224 S 3 '43

Effect of propamidine on bacterial metabolism. F. Bernheim. *Science* 98:223 S 3 '43

PROPANE

Adsorption of propane and propylene by silica gel and metallized silica gel. L. H. Reyerson and M. R. Cines. *bibliog* *diag J Phys Chem* 46:1060-8 D '42

Empirical equation for thermodynamic properties of light hydrocarbons and their mixtures; mixtures of methane, ethane, propane, and *n*-butane. M. Benedict, G. B. Webb and L. C. Rubin. *bibliog J Chem Phys* 10:747-58 D '42

Heat capacities at higher temperatures of ethane and propane. B. P. Dailey and W. A. Felsing. *bibliog Am Chem Soc J* 65:42-4 Ja '43

Ionization and dissociation by electron impact: isobutylene, propane, and propylene. D. P. Stevenson and J. A. Hipple. *bibliog Am Chem Soc J* 64:2769-72 D '42

Lone Star's central fractionator concentrates special products from natural gasoline. A. L. Foster. *flow chart il* *Oil & Gas J* 42: 74, 76, 78+ Ag 26 '43

Phase equilibria in hydrocarbon systems; heat of solution of ethane and propane. R. A. Budenholzer, B. H. Sage and W. N. Lacey. *bibliog il* *diag Ind & Eng Chem* 35: 1214-20 N '43

Propane plant helps meet peak load demands; Dominion natural gas company. F. D. Howell. *flow chart il* *Gas Age* 92:13-16 O 7 '43

Surface tensions of methane-propane mixtures. C. F. Weinaug and D. L. Katz. *bibliog il* *diags Ind & Eng Chem* 35:239-46 F '43

Synthetic estrogenic compounds; monosubstituted derivatives of 1,3-di-(*p*-hydroxyphenyl)-propane. A. H. Stuart and R. C. Tallman. *bibliog Am Chem Soc J* 65:1579-81 Ag '43

Thermodynamic properties of propane. W. V. Stearns and E. J. George. *bibliog Ind & Eng Chem* 35:602-7 My '43; Same, *Pet Eng (Ref annual)* 14:262-3+ JI 1 '43

Viscosities of the methane-propane system. L. B. Bicher, jr. and D. L. Katz. *bibliog diag Ind & Eng Chem* 35:754-61 JI '43

Viscosity of propane, butane, and isobutane. M. R. Lipkin, J. A. Davison and S. S. Kurtz, jr. *bibliog diags Ind & Eng Chem* 34:376-8 Ag '42; Same, *Pet Eng (Ref annual)* 14:279-80 JI 1 '43

PROPANONE

Studies on lignin and related compounds; isolation and identification of 1-(4-hydroxy-3,5-dimethoxyphenyl)-2-propanone and 1-(4-hydroxy-3-methoxyphenyl)-2-propanone from maple wood ethanolysis products; metabolic changes in lower and higher plants. M. Kulka and H. Hibbert. *bibliog Am Chem Soc J* 65:1180-5 Je '43

Studies on lignin and related compounds; isolation of 1-(4-hydroxy-3-methoxyphenyl)-2-propanone and 1-ethoxy-1-(4-hydroxy-3-methoxyphenyl)-2-propanone from the ethanolysis products of spruce wood. E. West, A. S. MacInnes and H. Hibbert. *bibliog Am Chem Soc J* 65:1187-92 Je '43

PROPANONE—Continued

Studies on lignin and related compounds; synthesis and properties of 1-ethoxy-1-(4-hydroxy-3-methoxyphenyl)-2-propanone, 3-ethoxy-1-(4-hydroxy-3-methoxyphenyl)-2-propanone and their methyl ethers. M. Kulka and H. Hibbert. bibliog Am Chem Soc J 65:1185-7 Je '43

Studies on lignin and related compounds; synthesis and properties of 3-hydroxy-1-(4-hydroxy-3-methoxyphenyl)-1-propanone. K. A. West and H. Hibbert. bibliog Am Chem Soc J 65:1170-2 Je '43

PROPARGYL acetal

Studies in the polyene series; carbinols from propargyl acetal. I. M. Heilbron, E. R. H. Jones and H. P. Koch. Chem Soc J p735-7 D '42

PROPELLER club of the United States

Annual convention, 16th, New York, Oct. 15-16. Marine Eng 47:112-14 N '42

PROPELLERS

Cargo liner Argentina equipped with variable-pitch propellers. diag Marine Eng 48:207-8 J1 '43

Close-quarter filing of bearing spools; propeller drive shafts. N. C. Elza. diags Am Mach 87:91 Ap 29 '43

From paddle to screw in the navy. F. C. Bowen. Engineer 176:12-13 J1 2 '43

Marine propeller blade deflection. J. F. C. Conn. diags Engineering 156:58-60 J1 16 '43

Micarta bearings employed for propeller shafts. Mach 49:197 Ap '43

Robert Griffiths, 1805-1883. Engineering 155:492 Je 18 '43

Variable-pitch marine propellers. il diag Engineer 176:87-8 J1 30 '43

See also

Airplane propellers

Manufacture

Mass-producing ships' wheels; Koppers company. il Marine Eng 48:149-50 Ja '43

Molding large bronze propellers; Bartlett-Hayward co. P. Dwyer. il diags Foundry 71:90-3+ S; 112-14+ O '43

Propeller manufacture; Bath iron works corporation. S. H. Towne, jr. il Marine Eng 48:211-14+ S '43

Rapid heating for propeller forming. il Iron Age 151:35 Ja 28 '43

Repair

Saving steamboat propellers from the scrap heap. H. C. Elliott. diag Welding J 22:326 My '43

PROPENE. See Propylene

PROPERTY

See also

Estates, Decedents' Income	Missing persons
Joint tenancy	Real property
	Taxation

PROPERTY, Enemy. See Enemy property

PROPERTY in foreign countries. See Investments, Foreign

PROPIONALDEHYDE

Mechanism of the photolysis of propionaldehyde. W. M. Garrison and M. Burton. bibliog J Chem Phys 10:730-9 D '42

PROPIONIC acid

Effect of propionic acid and of Na propionate on paramacia. H. E. Potts. Franklin Inst J 236:99-100 J1 '43

Indanone ring closure of unsymmetrical β,β -diarylpropionic acids. C. F. H. Allen and J. W. Gates, jr. bibliog Am Chem Soc J 65:422-4 Mr '43

Preparation of β -(2-methyl-6-oxo-1-cyclohexen-1-yl)-propionic acid. E. Schwenk and E. Bloch. Am Chem Soc J 64:3050-1 D '42

3,4-Substituted pyridines; β -(4-pyridyl)-propionic acid. J. R. Stevens and R. H. Beutel. Am Chem Soc J 65:449-51 Mr '43

PROPIONYL naphthol

Some derivatives of 2-propionyl-1-naphthol. C. M. Brewster and G. G. Watters. bibliog Am Chem Soc J 64:2578-80 N '42

PROIOPHENONE

Hydrogen fluoride as a condensing agent; alkyl ketones. J. H. Simons and E. O. Ramler. bibliog Am Chem Soc J 65:1390-2 J1 '43

PROPORTIONING equipment

Chemical and proportioning pumps manufactured by Milton Roy pumps. il Engineering 155:236-7 Ap 9 '43

Close control of raw material; continuous proportioning system, Kosmos portland cement co. W. B. Lenhart. il Rock Prod 46:49+ J1 '43

Converting a steam pump for proportioning service; Pennsylvania sugar co. diag Chem & Met Eng 50:118 S '43

How would you do it? case of the two vats; problem of filling two vats of unequal size simultaneously. diags Power Pl Eng 46:110 N '42; Solution. 47:93-4, 96, 98+ Ja '43

Improved liquid splitter; Rotaveir proportioning weir. il Chem & Met Eng 50:127 Ag '43

Making a phosphate control system work. J. W. Odium. diags Power Pl Eng 46:70-2+ D '42; Discussion. R. C. Baker. 47:98 My '43

Mystery of the two vats. diags Power Pl Eng 47:104, 106, 108 F '43

PROPRIETARY association of America

Annual meeting, 61st, New York, May 18-19. Oil Paint & Drug Rep 143:7+ My 24 '43

PROPYL chloride

Ionization and dissociation by electron impact; normal propyl chloride and tertiary butyl chloride. D. P. Stevenson and J. A. Hipple. bibliog Am Chem Soc J 64:2766-8 D '42

PROPYL formate

Kinetics of the thermal decomposition of *n*-propyl and isopropyl formates. R. B. Anderson and H. H. Rowley. bibliog J Phys Chem 47:454-63 Je '43

PROPYLAMINE

Phenethylamines; dimethoxy and dihydroxyphenyl-*n*-propylamines (β -methyl- β -phenethylamines). E. H. Woodruff. bibliog Am Chem Soc J 64:2859-62 D '42

PROPYLENE

Adsorption of propane and propylene by silica gel and metallized silica gel. L. H. Reyer-son and M. R. Cines. bibliog diag J Phys Chem 46:1060-8 D '42

Cadmium (^{113}Cd) photosensitized reactions of the lower olefins. D. J. LeRoy and E. W. R. Steacie. bibliog J Chem Phys 10:583-5 N '42

Ionization and dissociation by electron impact; isobutylene, propane, and propylene. D. P. Stevenson and J. A. Hipple. bibliog Am Chem Soc J 64:2769-72 D '42

PROPYLENE glycol

Simplified propylene glycol dispenser for field use. bibliog Science 97:208 F 26 '43

PROPYLENE thiourea

Complex formations between iodine and *p*-mercapto-dihydroxyglyoxalines. T. B. Johnson and C. O. Edens. Am Chem Soc J 64:2706-8 N '42

PROSPECTING

Detection of scheelite by ultraviolet radiation. D. C. McLaren. il Can Min J 64:494-500 Ag '43

Diamond drilling the manganese deposits of Nova Scotia. E. Walker. diags Can Min J 64:487-9 Ag '43

Exploration for war minerals through fiscal year 1942; with list of Bureau of mines publications relating to exploration for war minerals. July 1, 1939 to June 30, 1942. M. Mosier and A. C. Johnson. U S Bur Mines Rep of Invest 3676:1-44 '43

Gold hunting house-boat. G. Y. Schierboltz. il Can Min J 64:358 Je '43

Metals to win the war; what to look for and where. G. M. Fowler. map Eng & Min J 143:50-2 N '42

Mining geology; intensive study of ore occurrence demanded by wartime needs. C. D. Hulin. il Min & Met 24:51-5 F '43

Mining geology, 1942. C. H. Behre, jr. Eng & Min J 144:94-5 F '43

Prospecting for radium ore. Science 98:sup8 Ag 20 '43

Prospecting with ultra-violet; search for scheelite. Chem Age (Lond) 48:611-12 Je 5 '43

Rare element prospecting in pegmatites. T. T. Quirk and H. E. Kremers. bibliog Econ Geol 38:173-87 My '43

PROSPECTING—Continued

Surveying in the tropics. R. W. Michael. Eng & Min J 143:70 N '42
Tungsten; hints to prospectors. M. S. Hedley. Can Min J 64:491-3 Ag '43

See also

Mine examination Petroleum—Prospecting
Mines and mineral resources Water, Underground—Prospecting

Geophysical methods

Geophysical activities in California. W. A. Sawdon. il Pet Eng 14:66 Mr '43
Geophysics company stresses necessity of finding oil to reduce personnel losses; advertising and publicity campaign of Geophysical service, inc. H. F. Simons. Oil & Gas J 42:38-9 Je 17 '43
Geophysics, 1942. C. A. Heiland. Min & Met 24:73-6+ F '43
Maintaining an adequate level of geophysical exploration. F. Goldstone. Oil & Gas J 41: 56, 59+ Ap 8 '43; Same. Am Assn Pet Geologists Bul 27:948-53 Jl '43
Safer blasting near power lines; device prevents cap wires from fouling cables in seismograph shooting. M. D. McCarty. il Explosives Eng 21:192+ S '43
Scientific exploration for oil; electronics plays an important part. D. H. Gardner. il Electronics 16:136-7+ Mr '43

Bibliography

Geophysical abstracts 107, October-December 1941. W. Ayvazoglou, comp. U S Geol S Bul 932-D:123-66; pa 10c Supt. of doc. '42
Geophysical abstracts 108, January-March 1942. W. Ayvazoglou, comp. U S Geol S Bul 939-A:1-38; pa 10c Supt. of doc. '42
Geophysical abstracts 109, April-June 1942. W. Ayvazoglou, comp. U S Geol S Bul 939-B:39-66; pa 10c Supt. of doc. '42
Geophysical abstracts 110, July-September 1942. W. Ayvazoglou, comp. U S Geol S Bul 939-C:67-98; pa 10c Supt. of doc. '43
Geophysical abstracts 111, October-December 1942. W. Ayvazoglou, comp. U S Geol S Bul 939-D:99-138; pa 10c Supt. of doc. '43
Geophysical abstracts 112, January-March 1943. W. Ayvazoglou, comp. U S Bur Mines Information Circ 7256:1-45 '43
Geophysical abstracts 113, April-June 1943. W. Ayvazoglou and V. Skitsky, comps. U S Bur Mines Information Circ 7257:1-53 '43

Engineering applications

Seismic subsurface exploration on the St Lawrence River project. E. R. Shepard and R. M. Haines. il diags map Am Soc C E Proc 68:1743-61 D '42; Discussion. 69:584-6, 861-7, 1608-10 Ap, Je, D '43

PROSPECTIVE earnings insurance. See Insurance, Use and occupancy

PROSPECTS for life insurance. See Insurance, Life—Prospects

PROSPERITY

Fundamentals of prosperity. R. W. Babson. Comm & Fin Chr 157:2183 Je 10 '43

See also

Business conditions
Business cycles

PROSTATE gland

Endocrine control of prostatic cancer. C. Huggins. bibliog Science 97:541-4 Je 18 '43

PROSTHETICS. See Artificial limbs

PROTECTIVE clothing. See Clothing, Protective

PROTECTIVE paint. See Paint, Protective

PROTEINS

Absence of β -alanine in proteins. M. A. Pollack. bibliog Am Chem Soc J 65:484-5 Mr '43

Amino acids and human requirements. W. E. Gaunt. bibliog Chem & Ind 62:127-30; Discussion. 130-1 Ap 3 '43

Carbamic acid peptides; a new type of peptide and a new possible source of ammonia from proteins. A. H. Corwin and C. I. Damerel. bibliog Am Chem Soc J 65:1974-84 O '43

Catalyzed hydrolysis of amide and peptide bonds in proteins. J. Steinhardt and C. H. Fugitt. bibliog J Research Nat Bur Stand 29:315-27 N '42

Challenge to food technologists; oil-seed meals offer opportunity for preparing high-protein foods. il Food Ind 15:53 Ap '43

Chemistry of allergens; isolation and properties of an active protein-polysaccharide fraction, CB-1A, from castor beans. J. R. Spies and E. J. Coulson. bibliog Am Chem Soc J 65:1720-5 S '43

Combination of wool protein with acids in mixtures, and its relation to the acid dyeing of wool. J. Steinhardt, C. H. Fugitt and M. Harris. bibliog J Research Nat Bur Stand 29:417-24 D '42; Same. Textile Col 65:15-17, 22, 40 Ja '43

Combination of wool protein with weak acids. J. Steinhardt, C. H. Fugitt and M. Harris. bibliog J Research Nat Bur Stand 30:123-8 F '43

Crystalline proteins; abstract. G. A. Scott. Can Chem & Process Ind 27:162 Mr '43
Effect of heat on proteins. P. L. Julian. Can Chem & Process Ind 27:310 My '43

Effects of inorganic electrolytes on the liberation of —SH in proteins. N. F. Burk. bibliog J Phys Chem 47:104-18 F '43

Electrophoretic study of the proteins in rubber latex serum. C. P. Roe and R. H. Ewart. bibliog Am Chem Soc J 64:2628-32 N '42

Fibers for tomorrow. N. Clarey, jr. Textile Col 65:438-9 O '43

Mucopolysaccharides and related substances. M. Stacey. bibliog Chem & Ind 62:110-12 Mr 20 '43

New alcohol process cuts costs; Balls-Tucker process, Park & Tilford's Brownsville distillery. R. L. Taylor. il diags Chem Ind 53: 53-5 Jl '43

Nutritive value of cotton, peanut, and soy seeds. T. F. Zucker and L. Zucker. bibliog Ind & Eng Chem 35:868-72 Ag '43

Partial hydrolysis products derived from proteins and their significance for protein structure. R. L. M. Synge. Chem R 32:135-72 bibliog(235 references, p168-72) F '43

Particle size and disaggregation of proteins. A. Colin-Russ. bibliog Chem & Ind 62:134-5 Ap 3 '43

Possible substitute for blood plasma; hydrolyzed proteins from beef blood or casein; abstract. R. Elman and C. E. Lischer. Science 97:sup10+ F 19 '43

Progress in proteins. il Sci Am 169:160-2 O '43

Protein as a by-product of alcohol distillation from wheat. Science 97:sup8 Je 25 '43

Protein coatings to extend supply of scarce lacquers; abstract. C. S. Young. Chem Ind 53:358+ S '43

Protein concentrates from grasses. J. T. Sullivan. Science 98:363-4 O 22 '43

Protein from corn germ. Science 98:sup 10 S 10 '43

Protein recovery necessary to meet feed demands. Chem & Met Eng 50:139 Ag '43

Proteins of natural silk; abstract. D. Colman and F. O. Howitt. Chem & Ind 62:166 My 1 '43

Proteins of tuberculin. F. B. Seibert and J. W. Nelson. bibliog il Am Chem Soc J 65:272-3 F '43

Rapid determination of sodium chloride in the presence of protein; application to salt-cured food products. W. J. Dyer. bibliog Ind & Eng Chem Anal ed 15:439-40 Jl 15 '43

Role of glycine in protein structure. H. Neurath. bibliog Am Chem Soc J 65:2039-41 O '43

Soybean protein dispersions as printing ink vehicles. A. F. Schmutzler and D. F. Othmer. bibliog il Ind & Eng Chem 35:1196-1202 N '43

Structure of fibrous proteins. M. L. Huggins. bibliog(60 references) Chem R 32:195-218 Ap '43

Structure of the protein molecule. D. G. Dervichian. bibliog J Chem Phys 11:236-46 My '43

Study of the diffusion velocity of ovalbumin in relation to its molecular weight. L. Friedman and B. R. Ray. bibliog diags J Phys Chem 46:1140-50 D '42

Sulphate alcohol process provides high-grade protein. Oil Paint & Drug Rec 144:3+ JI 19 '43

PROTEINS—Continued

Toxicity and histopathology of some azo compounds as influenced by dietary protein. M. I. Smith, R. D. Lillie and E. F. Stehman. *bibliog Pub Health Rep* 63:304-17 F 19 '43

Types of nutritional deficiency. H. D. Kruse. *Ann Am Acad* 225:39-40 Ja '43

See also

Albumin	Gluten
Amino acids	Hemoglobin
Avidin	Peptides
Casein	Tryptophan
Cystine	Zein
Gelatin	

Analysis

Determination of microquantities of certain proteins; colorimetric method. D. Pressman. *bibliog Ind & Eng Chem Anal ed* 15:357-9 My 15 '43

Determination of purines in protein material. A. Bloch. *Franklin Inst J* 236:217-19 Ag '43

Separation and determination of protein sulfur, sulfide sulfur, and other sulfur in sodium sulfide dispersions of keratins. E. E. Potter and C. E. Jones. *bibliog Ind & Eng Chem Anal ed* 15:15-17 Ja 15 '43

Ultraviolet absorption spectra of protein solutions. R. N. Jones and H. J. Creech. *bibliog Opt Soc Am J* 33:209-18 Ap '43

PROTEST (law)*See also*

Checks—Protest

PROTHROMBIN

Plasma prothrombin concentration in dogs given 5,5'-methylenebis(4-hydroxycoumarin) and purified beef prothrombin. D. A. McGinty and others. *Science* 96:540 D 11 '42

PROTONS

Absorption curve and production of slow cosmic-ray protons at low altitude. V. H. Regener. *Phys R* 64:252-3 O 1 '43

Meson theory of the magnetic moment of proton and neutron. J. M. Jauch. *bibliog Phys R* 63:334-43 My 1 '43

Multiple production of penetrating particles by cosmic-ray protons and neutrons. W. E. Hazen. *Phys R* 64:257 O 1 '43

Relativistic theory of excited spin states of the proton and the neutron. V. L. Ginsburg. *bibliog Phys R* 63:1-12 Ja 1 '43

Scattering of neutrons by protons. L. Hulthén. *bibliog Phys R* 63:383 My 1 '43

Spectroscopic evidence of intermolecular transfer of protons. D. Williams and W. D. Stallcup. *Am Chem Soc J* 64:2684-6 N '42

See also

Neutrons

Scattering

Inelastic scattering of protons. R. H. Dicke and J. Marshall, Jr. *diags Phys R* 63:86-90 F 1 '43

Scattering of protons by magnesium nuclei. G. A. Wrenshall. *Phys R* 63:56-7 Ja 1 '43

PROTOPLASM

Constitution of protoplasm. A. Claude. *bibliog Science* 97:451-6 My 21 '43

PROTOZOA, Pathogenic

Demonstration of the protozoan parasite of gual malaria by fluorescence microscopy. R. L. Patton and R. L. Metcalf. *Science* 98:184 Ag 20 '43

See also

Trypanosoma cruzi

PROVINCETOWN, Massachusetts**Water supply**

Water supplies and iron removal plant; filtering through marble, coke and sand. P. E. Howard. *diags plans N E Water Works Assn J* 57:63-72 Mr '43

PROVITAMINS*See also*

Carotene
Cholesterol
Ergosterol

PROXIES

Nice lunch; reporters hear blast on new proxy rules. *Business Week* p85-6 Ja 30 '43

Proxy system held safeguard of management; SEC plan decried as paradoxical, unworkable. G. E. Sokolsky. *Comm & Fin Chr* 157:487 F 4 '43

SEC announces five new proxy revisions. *Comm & Fin Chr* 156:2242 D 34 '42

SEC issues interpretation of new rules relating to proxies. *Comm & Fin Chr* 157:737+ F 25 '43

S.E.C. proxy rules revised. *Trusts & Estates* 76:777 F 4 '43

SEC proxy rules unnecessary and against public interest. *Comm & Fin Chr* 157:481 F 4 '43

Simplification of proxy rules desirable for all concerned. C. O. Dimmock, Jr. *Comm & Fin Chr* 157:1753+ My 13 '43

Two-way proxies. *Economist* 144:432 Ap 3 '43

PRUDENTIAL assurance company

Annual general meeting, 94th, London. *Economist* 144:473-5 Ap 10 '43

PRUDENTIAL insurance company of America

Prudential government bond holdings raised near half billion; statement covering 1942 operations. *East Underw* 44:54+ Mr 12 '43

Prudential mutualized formally. *East Underw* 44:8 Ap 2 '43

Shifts to mutual basis. *Comm & Fin Chr* 157:1466 Ap 19 '43

PRURITUS, Anal. See Anus—Diseases**PRUSSIAN blue**

Demonstration of some properties of Prussian blue. M. Kohn. *J Chem Educ* 20:198 Ap '43

PRUSSIC acid. See Hydrocyanic acid**PSEUDO-SACCHARIN chloride**

Pseudo-saccharin chloride, a reagent for the identification of alcohols. J. R. Meadoc and E. E. Reid. *Am Chem Soc J* 65:457-8 Mr '43

PSYCHIATRIC clinics. See Psychological clinics**PSYCHOLOGICAL clinics**

Rehabilitation clinics at the New York hospital. *Science* 98:319 O 8 '43

PSYCHOLOGICAL research

Grants for research in applied psychology. *Science* 98:236-7 S 10 '43

PSYCHOLOGISTS

Psychology and the war; psychologists in military service and in government bureaus. H. E. Garrett. *Science* 96:465 N 20 '42

Directories

Directory of applied psychologists; members of the American association for applied psychology, Inc. C. M. Louttit, ed. 2d ed 111p \$1.50 Am. assn. for applied psychology, Inc., A. I. Bryan, sec, 650 South hall, Columbia Univ, New York '43

PSYCHOLOGY*See also*

Ability tests	Moving pictures—
Advertising—Psychology	Psychological aspects
Attitude (psychology)	Personality
Color—Psychology	Recognition (psychology)
Ethnopsychology	
Mental hygiene	

PSYCHOLOGY, Applied

Psychology of credit letters (cont). H. M. Sommers. *Credit & Fin Management* 44:10-13+ D '43; 45:10-13+ Ja; 7-9+ F; 11-14+ Mr; 15-21+ Ap; 15-18 My; 13-14+ Je; 7-10+ Ji; 10-11 Ag; 11-15 S; 13-13 O '43

See also

Psychology, Industrial

PSYCHOLOGY, Industrial

Attitudes toward types of industrial music. W. A. Kerr. *diags Acoustical Soc Am J* 15:1285-30 O '43

Dilemma of sympathy; psychic environment of worker must be reckoned with. P. Cohen. *Il Tech R* 45:437-8+ Je '43

Human factor in chemical engineering processes. G. H. Miles. *Inst Chem Eng Trans* 19:48-55; Discussion. 55-60 '41

Importance of human beings; four main motives. H. A. Lyon. *Personnel J* 22:130-1 O '43

PSYCHOLOGY, Industrial—*Continued*
Industrial psychology, by J. Tiffin; review by I. Knickerbocker. *Mech Eng* 65:137-8 F '43

Intelligent selfishness has sound basis in the science of psychiatry. *Sci Am* 169:175+ O '43

Management mentalities and worker reactions. R. N. McMurry. *Advanced Management* 7:165-72 O-D '42

Music in industry; results of test. H. Burris-Meyer. *Mech Eng* 65:31-4 Ja '43

Personality problems in the office. L. G. Giberson. *Personnel J* 21:239-43 Ja '43

Personnel management in industry; a synthesis of the viewpoint of the psychologist and the engineer. T. A. Ryan. *J Eng Educ* 33:239-50 N '42

Psychiatrist looks at industrial truancy. L. S. Selling. *bibliog Ind Med* 12:189-201 Ap '43

Psychiatry in personnel work. L. G. Giberson. *Ind Med* 12:164+ Mr '43

Role of psychiatry in absences. M. Brown. *Concrete* (mill sec) 61:193 Je '43

Role of psychology in absences. W. H. Kushnick. *Ind Med* 12:25-6 Ja '43; Same cond. *Concrete* (mill sec) 51:161 Ap '43

Unity of mind and body; abstract. W. E. Ritter. *Science* 98:sup12 JI 16 '43

See also

Ability tests	Employment management
Advertising—Psychology	Fatigue
Advertising copy	Personality tests
Employees' counselors	Safety devices and measures—Psychological aspects

PSYCHOLOGY, Military

Curtailment of military psychology in Germany. H. L. Ansbacher. *bibliog Science* 98:218 S 3 '43

PSYCHOLOGY, Pathological

See also

Mental diseases

PSYCHOLOGY of advertising. See Advertising—Psychology

PSYCHOLOGY of color. See Color—Psychology

PSYCHROMETRY. See Humidity

PT airplanes. See Airplanes, Training

PT boats. See Torpedo boats

PUBERULIC acid

Anti-bacterial substances from moulds; puberulic acid, $C_8H_{10}O_6$ and puberulonic acid, $C_8H_8O_6$, metabolic products of a number of species of penicillium. A. E. Oxford, H. Raistrick and G. Smith. *Chem & Ind* 61:485-7 N 28 '42

PUBERULONIC acid

Anti-bacterial substances from moulds; puberulic acid, $C_8H_{10}O_6$ and puberulonic acid, $C_8H_8O_6$, metabolic products of a number of species of penicillium. A. E. Oxford, H. Raistrick and G. Smith. *Chem & Ind* 61:485-7 N 28 '42

PUBLIC accountants. See Accountants, Public

PUBLIC address system. See Loud speaking apparatus

PUBLIC administration. See Administration, Public

PUBLIC agencies. See Administration, Public

PUBLIC baths. See Baths, Public

PUBLIC buildings

Information center, Office of war information, Washington, D.C. *il plan Arch Forum* 77:64 N '42

See also

Auditoriums, Municipal	Post offices
Courthouses	Public works
Health centers	School buildings
Library buildings	United States—War department—Buildings
Municipal buildings	

Air conditioning

Air conditioning equipment of Pentagon building. *il plan Sheet Metal Worker* 34:32, 34+ F '43

PUBLIC contracts. See Contracts, Government

PUBLIC debts. See Debts, Public

PUBLIC documents. See Government publications

PUBLIC health

Epidemics loom; conference on planning for war and post war medical services. *Business Week* p34+ Mr 27 '43

Malaria; public health and economic aspects. L. L. Williams, jr. *bibliog il Chem & Eng* N 21:1148-51 JI 25 '43

Panel discussion on Will current ventilating system operation undermine public health and efficiency? *Heating-Piping* 15:331-5 JI '43

Peacetime values from a war technology; health engineering. G. Egloff. *Science* 97:102-3 Ja 29 '43; Same. *Chem & Eng* N 21:142-4 F 10 '43; Same. *Inst Pet J* 29:136-9 My '43

Public health and industry. N. Millman. *Ind Med* 12:378-9 Je '43

Public health significance of dental deficiencies. H. J. Knapp. *Am Water Works Assn J* 35:1187-90 S '43

See also

Air pollution	Mental diseases
Alcoholism	Milk supply
Building laws and regulations	Mortality
Carbon monoxide poisoning	Negroes—Health and hygiene
Children—Care and hygiene	Nurses and nursing, Public health
Diseases—Statistics	Nutrition
Disinfection and disinfectants	Physical examinations
Drinking fountains	Rats—Extinction
Dust removal	Refuse disposal
Epidemics	Safety devices and measures
Health centers	Sanitary engineering
Hospitals	Sewage disposal
Hygiene, Industrial	Sickness
Infectious diseases	Tuberculosis
Insurance, Health	Veneral diseases
Insurance, Life—Health conservation service	War and disease
Medical service	Water pollution
Medical service, Industrial	Water purification
	Water supply

Bibliography

Best books on public health. *Munic Ref Lib Notes* [N.Y. Pub. Lib] 28:81-95 D '42

Health; diseases, drugs, and sanitation; list of publications for sale by Superintendent of documents. (Price list 51) 33d ed 138p Superintendent of documents, Washington, D.C. '42

Public health service publications; a list of publications issued during the period July-December 1942. *Pub Health Rep* 58:355-9 F 26 '43

Public health service publications; a list of publications issued during the period January-June 1943. *Pub Health Rep* 58:1511-16 O 8 '43

Statistics

See also

Hospitals—Statistics

Argentina

Public health in Peru and Argentina. *Science* 96:442 N 13 '42

Canada

National, provincial, and local nutrition programs. G. F. Amyot. *bibliog Pub Health Rep* 58:793-6 My 21 '43

See also

Insurance, Health—Canada

Germany

Germany's health; conditions in German Europe. *Economist* 144:180-1 F 6 '43

Great Britain

First British industrial health conference. *Int Labour R* 48:447-65 O '43

Nation's health. *Economist* 145:460 O 2 '43
Plan for prevention and care of tuberculosis in Great Britain. *Monthly Labor R* 57:509-11 S '43

Public health in Great Britain in 1941-42. *Monthly Labor R* 56:79-83 Ja '43

PUBLIC health—Continued

Haiti

Health work tied in with Haiti's sisal program. For Comm W 12:21 Ag 28 '43

India

Rickettsioses in India. N. H. Topping, R. Heilig and V. R. Naidu. bibliog Pub Health Rep 58:1203-10 Ag 6 '43

See also

Ross institute of tropical hygiene

Kentucky

Case studies of nutrition; rural Kentucky. M. Grant. Ann Am Acad 225:52-5 Ja '43

Latin America

Hemisphere betterment, health and sanitation. A. R. Dreisbach. II For Comm W 9: 4-5+ N 21 '42

Inter-American health plan. II For Comm W 11:8-9+ My 29 '43

North Carolina

Cooperative nutrition program. J. F. Kendrick. bibliog Pub Health Rep 58:797-803 My 21 '43

Oregon

Approach to the mental hygiene-public health problem; Division of mental hygiene, Oregon state board of health. G. B. Haugen. Pub Health Rep 58:1211-14 Ag 6 '43

Peru

Public health in Peru and Argentina. Science 96:441-2 N 13 '42

Philadelphia

Incidence of cancer in Philadelphia, Pa. 1938. H. J. Sommers. bibliog Pub Health Rep 57:1843-57 D 4 '42

United States

Broad health program under way. Weekly Underw 148:365+ F 13 '43

Civilian health condition generally favorable. Nat Underw 47:27 S 9 '43; Same. Nat Underw (Life ed) 47:4 S 10 '43

Distribution of health services in the structure of state government; central state services affecting all branches of public health work. J. W. Mountin and E. Flook. Pub Health Rep 58:249-78 F 12 '43

Distribution of health services in the structure of state government; industrial health activities by state agencies. J. W. Mountin and E. Flook. Pub Health Rep 58:33-53 Ja 8 '43

Distribution of health services in the structure of state government; maternity-child health activities by state agencies. J. W. Mountin and E. Flook. Pub Health Rep 57:1791-1821 N 27 '42

Distribution of health services in the structure of state government; state health department organization. J. W. Mountin and E. Flook. Pub Health Rep 58:541-77 Ap 2 '43

Forty-first annual conference of the United States public health service with the state and territorial health officers. T. Parran and others. Pub Health Rep 58:1077-1108 Jl 16 '43

Health during the war. Science 98:sup 12 S 3 '43

Health of the United States at war. Pub Health Rep 58:1281-2 Ag 20 '43

National health. Science 96:sup 10 D 11 '42

Public health and the family in World war II. C. P. Taft. Ann Am Acad 229:145-9 S '43

Something that's getting better; summarized improvements of a quarter century. Sci Am 168:63-9 F '43

See also United States—Public health service

PUBLIC health administration

Approach to the mental hygiene-public health problem; Division of mental hygiene, Oregon state board of health. G. B. Haugen. Pub Health Rep 58:1211-14 Ag 6 '43

Distribution of health services in the structure of state government; central state services affecting all branches of public health work. J. W. Mountin and E. Flook. Pub Health Rep 58:249-78 F 12 '43

Distribution of health services in the structure of state government; industrial health activities by state agencies. J. W. Mountin and E. Flook. Pub Health Rep 58:33-53 Ja 8 '43

Distribution of health services in the structure of state government; maternity-child health activities by state agencies. J. W. Mountin and E. Flook. Pub Health Rep 57:1791-1821 N 27 '42

Distribution of health services in the structure of state government; state health department organization. J. W. Mountin and E. Flook. Pub Health Rep 58:541-77 Ap 2 '43

Governmental industrial hygiene practice in 1942. J. J. Bloomfield. Ind Med 12:491-5 Jl '43

Status of full-time local health organization at the end of the fiscal year 1941-1942. F. W. Kraatz. map Pub Health Rep 58:345-51 F 26 '43

What are the responsibilities of public water supply officials in the correction of dental deficiencies. A. Wolman. Am Water Works Assn J 35:1198-1200 S '43

See also

Milk supply United States—Public health service
Public health department-lic health service
Public health officers Venereal diseases

PUBLIC health associations

Migratory health associations; list. Nat Underw (Life ed) 47:8 Jl 16 '43

PUBLIC health departments

County health department; creation, compliance with statute. Pub Health Rep 58:755-6 My 7 '43

Distribution of health services in the structure of state government; state health department organization. J. W. Mountin and E. Flook. Pub Health Rep 58:541-77 Ap 2 '43

Outlook for the coming year; personnel problems. J. W. Mountin. Pub Health Rep 58: 1088-94 Jl 16 '43

Relationship between small town water supply and state health department. W. A. Reiman. Am Water Works Assn J 35:77-80 Ja '43

Role of the health department in the national nutrition program. W. H. Sebrell and W. Wilkins. bibliog Pub Health Rep 58:803-13 My 21 '43

See also

Public health libraries

Directories

Government officials in charge of public water supply and sewerage undertakings, Canada. Water & Sewage 81:24 Je '43

Employees

Self-help solution of state personnel problems; North Carolina program. J. W. Mountin. Pub Health Rep 58:297-304 F 19 '43

PUBLIC health engineering. See Sanitary engineering

PUBLIC health laws

Court decisions on public health. Published in weekly numbers of Public health reports

Municipal sanitary by-laws; discussion at meeting of Canadian institute on sewage and sanitation. Water & Sewage 80:20-8+ N '42

See also

Milk supply—Laws Wells—Laws and regulations
and regulations
Shellfish—Law

PUBLIC health libraries

Health department library; Baltimore city health department. E. S. Horine. Special Lib 33:336-9 N '42

How the Illinois state department of public health library contributes to nutrition education. F. Nelson. Special Lib 34:262-3 Jl Ag '43

PUBLIC health libraries—Continued

Library and the nutrition program; Department of public health library, Boston. M. H. Smith. Special Lib 34:263-5 JI-Ag '43
 State health department library in a nutrition program, Minnesota department of health. E. C. Barthelemy. Special Lib 34:267-9 JI-Ag '43

PUBLIC health officers

Health officer's place in the management of mental illness. S. W. Hamilton. Pub Health Rep 58:979-84 Je 25 '43

Directories

List of state and insular health officers as of January 15, 1943. Pub Health Rep 58:234-6 F 5 '43

PUBLIC health research institute of New York city

First annual report. Science 96:464-5 N 20 '42

PUBLIC health service. See United States—Public health service**PUBLIC health surveys**

Disability table for urban workers. H. F. Dorn. Pub Health Rep 57:1761-75 N 20 '42
 Extent of immunization and case histories for diphtheria, smallpox, scarlet fever, and typhoid fever in 200,000 surveyed families in 28 large cities. S. D. Collins and C. Council. Pub Health Rep 58:1121-51 bibliog(p1150-1) JI 23 '43

Immunization; majority of children now immunized against diphtheria and smallpox; scarlet and typhoid fever vaccinations, in comparison, are still negligible; abstract. S. D. Collins and C. Council. Science 98: sup 12 Ag 27 '43

Nation-wide study of the bacterial etiology of the pneumonias. A. S. Runnreich and others. map Pub Health Rep 58:121-35 Ja 22 '43

Physically handicapped; orthopedic impairment, major part of problem. E. D. Karpinos. Pub Health Rep 58:1673-92 bibliog(p1591-2) O 22 '43

PUBLIC health workers

Self-help solution of state personnel problems; North Carolina program. J. W. Mountin. Pub Health Rep 58:297-304 F 19 '43

PUBLIC institutions. See Institutions, Public**PUBLIC lands**

See also

County lands	Oil reserves (United States navy)
Mineral lands	
National parks and reserves	

PUBLIC lockers. See Lockers, Public**PUBLIC officials**

See also

Administration, Public	Government employees
	Public health officers

Directories

Federal and state bureaus and officials concerned with mineral resources; U.S. and Canada. Min & Met 24:121-3 F '43

PUBLIC opinion

Eighth national opinion survey. Adv & Sell 38:165 F '43

Fortune survey; farmers tell what they think of farming as a way of life, attitudes toward the war and problems. Fortune 27: 8-10+ Mr; 8-10, 14+ Ap '43

Fortune survey; four potent segments of the U.S. working force judge their jobs, their unions, their employers, and their own prospects for the future. Fortune 27:8-9+ Ja '43

Fortune survey; if war continues, Roosevelt; if war ends, a Roosevelt peace, but not Roosevelt. Fortune 27:10+ Je '43

Fortune survey; labor still faithful to democracy; objectives: voice in management, share in profits, ceiling on incomes, sound peace. Fortune 27:8-10+ F '43

Fortune survey; opinion of American fascists, Lewis, farmers, Administration bodies, etc. Fortune 28:10+ N '43

Fortune survey; seventeen million young women: believe in men, marriage, morals, children, birth control, and jobs—with certain qualifications. Fortune 28:10, 12+ Ag '43

How not to make a customer opinion survey. K. I. Jack. Pub Util 32:142-8 Ag 5 '43

Public looks at labor unions. E. Roper. Harvard Business Rev 21 no4:425-31 [JI] '43
 Public opinion and foreign policy; public is outdistancing Mr Hull and needs leadership again. Fortune 28:134-5 N '43

Public relations; coal's no.2 job; how the public reported in survey. Coal Age 48:46-50 S '43

War workers answer these questions on post-war conditions. F. LaClave. Ptr Ink 204:11-14 Ag 6 '43

What people think about the railroads; third annual sampling of the state of public opinion. Ry Age 116:565 O 9 '43

PUBLIC ownership. See Government ownership**PUBLIC relations**

Begin selling free enterprise in the kindergarten. C. W. Drepperd. il Ptr Ink 204:20+ Ag 13 '43

Business Boswells; National association of public relations men projected. Business Week p23+ D 19 '42

Customer makes a prophecy; socialism not in demand by the masses. K. I. Jack. Pub Util 30:703-14 N 19 '42

Doctor and public relations; General motors corporation. D. D. Hogate. Ind Med 12:269-70 My '43

E. L. Bernays establishes public relations fellowship. Comm & Fin Chr 157:673 F 18 '43

Forum charts wartime public relations policies. Ptr Ink 203:72 My 28 '43

Four dimensions of public relations. P. Garrett. Ptr Ink 203:80+ Je 11 '43

G-E teaches new techniques to housewives befuddled by war. il Sales Management 52: 37, 40 Mr 1 '43

Help them get the facts. Business Week p107 Ap 3 '43

Leadership in industry will take chapter from war; fourth dimension of public relations. P. Garrett. Comm & Fin Chr 157:1977+ My 27 '43

Paid advertising best aid to public relations; A. & P., Bendix, Goodrich as examples. C. Byoir. Ptr Ink 203:17+ Je 18 '43

Pattern for your public relations program. W. Jacobs. il Am Business 13:11-12, 30 JI '43

Plain talk to business men about their press & radio contacts. J. W. Irwin. Sales Management 52:42, 44+ JI 15 '43

Post-war job number 2; more friends for business. il Am Business 13:16-18, 40 Ap '43

Public relations. T. J. Ross. East Underw 44: 19+ F 19 '43

Public relations a problem of first magnitude for industry. C. Robinson. Sales Management 51:26+ D 15 '42

Public relations; coal's no.2 job; how the public reported in survey. Coal Age 48:46-50 S '43

Public relations in action. il Coal Age 48: 51-3, 55-6 S '43

Public relations in the coal mining industry. E. H. Walker. Min Cong J 29:38-40 Je '43

Public relations manager looks at the labor relations program. V. Burnett. Advanced Management 8:74-8 JI '43

Public relations pointers. P. Garrett. Weekly Underw 148:1322-3+ Je 19 '43

Renegotiation as a public relations job for American business. M. H. Karker. il Ind Marketing 27:19-21+ D '42

Shell Oil sponsors roadshow for servicemen in western camps. il Sales Management 52:46+ F 1 '43

Six-point plan for building sound public relations. W. Jacobs. Sales Management 52: 42+ Ag 1 '43

See also

Banks and banking—	Insurance companies
Public relations	—Public relations
Drug trade—Public relations	Libraries, Special—Public relations
Electric utilities—Public relations	Public utilities—Public relations
Engineers—Public relations	Publicity
Insurance agents—Public relations	Railroads—Public relations
	Trade unions—Public relations

PUBLIC schools

See also
Chicago—Public
schools
School buildings

PUBLIC service

Public service for all. Economist 145:131-2
Jl 31 '43

Re-employment of ex-servicemen in public
positions. C. L. Jamison, bibliog Ann Am
Acad 227:104-10 My '43

See also
Civil service Government em-
ployees
Engineers—Public re- Municipal employees
lations Public officials

PUBLIC service company of Indiana

Bonds offered. Comm & Fin Chr 157:1851-2
My 17 '43

Registers with SEC. Comm & Fin Chr 157:
1466 Ap 19 '43

PUBLIC service company of New Hampshire

Amends proposed financing plan. Comm &
Fin Chr 157:1089 Mr 22 '43

Bonds offered. Comm & Fin Chr 157:1275 Ap
6 '43

Bonds reoffered. Comm & Fin Chr 157:1749
My 10 '43

Registers \$24,500,000 securities. Comm & Fin
Chr 157:45 Ja 4 '43

PUBLIC service company of Oklahoma

To merge Southwestern power & light co.
Comm & Fin Chr 158:679-80 Ag 16 '43

PUBLIC service coordinated transport

Public service coordinated transport. Pub
Util 30:725-6 N 19 '42

PUBLIC service corporation of New Jersey

Annual report. Comm & Fin Chr 157:1090 Mr
22 '43

Bond sale approved. Comm & Fin Chr 157:
170 Ja 11 '43

Depressed utility. W. Andrews, Barron's 23:5
Ag 2 '43

U.S. Supreme court refuses review of case;
action upholds court ruling that corporation
is subsidiary of U.G.I. Comm & Fin Chr
156:2309 D 23 '42

PUBLIC service electric and gas company

To purchase bonds. Comm & Fin Chr 157:
171 Ja 11 '43

PUBLIC speaking

Sparklers for speakers. H. V. Prochnow.
Banking 35:43 F; 44-5 Mr; 41 Ap; 51 My;
48 Je; 36:43 Jl '43

PUBLIC trustees

How war affects trustee business; experience
of New Zealand's public trust office. Trusts
& Estates 76:357-61 Ap '43

PUBLIC utilities

Nation-wide conservation and the utilities.
C. A. Esser. Pub Util 32:414-26 S 30 '43

National resources planning board report and
the utilities. Pub Util 31:434-8 Ap 1 '43

Public utility efficiency and postwar full em-
ployment. F. J. McDiarmid. Pub Util 32:
465-76, 547-56 O 14-28 '43

Utilities to-day and to-morrow. F. C. Fullerton.
Il Mag of Wall St 72:236-40+ Je 12
'43

What the state commissioners are thinking
about; opinions expressed at annual con-
vention of the National association of rail-
road and utilities commissioners. Pub Util
32:500-11 O 14 '43

See also
Air lines
Corporation law
Corporations
Electric railroads
Electric utilities
Gas, Natural—Pipe
lines
Gas companies
Motor bus lines
Motor trucks in
freight service

Petroleum pipe lines
Public utilities com-
missions
Railroads
Railroads and state
Street railroads
Telegraph
Telephone
Waterworks

Accounting

Confirmation of public utility accounts re-
ceivable. J Account 76:443-4 N '43

Confirmation of public utility accounts re-
ceivable; statement on auditing procedure
no. 14. J Account 75:65-7 Ja '43

Is straight-line depreciation more realistic?
opposed to sinking-fund method. A. V.
Roberts. Pub Util 31:207-19 F 18 '43
Original cost studies; mistake made by ap-
proaching problem from appraisal stand-
point. J. B. Klainer. Pub Util 30:842-50 D
17 '42

Retroactive regulation; rate reductions and
the treatment of depreciation. L. R. Nash.
Pub Util 32:333-43 S 16 '43

Statistical method for the estimation of
average service life of physical property.
C. B. Benson. N E Water Works Assn J
56:390-6 S '42

See also
Electric utilities—Ac- Railroads—Account-
counting ing
Gas companies—Ac- Waterworks—Ac-
counting counting

Advertising

P.U.A.A. contest winners. Am Gas J 159:36
Ag '43

See also
Electric utilities—Ad-
vertising

Appliance selling

See also
Electric utilities—Ap-
pliance selling

Costs

Incremental cost determination of utility
prices. E. Troxel. J Land & Pub Util Econ
18:468-67; 19:28-39 N '42-F '43

Employees

Are utilities a proving ground for the race
question? order to the Capital transit com-
pany. L. D. Farrar. Pub Util 31:805-14 Je
24 '43

Collective bargaining in public utility service.
S. Bent. Pub Util 31:531-8 Ap 29 '43

Employee has rights in utility property
sales; transfer from private to government
ownership. A. M. Cooper. Pub Util 32:135-
41 Ag 6 '43

Frequency and duration of disabilities caus-
ing absence from work among the em-
ployees of a public utility, 1938-42; Boston
Edison company. W. M. Gafafer, bibliog
Pub Health Rep 58:1554-60 O 15 '43

Key utility men will be held where they
are needed. H. Corey. Pub Util 30:695-702
N 19 '42

Moratorium for non-essential activities in
wartime. E. R. Abrams, Comm & Fin Chr
158:685, 698-9 Ag 19 '43

Should employees of utilities be allowed to
strike? M. M. Rice. Pub Util 31:399-405
Ap 1 '43

Social reform strengthens its antidiscrimina-
tion salient. L. D. Farrar. Pub Util 32:619-
25 N 11 '43

War manpower commission approved list of
essential occupations; group 30—heating,
power, water supply and illuminating ser-
vices. Am Water Works Assn J 35:528-36
Ap '43

See also
Electric utilities— Railroads—Employees
Employees Telephone companies
Gas companies—Em- —Employees
ployees

Equipment

Inventory evened; utilities order no. 1. Busi-
ness Week p20 Mr 20 '43

Necessity of living off each other's inven-
tories; WPB pooling of surplus equipment
and supplies. J. H. Collins. Pub Util 32:210-
15 Ag 19 '43

Finance

Court upholds present fair value for rate
base. O. Ely. Pub Util 31:432 Ap 1 '43

Fair rate of return under war conditions;
tabulation based on questionnaire circu-
lated among state commissions. Pub Util
32:505-11 O 14 '43

NARUC depreciation report. O. Ely. Pub Util
32:561-3, 760-2 O 28, D 9 '43

1942 utility financing down sharply, says SEC.
Comm & Fin Chr 157:1301 Ap 8 '43

PUBLIC utilities—Finance—Continued

Our public utilities in a free enterprise system. F. J. McDiarmid. Pub Util 31:69-81 Ja 21 '43

Public utility efficiency and postwar full employment; three types of utilities in operation, comparison of their methods of financing, and differences in tax burdens. F. J. McDiarmid. Pub Util 32:465-76 O 14 '43

Public utility finance during the war. R. H. O'Brien. Trusts & Estates 76:505-6 N '42

Public utility financing in the third quarter of 1942. R. G. Dudley and W. H. Evans. J Land & Pub Util Econ 18:501-3 N '42

Public utility financing in the fourth quarter of 1942 and a summary of the year 1942. R. G. Dudley and W. H. Evans. J Land & Pub Util Econ 19:105-9 F '43

Public utility financing in the first quarter of 1943. R. G. Dudley and W. H. Evans. J Land & Pub Util Econ 19:245-6 My '43

Relation of capital to utility rate of return. M. G. Davis. Pub Util 31:342-9 Mr 18 '43

SEC releases statistical report on operating utility finances. Pub Util 32:174-7 Ag 5 '43

SEC study of 1942 utilities finances. Comm & Fin Chr 158:314 JI 22 '43

Wall Street hopes Congress will do something for the utilities. O. Ely. Pub Util 31:233-5 F 18 '43

War taxes and the utilities. R. W. Peterson. Pub Util 32:281-6 S 2 '43

What should be done with excess utility earnings? three solutions. F. B. Warren. Pub Util 31:357-60 Mr 18 '43

See also

Holding companies	Public utilities—
Public utilities—	Securities
Regulation	Railroads—Finance

also Associated gas and electric system; Jacksonville gas company

Government ownership

See Government ownership

Insurance requirements

War damage; government's scheme for public utilities. Elec R (Lond) 31:657-8 N 20 '42

International control

Can the public utilities police the peace? international system controlled by Anglo-American interests proposed. F. X. Welch. Pub Util 31:337-41 Mr 18 '43

Law*See also*

Corporation law	Public utilities—Regulation
Holding companies—	Public utilities commissions
Laws and regulations	Railroad law

Management

Public utility efficiency and postwar full employment; operating efficiency of publicly and privately owned utilities. F. J. McDiarmid. Pub Util 32:547-56 O 28 '43

Twenty cities report on utility management. Comm & Fin Chr 158:420 JI 29 '43

See also

Meter reading

Municipal ownership

See Electric utilities—Municipal ownership; Waterworks—Municipal ownership

Public relations

Same old challenge with a great opportunity; reorganization of utility systems under Holding company act. R. B. Cooney. Pub Util 31:156-62 F 4 '43

See also

Electric utilities—	Railroads—Public
Public relations	relations

Rates

Base for rate regulation. L. H. Olson. Pub Util 31:90-6 Ja 21 '43

Court upsets OPA; Washington Gas Light gets favorable verdict on rate increase. Business Week p19-20 JI 31 '43

Incremental cost determination of utility prices. E. Troxel. J Land & Pub Util Econ 18:458-67 N '42

Limitations of the incremental cost patterns of pricing. E. Troxel. J Land & Pub Util Econ 19:28-39 F '43

O.P.A. and rate regulation. J Land & Pub Util Econ 19:103-4 F '43

OPA loses appeal on Washington rate rise. Elec W News ed 120:333 JI 31 '43

OPA's utility rate control. L. D. Farrar. Pub Util 31:486-92 Ap 15 '43

Refunds rather than rate cuts during the war; policy of the Arkansas Department of public utilities. J. D. Walker, jr. Pub Util 32:349-54 S 16 '43

Retroactive regulation; rate reductions and the treatment of depreciation. L. R. Nash. Pub Util 32:333-43 S 16 '43

Rules OPA evidence on rates must be heard; decision in Washington Gas Light case. Elec W 119:459 F 6 '43

See court test on OPA rate intervention; Washington gas light co. case. Elec W 118:1619 N 14 '42

See also

Electric rates	Telephone—Rates
Gas rates	Water rates
Railroads—Rates	

Regulation

Accounting principles and utility regulation. J Account 75:261-4 Mr '43; Discussion. 75:360-3, 451-2 Ap-May '43

How cooperation works in communications regulation; cooperation between regulatory authorities has grown. P. A. Walker. Pub Util 32:267-74 S 2 '43

Journal of commerce publishes compendium of utility articles. Pub Util 32:236-41 Ag 19 '43

New FURA volume released. Pub Util 32:644 N 11 '43

OPA's utility rate control. L. D. Farrar. Pub Util 31:486-92 Ap 15 '43

Relations between the state regulatory agencies and federal war agencies. R. A. Nixon. Pub Util 30:715-20 N 19 '42

Retroactive regulation; rate reductions and the treatment of depreciation. L. R. Nash. Pub Util 32:333-43 S 16 '43

Straws pointing to a change in the wind. H. Corey. Pub Util 32:25-33 JI 8 '43

Trends in public utility regulation. C. O. Ruggles. Gas Age 91:18-19+ Ap 8 '43; Same. Am Gas J 158:23-5 Ap '43

Utility regulation began in the Bay state. E. H. Barber. Pub Util 32:82-95 JI 22 '43

What if California should have to ration utilities? J. H. Collins. Pub Util 31:683-90 My 27 '43

What should be done with excess utility earnings? three solutions. F. B. Warren. Pub Util 31:357-60 Mr 18 '43

See also

Gas, Natural—Laws and regulations	Public utilities commissions
Public utilities—Rates	Securities and exchange commissions

also Jacksonville gas company

Safety measures

Accident prevention in a public utility; Philadelphia electric co. R. M. Godwin. Am Gas J 159:20-1 S '43

Securities

Bull market in utilities discounts favorable political developments. O. Ely. Pub Util 32:164-5 Ag 5 '43

Effect of a 50% federal income tax on utility earnings. Comm & Fin Chr 158:1404 O 7 '43

Many utility refunding issues on the fire. O. Ely. Pub Util 32:100-1 JI 22 '43

Newcomers in the utility list. Comm & Fin Chr 158:509-10 Ag 5 '43

Outlook for utilities; position of leading stocks. Mag of Wall St 71:481-3+ F 6 '43

Possible refunding operations. \$3,350,000,000. O. Ely. Pub Util 32:364-5 S 16 '43

Price trends, 1933-1943; chart. Pub Util 31:567 Ap 29 '43

Selected utility issues with outstanding prospects. F. C. Fullerton. Mag of Wall St 72:474-5, 490-1 Ag 7 '43

\$6,000,000,000 lost by investors through \$ 117 O. Ely. Pub Util 31:297-9 Mr 4 '43

PUBLIC utilities—Securities—Continued

Stock exchange magazine reveals rise in utility issues. Pub Util 32:310-11 S 2 '43

Utilities as peace stocks. Comm & Fin Chr 158:702 Ag 19 '43

Utilities on the way back? O. Ely. Mag of Wall St 72:72-4+ My 1 '43

Utilities to-day and to-morrow. F. C. Fullerton. Il Mag of Wall St 72:236-40+ Je 12 '43

Utility gross sets record, but net declines; indicated 1942 per share earnings and 1941 earnings; tabulation. Barron's 22:10 D 28 '42

Valuable statistical summary on utility bonds and preferred stocks; First Boston corporation. O. Ely. Pub Util 32:630-4 N 11 '43

Values in utility penny stocks. W. Andrews. Barron's 23:9 Mr 22 '43

Wave of utility refunding issues. Comm & Fin Chr 158:406 JI 29 '43

See also

Holding companies—
Securities

Service companies

See also

Holding companies

Taxation

Cities levy new taxes on local utilities. Comm & Fin Chr 157:1877 My 20 '43

Federal taxes increased nearly one-half in 1942. O. Ely. Pub Util 32:230-1 Ag 19 '43

Postwar taxes, will excess profits tax be repealed? effect on utilities. O. Ely. Pub Util 32:494-6 O 14 '43

Tax discrimination against private utility customers; its indirect effect is to foster public ownership. R. W. Peterson. Pub Util 31:473-8 Ap 15 '43

War taxes and the utilities. R. W. Peterson. Pub Util 32:281-6 S 2 '43

Why utilities hope for lower taxes. W. T. Hyde, jr. Barron's 23:11-12 Je 7 '43

See also

Electric utilities—
Taxation

Valuation

Original cost studies; mistake made by approaching problem from appraisal standpoint. J. B. Klainer. Pub Util 30:842-50 D 17 '42

Public utility valuation; special study published by New York journal of commerce. Edison Elec Inst Bul 11:279 S '43

See also

Depreciation
Public utilities—
Rates

War problems

England, its civilian protection and industrial and utility operations in wartime. D. M. DeBard. Elec Eng 62:55-60 F '43

Guide to U-1. Elec W 119:[insert] 1-12 My 29 '43

War emergency repairs in Great Britain. C. F. Greeves-Carpenter. Il Eng N 130:439-42 Mr 25 '43

Washington utility outlook for 1943. F. X. Welch. Pub Util 31:3-14 Ja 7 '43

Arkansas

Refunds rather than rate cuts during the war; policy of the Arkansas Department of public utilities. J. D. Walker, jr. Pub Util 32:349-54 S 16 '43

California

What if California should have to ration utilities? J. H. Collins. Pub Util 31:683-90 My 27 '43

Europe

Can the public utilities police the peace? international system controlled by Anglo-American interests proposed. F. X. Welch. Pub Util 31:333-41 Mr 18 '43

Indiana

Engineers in civilian defense work; the Indiana plan for mobilization of public works and public utility agencies. E. W. Cassidy. Roads & Sts 86:74-6 F '43

Massachusetts

Utility regulation began in the Bay state. E. H. Barber. Pub Util 32:82-95 JI 22 '43

Wisconsin

Tax discrimination against private utility customers; its indirect effect is to foster public ownership. R. W. Peterson. Pub Util 31:473-8 Ap 15 '43

PUBLIC utilities advertising association

Annual meeting, Chicago, June 24-25. Gas Age 92:11-13+ JI 29 '43; Ptr Ink 204:69 JI 2 '43; Elec W News ed 120:5-6 JI 3 '43

PUBLIC utilities commissions

How cooperation works in communications regulation; cooperation between regulatory authorities has grown. P. A. Walker. Pub Util 32:267-74 S 2 '43

Human side of a utility commissioner's life; former member of the Nebraska state railway commission. W. M. Maupin. Pub Util 31:350-6 Mr 18 '43

Relations between the state regulatory agencies and federal war agencies. R. A. Nixon. Pub Util 30:715-20 N 19 '42

Utility regulation began in the Bay state; career, 1885-1919, of the old Massachusetts gas and electric light commission. E. H. Barber. Pub Util 32:82-95 JI 22 '43

What if California should have to ration utilities? J. H. Collins. Pub Util 31:683-90 My 27 '43

PUBLIC utility pipe lines. *See* Pipe lines—
Moving

PUBLIC welfare

See also

Child welfare Safety movement
Hospitals Social laws and legislation
Public health Isolation

PUBLIC welfare departments**Accounting**

Standard classification of public assistance costs. C. R. Rorem. J Account 75:438-41 My '43

PUBLIC works

American public works association has war and postwar session. Concrete (mill sec) 51:242-+ N '43

Dreaming isn't planning. P. B. Fleming. Arch Rec 94:43-4 Ag '43

Manpower and materials shortage hampers municipal public works. Eng N 130:694 My 6 '43

Public works congress. Eng N 129:729-31 N 19 '42

War council construction program swings into high gear; first series of conferences, between Structural clay products institute engineers and staffs of regional, district, and state offices of government construction agencies. Brick & Clay Rec 102:35-6 Ap '43

See also

Aqueducts	Municipal improvement
Bridges	Pavements
Contracts, Government	Public buildings
Flood control	Refuse disposal
Highway departments	Roads
Irrigation	Sewage disposal
Municipal engineering	Sewerage
	Streets
	Waterworks

also Central Valley project, California

Economic aspects

Canadian planning for postwar reconstruction. W. C. Miller. Am Water Works Assn J 35:549-55 My '43; Same. Water & Sewage 81:82, 84+ Ap '43

Construction can pace reconversion. P. B. Fleming. Concrete 51:15+ S '43

Highway phase of post-war public works. G. D. Kennedy. Concrete 51:14, 17-18+ Ag '43

Impact of postwar planning on public works programs. W. Chevalier. Am Water Works Assn J 35:853-61 JI '43; Same. Water Works & Sewerage 90:255-8 JI '43

International public-works enterprises as a post-war measure. O. T. Mallery. For Comm W 11:17 Ap 24 '43

PUBLIC works—Economic aspects—Continued

Labor urged to promote plans for postwar construction projects. R. C. Kirkpatrick. Eng N 131:199 JI 29 '43

Missouri's construction industry forms a citizens postwar construction council. Eng N 131:360 S 2 '43

Needed for the postwar period; public works to absorb excess employables. W. N. Carey. il Civil Eng 13:462-4 O '43

Postwar construction; program adopted by the Board of direction, American society of civil engineers. Civil Eng 13:439-42 S '43; Discussion. 13:543-5 N '43

Postwar mass employment in public works. T. B. Spitzer. Pub Util 31:795-804; 32:15-24 Je 24-JI 8 '43

Postwar planning policy and program formulated by the American society of civil engineers. Eng N 131:300-1 Ag 19 '43

Post-war public works vital. R. Moses. Comm & Fin Chr 158:1709+ O 28 '43

Preparing for public works in the post war period. F. W. Herring. Civil Eng 13:315-16 JI '43

Public works programs; Hammond, Ind. ready for postwar construction. C. A. Mason. il Pub Works 74:11-12+ Ag '43

Putting postwar plans into reality; New York State developing plans and specifications for public works projects. Eng N 130:496-7 Ap 8 '43

Water and sewage works development; statement of the aims and objectives of the Inter-association committee on water and sewage works development. Am Water Works Assn J 35:1156-60 S '43

Widespread need for public works makes immediate planning imperative; abstract. P. B. Fleming. Eng N 130:553 Ap 22 '43

Finance

See also
Special assessments

Statistics

Construction volume statistics for computing 1942 corporation taxes; construction volume 1925-1942. Eng N 130:647 Ap 29 '43

Afghanistan

Afghanistan's contemplated construction. For Comm W 13:16-17 N 6 '43

Argentina

Public works planning in the Argentine Republic. Int Labour R 47:228-9 F '43

California

California provides funds to speed planning of postwar projects. Eng N 130:900 Je 17 '43

Objectives of area analysis in the northern Sierra Nevada. D. Weeks. J Land & Pub Util Econ 19:153-64 My '43

Indiana

Engineers in civilian defense work; the Indiana plan for mobilization of public works and public utility agencies. E. W. Cassady. Roads & Sts 86:74-6 F '43

Missouri

Missouri's construction industry forms a citizens postwar construction council. Eng N 131:360 S 2 '43

New York (state)

Putting postwar plans into reality; New York State developing plans and specifications for public works projects. Eng N 130:496-7 Ap 8 '43

United States

Federal postwar public works totals nearly eight billions. Eng N 130:655-6 My 6 '43

Impact of postwar planning on public works programs. W. Chevallier. Am Water Works Assn J 35:353-61 JI '43; Same. Water Works & Sewerage 90:255-8 JI '43

NRPB on housing; public works. Arch Forum 78:34 Ap '43

Post-war government works plans \$7,695,000,000. Comm & Fin Chr 157:1790 My 13 '43

Postwar works. Business Week p24+ Mr 20 '43

President asks Congress for \$85,000,000 to prepare for post-war works program. Comm & Fin Chr 157:2084 Je 3 '43

President suggests way to implement advance plans for postwar public works. Eng N 130:769 My 27 '43

WPB turns to war program for cuts in construction work. Eng N 129:755-6 D 3 '42

PUBLIC works association, American. See American public works association

PUBLICITY

Editor's viewpoint on publicity material in wartime. J. C. Penson. Ind Marketing 28: 29+ Ag '43

Getting in the news; abstract. M. Kenton. Management R 32:325-6 S '43

Reference service established by C.B.&Q.; information on history, policies, problems and achievements of railroads in general and the Burlington in particular. Ky Age 115:382 S 4 '43

What an editor thinks of company news releases. Adv & Sell 36:56 S '43

Why U. S. Rubber finds paid space more effective than publicity releases. F. D. Richards. Sales Management 51:50-1 D 1 '42

See also

Advertising
Government publicity

Library publicity

PUBLISHERS' libraries

Evaluating library procedures and services; coordination of branch office and home office libraries; Curtis publishing company. M. Hasselberg. Special Lib 34:54-6 F '43

PUBLISHING

Books; they're enjoying greatest sales in years. B. Hall. il Ptr Ink 205:19-21+ O 1 '43

In England, agencies and advertisers buy the space salesman's lunch! H. W. Yoxall. il Ptr Ink 202:60, 62-3 F 12 '43

Poll of publishers' opinions on postwar conditions. Paper Ind 25:708 O '43

Publishers make plans to meet 10% paper cut. Ptr Ink 202:44 Ja 29 '43

Publishers' woes. Business Week p72+ Mr 20 '43

See also

Book industry and trade

Copyright

Encyclopaedia Britannica

Music publishing

Newspapers

Periodicals

Printing

Printing trade—

Finance

PUERTO RICO

President asks home rule for Puerto Rico. Comm & Fin Chr 158:1429 O 7 '43

Puerto Rico home rule asked by Roosevelt. Comm & Fin Chr 157:1119 Mr 25 '43

Puerto Rico's little new deal. S. B. Heath. Ptr Ink 202:60+ F 26 '43

Storm over island; Senate's probe of Tugwell administration. Business Week p88+ D 12 '42

See also

Agriculture—Puerto Rico

Cement industry and trade—Puerto Rico

Cost of living—Puerto Rico

Cotton trade—Puerto Rico

Electric utilities—

Puerto Rico

Fisheries—Puerto Rico

Labor and laboring classes—Puerto Rico

Railroads and state—

Puerto Rico

Commerce

Victory brand soap bobs up in Rex Tugwell's Puerto Rico. Ptr Ink 201:26 D 25 '42

Industries and resources

Areibo grows; city to have two new factories. Business Week p66+ JI 31 '43

PUGET SOUND power and light company

Bonds offered. Comm & Fin Chr 157:1364-6 Ap 12 '43

Ceases to be subsidiary of Engineers public service co. Comm & Fin Chr 158:1537-8 O 18 '43

PUGET SOUND power and light company—*Continued*

- Curb ruling. *Comm & Fin Chr* 158:990 S 6 '43
 Drops mortgage plan. *Comm & Fin Chr* 156:2138 D 14 '42
 Files amendment to recapitalization plan. *Comm & Fin Chr* 157:734 F 22 '43
 Files registration for \$60,000,000 securities. *Comm & Fin Chr* 157:46 Ja 4 '43
 Public utility securities. *Comm & Fin Chr* 158:1300 S 30 '43
 Puget Sound Power & Light and Bonneville. *Pub Util* 30:727-9 N 19 '42
 Recapitalization plan effective; severs connection with Engineers public service co. *Comm & Fin Chr* 158:1177 S 20 '43
 Recapitalization plan gets SEC approval. *Comm & Fin Chr* 157:1653 My 3 '43
 Speculative value of Puget Sound preferred. *W. T. Hyde, jr. Barron's* 23:9 F 8 '43

PULLEYS

- Belt and pulley accidents. *Nat Safety* N 46:26-7 D '42
 Calculating pulleys for step-cone drives. *P. Grodzinski. Machine Design* 15:137-8 J1 '43
 Converts flywheel into larger pulley. *il diags Power* 87:109 F '43
 How to align pulleys and sheaves. *W. F. Schaphorst. diag Power Pl Eng* 47:88 S '43

See also

Belting

PULLMAN, Incorporated

- Annual report. *Ry Age* 114:725-6, 736-7 Ap 10 '43; *Comm & Fin Chr* 157:1466-7 Ap 19 '43
 Government wins anti-trust suit, special court orders car making business separated from sleeper service. *Comm & Fin Chr* 157:1564 Ap 26 '43
 Investment audit. *S. Devlin. il Mag of Wall St* 71:234-5+ D 12 '42
 Liquid resources. *Barron's* 23:13 O 25 '43
 Pullman's tax status less favorable. *H. Lawrence. Barron's* 23:5 Mr 22 '43
 Renders opinion against Pullman; anti-trust suit. *Ry Age* 114:831-2 Ap 24 '43
 Thumbnail stock appraisal. *Mag of Wall St* 72:253 Je 12 '43
 Thumbnail stock appraisal. *Mag of Wall St* 72:686 O 2 '43

PULLMAN company

- Pullman preparing for post-war; will reach down into the lower-budget travel market; luxury sleeping car service at low cost. *G. A. Kelly. Ry Age* 115:600-1 O 16 '43
 Revenue passenger miles, passenger revenues, 1933-1941. *Survey of Cur Business* 1942 Sup p100 [supplemented in monthly numbers]

PULLMAN-STANDARD car manufacturing company

- Car pact void? notice of termination is served by Pullman-Standard on union. *Business Week* p110 Mr 20 '43
 Pullman-Standard to get VT credit. *Ry Age* 115:569 O 9 '43

PULP and paper magazine of Canada

- May 1903-May 1943. *il Pulp & Pa of Can* 44:430-3 My '43

PULPSTONES

- Dismounting of worn-out pulpstones. *B. Bornstein. il Paper Ind* 24:1222+ Mr '43

PULPWOOD. See Wood pulp**PULSE rate indicators**

- Continuous electronic pulse-rate indicator and recorder. *M. M. Schwarzschild and M. C. Shelesnyak. bibliog il diags R Sci Instr* 13:496-501 N '42

PULVERIZED coal. See Coal, Pulverized**PULVERIZED coal firing.** See Boilers—Pulverized coal firing**PULVERIZED fuel engines.** See Diesel engines—Coal dust engines**PULVERIZED stone.** See Stone, Crushed**PULVERIZERS***See also*

- Ball mills
 Crushing machinery

PULVERIZING

- Contrasts in grinding characteristics of mineral products. *G. D. Coe and W. H. Coghill. U S Bur Mines Rep of Invest* 3704:1-11 '43

See also

- Coal, Pulverized—
 Preparation
 Crushing

PUMICE

- New markets for lightweight concrete made with natural and manufactured aggregate. *G. W. Hoffmann. il Rock Prod* 46:91 J1 '43
 Pumice, nature's unique abrasive. *F. Kutnewsky. il Comp Air M* 48:7063-5 Je '43

PUMPING

- Prediction of suction limitation when pumping volatile liquids. *C. D. Bower and P. H. Brown. diag Pet Eng (Ref annual)* 14:239-40+ J1 1 '43

See also

- Mine pumping Pumps
 Petroleum—Pumping Sewage pumping
 Pumping stations

Tables, calculations, etc.

- Acid pump problems involving long suction lines. *W. E. Pratt. diag Chem & Met Eng* 50:104-7 Mr '43
 Chart for determining head, capacity, efficiency, horse power with any three conditions known. *Water Works & Sewerage* 90:sup284 Je '43
 Charts for suction lift of pump. *W. L. Nelson. Oil & Gas J* 42:68 Ag 12 '43
 Determining capacity of reciprocating steam pumps. *W. L. Nelson. Oil & Gas J* 41:83 F 25 '43
 Estimating power required for pumps by short-cut method. *W. L. Nelson. Oil & Gas J* 41:43+ F 11 '43
 Oil-well pumping practices; plunger travel of pumps. *J. Zaba. bibliog Oil & Gas J* 42:66, 69-70 Ag 26; 43-4 S 2 '43
 Power requirements on pumps; chart. *M. Miller. Oil & Gas J* 41:80 Ap 29 '43
 Selection of main line meters; charts designed to simplify problem. *J. C. Thoresen. diags Water Works & Sewerage* 90:221-7 Je '43
 Selection of pumps for oleum and strong sulphuric acid. *W. E. Pratt. diag Chem & Met Eng* 50:86-9+ Ja '43
 Solution of pumping problem aided by use of tabular data. *R. G. Lovell. diags Pet Eng* 14:42, 44 D '42
 Tables show pump condition. *Oil & Gas J* 41:137 My 6 '43

PUMPING machinery

- Antelope Valley farmers profit from irrigation by Diesel pumping units; with cost data. *M. D. Pugh. il Diesel Power* 21:713-14 Ag '43
 Automotive engines adapted to water pump drives. *il Pet Refiner* 22:75-7 Mr '43
 Long-stroke pumping unit uses mine-hoist principle. *N. Williams. diags Oil & Gas J* 41:50 N 19 '42
 Lubrication of speed reducers for oil-field pumping service. *Am Pet Inst Proc* 23(4):210-12 '42
 Old motor bus engines' pump water. *J. C. Albright. il Power* 87:535-6 Ag '43
 Pumping plant for flood protection. *il diags Engineer* 175:432-3, 452-3 My 28-Je 4 '43

See also

- Mine pumps Pumping stations
 Oil pumps Pumps
 Petroleum—Pumping Sewage pumping
 Petroleum pipe lines Vacuum pumps
 —Pumping stations

Control

- Oil-well pump stroke controls. *K. Kelley. il Pet Eng* 14:55-6 J1 '43

Repair

- How to overhaul direct-acting reciprocating steam pumps. *S. M. Elonka. diags Power* 86:895-7 D '42
 Water systems; service and repair. *diags Dom Eng* 160:58-9 N '42

PUMPING machinery, Electric

- Circulating pumps made interchangeable. *W. K. Holmes. diag Elec W* 119:31 Ja 9 '43

PUMPING machinery, Electric—Continued

Electric installations; War emergency pipe line. W. H. Stueve. *il Oil & Gas J* 41:65-6+ Ja 7 '43

Electrical problems in constructing War emergency pipeline stations. W. H. Stueve. *plan Pet Eng* 14:133+ Mr '43

Englewood's sewage pumping station. R. Hartley. *il Pub Works* 74:11-13 S '43

Food fights for freedom; plumbing contractor sells water systems to farmers as conservers of manpower and producers of more food. *il Dom Eng* 162:72-4 S '43

Maintenance of sewage pumping stations. A. L. Soden. *il Water Works & Sewerage* 90:sup27-9 Je '43

Mine pumping; abstract. G. B. Alvey and N. Tetlow. *Elec R (Lond)* 131:748 D 11 '42

New type automatic pump station. S. S. Smith. *il diags Pet Eng* 14:169, 172+ Mr '43

Pipe-line problems from the electrical viewpoint. W. G. Taylor. *il Pet Eng* 14:41+ Je '43

Public water supply. *il Elec R (Lond)* 132:707-10 My 28 '43

Pumping equipment on world's largest diameter oil line. F. H. Love. *il diags Pet Eng* 14:39-41+ Ap '43

Pumping station operation and maintenance; with special reference to McPhillips Street station in Winnipeg. C. Keeping. *il Water & Sewage* 81:18-19+ O '43

Remote lamps show motor operation. *diag Elec W* 119:90 Ja 9 '43

Rural water supply. *il diags Elec R (Lond)* 133:163-6 Ag 6 '43

Thirty years' experience with deep well pumping equipment; with cost data. L. A. Smith. *il Pub Works* 74:14-16 Ja '43

To show that pumps are pumping. E. R. Bonds. *diag Elec W* 120:838+ S 4 '43

Trabon electric-hydraulic barrel pumps. *il Paper Tr J* 115:77 N 26 '42

Underground automatic continuous booster pumping station. W. Molis. *il plan Pub Works* 73:11-12+ N '42

Utilization for pumping loads; utility can net dividends, help farmers increase production by engineering irrigation equipment; with cost data. E. G. Stahl. *Elec West* 90:56-8 Ja '43

Water systems and the food shortage; views on equipment shortage. *il Dom Eng* 161:44-6 Mr '43

See also

Mine pumping, Electric	Petroleum pipe lines
Petroleum—Pumping, Electric	—Pumping stations, Electric
	Pumping stations—Power

Control

Advanced design features WEP products-line control desks. M. A. Hyde. *il Oil & Gas J* 42:158+ S 23 '43

Centralized control for pump house. *il diags Elec W* 118:2138 D 26 '42

Lectralevel floatless pump control. *il diags Electrician* 129:549-50 N 20 '42; *Elec R (Lond)* 131:685 N 27 '42

Pumps controlled automatically over phone line to reservoir; water system of Kalamazoo, Mich. *diag Electronics* 16:148+ Ap 43

Resistors watch level in water system reservoir; automatic system controls operations of pumps; Kalamazoo water distribution system. E. E. Norman. *il diags Elec W* 120:635-7 Ag 21 '43

PUMPING stations

Booster station built in record time in Detroit. L. E. Ayres. *il diags plans map Eng* N 131:472-5 S 23 '43

Pumping-station construction at western air fields. A. J. Taunton. *il diags Water & Sewage* 81:15-19 S '43

Pumping station for flood protection; Huntington, W. Va. *il diags Eng* N 130:886-9 Je 17 '43

Quarter century of development in Cleveland's water supply; progress in pumps and pumping stations. S. C. Simmermacher. *Am Water Works Assn J* 35:882-6 J1 '43

Underground automatic continuous booster pumping station. W. Molis. *il plan Pub Works* 73:11-12+ N '42

See also

Gasoline pipe lines—	Petroleum pipe lines
Pumping stations	—Pumping stations
Mine pumping	Sewage pumping

Cost

Pumping station superstructure, Chicago; unit prices. *Eng* N 131:168 J1 15 '43

Equipment

Lewiston, Idaho, water department saves money by modernizing equipment; with cost data. W. P. Hughes. *il Pub Works* 74:18-19+ Ap '43

Pumping station operation and maintenance; with special reference to McPhillips Street station in Winnipeg. C. Keeping. *il Water & Sewage* 81:18-19+ O '43

See also

Pumping machinery	Water level indicators
-------------------	------------------------

Power

Effect of water waste on power consumption. H. E. Beckwith. *bibliog Am Water Works Assn J* 35:295-8 Mr '43

Toledo's water system can take it: daily pump capacity $\frac{1}{2}$ billion gallons. G. J. Van Dorp and E. M. Wilgus. *il Power* 87:364-6+ Je '43

Utility power serves city in drought; pumped water into Worcester, Mass. system; with cost data. *il Elec W* 119:1500 My 1 '43

Underground stations

Turbine-driven pump under Fifth avenue regulates New York's water pressure. *il diags Power* 87:459-61 J1 '43

PUMPS

Basic considerations in selecting coolant pumps. J. W. Greve. *il Machine Design* 15:66-8 Ja '43

Chemical and proportioning pumps manufactured by Milton Roy pumps. *il Engineering* 155:286-7 Ap 9 '43

Civilian incendiary bomb extinguisher. *il diags Mod Plastics* 20:73-6 D '42

Converting a steam pump for proportioning service; Pennsylvania sugar co. *diag Chem & Met Eng* 50:113 S '43

Estimating power required for pumps by short-cut method. W. L. Nelson. *Oil & Gas J* 41:43+ F 11 '43

Forms of pumps used in hydraulic circuits. *diags Product Eng* 14:636-7 O '43

Handling small water quantities with the siphon or ejector pump; removal of condensate from small cooling coils. F. F. Stevenson. *il diags Heating-Piping* 15:138-9 Mr '43

How to prevent water systems freeze-ups. *il Dom Eng* 160:62 D '42

Hydrostatically-operated chemical dosing pump. *il diags Engineering* 156:86-7 J1 30 '43

Hypodermic syringe makes chemical pump. P. J. Gordon. *diags Power* 87:405 Je '43

Latex pump. *il Chem Ind* 53:362+ S '43

Magic of the metering pump. *il diags Rayon* 24:205-7 Ap '43

New equipment. *il Iron Age* 150:65-6 D 10 '42

Oil-well pumping practices; selection of the pump plunger. J. Zaba. *bibliog Oil & Gas J* 42:60, 62 S 9 '43

Packing gives good service when you give it a break. *diags Power* 87:187-9 Mr '43

Performance characteristics and general application of rotary pumps. D. F. Schaub. *il diags Power* 87:183-5 Mr '43

PESCO pressure-loaded gear pump for aircraft hydraulic systems. J. M. Roth. *il Aeronautical Eng R* 1:133 N '42

Positive-displacement variable-capacity pumps in butane-gasoline pipe-line service. E. A. Koenig. *diags Oil & Gas J* 42:129-30, 133-4+ S 23 '43

Pump efficiency chart. W. F. Schaphorst. *Chem Ind* 51:880 D '42

Pumps in the chemical industry. W. W. Melten and A. P. Smith. *Pet Eng (Ref annual)* 14:236-8 J1 1 '43

PUMPS—Continued

- Quarter century of development in Cleveland's water supply; progress in pumps and pumping stations. S. C. Simmermacher. *Am Water Works Assn J* 35:882-6 J1 '43
- Reciprocating pump stroke-length adjustment. P. H. Walker. *Power* 87:354b+ My '43
- Reciprocating steam pump in the natural gasoline plant. H. P. Henderson. *diags Pet Eng (Ref annual)* 14:309-12 J1 '43
- Review of power and mechanical equipment. *il Power* 86:958-60 Mid-D '42
- Self-priming and other pumps for pulp and paper processes. N. A. Pedersen. *Paper Tr J* 117:33-5 S 23 '43
- Setting and housing well pumps. J. A. Goetz. *il diags Water Works & Sewerage* 90:140-2 Ap '43
- Shriver diaphragm pumps for latex. *il Rubber Age* 53:555-6 S '43
- Small-volume sump improves pump operation. N. L. Dotson, jr. *il diag Power* 87:51-2 Ja '43
- Special war uses for pumps. *Marine Eng* 48:205 J1 '43
- Steam consumption of reciprocal pumps. W. L. Nelson. *Oil & Gas J* 41:46 Mr 11 '43
- Steam pump operates on compressed air. H. S. Sykes. *Power Pl Eng* 46:88 D '42
- Synthetic latex pump. *Chem & Met Eng* 50:125 Mr '43
- Trends of future pumps are indicated by recent designs. L. T. Gibbs. *il diags Oil & Gas J* 42:173-4+ S 23 '43
- Turbine-driven pump under Fifth avenue regulates New York's water pressure. *il diags Power* 87:459-61 J1 '43
- Vane-type rotary pumps. B. P. Hetler. *diags Pet Eng* 14:69-70 Ap '43
- Water system rationing; selling pumps under Dept. of agriculture rule. *Dom Eng* 160:59 D '42

See also

- | | |
|------------|--------------------|
| Air lifts | Oil pumps |
| Air pumps | Pumping machinery |
| Heat pump | Pumping stations |
| Mine pumps | Pumps, Centrifugal |
| Montejus | Vacuum pumps |

Bearings

- Facilitates renewal of worn sleeve on rotary pump shafts; patent assigned to G. & J. Weir Ltd. *diag Machine Design* 14:153 D '42

Design

- Laboratory bellows pump. B. B. Corson and W. J. Cerveney. *il diag Ind & Eng Chem Anal ed* 14:899-900 N 15 '42

History

- Some old tools in Hereford museum; craft of wooden pump making. F. C. Morgan. *Engineer* 174:478-9 D 11 '42

Maintenance and repair

- Application and maintenance of pumping equipment associated with water treating equipment. A. T. Nielsen. *Paper Tr J* 116:42-4 My 27 '43; Same cond. *Paper Ind* 25:309-10 Je '43
- Boring, seating tool for valve repairs. G. M. Heath. *il Nat Pet N* 35 pt 2:R352 Ag 4 '43
- Control of pump repair costs. *Oil & Gas J* 42:81-2 Je 17; 53 J1 1; 53 J1 8 '43
- How to recondition worn pump shafts and rods. *il diags Welding J* 22:248-9 Ap '43
- Increasing black liquor pump life. W. W. Krauss. *il Paper Ind* 25:511-12 Ag '43
- Keep them pumping. J. O. Glenn. *diags Power Pl Eng* 47:70-1 Je; 75-6+ J1 '43
- Maintenance of pumping station equipment. E. R. Spencer. *Pet Eng* 14:157, 159-60 Mr; 60, 63-4, 67 Ap; 85-6, 88 My '43
- Maintenance of pumps. *Chem Age (Lond)* 48:293 Mr 13 '43
- Old parts made new; cold casting for building up worn parts; fescollizing. *Eng & Min J* 144:83 Ap '43
- Pump maintenance. F. D. Mosher. *il Paper Ind* 24:1126-8 F '43
- Pump maintenance; special section. F. A. Annett, ed. *diags Power* 87:93-103 F '43
- Pump trouble check sheet. *Water Works & Sewerage* 90:sup42-3 Je '43

- Pumps and packings; they need attention. F. D. Mosher. *Power Pl Eng* 47:106, 108+ Mr '43
- Reconditioning worn pump shafts. *il diags Textile World* 93:116 Ap '43
- Repairs without priority; steam-driven, tandem-duplex, plunger pump. R. W. Klordan. *diags Power* 87:323 My '43
- Servicing oil-well pumping equipment. L. E. Kesselman. *Pet Eng* 14:70, 72 J1 '43
- Wartime repair of refinery pumps. *Nat Pet N* 35 pt 2:R245-6 Je 2 '43

Standards

- Wartime construction standards for pumps. *Nat Pet N* 35 pt 2:R221 My 5 '43

Statistics

- Pumps and water systems, domestic, shipments, pumps, steam, power, and rotary, new orders, 1938-1941. *Survey of Cur Business* 1942 Sup p146 [supplemented in monthly numbers]

Testing

- New hydraulic laboratory designed for precision testing of pumps. *il Power* 87:319 My '43
- Performance capabilities of pressure loaded gear pumps. J. M. Roth. *il Aero Digest* 41:160, 162 D '42
- PUMPS, Centrifugal**
- Acid pump problems involving long suction lines. W. E. Pratt. *diag Chem & Met Eng* 50:104-7 Mr '43
- Anti-corrosion pumps; selecting alloys for the chemical industry. H. Seymour. *Chem Age (Lond)* 47:536-7 D 12 '42
- Application of electricity in mine pumping. G. B. Alvey and N. Tetlow. *diags Inst E E J* 90 pt 2:139-43 Je '43
- Care of centrifugal pumps. *Coal Age* 48:94 Ap '43
- Care of centrifugal pumps. N. Williams. *il diag Oil & Gas J* 41:45-7 F 18 '43
- Centrifugal pump maintenance schedule. *Textile World* 93:102 Ag '43
- Centrifugal-pump performance as a function of specific speed. A. J. Stepanoff. *bibliog diags A S M E Trans* 65:629-36; Discussion. 636-47 Ag '43
- Centrifugal pumps speed oil through Big inch. *il map Power* 87:168 Mr '43
- Fluid motion inside rotating radial impellers; abstract. E. Grunagel. *Roy Aeronautical Soc J* 47:sup136-7 Ap '43
- How to tailor centrifugal pumps to fit new applications. F. Kristal. *il Power* 87:723-5+ N '43
- Huge centrifugal pumps speed oil through Big inch pipeline. H. P. Binder. *il diags map Power* 87:651-3+ Ap '43
- Increasing black liquor pump life. W. W. Krauss. *il Paper Ind* 25:511-12 Ag '43
- Main centrifugal pumps for WEP 24-inch line. P. Reed. *il Oil & Gas J* 41:38-9 Ja 21 '43
- Monel and nickel cast-iron pump has long life. W. L. Nelson. *Oil & Gas J* 42:70+ O 7 '43
- Novel pump-priming valve. P. Keast. *diags Eng & Min J* 144:77 Mr '43
- Packing problems on high-pressure high-temperature pumps. H. Hornschuch. *il diags Power* 87:225-6+ Ap '43
- Pump know-how improves operation and saves on repairs. F. F. MacWilliams. *Coal Age* 48:77-8 Je '43
- Pump maintenance; special section. F. A. Annett, ed. *diags Power* 87:97-101, 105-6 F '43
- Seal oil systems for refinery centrifugal pumps reviewed. I. Taylor. *il diags Nat Pet N* 35 pt 2:R113-16 Mr 3 '43; Same. *Pet Refiner* 22:70-4 Mr '43
- Selecting construction materials for centrifugal acid pumps. W. E. Pratt. *il Chem & Met Eng* 50:135-6 F '43
- Selection of pumps for oleum and strong sulphuric acid. W. E. Pratt. *diag Chem & Met Eng* 50:86-9+ Ja '43
- Sewage and sludge pumping. H. Ryon. *Water Works & Sewerage* 90:sup223-6 Fe '43
- Sludge pumping. S. E. Kappe. *diag Water Works & Sewerage* 90:sup231-3 Je '43
- Specific speed affects centrifugal-pump performance. A. J. Stepanoff. *Power* 86:967 Mid-D '42

PUMPS, Centrifugal—Continued

- Trailer fire unit; Dennis no. 3 two-stage centrifugal pump, *il* diags Automobile Eng 32:511-17 D '42
- Trends in centrifugal refinery pumps, K. P. Hurley and D. T. Whiting, *il* Pet Eng (Ref annual) 14:341-4 J1 1 '43
- Unusual stuffing box problems encountered in acid pumping, W. E. Pratt, bibliog diags Chem & Met Eng 50:109-13 Ap '43
- Why mechanical seals improve centrifugal pump operation, H. Hornschuck, *il* diags Power 87:524-6 Ag '43

Control

- Fundamentals of automatic operation of centrifugal pumps, W. D. Haentjens, diags Water Works & Sewerage 90:130-2 Ap '43
- Liquid rheostat for continuous control; centrifugal pump and draft fan motors, G. R. Shaw, diags Elec W 119:788+ Mr 6 '43

PUMPS, Feed water

- Boiler feed pump governor, Power Pl Eng 47: 73 O '43
- Bypass protects high-pressure boiler-feed pump, I. Karassik, diags Power 87:678-9+ O '43
- Care of centrifugal boiler feed pumps, diags Textile World 93:84-6 Ja '43
- Chrome plating extends pump-liner life, W. Meinecke, Power 87:762 N '43
- Guide improves pump-valve operation, R. Boettinger, diags Power 86:900-1 D '42
- Pump pounds after quiet operations; suggested causes, diags Power 87:626-7+ S '43
- Some practical considerations on standby boiler-feed pumps, I. J. Karassik, *il* diags Power 87:233-4+, 312-13+ Ap-May '43
- Stops emulsification of bearing oil, diags Elec W 120:1216+ O 2 '43
- Temperature rise in boiler-feed pumps, I. Karassik and R. Carter, chart Power 87: 611, 635 S '43

PUMPS, Fuel

- Effect of injection pumps on cold starting, M. M. Roensch, S A E J 51:277-9 Ag '43
- Motor fuel supply system for engine test rooms, A. F. Holler, diags plan Aero Digest 43:209-10+ J1 '43
- Pneumatic pressure operates aircraft pump; patent assigned to the Wright aeronautical corp, diags Machine Design 15:174+ Je '43
- Quantity-speed characteristics of fuel injection systems, O. F. Zahn, jr, Automotive & Aviation Ind 88:40-2+ Ap 1; 34-7 Ap 15 '43
- Wet driveshaft doubles service; aircraft fuel pumps, R. B. Wallace, *il* Machine Design 15:118+ Ap '43

Testing

- Injection pump test stand, P. H. Schweitzer, *il* diags Automotive & Aviation Ind 89:32-3 O 15 '43
- Stroboscope unmasks fuel injection; Diesel laboratory of Pennsylvania state college, P. H. Schweitzer, *il* diags Automotive & Aviation Ind 89:32-4 S 1 '43

PUMPS, Submersible

- Auxiliary pump assures certain and efficient operation; Packer collieries nos. 2, 3 and 4 of the Locust coal co, H. F. Brecker, diags Coal Age 47:63-4 D '42
- Thirty years' experience with deep well pumping equipment; with cost data, L. A. Smith, *il* Pub Works 74:14-16 Ja '43

PUMPS, Turbine

- Changing from artesian to deep well service; Lebanon, O., L. F. Wertz, *il* diags Pub Works 74:34, 36+ F '43
- Deepwell unit takes over from six other pumps; Purslove coal mining co, *il* Coal Age 48:85 Ap '43
- Installing a turbine pump at Roxboro, N.C., C. M. Abbott, diags plan Pub Works 74:15-16+ O '43
- Maintaining the vertical turbine pump, I. A. Oliver, *il* Eng & Min J 144:84 Ap; 79-80 My; 80-1+ Je '43

PUMPS, Vacuum. See Vacuum pumps**PUNCHED card system**

- Block rate computations, W. J. Root, Am Gas Assn Mo 25:75-7 F '43

- Errors in card punching, W. E. Deming, E. J. Tepping and L. Geoffrey, Am Stat Assn J 37:525-36 D '42
- Expense accounting simplified by electrical accounting machines, H. C. Wiebenson, Bankers Mo 59:552-3 D '42
- Integration of linear second-order differential equations by means of punched cards, M. Kormes, R Sci Instr 14:118 Ap '43
- Numerical solution of the boundary value problem for the potential equation by means of punched cards, M. Kormes, R Sci Instr 14:248-50 Ag '43
- Punched-card system of payroll and labor cost accounting, F. A. MacCauley, *il* N A C A Bul 24:685-702 F 15 '43
- Punched card technique to obtain coefficients of orthogonal polynomials, L. F. Knudsen, bibliog Am Stat Assn J 37:496-506 D '42
- This plan simplifies travel records; Pan American airways system controls and analyzes passenger reservations with punched card system, *il* Am Business 13:20-1+ O '43

PUNCHES

- Cutting costs on perforating dies; use of masonite and Cerromatrix, E. H. Ruder, *il* diags Aviation 42:165-7+ Ag '43
- Impact extrusion and cold pressing of airplane parts, P. Koenig, *il* diags S A E J 51:415-19 N '43; Same cond. Automotive & Aviation Ind 89:38-40 O 15 '43
- Increase of performance of hot work tools, W. Hauffer, Iron Age 152:44-8 S 2 '43
- More from your drop hammers, C. J. Frey and S. S. Kogut, *il* diags Aviation 42:143+ Ja '43
- One templet for engraving punches and dies, N. Hall, diags Am Mach 87:91 Ja 7 '43
- Punch and die life increased by colloidal graphite lubricant, Iron Age 151:58 My 13 '43
- Radii grinder for draw punches, F. Iacobelli, *il* diags Am Mach 87:119 My 13 '43
- Tooling for bombers at Willow Run, *il* diags Am Mach 86:1443-52 D 10 '42
- PUNCHES, Plastic**
- Plastic punch; thermoplastics for forming light metals, Business Week p82+ Ap 24 '43
- Plastic punches are tough; Vega aircraft corporation, *il* Am Mach 87:83-6 F 4 '43; Same, Aero Digest 42:121+ F '43; Same, Iron Age 151:68-72 F 18 '43; Same, Mod Plastics 20:68-9+ F '43; Same, Automotive & Aviation Ind 88:40-2 F 1 '43
- Plastic reduces cost of piercing dies; Vega aircraft corporation, R. Kennedy, *il* diags Am Mach 87:83-6 My 27 '43

PUNCHING

- Adaptor for riveter punches holes, J. Haydock, diags Am Mach 87:95 Ap 1 '43

*See also***Sheet metal work****PUNCHING machinery**

- Die piercing of stampings in small lots; Dayton Rogers mfg. co. using new type of punch press, *il* Iron Age 152:44 Ag 19 '43
- Layout tables speed work on turret punch presses, T. A. Wiedemann, *il* diags Iron Age 151:47-53 F 18 '43

*See also***Dies****PUNCTUATION**

- Under attack, semicolon finds bold defender, E. N. Teall, Inland Ptr 110:58-9 N '42

PURCHASING

- Expediting in wartime, S. Y. Johnson, Harvard Business R 21 no 3:344-57 [Ap] '43
- Lay-away orders for machinery; RCA plan, Mod Packaging 16:92+ My '43
- Streamlining switchgear transactions speeds ordering and installation; use of diagrams and specifications, E. H. Beckert, diags Coal Age 47:102 D '42
- Ten years' progress in management, S. F. Heinritz, A S M E Trans 65:215-18 Ap '43
- What executives should know about purchasing control; using Gantt charts, E. Caldwell, Iron Age 152:59-61 S 16 '43

PURCHASING—Continued

Where to shop by mail. Consumers' Research
Bul 12:26 N '43

See also

Chain stores—Purchasing
Coal purchasing
Consumers
Consumption (economics)
Installment plan
Inventories

Machinery, Replacement of
Merchandizing
Quality of products
Railroads—Purchasing
Retail trade—Purchasing
Stores systems

Advertising aids

Promotion shoe on other foot! Chicago liquor retailer wants preferred stock allocation from distillers. C. Gavin. *Il Ptr Ink* 204:17+ J1 23 '43

Retailer tells manufacturers why they should sell to him; Gamble stores introduces itself to sellers by means of booklet. *Il Ptr Ink* 202:66+ F 26 '43

Spends \$150,000 a year advertising to buy outmoded diamonds and jewelry. *Ptr Ink* 204:54 J1 30 '43

Postwar delivery plans

See Bonds, Government—Merchandise bonds (proposed); Nugent plan

PURCHASING, Cooperative

Druggists at work, to legalize buying pools for small retailers. *Business Week* p96+ Ag 14 '43

See also
Farmers' cooperative oil associations

PURCHASING, Government

Chemical wants of U.S. Oil Paint & Drug Rep 142:7+ D 7 '42
Government to buy U.S. wool clip. *Textile World* 93:113 Mr '43

See also
Contracts, Government
Munitions
Paper, Government

Priorities and allocations, Industrial

PURCHASING, Household

See also
Budget, Household
Buying habits

Consumption (economics)
Installment plan

PURCHASING agents

Buyer and retail training. I. M. Thormann. *Il J Retailing* 18:102-10 D '42
Office manager and the purchasing agent; why some offices never have the right equipment. *Il Am Business* 13:24-6 Ag '43

See also National association of purchasing agents

PURCHASING departments

Expediting in wartime. S. Y. Johnson. *Harvard Business R* 21 no 3:344-57 [Ap] '43

PURCHASING power. See Consumption (economics); Market statistics**PURDUE research foundation**

Graduate fellowship system. H. B. Hass. *bibliog Ind & Eng Chem* 35:223-5 F '43

PURE oil company

Pure oil company; lubricating and other oils for aircraft; cutting oils. W. B. Ross. *Il Aeronautical Eng R* 1:135 N '42
Pure Oil increases crude reserves. H. Lawrence. *Barron's* 23:8 Mr '43

PURINES

Experiments on the synthesis of purine nucleosides; a new and convenient synthesis of adenine. J. Baddiley, B. Lythgoe and A. R. Todd. *Chem Soc J* p386-7 Ag '43

Experiments on the synthesis of purine nucleosides; model experiments on the synthesis of 9-alkylpurines. J. Baddiley and others. *Chem Soc J* p383-6 Ag '43

Analysis

Determination of purines in protein material. A. Bloch. *Franklin Inst J* 236:217-19 Ag '43

PURITAN compressed gas corporation

Contributions to aeronautical progress. G. W. Larson. *Il Aeronautical Eng R* 1:137 N '42

PURITY bakeries corporation

Another look. *Mag of Wall St* 71:196 N 28 '42

PURKINJE effect

Vision at low brightness-levels. A. H. Taylor. *bibliog Il Illum Eng* 38:89-98 F '43

PUZZOLANA. See Pozzuolana**PYCNOMETERS**

Isopropyl alcohol-water system; density-composition data and pycnometric technique. W. M. Langdon and D. B. Keyes. *bibliog Ind & Eng Chem* 35:459-64 Ap '43

PYRANOL

Filter blotter press reconditions pyranol. L. J. Gill. *Elec W* 119:1138+ Ap 3 '43

PYRANOSIDES

Lead tetraacetate oxidations in the sugar group; the rates of oxidation of trehalose, levoglucosan, α -methyl-L-sorbopyranoside, polygalactol and styracitol in glacial acetic acid. R. C. Hockett, M. T. Dienes and H. E. Ramsden. *bibliog Am Chem Soc J* 65:1474-7 Ag '43

Lead tetraacetate oxidations in the sugar group; triphenylmethyl ethers of β -methyl-D-arabinopyranoside and of α -methyl-L-fucopyranoside; the determination of their structures. R. C. Hockett and D. F. Mowery, jr. *bibliog Am Chem Soc J* 65:403-9 Mr '43

PYRANS

Tetrahydrocannabinol—analogs with marihuana activity. R. Adams and others. *bibliog Am Chem Soc J* 64:2653-5 N '42

PYRAZOLE

Investigation of pyrazole compounds; the acylation of 3-phenyl-5-pyrazolone and 3-anilino-5-pyrazolone. A. Weissberger and H. D. Porter. *bibliog Am Chem Soc J* 65:1495-1502 Ag '43

Investigation of pyrazole compounds; the condensation of α -carboxyoxycetothioacetanilide with hydrazines. A. Weissberger and H. D. Porter. *Am Chem Soc J* 65:732-4 Ap '43

Investigation of pyrazole compounds; the synthesis of 1-phenyl-3-hydroxy-5-pyrazolone imide. A. Weissberger and H. D. Porter. *bibliog Am Chem Soc J* 65:52-4 Ja '43

PYRAZOLIDINE

Configuration of tervalent nitrogen; bicyclic hydrazine derivative. E. L. Buhle, A. M. Moore and F. Y. Wiselogle. *bibliog Am Chem Soc J* 65:29-32 Ja '43

PYRAZOLONE

Investigation of pyrazole compounds; the condensation of α -carboxyoxycetothioacetanilide with hydrazines. A. Weissberger and H. D. Porter. *Am Chem Soc J* 65:732-4 Ap '43

Investigation of pyrazole compounds; the synthesis of 1-phenyl-3-hydroxy-5-pyrazolone imide. A. Weissberger and H. D. Porter. *bibliog Am Chem Soc J* 65:52-4 Ja '43

PYRETHRINS

Absorption spectra and the structures of pyrethrins I and II. A. E. Gillam and T. F. West. *Chem Soc J* p671-6 N '42

Observations on the chemical and biological testing of pyrethrum extracts and the relative toxicity of pyrethrins I and II. R. G. Green and others. *Soc Chem Ind J* 61:173-6 N '42

Analysis

Pyrethrum analysis; a modification of the hydrogenation method for determination of pyrethrins. F. B. La Forge and B. B. Bendigo. *Soap & San Chem* 19:100+ Ap '43

PYRETHRUM

Active principles in pyrethrum. *Soap & San Chem* 19:113 Ap '43

Brazilian pyrethrum crop bought by U.S. Oil Paint & Drug Rep 144:7 N 8 '43

Insect control on aircraft. G. L. Dunnahoo. *Il Soap & San Chem* 19:111+ F '43

Insecticidal aerosol production; spraying solutions in liquefied gases. L. D. Goodhue. *bibliog Il diags Ind & Eng Chem* 34:1456-9 D '42

Insecticide outlook; the possibilities of supply and requirements in 1944 for rotenone, pyrethrum, thiocyanates, arsenicals and other raw materials. *Soap & San Chem* 19:107, 109 N '43

PYRETHRUM—Continued

- Observations on the chemical and biological testing of pyrethrum extracts and the relative toxicity of pyrethrins I and II. R. G. Green and others. *Soc Chem Ind J* 61:173-6 N '42
- Pyrethrum and rotenone; abstract. H. Noble. *Oil Paint & Drug Rep* 143:32D Je 14 '43
- Pyrethrum in India. *Chem Age (Lond)* 48:354 Mr 27 '43
- Pyrethrum insecticides for farm under WFA. *Oil Paint & Drug Rep* 143:3+ My 3 '43
- Pyrethrum insecticides use put under control. *Oil Paint & Drug Rep* 143:3 My 10 '43
- Pyrethrum outlook. *Soap & San Chem* 18:109-11 D '42
- Pyrethrum outlook clouded by acute rotenone shortage. *Soap & San Chem* 19:115 F '43
- Pyrethrum processors industry group formed. *Oil Paint & Drug Rep* 143:7 F '43
- Pyrethrum production, India. *For Comm W* 12:13 JI 24 '43
- Review pyrethrum outlook. *Soap & San Chem* 19:133 O '43
- Water emulsion of pyrethrum; abstract. P. F. Russell, F. W. Knipe and T. R. Rao. *Soap & San Chem* 19:105 JI '43

Analysis

- Pyrethrum analysis; a modification of the hydrogenation method for determination of pyrethrins. F. B. La Forge and B. B. Bendigo. *Soap & San Chem* 19:100+ Ap '43
- Pyrethrum analysis; revision of factor used in mercury reduction method. J. J. T. Graham and F. B. La Forge. *bibliog Soap & San Chem* 19:111, 113 N '43

Prices

- Pyrethrum prices on WPB orders set. *Oil Paint & Drug Rep* 143:5+ Ja 25 '43

PYREX

- Development of pyrex glassware; based on information furnished by Corning glass works. *il Chem & Eng N* 21:312-13 Mr 10 '43
- Properties of pyrex multiform glassware. *Elec W* 119:469 F '43
- Pyrex brand multiform glassware. *il R Sci Instr* 14:155-6 My '43
- Surface recombination of H atoms and OH radicals. W. V. Smith. *diags J Chem Phys* 11:110-25 Mr '43

PYRIDINE

- Compound formation between the isomeric phenylphenols and pyridine. S. E. Hazlet and R. W. Morrow. *bibliog Am Chem Soc J* 64:2625-8 N '42
- Derivatives of pyridine acids; N-(2-acylaminoethyl)-nicotinamides. E. M. Hodnett and V. E. Stewart. *bibliog Am Chem Soc J* 65:254-5 F '43
- Infra-red absorption of pyridine vapor. J. Turkovich and P. C. Stevenson. *J Chem Phys* 11:328-9 JI '43

- Microdetermination of hydroxyl content of organic compounds; acetic anhydride-pyridine mixture as reagent. J. W. Petersen, K. W. Hedberg and B. E. Christensen. *bibliog Ind & Eng Chem Anal ed* 15:225-6 Mr 15 '43

- Nitrogen compounds in petroleum distillates; isolation and identification of a $C_{10}H_{11}N$ base from California petroleum. H. L. Lochte, W. W. Crouch and E. D. Thomas. *bibliog diag Am Chem Soc J* 64:2753-5 D '42

- Pyridine recovery from saturators. H. S. Boardman. *flow diag Blast F & Steel Pi* 31:332-6 Mr '43

- Reaction of glutarimides with phosphorus pentachloride; a new pyridine synthesis. W. W. Crouch and H. L. Lochte. *bibliog Am Chem Soc J* 65:270-2 F '43

- 3,4-Substituted pyridines; β -(4-pyridyl)-propionic acid. J. R. Stevens and R. H. Beutel. *Am Chem Soc J* 65:449-51 Mr '43

- Synthesis of a pyridine analog of hydnicarpic acid and of a lower homolog. F. Brody and M. T. Bogert. *bibliog Am Chem Soc J* 65:1075-80 Je '43

PYRIDINESULFONAMIDE

- Preparation of some N-substituted 3-pyridinesulfonamides. F. E. Reinhart. *Franklin Inst J* 236:316-20 S '43

PYRIDOXINE. See Vitamins—Vitamin B₆**PYRIMIDINES**

- Chlorination of 2,4-diketotetrahydropyrimidines by action of a mixture of superoxol and hydrochloric acid. T. B. Johnson. *Am Chem Soc J* 65:1218-19 Je '43

- Reaction of hydrochloric acid with 6-methyl-5,5-dichloroxyhydrouracil. T. B. Johnson. *Am Chem Soc J* 65:1220-2 Je '43

- Ultraviolet absorption spectra of nitrogenous heterocycles; the blocking effect of methyl groups on the ultraviolet absorption spectra of some hydroxypyrimidines and pyrimidines. J. R. Loofbrow, M. M. Stimson and M. J. Hart. *bibliog Am Chem Soc J* 65:148-51 F '43

- Ultraviolet absorption spectra of nitrogenous heterocycles; the effect of pH on the spectrum of uracil-5-carboxylic acid. M. M. Stimson and M. A. Reuter. *Am Chem Soc J* 65:151-2 F '43

Analysis

- Sensitive color reaction for the detection of uracil and cytosine. T. B. Johnson. *Science* 98:90-2 JI 23 '43

PYRITES

- Determination of sulfur in pyrites; abstract. H. Doering. *Paper Ind* 24:984 D '42

- See also*
Arsenopyrite
Chalcopyrite
Pyrrhotite

PYROLIGNEOUS acid

- Tar elimination in pyroligneous acid; removal of tar-forming constituents by polymerization and condensation. D. F. Othmer and R. Katzen. *bibliog flow sheets il Ind & Eng Chem* 35:288-96 Mr '43

PYROMETERS and PYROMETRY

- Pitfalls of temperature measurement. C. O. Fairchild. *Instruments* 15:498-9+ D '42

- Recent work with the quick-immersion thermocouple in the steelworks of Sheffield; comparison of thermocouple and optical pyrometer on acid open-hearth furnace. F. H. Schofield. *Iron & Steel Inst J* 145:235-43 no 1 '42

- Temperature compensation of instruments with negative coefficient resistors; Diesel engine pyrometer application. J. R. Pattee. *Electronics* 16:194+ Ag '43

- Temperature measurement and control with solid photoelectric cells. M. E. Fogle. *il diag Electrochem Soc Trans* 83 (preprint 14):183-91 Ag '43

- See also*
Temperature—Measurement Thermocouples
Thermometers and thermometry

PYROPHOSPHATES**Analysis**

- Determination of pyrophosphate by precipitation with cadmium and polarographic measurement of cadmium in the precipitate. G. Cohn and I. M. Kolthoff. *bibliog Ind & Eng Chem Anal ed* 14:886-90 N 15 '42

- Polarographic determination of manganese as tri-dihydrogen pyrophosphatomanganate. I. M. Kolthoff and J. I. Watters. *bibliog Ind & Eng Chem Anal ed* 15:8-13 Ja 15 '43

PYROPHYLLITE

- United Feldspar's pyrophyllite enterprise. *il Eng & Min J* 144:69-71 Ap '43

PYROTECHNICS, Military. See Military fireworks**PYROXENES**

- Pyroxenes of basaltic magma. F. Walker. *Am J Sci* 241:517-20 Ag '43

PYROXYLIN coated fabrics

- Pyroxylin; coated woven cotton fabrics, 1938-1941. Survey of Cur Business 1942 Sup p169 [supplemented in monthly numbers]

PYRRHOTITE

- Fe-Ni-S system; an introduction with new data on the crystallization of pyrrhotite and pentlandite. H. E. Hawley, G. L. Colgrove and H. F. Zuerbrigg. *bibliog il Econ Geol* 38:335-88 Ag '43

Q

Q FEVER

American and Australian Q fevers: persistence of the infectious agents in guinea pig tissues after defervescence. R. R. Parker and E. A. Steinhilber. *Pub Health Rep* 58:523-7 Mr 26 '43

American Q fever; experimental transmission by the argasid ticks *Ornithodoros moubata* and *O. hermsi*. G. E. Davis. *Pub Health Rep* 58:984-7 Je 25 '43

American Q fever: the occurrence of rickettsia diaporica in *amblyomma americanum* in eastern Texas. R. R. Parker and G. M. Kohls. *Pub Health Rep* 58:1510-11 O 8 '43

Q METER. See Radio instruments**QUALITATIVE analysis**. See Chemistry, Analytic—Qualitative**QUALITY control**. See Chemical plants—Quality control; Factory management—Quality control; Office management—Quality control**QUALITY of products**

Changes in the quality of consumers' goods. Consumers' Research Bul 11:2, 19-20 Mr '43

Joyce sales strategy stresses quality as answer to rationing. *Sales Management* 52: 75-6 Ap 1 '43

Let him buy it at the post exchange. Consumers' Research Bul 12:5-7 N '43

Merchandising problem of the moment: what to do with trade-name when war alters quality? 20 advertisers and advertising agencies answer to P.I. inquiry. F. La-Clave. *Il Ptr Ink* 203:13-15+ Je 4 '43

Post-war industry and quality control. B. H. Wildon. *See Dyers & Col J* 59:161-4 Ag '43

What the consumer seeks from the textile manufacturer. L. C. Prellie. *Am Dyestuff Rep* 32:224-5 My 10 '43

See also

Factory management—Quality control	Inspection Labels Standardization
Grade marks	

QUANTITATIVE analysis. See Chemistry, Analytic—Quantitative**QUANTUM theory**

Dirac's new method of field quantization. W. Pauli. *Rs Mod Phys* 15:175-207 Jl '43

Einstein's theory of gravitation; abstract. G. D. Birkhoff. *Science* 97:sup10 Mr 12 '43

Thermoelectromotive force. K. F. Herzfeld. *Phys R* 64:37-8 Jl 1 '43

Transmission coefficient in the theory of absolute reaction rates. H. M. Hulburt and J. O. Hirschfelder. *bibliog J Chem Phys* 11:276-90 Je '43

See also

Statistical mechanics
Wave mechanics

QUARANTINE, Plant. See Plant quarantine**QUARRIES and quarrying**

Big Rock in Little Rock, Arkansas; quarry and crushing plant. J. M. Daugherty. *il Explosives Eng* 21:130, 151 Jl '43

Blasting a 22ft. limestone ledge over a wide area; Hillsville district, Ohio. *il Rock Prod* 46:54-5+ Ap '43

Blasting five tunnels at one time; Trap rock company of Dresser, Wisconsin. W. P. Behn-horn. *il Explosives Eng* 21:172-3 S '43

Limestone production around the clock; flux stone for steel furnaces; Hillsville district near Youngstown, Ohio. W. B. Lenhart. *il Rock Prod* 46:50 Ap '43

Quarrying around the rim of a hill; Midwest pre cote company. F. Castellani. *il Explosives Eng* 21:190-1 S '43

Tunnel blast at North Branford, J. Harty. *il Explosives Eng* 21:84-5, 99 My '43

See also

Blasting	Rock products plants
Mines and mineral resources	Stone, Crushed

Accidents

National safety competition of 1942. W. W. Adams and T. D. Lawrence. *U S Bur Mines Rep of Invest* 3723:1-44 '43

Quarry accidents in the United States during the calendar year 1941. W. W. Adams and V. E. Wrenn. *U S Bur Mines Bul* 452:1-89; pa 15c Supt. of doc. '43

Wartime safety competition breaks records; 18th annual safety contest for the Sentinels of safety trophies; with list of winners and honorable mention awards. W. W. Adams. *il map Explosives Eng* 21:119-23, 140-4 Jl '43

Electric equipment

Electric power distribution for open-pit mines and quarries. J. E. Borland. *il diags Min Cong J* 29:23-34 Ja; 42-9 Mr '43

Equipment

Construction plant for Fontana project. R. E. Martin. *il diags Civil Eng* 13:533-6 N '43

From quarry to mill with 15-ton trucks; Medusa Portland cement co. *il Rock Prod* 46:47+ Je '43

Million tons for Douglas dam; Birmingham slag company builds plant to produce aggregates and stone sand. B. Nordberg. *il Rock Prod* 45:54-8 D '42

More fines, fewer screen changes; New Enterprise stone & lime co. B. Nordberg. *il diags Rock Prod* 46:44-6 Je '43

More storage capacity reduces compressor load; with cost data. G. C. Tucker. *il Power* 87:91-2 F '43

Over mile of belt, quarry to mill; National cement co. W. B. Lenhart. *il diags Rock Prod* 46:58-62 S '43

Quarrying stone for quicklime; Moores lime company. T. L. Wells. *il diags Explosives Eng* 20:319-23 N '42

Rolls do the entire job; crushing at Paul Frank quarries. W. B. Lenhart. *il diags Rock Prod* 46:48-51 Mr '43

Saving motor truck maintenance; loaded trucks hauled up incline at Cedar Bluff quarry by means of Barney car. B. Nordberg. *il Rock Prod* 45:50-1 N '42

Two-way Barney car system. J. Q. Taylor. *il Rock Prod* 46:50-3 Ja '43

Safety measures

New workers' accident hazards; National safety council's cement and quarry section annual meeting. *Rock Prod* 45:68-9+ D '42

Quarry safety contest; honorable mention certificates. *Rock Prod* 45:111+ D '42

Safety is a boon to wartime cement-and-quarry manpower. J. J. Porter. *il Concrete (mill sec)* 51:155-6+ Ap '43

Second successive trophy award signaled at Dolan quarry. *il Explosives Eng* 20:365-6 D '42

Canada

Canada's stone-quarrying industry. *For Comm W* 12:27 Jl 3 '43

QUARTERMASTER corps. See United States—Quartermaster corps**QUARTZ**

Brazil's quartz crystals play key role in war communications. *For Comm W* 11:23 Je 19 '43

British non-ferrous minerals; quartz, sandstone, sand. W. H. Reynolds. *Chem Age (Lond)* 48:549-52 My 22 '43

Crystals used to measure high accelerations; abstract. *Franklin Inst J* 236:8 Jl '43

Discovery of quartz crystal deposits and new production methods. G. Sonnedeker. *Science* 98:sup10 Ag 6 '43

Miscellaneous metals and minerals production; domestic sources of quartz crystal. R. J. Lund. *Min Cong J* 28:34+ D '42

Proposed standard conventions for expressing the elastic and piezoelectric properties of right and left quartz. W. G. Cady and K. S. Van Dyke. *bibliog diags Inst Radio Eng Proc* 30:495-9 N '42

Quartz crystal applications. W. P. Mason; W. L. Bond. *il diags Bell System Tech J* 22: 178-262 Jl '43

Quartz crystal cuts for oscillator plates. L. A. Elbl. *il diags Electronics* 16:110-12+ Jl '43

Quartz crystals; export standards revised and minimum export prices increased by Brazil. *For Comm W* 10:14-15 Ja 9 '43

QUARTZ—Continued

Quartz crystals in production; processing steps used at the August E. Miller laboratories. *Il Electronics* 16:106-7 O '43

Quartz veins in the Ouachita mountains of Arkansas and Oklahoma (their relations to structure, metamorphism, and metalliferous deposits). H. D. Miser. *bibliog maps Econ Geol* 38:91-118 Mr '43

Radio-quality quartz crystals. *Science* 97: sup12 Ap 9 '43

Silica and semi-silica refractories. J. H. Chesters. *il diags Iron Age* 151:36-7 Ja 21; 44-9 *bibliog*(p47-9) Ja 28 '43

Slicing it thin. *Business Week* p97-8 Ap 17 '43

See also

Chert	Radio frequency—
Crystals, Piezoelectric	Crystal control
Glass	Silica
Quartzite	Tridymite

QUARTZITE

Quartz pebbles for ball mill grinding in Saskatchewan; abstract. W. F. Kerr. *Eng & Min J* 144:71 Ap '43

Recrystallization and flowage in Appalachian quartzite. R. E. Fellows. *bibliog fold map Geol Soc Bul* 54:1399-1431, pl 1-12 S '43

Silica and semi-silica refractories. J. H. Chesters. *il Iron Age* 151:39-41 Ja 21; 44-9 *bibliog*(p47-9) Ja 28 '43

QUASSIA

Quassin; a minor constituent of Jamaica quassia wood. E. P. Clark. *Am Chem Soc J* 64:2883-4 D '42

QUASSIN

Quassin; a minor constituent of Jamaica quassia wood. E. P. Clark. *Am Chem Soc J* 64:2883-4 D '42

QUEBEC

Bridges

Redesign of the Quebec bridge; new structure to illustrate how steel can be conserved. *il diags Roads & Bridges* 81:17-22+ F '43

QUEBEC (province)

See also
Electric utilities— Mines and mineral
Quebec (province) resources—Quebec

QUEBEC conference, 1943

Decisions at Quebec. *Economist* 145:225-6 Ag 21 '43

Inside news from Barron's Capital reporter. E. Blair. *Barron's* 23:4 Ag 23; 5-+ Ag 30 '43

President's address at Ottawa. *Comm & Fin Chr* 158:929 S 2 '43

Roosevelt and Churchill conclude war talks: promise sea, land and air action on all fronts. *Comm & Fin Chr* 158:1021 S 9 '43

Unity issue confronts allies. *Business Week* p15-16+ Ag 21 '43

QUEBRACHO

Practical way to prevent embrittlement cracking; use of sodium nitrate, quebracho extract, waste sulphite liquor and elimination of caustic alkalinity. A. A. Berk and W. C. Schroeder. *diag A S M E Trans* 55: 701-4; Discussion. 704-11 Ag '43

Quebracho trust indictments returned. *Oil Paint & Drug Rep* 142:7+ N 30 '42

QUENCHING

Self-cleaning heat-treat nozzle. J. Whitely. *il diag Metals & Alloys* 17:126 Ja '43

See also

Steel. Quenching of

QUESTIONNAIRES

Consumer questionnaire is part of this down-to-earth post-war promotion; Crane co. program. *il Ptr Ink* 203:20-2 My 28 '43

Don'ts about mail questionnaires; can't assume that facts concerning those who don't answer are the same as for those who do. R. O. Eastman. *Ptr Ink* 202:24, 26+ Mr 12 '43

Psychology plus, pays! faith in human integrity brings 53 per cent response in denture wearer survey for Polident. A. B. Day. *il Ptr Ink* 203:42+ Je 11 '43

Rationalization of government questionnaires. S. A. Rice and H. Venneman. *N A C A Bul* 24:1225-35 Je 15 '43

Shall we kill the questionnaire that lays the golden fact? V. D. Reed. *Ptr Ink* 202:14 Ja 15 '43

Use both mail-type questionnaire and personal interviews in readership research; study made by Los Angeles times; readers don't want to admit reading certain ads. R. E. Baxter. *Ptr Ink* 203:24+ My 7 '43

See also

Business—Reports to government
QUICKSILVER. See Mercury

QUINALDALDEHYDE

Condensation reactions of cinchoninaldehyde and quinaldinaldehyde. H. Kaplan and H. G. Lindwall. *Am Chem Soc J* 65:927-8 My '43

QUINALIZARIN

Colorimetric determination of boron in steel using quinalizarin reaction. G. A. Rudolph and L. C. Flickinger. *il Steel* 112:114+ Ap 5 '43; Same. *Foundry* 71:168-70 My '43

QUINCE seed

Research discovers new stabilizer; extract of quince seed. G. Hadary. *il Food Ind* 15:76-7 F '43

QUINHYDRONE

Electrolytic preparation of quinhedrone. R. E. Ely. *Ind & Eng Chem Anal ed* 15:284-5 Ap 15 '43

QUININE

Antimalarial ammunition; synthetic drugs. R. E. Gruber. *il Tech R* 45:179-81, 190+ F '43

Big quinine plantation to be developed in Guatemala. *Chem & Eng N* 21:1202 Jl 25 '43

Chemistry and development of atabrine and plasmochin. A. E. Sherndal. *il Chem & Eng N* 21:1154-8 Jl 25 '43

Men who gave us quinine. *Chem Ind* 53:341 S '43

National quinine pool. *For Comm W* 10:23 F 13 '43

Quinine after the war. T. W. Delahanty and E. D. Schutrumpf. *il For Comm W* 13:6-7+ N 6 '43

Quinine hunt. *Business Week* p48-9 Mr 6 '43

Quinine mission to seek plantation sites in Costa Rica. *For Comm W* 11:41 My 1 '43

Quinine progress in the war program. J. Jones. *Oil Paint & Drug Rep* 144:3+ Jl 12 '43

Quinine progress in the war program; excerpt from statement by Vice-president Wallace. *Oil Paint & Drug Rep* 144:3+ Jl 5 '43

QUINN, Theodore Kinget, 1893-

Portrait. *Business Week* p7 Jl 3 '43

QUINOIDATION

Quinoidation of triaryl compounds; bromonaphthylidiphenylchloromethanes. L. C. Anderson and D. Johnston. *Am Chem Soc J* 65:239-42 F '43

Quinoidation of triaryl compounds; hydroxynaphthylidiphenylcarbinols. L. C. Anderson and D. G. Thomas. *bibliog Am Chem Soc J* 65:234-8 F '43

QUINOLINE

Alkoxy interchange by γ -alkoxyquinoline derivatives in alcoholic alkali. B. Berinzaghi and others. *Am Chem Soc J* 65:1357-9 Jl '43

Reduction of quinoline and certain substituted quinolines in liquid ammonia. C. M. Knowles and G. W. Watt. *bibliog Am Chem Soc J* 65:410-12 Mr '43

QUINOLINECARBOXYLIC acid

Determination of copper with 8-quinolinecarboxylic acid. J. R. Gilbreath and H. M. Haender. *bibliog Ind & Eng Chem Anal ed* 14:866-7 N 15 '42

QUINOLINOL. See Hydroxyquinoline**QUINOLS**

Some alkyl quinols and related compounds. A. H. Cook, I. M. Heilbron and F. B. Lewis. *Chem Soc J* p659-61 N '42

QUINONE

Homogeneous catalysis and solvent effects in a diene synthesis. A. Wassermann. *Chem Soc J* p623-6 O '42

Optimum conditions for cross-linking animal fibres with formaldehyde and quinone. J. B. Speakman and P. L. D. Peill. *bibliog Text-til Inst J* 34:7770-6 S '43

Tautomerism of benzoquinone-p-nitrosophenol systems; 3-fluoro-4-nitrosophenol. H. H. Hodgson. *Chem Soc J* p89-90 Mr '43

QUINONES

Polarographic studies; mould metabolites and related quinones. J. E. Page and F. A. Robinson. *Chem Soc J* p133-5 Mr '43

Reaction between quinones and metallic enolates; dibromo-*p*-xyloquinone and sodium-malonate ester. L. I. Smith and J. Nichols. *bibliog Am Chem Soc J* 65:1739-47 S '43

Reaction of *ortho*-quinones and *ortho*-quinonimines with primary amines. G. McCoy and A. R. Day. *bibliog Am Chem Soc J* 65: 1956-9 O '43

See also

Naphthoquinone

QUINONIMINE

Reaction of *ortho*-quinones and *ortho*-quinonimines with primary amines. G. McCoy and A. R. Day. *bibliog Am Chem Soc J* 65: 1956-9 O '43

Reactions of retenequinonimine and phenanthraquinonimine with aldehydes; a new example of an aldol-type of condensation. C. W. C. Stein and A. R. Day. *bibliog Am Chem Soc J* 64:2567-9 N '42

Reactions of retenequinonimine and phenanthraquinonimine with Schiff bases; a new example of an aldol-type of condensation. C. W. C. Stein and A. R. Day. *bibliog Am Chem Soc J* 64:2569-73 N '42

QUINOXALINE

Bacterial inhibition by metabolite analogues; reactions and antibacterial properties of *p*-diazine di-*N*-oxides. H. McIlwain. *Chem Soc J* p322-5 JI '43

Quinoxaline cyanines. A. H. Cook, J. Garner and C. A. Perry. *Chem Soc J* p710-13 N '42

Quinoxaline formation and the *ortho* effect. R. C. Fuson and others. *bibliog Am Chem Soc J* 65:1028-9 Je '43

QUITMAN mountains

Geology of the northern Quitman mountain, Trans-Pecos, Texas. R. M. Huffington. *diags map Geol Soc Bul* 54:987-1047, pl 1-3 *bibliog*(p1046-7) JI '43

R**RABBIT houses**

How to design and build a California rabbit hutch. *diags Am Bld* 65:55 Ag '43

RABBITS

Bunnies ride high; rabbits as meat. *Business Week* p55-6 Mr 20 '43

Can Australia's plague be turned to profit? C. R. Budd. *il For Comm W* 11:12-15 Je 12 '43

RACE discrimination

Anti-discriminatory clauses in government contracts are mandatory: FRD. *Comm & Fin Chr* 158:1922 N 11 '43

War labor board decision on wages of Negroes. *Monthly Labor R* 57:31-2 JI '43

Warren objects; Comptroller General voids President's fair employment order. *Business Week* p99 N 6 '43

See also

Fair employment practices committee Negroes—Employment

RACE prejudice

Deep South looks up; it sees an opportunity, with northern aid, to join the Union. *il Fortune* 28:94-100+ JI '43

Recognition of cultural diversities in the postwar world. R. Benedict. *Ann Am Acad* 228:101-7 JI '43

RACE problems

See also

Ethnopsychology

RACE riots

Race riots hurt. *il Business Week* p102+ Je 26 '43

RACEMIZATION

See also

Optical rotation

RACES of man

Human anti-Rh sera and their importance in racial studies. P. Levine. *bibliog Science* 96:452-3 N 13 '42

See also

Ethnopsychology

RACKS

Hanging and racking airplane parts for processing. W. P. Sykes. *il Metal Finishing* 41: 131-3+ Mr '43

See also

Plating racks

RADAR

Development of radar. *Mech Eng* 65:590-2 Ag '43

How radar spots enemy aircraft and helps protect cargo ships on seven seas. *Weekly Underw* 148:1372+ Je 26 '43

Navy's history of radar. *Electronics* 16:212+ JI '43

Official Army-Navy statement issued. *R Sci Instr* 14:192-3 Je '43

Radar; background of the war's greatest development. *Sci Am* 169:78-80 Ag '43

Radar comes out into the open. *Aero Digest* 42:354-6 My '43

Radar goes commercial. *il Business Week* p36 Je 5 '43

Radar plane detectors now in mass production. C. J. Burnside. *Marine Eng* 48:201 JI '43

Radar stories are released by U.S. and Great Britain. *Electronics* 16:274+ Je '43

See also United States—War production board—Radio and radar division

Advertising

Sudden burst of radar advertising; early copy heralds promises of peace-time benefits. *il Ptr Ink* 204:36+ JI 16 '43

RADFORD, William Helsham, 1854-1943

Appreciation. J. P. Hutchins. *Eng & Min J* 144:97-8 Ag '43

RADIANT heating. See Heating—Panel system**RADIATION**

Blackbody. F. Benford. *Gen Elec R* 46:377-82, 433-40 JI-Ag '43

Impact of a wave-packet and a reflecting particle. H. E. Ives. *Opt Soc Am J* 33: 163-6 Mr '43

Propagation of radiation in a scattering and absorbing medium. E. O. Hulburt. *Opt Soc Am J* 33:42-5 Ja '43

Quenching of cadmium resonance radiation (3261A) by hydrocarbons and other gases. E. W. R. Steacie and D. J. LeRoy. *bibliog J Chem Phys* 11:144-71 Ap '43

Spatial asymmetry of Cerenkov radiation as a function of electron energy. H. O. Wyckoff and J. E. Henderson. *bibliog diags Phys R* 64:1-6 JI 1 '43

Specular reflection of plane wave pulses in media of continuously variable refractive properties. M. E. Rose. *Phys R* 63:111-20 F 1 '43

Tables of Planck's radiation functions, and electronic functions. *Franklin Inst J* 236: 196-7 Ag '43

See also

Absorption of rays

Alpha rays

Beta rays

Black body

Cosmic rays

Dispersion of rays

Gamma rays

Heat radiation

Heating—Tables,

calculations, etc.

Light

Quantum theory

Radiators

Radioactivity

Radiography

Radium

Raman effect

Solar radiation

Sound

Spectrum

Ultraviolet rays

X rays

RADIATOR solutions. See Anti-freeze solutions

RADIATORS

Cast-iron boilers and radiators, 1938-1941. Survey of *Cur Business* 1942 Sup p138 [supplemented in monthly numbers]

How to meet war time restrictions in heating and air conditioning design; radiators and coils. T. W. Reynolds. *Heat & Ven* 40:60F F '43

How to size radiators and convectors when used in the same hot water heating system. F. E. Geisecke. *Heating-Piping* 15:408-9 Ag '43

RADIATORS—Continued

Reducing weights and costs of radiator heating systems; experiment at Washburne trade school. A. J. Sander. *il* *diags* plan Heat & Ven 39:17-19 D '42
 Reflective shields for radiators. Consumers' Research Bul 11:8 Mr '43
 Steam trap installation. *il* *diag* Dom Eng 161:56 Ja '43

See also

Hot water heating
 Steam heating

Painting

Steam and hot-water radiators, the right paint to use. Consumers' Research Bul 11:13 D '42

Testing

Tests at Cornell show insulation affects radiator heat output. D. Dropkin. *il* plan Heat & Ven 39:26-7 N '42
 Thermopile for tests of heating equipment. L. W. Winbolt. *diags* Instruments 16:3-4 Ja '43

RADIATORS, Cooling

See also

Anti-freeze solutions

RADICALS (chemistry)

Atomic and free radical mechanisms in hydrocarbon chemistry; abstract. E. W. R. Steacie. *Can Chem & Process Ind* 27:314-15 Je '43

Polymerization of the free radicals of the Wurster dye type; the dimeric resonance bond. L. Michaelis and S. Granick. *bibliog* Am Chem Soc J 65:1747-55 S '43

Reactions of atoms and free radicals in solution; decomposition of acetyl peroxide in aliphatic acids, a new synthesis of succinic acid and its substitution derivatives. M. S. Kharasch and M. T. Gladstone. *bibliog* Am Chem Soc J 65:15-17 Ja '43

Reversible photochemical processes in rigid media: the dissociation of organic molecules into radicals and ions. G. N. Lewis and D. Lipkin. *bibliog* Am Chem Soc J 64:2801-8 D '42

Stabilization and binding of quantized radicals. K. Fajans. *J Chem Phys* 10:761 D '42
 Surface recombination of H atoms and OH radicals. W. V. Smith. *diags* J Chem Phys 11:110-25 Mr '43

Thermal decomposition of hydrocarbons, resonance stabilization and isomerization of free radicals. A. Kossiakoff and F. O. Rice. *bibliog* Am Chem Soc J 65:590-5 Ap '43

See also

Methyl group
 Substitution (chemistry)

RADIO advertising

Boastless commercials build good-will. Westinghouse finds; John Nesbitt's dramatic human stories. L. M. Hughes. *il* Sales Management 52:38+ O 1 '43

CBS asks clients to eliminate hitch-hiker and cow-catcher announcements. *Ptr Ink* 204:57 S 24 '43

Co-op radio program to show post-war problems. *Ptr Ink* 202:47 F 12 '43

Co-ops win air. *il* Business Week p85 F 13 '43

Does radio's technique apply to other media? M. K. Powers. *il* Adv & Sell 36:22+ Ap '43
 How radio is helping the housewife at war. Adv & Sell 36:96 J1 '43

Lone Star broadcasts nutrition programs. *il* Gas Age 91:15 Mr 11 '43

Mystery chef returns on nationwide network with gas company sponsors. J. Cortada. *Am Gas Assn* Mo 25:93 Mr '43

New Wrigley broadcasts will sell women on taking jobs in industry. *Ptr Ink* 204:40 J1 30 '43

Plugs limited; Columbia broadcasting system rescues its listeners from commercial patter. *Business Week* p99-100 S 25 '43
 Radio sells war bonds. *Ptr Ink* 202:50 Mr 12 '43

Radio's \$125,000 retail promotion presentation. *Ptr Ink* 205:40 O 1 '43

Recruiting by air; Seattle tries radio appeal for women workers. *Business Week* p115 J1 10 '43

Service type of advertising nothing new to Blue Coal's radio program. B. Hall. *il* *Ptr Ink* 202:50-1 Ja 8 '43

Smart news reporting features Owens-Illinois radio program. G. A. Nichols. *Ptr Ink* 203:76 Je 25 '43

Space that wasn't there; how paper shortage is affecting the balance among media. L. Deckinger. *Adv & Sell* 36:34 Mr '43

Utility advertising going on the air. *Elec W* 119:1967 Je 12 '43

Women commandos; a radio program building good-will for Oklahoma-natural gas co. J. H. Warden. *Am Gas Assn* Mo 25:249-50 Je '43

Wrigley converts program to promote WAAC enlistments. *il* *Ptr Ink* 203:69 Ap 23 '43

See also

Television advertising

Awards

Awards for contemporary services to radio advertising. *il* Adv & Sell 36:32-4 F '43

Check lists

After the radio program is launched; 15 ways to appraise and improve results. H. S. Chason. *Ptr Ink* 205:89-96 O 1 '43
 When you go into radio; 23-point check list. H. S. Chason. *il* *Ptr Ink* 203:22, 24, 28+ Ap 30 '43

Cost

Radio's green grass country, it's where you get most listeners per dollar; formula for determining it. E. L. Deckinger. *Ptr Ink* 201:71-2+ D 18 '42

Coverage

Audimeter enters first phase of commercial operation; Nielsen radio index based on 1,000 machines. *Ptr Ink* 201:75 D 18 '42

Family versus individual in measurement of audiences. A. Politz. *Am Stat Assn* J 38:233-7 Je '43

How do the four network stand in the Nation's 412 largest cities? Sales Management 52:33-42 My 10 '43

How to measure the potential value of your radio advertising. R. Manville. *Sales Management* 52:18-21 Ap 1; 32, 37-9 My 1; 50+ Je 1; 90-4 J1 15 '43

Radio's green grass country, it's where you get most listeners per dollar; formula for determining it. E. L. Deckinger. *Ptr Ink* 201:71-2+ D 18 '42

Tuning out commercials. M. N. Chappell. *Adv & Sell* 36:24+ N '43

What constitutes radio circulation? C. Franco. *Adv & Sell* 36:44+ My '43
 Who listens to nighttime radio? T. B. Ellsworth. *Adv & Sell* 36:17+ My '43

See also

Radio listeners

Dealer cooperation

Co-op radio clicks for fair-trade drug products in California; manufacturers bear cost of four-station campaign in behalf of 2,700 retail druggists. *Sales Management* 52:30 Je 15 '43

Employees' programs

N. & W. better service clubs sponsor radio broadcast. *Ry Age* 115:34-5 J1 3 '43

Local stations

Sponsorable local radio shows not encouraged by agencies. H. S. Chason. *Ptr Ink* 203:34+ Je 25 '43

Participating programs

See Radio advertising, Cooperative

Regulation

CBS issues bulletin for agencies and advertisers on new FCC rules. *Ptr Ink* 203:79-80+ Je 18 '43

Research

How to measure the potential value of your radio advertising; telephone one of standard tools of radio research. R. Manville. *Sales Management* 52:50+ Je 1 '43
 Listeners want less "soap opera" Blue network survey shows. *Sales Management* 52:80-2 Je 15 '43

No typical daytime serial listener; study of 5,324 women, made by Leda P. Summers and Office of radio research. *Ptr Ink* 203:69-70+ Ap 30 '43

RADIO advertising—Research—Continued

Problem of the daytime serial. M. N. Chappell. Adv & Sell 35:17-18, 70+ D '42

Radio's promising 10-year-old: the daytime serial; a refutation of Dr M. N. Chappell's thesis. G. Seides. Ptr Ink 201:34, 37+ D 11 '42

Recommended: a balanced diet for daytime radio; advertisers too wedded to serials. E. Kobak. Ptr Ink 204:67-8+ Ag 13 '43

Soap operas need new formula; ratings show daytime radio serials losing popularity. M. N. Chappell. Ptr Ink 201:28, 30, 32-3 N 20 '42

Returns

Network radio builds distribution by selling \$1.80 item by mail order; pulls orders from 47 states, opens 140 new jobbing accounts for Melo Crown Stogies. W. J. Frankston. Sales Management 52:36+ J1 15 '43

Spot radio

Radio program convinces quality audience of lower-priced item's value; Clipper Craft clothes, national broadcast followed by local spot announcements. E. Mogul. Ptr Ink 204:26+ J1 23 '43

Some notes on spot radio. N. C. Rorabaugh. Il Ptr Ink 202:134+ F 5 '43

Sponsorable local radio shows not encouraged by agencies. H. S. Chason. Ptr Ink 203:34+ Je 25 '43

Spot radio, movies, are basis of Carter Car-buretor local dealer help program. Il Sales Management 52:50+ Ap 15 '43

Uses spot radio to get war workers. A. W. Hecker. Cleveland. F. Kaumann. Ind Marketing 28:41+ My '43

Statistics

Columbia, Mutual and Blue report on billings. Ptr Ink 202:150-2 F 5 '43

Leading advertisers of 1942 and their expenditures; 399 companies invested \$256,221,479 in magazines, farm papers and network radio. Ptr Ink 203:57+ F 5 '43

Radio broadcasting, cost of facilities, 1938-1941. Survey of Cur Business 1942 Sup p29 [supplemented in monthly numbers]

Surveys

Blue network survey shows daytime listeners dissatisfied with fare. Ptr Ink 203:78 My 23 '43

Preliminary report by NBC on listening survey. Ptr Ink 201:22 D 25 '42

Testing

After the radio program is launched; 15 ways to appraise and improve results. H. S. Chason. Ptr Ink 205:89-96 O 1 '43

Attention, please! part-time and divided-interest listening. A. M. Crossley. Adv & Sell 36:17-18+ Ja '43

How to measure the potential value of your radio advertising. R. Manville. Sales Management 52:18-21 Ap 1; 32, 37-9 My 1; 50+ Je 1; 90+ J1 15 '43

See also

Radio advertising—Coverage

RADIO advertising, Cooperative

Advertising to customers, once well defined, now scattered by the war; teamed sponsorship radio plan, Minneapolis-Honeywell regulator company. C. B. Sweatt. Ptr Ink 202:56, 58 Ja '43

Co-op radio clicks for fair-trade drug products in California; manufacturers bear cost of four-station campaign in behalf of 2,700 retail druggists. Sales Management 52:30 Je 15 '43

RADIO advertising, Foreign

Radio advertising as a selling tool for reaching Latin-America. J. D. Cathcart. Il Sales Management 52:32, 34 Mr 1 '43

What about commercial short wave post war? B. Estes. Ptr Ink 205:19-20 O 22 '43

RADIO aids to aviation

Aviation radio: Aircraft radio laboratory, Wright field. H. R. Yeager. Il Radio N 28: 124-7+ N '42

Aviation radio course (cont). P. W. Karrol. Il Radio N 29:37, 77-80 Ja; 39+ F; 25+ Ap '43

Avigation aids promote flying safety. P. C. Sandretto. Il diag Electronics 16:103-5+ Mr '43

Avigation by radio. L. LeKashman. Il maps Radio N 30:19-21+ O '43

CAA develops traveling air control tower. Civil Aero J 4:101 Ag 15 '43

Danger ahead tips given pilots by flight communications service. Civil Aero J 4:129 O 15 '43

Details of the Vultee flight test recorder. Il diags Aero Digest 42:255-6, 258, 261-2 F '43

Eleventh annual meeting of the Institute of the aeronautical sciences; review of technical papers. A. Klemin. Il diags Aeronautical Eng R 2:31, 33+ Ap '43

Flight performance recorded automatically in ground station; Vultee radio flight test recorder. Il Automotive & Aviation Ind 88: 38 Ja 1 '43

Flight recorder for aircraft. H. D. Giffen. Il diags Radio N 29:14-17+ Ap '43

Forecast by Billy Mitchell; letter found in files of late Aviation authority. Radio N 25:222 N '42

New flight testing apparatus radios precise plane data; instrument developed by the Consolidated-Vultee aircraft corporation. Il diags Product Eng 14:395-9, 512-16 J1-Ag '43

Post-war civilian aviation radio prospects. R. E. Ricketts. Il diags Electronics 16:86-9+ Ag '43

Special U.S. aviation communications issue. Il diags maps Radio N 29:50-295 Je '43

Technical functions and responsibilities of the civil aeronautics administration; radio and land-line communications; Signals division; Air traffic control. E. Sibley; H. S. Stokes; G. A. Gilbert. Il map Aeronautical Eng R 2:15-16, 21, 25 S '43

Vultee radio recorder. H. D. Giffen. Il diags Aeronautical Eng R 2:9+ J1 '43; Same abr. Automotive & Aviation Ind 89:24-8 Ag 15 '43

Western Electric contributes to aeronautical progress. F. C. McMullen. Il Aeronautical Eng R 2:27 F '43

See also

Air lines—Radio communication

Airways—Traffic control

Direction finding apparatus

RADIO aids to navigation
Buoy radiobeacons for inshore navigation. W. W. MacDonald. Il diags Electronics 16:88-91 J1 '43

See also

Direction finding apparatus

RADIO announcers. See Radio broadcasting—Announcers

RADIO antennas

Aerial characteristics. N. Wells. bibliog Il diags Inst E E J 89 pt 3:76-95 Je '42; Discussion. 89 pt 3:95-9 Je '42; 90 pt 3:24-5 Mr '43

Aircraft antenna characteristics. P. J. Holmes. Il Electronics 15:46-8 D '42

Calculation of aerial capacitance. G. W. O. Howe. Wireless Eng 20:157-8 Ap '43

Coupled antennas and transmission lines. R. King. diags Inst Radio Eng Proc 31:626-40 N '43

Design data for ground plane antennas. H. W. Hasenbeck. diags Electronics 16:98-101 Ag '43; Discussion. G. H. Brown. 16:338-9+ D '43

Distribution of current along a symmetrical center-driven antenna. R. King and C. W. Harrison, jr. bibliog diags Inst Radio Eng Proc 31:548-67 O '43; Correction. 31:697 D '43

Effect of radio frequencies of a power system on radio-receiving systems. C. V. Aggers, W. E. Pakala and W. A. Stickel. Elec Eng 62:Trans 169-72 Ap '43

FM circular antenna. M. W. Scheldorf. Il diags Gen Elec R 46:163-70 Mr '43

Input resistance of dipole aeriels; abstract. H. Kaufmann. Wireless Eng 20:354-5 J1 '43

RADIO antennas—Continued

Investigations on umbrella aeriels; abstract. G. Rösseler and K. Vogt. *Wireless Eng* 20:141-2 Mr '43

Method of measuring the effectiveness of electrostatic loop shielding. D. E. Foster and C. W. Finnigan. *diags Inst Radio Eng Proc* 31:253-5 Je '43

Microwave plumbing; laboratory instruction u-h-f equipment used at Harvard. D. D. King. *il Electronics* 16:118-21+ O '43

Modified protective gap for transmitting antennas. A. Leeman. *diags Electronics* 16:128+ My '43

Mutual impedance of antennas. C. W. Harrison, jr. *bibliog J Ap Phys* 14:306-9 Je '43

Open-wire radio-frequency transmission lines. E. A. Laport. *diags Inst Radio Eng Proc* 31:271-80 Je '43

Optimum current distributions on vertical antennas. L. La Paz and G. A. Miller. *bibliog diags Inst Radio Eng Proc* 31:214-32 My '43

Pickup of balanced four-wire lines. C. W. Harrison, jr. *bibliog Inst Radio Eng Proc* 30:517-18 N '42

Powdered iron cores. A. Crossley. *il J Ap Phys* 14:451-5 S '43

Radiation field of a vertical transmitting dipole over stratified ground; abstract. J. Grosskopf. *Wireless Eng* 20:245-6 My '43

Radiation field of long wires, with application to vee antennas. C. W. Harrison, jr. *bibliog diags J Ap Phys* 14:537-44 O '43

Radiation from antennas. S. A. Schelkunoff and C. B. Feldman. *bibliog Inst Radio Eng Proc* 30:511-16 N '42

Radiation from vee antennas. C. W. Harrison, jr. *bibliog diags Inst Radio Eng Proc* 31:362-4 Jl '43

Short-wave dipole aeriels. N. Wells. *bibliog diags Wireless Eng* 20:219-32 My '43

Shunt condenser aerial coupling. S. W. Amos. *diags Wireless Eng* 19:549-54 D '42

Some aspects of radio reception at ultra-high frequency; the antenna and the receiver input circuits. E. W. Herold and L. Malter. *diags Inst Radio Eng Proc* 31:423-38 Ag '43

Theoretical investigations of radiation diagrams and radiation resistance for progressive waves of various phase velocities; abstract. W. Jachnow. *Wireless Eng* 20:87-8 F '43

Theory of antennas of arbitrary size and shape. S. A. Schelkunoff. *bibliog Inst Radio Eng Proc* 29:493-521 S '41; Correction. 31:38 Ja '43

Ultrashort electromagnetic waves; design of radiators or antennas for ultrashort waves. A. Alford. *bibliog diags Elec Eng* 62:303-12, 338-44 Jl-Ag '43

See also

Television antennas

Directional antennas

Adjustment of directional antennas. W. S. Duttera. *il diags Electronics* 16:91-3 Ap '43

Characteristics of the two-antenna array. C. W. Harrison, jr. *bibliog Inst Radio Eng Proc* 31:75-8 F '43

Determination of directional characteristics of aircraft antennas. E. Lovick, jr. *diags Aero Digest* 43:259-60 Jl '43

Determination of the radiation diagrams of radiator groups; directive or anti-fading aerial systems and acoustic radiators; an electro-mechanical method; abstract. H. Kleinwächter. *Wireless Eng* 19:576-7 D '42

Electromechanical calculator for directional-antenna patterns. C. E. Smith and E. L. Gove. *bibliog il diags Elec Eng* 62:Trans 78-83 F '43

Loop antennas for aircraft. G. F. Levv. *bibliog il diags Inst Radio Eng Proc* 31:56-66 F '43; Correction. 31:384 Jl '43

Machine for calculating polar diagrams. H. P. Williams. *diag Electronics* 16:196+ S '43

Mathematical theory of linear arrays. S. A. Schelkunoff. *diags Bell System Tech J* 22:80-107 Ja '43

Remarks on the absorption surfaces of directive aeriels; abstract. K. Fränz. *Wireless Eng* 20:352-4 Jl '43

RADIO apparatus

Alternative materials; developments of electrical interest for panels and screening; metal-treated boards and fabrics, Metrelite; Nuprint panels. *Electrician* 130:270 Mr 12 '43

Crystal holder design. L. A. Elbl. *il diags Electronics* 16:134-8 O '43

Electrical developments of 1942; radio. G. Bartlett. *il Gen Elec R* 46:53-6 Ja '43

Frequency modulated metal-treasure locator. G. M. Bettis. *il diags Radio N* 28:22-4+ O '42

Network theory, filters, and equalizers. F. E. Terman. *bibliog diags Inst Radio Eng Proc* 31:164-75, 233-40, 288-302 Ap-Je '43

Plastics in radio production; discussion. *Inst E E J* 90 pt 3:26 Mr '43

Practical radio course (cont). A. A. Ghirardi. *il diags Radio N* 28:32-3+ D '42; 29:30-1+ Ja; 28-9+ F; 30-1+ Mr; 34-5+ Ap; 31-2+ My; 30:43-4+ Jl; 38-9+ Ag; 43-4+ S; 48-50+ O; 55-6+ N '43

Principles of micro-wave radio. E. U. Condon. *bibliog diags Rs Mod Phys* 14:341-89 O '42

Radio progress during 1942. *bibliog Inst Radio Eng Proc* 31:127-32 Ap '43

Technical development; many developments perfected by engineers of the CAA. J. Easton. *il Radio N* 29:118-20+ Je '43

Vagaries and elusiveness of invention. E. H. Armstrong. *Elec Eng* 62:149-51 Ap '43

See also

Amplifiers, Vacuum tube	Radio compass
Direction finding apparatus	Radio condensers
Inductance coils	Radio detectors
Oscillators	Radio generators
Radio antennas	Radio instruments
Radio apparatus industry	Radio meteorographs
Radio circuits	Radio receiving apparatus
Radio coils	Radio rectifiers
Radio communication	Radio transmitters
	Vacuum tubes

also United States—War information, Office of—Radio control center; United States—War production board—Radio and radar division

Bibliography

Abstracts and references. Published in monthly numbers of *Wireless engineer* Index to abstracts and references published month by month in *Wireless engineer* during 1942. *Wireless Eng* 19:supl-40 [D] '42

See also

Radio engineering

—Bibliography

Manufacture

Assembly work in prisons; Borstal girls produce radio power units. *il Electrician* 131:371 O 15 '43

Plant procedure for expediting war production; Alden products company. *diags Electronics* 16:60-3+ Ja '43

Replacing rubber with synthetic resin at the plants of RCA manufacturing co.; Resistoflex PVA. E. S. Peierls. *il Rubber Age* 52:315-17 Ja '43

Specially equipped comparator speeds inspection of aircraft radio part. *il Mach* 49:141 Je '43

Military use

Laboratories to develop final victory; Signal corps general development laboratories. F. F. Uhrhane. *il Radio N* 28:112-14 N '42

Military radio design; Signal corps equipment. J. Hessel. *il Radio N* 28:110-11+ N '42

Procurement; Signal corps procurement branch. E. V. Eleder. *il Radio N* 28:115-17+ N '42

Radio and electronics in the navy. S. P. Sashoff. *il Electronics* 16:72-5 Ap '43

Radio engineering in wartime. J. L. Fly. *Inst Radio Eng Proc* 31:303-4 Je '43

Radio in the U.S. army; illustrations. *Electronics* 15:50-1 D '42

Radio in warfare. L. W. Orton. *diags Radio N* 30:29+ N '43

Radio production for the armed forces. S. C. Hooper. *Inst Radio Eng Proc* 31:640-2 N '43; Abstract. *Electronics* 16:288+ Mr '43

RADIO apparatus—Military use—Continued

- Radio standards go to war. H. P. Westman. *Inst Radio Eng Proc* 31:381-4 JI '43
 War and radio standards. H. P. Westman. *II Electronics* 16:56-7+ F '43
 War, by radio. S. L. Solon. *Radio N* 30:37+ Ag '43
 Wartime radio production. R. C. Ellis. *Inst Radio Eng Proc* 31:379-80 JI '43
See also
 Radio communication,
 Military

Bibliography

- Electronics bibliography for war training. *Electronics* 16:109-11 My; 128-30 Je '43

Patents

- Enemy-owned patents; description of some electronic patents, available to American industry. *diags Electronics* 16:182+ S '43
 Wartime progress in electronics. R. Eichberg. *II diags Radio N* 29:70-4 Mr '43
 Wartime progress in radionics; review of recently issued patents. R. Eichberg. *II diags Radio N* 29:22-3+ My; 30:33-4+ JI '43
 Wireless patents; a summary of recently accepted specifications. Published in monthly numbers of *Wireless engineer*

Power supply

- Replacement power supplies. R. F. Scott. *diags Radio N* 30:42-3+ O '43
 Variable B voltage supply for lab or classroom. A. H. Broly and J. L. Lahey. *II diags Electronics* 16:156+ O '43
 Variable-frequency electronic generator. D. A. Griffin. *II diags Electronics* 16:130-2+ S '43

Repair

- Airways maintenance. W. Boesch, Jr. and J. F. Teunisson. *II Radio N* 29:116-17+ Je '43
 Maintenance of foreign marine radio. C. Coleman and J. T. Donnelly. *II diags Radio N* 29:36-7+ Mr '43
See also
 Radio receiving apparatus—Repair

Standards

- Mica capacitor standard first American war standard on radio. H. P. Westman. *II Ind Stand* 13:295-8 D '42
 New standard on glass-bonded mica radio insulators. *diags Ind Stand* 14:239 Ag '43
 Radio loudspeaker tests pave way for better reception. A. N. Goldsmith. *II Ind Stand* 13:306-8 D '42
 Second war standard in series covers statite radio insulators. H. R. Wilsey. *II Ind Stand* 14:273-5 O '43
 Signal corps organizes standards agency. *Ind Stand* 14:118 Ap '43
 Standardization of radio parts aids production. S. K. Wolf. *II Ind Stand* 14:149-52 My '43
 Standards for replacement parts for civilian radio in war time. O. H. Caldwell. *II Ind Stand* 13:312-13 D '42
 War and radio standards. H. P. Westman. *II Electronics* 16:56-7+ F '43
 War model standards assure replacement parts for home radios. *II Ind Stand* 14:77-8 Mr '43
 War radio components standardized. *Electronics* 16:126-7 Je '43
 War standards for ceramic materials for radio insulators. A. N. Goldsmith. *II Ind Stand* 14:81-3 Mr '43

Testing

- Automatic production tester. D. A. Griffin and N. B. Smalley. *II diags Electronics* 16:58-61+ F '43
 Bomber nose cone doubles as altitude test chamber for radio equipment. *II Aero Digest* 42:286 My '43
 Factory testing of radio equipments; discussion. *Inst E E J* 90 pt 3:145-6 S '43
 Fighting plane radio parts tested in controlled atmosphere room. *Heat & Ven* 40:66 F '43

- Vibration, humidity, temperature and pressure test generators and chambers. W. W. MacDonald. *II diags Electronics* 16:82-6+ F '43

Wiring

- Graphical symbols; aid in interpreting schematic wiring diagrams. *Electronics* 16:84-7 Ap '43

RADIO apparatus industry

- Future of the radio industry. J. L. Fly. *Ind Marketing* 28:53-4+ JI '43
 OPA tunes in; radio dealers building receivers from odds and ends. *Business Week* p52 Ap 3 '43
 Post-war planning problems; electronics industries. W. MacDonald. *Electronics* 16:72-3+ My '43
 Postwar radio; manufacturers, engineers urge technical planning board. *Business Week* p 32+ Ag 21 '43
 Radical policy changes help Coast distributors cheat hangman. *Sales Management* 52:50-3+ Mr 1 '43
 Radio revolution. *Business Week* p94 O 30 '43
 Tubes due back; armed services steered out of civilian markets. *Business Week* p51-2 Je 26 '43
 Tubes dwindle; WPB urges manufacturers to adjust production. *Business Week* p22 Ap 24 '43
 Zenith helps its distributors survive the global hurricane; hunt for new things to sell, development of service, and sometimes a tie-up with local war industry. O. E. Wolf. *II Sales Management* 52:70+ F 15 '43

See also

- Radio corporation of United States—War America production board—Radio and radar division

Directories

- Buyers' guide; directory of electronic and allied products. *Electronics* 16:supD1-D34 Je '43

Materials

- Petrographic study of domestic talcs. L. H. Berkelhamer. *bibliog II Am Cer Soc Bul* 22:227-30 JI 15 '43

Statistics

- 1942 radio receiver by factories; tabulation. *Electronics* 16:186 My '43

Canada

- Canadian production decreased; quarterly figures, 1939-1941 and first two quarters, 1942. *For Comm W* 9:31 D 12 '42
 Radio production and sales in Canada, 1940-1942. *For Comm W* 12:39 Ag 21 '43

Ecuador

- Receiving sets in Ecuador. *For Comm W* 10:25 F 6 '43

Great Britain

- Radio research and production. G. M. Garro-Jones. *Engineering* 156:135 Ag 13 '43
 Radio silver jubilee. T. E. Goldup. *Elec R (Lond)* 133:544 O 22 '43

South Africa

- South Africa's new radio industry. E. F. Sylvester. *II For Comm W* 11:9+ Ap 3 '43

RADIO apparatus on aircraft

- Air transport command; radio helps deliver men and supplies. *II Radio N* 29:72-3+ Je '43
 Aircraft antenna characteristics. P. J. Holmes. *II Electronics* 15:46-8 D '42
 Aircraft-engine radio shielding. D. W. Randolph. *diags S A E J* 50:538-41+ D '42
 Aircraft radio design. A. F. Trumbull. *II diags Electronics* 16:98-101+ N '43
 Aircraft radio industry. *II Radio N* 29:162-5 Je '43
 Bomber nose cone doubles as altitude test chamber for radio equipment. *II Aero Digest* 42:286 My '43
 Determination of directional characteristics of aircraft antennas. E. Lovick, Jr. *diags Aero Digest* 43:259-60 JI '43
 Emergency radio transmitter automatically sends out S O S signals. *II Aero Digest* 43:318 JI '43

RADIO apparatus on aircraft—Continued

- German aircraft radio equipment. L. Winner. *il* Radio N 29:10-12+ Mr '43
 Grasshoppers. *il* Radio N 29:80-2 Je '43
 Ignition shielding design. J. J. Mascuch. *il* Aero Digest 41:227-8, 230+ N '42
 Interphones go to war. *il* Radio N 29:74-5+ Je '43
 Lear avia, inc.; ten years' progress in airplane electric and radio equipment. L. Gelin. *il* Aeronautical Eng R 1:127 N '42
 Loop antennas for aircraft. G. F. Levy. bibliog *il* diags Inst Radio Eng Proc 31:56-66 F '43; Correction. 31:384 JI '43
 Radio for our bombers; serviced and repaired by Signal corps men. H. J. Andrews. *il* Radio N 30:30-1 O '43
 Radio-noise filters applied to aircraft. C. W. Frick and S. W. Zimmerman. *il* diags Elec Eng 62:Trans 590-5 S '43
 Ten years of RCA aviation radio development. H. M. Huckle. *il* Aeronautical Eng R 1:139 N '42
 United nations vs Axis warplane radio equipment. J. L. Waddington. *il* Aero Digest 42:154-5+ Je '43

See also

- Radio aids to aviation
 Radio compass

RADIO apparatus on ships

- Maintenance of foreign marine radio. C. Coleman and J. T. Donnelly. *il* diags Radio N 29:36-7+ Mr '43

See also

- Direction finding apparatus

RADIO attenuators

- Design for dissymmetrical T pads. E. Y. Webb, Jr. charts Electronics 16:123-4 JI '43
 Network theory, filters, and equalizers. F. E. Terman. bibliog diags Inst Radio Eng Proc 31:233-40, 288-302 My-Je '43; Correction. 31:656 D '43

RADIO beacons

- Buoy radiobeacons for inshore navigation. W. W. MacDonald. *il* diags Electronics 16:88-91 JI '43
 Federal airways. C. I. Stanton. *il* Radio N 29:100-1+ Je '43
 Postwar airways. A. Scott. Air Transport 1:63-4+ S '43
 Radio ranges. D. M. Stuart. *il* map Radio N 29:126-9+ Je '43

See also

- Direction finding apparatus

RADIO broadcasting

- Broadcasters adopt standard formula for measuring station physical coverage. P. H. Erbes, Jr. *Ptr Ink* 203:33+ My 7 '43
 Future of broadcasting. Economist 145:195-6 Ag 14 '43
 Radio and camp shows build service men's morale: Coca-Cola, Camel, General Electric and other national advertisers. P. Murray. *il* *Ptr Ink* 202:20, 22, 24+ Ja 22 '43

See also

- | | |
|----------------------------------|----------------------------|
| Radio advertising stations | Radio frequency modulation |
| Radio broadcasting stations | Radio receiving apparatus |
| Radio communication—Interference | |

also Radio corporation of America**Announcers**

- Station has error contest for announcers. H. Bratsberg. *Ptr Ink* 204:33 S 17 '43

Control

- See also* United States—War information, Office of—Radio control center

Frequency modulation system

- See* Radio frequency modulation

Frequency standards

- Standard frequency broadcasts of National bureau of standards. Electronics 16:228+ S '43; Same. Elec Eng 62:424-5 S '43; Same. Inst Radio Eng Proc 31:642 N '43; Same. Franklin Inst J 236:392-4 O '43; Same cond. Elec W 120:1008 S 18 '43

Government use

- U.S. short-wave broadcast control center, new Office of war information radio headquarters. *il* plans Electronics 16:114-17+ O '43

International aspects

- Short wave miracle pulls the Americas together. D. Francisco. maps *Ptr Ink* 205:20-1+ O 15 '43
 What about commercial short wave post war? B. Estes. *Ptr Ink* 205:19-20 O 22 '43

News

- Smart news reporting features Owens-Illinois radio program. G. A. Nichols. *Ptr Ink* 203:76 Je 25 '43

Night programs

- Who listens to nighttime radio? T. B. Ellsworth. Adv & Sell 36:17+ My '43

Phonograph programs

- Foolproof cuing system for broadcast stations. J. Zelle. diags Electronics 16:106+ F '43
 Measurement of transcription-turntable speed variation. H. E. Roys. *il* diags Inst Radio Eng Proc 31:52-5 F '43
 NAB answers Mr Smith. N. Miller. Adv & Sell 35:23+ D '42
 Records again? Senate grilling may force Petrillo to end six-month ban on recordings. Business Week p28-30 Ja 23 '43
 Sound recording depends upon electronics. C. R. Keith. *il* Electronics 16:114-15 Mr '43
 Steelman tunes in, but Petrillo holds out. Business Week p101 Je 26 '43
 Techniques of sound recording. F. E. Butler. *il* plan Radio N 30:21-3+ N '43

Police uses

- See also*
 Radio telephone—
 Police uses

Program rating

- Problem of the daytime serial. M. N. Chapell. Adv & Sell 35:17-18, 70+ D '42
 Yardstick of criticism; Columbia broadcasting system's program analyzer. *il* Business Week p78 O 9 '43

Program recording

- Recording war news with the SX-28. O. Read. *il* diags Radio N 29:18-21+ F '43
 Techniques of sound recording. F. E. Butler. *il* plan Radio N 30:21-3+ N '43

Programs

- See also*
 Radio broadcasting
 —Serials

Regulation

- See* Radio laws and regulations

Safety programs

- Congress on the air. *il* Nat Safety N 48:26+ N '43
 Ghost shift; safety broadcast program; safety award to Caterpillar tractor company. Safety Eng 85:23 My '43
 Men, machines and victory outstanding program. Nat Safety N 47:94-5 F '43
 Safety on the air. Nat Safety N 47:32 My '43
 Station NSC calling. Nat Safety N 47:27 Je '43

Serials

- Dusting off Dr Berg; comments on his criticisms of the daytime serial. M. Wylie. *il* *Ptr Ink* 202:19-20+ F 12 '43
 Listeners want less "soap opera" Blue network survey shows. Sales Management 52:80-2 Je 15 '43
 Maybe it's old-fashioned lumbago. C. B. Brown. *Ptr Ink* 202:68 Ja 1 '43
 No typical daytime serial listener; study of 5,324 women, made by Leda F. Summers and Office of radio research. *Ptr Ink* 203:69-70+ Ap 30 '43
 Problem of the daytime serial. M. N. Chapell. Adv & Sell 35:17-18, 70+ D '42
 Radio serials transmit war messages and solve life problems through stories; interview with Anne Hummert. P. Murray. *Ptr Ink* 204:22-3+ S 3 '43

RADIO broadcasting—Serials—Continued

Radio's promising 10-year-old: the daytime serial; a refutation of Dr M. N. Chappell's thesis. G. Selde. *Ptr Ink* 201:34, 37+ D 11 '42

Recommended: a balanced diet for daytime radio; advertisers too wedded to serials. E. Kobak. *Ptr Ink* 204:67-8+ Ag 13 '43

Say virtues of daytime serials outweigh shortcomings; committee of physicians, preliminary report. *Ptr Ink* 202:20 F 12 '43

Soap operas need new formula; ratings show daytime radio serials losing popularity. M. N. Chappell. *Ptr Ink* 201:28, 30, 32-3 N 20 '42

Sound effects

Producing sound effects. A. R. Boone. *il Radio N* 29:20-1+ Ja '43

Standard frequency

See Radio broadcasting—Frequency standards

War propaganda

Radio engineer in psychological warfare. R. C. Corderman. *Inst Radio Eng Proc* 31: 510-14 S '43

War uses

OWI reviews war communications. *Electronics* 16:242+ N '43

Radio broadcasting; new industry plays vital war role. *Index* 22 no 4:89-96 [D] '42

Radio serials transmit war messages and solve life problems through stories; interview with Anne Hummert. P. Murray. *Ptr Ink* 204:22-3+ S 3 '43

United States radio at war. P. Hollister. *Special Lib* 34:238-41 Jl-Ag '43; Same cond. *Adv & Sell* 36:42+ Ag '43

Wire recorders for army. *il Electronics* 16: 234+ O '43

Wired radio

Rediffusion; abstract. P. Adorjan. *Electronics* 16:126 F '43

Wartime developments in carrier current communication. G. Abraham. *Electronics* 16:76-7+ Ja '43

Women's programs

How radio is helping the housewife at war. *Adv & Sell* 36:96 Jl '43

Women commandos; a radio program building good-will for Oklahoma natural gas co. J. H. Warden. *Am Gas Assn Mo* 25: 249-50 Je '43

Canada

Maintenance of broadcast operations in wartime. J. A. Oumet. *il Inst Radio Eng Proc* 31:93-9 Mr '43

Great Britain

Progress in short-wave broadcasting. N. Ashbridge. *Engineering* 155:17 Ja 1 '43

Will foreign concerns advertise to America by short wave post war? B. Estes. *Ptr Ink* 205:24-5+ N 5 '43

New Zealand

New Zealand's broadcasting; some unusual arrangements. *For Comm W* 13:16 O 16 '43

United States

Facts on the Blue; review of network's sale by FCC. *Business Week* p96+ Ag 21 '43

Noble buys Blue; RCA sells network, as required by FCC. *Business Week* p78+ Ag 7 '43

Radio broadcasting; new industry plays vital war role. *Index* 22 no 4:89-96 [D] '42

Radio's self help broadcasters weigh help for small stations. *Business Week* p60 My 8 '43

WMCA is sold. *Business Week* p96+ S 18 '43

See also
Columbia broadcast- National broadcasting ing system company

RADIO broadcasting stations

WMCA is sold. *Business Week* p96+ S 18 '43

See also
Columbia broadcast- ing system

Advertising

Color slide presentation pre-viewed by Mutual. *Ptr Ink* 203:26 Je 11 '43

Hitch your camera to your job. R. MacLeod. *il Am Phot* 37:30-1 Je '43

Coverage

Broadcasters adopt standard formula for measuring station physical coverage. P. H. Erbes, jr. *Ptr Ink* 203:33 My 7 '43

Equipment

Automatic air-raid alarm for broadcast stations use. V. Voss. *diag Electronics* 16: 100+ F '43

Automatic control circuits for broadcast transmitters. W. R. Sloat. *il diags Electronics* 16:102-5+ N '43

Flux navigator; enables WABC's personnel to reach island station in fog; magnetic field from power cable guides vessel. D. D. Jones. *il diags Electronics* 16:74-7+ F '43

Foolproof cuing system for broadcast stations. J. Zelle. *diag Electronics* 16:106+ F '43

Precision time control; amplified tuning fork power supply in National broadcasting company studios and control rooms at New York. *il diag Electronics* 15:49+ D '42

Simplified carrier-failure and tone alarm system for broadcast stations. J. Herold. *diag Electronics* 16:315-16 Mr '43

Using phone line for remote indication of overmodulation. A. Leeman. *diags Electronics* 16:144+ Jl '43

See also

Radio antennas

Radio transmitters

Location

Moving a 50-kw transmitter without loss of air time; WJZ moving to new site. *il map Electronics* 16:100-1+ O '43

WJZ moves in; OWI permits it to move transmitter closer to New York. *il map Business Week* p88+ O 16 '43

Moving

Moving a 50-kw transmitter without loss of air time; WJZ moving to new site. *il map Electronics* 16:100-1+ O '43

Power

Engine-driven emergency power plants; station WIEW. K. Troeglen. *il diag Inst Radio Eng Proc* 31:15-18 Ja '43

See also

Radio transmitters—

Power supply

Protection

Maintenance of broadcast operations in wartime; Canadian broadcasting corporation. J. A. Oumet. *il Inst Radio Eng Proc* 31: 93-9 Mr '43

RADIO broadcasting studios

Contributions to the acoustics of radio studios. W. Furrer. *Acoustical Soc Am J* 14:239-41 Ap '43

Haydite units supply sound insulation in NBC building. *il Concrete* 51:21 Jl '43

San Francisco's Radio City; views and plans. *Arch Rec* 92:37-40 N '42

Air conditioning

Conditioned air can't go on the air at Hollywood Radio City; maintenance of sound-proof system. H. C. Alber. *il Heating-Piping* 15:476 S '43

National broadcasting company completely conditions its San Francisco Radio City plant. S. E. Locke. *il Heat & Ven* 39:21-5 N '42

RADIO circuits

Air-raid alarm circuits. W. D. Stewart. *il diags Radio N* 30:23-5+ Ag '43

Amplification of direct voltages with a high-frequency push-pull circuit; abstract. F. Kerkhof. *Wireless Eng* 20:249 My '43

Analysis of rectifier operation. O. H. Schade. *bibliog il diags Inst Radio Eng Proc* 31: 341-61 Jl '43

Analytical demonstration of Hartley oscillator action. F. A. Record and J. L. Stiles. *diags Inst Radio Eng Proc* 31:281-7 Je '43

RADIO circuits—Continued

- Application of the transformation law of loss-free quadripoles to the series connection of quadripoles; abstract. A. Weissfloch. *Wireless Eng* 20:389-90 Ag '43
- Band-pass wave filter units. E. S. Purington. *diags Electronics* 16:126-9 S '43
- Cathode follower circuits for coupling high-impedance sources to low-impedance loads. W. Richter. *bibliog diags Electronics* 16:112-17+ N '43
- Chart for equivalent series and parallel circuits; reference sheet. R. Toombs. *Electronics* 16:109-10 Ap '43
- Circuit network for trebling the impedance angle of a lattice section, and its use for phase-correction in pupinised lines; abstract. M. Wald. *Wireless Eng* 20:392-3 Ag '43
- Contribution to the theory of network synthesis. R. A. Whiteman. *Inst Radio Eng Proc* 30:244-6 My '42; Discussion. 31:80-2 F '43
- Coupled antennas and transmission lines. R. King. *diags Inst Radio Eng Proc* 31:626-40 N '43
- Coupled circuit filters; generalised selectivity, phase shift, and trough and peak transfer impedance curves. K. E. Sturley. *diags Wireless Eng* 20:426-34, 473-87 S-O '43
- Coupled resonant circuits for transmitters. N. I. Korman. *Inst Radio Eng Proc* 31:28-32 Ja '43
- Fundamental bass boost circuits. W. Moody. *diags Radio N* 30:43-9 N '43
- Half-wave voltage-doubling rectifier circuit. D. L. Waidelich and C. H. Gleason. *bibliog diags Inst Radio Eng Proc* 30:535-41 D '42
- Impedance of some simple electrical circuits; reference sheet. B. Dudley. *diags Electronics* 15:75-7 D '42
- Low- and high-pass wave filter units. E. S. Purington. *diags Electronics* 16:106-9 Je '43
- Network theory, filters, and equalizers. F. E. Terman. *bibliog diags Inst Radio Eng Proc* 31:164-75, 233-40, 288-302 Ap-Je '43
- Notes on tracking circuits. A. Bloch. *diags Wireless Eng* 19:508-14 N '42
- Performance of self biased modulated amplifiers. R. I. Sarbacher. *bibliog Electronics* 16:39-103+ Ap '43
- Reactance-valve frequency modulator. E. Williams. *diags Wireless Eng* 20:369-71 Ag '43
- Receiver input circuits; design considerations for optimum signal/noise ratio. R. E. Burgess. *diag Wireless Eng* 20:66-76 F '43
- Reduction of band width in F.M. receivers. D. A. Bell. *Wireless Eng* 19:497-502 N '42
- Resonators for ultra-high frequencies; abstract. C. G. A. von Lindern and G. de Vries. *Wireless Eng* 19:524 N '42
- Shunt condenser aerial coupling. S. W. Amos. *diags Wireless Eng* 19:549-54 D '42
- Some aspects of coupled and resonant circuits. J. B. Sherman. *diags Inst Radio Eng Proc* 30:505-10 N '42
- Some aspects of radio reception at ultra-high frequency; the antenna and the receiver input circuits. E. W. Herold and L. Malter. *diags Inst Radio Eng Proc* 31:423-38 Ag '43
- Some characteristics of a stable negative resistance. C. Brunetti and L. Greenough. *bibliog diags Inst Radio Eng Proc* 30:542-6 D '42
- Some graphic solutions of parallel circuits. R. C. Paine. *diags Electronics* 15:90+ D '42
- Speech scrambling methods. W. W. Roberts. *il diags Electronics* 16:108-11+ O '43
- Thermal-frequency-drift compensation. T. R. W. Bushby. *bibliog diags Inst Radio Eng Proc* 30:546-53 D '42; Discussion. 31:385-6 Jl '43
- Three resonant circuit transformer. M. R. Winkler. *il diags Electronics* 16:96-100+ Ja '43
- Tuning indicators and circuits for frequency-modulation receivers. J. A. Rodgers. *diags Inst Radio Eng Proc* 31:89-93 Mr '43
- Valve-oscillator theorem. E. Williams. *diags Wireless Eng* 20:489-91 O '43
- Voltage-stabilized bias supply for power tubes. G. E. Pihl. *diag Electronics* 16:160+ S '43

Warble or sweeping frequencies in oscillatory circuits; sound analysis, resonance-curve recording with cathode-ray oscillograph, etc.; abstract. R. Feldtkeller and H. Wilde. *Wireless Eng* 19:570-1 D '42

RADIO coat. See Radio transmitters, Portable

RADIO coils

Direct-reading Q meter for coil testing. R. P. Turner. *il diags Radio N* 30:20-2+ Jl '43

RADIO communication

Effects of solar activity on the ionosphere and radio communications. H. W. Wells. *bibliog il maps Inst Radio Eng Proc* 31:147-57 Ap '43

Electric communications, the past and present illuminate the future. L. Espenschied. *Inst Radio Eng Proc* 31:395-402 Ag '43

Postwar-radio planning. J. L. Fly. *Inst Radio Eng Proc* 31:33-5 Ja '43

Practical radio course (cont.). A. A. Ghirardi. *il diags Radio N* 28:32-3+ D '42; 29:30-1+ Ja; 28:9+ F; 30:1+ Mr; 34:6+ Ap; 31:2+ My; 30:43-4+ Jl; 39:9+ Ag; 43:4+ S; 48:50+ O; 55:6+ N '43

Radio and its post-war prospects. R. R. Beal. *il Electronics* 16:92-5+ Mr '43

Radio silver jubilee; abstract. T. E. Goldup. *Elec R (Lond)* 133:544 O 22 '43

System of radiocommunication by modulation of the phase of the carrier wave; abstract. E. Severini. *Wireless Eng* 19:527-8 N '42

Technique of frequency measurement, and its application to telecommunications. J. E. Thwaites and F. J. M. Laver. *bibliog diags Inst E E J* 89 pt 3:139-65 S '42; Discussion. 89 pt 3:165-7; 90 pt 3:73-4 S '42, Je '43

Wave guides in electrical communication. J. Kemp. *bibliog(52 references) diags Inst E E J* 90 pt 3:90-114 S '43

See also

- | | |
|------------------------|--------------------|
| Electric utilities— | Radio broadcasting |
| Radio communication | Radio engineering |
| Gas companies— | Radio frequency |
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| | Radio transmission |
| | Radio waves |

Bibliography

Abstracts and references. Published in monthly numbers of *Wireless engineer*

Index to abstracts and references published monthly by month in *Wireless engineer* during 1942. *Wireless Eng* 19:supl-40 [D] '42

See also

Radio engineering

—Bibliography

Emergency use

WERS calling; radio amateurs and other volunteer workers are setting up a communications system for war or peace. U. S. Grant, 3d. *il Sci Am* 169:23-5 Jl '43

Intercommunicating systems

See Intercommunicating systems

Interference

Broadcast and short-wave bands; abstract. R. Moebes. *Wireless Eng* 20:139 Mr '43

Common-wave broadcasting and the interaction of modulation (Lombourg effect); abstract. F. Vilbig. *Wireless Eng* 20:79 F '43

Effect of radio frequencies of a power system on radio-receiving systems. C. V. Aggers, W. E. Pakala and W. A. Stickel. *Elec Eng* 62:Trans 169-72 Ap '43

Investigation on atmospherics in high-frequency channels 2-20 Mc/s; with particular attention to sunrise and sunset periods; abstract. S. R. Khastgir and M. I. Ali. *Wireless Eng* 20:496-7 O '43

Interference elimination

Aircraft-engine radio shielding. D. W. Randolph. *diags S A E J* 50:538-41+ D '42

Dynamotor filtering. H. Goldberg. *il diags Radio N* 29:13+ Mr '43

Frequency modulation communication system; interference and propagation characteristics. D. A. Bell. *bibliog Wireless Eng* 20:233-42 My '43

RADIO communication—Interference elimination—Continued

- Ignition shielding design. J. J. Mascuch. *il Aero Digest* 41:227-8, 230+ N '42
- Measurements pertaining to the co-ordination of radio reception with power apparatus and systems. C. M. Foust and C. W. Frick. *bibliog diags Elec Eng* 62: Trans 284-91 Je '43
- Method of measuring the effectiveness of electrostatic loop shielding. D. E. Foster and C. W. Finnigan. *diags Inst Radio Eng Proc* 31:253-5 Je '43
- Quiet please! suppression of electrical interference in motored vehicles. W. Fernald. *diags Radio N* 30:41-2+ J1 '43
- Radio-noise filters applied to aircraft. C. W. Frick and S. W. Zimmerman. *il diags Elec Eng* 62:Trans 590-5 S '43
- Static neutralizer. F. Thone. *Science* 98:sup12 J1 2 '43
- Wiring methods: television and radio interference elimination. *Electrician* 131:9-10 J1 2 '43

See also
Radio frequency modulation

International aspects

- International airways radio communications. L. H. Simson. *il Radio N* 29:130+ Je '43
- International telecommunications. A. S. Angwin. *Engineering* 156:357 O 29 '43

See also
Radio broadcasting—
International aspects

Short wave

- Beyond the ultra-short waves. G. C. Southworth. *il diags Inst Radio Eng Proc* 31: 319-30 J1 '43
- Design of ultra-short-wave field-strength measuring equipment. F. M. Colebrook and A. C. Gordon-Smith. *diags Inst E E J* 90 pt 3:28-32 Mr '43
- Microwave plumbing; laboratory instruction u-h-f equipment used at Harvard. D. D. King. *il diags Electronics* 16:116-19+ S; 118-21+ O '43
- Planning a V-H-F communications system; with details concerning the Massachusetts state police system. J. A. Doremus. *il plan map Electronics* 16:96-101+ S '43
- Precision tuning problem in U-H-F broadcasting. S. V. White. *diags Electronics* 16: 94-7+ Mr '43
- Principles of micro-wave radio. E. U. Condon. *bibliog diags Rs Mod Phys* 14:341-89 O '42
- Short-wave dipole aerials. N. Wells. *bibliog diags Wireless Eng* 20:219-32 My '43
- Short wave miracle pulls the Americas together. D. Francisco. *maps Ptr Ink* 205:20-1+ O 15 '43
- Some aspects of radio reception at ultra-high frequency. E. W. Herold and L. M. Maltzer. *bibliog diags Inst Radio Eng Proc* 31:423-38, 491-510, 567-82 Ag-O '43
- Study of propagation over the ultra-short-wave radio link between Guernsey and England on wavelengths of 5 and 8 metres (60 and 37.5 mc./s.). R. L. Smith-Rose and A. C. Stickland. *bibliog Inst E E J* 90 pt 3:12-19 Mr '43; Excerpts. *Electrician* 129: 496 N 6 '42; *Elec R (Lond)* 131:591-2 N 6 '42; Discussion. *Inst E E J* 90 pt 3:20-4 Mr '43
- Ultrahigh-frequency transmission in wave guides. L. A. Ware. *bibliog diags Elec Eng* 61:598-603 D '42
- U.S. short-wave broadcast control center; new Office of war information radio headquarters. *il plans Electronics* 16:114-17+ O '43
- What about commercial short wave post war? B. Estes. *Ptr Ink* 205:19-20 O 22 '43

See also
Radio frequency modulation
Radio receiving apparatus—Short wave

Terminology

See also
Radio symbols

Arctic regions

- Arctic networks; radio for Hudson's Bay company fur trade posts. S. G. L. Horner. *il Radio N* 30:17-19+ S '43

RADIO communication, Military

- Air force radio communications. *il Radio N* 29:56-82+ Je '43
- Aircraft communication in World War I. W. R. Lansford. *il Radio N* 29:50-4+ Je '43
- Army's SCR-299; mobile radio communications unit. O. Read. *il map Radio N* 30:17-20+ Ag '43
- Coast Guard radio. *il Radio N* 29:158-60 Je '43
- Development of vehicular equipment; Signal corps development agencies. J. D. O'Connell. *il Radio N* 28:106-9+ N '42
- Eastern signal corps schools code training. *il Radio N* 30:24-5+ S '43
- How electronic equipment aids invasion forces. *il Electronics* 16:212+ S '43
- Invasion communications; jobs of the Signal corps are many and varied. R. L. Sigeron. *il Sci Am* 169:53-5 S '43
- Mechanical design of German army wireless components. D. G. Hull. *Electronics* 16: 140+ Ja '43
- Military communications, their part in global war. C. J. McIntyre. *il Electronics* 16:100-2+ Mr '43
- Military facsimile; illustrations. *Electronics* 16:108-9 S '43
- OWI reviews war communications. *Electronics* 16:242+ N '43
- Radio and radar at war; illustrations. *Electronics* 16:118-19 Ag '43
- Radio communication and scientific research in 1942. D. Sarnoff. *Comm & Fin Chr* 157: 395 Ja 28 '43
- Radio engineer in the navy. C. F. Holden. *Inst Radio Eng Proc* 31:517-19 S '43
- Radio in naval aviation. F. Akers. *il Radio N* 29:150-4 Je '43
- Radio in the Marines. E. C. Dyer. *il Radio N* 29:155-7 Je '43
- Radio in this war. D. Sarnoff. *il Radio N* 28:49-50+ N '42
- Radio standards go to war. H. P. Westman. *Inst Radio Eng Proc* 31:381-4 J1 '43
- Radio-telephones for military police. Scott Field, Ill. *il Radio N* 29:17+ My '43
- Signal corps between two wars. R. E. Meeds. *il Radio N* 28:40-4 N '42
- Signal corps in World War I. M. B. Herr. *il Radio N* 28:34-7+ N '42
- Walkie-talkie; portable two-way radios are a boon to the military. *Fortune* 28:62 O '43
- W-A-R and the nerves of war. E. F. French. *il Radio N* 28:128-30+ N '42
- War-front communications; illustrations. *Radio N* 30:22-3 O '43
- War matériel; Signal Corps activity in designing new devices. *il Product Eng* 14:195-9 Ap '43

See also
Air raid signals
Radio operators, Military
War emergency radio service

RADIO compass

- Adjustable cam compensates for errors; patent assigned to Fairchild aviation corp.; device developed primarily for compensating radio compasses. *diag Machine Design* 15:72-4 S '43
- Automatic radio compass. W. L. Webb and G. O. Essex. *il diags Aeronautical Eng R* 1:23-7+ N '42

See also
Direction finding apparatus

RADIO condensers

- Ceramic condensers. *il Electronics* 16:303 Mr '43
- Condensers at radio frequency; why they have high impedance. P. M. Deeley. *Electronics* 16:209-11 Ap '43
- Mica capacitor standard first American war standard on radio. H. P. Westman. *il Ind Stand* 13:296-8 D '42
- Self-discharge and time constant of the high-voltage oil-paper condenser; abstract. C. Brinkmann. *Wireless Eng* 20:449 S '43
- Shunt condenser aerial coupling. S. W. Amos. *diags Wireless Eng* 19:549-54 D '42

RADIO condensers—Continued

Thermal-frequency-drift compensation. T. R. W. Bushby. bibliog diag Inst Radio Eng Proc 30:546-53 D '42

Use of manganese alloys for electrical condenser plates. E. V. Potter and R. W. Huber. U S Bur Mines Rep of Invest 3689: 1-9 '43

Vacuum rectifiers working with condenser input; graphical assessment of their performance. R. G. Mitchell. diags Wireless Eng 20:414-25 S '43

RADIO conductors

Attenuation of electromagnetic fields in pipes smaller than the critical size. E. G. Linder. bibliog Inst Radio Eng Proc 30: 554-6 D '42

Beyond the ultra-short waves. G. C. Southworth. il diags Inst Radio Eng Proc 31: 319-30 JI '43

Calculation of the alternating-current resistance of layered cylindrical conductors; abstract. W. Egloff. Wireless Eng 20:391-2 Ag '43

High-frequency resistance of plated conductors. R. F. Proctor. diags Wireless Eng 20: 56-65 F '43

Magnetic fundamental oscillation of the cylindrical cavity with circular cross section; abstract. F. Borgnis. Wireless Eng 20: 344-5 JI '43

Microwave plumbing; laboratory instruction u-h-f equipment used at Harvard. D. D. King. il diags Electronics 16:116-19+ S; 118-21+ O '43

Physical behavior of wave guides. H. Skilling. bibliog il diags Electronics 16:76-80+ Mr '43

Ultra-high frequency oscillations of cylindrical cavity resonators containing two and three dielectric media. D. Middleton. bibliog diag Phys R 63:343-51 My 1 '43

Ultrahigh-frequency transmission in wave guides. L. A. Ware. bibliog diags Elec Eng 61:598-603 D '42

Ultrashort electromagnetic waves; design of radiators or antennas for ultrashort waves. A. Alford. bibliog diags Elec Eng 62:303-12, 338-44 JI-Ag '43

Ultrashort electromagnetic waves; guided propagation. S. A. Schelkunoff. bibliog diags Elec Eng 62:235-46 Je '43

Wave guides in electrical communication. J. Kemp. bibliog(52 references) diags Inst E E J 90 pt 3:90-114 S '43

Wave guides; theory and application as used in conjunction with uhf equipment. J. Williams. diags Radio N 30:24-5+ O '43

See also

Radio lines

RADIO control

Induction control for experimenters; induction transmission becoming increasingly popular. W. T. Peterson. diags Radio N 28: 20-1 JI; 18-19+ O '42

Radio in warfare. L. W. Orton. diags Radio N 30:29+ N '43

Resonant electrical control systems. D. W. Moore, Jr. il diags Elec Eng 62:436-9 O '43; Same. diags J Aeronautical Sci 10:285-8+ O '43

See also

Carrier current control

RADIO corporation of America

Annual report. Comm & Fin Chr 157:1091 Mr 22 '43

Consent decree stands. Comm & Fin Chr 157: 1467 Ap 19 '43

Consolidates loans; review granted U.S. in RCA case. Comm & Fin Chr 157:558 F 8 '43

FCC approves sale of Blue network to Noble. Comm & Fin Chr 158:1538 O 18 '43

Merges with manufacturing subsidiary. Comm & Fin Chr 157:46 Ja 4 '43

New direct circuit links New York and Quito. Comm & Fin Chr 157:2051 My 31 '43

Radio communication and scientific research in 1942. D. Sarnoff. Comm & Fin Chr 157: 395 Ja 28 '43

Sale of Blue network. Comm & Fin Chr 158:583 Ag 9 '43

\$3.50 first preferred. O. Ely. Mag of Wall St 71:363 Ja 9 '43

To redeem balance of B preferred stock. Comm & Fin Chr 157:1366 Ap 12 '43

Laboratories

Acoustic laboratory in the new RCA laboratories. H. F. Olson. il plans Acoustical Soc Am J 15:96-102 O '43

Dedicated to war and peace; RCA laboratories building. Princeton, New Jersey. il diags Arch Rec 93:57-62 Mr '43

RCA laboratories. il Factory Management 101:B61-B62 Ap '43

RCA research laboratories has two air conditioning systems and three separate ventilating systems. F. W. Buck. il diags plans Heat & Ven 40:51-5 JI '43

RADIO corporation of America manufacturing company

Ten years of aviation radio development. H. M. Hucke. il Aeronautical Eng R 1:139 N '42

RADIO detection of airplanes. See Radar

RADIO detectors

Emergency radio receivers; crystal, copper oxide and home-made tube detectors. G. Dexter. diags Radio N 29:28-9+ Ja '43

Oscillator and detector demonstrator for war radio training classes. H. C. Lawrence. diags Radio N 30:35-6+ S '43

RADIO engineering

Beyond the ultra-short waves. G. C. Southworth. il diags Inst Radio Eng Proc 31: 319-30 JI '43

Engineering; safety of aircraft depends upon radio equipment. A. H. Hadfield. il map Radio N 29:105-7+ Je '43

I.R.E. and the war. A. Van Dyck. Inst Radio Eng Proc 31:36-8 Ja '43

Institute of radio engineers winter meeting, New York, Jan. 28. Electronics 16:157+ Mr 43

Network theory, filters, and equalizers. F. E. Terman. bibliog diags Inst Radio Eng Proc 31:164-75, 233-40, 288-302 Ap-Je '43

Postwar-radio planning. J. L. Fly. Inst Radio Eng Proc 31:33-5 Ja '43

Radio engineering in wartime. J. L. Fly. Inst Radio Eng Proc 31:303-4 Je '43

Radio engineers' handbook. F. E. Terman. 1019p \$6 McGraw-Hill, 330 W. 42d st, New York '43

Radio progress during 1942. bibliog Inst Radio Eng Proc 31:127-32 Ap '43

Radio regulation and radio design. T. A. M. Craven. Inst Radio Eng Proc 31:124-5 Ap '43

Technical development; many developments perfected by engineers of the CAA. J. Easton. il Radio N 29:118-20+ Je '43

See also

Electric engineering	Radio telegraph
Electronics	Radio telephone
Radio broadcasting	Television
Radio research	

Bibliography

Proceedings of the Institute of radio engineers; cumulative index 1913-1942; papers, chronologically arranged; authors, alphabetically arranged; subjects, cross indexed. Inst Radio Eng Proc 31:1-69 pt 2 Je '43 (pa 1)

History

Tesla's contribution to high frequency. L. F. Wheeler. bibliog Elec Eng 62:555-7 Ag '43

Study and teaching

New laboratory techniques expedite training in electronics. il diags Electronics 16:90-3 Je '43

University education and industrial training of engineers, with particular reference to telecommunications. W. Jackson. Inst E E J 90 pt 3:53-60; Discussion. 61-72 Je '43

Tables, calculations, etc.

Analysis of full wave rectifier with choke input. L. C. Tillotson and C. M. Wallis. diags Electronics 16:94-7+ Ap '43

Analysis of rectifier operation. O. H. Schade. bibliog il diags Inst Radio Eng Proc 31: 341-61 JI '43

Application of the transformation law of loss-free quadripoles to the series connection of quadripoles; abstract. A. Weissfloch. Wireless Eng 20:389-90 Ag '43

RADIO engineering—Tables, calculations, etc—*Continued*

- Calculation of aerial capacitance. G. W. O. Howe. *Wireless Eng* 20:157-8 Ap '43
- Characteristics of resonant transmission lines; reference sheets. J. B. Epperson. *Electronics* 16:139-40 O '43
- Chart for determining square root of a complex number; transmission line and filter calculations; reference sheet. R. G. Nisile. *Electronics* 16:127-8 Ag '43
- Contribution to the theory of network synthesis. R. A. Whiteman. *Inst Radio Eng Proc* 30:244-6 My '42; Discussion. 31:80-2 F '43
- Design for dissymmetrical T pads. E. Y. Webb, jr. *charts Electronics* 16:123-4 Jl '43
- Distribution of current along a symmetrical center-driven antenna. R. King and C. W. Harrison, jr. *bibliog diags Inst Radio Eng Proc* 31:548-67 O '43; Correction. 31:697 D '43
- Graphical-vector solution and study of the coil-loaded line. A. K. Robinson. *Inst E E J* 90 pt 3:115-28 S '43
- How to use the slide rule in calculations. R. P. Turner. *il diag Radio N* 29:22-3, 52, 54 F '43
- Impedance magnitude and phase angle charts; reference sheet. T. C. Blow. *Electronics* 16:94-5 Ja '43
- Narrow band-pass filter performance; design charts. H. Holubow. *Electronics* 16:104-7 My '43
- Open-wire radio-frequency transmission lines. E. A. Laport. *diags Inst Radio Eng Proc* 31:271-80 Je '43
- Optimum current distributions on vertical antennas. L. La Paz and G. A. Miller. *bibliog diag Inst Radio Eng Proc* 31:214-32 My '43
- Q for unloaded concentric transmission lines; alignment chart makes possible rapid determination of Q and sending-end impedance. R. C. Miedke. *Electronics* 16:139-40 S '43
- Radiation field of long wires, with application to vee antennas. C. W. Harrison, Jr. *bibliog diags J Ap Phys* 14:537-44 O '43
- Reflections from unmatched feeder terminals; simple graphical method. G. W. O. Howe. *Wireless Eng* 20:215-18 My '43
- 36 and 72 ordinate schedules for general harmonic analysis. R. P. G. Denman. *Electronics* 15:44-7 S '42; Correction. 16:214-15 Ap '43
- Transmission line charts. R. F. Baum. *Electronics* 16:92-4+ Jl '43
- Ultrashort electromagnetic waves; design of radiators or antennas for ultrashort waves. A. Alford. *bibliog diags Elec Eng* 62:303-12, 338-44 Jl-Ag '43
- Vacuum rectifiers working with condenser input; graphical assessment of their performance. R. G. Mitchell. *diags Wireless Eng* 20:414-25 S '43

Terminology

- Superheterodyne converter terminology. H. Stockman. *diags Electronics* 16:144-6+ N '43

RADIO engineers

- Radio engineer in the navy. C. F. Holden. *Inst Radio Eng Proc* 31:517-19 S '43
- Radio engineer's responsibilities of tomorrow. H. Pratt. *Inst Radio Eng Proc* 31:316-17 Jl '43

—*See also*

- Stone, John Stone

RADIO facsimile

- Facsimile; old in principle, new in practice. J. H. Hackenberg. *diag map Electronics* 16:106-7+ Mr '43
- Military facsimile; illustrations. *Electronics* 16:108-9 S '43
- New facsimile system assigned to RCA by John W. Cox. R. Eichberg. *diags Radio N* 29:73-4 Ja '43
- Sending train orders by facsimile telegraphy. *il diag Electronics* 16:148+ S '43
- Use of subcarrier frequency modulation in communication systems. W. H. Bliss. *il diags Inst Radio Eng Proc* 31:419-23 Ag '43

RADIO fade-out. See Radio transmission—Fading**RADIO filters**

- Approximate method for the calculation of building-up processes in filter circuits; abstract. J. Gensel. *Wireless Eng* 20:447-8 S '43
- Attenuation and phase-shift equalisers; semi-graphical method of designing equalising networks. W. Saraga. *diags Wireless Eng* 20:163-81 Ap '43
- Band-pass wave filter units. E. S. Purington. *diags Electronics* 16:126-9 S '43
- Conjugate impedances and separating filters; abstract. H. Piloty. *Wireless Eng* 20:446-7 S '43
- Coupled circuit filters; generalised selectivity, phase shift, and trough and peak transfer impedance curves. K. R. Sturley. *diags Wireless Eng* 20:426-34, 473-87 S-O '43
- Deriving the parameters of filters. C. R. Burrows. *bibliog diag Elec Eng* 62:516 N '43
- Dynamotor filtering. H. Goldberg. *il diags Radio N* 29:13+ Mr '43
- Filters with a minimum number of elements; abstract. G. Cocci. *Wireless Eng* 20:446 S '43
- Investigations on crystal band-pass filters, particularly for carrier-current telephony; abstract. W. Pöhlmann. *Wireless Eng* 19:572 D '42
- Low- and high-pass wave filter units. E. S. Purington. *diags Electronics* 16:106-9 Je '43
- Narrow band-pass filter performance; design charts. H. Holubow. *Electronics* 16:104-7 My '43
- Network theory, filters, and equalizers. F. E. Terman. *bibliog diags Inst Radio Eng Proc* 31:288-302 Je '43
- Quartz bridge filters with very narrow pass band; abstract. E. Hudec. *Wireless Eng* 20:393-4 Ag '43
- Quartz crystal applications. W. P. Mason; W. L. Bond. *il diags Bell System Tech J* 22:178-262 Jl '43
- Radio-noise filters applied to aircraft. C. W. Frick and S. W. Zimmerman. *il diags Elec Eng* 62:Trans 590-5 S '43
- Simple quartz-crystal filters of variable bandwidth. G. Builder and J. E. Benson. *bibliog diags Wireless Eng* 20:183-9 Ap '43; Discussion. J. Robinson. 20:435-6 S '43
- Swinging filter choke. R. M. Hanson. *diags Electronics* 16:112-16+ Je '43
- Theory of ideal filters; the relation of transient response to an ideally-limited frequency band. D. A. Bell. *Wireless Eng* 20:323-6 Jl '43

—*See also*

- Electric filters
Radio communication—Interference elimination
Radio condensers

RADIO frequency

- Effect of radio frequencies of a power system on radio-receiving systems. C. V. Aggers, W. E. Pakala and W. A. Stickel. *Elec Eng* 62:Trans 169-72 Ap '43
- New and stable frequency divider; abstract. F. R. Stansel. *diag Electronics* 16:126+ F '43

—*See also*

- Radio filters
Radio modulation
Radio receiving apparatus—Tuning
- Radio stations.
Standard frequency

Allocation

- Channel allocations for WERS. *Electronics* 16:153 F '43
- International airways radio communications. L. H. Simson. *il Radio N* 29:130 Je '43

Control

- Frequency stability problems with particular reference to commercial radio-receiver development; abstract. C. W. Eggleton. *Electrician* 129:554 N 20 '42
- Stability in high-frequency oscillators. R. A. Heising. *diags Inst Radio Eng Proc* 31:595-600 N '43
- Thermal-frequency-drift compensation. T. R. W. Bushby. *bibliog diags Inst Radio Eng Proc* 30:546-53 D '42; Correction. 31:232 My '43; Discussion. 31:385-6 Jl '43

RADIO frequency—Control—Continued

260- to 350-megacycle converter unit for General Electric frequency-modulation station monitor. H. R. Summerhayes, Jr. il diags Inst Radio Eng Proc 31:249-53 Je '43

Variable-frequency bridge-type frequency-stabilized oscillators. W. G. Shepherd and R. O. Wise. bibliog diags Inst Radio Eng Proc 31:256-68 Je '43

Crystal control

Crystal holder design. L. A. Elbl. il diags Electronics 16:134-8 O '43

Properties of quartz oscillators and resonators in the region from 300 to 5000 kilocycles per second; abstract. R. Bechmann. Wireless Eng 19:537-8 N '42

Quartz crystal applications. C. F. Booth. Inst E E J 90 pt 3:27 Mr '43

Simple quartz-crystal filters of variable bandwidth. G. Builder and J. E. Benson. bibliog diags Wireless Eng 20:183-9 Ap '43; Discussion. J. Robinson. 20:435-6 S '43

Terminology

Communications commission standardizes radio terms; radio frequency bands. Ind Stand 14:111 Ap '43

RADIO frequency modulation

Frequency modulated metal-treasure locator. G. M. Bettis. il diags Radio N 28:22-4+ O '42

Frequency-modulated resistance-capacitance oscillator. C. K. Chang. diags Inst Radio Eng Proc 31:22-5 Ja '43

FM circular antenna. M. W. Scheldorf. il diags Gen Elec R 46:163-70 Mr '43

Frequency modulation communication systems; interference and propagation characteristics. D. A. Bell. bibliog Wireless Eng 20:233-42 My '43

Frequency modulation distortion in loud speakers. G. L. Beers and H. Belar. bibliog Soc Motion Picture Eng J 40:207-21 Ap '43; Same. Inst Radio Eng Proc 31:132-8 Ap '43

Frequency modulation for power-line carrier current. E. W. Kenefake. bibliog diags Elec Eng 62:Trans 616-20 O '43

FM hangs on; list of commercial frequency modulation stations. Business Week p64+ F 27 '43

Frequency-modulation transmitter and receiver for studio-to-transmitter relay system. W. F. Goetter. il diags Inst Radio Eng Proc 31:600-6 N '43

Post-war FM and television. B. Dudley. il Electronics 16:94-7+ N '43

Reactance-valve frequency modulator. E. Williams. diags Wireless Eng 20:369-71 Ag '43

Use of subcarrier frequency modulation in communication systems. W. H. Bliss. il diags Inst Radio Eng Proc 31:419-23 Ag '43

Utility uses two-way FM dispatching; instantaneous communication with field crews by Department of water & power system, Los Angeles. il Elec West 91:64-5 S '43

See also

Radio receiving apparatus—Frequency modulation receivers

RADIO generators

Deionization considerations in a harmonic generator employing a gas-tube switch. W. G. Shepherd. diags Inst Radio Eng Proc 31:66-74 F '43

Harmonic generator for frequencies above 100 mc/s. W. M. Colles. il diag Wireless Eng 20:300-2 Je '43

Molding with radio frequency. W. M. Witty. il diags Mod Plastics 20:83-5+ My '43

RC generators; abstract. K. Bucher. Wireless Eng 20:445 S '43

Radio frequency generators. W. Moody. diags Radio N 28:40-1 O '42

Variable-frequency electronic generator. D. A. Griffin. il diags Electronics 16:130-2+ S '43

See also

Oscillators
Vacuum tubes—Generating action

RADIO in education

Educators learn about radio. Ptr Ink 205:40 O 3 '43

FM radio used in 80 San Francisco public schools. Inst Radio Eng Proc 31:sup 50 Je '43

RADIO in forestry. See Radio telephone—Forestry service

RADIO in industry

Sound system is important factor in Fellows Gear production promotion plan. il Ind Marketing 28:50 Je '43

RADIO in safety education. See Radio broadcasting—Safety programs

RADIO instruments

Automatic production tester. D. A. Griffin and N. B. Smalley. il diags Electronics 16:58-61+ F '43

Charts for simplifying high-impedance measurements with the radio-frequency bridge. R. L. Nielsen. bibliog diags Inst Radio Eng Proc 31:372-8 JI '43

Compact direct-reading Z-meter. R. P. Turner. il diags Radio N 28:10-12+ O '42

Design of ultra-short-wave field-strength measuring equipment. F. M. Colebrook and A. C. Gordon-Smith. diags Inst E E J 90 pt 3:28-32 Mr '43

Direct-reading Q meter for coil testing. R. P. Turner. il diags Radio N 30:20-2+ JI '43

Distortion meter for public address men. R. P. Turner. il diags Radio N 29:18-20+ Ap '43

General-purpose test unit. R. P. Turner. diags Radio N 30:35-7+ N '43

General Radio type 916-A radio-frequency bridge for use at frequencies up to 60 mc. il R Sci Instr 13:539 D '42

Inexpensive portable capacity bridge. H. L. Poling. il diags Radio N 29:26-7+ F '43

Metre substitutes. R. P. Turner. il diags Radio N 30:38-9+ O '43

Methods of measuring radio frequencies. R. P. Turner. il diags Radio N 29:6-9+ Ja '43

Multi-servimeter. R. F. Scott. il diags Radio N 29:24-6+ Ja '43

New type of practical distortion meter. J. E. Hayes. il diags Inst Radio Eng Proc 31:112-17 Mr '43

Q meter and its theory. V. V. L. Rao. diags Inst Radio Eng Proc 30:502-5 N '42

Q-meter for power factor and dielectric constant. D. M. Hill. il diags Elec W 120:1365+ O 16 '43

Radio-frequency capacitometer; cathode-ray-tube instrument for precise radio-frequency measurement of capacitance and inductance. F. J. Moles. il diags Gen Elec R 46:457-9 Ag '43

Simple harmonic wave analyzer. R. F. Thomson. il diags Electronics 15:61-2+ D '42

Super-het tuner for the dynamic demonstrator. D. Gnessin. il diags Radio N 29:33+ F '43

Use those old meters! G. L. Manning. il diags Radio N 29:36-7+ F '43

Versatile Q meter. F. E. Planer. il diags Electronics 16:190+ S '43

See also

Oscillators
Radar
Radio measurements
Radio meteorographs

RADIO interference. See Radio communication

—Interference

RADIO-KEITH-ORPHEUM corporation

Makes long term contracts with executives; stock options granted. Comm & Fin Chr 158:584 Ag 9 '43

RADIO laboratories

Aviation radio; aircraft radio laboratory. Wright field. H. R. Yeager. il Radio N 28:124-7+ N '42

Development laboratories. Wright field. R. E. Williams, Jr. il Radio N 29:76-9+ Je '43

Laboratories to develop final victory; Signal corps general development laboratories. F. F. Uhrhane. il Radio N 28:112-14 N '42

Microwave plumbing; laboratory instruction u-h-f equipment used at Harvard. D. D. King. il diags Electronics 16:116-19+ S; 118-21+ O '43

See also

Radio corporation of America—Laboratories

RADIO laws and regulations

Court decisions affecting broadcasting. L. T. Parker. *Electronics* 16:117-18+ Je '43
 Radio chains lose; FCC rules regulating dealings of networks with affiliated stations upheld by U.S. Supreme court. *Business Week* p90+ My 15 '43
 Supreme court upholds FCC radio rules. *Ptr Ink* 203:19 My 14 '43

See also

Federal communications commission

RADIO lines

Characteristics of resonant transmission lines; reference sheets. J. B. Epperson. *Electronics* 16:139-40 O '43
 Coupled antennas and transmission lines. R. King. *diags Inst Radio Eng Proc* 31:626-40 N '43
 Graphical-vector solution and study of the coil-loaded line. A. K. Robinson. *Inst E E J* 90 pt 3:115-28 S '43
 Instrument for direct measurement of the travelling wave coefficient in feeders. G. W. O. Howe. *diags Wireless Eng* 20:365-7 Ag '43
 Microwave plumbing; laboratory instruction u-h-f equipment used at Harvard. D. D. King. *il diags Electronics* 16:116-19+ S; 118-21+ O '43
 Network theory, filters, and equalizers. F. E. Terman. *bibliog diags Inst Radio Eng Proc* 31:164-75, 233-40, 288-302 Ap-Je '43
 Open-wire radio-frequency transmission lines. E. A. Laport. *diags Inst Radio Eng Proc* 31:271-80 Je '43
 Pickup of balanced four-wire lines. C. W. Harrison, Jr. *bibliog Inst Radio Eng Proc* 30:517-18 N '42
 Polynomial quadrupoles [four-terminal networks] with given losses and predetermined frequency-dependence; abstract. W. Bader. *Wireless Eng* 19:525 N '42
 Q for unloaded concentric transmission lines; alignment chart makes possible rapid determination of Q and sending-end impedance. R. C. Miedke. *Electronics* 16:139-40 S '43
 Reflections from unmatched feeder terminals; simple graphical method. G. W. O. Howe. *Wireless Eng* 20:215-18 My '43
 Some aspects of radio reception at ultra-high frequency; the antenna and the receiver input circuits. E. W. Herold and L. Malter. *diags Inst Radio Eng Proc* 31:423-38 Ag '43
 Suppressor action of concentric lines with longitudinally layered dielectric in the decimetric-wave band; abstract. H. Kiedel. *Wireless Eng* 20:505-6 O '43
 Symmetrical electrical systems; method of evaluating the transmission characteristics of four-terminal networks. E. S. Purington. *diags Electronics* 15:54-7 N '42; 16: 69-72+ Ja '43
 Theory of non-uniform lines; abstract. K. W. Wagner. *Wireless Eng* 19:522-3 N '42
 Transmission line equation in terms of impedance. J. R. Pierce. *diag Bell System Tech J* 22:263-5 Jl '43
 Treatment of network problems by means of matrices; abstract. G. A. Usunoff. *Wireless Eng* 19:525-6 N '42
 Ultrashort electromagnetic waves; transmission lines at ultrahigh frequencies. J. R. Ragazzini. *bibliog diags Elec Eng* 62:159-67 Ap '43

See also

Radio antennas
 Radio conductors

RADIO listeners

Attention, please! part-time and divided-interest listening. A. M. Crossley. *Adv & Sell* 36:17-18+ Ja '43
 Audimeter enters first phase of commercial operation; Nielsen radio index based on 1,000 machines. *Ptr Ink* 201:75 D 18 '42
 Blue network survey shows daytime listeners dissatisfied with fare. *Ptr Ink* 203: 78 My 28 '43
 Gas rationing doesn't increase radio listening; pictograph. *Sales Management* 52:40 Ja 15 '43
 How do the four networks stand in the Nation's 412 largest cities? *Sales Management* 52:33-42 My 10 '43

How to measure the potential value of your radio advertising. R. Manville. *Sales Management* 52:90+ Jl 15 '43
 Listeners want less "soap opera" Blue network survey shows. *Sales Management* 52: 80-2 Je 15 '43

No typical daytime serial listener; study of 5,324 women, made by Leda F. Summers and Office of radio research. *Ptr Ink* 203:69-70+ Ap 30 '43
 Preliminary report by NBC on listening survey. *Ptr Ink* 201:22 D 25 '42
 Tuning out commercials. M. N. Chappell. *Adv & Sell* 36:24+ N '43
 Who listens to nighttime radio? T. B. Ellsworth. *Adv & Sell* 36:17+ My '43
 Yardstick of criticism; Columbia broadcasting system's program analyzer. *il Business Week* p78 O 3 '43

See also

Radio advertising—
 Coverage

RADIO loud speakers

Frequency modulation distortion in loud speakers. G. L. Beers and H. Belar. *bibliog Soc Motion Picture Eng J* 40:207-21 Ap '43
 Same. *Inst Radio Eng Proc* 31:132-8 Ap '43
 Radio loudspeaker tests pave way for better reception. A. N. Goldsmith. *il Ind Stand* 13:306-8 D '42
 Unique sound reproducers; artistically designed for home use. W. H. Hutter. *il diags Radio N* 30:32-4 N '43

See also

Loud speaking apparatus

RADIO measurements

Charts for simplifying high-impedance measurements with the radio-frequency bridge. R. L. Nielsen. *bibliog diags Inst Radio Eng Proc* 31:372-8 Jl '43
 Cylindrical cavity resonators containing several dielectric media. *J Ap Phys* 14:363 Jl '43
 Design of ultra-short-wave field-strength measuring equipment. F. M. Colebrook and A. C. Gordon-Smith. *diags Inst E E J* 90 pt 3:28-32 Mr '43
 Dielectric constant and loss angle of dry and wet sand for centimetric waves; abstract. E. Löb. *Wireless Eng* 20:345 Jl '43
 Direct-reading wattmeters for use at radio frequencies. G. H. Brown, J. Epstein and D. W. Peterson. *il diags Inst Radio Eng Proc* 31:403-10 Ag '43
 Experimental determination of the resonance resistance of resonators in the centimetric-wave band; abstract. F. Borgnis. *Wireless Eng* 20:509 O '43
 Field strength of Delhi 3 and Delhi 4 at Calcutta during the solar eclipse of September 21, 1941. S. P. Chakravarti. *Inst Radio Eng Proc* 31:269-70 Je '43
 High frequencies; status of standards and measurements. H. R. Meahl. *il Gen Elec R* 45:617-19 N '42
 High-frequency resistance of plated conductors. R. F. Proctor. *diags Wireless Eng* 20: 56-65 F '43
 Instrument for direct measurement of the travelling wave coefficient in feeders. G. W. O. Howe. *diags Wireless Eng* 20:365-7 Ag '43
 Measurement of audio frequencies. R. P. Turner. *il diags Radio N* 28:17-19+ D '42
 Measurement of electrical conductivity for stratified ground; abstract. J. Grosskopf and K. Vogt. *Wireless Eng* 19:71 F '42; Discussion. W. Pfister. 19:521-2 N '42
 Measurement of the characteristics of concentric cables at frequencies between 1 and 100 megacycles per second. T. I. Jones. *Inst E E J* 89 pt 3:213-20 D '42
 Measurements pertaining to the co-ordination of radio reception with power apparatus and systems. C. M. Foust and C. W. Frick. *bibliog diags Elec Eng* 62: Trans 284-91 Je '43
 Measuring coil characteristics without an impedance bridge. H. D. Brallsford. *diags Electronics* 16:86-84 My '43
 Method of measuring the effectiveness of electrostatic loop shielding. D. E. Foster and C. W. Finnigan. *diags Inst Radio Eng Proc* 31:253-5 Je '43

RADIO measurements—Continued

- Q meter and its theory. V. V. L. Rao. diags Inst Radio Eng Proc 30:502-5 N '42; Discussion. H. Stockman. diags 31:85 F '43
- Symmetrical electrical systems; method of evaluating the transmission characteristics of four-terminal networks. E. S. Purington. diags Electronics 15:54-7 N '42; 16:69-72+ Ja '43
- Technique of frequency measurement, and its application to telecommunications. J. E. Thwaites and F. J. M. Laver. bibliog diags Inst E E J 89 pt 3:139-65 S '42; Discussion. 89 pt 3:165-7; 90 pt 3:73-4 S '42, Je '43
- Thermal-frequency-drift compensation. T. R. W. Bushby. bibliog diags Inst Radio Eng Proc 30:546-53 D '42
- Ultra-high frequency oscillations of cylindrical cavity resonators containing two and three dielectric media. D. Middleton. bibliog diag. Phys R 63:343-51 M '43
- Wavelength measurements of decimetric, centimetric and millimetric waves; abstract. A. C. Clavier. diags Electronics 15:108+ D '42
- Wide-band oscilloscope for problems in television and other fields. E. D. Cook. il diags Inst Radio Eng Proc 31:410-19 Ag '43

See also

- | | |
|---|---|
| Radio engineering—
Tables, calculations,
etc. | Radio instruments
Voltmeters, Vacuum
tube |
| Radio frequency | |

RADIO meteorographs

- Determining cloud depths; electronic photo-cell equipment; essential for safe aircraft flights. S. E. Winters. diags Radio N 30:44-5+ O '43
- Improved cosmic-ray radio sonde. W. H. Pickering. diags R Sci Instr 14:171-3 Je '43; Abstract. Electronics 16:212+ D '43
- Radio sonde. W. Moody. diag Radio N 28:13+ O '42
- Radio sonde. W. H. Pickering. il diags Inst Radio Eng Proc 31:479-85 S '43
- Radio sounding in the United States. C. B. Pear, jr. bibliog il map Electronics 16:82-5 Ja '43
- Radiosondes and high voltage lines; a warning. il Edison Elec Inst Bul 11:106 Ap '43; Same. Elec W 119:1614 My 15 '43

RADIO modulation

- Practical radio course; various unmodulated and modulated r.f. carrier waves and how they are used. A. A. Ghirardi. il diags Radio N 28:32-3+ D '42
- Sideband asymmetry in amplitude modulation; abstract. F. Böttcher. Wireless Eng 20:398 Ag '43
- Spectra and non-linear-distortion factors of frequency- and amplitude-modulated oscillations; abstract. M. Kulp. Wireless Eng 16:33-4 Ja '43
- System of radiocommunication by modulation of the phase of the carrier wave; abstract. E. Severini. Wireless Eng 19:527-8 N '42
- Transmission characteristics of asymmetric-sideband communication networks. E. C. Cherry. bibliog diags Inst E E J 89 pt 3:19-39; 90 pt 3:75-89 Mr '42, Je '43; Discussion. 89 pt 3:39-42 Mr '42
- Using phone line for remote indication of overmodulation. A. Leeman. diags Electronics 16:144+ JI '43

See also

- Radio frequency
modulation

RADIO networks. See Radio lines**RADIO noise. See Radio communication—Interference; Radio receiving apparatus—Noise****RADIO operators**

- Aviation radio course (cont). P. W. Karrol. il Radio N 29:37, 77-80 Ja; 39+ F; 25+ Ap '43
- Training radio ops for the airlines. L. Winner. il Radio N 28:34-6+ D '42

See also

- Radio schools and
training

RADIO operators, Amateur

- WERS calling; radio amateurs and other volunteer workers are setting up a communications system for war or peace. U. S. Grant, 3d. il Sci Am 169:23-5 JI '43

See also

- Army amateur radio
system

RADIO operators, Military

- AAFTTC trains radio OPS. Scott Field, Ill. W. P. Hayes. il Radio N 29:60-3+ Je '43
- Midwestern Signal corps training. W. E. Prosser. il Radio N 28:65-9+ N '42
- Navy radio ops in the making. L. Winner. il Radio N 28:6-9+ O '42
- Our navy's Jekyll-Hydes; radioman-gunner on our heavy bombers. F. Tupper, jr. il Radio N 29:3-9+ F '43
- Radio operators for our bombers. H. A. Evans. il Radio N 29:68-71+ Je '43
- Training; Signal corps facilities. G. L. Van Deusen. il Radio N 28:60-4+ N '42

See also

- Army amateur radio
system

RADIO oscillators. See Oscillators**RADIO receiving apparatus**

- Air-raid alarm circuits. W. D. Stewart. il diags Radio N 30:23-5+ Ag '43
- Audio perspective system for home radio receivers. I. Volpe. diag Electronics 16:156 Ag '43
- Emergency radio receivers; crystal, copper oxide and home-made tube detectors. G. Dexter. diags Radio N 29:28-9+ Ja '43
- Frequency stability problems with particular reference to commercial radio-receiver development; abstracts. C. W. Eggleton. Electrician 129:554 N 20 '42; Elec R (Lond) 131:656 N 20 '42
- Fundamental bass boost circuits. W. Moody. diags Radio N 30:48-9 N '43
- Mechanical design of German army wireless components. D. G. Hull. Electronics 16:140+ Ja '43
- New bass-boosting circuit. L. M. Barcus. diags Electronics 16:216+ Je '43
- 1915-type C receiving set. diag Radio N 28:138 N '42
- Notes on the current radio situation; serious problems developing in repairs and replacement parts. Consumers' Research Bul 11:22-3 F '43
- Pre-set broadcast receiver. A. K. Brumbough, jr. il diags Radio N 29:32-4, 64-6 Ja '43
- Priority-free radio intercomm; conversion of small ac-dc sets. R. F. Scott. il diags Radio N 29:28-9+ Mr '43
- Radio receiver circuit invented by A. L. Green. diag Radio N 29:23+ My '43
- Receiver input circuits; abstract. H. Behling. Wireless Eng 20:198 Ap '43
- Self-checking carrier tone alarm. P. A. Berg. diag Electronics 16:174+ N '43
- Simple quartz-crystal filters of variable bandwidth. G. Builder and J. E. Benson. bibliog diags Wireless Eng 20:183-9 Ap '43; Discussion. J. Robinson. 20:435-6 S '43

See also

- | | |
|----------------------------------|-----------------------------------|
| Amplifiers, Vacuum
tube | Radio apparatus in-
dustry |
| Direction finding ap-
paratus | Television receiving
apparatus |

Control

- Resistance network provides interlock for simple relays; pushbutton-operated remote receiver. J. H. Miller. diag Electronics 16:317-18 Mr '43

- Thermal-frequency-drift compensation. T. R. W. Bushby. bibliog diags Inst Radio Eng Proc 30:546-53 D '42; Correction. 31:232 My '43

Frequency modulation receivers

- Frequency-modulation transmitter and receiver for studio-to-transmitter relay system. W. F. Goetter. il diags Inst Radio Eng Proc 31:600-6 N '43
- New designs in F.M. H. DuVal, jr. il Gen Elec R 46:631-4 N '43
- Reduction of band width in F.M. receivers. D. A. Bell. Wireless Eng 19:497-502 N '42

RADIO receiving apparatus—Frequency modulation receivers—Continued

Tuning indicators and circuits for frequency-modulation receivers. J. A. Rodgers. diags Inst Radio Eng Proc 31:89-93 Mr '43

Noise

Amplitude of noise voltages; abstract. K. Fränz. Wireless Eng 20:397-8 Ag '43
Chart for radio noise. J. M. Sowerby. Wireless Eng 20:327-30 Jl '43

Feedback amplifiers, signal-to-noise ratio. F. S. Macklem. Electronics 16:211 Ap '43;
Discussion. J. T. Pratt. 16:336-9 Je '43

Measurements pertaining to the co-ordination of radio reception with power apparatus and systems. C. M. Foust and C. W. Frick. bibliog diags Elec Eng 62: Trans 284-91 Je '43

Method of measuring the effectiveness of electrostatic loop shielding. D. E. Foster and C. W. Finnigan. diags Inst Radio Eng Proc 31:253-5 Je '43

Noise of diodes and detectors (pyrite, carborundum) in the static and dynamic régimes; abstract. H. F. Mataré. Wireless Eng 20:85 F '43

Receiver input circuits; design considerations for optimum signal/noise ratio. R. E. Burgess. diags Wireless Eng 20:66-76 F '43

Some aspects of radio reception at ultra-high frequency; admittances and fluctuation noise of tubes and circuits; signal to noise ratio. E. W. Herold and L. Malter. bibliog diags Inst Radio Eng Proc 31:491-510 S '43

Ultrashort electromagnetic waves; signal to noise ratio. B. Trevor. bibliog Elec Eng 62:407-9 S '43

Power supply

Experimenters' power supply. H. L. Davidson. il diags Radio N 29:17-8 Ja '43

Half-wave voltage-doubling rectifier circuit. D. L. Waldelich and C. H. Gleason. bibliog diags Inst Radio Eng Proc 30:535-41 D '42

Practical radio course; harmonic and frequency distortion produced by power pentode tubes. A. A. Ghirardi. diags Radio N 30:55-6-8 N '43

Rating

1942 console radio-phonograph combinations; some available, but stocks will soon be exhausted. Consumers' Research Bul 11:15-17 D '42

Repair

Servicing the radio at home. il diags Consumers' Research Bul 11:21-3 Je; 12:19-21 Jl '43

Selectivity

Coupled circuit filters; generalised selectivity, phase shift, and trough and peak transfer impedance curves. K. R. Sturley. diags Wireless Eng 20:426-34, 473-87 S-O '43

Sensitivity

Highest attainable sensitivity of receivers with band-filter input; abstract. H. Behling. Wireless Eng 16:35 Ja '43

Measurement of the sensitivity of receivers for short [metric and decimetric] waves; abstract. K. Fränz. Wireless Eng 19:529-30, 574-5 N-D '42

Sensitivity of ultra-high-frequency receivers, with special attention to the U.H.F. duopentode type EFF50; abstract. R. Wilke. Wireless Eng 19:530-1 N '42

Short wave

Diode as a frequency-changer. F. M. Colebrook and G. H. Aston. Wireless Eng 20:5-14 Ja '43

Diode frequency changers. E. G. James and J. E. Houldin. Wireless Eng 20:15-26 Ja '43
Frequency-conversion for decimetric waves with the help of diodes; abstract. M. J. O. Strutt and A. van der Ziel. Wireless Eng 20:451 S '43

Measurement of the sensitivity of receivers for short [metric and decimetric] waves; abstract. K. Fränz. Wireless Eng 19:529-30, 574-5 N-D '42

130-210 mc. receiver for FM-AM coverage. C. E. Jackson. il diag Radio N 30:23-5-7 Jl '43

Practical ultra-high-frequency oscillators. R. Ricketts. diags Radio N 29:28-9-4p '43
Precision tuning problem in U-H-F broadcasting. S. Y. White. diags Electronics 16: 94-7-7 My '43

R-F converter. W. F. Frankart. il diag Radio N 30:29-4p S '43

Sensitivity of ultra-high-frequency receivers, with special attention to the U.H.F. duopentode type EFF50; abstract. R. Wilke. Wireless Eng 19:530-1 N '42

Some aspects of radio reception at ultra-high frequency. E. W. Herold and L. Malter. bibliog diags Inst Radio Eng Proc 31:423-33, 491-510, 567-82 Ag-O '43

V-H-F receiver oscillator design. S. Y. White. Electronics 16:96-7-4p Jl '43

Standards

Fire prevention requirements for electric radios revised: 1942 edition of the Standard for power-operated radio receiving appliances of Underwriters' laboratories, Inc. H. B. Smith. il diag Ind Stand 14:17-19 Ja '43

Keep 'em playing; program of standardization. Business Week p38 D 19 '42

Standards for replacement parts for civilian radio in war time. O. H. Caldwell. il Ind Stand 13:312-13 D '42

War model standards assure replacement parts for home radios. il Ind Stand 14:77-8 Mr '43

Superheterodyne

Behaviour of mixing diodes at low and high frequencies; abstract. H. Meinke. Wireless Eng 20:502-3 O '43

Input and output resistances of mixing diodes, including the case of ultra-high frequencies; abstract. H. F. Mataré. Wireless Eng 20: 503-4 O '43

Mitnahme (pulling-into-tune) of self-excited oscillations, and its technical utilisation; abstract. F. Kirschstein. Wireless Eng 20: 499-500 O '43

Notes on tracking circuits. A. Bloch. diags Wireless Eng 19:508-14 N '42

Some aspects of radio reception at ultra-high frequency; general superheterodyne considerations at ultra-high frequencies; frequency mixing in diodes. E. W. Herold and L. Malter. diags Inst Radio Eng Proc 31:567-82 O '43

Super-het tuner for the dynamic demonstrator. D. Gnessin. il diags Radio N 29:33-4p '43

Superheterodyne converter terminology. H. Stockman. diags Electronics 16:144-6-4p N '43

Superheterodyne tuning. D. Riach. diags Wireless Eng 20:159-62 Ap '43

Three-point tracking in superheterodynes. K. Fränz. bibliog diags Wireless Eng 20:331-8 Jl '43

Testing

Harmonic generator for frequencies above 100 mc/s. W. M. Colles. il diag Wireless Eng 20:300-2 Je '43

Multi-servimeter. R. F. Scott. il diags Radio N 29:24-6-4p Ja '43

Tuning

Precision tuning problem in U-H-F broadcasting. S. Y. White. diags Electronics 16: 94-7-4p M '43

Super-het tuner for the dynamic demonstrator. D. Gnessin. il diags Radio N 29:33-4p '43

Superheterodyne tuning. D. Riach. diags Wireless Eng 20:159-62 Ap '43

Tuning indicators and circuits for frequency-modulation receivers. J. A. Rodgers. diags Inst Radio Eng Proc 31:89-93 Mr '43

Variable inductors. G. Dexter. il diags Radio N 30:43-4-4p Ag '43

RADIO receiving apparatus, Portable

1913. field radio pack set. diag Radio N 28: 140-4 N '42

112-120 mc emergency portable. O. Read. il diags Radio N 28:26-8-4p D '42

Radio coat for fighting men. S. R. Winters. diags Radio N 28:20-1-4p O '42

RADIO reception
Radio loudspeaker tests pave way for better reception. A. N. Goldsmith. il Ind Stand 13:306-8 D '42

RADIO reception—Continued

Some aspects of radio reception at ultra-high frequency. E. W. Herold and L. Malter. bibliog diags Inst Radio Eng Proc 31:423-38, 491-510, 567-82 Ag-O '43
 Ultrashort electromagnetic waves; reception. B. Trevor. bibliog Elec Eng 62:405-9 S '43

See also

Radio antennas

RADIO rectifiers

Analysis of full wave rectifier with choke input. L. C. Tillotson and C. M. Wallis. diags Electronics 16:94-74 Ap '43
 Analysis of rectifier operation. O. H. Schade. bibliog diags Inst Radio Eng Proc 31:341-61 Jl '43

Copper-oxide rectifiers in standard broadcast transmitters. R. N. Harmon. il Inst Radio Eng Proc 30:534-5 D '42
 Half-wave voltage-doubling rectifier circuit. D. L. Waidehlich and C. H. Gleason. bibliog diags Inst Radio Eng Proc 30:535-41 D '42

Operation of a thyatron as a rectifier. L. A. Ware. diags Inst Radio Eng Proc 30:500-2 N '42

Swinging filter choke. R. M. Hanson. diags Electronics 16:112-16+ Je '43

Vacuum rectifiers working with condenser input; graphical assessment of their performance. R. G. Mitchell. diags Wireless Eng 20:414-25 S '43

See also

Radio condensers

Radio filters

RADIO research

Dedicated to war and peace; RCA laboratories building, Princeton, New Jersey. il diags Arch Rec 93:57-62 Mr '43

Determination of the electrical properties of soil at a wavelength of 5 metres (frequency 60 mc./s.). J. S. McPetrie and J. A. Saxton. bibliog diags Inst E E J 90 pt 3: 33-5 Mr '43

Electronics and research. R. R. Beal. Comm & Fin Chr 157:2262, 2274-5 Je 17 '43

Navy's history of radar. Electronics 16:212+ Jl '43

Power-tube performance in class C amplifiers and frequency multipliers as influenced by harmonic voltage. R. I. Sarbacher. il diags Inst Radio Eng Proc 31:607-25 N '43

Radio and electronics in the navy. S. P. Sashoff. il Electronics 16:72-5 Ap '43

Radio research and production. G. M. Garro-Jones. Engineering 156:135 Ag 13 '43

Transformation theorem for loss-free quadrupoles, and its application to the experimental investigation of decimetric and centimetric-wave circuits; abstract. A. Weiss-floch. Wireless Eng 20:135 Mr '43

Wave guides in electrical communication. J. Kemp. bibliog(52 references) diags Inst E E J 90 pt 3:90-114 S '43

Wireless section; chairman's address. R. L. Smith-Rose. bibliog diags Inst E E J 90 pt 1:29-38 Ja '43; Same. Inst E E J 90 pt 3:2-11 Mr '43; Abstracts. Electrician 129: 415-18 O 16 '42; Elec R (Lond) 131:484-5 O 16 '42; Electronics 16:206+ O '43

See also

Radio laboratories

RADIO sales meetings. See Sales conventions—Radio conventions

RADIO schools and training

AAFTTC trains radio OPS. Scott Field, Ill. W. P. Hayes. il Radio N 29:60-3+ Je '43

Basic Signal corps training; examples of various military and civilian training courses. il diags Radio N 28:172-94 N '42

Civilian training in our war effort. L. B. Bender. il Radio N 28:10-13+ D '42

Eastern signal corps schools code training. il Radio N 30:24-5+ S '43

Greatest opportunity of all time; Signal corps educational programs to teach radio specialists. P. L. Schauble. il Radio N 28: 132-34 N '42

How enlisted men learn; Signal corps training in radio and wire communication. F. C. Shidel. il Radio N 28:70-3+ N '42

Microwave plumbing; laboratory instruction u-h-f equipment used at Harvard. D. D. King. il diags Electronics 16:116-19+ S: 118-21+ O '43

Midwestern Signal corps training. W. E. Prosser. il Radio N 28:65-9+ N '42

Navy radio ops in the making. L. Winner. il Radio N 28:6-9+ O '42

Oscillator and detector demonstrator for war radio training classes. H. C. Lawrence. diags Radio N 30:35-6+ S '43

Radio mechanics; training for the air forces executed at AAFTTC post (Camp Truax). F. O. Dice. il Radio N 29:64-7+ Je '43

Radio operators for our bombers. H. A. Evans. il Radio N 29:68-71+ Je '43

Training radio ops for the airlines. L. Winner. il Radio N 28:34-6+ D '42

Training RAF radiomen. A. C. H. Purthrey. il Radio N 29:21+ My '43

Training; Signal corps facilities. G. L. Van Deusen. il Radio N 28:60-4+ N '42

RADIO serials. See Radio broadcasting—Serials

RADIO signals

Capacity released by load swing control; frequency indicator operated by frequency standard received by radio. J. E. McCormack. diags Elec W 118:1775-7 N 28 '42

Details of the Vultee flight test recorder. il diags Aero Digest 42:255-6, 258, 261-2 F '43

New flight testing apparatus radios precise plane data; instrument developed by the Consolidated-Vultee aircraft corporation. il diags Product Eng 14:395-9, 512-16 Jl-Ag '43

Technical functions and responsibilities of the Civil aeronautics administration; signals. H. S. Stokes. Aeronautical Eng R 2:16, 21 S '43

See also

Direction finding apparatus

RADIO sonde. See Radio meteorographs

RADIO standards

High frequencies; status of standards and measurements. H. R. Meahl. il Gen Elec R 45:617-19 N '42

Proposed standard conventions for expressing the elastic and piezoelectric properties of right and left quartz. W. G. Cady and K. S. Van Dyke. bibliog diags Inst Radio Eng Proc 30:495-9 N '42

Radio standards go to war. H. P. Westman. Inst Radio Eng Proc 31:381-4 Jl '43

Standards and standardisation. W. H. F. Griffiths. Wireless Eng 20:109-26 Mr '43

See also

Radio apparatus— Standards

Radio broadcasting— Standards

Frequency stand-ards

Radio stations, Standard frequency

RADIO stations

Utility uses two-way FM dispatching; instantaneous communication with field crews by Department of water & power system, Los Angeles. il Elec West 91:64-5 S '43

See also

Radio broadcasting stations

Emergency stations

Office of civilian defense war emergency radio service; WERS. Pub Util 31:560-1 Ap 29 '43

RADIO stations, Air line

Engineering; safety of aircraft depends upon radio equipment. A. H. Hadfield. il map Radio N 29:105-7+ Je '43

RADIO stations, Government

Wind that talks; government radio network aids work among Navahos. C. Huff. il Comp Air M 48:7120-1 Ag '43

RADIO stations, Standard frequency

Radio station of the National bureau of standards. Science 98:sup8 Ag 20 '43

RADIO studios. See Radio broadcasting studios

RADIO symbols

Radio vs. industrial symbols; lack of uniformity. diags Electronics 16:94-5 S '43

RADIO technical planning board

Meeting, 1st, New York, Sept. 29. Electronics 16:230 N '43

RADIO telegraph

500-watt CW transmitter. W. W. MacDonald. il diags Electronics 16:67-9 F '43

RADIO telegraph—Continued

- Graphical method to find the optimal operating conditions of triodes as class C telegraph transmitters. J. C. Frommer. *Inst Radio Eng Proc* 30:519-25 N '42
- McElroy chart of codes and signals. *Radio N* 29:284-5 Je '43
- Postwar merger? consolidation of cable and radio facilities discussed. *Business Week* p34+ My 29 '43
- Radio telegraph carriers, operating revenue, 1938-1941. Survey of *Cur Business* 1942 Sup p101 [supplemented in monthly numbers]
- Sending helps for the beginner. F. L. Velten. *Radio N* 28:62+ O '42

See also

- | | |
|-------------------------|---------------------|
| Amplifiers, Vacuum tube | Radio communication |
| Electric waves | Radio measurements |
| Radio apparatus | Radio transmitters |
| | Vacuum tubes |

History

- Saga of the vacuum tube. G. F. J. Tyne. *il diags Radio N* 30:30-2+ JI '43

RADIO telephone

- Emergency communication by radiotelephone; Southern counties gas co. of California. H. J. Keeling. *il diags Am Gas Assn Mo* 25:130-4 Ap '43
- Study of propagation over the ultra-short-wave radio link between Guernsey and England on wavelengths of 5 and 8 metres (60 and 37.5 mc./s.). R. L. Smith-Rose and A. C. Stickland. *bibliog Inst E E J* 90 pt 3:12-19 Mr '43; *Excerpts. Electrician* 129:496 N 6 '42; *Elec R (Lond)* 131:591-2 N 6 '42; *Discussion. Inst E E J* 90 pt 3:20-4 Mr '43

See also

- | | |
|-------------------------|----------------------------|
| Amplifiers, Vacuum tube | Radio receiving apparatus |
| Radio apparatus | Radio stations |
| Radio broadcasting | Telephone, Carrier current |
| Radio communication | Vacuum tubes |

Forestry service

- Equipment for forest defense. S. R. Winters. *il(cover) Radio N* 28:48+ D '42
- Fire-fighting amplitude modulation network. L. Winner. *il Radio N* 29:11-13+ Ap '43

Highway department uses

- Radio keeps 'em plowing; radio transmitters and receivers speed snow removal on California mountain highway. T. M. Dennis. *il Radio N* 29:14-15+ F '43

Police uses

- Mobile crime laboratory and emergency truck; Illinois state highway maintenance police. C. H. Nicholson. *il diags Radio N* 29:16-19+ Mr '43
- Planning a V-H-F communications system; with details concerning the Massachusetts state police system. J. A. Doremus. *il plan map Electronics* 16:96-101+ S '43

Secrecy

- Speech scrambling methods. W. W. Roberts. *il diags Electronics* 16:108-11+ O '43

Transoceanic

- Calling Moscow. *Business Week* p48+ O 9 '43

RADIO telephone, Portable

- Postwar phones; two-way radiophone. *Business Week* p102 S 18 '43
- Walkie-talkie; portable two-way radios are a boon to the military. *Fortune* 28:62 O '43

RADIO transformers

- B-H curve tracer for lamination samples; magnetic material used in transformers and chokes. R. Adler. *il diags Electronics* 16:128-31+ N '43
- Cathode follower circuits for coupling high-impedance sources to low-impedance loads. W. Richter. *bibliog diags Electronics* 16:112-17+ N '43
- Iron-core components in pulse amplifiers. R. Lee. *diags Electronics* 16:115-17+ Ag '43
- Replacement power supplies. R. F. Scott. *diags Radio N* 30:42-3+ O '43
- Rolled steel cores for radio transformers; Hipsersil. C. C. Horstman. *il diags Electronics* 16:110-11 Je '43

- Three resonant circuit transformer. M. R. Winkler. *il diags Electronics* 16:96-100+ Ja '43

RADIO transmission

- Induction control for experimenters; induction transmission becoming increasingly popular. W. T. Peterson. *diags Radio N* 28:20-1 JI; 18-19+ O '42
- Pickup of balanced four-wire lines. C. W. Harrison, Jr. *bibliog Inst Radio Eng Proc* 30:517-18 N '42
- Symmetrical electrical systems; method of evaluating the transmission characteristics of four-terminal networks. E. S. Purington. *diags Electronics* 15:54-7 N '42; 16:69-72+ Ja '43
- Transmission characteristics of asymmetric-sideband communication networks. E. C. Cherry. *bibliog diags Inst E E J* 89 pt 3:19-39; 90 pt 3:75-83 Mr '42, Je '43; *Discussion. 89 pt 3:39-42 Mr '42*
- Transmission of radio waves through the earth; abstract. D. Silverman and D. Sheffet. *Wireless Eng* 20:496 O '43
- Ultrahigh-frequency transmission in wave guides. L. A. Ware. *bibliog diags Elec Eng* 61:598-603 D '42
- Wireless section; chairman's address. R. L. Smith-Rose. *bibliog diags Inst E E J* 90 pt 1:23-38 Ja '43; *Same. Inst E E J* 90 pt 3:2-11 Mr '43; *Abstract. Electronics* 16:206+ O '43

See also

- | | |
|---|--------------------|
| Kennelly-Heaviside | Radio lines |
| Jayvee | Radio modulation |
| Radio antennas | Radio telephone— |
| Radio broadcasting | Secrecy |
| Radio communication | Radio transmitters |
| —Interference | Radio waves |
| <i>also United States—War information, Office of—Radio control center</i> | |

Fading

- Effects of solar activity on the ionosphere and radio communications. H. W. Wells. *bibliog il maps Inst Radio Eng Proc* 31:147-57 Ap '43
- Field strength of Delhi 3 and Delhi 4 at Calcutta during the solar eclipse of September 21, 1941. S. P. Chakravarti. *Inst Radio Eng Proc* 31:269-70 Je '43
- Study of propagation over the ultra-short-wave radio link between Guernsey and England on wavelengths of 5 and 8 metres (60 and 37.5 mc./s.). R. L. Smith-Rose and A. C. Stickland. *bibliog Inst E E J* 90 pt 3:12-19; *Discussion. 20-4 Mr '43*

RADIO transmitters

- Buoy radiobeacons for inshore navigation. W. W. MacDonald. *il diags Electronics* 16:88-91 JI '43
- Coupled resonant circuits for transmitters. N. I. Korman. *Inst Radio Eng Proc* 31:28-32 Ja '43
- 500-watt CW transmitter. W. W. MacDonald. *il diags Electronics* 16:67-9 F '43
- Graphical method to find the optimal operating conditions of triodes as class C telegraph transmitters. J. C. Frommer. *Inst Radio Eng Proc* 30:519-25 N '42; *Abstract. Wireless Eng* 20:267-72 Je '43
- KTKC builds a 5-kw transmitter in wartime. B. Williamson. *il diags plan Electronics* 16:74-9 My '43
- Mechanical design of German army wireless components. D. G. Hull. *Electronics* 16:142+ Ja '43
- Radio progress during 1942; radio transmitters. *Inst Radio Eng Proc* 31:128-9 Ap '43

See also

- Direction finding apparatus

Control

- Automatic control circuits for broadcast transmitters. W. R. Sloat. *il diags Electronics* 16:102-5+ N '43

Frequency modulation transmitters

- Frequency-modulation transmitter and receiver for studio-to-transmitter relay system. W. F. Goetter. *il diags Inst Radio Eng Proc* 31:600-6 N '43
- New designs in FM. H. DuVal, Jr. *il Gen Elec R* 46:631-4 N '43

RADIO transmitters—Frequency modulation transmitters—*Continued*

260- to 350-megacycle converter unit for General Electric frequency-modulation station monitor. H. R. Summerhayes, jr. *il* diags *Inst Radio Eng Proc* 31:249-53 *Je* '43

Manufacture

Ball bearings loaded easily; contact wheel assemblies for radio transmitters. diag *Elec W* 120:653 *Ag* 21 '43

Power supply

Copper-oxide rectifiers in standard broadcast transmitters. R. N. Harmon. *il* *Inst Radio Eng Proc* 30:534-5 *D* '42
Power-tube performance in class C amplifiers and frequency multipliers as influenced by harmonic voltage. E. I. Sarbacher. *il* diags *Inst Radio Eng Proc* 31:607-25 *N* '43

Protection

Automatic transmitter protection; electronic relay system. F. Marx. diags *Electronics* 16:98-9+ *Je* '43
Modified protective gap for transmitting antennas. A. Leeman. diags *Electronics* 16:128+ *My* '43

Short wave

Practical ultra-high-frequency oscillators. R. Ricketts. diags *Radio N* 29:28-9+ *Ap* '43
Tubes for high-power short-wave broadcast stations; their characteristics and use. G. Cheigny. *il* diags *Inst Radio Eng Proc* 31:331-40 *Jl* '43
Wave guides; theory and application as used in conjunction with uhf equipment. J. Williams. diags *Radio N* 30:24-5+ *O* '43

Tuning

Automatic transmitter tuning with push-buttons. *il* diags *Electronics* 16:154, 156+ *N* '43

RADIO transmitters, Portable

Army's SCR-299; mobile radio communications unit. O. Read. *il* map *Radio N* 30:17-20+ *Ag* '43
Emergency radio transmitter automatically sends out S O S signals. *il* *Aero Digest* 43:318 *Jl* '43
1913. Field radio pack set. diag *Radio N* 28:140+ *N* '42
112-120 mc emergency portable. O. Read. *il* diags *Radio N* 28:26-8+ *D* '42
Portable helicopter transmitter. C. Coleman and J. T. Donnelly. *il* diag *Radio N* 30:35-6+ *Jl* '43
Radio coat for fighting men. S. R. Winters. diags *Radio N* 28:20-1+ *O* '42

RADIO tubes. See Vacuum tubes**RADIO waves**

Beyond the ultra-short waves. G. C. Southworth. *il* diags *Inst Radio Eng Proc* 31:319-30 *Jl* '43; Abstract. *Electronics* 16:296-7 *Mr* '43
Determination of the electrical properties of soil at a wavelength of 5 metres (frequency 60 mc./s.). J. S. McPetrie and J. A. Saxton. bibliog diag *Inst E E J* 90 pt 3:33-5 *Mr* '43
Effects of solar activity on the ionosphere and radio communications. H. W. Wells. bibliog *il* maps *Inst Radio Eng Proc* 31:147-57 *Ap* '43
Generation of short waves. A. Arsenjew-Hell and O. Hell. *Electronics* 16:164+ *Jl* '43
Measurement of the angle of downcoming waves from Indian regional short-wave stations; abstract. M. R. Rao. *Wireless Eng* 20:495 *O* '43
Physical behavior of wave guides. H. Skilling. bibliog *il* diags *Electronics* 16:76-80+ *Mr* '43
Practical radio course; various unmodulated and modulated r.f. carrier waves and how they are used. A. A. Ghrardi. *il* diags *Radio N* 28:32-3+ *D* '42
Principles of micro-wave radio. E. U. Condon. bibliog diags *Rs Mod Phys* 14:341-89 *O* '42
Radiation from antennas. S. A. Schelkunoff and C. B. Feldman. bibliog *Inst Radio Eng Proc* 30:511-16 *N* '42
Reflection of an electromagnetic impulse from the Heaviside layer [and the resulting deformation]; abstract. V. L. Ginsburg. *Wireless Eng* 20:441-2 *S* '43

Transmission characteristics of asymmetric-sideband communication networks. E. C. Cherry. bibliog diags *Inst E E J* 89 pt 3:19-39; 90 pt 3:75-88 *Mr* '42, *Je* '43; Discussion. 89 pt 3:39-42 *Mr* '42

Ultrashort electromagnetic waves. E. Weber and others. bibliog *il* diags *Elec Eng* 62:103-12, 159-67, 206-15, 235-46, 303-12, 338-44, 405-9 *Mr-S* '43

Wavelength measurements of decimetric, centimetric and millimetric waves; abstract. A. C. Clavier. diag *Electronics* 15:108+ *D* '42

Wireless section; chairman's address. R. L. Smith-Rose. bibliog diags *Inst E E J* 90 pt 1:29-38 *Ja* '43; Same. *Inst E E J* 90 pt 3:2-11 *Mr* '43; Abstracts. *Electrician* 129:415-18 *O* 16 '42; *Elec R (Lond)* 131:484-5 *O* 16 '42; *Electronics* 16:206+ *O* '43

See also

Electric waves
Radio transmission

RADIO workers

Aviation radio course (cont). P. W. Karrol. *il* *Radio N* 29:37, 77-80 *Ja*; 39+ *F*; 25+ *Ap* '43
Civilian training in our war effort. L. B. Bender. *il* *Radio N* 28:10-13+ *D* '42
Radio mechanics; training for the air forces executed at AAFTTC post (Camp Truax). F. O. Dice. *il* *Radio N* 29:64-7+ *Je* '43

See also

Radio operators
Radio schools and training

RADIOACTIVE substances

Causes of variations in radioactivity data. N. B. Keevil and others. *pl* *Am J Sci* 241:345-65 *Je* '43
Distribution of helium and radioactivity in rocks; helium age investigations of diabase and granodiorites from Yellowknife, Northwest Territories, Canada. N. B. Keevil, A. W. Jolliffe and E. S. Larsen. map *Am J Sci* 240:831-46 *D* '42
Distribution of helium and radioactivity in rocks; rocks and associated minerals from Quebec, Ontario, Manitoba, New Jersey, New England, New Brunswick, Newfoundland, Tanganyika, Finland, and Russia. N. B. Keevil. *Am J Sci* 241:277-306 *My* '43
Helium indexes for several minerals and rocks. N. B. Keevil. *Am J Sci* 241:680-93 *N* '43
Interior of the earth viewed in relation to earthquake causes; what radioactivity tells us about the interior of the earth. V. F. Hess. bibliog *J Ap Phys* 14:116-20 *Mr* '43
Occupational hazards to young workers; radioactive substances. bibliog *U S Children's Bur Pub* 286:1-18; *pa* 10c *Supt. of doc.* '42

See also

Allanite
Radioactivity
Radium
Thorium

RADIOACTIVITY

Absorption of lead tetraethyl with radioactive lead as indicator. R. A. Mortensen. bibliog *J Ind Hygiene* 24:285-8 *N* '42
Analysis for potassium by its natural radioactivity. R. B. Barnes and D. J. Salley. bibliog *il* *Ind & Eng Chem Anal ed* 15:4-7 *Ja* 15 '43
Antisymmetrical interaction in beta-decay theory. C. L. Critchfield. bibliog *Phys R* 63:417-25 *Je* 1 '43
Artificial radioactivity of Cr⁴⁸. J. J. O'Connor, M. L. Pool and J. D. Kurbatov. bibliog *Phys R* 62:413-16 *N* 1 '42
Distribution in the rat of injected radioactivated bacteria. J. O. Ely. Franklin *Inst J* 234:500-14 *N* '42
Exchange of radioactive silver and bromide with silver bromide suspensions. A. Langer. bibliog *J Chem Phys* 11:11-15 *Ja* '43
High centrifugal fields and radioactive decay. bibliog diags *J Ap Phys* 14:271 *Je* '43
High centrifugal fields and radioactive decay. S. Freed, A. H. Jaffey and M. L. Schultz. diags *Phys R* 63:12-17 *Ja* 1 '43
Locating cased-off production by radioactivity logging. W. A. Sawdon. *il* *Pet Eng* 14:43-6 *My* '43

RADIOACTIVITY—Continued

- Mercury vapor measurement; a radioactive method. C. Goodman, J. W. Irvine, Jr. and C. F. Horan. bibliog diags J Ind Hygiene 25:275-81 S '43
- Radiations from radioactive Co⁶⁰. C. S. Cook and P. W. McDaniel. bibliog Phys R 62:412-13 N '42
- Radioactive exchange and adsorption of methyl bromide with several inorganic bromides. G. B. Kistiakowsky and J. R. Van Wazer. diag Am Chem Soc J 65:1829-34 O '43
- Radioactive isotopes for the study of trace elements in living organisms. J. D. Kurbatov and M. L. Pool. bibliog il Chem R 32:231-48 Ap '43
- Radioactive isotopes of lanthanum. K. E. Weimer, M. L. Pool and J. D. Kurbatov. bibliog chart Phys R 63:67-72 F '43
- Radioactive isotopes of mercury. G. Friedlander and C. Wu. bibliog Phys R 63:227-34 Ap '43
- Radioactive mercury in mercury-vapor measurements. J. W. Irvine, Jr. and C. Goodman. bibliog diag J Ap Phys 14:496-8 S '43
- Radioactivity and geochemical well logging. L. C. Uren. bibliog Pet Eng 14:50+ Ja '43
- Radiosulfur tracer study of sulfurized lubrication addition agents. G. L. Clark, S. G. Gallo and B. H. Lincoln. bibliog diags J Ap Phys 14:428-34 Ag '43
- Tracer studies with radioactive hydrogen; some experiments on photosynthesis and chlorophyll. T. H. Norris, S. Ruben and M. B. Allen. bibliog Am Chem Soc J 64:3037-40 D '42

See also

- | | |
|----------------------|---------------|
| Alpha rays | Radiography |
| Atoms—Disintegration | Radium |
| Beta rays | Thorium |
| Electrons | Transmutation |
| Gamma rays | (chemistry) |
| Ionization, Gaseous | X rays |

Measurement

- Measurement of the activity of radiosulfur in barium sulfate. R. H. Hendricks and others. bibliog diags J Phys Chem 47:469-73 O '43
- Mica window Geiger counter tube for measuring soft radiations. D. H. Copp and D. M. Greenberg. diag R Sci Instr 14:205-6 JI '43; Same cond. Electronics 16:190+ O '43

RADIOCHEMISTRY*See also*

- Alpha rays
Photochemistry
Radioactivity

RADIOGRAPHY

- Analytical patterns in the study of mineral and biological materials; autoradiograph, contact print, electrographic print, etc. H. Yagoda. bibliog (70 references) il diags Ind & Eng Chem Anal ed 15:135-41 F '43
- Correlation of metallographic and radiographic examinations of spot welds in aluminum alloys. D. W. Smith and F. Keller. bibliog il Welding J 21:sup573-83 D '42
- General principles of industrial radiography. R. Taylor. diag Automotive & Aviation Ind 88:24-5+ F '43
- Handling film for radiography. A. Gobus. il Metal Prog 44:618 O '43
- Industrial micro-radiography. H. Seymour. Electrician 129:476-8 O '40
- Investigation of the apparatus used in radium radiography. L. W. Ball and D. R. Draper. bibliog diags Am Soc T M Proc 42:1134-43; Discussion. 1144 '42
- Kryptoscreen; new fluorescent paper for radiography. Chem Age (Lond) 47:424 N 14 '42
- Long films for radiography; inspecting welded joints. A. Gobus. il Metals & Alloys 17:125 Ja '43
- Medical science joins hands with electronics. W. E. Gilson. bibliog il Electronics 16:144-5+ Mr '43
- Micro-radiography of light alloy spot welds. S. T. Gross and G. L. Clark. bibliog il diag Iron Age 152:44-8 JI 22 '43
- Opportunities in the newer methods of tuberculosis case finding. H. E. Hilleboe. Pub Health Rep 58:1094-1101 JI 16 '43

- Photoelectric timer controls X-ray film exposure. diags Electronics 16:173+ JI '43
- Precision radiography. R. J. Schier and G. E. Doan. il diags Am Soc T M Proc 42:1171-5 '42
- Radiography and X-ray tube design. J. Lampert. bibliog il diag Electronics 16:134-9+ N '43
- Radiography as an inspection tool; panel discussion. T. A. Triplett and others. il Metal Prog 43:236-34 F '43
- Radiography in the foundry; abstract. W. Gladwell. Metals & Alloys 15:602+ S '43
- Radiography in the foundry; abstract. W. Montgomery. Metals & Alloys 17:642 Mr '43
- Radiography, 1942. D. M. McCutcheon. Metals & Alloys 17:121 Ja '43
- Radiography of aircraft castings. R. Taylor. Aero Digest 42:238, 240+ Ap '43
- Radiography of aircraft spot-welds. R. Taylor. il diags Aero Digest 43:263, 265-6+ JI '43
- Radiography of light alloys. R. C. Woods and V. C. Cetrone. il Iron Age 151:62-8 Mr 25 '43
- Rapid gamma-ray inspection technique; use of calcium tungstate screens. R. C. Woods. il diags Metals & Alloys 17:764-6 Ap '43
- Survey of problems in taking X-ray movies. Electronics 16:166+ My '43
- Symposium on radiography. D. M. McCutcheon and others. il diags Am Soc T M Proc 42:1023-1182 '42
- Symposium on radiography, held at the thirty-ninth annual meeting, Atlantic City, N.J., June 30-July 1, 1936 and forty-fifth annual meeting, Atlantic City, N.J., June 23, 1942 of the American society for testing materials. 256p. \$4 American society for testing materials, 260 S. Broad st, Philadelphia '43
- Trends in the technique of industrial radiography. H. E. Seemann. il diags Engineer 174:492-5 D 18 '42
- Tuberculosis in industry; value of mass radiography. L. Banský. Electrician 130:190 F 19 '43
- X-ray contact printing with a human body as a negative. A. J. Lockrey. il Am Phot 37:14-16 JI '43

See also

- | | |
|-------------------------|--------------------------|
| Metallography | Welding—X ray inspection |
| Metals—X ray inspection | |

Exposure

- Automatic control of exposure in photo-fluorography. R. H. Morgan. diags Pub Health Rep 58:1533-41, pl 1-2 O 15 '43
- Exposure meter for X-ray radiography. H. Friedman and A. L. Christenson. il Am Soc T M Proc 42:1145-53; Discussion. 1154-5 '42

Study and teaching

- School of industrial and engineering radiography. il Engineer 175:50-1 Ja 15 '43

RADIOGRAPHY, Stereoscopic

- Camera for stereoscopic microradiography. G. L. Clark and E. W. Eyler. bibliog il diags R Sci Instr 14:277-8 S '43
- Location of flaws by double-exposure radiography. J. Rigbey. Am Soc For Metals Trans 31:599-608; Discussion. 609-12 S '43

RADIOLOCATOR. See Radar**RADIOMETEOROLOGRAPHS. See Radio meteorographs****RADIOMETERS**

- Tungsten-in-quartz lamp and its applications in photoelectric radiometry. R. Stair and W. O. Smith. bibliog diag pl J Research Nat Bur Stand 30:449-59 Je '43

See also

- Actinometers

RADIONICS (term)

- Radionics. E. F. McDonald, Jr. Science 97: 554-5 Je 18 '43; Discussion. H. Ward. 98: 174-5 Ag 20 '43

RADIOSONDE. See Radio meteorographs**RADIOTHERAPY**

- Medical science joins hands with electronics. W. E. Gilson. bibliog il Electronics 16:144-5+ Mr '43

RADIOTHERAPY—Continued

Therapeutic radionics. S. R. Winters. il diag
Radio N 30:17-19+ J1 '43

See also

X rays—Therapeutic
use

RADIUM

Helium age measurement: preliminary mag-
netite index. P. M. Hurley and C. Goodman.
bibliog Geol Soc Bul 54:305-23 Mr '43

How 3 lost tubes of radium were found in
Rochester, Minn. sewer. East Underw 44:
24 My 21 '43

Measurement of large quantities of water;
abstract. V. F. Hess. Science 97:sup10+
My 7 '43

Radium: not so precious now. F. T. Sisco.
Min & Met 24:322 J1 '43

—Radium production: abstract. E. F. Mactag-
gart. Chem & Met Eng 50:178-81 J1 '43

See also

Alpha rays
Beta rays
Gamma rays

Radioactivity
Radiography

Analysis

Counting method for the determination of
small amounts of radium and of radon.
L. F. Curtiss and F. J. Davis. pl diag
J Research Nat Bur Stand 31:181-95 S '43

Safety measures

Protection of radium dial painters, specific
work habits and equipment. G. E. Morris
and others. il diag J Ind Hygiene 25:270-4
S '43

Protection of radium dial workers and radi-
ologists from injury by radium. R. D.
Evans. bibliog il J Ind Hygiene 25:253-69
S '43

RADIUM E

Direct determination of the charge of the 8-
particle. Y. Beers. bibliog Phys R 63:77-85
F 1 '43

RADIUM ores

Prospecting for radium ore. Science 98:sup8
Ag 20 '43

RADIUM poisoning

Protection of radium dial painters, specific
work habits and equipment. G. E. Morris
and others. il diag J Ind Hygiene 25:270-4
S '43

Protection of radium dial workers and radi-
ologists from injury by radium. R. D.
Evans. bibliog il J Ind Hygiene 25:253-69
S '43

RADON**Analysis**

Counting method for the determination of
small amounts of radium and of radon.
L. F. Curtiss and F. J. Davis. pl diag
J Research Nat Bur Stand 31:181-95 S '43

RAGS

Bleaching rag stock with chlorite activated
by hypochlorite. J. E. Brennan, J. D.
MacMahon and G. P. Vincent. Paper Tr J
115:25-6 N 19 '42

Effect of acetylation on water-binding prop-
erties of cellulose. J. C. Bletzinger; W. H.
Aiken. bibliog il Ind & Eng Chem 35:474-80,
1206-10 Ap, N '43

Effect of acetylation on water-binding prop-
erties of cellulose; rag stock. J. C. Blet-
zinger. bibliog il Ind & Eng Chem 35:474-80
Ap '43

Stripping and re-dyeing of rags. N. C. Gee.
Textile Col 65:369-70 Ag '43

RAGWEED

North American ragweeds and their occur-
rence in other parts of the world. H. A.
Allard. Science 98:292-4 O 1 '43

RAIL. See Rails**RAIL motor cars. See Motor cars (railroad)****RAIL removers. See Street railroads—Track****RAILROAD associations**

See also

Association of
American railroads

RAILROAD board of mediation. See National mediation board**RAILROAD bridges. See Bridges, Railroad****RAILROAD cars. See Cars; Freight cars****RAILROAD engineering**

A.R.E.A. convention in print; president's re-
port; secretary's report; committee reports.
Ry Age 114:550-74 Mr 20 '43

Progress in railway mechanical engineering,
1941-1942. il diag Mech Eng 65:21-30 Ja '43
What the A.A.R. has under way in engineer-
ing and mechanical research. il Ry Age 114:
430-3 F 27 '43

See also

Bridges, Railroad

Cars

Grade crossing elimi-
nation

Locomotives

Railroad research

Railroads—Construc-
tion

Railroads—Location

Railroads—Main-
tenance and repair

Railroads—Track

Tables, calculations, etc.

Locomotive machine friction. L. H. Fry. Ry
Mech Eng 117:201-3 My '43

RAILROAD engineers

Co-operative relations with universities;
A.R.E.A. committee report. Ry Age 114:
564-5 Mr 20 '43

RAILROAD labor. See Railroads—Employees**RAILROAD land grants**

Big money in land-grant discount; exhibit
from study board; other public-aids state-
ments; highway and waterway data. Ry
Age 114:161-2 Ja 9 '43

Rail rate threat; government demands for
land-grant freight rates on all war goods.
Business Week p50+ My 29 '43

RAILROAD law

Evolution of tariff publication. G. P. Wilson.
G. P. Shaw and G. L. Wilson. Ry Age 113:
1023-6 D 26 '42

Icy tender found violation of law; roads'
liability under Boiler inspection act; Lilly
versus Grand Trunk Western. Ry Age 114:
220 Ja 16 '43; Same. Ry Mech Eng 117:108-
9 F '43

States keep power despite Railway labor act,
Supreme court upholds their authority. Ry
Age 114:259 Ja 23 '43

See also

Interstate commerce
commission
National mediation
board

Railroads—Rates

Railroads and state

RAILROAD rates. See Railroads—Rates**RAILROAD research**

N.Y. Central's research program. R. E.
Dougherty. Ry Age 115:50-2 J1 10 '43

Railroad research, a basic approach. E. C.
Nickerson. Ry Age 115:406-10 S 11 '43

Railroad research, its problems, profits and
potentialities. A. E. Perlman. il Ry Age
114:156-60 Ja 9 '43

Railroads prepare for post-war era; A.A.R.
sponsoring comprehensive research pro-
gram. W. J. Taft. Ry Age 114:23-5 Ja 2 '43

Suggests change in rail design as result of
investigations. W. E. Leaf. il diag Ry
Age 113:963-7 D 12 '42

What the A.A.R. has under way in engineer-
ing and mechanical research. il Ry Age 114:
430-3 F 27 '43

RAILROAD shops. See Car shops; Locomotive shops; Railroads—Shops**RAILROAD stations. See Railroads—Stations****RAILROAD supplies. See Railroads—Equip-ment and supplies****RAILROAD supplies industry**

No exhibit, but National railway appliances
association carries on; message from presi-
dent and report of secretary; new and im-
proved products of manufacturers. il diag
Ry Age 114:575-89 Mr 20 '43

Proudly fly the war emblems that testify
to achievement! railroad supplies industry
make munitions. R. A. Doster. il Ry Age
114:32-6+ Ja 2 '43

Supply companies do their part. il Ry Age
114:1041-5 My 22 '43

Supply companies handicapped in meeting
railway needs. il Ry Age 115:175-7 J1 24 '43
What of railway materials after the war?
il Ry Age 115:269-72+ Ag 14 '43

See also

Locomotive indus-
try

Railroad ties

Railroads—Equip-
ment and supplies

Railroads—Purchas-
ing

Rails

RAILROAD supplies industry—Continued**Finance**

SEC issues report on railroad equipment manufacturing. *Comm & Fin Chr* 157:283 Ja 21 '43

Securities

Appraising near and longer prospect for machinery, rail, and office equipment; position of leading stocks. *R. Colston. Il Mag of Wall St* 72:469-73+ Ag 7 '43

Big post-war demand for rail equipment likely. *M. Pescatello. Barron's* 23:1 My 3 '43

Highlights of rail equipment prospects in peace. *R. Carleson. Mag of Wall St* 72:132-3 My 15 '43

Outlook for rail equipments; position of leading railroad equipment and accessory stocks. *Mag of Wall St* 71:540-1+ F 20 '43

Statistics

See also
Cars—Statistics
Locomotives—Statistics

Railroads—Purchasing

RAILROAD ties

American wood preservers' association 39th annual meeting. *Chicago. reports. Ry Age* 114:864-6 My 1 '43

Lumber and cross ties; purchasing problems. *M. E. Townner. Ry Age* 114:288-9 Ja 30 '43

Report of A.R.E.A. committee on ties. *Ry Age* 114:570-1 Mr 20 '43

Scramble for ties. *Il Business Week* p54+ My 29 '43

Session on wood preservation. *Ry Age* 115:456-7 S 18 '43

Tie producers discuss war problems; Railway tie association 25th annual meeting. *Il Ry Age* 114:948-51 My 15 '43

See also
Mine ties
Railroads—Track

Manufacture

Changes in manufacturing practices; committee report. *Ry Age* 114:949-50 My 15 '43

Statistics

Tie renewals 3.7 per cent higher. *Ry Age* 115:98-100 Jl 17 '43

RAILROAD turntables. See Turntables**RAILROADS**

Tempo of transport. *L. K. Sillico. Harvard Business R* 23 no 1:29-39 [O] '43

See also

Air brakes	Motor cars (railroad)
Bridges, Railroad	Railroad engineering
Cableways	Railroad ties
Cars	Railroads and state
Electric railroads	Rails
Freight car service	Rapid transit
Freight cars	Street railroads
Grade crossings	Subways
Locomotive shops	Transportation
Locomotive terminals	Tunnels and tunneling
Locomotives	
Mine tracks	

also names of railroads, e.g. Pennsylvania railroad

Abandonment

Rail abandonments set new record; U.S., Canada and Mexico. *G. E. Boyd. Il Ry Age* 114:107-10+ Ja 2 '43

To make it harder for a railroad to quit; bill to make abandonment permits difficult to secure. *Ry Age* 115:737-8 N 6 '43

WPB asks for 415 more miles of line. *Ry Age* 113:971 D 12 '42

Accidents

Accident in train control territory. *Ry Age* 114:827 Ap 24 '43

Accident on D.L. at Wayland, N.Y. *Ry Age* 115:388 S 4 '43

Accidents in 1942. *Ry Age* 115:529-30 O 2 '43

British railway accidents in 1942. *Engineering* 156:52 Jl 16 '43

Congressional ltd. accident reported. *Ry Age* 115:576-7 O 9 '43

Congressional limited derailed at Philadelphia. *Ry Age* 115:428-9 S 11 '43

I.C.C. issues report on Delair derailment. *Ry Age* 115:69-70 Jl 10 '43

I.C.C. on collision at Sageeyak, Okla. *Ry Age* 114:1274 Je 26 '43

I.C.C. reports on Dickerson accident. *Ry Age* 113:795-+ N 14 '43

Lackawanna Limited accident at Wayland, N.Y. reported. *Ry Age* 115:663-3 O 23 '43

Locomotive defects and casualties show decided increase; report of the Bureau of locomotive inspection. *Ry Age* 114:279-81 Ja 30 '43; *Ry Mech Eng* 117:74-6+ F '43

Low water cause of Century accident east of Canastota, N.Y. *Ry Age* 115:575+ O 9 '43; *Same. Ry Mech Eng* 117:668-9 N '43

Milan, N.C. accident described in report. *Ry Age* 115:427 S 11 '43

Railroads compete in employee safety; sixteenth annual railroad employees' national safety contest. *Nat Safety N* 48:31 Jl '43

Report on collision at Almonte, Ontario. *Ry Age* 114:439 F 27 '43

Report on sideswiping collision at Warden, Wash. *Ry Age* 115:470-1 S 18 '43

See also
Railroads—Safety measures

Accounting

Leak-proof accounting pays. *E. H. Bunnell. Ry Age* 113:777-9 N 14 '42

Simplified accounting for government travel. *Il Ry Age* 114:632-4 Mr 27 '43

See also
Waybills

Advertising

Long Island tells patrons about its problems. *Ry Age* 113:796 N 14 '42

New Haven railroad series received so well, it goes national. *Il Ptr Ink* 201:19 D 11 '42

New post-war era for South is promoted by humanized Southern Railway advertising; interview by G. A. Nichols with E. E. Norris. *Il Ptr Ink* 204:19-21+ Ag 20 '43

N. & W. better service clubs sponsor radio broadcast. *Ry Age* 115:34-5 Jl 3 '43

Railroad ads change week-end travel habits of fun seekers. *Ptr Ink* 204:60 Jl 16 '43

Railroad advertising in 1942. *F. Snow. Il Adv & Sell* 36:46 Je '43

Railroad advertising is given high rank. *Ry Age* 115:538 O 2 '43

Southern Pacific spends \$73,728 to discourage travel. *Il Ry Age* 114:816-19 Ap 24 '43

Wave of institutional copy tells story of railroads at war. *L. B. Colby. Il Sales Management* 51:52+ D 1 '42

Air conditioning

See Car cooling

Air line competition

Air cargo economically limited; S.A.E. discussion. *J. V. Sheehan; C. G. Peterson; E. S. Evans. Ry Age* 113:1032-4 D 26 '42

Airlines, how dangerous a rival? *W. A. Patterson. Ry Age* 113:920-3 D 5 '42

Air line subsidiaries

Missouri-Pacific railroad asks to add air service for 103 cities. *B. Frederick. Aviation N* 1:27-8 O 25 '43

Northeast Airlines stock control studied; extent of B.&M. and Maine Central rule investigated by CAB. *Aviation N* 1:25 N 8 '43

Airplane auxiliaries

Railroad operation of local air service; abstract. *T. W. Van Metre. Ry Age* 116:699+ O 30 '43

Rails look ahead; two companies invest in glider manufacturing. *Business Week* p32 N 6 '43

Automatic stop and train control

Accident in train control territory. *Ry Age* 114:827 Ap 24 '43

Brakes

See Air brakes; Brakes

Braking

Braking of high-speed trains. *C. D. Stewart. Ry Age* 114:909-10 My 8 '43; *Same. Ry Mech Eng* 117:258-9+ Je '43

RAILROADS—Braking—Continued

Stress analysis of passenger-car trucks. J. C. Travilla, Jr. and W. E. Burdick. *il* diags A S M E Trans 65:297-300 My '43

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Air brakes

Bridge crossing

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Buildings and structures

Demountable buildings. *il* Ry Age 115:55-6 JI 10 '43

How cement grout restores old masonry railway structures; with cost data. *il* Concrete 51:2-3+ JI '43

Mastic used to seal leaky brick walls; made from gilsonite asphaltic mixture and slate granules, Pennsylvania railroad's harbor-side terminal warehouse. J. E. Nicholson. *il* Eng N 129:716-17 N 19 '42

Report on buildings; A.R.E.A. committee. Ry Age 114:563-4 Mr 20 '43

To underestimate the needs of the fixed properties is to undermine the railroads. *il* Ry Age 115:164-9 JI 24 '43

Yard control towers have new features; Chicago, Burlington & Quincy switch and car retarder control tower at Galesburg. *il* plans Ry Age 114:1130-1 Je 5 '43

See also

Bridges, Railroad

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Railroads—Signal

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Car departments

A.A.R. Mechanical division releases having important bearing on car department matters. diags Ry Mech Eng 117:330-1 JI '43

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See Cars; Dining cars; Freight cars; Motor cars (railroad); Refrigerator cars; Sleeping cars; Tank cars

Claims

Is faulty packing increasing freight claims? *il* Mod Packaging 17:70-3 O '43

See also Association of railway claim agents

Clearance

New York Central puts clearance matters on highly efficient basis; establishes central bureau and builds new clearance car. *il* Ry Age 114:1080-2+ My 29 '43

Commissaries

OPA sets ceiling prices for diners. Ry Age 115:28 JI 3 '43

Competitive transportation

War's end won't stop train travel. M. Good-sill. Ry Age 114:359-61 F 13 '43

See also

Motor trucks in

freight service

Railroads—Air line

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Railroads—Motor

vehicle competition

Concrete construction

Cement-grout effectively ends maintenance problem; Norfolk & western railroad concrete driveways and storage platforms, West Roanoke yard and engine facilities. H. F. Smith. *il* Eng N 130:818 Je 3 '43

Consolidation

Benefits of a railroad merger; Gulf, Mobile & Ohio has elements of lasting strength. Bar-ron's 23:19+ Ja 11 '43

Construction

C. & O. replaces 1850 Blue Ridge tunnel. *il* diags Eng N 131:18-20 JI 1 '43

1943, another billion-dollar year in construction and maintenance. *il* Ry Age 114:512-16 Mr 13 '43

Railroad construction indices for 1942. Ry Age 115:317-18 Ag 21 '43

Railway construction makes large gain in 1942; U.S., Canada, and Mexico. G. E. Boyd. Ry Age 114:73-80+ Ja 2 '43

See also

Bridges, Railroad

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nation

Railroads—Earth-

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Railroads—Electrifi-

cation

Railroads—Location

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ing

Cost of construction

Railroad construction cost indexes; 1919-1941. Eng N 130:578 Ap 22 '43

Costs

Equipment prices, 1942. Ry Age 114:124 Ja 2 '43

Higher average material costs. D. A. Steel. *il* Ry Age 114:86-94+ Ja 2 '43

Will railroad traffic of the future require steam or Diesel? with cost data. L. K. Sill-cox. Ry Age 113:913-18 D 5 '42; Same. Ry Mech Eng 117:29-34 Ja '43

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See also

Grade crossings

Curves and turnouts

Curve rails face new affliction; gage-corner shelling. *il* map Ry Age 114:617-20 Mr 27 '43

Damage from air raids

L.N.E.R. air raid incident. *il* Engineer 175:476 Je 11 '43

Damage from floods, storms, etc.

Floods delay traffic on mid-western roads. *il* Ry Age 114:1100-2 My 29 '43

Presents railroads an orchid; Eastman praises railroads' handling of petroleum traffic during floods. Nat Pet N 35:24+ Je 16 '43

Development work

Promoting forestry for freight revenue; Sea-board air line railway. C. A. Gillett. *il* Paper Ind 25:373-4 JI '43

Earthwork

Deep cut replaces old railroad tunnel. A. W. Loomis. *il* Comp Air M 48:7196-7 N '43

Retirement of old viaduct speeds traffic on two railroads; bridge near Lakeview, N.Y. replaced by embankment over concrete culvert. *il* diag Ry Age 114:316-18+ F 6 '43

Electric equipment

A.A.R. Electrical section reports. Ry Age 113:968-70 D 12 '42

Charging sets on rails in the yards of the Jacksonville terminal company. *il* Ry Mech Eng 117:233-4 My '43

Correcting overloads on conductors. Ry Mech Eng 117:56-9 Ja '43

Developments in the application of electricity to railways. H. W. Green. Inst E E J 90 pt 1:71-4 F '43; Abstract. Elec R (Lond) 131:522 O 23 '42

Electrical departments getting by. *il* Ry Age 115:173-4 JI 24 '43

Electrical service requirements. A. G. Oehler. Ry Age 114:26-7 Ja 2 '43

Mobile substations for the L.N.E.R. *il* Engineering 156:208, 210 S 10 '43; Elec R (Lond) 133:315 S 3 '43; Electrician 131:246 S 10 '43

New requirements for railway rotating machinery. F. B. Powers. *il* Ind Stand 14:112-14 Ap '43

Electrification

Developments in the application of electricity to railways. H. W. Green. Inst E E J 90 pt 1:71-2 F '43

Railway electrification; advantages over steam operation. G. O. McLean. Elec R (Lond) 132:684-5 My 21 '43

See also

Electric locomotives

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tric

RAILROADS—Electrification—Continued

Brazil

Sorocabana electrification; electric operation of meter gage line in Brazil will liquidate investment in less than ten years. D. Muyaert. diagrs map Ry Age 114:956-8 My 15 '43

Great Britain

Electrifying the railways. G. O. McLean. *il Elec R (Lond)* 132:103-6 Ja 22 '43
 Railway electrification; 3 ten-year plan? G. O. McLean. *Elec R (Lond)* 131:712 D 4 '42
 Railways of Britain; authors of County of London plan envisage complete electrification. *Electrician* 131:130 Ag 6 '43
 Transport in London; suggestions in the L.C.C. plan. *Elec R (Lond)* 133:141-2 Jl 30 '43

South Africa

Automatic Diesel control; abstract. J. S. Muir. *Elec R (Lond)* 131:826 D 25 '42

Employees

Agree to promote manpower program; rail and labor executives unanimous. Ry Age 114:329+ F 6 '43
 British women fill many railroad jobs. D. Sells. Ry Age 114:255 Ja 23 '43
 Claim joint guilt of unions and railroads; charges of unfair treatment of non-white employees. Ry Age 115:428 S 11 '43
 Conductor awarded a medal of honor; H. W. Wortham acclaimed for risking his life to save another. Ry Age 114:145 Ja 2 '43
 Diesel board would reject many demands. Ry Age 114:1092-3 My 29 '43
 Diesel demands heard; demands of the Brotherhood of locomotive firemen and engineers for a fireman-helper on Diesel locomotives. Ry Age 114:472-3, 507, 590, 625-6 Mr 6-27 '43
 Eastman demanding action on manpower. Ry Age 115:422-3 S 11 '43
 Eastman modifies featherbed rules. *Pub Util* 32:311-12 S 2 '43
 Economics of railway labor in maintenance work; A.R.E.A. committee report. Ry Age 114:565-6 Mr 20 '43
 Effects of featherbed rules on Toledo, Peoria & Western. Ry Age 114:862-4 My 1 '43
 Employee magazines go to war. *il Ry Age* 114:1180-2 Je 12 '43
 Employment practice hearings; race discrimination said to result from agreements of unions and roads. Ry Age 115:466-7, 495-6 S 18-25 '43
 Featherbedding hampers the war effort. J. Patric and F. J. Taylor. *Barron's* 23:3 F 8 '43
 Featherbedding is put up to Congress. G. P. McNear, Jr. Ry Age 114:878-9 My 1 '43
 Finds power to fix status of workers; new ICC disclaimer of Labor act authority. Ry Age 114:882-3 My 1 '43
 Flynn's mission; retained by the railroad brotherhoods. *Business Week* p114 Mr 20 '43
 High school boys help overcome serious track labor shortage; Chicago, Milwaukee, St Paul & Pacific railroad. *il Ry Age* 115:273-5 Ag 14 '43
 How C.N.R. could make postwar jobs. Ry Age 115:109-10 Jl 17 '43
 Increasing manpower by relaxing working rules. Ry Age 114:308-9 F 6 '43
 Industrial medicine; Canadian national railways and Trans-Canada air lines. E. Dwyer. *bibliog Ind Med* 12:686, 688+ O '43
 Lewis switches. *Business Week* p56 D 26 '42
 Manpower, a threatening menace. *il Ry Age* 114:1049-58 My 22 '43
 Manpower is railroad's number 1 problem. Ry Age 114:959+ My 15 '43
 Manpower, scarcer all the time. *il Ry Age* 114:43-5+ Ja 2 '43
 Manpower shortage is slowing trains. J. B. Eastman. Ry Age 114:474-5 Mr 6 '43
 Mechanical department employs many women workers; women workers on Southern Pacific; women workers in southern district. M. J. Warren; R. L. Tibbet. *il(p327, 333, 340) Ry Mech Eng* 117:306-7+ Jl '43
 Mediation fails in non-op wage case. Ry Age 114:248, 253 Ja 23 '43

Mrs. Casey Jones; ODT survey shows greater need of women on railroads. *Business Week* p83-4 N 28 '42
 No seniority for women employees; idea of union. Ry Age 114:636 Mr 27 '43
 Non-op case opens. Ry Age 114:471-2 Mr 6 '43
 Nowadays there are few railroad departments invaded by women. *il Ry Age* 114:828-9 Ap 24 '43
 Occupational status of Negro railroad employees. *Monthly Labor R* 56:484-5 Mr '43
 Personnel practices; railroads' problem and some suggestions for improvement. L. W. Horning. Ry Age 115:724-8 N 6 '43
 Planned conservation of manpower in the Equipment department of the New York Central. F. K. Mitchell. *Mech Eng* 65:191-6 Mr '43; Same cond. Ry *Mech Eng* 117:25-8 Ja '43; Same cond. Ry Age 113:995-8 D 19 '42
 Railroad employee security program. Ry Age 114:296+ Ja 30 '43
 Railroads had 63,187 women employees in January; statistical statements. Ry Age 114:735 Ap 10 '43
 Railway supply forces are on the march. *il Ry Age* 115:151-5 Jl 24 '43
 Record railroad A. & H. business. *Nat Underw* 47:18+ Jl 15 '43
 Roundtable on absenteeism. *il Ry Mech Eng* 117:170-1 Ap '43
 Rules for admission of Mexican workers as railroad track laborers. *Monthly Labor R* 57:240-1 Ag '43
 Russell Gray Henley; vice-chairman, Mechanical division, Norfolk & Western. *il Ry Mech Eng* 117:252-7 Je '43
 States keep power despite Railway labor act, Supreme court upholds their authority. Ry Age 114:259 Ja 23 '43
 Suggestion system turns up thousands of efficiency ideas for Illinois Central. H. C. Marmaduke. *il Sales Management* 52:24-6+ Mr 1 '43
 Union leaders air views on manpower; Truman committee hearing. Ry Age 114:728-9 Ap 10 '43
 Victorian railways' suggestions scheme. Ry Age 114:214 Ja 16 '43
 Wartime labor productivity in railroad transportation. K. A. Middleton. *bibliog Monthly Labor R* 57:444-51 S '43
 Wartime retreat; rail unions yield on featherbedding. *Business Week* p58 F 27 '43
 What the student thinks about a job on the railroad. Ry Age 115:376-8 S '43
 Women getting more work on railroads. Ry Age 115:28 Jl 3 '43
 Women in railroad work increase in number. Ry Age 115:531-2 O 2 '43

See also
 Railroads—Wages
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Education for Reading engineers; new fuel instruction car. *il Ry Age* 115:276-9 Ag 14 '43; Same. Ry *Mech Eng* 117:464-6 O '43
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 Railroad material outlook in 1943. A. L. Sorensen. Ry Age 114:469-70 Mr 6 '43
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 Railroads pinched; equipment authorization by WPB fails to dispel gloom. Business Week p37-8+ N 28 '42
 Railroads slash their rubber uses. il Ry Age 113:785-8 N 14 '42
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 Gross and net earnings of United States railroads for the calendar year 1942. Comm & Fin Chr 157:1217-19 Ap 1 '43
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 IEA group to study post-war prospects for transportation expansion and financing. Comm & Fin Chr 158:3+ Jl 1 '43
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 Katy cutting debt down sharply. H. Van Ellis. Barron's 22:13 D 14 '42
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 Railroad securities use of revenues from fare and freight increases for debt retirement. Comm & Fin Chr 157:269-70 Ja 21 '43
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 Railroad traffic and earnings. Nat City Bank p91 Ag '43
 Railroads face divergent prospects. P. R. Bretey. Mag of Wall St 73:26-8+ O 16 '43

Railroads' war achievement; with figures for operating income account all class I railroads, 1916-1943. Nat City Bank p127-31 N '43

Rails are flush. Business Week p106+ S 18 '43

Railways evidence earning power. J. G. Lyne. Ry Age 114:49-52 Ja 2 '43

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Reappraisal of the rails. P. R. Bretey. Mag of Wall St 72:306-8+ Je 26 '43

Recession in rail earnings likely. A. Jansen. Barron's 23:40-1+ Ja 11 '43

Recognize railroad maintenance, renewal work as operating expense. R. V. Fletcher. Comm & Fin Chr 158:1422 O 7 '43

Revenues, expenses, and income of class I railroads, seasonally adjusted and unadjusted, monthly Sept. 1941-Oct. 1942. Fed Res Bul 29:85 Ja '43 [cont monthly]

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 road
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 Freight carloadings, 1938-1941. Survey of Cur
 Business 1942 Sup p96-8 [supplemented in
 monthly numbers]
 Freight progress annual. *il Ry Age* 114:980-
 1071 My 22 '43
 Freight revenues and commodity values, 1941.
Ry Age 114:1144-5 Je 5 '43
 Freight ton-miles and carloadings, class I
 railways, 1939-March 1943; chart. Survey of
 Cur Business 23:2 Mr '43
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Blackout and protective lighting. W. G. Dar-
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Other uses for Diesel engines by American railroads. *B. W. Reynolds. Diesel Power* 21:943+ O '43

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Long Island tells patrons about its problems. *Ry Age* 113:796 N 14 '42

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Purchases reached peak in 1942. *Ry Age* 114:676-83 Ap 3 '43

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Bills propose freight rate system change. *Pub Util* 31:642-3 My 13 '43

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Eastman defends joint action in making rates. *Ry Age* 114:1229-31 Je 19 '43

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Eyes West! midwestern packers coaxing ICC to revise freight rates. *Business Week* p44+ O 30 '43

Freight rates in wartime. *G. L. Wilson. Harvard Business R* 21 no2:230-7 [Ja] '43

Increase volume, reduce costs. *S. O. Dunn. Ry Age* 114:1001-4 My 22 '43

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Simpler tariffs. *Ry Age* 114:403-4 F 20 '43

South warned against political rate making. *R. S. Henry. Ry Age* 114:882+ My 1 '43

Southern roads oppose Procrustean rate-making. *Ry Age* 115:491 S 25 '43

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Uniform rate allies form strategy board. *Ry Age* 115:614+ O 16 '43

Uniform rate report is submitted by Board of investigation and research. *Ry Age* 115:617-18+ O 2 '43

U.S.-wide rate changes urged by Transportation board of investigation and research. *Nat Pet R* 35:22 S 29 '43

War control of rates in Britain. *G. L. Wilson. Ry Age* 115:281-3 Ag 14 '43

Western lines file brief in I.C.C. class rate case. *Ry Age* 115:279-80 Ag 14 '43

Would ignore rates in war contracts. *Ry Age* 114:684 Ap 3 '43

Grain

I.C.C. upheld in barge grain case. *Ry Age* 114:1235 Je 19 '43

Receiverships

Equities lose in Supreme court; Commission upheld in expropriating shareholders in reorganization cases. *Ry Age* 114:544-6 Mr 20 '43

Examiner proposes Susquehanna plan. *Ry Age* 115:389-90 S 4 '43

Gambling in bankrupt rail stocks. *A. Jansen. Barron's* 23:3 Mr 8 '43

I.C.C. revamps its plan for D. & R.G.W. *Ry Age* 115:25-6 JI 3 '43

New Haven plan modified by I.C.C. *Ry Age* 115:185+ JI 24 '43

Propose new plan in Missouri Pacific reorganization. *Ry Age* 115:537+ O 2 '43

RAILROADS—Receiverships—Continued

Rail fight goes on. *Business Week* p102-3+ Je 12 '43
 Railroad securities; drive by security holders to get their share of accumulated cash balances during reorganization. *Comm & Fin Chr* 158:301+ J1 22 '43
 Railroads in the hands of receivers or trustees on December 31, 1942; tabulation. J. G. Lyne. *Ry Age* 114:83 Ja 2 '43
 Reorganization of Monon is approved. *Ry Age* 115:536+ O 2 '43
 Summary of railroad receiverships and trusteeships, 1876 to 1942; tabulation. J. G. Lyne. *Ry Age* 114:84 Ja 2 '43
 Supreme court speeds rail reorganizations. A. Jansen. *Barron's* 23:15-16 Mr 22 '43

Records

Evolution of tariff publication. G. P. Wilson, G. P. Shaw and G. L. Wilson. *Ry Age* 113:1023-6 D 26 '42
 Location sheet to reduce car detention. R. C. Munholland. *Ry Age* 113:783-4 N 14 '42
 Southern reduces guessing in planning material needs. *il Ry Age* 114:1215-18 Je 19 '43

See also

Railroads—Accounting

Regulation

See Interstate commerce commission; Railroads and state

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See Railroads—Location

Reorganization

See Railroads—Receiverships

Roadmasters

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Rolling stock

Equipment prices, 1942. *Ry Age* 114:124 Ja 2 '43
 Influence on railway freight equipment of postwar materials and machinery. M. P. Taylor. *Mech Eng* 65:708-10 O '43; Same cond. *Ry Age* 115:242-4 Ag 7 '43
 Materials shortages hinder railroads' building program. *Steel* 112:412-16 Ja 4 '43
 Revised status of car and locomotive orders; first six months of 1943. *Ry Mech Eng* 117:389-90 Ag '43
 Substantial locomotive and car building programs projected. *Steel* 113:53 Ag 9 '43

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Baggage and express cars	Locomotives
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Safety measures

Accident prevention; roundtable discussion. *Ry Mech Eng* 117:407-12 S '43
 Annual report of the Bureau of safety. *Ry Age* 114:213-14 Ja 16 '43
 Beware of the empty water glass. J. M. Hall. *Ry Mech Eng* 117:83-4 F '43
 Compressed air replaces steam in derrick of wrecker; technique for moving wrecked railroad cars containing explosives or flammable materials. W. J. Flannigan. *Nat Safety N* 47:28 Ap '43
 Curtailing casualties conserves manpower; conference held by Steam railroad section of National safety council. *Ry Age* 115:607-9 O 16 '43
 Handling with care; safe and efficient methods in stores department. G. A. Goerner. *il Nat Safety N* 48:12-13+ J1 '43
 How to guard against low water and prevent locomotive failures; roundtable discussion. *diags Ry Mech Eng* 117:470-3 O '43
 Ice tender found violation of law; roads' liability under Boiler inspection act; Lilly versus Grand Trunk Western. *Ry Age* 114:220 Ja 16 '43; Same. *Ry Mech Eng* 117:108-9 F '43

Lessons from boiler explosions; steel with superior physical properties at high temperatures and syphons both contribute to safety. R. McBrian. *il diag Ry Age* 115:47-9 J1 10 '43; Same. *Ry Mech Eng* 117:353-5 Ag '43
 Safe handling of leaky tank cars. *Ry Mech Eng* 117:176-7 Ap '43
 Winners in Pennsylvania Railroad contest. *Nat Safety N* 47:79-80 Ap '43

See also

Air brakes	Railroads—Automatic
Brakes	stop and train control
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Harriman memorial	fire protection
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Sanitation

Sanitation manual for land and air conveyances operating in interstate traffic. *Pub Health Rep* 58:159-93 Ja 29 '43

See also

Railroads—Water supply

Schedules

Many name trains to be decelerated. *Ry Age* 113:860-1 N 21 '42

Scrap material

Nation looks to its railways for more ferrous scrap; second National railroad conference. *Ry Age* 115:647-50 O 23 '43
 Navy gets rail from 116 miles of historic line; closure in the first transcontinental route, around Great Salt Lake, Utah. *il map Ry Age* 114:398-400 F 20 '43
 Railroad scrap and total scrap, 1942. *Ry Age* 114:523 Mr 13 '43
 Railroads get new tips on scrap and reclamation. *il Ry Age* 115:12-15+ J1 3 '43
 Scarce materials are vital to the war effort. W. J. Clardy. *Mech Eng* 65:568-9, 572 Ag '43
 Scrap-gathering mission fulfilled. D. A. Steel. *il Ry Age* 114:100-6 Ja 2 '43
 Who's who in railway salvage; list of scrap collection directors. *il Ry Age* 114:517-20 Mr 13 '43
 Wide-open throttle on reclaiming materials. *il Ry Age* 113:870-4 N 28 '42

Securities

Are investments in railroads really assets? A.A.R. publication objects to designation for taxes as outside investments. *Ry Age* 115:465 S 13 '43
 Bill requiring competitive bidding on all rail issues objected to by ICC. *Comm & Fin Chr* 157:2086 Je 3 '43
 Colorado & Southern adjusts its finances. *Ry Age* 114:720 Ap 10 '43
 Competitive bidding in rail securities; briefs filed with ICC. *Comm & Fin Chr* 158:1228-9, 1424 S 23, O 7 '43
 Competitive bidding in rail securities; reply states study fails to show ICC has lesser authority than other regulatory bodies. *Comm & Fin Chr* 158:1506 O 14 '43
 Effects of freight rate increase suspension on railroad earnings. *Mag of Wall St* 72:89 My 1 '43
 Fight up to ICC; issue of competitive bids for railroad securities. *Business Week* p100+ O 2 '43
 Gambling in bankrupt rail stocks. A. Jansen. *Barron's* 23:3 Mr 8 '43
 Generous returns on Chicago Great Western bonds; first 4s yield 5.24% and income 4½% furnish current income of 9.68%. A. Jansen. *Barron's* 23:10 Ag 30 '43
 High yield bonds for income and appreciation. P. R. Bretey. *Mag of Wall St* 71:465-7+ F 6 '43
 Hollow victory; Pennsylvania railroad gets ICC approval on sale of affiliate's bonds by negotiation. *Business Week* p103+ Ag 7 '43
 Important bond maturities in 1943. *Barron's* 22:15-16 D 23 '42
 Investors' confidence not restored. J. G. Lyne. *Ry Age* 114:81-5 Ja 2 '43
 Lehigh Valley bonds at big discounts. A. Jansen. *Barron's* 23:15-16 F 15 '43
 Lessons in Erie; ICC sidestepped a decision on competitive bidding. *Business Week* p102-3 Mr 27 '43

RAILROADS—Securities—Continued

New age for transportation; railroads. P. R. Bretey. *Il Mag of Wall St* 71:401-6+ *Ja* 23 '43

New York Central bonds up from lows. A. Jansen. *Barron's* 23:15-16 *My* 31 '43

Oppose compulsory competitive bidding. *Ry Age* 115:465+ *S* 18 '43

Private bond sale defended by Erie. *Ry Age* 114:478-9 *Mr* 6 '43

Rail bond retirements. *Banking Law J* 60:593-5 *JI* 43

Railroad bond prices. *Bankers M* 146:50-2 *Ja* '43

Railroad bonds for institutional investment. *Comm & Fin Chr* 157:663 *F* 18 '43

Railroad securities in post-war era. P. B. McGinnis. *Comm & Fin Chr* 158:781+ *Ag* 26 '43

Three rail bonds for good income yields. F. R. Walters. *Mag of Wall St* 72:259+ *Je* 12 '43

Two debt extension plans pass I.C.C.: Delaware & Hudson and Midland Valley will extend maturities. *Ry Age* 114:687-8 *Ap* 3 '43

Vie for rail bonds; western bankers resume fight for competitive bidding. *Business Week* p102+ *JI* 3 '43

What are 'Frisco bonds worth? A. Jansen. *Barron's* 22:19 *N* 23 '43

What are Missouri Pacific bonds worth? A. Jansen. *Barron's* 23:10+ *Ag* 2 '43

What are New Haven bonds worth? A. Jansen. *Barron's* 23:18-19 *Ap* 26 '43

What are Rock Island bonds worth? A. Jansen. *Barron's* 23:19 *F* 8 '43

What are St Paul railroad bonds worth? A. Jansen. *Barron's* 22:18-19 *D* 21 '42

What's ahead for the bond market? high grade vs. speculative issues. J. S. Williams. *Mag of Wall St* 72:296-7+ *Je* 26 '43

Yield on Illinois Central bonds high. *Barron's* 23:12+ *Ag* 16 '43

See also

Railroads—Terminal Western Pacific railroad

Service

Santa Fe Coast lines serve area important to war effort. *Il map Ry Age* 114:502-6 *Mr* 13 '43

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Fireproof shop buildings on Union Pacific. *Il plan Ry Age* 114:666-9 *Ap* 3 '43

Railroad centralizes machine operations; packing rings for locomotive pistons. *Il diags Am Mach* 87:100-2 *Je* 10; 96-8 *JI* 8 '43

Railroads extend use of metallizing. *Il diags Am Mach* 86:1354-6 *N* 26 '42

Reclamation work on motor vehicles. London Midland and Scottish railway. *Il diag Engineering* 155:245-6, 250 *Mr* 26 '43; *Engineer* 175:255-6 *Mr* 26 '43

Wheel conditions and wheel shop practices. M. E. Fitzgerald. *Ry Mech Eng* 117:328-30 *JI* '43

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Car shops
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Equipment

Coupler reclamation by electric-arc welding; Erie welding shop at Meadville, Pa. *Il diags Ry Mech Eng* 117:416-19 *S* '43

Erie modernizes Hornell fuel repair shop. *Il Ry Mech Eng* 116:531-4 *D* '42

General Electric shop kinks. *Il diags Ry Mech Eng* 117:427-8 *S* '43

Heat treatment plant for steel tools; L.M.S. railway. *Il Engineer* 176:213-14 *S* 10 '43; *Engineering* 156:206 *S* 10 '43

Machine for forming and rolling brake-shoe keys. *Il Ry Mech Eng* 117:135 *Mr* '43

Railroad shop flame hardening. S. Smith and J. G. McIlhiney. *Il diags Ry Mech Eng* 117:422-5 *S* '43

Signal towers

No fires in these towers; fireproofing of structures on Norfolk & Western. *Il Ry Age* 113:992-3+ *D* 19 '42

Signals

Army 'railroads encounter novel operating methods in Africa; signals differ widely from U.S. practice. *Il Ry Age* 115:718-20 *N* 6 '43

Bessemer & Lake Erie installs centralized traffic control. *Il plan Ry Age* 114:435-8 *F* 27 '43

Burlington installs 39 miles of centralized traffic control. W. F. Zane. *Il plan Ry Age* 114:911-14 *My* 3 '43

Centralized traffic control at junctions and a crossing on the Missouri Pacific. *Il plan Ry Age* 114:1175-6+ *Je* 12 '43

Centralized traffic control installed on Nashville, Chattanooga & St. Louis. *Il plan Ry Age* 115:640-2 *O* 23 '43

Centralized traffic control on 107 miles of single-track on the Rio Grande. *Il diags map Ry Age* 115:309-12 *Ag* 21 '43

Centralized traffic control solves war traffic problem on the Texas & Pacific. *Il plan Ry Age* 113:875-8 *N* 28 '42

Interlocking with novel features on Peoria & Pekin Union. *Il plan Ry Age* 114:856-8 *My* 1 '43

Louisville & Nashville cuts train time one-third in bottleneck. *Il diags Ry Age* 115:519-21 *O* 2 '43

Modern railway signalling practice in America. O. S. Noek. *Il diags plan Engineer* 176:162-5, 190-3, 202-5, 223-31, 243-5 *Ag* 27-*S* 24 '43

Need more materials for signaling. *Il Ry Age* 115:170-2 *JI* 24 '43

Nickele Plate installs c.t.c. on busy section of single track. *Il diags Ry Age* 115:89-92 *JI* 17 '43

Railway signalling developments. A. E. Tattersall. *Elec R (Lond)* 131:719-20 *D* 4 '42

Relative merits of protective devices at highway-railway crossings. R. L. Morrison. *Roads & Bridges* 81:80, 82 *O* '43

Signaling construction in 1942. J. H. Dunn. *Il Ry Age* 114:126-31 *Ja* 2 '43

Signaling keeps passenger trains moving during war time. *Il Ry Age* 113:848-50 *N* 21 '42

Signals for safety at railroad-highway crossings. L. C. Heilman. *Il Ind Stand* 14:214-16 *JI* '43

Signals keep freight trains moving. *Il Ry Age* 114:1033-4+ *My* 22 '43

Signals keep war traffic moving. J. H. Dunn. *Il Ry Age* 114:28-31 *Ja* 2 '43

Union Pacific installs centralized traffic control on 175 miles of single track. *Il Ry Age* 115:371-5+ *S* 4 '43

Virginian installs centralized traffic control. *Il plan Ry Age* 114:249-52 *Ja* 23 '43

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Railroads—Automatic
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Stations

Canadian National opens new Central station at Montreal. *Il plans map Ry Age* 115:201-5, 234-8+ *JI* 31-*Ag* 7 '43

Effective station modernization requires careful planning. *Il Ry Age* 114:711-14 *Ap* 10 '43

Fire ravages Pennsylvania's Broad Street trainshed area. *Il Ry Age* 115:452-5 *S* 18 '43

New buildings for 194X; railroad-bus terminal. *Il diags plans Arch Forum* 72:129-31 *My* '43

New passenger station promotes operating efficiency; Union depot at Raleigh, N.C. *Il plan map Ry Age* 114:1256-9 *Je* 26 '43

Railways and public address; new installation at Waverley station, Edinburgh. *Electrician* 131:102 *JI* 30 '43

Rock Island modernizes stations to keep in step with needs. *Il Ry Age* 113:780-3 *N* 14 '42

RAILROADS—Stations—Continued

Two stations for the Pennsylvania railroad; stations at Edgewood, Md. and Ridley Park, Pa.; views, plans and construction outline. Arch Forum 78:83-8 Mr '43

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Railroads—Terminals

Lighting

Lighting of railway stations. Light & Lighting 36:45 Mr '43

Lunch counters

Prefabricated railbars. il Engineer 176:231 S 17 '43

Statistics

Freight carloadings and railway operations, 1938-1941. Survey of Cur Business 1942 Sup p96-8 [supplemented in monthly numbers] Inventory expansion has halted. Ry Age 114:768-74 Ap 17 '43

Long-term freight traffic trend; method suggested whereby probable volume of freight service (ton-miles) in post-war years may be estimated. A. F. Stuebing. Ry Age 115:211-15 J1 31 '43

1942 railway operations reviewed. J. H. Parmelee. Ry Age 114:59-72 Ja 2 '43

1942 traffic tops all records. J. J. Pelley. Ry Mech Eng 117:109 F '43

Purchases reached peak in 1942. Ry Age 114:676-83 Ap 3 '43

Railroad construction indices for 1942. Ry Age 115:317-18 Ag 21 '43

Rails enter new war phase; graphs. Business Week p16 S 25 '43

Railways make amazing records. Ry Age 114:1009-16 My 22 '43

Revised status of car and locomotive orders; first six months of 1943. Ry Mech Eng 117:389-90 Ag '43

Santa Fe Coast lines serve area important to war effort. il map Ry Age 114:502-6 Mr 13 '43

Selected transportation statistics of traffic, equipment, and employees, 1941 and 1942; tabulation. Survey of Cur Business 22:8 N '42

Too little, but not yet too late; outstanding railway performance of 1942-43. il Ry Age 114:994-1000 My 22 '43

See also

Cars—Statistics
Freight cars—Statistics

Locomotives—Statistics
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Stores systems

Handling with care; safe and efficient methods in stores department. G. A. Goerner. il Nat Safety N 43:12-13+ J1 '43
Southern reduces guessing in planning material needs. il Ry Age 114:1215-18 Je 19 '43

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Switch rods and clips developed by Ramapo Ajax. il diags Ry Age 114:583-4 Mr 20 '43

Switching

Bessemer & Lake Erie installs centralized traffic control. il plan Ry Age 114:435-8 F 27 '43

Burlington installs 39 miles of centralized traffic control. W. F. Zane. il plan Ry Age 114:911-14 My 8 '43

Centralized traffic control at junctions and a crossing on the Missouri Pacific. il plan Ry Age 114:1175-6+ Je 12 '43

Centralized traffic control installed on Nashville, Chattanooga, & St. Louis. il plan Ry Age 115:640-2 O 23 '43

Centralized traffic control on 107 miles of single-track on the Rio Grande. diags map Ry Age 115:309-12 Ag 21 '43

Centralized traffic control solves war traffic problem on the Texas & Pacific. il plan Ry Age 113:875-8 N 28 '42

Diesel in switching service. A. H. Candee. Ry Age 114:310-14 F 6 '43

Interlocking with novel features on Peoria & Pekin Union. il plan Ry Age 114:856-8 My 1 '43

Louisville & Nashville cuts train time one-third in bottleneck. il diags Ry Age 115:519-21 O 2 '43

Nickel Plate installs c.t.c. on busy section of single track. il diags Ry Age 115:89-92 J1 17 '43

Road-switcher Diesel-electrics in short-line service; with comparative cost data; Atlanta & Saint Andrews Bay railway. il Ry Age 114:852-5+ My 1 '43

Union Pacific installs centralized traffic control on 175 miles of single track. il Ry Age 115:371-5+ S 4 '43

Virginian installs centralized traffic control. il plan Ry Age 114:249-52 Ja 23 '43

Taxation

Many railroads liable for excess profits taxes. A. Jansen. Barron's 23:9 S 13 '43
Railroads' tax relief program. R. V. Fletcher. Ry Age 115:610-11 O 16 '43

Telegraph

D. & R.G.W. war time telegraph switchboard. il Ry Age 114:281 Ja 30 '43

Railroad telegraph and telephone construction in 1942. J. H. Dunn. il Ry Age 114:138-40 Ja 2 '43

Sending train orders by facsimile telegraphy. il diags Electronics 16:148+ S '43

Telephone

Railroad telegraph and telephone construction in 1942. J. H. Dunn. il Ry Age 114:138-40 Ja 2 '43

Train communication. L. O. Grondahl and P. N. Bossart. il diags Elec Eng 62:Trans 493-500 J1 '43

Terminal bonds

Generous returns on Cleveland Union Terminal bonds. A. Jansen. Barron's 23:15-16 Mr 29 '43

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Huge railroad expansion completed at Ronanoke; \$5,000,000 yard and engine terminal facilities improvement by Norfolk & Western. il Manuf Rec 112:34-5+ My '43

Old power plant carries war load; Washington terminal company. il Ry Age 115:5-7 J1 '43

Yards and terminals; A.R.E.A. committee report. Ry Age 114:557-8 Mr 20 '43

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Pari-mutuel machine used by Pennsylvania railroad to sell tickets. il Ry Age 113:1041 D 26 '42

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Track

Construction and maintenance up in 1942. N. D. Howard. il Ry Age 114:15-22+ Ja 2 '43

Railway track after the war. P. C. Dewhurst. diags Engineering 155:14 Ja 1 '43

Report on track; A.R.E.A. committee. Ry Age 114:561-2 Mr 20 '43

Roadway and ballast; A.R.E.A. committee report. Ry Age 114:572-4 Mr 20 '43

Stabilizing railway track base with portland cement grout. il Concrete 51:2-3+ Ag '43

To underestimate the needs of the fixed properties is to undermine the railroads. il Ry Age 115:164-3 J1 24 '43

Track and structures waging up-hill fight on New Haven. P. H. Hatch. il Ry Age 114:1022-9 My 22 '43

War-time track must be kept in step with war-time traffic. il Ry Age 113:830-4 N 21 '42

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Grade crossings
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Track depression

Long Island railroad puts 4.6 mi. line in tunnel. il Eng N 130:4-5 Ja 7 '43

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Navy gets rail from 116 miles of historic line; closure in the first transcontinental route, around Great Salt Lake, Utah. *il* map Ry Age 114:338-400 F 20 '43

Traffic

Diesel-electrics serve war-time traffic needs on New Haven. P. H. Hatch. *il* Ry Age 114:1087-91 My 29 '43

Rail's 1942 job tops all records. Ry Age 114:141+ Ja 2 '43

Rio Grande carries a heavy load; increases in transcontinental freight and passenger traffic. flow chart *il* Ry Age 115:336-40 Ag 28 '43

South Pacific handles a staggering load. *il* map Ry Age 114:706-9, 779-83 Ap 10-17 '43

Twice as many trains to handle; Richmond, Fredericksburg & Potomac. *il* Ry Age 113:927-30 D 5 '42

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Train dispatching

Bessemer & Lake Erie installs centralized traffic control. *il* plan Ry Age 114:435-8 F 27 '43

Burlington installs 39 miles of centralized traffic control. W. F. Zane. *il* plan Ry Age 114:911-14 My 8 '43

Centralized traffic control at junctions and a crossing on the Missouri Pacific. *il* plan Ry Age 114:1175-6+ Je 12 '43

Centralized traffic control solves war traffic problem on the Texas & Pacific. *il* plan Ry Age 113:875-8 N 28 '42

Nickel Plate installs c.t.c. on busy section of single track. *il* diag Ry Age 115:89-92 J1 17 '43

Seaboard installs 64 miles of centralized traffic control; reduces average running time of freight trains one hour. *il* diag Ry Age 114:942-6 My 15 '43

Signaling keeps passenger trains moving during war time. *il* Ry Age 113:848-50 N 21 '42

Signals keep war traffic moving. J. H. Dunn. *il* Ry Age 114:28-31 Ja 2 '43

Virginian installs centralized traffic control. *il* plan Ry Age 114:249-52 Ja 23 '43

Train speed

Braking of high-speed trains. C. D. Stewart. Ry Age 114:909-10 My 8 '43; Same. Ry Mech Eng 117:258-9+ Je '43

High-speed freight-car trucks. J. A. Shafer. *il* diag Ry Mech Eng 116:539-41 D '42

Seaboard installs 64 miles of centralized traffic control; reduces average running time of freight trains one hour. *il* diag Ry Age 114:942-6 My 15 '43

Tachometers for fast trains. P. MacGahan. *il* diag Ry Mech Eng 117:429-30 S '43

Trains

America's streamliners go to war. *il* Ry Age 113:825-9 N 21 '42

Analysis of longitudinal motions of trains by the electrical analog. L. A. Pipes. biblog diags J Ap Phys 13:780-6 D '42

Modern power carries the burden of today's war traffic. *il* Ry Age 113:839-40 N 21 '42

ODT orders changes in passenger train operations. Ry Age 113:973 D 12 '42

Passenger cars used intensively. *il* Ry Age 113:835-8 N 21 '42

Railways handle record movement. *il* Ry Age 113:814-18 N 21 '42

Susquehanna adds two-car train to streamliner service. *il* Ry Age 115:411-13 S 11 '43

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Briefs are filed in op wage case. Ry Age 115:178-80, 215 J1 24-31 '43

Eastern railroads settle Diesel case. Ry Age 115:380-1 S 4 '43

Emergency board would give non-ops 8-cent raise. Ry Age 114:1095-6 My 29 '43

Four-cent rail pay rise affirmed. Comm & Fin Chr 153:1619 O 21 '43

Ground cleared for non-op strike vote. Ry Age 115:251-2 Ag 7 '43

Mediation mired. Business Week p98+ O 23 '43

Non-ops base case on wage differentials; hearings. Ry Age 114:506-7, 548+, 628-32, 662-4, 824-5, 907-8 Mr 13-Apr 3, 24, My 8 '43

Non-ops get special wage board. Ry Age 115:652-3+ O 23 '43

Op wage hearings. Ry Age 114:1143-4, 1172-4, 1225-8, 1262-6; 115:18-22, 62-4, 101-4 Je 5-J1 17 '43

Pacific Electric case is non-controversial. Ry Age 115:574+ O 9 '43

Pacific Electric employees get eight-cent increase. Ry Age 115:694-5 O 30 '43

President gets non-op wage case. Ry Age 115:57-8 J1 10 '43

President intervenes in rail wage cases. Ry Age 114:1182-3 Je 12 '43

Productivity theory of wages is attacked; hearing on demands of firemen and engineers. Ry Age 114:672-3, 722-5, 775-7+, 825-6 Ap 3-24 '43

Rail wage decision. Comm & Fin Chr 158:1430 O 7 '43

Rail wages rise. Business Week p105 My 29 '43

Railroad wage figure; Railroad retirement board compilation for 1941. Ry Age 114:334-5 F 6 '43

Railway wage case will go to Byrnes. Ry Age 114:372-3 F 13 '43

Reach settlement in non-op wage case. Ry Age 115:285-6 Ag 14 '43

Recommendation of emergency board in dispute of railroad nonoperating employees. Monthly Labor R 57:46-57 J1 '43

Recommends 4-cent raise for ops. Ry Age 115:528-9 O 2 '43

Report in Pacific Electric wage case. Ry Age 114:1108-9 My 29 '43

Report of non-ops board is protested. Ry Age 114:1236 Je 19 '43

Special board hears non-op case. Ry Age 115:721-3 N 6 '43

Vinson committee studies wage case; to investigate facts behind Pacific Electric situation. Ry Age 115:219-20 J1 31 '43

Vinson cuts award of Emergency board; proposed hourly raise in North Shore case brought down. Ry Age 115:105 J1 17 '43

Vinson cuts one more wage award; trains proposed hourly increase for Pacific Electric train crews. Ry Age 115:183 J1 24 '43

Wage cases moved along fast this week; personnel of Emergency boards. Ry Age 114:427-9 F 27 '43

Wage increase in Britain \$1 a week. Ry Age 115:216 J1 31 '43

Wages blamed for manpower shortage. Ry Age 115:531 O 2 '43

WLB okays short line wage boost. Ry Age 113:898 N 28 '42

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Water supply

Methods of systematic treatment of feed-water. *il* Ry Mech Eng 116:519-20+ D '42

Public health service drinking water standards adopted Sept. 25, 1942, for drinking and culinary water supplied by common carriers in interstate commerce. Pub Health Rep 58:72-82 Ja 15 '43; Same. Am Water Works Assn J 35:93-104 Ja '43; Same. Water & Sewage 81:11, 34-6, 38-9 F '43; Same. Water Works & Sewerage 90:sup125-7 Je '43; Excerpt. Eng N 130:433 Mr 25 '43

Sanitation manual for land and air conveyances operating in interstate traffic. Pub Health Rep 58:159-63, 181-6 Ja 20 '43

Save critical materials by softening water. C. R. Knowles. *il* Ry Age 114:820-3 Ap 24 '43

Water service, fire protection and sanitation; A.R.E.A. committee report. Ry Age 114:560-1 Mr 20 '43

Water service materials; abstract. E. M. Grime. Ry Age 115:730 N 6 '43

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Weed removal

Bysulox, weed killer. *il Ry Age* 114:588-9 Mr 20 '43

Yards

Burlington expands largest yard to meet war-time demands. *il plans Ry Age* 114:459-65 Mr 6 '43

Largest tank car yards completed; Central of New Jersey builds terminal at Tremley, N.J. *il plan Nat Pet N* 35:24-5 Ag 18 '43

Norfolk and western railway reconstructs Roanoke yard. F. P. Turner. *il plans Civil Eng* 13:301-4 Jl '43

Yard control towers have new features; Chicago, Burlington & Quincy switch and car retarder control towers at Galesburg. *il plans Ry Age* 114:1130-1 Je 5 '43

Yards and terminals; A.R.E.A. committee report. *Ry Age* 114:557-8 Mr 20 '43

Africa, North

Army railroaders encounter novel operating methods in Africa; signals differ widely from U.S. practice. *il Ry Age* 115:718-20 N 6 '43

Army railroading in northern Africa. *Ry Age* 114:1093-4 My 29 '43

Engines of War I at work in Africa. *Ry Age* 114:1270-1 Je 26 '43

Fluid port traffic aids African armies. *Ry Age* 114:378 My 1 '43

Railroads form main supply line to North African front. *map Ry Age* 114:456-8 Mr 6 '43

Transport of Britain's 8th army. *map Ry Age* 114:636-7 Mr 27 '43

Alaska

Geology of the Portage Pass area, Alaska; feasibility of proposed railroad. F. F. Barnes. *U S Geol S Bul* 926-D:211-35, pl 17-21; pa 20c Supt. of doc. '43

Algeria

Algerian railways; Diesel-electric units now available to allied forces. *il Electrician* 129:578 N 27 '42

Argentina

Argentine railway capital changes? *Economist* 145:248 Ag 21 '43

Argentine railways. *Economist* 144:764 Je 12 '43

Australia

Victorian railways' suggestions scheme. *Ry Age* 114:214 Ja 16 '43

Belgium

Railway shortages and harassments afflict Nazis in Belgium. *For Comm W* 11:26 My 1 '43

Brazil

Government assists in improving railway service. *For Comm W* 10:13-14 Ja 30 '43

Historic railway in Brazilian rubber country. E. D. Kingman. *Civil Eng* 13:187 Ap '43

Rehabilitate Amazon railroad for rubber traffic. *Ry Age* 115:133 Jl 3 '43

See also

Railroads—Electrification—Brazil

Canada

Agreed charges in railway freight rates abroad; experiences of Great Britain and Canada. S. G. Spal. *J Business* 16:100-6 Ap '43

Canada's railways are carrying on. *il Ry Age* 114:56-8 Ja 2 '43

Canada's railways in tie with U.S. *il Ry Age* 114:1059-62 My 22 '43

Canadian National western lines carry on during war years. *il map Ry Age* 114:239-43 Ja 23 '43

Engineers and the British empire; railway construction in Canada. M. Smith. *il Engineer* 176:102-4, 122-4 Ag 6-13 '43

See also

Canadian Pacific rail- Railroads and state way —Canada

Central America

Mexico-Guatemala bridge speeds "good neighbor" aims. E. W. James. *map For Comm W* 9:44 N 14 '42

New bridge closes gap in all-rail banana route; connecting National railways of Mexico with international railways of Central America. *il map Ry Age* 114:1269 Je 26 '43

China

Railroads for Asia. *map Fortune* 23:28, 32+- N '43

Colorado

Last of C. & S. narrow-gage system converted for war traffic. *il Ry Age* 115:418-19 S 11 '43

Rails' end; Burlington road replaces last of its narrow-gage track. *il map Business Week* p19-20 S 4 '43

Europe

Railways of Europe; *map. Fortune* 28:108 Ag '43

Germany

Busting boilers; locomotive production in Europe may be overtaken by new R.A.F. shelling. *map Business Week* p98+ My 22 '43

Nazi's military transportation problem; abstract. G. Stolper. *Ry Age* 113:773-4 N 14 '42

Great Britain

Agreed charges in railway freight rates abroad; experiences of Great Britain and Canada. S. G. Spal. *J Business* 16:100-6 Ap '43

British railway accidents in 1942. *Engineering* 156:52 Jl 16 '43

Fair deal for railways. *Economist* 144:466 Ap 10 '43

London Midland and Scottish railway company; Great western railway company; London and north eastern railway company; Southern railway company; annual general meetings, London. *Economist* 144:340-2 Mr 13 '43

Wage increase in Britain \$1 a week. *Ry Age* 115:216 Jl 31 '43

See also

Railroads—Electrification—Great Britain

Illinois

See also

Illinois central railroad

India

Unprecedented railway earnings bring proposed revision of arrangement for distribution of surplus. *For Comm W* 11:21 Ap 24 '43

Italy

Operations of state railways, fiscal year 1941-42. *For Comm W* 13:23-4 O 23 '43

Mexico

Mexican railways change officers; statistical data for 1942. *Ry Age* 114:53-5 Ja 2 '43

Mexican railways rebuild for war and peace. S. T. R. Abbott. *il map For Comm W* 12:3-5, 29-30 Jl 17 '43

National railways of Mexico; payment to bondholders. *Comm & Fin Chr* 156:2226 D 21 '42

New bridge closes gap in all-rail banana route; connecting National railways of Mexico with international railways of Central America. *il map Ry Age* 114:1269 Je 26 '43

Railroad bond issue. *For Comm W* 10:16 F 13 '43

Rebuilt locomotives for Mexican railways. *il Ry Age* 114:1145 Je 5 '43

U.S. and Mexico collaborate in railroad construction. *For Comm W* 10:20 Ja 30 '43

U.S. will improve Mexican railroads. *map Ry Age* 113:885-6 N 28 '42

Palestine

Railway construction completed despite obstacles. *For Comm W* 10:16 Ja 23 '43

RAILROADS—Continued

Persia
American railroads and equipment in Iran.
J. A. Appleton. Ry Age 114:819 Ap 24 '43

Russia
Russia at war; Eastern railways. map Economist 143:802 D 26 '42

Sahara desert
Proposed trans-Saharan railway. map Engineering 155:296 Ap 9 '43

Southern states
New post-war era for South is promoted by humanized Southern Railway advertising; interview by G. A. Nichols with E. E. Norris. il *For Ink* 204:19-21+ Ag 20 '43
South warned against political rate making.
E. S. Henry. Ry Age 114:882+ My 1 '43
Southern roads oppose Procrustean rate-making. Ry Age 115:491 S 25 '43

See also
Southern railway

Sweden
All-welded tank wagons for the Swedish state railways. il Engineering 155:26 Ja 8 '43

Amalgamation of private and state railways; increased receipts first 9 months of 1942.
For Comm W 10:22 Mr 13 '43

Switzerland
Shortage of rolling stock. For Comm W 13: 11 O 9 '43

United States
Annual report of Board of investigation and research. Ry Age 115:488-90 S 25 '43
Appraises railroads' post-war prospects; National planning association report; abstract.
E. W. Williams, jr. Ry Age 115:699+ O 30 '43

How present events set course for post-war railroading. R. V. Fletcher. Ry Age 115: 562-4 O 9 '43

How railroads can prepare for post-war. E. E. Norris. Ry Age 115:650-1 O 23 '43

Huge job done—harder one ahead. J. B. Eastman. Ry Age 114:5-6 Ja 2 '43
Incredible 1942—what of 1943? Ry Age 114:1-4 Ja 2 '43

J. J. Pelley answers Wallace attack on railroads; with reply by H. A. Wallace. Ry Age 115:700-2 O 30 '43; Abstract. Comm & Fin Chr 158:1697 O 28 '43

Materials situation worries I.C.C.; annual report. Ry Age 114:164-7 Ja 9 '43

More railroad equipment needed to haul war traffic. E. F. Ross. Steel 112:41-3 My 24 '43

Railroads must have more material. Ry Age 115:137-41 Jl 24 '43

Railroad's peace status. A. T. Mercier. Ry Age 115:388+ S 4 '43

Railroads' war achievement. Nat City Bank p113-17, 127-31 O-N '43

Railway construction makes large gain in 1942; U.S., Canada, and Mexico. G. E. Boyd. Ry Age 114:73-80+ Ja 2 '43

Railway inventories not excessive. il Ry Age 115:142-5 Jl 24 '43

Recast transportation laws to end monopoly. H. A. Wallace. Comm & Fin Chr 158: 1696-7 O 28 '43; Abstract. Ry Age 115:667-8 O 23 '43

Thirty-six years on Railway age. S. O. Dunn. Ry Age 114:235-8 Ja 23 '43

Top of the grade. Business Week p20+ Jl 10 '43

Victory rides America's railways. J. B. Eastman and others. Ry Age 114:984-8+ My 22 '43

War's end won't stop train travel. M. Good-sill. Ry Age 114:359-61 F 13 '43

What of the railroads' future? E. E. Norris. il *Manuf Rec* 112:28-9+ N '43

Will carriers avert transport crisis? il *Steel* 113:69-70 O 25 '43

See also
Freight car service
Railroads and state—
United States
also Association of American railroads
also names of railroads, e.g. New York central railroad

Bibliography

Check list of publications on American railroads before 1841. T. R. Thomson, comp. 250p pa \$2 New York public lib, 5th av. & 42d st, New York '42

Western states

C'est la guerre! war riding the rails, traveler finds on trip through West. il *Steel* 112:84-6 Je 21 '43

RAILROADS, Cable

Conquering the toughest bus operation in America; cable cars operating on route with seventeen percent grades in San Francisco replaced by buses. G. Griffith. il *Mass Transportation* 38:337-8 N '42

RAILROADS, Industrial

War plants need much trackage. M. H. Dick. il Ry Age 114:40-2 Ja 2 '43

See also
Mine tracks

RAILROADS, Military

War plants need much trackage. M. H. Dick. il Ry Age 114:40-2 Ja 2 '43

See also
Railroads—Military use

RAILROADS, Narrow gage

Last of C. & S. narrow-gage system converted for war traffic. il Ry Age 115:418-19 S 11 '43

Rails' end; Burlington road replaces last of its narrow-gage track. il *map Business Week* p19-20 S 4 '43

RAILROADS, Short line

Poll of short lines for the facts about materials. Ry Age 114:875-6 My 1 '43

Road-switcher Diesel-electrics in short-line service; with comparative cost data; Atlanta & Saint Andrews Bay railway. il Ry Age 114:852-5+ My 1 '43

RAILROADS, Underground. See Subways

RAILROADS and state

See also
Railroad law
Railroads—Rates

Canada

Canada's O.D.T. L. J. Knowles. il Ry Age 114:1062-3 My 22 '43

Great Britain

Railway ownership. Economist 145:166 Ag 7 '43

Threshold of a new era in transport. W. V. Wood. Engineer 176:305 O 15 '43

War control of rates in Britain. G. L. Wilson. Ry Age 115:281-3 Ag 14 '43

Puerto Rico

Government takes over another road. Ry Age 114:1066 My 22 '43

ODT's railroad. map Business Week p92 Je 26 '43

United States

America has evolved organization for war transportation. il Ry Age 114:1005-8+ My 22 '43

Control of rates in time of war. G. L. Wilson and J. C. Howard. Ry Age 115:690-2 O 30 '43

National association of railroad and utilities commissioners conference, Chicago, Sept. 14-16. Ry Age 115:458-60, 492-3 S 18-25 '43

Procurement patterns and people; ODT organization, relations with WPB clarified; Purchases and stores division, A.A.R. Ry Age 115:146-50 Jl 24 '43

Remember Toledo, Peoria and western. H. T. Newcomb. Comm & Fin Chr 158:1013+ S 9 '43

Resources board defends its plan in transportation study. R. J. Watkins. Ry Age 114:318-20; Reply, by Railway age. 320-2 F 6 '43

Seventy-seventh Congress adjourns; with résumé of legislation affecting railroads. Ry Age 113:1003-4 D 19 '42

Simplified accounting for government travel. il Ry Age 114:632-4 Mr 27 '43

RAILROADS and state—United States—Cont.
What war agencies are doing to the railroads. C. S. Hadley. Ry Age 114:1064-5 My 22 '43

See also

Interstate commerce commission	Railroads—Consolidation
Railroad land grants	Railroads—Rates
Railroad law	

RAILROADS in war

Advisory boards gird themselves for transportation crisis. Ry Age 115:643-6 O 23 '43

Algerian railroaders compliment Americans. Ry Age 115:241 Ag 7 '43

Army railroaders build reefers in North Africa. il Ry Age 115:480-2 S 25 '43

Army railroaders deliver the goods; delivering ammunition in North Africa. Ry Age 114:835 Ap 24 '43

Army railroading in northern Africa. Ry Age 114:1093-4 My 29 '43

Buda builds multi-gage motor cars. il Ry Age 115:8 Jl 3 '43

Canada's railways are carrying on. il Ry Age 114:56-8 Ja 2 '43

Canadian National western lines carry on during war years. il map Ry Age 114:239-43 Ja 23 '43

C'est la guerre! war riding the rails, traveler finds on trip through West. il Steel 112:84-6 Je 21 '43

Chamber of commerce discusses transportation at annual meeting. Ry Age 114:867-9 My 1 '43

Contrasts in traffic of the two World wars. H. W. Siddall. Ry Age 114:1223-4 Je 19 '43

Control of rates in time of war. G. L. Wilson and J. C. Howard. Ry Age 115:690-2 O 30 '43

Coordinating fight reviewed by ODT. Ry Age 114:441-2 F 27 '43

Crosshauls cut; return empty freight cars by shortest possible route. Business Week p64- Mr 13 '43

Engines of War I at work in Africa. Ry Age 114:1270-1 Je 26 '43

Fast freights speed war traffic; Kansas City-Colorado line of the Missouri Pacific. il diag Ry Age 115:59-61 Jl 10 '43

Fluid port traffic aids African armies. Ry Age 114:878 My 1 '43

Freight progress annual. il Ry Age 114:980-1071 My 22 '43

Highlights in railway materials. D. A. Steel. Ry Age 114:46-8+ Ja 2 '43

How adequate are plans for war transportation? W. J. Wilgus. Ry Age 114:877 My 1 '43

How the Western Pacific handles ever-increasing wartime traffic. il map Ry Age 114:610-14 Mr 27 '43

Margin of safety dangerously close; abstract. J. B. Eastman. Ry Age 113:931 D 5 '42

Materials procurement number. il Ry Age 115:129-77 Jl 24 '43

Mid-West shippers advisory board prepares for harder job; annual meeting, Chicago. Jan. 7. Ry Age 114:205-6 Ja 16 '43

More railroad equipment needed to haul war traffic. E. F. Ross. Steel 112:41-3 My 24 '43

Nazi's military transportation problem. G. Stolper. Ry Age 113:773-4 N 14 '42

New path to maximum production. E. E. Norris. Ry Age 113:924-5 D 5 '42

O.W.I. reports on transportation. il Ry Age 114:870-3, 904-7 My 1-8 '43

Ore fleet can do it, if—; Great Lakes waterway problem and alternative route across the upper Michigan peninsula. F. M. Paterson. Pub Util 31:225-8 F 18 '43

Our domestic transportation system is having to carry extraordinary load. J. B. Eastman. map Ry Age 113:774-6 N 14 '42

Passenger service efficiency number. il Ry Age 113:812-50 N 21 '42

Rail officer gets army merit award; Transportation corps engaged in battle for abandoned ammunition trains. Ry Age 114:917 My 8 '43

Railroading in zones of combat. J. A. Appleton. Ry Age 114:766-7 Ap 17 '43

Railroads carry-on. S. O. Dunn. Manuf Rec 111:26-7 N '42

Railroads' essential job in war. A. A. Miller. Ry Age 114:948-9 My 15 '43

Railroads form main supply line to North African front. map Ry Age 114:456-8 Mr 6 '43

Railroads vital in a theater of war. M. S. Watson. Ry Age 115:340 Ag 28 '43

Railroads' war achievement. Nat City Bank p113-17, 127-31 O-N '43

Railroads; what Damon Runyon had to say about the wartime role of the railroads. J. J. Pelley. il Am Inst Banking Bul 25: 3-4+ Ja '43

Rails fear cold. Business Week p17-18 S 25 '43

Scanty railroad materials worry Gross; testimony before House appropriations subcommittee which considered the Military establishment appropriation bill for fiscal '44. Ry Age 114:1267 Je 26 '43

Top of the grade. Business Week p20+ Jl 10 '43

Transport of Britain's 8th army. map Ry Age 114:636-7 Mr 27 '43

Travel up fourfold, car supply reduced. Ry Age 115:246-7 Ag 7 '43

Troop trains start every six minutes. Ry Age 114:960 My 15 '43

War control of rates in Britain. G. L. Wilson. Ry Age 115:281-3 Ag 14 '43

War traffic's exigencies are met. C. Layng. il Ry Age 114:7-11 Ja 2 '43

War without adequate railroads? abstracts. F. K. Mitchell. Ry Age 114:466-8+ Mr 6 '43; Ry Mech Eng 117:163-5 Ap '43

Wartime labor productivity in railroad transportation. K. A. Middleton. bibliog Monthly Labor R 57:444-51 S '43

Wartime transportation problems. J. B. Eastman. Trusts & Estates 75:461 N '42

Wave of institutional copy tells story of railroads at war. L. B. Colby. il Sales Management 61:52+ D 1 '42

What's ahead for railroads? F. Snow. il Adv & Sell 36:136+ F '43

See also

Hospital trains	Railroads—Damage
Military railway service	from air raids
	Railroads—Military use

RAILS

Burlington tries new rail design. il diags Ry Age 115:515-16 O 2 '43

Concrete for railway bridge decks, with rails directly attached. Am Concrete Inst J 14: 218-19 Ja '43

Navy gets rail from 116 miles of historic line; closure in the first transcontinental route, around Great Salt Lake, Utah. il map Ry Age 114:398-40 F 20 '43

New abrasive wheel for cutting rails. il Mass Transportation 39:255-6 Jl '43

New developments in flame hardening. S. Smith. il Welding J 22:21-3 Ja '43

Propose reduction in active rail sections. Ry Age 115:343, 347 Ag 28 '43

Report of A.R.E.A. committee on rail. Ry Age 114:569-70 Mr 20 '43

WPB asks for 415 more miles of line. Ry Age 113:971 D 12 '42

See also

Railroads—Track
Street railroads—
Track reclamation

Failures

Curve rails face new affliction: gage-corner shelling. il map Ry Age 114:617-20 Mr 27 '43

Rails, yesterday, today, tomorrow. C. W. Gennet, Jr. il Ry Age 115:555-8 O 9 '43

Lubrication

Rail lubricators demonstrate advantages. il Ry Age 114:581-2 Mr 20 '43

Stresses

Determining counter-balancing effects by rail-stress measurements. diags Engineering 154:301-4, 341-4, 351-3, 421-2 O 16, 30, N 13, 27 '42

Suggests change in rail design as result of investigations. W. B. Leaf. il diags Ry Age 113:963-7 D 12 '42

Testing

Increased rail testing yields smaller fissures; Sperry rail service. il Ry Age 114:578 Mr 20 '43

RAILS—Testing—Continued

Suggests change in rail design as result of investigations. W. B. Leaf. *il* diags Ry Age 113:963-7 D 12 '42

RAILWAY age (periodical)

Thirty-six years on Railway age. S. O. Dunn. Ry Age 114:235-8 Ja 23 '43

RAILWAY express agency**Employees**

Non-op board hears views on express pay. Ry Age 114:721, 777-8 Ap 10-17 '43
Railway Express opens training program for 60,000 employees. Sales Management 52:74+S 15 '43

RAILWAY tie association

Annual meeting, 25th, St Louis, May 4. Ry Age 114:948-51 My 15 '43

RAIN and rainfall

Method of computing urban runoff. W. I. Hicks. *diag* map Am Soc C E Proc 69:461-97 Ap '43
Primary rôle of meteorology in flood flow estimating. M. Bernard. maps Am Soc C E Proc 69:105-44 bibliog(p141-2) Ja '43; Discussion. bibliog 69:597-608, 1006-12, 1309-16, 1480-2 Ap, Je, O-N '43
Rôle of the land during flood periods. W. W. Horner. map Am Soc C E Proc 69:665-90 My '43; Discussion. 69:911-14, 1138-43, 1321-3, 1611-19 bibliog(p1615-16) Je, S-O, D '43

See also

Floods
Run-off

Statistics

Rainfall in New England. G. V. White. N E Water Works Assn J 56:405-502; 57:15-62, 201-59 D '42, Mr, S '43

Arizona

Characteristics of heavy rainfall in New Mexico and Arizona. L. B. Leopold. maps Am Soc C E Proc 69:205-34 F '43; Discussion. 69:630-1, 960-6, 1505-6, 1620-5 Ap, Je, N-D '43

Connecticut

Rainfall in New England. G. V. White. N E Water Works Assn J 57:212-40 S '43

Georgia

Soil loss on Georgia farms; rainfall, runoff, and other factors are correlated at government experiment station. J. R. Carreker. *il* Civil Eng 12:670-2 D '42

Maine

Rainfall in New England. G. V. White. N E Water Works Assn J 57:15-33 Mr '43

Massachusetts

Rainfall in New England. G. V. White. N E Water Works Assn J 56:405-502 D '42

New England

Rainfall in New England. G. V. White. N E Water Works Assn J 56:405-502; 57:15-62, 201-59 D '42, Mr, S '43

New Hampshire

Rainfall in New England. G. V. White. N E Water Works Assn J 57:33-48 Mr '43

New Mexico

Characteristics of heavy rainfall in New Mexico and Arizona. L. B. Leopold. maps Am Soc C E Proc 69:205-34 F '43; Discussion. 69:630-1, 960-6, 1505-6, 1620-5 Ap, Je, N-D '43

New York (state)

Rainfall in New England. G. V. White. N E Water Works Assn J 57:241-59 S '43

Rhode Island

Rainfall in New England. G. V. White. N E Water Works Assn J 57:202-11 S '43

Vermont

Rainfall in New England. G. V. White. N E Water Works Assn J 57:49-62 Mr '43

RAINBOW bridge. See Niagara Falls, New York—Bridges

RAINCOATS

Haydenite in the production of service raincoats. Rubber Age 52:403-4 F '43
Haydenite replaces rubber in army raincoats. India Rubber W 107:279 D '42

RAINPROOFING. See Waterproofing of textiles.

RAISINS

Raisin production in Iran, year ended March 20, 1942. For Comm W 10:23 Ja 9 '43
Spain's raisin crop. For Comm W 12:23 Ji 31 '43

RAKU ware. See Pottery, Japanese

RALEIGH, North Carolina

Railroads

New passenger station promotes operating efficiency; Union depot. *il* plan map Ry Age 114:1256-9 Je 26 '43

RAMAN effect

Aldol condensation; detection of carbonyl groups in aldols by use of Raman spectra. R. H. Saunders and others. bibliog Am Chem Soc J 65:1309-11 Ji '43
Depolarization studies of Raman lines; a simplified method. G. Glockler and H. T. Baker. bibliog diags J Chem Phys 11:446-9 O '43
Determination of chlorine vibrations in dichlorobenzenes from intensities and polarizations of their Raman lines. G. Nordheim and H. Sponer. J Chem Phys 11:253-62 Je '43

Infra-red and Raman spectra of polyatomic molecules; acetaldehyde and acetaldehyde-*d*₄. J. C. Morris. bibliog J Chem Phys 11:230-5 My '43

Infra-red and Raman spectra of polyatomic molecules; methyl-*d*₃-alcohol-*d* and methyl-*d*₃-alcohol. H. D. Noether. J Chem Phys 10:693-9 D '42

Infra-red and Raman spectra of polyatomic molecules; trideuteriomethane. T. P. Wilson. bibliog J Chem Phys 11:361-8 Ag '43

Method for determining depolarization factors in Raman spectra. D. H. Rank, R. J. Pfister and H. H. Grimm. diags Opt Soc Am J 33:31-5 Ja '43

Raman effect. G. Glockler. *il* diags Rs Mod Phys 15:111-73 bibliog(521 references, p166-73) Ap '43

Raman spectra of acetylenes; symmetrical-top acetylenes. F. F. Cleveland and M. J. Murray. bibliog J Chem Phys 11:450-4 O '43

Raman spectra of amino acids and related compounds; sarcosine, ethanolamine, choline, betaine and betaine derivatives. J. T. Eadsall. bibliog Am Chem Soc J 65:1767-70 S '43

Raman spectra of l-ascorbic acid, tetroneic acid and related compounds. J. T. Eadsall and E. L. Sagall. bibliog Am Chem Soc J 65:1312-16 Ji '43

Raman spectra of four pairs of *meso* and *dl* disubstituted butanes. H. J. Taufen, M. J. Murray and F. F. Cleveland. bibliog Am Chem Soc J 65:1130-4 Je '43

Raman spectra of hydrocarbons; diisobutylene, cyclohexene, and dipentene. F. F. Cleveland. bibliog J Chem Phys 11:301-6 Ji '43

Raman spectra of hydrocarbons; 2-methyl-1-heptene and 6-methyl-1-heptene. F. F. Cleveland. J Chem Phys 11:227-30 My '43
Raman spectra of hydrocarbons; 1-octene, *cis*-*trans* 2-octene, *trans*-3-octene, *trans*-4-octene, 4-octyne, and 1-octyne. F. F. Cleveland. bibliog *il* diags J Chem Phys 11:1-6 Ja '43

Raman spectrum and molecular vibrations of nitric and deuteronic acids. O. Redlich and L. E. Nielsen. bibliog Am Chem Soc J 65:654-60 Ap '43

Raman spectrum of O-methyl isourea hydrochloride. J. T. Eadsall. bibliog Am Chem Soc J 65:1814-15 O '43

RAMIE

Dough ramie; decorticators. *il* Business Week p26-8 Mr 13 '43

More about the ramie fiber situation. D. B. Gibb. Rayon 23:717-18 D '42

Research into ramie, man's oldest fiber. Barron's 22:5 N 30 '42

RAMPS

Precast units cut cost and time on seaplane ramps. diags Eng N 130:306-9 F 25 '43

RAMPS—Continued

Safety measures

Stairways and ramps; safety aspects. *il Nat Safety N 47:101-2 Mr '43*

RANCH houses

Natural house of wood surrounded by green oaks and sparse California hills. *il plan Arch Forum 79:46-7 J1 '43*

RANCIDITY

Determination of the stability of oils and fats. N. D. Sylvester, L. H. Lampitt and A. N. Ainsworth. *bibliog il diags Soc Chem Ind J 61:165-9 N '42*

RANEY nickel catalyst. See Catalysts

RANNEY water collectors

New trends in ground water development. R. Nebolsine. *il diag plan N E Water Works Assn J 57:186-200 S '43*

RANSON, Stephen Walter, 1880-1942

Sketch. J. C. Hinsey. *Science 97:254-6 Mr 19 '43*

RAOULT'S law

Distribution equilibria between molten metals and molten salts, with reference to the stability of intermetallic compounds in the molten state. E. Heymann, R. J. L. Martin and M. F. R. Mulcahy. *bibliog J Phys Chem 47:473-84 O '43*

RAPESEED oil

Determination of water in aniline by a cloud point method; comparison of rapeseed oil with cottonseed-mineral oil mixtures. W. Seaman, A. R. Norton and J. J. Hugonet. *Ind & Eng Chem Anal ed 15:322-4 My 15 '43*

RAPID construction. See Building—Rapid construction

RAPID transit

Comments and opinions of transit officials. *Mass Transportation 39:311-31 S '43*
 Future for tractions bright now and after war. *Comm & Fin Chr 157:1004+ Mr 18 '43*
 Human sardine after the war. R. S. Tompkins. *Pub Util 32:69-75 J1 22 '43*; Same. *Mass Transportation 39:289-91+ Ag '43*
 Opportunity of a decade. E. Dana. *Bus Transportation 22:30-1 Ap '43*
 Transit's postwar role; studies of pre-war riding on public and private vehicles. J. A. Beeler. *Transit J 86:440-2 D '42*

See also

Electric railroads	Railroads
Motor bus lines	Street railroads
Public service co-	Subways
ordinated trans-	Trolley buses
port	
also subdivision Rapid transit under names of cities, e.g. Baltimore—Rapid transit; Chicago—Rapid transit	

Advertising

Bad news made good; Cincinnati street railway's public relations job. E. F. Theisinger. *il Bus Transportation 22:48-51 S '43*
 Baltimore Transit advertises in wartime. *il Mass Transportation 39:56-60 F '43*
 How the Boston elevated railway is following up on the subject of staggered hours. *il Bus Transportation 22:43-4 O '43*
 National advertising, a present requisite! L. J. Mathieu. *il Mass Transportation 39:320-1 S '43*
 Reasons why national advertising is more necessary than ever. C. W. Gifford. *Mass Transportation 39:20 Ja '43*

Equipment and supplies

Exhibit on paper. *il diags Mass Transportation 39:333-44 S '43*

Finance

Annual payroll 455 million. E. J. Murphy. *Mass Transportation 39:108 Mr '43*
 Operating ratio reduced; taxes up 95.44 percent. E. J. Murphy. *Mass Transportation 39:99 Mr '43*
 Practical idea for American industry. B. Hill. *Mass Transportation 39:316-18, 323 S '43*
 Transit financing in 1942. E. J. Murphy. *Mass Transportation 39:144-5 Ap '43*
 Transit revenue up twenty-eight per cent. E. J. Murphy. *Mass Transportation 39:96-7 Mr '43*

Information service

And in St Louis it's Grand 1414: information department of the St Louis public service company. *il Bus Transportation 22:28-9 Ap '43*

Michigan 6363, it's Washington's most popular number; phone call of Capital transit company's information department. E. C. Giddings. *il Bus Transportation 22:26-7 Ap '43*

St Louis trains its voice; employees trained in telephone technique. *il Mass Transportation 39:186-8 My '43*

There are no bewildered customers in Baltimore; pamphlets, radio, newspapers, and information bureau provide information. R. S. Tompkins. *il Bus Transportation 22:36-7 Ag '43*

Statistics

Rubber tired vehicles show phenomenal traffic increase; 10-year record of transit traffic in the United States by types of service, 1933 to 1942. E. J. Murphy. *Mass Transportation 39:100-1 Mr '43*
 Transit statistics for 1942. E. J. Murphy. *Mass Transportation 39:93-108 Mr '43*

RAPID transit in war

Great Britain's transport problems. W. V. Morland. *Mass Transportation 39:32 Ja '43*
 Handling wartime traffic. *il plan Bus Transportation 22:46-8 Ap '43*

How Key System is meeting war problems in Oakland area. *il Mass Transportation 38:356-9 D '42*

Jersey's staggered-hour plan. J. E. Conlon. *Pub Util 31:201-6 F 18 '43*

One year of the local transport division, Office of defense transportation. G. A. Richardson. *Mass Transportation 39:30-1+ Ja '43*

Schenectady railway overcomes wartime difficulties. *Mass Transportation 39:288+ Ag '43*

Staggered hours; a national challenge; survey of many cities. M. Buck. *Transit J 86:434-9 D '42*

Staggered hours just had to work in Portland, Oregon. G. G. Steele. *il Bus Transportation 22:32-4 Ag '43*

Strategy for transit; overcoming wartime difficulties. *il Mass Transportation 39:4-19 Ja '43*

Streamlined planning for staggered hours in Boston. H. S. Knowlton. *il Transit J 86:405-7 N '42*

Successful cooperation program in Indianapolis. E. B. Walker. *Mass Transportation 39:292-3 Ag '43*

Too many riders. *Business Week p37-8 S 4 '43*

Transportation battle being won; Office of war information reports on survey. *Bus Transportation 22:50 My '43*

War-time transit. J. B. Eastman. *Pub Util 30:733-6 N 19 '42*

Wartime transit problems; first of series of conferences held in New York city. *Mass Transportation 39:173-5, 189-91 My '43*

Wartime transportation in Los Angeles; Pacific electric railway company operates railroad, interurban, street car, and motor bus service. D. Batman. *il map Civil Eng 13:537-40 N '43*

See also

Motor bus lines in war

Bibliography

Local transportation. D. C. Tompkins. 29p pa 35c Bur. of public administration, Univ. of California, Berkeley '42

RARE earth metals

Fractionation of the rare earths by zeolite action. R. G. Russell and D. W. Pearce. *Am Chem Soc J 65:595-600 Ap '43*

Line spectra; atomic spectra of rare earth elements. W. F. Meggers. *bibliog Rs Mod Phys 14:96-103 Ap-J1 '42*

Monazite sand. L. G. Houk. *U S Bur Mines Information Circ 7233:1-19 '43*

Rare-earth metal amalgams; the separation of ytterbium from its neighbours. J. K. Marsh. *Chem Soc J p8-10 Ja '43*

RARE earth metals—Continued

Some yttrium-group oxalates. J. K. Marsh. Chem Soc J p40-1 Ja '43

See also

Cerium Scandium
Lanthanum Ytterbium

RARE earths

Rare earths; their history, occurrence, separation, properties and applications. L. Lortie. Can Chem & Process Ind 27:213-16 Ap '43

Rare element prospecting in pegmatites. T. T. Quirke and H. E. Kremers. bibliog Econ Geol 33:173-87 My '43

Analysis

Analytical chemistry of the rare earths; average atomic weight of the rare earths in a mixture. G. L. Barthauer, R. G. Russell and D. W. Pearce. bibliog Ind & Eng Chem Anal ed 15:548-9 S 15 '43

RARE gases. See Gases, Rare**RASPBERRIES, Frozen**

Brief summaries of grade standards. Food Ind 15:70 Ja '43

RAT fleas. See Fleas as carriers of infection**RATE setting**

Maximum works production. J. J. Gracie. Engineer 176:13; Discussion. 13-14 Jl 2 '43

RATHBUN, Mary Jane, 1860-1943

Sketch. L. McCain. Science 97:435-6 My 14 '43

RATIO and proportion

Calculation of interdependent taxes through ratio and proportion. E. H. Dale. J Account 75:60-4 Ja '43

RATION (term)

This blessed language; pronunciation of ration. A. P. Richardson. J Account 74:547 D '42

RATION banking. See Banks and banking—

Ration coupon handling

RATION-book holders

Ration books as media. Sales Management 52:26 Ap 1 '43

RATION coupon handling. See Banks and banking—

Ration coupon handling

RATIONALIZATION

See also

Economic planning
Efficiency, Industrial

RATIONING

Accurate order-filling of rationed goods. E. A. Dench. Credit & Fin Management 45:28-9 Je '43

Baruch would like to see much more drastic taxes and civilian standardization. E. Blair. Barron's 23:4 Je 7 '43

Britain's smoother ration process. F. B. Makin. Banking 36:109-10 S '43

British food rationing. J. Backman. Il Dun's R 50:12-16+ D '42

Brown expected to simplify rationing and seek to enlist public co-operation. E. Blair. Barron's 22:4 D 21 '42

Canada's rationing. D. Fellman. Il For Comm W 10:5-9+ Ja 30 '43

Canadian rationing. Bankers M 146:528-30 Je '43

Food rationing; the time is now. Fortune 26:124-5+ D '42

Grocery manufacturers hear voluntary vs. compulsory rationing debated. Ptr Ink 201:24 N 27 '42

Have you heard? Business Week p77 My 8 '43

How advertising can sell rationing. Adv & Sell 36:140 F '43

How standards are used in price and rationing control. W. S. MacLeod. Il Ind Stand 14:36-9 Mr '43

Impact of shortages on marketing. C. F. Phillips. Harvard Business R 21 no4:432-43 [Jl] '43

Legacy (if any) of rationing. Business Week p108 My 8 '43

More rationing in prospect. Barron's 22:6 D 7 '42

Need for rationing. Bankers M 145:552-3 D '42

New ration book in Great Britain. Economist 144:671 My 22 '43

New series of radio programs on rationing. Comm & Fin Chr 157:667 F 13 '43

900 million points; OPA order for ration tokens. Business Week p32+ O 16 '43

No retreat for brand names at point of sale; replies to questionnaire. Il Mod Packaging 16:31-5, 118+ Je '43

OPA point rationing to start in January. Comm & Fin Chr 156:2159 D 17 '42

Point rationing overtakes coupon system. Business Week p7 Ja 2 '43

Point rationing will create horizontal competition. Ptr Ink 201:66 D 11 '43

Pointed rationing. Business Week p14-15 D 5 '42

Preliminary population estimates based on ration book applications. T. J. Woolter, Jr. Am Stat Assn J 37:437-40 D '42

Price of price control; a discussion of the costs of rationing. P. F. Cadman. Credit & Fin Management 44:17-18+ D '42

Principles of consumer rationing. Il Staehle. Ann Am Acad 225:158-61 Ja '43

Ration book poll. Business Week p76+ O 9 '43

Ration books. Economist 144:685-6 My 29 '43

Rationing affects the marketing of every product. M. M. Lebensburger. Il Ptr Ink 202:13-14+ F 19 '43

Rationing ahead. Banking 35:27 D '42

Rationing aides; union members serving on local boards help OPA. Business Week p92+ Ap 10 '43

Rationing and price control in Great Britain. J. Backman. Trusts & Estates 77:25 Jl '43

Rationing and price-fixing. R. W. Babson. Comm & Fin Chr 158:4+ Jl 1 '43

Rationing; arbitrary or expert? Trusts & Estates 75:440-1 N '42

Rationing favors N '42

Rationing favors advertised brands. Ptr Ink 202:17 D 26 '43

Rationing opens odd and unexpected areas of inter-industry competition. Ptr Ink 205:39+ O 1 '43

Rationing pains; baking and drug trades feel pinch. Business Week p30-2 Ap 17 '43

Sees extension of rationing and increased standardization in 1943. L. Henderson. Comm & Fin Chr 156:2069 D 10 '42

Seven snags in price control and rationing. W. Mitchell, Jr. Trusts & Estates 75:549 D '42

Swedish ration-card system. For Comm W 11:26 My 22 '43

Treasury working on drastic new plan of overall rationing to force saving. E. Blair. Barron's 23:4 Mr 8 '43

Unused rations. Economist 143:600-1 N 14 '42

War ration book two is now on the presses. Comm & Fin Chr 157:76 Ja 7 '43

See also

Advertising copy— Priorities and allocations, Industrial

Conservation appeal World war, 1939—

Banks and banking— Commodity control

Ration coupon handling

also subdivision Rationing under names of products, e.g.

Clothing and dress Oil fuel

Coffee Soap

Food Stoves

Fuel Sugar

Gasoline Tires, Automobile

Meat

RATIONING, Industrial. See Priorities and allocations, Industrial

RATIONS. See United States—Army—Commisariat

RATIOS, Financial. See Financial ratios

RATPROOFING

Murine typhus fever control. C. R. Eskey. Pub Health Rep 58:631-8 Ap 16 '43

Plan for rodent control in cities. G. C. Sherrard. bibliog Pub Health Rep 58:325-32 My 28 '43

Ratproofing cellarways. diags Am Bld 65:56 My '43

Typhus fever control unit of the United States Public health service. Pub Health Rep 58:638-9 Ap 16 '43

RATS

Harborage of rattus rattus alexandrinus. B. K. Milmore. bibliog Pub Health Rep 58:1607-9 O 8 '43

RATS—Continued

Extermination

Plan for rodent control in cities. G. C. Sherrard. bibliog Pub Health Rep 58:325-32 My 28 '43

Variations in rat infestation on vessels. R. Olesen and G. C. Sherrard. Pub Health Rep 57:1966-70 D 25 '42

RATS as carriers of infection

Leptospirosis in rats (*R. norvegicus*) in and about Washington, D.C.; evaluation of the methods used for diagnosis. C. L. Larson. bibliog Pub Health Rep 58:949-55 Je 18 '43

Murine typhus fever control. C. R. Eskey. Pub Health Rep 58:631-8 Ap 16 '43

Plague infection reported in the United States during 1942. Pub Health Rep 58:640-5 Ap 16 '43

RAW materials

Access to raw materials in the postwar world. K. E. Knorr. Harvard Business R 21 no 3:385-96 [Ap] '43

Allies raw materials in orderly flow; first year's operations of Combined raw materials board. W. L. Batt. Comm & Fin Chr 157:1218 Ap 1 '43

American economy in 1942: raw materials. C. A. R. Wardwell and R. B. Bangs. Survey of Cur Business 23:7 Ja '43

Changing status of the United States under raw materials shortages. L. Stern. Il Mag of Wall St 73:11-13+ O 16 '43

Chemurgists discuss domestic sources of raw materials. Chem Ind 51:862-8 D '42

Combined board may aid control of postwar distribution problems. Steel 112:71-2 Mr 8 '43

Coming battle of materials. J. V. Sherman. Barron's 23:3 N 1 '43

Conservation problems in the toilet goods industry. E. C. Merrill. Oil Paint & Drug Rep 143:61-3 My 17 '43

Controllers of raw materials. G. D. N. Worswick. Economist 143:660 N 28 '42

Critical materials list revised; issue no. 8. Oil Paint & Drug Rep 143:7+ Ap 26 '43

Critical materials listed by conservation unit; sixth material substitution and supply list. Oil Paint & Drug Rep 142:3+ N 16 '42

Critical materials supply list seventh issue. Oil Paint & Drug Rep 143:7+ F 15 '43

Five postwar trade problems; synthetic substitutes. A. E. Taylor. Harvard Business R 21 no2:156-8 [Ja] '43

Imports make total war possible. W. Y. Elliott. Il For Comm W 13:8-11 O 23 '43

Marriageability of industrial products. Trusts & Estates 76:369-70 Ap '43

Material substitution and supply list No. 9 issued. Oil Paint & Drug Rep 144:7+ Ag 2 '43

Materials substitution and supply list No. 10. Oil Paint & Drug Rep 144:7+ O 18 '43

More scarcities appear; War production board's list of relative supply positions. Barron's 23:7 My 10 '43

Plastics for South Carolina. F. E. Lawrence. Il Manuf Rec 112:30-1+ Mr '43

Postwar products planning and raw materials sources. C. E. Williams. Min & Met 24:268-70 Je '43; Same, with Il. Chem & Eng N 21:1035-40 Jl 10 '43

Problem of raw materials. Economist 143: 577-8 N 7 '42

Quick and drastic changes in use of material at war's end held unlikely. G. S. Brady. charts Iron Age 151:95-6 Je 3 '43

Raw material supplies for plastics manufacture. R. H. Ball. Il Chem & Eng N 21:73-6 Ja 25 '43

Raw materials and the Atlantic charter. Chem Age (Lond) 43:351-2 O 9 '43

Raw materials for allies from North Africa. Comm & Fin Chr 157:68 Ja 7 '43

Raw materials for the next war; why the United States should accumulate all needed metals and minerals. W. O. Hotchkiss. Min & Met 24:224-6 My '43

Raw materials; new records set in all supplies for steel industry. Il Steel 112:261-2 Ja 4 '43

Raw materials, 1942. Economist 144:sup19-20, 22 Mr 13 '43

Raw materials solvency; United nations co-operation has assured supplies. W. L. Batt. Min & Met 24:308-9 Jl '43

Scarce materials are vital to the war effort. W. J. Clardy. Mech Eng 65:567-72 Ag '43

Stock-piling for peace; symposium in favor of accumulating emergency supplies of metals and minerals. Min & Met 24:273-4 Je '43

Vital service of Combined raw materials board. For Comm W 9:16 N 28 '42

War contract renegotiation banned on 32 materials. Oil Paint & Drug Rep 143:3+ Mr 22 '43

What are raw materials? F. Fromm. bibliog Chem Ind 51:848-50 D '42

See also

Cellulose	Mines and mineral resources
Ceramic materials	Oils and fats
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Chromium	Priorities and allocations, Industrial
Coal	Rubber
Cotton	Textile fibers
Farm produce	Wood
Metals	
Metals, Non-ferrous	
Mineral industries	

RAWDON, Henry S. 1832-

Chief metallurgist, Bureau of standards. E. C. McDowell, Jr. por Metal Prog 44:422-4 S '43

RAY, Tommy

Portland revolt; Tommy Ray's control of Local 72 of the A.F.L. boilermakers' union. por Business Week p78+ F 13 '43

Ray won't bounce. Business Week p107-8 O 23 '43

RAYBESTOS-MANHATTAN, Incorporated

Capital stock yielding 8%. H. Lawrence. Barron's 23:6 Ap 5 '43

RAYLEIGH, John William Strutt, 3d baron, 1842-1919

Great physicist. M. Schofield. Engineer 174: 421-2 N 20 '42

RAYMOND'S store, Boston. See Retail trade—Store management

RAYOLANDA

Rayolanda X. A. J. Hall. Textile Col 65:431-2 O '43

Scope of Rayolanda X as a supplementary fibre; admixture with Fibro and wool. H. A. Thomas. bibliog Soc Dyers & Col J 58: 197-202 O '42; Abstract. Am Dyestuff Rep 32:186 Ap 12 '43; Discussion. Soc Dyers & Col J 58:202-3 O '42

RAYON

Cholesterol in the rayon industry. L. I. Conrad. bibliog Il Rayon 23:675-6 N '42

Destruction of rayon by mildew organisms. W. S. Marsh and A. E. Duske. Il Rayon 24:185-7, 242-4 Ap-MY '43

Double demand met by rayon. W. C. Appleton. Rayon 24:330 Jl '43

Fibers for tomorrow; rayon, 279 years old. N. Clarey, Jr. Textile Col 65:439-40, 483-4 O-N '43

Hydrolysis and catalytic oxidation of cellulosic materials; characterization of celluloses. R. F. Nickerson. bibliog Il Ind & Eng Chem 34:1480-5 D '42

Novel use of rayon; precision gloves for aviators. Rayon 24:479 S '43

Rayon and the war. D. B. Wicker. Paper Tr J 116:25-7 F 25 '43

Rayon proves substantial war aid factor in many fields. Rayon 24:2-3 Ja '43

Rayon rope seals in the power of vital hydraulic machines. Rayon 23:672 N '42

Striking analogy between development of chemical rubber and rayon industry in U.S.A. Rayon 23:642-3 N '42

Symposium of man-made fibers; story of rayon. J. K. Hunt. Textile Col 65:102-4, 133 Mr '43

Symposium of man-made fibers; viscose rayon. J. Leeming. Textile Col 65:9-10 Ja '43

Why rayon hosiery is not what it could be. Rayon 24:478 S '43

See also

Cellulose	Rayolanda
Cellulose acetate	Rayon fibers
Dyes and dyeing—Rayon	

RAYON—Continued

Analysis

Quantitative analysis of cotton-viscose rayon mixtures; adsorption of barium hydroxide. F. P. Greenspan and S. M. Edelstein. *bibliog Am Dyestuff Rep* 32:73-6, 98 F 15 '43; Same. *Rayon* 24:125-7, 188-90 Mr-Ap '43

Bibliography

Review of periodicals. *Rayon* 24:49-50 Ja '43 [cont monthly]

Dyeing

See Dyes and dyeing—Rayon

Fabrics

See Rayon fabrics

Finishing

See Rayon finishing

Knit goods

Are synthetics dooming the full-fashioned hosiery machine? J. W. Hughes; M. C. Miller. *il Textile World* 93:74-8 Ag '43; Celanese hosiery. J. P. Holmes. *Rayon* 24:241 My '43

Dyeing and finishing of rayon Milanese knitted fabric. *Textile Col* 64:581-4 D '42

Handling acetate rayon in full-fashioned mills. *il Textile World* 93:107 Ap '43

New rayon hosiery oils. *Rayon* 24:91 F '43

OPA standards of inspection for women's rayon hosiery. *Rayon* 24:169-71 Ap '43

Portioning hosiery yarns. K. R. Barker. *il Textile World* 93:114 F '43

Problems in the evolution of rayon hosiery. H. H. Mosher. *Rayon* 24:142-4 Mr '43

Processing of full fashioned rayon hosiery yarns with a new treatment; Nopco treatment. *il Rayon* 23:673-4, 727-8 N-D '42

Rayon hosiery comes to stay. H. A. Lester. *il Rayon* 23:699-701 D '42

Rayon stockings for women in wartime. *diag Consumer's Research Bul* 11:11-14 Je '43

Solving a rayon hosiery problem; 51 gauge rayon stocking has badly streaked boot. *Rayon* 24:37-8 Ja '43

Substitute fibers gaining knit goods leadership. W. B. Dall. *il Textile World* 93:100-1 Ap '43

Technique in the manufacture of acetate rayon hosiery. M. Oplitz, S. L. Dills and others. *il Rayon* 24:197-9, 253-5 Ap-My '43

Wearing qualities of rayon hose compared with silk and nylon hose. H. M. Fletcher. *Rayon* 24:537-8, 601-3 O-N '43

Moisture content

See also

Rayon drying

Patents

Making viscose rayon wool-like. A. J. Hall. *Textile Col* 65:313 Jl '43

Prices

Maximum prices of rayon yarns and staple fiber. *Rayon* 24:6 Ja '43

Summary of OPA schedules and maximum price regulations affecting the rayon industry. F. C. Niederhauser. *Rayon* 24:461-3 S '43

Viscose rayon staple top prices raised. *Rayon* 24:324 Je '43

See also

Hosiery—Prices

Strength

Seam strength of common rayon dress fabrics. J. Lederer. *il Rayon* 24:26-7 Ja '43

RAYON carding

Processing long staple fiber blends on cotton equipment. J. McComb. *Rayon* 24:22-3 Ja '43

RAYON cords

Army proves rayon cord superiority over cotton for tires. *Rayon* 23:641 N '42

Cotton vs. rayon tires a hot potato. B. Stubblefield. *Textile World* 92:64-5 N '42

Expansion of rayon plants to provide tire cord for army decreed by Jeffers. *il Rubber Age* 52:143-4 N '42

Rayon-cotton tire cord controversy flares up again in official circles. *Rubber Age* 53:443-4 Ag '43

Seven year record proved intrinsic merit of rayon cord for tires. *Rayon* 24:394-5 Ag '43

Truman committee reports on rayon. *Textile Col* 65:461 O '43

RAYON drying

Drying of rayon. H. P. Simons and others. *il diag Ohio State U Eng Exp Sta Bul* 116:133-71 bibliog(p154-5) '43 (pa 50c); Abstract. *Chem & Met Eng* 50:175-6 Mr '43

Drying of rayon; the drying of rayon cakes. R. J. Mitchell, J. H. Koffolt and J. R. Withrow. *diags Am Inst Chem Eng Trans* 39:156-69; Discussion. 170-1 Ap '43

Drying of rayon; the drying of rayon skeins. H. P. Simons, J. H. Koffolt and J. R. Withrow. *bibliog il diags Am Inst Chem Eng Trans* 39:133-55 Ap '43

New developments in handling of rayon cut staple. J. W. Reinhardt. *il diags Rayon* 24:470-1 S '43

RAYON fabrics

American viscose corporation fellowship; to study the durability and care of rayon fabrics. *Textile Col* 65:344 Ag '43

Aralac and spun rayon fabrics; desizing, dyeing, finishing, etc. *il Rayon* 23:715-16 D '42

British standard utility cloths. *il Textile World* 93:86-7 Je '43

Burnt-out effects with acetate rayon. A. J. Hall. *Textile Col* 65:433-4 O '43

Chemical finishes for rayon fabrics. H. H. Mosher. *Am Dyestuff Rep* 32:150-2+ Mr 29 '43

Crease-resisting spun rayon fabrics. *Rayon* 24:597-8 N '43

Development of Eastman high impact acetate rayon as parachute material. *il Rayon* 24:599-600 N '43

Loomfixers' reference chart; reveals causes and indicates remedies for common defects in rayon fabrics. *Textile World* 93:78-9 Jl '43

Parachutes and the new fabrics they require. *il Textile World* 93:65-8 O '43

Place of filament rayon in fabrics; review of history, terminology and physical properties. R. Bouvet. *Rayon* 24:293-4, 349-50 Je-Jl '43

Place of rayon staple in fabrics. H. O. Kenette. *Rayon* 24:295-6, 347-8, 412-14 Je-Ag '43

Pre-embossing in the processing of rayon crepe fabrics. *Textile Col* 64:515-17 N '42; Excerpt. *Rayon* 24:124 Mr '43

Protecting textiles from silverfish. C. L. Mantell and E. May. *il Mod Plastics* 20:51-3+ F '43

Rayon in pile fabrics. C. H. Beaver. *diags Rayon* 24:595-6 N '43 (to be cont)

Seam strength of common rayon dress fabrics. J. Lederer. *il Rayon* 24:26-7 Ja '43

See also

Rayon weaving

Cotton mixtures

Commercial standard CS103-42, cotton and rayon velour. *Textile Col* 65:31-2 Ja '43

Quantitative analysis of cotton-viscose rayon mixtures; adsorption of barium hydroxide. F. P. Greenspan and S. M. Edelstein. *bibliog Am Dyestuff Rep* 32:73-6, 98 F 15 '43; Same. *Rayon* 24:125-7, 188-90 Mr-Ap '43

Spun rayon and cotton blends. P. Sillan. *Textile Col* 64:518 N '42

Defects

Defects in combination fabrics; careful loom-check prevents injury to crepe yarn of viscose and acetate. A. C. Wayman. *il Textile World* 93:78-9 Mr; 94-5 Ap '43

Principal rayon weaving defects; their causes and remedies. *il Rayon* 24:24-5, 85-6, 133-4 Ja-Mr '43

Sources of barré and irregular cloth. H. E. Wenrich. *il Rayon* 24:191-2, 247-8, 303-4, 354-5, 419-20, 487-8, 535-6, 593-4 Ap-N '43

Knit fabrics

See Rayon—Knit goods

Testing

Color fastness and physical properties of wool and rayon gabardines. H. M. Fletcher and H. M. S. Sherwood. *bibliog Am Dyestuff Rep* 32:280, 291-6 Je 21 '43

RAYON fabrics—Testing—Continued

Dimensional restorability of rayon fabrics; Crown tested plan. A. R. Wachter. *il Rayon* 23:659-60 N '42

Effect of laundering and laundry-bleaching processes on cotton, linen and viscose fabrics. E. Honegger and A. Schnyder. *pl Textile Inst J* 34:T29-40 Je '43

Fatigue of fabrics. W. F. Busse and others. *bibliog diag J Ap Phys* 13:715-24 N '42

Resistance of various textile fibers to mildew. N. E. Borlaug. *il Rayon* 24:475-6 S '43

Wool mixtures

How to sell and care for rayon and wool blended fabrics; valuable hints on washing, drying, pressing, drycleaning and stain removal. A. Ten Eyck. *Rayon* 23:660-1 N '42

RAYON fibers

Fiber from the spinner's viewpoint. C. D. Brandt. *Rayon* 24:351-3 Jl '43

New developments in handling of rayon cut staple. J. W. Reinhardt. *il diags Rayon* 24:470-1 S '43

New tow-to-top rayon process eliminates traditional carding and combing. *il Rayon* 24:69-72 F '43

New varied length viscose rayon staple. *il Rayon* 24:224 My '43

Place of rayon staple in fabrics. H. O. Kennette. *Rayon* 24:295-6, 347-8, 412-14 Je-Ag '43

Processing long staple fiber blends on cotton equipment. J. McComb. *il Rayon* 24:22-3, 81-2 Ja-F '43

Processing rayon tow to slivers of staple fibers. *il Rayon* 24:469 S '43

Properties of synthetic fibers; charts. *Textile World* 93:109-14 S '43

Quick detection of fiber damage; chemical and microscopic tests. W. Krauss. *il Textile World* 93:76-7 Ja '43

Recent developments in rayon staple. W. Hardacre. *Textile Inst J* 34:P71-7 Ap '43

Spun rayon and cotton blends. P. Sillan. *Textile Col* 64:518 N '42

Tow-to-top processes for rayon. *il Textile World* 93:109-10 F '43

Utilization of rayon tow for spun rayon manufacture. *Rayon* 24:19-20 Ja '43

Varied-staple rayon has fiber diagram similar to worsted top. *il Textile World* 93:87 My '43

See also

Rayon spinning

Testing

Effect of relative humidity on load-elongation properties of certain fibers. H. Hindman and K. R. Fox. *bibliog il Rayon* 24:235-6, 287-9 My-Je '43

Resistance of various textile fibers to mildew. N. E. Borlaug. *il Rayon* 24:416-18, 475-6 Ag-S '43

RAYON finishing

After boiling-out—use bicarbonate; advantages over customary acid sour. A. L. Dubeau and G. P. Vincent. *il Textile World* 93:79 My '43

Chemical finishes for rayon fabrics. H. H. Mosher. *Am Dyestuff Rep* 32:150-2+ Mr 29 '43

Dyeing and finishing of rayon Milanese knitted fabric. *Textile Col* 64:581-4 D '42

Making viscose rayon wool-like. A. J. Hall. *Textile Col* 65:313 Jl '43

Pre-embossing in the processing of rayon crepe fabrics. *Textile Col* 64:515-17 N '42; Excerpt. *Rayon* 24:124 Mr '43

Processing of full fashioned rayon hosiery yarns with a new treatment; Nopco treatment. *il Rayon* 23:673-4, 727-8 N-D '42

See also

Dyes and dyeing—Rayon

Rayon oiling
Rayon printing

Creasing

Crease-resisting spun rayon fabrics. *Rayon* 24:597-8 N '43

RAYON flock

Many uses found for rayon flock. M. A. Foley. *Rayon* 24:458 S '43

RAYON industry

Planning corporate research and development. H. W. Rose. *Am Dyestuff Rep* 32:256 My 24 '43

Rayon and the war. D. B. Wicker. *Paper Tr J* 116:25-7 F 25 '43; Same cond. *Paper Ind* 24:1290+ Mr '43

Rayon edges up. *Business Week* p28-9 My 8 '43

Rayon fights on two fronts. W. C. Appleton. *il Manuf Rec* 111:28-9+ D '42

See also

Celanese corporation
of America

Advertising

With no goods to sell, Industrial Rayon sells its process. *il Ind Marketing* 28:110+ O '43

Regulation

Summary of OPA schedules and maximum price regulations affecting the rayon industry. F. C. Niederhauser. *Rayon* 24:461-3, 506-7 S '43

Securities

Dynamic outlook for rayon stocks in war and peace. J. C. Clifford. *il Mag of Wall St* 72:22-5+ Ap 17 '43

Statistics

Consumption of cellulose by the rayon industry, 1930-1942. *Rayon* 24:324 Je '43

New rayon record in 1942. *Textile World* 93:139 R '43

1942 rayon output up 10% to new high. *Comm & Fin Chr* 157:505 F 4 '43

Rayon and synthetic fibers, 1942. *Chem & Met Eng* 50:116-17 F '43

Rayon, 1938-1941. Survey of Cur Business 1942 Sup p167 [supplemented in monthly numbers]

Rayon production in 1942 rose sharply. *Comm & Fin Chr* 157:203 Ja 14 '43

U.S.A. rayon production; chart. *Rayon* 24:5 Ja '43

Great Britain

British rayon federation. *Economist* 145:23-4 Jl 3 '43

Mexico

Problems involved in moving a plant; Productora de Artisela, Obregon, Mexico, D.F. E. C. Dunham. *il Chem & Met Eng* 50:101+ Ap '43

RAYON machinery

Krehbiel gets godet patent; control of tension of rayon yarn; and spinning apparatus. *diags Rayon* 23:735 D '42

New developments in handling of rayon cut staple; Proctor impact dryer; pin cylinder lap unit; carding machine. J. W. Reinhardt. *il diags Rayon* 24:470-2 S '43

Perlock system of converting rayon tow. J. L. Lohrke. *il Rayon* 24:129-30 Mr '43

Reclaiming worn spindles with metallizing. *il diags Rayon* 24:611-12 N '43

Speed control assumes added weight under wartime impetus. *il diags Rayon* 24:93-6, 149-51 F-Mr '43

RAYON manufacture

Simple classroom demonstration of the manufacture of rayon. F. Fromm. *diag J Chem Educ* 20:197 Ap '43

See also

Dyes and dyeing—Rayon

Rayon fabrics

Rayon mills

Rayon spinning

Rayon weaving

Rayon yarn

Spinnerettes—Manu-

facture

RAYON mills

Death to the silverfish. *il Textile World* 93:83 Jl '43

Ten year expansion in fine fabrics field by Burlington Mills. *il Rayon* 24:361-72 Jl '43

Equipment

Instrumentation under wartime demands revolutionizes manufacturing procedures. *il diag Rayon* 24:151-3 Mr '43

Magic of the metering pump. *il diags Rayon* 24:205-7 Ap '43

Rayon plant in Virginia installs 750-ton refrigerating system. *Refrig Eng* 44:397 D '42

Refrigerating system at Front Royal. *il Power Pl Eng* 47:112 Je '43

See also

Rayon machinery

RAYON mills—Continued

Safety measures

Rayon industry, keyed to war, shares in nation-wide safety movement. W. C. Appleton. Rayon 24:58-60 F '43

RAYON oiling

Oil notes in rayon processing. Textile Col 65:63-5 F '43

RAYON printing

Application of azoic dyes to cellulose materials. A. J. Hall. Textile Col 65:293-4 J1 '43

Azoic dyes; problem to simplify their application. A. J. Hall. Textile Col 65:49-50 F '43

Glycerine paces textile progress. G. Leffingwell and M. A. Lesser. bibliog Rayon 24:493 S '43

Screen printing of rayons. il Rayon 23:353-4, 400-1, 547-8, 666-7; 24:89-90, 136-7, 193-4, 251-2, 421-2, 539-40 Je-J1, S, N '42, F-My, Ag, O '43 (to be cont)

RAYON research

Importance of rayon research. H. W. Rose. Rayon 24:222-3 My '43

Reactions of cellulose in liquid sulfur dioxide. P. C. Scherer, Jr. and L. C. Brooks. bibliog Rayon 23:657-8, 718-20 N-D '42

RAYON scouring

Finding new synthetic detergents for rayon hosiery. C. M. Robbins. Rayon 24:480 S '43

RAYON sizing

Oil notes in rayon processing. Textile Col 65:63-5 F '43

Present situation in gelatine warp sizes. Rayon 24:486 S '43

Warp sizing of man-made yarns; deformed gelatin; effect of different types of softeners. il Rayon 24:590-2 N '43

RAYON spinning

Place of rayon staple in fabrics. H. O. Ken- nette. Rayon 24:347-8 J1 '43

Processing long staple fiber blends on cotton equipment. J. McComb. il Rayon 24:81-2 F '43

Spinning rayon staple; British practice. Textile World 93:97 Ja '43

See also

Rayon fibers
Rayon yarn

RAYON staple fibers. See Rayon fibers

RAYON throwing

Defects in combination fabrics. A. C. Way- man. il Textile World 93:94-5 Ap '43

Throwing rayon for hosiery. C. W. Bendigo. il Textile World 93:110 Ap '43

RAYON tow. See Rayon fibers; Rayon yarn

RAYON waste

Report on rayon waste during 1943. E. W. Dutton. Rayon 24:466 S '43

RAYON weaving

Defects in combination fabrics; careful loom- check prevents injury to crepe yarn of viscose and acetate. A. C. Wayman. il Textile World 93:78-9 Mr; 94-5 Ap '43

Fabric defects charted. S. C. Veney. il Textile World 92:88-9 D '42

Loomfixers' manual; rayon and silk section (cont). H. E. Wenrich. diags Textile World 92:124 N '42; 93:136 F; 136 Ap; 110 Je '43

Loomfixers' reference chart; reveals causes and indicates remedies for common defects in rayon fabrics. Textile World 93:78-9 J1 '43

Place of rayon staple in fabrics. H. O. Ken- nette. Rayon 24:347-8 J1 '43

Principal rayon weaving defects; their causes and remedies. il Rayon 24:24-5, 85-6, 133-4 Ja-Mr '43

Progress in designing shuttles for rayon weaving. R. Makepeace. il Rayon 24:484-6 S '43

Rayon in pile fabrics. C. H. Beaver. diags Rayon 24:595-6 N '43 (to be cont)

Reducing finger-marks and similar defects. H. E. Wenrich. il Rayon 24:83-4, 131-2 F- Mr '43

Sources of barré and irregular cloth. H. E. Wenrich. il Rayon 24:191-2, 247-8, 303-4, 354-5, 419-20, 487-8, 535-6, 593-4 Ap-N '43

Speeding-up weave change-overs; looms for civilian work shifted to military fabric production. H. E. Wenrich. il diag Textile World 93:76-7 My '43

Useful hints on quality and quantity in the weave room. L. Schlessinger. il Rayon 24: 28-30 Ja '43

RAYON yarn

Allocation of rayon yarns to hosiery manu- facturers. Rayon 24:60-2 F '43

Celanese hosiery. J. P. Holmes. Rayon 24:241 My '43

Celanese produces $\frac{1}{4}$ of a denier Fortisan filament. Rayon 23:640 N '42

Cellulose acetate yarn replaces silk for wire insulation. D. R. Brobst. il Rayon 24:467-8 S '43

Drying of rayon; the drying of rayon skeins. H. P. Simons, J. H. Koffolt and J. R. Withrow. bibliog il diags Am Inst Chem Eng Trans 39:133-55 Ap '43

Elasticity, creep and recovery of acetate and viscose rayon yarns. H. Mark and J. Press. bibliog Rayon 24:297-9, 339-41, 405-7 Je-Ag '43

Flow and recovery properties of viscose rayon yarn. J. J. Press. bibliog(90 titles) J Ap Phys 14:224-33 My '43; Correction. 14:464 S '43

Handling rayon cakes in the textile trade. L. M. Dinsmore. il Rayon 24:20-1, 75-6 Ja- F '43; Same cond. Textile World 93:74-5 Ja '43

New tow-to-top rayon process eliminates traditional carding and combing. il Rayon 24:69-72 F '43

Perlock system of converting rayon tow. J. L. Lohrke. il Rayon 24:129-30 Mr '43

Place of filament rayon in fabrics; review of history, terminology and physical prop- erties. R. Bouvet. Rayon 24:293-4, 349-50 Je-J1 '43

Processing of full fashioned rayon hosiery yarns with a new treatment; Nopco treat- ment. il Rayon 23:673-4, 727-8 N-D '42

Processing rayon tow to slivers of staple fibers. il Rayon 24:469 S '43

Progress in Fortisan, the strong yarn. W. Whitehead. Rayon 24:456 S '43

Sources of barré and irregular cloth. E. H. Wenrich. il Rayon 24:191-2 Ap '43

Tow-to-top processes for rayon. il Textile World 93:109-10 F '43

Utilization of rayon tow for spun rayon manufacture. Rayon 24:19-20 Ja '43

Warp sizing of man-made yarns; deformed gelatin; effect of different types of softeners. il Rayon 24:590-2 N '43

Cotton mixtures

Quantitative analysis of cotton-viscose rayon mixtures; adsorption of barium hydroxide. F. P. Greenspan and S. M. Edelstein. bib- liog Am Dyestuff Res 32:73-6, 98 F 15 '43; Same. Rayon 24:125-7, 188-90 Mr-Ap '43

Spun rayon and cotton blends. P. Sillan. Textile Col 64:518 N '42

Mixtures

Processing long staple fiber blends on cotton equipment. J. McComb. il Rayon 24:22-3, 81-2 Ja-F '43

Prices

Amendment to maximum price regulation no. 168 for converted rayon yarns. Rayon 23:655-6 N '42

Text of amendment 3-MPR-168 rayon yarn converting order. Rayon 24:279-81 Je '43

Tables, calculations, etc.

Changes in deniers and filament numbers; new hosiery and high tenacity yarns; re- vised tables as of March, 1943. H. R. Mauersberger. Rayon 24:122-3, 135, 141 Mr '43

Many changes in denier and filament num- bers of American rayon yarns; with revised table as of September, 1943. H. R. Mauers- berger. Rayon 24:455-6, 464-6, 477 S '43

Testing

Determination of the regularity of the denier in rayon yarns. E. Viviani. diags Rayon 24:79-80 F '43

Effect of ageing on rayon yarn; effect of oil. C. B. Weill. il Textile World 92:74-5 N '42

RAYON yarn—Testing—Continued

Relation of tensile strength units; grams per denier and pounds per square inch. M. A. Sieminski. *Bibliog Rayon* 24:585-7 N '43

RAYS

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Absorption of rays	Gamma rays
Alpha rays	Infrared rays
Beta rays	Radiation
Cosmic rays	Ultraviolet rays
Dispersion of rays	X rays

RAYS, Absorption of. *See* Absorption of rays
RAZOR blade sharpeners

Rating

Razor blade sharpeners. *il* Consumers' Research Bul 11:9-10 D '42

RAZOR blades

How to allocate restricted output; Durham-Enders razor corporation. J. Barteau. *Ptr Ink* 202:66+ F 19 '43

Rating

Safety-razor blades. Consumers' Research Bul 11:10 F '43

REACTANCE

General reactance theorem for electrical, mechanical, and acoustical systems. D. Maa. *bibliog Inst Radio Eng Proc* 31:365-71 JI '43

How to determine reactance for electronic circuits; chart. *Elec W* 118:1814 N 28 '42

Line reactance for motor starting. E. R. Bonds. *Elec W* 119:1802 My 29 '43

Method for determining the normal modes of Foster's reactance networks. W. R. LePage. *bibliog diags Elec Eng* 62:Trans 674-8 N '43

Practical radio course; reactance of inductances and condensers. A. A. Ghirardi. *diags Radio N* 28:28-9+ O '42

Quadrature synchronous reactance of salient-pole synchronous machines. R. V. Shepherd and C. E. Kilbourne. *bibliog Elec Eng* 62:Trans 684-9 N '43

REACTION, Chemical. *See* Chemical reaction

REACTIVE power

How kvar losses can be minimized. R. M. Sensintaffar. *diags Elec W* 119:1810 My 29 '43

Kilowatts, kilovars, and system investments. J. W. Butler. *Elec Eng* 62:Trans 133-7 Mr '43

Reactive power. C. J. O. Garrard. *Electrician* 128:359-61 Ap 17 '42; Discussion, 128:396; 129:167-70, 505-6+; 130:90-2 Ap 24, Ag 14, N 6 '42, Ja 22 '43

Reactive power, kilovars. C. E. Greenslade. *diags Electrician* 131:199-200 Ag 27 '43

Reactive power magnetizes machine iron; generator power factor. R. V. Selander. *Power* 87:772+ N '43

Static phase modifier; applicability and availability of reactor-capacitors to supply system regulated kilovar requirements. J. W. Butler and L. W. Foster. *il diag Gen Elec R* 46:171-3 Mr '43

REACTORS

Analysis of full wave rectifier with choke input. L. C. Tillotson and C. M. Wallis. *diags Electronics* 16:94-7+ Ap '43

Feeder reactor saves over-fusing. *il diags Elec W* 119:2144 Je 26 '43

Interim report on overloading current-limiting reactors. *Elec Eng* 62:Trans 611-12 O '43

Linear couplers used for bus protection. W. K. Sonnemann. *diag Elec W* 120:110+ JI 10 '43

Neutral relays guard reactors, generators. H. E. Chambers. *diags Elec W* 119:634 F 20 '43

Reactance networks with resistance terminations. E. S. Purington. *diags Electronics* 16:69-72+ Ja '43

Reactors in busbars; their effect on circuit-breaker rating. *diag Elec R (Lond)* 132:408 Mr 26 '43

Static phase modifier; applicability and availability of reactor-capacitors to supply system regulated kilovar requirements. J. W. Butler and L. W. Foster. *il diag Gen Elec R* 46:171-3 Mr '43

Swinging filter choke. R. M. Hanson. *diags Electronics* 16:112-16+ Je '43

READERS' digest (periodical)

Digest spreads. *Business Week* p99-101 F 27 '43

Traveling Digest; well intrenched on foreign soil. Reader's digest casts a postwar eye on enemy countries. *Business Week* p52 O 9 '43

READERSHIP. *See* Advertisements—Readership; Newspapers—Reader interest; Periodicals—Reader interest

READING

See also

Books and reading

READING company

Annual report, 1942. *Comm & Fin Chr* 157:1357 Ap 12 '43; Same abr. *Ry Age* 114:743 Ap 10 '43

Prosperous anthracite road. *Barron's* 23:13 F 22 '43

Railroad securities; Reading Jersey Central collateral 4s, 1951. *Comm & Fin Chr* 156:1877 N 26 '42

READY-mixed concrete. *See* Concrete mixing—Ready-mixed concrete

READY-mixed concrete association, National. *See* National ready-mixed concrete association

REAL estate boards, National association of. *See* National association of real estate boards

REAL estate bonds. *See* Bonds, Real estate

REAL estate business

Can real estate be a two-way hedge? R. P. Crawford. *Barron's* 23:3-4 O 25 '43

How to make A-1 prospects for your postwar houses; with text of land contract and terms of sale. N. P. Ninneman. *il Am Bld* 65:35+ JI '43

Land sells fast. *map Business Week* p24+ Je 12 '43

Mortgage market, today and after World war I; residential mortgages. P. M. Stoner. *J Land & Pub Util Econ* 19:224-30 My '43

Outlook for city real estate. R. P. Crawford. *Barron's* 22:9 D 14 '42

Real estate and real estate bond markets in 1942; 1943 outlook. H. R. Amott. *Comm & Fin Chr* 157:386 Ja 28 '43

Real estate in post-war period. H. R. Amott. *Comm & Fin Chr* 158:1892-3 N 11 '43

Really association teaching property management. *Comm & Fin Chr* 157:69 Ja 7 '43

See also

Banks and banking—	Land—Subdivision
Real estate operations	Leases
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<i>also</i> National association of real estate boards	

Advertising

HOLC launches advertising drive in 62 newspapers to sell 10,000 homes. *il Ptr Ink* 204:38 Ag 6 '43

Finance

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Bonds, Real estate	Housing finance
Building—Finance	Mortgages
Home ownership—Finance	

Securities

See also

Bonds, Real estate

Detroit

Gardens for sale; Detroit creamery farm broken into plots. *Business Week* p37 F 27 '43

New York (city)

New York city in the postwar period. H. Held. *Harvard Business R* 21 n04:455-71 JI '43

Real estate securities. *Comm & Fin Chr* 158:904 S 2 '43

Southwestern states

Boom in the Southwest. R. P. Crawford. *Barron's* 23:11 My 24 '43

REAL PROPERTY

Modernization of real property law; suggestions for improving procedure in transfers of realty. R. G. Patton. *Trusts & Estates* 77:79-83 J '43

See also

Banks and banking—	Land tenure
Real estate operations	Mortgages
Farms	Real estate business
	Rent

Taxation

Inequities of real estate taxation. E. D. Loughman. *Trusts & Estates* 76:269-70, 272 Mr '43

Pattern of successful property tax administration: the Wisconsin experience; state supervision. H. M. Groves and A. B. Goodman. *J Land & Pub Util Econ* 19:141-52 My '43

Real estate tax called far reaching in effect. M. Y. Cooper. *Comm & Fin Chr* 156:2166 D '42

See also

Assessment maps

Valuation

Appraising slums for redevelopment. *il Am Bld* 65:62+ N '43

Real estate lending. H. Bruere. *Bankers M* 146:335-7 Ap '43

See also

Insurance, Fire—
Valuation of property

REAMERS

Faster method for sharpening gun-chamber reamers; Barber-Colman combination sharpening machine. *il Mach* 49:228+ D '42

Reamers; how to choose them, and how to use them. A. H. Korn. *diags Am Mach* 87:76-9 Ja 7 '43

Sizing reamer for restricted locations. H. Bernadt. *diag Ry Mech Eng* 117:375 Ap '43

Spiral reamer to straighten holes. *diag Ry Mech Eng* 117:129 Mr '43

REARRANGEMENTS, Molecular. See Molecular rearrangements**RECEIVABLES. See Accounts receivable****RECEIVERS**

Trustees as business managers; Canadian practice of trustee receivers and reorganization managers. F. R. MacKelcan. *Trusts & Estates* 77:152-6 Ag '43

See also

Bankruptcy	Railroads—Receiver-
Insurance companies	ships
—Receiverships	

RECEIVERS, Radio. See Radio receiving apparatus**RECIPES. See Advertisements—Cookbooks and recipes****RECIPROCAL insurance. See Insurance, Reciprocal****RECIPROCAL trade agreements. See Commercial treaties and agreements****RECLAIMED rubber. See Rubber waste****RECLAMATION bureau. See United States—Reclamation, Bureau of****RECLAMATION of land**

El Salvador reclaims farm land in malaria-control project. *For Comm W* 11:41 My 8 '43

Landfill disposal wins army favor. *il diags Eng N* 129:351-3 D 17 '42

Peat salvage and reclamation of bog area; explosives displace swamp materials. O. F. Burbank. *il diag Civil Eng* 13:425-6 S '43

See also

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RECOGNITION (psychology)

Split-second recognition, a new allied weapon; identification of planes, ships, and armored land vehicles at speeds up to 1/100 of a second. *il Aviation* 42:119+ JI '43

RECOMBINATION of atoms. See Atoms—Recombination**RECONSTRUCTION (European war, 1914-1918)**

Work of reconstruction cooperatives in France after first World war. V. J. Tereshchenko. *Monthly Labor R* 57:278-83 Ag '43

RECONSTRUCTION (World war, 1939-)

Adequate living standard for all; Goals for America; abstracts. S. Chase. *Bankers M* 145:447-8 N '42; *Comm & Fin Chr* 156:1806 N 19 '42; *Credit & Fin Management* 44:9, 23-6 D '42

America dreams a new frontier. E. A. Johnston. *il Dun's R* 52:7-9+ JI '43

A.B.A. economic policy commission sees need for stabilization machinery; place of the United States in post-war economy. *Comm & Fin Chr* 158:1501-2, 1314-15 S 30 '43

American programme for a permanent world order; the Commission to study the organization of peace. *Int Labour R* 47:617-19 My '43

As I see it! reconstruction of Europe. C. Benedict. *il Mag of Wall St* 72:609+ S 18 '43

Begin apprenticeship to world peace; Detroit speech; abstracts. H. A. Wallace. *Comm & Fin Chr* 158:427 JI 29 '43; *Trusts & Estates* 77:124-5 Ag '43

Britain's plans are bold. D. Haskell. *il Arch Rec* 93:49-56 Mr; 42-9 Ap '43

Can the public utilities police the peace? international system controlled by Anglo-American interests proposed. F. X. Welch. *Pub Util* 31:333-41 Mr 18 '43

Chemical engineer in reconstruction. C. S. Garland. *Engineering* 155:316-17, 325-6 Ap 16-23 '43

China's postwar plans; Chinese are blueprinting roads, railroads, airways, factories and they are already talking loans, markets, terms. T. H. White. *il Fortune* 28:150-6, 158+ O '43

Common United nations policy—now! F. Czernin. *Ann Am Acad* 228:11-15 JI '43

Cooperation plan; Canadian chamber of commerce. *Business Week* 1104+ Je 19 '43

Co-operative movement and post-war reconstruction. J. McFadyen. *Int Labour R* 47:417-25 Ap '43

Declaration of purpose; Mr Churchill's speech. *Economist* 144:381-3, 386-7 Mr 27 '43

Draftsmen of the new world; a report on the principal plans for postwar political reconstruction. R. L. Buell. *Fortune* 27:128-9+ F '43

Effective currency control of utmost importance in post-war reconstruction. J. T. Madden. *Comm & Fin Chr* 158:834 Ag 26 '43

Electrical engineers and the post-war period. C. L. Fortescue. *bibliog Inst E E J* 90 pt 1:20-8 Ja '43; Same cond. *Engineering* 154:315-16, 338 O 16-23 '42; Same cond. *Engineer* 174:300-1, 312-14 O 9-16 '42

Employment in the post-war switchback period. M. T. Copeland. *Trusts & Estates* 75:462 N '42

Engineers on reconstruction. *Economist* 144: 83 Ja 16 '43

European reconstruction planning; Allied technical advisory committees. *Int Labour R* 48:68-70 JI '43

Europe's economic reconstruction; an enormously difficult task. *For Comm W* 13:17 O 30 '43

Far Eastern compensation. *Economist* 143: 739-40 D 12 '42

Fortune management poll; executives consider postwar prospects. *Fortune* 28:12, 18+ O '43; Abstract. *Management R* 32:442-4 D '43

Industry ponders postwar disposition of facilities. *Steel* 113:141-3 O 11 '43

Inter-American recommendations on post-war planning; reconstruction planning United States, India, Great Britain, South Africa. *Int Labour R* 47:211-22 F '43

International aspects of postwar food and agriculture. F. L. McDougall. *Ann Am Acad* 225:122-7 Ja '43

League of nations post-war program for world trade and stable economy in all nations. *Comm & Fin Chr* 158:119 JI 8 '43

Letter—and a reply; war and a girl's part in it. *Sci Am* 168:17 Ja '43

Massachusetts prepares for tomorrow. J. W. Culliton. *Harvard Business R* 21 no 3:298-308 [Ap] '43

RECONSTRUCTION (World war, 1939-)—*Cont.*
 Needed for the postwar period; public works to absorb excess employables. W. N. Carey. *il Civil Eng* 13:462-4 O '43
 New world-wide democracy of United Nations urged in Wilson's birthday address; abstracts. H. A. Wallace. *Comm & Fin Chr* 157:71 Ja 7 '43; *For Comm W* 10:3+ Ja 9 '43
 Our goal, personal security, national prosperity. S. Welles. *For Comm W* 9:3+ D 12 '42
 Our official postwar line; unconditional surrender, then: a world of international trade, national sovereignties, four freedoms, and more than four contradictions. *Fortune* 27:86-8+ Mr '43
 Our stake in the pre-peace conferences. *il Business Week* p53-60 My 22 '43
 Over 137 government and private agencies engaged in research on post-war problems. *Comm & Fin Chr* 157:2088 Je 3 '43
 Pan-American jurists propose world order. *Comm & Fin Chr* 156:1984 D 3 '42
 Peaceful world of opportunity. J. H. Jones. *For Comm W* 11:16-17+ Ap 17 '43
 People's peace in the colonies. W. Benson. *Int Labour R* 47:141-68 F '43
 Planning for peace. G. B. Galloway. *Advanced Management* 8:64-7 Ap '43
 Planning for the postwar period. *Am Concrete Inst J* 15:1-4 S '43
 Planning for things to come. H. S. Osborne. *Elec Eng* 62:333-7 Ag '43
 Policies for post-war reconstruction in Great Britain; Scott committee and Uthwatt committee reports. *Monthly Labor R* 56:46-52 Ja '43
 Political principle must be base for economic reconstruction. N. Angell. *Comm & Fin Chr* 157:1933 My 27 '43
 Postwar goals for Americans; review of Twentieth Century trends study. M. R. T. Carter. *Credit & Fin Management* 45:9-10 Mr '43
 Postwar; Industrial conference board address; collective defense; economic illiteracy a stumbling block. N. Angell. *Mech Eng* 65:592-4 Ag '43
 Post-war industrial reconstruction in Europe. *For Comm W* 13:11 N 6 '43
 Postwar international economic position of the United States. M. Nadler. *Ann Am Acad* 228:92-100 Ji '43
 Post war planning and co-operation. H. V. Potter. *Chem & Ind* 62:91-3; Discussion. 93-4 Mr 6 '43
 Post-war planning digest news. Published by Citizens housing council of New York, 470 Fourth av, New York
 Post-war problems; address before New York board of trade. J. H. Jones. *For Comm W* 13:3-4 O 16 '43
 Post-war reconstruction. *Economist* 144:14-15 Ja 2 '43
 Post-war reconstruction: employers' need of organization. *Engineering* 155:383-4 My 14 '43
 Post war reconstruction will require new era of American business leadership. R. D. Calkins. *Comm & Fin Chr* 156:1805 N 19 '42
 Postwar world and the American tradition. H. W. Dodds. *Gen Elec R* 46:425-30 Ag '43
 Practical planning; civil engineers stage an exhibition on reconstruction. *il Electrician* 131:355-6 O 15 '43
 Prepare to occupy; need for mature, coordinated and flexible policy. *il Fortune* 27:90-5+ F '43
 Preparing for public works in the post war period. F. W. Herring. *Civil Eng* 13:315-16 Ji '43
 President offers Congress post-war program and security, work and relief system; reports of the National resources planning board. *Comm & Fin Chr* 157:1017, 1024-5 Mr 18 '43
 Private enterprise in the post-war world. E. L. Bernays. *Trusts & Estates* 75:463 N '42
 Reconstruction of Europe; how will we participate? to what extent? V. L. Horoth. *il maps Mag of Wall St* 71:211-15+ D 12 '42
 Reconstruction policy of the governments of Canada, the Union of South Africa, and the United States. *Int Labour R* 46:718-21 D '42

Re-education of post-war Europe is U.S. aim. *Comm & Fin Chr* 157:1502 Ap 22 '43
 Relations with Europe; prepared by committee of editors of Time, Life, and Fortune; proposal for a European council. *Fortune* 27:supp 1-21 Ap '43
 Sees U.S. post-war foreign aid comprising direct investments. J. T. Madden. *Comm & Fin Chr* 158:1590+ O 21 '43
 Shift from class to national legislation; role of state and private enterprise in post-war works and security. W. Churchill. *Trusts & Estates* 76:315-17 Ap '43
 Social and economic policy; speeches and proposals in Parliament. *Int Labour R* 47:345-54 Mr '43
 Some problems of postwar reconstruction in southeastern Asia. L. A. Mills. *Ann Am Acad* 226:137-50 Mr '43
 Strategy of post-war recovery; report of the Economic policy commission of the American bankers association. *il Banking* 36:24-6+ O '43
 Toward the mountain; an America at peace in years to come is a goal accessible to skill and courage. K. T. Compton. *il Tech R* 45:235-6+ Mr '43
 Transition from war to peace economy; analysis of an international report issued by Economic, financial and transit department of League of nations. E. J. Riches and L. B. Jack. *Int Labour R* 48:1-22 Ji '43
 Treasury outlines plan for United nations RFC bank. *Comm & Fin Chr* 158:1486+ O 14 '43
 Two stages of conversion to peace will require differing approaches. D. Tyerman. *Barron's* 23:3 Ag 2 '43
 U.S. and United nations to discuss methods of preparing for post-war problems. S. Welles. *Comm & Fin Chr* 157:844-5 Mr 4 '43
 United States as a power house of peace. D. Tyerman. *Barron's* 23:1 S 27 '43
 U.S. has economic, political responsibility to world in post-war period. H. C. Coombs. *Comm & Fin Chr* 157:1784 My 13 '43
 United States in a new world; reports on potential courses for democratic action. *il map Fortune* 25:supp 1-21 My; 26:supp 1-33 Ag; supp 1-21 D 42; 28:supp 1-13 N '43; Discussion 27:124+ My '43
 U.S. role as helper of post-war world. W. L. Hemmings. *Banking* 35:36-7 F '43
 Urges United nations to begin study now of political, economic reconstruction of Europe. J. T. Madden. *Comm & Fin Chr* 157:501 F 4 '43
 Uthwatt report; extracts and comments. *Arch Forum* 77:49-51 N '42
 When the war ends; review of Road we are traveling, 1914-1942, and Goals for America: a budget of our needs and resources by S. Chase. P. A. Samuelson. *Mech Eng* 65:360-1 Mr '43
 Where angels fear to tread: a contribution from general sociology to human ethics. W. C. Allee. *bibliog Science* 97:517-25 Je 11 '43
 World in revolution. W. A. Irwin. *Am Inst Banking Bul* 25:10-12 Ja '43
 See also National resources planning board

Bibliography

Research and post war planning; bibliography. pts 1-10 United nations information office, 610 5th av, New York 42-43
 Selected bibliography on postwar planning; sampling of books, pamphlets, magazine and newspaper articles by National planning association, Washington. *Steel* 112:66, 68-71 Mr 15 '43

Relief work

On order, goods for Europe; governments of countries to be reoccupied submit to Washington and London detailed schedules of what they will need for rehabilitation. *Business Week* p38+ Ji 17 '43
 Postwar European relief and rehabilitation program. *il Steel* 112:64, 66-7 Mr 8 '43
 Relief for the freed. *Economist* 143:757-8 D 19 '42
 Relief for world; Lehman's office ponders need for United nations controls. *Business Week* p79-80 My 29 '43
 Role of food in post-war reconstruction. J. E. Orr. *Int Labour R* 47:279-96 Mr '43

RECONSTRUCTION finance corporation

- Bank stock acquired by RFC not taxable, Supreme court rules, *Comm & Fin Chr* 167: 1021 Mr 18 '43
- Discount story of RFC's self insurance, *Ins Field (Pire ed)* 72:3-6 Mr 18 '43
- Unit insurance contracts may be renegotiated, *Nat Underw* 47:3 Ag 12 '43
- How to obtain a government mining loan, *Eng & Min J* 144:62 Ja '43
- Loans outstanding, end of month, 1938-1941, Survey of Our Business 1942 Sup p77-8 [supplemented in monthly numbers]
- RFC adopts plan for subsidiaries' insurance, *East Underw* 44:16 Mr 12 '43
- RFC cancels shore risk cover on imported stocks, *Nat Underw* 47:1 Ap 1 '43
- RFC finances Mexican refinery, A. M. Petty, *Nat Pet N* 35:9 Ag 25 '43
- RFC must follow the law in loans to mining companies, C. B. Henderson, *Eng & Min J* 141:67 9 Je '43
- RFC offers loans on stations, *Nat Pet N* 35:34 My 19 '43
- Station loan machinery set up by RFC mortgage co., *Nat Pet N* 35:8 Jo 23 '43
- Stockholders sue to ease control of Maryland Casualty by RFC, *Nat Underw* 47:16 Ap 1 '43; *Weekly Underw* 148:729 f. Ap 3 '43

RECORDING and statistical corporation

- Recording and statistical corporation; collates information for insurance companies, *East Underw* 44:16 Mr 6 '43

RECORDING instruments

- All vital drilling functions are recorded by new instrument, H. P. Simons, *Oil & Gas J* 41:123-5 Ap 15 '43
- Application of recording fluid level gauge to oil production, L. C. Hulpomny, *Oil Pet Eng* 14:133-4, 136 D '42
- Kinematic errors in inclined plane testers and methods for eliminating them, S. L. Gerhard, *Diags Rayon* 24:237-9; *Discussion*, 239-40 My '43
- Mechanical operation analyzer for induction regulator, R. V. Baker, *diag Elec W* 119: 1447 My 1 '43
- On-the-job adjustments of air-operated recorder controllers, J. G. Ziegler, *Oil Instru-* ments 16:394 7, 694-6 f. Jl. O '43
- Reading pulsating flows on an orifice meter chart, H. H. Reeson, *Pet Eng* 14:151 f. My '43

See also

- | | |
|--------------------|------------------------|
| Aeronautic instru- | Spectrograph |
| ments | Spectrophotometers |
| Oncillographs | Speed indicators |
| Photometers | Water level indicators |
| Smoke recorders | |

RECORDING instruments, Electric

- Amplifying and recording technique in electro-biology, with special reference to the electrical activity of the human brain, G. Parr and W. G. Walter, *Oil Instr* 16 E J 90 pt 3:129-42; *Discussion*, 142-4 S '43
- Application of turbine-supervisory instruments to power generating equipment, J. L. Roberts and H. M. Dimond, *Oil S M E Trans* 65:803 7; *Discussion*, C. C. Franck, O '43
- Appropriate regulator range; regulators controlled by graphic analyzer, E. D. Hartzell and R. C. Thompson, *diag Elec W* 119: 1144-6 My 1 '43
- Autographic load elongation apparatus for fibers, A. M. Sookne and H. A. Rutherford, *biblog pls diags J Research Nat Bur Stand* 31:26-31 Jl '43; *Same*, *Rayon* 24:342-3, 414-15 Jl-Ag '43
- Better ink records with recording instruments, L. J. Lunas, *diags Power Pl Eng* 47:65-7 Ja '43
- Contact bounce, P. H. Estes, *diag Gen Elec R* 16:321 3 Jo '43
- Continuous electronic pulse-rate indicator and recorder, M. M. Schwarzschild and M. C. Shelesnyak, *biblog diag R Sci Instr* 13:496-501 N '42
- Dorr Torq recorder to provide an accurate continuous record of thickener operation, *diag Paper Tr J* 117:18 Jl S '43
- Electric brain remembers what happens in a rectifying circuit, W. E. Padala, *Oil Sci Am* 169:25-6 Jl '43

Electrochemist adopts automatic recording

- devices used in medical research, J. Gorrrell, *Oil Electrochem Soc Trans* 83 (preprint 22):263-8 Ap '43
- Electronic curve tracer, P. Padva, *diag Electronics* 16:87-90 f. P '43
- Film-recording seismograph, H. Benloff and others, *diag Electronics* 16:89-92 My '43
- Flight recorder for aircraft, H. D. Giffen, *diag Radio N* 23:14-17 f. Ap '43
- Flight-testing equipment for large aircraft, W. T. Dickinson, *diag S A E J* 51:139-47 Ap '43
- Frequency variations; a chart recording instrument, *diag Elec R (Lond)* 132:415-16 Mr 26 '43
- Hydrogen ion concentration; new German recording method, *diag Electrician* 131:65-6 Jl 16 '43
- Michigan checking recorder, *diag Steel* 112:132 f. My 17 '43
- Minimum of graphic equipment yields maximum of data; graphic meters supplemented by transfer switches in load and voltage surveys; Indianapolis power & light company, G. H. Kelsay, *diag Elec W* 119:750-2 Mr 6 '43
- Multiple recording manometer for use in wind tunnels, F. J. Campbell, *diag J Aeronautical Sci* 10:313-17 O '43
- New pressure and detonation pickups, *diag Aeronautical Eng R* 2:107 F '43
- Photoelectric potentiometer recorder, D. F. Huang, *diag Gen Elec R* 46:623-5 N '43
- Power factor recorders have synchronous clocks, P. MacChahan, *diag Elec W* 118:1816 N 28 '43
- Recording audio analyzer, *diag Electronics* 16:100-3 f. Jl '43
- Recording dilatometer for metal specimens, L. R. Stanton, *diag Engineering* 155:518-19 Je 26 '43
- Simplified flow recorder for Parshall flumes; Wellsville sewage treatment plant, J. D. Slough, *diag Water Works & Sewerage* 30: 285-6 Ag '43
- Survive ambient temperature recorder, *diag Engineering* 155:206 Mr 13 '43
- Traffic count printed hourly by photoelectric recorder, *diag Electronics* 16:130 f. My '43
- Vulite radio recorder, H. D. Giffen, *diag Aeronautical Eng R* 2:9 f. Jl '43; *Same* *abr. Automotive & Aviation Ind* 39:24-8 Ag 15 '43
- Why the weld recorder, J. R. Fetcher and J. Van Den Beemt, *diag Welding J* 22: 516-18 O '43

*See also***Demand meters****RECORDS***See also*

- | | |
|-------------------------|----------------------|
| Accounting | Inventories |
| Banks and banking— | Invoices |
| Records | Microfilm records |
| Card system in busi- | Motor bus lines— |
| ness | Records |
| Electric utilities— | Payrolls—Records |
| Records | Photographic records |
| Factories—Records | Production control |
| Files and filing (docu- | Punched card system |
| ments, etc.) | Railroads—Records |
| Forms and blanks, | Sales records |
| Business | Shadow pictures |
| Gantt charts | Stores systems |
- RECORDS, Disposal of.** *See* Files and filing (documents, etc.)
- RECORDS, Microfilm.** *See* Microfilm records
- RECORDS, Photographic.** *See* Photographic records
- RECORDS, Preservation of**
- Air-raid protection for valuable records, *Gas Age* 31:29 31 f. Mr 11 '43
- How Western Electric safeguards its records, *diag Am Business* 13:14-15 F '43
- Irreplaceable values; fire menace to records and historic documents, P. W. Eberhardt, *diag Nat Safety N* 48:66-7 f. O '43
- Photography in accounting, D. S. Potts, *diag N A C A Bul* 24:433-40 D 15 '42

See also

- Microfilm records
- Paper—Durability

RECREATION

Community recreation in 1942. *Monthly Labor R* 57:284-6 Ag '43

Industrial recreation in wartime. *F. R. Eastwood. il Am Business* 13:20-1-4 JI '43

Keeping plant people fit; North American aviation, inc. K. L. Kellough. *il Factory Management* 101:95-7 Ja '43

Providing worker recreation; National cash register company. J. E. Ernst. *il Factory Management* 101:98-100 Ja '43

See also

Swimming pools
United States—Army

—Recreation
Vacations

RECREATION areas

Recreation livelhood area; northern Wisconsin and upper Michigan. G. S. Wehrwein and H. A. Johnson. *bibliog map J Land & Pub Util Econ* 19:193-206 My '43

RECREATION buildings

Mac Dill field, Florida; architects in uniform produce a new post exchange. *il diags plans Arch Forum* 78:55-60 Je '43

Service men's centers; Pepsi-Cola co., New York and Washington canteens. *il plans Arch Forum* 77:38-43 D '42

Welfare building, Naval training station, Great Lakes, Ill.; views, plans, and construction outline. *Arch Forum* 78:55-60 Mr '43

See also

Casinos
Skating rinks
Swimming pools

also United service organizations for national defense—Buildings

RECREATION rooms

British hostels, social rooms. *il diags plan Arch Forum* 78:68-70 Ja '43

RECTIFICATION. See Crystallization**RECTIFICATION**

Batch rectification; effect of fractionation and column holdup. R. Edgeworth-Johnstone. *bibliog il Ind & Eng Chem* 35:407-10 Ap '43

See also

Distillation

RECTIFIERS, Electric. See Electric rectifiers**RECTIFIERS, Radio.** See Radio rectifiers**RECTIFYING apparatus.** See Distillation apparatus**RECTIFYING column.** See Distillation apparatus**RED**

Single judgment test for red-green discrimination. L. H. Hardy. *il Opt Soc Am J* 33:512-14 S '43

See also

Madder

RED brass. See Brass**RED caps.** See Porters**RED cedar oil.** See Cedar oil**RED cross**

Declares Red cross should not be subject to unionization. N. Davis. *Comm & Fin Chr* 157:2087 Je 3 '43

FDR opens Red cross drive for \$125,000,000. *Comm & Fin Chr* 157:929 Mr 11 '43

March proclaimed as Red cross month by President Roosevelt. *Comm & Fin Chr* 157:846 Mr 4 '43

Red cross seeks advertising aid for its 1943 war fund campaign. *Ptr Ink* 202:148-9 F 5 '43

Red cross spent \$62,000,000 for foreign relief in first year of the war. *Comm & Fin Chr* 156:2336 D 31 '42

Red cross war fund over goal. *Comm & Fin Chr* 157:1683 My 6 '43

Use of Red cross in advertising. *Adv & Sell* 36:78 N '43

RED Cross nutrition classes. See Nutrition education**RED lead.** See Lead oxides**RED oils.** See Oleic acid; Turkey red oil**RED water**

Occurrences of red water near San Diego. W. E. Allen. *Science* 96:471 N 20 '42

Unrecorded cause of red water; trocophore larvae. W. L. Schmitt. *Science* 98:39 JI 9 '43

REDEVELOPMENT corporations. See City planning**REDUCTION, Chemical**

Catalytic reduction by formic acid under pressure; a comparison of copper and nickel as catalysts. R. R. Davies and H. H. Hodgson. *Chem Soc J* p281-2 Je '43

Catalytic reduction of cholesterol α -oxide. H. E. Stavely. *bibliog Am Chem Soc J* 64:2723-4 N '42

Catalytic reduction of dehydrocholic acid in presence of Raney nickel. W. M. Hoehn and H. E. Ungrnade. *bibliog Am Chem Soc J* 65:124 Ja '43

Direct reduction of certain carboxylic acids to aldehydes, and the preparation of undecaldehyde by a modified Blaise reaction. R. R. Davies and H. H. Hodgson. *Soc Chem Ind J* 62:128 Ag '43

Monoreduction of dinitronaphthalenes in acid solution and of 1:5- and 1:6-dinitronaphthalene by aqueous sodium sulphide. H. H. Hodgson and H. S. Turner. *Chem Soc J* p318-19 JI '43

Reduction of ferric oxide by hydrogen. F. Olmer. *bibliog diags J Phys Chem* 47:317-25 Ap '43

Reduction of quinoline and certain substituted quinolines in liquid ammonia. C. M. Knowles and G. W. Watt. *bibliog Am Chem Soc J* 65:410-12 Mr '43

Reductions with nickel-aluminum alloy and aqueous alkali; quantitative determination of halogens in organic compounds. E. Schwenk, D. Papa and H. Ginsberg. *Ind & Eng Chem Anal* ed 15:576-7 S 15 '43

Simplified technique in the use of liquid amalgam reducers. G. F. Smith and L. T. Kurtz. *bibliog diag Ind & Eng Chem Anal* ed 14:854-5 N 15 '42

Some factors affecting the reduction of silver oxalate. T. H. James. *bibliog J Chem Phys* 10:744-6 D '42

Study of the products obtained by the reducing action of metals upon salts in liquid ammonia solution; the reduction of complex cyanides. J. W. Eastes and W. M. Burgess. *Am Chem Soc J* 64:2715-16 N '42

Symmetrical biaryls from diazotized amines; reducing agents. E. R. Atkinson and others. *bibliog Am Chem Soc J* 65:476 Mr '43

See also

Hydrogenation Polarography
Metallurgy Reducers

REDUCTION, Electrolytic

Addition of hydrogen to multiple carbon-carbon bonds; the electrolytic reduction of alkyl and aryl acetylenes. K. N. Campbell and E. E. Young. *bibliog Am Chem Soc J* 65:965-7 My '43

Electrolytic reduction of amides; *N,N*-dimethylvaleramide and acetanilide. S. Swann, jr. *bibliog Electrochem Soc Trans* 84 (preprint 8):67-73 O '43

Electrolytic reduction of cinnamic acid; a new preparative method for β -diphenyladipic acid. C. L. Wilson and K. B. Wilson. *bibliog Electrochem Soc Trans* 84 (preprint 4):25-35 O '43

Electrolytic reduction of *p*-nitrobenzoic acid to *p*-aminobenzoic acid. P. H. Ravenscroft, R. W. Lewis and O. W. Brown. *bibliog Electrochem Soc Trans* 84 (preprint 2):11-17 O '43

Electrolytic reduction of trinitro aromatic compounds to triamines by use of a carrier catalyst. R. W. Lewis and O. W. Brown. *bibliog Electrochem Soc Trans* 84 (preprint 1):1-9 O '43

REDUCTORS

Determination of iron in the presence of chromium and titanium with the Jones reductor. F. S. Grimaldi, R. E. Stevens and M. K. Carron. *bibliog Ind & Eng Chem Anal* ed 15:387-8 Je 15 '43

REDWOOD

Botanical name of the giant sequoia. G. N. Jones. *Science* 98:406-7 N 5 '43

California redwood, 1938-1941. Survey of *Cur Business* 1942 Sup p135 [supplemented in monthly numbers]

Dyeing of redwood fibers. H. Luttringhaus. *il Rayon* 24:489-90 S '43

REDWOOD—Continued

- New plastic from redwoods. J. M. Crowe. *Chem Ind* 52:611 My '43
 Plastic developments from redwood. H. F. Lewis. *il Mech Eng* 65:515-17 J1 '43; Same cond. *Mod Plastics* 20:91-2+ J1 '43
 Redwood fiber fills war needs. *Textile Col* 65:299 J1 '43
 Steering with redwood wheels. *il diag Mod Plastics* 20:77-81+ Ja '43

REFERENCE books

- See also
 Bibliography
 Periodicals—Indexes

Bibliography

- Business reference publications; trade directories, consolidated catalogs, encyclopedias, and buyers' guides. *Ind Marketing* 27:109-10 O 25 '42
 Short cuts to information; time savers for teachers, librarians, and all who must find the answers. Z. Brown. p97-124 pa 25c Wilson, H.W. '43 [reprinted from *Library key*]
 Tools of 1941 and 1942. (Business literature v 15, no 5) 2p Business branch, Newark public library, Newark, N.J. Ja '43

REFERENCE work. See Libraries—Reference work**REFINERIES, Petroleum. See Petroleum refineries****REFLECTION (optics)**

- Analysis of errors in a reflecting prism. P. W. Stevens. *diags Opt Soc Am J* 33:74-8 F '43
 Determination of optical constants of metals by reflectivity measurements. J. R. Collings and R. O. Bock. *il R Sci Instr* 14: 135-41 My '43
 Factors influencing the reflectivity of white Portland cement concretes. C. W. Muhlenbruch and E. H. Miller. *diag Am Soc T M Proc* 42:775-85; Discussion. 786 '42
 Fresnel reflection of diffusely incident light. D. B. Judd. *bibliog J Research Nat Bur Stand* 29:329-32 N '42
 Increasing the reflectivity of concrete by additions of high-calcium lime. C. W. Muhlenbruch and B. Marcini. *Eng N* 131:325 Ag 26 '43
 Properties of low reflection films produced by the action of hydrofluoric acid vapor. F. H. Nicoll and F. E. Williams. *il Opt Soc Am J* 33:434-5 Ag '43
 Vacuum evaporated films on glass; metallic reflecting films. S. Bateson. *il Can Chem & Process Ind* 27:438-40 Ag '43

See also

- Infrared rays
 Reflectometers

REFLECTION of electrons. See Electrons—Reflection, scattering, etc.**REFLECTOMETERS**

- Grading of soft sugars; photoelectric reflectance measurements. T. R. Gillett and A. L. Holven. *bibliog il diags Ind & Eng Chem* 35:210-14 F '43
 Photoelectric grading of sugars. H. Seymour. *diags Electrician* 131:137-8 Ag 6 '43
 Practical factory reflectometer. E. H. Addison and R. A. Peterson. *il diags Paint Oil & Chem R* 105:9-12 My 6 '43

REFLECTOR buttons

- Reflectorized guide posts help driving on Wyoming highways; lessening hazards of snow and fog. C. W. Beaver. *il diag Roads & Sts* 85:39-40 N '42

REFLECTORS

- Alternate materials for luminaires. E. H. Robinson. *il diags Illum Eng* 37:691-9 D '42; Excerpts. *Elec W* 118:1446-7 O 81 '42
 Aluminum saved; silvered-glass reflectors. *il Gen Elec R* 45:711 D '42
 Design of plane-mirror reflectors for fluorescent lamps. D. P. Severance. *diags Illum Eng* 38:45-57 Ja '43
 Design of reflectors for fluorescent lamps. R. D. Douglass and D. P. Adams. *diags Illum Eng* 38:141-7 Mr '43

Testing

- Photocell photometry of reflex reflectors. W. F. Little and A. E. Parker. *il diags Illum Eng* 37:789-94; Discussion. 795-7 D '42

REFORESTATION. See Forests and forestry**REFRACTION, Double**

- Origin and the complications of electric double refraction and of electric dichroism in dilute dispersed systems. W. Heller. *Rs Mod. Phys* 14:390-409 bibliog(82 references, p408-9) O '42

REFRACTION, Molecular

- Additive physical properties in hydrocarbon mixtures. R. M. Deanesly and L. T. Carleton. *bibliog J Phys Chem* 46:859-70 N '42
 Molar dispersion and refraction of free and bonded ions. N. Bauer and K. Fajans. *bibliog Am Chem Soc J* 64:3023-34 D '42

REFRACTIVE index

- Analytical data for the systems carbon tetrachloride-acetic acid-benzene and carbon tetrachloride-tetrachloroethylene. W. R. McMillan and H. J. McDonald. *Ind & Eng Chem Anal* 15:114-16 F 15 '43
 Density and refractive index of cumene. J. E. Troyan. *bibliog Am Chem Soc J* 64:3056 D '42
 Fibre refractometer. K. Freeman and J. M. Preston. *bibliog il Textile Inst J* 34: T19-28 My '43
 Freezing points, densities, and refractive indexes of the system glycerol-ethylene glycol-water. J. A. Spangler and E. C. H. Davies. *bibliog Ind & Eng Chem Anal* 15: 95-9 F 15 '43
 Magneto-optic rotation; acetic and chloroacetic acids in polar and non-polar solvents. C. E. Waring, S. Steingiser and H. H. Hyman. *Am Chem Soc J* 65:1066-8 Je '43
 Measurement of anomalous dispersion in opaque dielectrics. A. W. Lawson. *diags R Sci Instr* 14:38-43 F '43
 Paraffin hydrocarbons; correlation of physical properties. A. W. Francis. *bibliog Ind & Eng Chem* 35:442-9 Ap '43
 Physical properties of terpenes; the system α - and β -pinene. R. E. Fugitt, W. D. Stallcup and J. E. Hawkins. *bibliog Am Chem Soc J* 64:2978-81 D '42
 Refractive indices and densities of normal saturated fatty acids in the liquid state. A. Dorinson, M. R. McCorkle and A. W. Ralston. *bibliog Am Chem Soc J* 64:2739-41 D '42
 Ternary system: dioxane-ethanol-water. C. H. Schneider and C. C. Lynch. *bibliog Am Chem Soc J* 65:1063-6 Je '43
 Transformation region of glass. A. Winter. *bibliog diags Am Cer Soc J* 26:189-200 Je 1 '43

See also

- Refractometers

REFRACTOMETERS

- Fibre refractometer. K. Freeman and J. M. Preston. *bibliog il Textile Inst J* 34:T19-28 My '43

- Sources of error in precise commercial refractometry. L. W. Tilton. *bibliog diags J Research Nat Bur Stand* 30:311-28 Ap '43

REFRACTOMETRY

- Refractometric determination of casein in skim milk. J. G. Brereton and P. F. Sharp. *bibliog Ind & Eng Chem Anal* 14:872-4 N 15 '42

REFRACTORY concrete. See Concrete, Refractory**REFRACTORY materials**

- Action of magnesium and aluminum salts as binders for refractories. *Brick & Clay Rec* 103:43 Ag '43
 American ceramic society meeting; abstracts of papers on refractories. *Brick & Clay Rec* 102:19-21 My '43
 Amorphous graphite in the open-hearth. R. J. Zemanek. *il diags Steel* 111:86-7, 89 N 23 '42
 Basic open hearth, modern plant and practice. J. A. Davies. *Blast F & Steel Pl* 31: 1064, 1066 S '43
 Behavior of tuckstones in a glass tank furnace; abstract. Partridge. *Glass Ind* 24:71 F '43
 Blast furnace refractories; abstract. R. E. Birch. *Metal Prog* 43:932+ Je '43
 Boiler firebox maintenance; refractories and the importance of their proper use. K. Steiner. *il Heating-Piping* 15:174-5 Ap '43

REFRACTORY materials—Continued

Burned out furnace can be replaced in 30 minutes with castable refractories; furnaces used in Penstrate process. Brick & Clay Rec 103:58 S '43

Carbon, a refractory material. F. J. Vosburgh. *il* diags Steel 112:106-8, 110+ Ap 5; 118, 120, 125+ bibliog(p147) Ap 12 '43

Casting-pit refractories as source of non-metallic inclusions in steel; abstracts. J. R. Rait. *Am Cer Soc Bul* 22 (Cer A 22):154-5 S 15 '43; *Iron Age* 152:45 S 30 '43; *Metals & Alloys* 18:834+ O '43

Chrome ore and chrome magnesite; steel plant refractories. J. H. Chesters. *il* *Iron Age* 152:68-71 N 11; 52-5, 166, 168 bibliog(p 166, 168) N 18 '43

Chromite and magnesite refractories. G. E. Seil. *Blast F & Steel* Pl 30:1304-5 N '42

Compound merwinite ($3\text{CaO} \cdot \text{MgO} \cdot 2\text{SiO}_2$) and its stability relations within the system CaO-MgO-SiO_2 (preliminary report). E. F. Osborn. bibliog diags *Am Cer Soc J* 26:321-32 O 1 '43

Conserving foundry refractories. C. E. Bales and F. McCarthy. bibliog *Foundry* 71:95+ My '43

Controlling factors for efficient rotary kiln operation; refractory lining materials and their proper installation. R. Gibbs. *Rock Prod* 46:74-5 Mr '43

Crucibles for centrifugal casting, a big new refractory market. diags *Brick & Clay Rec* 103:44 Ag '43

Discussion on open-hearth furnace refractories. *Iron & Steel Inst J* 145:307-22 no 1 '42; *Abstract. Engineering* 153:505 Je 26 '42

Dolomite-base refractories. A. Schallis. map U S Bur Mines Information Circle 7327:1-11 '42

Dolomite refractories. J. H. Chesters. *il* *Iron Age* 152:48-53 Ag 5; 86-9+ bibliog(p89+) Ag 12 '43

Factors insuring satisfactory industrial furnace refractory construction. J. Wallerius and F. Ericson. *il* *Metal Prog* 44:632-4 O '43

Glass tank regenerator refractories; abstract. C. A. Brashares. *Cer Ind* 41:46+ O '43

How refractories are used in gigantic installation at Basic magnesium, inc. F. A. McCann. *il* *Brick & Clay Rec* 103:51-4 S '43

Linings of large basic open-hearth tilting furnaces. A. Jackson. *Iron & Steel Inst J* 146:9-16 no 2 '42; *Same. Engineering* 154:216-17, 224-5 S 11-18 '42; *Same. Blast F & Steel* Pl 31:316-19 Mr '43; *Discussion. Iron & Steel Inst J* 146:16-19 no 2 '42

Magnesite refractories. J. H. Chesters. bibliog *il* *diag Iron Age* 151:46-51 Je 3; 75-81 Je 10 '43

Maintenance of the furnace linings in large basic open-hearth tilting furnaces by the use of chrome ore, magnesite and serpentine. A. Jackson. *Engineering* 156:265 O 1 '43

Need for continued production now overshadowed economics in refractory use. H. M. Kraner. *Steel* 112:83 Ja 25 '43

New developments in the production of magnesia for refractories; abstract. G. E. Seil. *Rock Prod* 45:63 D '42

Observations on solid-phase inversions of calcium orthosilicate, constituent of dolomite-silica brick. S. Zerfoss and H. M. Davis. bibliog *Am Cer Soc J* 26:302-7 S 1 '43

Properties of refractory materials, except fireclay; tabulation. S. M. Phelps, comp. *Metal Prog* 44:746 O '43

Ramming mix as refractory for desulfurizing ladles. C. E. Bales and D. R. Smith. diags *Brick & Clay Rec* 103:41-3 Ag '43

Ramming mixture for basic furnace bottoms; H-W Magnamix. *Blast F & Steel* Pl 31:700+ Je '43

Refractories employed in the construction of open hearth furnaces at Port Kembla, Australia. *Blast F & Steel* Pl 31:812-13 JI '43

Refractories in review, 1942. L. A. Smith. *il* *Blast F & Steel* Pl 31:81-3 Ja '43

Refractory materials 33d report of the Refractory materials joint committee of the Gas research board. *Blast F & Steel* Pl 31:248+ F '43

Refractory selection and maintenance problems. D. W. Wuerthele. *Paper Tr J* 116:48-50 My 13 '43; *Same cond. Paper Ind* 25:433-4+ JI '43

Report of the Nonmetals division, fiscal year 1942. O. C. Ralston and A. G. Stern. pls U S Bur Mines Rep of Invest 3675:27-31 F '43

Second report on refractory materials; summary. *Iron & Steel Inst J* 145:303-5 no 1 '42

Silica and semi-silica refractories. J. H. Chesters. *il* diags *Iron Age* 151:36-41 Ja 21; 44-9 bibliog(p47-9) Ja 23 '43

Silicon carbide linings in water gas generators. T. F. Papen. *il* diags *Am Gas J* 159:37-9 O '43

Silicon carbide refractories; abstract. C. Bruchhausen. *Metals & Alloys* 18:98+ JI '43

Silicon carbide solid linings for water-gas generators. A. S. Hall. diags *Gas Age* 91:24-6 Je 17 '43

Sleevebrick and nozzle problems. F. F. Franklin. *il* *Steel* 112:94, 96+ Ap 26 '43

Some refractory properties of Washington chromite. H. Wilson, K. G. Skinner and T. L. Hurst. pls U S Bur Mines Rep of Invest 3694:1-31 '43

Special kettle setting simplifies temperature-cycle control; heating varnish oil. W. J. Shore. *diag Chem & Met Eng* 49:93-5 D '42

Steel plant refractories; abstract. C. A. Brashares. *Metals & Alloys* 17:1232+ Je '43

Substitution of topaz, domestic kyanite, and synthetic mullite-corundum for India kyanite. T. N. McVay and H. Wilson. bibliog map *Am Cer Soc J* 26:252-66 Ag 1 '43

Supervision of bottom makeup results in increased output. J. Hysong. *Steel* 111:76+ N 23 '42

Use of lead oxide in glassmaking refractories. A. E. Badger, C. J. Uhrmann and A. C. Ottoson. *il* *Glass Ind* 24:465-7, 478+ N '43

Utility of refractories and resistance to destruction; chart. M. E. Holmes. *Brick & Clay Rec* 101:49 N '42

War accelerates technical progress. *Steel* 112:274+ Ja 4 '43

See also
Concrete, Refractory Fire brick
Cyanite Silica brick

Bibliography

Cecil Eugene Bales bibliography. *Am Cer Soc Bul* 22:114 Ap 15 '43

Manufacture

Kyanite insulating refractories by the dry-press method; abstract. J. W. Whittemore and A. W. Allen. *Am Cer Soc Bul* 22 (Cer A 22):75 My 15 '43

Pouring pit refractories manufactured by extrusion process. G. E. Mercer. *il* *Blast F & Steel* Pl 30:1408, 1410-11 D '42

Refractories industry assists Pan-American training program. *il* *Brick & Clay Rec* 102:50-1 My '43

Refractories life is increased by proper selection of binders. *Brick & Clay Rec* 102:48-50 Mr '43

See also
Magnesite

Prices

Refractories prices. Published in weekly numbers of *Iron age*

Study and teaching

Why mineral technology schools should offer courses in low- and high-temperature chemistry. R. B. Sosman. *Min & Met* 24:355 Ag '43

Testing

High temperature resistivity measurements on compressed granular refractory materials. G. H. Fetterley. *il* diags *Electrochem Soc Trans* 83 (preprint 2):5-18 Ap '43

Measurement of the thermal conductivity of fire-clay refractories. T. C. Patton and C. L. Norton, Jr. *il* diags *Am Cer Soc J* 26:350-8 O 1 '43

REFRACTORY materials—Testing—Continued

New refractory compositions resistant to molten rock phosphate. G. R. Pole and A. W. Beinlich, jr. *bibliog* *il diag* *Am Cer Soc J* 26:21-37 *Ja* 1 '43

Some properties of heat-setting refractory mortars. R. A. Heindl and W. L. Pendergast. *J Research Nat Bur Stand* 30:303-10 *Ap* '43

REFRACTORY research

Present status of ceramic research. G. A. Bole. *il Blast F & Steel Pl* 31:150 *Ja* '43

Report of committee on research, American ceramic society. *Am Cer Soc Bul* 22:240-1 *Jl* 15 '43

See also

Refractory materials

—Testing

REFRIGERANTS

Charging Freon-12 systems with methyl chloride or sulfur dioxide. *Refrig Eng* 46:245 *O* '43

Methyl chloride, an expedient substitute. H. G. Brandt. *diag Refrig Eng* 46:301-4 *N* '43

Pressure-temperature relationships of refrigerants; chart. *Power Pl Eng* 47:112 *O* '43

Safety and relief valves for refrigerants. E. K. Falls. *diags Refrig Eng* 45:257-62; Discussion. 262-3 *Ap* '43

Some characteristics of refrigerants. B. H. Spurlock, jr. *Refrig Eng* 46:107-9 *Ag* '43

Testing for leaks of refrigerants. R. J. Thompson. *Heating-Piping* 15:24 *Ja* '43

Text of newly amended refrigerant order M-28. *Heating-Piping* 15:168-73 *S* '43

Things to remember when using methyl chloride in place of Freon-12. *il Heating-Piping* 15:521-4 *O* '43

See also

Ammonia	Dichlorodifluoro-
Brine	methane
Carbon dioxide, Solid	Methyl chloride
Chlorofluoromethanes	Propane

Physiological effects

Safety measures against lethal gases; war gases and refrigerants; tests and treatments. W. D. McNally. *Refrig Eng* 45:24, 50-1 *Ja* '43

REFRIGERATING engineering

Effect of structural interruptions of insulation in warehouses. J. F. Stone. *diags Refrig Eng* 46:243-5 *O* '43

Low temperatures by means of multi-stage and other compression systems. H. Sloan. *diags Refrig Eng* 45:419-25 *Je* '43

Spotlighting refrigeration facts for apprentice engineers. A. B. Durjee. *diags Power* 37:370-1+, 437-8+ *Je-Jl* '43

See also

Cold storage	Refrigeration and
Cooling	refrigerating ma-
	chinery

Bibliography

1942 report of technical committee no.11; industrial and process engineering. *Refrig Eng* 44:392-3 *D* '42

Study and teaching

Officers at quartermaster school experienced in refrigeration. N. Horton. *il Refrig Eng* 46:95 *Ag* '43

Refrigeration quartermaster at the Camp Lee quartermaster training center. A. N. Johannesen. *il Refrig Eng* 45:10-11 *Ja* '43

REFRIGERATING industries

Earnings in manufacture of refrigerating equipment, 1942. O. F. Brown. *Monthly Labor R* 56:768-76 *Ap* '43

Functional operating organization of industry advisory committees to Refrigeration and air conditioning section, General industrial equipment division, War production board; chart. *Refrig Eng* 45:336 *My* '43

Refrigeration parts distribution in wartime. A. H. Holcombe, jr. *Refrig Eng* 44:365-9+ *D* '42

Refrigeration, the War production board, and advisory committees. M. G. Munce. *Refrig Eng* 46:22-4+ *Jl* '43

Task committee urges action to safeguard refrigerating equipment. *Refrig Eng* 45:183+ *Mr* '43

See also

Air conditioning in-	Cold storage lockers
dustries	Cooling
Cold storage	Refrigerators
<i>also</i> National refrigeration war council	

Service

Wartime crisis in the refrigeration service field. J. Wyllie, jr. *Refrig Eng* 46:162-3+ *S* '43

Statistics

Demand for refrigeration. D. L. Fiske. *Refrig Eng* 46:321-48 *bibliog*(p346) *N* '43

Australia

Some personal observations on Australia. R. E. Cherne. *Refrig Eng* 46:174 *S* '43

REFRIGERATING plants

See also

Cold storage	Piping (refrigerating
Cold storage ware-	plants)
houses	Refrigeration and
Ice plants	refrigerating ma-
	chinery

Accidents

Hair-raising refrigerating experiences. R. Baker. *Power Pl Eng* 47:86-7 *My* '43

Refrigeration industry has poor safety record; abstracts of papers at National safety congress. *Heating-Piping* 15:576-7 *N* '43

Fires and fire protection

Fire safety in the refrigeration field. W. H. Easton. *Refrig Eng* 46:232+ *O* '43

REFRIGERATION, Reversed. *See* Heat pump

REFRIGERATION and refrigerating machinery

Analyzing refrigerating troubles. G. Holman.

diag Power Pl Eng 47:92-3 *O* '43

Cold treatment of metals; refrigerating apparatus used in producing shrink fits, in hardening processes and in retarding aging in aluminum rivets. W. A. Phair. *flow sheet*

il diag Iron Age 151:37-43 *F* 25 '43

Compressor and condensing unit substitutions. S. R. Hirsch. *il Refrig Eng* 45:160-2 *Mr* '43

How air conditioning has advanced refrigeration. W. H. Carrier. *Mech Eng* 65:332-4 *My* '43

Ice skating rink at Buenos Aires. G. Joselevic and J. R. Joselevic. *Engineer* 176:193-4 *S* 3 '43

If Uncle Sam drafts your refrigerating compressors you can still maintain air conditioning service. W. L. Fleisher. *Power Pl Eng* 47:112, 114 *Ag* '43

Low temperature cabinets. R. H. Swart. *il diag Refrig Eng* 46:17-20, 39, 52-3+ *Jl* '43

Low temperature refrigeration requirements in war production. C. L. Olin. *il diags Refrig Eng* 45:33-7, 172-5 *F-Mr* '43

Natural humidity control. F. S. Graham. *diags Power Pl Eng* 46:112, 114+ *O*; 73-7 *D* '42; Discussion. C. T. Baker. *Refrig Eng* 47:98+ *Ap* '43

Non-condensibles in refrigerating systems. L. Buehler, jr. *diags Refrig Eng* 45:165-9 *Mr* '43

Operating engineer's criticism of refrigeration system design. G. Holman. *diags Power Pl Eng* 47:38-9 *N* '43

Portable refrigerators for the armed forces. M. Mooney. *il diag Refrig Eng* 45:169-70 *Mr* '43

Quartermaster specialists study foreign refrigeration equipment. C. B. Dunham. *il Refrig Eng* 46:242 *O* '43

Rayon plant in Virginia installs 750-ton refrigerating system. *Refrig Eng* 44:397 *D* '42

Recent developments in refrigeration. D. Gordon. *diags plans Inst Mech Eng J & Proc* 149:Proc 49-62, pl 1-6 *My* '43; Same cond. *Engineer* 174:402-5, 414-17 *N* 13-20 '42; Same cond. *Engineering* 154:396-7, 444-6, 484-5 *N* 13, *D* 4, 18 '42

Refrigerated test cabinet for army use. C. F. Moores. *diags Refrig Eng* 46:230-1 *O* '43

Refrigerating system at Front Royal. *il Power Pl Eng* 47:112 *Je* '43

REFRIGERATION and refrigerating machinery

—Continued

- Refrigeration as an aid in winning the war on the farm. D. Comin. Refrig Eng 45:82+ F '43
- Refrigeration in Iceland. R. E. Orcutt. Refrig Eng 45:327+ My '43
- Refrigeration in the oil refining industry. A. Roe. il Refrig Eng 46:225-9 O '43
- Refrigeration notebook. T. Mitchell. il diag Power 87:261, 331, 414, 473, 543, 630, 702, 761 Ap-N '43
- Salvaging existing refrigeration for emergency work. W. L. Fleisher. Refrig Eng 45: 235-8+ Ap '43
- Separation of gases; partial liquefaction by refrigeration. M. Ruhemann. bibliog diags Inst Pet J 28:215-31; Discussion. 231-9 O '42
- Study of the application of refrigeration to the cooling of spot-welding electrodes. W. F. Hess and others. il diags Welding J 22: sup555-67 N '43
- Too low a head pressure can cost money. A. B. Duryee. Power 87:755 N '43
- Water sprayed direct expansion coils. W. Goodman. diag chart Heating-Piping 15: 165-8, 243-8, 295-9, 350-2 Ap-Jl '43

See also

- | | |
|---------------------------------|-------------------------------------|
| Ammonia compressors | Evaporators |
| Car cooling | Freezing |
| Carbon dioxide, Solid | Gas in air conditioning |
| Cold storage | Gas in refrigeration |
| Compressors | Insulation (heat) |
| Cooling | Refrigerants |
| Cooling equipment | Refrigerating plants |
| Cooling of water | Refrigeration on cars, trucks, etc. |
| Electricity in air conditioning | Refrigerator cars |
| Electricity in refrigeration | Refrigerators |
| | Temperature, Low |

Bibliography

- 1942 report of technical committee no.10; agricultural products refrigeration. Refrig Eng 44:391-2 D '42

History

- Pioneers of refrigeration. E. C. Smith. Engineering 155:314 Ap 16 '43

Maintenance and repair

- Evening training classes for refrigeration service mechanics; Washington vocational high school, Pittsburgh. K. W. Krummell. Refrig Eng 45:171+ Mr '43
- Keep that head pressure down; how refrigerating engineers can lower power costs or reduce fuel consumption. J. D. Constance. diags Power 87:684-5+ O '43
- Preventive maintenance keeps refrigeration motors running. B. M. Brown and W. W. McCullough. il Refrig Eng 45:319-22+ My '43
- Refrigeration parts distribution in wartime. A. H. Holcombe, jr. Refrig Eng 44:365-9+ D '42
- Task committee urges action to safeguard refrigerating equipment. Refrig Eng 45:183+ Mr '43
- Wartime crisis in the refrigeration service field. J. Wyllie, jr. Refrig Eng 46:162-3+ S '43

Safety measures

- Cross-connection hazards from refrigerating equipment; abstract. L. C. Ajax. Eng N 130:446 Mr 25 '43
- Methyl chloride, an expedient substitute. H. G. Brandt. diag Refrig Eng 46:301-4 N '43
- Protection of pressure vessels with rupture discs. C. E. Huff. il Refrig Eng 46:312-15+ N '43
- Refrigeration notebook; safe working methods. T. Mitchell. il Power 87:331 My '43
- Safety and relief valves for refrigerants. E. K. Falls. diags Refrig Eng 45:257-62; Discussion. 262-3 Ap '43
- Things to remember when using methyl chloride in place of Freon-12. il Heating-Piping 15:521-4 O '43

Standards

- Revisions in A.S.R.E. circular no. 25, Tentative A.S.R.E. standard methods of rating and testing forced-circulation air coolers for commercial and industrial refrigeration. Refrig Eng 46:349 N '43

Tables, calculations, etc.

- Centrifugal compressors. J. R. Zwickl. diag Refrig Eng 45:177-83 Mr '43
- Insulation for low temperatures. J. F. Stone. Refrig Eng 46:31-7 bibliog(p36); Discussion. 37-8 Jl '43
- Thermal conductances and heat transmission coefficients of Freon refrigerants. W. H. Markwood, jr. and A. F. Benning. Refrig Eng 45:95-9 F '43

REFRIGERATION on cars, trucks, etc.

- Church containers used for blood shipments. il Refrig Eng 44:396 D '42
- Demand for refrigeration. D. L. Fiske. Refrig Eng 46:337-8 N '43
- Ice for cars cut. Business Week p38+ Jl 3 '43
- 1942 reports from members of technical committee no.12; refrigerated transport. Refrig Eng 44:393-4 D '42
- Universal cooler makes refrigeration units for army supply trucks. il Refrig Eng 46: 189 S '43

See also

- Food, Frozen—Transportation
- Refrigerator cars

REFRIGERATION on ships

- Conservation of perishables by refrigeration. M. E. Pennington. bibliog il Ind & Eng Chem 35:62-6 Ja '43; Same. Refrig Eng 45: 89-92 F '43
- Miniature cold-storage plants coming? For Comm W 12:20 S 18 '43
- Refrigeration installations aboard naval vessels. T. J. Bay. Refrig Eng 45:17-19 Ja '43
- Wartime refrigeration of foods for transport at sea; emergency method of transporting Canadian bacon over the North Atlantic route. W. H. Cook and T. A. Steeves. diags Refrig Eng 44:373-9 D '42

REFRIGERATION war council, National. See National refrigeration war council**REFRIGERATOR cars**

- American car and foundry company builds plywood refrigerator cars. il Ry Mech Eng 117:352+ Ag '43
- Army railroads build reefers in North Africa. il Ry Age 115:480-2 S 25 '43
- Bigger demand for reefer service. W. C. Kendall. Ry Age 114:591-2 Mr 20 '43
- I.C.C. Service order controls. Ry Age 113: 791 N 14 '42
- Overhead cars used for bacon to Britain. Refrig Eng 46:111 Ag '43
- Reefers must be used as box cars. Ry Age 115:349-50 Ag 28 '43
- Refrigerator cars of plywood. H. A. Dodge. il Ry Age 114:246-8 Ja 23 '43; Same. Ry Mech Eng 117:30-2 F '43
- Refrigerator cars with ice overhead. J. L. Townshend. il Refrig Eng 45:243-5 Ap '43

REFRIGERATORS

- Coolerator metal-less (almost) ice box beats materials shortage; has distribution in 7,000 stores in all 48 states and Alaska. J. H. Ganzer. il Sales Management 52:66+ F 15 '43
- Housing census: refrigeration equipment in occupied dwelling units for the United States, 1940. Gas Age 30:29 D 3 '42
- Ice boxes get aid; WPB unfreezes mechanical refrigerators, and nonmechanical models assured place in federal program. Business Week p72 Mr 13 '43
- Plate glass meets all tests as a refrigerator lining. il Cer Ind 40:36 F '43
- Postwar cooling; refrigerator makers looking for new sales appeal. Business Week p92-3 Ap 24 '43
- Sears, Roebuck converts unitless refrigerators for use with ice. Refrig Eng 46:58 Ja '43
- WPB announces 250,000 ice-boxes may be produced in second quarter of '43. Refrig Eng 45:330 My '43

See also

- Refrigeration and refrigerating machinery

Advertising

- Ice now gaining enlarged foothold in domestic refrigeration market; 69 Coolerator wholesalers out telling story to 5,000 retailers. Ptr Ink 201:78 N 20 '42

REFRIGERATORS—Continued**Rating**

Wartime ice boxes. Consumers' Research Bul 12:9-10 J1 '43

Standards

Proposed American standard method of computing food-storage volume and shelf area of automatic household refrigerators. Refrig Eng 46:insert 376a-376b My '43

REFRIGERATORS, Electric

Demand for refrigeration. D. L. Fiske. Refrig Eng 46:323-9 N '43

Advertising

Frigidaire must. il Sales Management 52:25 Mr 15 '43

Public service copy approach scores heavily for Frigidaire. il Ptr Ink 203:28+ Je 11 '43

Design

Post-war refrigerator. M. K. Brody and E. Arens. diags Refrig Eng 45:7-9+ Ja '43; Discussion (More about post-war refrigerators). G. Muffly. 45:165-8+ Mr '43

Portable refrigerators

Portable refrigerators developed for U.S. navy. il Product Eng 14:625 O '43

Portable refrigerators for the armed forces. M. Mooney. il diag Refrig Eng 45:169-70 Mr '43

Portable refrigerators provide interesting manufacturing features. Refrig Eng 44:410 D '42

Standards

Commercial electric-refrigeration condensing units. U S Nat Bur Stand Commercial Standard (Emergency) CS(E)107-43:1-19; pa 10c Supt. of doc. '43

Statistics

Mechanical refrigerator saturation in U. S. A. April 1, 1940; tabulation by states. Edison Elec Inst Bul 11:29 Ja '43

Testing

Air conditioned room used for refrigeration life tests; Philco corp. Engineering division, Philadelphia. H. K. Sellick. il plans Heat & Ven 40:58-60 F '43

Proposed American standard test procedures for household electric refrigerators (mechanically-operated). diags Refrig Eng 45: insert 376c-376f My '43

REFRIGERATORS, Gas

Care and use of gas equipment in the kitchen. Am Gas Assn Proc 1942:152-3

Advertising

Keeping the name alive though 100% busy; Servel Nutrition in industry and Fashions in rations campaigns. Adv & Sell 36:110+ Ag '43

Merchandizing

Post-war market for gas refrigeration indicated in apartment survey. R. G. Rees. Am Gas Assn Mo 25:113 Mr '43

REFUGEES

Anglo-U.S. parley on refugee problems ends; recommendations to U.S. and British governments. Comm & Fin Chr 157:1785 My 13 '43

British asylum. Economist 144:653-4 My 22 '43

Hope deferred; Anglo-American conference at Bermuda. Economist 144:541-2 My 1 '43

Hull suggests U.S.-British parley on refugee problems. Comm & Fin Chr 157:1118 Mr 25 '43

Impact of migration weighed; Bermuda conference on policy toward refugees. Business Week p72-3 Ap 24 '43

REFUSE, Utilization of

City struggles with garbage disposal; Oakland, Calif. program includes disposal of wet garbage to hogs and dry garbage to fill. il Eng N 130:756-8 My 20 '43

Experiments in the cooking of garbage for the destruction of trichinae in pork scraps. W. H. Wright and J. Bozicevich. Pub Health Rep 68:396-404 Mr 5 '43

REFUSE as fertilizer

Humus from rubbish and sludge. F. C. Temple. Pub Works 73:28 D '42

REFUSE collection

Salvage of war materials in relation to municipal refuse collection; abstract. C. La Ferle. Water & Sewage 81:44 Ja '43

Saniyan refuse-collection vehicle. il Water & Sewage 81:52 Ap '43

Wartime problems in refuse collection and disposal; with special reference to Washington, D.C. Pub Works 73:16+ D '42

Finance

Garbage collection services put on fee basis as operating cost rises. Eng N 130:822 Je 3 '43

Service charges for garbage collection. Pub Works 74:34+ J1 '43

REFUSE disposal

Army tries garbage disposal by grinding. R. N. Clark and A. Heifetz. il Pub Works 74: 21+ Mr '43

City struggles with garbage disposal; Oakland, Calif. program includes disposal of wet garbage to hogs and dry garbage to fill. il Eng N 130:756-8 My 20 '43

Garbage; granting by city of exclusive right of removal and disposal. Pub Health Rep 58:754 My 7 '43

Landfill disposal wins army favor. il diags Eng N 129:851-3 D 17 '42

Refuse disposal problems; abstract. W. A. Xanten. Eng N 129:730 N 19 '42

Sanitary fill experience at San Francisco. il Eng N 130:554-7 Ap 22 '43

Wartime problems in refuse collection and disposal; with special reference to Washington, D.C. Pub Works 73:16+ D '42

See also

Acid waste

Refuse collection

Refuse grinders

Refuse incinerators

Sewage disposal

Sewage disposal—

Sludge and refuse

mixing

Trade waste

Water pollution

Cost

Salvage value of materials fixes Sacramento garbage disposal fee. Eng N 129:712 N 19 '42

REFUSE grinders

Disposal; now in military service on land and at sea; also in commercial use. J. H. Powers. il diags Gen Elec R 46:175-7 Mr '43

REFUSE incinerators

Eight years' operation of Princeton's incinerator; with cost data. I. R. Riker. il Pub Works 74:14-16+ F '43

Incinerator and sewage plant operated jointly; Fairport, N.Y. F. A. Cary. il plan Pub Works 74:28-9+ Ja '43

You can build incinerators for apartment, commercial and industrial use. il diags Am Bid 65:60 J1 '43

REFUSE receptacles

Non-metallic garbage cans. Pub Works 74: 41 Ag '43

See also

Ash receptacles

REGESTER, Robert Thomas, 1903-

Sketch. por(p46) Civil Eng 13:47 Ja '43

REGIONAL agricultural credit corporation. See Agricultural credit**REGIONAL indexes. See Index numbers (economics)—Regional indexes****REGIONAL planning**

British plan big post-war building program. il Am Bid 65:54-5 Ja '43

Engineer, the architect, and the surveyor in town and country planning. H. J. Manzoni. Engineer 176:303-4 O 15 '43

National planning for town and country in Great Britain. Int Labour R 47:197-206 F '43

North Pacific planning project. Science 98: 275 S 24 '43

Objectives of area analysis in the northern Sierra Nevada. D. Weeks. J Land & Pub Util Econ 19:153-64 My '43

Planning, but for what? plan of the National planning association. E. R. Abrams. Pub Util 31:406-13 Ap 1 '43

REGIONAL planning—Continued

Regional development through industrial research. L. W. Bass. *Elec Eng* 62:496-7 N '43

Regional planning solves many wartime state and city problems. *Eng N* 130:550 Ap 22 '43

Town and country planning. *Economist* 144:174-5 F 6 '43

See also

City planning	Neighborhood planning
Land utilization	Zoning

REGISTERED mail insurance. See Insurance, Registered mail

REGISTERS (heating and ventilating)

Facing register and grille facts; War production board restrictions on production. C. J. Pearson. *Sheet Metal Worker* 34:40+-Je '43

Pressure losses in registers and stackheads in forced warm-air heating. A. P. Kratz and S. Konzo. *Il diags Ill J Eng Exp Sta Bul* 342:1-58 '43 (pa 65c); Abstract. *Sheet Metal Worker* 34:48-50 JI; 53-5 Ag '43

REGISTERS, Autographic

Plywood and hardwoods replace critical metals in new business machine. *Il diags Product Eng* 14:337-8 Je '43

REGRESSION analysis. See Correlation (statistics)

REGULATORS

See also

Control equipment	Temperature regulators
Governors (machinery)	Voltage regulators
Pressure regulators	

REHABILITATION. See Disabled—Rehabilitation; Soldiers, Disabled—Rehabilitation

REHABILITATION of mentally ill. See Psychological clinics

REHYDRATION. See Hydration

REICH test. See Sulfur dioxide—Analysis

REICHHOLD chemicals, inc.

News from the chemists' front. *Barron's* 23:25 S 20 '43

REID, Mont Rogers, 1889-1943

Sketch. G. J. Heuer. *Science* 97:571-2 Je 25 '43

REINARTZ, Leo Frederick, 1888-

Sketch. *por Min & Met* 24:352 Ag '43

REINEHR, John, 1866-

Portrait of a prominent citizen. R. Erickson. *Nat Safety N* 46:52 D '42

REINFORCED concrete. See Concrete, Reinforced

REINSURANCE. See Insurance—Reinsurance; Insurance, Casualty—Reinsurance

RELAPSING fever

Relapsing fever: the tick ornithodoros turicata as a spirochetal reservoir. G. E. Davis. *Pub Health Rep* 58:839-42 My 28 '43

RELATIVITY (physics)

Aristotle, Newton, Einstein. E. T. Whittaker. *Science* 98:249-54, 267-70 S 17-24 '43

Relativistic theory of excited spin states of the proton and the neutron. V. L. Ginsburg. *bibliog Phys R* 63:1-12 Ja 1 '43

See also

Quantum theory

RELAYS

Adjusting sensitive relays. R. T. Fisher. *Il diag Electronics* 16:70-3+-F '43

Automatic transmitter protection; electronic relay system. F. Marx. *diags Electronics* 16:98-9+-Je '43

Automatic welding-machine starter and its relation to maximum utilization of power and facilities; with cost data. N. E. Porter. *Elec Eng* 62:Trans 728-30 N '43

Cold cathode tubes used on relays. E. C. Schurch. *diags Elec W* 119:468-9, 630, 782, 980+-F 6-Mr 20 '43

Damage local and less with fault bus relaying. I. C. Eppley. *Il diags Elec W* 120:633-4 Ag 21 '43

Directional overcurrent relay. W. C. Morris. *Il diags Gen Elec R* 46:571-4 O '43

Effect of current-transformer residual magnetism on balanced-current or differential relays. H. T. Seeley. *diags Elec Eng* 62:Trans 164-9 Ap '43

Electrical remote control. C. J. Dorr and L. N. Galton. *Il diags Electronics* 15:60-4, 173-4 N; 57-60+-D '42

Filter bans 25-cycle from ground relay. R. B. Squires. *Il diags Elec W* 119:2164 Je 26 '43

Graphic solution of design problems involving sensitive relays. R. T. Fisher. *Il diag Electronics* 16:125-7+-O '43

How to connect controls, meters and relays for parallel 220-kv. transmission lines; diagram. *Elec W* 118:1980 D 12 '42

Improved form of sensitive relay. V. Legalais. *diags R Sci Instr* 14:51-2 F '43

Instance of corrosion in electric relays; phosphor-bronze springs. R. Wood and G. H. Wyatt. *Soc Chem Ind J* 62:110-11 JI '43

Interim report on application and operation of out-of-step protection. *bibliog diag Elec Eng* 62:Trans 567-73 S '43

Line relayed to adjust local stations to local loads. J. F. Pennington and J. T. Logan. *bibliog Il diag Elec W* 119:1295-7 Ap 17 '43

Neutral relays guard reactors, generators. H. E. Chambers. *diags Elec W* 119:634 F 20 '43

New generator differential relay. A. J. McConnell. *bibliog Il diags Elec Eng* 62:Trans 11-13 Ja '43

New high-speed balanced-current relay. V. N. Stewart. *bibliog Il diags Elec Eng* 62:Trans 553-5 Ag '43

New one-cycle directional overcurrent relay. W. C. Morris. *Il diags Elec Eng* 62:Trans 725-7 N '43; Same. *Gen Elec R* 46:571-4 O '43

One relay recloses several breakers. H. A. P. Langstaff. *diag Elec W* 120:1384 O 16 '43

Performance requirements for relays on unusually long transmission lines. F. C. Pogue and others. *bibliog diags Elec Eng* 62:Trans 275-83 Je '43

Pilot-wire circuits for protective relaying, experience and practice. *Elec Eng* 62:Trans 210-14 My '43

Pilot-wire relaying on a metropolitan system. T. G. LeClair and E. L. Michelson. *bibliog diags Elec Eng* 62:Trans 511-15 Ag '43

Pre-empting relays limit welder load. L. H. Church. *Elec W* 119:2158 Je 26 '43

Protective relaying for long transmission lines. A. E. van C. Warrington. *bibliog Il diags Elec Eng* 62:Trans 261-8 Je '43

Relay and switch upkeep and trouble shooting; data sheets. W. A. Holland. *Factory Management* 101:134+-F '43

Relay protection of tapped transmission lines. M. A. Bostwick and E. L. Harder. *diags Elec Eng* 62:Trans 645-50 O '43

Relaying modernized with few changes. V. D. Hollis. *Elec W* 118:1800 N 28 '42

Resistance network provides interlock for simple relays; pushbutton-operated remote receiver. J. H. Miller. *diag Electronics* 16:317-18 Mr '43

Resistors watch level in water system reservoir; automatic system controls operations of pumps; Kalamazoo water distribution system. E. E. Norman. *Il diag Elec W* 120:635-7 Ag 21 '43

Temperature relay cuts power load. A. G. Johnson. *diag Elec W* 119:620 F 20 '43

Thyratron thermal relay. D. Rittenberg and I. Sucher. *diag R Sci Instr* 14:51 F '43

Tubes drive relay in telegraph repeater circuit. A. F. Connery. *diag Electronics* 16:226+-Je '43

Standards

Protective relays; notes on the new British standard specification. W. Casson. *Elec R (Lond)* 132:346-8 Mr 12 '43

Testing

Contact bounce. P. H. Estes. *Il diags Gen Elec R* 46:321-3 Je '43

Distance relay protection for subtransmission lines made economical. L. J. Audin and A. R. van C. Warrington. *Il diags Elec Eng* 62:Trans 574-8 S '43

Improved design for relay test set. B. J. Bortell and J. E. Kozlowsky. *Il diags Elec W* 118:2094-5 D 26 '42

Relay testing practice by Wisconsin utilities. *Elec W* 119:1486 My 1 '43

RELAYS, Time limit

Delay and timing circuits. R. P. Turner. diags Radio N 30:32-4+ Ag '43
 Durakool time delay mercury relay. diag Machine Design 14:130+ D '42
 Time sequence relay for system separation. C. L. Betts, jr. diags Elec W 118:2096-7 D 26 '42

RELIANCE life insurance company of Pittsburgh

40th anniversary. East Underw 44:8 My 7 '43;
 Ins Field (Life ed) 72:6-7 My 7 '43; Nat Underw (Life ed) 47:6 My 7 '43

RELIEF work

Working the dole; Pennsylvania finds war work for its relievers. Business Week p88 D 19 '42

See also

Reconstruction (World war, 1939-) Work projects administration
 —Relief work World war, 1939—
 Red cross —Relief work

Social work

Unemployment—Relief measures

RELIGION and science

Biologist looks at man. J. Huxley. il Fortune 26:138-41+ D '42

RELIGIOUS liberty

U.S. Supreme court rules against compulsory salute of flag where religious scruples exist. Comm & Fin Chr 158:52 JI 5 '43

REMADE milk. See Milk, Remade**REMEDIES (law)**

High court rules on unusual legal angle; Minnesota Supreme bench holds plaintiff participating in settlement may sue others. Weekly Underw 148:1292 Je 12 '43

REMINGTON arms company

Annual report. Comm & Fin Chr 157:1467 Ap 19 '43

Remington Arms: the rise of the foreman; he is sergeant of production on industry's battlefield. il Fortune 27:93-6+ Ap '43

REMINGTON RAND, inc.

Another look. Mag of Wall St 71:358 Ja 9 '43
 Low-priced stocks for large percentage gains. Mag of Wall St 71:671 Mr 20 '43

REMODELED houses. See Houses, Remodeled**REMODELING (architecture)**

See also

Building—Repair and reconstruction
 Buildings, Remodeled
 Houses, Remodeled

REMOTE control. See Electric control**RENEGOTIATION of contracts. See Contracts, Government—Renegotiation****RENIN-ACTIVATOR (term)**

Suggested change in designation of renin-activator (hypertensinogen) to renin-substrate (α globulin). I. H. Page and others. biblog Science 98:153-4 Ag 13 '43

RENNIN

Preparation of crystalline rennin; abstract. C. L. Hankinson. Food Ind 15:122 Ap '43

RENOVATED butter. See Butter, Renovated**RENSSELAER polytechnic institute**

Our research laboratories. biblog il Welding J 22:sup145-9 Ap '43

RENT

Flexible rents; Federal housing projects boosting rentals up to OPA maximum. Business Week p63-4 Ag 28 '43
 Rent dilemma. Economist 144:136-7 Ja 30 '43
 Wartime relief from civil obligations in Great Britain. R. F. J. Sanders. Ann Am Acad 227:62-8 My '43

See also

Real estate business

Laws and regulations

Acceptance of maximum rent principle held essential to preserve economic stability. P. Porter. Comm & Fin Chr 156:1886 N 26 '42

Amends rent provisions. Comm & Fin Chr 156:2170 D 17 '42

Constitutionality of Rent control act questioned by Federal Judge in Indiana. Comm & Fin Chr 157:835 Mr 4 '43

Controls affirmed; OPA rejects appeals of Detroit property owner groups for relaxation of rent freeze. Business Week p34+ JI 3 '43

Criticism: carping. Arch Forum 79:140 Ag '43

Criticizes OPA for not correcting rent control injustices. C. A. Mullenix. Comm & Fin Chr 157:1584 Ap 29 '43

Defense rental areas. Arch Rec 92:12 N '42
 High court dismisses rent control suit. Comm & Fin Chr 157:2071 Je 3 '43

House group finds OPA effectively stabilized rents but charges powers were exceeded. Comm & Fin Chr 158:524 Ag 5 '43

Implications of rent control; abstract. E. M. Fisher. Trusts & Estates 76:158 F '43

New York city rents to be frozen at March 1 levels. Comm & Fin Chr 158:1329 S 30 '43

Rent control extended to 68 more areas. Comm & Fin Chr 156:2159 D 17 '42

Rent control law invalid by Georgia Federal Judge Deaver; OPA to appeal. Comm & Fin Chr 158:1018 S 9 '43

War-damaged premises; remission or reduction of rent. F. E. Sugden. Elec R (Lond) 133:248 Ag 20 '43

RENT insurance. See Insurance, Rent

REORGANIZATION. See Corporations—Reorganization**REPAIR parts**

Buy repair parts from manufacturers that pioneer. N. C. Rockwood. Rock Prod 46:88+ Ja '43

New system of spare part selection aids production and field servicing; Kollsman instrument division of Squares D co. H. N. Droge. il Aero Digest 42:151-3 Je '43

Parts situation necessitates ordering year in advance. W. J. Walker. il Coal Age 48:69-70 S '43

Refrigeration parts distribution in wartime. A. H. Holcombe, jr. Refrig Eng 44:365-9+ D '42

Repair parts assured for essential appliances. R. Larkin. Elec W 118:1788 N 28 '42

Wartime replacement parts; with trouble-shooting chart. R. Cass. il S A E J 51:269-76+ Ag '43

REPAIR ships

Cramp speeds building of floating workshops. Marine Eng 48:208 JI '43

REPAIR shops

How army overhauls big stuff at Fort Logan shop. il Roads & Sts 86:76-7 S '43

Practical equipment maintenance in building a naval supply depot in Pennsylvania. P. Copenhaver. il Eng N 130:292-6 F 25 '43

See also

Airplane repair stations	Motor bus lines—Shops
Car shops	Railroads—Shops
Locomotive shops	

REPAIRING

See also

Department stores—Repair service	Motor trucks in repair service
also subdivision	Maintenance and repair
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Banks and banking—Reports	Corporations—Reports and year-books
Business—Reports to government	

REPORTS, Engineering. See Engineering reports**REPORTS to government. See Business—Reports to government**

REPRINTS

Bibliography

- Catalog of reprints in series, 1943. R. M. Orton, comp. 2d ed 302p \$3.50 Wilson, H.W. '43
 Catalog of reprints in series, supplement to third edition, comp. to May 1943. A. H. Rothe, comp. 48p Wilson, H.W. '43

REPRODUCTION

See also

Birth rate

REPTILES, Fossil

See also

Phytosauria

REPUBLIC drill and tool company

Debentures offered. Comm & Fin Chr 158: 1283 S 27 '43

REPUBLIC service corporation

SEC orders sale of 5 subsidiaries. Comm & Fin Chr 157:902 Mr 8 '43

REPUBLIC steel corporation

Annual report. Comm & Fin Chr 157:997 Mr 15 '43

Operations in 1942. Comm & Fin Chr 157:171 Ja 11 '43

Republic produces all-time record in 1942. T. M. Girdler and R. J. Wysoy. Blast F & Steel Pl 31:450 Ap '43

Special offering. Comm & Fin Chr 158:93 Jl 5 '43

Ten years' progress in aircraft steel. E. R. Johnson. Aeronautical Eng R 1:140 N '42

REPUBLICAN party

Do the Republicans want to win with Roosevelt and lose with Willkie? Fortune 23:82+ S '43

Fate of mighty nations; in the Republican era of 1897-1912 American internationalism was born. R. W. Davenport. il Fortune 27: 114-19+ My '43

Foreign and domestic policy statements of Republican post-war advisory council. Comm & Fin Chr 158:1115 S 16 '43

Republican advisory council named to plan peacetime program and frame 1944 platform. Comm & Fin Chr 157:2276 Je 17 '43

Republican committees named at Mackinac. Comm & Fin Chr 158:1019 S 9 '43

Republicans can win in 1944. W. L. Willkie. Comm & Fin Chr 158:702 Ag 19 '43

Says end of present administration's power necessary to maintain free society; measures for which Republican party must stand. W. L. Willkie. Comm & Fin Chr 158:1616-17 O 21 '43

REQUISITIONING

Attachment by cargo's creditor on requisitioned vessel not allowed. East Underw 44: 27 F 5 '43

Copper snatch; requisitioning under way against holders of 66,000,000 lb. Business Week p30+ N 28 '42

Court holds U.S. government must pay full claims against seized ships. East Underw 44:26 My 21 '43

Services in check; Seattle protests effort of armed forces to preempt more hotels and apartment houses. Business Week p34 My 15 '43

Steamship industry's war and post-war problems. R. P. Stewart. Barron's 23:9+ Je 28 '43

Tempest in ships; owners of seized vessels rebel against basis of charter rates paid by government. Business Week p30+ Je 26 '43

Vetoes bill denying government liability on profits lost by requisitioning in World war I. Comm & Fin Chr 158:2251 D 24 '42

RESCUE at sea. See Life saving apparatus

RESEARCH

Library versus laboratory research. A. G. Connolly. J Chem Educ 20:531-3 N '43

Postwar planning; getting ready for research. L. V. Burton. Food Ind 15:55-6 N '43

See also

Advertising research

Aeronautic research

Agricultural research

Bacteriological research

Business research

Cement research

Ceramic research

Chemical research

Coal research

Colleges and universities—Research

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Heating research

Highway research

Industrial research

Insurance research

Laboratories

Leather research

Management research

Market research

Metallurgical research

National research

council

National research

council of Canada,

Ottawa

Paint research

Paper research

Petroleum research

Purdue research

foundation

Railroad research

Rubber research

Scientific research

Soap research

Social research

Steel research

Textile research

Trade unions—Research work

United States—Standards, National

bureau of

Wool research

RESEARCH, Industrial. See Industrial research

RESEARCH, Scientific. See Scientific research

RESEARCH accounting. See Industrial research

—Accounting

RESEARCH workers

Status of technical manpower in the chemical industry; report of Director of WPB. H. M. Harker. Chem & Eng N 21:84-5 Ja 25 '43

RESERVE banks. See Federal reserve banks

RESERVES

Aircraft industry's problem of reserves for postwar transition. F. A. Callery. Automotive & Aviation Ind 89:17+ S 15 '43

Asks Congress for provision to set aside reserves before taxes for peacetime. G. L. Martin. Comm & Fin Chr 157:1658+ My 6 '43

Better management for the rubber factory; reserves. A. Roberts. Rubber Age 52:407-9 F '43

Change in renegotiation law opposed by Jesse Jones and Randolph Paul. Comm & Fin Chr 158:1193 S 23 '43

Congress and business reserves. B. W. Gearheart and others. Banking 36:10+ O '43

Funding depreciation and maintenance reserves under war conditions. W. A. Hosmer. Harvard Business R 21 no 3:369-84 [Ap] '43

Integrated plan for postwar reserve allowances. W. A. Cooper. J Account 76:192-9 S '43

Offers plan for establishing post-war reconversion and working capital reserves now. D. Emery. Comm & Fin Chr 157:2389 Je 24 '43

Plan for the deduction of post-war reserves. W. A. Cooper. Comm & Fin Chr 158:1294+ S 30 '43

Post-war reserves vs. subsidies. V. H. Stempf. N A C A Bul 25:207-19 N 1 '43

Problems in the funding of tax and other reserves. W. A. Hosmer. N A C A Bul 24: 1049-75 My 1 '43

Reconversion reserves, they're postwar worry no. 1. R. L. Hoadley. Aviation 42:179+ S '43

Reserves assured; Congress intends to include provision for postwar conversion in the tax bill. Business Week p18-20 O 23 '43

Reserves for possible losses arising out of the war; Securities and exchange commission opinion. J Account 75:189-90 F '43

Reserves for that day; Armistice day to World war II. R. A. Foulke. Banking 35:23-4+ My '43

Reserves for war losses should be set up now. A. C. Kiechlin. Inland Ptr 111:31-3 Je '43

Reserves to meet indeterminate war costs. V. H. Stempf. J Account 76:383-90 N '43

SEC accounting opinion on disclosure of reserves. Comm & Fin Chr 157:183 Ja 14 '43

Special reserves arising out of the war; study by research department of American institute of accountants. J Account 76:391-408 N '43

Special reserves for post-war adjustments. Edison Elec Inst Bul 11:230-2+ Ag '43

Wartime industrial expansion and post-war reserves. Nat City Bank p 102-5 S '43

See also

Bank reserves

RESERVES, Bank. See Bank reserves

RESERVOIRS

Biological water conditioning; Judson reservoir, southern California; growth of Chara inhibits algae. H. C. Myers. *Water Works & Sewerage* 90:185-6 My '43

Design of recent TVA projects; Chatuge and Nottely projects. M. L. Dickinson. *il diags plan Civil Eng* 13:143-16 S '43

Emergency 60,000-gal. reservoir made of wood and four-ply roofing. *diags Eng N* 130:34 Ja 14 '43

Foundation grouting of reservoir. H. C. McCrea. *il diags Pub Works* 74:23-4, 28 S '43

Multiple purpose river development; storage of hydraulic mining debris in reservoir; Narrows development on Yuba river; Pacific gas and electric company. H. V. Lutge and E. F. Maryatt. *il diags plans Elec West* 90:60-4 Ap '43

Quarter century of development in Cleveland's water supply. A. G. Levy; S. C. Simmermacher; L. A. Marshall. *il diags plan map Am Water Works Assn J* 35:869-99 Jl '43

Sedimentation in reservoirs. B. J. Witzig. *Am Soc C E Proc* 69:793-815 bibliog(p814-15) Je '43; Discussion. bibliog 69:1104-8, 1324-30, 1493-1500, 1630-3 S-D '43

See also

Dams	Water supply engi-
Flood control	neering
Irrigation	Water tanks
Water supply	Waterworks

Cost

Reservoir and water mains, Fort Worth, Texas; unit prices. *Eng N* 130:910 Je 17 '43

Lining

Asphalt concrete paving on 2 to 1 slope rolled with aid of tractor. *il Eng N* 130:561 Ap 22 '43

Protection

Effect of bird life on water-supply reservoirs. R. E. Thompson. *il Water & Sewage* 81:19-20 F '43

Protective concealment for reservoirs and exposed aqueducts; experiments with smoke screens. *il Eng N* 131:595-7 O 21 '43

Repair

Action of bentonite clay in stopping leaks in water-supply reservoirs. *il Water & Sewage* 81:14-15 F '43

Standards

Revisions in standard specifications for elevated steel water tanks, standpipes and reservoirs. *Am Water Works Assn J* 34:1915-16 D '42; Same. *N E Water Works Assn J* 56:supl-2 D '42

RESERVOIRS, Concrete

Concrete reservoirs of the vertical-beam type. C. M. Stanley, jr. *diags Am Soc C E Proc* 68:1679-88 D '42; Discussion. *diags* 69:456-7, 619-29, 716-18 Mr-May '43

Many-sided reservoir simplifies formwork. *il diags Eng N* 130:904-5 Je 17 '43

Reservoir roof of unreinforced arches at Springfield, Vt. *il diags Eng N* 131:479-81 S 23 '43

Cost

Concrete reservoir, Salt Lake City, Utah; unit prices. *Eng N* 131:416 S 9 '43

Repair

Locating reservoir leaks with the aid of air bubbles. *Eng N* 130:350 Mr 11 '43

RESIDENCE halls. See Dormitories**RESILIENCE**

Resilience of duralumin vs. steel; abstract. L. P. Dudley. *Metals & Alloys* 17:840+ Ap '43

RESILIOMETERS

Resiliency meter. *il Chem Ind* 53:528 O '43

RESILITEX

Latest developments. *il Electrician* 130:572 Je 4 '43

Resilitex shock-absorbent material. Engineering 155:67-8 Ja 22 '43; *il Engineer* 175:159-60 F 19 '43; *Electrician* 130:164 F 12 '43; *Chem Age (Lond)* 48:297 Mr 13 '43

RESIN acids

See also
Abietic acid

RESINOUS products

ABC of chemical derivatives from petroleum; synthetic resins and plastics. R. L. Wakeman and E. H. Weil. *il Nat Pet N* 34 pt 2: R413-16, R418 N 25 '42

Advances in plastics during 1942; vinyl resins. H. Bunn. *il Mod Plastics* 20:96-7 Ja '43

Alkyd resins advisers named by War board. *Oil Paint & Drug Rep* 142:5 D 28 '42

Allyl-type cast resins and laminates. A. Pechukas, F. Strain and W. R. Dial. *Mod Plastics* 20:101-4+ Je '43

Amberlites; new synthetic ion exchange resins. *Water Works & Sewerage* 90:266 JI '43

Coal by-products in the plastics industry. R. L. Wakeman. *Blast F & Steel Pl* 31:217-19, 320-2 F-Mr '43

Cresol-formaldehyde resins; abstract. A. A. Vansheidt, A. T. Itenberg and U. Michailova. *Chem & Met Eng* 50:193 Ag '43

Derivation of principal synthetic resins; chart. R. J. Moore. *Chem Ind* 53:56-7 JI '43

Development of a cast resin stretch press die. L. J. Jaworski. *il Aero Digest* 42:230, 235 Ap '43

Effect of air-entraining admixture with bad aggregates; use of vinsol resin. *Rock Prod* 46:114+ Ag '43

Elastic plastics for war production; plasticized vinyl chloride-acetate resins. *il Mod Plastics* 20:48-52 D '42

Forming acrylic resin sheets with plastic dies. K. J. Leeg. *il Iron Age* 152:68-70 S 9 '43

Forming and repairing acrylic plastics. D. S. Frederick. *il diags Mod Plastics* 20:86-9+ D '42

Glycol esters; Hercules powder company's two new esters of Poly-pale resin. J. M. Crowe. *Chem Ind* 53:84 JI '43

Heat-resistant phenolics. *il Am Gas J* 159:25-6 O '43

High duty bearings made of synthetic pressed resins; abstract. E. Gilbert and K. Lurenbaum. *Roy Aeronautical Soc J* 46:sup412-13 N '42

Industrial applications of phenolic resins. *il Mod Plastics* 21:84-8+ N '43

Laminating by low-pressure method. J. D. Nelson. *Gen Elec R* 46:483-7 S '43

Liquid phenolic resins for tooling. K. J. Leeg. bibliog *il Mod Plastics* 20:65-6+ JI '43

Moulded plastics. H. W. McCready. *diags Can. Chem & Process Ind* 27:70+ F '43

New high impact molding plastic; BM-16468. *Iron Age* 152:57 Ag 5 '43

New partnership is formed; aluminum and plastics. C. Braglio. *il Mod Plastics* 20:53-4+ Ap '43

New products and processes; polyvinyl resins. J. M. Crowe. *Chem Ind* 52:54 Ja '43

New series of thermosetting materials covers wide range; developed by Columbia chemical division of Pittsburgh plate glass company. *il Product Eng* 14:223-6 Ap '43

Non-corrosive materials; plastics and resins in the textile mill. R. Trauttschold. *il Rayon* 23:729-32 D '42

Permeability of flexible materials. L. W. Elder. *il Mod Packaging* 16:69-71 JI '43

Petroleum resins. C. A. Thomas. *il Chem & Eng N* 20:1507-8 N 25 '42

Phenolic-resin boards, properties and applications. C. A. Nash and E. W. Vaill. *il Product Eng* 14:638-40 O '43

Plastics and plasticity; paper compounded with synthetic resins. E. V. Crane. *il diags Iron Age* 152:54-9 Ag 13; 60-5 Ag 26 '43

Plastics and soap combined in water-base paints. *Iron Age* 151:57 Je 17 '43

Plastics from petroleum. R. J. Moore. flow sheet *Oil & Gas J* 42:49+ JI 1 '43

Plastics; recent developments in Germany. H. Stener. *Automobile Eng* 33:9 Ja '43

Properties of Columbia allyl resins; abstract. F. Strain. *Mod Plastics* 21:95-7 N '43

Raw material supplies for plastics manufacture. R. H. Ball. *il Chem & Eng N* 21:73-6 Ja 25 '43

Replacing rubber with synthetic resin at the plants of RCA manufacturing co.; Resistoflex PVA. E. S. Peierls. *il Rubber Age* 52:315-17 Ja '43

RESINOUS products—Continued

Resin impregnation of wood. R. Casselman. *bibliog Mech Eng* 65:737-8+ O '43; Same, without bibliog. *Mod Plastics* 21:124-6+ N '43

Resins as rubber substitutes. *il Manuf Rec* 112:26-7 Ja '43

Review of the literature on wet strength paper. T. T. Collins, jr. *Paper Ind* 25:265-6 Je '43

Ryvertex design improves resin bonded marine bearings. *il diags Marine Eng* 48:222, 224 O '43; *Mod Plastics* 21:78-9 N '43

Soap's role in the plastics industry. G. Leffingwell. *bibliog Mod Plastics* 21:87-8+ O '43

Supply situation of plastic materials. F. Carman. *Mod Plastics* 20:45-8 N '42; *Abstract. Chem & Met Eng* 50:150-2 Ja '43

Synthetic bearings from pressed resins. E. Gilbert and K. Lurenbaum. *Automobile Eng* 32:477 N '42

Synthetic resin dispersions and their use as substitutes for latex; abstract. C. M. Jackson. *Chem Ind* 52:628 My '43

Synthetic resins come of age. W. F. White-scarver. *Oil Paint & Drug Rep* 144:60-1 N 1 '43

Transfer molding of phenolic material. C. A. Norris. *il Mod Plastics* 20:73-8 Ap '43

Treads and wheels for hand trucks; Resinox. *il diags Mod Plastics* 20:70-2+ F '43

Vinyl resins in war and peace. R. B. Akin. *bibliog (76 references) il Chem Ind* 52:456-60, 599-603 Ap-May '43

Wet strength resin for stock addition; abstract. R. Kumlér. *Paper Ind* 25:425-6 JI '43

See also

Bakelite	Phenol condensation products
Melamine resins	Plastic materials
Methyl methacrylate	Saran
Micarta	Tygon
Molded products	Vistanex

Adhesives

Beams of glued 1-in. boards carry railroad line to war project. *il Eng N* 130:287 F 25 '43

Behavior of plywood under repeated stresses. A. G. H. Dietz and H. Grinsfelder. *bibliog il diags A S M E Trans* 65:187-91; Discussion. 191 Ap '43

Details of Duramold fabrication. S. M. Fairchild. *il Aero Digest* 42:232, 235-6, 239 F '43

Electric glue heating. *diag Electrician* 131: 297-9 S 24 '43

Gliders from the Wolverine state; use of plastic-bonded plywood. *il Mod Plastics* 20: 62-6+ Ap '43

High-frequency gluing of resins. W. Godfrey and P. H. Bilhuber. *il diags Mod Plastics* 21:89-93, 154, 156 S '43

Joining light alloys by plastic adhesives. *il Iron Age* 152:52-3 Ag 19 '43

Lamination of weatherproof solid fiberboard with starch and resin adhesives. J. E. Killinger. *Paper Tr J* 117:25-30 N 4 '43

Palm reading the hand of Mars; future of plastics and plastic bonded plywood. *il Am Gas J* 159:27-8 O '43

Radio-frequency gun for spot-gluing wood; molded plywood parts. J. P. Taylor. *il diags Electronics* 16:106-11+ N '43

Radio-frequency heating applied to wood gluing. R. A. Bierwirth and C. N. Hoyler. *diags Inst Radio Eng Proc* 31:529-37 O '43

Redux process; resin adhesives enable light alloys and steel to be cemented together or to wood. *Engineer* 175:395 My 14 '43

Resin-bonded plywood tubing. *il Mod Plastics* 21:81-2+ O '43

Secret adhesive combines thermoplastic and thermosetting qualities. R. C. Peter. *Sci Am* 169:229 N '43

Strength characteristics of plastic-bonded plywood. G. B. Parsons. *bibliog diags A S M E Trans* 65:1-7 Ja '43; Same. *Mod Plastics* 19:74-9, 110, 112+ Ag '42; Same. *Aero Digest* 41:160, 162, 165+ JI; 140+ Ag '42

See also

Plywood

Analysis

Detection of phenolic resins; abstract. P. Von Stein. *Chem Ind* 53:96 JI '43

Binding materials

Grinding milling cutters with resinoid bonded wheels. J. E. Rogers. *il Iron Age* 152:34-9 O 21 '43

Plastic-bonded cotton fiber. M. A. Goldman and G. A. Olsen. *il Mod Plastics* 20:100, 130+ My '43

Sand stretcher; resin binder used in molds. *Business Week* p62+ O 23 '43

Substitutes for white-paint road markings; new British developments; plastic and surface dressed lines. *il Roads & Bridges* 81: 31-2 Je '43

Ceramic use

Battelle develops body fired at 200-450° F.; resin for flux ingredient. *il Cer Ind* 40:62 Je '43

Color

Determination of color of paracoumarone-indene resins. C. S. Reeve. *Paint Oil & Chem R* 105:16+ Ja 14 '43

Electric properties

Aid to selecting plastics for electrical applications. *il Product Eng* 14:165-7 Mr '43

Electrical properties of polyvinyl acetate. T. W. Dakin. *Electrochem Soc Trans* 83 (preprint 27):309-17 Ap '43

See also

Resinous products—
Insulating materials

Finishing materials

Advances in plastics during 1942; surface coatings. W. T. Pearce. *bibliog il Mod Plastics* 20:88-9 Ja '43

Durability of lusterless enamels. S. E. Beck. *il Ind & Eng Chem* 35:594-5 My '43

Flame-resistant resins; formation of inorganic crust. *Chem Age (Lond)* 48:563 My 22 '43

Heat resisting and stoving finishes. R. L. Frost. *bibliog Chem & Ind* 62:306-10; Discussion. 309 Ag 14 '43

Industrial paint coatings; abstract. W. H. Lutz. *Iron Age* 152:66-7 JI 15 '43

Ketones as solvents for vinyl resins. R. W. Quarles. *Ind & Eng Chem* 35:1033-43 O '43

Steel shell case coating. *il Mod Plastics* 21: 74+ S '43

Synthetic coatings protect engine parts; Resistoflex coated containers. *il Aviation* 41:169 D '42

Utilization of dispersion resins. W. R. Catlow, jr. *Oil Paint & Drug Rep* 144:61-2 N 1 '43

Insulating materials

Data on power factor measurements parallel with laminations for phenolic laminated sheet. *Am Soc T M Proc* 42:381-3 '42

Enamelled wire; toughness of Thermex (Formex). *il Elec R (Lond)* 132:290 F 26 '43

Influence of measurements on development of magnet wire. F. P. Wilson, jr. and J. A. Weh. *il Gen Elec R* 45:612-14 N '42

Insulation for Wheatstone bridges. *il Mod Plastics* 20:79+ Ap '43

Plastic insulations for conductors. E. D. Youmans. *Elec W* 120:457-9 Ag 7 '43

Polystyrene for wartime electronics. F. E. Wiley. *bibliog il Mod Plastics* 20:80-1+ Ag '43

Recent developments in organic plastics for electrical insulation. T. Hazen. *bibliog Elec Eng* 62:191-7 My '43

Synthetic plating insulations. J. McGee. *il Metal Finishing* 41:138-9 Mr '43

Manufacture

Behavior of plasticizers in vinyl chloride-acetate resins. M. C. Reed. *bibliog diags Ind & Eng Chem* 35:896-904 Ag '43

More synthetic resins from rosin. J. R. Callahan. *flow chart il Chem & Met Eng* 50: 109-11 O '43

New plasticizers for vinyl resins and cellulose esters. D. W. Elam, H. M. Preusser and R. L. Page. *Mod Plastics* 20:95-7 My '43

RESINOUS products—Manufacture—Continued

Soybean-modified phenolic plastics. L. L. McKinney and others. *Ind & Eng Chem* 35: 905-8 Ag '43

Patents

Advances in plastics during 1942; urea-formaldehyde resins. M. H. Bigelow. *Mod Plastics* 20:92-3 Ja '43

German patents relating to vinyl polymers (cont). H. Hoseh. bibliog *India Rubber W* 107:379-80, 473-4, 571-2+ Ja-Mr '43

Physiological effect

Dermatitis due to the formaldehyde resins; prevention and methods of control. K. E. Markuson, T. F. Mancuso and J. S. Soet. *Ind Med* 12:383-6 Je '43

Dermatitis from new synthetic resin fabric finishes. L. Schwartz. *Rayon* 24:309-10 Je '43

Prices

19 resins, plastics pricing method set. *Oil Paint & Drup Rep* 143:4+ Je 21 '43

Synthetic resins and other branded paint materials (manufacturers' list prices). *Oil Paint & Drug Rep* 143:31-3 F 1 '43 [cont monthly]

Testing

Coloring materials for copolymer vinyl chloride-acetate compounds. F. G. Clark. bibliog *Ind & Eng Chem* 35:368-74 Mr '43

Effects of continued heating on mechanical properties of molded phenolic plastics. T. S. Carswell, D. Telfair and R. U. Haslanger. bibliog *A S M E Trans* 65:325-8 My '43

Textile uses

Application of vinyl resins and plastics to textiles. C. W. Patton. *Il Am Dyestuff Rep* 32:124-7+ Mr 15 '43

Cleaning resins from dye kettles. *Textile World* 92:101 D '42

Coated fabrics for variety of military uses. *Il Textile World* 93:92-3 S '43

Crease-resisting spun rayon fabrics. *Rayon* 24:597-8 N '43

Dermatitis from new synthetic resin fabric finishes. L. Schwartz. *Rayon* 24:309-10 Je '43

Developments in mordanting; polymerized products and resins as binding agents. *Am Dyestuff Rep* 32:393-4 Ag 30 '43

Disappearing marine; ponchos of water-repellent cloth bonded with polyvinyl butyral resin filler. *Il Mod Plastics* 20:63 Je '43

First elastic textile yarn not made of rubber; vinyl resin yarn. *Rayon* 24:7 Ja '43

Glycerine paces textile progress. G. Leffingwell and M. A. Lesser. bibliog *Rayon* 24: 543-4 O '43

Haydenite in the production of service raincoats. *Rubber Age* 52:403-4 F '43

Haydenite replaces rubber in army raincoats. *India Rubber W* 107:279 D '42

Now Saran and Velon for textiles; yarns derived from vinylidene chloride. *Il Textile World* 92:33-4 D '42

Phenol resins and resin emulsions and their application to textiles. W. H. Butler. *Il diags Am Dyestuff Rep* 32:128-33 Mr 15 '43

Plastic coatings in the post-war era; synthetic resins; synthetic rubbers. J. B. Cleaveland. *Il Textile World* 93:61-3 My '43

Production of coated fabrics; application of polyvinyl resins. J. B. Cleaveland. *Il Textile World* 92:76-7 D '42

Progress in new synthetic textile fibers. H. R. Mauersberger. *Textile Col* 16:211, 216-19 My '43. Same abr. *Rayon* 24:131-4 Ap '43

Replacements for rubber coated fabrics. A. F. Schildhauer. *Il Mod Plastics* 21:89-91+ N '43

Synthetic plastics and the textile industry. P. B. Sarkar. *Textile Col* 16:530, 532-3 N '42

Textile applications of natural and synthetic resins. M. H. Gurley, Jr. bibliog *Rayon* 23:726-7; 24:34-6 D '42-Ja '43

Vinyl acetal to replace rubber in fabrics; Saffex. *Sci Am* 168:9-10 Ja '43

Vinyl acetals for rubberized fabric. E. R. Derby. *Textile Col* 16:533 N '42

War uses of du Pont fabrics. *Il India Rubber W* 108:581 S '43

Yarn for screens; plastic-coated yarn woven into screen cloth replaces galvanized steel wire and bronze mesh. *Il Mod Plastics* 20: 70+ Mr '43

See also

Saran

Water treatment

De-ionized water for the electroplating industry; application of Amberlite resins; abstract. W. S. Morrison. *Iron Age* 152:69-70 Jl 8 '43

Distilled water supply for small schools. S. Gaddis and C. Kubina. *diag J Chem Educ* 20:381+ Ag '43

Ion exchange resins; new tools for process industries. F. J. Myers. bibliog flow sheet *Il Ind & Eng Chem* 35:858-63 Ag '43

Ion-exchanging resins; abstract. R. J. Myers. *Chem & Met Eng* 50:148-50 Ja '43

Pure water without heat; costs of purifying water by stills and by regenerative exchange filters using resins in a food and beverage plant. A. A. Fette. *Power Pl Eng* 47:118+ My '43

Water purification by the ion-exchange method. O. K. Smith. *diags Pet Eng* 14: 57-60 S '43

RESINS. See Gums and resins

RESINS, Synthetic. See Resinous products

RESISTOFLEX PVA. See Resinous products

RESONANCE

Design office problem in the estimation of the torsional resonance characteristics of small marine Diesel-propulsion units. R. W. S. Mitchell. *diag Inst Mech Eng J & Proc* 149:Proc 133-42 S '43

Universal resonance chart. H. G. Yates. *Engineer* 176:268-9 O 1 '43

RESONANCE (chemistry)

Spectra of dye molecules; absorption and resonance in dyes. L. G. S. Brooker. *Rs Mod Phys* 14:275-93 Ap-Jl '42

RESPIRATION

Apparatus for measuring air flow during inspiration. R. C. Lee and L. Silverman. bibliog *Il diags R Sci Instr* 14:174-81 Je '43

RESPIRATION, Artificial
Back from death. K. W. Francis. *Nat Safety* N 46:24-5+ N '42

Pole-top resuscitation. *Il Nat Safety* N 48: 26-7+ Jl '43

Pole top resuscitation instruction manual ready for publication. W. R. Smith. *Il Edison Elec Inst Bul* 11:300-6+ O '43

Twenty-four Edison electric institute awards for resuscitation made in 1942. M. B. Woods. *Il Edison Elec Inst Bul* 11:52-6, 85-9 F-Mr '43

RESPIRATORY apparatus

Apparatus for measuring air flow during inspiration. R. C. Lee and L. Silverman. bibliog *Il diags R Sci Instr* 14:174-81 Je '43

List of respiratory protective devices approved by the Bureau of mines. H. H. Schrenk. *pls U S Bur Mines Information Circ* 7237:1-14 '43

New Bullard rubber lung; device for administering artificial respiration. *Il Rubber Age* 53:239 Je '43; *Refrig Eng* 45:36 Ja '43

Poison gases; the action of the respirator canister. W. J. G. Davey. *Chem Age (Lond)* 49:31-3 Jl 10 '43

Respiratory protective equipment. *Il Nat Safety* N 47:20+ Mr '43

Selection, use, and maintenance of respiratory protective devices. H. H. Schrenk and S. J. Pearce. *U S Bur Mines Information Circ* 7236:1-12 '43

See also

Gas masks

Oxygen apparatus

RESPIRATORY organs**Diseases**

Air-borne infection. O. H. Robertson. bibliog *Science* 97:495-502 Je 4 '43

Disabling morbidity among industrial workers, third quarter of 1942, with a note on the occurrence of the respiratory diseases, 1933-42. W. M. Gafafar. *Pub Health Rep* 58: 232-4 F 5 '43

RESPIRATORY organs—Diseases—Continued

Sickness absenteeism among industrial workers, first quarter of 1943, with an inquiry into the occurrence of the respiratory diseases, 1934-43. W. M. Gafafer. Pub Health Rep 58:1273-7 Ag 20 '43

See also

Cold (disease)

Influenza

Lungs—Dust diseases

Pneumonia

Silicosis

RESPIROMETER

Barcroft-Warburg manometric apparatus; usage, recent developments, and applications. J. J. Perkins. bibliog(102 references) il diags Ind & Eng Chem Anal ed 15:61-8 Ja 15 '43

Volumetric respirometer for aquatic animals. P. F. Scholander, N. Haugaard and L. Irving. diag R Sci Instr 14:48-51 F '43

RESPONSIBILITY

Determinism and responsibility. H. N. Russell. Science 97:249-53 Mr 19 '43

Managerial responsibility. H. S. Fries. Advanced Management 8:45-8 Ap '43

REST periods

Rest periods for women war workers; abstract. M. Anderson. Safety Eng 86:54 Ag '43

What management thinks of rest periods. E. E. Roberts and others. il Am Business 12: 20-2 D '42

RESTAURANTS

Drive-in restaurants; Lobello's, Dallas, Tex. il Am Bld 65:42+ Je '43

Meal prices set; regional offices regulate restaurants. Business Week p88+ My 29 '43

Menu rationing; restaurant food portions and frills will be cut. Business Week p58+ Mr 6 '43

New buildings for 194X: service station, including roadside stand and small restaurant, il plan Arch Forum 72:132-3 My '43

Off the highways; Howard Johnson chain of restaurants has come back by finding new mouths to feed. il Business Week p60-2 Je 19 '43

OPA eyes cafes. Business Week p90-1 Ap 24 '43

One brandy for the boss; Pius Sabia's restaurant in Boston. Adv & Sell 36:101 Ji '43

Planning the restaurant kitchen. H. Blumberg. il diags Arch Rec 94:75-7 Ag '43

Point-rationing plan for restaurants. Comm & Fin Chr 157:936 Mr 11 '43

Pump room, Hotel Ambassador, Chicago. il plan Arch Rec 94:73-4 Ag '43

Restaurant blues. Business Week p32+ D 5 '42

Restaurant prices are frozen to April levels. Comm & Fin Chr 158:333 Ji 22 '43

Restaurants of the future. F. Keally. il plans Arch Rec 94:68-71 Ag '43

See also
Hotels Lunchrooms and
Lunchrooms and cafeterias, Em-
cafeterias ployees'
 Night clubs

Air conditioning

Kitchen air conditioning features Kansas City drive-in restaurant. il Heat & Ven 40:60-1 Ap '43

Designs and plans

Restaurants; building types study. il Arch Rec 94:67-84 Ag '43

Electric equipment

Catering trade. G. A. T. Burdett. Electrician 130:265-6 Mr 12 '43

Employees

Catering conflict. Economist 144:200-1 F 13 '43

Replacement of men by women in New York service industries. Monthly Labor R 56: 486-7 Mr '43

Equipment

Restaurant seating; time-saver standards. W. J. Ward, jr. plans Arch Rec 94:83-4 Ag '43

What's become of the steam in steam tables? gas-heated food warmers. M. P. Duke. il Am Gas Assn Mo 25:323-4 Ji-Ag '43

RESTAURANTS, Government

Britain is feeding her workers well, and all for a shilling. F. B. Barton. il Factory Management 101:112-15 O '43

RESTRAINT of trade

U.S. sues to end fluorescent monopoly. Elec W News ed 118:2035 D 19 '42

See also

Glass container in-

dustry

Interstate commerce

Monopolies

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Trade associations

Trusts, industrial

RESUSCITATION

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Respiration, Artificial

RETAIL salesmen. See Salesmen, Retail**RETAIL stores. See Chain stores; Department stores; Market stores; Retail trade; Store buildings****RETAIL trade**

Anticipate, take advantage of changes in retail distribution. V. Lebow. Ptr Ink 204:15-16 Ji 30 '43

Bureau of foreign and domestic commerce, how it can help you; Distribution division. A. R. Hahn. Sales Management 52:66+ O 15 '43

Challenge of change! V. Lebow. Ptr Ink 204: 17-18+ S 24 '43

Credit phases of small business; what will be small retailers status after war? J. S. Thomas. Credit & Fin Management 45:22+ N '43

Dealers swap slow items for goods in demand; International silver company helps dealers exchange non-selling patterns. il Ptr Ink 204:30+ S 10 '43

Discount house; cut-rate retail establishment. F. M. Lehman. J Retailing 19:19-26 F '43

Distribution of scarce goods; wartime practices in allocating goods to retailers. E. R. Hawkins and W. F. Crowder. U S Bur For & Dom Com. Economic Ser 26:1-54 '43

How two West Coast auto dealers found the means to survival. Sales Management 52: 84+ Mr 15 '43

Is small business really doomed? P. J. Howe. il Adv & Sell 36:17-18+ Ag '43; Abstract. Management R 32:346-8 S '43

Is there a law of retail gravitation? P. D. Converse. map Ptr Ink 204:36, 40-1+ S 10 '43

Newspapers and retail gravitation determine trading area boundaries; results of study in Laurel, Md. and one in 20 Illinois towns. J. P. Converse. map Sales Management 52: 21-3 O 15 '43

Postwar planning by retailers. S. W. Reburn. J Retailing 19:65-6+ O '43

Price fixing curbs production and leads to rationing; postwar planning problems of the retailer. C. F. Roos. Comm & Fin Chr 158:1-+ Ji 1 '43

Quiz on OPA price regulations affecting retailers. J Retailing 19:45-50 Ap '43

Retail credit in the postwar world. C. N. Schmalz. Harvard Business R 22 no 1:63-74 Ol '43

Retail paradox; if sales remain healthy, inventories must suffer. Business Week p43-4+ Ja 23 '43

Shoes are tight; overdue ration control sets off buying rush in other lines. Business Week p92-3+ F 13 '43

War has caused modifications rather than radical changes in marketing. L. D. H. Weld. Ptr Ink 203:34, 66-7 Ap 9 '43

War speeds retail diversification. V. Lebow. il Ptr Ink 203:28, 30+ Ar 16 '43

What lies ahead for the retailer? B. E. Puckett. Adv & Sell 36:136+ O '43

What war-born consumer habits will do to retailing. B. E. Puckett. Ptr Ink 205:98-9 O 8 '43

What's going to happen to our retail stores? B. R. Canfield. il Adv & Sell 36:13-14, 48 Ja '43

See also

Advertising—Dealer

cooperation

Advertising—Dealers,

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Cancellation of orders

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Christmas business

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Cooperative associations
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 Shopping areas
 Shopping centers
 Show windows
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 Specialty stores
 Store buildings

Advertising

America's goshawfulest store; Raymond's store in Boston. J. M. Stenbuck. *il Adv & Sell* 36:16, 68+ Ap '43
 How retail advertisers regard newspapers' helpfulness. A. Coons. *Ptr Ink* 205:26+ N 12 '43
 Radio's \$125,000 retail promotion presentation. *Ptr Ink* 205:40 O 1 '43
 Retailers face advertising problem as stocks diminish. F. LaClave. *il Ptr Ink* 201:19-20+ D 18 '42
 Saroyan did it, so why can't Zareh? J. Stenbuck. *il Adv & Sell* 36:44, 128 O '43
 Shows tradesmen how to advertise to farmers; Republic steel co. *Ptr Ink* 205:24 O 29 '43
 Why merchandise-short retailers must continue advertising. H. P. Abrahams. *il Ptr Ink* 204:21-2 Ag 13 '43

See also

Advertising—Dealer cooperation
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 Mail order business—
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Employees

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Finance

Cost of prosperity, department store sales in 1942 were high enough to slash costs to lowest level in 14 years. *Business Week* p94-6 J1 31 '43
 Implications of the withholding tax for business and retail trade. G. B. Collingwood. *Mag of Wall St* 72:386-8+ J1 10 '43
 Profit makers increase, first half of 1942. *Trusts & Estates* 75:508 N '42
 Retail trade in 1942. *J Retailing* 19:41-3 Ap '43
 Weathering the war at the retail level; results of a survey. W. Hayes. *Dun's R* 51:7-10+ Ap '43

See also

Chain stores—Finance

Hours of business

Retailing and the night shift. M. K. Powers. *Adv & Sell* 36:56+ Mr '43
 Trend reversing; opening and closing hours no longer keyed to free time of war-plants workers. *Business Week* p75-6 J1 10 '43

Insurance requirements

Retail store insurance buyers present views. *Nat Underw* 47:3-4 Je 17 '43

Laws and regulations

Effects of inventory control order. *Barron's* 23:12 Ja 4 '43
 Limitation order L-219. G. N. Farrand. *J Account* 75:334-42 Ap '43
 OPA finds sins; most of them small. *Business Week* p64 N 14 '42

Purchasing

Druggists at work, to legalize buying pools for small retailers. *Business Week* p96+ Ag 14 '43
 Fall opening plan for dresses; an example of planning a stock assortment. B. F. Miller. *J Retailing* 18:118-22 D '42
 Overbuying in war-time prosperity; problems faced by credit men. E. S. Horowitz. *Credit & Fin Management* 44:30-1+ D '42

Securities

Merchandising stocks; outlook for sales and profits; position of leading stocks. P. Dobbs. *il Mag of Wall St* 73:19-22 O 16 '43
 Mixed, sales and profit outlook for merchandising stocks; position of leading stocks. *il Mag of Wall St* 71:584-7 Mr 6 '43
 Outlook for merchandising stocks in war and peace; position of leading stocks. P. Dobbs. *il Mag of Wall St* 72:522-5, 546 Ag 21 '43

See also

Chain stores—
 Securities

Service

Cutting service. *Business Week* p63-4 D 19 '42

Retail service to do a strip-tease; OPA sanctions economy in wrapping, lighting, returns. *Ptr Ink* 201:88+ D 4 '42

See also

Delivery of goods

Statistics

American economy in 1942: consumer expenditures; with comparisons for earlier years. C. A. R. Wardwell and R. B. Bangs. *Survey of Cur Business* 23:16-17 Ja '43
 Births and deaths in retailing. *J Retailing* 18:117 D '42
 Divergent trends in retail sales; how dollar volume has been affected by changes in supplies, prices, and demand; graphs. *Business Week* p24 My 8 '43
 Recent trends in retail trade. *Fed Res Bul* 29:490-1 Je '43
 Retail credit survey, 1942. *Fed Res Bul* 29:604-8 J1 '43
 Retail trade in 1942. *J Retailing* 19:41-3 Ap '43
 Retail trade, 1938-1941. *Survey of Cur Business* 1942 Sup p32-7 [supplemented in monthly numbers]
 Retail trade; sales in the third quarter and comparisons with other periods; tables. *Survey of Cur Business* 23:4-5 O '43
 Sales Management high-spot cities; retail sales and service estimates for February, 1943. *Sales Management* 52:56, 58-9 Ja 1 '43 [cont monthly]
 Sales Management survey of buying power, 1943; retail sales, effective buying income and other indices of buying power, with data on occupied dwellings, median rents, urban and farm residents. *il maps Sales Management* 52:11-322 My 10 '43
 Sales of retail stores by kind of business, 4th quarter, 1941 to 1st quarter, 1943; table. *Survey of Cur Business* 23:6 My '43
 Sales of retail stores, by kinds of business, 1941-43. *Survey of Cur Business* 23:9 Mr '43
 You, your retailers and the future. A. M. Sullivan. *Ptr Ink* 202:15-16, 70 Mr 19 '43

See also

Department stores—
 Statistics

Stock

Civilian supply: inventories. *Survey of Cur Business* 23:5-8 Je '43
 Dealers' scramble to survive foreshadows big changes in distribution; furniture in the five and ten, clothing in the tire store and household appliances in the grocery. P. H. Erbes, Jr. *il Ptr Ink* 203:14-16+ Ap 23 '43; Same cond. *Management R* 32:302-4 Ag '43
 Fall opening plan for dresses; an example of planning a stock assortment. B. F. Miller. *J Retailing* 18:118-22 D '42
 Merchandise diversification in unit stores. J. M. Rathmell. *J Retailing* 18:113-16 D '42

Store buildings

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Store management

America's goshawfulest store; Raymond's store in Boston. J. M. Stenbuck. *il Adv & Sell* 36:16, 68+ Ap '43
 First aid for the man in the corner store; wartime business clinics in Philadelphia. R. Amberson. *il Ptr Ink* 203:11-13+ Je 18 '43
 Handling glass in stores. *il Mod Packaging* 16:104-6 D '42

RETAIL trade—Store management—Continued
 Letters to a sow's ear; America's gosh-
 awfullest store, Raymond store, Boston. W.
 J. Haughey. Adv & Sell 36:132 Je '43
 Move fast, change rapidly, seek new lines
 to sell; merchandising philosophy of J. K.
 Gill company, Portland, Oregon. Il Am
 Business 13:16-18 S '43
 Psychology of credit letters; phases of retail
 collection appeals. H. M. Sommers. Credit
 & Fin Management 45:11-15 S '43
 Radical policy changes help Coast distribu-
 tors cheat hangman. Sales Management 52:
 50-3+ Mr 1 '43
See also
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Study and teaching

First aid for the man in the corner store;
 wartime business clinics in Philadelphia.
 R. Amberson. Il Ptr Ink 203:11-13+ Je 18
 '43
 How wartime clinics are aiding business on
 the West coast. Sales Management 52:68+
 Jl 1 '43
 Problems in conducting a cooperative train-
 ing program. A. C. Mossin. J Retailing 19:
 56-63 Ap '43
 Programs under George-Deen act help to
 break retail bottlenecks. Sales Management
 52:62+ Jl 1 '43
 Rating sheet for teaching ability. I. B.
 Wingate. J Retailing 18:125-6 D '42
 School contributes to retailing. J. B. Pope.
 J Retailing 19:27-31 F '43
 Solving wartime problems in distributive edu-
 cation. N. A. Brisco and O. P. Robinson.
 J Retailing 19:51-5 Ap '43

Taxation

See also
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 tion

Canada

Control of retail business extended. For
 Comm W 12:14 Jl 10 '43

Cuba

Cuba's retail sales keep pace with ours.
 Sales Management 52:48 F 15 '43

Germany

German retail trade and handicrafts today.
 H. K. Ladenburg. For Comm W 11:3-4+
 Je 12 '43

Great Britain

Allocation of small retailers' supplies. For
 Comm W 10:29 F 27 '43
 Britain's stores in the fourth year of war. G.
 Burlton. Adv & Sell 36:86+ Ag '43
 Cat and mouse; small retailers' supply
 scheme. Economist 143:759, 777-8 D 19 '42
 Department store outlook. Economist 144:
 694-5 My 29 '43
 No sales. Economist 144:9-10 Ja 2 '43
 Retail trade in 1942. Economist 144:sup26
 Mr 13 '43
 Retail trade trends. Economist 145:378 S 11
 '43
 Retail trade, year ended January, 1942. Econ-
 omist 144:435 Ap 3 '43
 Small trader. Economist 145:340 S 4 '43
 War seen closing many retailers, OPA study
 of British experience holds. Comm & Fin
 Chr 158:617 Ag 12 '43

Hawaiian Islands

Honolulu in year of war adds \$100,000,000
 buying power. Sales Management 52:37-8
 Ja 1 '43

Illinois

Study of retail trade areas in east central
 Illinois. P. D. Converse. map Ill U Bur
 of Econ and Business Res, Business Studies
 2:1-68 '43

Pacific coast

Radical policy changes help Coast distribu-
 tors cheat hangman. Sales Management 52:
 50-3+ Mr 1 '43

Philadelphia

First aid for the man in the corner store;
 wartime business clinics. R. Amberson. Il
 Ptr Ink 203:11-13+ Je 18 '43

United States

Plan for new civilian supply office offered.
 Comm & Fin Chr 157:583 F 11 '43
 Retailers survive; checkup on mortalities.
 Business Week p70+ Jl 10 '43
 Small retail store mortality. W. T. Hicks
 and W. F. Crowder. U S Bur For & Dom
 Com. Economic Ser 22:1-43 '43
 Weathering the war at the retail level;
 results of a survey. W. Hayes. Il Dun's R
 51:17-19, 34-5 Mr; 7-10+ Ap '43; Abstract.
 Management R 32:185-7 My '43

RETAIL workers

A.F.L. hits stores; 3-day strike, closing Gim-
 bels and crippling two competitors in Pitts-
 burgh. Business Week p98 N 14 '42
 48-hour week pay rise called ruinous for
 some retail stores. Comm & Fin Chr 157:
 1399 Ap 15 '43
 Problems in conducting a cooperative train-
 ing program. A. C. Mossin. J Retailing 19:
 56-63 Ap '43
 Programs under George-Deen act help to
 break retail bottlenecks. Sales Management
 52:62+ Jl 1 '43
 Replacement of men by women in New York
 service industries. Monthly Labor R 56:
 486-7 Mr '43
 School contributes to retailing. J. B. Pope.
 J Retailing 19:27-31 F '43
 Shop assistants and conscription for war
 work. Economist 143:796 D 26 '42

See also
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RETAINING walls

Charts and a direct method for design of
 cantilever retaining walls. W. A. Jones.
 diags Am Concrete Inst J 15:5-32 S '43

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Dams
 Earth pressure
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 tion
 Reservoirs

RETAINING walls, Concrete

Access road follows century-old canal bed;
 Lockland-Arlington Heights section of Ohio
 state route 987. J. A. Byrnes. Il Roads &
 Sts 86:47-8 Je '43

Disintegrated cut stone in Kentucky state
 capitol replaced by architectural concrete.
 Il diag Concrete 51:4+ F '43

RETENEQUINONE

Reactions of phenanthraquinone and re-
 tenequinone with aldehydes and ammonium
 acetate in acetic acid solution. E. A. Steck
 and A. R. Day. bibliog Am Chem Soc J
 65:452-6 Mr '43

RETENEQUINIMINE

Reactions of retenequinimine and phenan-
 thraquinimine with aldehydes; a new ex-
 ample of an aldol-type of condensation.
 C. W. C. Stein and A. R. Day. bibliog Am
 Chem Soc J 64:2567-9 N '42

Reactions of retenequinimine and phenan-
 thraquinimine with Schiff bases; a new
 example of an aldol-type of condensation.
 C. W. C. Stein and A. R. Day. bibliog Am
 Chem Soc J 64:2569-73 N '42

RETENOXAZOLES

Reactions of retenequinimine and phenan-
 thraquinimine with aldehydes; a new ex-
 ample of an aldol-type of condensation.
 C. W. C. Stein and A. R. Day. bibliog Am
 Chem Soc J 64:2567-9 N '42

Reactions of retenequinimine and phenan-
 thraquinimine with Schiff bases; a new
 example of an aldol-type of condensation.
 C. W. C. Stein and A. R. Day. bibliog Am
 Chem Soc J 64:2569-73 N '42

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RETIREMENT insurance. *See* Annuities; In-
 surance, Life—Retirement income policies

RETIREMENT of equipment. *See* Machinery,
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RETIREMENT plans. *See* Pensions, Industrial

RETORTS, Gas. See Gas retorts

RETRO charts. See Graphic methods

RETRONECINE

Structure of monocrotaline; proof of the position of the double bond in retronecine. R. Adams and J. E. Mahan. bibliog Am Chem Soc J 65:2009-12 O '43

Structure of monocrotaline; structure of retronecine and related bases. R. Adams, M. Carmack and J. E. Mahan. bibliog Am Chem Soc J 64:2593-7 N '42

Structure of monocrotaline; the proof of primary and secondary hydroxyl groups in retronecine. R. Adams and K. E. Hamlin, Jr. bibliog Am Chem Soc J 64:2597-9 N '42

REUTHER, Walter, 1907-

Reuther plan II. Business Week p68+ Ja 23 '43

REVENUE act of 1942

1942 Revenue act. F. L. Pearce. N A C A Bul 24:761-75 Mr 1 '43

REVENUE bonds. See Bonds, Revenue

REVERBERATORY furnaces. See Furnaces, Reverberatory

REVERE, Paul, 1735-1818

Paul Revere; patriot, silversmith, and engraver. P. T. Sisco. Min & Met 24:202-3, 239, 283, 365 Ap-Je, Ag '43

REVERE copper and brass, Inc.

Paul Revere; the Revere copper company. Min & Met 24:365 Ag '43

REVERSAL process. See Photography—Reversal process

REVERSE cycle refrigeration. See Heat pump

REVERSING mechanism

Air pressure controls reversing drive; patent assigned to The Falk corp. diag Machine Design 15:170+ S '43

Bunker conveyor control relayed for flexibility; American Gas & Electric station. A. H. Beiler. il diags Elec W 120:254-6 Jl 24 '43

Reversing drive uses fluid couplings; patent assigned to General Motors corp. diag Machine Design 15:158 My '43

Reversing rotating motion. L. Kasper. diags Mach 49:199-200 Ag '43

REVOCABLE trusts. See Trusts and trustees—Revocable trusts

REWARDS, prizes, etc.

B-complex award of Mead Johnson and company. A. H. Smith. Science 98:237 S 10 '43
First Charles L. Mayer award of the National science fund. Science 97:349 Ap 16 '43

Institute of the aeronautical sciences honors night dinner. il Aeronautical Eng R 2: 19+ Mr '43

Peterson given Hanlon award. Oil & Gas J 41:42 Ap 22 '43

Presentation of Samuel Wylie Miller memorial award to Dr D. S. Jacobus, Oct. 18, 1943, by H. C. Boardman; with reply by D. S. Jacobus. Welding J 22:923-4 N '43

See also

Advertising awards	Science talent search
Medals	Washington award
Safety contests and awards	

REYBOLD, Eugene, 1884-

Sketches of our engineer generals. por Eng N 131:231 Ag 5 '43

REYNOLDS, R. J., tobacco company

Annual report. Comm & Fin Chr 157:349 Ja 25 '43

Rh factor. See Blood group

RHAMNUS. See Buckthorn

RHEAD, Frederick Hurten, 1880-1942

Sketch, bibliog por Am Cer Soc Bul 21:305-7 D 15 '42

RHENIUM

Rhenium. Can Chem & Process Ind 27:394 Jl '43

Rhenium now available to researchers from a domestic source. Sci Am 169:124+ S '43

RHEOLOGY

Anomalies of elasticity and flow and their interpretation. R. Simha. bibliog J Phys Chem 47:345-63 Ap '43

Rheology of paints. Paint Oil & Chem R 105: 14 Mr 25 '43

See also

Fluids

Plasticity

RHEOSTATS

Artificial-load rheostat. E. Simpson. diag Power 87:690-1 O '43

Liquid rheostat for continuous control; centrifugal pump and draft fan motors. G. R. Shaw. diag Elec W 119:788+ Mr 6 '43

Water rheostat for testing Diesel-electric locomotives. il diags Ry Mech Eng 117:137-9 Mr '43

RHEUMATIC fever

Integration of genetic and epidemiological methods of analysis in rheumatic fever. M. G. Wilson, R. Lubschez and M. D. Schweitzer. Science 97:335-6 Ap 9 '43

RHODAMINE B

Substitute for cinchonine in the tungsten assay. J. T. Oats. Eng & Min J 144:72 Ap '43

RHODE ISLAND

See also

Rain and rainfall—

Rhode island

RHODES scholars

Dr Aydelotte refutes charges made against Rhodes scholars. Comm & Fin Chr 158:1621 O 21 '43

RHODESIA

Economic conditions

News by countries; Northern Rhodesia. For Comm W 11:20-1 Je 19 '43

News by countries; Southern Rhodesia. For Comm W 11:19-20 Je 5 '43

RHUBARB, Frozen

Summer pies in winter. il Mod Packaging 16: 58-9+ Ag '43

RHUS. See Sumac

RHYTHM

Rhythm in time and motion study. C. Babbits. bibliog diags Advanced Management 8:6-16+ Ja '43

RIBBONS

Ribbon reel. il Mod Packaging 16:64 Je '43

RIBOFLAVIN. See Vitamins—Vitamin B₂

RIBOSE

Production of furfural from D-xylose and D-ribose. R. C. Hockett, A. Guttag and M. E. Smith. bibliog diag Am Chem Soc J 65:1-3 Ja '43

RICARDO, Harry Ralph, 1885-

Autobiography. por Mech Eng 65:765-9 N '43

RICE

Bumper rice crops help ease hemisphere food shortages. For Comm W 10:26 F 20 '43

New rice-exporting association formed. For Comm W 9:17 N 14 '42

Peruvian rice situation. For Comm W 13:19 N 6 '43

Pioneering rice flood insurance on the Carolina coast through London. E. G. Seibels. East Underw 44:27 Ja 8 '43

Pooling of rice. Economist 144:509 Ap 17 '43

Production of rice in India, 1939-40 and 1941-42. For Comm W 10:23 Ja 23 '43

Rice cultivation in Surinam. For Comm W 12:22-3 Jl 17 '43

Rice-growing in Colombia; Uruguay's 1943 rice crop. For Comm W 10:26 Mr 20 '43

Rice, 1938-1941. Survey of Cur Business 1942 Sup p119 [supplemented in monthly numbers]

Rice production in Brazil, Ecuador, 1942. For Comm W 10:21 F 6 '43

Rice production in Japan. For Comm W 12: 26 Jl 10 '43

Thiamin in products of commercial rice milling; abstract. M. C. Kik. Food Ind 15:119 Ap '43

RICHFIELD oil corporation

Low-priced stocks for large percentage gains. Mag of Wall St 71:635 Mr 20 '43

RICKENBACKER, Edward Vernon, 1890-

Rickenbacker's own story. pors S A E J 51: sup26-8, 33-9 Mr '43

RICKETTSIAE

American and Australian Q fevers: persistence of the infectious agents in guinea pig tissues after defervescence. R. R. Parker and E. A. Steinhause. *Pub Health Rep* 58:523-7 Mr 26 '43

American Q fever: the occurrence of rickettsia diaporica in amblyomma americanum in eastern Texas. R. R. Parker and G. M. Kohls. *Pub Health Rep* 58:1510-11 O 8 '43

Complement fixation in rickettsial diseases. H. Plotz. *Science* 97:20-1 Ja 1 '43

Ornithodoros ticks as a medium for the transportation of disease agents. R. R. Parker. *bibliog Pub Health Rep* 57:1963-6 D 25 '42

Rickettsiosis in India. N. H. Topping, R. Heilig and V. R. Naidu. *bibliog Pub Health Rep* 58:1208-10 Ag 6 '43

Rocky Mountain spotted fever; spontaneous infection in the tick amblyomma americanum. R. R. Parker, G. M. Kohls and E. A. Steinhause. *bibliog Pub Health Rep* 58:721-9 My 7 '43

Tick ornithodoros rudis as a host to the rickettsiae of the spotted fevers of Colombia, Brazil, and the United States. G. E. Davis. *bibliog Pub Health Rep* 58:1016-20 Jl 2 '43

RIDBO 369. See Plasticizers

RIDDELLINE

Structure of riddelline, the alkaloid in senecio riddellii. R. Adams and others. *Am Chem Soc J* 64:2760-3 D '42

RIDGWAY, Raymond Ronald, 1897-

Jacob F. Schoellkopf medal award. *Chem & Eng N* 21:859 Je 10 '43

RIEBEL, Frederick

Portrait. *Business Week* p20 Ap 17 '43

RIFLES**Advertising**

Share your rifle plan helps make U.S. nation of marksmen; Mossberg campaign. *il Sales Management* 52:38+ N 1 '43

Manufacture

Breech bolts for Boys anti-tank rifles. *il diags Am Mach* 87:99-101 My 13 '43

Development of broach rifling at Rock Island arsenal; with cost data. W. Baumbeck. *il diags Mech Eng* 65:401-5 Je '43

Machining the Garand rifle. J. Kirk. *il Iron Age* 151:66-71 My 13 '43

Manufacturing the light carbine. J. Kirk. *il Iron Age* 151:47-55 Ap 8 '43

Mass production of the caliber 0.30, M-1 carbine. Standard products co. T. E. Lloyd. *il Iron Age* 152:42-7 Ag 26 '43

Pressed metal replaces machined forging for rifle trigger guard. *il diags Product Eng* 14:624 O '43

Rifle drilling with carbides; International business machines, Inc. T. R. Skoftefeld. *il Am Mach* 87:83-5 Ag 19 '43

Rifling gun barrels by broaching. I. A. Swidlo. *il diags Am Mach* 87:117-24 O 14 '43

RING compounds. See Cyclic compounds

RINGWORM

Outbreak of microsporon lanosum infection from a kitten. I. Botvinick, S. M. Peck and L. Schwartz. *bibliog Pub Health Rep* 58:317-19 F 19 '43

See also

Athlete's foot (dis-ease)

RIO DE JANEIRO

Office building for Ministry of education and health. *il diags plans Arch Forum* 78:37-44 F '43

RIOT insurance. See Insurance, Riot and civil commotion

RISK

See also

Profit
Speculation

RISK research institute, incorporated

R. D. Guernsey again heads Risk research; other officers. *East Underw* 44:27 Jl 2 '43

RISKS (insurance). See Insurance, Fire—Risks; Insurance, Life—Aviation risks; Insurance, Life—Risks; Insurance, War risk

RIVANOL

Improved syntheses of aminoacridines; 2:5-diamino-7-ethoxyacridine, the base of rivanol. A. Albert and W. Gledhill. *bibliog Soc Chem Ind J* 61:159-60 O '42

RIVER coal. See Coal dredging

RIVER pollution. See Water pollution

RIVER traffic

Inland waterways gain importance in wartime movement of petroleum. H. D. Ralph. *il Oil & Gas J* 42:26-7+ S 30 '43

River movement looms large in bituminous traffic. M. L. Branin. *map Coal Age* 48:64-6 O '43

River terminal dedicated in Tennessee. *il map Manuf Rec* 112:70 S '43

War uses of the inland waterways. *il Marine Eng* 48:189-90 My '43

See also

Barges
Tank barges
Waterways

Statistics

Waterway traffic, 1938-1941. Survey of Cur Business 1942 Sup p99 [supplemented in monthly numbers]

RIVERS

Distorted river models. by A. Rohringer; tr. and abst. by D. C. Davis. *diags Am Soc C E Proc* 69:sup42-6 S '43

Use of turbidity determinations in estimating the suspended load of natural streams. R. G. Grassy. *bibliog diags Am Water Works Assn J* 35:439-53 Ap '43

See also

Canyons
Dams
Flood control
Floods
Hydraulic engineering
Hydraulics
also names of rivers, e.g.
Columbia river
Mississippi river

River traffic

Stream flow

Water pollution

Water rights

Water supply

Watersheds

Waterways

Regulation

Flow diversion at Niagara falls. N. Marr; C. G. Cline; H. C. Woods. *il diags maps Civil Eng* 13:321-4, 359-62, 403-6 Ji-S '43

Postwar mass employment in public works. T. S. Spitzer. *Pub Util* 31:803-4 Je 24 '43

River diversion at Shasta dam. D. C. May. *il diags Eng N* 131:397-9 S 9 '43

See also

Columbia river
Dams
Flood control
Locks (hydraulic engineering)

New Hampshire

See also
Floods—New Hampshire

Ohio

Distribution of stream plankton in the Ohio River system; abstract. F. J. Brinley and L. J. Katzin. *Am Water Works Assn J* 35:819 Je '43

RIVERS, Underground. See Water, Underground

RIVETED joints

Physical properties that affect the behavior of structural members. W. M. Wilson. *il Am Soc C E Proc* 68:1715-25 D '42; Discussion. 69:775-8, 858-60, 1587-93 My-Je, D '43

Spot welding of light alloys; comparison with riveted joints. G. H. Field, H. Sutton and H. E. Dixon. *bibliog il diags Welding J* 22:sup 573-92 N '43

Transition from riveted to welded construction of light combat tanks. W. Osha and J. W. Sheffer. *il diags Welding J* 22:780-3 O '43

Welding armor plate for combat tanks; superiority of welded over riveted construction. E. Brooker and L. L. Elliot. *il diags Iron Age* 151:23-7 Ja 14 '43

Testing

Riveted and pin-connected joints of steel and aluminum alloys. L. S. Moisseff, E. C. Hartmann and R. L. Moore. *il diags Am Soc C E Proc* 69:3-40 Ja '43; Discussion. 69:575-6, 1463-4 Ap, N '43

RIVETED joints—Testing—Continued

Tension joints in aircraft structures; riveted joint design practice with respect to applicability to aluminum alloys. C. H. Holleman. *J Aeronautical Sci* 10:295-302+ O '43

Tests of riveted and welded joints in low-alloy structural steels. W. M. Wilson, W. H. Bruckner and T. H. McCrackin, jr. *II diags III U Eng Exp Sta Bul* 337:1-73 '42 (pa 80c)

See also

Rivets—Testing

RIVETERS

Women in industry; a study of 135 women working as riveters in the aircraft industries. W. C. Bradbury and C. E. S. Evans. *bibliog Ind Med* 12:690, 692 O '43

RIVETING

Automatic control of riveting; Murray Time-Air. *II Aero Digest* 41:184 N '42; *Iron Age* 150:39 D 24 '42

Automatic riveting at Vultee. *II Iron Age* 151:67 Ap 3 '43

Automatic tool simplifies rivet handling. *diags Product Eng* 14:148 Mr '43

Broom and Wade squeeze riveter. *II Engineer* 174:527 D 25 '42

Bucking bar simplifies aircraft riveting. *II diags Product Eng* 14:78-9 F '43

Developments in riveting. *Franklin Inst J* 236:312 S '43

Fully-automatic spar riveter at Curtiss-Wright. *II Aero Digest* 42:195+ Je '43

Gear riveting; how to do it properly. *II diags Bus Transportation* 22:48-9 Jl '43

General automatic multiple riveter. *II Mach* 49:222+ Ap '43

General Engineering riveter. *II Am Mach* 87:138 Jl 8 '43

Jam riveting process adopted by Curtiss-Wright. *II Aero Digest* 43:234 Jl '43

Know-how of aluminum riveting; illustrations showing tools and methods. *Am Mach* 87:94-7 O 14 '43

New fastening system combines blind rivet with nut-and-bolt action; Rivnut. *II diags Steel* 111:80-1+ D 28 '42

Roving rivet girls. *II Business Week* p27 Jl 17 '43

Telescoping bar drives rivets in close quarters. M. Umbraco. *diag Am Mach* 87:102 Ag 5 '43

RIVETS

Aircraft rivets sorted by machine. *Iron Age* 151:106 F 18 '43

Automatic sorters for aircraft rivets. H. O. Mills and L. Donner. *II diags Am Mach* 87:105-8 Jl 8 '43

Cherry blind rivets. *diags Steel* 112:136-7 Ap 5 '43

Cold treatment of metals; refrigerating apparatus used in producing shrink fits, in hardening processes and in retarding aging in aluminum rivets. W. A. Phair. *II Iron Age* 151:41-2 F 25 '43

Experience with alloy steels in boilers. A. G. Trumbull. *Ry Mech Eng* 117:77-9 F '43

Hi-shear rivet replaces bolts in Mustang wing. *II Automotive & Aviation Ind* 88:19-20 Je 1 '43

Low temperature refrigeration requirements in war production; processing aluminum alloy rivets. C. L. Olin. *II Refrig Eng* 45:83-4 F '43

Physically handicapped workers handle control system for ice-box rivets at Curtiss-Wright Columbus plant. *II Steel* 113:84+ Jl 5 '43

PRECO blind rivet. *diag Automotive & Aviation Ind* 89:39 O 1 '43

Radio frequency heating tool fires explosive rivets. *diag Electronics* 16:310 Mr '43

Refrigerating aluminum alloy rivets and parts. B. J. Fletcher. *flow chart II Metals & Alloys* 17:1178-82 Je '43; *Correction*. 18:65 Jl '43

Rivet heater with improved burner. *II diags Ry Mech Eng* 117:44-5 Ja '43

Rivet sorting machines. *II Aero Digest* 42:370+ Mr '43; *Same cond. Mach* 49:179 My '43; *Excerpts. Steel* 112:52 Mr 29 '43

Rivets, cool and collected. *II Mod Packaging* 17:92-4 O '43

Structural rivets, Pittsburgh; prices, 1929-1942; tabulation. *Steel* 112:372 Ja 4 '43

Sub-zero temperatures in industry. G. F. Forsthoefel. *flow chart II Refrig Eng* 46:164-7 S '43

Super-hard rivet for aircraft. *II Iron Age* 151:64 Je 3 '43

Manufacture

50,000,000 plated rivets a day; Chicago rivet & machine company. H. Chase. *II Am Mach* 87:87-8 F 4 '43

Pneumatic cutter shears 2,500 rivets a day. S. D. Gardner. *II diags Am Mach* 87:109 Jl 22 '43

Testing

Prescriptions for head cracks in 24ST rivets; laboratory tests of strengths, corrosion resistance, heat treatments, and aging. E. C. Hartmann, C. F. Westcoat and M. W. Brennecke. *II Aviation* 42:139-43+ N '43

ROACHES. See Cockroaches**ROAD accidents**

Compensation for pedestrians? *Economist* 143:602 N 14 '42

See also

Automobile accidents Roads—Safety measures Roads—Lighting

ROAD contractors

Alaska highway's builders; including list of American and Canadian contractors. H. J. McKeever. *II Roads & Sts* 86:58-61 O '43

Alcan highway; Public roads administration and construction companies. H. J. McKeever. *II Roads & Sts* 86:54-8 Ja '43

Springville, where all the contractors come from. *Roads & Sts* 86:66 Ag '43

Directories

Contractors, Canada; roads, bridges, airports, earthmoving. *Roads & Bridges* 81:68-76 Jl '43

ROAD guards. See Roads—Safety guards**ROAD magnets. See Roads—Magnetic sweeping****ROAD making machinery**

How eastern equipment distributor is aiding war program. H. J. McKeever. *II Roads & Sts* 86:71-2, 74, 76-7 Mr '43

New control over road machinery; purchase of equipment of U.S. origin affected by limitation order. *Roads & Bridges* 81:27-8+ Ja '43

New method of honing bituminous road surfaces. *II Roads & Sts* 85:44 N '42

Using power patrols in tandem for heavy grading. D. R. Savage. *II Pub Works* 74:13+ Je '43

See also

Road rollers Road scrapers

Lubrication

Lubrication guide for earthmoving equipment. *Roads & Bridges* 81:60 Mr '43

Lubrication makes scarce road machinery last longer. *II Pub Works* 74:28+ My '43

Repair

Equipment maintenance. *II diags Roads & Sts* 85:49-60 N; 49-60 D '42

Repairs for road machinery; procedure for securing parts. *Roads & Bridges* 80:36, 78 D '42

ROAD materials

Produce 180 tons road mix per hour; Porter W. Yett, Portland, Ore. uses quarry methods in excavating sand and gravel. R. S. Torgerson. *II Rock Prod* 46:52-4 My '43

Soil science; aspects that should be understood by road surveyors. J. R. Scott. *Roads & Bridges* 81:44 Mr '43

Use of deliquescent materials in road construction. *Roads & Bridges* 81:96+ Jl '43

See also

Asphalt	Pavements
Bituminous materials	Road oils
Cement	Road tar
Concrete	Sand
Limestone	Stone, Crushed

ROAD materials—Continued**Testing**

Volcanic cinders suitable for use in base course construction. E. A. Willis, H. Aaron and R. C. Lindberg. *il Pub Roads* 23:125-35 O '42

See also

Soils—Testing

ROAD oils

California plant adapted to refine sulfur crude; road oil and asphalt main products; Bell oil & refining co. *il Oil & Gas J* 42:74 Je 17 '43

See also

Asphalt

ROAD research. *See Highway research*

ROAD rollers

Lean-mix concrete used for roads; forming pavements by rolling. D. V. Darwin. *Eng N* 130:685 My 6 '43

ROAD scrapers

Welding a scraper drawbar. *il Roads & Sts* 86:71 My '43

ROAD signs

Highway signs and markings for blackout conditions; test using cars equipped with lights approved by the War department. G. J. Fisher and O. K. Normann. *il diags map Pub Roads* 23:105-24, 135-6 O '42

Road marking for blackout conditions; embedding glass beads in paint more than doubles visibility. *Pub Works* 74:47-8 S '43

Suggestions for traffic sign improvements. *Eng N* 130:sup206+ Ja 14 '43

ROAD tar

See also

Roads, Tarred

Testing

Sulfonation index test for road tars. R. H. Lewis and W. J. Halstead. *Pub Roads* 23:141-54+ Ja '43; Conclusions. *Pub Works* 74:32 Jl '43

ROAD traffic

Achieving maximum highway use in the United States; abstract. S. J. Williams. *Roads & Bridges* 81:76-8 Ap '43

Highway traffic cut 48 percent in 1942 due to war restrictions. *Eng N* 130:755 My 20 '43

How the war has affected highway traffic. V. W. Killick. *Roads & Bridges* 80:84-5 D '42

Pennsylvania Turnpike in war-time; traffic changes. *il Roads & Sts* 85:42 N '42

Plan for London. *map Engineer* 176:46-8 Jl 16 '43

Traffic and the neighborhood plan. G. D. Clarke and M. Rapuano. *diags plans Arch Forum* 79:130-2 O '43

Traffic growth and composition, 1937-1941. L. E. Peabody. *Pub Roads* 23:155-6+ Ja '43

Urban street traffic and rural truck highway travel in Minnesota. *Roads & Sts* 85:32 D '42

See also

Highway engineering Street traffic
Highway transportation Traffic regulations
 Traffic surveys

ROAD workers

Kentucky paves the way; safety for highway workers. T. B. Smith. *il Nat Safety N* 46:20-1+ N '42

ROADMASTERS' and maintenance of way association

Meeting of officers and directors. Chicago. Sept. 15. *Ry Age* 115:483-5+ S 25 '43

ROADS

Highway operations under war conditions; special section. *il maps diags Eng N* 130:43-62 Ja 14 '43

Highways in war and peace. T. G. Morgan. *Roads & Bridges* 81:90+ Mr '43

Road builders talk about post-war construction; annual meeting. American road builders association. *il Concrete* 51:4-5 Je '43

Transportation under war conditions, 1942. V. T. Boughton. *il Eng N* 130:193-9 F 11 '43

Wartime importance of granular stabilized roads; recommendations for their design, construction and maintenance. *il diags Roads & Bridges* 81:26-30+ Je; 33-4+ Jl; 84+ S '43

See also

Airplanes in road construction	Pan American highway
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Highway administration	Road making machinery
Highway engineering	Road materials
Highway research	Road rollers
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Mountain roads	Snow removal
also Association of highway officials of the North Atlantic states	Streets

Accidents

See Road accidents

Automobile roads

See Roads, Automobile

Construction

Alcan, America's glory road. H. W. Richardson. *il maps Eng N* 129:858-72, 907-14; 130:63-70 D 17, 31 '42, Ja 14 '43

Alcan highway. H. J. McKeever. *il diags maps Roads & Sts* 86:34-62, 70-2 Ja; 40-52 F '43

Alcan military highway. C. L. Sturdevant; A. L. Lane. *il maps Civil Eng* 13:131-8 Mr '43

Equipment and personnel organization on the Alaska highway. *il Roads & Bridges* 81:25-6+ Ja '43

1943 Alcan construction job. H. J. McKeever. *il map Roads & Sts* 86:53-8 O '43

Construction equipment

Alcan highway; equipment repairs and maintenance on Alcan. H. J. McKeever. *il Roads & Sts* 86:70-2 Ja '43

Building the Inter-American highway; maintenance and repair of equipment. A. N. Carter. *il Eng N* 131:345-6 Ag 26 '43

Crowning screeds. *diags Roads & Sts* 86:84 Ap '43

Equipment for soil-cement road construction. *Concrete* 50:26 D '42

Used construction equipment now under WPTB control. *Roads & Bridges* 81:88, 90+ O '43

See also

Road making machinery	Roads, Concrete—Construction equipment
-----------------------	--

Directories

Products index; with addresses of manufacturers and agents. *Roads & Bridges* 81:86-96, 100-12 Jl '43

Contracts

See also

Road contractors

Cost

Access road follows century-old canal bed; Lockland-Arlington Heights section of Ohio state route 987. J. A. Byrnes. *il Roads & Sts* 86:47-8 Je '43

Contract unit bid prices; list of projects showing how contractors bid in 1942-1943. *Eng N* 130:sup174+ Ap 22 '43

Grade separation. New Jersey; unit prices. *Eng N* 131:639-4 O 21 '43

Highway and bridge. New Mexico; unit prices. *Eng N* 131:494 S 23 '43

Highway grading and culverts, Missouri; unit prices. *Eng N* 130:78 Ja 14 '43

Highway improvement. North Carolina; unit prices. *Eng N* 129:800 D 3 '42

Highway improvements. New Mexico; unit prices. *Eng N* 131:358 Ag 26 '43

Highway improvements. North Dakota; unit prices. *Eng N* 130:78 Ja 14 '43

Highway, New Jersey; unit prices. *Eng N* 130:508 Ap 8 '43

Highway, North Carolina; unit prices. *Eng N* 131:554 O 7 '43

Highway, Pennsylvania; unit prices. *Eng N* 130:246 F 11 '43

ROADS—Cost—Continued

Highway, Virginia; unit prices. Eng N 129: 734 N 19 '42

Highways, Virginia; unit prices. Eng N 130: 386 Mr 11 '43

Minnesota determines road costs per mile of travel. Roads & Sts 86:86 Ja '43

Roadbuilding costs, 1922-1942. Eng N 130:630 Ap 22 '43

Surface area and access road, California; unit prices. Eng N 131:702 N 4 '43

Cost of maintenance

See Roads—Maintenance and repair

Crossings

See Grade crossings; Roads—Intersections

Curves

Vertical curve elevations. C. G. Curry. Eng N 130:447 Mr 25 '43

Drainage

Electrical drainage of fine soils; electro-osmotic process. Roads & Bridges 80:99 D '42

No steel in Kansas concrete culverts. T. W. Oliver. Il diags Eng N 131:484-8 S 23 '43

Underdrains for highways; California specifications. Pub Works 74:32-3 Ag '43

Economic aspects

Alcan highway; a summary of its potential economic influence. map Index 23 no 2:36-44 [Je] '43

Highway construction as an economic catalyst. C. M. Upham. Roads & Bridges 81: 76+ O '43

Importance of adequately maintained roads in war time. J. G. Cameron. Roads & Bridges 81:74, 76 Mr '43

Place of highways in post-war reconstruction. C. M. Upham and D. R. Lamson. Roads & Bridges 81:92-4 My '43

Place of road construction in post-war rehabilitation. R. C. Wallace. Roads & Bridges 80:54, 56 D '42

Post-war highway development. T. G. Morgan. Roads & Bridges 81:54, 56+ Ap '43

Federal aid

Federal highway balances may be used for postwar plans and specifications. Eng N 130:709 My 13 '43

Funds for postwar highway planning provided in new federal-aid law. Eng N 131:174 Jl 22 '43

Highway construction, 1938-1941. Survey of Our Business 1942 Sup p24-5 [supplemented in monthly numbers]

President signs post-war road bill (H.R. 2798); distribution of funds by states. Roads & Sts 86:44 Ag '43

Finance

Current highway work in four states. Eng N 131:433 S 16 '43

Disposition of state motor-fuel tax receipts, 1941; other tax receipts; tabulated by states. Pub Roads 23:137-40 O '42

Florida gas tax amendment favorable to road and road district issues. H. G. Garrison. Comm & Fin Chr 156:1963+ D 3 '42

Highway boards, planners announce new programs for postwar construction. Eng N 130:257 F 13 '43

Highway department budgets reflect anticipated drops in tax revenues. Eng N 130:18 Ja 14 '43

Highway expenditures and plans for 1943; 33 states. Eng N 130:49 Ja 14 '43

Maintenance and finance discussed at meetings of highway engineers; summaries of discussions at meetings of the Highway research board and the American association of state highway officials. Eng N 130: 71-3 Ja 14 '43

Municipal road financing in the post-war period. D. J. Emrey. Roads & Bridges 81: 118-20 Mr '43

\$100,000,000-a-year industry; statistical analysis of the construction of road and air transport facilities in Canada. Il Roads & Bridges 81:27-9 Jl '43

Post war construction and its influence on the market for portland cement. Concrete 51:2-4 N '43

Roads under war restrictions. Il Eng N 129: 484-8, 555-7, 627-30, 847-50; 130:351-6 O 8, 22, N 5, D 17 '42, Mr 11 '43

State highway debt requirements exceed \$2,433,000,000. Roads & Sts 86:60 Je '43

War conditions force states to protect highway funds. Comm & Fin Chr 158:1009 S 9 '43

See also

Roads—Federal aid

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Foundations

Cement-treated base plus plant mix; road between Bradley and King City, California. A. N. Lund. Il Roads & Sts 86:35-8 Jl '43

Volcanic cinders suitable for use in base course construction. E. A. Willis, H. Aaron and R. C. Lindberg. Il Pub Roads 23:125-35 O '42

See also

Roads—Subgrades

Frost damage

Frost heaving in road subgrades. Pub Works 74:44-5 S '43

How can frost boils be prevented? effect of calcium chloride. Il Roads & Bridges 80: 26+ N '42

Mechanics of frost heaving. Roads & Bridges 81:84-5 My '43

Grading

Using power patrols in tandem for heavy grading. D. R. Savage. Il Pub Works 74: 13+ Je '43

Ice control

Ohio extends use of chemicals to free highways of ice and snow. Eng N 131:539 O 7 '43

Skidproofing highways with chemically-treated sand in Ontario. Il Roads & Bridges 81: 112-14 O '43

See also

Roads—Frost damage

Intersections

California project involves novel intersectional design; channelization structures combined with traffic-actuated signals. A. G. Lindley. diags Pub Works 74:13+ F '43

Lighting

Illuminated road guardposts. Il Elec R (Lond) 131:653 N 20 '42

Street and highway lighting for 194X. R. C. Engelken. Il diags Arch Forum 79:100-2 O '43

Location

Alcan military highway; problems of location. A. L. Lane. Il maps Civil Eng 13: 135-8 Mr '43

Highway around Shasta Dam reservoir; relocation project. Il map Eng N 131:646-7 O 28 '43

Speeding-up the Alaska highway by aerial-survey methods. R. N. Johnston. Il map Roads & Bridges 80:17-23+ N '42

Magnetic sweeping

Magnet-equipped truck saves tire damage; clearing the streets of metal pieces; Chicago surface lines. W. C. Wheeler. Il Mass Transportation 38:363 D '42

Magnetic nail pickers go to war; metal removed from airfields and roads around camps and industrial plants in Texas. Il Eng N 130:479-80 Ap 3 '43

Road magnet collects tramp steel on refinery roads. Il Oil & Gas J 42:69 O 7 '43

Systematic removal of metal pieces from roads; magnetic nail-picker trucks. N. Swift. Roads & Bridges 80:74 D '42

Maintenance and repair

ABC's of road maintenance with tars. Il Eng N 129:731-5 D 3 '42

Alcan highway; maintenance and winter problems. H. J. McKeever. Il diags Roads & Sts 86:46-50 Ja '43

County road problems in northern Michigan. K. I. Sawyer. Il Roads & Sts 86:45-6 Je '43

ROADS—Maintenance and repair—Continued

Emergency pavement patching with pre-stabilized soil-aggregate mixes. R. L. Fosburg. *Il Roads & Bridges* 81:25+ Je '43

Equipment pool; cooperative exchange of idle highway machinery urged. *Business Week* p38+ Mr 13 '43

425th spot treatment in Wayne county. *Il Roads & Sts* 86:63 Mr '43

Highway maintenance costs. Eng N 130:632 Ap 22 '43

Highway maintenance during the war. R. M. Whitton. *Il Eng N* 130:52-5 Ja 14 '43

Keeping trucks rolling in Oregon. E. A. Collier. *Il diags Eng N* 130:55-6 Ja 14 '43

Maintaining Michigan highway and street service during the war period. L. B. Reid; L. Belknap. *Roads & Sts* 86:56+ Mr '43

Maintenance and finance discussed at meetings of highway engineers; summaries of discussions at meetings of the Highway research board and the American association of state highway officials. Eng N 130:71-3 Ja 14 '43

Maintenance of roads in wartime. M. A. Lyons. *Il Roads & Bridges* 80:37-8+ D '42

Nation faces critical road conditions. *Il Roads & Sts* 86:48-50+ My; 49-50, 82-4 Je '43

Ohio maintenance geared to wartime; state road program. H. D. Metcalf. *map Roads & Sts* 86:39-43 Ap '43

Riding is rough. *Business Week* p22+ N 6 '43

Road maintenance in Grand Forks county, North Dakota. J. W. Harty. *Il Pub Works* 74:28, 30+ Mr '43

Virginia roads put on war basis. J. J. Forrer. Eng N 130:57 Ja 14 '43

Wartime maintenance of county roads. G. W. Garrett. *Pub Works* 74:43-5 Mr '43

Wartime road-maintenance methods in Germany. *Roads & Bridges* 80:72 D '42

See also

Roads—Surface treatment

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Shoulders

Evaluating soils for specific road uses; methods developed in Kansas. D. L. Lacey. Eng N 130:312-15 F 25 '43

Soil-cement stabilized; shoulders in Texas; details and costs. J. E. Pirie and J. R. Ward, jr. *Il Roads & Sts* 86:32-7 N '42

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Specifications

Alcan roadway specifications. H. J. McKeever. *Roads & Sts* 86:40 Ja '43

Some highway specifications; Nebraska specifications for curb and gutter and California's for highway underdrains. *Pub Works* 74:32-3 Ag '43

Some highway specifications; settling embankments by jetting, and protecting road fills by means of willow mattresses. *Pub Works* 74:38-9 JI '43

Well worded state highway specifications. *Pub Works* 73:38-9 D '42; 74:42 Mr '43

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See Roads—Subgrades

Statistics

Highway construction, 1938-1941. Survey of Cur Business 1942 Sup p24-5 [supplemented in monthly numbers]

Subgrades

Evaluating soils for specific road uses; methods developed in Kansas. D. L. Lacey. Eng N 130:312-15 F 25 '43

Structural design of concrete pavements; experimental study of the Westergaard analysis of stress conditions in concrete pavement slabs of uniform thickness. L. W. Teller and E. C. Sutherland. *Biblog* *Il diags Pub Roads* 23:167-212 Ap '43

Studies of stabilized bases; Highway research board meeting. Eng N 130:146-7 Ja 28 '43

Superhighways

Short-distance superhighways most urgent post-war necessity. H. S. Fairbank. *Concrete* 51:35-6 Ap '43

Surface treatment

ABC's of road maintenance with tars; treatment of various types of surfaces. *Il Eng N* 129:784-5 D 3 '42

See also

Roads, Oiled

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ROADS—Winter maintenance—Continued

Winter maintenance. *il* Roads & Bridges 81: 35, 37-50+ O '43

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Roads—Ice control
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Afghanistan

Road construction planned. *For* Comm W 13: 10 N 6 '43

Alaska

Some problems of road construction and maintenance in Alaska. S. Taber. *il* map Pub Roads 23:247-51 J1 '43

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Argentina

Additional highway construction planned. *For* Comm W 10:12 Mr 6 '43

Contemplated highway construction in Argentina. *For* Comm W 13:17 N 6 '43

Arkansas

Roads under war restrictions. *Eng* N 129: 848-9 D 17 '42

Australia

1000-mile wartime highway in Australia. A. Olsen. *il* Roads & Sts 85:30-2 D '42

Bolivia

Bolivia plans to build strategic highway. *For* Comm W 9:8-9 N 21 '42

Highway exploration in Bolivia. H. P. Hart. *il* map *Eng* N 130:482-5 Ap 8 '43

British Columbia

Variation of climate adds to snow-removal problems in the province of British Columbia. A. Dixon. *il* Roads & Bridges 81:42+ O '43

California

California steps up mudjacking; methods and costs. T. H. Dennis. *il* Roads & Sts 86:40-2 Ag '43

California's fighting roads. *il* Roads & Sts 86: 73-4+ O '43

Cement-treated base plus plant mix; road between Bradley and King City. A. N. Lund. *il* Roads & Sts 86:35-8 J1 '43

Highway around Shasta Dam reservoir; relocation project. *il* map *Eng* N 131:646-7 O 28 '43

Roads under war restrictions. *il* *Eng* N 129: 849-50 D 17 '42

29-mile streamlined logging road. *il* Roads & Sts 86:58, 60-2+ S '43

Canada

Alaska highway. E. E. R. Tratman. *il* map *Engineer* 175:204-6, 224-6 Mr 12-19 '43

Alaska highway completion confounds the critics. Roads & Bridges 80:52 N '42

Alaska highway construction; abstract. R. P. Rosengren. *Science* 97:sup12 F 26 '43

Alaska highway; construction activities of the Public roads administration. T. H. MacDonald, L. I. Hewes and J. S. Bright. *il* Civil *Eng* 13:171-4 Ap '43

Alaska highway dedicated. *Comm & Fin* Chr 156:1982 D 3 '42

Alaska highway; effect of climate and soils on design. A. C. Clark. *il* Civil *Eng* 13: 209-12 My '43

Alaska highway; its survey and construction. *il* *Engineer* 175:480-1+, 498-500 Je 18-25 '43

Alcan. America's glory road. H. W. Richardson. *il* maps *Eng* N 129:858-72, 907-14; 130:63-70 D 17, 31 '42, Ja 14 '43

Alcan highway. H. J. McKeever. *il* diags maps Roads & Sts 86:34-62, 70-2 Ja; 40-52 F '43

Alcan highway; a summary of its potential economic influence. map *Index* 23 no 2:36-44 [Je] '43

Alcan highway aggregates. H. J. McKeever. *il* Rock *Prod* 46:55-8+ Ja '43

Alcan highway diary. H. W. Richardson. *il* maps *Eng* N 129:670-1, 690-1, 740-1 N 12-26 '42

Alcan highway may be brought into Edmonton from Dawson Creek. *Eng* N 130:782 Je 3 '43

Alcan highway, pioneered from the air. E. H. Forbes. *il* map *Aviation* 42:114-16+ My '43

Alcan military highway. C. L. Sturdevant; A. L. Lane. *il* maps *Civil Eng* 13:131-8 Mr '43

All-American highway; Alaska highway forms important link. map Roads & Bridges 80: 40+ N '42

Blazing the Alcan. *il* map *Business Week* p20+ Ja 16 '43

Building the Alcan. America's glory road. H. W. Richardson. *il* map *Comp Air M* 48:7047-54 Je '43

Construction of the Alaskan international highway. *il* map *Engineering* 155:321-3, 330 Ap 23 '43

Directory, provincial highway officials; organization charts, provincial highways departments, Canada. Roads & Bridges 81:50-66 J1 '43

Equipment and personnel organization on the Alaska highway. *il* Roads & Bridges 81: 25-6+ Ja '43

Far-northern pipeline construction presents transportation problems; involves extensive road building. *il* Roads & Bridges 81: 33-9+ My '43

Maintenance of roads in wartime. M. A. Lyons. *il* Roads & Bridges 80:37-8+ D '42

Named Alaska highway. *Comm & Fin* Chr 158:421 J1 29 '43

New key to the North; Alcan highway. A. D. Rathbone, 4th. *il* map *Sci Am* 168:262-4 Je '43

Notes from the Yukon. H. W. Richardson. maps *Eng* N 131:181, 232, 245 J1 29-Ag 12 '43

\$100,000,000-a-year industry; statistical analysis of the construction of road and air transport facilities in Canada. *il* Roads & Bridges 81:27-9 J1 '43

Place of road construction in post-war rehabilitation. R. C. Wallace. Roads & Bridges 80:54, 56 D '42

Post-war highway development. T. G. Morgan. Roads & Bridges 81:54, 56+ Ap '43

Provincial officials discuss highway problems. Roads & Bridges 80:58+ N '42

Road mileages in Canada. Roads & Bridges 81:43 J1 '43

2nd year on the big road; Alcan highway. H. J. McKeever. *il* Roads & Sts 86:45-61 O '43

Speeding-up the Alaska highway by aerial-survey methods. R. N. Johnston. *il* map Roads & Bridges 80:17-23+ N '42

U.S. Army's first official story of the Alaska highway. C. L. Sturdevant. *il* maps Roads & Bridges 81:27-32+ Mr '43

Winter maintenance. *il* Roads & Bridges 81: 35, 37-50+ O '43

Central America

Building the Inter-American highway; construction in Costa Rica and Panama. A. N. Carter. *il* map *Eng* N 131:339-46 Ag 26 '43

Building the Inter-American highway; construction in the four northern republics. A. N. Carter. *il* map *Eng* N 131:269-72 Ag 12 '43

Highways in Central America benefit the whole continent. E. W. James. Roads & Bridges 81:100+ S '43

New construction speeds Inter-American highway travel. *For* Comm W 12:15 Ag 28 '43

Rapid progress on road through Central America. E. W. James. *Eng* N 130:457 Ap 1 '43

Texas to Panama by road-rail; efforts aimed at this objective being pushed. E. W. James. *il* map *For* Comm W 10:12-13+ Mr 13 '43

Colorado

Colorado limited access road; with list of low bid prices. F. Miller. *il* diags Roads & Sts 86:64-8 O '43

Connecticut

Improving Connecticut highways for heavy wartime traffic. A. H. Sibley. *il* Explosives *Eng* 21:136+ J1 '43

Cuba

Financing and maintenance of highways. *For* Comm W 10:15 Mr 27 '43

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Dominican Republic

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Transport; highways of Ecuador. For Comm W 10:23 F 27 '43

England

Plan for London. map Engineer 176:46-8 J1 16 '43

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Roads under war restrictions. Eng N 130: 353-4 Mr 11 '43

Germany

Experiments with road embankments; abstract. J. Schneider. Roads & Bridges 81: 90 My '43

Wartime road-maintenance methods in Germany. Roads & Bridges 80:72 D '42

Great Britain

British ideas on post-war highway construction. Roads & Bridges 81:118-19 O '43
Planning Britain's roads. Economist 144:566 My 1 '43

Guatemala

Highway system being extended. For Comm W 10:19 F 20 '43

Road taps new rubber supply. Roads & Bridges 81:82+ My '43

Illinois

Illinois concrete patching program. il Roads & Sts 86:41-3 J1 '43

Illinois 1943 concrete patching work totals over \$4,343,000. il Concrete 51:10-11 N '43

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Survey shows Indiana highways need widening. S. C. Hadden. Eng N 131:402 S 9 '43

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Latin America

Highway south; motor road from U.S. to Panama canal. map Business Week p92+ Ap 3 '43

Manitoba

Snowfence and permanent hedges; Manitoba's effective means of winter road maintenance. M. A. Lyons. il Roads & Bridges 81:43+ O '43

Mexico

Mexico's roads as seen by an American engineer. J. C. Black. il Roads & Sts 86:49-50+ S '43

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Work progressing on Mexican highways. For Comm W 11:24-5 My 8 '43

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Battling snow in Michigan. il map Roads & Sts 86:66+ S; 69-72 O '43

County road problems in northern Michigan. K. I. Sawyer. il Roads & Sts 86:45-6 Je '43

Maintaining Michigan highway and street service during the war period. L. B. Reid; L. Belknap. Roads & Sts 86:56+ Mr '43

Michigan builds war roads. il diags map Eng N 130:58-62 Ja 14 '43

Michigan practice in gravel stabilization. B. R. Downey. il Roads & Sts 86:57-9 Je '43

Wayne county had real tussle; snow removal problem. il Roads & Sts 86:50-1 Ag '43

Minnesota

Minnesota determines road costs per mile of travel. Roads & Sts 86:86 Ja '43
Urban street traffic and rural truck highway travel in Minnesota. Roads & Sts 85:32 D '42

New Brunswick

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New York (state)

Development of the Buffalo waterfront as a post-war planning project. C. R. Waters. map Roads & Sts 86:55 S '43

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Highway system in Newfoundland. For Comm W 10:19 Mr 20 '43

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Mudjacking in North Carolina. B. W. Davis. il diags Roads & Sts 86:43-4 Ag '43

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Snow removal in North Dakota. R. Robinson. il map Roads & Sts 86:48-9 Ag '43

Northwest Territories, Canada

U.S. Army building several roads in Northwest Territories. Roads & Bridges 81:86+ Mr '43

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Snow-clearing in Nova Scotia. J. L. Wickwire. Roads & Bridges 81:86 O '43

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Access road follows century-old canal bed; Lockland-Arlington Heights section of Ohio state route 387. J. A. Byrnes. il Roads & Sts 86:47-8 Je '43

Cleveland freeways a major problem; reconditioning state's system by the Ohio department of highways. R. C. Chaney. il diags map Roads & Sts 86:40-4 Je '43

Hot-mix resurfacing contract; part of statewide program. W. H. Moore. il Roads & Sts 86:39-40 J1 '43

Ohio maintenance geared to wartime; state road program. H. D. Metcalf. map Roads & Sts 86:39-43 Ap '43

Ohio post-war planning conference. Roads & Sts 86:64 J1 '43

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Equipment for winter road maintenance; eighteen county engineers give their views. il Roads & Bridges 81:48-50+ O '43

Importance of adequately maintained roads in war time. J. G. Cameron. Roads & Bridges 81:74, 76 Mr '43

Municipal road financing in the post-war period. D. J. Emrey. Roads & Bridges 81: 118-20 Mr '43

Ontario good roads association 41st annual meeting, Toronto, Feb. 24-25. Roads & Bridges 81:33-6+ Mr '43

Ontario road builders' association 16th annual meeting, Toronto, Feb. 25. Roads & Bridges 81:37-8+ Mr '43

Planning for the post-war period. W. J. Moore. Roads & Bridges 81:98+ Mr '43

Public service aspects of winter maintenance; how reports concerning road conditions in Ontario are collected and disseminated. E. H. Murray. il map Roads & Bridges 81:37-8+ O '43

Secondary roads. J. C. Monteith. Roads & Bridges 81:92 Mr '43

Skidproofing highways with chemically-treated sand in Ontario. il Roads & Bridges 81:112-14 O '43

Snowfences for drift control; their use by the counties of Ontario. Roads & Bridges 81: 110-12 O '43

Winter maintenance by snow-plowing associations; experiences of three counties in Ontario. Roads & Bridges 81:47+ O '43

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Keeping trucks rolling in Oregon. E. A. Collier. il diags Eng N 130:55-6 Ja 14 '43

Oregon highways open rugged country. il map Eng N 129:718-19 N 19 '42

Wolf Creek and Wilson River highways. il Pub Works 73:13-14 N '42

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Maintenance operations on Ottawa suburban roads; with cost data. A. K. Hay. *il Roads & Bridges* 81:31+ Ap '43

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Panama

Pioneer in Darien; completion of Pan American highway. R. Tewkesbury. *il map For Comm W* 11:11-12+ Ap 17 '43; Same, with additional *il. Explosives Eng* 21:80-3, 94 My '43; Excerpt. Concrete 61:8 Je '43

Pennsylvania

Pennsylvania Turnpike commission revenue bonds. Comm & Fin Chr 157:1662 My 6 '43
Selection of civilian evacuation routes; Pennsylvania chooses major highways for emergency movement. R. F. Riegelmeier. *il Civil Eng* 12:659-60 D '42
Work continues on Pittsburgh expressway. *il diags map Eng N* 131:110-11 J1 8 '43

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Road to Russia; truck-driving artist's record of a crucial construction job. *il map Fortune* 28:150-4 N '43

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Saskatchewan

Highway progress in Saskatchewan. *Roads & Bridges* 81:72+ Ap '43
War conditions increase demand for snow removal in the province of Saskatchewan. W. W. Perrie. *il Roads & Bridges* 81:45-6+ O '43

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Roads under war restrictions. *Eng N* 129: 847-8 D 17 '42

United States

Amount and characteristics of trucking on rural roads. J. T. Lynch and T. B. Dimmick. *il tables map Pub Roads* 23:213-46 J1 '43; Abstract. Concrete 61:2+ S '43
Combination of factors destroying the key roads of the country; abstract. G. D. Kennedy. Concrete (mill sec) 51:242+ N '43
Highway phase of post-war public works. G. D. Kennedy. Concrete 51:14, 17-18+ Ag '43
Highway plans for the post-war period are urgently needed. C. M. Upham. *Roads & Bridges* 81:70+ Ap '43
Low cost access roads to secure raw materials; mileage and construction costs. *Roads & Sts* 86:46 Ap '43
Nation faces critical road conditions. *il Roads & Sts* 86:48-50+ My; 49-50, 82-4 Je '43
National highway situation under war conditions. T. H. MacDonald. *il Eng N* 130: 44-8 Ja 14 '43
On the threshold of great developments in highway and airport construction; report of National resources planning board. *il Roads & Bridges* 81:24+ F '43
Post war construction and its influence on the market for portland cement. Concrete 51:2-4 N '43
Post war construction; statements from state highway officials regarding their plans for highway work. *il map Roads & Sts* 86:58-60, 62, 64, 70-2 F '43
Postwar highway development. G. D. Kennedy. *Eng N* 130:437-8 Mr 25 '43
Public road work in the United States, 1942. *il Engineer* 175:393-5 My 14 '43

Roadbuilders launch their program for post-war roads. *Eng N* 130:707-8+ My 13 '43
Roads under war restrictions. *il Eng N* 129: 484-8, 555-7, 627-30, 847-50; 130:351-6 O 8, 22, N 5, D 17 '42, Mr 11 '43
Selling the postwar highway program. *Roads & Sts* 86:78 O '43
Short-distance superhighways most urgent post-war necessity. H. S. Fairbank. Concrete 61:35-6 Ap '43

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Virginia

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Roads under war restrictions. *il Eng N* 130: 351-2 Mr 11 '43
Virginia roads put on war basis. J. J. Forrer. *Eng N* 130:57 Ja 14 '43

West Virginia

Access to the Great Kanawha Valley. G. W. McAlpin. *il Manuf Rec* 112:82-3+ O '43
Maintaining West Virginia's roads under war restrictions. E. L. Worthington. *il diags Roads & Sts* 86:54-5+ Je '43
Roads under war restrictions. *il Eng N* 130: 354-5 Mr 11 '43

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ROADS, Asphalt

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Allegheny county improves Duquesne Way. *il diags plan map Eng N* 131:540-3 O 7 '43
Cincinnati expressway soon to be completed. *il map Eng N* 131:436-7 S 16 '43
Colorado limited access road; with list of low bid prices. F. Miller. *il diags Roads & Sts* 86:64-8 O '43
Davison limited highway, Wayne county, Mich. H. A. Shuptrine and J. C. Mead. *il diag map Civil Eng* 12:673-6; 13:15-18 D '42-Ja '43
General Paz avenue, Buenos Aires. *il Engineer* 174:367 O 30 '42
Manhattan prepares for postwar construction. D. G. Edwards. *il map Civil Eng* 13:353-5 Ag '43
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Roads, Elevated

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New method of honing bituminous road surfaces. *il Roads & Sts* 85:44 N '42
Road experiments on the design of thin bituminous surfacings. R. Slater. *Pub Works* 73:48 N '42

ROADS, Bituminous—Continued

Volcanic cinders suitable for use in base course construction. E. A. Willis, H. Aaron and R. C. Lindberg. *Il Pub Roads* 23:125-25 O '42

See also

Pavements, Asphalt
Pavements, Bituminous
Roads, Tarred

Cost

Highway, California; unit prices. *Eng N* 130:78 Ja 14 '43
Highway, New Mexico; unit prices. *Eng N* 130:310 Je 17 '43
Highway, North Dakota; unit prices. *Eng N* 131:642 O 21 '43
Highway surfacing, Utah; unit prices. *Eng N* 130:320 F 25 '43
Highway, Virginia; unit prices. *Eng N* 129:938 D 31 '42
Highways, Idaho; unit prices. *Eng N* 131:416 S 9 '43

Maintenance and repair

Hot-mix resurface contract; part of state-wide program in Ohio. W. H. Moore. *Il Roads & Sls* 86:39-40 J1 '43
Maintaining West Virginia's roads under war restrictions. E. L. Worthington. *Il diags Roads & Sls* 86:54-5+ Je '43
Maintenance operations on Ottawa suburban roads; with cost data. A. K. Hay. *Il Roads & Bridges* 81:31+ Ap '43
Shrunken budgets, swarming traffic, swollen rivers; wartime problems of an Indiana county. R. R. Fisher. *Il Roads & Sls* 86:45-7 Ag '43

ROADS, Bituminous concrete

Good management saves labor on widen-resurface job. *Il Roads & Sls* 86:56-3 Ag '43
Maintenance of bituminous concrete and oil penetration urban roads; borough of Princeton, N.J. I. R. Riker. *Il Pub Works* 74:22-3+ Mr '43

ROADS, Cement. See Roads, Soil-cement**ROADS, Concrete**

Concrete road 1½ inches thick. *Pub Works* 74:18 S '43
Concrete traffic-lane separator without reinforcing. *diags Pub Works* 74:42-3 Ap '43
Lean-mix concrete used for roads; forming pavements by rolling. D. V. Darwin. *Eng N* 130:685 My 6 '43
Methods followed in determining stresses in corners of pavement slabs. M. G. Spangler. *diags Concrete* 51:33-5 My '43
Michigan builds war roads. *Il diags map Eng N* 130:58-62 Ja 14 '43
Old concrete slab salvaged for new road. C. A. Rothrock. *Il diags Eng N* 130:671-4 My 6 '43
Simple working formula for corner-load stresses in concrete pavements. M. G. Spangler. *Il Roads & Bridges* 81:17+ Ja '43; *Abstract. Concrete* 51:12-13 F '43
Wartime restrictions affect curing methods for concrete roads. *Il Roads & Bridges* 81:26-7, 64, 66+ F '43; *Excerpt. Concrete* 51:33-4 Ap '43

See also

Pavements, Concrete
Roads, Bituminous concrete

Construction equipment

Study of the mechanical finishing of concrete pavements. *Roads & Bridges* 81:50 Ja '43
Texas road built by day labor with home-made equipment. *Il Roads & Sls* 86:57-8 Mr '43

Cost

Highway, Franklin county, Georgia; unit prices. *Eng N* 129:736 N 19 '42
Highway, Nebraska; unit prices. *Eng N* 129:800 D 3 '42
Highway paving, Tennessee; unit prices. *Eng N* 131:286 Ag 12 '43
Highway, Texas; unit prices. *Eng N* 130:152 Ja 28 '43

Joints

Load-transfer sills under dowel-less joints; two New Jersey roads. *Il diags Roads & Sls* 86:47-9 Ap '43
Michigan test road provides for extensive study of highway joints. *Il diags Concrete* 50:4-6 D '42
Pumping joints sealed by mudjacking asphaltic cement. H. D. Metcalf. *Il Roads & Sls* 86:53-4 My '43

Maintenance and repair

California steps up mudjacking; methods and costs. T. H. Dennis. *Il Roads & Sls* 86:40-2 Ag '43
Concrete skin-patches used successfully on New Jersey concrete roads. *Roads & Sls* 86:52 My '43
Illinois concrete patching program. *Il Roads & Sls* 86:41-3 J1 '43
Illinois 1943 concrete patching work totals over \$4,343,000. *Il Concrete* 51:10-11 N '43
Liquid asphalt ends pumping action at joints in concrete road slabs. *Il Eng N* 131:333 Ag 26 '43
Mudjacking in North Carolina. B. W. Davis. *Il diags Roads & Sls* 86:43-4 Ag '43

ROADS, County

Building a soil-cement road in Kenosha county, Wisconsin; with cost data. H. H. Herzog. *Il Pub Works* 74:14-15+ S '43
Corn County road upkeep, 1943 style; Sangamon county, Springfield, Ill. R. V. Tilly. *Il Roads & Sls* 86:33-4 My '43
County road problems in northern Michigan. K. I. Sawyer. *Il Roads & Sls* 86:46-6 Je '43
Road maintenance in Grand Forks county, North Dakota. J. W. Harty. *Il Pub Works* 74:28, 30+ Mr '43
Shrunken budgets, swarming traffic, swollen rivers; wartime problems of an Indiana county. R. R. Fisher. *Il Roads & Sls* 86:45-7 Ag '43
Wartime maintenance of county roads. G. W. Garrett. *Pub Works* 74:43-5 Mr '43
Winter maintenance by snow-plowing associations; experiences of three counties in Ontario. *Roads & Bridges* 81:47+ O '43

ROADS, Earth

See also

Roads, Gravel
Streets

Cement hardening

See Roads, Soil-cement

ROADS, Elevated

Pattern for the future; Gowanus elevated parkway. *Il Arch Forum* 78:4+ My '43

ROADS, Experimental

Michigan test road provides for extensive study of highway joints. *Il diags Concrete* 50:4-6 D '42

Paving with soil and cement. M. D. Catton. *Il Comp Air M* 48:7184-8 N '43

Steel highways; Connecticut truck highway, experimental installation of a steel roadway strip. *Il Mech Eng* 65:sup24-5 N '43

ROADS, Forest. See Forest roads**ROADS, Gravel**

Alcan highway aggregates. H. J. McKeever. *Il Rock Prod* 46:55-8+ Ja '43
Colorado limited access road; with list of low bid prices. F. Miller. *Il diags Roads & Sls* 86:64-8 O '43

Stabilization

Michigan practice in gravel stabilization. B. R. Downey. *Il Roads & Sls* 86:57-9 Je '43

Wartime importance of granular stabilized roads; recommendations for their design, construction and maintenance. *Il diags Roads & Bridges* 81:26-30+ Je; 33-4+ J1; 84+ S '43

ROADS, International

Alaska highway dedicated. *Comm & Fin Chr* 156:1982 D 3 '42

See also

Pan American highway
Roads—Canada

ROADS, Military

- Beating a path to Russia's back door; Persian war supply corridor. W. G. Bowman. *il map Eng N 131:520-7 O 7 '43*
- Far-northern pipeline construction presents transportation problems; involves extensive road building. *il Roads & Bridges 81:38-9+ My '43*
- 1000-mile wartime highway in Australia. A. Olsen. *il Roads & Sts 85:30-2 D '42*
- Road construction on western cantonments. D. H. McCreery. *il diags Civil Eng 13:101-3 F '43*
- U.S. Army building several roads in Northwest Territories. *Roads & Bridges 81:86+ Mr '43*

ROADS, Oiled

- Corn County road upkeep, 1943 style; Sangamon county, Springfield, Ill. R. V. Tilly. *il Roads & Sts 86:33-4 My '43*
- Maintenance of bituminous concrete and oil penetration urban roads; borough of Princeton, N.J. I. R. Riker. *il Pub Works 74:22-3+ Mr '43*

ROADS, Soil-cement

- Building a soil-cement road in Kenosha county, Wisconsin; with cost data. H. H. Herzog. *il Pub Works 74:14-15+ S '43*
- Equipment for soil-cement road construction. Concrete 50:26 D '42
- Soil-cement pavement for desert airbase. *il Eng N 129:921-5 D 31 '42*
- Soil-cement stabilized; shoulders in Texas; details and costs. J. E. Pirie and J. R. Ward, Jr. *il Roads & Sts 85:32-7 N '42*

ROADS, State

- Current highway work in four states. *Eng N 131:433 S 16 '43*
- State highway debt requirements exceed \$2,433,000,000. *Roads & Sts 86:60 Je '43*

See also

Roads—Federal aid**ROADS, Tarred**

- ABC's of road maintenance with tars. *il Eng N 129:781-5 D 3 '42*

See also

Road tar—Testing**ROADSIDES**

- Cotton fabric for lining roadside ditches. *Pub Works 74:39 Ja '43*

ROANOKE, Virginia**Railroads**

- Huge railroad expansion completed; \$5,000,000 yard and engine terminal facilities improvement by Norfolk & Western. *il Manuf Rec 112:34-5+ My '43*
- Norfolk and western railway reconstructs Roanoke yard. F. P. Turner. *il plans Civil Eng 13:301-4 J1 '43*

ROASTING (coffee, cereals, etc.)

- Roasting beverage materials. R. E. Kremers. *bibliog il Food Ind 15:74-6 O '43*

ROBBERY, Bank. See Bank robberies**ROBBERY insurance. See Insurance, Burglary; Insurance, Theft****ROBBINS, Charles Burton, 1877-1943**

- Sketch. *por East Underw 44:3-4 J1 9 '43*; *Nat Underw (Life. ed) 47:1+ J1 9 '43*; *Weekly Underw 149:87+ J1 10 '43*

ROBERT, James Marshall, 1885-

- Sketch. *por Mech Eng 65:611 Ag '43*

ROBERTS, Ellsworth Alan, 1896-

- Fidelity Mutual new president. *por Nat Underw (Life ed) 47:1 Mr 12 '43*; *East Underw 44:3 Mr 12 '43*

- Fidelity Mutual's new president. C. Axman. *por East Underw 44:3-4 Ap 16 '43*

ROBERTS-AUSTEN, Sir William Chandler, 1843-1902

- Sir William Chandler Roberts-Austen. S. W. Smith. *Engineer 175:194-6 Mr 5 '43*

ROBERTS mountains, Nevada

- Reconnaissance survey of the Roberts mountains. C. W. Merriam and C. A. Anderson. *diag maps Geol Soc Bul 53:1675-1727 bibliog(p 1725-7), pl 1-4 D '42*

ROBERTSON, Andrew Wells, 1880-

- Sketch. *por Mag of Wall St 71:345 Ja 9 '43*

ROBINSON, Sir Robert, 1886-

- Award of Copley medal. H. Dale. *Science 97:29 Ja 8 '43*

ROBINSON, Samuel Murray, 1882-

- Portrait. *Ry Age 115:130 J1 24 '43*

ROBINSON, William E. 1900-

- Gallery. S. Jones. *por Adv & Sell 35:28+ D '42*

ROBINSON-MANNICH base synthesis. See Synthesis**ROBINSON-PATMAN act. See Price discrimination—Patman law****ROCHELLE salt. See Potassium sodium tartrate****ROCHESTER museum of arts and sciences**

- Air conditioning equipment and heating plant on roof. A. S. Crocker. *il plan Heat & Ven 40:33-7 Ag '43*
- Heating and ventilating a Rochester museum. D. K. Smith. *il plan Gas Age 92:55-8 O 21 '43*

ROCHESTER university**Industrial X ray laboratory**

- Industrial research laboratory of the University of Rochester; X-ray laboratory equipped with a million-volt unit. *Science 97:395-6 Ap 30 '43*

ROCK drills

- Alloy steel has advantages in rock drilling; controlled oil-hardening required. C. G. Kemsley. *il diag Eng & Min J 144:82-3 Ag '43*

- Care of drill steel. *Eng & Min J 143:73 D '42*

- Care of rock drills. E. C. Powers. *il Roads & Sts 86:72, 74 J1 '43*

- How to maintain rock drills at maximum efficiency. *il Concrete (mill sec) 51:216-17 Ag '43*

- Insurance and drilling; care of rock drills. *il Eng & Min J 144:84-5 J1 '43*

- Making hollow steel drills. E. N. Simons. *il Metals & Alloys 17:320-5 F '43*

- New quarry drills from worn-out steel. *Eng N 129:732 N 19 '42*

- When should a rock drill be dismantled? T. M. Waterland. *Eng & Min J 144:70-2 S '43*

See also

- Drilling and boring (earth and rocks)
- Drills, Oil well

Lubrication

- Rock drill lubrication. F. R. Anderson. *il Rock Prod 46:59-60 Je; 60-1+ J1 '43*

ROCK dusting. See Coal mines and mining—Rock dusting**ROCK excavation. See Drilling and boring (earth and rocks); Excavation****ROCK products**

- Sand blending; simple mathematical methods of determining size distribution. F. C. Bond. *Rock Prod 45:60+ O '42*; *Discussion (Clarifying the sand blending problem). 46:55 Mr '43*

See also

- | | |
|------------|----------------|
| Aggregates | Phosphate rock |
| Gypsum | Sand |
| Lime | Stone, Crushed |

ROCK products industry

- Where are we? whither bound? N. C. Rockwood. *Rock Prod 46:36-9 Ja '43*

Western states

- Business is war—in the West. R. S. Torgerson. *Rock Prod 45:37-8 N '42*

ROCK products plants

- Eliminating phosphate wastes. B. Nordberg. *il diags Rock Prod 46:48-51+ My '43*

- Manufactures and sells all building supplies; J. P. Burroughs & sons, produces sand and gravel, ready mixed concrete and concrete block. *il Rock Prod 46:78-9+ O '43*

See also

- Sand and gravel plants
- Stone, Crushed

Electric equipment

- Maintenance-trouble shooting tips; electronic control equipment in rock products industry. W. D. Cockrell. *il Rock Prod 46:102, 104+ Ag '43*

ROCK products plants—Continued

Employees

Two reports on Industry committee 59, U.S. Dept. of labor. J. R. Boyd; W. Schoenberg. Rock Prod 46:146-7 Ag '43

Equipment

Browntown silica meets growing war demands. R. S. Torgerson. il Rock Prod 46:61-3+ O '43

Buy repair parts from manufacturers that pioneer. N. C. Rockwood. Rock Prod 46:88+ Ja '43

Control and collection of industrial dust. E. D. Powers. il diags plan Rock Prod 45:58-60 F; 46-8 Ap; 48-9+ S '42; 46:66-8 Mr; 70, 72 Je '43

Directory of suppliers; machinery and equipment for rock products industries. Rock Prod 46:149-64, 164A-164D Ja '43

Feldspar-grinding plant in North Carolina. il Eng & Min J 144:73-5 Ag '43

Grinding five sizes in one operation; Thomasville stone and lime co. flow sheet il Rock Prod 46:64-6 O '43

Hard surfacing prolongs life. il Rock Prod 46:58-9 O '43

Importance of maintenance, inspection and lubrication. Rock Prod 46:60+ O '43 (to be cont)

Practical operation conveyor belts. M. C. Dow and H. A. Harnden. il diags Rock Prod 45:52+ F; 56-7 Ap; 42-3 Jl; 47 S; 53-5, 80-1 N '42; 46:58+ F; 66+ Je; 49+ D '43

United Feldspar's pyrophyllite enterprise. il Eng & Min J 144:69-71 Ap '43

See also

Dust collectors

Heating and ventilation

Conserving heat in exhaust system; cutting quartz rock, and returning cleaned air without wasting heat. diag Sheet Metal Worker 34:23+ 4p '43

ROCKEFELLER, John Davison, Jr. 1874-Rockefeller sells; distribution of securities. Business Week p106-7 O 30 '43

ROCKEFELLER foundation
Work of the Rockefeller foundation, 1942. R. E. Fosdick. Science 97:379 Ap 23 '43

ROCKET propulsion

Rocket power for assisted takeoff. R. Healy. il diag Aviation 42:100+ Ja '43

Rocket propulsion principles studied by Allies and Germany. Aviation N 1:13-14 S 20 '43

See also

Jet propulsion

ROCKETS

Famed bazooka described, in part; army's new rocket gun. il Iron Age 152:104 S 23 '43

Rocket, oldest yet newest weapon of war; details of the army's famous bazooka. A. F. Macconochie. il diags Steel 113:176-8+ O 11 '43

Rockets versus tanks; bazooka that fires a rocket projectile. Fortune 27:92 Je '43

Up with rockets; jet propulsion may be power for airplanes. Business Week p19-20 O 2 '43

ROCKPORT, Massachusetts

Water supply

Rockport, Mass.; the evolution of a small water works system. E. S. Chase and G. C. Houser. N E Water Works Assn J 56:335-54 S '42

ROCKS

Causes of variations in radioactivity data. N. B. Keevil and others. pl Am J Sci 241:345-65 Je '43

Compound merwinite ($3\text{CaO} \cdot \text{MgO} \cdot 2\text{SiO}_2$) and its stability relations within the system $\text{CaO} \cdot \text{MgO} \cdot \text{SiO}_2$ (preliminary report). E. F. Osborn. bibliog diags Am Cer Soc J 26:321-32 O 1 '43

Franciscan-Knoxville problem. N. L. Taliaferro. bibliog diags maps Am Assn Pet Geologists Bul 27:109-219, pl 1-7 F '43

Geology of the northern Quitman mountain, Trans-Pecos, Texas. R. M. Huffington. diags map Geol Soc Bul 54:987-1047, pl 1-3 bibliog (p1046-7) Jl '43

Geology of the Wolf Creek area, St Elias range, Yukon territory, Canada. R. P. Sharp. Geol Soc Bul 54:625-49, pl 1-5 bibliog (p647-9) My '43

Helium indexes for several minerals and rocks. N. B. Keevil. Am J Sci 241:680-93 N '43

Older rocks of Sudbury district, Ontario. H. C. Cooke. diags maps Am J Sci 241:553-78 S '43

Ordovician clastic sedimentary rocks in Pennsylvania. B. Willard. diags maps Geol Soc Bul 54:1067-1121, pl 1-11 bibliog (p1118-21) Ag '43

Packing in ionic minerals. H. W. Fairbairn. diags Geol Soc Bul 54:1305-74 bibliog (p 1373-4) S '43

Partial list of fluorescent rocks and minerals from the Rocky Mountain region of the United States. Can Min J 63:712 N '42

Petrology and silicate technology. N. L. Bowen. bibliog diags Am Cer Soc J 26:285-301 S 1 '43

Phosphatization at Malpelo island, Colombia. D. McConnell. bibliog Geol Soc Bul 54:707-15, pl 1-2 My '43

Record of deformational movements shown by petrofabric analyses. E. B. Knopf. Am J Sci 241:337-42 My '43

Recrystallization and flowage in Appalachian quartzite. R. E. Fellows. bibliog fold map Geol Soc Bul 54:1399-1431, pl 1-12 S '43

Rock alteration at the San Antonio mine. J. G. Bragg. il Can Min J 64:553-6 S '43

Stratigraphical analysis and environmental reconstruction. T. G. Payne. flow diag bibliog diags map Am Assn Pet Geologists Bul 26:1697-1770, pl 1 N '42

Structure and metamorphism of early Precambrian rocks between Gordon and Great Slave lakes, Northwest Territories. J. F. Henderson. bibliog maps Am J Sci 241:430-46 Jl '43

Structure of central part of Sawtooth range, Montana. C. Deiss. diags maps Geol Soc Bul 54:1123-67, pl 1-9 bibliog (p1165-7) Ag '43

Traverse rocks of Thunder Bay region, Michigan. A. S. Warthin, Jr. and G. A. Cooper. bibliog 2 pl maps Am Assn Pet Geologists Bul 27:571-95 My '43

Upper Desmoinesian and lower Missourian rocks in northeastern Oklahoma and southeastern Kansas. M. C. Oakes and J. M. Jewett. bibliog diags Am Assn Pet Geologists Bul 27:632-40 My '43

See also

Chert	Minerals
Conglomerate	Palisades of the Hudson
Crystallography	
Dolomite	Phosphate rock
Drilling and boring	Quarries and quarrying
(earth and rocks)	
Geochemistry	Sandstone
Geology	Sedimentation and
Geophysics	deposition
Granite	Shale
Gypsum	Stone, Crushed
Limestone	Tektites
Metamorphism	

Analysis

Spectrographic analysis of New England granites and pegmatites. J. A. Shimer. bibliog maps Geol Soc Bul 54:1049-66 Ag '43

ROCKS, igneous

Distribution of helium and radioactivity in rocks; helium age investigations of diabase and granodiorites from Yellowknife, Northwest Territories, Canada. N. B. Keevil, A. W. Jolliffe and E. S. Larsen. map Am J Sci 240:831-46 D '42

Distribution of helium and radioactivity in rocks; rocks and associated minerals from Quebec, Ontario, Manitoba, New Jersey, New England, New Brunswick, Newfoundland, Tanganyika, Finland, and Russia. N. B. Keevil. Am J Sci 241:277-306 My '43

Elasticity of igneous rocks at high temperatures and pressures. F. Birch. bibliog Geol Soc Bul 54:263-85 F '43

Helium age measurement; preliminary magnetite index. P. M. Hurley and C. Goodman. bibliog Geol Soc Bul 54:305-23 Mr '43

Metamorphism of extrusives by basic intrusives in the Keweenaw of Minnesota. G. M. Schwartz. bibliog Geol Soc Bul 54:1211-25, pl 1-2 Ag '43

ROCKS, Igneous—Continued

- Nickel deposit near Dracut, Massachusetts. W. H. Dennen. bibliog il maps Econ Geol 38:25-55 Ja '43
- Pyroxenes of basaltic magma. F. Walker. Am J Sci 241:517-20 Ag '43
- Reconnaissance survey of the Roberts mountains, Nevada. C. W. Merriam and C. A. Anderson. diag maps Geol Soc Bul 53:1675-1727 bibliog(p 1725-7), pl 1-4 D '42
- Weathering of igneous rocks near Hong Kong. R. W. Brock. Geol Soc Bul 54:717-38 Je '43

See also

- | | |
|------------|-------------------|
| Basalt | Nephelite syenite |
| Batholiths | Ore deposits |
| Granite | Pegmatites |

ROCKWELL hardness test. See Hardness—Testing

ROCKY MOUNTAIN spotted fever

- Amblyomma americanum, a vector of Rocky Mountain spotted fever. Pub Health Rep 58:491 Mr 19 '43
- Experimental Rocky Mountain spotted fever; results of treatment with certain drugs. E. A. Steinhaus and R. R. Parker. Pub Health Rep 58:351-2 F 26 '43
- Experimental transmission of the spotted fevers of the United States, Colombia, and Brazil by the argasid tick ornithodoros parkeri. G. E. Davis. bibliog Pub Health Rep 58:1201-8 Ag 6 '43
- Protective effect of separate inoculation of spotted fever virus and immune serum by intradermal route. L. Anigstein, M. N. Bader and G. Young. Science 98:285-6 S 24 '43
- Rocky Mountain spotted fever: duration of potency of tick-tissue vaccine. R. R. Parker and E. A. Steinhaus. Pub Health Rep 58:230-2 F 5 '43
- Rocky Mountain spotted fever; further experience in the therapeutic use of immune rabbit serum. N. H. Topping. bibliog Pub Health Rep 58:757-75 My 14 '43
- Rocky Mountain spotted fever; spontaneous infection in the tick amblyomma americanum. R. R. Parker, G. M. Kohls and E. A. Steinhaus. bibliog Pub Health Rep 58:721-9 My 7 '43
- Salmonella enteritidis: experimental transmission by the Rocky Mountain wood tick dermacentor andersoni Stiles. R. R. Parker and E. A. Steinhaus. Pub Health Rep 58:1010-12 Jl 2 '43
- Tick ornithodoros rudis as a host to the rickettsiae of the spotted fevers of Colombia, Brazil, and the United States. G. E. Davis. bibliog Pub Health Rep 58:1016-20 Jl 2 '43

ROCKY mountains

- New geography of American business. W. H. Hillyer. map Barron's 23:8+ Je 7 '43

See also

- Geology—Rocky Mountain region

ROD mills (for crushing). See Tube mills

RODENTS

See also

- Mice
Rats

RODENTS as carriers of infection

- Coccidioidomycosis in wild rodents; a method of determining the extent of endemic areas. C. W. Emmons. bibliog Pub Health Rep 58:1-5 Ja 1 '43
- Isolation of haplosporangium parvum n. sp. and coccidioides immitis from wild rodents; their relationship to coccidioidomycosis. C. W. Emmons and L. L. Ashburn. bibliog diagms Pub Health Rep 57:1715-27, pl 1-4 N 13 '42
- Plague infection reported in the United States during 1942. Pub Health Rep 58:640-5 Ap 16 '43

RODS

See also

- Connecting rods
Steel rods

ROEBLING'S, John A., sons company

- Ten years' progress in wire rope, cables, wires, etc. for aircraft. A. J. Morgan. Aeronautical Eng R 1:143 N '42

ROEBUCK, John, 1718-1795

- John Roebuck. N. L. Clow and A. Clow. Chem & Ind 61:497-8 D 5 '42

ROENTGEN rays. See X rays**ROGERS, James Blythe, 1802-1852**

- James Blythe Rogers, chemist. E. F. Smith. por J Chem Educ 20:287-91 Je '43

ROLLER bearings

- Lubrication fundamentals for traction motors. J. W. Teker. il diag Mass Transportation 39:213-15 Je '43; Same. Diesel Power 21:703-5 Ag '43
- Railroading on roller bearings. W. C. Sanders. il Ry Age 115:379-80 S 4 '43
- Report on load rating of roller bearings in oscillation. C. R. Athy. diagms Am Pet Inst Proc 23(4):156-62 '42

Manufacture

- NE (national emergency) alloy steels; successful applications of NE-8000 series. A. S. Jameson. il diag Steel 111:112-14, 116, 118 D 7 '42
- Stampings eliminate machining in roller bearing retainers. R. R. Killian. il Product Eng 14:504-5 Ag '43

ROLLERS

- Roller support speeds flame hardening; cable grooves of sheave wheels. il Am Mach 87:95 Jl 22 '43

ROLLERS, Lawn. See Lawn rollers

ROLLERS, Printers'

- Care and maintenance of printers' rollers. Inland Ptr 111:67-8, 70, 72 Ap '43
- How to conserve and prolong the life of synthetic rollers. il Inland Ptr 111:61-2+ Ag '43

- Important facts about anilin rolls and fountains. F. E. Boughton. Inland Ptr 111:51-2 My '43

- Platen and roller saving plan. il Am Business 12:8-9 N '42

ROLLERS, Road. See Road rollers

ROLLING (metal work)

- Automatic uniform rolling-in of small tubes. F. F. Fisher and E. T. Cope. il diagms A S M E Trans 65:53-9; Discussion. 59-60 Ja '43
- Effect of microstructure upon the work hardening characteristics of a 0.74 per cent carbon strip steel. N. P. Goss and W. Brenner, jr. il Am Soc for Metals Trans 30:936-45; Discussion. 945-6 D '42
- Effects of temperature on blooming mill production of hot-topped steel. H. J. Forsyth. Blast F & Steel Pl 31:638-40, 767-70 Je-Jl '43
- Effects of various solute elements on the hardness and rolling textures of copper. R. M. Brick, D. L. Martin and R. P. Angier. bibliog diagms Am Soc for Metals Trans 31:675-95; Discussion. 695-8 S '43
- Hot rolling clad steel; abstract. A. Pomp and W. Leug. Metals & Alloys 18:544 S '43
- Hot strip mills double plate tonnage. F. Felix. il diag Steel 111:110-11+ D 7 '42
- Making hollow steel drills. E. N. Simons. il Metals & Alloys 17:320-5 F '43
- Planning and designing of wide strip mills. Blast F & Steel Pl 30:1248-50 N '42
- Practical aspects of making expanded joints. C. A. Maxwell. il diagms A S M E Trans 65:507-14; Discussion. 515-22 Jl '43
- Rolling of copper; abstract. C. W. MacGregor and L. Coffin, jr. Metals & Alloys 17:1008 My '43
- Rolling seamless tubes; abstract. E. W. Wraga. Metals & Alloys 17:364 F '43
- Square-tread floor plate rolled on 4-high mill; Jones & Laughlin steel corp. il Steel 113:79 S 27 '43
- Das walzen von grob- und mittelblechen. E. Howahr. il diagms plans Stahl & Eisen 61:73-83, 100-7 Ja 23-30 '41; Translation (Rolling heavy and medium plates). Blast F & Steel Pl 31:309-15, 419-22 Mr-Apr '43

See also

- Rolling mills
Steel, Strip

Patents

- Government action seeks to void Cold metal process co.'s patents of the Steckel mill. Steel 113:66 Ag 2 '43

ROLLING (metal work)—Patents—*Continued*
 Patents at stake; Dept. of Justice seeks to win cancellation in cold rolling process, alleging fraud. *Business Week* p56+ O 2 '43

Tables, calculations, etc.

Roll more tons; calibrations of tee-sections. A. E. Lendl. *diags Blast F & Steel Pl* 31: 325-31 Mr '43

ROLLING doors. See Doors, Rolling

ROLLING mills

Controversy grows warm over which mills will roll bars. *Iron Age* 151:64 Ja 14 '43
 Design of wide-strip mills. H. P. Lemm. *Blast F & Steel Pl* 31:144-5, 246-7, 360-1+ Ja-Mr '43

European adaptations of wide strip mills; report by committee of Verein Deutscher eisenhüttenleute. *diags Iron Age* 150:35-9 D 24 '42

Hot strip rolling mills; condensed from Stahl & Eisen. H. P. Lemm. *Metals & Alloys* 17:137-8 Ja '43

New 3-strand mill in California delivers rods at mile-a-minute. *il Steel* 112:52-3 Ap 26 '43

Planning and designing of wide strip mills. *Blast F & Steel Pl* 30:1243-50 N '42
 Sendzimir mill rolls strip to close tolerance. T. Sendzimir. *il diags Steel* 111:64, 67-8+ N 30 '42

See also
 Steel works

Bearings

Non-metallic bearings; abstract. G. E. Reiser. *Iron Age* 152:70-1 O 7 '43

Electric equipment

Electrolytic tinning lines help solve tin shortage. R. A. Geuder. *il diags Steel* 113:126-8 Jl 19 '43

New applications of electric equipment for electro-tinning lines. J. H. Hopper. *il diags Blast F & Steel Pl* 31:423-7, 449-50 Ap '43

Recent developments in steel plant electrification. A. F. Kenyon. *il Blast F & Steel Pl* 31:58-92 Ja '43

Unified drives increase rod mill production. F. R. Grant and G. L. Beaver. *il Steel* 113:120-2+ S 6 '43

Wire-rod rolling. *il Elec R (Lond)* 133:531-5 O 22 '43

See also
 Electric driving—
 Rolling mills

Employees

Women operators prove their worth in aircraft steel tube mill; Summerill tubing co. *il Aero Digest* 42:184 Ja '43

See also
 Steel workers

Equipment

Columbia Steel starts new rod mill. *il Blast F & Steel Pl* 31:560+ My '43

Converts world's widest strip mill to plate production. *il Steel* 111:72-3, 110 S 7 '42; Same. *Mech Handling* 30:300-4 Jl '43

Corrosion of water pipes in a steel mill. C. L. Clark and W. J. Nungester. *bibliog il Am Soc for Metals Trans* 31:304-14 Je '43; Same cond. *Oil & Gas J* 42:65-6+ O 7 '43; Discussion. *Am Soc for Metals Trans* 31: 314-20 Je '43

Descaling steel by spray system. R. Traut-schold. *il diag Steel* 113:112-13+ S 13 '43

Metal-forming machine; electric-weld pipe mill. E. W. Allardt. *il Welding J* 22:319-21 My '43

Stanley works gets in the scrap. E. W. Christ. *il Steel* 113:122+ Jl 5 '43

Vanderbilt plate mill in South Africa now building. *Blast F & Steel Pl* 31:508+ Jl '43

Das walzen von grob- und mittelblechen. E. Howahr. *il diags plans Stahl & Eisen* 61: 73-53, 100-7 Ja 23-30 '41; Translation (Rolling heavy and medium plates). *Blast F & Steel Pl* 31:309-14, 419-22 Mr-Apr '43

See also
 Furnaces, Heating

Heating and ventilation

Carnegie-Illinois armor plate plant. R. E. Hattis. *plans Heat & Ven* 40:68-73 Je '43

Lubrication

Salvaging and reconditioning palm oil. M. Reswick. *il diag Steel* 111:72-4 D 28 '42

Management

Scheduled repairs urged; abstract. C. P. Spangler. *Iron Age* 152:71-2 O 7 '43

Power

Standard costs for power consumption in rolling mills. F. Ryder. *bibliog Blast F & Steel Pl* 31:104-8, 1030-5, 1152-4 Ja, S-O '43

See also
 Electric driving—
 Rolling mills

Tables, calculations, etc.

Standard costs for power consumption in rolling mills. F. Ryder. *bibliog Blast F & Steel Pl* 31:104-8 Ja '43

ROLLING pins, Glass
 Glasshouse friggers; rolling pins. *il Glass Ind* 24:339 Ag '43

ROLLS

Rolls for sheet galvanizing. W. G. Imhoff. *bibliog il Steel* 112:72-3, 76, 78 Ja 25; 88, 90+ F 8 '43

ROLLS (bending machines)

Standard bending roll used to salvage electric cable. *il diags Iron Age* 151:51 F 25 '43

Uses bending roll to salvage rubber at Timken roller bearing co. *il Steel* 111:80 N 23 '42

ROLLS (rolling mills)

Backing-up rolls; abstract. J. A. Succop. *Metals & Alloys* 16:914+ N '42

Blooming mill rolls; abstract. D. L. Eynon and F. C. T. Daniels. *Iron Age* 152:70 O 7 '43

ROMAN Catholic church

Foreign relations

Vatican policy in Europe. *Economist* 145:367-9 S 11 '43

RONAN, John Joseph, 1917-1942

Sketch. A. K. Snelgrove. *Science* 96:551-2 D 18 '42

ROOF gutters.

 See Gutters (roof)

ROOF prisms.

 See Prisms

ROOFING

Versatile gypsum finds applications in new wallboards and roofs. *Sci Am* 169:13 Jl '43

See also

Roofs

ROOFING, Copper

Outstanding copper shingle roof. *il diag Sheet Metal Worker* 33:50-1 D '42

ROOFS

Amounts of steel required for steel mill buildings; study made by the Specifications branch, Conservation division, War production board. *diags Eng N* 129:722-8 N 19 '42
 Copper roofing for church and school. *il diag Sheet Metal Worker* 34:25-6 F '43

Fire stops for timber deck roofs. J. McCawley. *il diags Sheet Metal Worker* 34: 18-20 F '43

Heat transfer coefficients for roof constructions. P. D. Close. *Heating-Piping* 15:248 My '43

Outstanding copper shingle roof. *il diag Sheet Metal Worker* 33:50-1 D '42

Roof coverings under the blitz. J. McCawley. *il Sheet Metal Worker* 34:26-8 Mr '43

Roofing of army buildings. *Franklin Inst J* 236:192-3 AE '43

Timber bowstring trusses supported on buttressed concrete columns for U.S. army hangar. *il diags Eng N* 129:771-4 D 3 '42

Treatment of roof glazing by fabric attached with bituminous adhesive. C. M. Watkins and T. A. Baker. *Soc Chem Ind J* 62:132-5 S '43

ROOFS—Continued

Two-hinged timber roof trusses use synthetic gusset plates. diags Eng N 131:410-11 S 9 '43

See also
 Architecture Girders
 Building Mine roofs
 Factories—Roofs Strains and stresses

Tables, calculations, etc.

Short cut estimating methods; how to figure barn roofing. H. F. Lotz. il Am Bld 65:62+ Mr '43

Short cut estimating methods; roofing. H. F. Lotz. il diags Am Bld 65:52+ F '43

Water cooling

Spray canopy for roof cooling. A. B. Tappen. diags Power Pl Eng 47:77-8 F '43; Same. il Refrig Eng 45:163-4, 224 Mr '43

Water-spray cooling system for flat roof buildings. A. B. Tappen. diags Eng N 130:816-17 Je 3 '43

ROOFS, Concrete

Arched concrete shell for industrial roof; extension to Westinghouse plant. H. C. Schwerin. il Civil Eng 13:213-14 My '43

Building an 82-acre concrete roof with traveling retractable forms; Dodge-Chicago plant, Division of Chrysler corp. il diags Eng N 130:874-7 Je 17 '43

Concrete arch roof for Kansas City factory; movable forms speed construction of Pratt and Whitney plant. T. Wood. il Civil Eng 13:363-5 Ag '43

Flat-slab concrete roof found economical; with cost data. J. Feld. il diags Eng N 131:637-8 O 21 '43

Heating arch ties for a concrete roof; electric ovens utilized in construction of wharf shed at St John harbor. F. E. Sterns. il diags Civil Eng 13:253-6 Je '43

Long span concrete roof construction. C. H. Mayer. il diags Am Concrete Inst J 14:389-96 Ap '43

Multiple-arch concrete roof saves steel; plant built for Chrysler corp. il diags Eng N 130:31-4 Ja 14 '43

New speed technique for thin-shell concrete. il Arch Rec 32:62-3 D '42

Reinforced concrete barrel-roof design saves big tonnage of steel; new Westinghouse plant. il Concrete 51:2-3 Ap '43

Reservoir roof of unreinforced arches at Springfield, Vt. il diags Eng N 131:479-81 S 23 '43

Series of mobile roof forms speed aircraft engine factory; Pratt & Whitney plant. il Steel 111:41 D 28 '42

Thin concrete roof withstands fire test. J. E. Kalinka. il diags Eng N 130:804-5 Je 3 '43

ROOFS, Steel

Air-supported roofs for factories. H. H. Stevens, jr. il diags Arch Rec 32:45-6 D '42

Amounts of steel required for steel mill buildings; study made by the Specifications branch, Conservation division, War production board. diags Eng N 129:722-8 N 19 '42

How to ground a steel roof. Sheet Metal Worker 33:46+ D '42

Sheet metal workers' catechism (cont). W. Neubecker. diags Sheet Metal Worker 34: 21+ F; 30 Ap; 30 Je; 29-30 Jl; 27 O '43

ROOFS, Tile

Precast tile slabs save time and money. il Brick & Clay Rec 103:30-1 Ag '43

ROOMS

Freedom by adding just one small room. il plans Arch Rec 92:64 N '42

100 attics will house over 200 war workers; wartime repairs, maintenance and conversion jobs. il diags plan Am Bld 65:36-7 F '43

See also
 Bathrooms Living rooms
 Bedrooms Recreation rooms
 Kitchens

ROOSEVELT, Anna Eleanor (Mrs Franklin Delano Roosevelt) 1884-

Visit to Britain. Comm & Fin Chr 156:1982 D 3 '42

ROOSEVELT, Franklin Delano, 1882-

Annual message on the state of the Union; text. Comm & Fin Chr 157:193, 196-7 Ja 14 '43

Can Roosevelt keep his new friends without losing his old ones? Fortune 27:100+ Je '43

Democracy can be efficient. Fortune 28:116-17+ Ag '43

Do the Republicans want to win with Roosevelt and lose with Willkie? Fortune 28:82+ S '43

Fortune survey; if war continues, Roosevelt; if war ends, a Roosevelt peace, but not Roosevelt. Fortune 27:10+ Je '43

Fortune survey; Roosevelt. Fortune 28:22+ N '43

Gallup poll links Roosevelt's fate to war; 51% will back him if conflict continues. Comm & Fin Chr 157:2723 Je 17 '43

Message to Congress pledges new blows at Axis; asks for more output. Comm & Fin Chr 158:1224-5+ S 23 '43

New deal decade. Economist 144:288-9 Mr 6 '43

No other President successful as FDR in getting Congress to share war responsibility. G. H. Montague. Comm & Fin Chr 157: 426 Ja 28 '43

Political aspects of Roosevelt message on the state-of-the-nation and the progress-of-the-war. E. Blair. Barron's 23:5-6 Ja 11 '43

President favors post-war training for youth; concludes tour of camps and war plants. Comm & Fin Chr 157:1683 My 6 '43

President leads Thanksgiving services. Comm & Fin Chr 156:1983 D 3 '42

President on inspection tour of camps visits President Camacho of Mexico. por Comm & Fin Chr 157:1490 Ap 22 '43

This Christmas is happier than last; Christmas eve radio address. Comm & Fin Chr 157:79 Ja 7 '43

Urges adherence to faith of Washington; Washington's birthday address. Comm & Fin Chr 157:845 Mr 4 '43

ROOSEVELT, Kermit, 1889-1943

Sketch. Comm & Fin Chr 158:135 Jl 8 '43

ROOSEVELT, Theodore, 1858-1919

Fate of mighty nations; in the Republican era of 1897-1912 American internationalism was born. R. W. Davenport. pors Fortune 27: 114-19+ My '43

ROOT, Elihu, 1845-1937

Fate of mighty nations; in the Republican era of 1897-1912 American internationalism was born. R. W. Davenport. por Fortune 27:114-19+ My '43

ROPE

Acid-resistant rope. il Mod Plastics 20:71 My '43

Chain as manila rope substitute. il Pulp & Pa of Can 44:323 O '43

Give them rope; many fibres besides manila. Business Week p24+ F 6 '43

Guarding against rope waste. Marine Eng 47:160-2 D '42

How to determine safe loads for manila rope slings. Elec W 119:2161 Je 26 '43

How to determine safe loads for sisal rope. Elec W 120:334 Jl 24 '43

How to determine size of rope for tackle. il Elec W 120:1386 O 16 '43

Improved rule for figuring lineal feet on drum or reel. W. F. Schaphorst. diag Pulp & Pa of Can 44:448 My '43

Manila rope substitute suggested; weldless chains. Oil & Gas J 42:52 My 27 '43

Mechanical equipment; handling materials; fiber rope. Nat Safety N 47:70-1+ Mr '43

More use from your manila and hemp rope. Roads & Sts 86:84 S '43

Proper use and conservation of rope. il Eng N 129:710-12 N 19 '42

Rope-ology; construction, use and care of rope. E. L. Cady. il Mech Handling 30: 429-33+, 495-6 O-N '43

See also
 Wire rope

Manufacture

Condensed history of rope-making. H. W. Dickinson. Engineer 175:297-8 Ap 9 '43

Testing

Comparative tests of rope hand lines; sisal and manila. H. Miller. Elec W 120:106 Jl 10 '43

ROPE fibers*See also*

Sisal hemp

ROPEWAYS. *See* Cableways**ROSE, Robert Evstafieff, 1879-**Retires as director of du Pont laboratory.
por Oil Paint & Drug Rep 144:7+ S 13 '43**ROSES**Promotion finesse builds roses into big-time
business for Jackson & Perkins. C. H.
Perkins. il Sales Management 52:22-4 J1 15
'43**ROSIN**Evaluation of rosins in soaps; abstract. J.
N. Borglin and others. Soap & San Chem
19:57-8 Ag '43Manufacture and testing of oils and oil-
rosin saturants for use in electrical equip-
ment. A. W. Thompson and J. C. Wood-
Mallock. Inst E E J 90 pt 2:35-53 bib-
liog(p52-3); Discussion. 53-64 F '43More synthetic resins from rosin. J. R. Cal-
laham. flow chart il Chem & Met Eng 50:
109-11 O '43Naval stores and compounding synthetic rub-
ber. India Rubber W 109:149 N '43New patented rosin process available. Chem
& Eng N 20:1392 N 10 '42Present day use of natural oils and resins
in printing inks. F. E. Petke and C. H.
Allen. il Chem Ind 53:502-4 O '43Products from rosin; abstract. W. W.
Trowell. Can Chem & Process Ind 27:195 Ap
'43Report of A.S.T.M. subcommittee I on
softening point of rosin. Am Soc T M
Proc 42:443-6 '42Research dispels some myths about rosin in
soap. il Chem Ind 52:369+ Mr '43Rosin in soap. P. Mayfield. il Soap & San
Chem 19:21-4+ Ap '43Rosin in soap contributes many desirable
properties. Sci Am 168:200 My '43Rosin replacement of coconut. Soap & San
Chem 18:61-2 D '42Rosin to ease shortage of soap oils. F. J.
Van Antwerpen. il Chem & Eng N 21:376-7
Mr 25 '43Rosin's roles in varnishmaking. Oil Paint
& Drug Rep 143:7+ Ap 26; 7+ My 3; 7+
My 10; 7+ My 17; 42+ My 31 '43Soap from southern pines. N. G. Farquhar.
il Chem & Met Eng 50:108 Ap '43Solvent refining of wood rosin. I. W.
Humphrey. bibliog(patents) il diag Ind &
Eng Chem 35:1062-7 O '43Waterproof paper products vs. paper strength;
effect of rosin. J. A. DeCew. Paper Tr J
116:16 F 4 '43*See also*

Galex

StatisticsTurpentine and rosin, 1942. Chem & Met Eng
50:121-3 F '43**ROSS, Frank S. 1893-**Railroads form main supply line to North
African front. por Ry Age 114:456-8 Mr 6
'43**ROSS, Malcolm**

Portrait. Business Week p101 O 23 '43

ROSS institute of tropical hygieneAnnual report for 1941-42: India branch. Sci-
ence 98:168 Ag 20 '43**ROSTER of scientific and specialized person-
nel, National.** *See* National roster of sci-
entific and specialized personnel**ROTAMETERS**Rotameter for accurate rate of flow measure-
ment. il Pub Works 74:50 Ap '43Technical aspects of rotameters; remote read-
ing fuel rate metering device. W. J.
Diamant. il Aero Digest 42:138, 142 F '43**ROTATING pipe conveyors.** *See* Conveying ma-
chinery—Rotating pipe conveyors**ROTATION**Use of stroboscopic patterns in the determi-
nation of speeds of rotation. D. A. MacInnes.
bibliog diag R Sci Instr 14:14-16 Ja '43;
Abstract. Electronics 16:166+ Ap '43**ROTATION, Optical.** *See* Optical rotation**ROTATION of molecules.** *See* Molecules—Ro-
tationROTATORY dispersion. *See* Dispersion of rays**ROTENONE**Active principles of leguminous fish-poison
plants; the synthesis of furanosoilavones
related to rotenone. S. H. Harper. Chem
Soc J p595-8 O '42Control of rotenone use and distribution in
United States. For Comm W 11:34 My 29
'43Effect of oil in rotenone dust mixtures. H.
E. Wilson and E. J. Campau. Soap & San
Chem 19:123, 125+ Je '43Government program for purchase of rote-
none. For Comm W 9:25 N 28 '42Insecticide outlook; the possibilities of supply
and requirements in 1944 for rotenone,
pyrethrum, thiocyanates, arsenicals and
other raw materials. Soap & San Chem 19:
107, 109+ N '43Occurrence of rotenone and related substances
in the seeds of the berbera tree; procedure
for the separation of deguelin and tephrosin.
E. P. Clark. Am Chem Soc J 65:27-9 Ja '43Pyrethrum and rotenone; abstract. H. Noble.
Oil Paint & Drug Rep 143:32D Je 14 '43Pyrethrum outlook clouded by acute rotenone
shortage. Soap & San Chem 19:115 F '43Rotenone crop introduced in Ecuador for
export market. For Comm W 11:30 My 29
'43Rotenone production in the Amazon valley.
E. C. Higbee. il For Comm W 12:8-9+
J1 24 '43Rotenone production plan for western hemi-
sphere. Oil Paint & Drug Rep 144:3+ S 27
'43Rotenone under allocation. For Comm W 10:
24 F 13 '43Toxicity of rotenone to animals; a review and
comparison of responses shown by various
species of insects, fishes, birds, mammals,
etc. L. K. Cutkomp. bibliog Soap & San
Chem 19:107+ O '43**Analysis**Determination of rotenone improvements in
the gravimetric method. S. I. Gertler. Ind
& Eng Chem Anal ed 14:897-8 N 15 '42Evaluation of derris root. K. E. Edwards.
Soc Chem Ind J 61:192-4 D '42; Reply. H.
E. Coomber, J. T. Martin and S. H. Har-
per. 62:73-5 My '43**Prices**Rotenone prices ceiled by OPA. Oil Paint &
Drug Rep 143:4+ Ja 11 '43**ROTENONE, Substitutes for**Rotenone substitute now under study. Oil
Paint & Drug Rep 142:7+ N 23 '42; Soap
& San Chem 18:135 D '42**ROTHAMSTED experimental station**Centenary of Rothamsted. Chem & Ind 62:
285-6 J1 31 '43

Centennial. Science 98:sup10 O 1 '43

Science in agriculture; a century of solid
achievement. il Chem Age (Lond) 49:109-
10 J1 31 '43**ROTOLACTOR.** *See* Milking machines**ROTORS**Aerodynamic considerations of rotors in hover-
ing and vertical climb conditions. C. H.
Kaman. bibliog J Aeronautical Sci 10:201-8
J1 '43*See also*

Autogiros

ROTORS (electric machinery)How to service telechron rotors. G. W. Vill-
ers. il Elec W 120:838 S 4 '43Sleeve for dip-soldering leads of small gener-
ator rotors. diag Ry Mech Eng 117:184 Ap
'43**ROTPROOFING.** *See* Textile fabrics— Protec-
tion**ROTTERDAM****Harbor**Coal handling equipment in Rotterdam har-
bour. D. Rebbeck. il Mech Handling 30:
188-91 My '43**ROUMANIA.** *See* Rumania**ROUNDHOUSES***See also*Locomotive shops
Locomotive terminals
Railroads—Shops

ROUTING systems

Curtiss-Wright's newest propeller plant. P. B. Terhorst. *il Mach* 49:152-63 Ag '43
How handling helped us beat space limitations; Propeller division, Nash-Kelvinator corporation. C. Wood. *il Factory Management* 101:93-6 O '43

See also

Assembling methods
Production control

ROXBORO, North Carolina**Water supply**

Installing a turbine pump at Roxboro. C. M. Abbott. *diags plan Pub Works* 74:15-16+ O '43

ROYAL aeronautical society

Annual report, 78th. of the council, 1942-1943. *Roy Aeronautical Soc J* 47:144-58 My '43

ROYAL air force. See Great Britain—Air force**ROYAL automobile club of Canada**

Annual general meeting, Montreal, Jan. 8. *Roads & Bridges* 81:34, 51-2 F '43

ROYAL college of surgeons, London**Museum**

Restoration of the museum. *Science* 98:296 O 1 '43

ROYAL society of Canada

Annual meeting. D. A. Keys. *Science* 98:178-9 Ag 20 '43

ROYAL society of Edinburgh

New fellows. *Science* 97:459-60 My 21 '43

ROYAL society of London

Address of the president; with awards of medals. H. Dale. *Science* 97:27-32 Ja 8 '43
Election of fellows of the Royal society. *Science* 97:349-50 Ap 16 '43
Foreign members. *Science* 98:34-5 Jl 9 '43

ROYAL society of South Australia

Transactions sent only to twelve American institutions. *Science* 97:482 My 28 '43

ROYAL typewriter company

Considers N.Y. stock exchange listing. *Comm & Fin Chr* 158:1477 O 11 '43

ROYALTIES

See also

Oil lands—Royalties

RUBBER

Advances in rubber during 1942. J. H. Dillon. *bibliog*(53 titles) *Rubber Age* 52:308-11 Ja '43; Same. *India Rubber W* 107:477-9 F '43; Same. *Mech Eng* 65:248-50 Ap '43

A.S.T.M. rubber committee meetings, Buffalo. *Rubber Age* 53:59 Ap '43

Combining non-vulcanizable synthetic products with natural and synthetic rubber. *India Rubber W* 107:298+ D '42

Crisis in rubber. J. L. Collyer. *Science* 97:32-6 Ja 8 '43

Dewey acting rubber director. *Oil Paint & Drug Rep* 144:5+ S 13 '43

Equations of state for natural and synthetic rubber-like materials; unaccelerated natural soft rubber. E. J. Anthony, R. H. Caston and E. Guth. *bibliog J Phys Chem* 46:826-40 O '42

Kinetic theory of rubber. F. C. Auluck and D. S. Kothari. *J Chem Phys* 11:387-92 Ag '43

Mechanical properties of polymeric materials. A. Tobolsky and H. Eyring. *bibliog J Chem Phys* 11:125-34 Mr '43

Natural and synthetic rubber. *Economist* 145:150 Jl 31 '43

Natural and synthetic rubber. W. C. Geer. *Chem & Ind* 61:445-7 O 31 '42

Natural vs. synthetic rubbers. *Am Gas J* 158:12-13+ Je '43

Our rubber problem. E. A. Hauser. *J Chem Educ* 20:203-5 Ap '43

Our rubber supply, today and after the war. W. O'Neill. *il Am Business* 13:10-12 Je '43

Physical states of rubber in relation to its molecular structure. L. R. G. Treloar. *bibliog diags Chem & Ind* 62:326-8 Ag 28 '43; Same. *Soc Dyers & Col J* 59:247-9 N '43

Rubber and reform don't mix; getting rubber from South America proves a fiasco. S. Ross. *Barron's* 23:16 Je 14 '43

Rubber is easing. *Business Week* p48+ Je 5 '43

Rubber; natural and synthetic supplies. C. Ridley. *Automobile Eng* 33:334-7, 356-8 Ag-S '43

Rubber problems. N. C. Rockwood. *il Rock Prod* 46:80-1+ Ja '43

Rubber program, present and future. B. Dewey. *flow diag il map Chem & Eng N* 21:1503-9 S 25 '43

Rubber progress report no. 3. *Chem & Eng N* 21:782 My 25 '43

Rubber supplies; a survey of the wild, cultivated and synthetic varieties. *Automobile Eng* 33:79-80 F '43

Sources of rubber; Norepol and natural rubber. *Science* 97:sup8-9 Ja 29 '43

Standard SAE-ASTM classification and tests recommended for natural automotive rubbers. S. A. E. J. 50:sup25 Jl '42

Theory of the elastic properties of rubber. H. M. James and E. Guth. *J Chem Phys* 11:455-81 O '43

U.S. rubber; guayule and kok-saghyz sources now striding ahead. *Sci Am* 168:172-3 Ap '43

War procurement of natural rubber. E. G. Holt. *il For Comm W* 12:3-5 Jl 31 '43

We have a tough nut to crack; appeal to petroleum industry to help rubber program. W. M. Jeffers. *Oil & Gas J* 41:10 N 26 '42

What you can use; materials suitable for various purposes in processing industries (cont). *Oil Paint & Drug Rep* 142:38 D 21; 58 D 28 '42; 143:38 Ja 4; 54 Ja 13; 45 Ja 25; 40 F 1; 44 F 8; 8 F 15; 51 F 22; 32 Mr 15; 42 Mr 29; 47 Ap 5; 46 Ap 12; 40 Ap 19; 49 Ap 26; 66 My 3; 68 My 10; 25 My 24; 62 Je 14 '43

Why is rubber elastic? abstract. L. R. G. Treloar. *Chem & Ind* 61:500 D 5 '42

See also

Guayule	Rubber latex
Printing plates, Rubber	Rubber plants and
ber	planting
Rubber factories	Rubberized fabrics
Rubber goods	Tires, Automobile
Rubber industry and	Tires, Rubber
trade	Vulcanization

Accelerators

See Vulcanization—Accelerators

Aging

Accelerators and antioxidants in the rubber industry. P. I. Murrill. *il Chem & Eng N* 20:1361 N 10 '42

Digest of cooperative test program on accelerated light aging of rubber. J. H. Ingmanson. *Am Soc T M Proc* 42:392-8 '42

Variables and suggested modifications in accelerated light aging. C. K. Chatten and T. A. Werkenhith. *il India Rubber W* 108:40-2 Ap '43

Analysis

Determination of mercury in rubber by the Volhard method; separation of iodine. C. L. Luke. *bibliog diag Ind & Eng Chem Anal* ed 15:597-9 S 15 '43

Determination of total sulfur in rubber. C. L. Luke. *diag Ind & Eng Chem Anal* ed 15:602-4 S 15 '43

Determination of total sulfur in rubber and rubberlike materials. L. E. Cheyney. *bibliog Ind & Eng Chem Anal* ed 15:164-5 Mr 15 '43

Identification of carbon black by surface area measurements. F. H. Amon, W. R. Smith and F. S. Thornhill. *bibliog Ind & Eng Chem Anal* ed 15:256-8 Ap 15 '43

Methyl ethyl ketone extraction of rubber. L. E. Cheyney. *bibliog Ind & Eng Chem* 34:1426-8 D '42

Multiple-extraction rack for chemical analysis of rubber products. *il Ind & Eng Chem Anal* ed 15:537-8 Ag 15 '43

Bacteriology

Preventing the bacterial oxidation of rubber. A. E. Dimond and J. G. Horsfall. *Science* 97:144-5 F 5 '43; Same. *Rubber Age* 53:242-3 Je '43

RUBBER—Continued

Bibliography

Recent Russian literature on natural and synthetic rubber. M. Hosh. India Rubber W 108:253-4+, 461-3, 559-60; 109:45-8, 155-7+ Je, Ag-N '43 (to be cont)

Rubber bibliography. Published in monthly numbers of India rubber world

Brittle point

Brittle points of natural and synthetic rubber stocks. R. E. Morris, F. R. James and T. A. Werkenthin. bibliog il Ind & Eng Chem 35:864-7 Ag '43

Brittle temperature of rubber under variable stress. A. R. Kemp, F. S. Malm and G. G. Winspear. bibliog diag Ind & Eng Chem 35:488-92 Ap '43

Chemistry

American chemical society, Division of rubber chemistry meeting, Detroit, April 15-16; abstracts of papers. Rubber Age 52:499-502+ Mr '43; India Rubber W 108:56-8 Ap '43

Chemical reactions during vulcanization; liquid rubber latex. E. A. Hauser, D. S. le Beau and J. Y. L. Kao. bibliog J Phys Chem 46:1099-1111 D '42

Crystal structure of rubber hydrochloride. C. W. Bunn and Mrs E. V. Garner. Chem Soc J p654-8 N '42

Division of rubber chemistry, A.C.S. to meet in New York, Oct. 5-7; abstracts of papers. Rubber Age 53:523-9 S '43; India Rubber W 109:55-60 O '43

Molecular structure of rubber. H. P. Stevens. Chem & Ind 52:351 S 11 '43

Oxidation of rubber and its colloid chemical results. R. Houwink. bibliog diags India Rubber W 107:369-77 Ja '43

Properties of rubber solutions and gels. M. L. Huggins. bibliog Ind & Eng Chem 35:216-20 F '43

Rubber, polyisoprenes, and allied compounds; the relative tendencies towards substitutive and additive reaction during chlorination. G. F. Bloomfield. diag Chem Soc J p289-96 J1 '43

Statistical lengths of rubber-like hydrocarbon molecules. F. T. Wall. bibliog J Chem Phys 11:67-71 F '43

Structure of rubber. R. Houwink. bibliog diags J Phys Chem 47:436-42 Je '43

X-ray study of reactions involving accelerators; orientation of crystalline phases on stretching of rubber stocks. G. L. Clark, R. L. LeTourneau and J. M. Ball. il Ind & Eng Chem 35:198-204 F '43

See also

Rubber chemicals
Vulcanization

Chlorination

Chlorinated rubber; an outstanding modern chemical product. Chem Age (Lond) 48: 224-5 F 20 '43

Rubber, polyisoprenes, and allied compounds; the relative tendencies towards substitutive and additive reaction during chlorination. G. F. Bloomfield. diag Chem Soc J p289-96 J1 '43

Synthetic rubber and rubber produced from native plants used as the bases for chlorinated rubber in Russia. India Rubber W 108: 74+ Ap '43

Conservation

How to save rubber belting. il Mod Packaging 16:109-11+ D '42

How to stretch life of rubber; tires, hose, belts and gloves. il Food Ind 15:58-60 F '43
New design quirks ease rubber headache on garters and braces. il Sales Management 52:50-1 My 1 '43

Platen and roller saving plan. il Am Business 12:8-9 N '42

Railroads slash their rubber uses. il Ry Age 113:785-8 N 14 '42

Recommended reduced use of rubber; Association of American railroads; table. W. J. Clardy. Mech Eng 65:571-2 Ag '43

Rubber; army conserves, too; synthetic rubber; story of natural rubber; reclaiming processes; how auto transportation is to be maintained. A. F. Macconochie. il Steel 111:80-2, 84+ N 16 '42

Rubber maintenance and conservation hints. Oil & Gas J 41:138 N 26 '42

Rubber scarcity; special care of hose and lined vessels. Chem Age (Lond) 48:398 Ap 10 '43

Some hints on maintenance and conservation frequently overlooked; fundamentals for conservation of rubber. il Min Cong J 29: 26-8 Ap '43

See also

Rubber, Substitutes
for

Crystallization

Crystal structure of rubber hydrochloride. C. W. Bunn and Mrs E. V. Garner. Chem Soc J p654-8 N '42

Curing

See Vulcanization

Electric properties

Conductivity of rubber tread stocks; effect of properties of carbon black. L. H. Cohan and J. F. Mackey. bibliog Ind & Eng Chem 35:806-8 J1 '43

Rubber as electrical conductor. Manuf Rec 112:44 Je '43

Freezing

Brittle temperature of rubber under variable stress. A. R. Kemp, F. S. Malm and G. G. Winspear. bibliog diag Ind & Eng Chem 35:488-92 Ap '43

Joining to metal

Reanite bonding process. il Rubber Age 53: 426 Ag '43

Manufacture

Compounding of guayule rubbers; effect of various factors on physical properties. R. E. Morris and others. India Rubber W 107: 463-7 F '43

Studies in compounding guayule rubber. E. A. Hauser and D. E. le Beau. India Rubber W 106:447-9; 107:568-70; 108:37-9+ Ag '42, Mr-Ap '43

Vulcanization or other heat treatment by electrical conduction; rubber and rubber-like materials. F. L. Yerzley. diags Rubber Age 52:133-4 N '42

See also

Carbon black
Rubber, Sponge—
Manufacture
Rubber factories
Rubber goods—Manu-
facture

Rubber technology
Tires, Automobile—
Manufacture
Vulcanization

Oxidation

Course of autoxidation reactions in polyisoprene and allied compounds; the oxidation of rubber in the presence of acetic acid or acetic anhydride. G. F. Bloomfield. Chem Soc J p356-60 Ag '43

Course of autoxidation reactions in polyisoprenes and allied compounds; the peroxidation of rubber. E. H. Farmer and A. Sundralingam. diags Chem Soc J p125-33 Mr '43

Oxidation of rubber and its colloid chemical results. R. Houwink. bibliog diags India Rubber W 107:369-77 Ja '43

See also

Rubber—Aging

Patents

Patents and trade marks. Published in monthly numbers of India rubber world

See also

Rubber, Artificial—
Patents

Standards

See also

Rubber industry and
trade—Regulation

Temperature

Heat generation in flexed rubber. S. D. Gehman, P. J. Jones and D. E. Woodford. bibliog il diags Ind & Eng Chem 35:964-71 S '43

See also

Rubber, Effect of
temperature on

RUBBER—Continued

Testing

- Analysis of the uranyl oxalate actinometer as applied to accelerated light and weathering tests. F. T. Bowditch, C. E. Greider and C. G. Ollinger. *bibliog Am Soc T M Proc* 42:345-50 '42
- Carbon black in all-reclaim tire treads. L. H. Cohan and J. F. Mackey. *India Rubber W* 107:469-70+ F '43
- Digest of cooperative test program on accelerated light aging of rubber. J. H. Ingmanson. *Am Soc T M Proc* 42:392-8 '42
- Heat generation in flexed rubber. S. D. Gehman, P. J. Jones and D. E. Woodford. *bibliog il diags Ind & Eng Chem* 35:964-71 S '43
- Hydraulic efficiency of rubber pads. W. Tucker. *il diags Aviation* 42:167, 169+ My '43
- Improved procedure for testing with the Pusey and Jones plastometer. R. E. Morris and R. E. Harmon. *il diag Rubber Age* 53:139-40 My '43
- Use of Shore Durometer for measuring hardness of rubber; abstract. R. H. Taylor. *Franklin Inst J* 236:195-6 Ag '43; Same. *Rubber Age* 53:434 Ag '43
- Variables and suggested modifications in accelerated light aging. C. K. Chatten and T. A. Werkenhith. *il India Rubber W* 108:40-2 Ap '43

See also

- Rubber—Aging
Rubber laboratories

Uses

See also

- Rubber goods
Rubber latex

RUBBER, Artificial

- ABC of chemical derivatives from petroleum; synthetic rubbers. R. L. Wakeman and B. H. Weil. *il Nat Pet N* 35 pt 2:R22-5, R28-31 Ja 6 '43
- ABC of the synthesis of rubber. *il Oil & Gas J* 41:30-1+ N 26 '42
- Advances in rubber during 1942. J. H. Dillon. *bibliog(53 titles) Rubber Age* 52:308-11 Ja '43; Same. *India Rubber W* 107:477-9 F '43; Same. *Mech Eng* 65:248-50 Ap '43
- Alcohol tilt due; fight for more rubber from grain alcohol. *Business Week* p28-30 D 19 '42
- All resources pooled to produce aviation gasoline, toluene, and other war necessities. W. Miller. *Min & Met* 24:98-9 F '43
- American chemical society, Division of rubber chemistry meeting, Detroit, April 15-16; abstracts of papers. *Rubber Age* 52:499-502+ Mr '43; *India Rubber W* 108:56-8 Ap '43
- A. C. S. Division of rubber chemistry meeting; problems of utilizing synthetics. *Chem & Eng N* 21:1742-4 O 25 '43
- A.S.M.E. conferences on synthetic rubber and plastics. *India Rubber W* 109:159-60 N '43
- Another government-owned synthetic plant starts production; other reports. *Rubber Age* 52:242-4+ D '42
- Applications and unusual physical properties of synthetic rubbers. O. D. Cole. *bibliog A S M E Trans* 65:15-20 Ja '43; Same. *Machine Design* 14:76-81 JI '42
- Applications of Buna S rubber; abstract. N. A. Shepard. *Chem & Met Eng* 50:114 JI '43
- Artificial rubber from wood is planned; Canadian interest aroused by Stockholm report. *Paper Tr J* 115:8 N 12 '42
- Aviation-fuel program may be unveiled by investigation of alleged conflict with synthetic rubber program. H. D. Ralph. *il Oil & Gas J* 41:34-5 Ap 29 '43
- Behind the rubber now. *Barron's* 23:6 F 1 '43
- Buna and butyl rubbers excel natural in many qualities. J. A. Britton, jr. *il Oil & Gas J* 41:70, 73-4+ N 26 '42
- Canada's synthetic rubber program. C. C. Fryor. *il Pet Eng* 15:133, 142, 144 O '43
- Chemurgic rubber can be used alone or as extender; Witogum. *Sci Am* 169:60 Ag '43
- Chemurgic rubber; Kempol; abstract. N. E. Van Stone. *Sci Am* 168:266-7 Je '43

- Combining non-vulcanizable synthetic products with natural and synthetic rubber. *India Rubber W* 107:298+ D '42
- Commercial synthetic rubber types; comparative properties. *Aviation* 42:189, 191 JI '43
- Crisis in rubber. J. L. Collyer. *Science* 97:32-6 Ja 8 '43
- Current importance of synthetic latices and a review of one of them (neoprene latex type 571). H. H. Abernathy. *Rubber Age* 52:125-7+ N '42
- Directory of synthetic rubbers; trade names, structure, manufacture, and physical properties. W. C. Holliman. *bibliog Chem Ind* 53:63-70 JI '43
- Division of rubber chemistry, A.C.S. to meet in New York, Oct. 5-7; abstracts of papers. *Rubber Age* 53:523-9 S '43; *India Rubber W* 109:55-60 O '43
- Effects of blending guayule rubber with GR-S. R. E. Morris and others. *il India Rubber W* 109:150-2+ N '43
- Electrical and mechanical properties of the system Buna S-gilsonite. A. H. Selker, A. H. Scott and T. C. McPherson. *bibliog J Research Nat Bur Stand* 31:141-61 S '43
- Enough synthetic rubber will be made in time. *Oil & Gas J* 41:140 N 26 '42
- Expanding uses for synthetic rubber seen in peace as well as war. W. D. Parrish. *il Nat Pet N* 35 pt 2:R277-8 Je 2 '43
- Facts on rubber. *Business Week* p18 My 8 '43
- Falkomer, new extender for Buna-type synthetic rubber. *Rubber Age* 52:409 F '43
- Federal mechanism for directing the synthetic rubber program. H. D. Ralph. *Oil & Gas J* 41:32, 148 N 26 '42
- Five commercial types of synthetic rubber. *R Sci Instr* 14:325 O '43
- Here to stay; Hycar chemists say synthetic won't go out. *Business Week* p32 Je 12 '43
- Hitched to a star; synthetic rubber's need for greater quantity of carbon black. *Business Week* p48 D 26 '42
- How to conserve and prolong the life of synthetic rollers. *il Inland Ptr* 111:61-2+ Ag '43
- Hycar OR-25; a new polymeric hydrocarbon. D. E. Sausser. *Rubber Age* 53:42-4 Ap '43
- Hycar synthetic rubber. *Aviation* 42:195, 197 Je '43
- Hycar synthetic rubber OR-25. *India Rubber W* 108:51 Ap '43
- Introduction of some new rubber and plastic developments and symposiums feature Goodyear laboratory dedication. *Rubber Age* 53:348-9 JI '43
- Jeffers reports on rubber progress; text of report. *Nat Pet N* 34:26-7, 30 D 9 '42; Same. *Rubber Age* 52:229-34 D '42; Same. *India Rubber W* 107:398-401+ Ja '43
- KemPol chemurgic rubber. *India Rubber W* 107:476 F '43
- Kem-Pol; properties, characteristics and applications. W. T. Walton. *Rubber Age* 53:234-9 Je '43
- KemPol; synthetic rubber from domestic vegetable oils announced. *il Chem & Eng N* 21:306-7 Mr 10 '43
- Lining fuel storage tanks with synthetic rubber sheet. J. W. Crosby. *il Rubber Age* 53:240-1 Je '43
- Low temperature synthetics. P. A. Anderson. *il Aero Digest* 41:134+ D '42
- Natural and synthetic rubber. W. C. Geer. *Chem & Ind* 61:445-7 O 31 '42
- Natural and synthetic rubber, 1942. *Chem & Met Eng* 50:110-11 F '43
- Natural vs. synthetic rubbers. *Am Gas J* 158:12-13+ Je '43
- New billion-dollar rubber industry in the making. H. D. Ralph and A. L. Foster. *il Oil & Gas J* 41:11-13 N 26 '42
- New frontiers in rubber. E. J. Thomas. *Elec Eng* 62:510-11 N '43
- Oil seals; leather and synthetic rubber. *diags Automobile Eng* 33:291-3 JI '43
- Paracon, a new polyester rubber. B. S. Biggs and C. S. Fuller. *il Chem & Eng N* 21:962-3 Je 25 '43
- Paracon, new synthetic rubber. *India Rubber W* 108:150 My '43; *Science* 97:sup10 Ap 16 '43; *Rubber Age* 53:138 My; 441 Ag '43
- Paracon, specialty rubber developed during research on electrical insulators. *il Sci Am* 169:13 JI '43

RUBBER, Artificial—Continued

- Peacetime values from a war technology; synthetic rubber. G. Egloff. Science 97: 106-7 Ja 29 '43; Same. Chem & Eng N 21: 146-9 F 10 '43; Same. Inst Pet J 29:142-4 My '43
- Petroleum rubber program progressing satisfactorily. H. D. Ralph. Oil & Gas J 41:14-15+N 26 '42
- Plastic coatings in the post-war era; synthetic rubbers. J. B. Cleaveland. il Textile World 93:62-4 My '43
- Plastics from petroleum. R. J. Moore. flow sheet Oil & Gas J 42:49+- JI 1 '43
- Postwar prospects discussed at Goodyear laboratory dedication. India Rubber W 108: 470-1 Ag '43
- Progress in rubber reported; progress report no. 2; text. W. M. Jeffers. map Nat Pet N 35:20, 24-6+ F 24 '43; Same. India Rubber W 107:576-81 Mr '43; Same. Rubber Age 52:487-93 Mr '43; Excerpts. Oil & Gas J 41:42-3 F 25 '43
- Progress report no. 3; text. W. M. Jeffers. India Rubber W 108:262-4 Je '43; Same. Nat Pet N 35:18, 20+- My 19 '43; Same. Rubber Age 53:266-8 Je '43
- Properties of synthetic rubber. il Oil & Gas J 41:81-2, 85-6+N 26 '42
- Rediscover the rainbow; Chandler medal lecture. W. H. Dow. Chem & Eng N 21:850-1 Je 10 '43
- Report on rubber projects. India Rubber W 107:570+- Mr '43
- Rubber after the war. K. E. Knorr. il India Rubber W 108:356-8, 464-6, 556-8; 109:49-51 JI-O '43
- Rubber; army conserves, too; synthetic rubber; story of natural rubber; reclaiming processes; how auto transportation is to be maintained. A. F. Macconochie. il Steel 111:30-2, 84+- N 16 '42
- Rubber at last. Business Week p19 Mr 13 '43
- Rubber crisis. A. C. Lutz. Paper Tr J 116: 83-4 Je 24 '43
- Rubber from farm crops; research and development; abstracts of papers at Chemurgic conference. Nat Pet N 35 pt 2:R325-6 JI 7 '43
- Rubber; natural and synthetic supplies. C. Ridley. Automobile Eng 33:334-7, 366-8 Ag-S '43
- Rubber outlook improved by early progress. Oil & Gas J 41:142 N 26 '42
- Rubber problems resolves into conflicting charges. Oil Paint & Drug Rep 143:7+- F 1 '43
- Rubber problems. N. C. Rockwood. il Rock Prod 46:80-1+ Ja '43
- Rubber replacements. E. G. Kimmich. Mech Eng 65:113-14 F '43
- Rubber supplies; a survey of the wild, cultivated and synthetic varieties. Automobile Eng 33:79-80 F '43
- Rubber uses soap; causing scramble for fancy grade of tallow. Business Week p66 My 15 '43
- Rubber's influence on post-war alcohol industry. Chem Ind 52:548 Mr '43
- Second mile. L. B. Sebrrell. bibliog il Ind & Eng Chem 35:736-50 JI '43; Same. India Rubber W 108:351-5, 451-6+, 561-4+ JI-S '43
- Sheet linings of synthetic rubber for concrete gasoline tanks. il Nat Pet N 35 pt 2:R200, R202 My 5 '43; Same. Aero Digest 42:266, 269 Je '43
- Simple vulcanizates of Buna S and sulfur; physical and chemical properties. L. E. Cheyney and A. L. Robinson. bibliog il Ind & Eng Chem 35:976-9 S '43
- Some interesting properties of synthetic rubber. O. D. Cole. il Refrig Eng 45:406-9+- Je '43; Correction. 46:38 JI '43
- Some physical properties of butadiene and styrene. L. A. Wood and C. F. Higgins. bibliog India Rubber W 107:475-6 F '43
- Soviet Russia; rubber thread; Sovprene and natural rubber compared. India Rubber W 108:390+- JI '43
- Soviet synthetic industry, subject of special report. Rubber Age 52:512 Mr '43
- Soya rubber; Reichhold chemicals, inc. of Detroit, is in mass production of Agripol. Business Week p68+- N 28 '42
- Special material directives withheld on rubber plants; testimony before Gillette investigating committee. Oil & Gas J 41:55 Ja 28 '43
- Striking analogy between development of chemical rubber and rayon industry in U.S.A. Rayon 23:642-3 N '42
- Symposium on current compounding and processing problems features annual spring meeting of New York group, Rubber division, A.C.S. Rubber Age 53:60-2 Ap '43
- Synthetic product seen stabilizing factor in natural rubber prices. H. S. Hotchkiss. plan Manuf Rec 112:30-1+- N '43
- Synthetic rubber. H. I. Cramer. Mod Plastics 20:108+- Mr '43
- Synthetic rubber. L. F. Marek. Mech Eng 65:412-16 Je '43
- Synthetic rubber; a survey of its past, present, and future. H. L. Fisher. bibliog il map Chem & Eng N 21:741-50 My 25 '43
- Synthetic rubber cements. D. V. Sarbach. il India Rubber W 108:249-52+-, 363-7 Je-JI '43
- Synthetic rubber-coated gaskets. Iron Age 152:77 JI 8 '43
- Synthetic rubber from petroleum. G. Egloff. il Rubber Age 52:221-6 D '42; Same. Pet Eng 141:107-8 D '42
- Synthetic rubber from soy beans. il Manuf Rec 111:24+- D '42
- Synthetic rubber fuel storage tanks, collapsible and portable for advanced bases. il Aero Digest 42:212+- JI '43
- Synthetic rubber fuel tank; Mareng cells. il Sheet Metal Worker 33:25 N '42
- Synthetic rubber in aircraft indicates possibilities for marine uses. Marine Eng 48:200-1 JI '43
- Synthetic rubber in Britain. Chem Age (Lond) 49:106 JI 31 '43
- Synthetic rubber industry in the Soviet in the last 25 years; abstract. N. I. Smirnov. Chem & Met Eng 50:192 JI '43
- Synthetic rubber; its production from petroleum, coal, and other materials. W. C. Holliman. U S Bur Mines Information Circ 7242:1-36 bibliog(p32-6) '43; Abstract. Nat Pet N 35 pt 2:R368-70, R372-4 Ag 4 '43
- Synthetic rubber; its properties compared with the natural product. S. S. Pickles. Automobile Eng 33:201-2 My '43
- Synthetic rubber production; Buna S. F. Thone. Science 97:sup12 Je 4 '43
- Synthetic rubber program assured as officials reach priorities decision. Rubber Age 52: 415-17 F '43
- Synthetic rubber program rapidly nears successful completion. il Rubber Age 53:535-6 S '43
- Synthetic rubber research. Can Chem & Process Ind 27:177-80 Ap '43
- Synthetic rubber status. B. Dewey. Nat Pet N 34:14-15 D 23 '42
- Synthetic rubber today. J. M. Crowe. il Sci Am 169:115-17 S '43
- Synthetic rubber's post-war markets. M. W. Moore. Barron's 23:3 Je 23 '43
- Two-way stretch coming back; release of synthetic rubber. Business Week p90 O 30 '43
- War rubber problem of the United States. A. V. Karpov. plan Mech Eng 65:179-81+- Mr '43; Discussion. C. L. Gabriel. 65:442 Je '43
- Witcogum; new type chemurgic rubber. Rubber Age 53:38 Ap '43
- Witcogum, new-type chemurgic rubber. C. S. Yorán and W. I. Harber. il India Rubber W 108:43-4 Ap '43
- See also
- Neoprene
- Thiokol
- also National synthetic rubber corporation
- Analysis
- Rubber reserve company's tentative specifications for GR-S. Rubber Age 53:45-6 Ap '43; Same. India Rubber W 107:582-3+- Mr '43
- Synthetic rubber; spectroscopic method for analysis and control. R. B. Barnes, U. Liddel and V. Z. Williams. bibliog il diags Ind & Eng Chem Anal ed 15:83-90 F 15 '43

RUBBER, Artificial—Analysis—Continued

Unsaturation of butadiene and related polymers as determined by iodine chloride addition. A. R. Kemp and H. Peters. *bibliog Ind & Eng Chem Anal ed* 15:453-9 J1 15 '43

Bibliography

Recent Russian literature on natural and synthetic rubber. M. Hosh. *India Rubber W* 108:253-4+, 461-3, 559-60; 109:45-8, 155-7+ Je, Ag-N '43 (to be cont)

Electric properties

Buna S for wire insulation; abstract. J. H. Ingmanson and others. *Rubber Age* 53:528 S '43; Same. *India Rubber W* 109:59 O '43
Electric cable insulation from synthetic rubbers. S. E. McCrary and others. *India Rubber W* 107:157-62+, 265-71 N-D '42
Plastic insulations for conductors; rubberlike, other synthetics. E. D. Youmans. *Elec W* 120:812-15 S 4 '43
Synthetic flexible insulations. A. M. Ross, jr. *chart Gen Elec R* 46:212-18 Ap '43

History

Thirty years contributions to the science of synthetic rubber. W. L. Semon. *bibliog il Chem & Eng N* 21:1613-19 O 10 '43; Abstract. *India Rubber W* 108:163 My '43

Manufacture

Agripol, a chemurgic rubber. C. A. Braidwood. *il Chem Ind* 52:322-4 Mr '43
Batch-continuous process for Buna-S. A. Brothman and A. P. Weber. *flow sheet Chem & Met Eng* 50:108-12 Mr '43
Blends of Thiokol FA with neoprene GN, Hycar OR-15, and Perbunan 26. S. M. Martin, jr. and A. E. Laurence. *il Ind & Eng Chem* 35:986-91 S '43
Built with minimum use of critical materials; new synthetic rubber plant in Baton Rouge. *il Factory Management* 101:130-1 Je '43
Buna S plant operating at Institute. *il plan Chem Ind* 52:742-4 Je '43
Buna S rubber program. S. T. Russell. *flow sheet il Pet Eng* 14:84-6+ S '43
Butyl rubber. *il Nat Pet N* 35 pt 2:R399-401 S 1 '43
Butyl rubber production unique American development; Baton Rouge plant. J. A. Lee. *flow sheet (p132-5) il Chem & Met Eng* 50: 102-3 J1 '43
Canadian chemistry. S. J. Cook. *Chem & Eng N* 21:1612 O 10 '43
Carbon black in butyl rubber. L. B. Turner and others. *bibliog diags Ind & Eng Chem* 35:958-63 S '43
Chemical materials used in rubber manufacture. *il Oil & Gas J* 41:49-50, 53 N 26 '42
Coal's new horizons; hydrogenation outlook includes rubber and plastics. *Coal Age* 48: 61-2 Ap '43
Commercial production of chemurgic rubber Agripol, made from soybeans and alcohol. *India Rubber W* 107:283 D '42
Compounding adjustments for controlling the variability of GR-S. G. R. Vila and F. L. Holbrook. *India Rubber W* 109:37-40 O '43
Compounding neoprene latex. B. Dales, R. H. Walsh and H. H. Abernathy. *India Rubber W* 107:565-7; 108:146-7 Mr, My '43
Compounding of Buna S. W. J. Geldard. *Rubber Age* 52:254 D '42
Contributions of the petroleum industry to the war effort; abstract. E. V. Murphree. *Oil & Gas J* 41:55 Ap 15 '43
Economy of petroleum processes compared to alcohol base guided Canadian rubber program. C. D. Howe. *Oil & Gas J* 42:88-9 J1 15 '43
Engineering problems of the synthetic rubber program. H. W. Fisher. *India Rubber W* 107:483 F '43
Few dermatitis cases in rubber plants; abstract. W. E. Obetz. *Nat Pet N* 35 pt 2:R538 N 3 '43
Five rules for compounding GR-I (butyl rubber). *Rubber Age* 53:145 My '43; Same. *India Rubber W* 108:269 Je '43
Furnace black for synthetic rubber. W. L. Nelson. *Oil & Gas J* 41:62+ Mr 11 '43

GR-S rubber; West Virginia's synthetic rubber plantation. J. A. Lee. *flow sheet (p140-3) il Chem & Met Eng* 50:98-102 Je '43
Galex, as a plasticizer for GR-S (Buna S) stocks. J. Panek. *Rubber Age* 53:35-6 Ap '43
General Tire to operate government synthetic rubber plant; some data on Norepol; butadiene developments. *Rubber Age* 52: 419-20 F '43
Government synthetic rubber plant at Institute, W. Va. R. G. Seaman. *flow charts il India Rubber W* 108:359-62, 457-60, 466 J1-Ag '43
How an alky-rubber plant works; Institute, W. Va. project. *il Nat Pet N* 35:18, 20 Je 2 '43
Importance of natural gasoline and derivatives to synthetic rubber and aviation gas programs. P. M. Raigorodsky and F. H. Dotterweich. *bibliog Nat Pet N* 34 pt 2: R420+ N 25 '42
Industrial hygiene in synthetic rubber manufacture. F. S. Mallette. *bibliog flow sheet il Ind Med* 12:495-9 J1 '43
Industrial hygiene of rubber materials; control of health hazards in synthesis and compounding. F. A. Van Atta and A. M. Noyes. *bibliog Can Chem & Process Ind* 27:183-5+ Ap '43; Same abr. *Chem & Met Eng* 50:119-21 Je '43
Inspection confirms magnitude of plants on Gulf coast producing war materials. A. L. Foster. *il Oil & Gas J* 42:16+ Je 3 '43
Labor requirements for synthetic-rubber industry. J. M. Silberman and G. E. Sadler. *Monthly Labor R* 56:837-45 My '43
Making synthetic rubber. A. F. Macconochie. *il Steel* 112:46-9 Ja 25 '43
Map of the United States showing locations of synthetic rubber plants, February 1, 1943. *Chem & Eng N* 21:743 My 26 '43
Mechanical safety in synthetic rubber plants. G. D. Cross. *il Nat Pet N* 35 pt 2:R526, R528-9 N 3 '43
Methods employed in making synthetic rubber. A. L. Foster. *il Oil & Gas J* 41:57+ N 26 '42
Methods of manufacturing synthetic-rubber intermediates. C. R. Wagner. *diags Oil & Gas J* 41:44+ N 26 '42
Molecular magic at Baton Rouge. F. J. Van Antwerpen. *flow sheets il diag Chem & Eng N* 21:950-9 Je 25 '43
Nation's largest synthetic rubber plant starts operations in Texas. *il Manuf Rec* 112:64+ S '43
Naval stores and compounding synthetic rubber. *India Rubber W* 109:149 N '43
New carbon blacks to extend volume of synthetic rubber for tires. *il diag Nat Pet N* 35 pt 2:R195-8 My 5 '43
New chemicals for GR-S. *India Rubber W* 108:583 S '43
Newest techniques; text in English and Spanish. *il Oil & Gas J* 41:188+ D 31 '42
1942 electrical developments in the chemical industry. *Rubber Age* 52:329 Ja '43
90,000-ton Buna-S plant; project at Institute, W. Va. D. P. Thornton, jr. *il Nat Pet N* 35 pt 2:R358-62 Ag 4 '43
Non-critical material use hastens rubber project at Baton Rouge. *il Manuf Rec* 112: 32-3+ Je '43
192 pounds of soap in a rubber pontoon bridge. *Textile Col* 65:459 O '43
Ottawa's rubber; big plant at Sarnia, to be in operation by November. *Business Week* p96 Je 26 '43
Plasticization of Buna; translated from Kautschuk. Nov. 1938. H. Hagen. *India Rubber W* 108:45-51 Ap '43
Polymerization of butadiene into synthetic rubber. *Oil & Gas J* 41:74 F 25 '43
Pooling for Buna; triumph for smaller tire companies. *Business Week* p29-30 D 12 '42
Preliminary evaluation of Falkomer in certain Buna N stocks. G. A. Schroeder. *India Rubber W* 107:471-2 F '43
Production of butadiene. G. Egloff and G. Hulla. *flow chart il Chem Ind* 51:718-24 N '42
Raw materials for synthetic rubber intermediates. W. L. Nelson. *Oil & Gas J* 41:34-5+ N 26 '42

RUBBER, Artificial—Manufacture—Continued

Refinery-conversion phase of rubber plans explained; abstracts. B. K. Brown. Oil & Gas J 41:14-15, 28-9 Ja 14 '43; Nat Pet N 35:19-20, 22-4 Ja 13 '43

Ridbo 369, fortifying plasticizer for GR-S. C. R. Johnson. Rubber Age 54:40 O '43

Role of soap in the rubber program. G. Leflingwell and N. Radin. bibliog Rubber Age 52:235-6 D '42

Sabine district's enduring industrial development. J. C. Watkins. il Manuf Rec 112:42+ JI '43

Saving the black; rubber companies urged to conserve scarce furnace black. Business Week p62+ My 29 '43

Softeners for government synthetic rubber. Rubber Age 52:406 F '43

Solubility of sulphur in butadiene-styrene copolymer. I. Williams. India Rubber W 108:35-6 Ap '43

Some data on synthetic rubber from grain; abstract. P. Kolachov. Rubber Age 53:48 Ap '43

Some industrial hygiene problems in the synthetic rubber industry. F. A. Van Atta and A. M. Noyes. bibliog Rubber Age 54:35-9 O '43; Same cond. Can Chem & Process Ind 27:183-5+ Ap '43; Same abr. Chem & Met Eng 50:119-21 Je '43

Special priorities are assigned for 43.6 per cent of rubber capacity. H. D. Ralph. Oil & Gas J 41:16-17 F 4 '43

Steam helps make synthetic rubber. J. R. Carlson. diags Power 87:166-8 Mr '43

Styrene for rubber made from benzene, alcohol or ethylene. il Oil & Gas J 41:43 N 26 '42

Suggested vulcanizing combination for GR-1. Rubber Age 53:433 Ag '43

Synthetic rubber at Institute. flow chart il Rubber Age 53:229-33 Je '43

Synthetic rubber compounding. T. R. Griffith. Can Chem & Process Ind 27:444-5 Ag '43

Synthetic-rubber development smoothing out some serious problems. A. L. Foster. il Oil & Gas J 41:87-9+ Mr 25 '43

Synthetic rubber processes. D. R. Jenkins. diags plans Elec West 89:42-4 D '42; 90:35-7 Ja '43

TP-90B, a new plasticizer for synthetic rubbers and elastomers; increases low temperature resistance. V. H. Perrine and T. J. Scheirer. il India Rubber W 109:153-4 N '43

Toxicology of acrylonitrile (vinyl cyanide); studies of effects of daily inhalation. H. C. Dudley, T. R. Sweeney and J. W. Miller. J Ind Hygiene 24:255-8 N '42

Training women operators for chemical industry; University of Pittsburgh trains women for butadiene-styrene plant of Koppers united co. J. P. Coull. il diags Chem & Met Eng 50:116-18 Je '43

United States government synthetic rubber plant. il Engineering 156:181-3, 190 S 3 '43

U.S. synthetic rubber program moves forward; government plant at Institute, West Virginia. W. J. Murphy. il Chem & Eng N 21:864-77 Je 10 '43

Use of accelerators in Buna S. A. M. Neal. Rubber Age 53:31-4 Ap '43

Utilities are a major factor in synthetic-rubber operations; government project for production of butadiene and styrene by Carbide & carbon chemicals corp. and manufacture of Buna-S by United States rubber co. C. O. Willson. il Oil & Gas J 42:29-30, 32 Je 3 '43

Ventilation for control of solvent exposures in fabricating rubber military equipment. T. R. Thomas and B. D. Tebbens. bibliog diags Heating-Piping 15:122-6 Mr '43

Vulcanization or other heat treatment by electrical conduction; rubber and rubberlike materials. F. L. Yerzley. diags Rubber Age 52:133-4 N '42

Wartime chemicals from natural gas. G. Egloff. Pet Eng 14:33-8 N '42; Same. Science 96:502-5, 527-30 D 4, 11 '42; Same. Inst Pet J 29:124-34 Ap '43; Same cond. Am Gas Assn Mo 25:21-2+, 71-2+ Ja-F '43; Same cond. Gas Age 90:22+ N 19 '42; Same. Am Gas J 157:21-2 D '42

West Virginia's \$56,000,000 rubber plant placed in operation. il Manuf Rec 112:26-7+ Je '43

See also

Butadiene
Thiokol

Patents

Abstracts of United States patents on the compounding and use of synthetic rubber. F. Marchionna. Rubber Age 51:209-12, 302-4, 494-7; 52:42-5, 138-41, 237-9, 312-14, 410-13; 53:39-41, 146-9; 54:46-9 Je-JI, S '42-F, Ap-May, O '43 (to be cont)

German patents relating to vinyl polymers (cont). M. Hoshel. bibliog India Rubber W 107:379-80, 473-4, 571-2+ Ja-Mr '43

Jersey offers Bu. patents to U.S.; Jeffers accepts. Nat Pet N 35:16 Ap 28 '43

Rubber for peace; Standard Oil's offer to pool patents. Business Week p14-15 My 1 '43

Temperature effect

Bend-brittle and shatter points of rubberlike materials. G. E. King. bibliog diag Ind & Eng Chem 35:949-51 S '43

Effect of petroleum solvents on the cold resistance of synthetic vulcanizates. R. E. Morris and others. il India Rubber W 108:553-5+ S '43

Evaluating low-temperature stiffness and brittle point in elastomers. F. L. Graves and A. R. Davis. il India Rubber W 109:41-4 O '43

Heat resistance of neoprene GN vulcanizates. D. E. Forman. bibliog il diags Ind & Eng Chem 35:952-7 S '43

Low temperature flexing apparatus. S. M. Martin, Jr. il Rubber Age 52:227-8 D '42

Method of testing the elasticity of synthetic rubbers at low temperatures; Elastensometer. G. D. Kish. il diags Rubber Age 53:131-5 My '43; Same. Aero Digest 42:245-6, 257+ My '43; Same. Am Gas J 158:9-12 Je '43; Same. Oil & Gas J 42:43-4+ Je 3 '43; Same cond. Pet Eng 14:128+ My '43

New guides to high-altitude rubbers. H. J. Marx and S. S. Kogut. il Aviation 42:152-4+ S '43

TP-90B, a new plasticizer for synthetic rubbers and elastomers; increases low temperature resistance. V. H. Perrine and T. J. Scheirer. il India Rubber W 109:153-4 N '43

Tensiometer stiffness test for elastomers at low temperatures. B. K. Green, R. G. Chollar and G. J. Wilson. il diags Rubber Age 53:319-27 JI '43

Testing elasticity of synthetic rubbers at low T; Elastensometer. diag Gas Age 91:48+ Je 17 '43

Terminology

Synthetic rubber glossary. Business Week p18 Ja 23 '43

Testing

Accelerated vulcanization of Sk-B; Russian tests. India Rubber W 109:184+ N '43

Bend-brittle and shatter points of rubberlike materials. G. E. King. bibliog diag Ind & Eng Chem 35:949-51 S '43

Blends of Thiokol TA with neoprene GN, Hycar OR-15, and Perbunan 26. S. M. Martin, Jr. and A. E. Laurence. il Ind & Eng Chem 35:986-91 S '43

Brittle points of natural and synthetic rubber stocks. R. E. Morris, R. R. James and T. A. Werkentin. bibliog il Ind & Eng Chem 35:864-7 Ag '43

Brittle temperature of rubber under variable stress. A. R. Kemp, F. S. Malm and G. G. Winspear. bibliog diag Ind & Eng Chem 35:488-92 Ap '43

Cut growth of Buna S compounds; method to determine rate. C. A. Carlton and E. B. Reinbold. il India Rubber W 108:141-2 My '43

Effect of petroleum products on Buna S vulcanizates. R. E. Morris and others. bibliog il Ind & Eng Chem 35:646-9 Je '43

Effects of petroleum products on synthetic vulcanizates. R. E. Morris and others. Rubber Age 53:335-8 JI '43

GR-S tires; standard methods of compound evaluation and for reporting test data. India Rubber W 107:497-8 F '43; Same. Rubber Age 52:305-7 Ja '43

RUBBER, Artificial—Testing—Continued

- Low temperature flexing apparatus. S. M. Martin, Jr. *il Rubber Age* 52:227-3 D '42
- Method of testing the elasticity of synthetic rubbers at low temperatures; Elastensometer. G. D. Kish. *il diags Rubber Age* 53:131-5 My '43; Same. *Aero Digest* 42:245-6, 257+ My '43; Same. *Am Gas J* 158:9-12 Je '43; Same. *Oil & Gas J* 42:43-4+ Je 3 '43; Same cond. *Pet Eng* 14:128+ My '43
- Mooney viscometer adopted for GR-S control. *India Rubber W* 109:40+ O '43
- Role of zinc oxide in compounding government synthetic rubber; flexometer tests simulating road tests on tires. R. S. Havenhill and J. J. Ranklin. *il India Rubber W* 107:365-8+ Ja '43
- Rubber reserve company's tentative specifications for GR-S. *Rubber Age* 53:46-6 Ap '43; Same. *India Rubber W* 107:582-3+ Mr '43
- Some observations on the flex-cracking characteristics of GR-S (Buna S) compounds. J. Breckley. *il Rubber Age* 53:331-4 Jl '43
- Temperature correction factors for specification tensile testing of GR-S. *India Rubber W* 108:573 S '43
- Tensometer stiffness test for elastomers at low temperatures. B. K. Green, R. G. Chollar and G. J. Wilson. *il diags Rubber Age* 53:319-27 Jl '43

Tire use

- Experience with synthetic tires on buses. *il Mass Transportation* 38:339 N '42
- How good are synthetic rubber tires? E. L. Warner, Jr. *il Automobile & Aviation Ind* 89:26-7+ O 15 '43
- Production handicaps are synthetic tire bottleneck. *il Nat Pet N* 35:24-6 Ag 11 '43
- Repairing synthetic tires and tubes requires new technique, more care. H. Taylor. *il Nat Pet N* 35:34-6 O 27 '43
- Synthetic tires pass rigid bus test. *Nat Pet N* 35:24 Ag 4 '43
- Tires for all? synthetic output to reach goal by Jan. 1. *Business Week* p36+ Jl 24 '43
- Truck owners warned to expect less in synthetic tires. *Nat Pet N* 35:26 Ag 11 '43

RUBBER, Effect of light on

- Analysis of the uranyl oxalate actinometer as applied to accelerated light and weathering tests. F. T. Bowditch, C. E. Greider and C. G. Ollinger. *bibliog Am Soc T M Proc* 42:845-50 '42
- Digest of cooperative test program on accelerated light aging of rubber. J. H. Ingman. *Am Soc T M Proc* 42:392-8 '42
- Variables and suggested modifications in accelerated light aging. C. K. Chatten and T. A. Werkenhain. *il India Rubber W* 108:40-2 Ap '43

RUBBER, Effect of temperature on

- Brittle temperature of rubber under variable stress. A. R. Kemp, F. S. Malm and G. G. Winspear. *bibliog dig Ind & Eng Chem* 35:488-92 Ap '43
- Effect of temperature on resilience of natural and synthetic rubber. H. C. Jones and E. G. Snyder. *il India Rubber W* 108:137-40 My '43
- New guides to high-altitude rubbers. H. J. Marx and S. S. Kogut. *il Aviation* 42:152-4+ S '43

RUBBER, Reclaimed. See Rubber waste**RUBBER, Sponge****Manufacture**

- Electric conveyances in air-foam rubber production. C. E. Risler and J. Grotzinger. *il plan Elec Eng* 62:250-4 Je '43
- How the production of air-foam rubber is controlled at the Goodyear factory. H. C. Jenks and J. Grotzinger. *flow chart il Rubber Age* 52:128-32 N '42

RUBBER, Substitutes for

- Compars; new family of rubber-like materials. E. S. Peierls. *il Rubber Age* 54:41-2 O '43
- Elastic plastics; abstract. J. R. Price. *India Rubber W* 108:154-5 My '43
- Elastic plastics for war production; plasticized vinyl chloride-acetate resins. *il Mod Plastics* 20:48-52 D '42
- Elastic vinyl resin yarn. *Textile Col* 65:41 Ja '43

- Haydenite in the production of service raincoats. *Rubber Age* 52:403-4 F '43
- Marvinol; new rubber-like plastic. *il Manuf Rec* 112:86-7+ O '43
- Molding polyvinyl alcohol. C. B. Hess and J. W. Criss. *Rubber Age* 53:431-3 Ag '43
- Norepol, a new rubber substitute from vegetable oils. *il Manuf Rec* 112:32-3+ F '43
- Polyvinyl chloride (P.V.C.) cables. *Engineer* 176:309 O 15 '43
- Proposed substitutes for rubber. Franklin Inst J 235:406-9 Ap '43
- Recommended substitutes for rubber; Association of American railroads; table. W. J. Clardy. *Mech Eng* 65:569-71 Ag '43
- Replacing rubber with synthetic resin at the plants of RCA manufacturing co.; Resistoflex PVA. E. S. Peierls. *il Rubber Age* 52:315-17 Ja '43
- Resins as rubber substitutes. *il Manuf Rec* 112:26-7 Ja '43
- Rubber-like material from jojoba nut reported by Glidden. *Rubber Age* 53:344 Jl '43
- Rubber replacements; reclaimed rubber, synthetic rubber, plastics. E. G. Kimmich. *Mech Eng* 65:113-14 F '43
- Rubber substitutes from fatty oils; Norepol. Vulcanized Sulprene. R. T. Nazzaro and W. Abramowitz. *Rubber Age* 52:483-6 Mr '43
- Saflex. *Textile Col* 65:463 O '43
- Sealing jars, modern style. *il Mod Plastics* 20:71-2+ D '42
- Simple tests for rubber substitutes. *Power Pl Eng* 47:138+ O '43
- Some data on Norepol. *Rubber Age* 52:419 F '43
- Styraloy 22, a new synthetic elastomer. *Rubber Age* 53:46 Ap '43
- Synthetic resin dispersions and their use as substitutes for latex; abstract. C. M. Jackson. *Chem Ind* 52:628 My '43
- Testing proposed substitutes for rubber. *Rubber Age* 53:76-7 Ap '43
- Tube made of plastics will be marketed by Glenn Martin co.; new material, known as Marvinol. *Nat Pet N* 35:18 O 6 '43
- Tubes from coal; Marvinol, vinyl plastic processed in rubber mills. *il Business Week* p66+ S 25 '43
- Tygon, a new synthetic corrosion-resistant material. *il Product Eng* 14:88-90 F '43
- Ubatex, a new polymerized dispersion. P. M. Fleuriel. *India Rubber W* 108:52 Ap '43
- Abstract. *Chem & Met Eng* 50:212-13 My '43
- Vinyl resins in war and peace. R. B. Atkin. *bibliog(76 references) il Chem Ind* 52:456-60, 599-603 Ap-May '43
- Wool felt as a substitute for rubber. W. Colwell. *il Rubber Age* 53:136-8 My '43

See also

Resilite
Rubber, Artificial

RUBBER accelerators. See Vulcanization—Accelerators

RUBBER-backed rugs. See Rugs, Rubber-backed

RUBBER balls. See Balls, Rubber

RUBBER boats. See Boats, Rubber

RUBBER cement

Aquagum rubber cement. *Can Chem & Process Ind* 27:10 Mr '43

Synthetic rubber cements. D. V. Sarbach. *il India Rubber W* 108:249-52+, 363-7 Je-Jl '43

RUBBER chemicals

Chemical materials used in rubber manufacture. *il Oil & Gas J* 41:49-50, 53 N 26 '42

pH, surface, and structure of colloidal carbons. C. W. Sweitzer and H. A. Braendle. *India Rubber W* 107:468+ F '43

What you can use; materials suitable for various purposes in processing industries (cont). *Oil Paint & Drug Rec* 142:33 D 21: 58 D 28 '42; 143:38 Ja 4; 54 Ja 18; 45 Ja 25; 40 F 1; 44 F 8; 8 F 15; 51 F 22; 32 Mr 15; 42 Mr 29; 47 Ap 5; 46 Ap 12; 40 Ap 19; 49 Ap 26; 66 My 3; 68 My 10; 26 My 24; 62 Je 14 '43

See also

Vulcanization—Accelerators

Prices

Compounding ingredients. Published in monthly numbers of *India rubber world*

RUBBER coating

Rubber covered liquid level controller 11
India Rubber W 108:574 S '43

RUBBER development corporation

Rubber development corporation established.

For Comm W 10:36 F 27 '43

Speed and vigor displayed by Rubber development corporation. For Comm W 11:27 Ap 17 '43

RUBBER distillation

Heavene and its implications; solvent distilled from scrap rubber; abstract. F. N. Pickett. India Rubber W 107:298 D '42

RUBBER dust

Recaps keep 'em rolling; health and safety precautions. 11 Nat Safety N 48:78+ O '43

RUBBER factories

Built with minimum use of critical materials; new synthetic rubber plant in Baton Rouge. 11 Factory Management 101:130-1 Je '43

Fire reduces rubber stockpile. L. F. Maar. 11 India Rubber W 108:257-8 Je '43

U.S. synthetic rubber program moves forward; government plant at Institute, West Virginia. W. J. Murphy. 11 Chem & Eng N 21:864-77 Je 10 '43

West Virginia's \$56,000,000 rubber plant placed in operation. 11 Manuf Rec 112:26-7+ Je '43

See also

Electric driving—	Tire factories
Rubber factories	Tires, Automobile—
Rubber—Manufacture	Manufacture

Accidents

1941 accident rates in the industry. India Rubber W 107:277 D '42

Accounting

Better management for the rubber factory; profit and loss. A. Roberts. Rubber Age 52:135-7 N '42

Better management for the rubber factory; reserves. A. Roberts. Rubber Age 52:407-9 F '43

Electric equipment

Electric conveyances in air-foam rubber production. C. B. Risler and J. Grotzinger. 11 plan Elec Eng 62:250-4 Je '43

Employees

Akron off again. Business Week p100+ My 29 '43

Akron pay rise? Business Week p86+ Ap 10 '43

Akron rubber workers protest wage decision. Rubber Age 53:253 Je '43

Case history in on-the-job training; maintenance department of rubber factory. Factory Management 101:93+ Mr '43

Labor requirements for synthetic-rubber industry. J. M. Silberman and G. E. Sadler. Monthly Labor R 56:837-45 My '43

Wages in manufacture of mechanical rubber goods, August 1942. H. M. Douty and others. Monthly Labor R 56:542-57 Mr '43

Wages in rubber tire and tube plants, August 1942. H. M. Douty. Monthly Labor R 56:233-54 F '43

Equipment

How the production of air-foam rubber is controlled at the Goodyear factory. H. C. Jenks and J. Grotzinger. flow chart 11 Rubber Age 52:128-32 N '42

Heating and ventilation

Ventilating problems in the rubber industry. B. Offen. Nat Pet N 35 pt 2:R538 N 3 '43

Ventilation for control of solvent exposures in fabricating rubber military equipment. T. R. Thomas and E. D. Tebbens. bibliog diags Heating-Piping 15:122-6 Mr '43; Same. Ind Med 12:255-9 Ap '43

Lighting

Illumination recommendations for rubber. Rubber Age 52:137 N '42

Management

Better management for the rubber factory. A. Roberts. Rubber Age 49:173-6, 406-8; 50:275-8; 52:135-7, 407-9; 53:143-5, 437-8, 441; 54:43-4, 246-7 Je, S '41, Ja, N '42, F, My, Ag, O, D '43

Power

Rubber mill power transmission comparison; belt and electric power. diags India Rubber W 107:467 F '43

Safety measures

Carbon tetrachloride, from the health viewpoint. H. P. Quadiand. Rubber Age 53:141-2 My '43

Mechanical safety in synthetic rubber plants. G. D. Cross. 11 Nat Pet N 35 pt 2:R526, R528-9 N 3 '43

Shielding the plant and personnel against war hazards in the rubber industry; abstract. A. B. Guise. Rubber Age 52:311 Ja '43

RUBBER footwear. See Shoes, Rubber

RUBBER gloves. See Gloves, Rubber

RUBBER goods

Advances in rubber during 1942. J. H. Dillon. bibliog(53 titles) Rubber Age 52:308-11, Ja '43; Same. India Rubber W 107:477-9 F '43; Same. Mech Eng 65:248-50 Ap '43

B. F. Goodrich company; ten years' progress in rubber goods for aircraft. R. S. Colley. 11 Aeronautical Eng R 1:117 N '42

Goodyear tire and rubber company; ten years' engineering progress in development of airships, airplane materials and rubber goods. P. W. Litchfield. Aeronautical Eng R 1:61 N '42

How to stretch life of rubber; tires, hose, belts and gloves. 11 Food Ind 15:58-60 F '43

Railroads slash their rubber uses. 11 Ry Age 113:785-8 N 14 '42

Recent aircraft developments of United States rubber company. H. L. Hayward. Aeronautical Eng R 1:155 N '42

Rubber mouldings; developments in the technique for producing Reit components. 11 Automobile Eng 33:154 Ap '43

See also

Balls, Rubber	Rubberized fabrics
Elastic goods	Shoes, Rubber
Hose	Tires, Automobile
Printing plates, Rubber	Tires, Rubber

Manufacture

Acushnet process company's role in the production of gas masks. 11 Rubber Age 53:435-6 Ag '43

Manufacture of fuel tanks at Firestone; illustrations. Rubber Age 53:530-1 S '43

Role of soap in the rubber program. G. Leflingwell and N. Radin. bibliog Rubber Age 52:235-6 D '42

Symposium on current compounding and processing problems features annual spring meeting of New York group. Rubber division, A.C.S. Rubber Age 53:60-2 Ap '43

Prices

Changes in rubber goods price schedules. India Rubber W 108:476-7 Ag '43

Maximum price regulation 220, on certain rubber commodities. Rubber Age 52:164-6+ N '42

RUBBER goods, Mechanical

Bushings, inc. formed to make Rubberflex bushings. 11 Iron Age 150:53 D 31 '42

Carbon and molded rubber seal blower rotors. 11 diag Product Eng 14:339 Je '43

Effectiveness of shear-stressed rubber compounds in isolating machinery vibration. E. C. Madden. bibliog diags A S M E Trans 65:617-22 Ag '43; Same. cond. Machine Design 15:63-5+ Ja '43; Abstract. Automotive & Aviation Ind 88:53+ Ja 1 '43; Discussion. A S M E Trans 65:622-4 Ag '43

Engine smoothness and protection through shear rubber mountings. P. C. Roche. 11 diags S A E J 50:314-19 J1 '42; Same. Automobile Eng 32:499-502 N '42; Same. abr. Diesel Power 21:219-22 Mr '43

Grinding process reconditions rubber rollers and platens. 11 Rubber Age 53:243 Je '43

Handling rubber belts. E. H. Anderson. Coal Age 47:90-4 N '42

Mosquito less equipped with rubber pack to absorb shock. diags Automotive & Aviation Ind 89:29 Ag 15 '43

Properties of rubber as used in metal drawing and pressing. L. J. Brown. diags Steel 113:130, 132+ J1 19; 80, 82, 105-6 J1 26 '43

RUBBER goods, Mechanical—Continued

- Rubberflex bushings. *il* India Rubber W 108: 272 Je '43
 Rubberflex engine mountings. *il* Rubber Age 53:56 Ap '43
 Standard SAE-ASTM classification and tests recommended for natural automotive rubbers. S A E J 50:sup25 Jl '42
 Stretch the life of rubber conveyor belts. W. C. Winings. *il* diags Mech Handling 30:248-50+ Je '43
 Technical developments in high-production sheet metal forming; use of rubber platens. W. Schroeder and T. H. Hazlett. *il* diags S A E J 51:180-4 My '43

Manufacture

- Rotary machine speeds: curing of propeller blade fairings. *il* Aero Digest 43:215+ S '43; Same. Aviation 42:167-8 O '43; Same. Rubber Age 54:45 O '43; Same. Am Mach 87:89 S 16 '43
 Rubber mountings for vibration control; Lord manufacturing co. J. Geschelin. *il* Automotive & Aviation Ind 89:20-4+ O 1 '43
 Wages in manufacture of mechanical rubber goods, August 1942. H. M. Dooty and others. Monthly Labor R 56:542-57 Mr '43

RUBBER goods, Military

- Some of the new roles of rubber in modern warfare; parachute troopers, inflated boats and pontons, and balloons foreseen by Goodyear and Franklin. R. Wolf. *il* Rubber Age 52:399-402 F '43
 Ventilation for control of solvent exposures in fabricating rubber military equipment. T. R. Thomas and B. D. Tebbens. bibliog diags Heating-Piping 15:122-6 Mr '43

RUBBER heels. See Heels, Rubber**RUBBER hose. See Hose****RUBBER industry and trade**

- Crude rubber situation reported showing continued progress. Rubber Age 52:247-8 D '42
 Crude rubber surplus is proving economic problem to Japan; developments in Latin America and other countries. Rubber Age 52:423-5 F '43
 Natural and synthetic rubber, 1942. Chem & Met Eng 50:110-11 F '43
 Rubber after the war. K. E. Knorr. *il* India Rubber W 108:356-8, 464-6, 556-8; 109:49-51 Jl-O '43
 Rubber crisis. A. C. Lutz. Paper Tr J 116: 83-4 Je 24 '43
 Synthetic product seen stabilizing factor in natural rubber prices. H. S. Hotchkiss. plan Manuf Rec 112:30-14 F '43

See also

- Rubber goods—Tire industry and
 Manufacture trade
 Rubber latex
 also Firestone tire and rubber company;
 Goodyear tire and rubber company; United
 States rubber company

Advertising

- Why U. S. Rubber finds paid space more effective than publicity releases. F. D. Richards. Sales Management 51:50-1 D 1 '42

Finance

- Better management for the rubber factory; invested capital. A. Roberts. Rubber Age 54:43-4 O '43

History

- Cradle of the rubber industry, Naugatuck, Conn. L. Smith. *il* India Rubber W 108:565-9 S '43

Regulation

- Changes in various rubber orders made by WPB and OPA. Rubber Age 52:417-19 F '43
 Federal mechanism for directing the synthetic rubber program. H. D. Ralph. Oil & Gas J 41:32, 148 N 26 '42
 Jeffers: dynamo. Business Week p28, 30 N 21 '42
 Jeffers given complete authority to allot rubber to all claimant agencies; other regulations. *il* Rubber Age 52:319-22 Ja '43; Excerpt. Comm & Fin Chr 157:371 Ja 28 '43

- New rules and regulations on the distribution of rubber (circular no. 17 of the Rubber reserve company). Rubber Age 53:70-4 Ap '43

- Organization of rubber director's office. India Rubber W 107:285 D '42
 Rubber order R-1 is issued by ORD superseding all previous regulations. Rubber Age 53:341-2 Jl '43; Excerpts. Oil Paint & Drug Rep 143:5+ Je 28 '43
 Rubber reserve company circulars. India Rubber W 107:294-7+, 484, 581-2; 108:169-74, 264+, 384-5, 486+ D '42, F-Mr, My-Ag '43
 Who's who in Washington, and where, as of October 11, 1943; personnel of government agencies concerned with rubber. Rubber Age 54:66 O '43

Securities

- Rubber share possibilities. Economist 143:609-10 N 14 '42

Statistics

- About one-fourth rubber supply now available. Oil & Gas J 41:33 N 26 '42
 Rubber and products, 1938-1941. Survey of Cur Business 1942 Sup p160-1
 Rubber; consumption, imports, etc. Automotive & Aviation Ind 88:82-3 Mr 15 '43

Taxation

- Better management for the rubber factory; taxes. A. Roberts. Rubber Age 53:143-5, 437-8, 441 My, Ag '43

Brazil

- Battle of the Amazon. J. C. McClintock. *il* For Comm W 12:3-5, 30-2 Jl 3 '43
 Brazil's rubber transport problem to be aided by parachute task force. For Comm W 11: 23 Ap 17 '43
 Rubber credit bank established with full control over rubber program. For Comm W 9:13 N 28 '42
 Rubber from Amazon jungle. Mech Handling 29:227+ D '42
 Special agreement signed with Brazil on crude rubber. Rubber Age 52:327-8 Ja '43
 US and Brazil sign on rubber agreement. Comm & Fin Chr 157:75 Ja 7 '43
 War comes to Belém. *il* Business Week p19-20+ N 21 '42

Canada

- Manufacture in Canada in 1941. For Comm W 10:31 Mr 6 '43

Ecuador

- Yumbos, beads, and rubber; commerce in the far places. *il* For Comm W 10:9+ Mr 27 '43

Europe

- Rubber industry in Europe. Published in monthly numbers of India rubber world

Far East

- Rubber industry in Far East. Published in monthly numbers of India rubber world

Great Britain

- Rubber share possibilities. Economist 143:609-10 N 14 '42

See also

- Dunlop rubber company

Guatemala

- Road taps new rubber supply. Roads & Bridges 81:82+ My '43

Haiti

- Cryptostegia and related new activities of Haiti's SHADA. T. A. Fennell. *il* For Comm W 13:3-5+ N 6 '43
 Cryptostegia research in Haiti. R. Symontowne. *il* India Rubber W 108:148-50, 259-61 My-Je '43

India

- Rubber production board established; new regulations for production and distribution. For Comm W 11:27-8 My 1 '43

Japan

- Japan's oversupply of rubber. For Comm W 9:32 D 19 '42

RUBBER industry and trade—Continued**Latin America**

Development of rubber in tropical America. E. N. Bressman. *il Rubber Age* 53:427-30 Ag '43; Same cond. *Sci Am* 169:169-70+ O '43

Production of rubber in South and Central America. E. V. Crane. *il map India Rubber W* 107:259-64 D '42

Rubber in the Americas. *India Rubber W* 108:140 My '43

Rubber industry in Latin America. Published in monthly numbers of *India rubber world*

Mexico

Mexico expands rubber cultivation for United States markets. *For Comm W* 9:8 N 21 '42

Mexico plans to grow its own rubber. *For Comm W* 12:24 JI 3 '43

New regulations established for manufacture of rubber articles. *For Comm W* 12:17-18 JI 10 '43

Priorities established in supplying rubber to domestic manufacturers. *For Comm W* 10:15 Ja 2 '43

New Caledonia

Banyan rubber in New Caledonia. *For Comm W* 9:18 D 26 '42

Panama

Panama aims for 400 tons annual rubber production. *For Comm W* 11:28 Ap 24 '43

Russia

Soviet Russia; rubber thread; Sovprene and natural rubber compared. *India Rubber W* 108:390+ JI '43

Soviet synthetic industry, subject of special report. *Rubber Age* 52:512 Mr '43

South Africa

Rubber production in Union of South Africa. *For Comm W* 10:25-6 F 6; 11:42-3 My 1 '43

Sweden

Sweden's rubber situation. *For Comm W* 9:32 D 12 '42

Sweden's rubber supply. *For Comm W* 11:42 My 1 '43

United States

Distribution of rubber; Rubber reserve company circular. *India Rubber W* 108:169-73 My '43

First progress report from Office of the rubber director. *Chem & Met Eng* 50:85 Ja '43

Jeffers reports on rubber progress; text of report. *Nat Pet N* 34:26-7, 30 D 9 '42; Same. *Rubber Age* 52:229-34 D '42; Same. *India Rubber W* 107:398-401+ Ja '43

New frontiers in rubber. E. J. Thomas. *Elec Eng* 62:510-11 N '43

1943 critical year in civilian rubber supply. *Oil & Gas J* 41:145 N 26 '42

Our national dilemma, what of our future rubber supply? A. L. Foster. *il Oil & Gas J* 41:100+ N 26 '42

Progress report no. 3; text. W. M. Jeffers. *India Rubber W* 108:262-4 Je '43; Same. *Nat Pet N* 35:18, 20+ My 19 '43; Same. *Rubber Age* 53:266-8 Je '43

Rubber for peace; Standard Oil's offer to pool patents. *Business Week* p14-15 My 1 '43

Rubber outlook improved by early progress. *Oil & Gas J* 41:142 N 26 '42

Rubber reaches its crisis. *Business Week* p17-19 Ja 23 '43

Rubber's war and peace outlook. J. A. McWethy. *Barron's* 23:7+ Mr 8 '43

Who's who in Washington, and where, as of October 11, 1943; personnel of government agencies concerned with rubber. *Rubber Age* 54:66 O '43

RUBBER laboratories

Bell Telephone's rubber research laboratory. F. S. Malm. *il Rubber Age* 52:495-8 Mr '43; Same. *India Rubber W* 108:255-6+ Je '43

Goodyear dedicates new research facilities. *il Chem & Met Eng* 50:140 JI '43

Goodyear dedicates new research laboratory. *India Rubber W* 108:381-2 JI '43

Goodyear dedicates research laboratory. F. J. Van Antwerpen. *il Chem & Eng N* 21:1056-9 JI 10 '43

Goodyear research laboratory dedicated. *il Mod Plastics* 20:120, 122+ JI '43

Goodyear's new research laboratory. *il Mod Packaging* 16:102 JI '43

Goodyear's new research laboratory in Akron. *il Rubber Age* 53:328-30 JI '43

Rubber laboratory in Brazil. *Franklin Inst J* 235:75-6 Ja '43

RUBBER latex

Answer to comments on accelerators for latex: water-soluble vs water-insoluble. H. H. Abernathy. *Rubber Age* 52:405-6 F '43

Chemical reactions of latex during vulcanization; abstract. E. A. Hauser, D. S. le Beau and J. Y. Kao. *India Rubber W* 107:410+ Ja '43

Concentration and purification of latex. E. A. Murphy. *India Rubber W* 108:388 JI '43

Electrophoretic study of the proteins in rubber latex serum. C. P. Roe and R. H. Ewart. *bibliog Am Chem Soc J* 64:2628-32 N '42

Isolation of an active substance from calonyction aculeatum capable of coagulating castilla latex. S. G. Wildman, A. V. McMullan and R. Griggs. *Science* 97:471-2 My 21 '43

Latex pump. *il Chem Ind* 53:362+ S '43

Shriver diaphragm pumps for latex. *il Rubber Age* 53:555-6 S '43

RUBBER lifeboats. See Lifeboats, Rubber

RUBBER lining

Concrete tanks leak-proofed for gasoline storage with synthetic rubber latex. F. E. Stoner, jr. *il Nat Pet N* 35 pt 2:R446+ O 6 '43

Rubber-cementing process speeds war production. *Rubber Age* 53:434 Ag '43

Rubber scarcity; special care of hose and lined vessels. *Chem Age (Lond)* 48:398 Ap 10 '43

Sheet linings of synthetic rubber for concrete gasoline tanks. *il Nat Pet N* 35 pt 2:R200, R202 My 5 '43; Same. *Aero Digest* 42:266, 269 Je '43; Same, with additional *il Chem & Eng N* 21:580, 582-3 Ap 25 '43

RUBBER lung. See Respiratory apparatus

RUBBER machinery

Rotary machine speeds curing of propeller blade fairings. *il Aero Digest* 43:215+ S '43; Same. *Aviation* 42:167-8 O '43; Same. *Rubber Age* 54:45 O '43

RUBBER mats

How to make rubber floor mats last longer. E. W. Fair. *Bankers Mo* 60:18-19 Ja '43

RUBBER patents. See Rubber—Patents; Rubber, Artificial—Patents

RUBBER plants and planting

African rubber. *Engineer* 175:469 Je 11 '43

Banyan rubber in New Caledonia. *For Comm W* 9:18 D 26 '42

Cryptostegia and related new activities of Haiti's SHADA. T. A. Fennell. *il For Comm W* 13:3-5+ N 6 '43

Cryptostegia research in Haiti. R. Symontowne. *il India Rubber W* 108:148-50, 259-61 My-Je '43

Development of rubber in tropical America. E. N. Bressman. *il Rubber Age* 53:427-30 Ag '43; Same cond. *Sci Am* 169:169-70+ O '43

Discovery of rubber in decayed bark of Castilla rubber tree; abstract. O. F. Cook. *Science* 97:sup10 F 12 '43

Discussions at the 9th annual chemurgic conference in Chicago, March 24-25; plants as rubber sources. *Chem & Eng N* 21:488-90 Ap 10 '43

Extraction and value of rubber-like material from native grown plants. N. H. Grace. *Can Chem & Process Ind* 27:389-90 JI '43

Goldenrod planting for rubber. *India Rubber W* 108:370 JI '43

Goldenrod playing role in current emergency rubber program. *Rubber Age* 53:250 Je '43

Launch planting of cryptostegia; other crude rubber news. *Rubber Age* 52:146 N '42

Mexico's chilit plant may provide new rubber source. *For Comm W* 11:51 Ap 10 '43

Mother Nature's rubber probed. *il Nat Pet N* 34:11-12 D 30 '42

Production of rubber in South and Central America. E. V. Crane. *il map India Rubber W* 107:259-64 D '42

RUBBER plants and planting—Continued

- Progress in hemisphere rubber plantation development. E. W. Brandes. *il India Rubber W 108:143-5* My '43
 Report on rubber projects. *India Rubber W 107:570+* Mr '43
 Rubber deal set; field of yielding shrubs narrowed to three. *il Business Week p22+* F 13 '43
 Rubber from new domestic sources; abstract. H. L. Trumbull. *Nat Pet N 35 pt 2:R326* Jl 7 '43
 Rubber in the Americas. *India Rubber W 108:140* My '43
 Rubber seeds from Santo Domingo for experimental work. *Sci Am 168:83-4* F '43
 Schools for rubber tappers being set up in western hemisphere; other rubber developments. *Rubber Age 54:55* O '43
 Wild rubber of tropical Africa; abstract. G. Martin. *India Rubber W 109:86+* O '43

See also

Guayule
 Kok-sagyz

RUBBER printing plates. See **Printing plates, Rubber**

RUBBER reclamation. See **Rubber waste**

RUBBER research

- Cryptostegia research in Haiti. R. Symontowne. *il India Rubber W 108:148-50*, 259-61 My-Je '34
 Effects of blending guayule rubber with GR-S. R. E. Morris and others. *il India Rubber W 109:150-2+* N '43
 Kok-saghyz tires; experiments carried out by the Russians. *India Rubber W 108:490+* Ag '43
 X-ray study of reactions involving accelerators; orientation of crystalline phases on stretching of rubber stocks. G. L. Clark, R. L. LeTourneau and J. M. Ball. *il Ind & Eng Chem 35:198-204* F '43

See also

Rubber laboratories

RUBBER reserve company

- Circulars. *India Rubber W 107:294-7+*, 484, 581-2; 108:169-74, 264+, 384-5, 486+ D '42, F-Mr, My-Ag '43

RUBBER shoes. See **Shoes, Rubber**

RUBBER stamps

- Rubber stamps save drafting time. L. H. Remiker. *il Am Mach 87:93* Ap 1 '43
 Saving work in the drafting-room by the use of rubber stamps. *Mach 49:238* Ap '43
 Stamps facilitate drafting work. *il diag Machine Design 15:93* Mr '43

RUBBER substitutes. See **Rubber, Substitutes for**

RUBBER tapping

- Schools for rubber tappers being set up in western hemisphere; other rubber developments. *Rubber Age 54:55* O '43

RUBBER technology

- Rubber technology. W. C. Geer. *il Chem & Eng N 20:1358-61* N 10 '42

RUBBER thread

- Soviet Russia; rubber thread; Sovprene and natural rubber compared. *India Rubber W 108:390+* Jl '43

RUBBER tires. See **Tires, Rubber**

RUBBER waste

- Carbon black in all-reclaim tire treads. L. H. Cohan and J. F. Mackey. *India Rubber W 107:469-70+* F '43
 Limit consumers of reclaim to 45-day working inventory. *Rubber Age 52:249* D '42
 National board tells graphic tale of rubber salvaged at Fall River. *East Underw 44:14* Ja 1 '43
 Reclaiming rubber. A. F. Macconochie. *il Steel 112:56-9* Ja 18 '43
 Role of reclaimed rubber in rubber technology. *il Oil & Gas J 41:94*, 98 N 26 '42
 Solution reclaim. H. Fuchs. *Rubber Age 52:397-8* F '43; Discussion. 53:339+ Jl '43
 Standard bending roll used to salvage electric cable. *il diags Iron Age 151:51* F 25 '43
 Uses bending roll to salvage rubber at Timken roller bearing co. *il Steel 111:80* N 23 '42
 Victory heels; reprocessing cost is greater than for crude. *Business Week p34+* Je 12 '43

RUBBER workers

- New agency charged with supervision of supplies of foodstuffs and articles of prime necessity in the Amazon valley. *For Comm W 10:12-13* Ja 30 '43
 Rest camps rising for Brazil's rubber-gathering army. *For Comm W 11:14* Ap 3 '43

See also

Rubber factories—
 Employees

RUBBERIZED fabrics

- Morner life saving suit. *il Rubber Age 53:37-8* Ap '43
 Proofed goods and the rubber shortage; abstract. R. R. Lewis. *Rubber Age 53:61* Ap '43
 Replacements for rubber coated fabrics. A. F. Schildhauer. *il Mod Plastics 21:89-91+* N '43

See also

Rugs, Rubber-backed

RUBBERS. See **Shoes, Rubber**

RUBELLA

- German measles. *Science 98:sup10+* Jl 16 '43

RUBEROID company

- Annual report. *Comm & Fin Chr 157:1187* Mr 29 '43
 Net current assets \$19.21 a share. H. Lawrence. *Barron's 23:5* Mr 15 '43
 Ruberoid production at record levels. H. Lawrence. *Barron's 22:13* N 30 '42

RUBIDIUM

- Absorption spectra of potassium, rubidium, and caesium. H. R. Kratz and J. E. Mack. *Rs Mod Phys 14:104* Ap-Jl '42
 Rare alkalis in New England. F. L. Hess and others. *bibliog il diags map U S Bur Mines Information Circ 7232:1-51* '43

RUBIJERVINE

- Veratrine alkaloids; surface film studies. A. Rothen and L. C. Craig. *bibliog il Am Chem Soc J 65:1102-6* Je '43

RUDERS

See also

Steering

RUFF, Charles F. 1895-

- Sketch. *por(p46)* *Civil Eng 13:45* Ja '43

RUGS

- Pre-packs for rugs; fiber tubes, display cases. *il Mod Packaging 16:158*, 160, 162 Ap '43
 Rugs in doubt; pessimistic outlook for floor covering industry. *Business Week p48-9* Ap 24 '43
 Washington news-letter helps rug dealers solve war problems; Alexander Smith & sons. *il Sales Management 52:44-5* F 1 '43

Advertising

- Copy that clicked; Firth carpet company. R. Manville. *il Ptr Ink 202:64+* Mr 19 '43

Cleaning

- Rug and upholstery cleaners. *Textile Col 65:377* Ag '43
 Rug and upholstery cleaners; formulation, production, sales. C. T. Small. *Chem Ind 51:738-40* N '42

RUGS, Rubber-backed

- Nullifying static electricity in rugs and carpets; conductive yarn runs into rubber composition-treated backing. *Rubber Age 52:228* D '42

RUHR valley

- Bombing the Ruhr. *Economist 144:784* Je 19 '43; Abstract. *Business Week p50+* Jl 24 '43

RULE (instrument)

- Plexiglas rule for alignment charts. G. M. Mast. *il Electronics 16:200+* N '43

RUMANIA**Economic conditions**

- Roumanian war economy. *Economist 144:108-9* Ja 23 '43

RUML, Beardsley, 1894-

- Portrait. *Business Week p19* Ja 16 '43

RUNNING

- Running records. A. W. Francis. *Science 98:315-16* O 8 '43

RUN-OFF

Bridge and culvert flow areas; current practice in determining runoff. F. W. Greve. *Il Civil Eng* 13:381-2 Ag '43
 Method of computing urban runoff. W. I. Hicks. *diag map Am Soc C E Proc* 69: 461-97 Ap '43

Soil loss on Georgia farms; rainfall, runoff, and other factors are correlated at government experiment station. J. R. Carreker. *Il Civil Eng* 12:670-2 D '42

See also

Drainage
 Rain and rainfall
 Stream flow

RUNWAYS. See Aviation landing stations—Portable landing mats

RUNWAYS, Airport. See Airports—Runways

RUPPERT, Jacob

Debentures offered. *Comm & Fin Chr* 158: 294-5 JI 19 '43

RUPTURE. See Hernia

RURAL credit. See Agricultural credit

RURAL electric cooperative association, National. See National rural electric cooperative association

RURAL electrification. See Electric service, Rural; Electricity on the farm

RURAL electrification administration

Comments on use of Diesel engine power by REA-financed systems in the post-war period. F. P. Wood. *Diesel Power* 20:994+ D '42

Electricity cooperatives, 1941. *Monthly Labor R* 56:91-3 Ja '43

Ickes eyes REA. *Business Week* p42+ S 18 '43

Master of the cookie jar; political slights on the REA-NRECA controversy. H. Corey. *Pub Util* 32:275-80 S 2 '43

Opinion discusses question of federal control over electric co-ops. *Pub Util* 32:170-4 Ag 5 '43

REA head loses; Slattery stripped of power in feud with electric co-op. *Business Week* p27-3 JI 10 '43

REA; headquarters buildings for a program of rural electrification. *Il map diag plans Arch Forum* 78:79-88 F '43

REA insurance issue broadcast. R. Harkness. *Nat Underw* 47:5 Ag 19 '43

REA system revenue, consumption gains. *Elec W News* ed 120:1261 O 9 '43

REA under attack for making loans for other than rural electrification. *Pub Util* 32:107-9 JI 22 '43

Rural electrification praised by President. *Comm & Fin Chr* 157:426 Ja 28 '43

Statistics of REA-financed systems, 1941, 1942. *Elec W* 119:273 Ja 23 '43

Use of REA funds for Lake Catherine line condemned. C. M. Reed. *Elec W News* ed 119:2055-6 Je 19 '43

Western REA systems; tabulation. *Elec West* 90:60-1 F '43

Will refinanced co-ops be self-liquidating? E. R. Abrams. *Pub Util* 32:406-13 S 30 '43

RURAL sewage disposal. See Sewage disposal, Rural

RURAL sociology. See Sociology, Rural

RURAL water supply. See Water supply, Rural

RURAL workers

See also

Farm labor

RUSSELL, Alexander, 1861-1943

Sketch. *por Engineer* 175:74-5 Ja 22 '43; *Engineering* 155:76 Ja 22 '43

RUSSELL, Joseph Westell, 1875-1943

Sketch. *por East Underw* 44:16 Mr 5 '43; *Weekly Underw* 148:533 Mr 6 '43

RUSSIA

Fortune survey; does labor love Russia? *Fortune* 27:14 F '43

Russia looks back: counter-reforms, Moscow 1942-1943. *Economist* 145:358-9 S 11 '43

See also

Agricultural laws
 and legislation—
 Russia
 Agriculture—Russia

Botany, Economic—
 Russia
 Chemical industries—
 Russia

Education—Russia
 Electric plants (central stations)—
 Russia

Food supply—Russia
 Moving picture industry—Russia

Petroleum—Russia
 Science—Russia
 World war, 1939—
 Russia

World war, 1939—
 United States—Aid
 to Russia

Army

Army reforms. *Economist* 143:671 N 28 '42
 Red army. *Economist* 144:260-1 F 27 '43

Medical and sanitary affairs

Visit to the U.S.S.R. of British surgeons. *Science* 98:295 O 1 '43

Commerce

Post-war Russia offers huge market; eventual competitive threat predicted; abstract. L. L. Lorwin. *Iron Age* 152:102 N 11 '43

Pre-peace moves up to Stalin; food conference leading up to meeting of Roosevelt, Churchill, and U.S.S.R. premier. *Business Week* p74+ My 29 '43

Russia as a post-war customer; economic collaboration will require long-term agreements. P. Wohl. *map Barron's* 23:3+ S 13 '43

Russia's trade. *Economist* 144:453-4, 520-1, 582 Ap 10, 24, My 8 '43

Economic conditions

Rebuilding Russia. *Chem Age (Lond)* 49:25 JI 10 '43

Soviet Union in 1942. *Economist* 144:sup12 Mr 13 '43

Economic policy

Soviet millionaires? *Economist* 144:787 Je 19 '43

Foreign relations

Crisis of confidence. *map Economist* 144: 579-80 My 8 '43

Fortune survey; should we work with Russia as equal partner in fighting the war? as equal partner in working out peace? Russian postwar policies. *Fortune* 27:22, 26 Je '43

Poland

Polish-Soviet relations. *Economist* 144:463-4 Ap 10 '43

Russia suspends relations with Polish regime. *Comm & Fin Chr* 157:1591 Ap 29 '43

Russo-Polish dispute. *Economist* 145:8 JI 3 '43

United States

Unequivocal friendship and support for Russia. T. W. Lamont. *Comm & Fin Chr* 156: 1804 N 19 '42

Industries and resources

Donets basin; economic significance of the great industrial region. E. C. Ropes. *Il For Comm W* 13:3-5+ O 30 '43

Growth of industry in U.S.S.R. J. G. Tolpin. *Chem & Eng N* 21:166-9 F 10 '43

Russia at war; industrial front. *Economist* 143:770 D 19 '42

Russia at war; managers of industry. *Economist* 144:46 Ja 9 '43

Russia at war; Urals in 1942. *Economist* 144: 148 Ja 30 '43

Russia's economic wound. *maps Fortune* 26: 106-8 D '42

Politics and government

Red Russia. *Economist* 143:562-3 N 7 '42

RUSSIAN language

Transliteration of English names in Russian. A. Hrdlička. *Science* 98:219 S 3 '43

Dictionaries

New complete Russian-English dictionary (new orthography). L. Segal, ed. 965p \$10 G. E. Stechert & co, 31 E. 10th st, New York '42

RUSSIAN names. See Names, Personal—Russian

RUSSIANS in Germany

Soviet workers in Germany; methods of recruitment and conditions of employment *bibliog Int Labour R* 47:576-90 My '43

RUST. See Corrosion and anti-corrosives

RUSTLESS Iron and steel corporation

Low-priced stocks for large percentage gains.
Mag of Wall St 71:672 Mr 20 '43
Reported earnings may be too high. H.
Lawrence. Barron's 23:5 Mr 15 '43
Thumbnail stock appraisal. Mag of Wall St
71:242 D 12 '42

RUTGERS university

Graduate school of banking

Graduate school of banking curriculum keeps
pace; faculty lecturing at 1943 session.
Banking 35:36-7 Je '43

RUTILE

See also
Titanium oxides

RUTLEDGE, Wiley Blount, Jr.

Portrait. Business Week p8 Ja 16 '43

RUTTER, Sir Frederick Pascoe, 1859-

70 years with London & Lancashire. por
East Underw 44:20 Ag 13 '43

RYAN, Norman A. 1891-

Railroads form main supply line to North
African front. por Ry Age 114:456-8 Mr 6
'43

RYE

Agricultural department report on winter
wheat and rye acreage sown for 1943 crop.
Comm & Fin Chr 156:2343 D 31 '42

Rye; development for human consumption
and industry. Chem Age (Lond) 48:103 Ja
16 '43

Rye, 1938-1941. Survey of Cur Business 1942
Sup p120 [supplemented in monthly numbers]

RYERSON, Joseph T., and son, Inc.

100 years of steel-service. il Manuf Rec 112:
44+ F '43

Ryerson through a century. il Sheet Metal
Worker 33:31-2 N '42

S

SABATIER, Paul, 1854-1941

Mechanism of catalytic hydrogenation. E.
K. Rideal. Chem & Ind 62:335-8 S 4 '43

SABOTAGE

Anti-sabotage bill is passed by House. Comm
& Fin Chr 157:1789 My 13 '43

Defense against sabotage, espionage is vital
to war production effort; photoelectric
equipment. R. E. Appel. il Steel 112:90, 92+
F 1 '43

Sabotage; how to guard against it. H. D.
Farren. il Min Cong J 29:20-2 My '43

Sabotage! insurance policies probably cover
hazards that aggregate staggering sums.
W. E. Roesch. Spectator (Property ed) 8:
10-12+ F 4 '43

Safeguarding fire fighting equipment from the
work of the saboteur. P. W. Eberhardt; C.
H. Lindsay; G. Blair. il diag Nat Pet N
35 pt 2:R117-18 Mr 3 '43

SACCHARIDES

See also
Carbohydrates
Disaccharides
Polysaccharides

SACCHARIFICATION

Fungal amylases as saccharifying agents in
the alcoholic fermentation of corn. Lu
Cheng Hao, E. I. Fulmer and L. A. Under-
koffer. bibliog diag Ind & Eng Chem 35:814-
18 J1 '43

SACCHARIN

Aspects of chemistry of flavouring materials.
T. F. West. bibliog Chem & Ind 62:46-9 F
6 '43

See also
Pseudo-saccharin
chloride

SACKS. See Bags**SACRAMENTO**, California

Rapid transit

Rails come back to Sacramento. Transit J
86:443 D '42

Sanitary affairs

Salvage value of materials fixes Sacramento
garbage disposal fee. Eng N 129:712 N 19
'42

SACRAMENTO valley, California

Cretaceous; east side Sacramento valley,
Shasta and Butte counties. W. F. Popenoe.
diag map Am Assn Pet Geologists Bul 27:
306-12 Mr '43

Upper cretaceous stratigraphy of west side
of Sacramento valley south of Willows,
Glenn county. J. M. Kirby. diags maps Am
Assn Pet Geologists Bul 27:279-305 Mr '43

SAENGINEER, Walter, 1883-1943

Sketch. por Textile Col 65:272 Je '43

SAFE deposits

Agency discusses need of safe deposit cover-
age. Nat Underw 47:14 J1 22 '43

Don't record serial numbers of keys. Bank-
ers Mo 60:124 Mr '43

New income from vaults is now in prospect.
H. Blodgett. Bankers Mo 59:560-1 D '42

Possible duplication of vault keys. Bankers
Mo 60:105+ Mr '43

Regulations relating to safe deposit boxes
leased to nationals of blocked countries or
containing property in which nationals of
blocked countries have an interest. Fed
Res Bul 29:323-4 O '43

Safe deposit rentals and price control regu-
lations. Bankers M 145:551 D '42

Safe deposit; solution to problem of shortage
of boxes. J. J. McCann. Banking 36:75 S
'43

Safekeeping war bonds. il Banking 35:75-6
N; 76-7 D '42; 86-7 F '43

Six ways to protect customers' valuables;
what to do when safe deposit boxes are all
rented. il Bankers Mo 60:66-7 F '43

Treasury tightens regulations on safe de-
posit boxes leased to aliens. Comm & Fin
Chr 158:930 S 2 '43

Use the teapot; lack of safe-deposit facilities.
Business Week p106 Ag 7 '43

War has created new opportunities for safe
deposit rentals. J. A. McBain. Banking
Law J 60:607-12 Ag '43

See also
Insurance. Safe de-
posit box

SAFETY advertising

Women pick the safe plants. il Nat Safety
N 48:16-17+ S '43

SAFETY at sea

Marine safety men discuss shipyard safety
problems, stevedoring accidents and cur-
rent programs. C. E. Holmes. Weekly
Underw 148:744-5+ Ap 3 '43

See also

Life saving appara- Ships—Fires and fire
tus protection
Lifeboats Ships—Subdivision

SAFETY awards. See Safety contests and awards**SAFETY** belts

Safety belts and harness. Nat Safety N 47:
60+ Mr '43

SAFETY campaigns

Accident, saboteur of manpower; War pro-
duction fund to conserve manpower. Marine
Eng 47:126-7 D '42

Declare war on off-the-job accidents; ab-
stract. J. Stilwell. Concrete (mill sec) 51:175
My '43

It can be done! work of National committee
for the conservation of manpower in war
industries. Safety Eng 85:43-4 Ap '43

Off-the-job accidents. N. H. Dearborn. Paper
Ind 25:512 Ag '43

Rayon industry, keyed to war, shares in na-
tion-wide safety movement. W. C. Apple-
ton. Rayon 24:58-60 F '43

Reinforcing the home front. Nat Safety N
47:20 F '43

Reinforcing the homefront. S. H. Kershaw.
Nat Safety N 47:27+ My '43

Safety council heads national community
drive for industrial safety. il Concrete
(mill sec) 51:124-5 F '43

United for victory. W. A. Irvin. Nat Safety N
47:110+ My '43

SAFETY campaigns—Continued

War production fund organized by business in intensified campaign against accidents. Comm & Fin Chr 156:1980 D 3 '42

See also
Safety signs

SAFETY car heating and lighting company

Attractive securities. Comm & Fin Chr 158:300+ JI 22 '43

SAFETY cartoons

Axees make their debut. Il Nat Safety N 48:29 N '43

Meet the Axees! gremlins of accidents. R. Goslin. Il Nat Safety N 48:24-5 S '43

SAFETY clothing. See Clothing, Protective**SAFETY codes**

ASA committee work against difficulties to protect industrial workers. Il Ind Stand 13:284-7 N '42

Application of new piping requirements in refineries and gasoline plants. A. D. Sanderson. Il Nat Pet N 35 pt 2:R34-5 Ja 6 '43

New code for pressure piping brings safety requirements up-to-date. S. Crocker. Il Ind Stand 14:13-16 Ja '43

New method for computing pipe wall thickness provided in revised code. S. Crocker. diags Nat Pet N 35 pt 2:R36-8, R40 Ja 6 '43

Revision adds new speed rules in abrasive wheel code. A. Rousseau. Il Ind Stand 14:249-50 S '43

Safety standards help in fight on home front accidents; codes under development. Il Ind Stand 14:276-7 O '43

Standard refinery piping practice is prescribed in new code. Nat Pet N 35 pt 2:R32 Ja 6 '43

SAFETY committees

Employee committees cut accidents 36.5 percent. F. Dedrick. Il Factory Management 101:109 Ja '43

New ideas in an old plant; Terre Haute brewing company. R. P. Harris. Il Nat Safety N 47:18-19+ Je '43

No questions barred; safety committee program of Belden manufacturing company. C. S. Craigmile. Safety Eng 86:37-8 JI '43

Role of a safety committee in reducing woods accidents. P. J. Hurley and D. R. Stevens. Pulp & Pa of Can 44:322-4+ Mr '43

Safety for new workers; Westinghouse electric & manufacturing company. G. M. Daubach. Il Am Mach 87:80-1 F 4 '43

SAFETY conferences

Good safety records aren't accidents; United gas pipe line co., Houston Gulf gas co., Union producing co., and United oil pipe line co. C. L. Hightower. Il Nat Safety N 47:12-13+ Ap '43

SAFETY congresses

Midwest safety conference, Chicago, May 4-6. Safety Eng 85:31-3 Je '43

Wartime safety on parade; Greater New York safety council 14th annual safety convention and exposition. Safety Eng 85:26+ Ap '43

See also
National safety council

SAFETY contests and awards

Alloy mine no. 2 celebrates safety award; Sentinels of safety trophy also presented to Grasselli mine. Il Explosives Eng 20:336-9 N '42

Awards recognize service to safety; National safety council special wartime awards. Nat Safety N 48:27+ S '43

Contest helps set new no-accident record. O. L. Binder. Factory Management 101:110 Ja '43

Contest winners for 1941-42. Nat Safety N 46:68+ N '42

Data on the 1942-1943 paper industry safety contest. Paper Ind 25:760+ O '43

Fewer accidents reported by participants in safety contest. Oil & Gas J 41:51 Ja 14 '43

Ghost shift; safety broadcast program; safety award to Caterpillar tractor company. Safety Eng 85:23 My '43

Good safety records aren't accidents; United gas pipe line co., Houston Gulf gas co., Union producing co., and United oil pipe line co. C. L. Hightower. Il Nat Safety N 47:12-13+ Ap '43

Ideas at work; Victory sand and stone co. J. L. Roe. Il Nat Safety N 47:30+ Ap '43

Monthly safety suggestion system; Northwestern electric company. Il Elec W 119:1494+ My 1 '43

National safety competition of 1942. W. W. Adams and T. D. Lawrence. U S Bur Mines Rep of Invest 3723:1-44 '43

Quarry safety contest; honorable mention certificates. Rock Prod 45:111+ D '42

Railroads compete in employee safety; sixteenth annual railroad employees' national safety contest. Nat Safety N 48:31 JI '43

Safety aces honored; industrial war workers. Il Nat Safety N 47:68 F '43

Safety merit award inaugurated. Edison Elec Inst Bul 11:139-40 My '43

Safety record broken; Toledo district of the Ohio fuel gas company. I. A. Ludwig. Il Nat Safety N 47:66 F '43

Second successive trophy award signalized at Dolonah quarry. Il Explosives Eng 20:365-6 D '42

Sentinels of safety awarded for 1942. Nat Safety N 48:109-10 Ag '43

Seven more companies win EEI safety merit award. Edison Elec Inst Bul 11:312 O '43

Wartime safety competition breaks records; 18th annual safety contest for the Sentinels of safety trophies; with list of winners and honorable mention awards. W. W. Adams. Il map Explosives Eng 21:119-23, 140-4 JI '43

Winners in Pennsylvania Railroad contest. Nat Safety N 47:79-80 Ap '43

Winners of sand and gravel safety trophies. Il Rock Prod 45:110 D '42

See also Harriman memorial medals for safety

SAFETY councils

More power to community safety; new relationship between National safety council and local councils. Nat Safety N 47:20+ Ja '43

Plan enlarged programs at council conferences. Nat Safety N 48:32+ Ag '43

SAFETY devices and measures

Accident prevention in a public utility; Philadelphia electric co. R. M. Godwin. Am Gas J 159:20-1 S '43

Accidents worse than war; do's and don'ts to keep workers from getting hurt. Il Ry Mech Eng 117:314-16 JI '43

Alarm safeguards hot-water temperature. O. M. Roberts. diag Power 87:122 F '43

Conservation of man-power in United States war industries; industrial health and safety campaign. V. A. Zimmer. Int Labour R 48:611-18 N '43

Danger, women working! safety and hygiene. J. V. Grimaldi. Il Safety Eng 84:9, 12-13 D '42

Douglas' safety plan pays dividends; abstract. A. R. Boone. Management R 32:216 Je '43

Entertainment plus safety talks broadcast over plant public address system; Mengel company. W. Murphy. Il Nat Safety N 48:24-5+ N '43

Fifty office hazards. A. B. Roush. Il Am Business 13:22-3 JI '43

Figures that don't lie; how accident records are used; American welding and manufacturing company. Il Nat Safety N 48:24-5+ JI '43

Handling break-away barrage balloons. Edison Elec Inst Bul 11:315-16 O '43

Health and safety to make best use of manpower. Il Factory Management 101:89-112 Ja '43

How to handle chemicals safely; precautions to prevent accidents from caustic soda and liquid chlorine. diag Textile World 93:102-3 S '43

How we induce workers to think safety; Link-Belt company. F. L. Pyle. Il Factory Management 101:153-4 O '43

Industrial hazards and their prevention; survey based on 3600 accidents. J. J. Toiland Jr. and I. Kornbluh. bibliog(57 titles) Il Ind Med 12:534+ Ag '43

SAFETY devices and measures—Continued

It's a habit; celebrating no-accident years, Syracuse chilled plow company. H. I. Thomasmeyer. *Il Nat Safety N 48:20-1 S '43*

Labor department moves to cut industrial accident rate; suggestions intended to help workers protect themselves. *Il Gas Age 92:23-9 Ag 12 '43*

Library of ideas aids safety. H. R. Bigham. *Il Safety Eng 85:15-16, 18 Mr '43*

Meeting the safety problem. R. J. Crosby. *Il Food Ind 15:70-1 O '43*

Music as a safety factor. E. Hough. *Acoustical Soc Am J 15:124 O '43*

National safety news annual safety equipment issue; buyers' guide. *Il Nat Safety N 47:4-192 Mr '43*

1021 answers to industrial health and safety problems. J. E. Weiss and others, eds. 699p \$10 Occupational hazards inc, 812 Huron road, Cleveland, Ohio '43

Outposts of safety; natural gasoline plant safety program. R. A. Schuster. *Il Nat Safety N 48:16-17+ Ag '43*; Same. *Oil & Gas J 42:55, 58 O 7 '43*

Plant parking and public loading points; hazards and precautions. *Nat Safety N 46: 56+ D '42*

Production value of a well rounded accident-prevention program. H. L. Cox. *Concrete (mill sec) 51:108-9 Ja '43*

Rope drop hammers; hazards and precautions. *Nat Safety N 46:33+ N '42*

Safety for those new to industry. J. Creevey. *Chem Age (Lond) 43:419-20 Ap 17 '43*

Safety goes to press; ND safety letter distributed to employees of New departure division, General motors corporation. F. Stafford. *Il Nat Safety N 48:24+ Ag '43*

Scrap campaigning reduces accident hazards. N. H. Dearborn. *Marine Eng 43:192 My '43*

Shoot the works! camera can help to correct unsafe conditions and furnish training material. L. Zale. *Il Nat Safety N 48:23+ S '43*

Sight, sound and experience; safety program. Sherwin-Williams company. C. Fish. *Il Nat Safety N 48:64-5+ O '43*

Six tested ways to safety. J. R. Dunne. *Il Factory Management 101:124-6 J1 '43*

They are not expendable; protection of the civilian personnel of the Air service command. J. L. Whitney. *Il Nat Safety N 47: 19+ AD '43*

Treatment for gas poisoning. J. Creevey. *Chem Age (Lond) 43:237-8 S 13 '43*

Why not use color? F. Birren. *Il Nat Safety N 47:12-13+ Je '43*

Woman's place; safety and hygiene for working women. M. Anderson. *Safety Eng 85: 20-3 Mr '43*

Year of safety; outline of seasonal topics. *Nat Safety N 47:10-11 Ja '43*

See also

Accidents, Industrial

Air brakes

Automobile drivers

Automobile driving

Car couplings

Clothing, Protective

Deinfection and disinfectants

Dust removal

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and trade

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Scaffolding

Shipyards

Welding

Bibliography

Safety Library. M. M. Wells. Published in monthly numbers of National safety news

Psychological aspects

First law of nature; psychological aspects of safety; abstract. F. C. Van Zandt. *Concrete (mill sec) 51:241+ N '43*

Personal factor in accidents; abstract. *Am Water Works Assn J 35:627-8 My '43*

Safety sermonettes; the cause behind the cause. W. B. Paton. *Can Min J 64:228-30 Ap '43*

SAFETY education**See also**

Moving pictures in safety education

National safety council

Radio broadcasting—Safety programs

SAFETY engineering

Dirt to bury the Axis; rapid earth moving project in air base construction. *Safety Eng 86:21 Ag '43*

Every man on the job; safety program on war construction job. W. H. Magness. *Il Nat Safety N 47:20+ My '43*

Fire away! fire brigades and protection system. Kearney and Trecker corp. J. L. Trecker. *Il Safety Eng 86:33-8 Ag '43*

Kentucky paves the way; safety for highway workers. T. B. Smith. *Il Nat Safety N 46:20-1+ N '42*

Looking at crane hazards through a safety engineer's eyes. W. E. Rossnagel. *diags Power 87:519-21+ Ag '43*

Management aspects of safety engineering. F. E. Faast. *Il Mech Eng 65:802-4 N '43*

Personal contact promotes safety; Minnesota iron mines. A. J. Wiseley. *Il Safety Eng 86:13-20 J1 '43*

Safety, a double feature; two talks before the 31st National safety congress. H. W. Heinrich. *Safety Eng 84:29-30 D '42*

Safety in industry. M. A. Snell. *biolib J Eng Educ 33:794-817 Je '43*

Seasonal operation, year-round safety; Minnesota Valley canning company. V. Quackebush. *Il Nat Safety N 46:51-2 N '42*

Shipyards grows up; Jeffersonville boat and machine company. J. E. Glass. *Il Nat Safety N 48:14-15+ J1 '43*

War production safety; U.S. Army safety program. C. G. Richmond. *Safety Eng 84: 25-6, 28 D '42; 85:18 Ja '43*

See also

Machinery—Safety devices

Study and teaching

Plant protection and safety; training courses. *Safety Eng 85:33+ F '43*

Safety engineering in the technical college; Oklahoma agricultural and mechanical college. A. Naeter. *Elec Eng 62:499-501 N '43*

SAFETY engineers

How safe is a safety engineer? risks he must take. W. E. Rossnagel. *Il Nat Safety N 47: 14-15, 64, 66 Ja '43*

Ideal safety man. *Automotive & Aviation Ind 88:202+ Mr 15 '43*

Plant physician and safety engineer and co-operation between them. C. Leggo. *Ind Med 12:645-7 O '43*; Same. *Safety Eng 86: 100-3 O; 56-8 N '43*

Qualifications of a good safety administrator. R. L. Rollins. *Automotive & Aviation Ind 89:60+ J1 1 '43*

Woman safety engineer; Dorothy Chipchase. *Safety Eng 86:18 Ag '43*

See also

Kinsley, Richard F.

SAFETY equipment

ASSE sponsors conservation program to assure maximum life from supply of protective equipment. *Nat Safety N 47:40+ My '43*

Equipment on parade; exhibitors at the National safety congress and exposition. C. H. Miller. *Il Nat Safety N 48:56+ N '43*

SAFETY equipment—Continued

- Girded for safety; products at National safety exposition. C. H. Miller. *il Nat Safety N* 46:56, 58, 60+ *N* '42
- Industrial expenditures for safety equipment. Concrete 51:6 *N* '43
- Keep it working. A. M. Baltzer. *Nat Safety N* 47:10-11 *Mr* '43
- National safety news annual safety equipment issue; buyers' guide. *il Nat Safety N* 47:14-192 *Mr* '43
- New equipment; lighting and safety apparatus. *Iron Age* 151:76 *F* 18 '43
- Safety equipment in a war economy. H. C. Mesch. *il Nat Safety N* 47:4-6+ *Mr* '43
- Safety shortage; lack of manpower, raw materials, and facilities. *Business Week* p68+ *O* 23 '43
- 30th buyers reference number; plant service equipment. *il Am Mach* 87:373-5 *Ja* 21 '43
- War problems for the public utilities safety engineer. J. B. Davies. *Am Gas J* 158:21-3 *Mr* '43

See also

- Clothing, Protective Respiratory ap-
Fire extinguishers paratus
Shoes, Safety

SAFETY guards. *See* Roads—Safety guards

SAFETY hats. *See* Hats, Safety

SAFETY in the home

- Accidents and deaths in homes; reducing them is problem confronting New York safety council. *East Underw* 43:38+ *D* 11 '42
- Danger from carbon monoxide in the home. L. B. Berger and H. H. Schrenk. *U S Bur Mines Information Circ* 7238:1-8 '43
- Drive launched on home accidents; abstract. I. M. Ornburn. *Nat Safety N* 47:103-4 *Ja* '43
- Home safety review. Published monthly by the National safety council, 20 North Wacker drive, Chicago
- Reinforcing the homefront. S. H. Kershaw. *Nat Safety N* 47:27+ *My* '43

SAFETY inspection

- No plant too small. F. G. Bennett. *il Safety Eng* 85:16-18+ *Ap* '43
- Procedure for inspection of ladders. *Elec W* 120:354 *S* 4 '43
- Safety—A to Z; check list for supervisors and inspectors. *Safety Eng* 85:22, 24 *Je* '43
- Same old grind; inspection of portable air grinders. W. J. Thomsen. *il Safety Eng* 85:23-4 *Je* '43
- Uncle Sam cares! states will cooperate in inspecting for compliance with safety and health provisions of Walsh-Healey act. *Safety Eng* 85:16 *Ja* '43

See also

- Electric inspection
Factory inspection

SAFETY instructions and training

- All set for any emergency; Goodyear aircraft corporation, Akron. E. T. Hier and W. C. Wright. *il Factory Management* 100:107-12 *D* '42
- 8,000 years' experience; government aid in safety training. *Safety Eng* 86:83-5 *O* '43
- Foremen first! safety training. F. E. Bedale. *Safety Eng* 85:24-7+ *My* '43
- High toll of job accidents; how safety education and safety devices can be used. *Sheet Metal Worker* 34:57-8 *Ag* '43
- New man is safety problem; regional safety meetings of Portland cement association discuss successful methods of teaching. *Rock Prod* 46:126-9 *Ag* '43
- Safeguarding the newcomer. G. B. Milligan. *il Factory Management* 101:106-8 *Ja* '43
- Safety for new workers; Westinghouse electric & manufacturing company. G. M. Daubach. *il Am Mach* 87:30-1 *F* 4 '43
- 64 life savers from proposed shipyards safe practices manual. W. E. Lawrence. *il Safety Eng* 86:17-18+ *S* '43
- Tailor-made a safety book. P. F. Marrs. *il Factory Management* 100:38+ *D* '42
- TVA's safety measures on dam construction. *il Eng N* 130:819-20 *Je* 3 '43
- Tips on slide films. L. S. Metcalfe. *il Safety Eng* 86:25 *S* '43
- Training trainers. *Safety Eng* 85:35-6 *My* '43
- Visual education; bulletin boards and film strips teach safety to new and old employees. *il Nat Safety N* 47:185 *Mr* '43

What the new man needs to know about safety. A. J. R. Curtis. *Rock Prod* 46:80+ *Je* '43

See also

- First aid in illness
and injury

SAFETY isles

- Asphaltic pavement bars protect safety zones. *il Eng N* 131:141 *Jl* 15 '43
- Duration safety island. *il diags Roads & Sts* 86:69-70 *Ap* '43

SAFETY laws and regulations

- New York night club fire law approved. *Weekly Underw* 149:197+ *Jl* 31 '43

See also

- Automobile laws and Workmen's compen-
regulations sation
Factory inspection

SAFETY movement

- America's greatest resource. B. F. Fairless. *Nat Safety N* 47:10-11+ *Je* '43
- Back of the fleet; citizen's war against accidents. W. H. P. Blandy. *il Nat Safety N* 46:12-13+ *N* '42
- Handling the safety cynic without gloves. V. A. Zimmer. *Concrete (mill sec)* 51:113-14 *Ja* '43
- Latin America practices safety. M. Moas. *il Nat Safety N* 46:32+ *N* '42
- Licking the American accident plague; National safety council plans nation-wide drive. *Credit & Fin Management* 45:26-7 *F* '43

Safety goes into battle. C. E. Adams. *il Dun's R* 50:5-8 *N* '42

- Safety in a war economy. M. Bondfield. *il Nat Safety N* 47:16-17+ *Ja* '43
- Shortening the road to victory. J. Stilwell. *Nat Safety N* 46:11+ *N* '42
- Support for war-power. C. B. Morcom. *Nat Safety N* 46:10-11 *D* '42
- War work centers speed safety plans. *Nat Safety N* 47:18+ *Ap* '43

See also

- Automobile driving Roads—Safety meas-
National safety coun- ures
cil Safety councils

SAFETY nets. See Nets**SAFETY organization**

- Find status of safety in Terre Haute plants; questionnaire. R. C. Tuttle. *Nat Safety N* 48:90+ *O* '43
- Hamilton's big job. C. Fish. *il Nat Safety N* 47:16-17+ *Je* '43
- How the world's safety record for refineries was made; Standard oil co. (Indiana) refinery at Wood River, Ill. L. D. Palmer. *il Oil & Gas J* 41:43-5 *O* 22 '42; Same cond. *Nat Safety N* 47:14-15+ *My* '43
- Make way for the WIPs! Women's industrial production services. *il Safety Eng* 85:13 *My* '43
- No plant too small. F. G. Bennett. *il Safety Eng* 85:16-18+ *Ap* '43
- Production and safety; planning and organizing precautionary measures. *Automobile Eng* 32:519-22 *D* '42
- Protected production; organized accident prevention work. R. Clair. *Safety Eng* 86:23 *Jl* '43
- Ready for the emergency; first-aid workers, Nashville division of Vultee aircraft. *il Nat Safety N* 47:31+ *Ja* '43
- Relativity in safety. H. W. Heinrich. *il Safety Eng* 85:15-16 *F* '43
- Safety as usual; Caterpillar tractor company. H. S. Simpson. *il Nat Safety N* 46:16-17+ *D* '42
- Safety at the Arthur and Magna mills of the Utah copper company. R. L. Erickson. *il Min Cong J* 29:16-19 *Jl* '43
- Still learning; R. F. Kinsley, safety work at Dryden rubber company. G. R. Saccaro. *il Nat Safety N* 48:26 *S* '43
- TVA's safety measures on dam construction. *il Eng N* 130:819-20 *Je* 3 '43
- United for safety; safety organization of United air lines. J. Curtis. *il Nat Safety N* 48:70-1+ *O* '43
- Women go to bat; safety program of W. B. Conkey company. L. Stemp. *il Safety Eng* 86:15-16 *O* '43

See also

- Safety committees
Safety councils

SAFETY posters

- Dramatize safety. *il* Safety Eng 85:37 My '43
 Poster contest uncovers poet war worker. *il* Safety Eng 86:30 Ag '43
 Posters from Britain. *il* Nat Safety N 47:23 Je '43
 Sight, sound and experience; safety program, Sherwin-Williams company. C. Fish. *il* Nat Safety N 48:64-5+ O '43

SAFETY shoes. See Shoes, Safety**SAFETY signs**

- Reminders of safety; mottoes on overhead cranes at plants of United States steel supply company. *il* Nat Safety N 47:16 F '43
 Safety signs, silent sentinels of the shop. *il* Nat Safety N 47:184+ Mr '43

SAFETY standards

- New standards show how to prevent dust explosions. H. R. Brown. *il* Ind Stand 14: 59-62 F '43
 Safe limits on mercury and chromates in air work places. P. A. Neal and F. H. Goldman. *il* Ind Stand 14:79-80 Mr '43; Abstract. *il* Nat Safety N 47:38 Je '43
 Safety for hoisting equipment. J. C. Wheat. *il* Ind Stand 14:104-7 Ap '43
 Standard markings identify contents of cylinders for compressed gas. H. G. Lamb. *il* Ind Stand 14:45-6 F '43
 Testing for victory; industrial safety. A. Small. *il* Sci Am 168:216-18 My '43; Excerpt. *il* Nat Safety N 47:16-17+ Ap '43
 War standards for industrial safety shoes. M. L. Chandross and A. J. Truelson. *il* Ind Stand 14:49-52 F '43
 War standards on women's safety shoes. E. R. Granniss. *il* Ind Stand 14:211-12 Jl '43
 War time standard for manganese concentration. *il* Nat Safety N 46:89 D '42
 Women's shoe standards. *il* Safety Eng 86:31-3 Jl '43; Same cond. *il* Nat Safety N 48:19+ Ag '43

See also

- Safety codes
 Shoes, Safety

SAFETY valves

- Bottom-hole choke combines automatic safety valve. J. O. Farmer. *il* diags Pet Eng 14:78, 80, 82 F '43
 Emergency valves for high-pressure heating systems. *il* diags Engineer 176:273-4 O 1 '43; Engineering 156:347 O 29 '43
 Questions and answers for power engineers; safety valves, water-level alarms, fusible plugs. *diags* Power 87:770-2 N '43

SAFETY stores, inc.

- Locality price differentials in the western retail grocery trade. R. Cassidy, jr. and E. T. Grether. Harvard Business R 21 no2: 190-206 [Ja] '43; Correction. 21 no3:396 [Ap] '43

- Opens legal attack on OPA price ceiling policies. *Comm & Fin* Chr 158:1383 O 4 '43

SAFLEX

- Saflex. Textile Col 65:463 O '43

SAGE

- U.S. production of oil of sage. E. S. Guenther. *bibliog il* Food Ind 15:80-2 Ag '43

SAGE oil

- U.S. production of oil of sage. E. S. Guenther. *bibliog il* Food Ind 15:80-2 Ag; 82+ S '43

SAILORS. See Seamen**SAILPLANES.** See Gliders**ST GEORGES, Delaware****Bridges**

- Design of St Georges tied arch span. J. M. Garrelts. *il* diags Am Soc C E Proc 67: 1801-12 D '41; Discussion. 68:341-2, 593-5, 845-53, 1054-6, 1168-70, 1411-12, 1617-18; 69: 507-10 F, Ap-Je, S-N '42, Ap '43

ST JOHNSBURY, Vermont**Bridges**

- New bridge over old. A. D. Bishop. *il* plan Roads & Sts 86:41-3 My '43

ST JOSEPH, Missouri**Rapid transit**

- Trolley coach operating experience in St Joseph. F. N. Hill. *il* Mass Transportation 39:216-18 Je '43

ST LAWRENCE river

- Seismic subsurface exploration on the St Lawrence River project. E. R. Shepard and R. M. Haines. *il* diags map Am Soc C E Proc 68:1743-61 D '42; Discussion. 69:584-6, 861-7, 1608-10 Ap, Je, D '43

ST LAWRENCE waterway and power project

- New St Lawrence bill is introduced. *Elec W News* ed 120:1262 O 9 '43

ST LOUIS

- This is St Louis. P. James. *il* Adv & Sell 36:37, 40+ O '43

Description

- Host city for War credit congress is big industrial center. *Credit & Fin Management* 45:19-20 My '43
 Many points of interest for visitor. *il* Credit & Fin Management 45:37-8 Ap '43

Industries

- Yaleman and communist worked things out together for the good of Emerson Electric—and the war. *il* Fortune 28:146-9+ N '43

Rapid transit

- And in St Louis it's Grand 1414; information department of the St Louis public service company. *il* Bus Transportation 22:28-9 Ap '43

- St Louis trains its voice; employees trained in telephone technique. *il* Mass Transportation 39:186-3 My '43

ST LOUIS-San Francisco railway

- Annual report. *Comm & Fin* Chr 157:2156 Je 7 '43

- Court action sought on compromise with RRC. *Comm & Fin* Chr 158:1284 S 27 '43

- Prior lien bondholders' committee issues report. *Comm & Fin* Chr 158:1862 N 8 '43

- Railroad securities. *Comm & Fin* Chr 157: 653 F 18 '43

- Railroad securities. *Comm & Fin* Chr 158: 593, 596 Ag 12 '43

- Railroad securities. *Comm & Fin* Chr 158: 1593+ O 21 '43

- Supreme court rules trustee claims in rail cases come under ICC. *Comm & Fin* Chr 157:645 F 15 '43

- What are 'Frisco bonds worth? A. Jansen. *Barron's* 22:19 N 23 '42

ST LOUIS southwestern railway

- Objections filed to ICC plan. *Comm & Fin* Chr 157:2456 Je 28 '43

- Railroad securities. *Comm & Fin* Chr 156: 1789 N 19 '42

- Railroad securities. *Comm & Fin* Chr 158: 1089 S 16 '43

- What are Cotton Belt bonds worth? A. Jansen. *map Barron's* 23:10+ N 1 '43

ST LOUIS stock exchange

- Weekly record. Published in weekly Monday numbers of Commercial & financial chronicle

ST MARY'S, Pennsylvania**Industries**

- Powder metallurgy center holds no fears for outlook after war. *Iron Age* 151:96 Je 3 '43

ST PAUL, Minnesota**Sewerage**

- Possible economies in sludge disposal practice; Minneapolis-St Paul plant; with cost data. G. J. Schroeffer. *Am Soc C E Proc* 69:56-69 Ja '43; Discussion. 69:323-32 F '43

- Sewage plant maintenance; Twin-Cities plant. S. J. Larsen. *il* diags Water Works & Sewerage 89:457-64 N '42

- Ventilation features of the Minneapolis-St Paul sewage treatment plant. G. J. Schroeffer. *il* plans Water Works & Sewerage 90:353-8 O '43

Water supply

- 60th annual report (1941) of the Board of water commissioners, St Paul, Minn.; abstract. *Am Water Works Assn J* 35:118-19 Ja '43

- SAINT SOPHIA; Mosque of. See Constantinople (Istanbul)—Saint Sophia

- SAINT-VENANT'S torsion problem. See Torsion

SALAD dressing**Analysis**

Mayonnaise and salad dressing yolk content. F. J. Cahn and A. K. Epstein. *Ind & Eng Chem Anal ed* 15:281-2 Ap 15 '43
 Yolk nomograph for mayonnaise and salad dressing. D. S. Davis. *Ind & Eng Chem Anal ed* 15:595 S 15 '43

SALAMANDERS (heaters)

Salamanders; hazards and precautions. *Il Nat Safety N* 48:79+ O '43

SALAMANDERS, Fossil

New salamander from the upper miocene beds of San Jacinto county, Texas. E. H. Taylor and C. J. Hesse. *diags Am J Sci* 241:185-93 Mr '43

SALARIES

Brisk trade in policies in lieu of salary increases. *Nat Underw (Life ed)* 46:1+ D 25 '42

Clarification of the salary stabilization act. K. Marks. *Il Adv & Sell* 36:24+ Mr '43

Clerical salaries in New York city. Management R 32:130 Ap '43

End of Horatio Alger? limitation of salaries. Trusts & Estates 76:30 Ja '43

Fortune survey; labor favors ceiling for incomes. Fortune 27:9 F '43

Hold that query! Internal Revenue offices being established regionally. Business Week p16-17 N 21 '42

House nullifies salary limit order. Comm & Fin Chr 157:1020 Mr 18 '43

Insurance angle of salary limit. Weekly Underw 147:1117 N 14 '42

Limitation of income. Bankers M 145:467-8 D '42

Pay freeze stiff; will stick to letter of regulations. Business Week p102-4+ D 12 '42

Pay hike formula; NWLB all set to adjust salaries and wages. Business Week p120+ N 21 '42

Paying for policy not a salary boost, regulations hold. *Nat Underw (Life ed)* 46:2 D 11 '42

President permits debt limit bill to become law without signature; objects to salary rider. Comm & Fin Chr 157:1381 Ap 15 '43

Regulations of stabilization director controlling wage adjustments; Wage-stabilization policy of National war labor board. Monthly Labor R 55:1142-7 D '42

Salaries of school employees, 1942-43. Monthly Labor R 56:1198-1200 Je '43

Salary ceiling: \$25,000—plus or minus? H. S. Koster. Trusts & Estates 75:488-9 N '42

Salary regulations of Commissioner of internal revenue. Monthly Labor R 56:149-52 Ja '43

Senate votes repeal of salary limit order. Comm & Fin Chr 157:1108 Mr 25 '43

Some aspects of wage and salary administration of interest to accountants. G. A. Gesell. J Account 75:131-6 F '43

Stabilization of bank salaries. J. A. Reilly. Burroughs Clearing House 27:22-4+ F '43

Tax dangers in current wage and salary rate raises. J. M. Crimmins. Am Business 13: 10-11 F '43

'33 RFC pay cuts were precedents for \$25,000 income limit. Ry Age 113:932-3 D 5 '42

Treasury issues rules for controlling salaries over \$5,000 with \$67,200 limit. Comm & Fin Chr 156:2071 D 10 '42

Wage and salary stabilization. J. W. Havighurst. N A C A Bul 24:809-25 Mr 15 '43

What about 1943 salary and wage changes? Am Business 12:10-11 D '42

See also

Chemists—Salaries
 Engineers—Salaries
 Executives—Salaries
 Government employees—Salaries
 Moving picture actors—Salaries
 Nurses and nursing—Salaries

Nurses and nursing, Public health—Salaries
 Railroads—Officials—Salaries
 Salesmen—Salaries and commissions
 Teachers—Salaries Wages

SALARY savings insurance. See Insurance, Life—Salary savings plan

SALEM, Massachusetts

Mr Derby of old Salem. *Il Fortune* 28:136-7 Ag '43

SALES

Legal adventures of a chemist. Chem Ind 52:517-18 Ap '43 [cont monthly]

New laws affect sales' validity. L. T. Parker. Am Gas J 158:28-9 Mr '43

Some important higher court decisions in 1942 involving sales contracts. L. T. Parker. Chem Ind 52:597-8 My '43

Some important recent court decisions involving chemicals; when contract is void. L. T. Parker. Chem Ind 53:344-5 S '43

See also

Auctions
 Cancellation of orders
 Contracts
 Instalment plan

SALES, Conditional

Difference between cash price and credit price included in note not usurious interest. Banking Law J 60:767-72 S '43

See also

Instalment plan

SALES, Special. See Special sales

SALES areas. See Market areas

SALES campaigns**See also**

Advertising campaigns

SALES conferences

Slides tell how to plan and run a successful film meeting. *Il Sales Management* 52:78 F 15 '43

See also

Sales conventions

SALES contests, Jobbers'

Contest puts drive into distribution through wholesalers; Purepac corporation. T. J. Mahon. *Il Ptr Ink* 202:22-4, 28 Mr 5 '43

SALES contracts. See Sales

SALES conventions**Mail conventions**

Another splendid example of a convention-by-mail. Devco & Reynolds. J. M. Abrams. *Il Ptr Ink* 203:62+ Je 18 '43

Chicopee salts facts with humor in sales convention-by-mail. *Il Sales Management* 52:44-5 My 20 '43

Mail conventions are theme of new book sponsored by Graphic arts victory committee. *Ptr Ink* 202:75 F 19 '43

Sales conference by mail has everything in one portfolio! *Il Ptr Ink* 202:18+ Mr 12 '43

Radio conventions

Closed-circuit sales meeting saves travel; conference by radio wire used by S. C. Johnson & son. *Ptr Ink* 202:59 Ja 29 '43

How S. C. Johnson planned and produced a radio sales meeting. *Sales Management* 52: 54-6 Ap 1 '43

Swift salesmen learn to handle harried dealers with kid gloves. *Sales Management* 52: 70+ Mr 1 '43

SALES costs**See also**

Automobiles, Salesmen's—Costs
 Salesmen—Expenses

Accounting

Wanted: better sales cost accounting methods. Am Business 13:26 Je '43

SALES departments**See also**

Sales managers
 Sales policies

SALES estimates

Measuring your postwar market potential. S. M. Livingston. Management R 32:300-2 Ag '43

SALES executives, National federation of. See National federation of sales executives

SALES letters

Gas is rationed? postage stamps aren't! letters carry a heavier business burden than ever before. V. Young. *Ptr Ink* 201:46, 48-9 D 18 '42

Letter writer's best asset; inquiring mind. V. Young. *Ptr Ink* 201:48+ N 13 '42

Modernize your sales correspondence; shorten sentences and coming directly to the point involved. C. E. Richards. Ind Marketing 28:96 S '43

SALES letters—Continued

With less gas, use more letters. C. A. Emley. *Ind Marketing* 27:38+ D '42

See also
Advertising, Mail
Complaints

SALES management

Effective use of key salesmen in wartime; capital goods industries. K. B. Keefer. *Ind Marketing* 28:42+ M '43

How companies in many fields cultivate the Negro market; Standard Oil, Continental Oil, Pabst, Beech-Nut, Philip Morris and General Electric are typical. D. J. Sullivan. *Sales Management* 51:64, 66 D 15 '42

How salesmen are being kept profitably busy; survey of many industries. E. M. Housman. *Ptr Ink* 204:19+ S 17 '43

How the children's wear industry is pooling showings for dealers. J. C. Cumming. *Sales Management* 52:39 Jc 15 '43

In the best interest of all selling, should we kill straight commission? W. R. Jenkins. *Sales Management* 52:18-20+ F 1 '43

Keep your salesmen working, even with nothing to sell. A. L. Block. *Adv & Sell* 36:98, 100 O '43

Maintaining a sales organization in wartime. *Ind Marketing* 28:43 F '43

Manufacturers and distributors need more intelligent selling; better sales forces and constructive well-planned sales policies. H. H. Kuhn. *Ind Marketing* 28:33-4+ Je '43

Remington Rand runs typewriter clinics for government employees. S. L. Hooper. *Sales Management* 52:72+ S 1 '43

Sales managers have muffed the ball! C. S. Kauffman. *Ptr Ink* 203:15-17+ Ap 2 '43

Sales managers, it's up to you! to keep the number of workers you are obligated to, employed. G. S. Jones, Jr. *Ptr Ink* 202:38+ Mr 19 '43

Selling, day after tomorrow. W. S. Patjens. *Adv & Sell* 36:30 Mr '43

Six ways to keep in touch with customers when men can't travel. J. C. Cumming. *Sales Management* 52:36, 38 F 15 '43

Ten major musts for post-war sales managers. H. Simmons. *Ptr Ink* 204:17-18, 78, 80 Ag 27 '43

Todd's new sales strategy maintains volume in face of machine freeze; plan built on payroll service. L. T. Thomasma. *flow chart* *il Sales Management* 52:25-6, 30 JI 1 '43

Tomorrow's new kind of sales manager: what will he be like? B. Bigelow. *Sales Management* 52:18-19+ Mr 15 '43

War-hit sales staff aids public relations, serves war industries; Deteco scales, Inc. *il Ptr Ink* 204:20 S 3 '43

What happened when war wiped out \$17,000,000 of our annual volume; White Motors discover possibilities for volume and profit in service. H. D. Laidley. *il Sales Management* 52:18-21 JI 15 '43

What should become of a salesman's accounts when he enters the armed forces? W. C. Haff. *Comm & Fin Chr* 158:18 JI 1 '43

White Motor sells for future with plant all out for war. E. Whitmore. *il Am Business* 13:7-9, 22, 24 F '43

Why Vestal salesmen stuck to job; morale-building theme. C. E. Richards. *Ptr Ink* 204:32 JI 16 '43

See also
Advertising
Automobiles, Salesmen's
Complaints
Dealer helps
Display of merchandise
Export trade—Sales management
Gas companies—Salesmen

Marketing
Printing trade—Salesmen
Sales contests, Jobbers'
Sales conventions
Sales policies
Sales promotion
Salesmanship
Salesmen
Saleswomen

Letters to salesmen

Sales manager writes a wartime letter to his men. F. M. Truett. *Sales Management* 52:20-1 N 1 '43

SALES management (periodical)
How and why Sales management magazine was started. J. C. Aspley. *Sales Management* 52:19-20 O 1 '43

SALES managers

Know any presidents who came up through sales? *Ptr Ink* 202:39 F 12; 76-7 Mr 5 '43

Product strategy for post-war: the sales executive's assignment. F. Manning. *Sales Management* 52:98+ S 15 '43

Sales managers: take the initiative if your company is laggard in post-war planning. B. Bigelow. *Ptr Ink* 204:17-19+ S 10 '43

Selling can't afford to go to seed! J. Lacy. *Ptr Ink* 205:32+ O 8 '43

Ten major musts for post-war sales managers. H. Simmons. *Ptr Ink* 204:17-18, 78, 80 Ag 27 '43

SALES managers' clubs

Sales managers' clubs programs are guided by economic changes. *Sales Management* 51:60-2 N 15 '42

SALES meetings. See Sales conferences; Sales conventions

SALES mergers. See Sales policies—Combination selling

SALES policies

De Long rations dealers in ratio to WPB materials allotment. C. Emley. *Sales Management* 52:52+ My 20 '43

Distribution of scarce goods; wartime practices in allocating goods to retailers. E. R. Hawkins and W. F. Crowder. *U S Bur For & Dom Com, Economic Ser* 26:1-54 '43

Five planks in Reliance's wartime sales management platform. J. W. Champion. *il Sales Management* 52:44+ S 15 '43

Getting ready to sell. J. C. Aspley. *il Am Business* 13:10-12+ S '43

Issues own ration stamps to allot restricted output to dealers; Oshkosh B'Gosh. *il Ptr Ink* 202:94+ Mr 26 '43

Krasne brothers salesmen ration scarce foods to their customers. *Sales Management* 51:68 D 1 '42

Sales policies that won variety store leadership for Betty Lou; Columbia products corp. has concentrated for 25 years on a short line and one market. A. J. Siris. *il Sales Management* 51:60, 62-3 D 15 '42

Sells merit of product to those who don't need it; Sonotone. F. LaClave. *il Ptr Ink* 204:19+ JI 9 '43

Seven points to watch in postwar market planning. Serval, Inc. L. Hill. *Ind Marketing* 28:41, 44 Je '43

War has caused modification rather than radical changes in marketing. L. D. H. Weld. *Ptr Ink* 203:64, 66-7 Ap 9 '43

Without orders; Butler bros. allocates all scarce merchandise alphabetically among dealers. *Business Week* p86 JI 3 '43

Zenith helps its distributors survive the global hurricane; hunt for new things to sell, development of service, and sometimes a tie-up with local war industry. O. E. Wolf. *il Sales Management* 52:70+ F 15 '43

See also
Advertising policies
Catalogs
Christmas business
Complaints
Credit
Dealer helps
Dealer relations
Discount, Cash
Display of merchandise
Employees, Selling to
Exhibits, Traveling

Installation plan
Jobbers
Marketing
Premiums (merchandizing)
Price fixing
Price policies
Private brands
Products, Improved
Sales management
Sales promotion
Salesmen and credit

Combination selling

Two kinds of sunshine get together; joint display of Loose-Wiles biscuit co. and Florida citrus commission. *il Mod Packaging* 16:63 Mr '43

Selective selling

Selective selling helps Sunshine build now for post-war prosperity; Loose-Wiles sales policies will be altered permanently. L. M. Hughes. *il Sales Management* 52:18-20 JI 1 '43

SALES promotion
Bookshelf games hit jackpot; sell to service men and home folks. *il Sales Management* 52:53 Ja 1 '43

Candy kept cool; Whitman is booking orders for postwar delivery of refrigerated cabinets. *Business Week* p82+ O 2 '43

SALES promotion—Continued

Carboloy visual training slidefilm program is sold at cost to users. *il Ind Marketing* 28:46, 48+ F '43

Consolidated tunes new products to wartime needs of housewives; manufacturer of trimmings is finding new markets for new products. C. D. Carver. *il Sales Management* 52:80+ O 1 '43

Cookies for rookies catches on; Burnett sponsors nationally. *il Sales Management* 52:31-2 Ja 1 '43

Current promotion activities are of great variety. *il Ind Marketing* 27:62, 64, 68 D '42

Fabric house wins brand identity with dealers and consumers; Arlington Mills labels are carried after re-manufacture for their sales potency with consumers. *il Sales Management* 52:23-5 S 15 '43

How Orlorf cosmetics capitalized the reuse value of containers. *il Sales Management* 52:22-4 F 1 '43

How Para built a merchandising program for shower curtains; modern design, modern materials, smart packaging, sound display, and retail sales training. *il Sales Management* 52:28, 30 Ja 15 '43

How the farm market is reached through clinics; Johns-Manville company. M. Beu- ick. *il Ptr Ink* 205:25-6 O 29 '43

It's still sales promotion, but it's spiced the Latin-American way. J. D. Cathcart. *il Sales Management* 52:22-3 Je 1 '43

Maine wins markets and prestige in Super spuds campaign. *Sales Management* 52:66 Mr 1 '43

Promotion finesse builds roses into big-time business for Jackson & Perkins. C. H. Perkins. *il Sales Management* 52:22-4 Jl 15 '43

Sewing success; Singer selling instruction instead of machines; McCall's also offers course. *Business Week* p68+ Mr 13 '43

Sinclair's Farming for victory program: what it is, how it works. W. J. Andree. *il Sales Management* 52:18-21 Ja 15 '43

Smart design, smart promotion lend style zip to a staple; what Bailey, Green & Elger are doing to glamorize buttons. O. Boschen. *il Sales Management* 52:22-3 S 1 '43

This promotion to farmers has showmanship; Allied mills, inc. J. L. Richardson. *il Ptr Ink* 203:18-19 Je 11 '43

War advertising programs can now begin to talk results! *il Ptr Ink* 202:25-6, 30+ Ja 15 '43

Whet their appetites! National adequate wiring bureau public-service message on how to get along with present inadequacies. F. LaClave. *il Ptr Ink* 203:40+ Ap 16 '43

See also

Advertising cam- Instruction in use of
paigns—Special product
weeks Premiums (merchan-
Exhibits, Traveling dizing)

SALES promotion departments

No promotion during war! oh yeah? A. White. *Ptr Ink* 203:15-17 My 7 '43

SALES quotas

Sales managers, it's up to you! to keep the number of workers you are obligated to, employed. G. S. Jones, jr. *Ptr Ink* 202: 38+ Mr 19 '43

SALES records

Record systems are important to selling; Dobbs women's hats. A. J. Stack. *il Ptr Ink* 203:17-18+ My 14 '43

Testing advertising and checking sales records by paired cities. *Sales Management* 52:78, 80, 82 Jl 15 '43

SALES research

Product strategy for post-war: the sales executive's assignment. F. Manning. *Sales Management* 52:98+ S 15 '43

See also

Market research

SALES tax

Advocates a general sales tax. S. Harris. East Underw 44:40 Mr 12 '43

Federal sales tax advocated as war measure to check public debt. W. W. Aldrich. *Comm & Fin Chr* 157:353+ Ja 28 '43

Gallup poll shows public in favor of national sales tax. *Comm & Fin Chr* 158:1797 N 4 '43

High sales tax on non-essentials. *Trusts & Estates* 76:404 My '43

Money illusion and demand analysis. J. Marschak. *R Econ Stat* 25:40-8 F '43

Retail sales tax base. Survey of Cur Business 23:9 Mr '43

Retail sales tax more effective than spendings tax. R. Magill. *Comm & Fin Chr* 157: 1289 Ap 8 '43

Retail sales tax urged by U.S. Chamber in place of administration tax proposals. *Comm & Fin Chr* 158:1508 O 14 '43

Treasury still opposed to retail sales tax. *Comm & Fin Chr* 158:325 Jl 22 '43

See also

Spending tax
Stock transfer tax

SALESMANSHIP

Guide outlines for sales presentations; organized listings of pertinent product data from customers' viewpoint. A. A. Hanford. *il Ind Marketing* 28:34+ Ap '43
If women can weld and rivet, why can't they sell! M. Brown. *Ptr Ink* 202:15-16 Mr 5 '43

Manufacturers and distributors need more intelligent selling; better sales forces and constructive well-planned sales policies. H. H. Kuhn. *Ind Marketing* 28:33-4+ Je '43

Proud of its substitutes; Crane co. develops line of galvanized iron plumbing fittings and earthenware sinks and bath tubs. H. E. Fleming. *il Ptr Ink* 204:18-20 Jl 23 '43

Putting the sizzle into selling. B. Sando. *Ins Field* (Fire ed) 72:20-1 Ap 22 '43

Same. *Ins Field* (Life ed) 72:18-19 Ap 23 '43

Salesman still is quite a fellow! A. H. Motley. *Ptr Ink* 201:13-14 N 13 '42

Salesman's job in wartime. B. Maxim. *Paint Oil & Chem R* 104:16+ D 31 '42

Swift salesmen learn to handle harried dealers with kid gloves. *Sales Management* 52: 70+ Mr 1 '43

There's no such thing as a seller's market. A. J. Newman. *Adv & Sell* 36:54+ N '43

What qualities make good salesmen good? R. A. Floberg. *Sales Management* 52:57 Je 1 '43

See also

Advertising	Insurance agents
Advertising, Solicit-	Mail order business
ing of	Marketing
Advertising and	Merchandizing
salesmen	Package goods
Auctions	Sales contests, Job-
Business	bers'
Buying habits	Sales conventions
Instalment plan	Sales letters
Insurance, Life—	Sales management
Agents	Salesmen

Service

Priority knowledge as a sales tool; enables salesman to help customer buy. R. A. Ness. *Ind Marketing* 28:31-2 Ap '43

Service approach in selling: lessons the years have taught us. A. R. Kneibler. *Sales Management* 52:18-19 O 1 '43

Sixty-five ways for salesmen to help dealers stay in business. A. A. Hood. *Sales Management* 51:18-20 D 1 '42

Todd's new sales strategy maintains volume in face of machine freeze; plan built on payroll service. L. T. Thomasma. *flow chart il Sales Management* 52:25-6, 30 Jl 1 '43

What's cooking on the sales front; salesmen help customers. J. H. Van Deventer. *Ind Marketing* 27:40, 44 D '42

Where can industrial salesmen best fit into the war effort? training in the installation, use and repair of vital machines. H. Conover. *Sales Management* 51:60, 62-3 D 1 '42

Standardized sales talk

Wanted: better sales techniques for tomorrow's better products. W. S. Patjens. *Sales Management* 52:18-20 Je 15 '43

Study and teaching

Wine makers offer correspondence course in wine lore and salesmanship. *il Sales Management* 52:60, 62 Mr 15 '43

SALESMANSHIP, Retail*See also*

Salesmen, Retail

SALESMEN

Assign your labor relations to a sales-minded executive. A. M. Fisher. *Il Ptr Ink* 202:15-17 Mr 26 '43

Milk salesmen sell war bonds, publicize an over-sold product; Pet milk sales corporation. *Il Ptr Ink* 202:36 Ja 22 '43

Salesmen do well. *Business Week* p100-1 N 6 '43

Salesmen might suggest ways to cut costs of distribution. E. C. Morse. *Ptr Ink* 205:24 O 29 '43

Sixty-five ways for salesmen to help dealers stay in business. A. A. Hood. *Sales Management* 51:18-20 D 1 '42

Tale of a tough territory; Young tool salesman in Quebec. M. K. Powers. *Adv & Sell* 36:30 O '43

Unions have substantial foothold among Frisco sales organizations. E. Gidlow. *Sales Management* 52:66+ O 1 '43

What happened to salesmen? *Adv & Sell* 36:42 Ap '43

Where can industrial salesmen best fit into the war effort? training in the installation, use and repair of vital machines. H. Conover. *Sales Management* 51:60, 62-3 D 1 '42

Wisconsin salesmen organize a Cooperative riders' club; hotels maintain bulletin boards for posting of itineraries. *Sales Management* 51:67 D 15 '42

Yesterday's sales staff; today's victory workers. *Sales Management* 52:96 S 15 '43

See also

Advertising, Soliciting of	Motor truck industry and trade—Salesmen
Advertising and salesmen	Oil companies—Salesmen
Gas companies—Salesmen	Printing trade—Salesmen
Insurance, Life—Agents	Sales conventions
Insurance agents	Sales management
	Salesmanship
	Saleswomen

Advance cards and letters

Letters cure salesmen's stage fright and absenteeism. R. B. Thompson. *Ptr Ink* 202:96 Mr 26 '43

Bonuses

Graduated bonuses put incentive into this compensation plan; Detroit-Michigan stove co. D. G. Baird. *Sales Management* 52:34+ O 1 '43

Expenses

Adjustments in salesmen's expense allowances. *Management R* 32:233-5 Je '43

Bread and butter problems of a sales manager; creeping costs. A. H. Deute. *Adv & Sell* 36:56 N '43

See also

Automobiles, Salesmen's—Costs

Law

Legal rights of salesmen to collect commissions. L. T. Parker. *Ind Marketing* 28:42, 46+ Mr '43

Liability for injuries affected and sustained by salesmen; analysis of higher court decisions distinguishing when salesmen operate as independent contractors. L. T. Parker. *Ind Marketing* 28:39-40+ Jl '43

Salaries and commissions

Approves extension of rule on commissions. *Comm & Fin Chr* 158:1798 N 4 '43

Compensating sales force disorganized by war conditions. W. R. Moore. *Ind Marketing* 28:40+ F '43

In the best interest of all selling, should we kill straight commission? W. R. Jenkins. *Sales Management* 52:18-20+ F 1 '43

Legal rights of salesmen to collect commissions. L. T. Parker. *Ind Marketing* 28:42, 46+ Mr '43

Rule on salesmen's commissions modified by Internal revenue commissioner. *Comm & Fin Chr* 158:1606 O 14 '43

Salesman's salary again. *Sales Management* 52:84-5 Ag 15 '43

So you need a new payment plan for your post-war sales force? B. Bigelow. *Sales Management* 52:24, 26+ S 1; 68, 70, 72 S 16 '43

Time and a half for salesmen? *Am Business* 13:2-3 Ag '43

Treasury relents; employers may continue paying commissions to salesmen. *Business Week* p90+ O 16 '43

Treasury to reconsider commission ruling on salary and commission increases. *Sales Management* 52:24 O 15 '43

See also

Salesmen—Bonuses

Selection

Advertises now for post-war salesmen. *Il Ptr Ink* 204:32-3 Jl 2 '43

Build training program now; give older salesmen a break; Johns-Manville's experiences. N. B. Sherrill, Jr. *Ptr Ink* 201:15-17+ D 4 '42

What kind of salesman will I need on my post-war sales force? B. Bigelow. *Il Sales Management* 52:24-6, 28 Ag 15 '43

See also

Insurance, Life—Agents—Selection

Service*See* Salesmanship—Service**Training**

Build training program now; give older salesmen a break; Johns-Manville's experiences. N. B. Sherrill, Jr. *Ptr Ink* 201:15-17+ D 4 '42

Kendall salesmen prepare for tomorrow by re-training today. S. D. Chamberlain. *Sales Management* 52:48+ My 20 '43

McKesson self-development plan produces master merchandisers. L. M. Hughes. *Sales Management* 52:38, 40 S 1 '43

Post-war planning is a job for the infantry. A. H. Deute. *Il Ptr Ink* 203:24+ Je 25 '43

Rehearsal for sales. H. G. Bailey. *Ptr Ink* 202:56+ Mr 26 '43

To offer degree in technical sales; Western reserve university, Cleveland college, Cleveland. *Ptr Ink* 201:12 N 27 '42

Todd's new sales strategy maintains volume in face of machine freeze; plan built on payroll service. L. T. Thomasma. *flow chart* *Il Sales Management* 52:25-6, 30 Jl 1 '43

Training program for power salesmen. J. T. Kimball. *Elec W* 119:808+ Mr 6 '43

12 errors to avoid in planning your post-war sales training program. W. Rados. *Sales Management* 52:22-5 Je 15 '43

See also

Insurance, Life—Salesmen, Retail—Agents—Training Training

SALESMEN, Jobbers'

Performance standards help salesmen make better use of their time; sales report form used by J. J. Haines & co, floor coverings wholesaler. R. A. Siegel, Jr. *Il Sales Management* 52:30, 32, 34 Ag 1 '43

SALESMEN, Negro

How companies in many fields cultivate the Negro market; Standard Oil, Continental Oil, Pabst, Beech-Nut, Philip Morris and General Electric are typical. D. J. Sullivan. *Sales Management* 51:64, 66 D 15 '42

SALESMEN, Retail

How much progress are unions making in organizing salesmen? answer from southern California area. J. H. Collins. *Sales Management* 52:84+ Ag 1 '43

Unions have substantial foothold among Frisco sales organizations. E. Gidlow. *Sales Management* 52:66+ O 1 '43

Training

Buyer and retail training. I. M. Thormann. *Il J Retailing* 18:102-10 D '42

House paper helps educate employees; Hart Schaffner & Marx teach selling to new salesmen. *Ptr Ink* 202:23 Ja 8 '43

Importance of merchandise facts. K. R. Gillespie. *J Retailing* 18:111-12 D '42

SALESMEN, Retail—Training—Continued

- McKesson offers druggists a hand in training green sales help. L. M. Hughes. *Il Sales Management* 52:364- Ag 15 '43
- McKesson program eases retailers' burden of training sales help; new distributing handbook. R. H. Ganly. *Il Ptr Ink* 204:17, 72 JI 30 '43
- Re-examine your training program for retail sales people! J. C. Cumming. *Il Ptr Ink* 203:13-14+ My 21 '43
- Stores pool training of help; Houston group hiring and training program. *Il Business Week* p92 My 22 '43

SALESMEN and advertising. See Advertising and salesmen

SALESMEN and credit

- Overbuying in war-time prosperity; problems faced by credit men. E. S. Horwitz. *Credit & Fin Management* 44:30-1+ D '42

SALESMEN'S association of the American chemical industry

- Chemical salesmen name Phil LoBue president; other officers. *Oil Paint & Drug Rep* 143:4+ Ja 25 '43

SALESMEN'S automobiles. See Automobiles, Salesmen's**SALESMEN'S reports**

- Performance standards help salesmen make better use of their time; sales report form used by J. J. Haines & co. floor coverings wholesaler. R. A. Siegel, jr. *Il Sales Management* 52:30, 32, 34 Ag 1 '43

SALESWOMEN

- If women can weld and rivet, why can't they sell! M. Brown. *Ptr Ink* 202:15-16 Mr 5 '43

See also
Insurance, Life—
Agents—Women agents

SALICYLIC acid

- Fatty derivatives of salicylic acid and α -naphthol. D. Price and E. L. May. *Am Chem Soc J* 65:297 F '43
- Salicylic acid and salicylate. flow sheet *Il Chem & Met Eng* 50:132-5 Ag '43

SALMON

- Application of the control chart method to the analysis of fisheries data. W. H. Rich. *Biblog Science* 97:269-70 Mr 19 '43
- Canada's 1942 salmon pack; with comparisons for 1941. *For Comm W* 10:25 Ja 30 '43
- Canada's salmon industry, 1942. *For Comm W* 11:27 Je 19 '43
- Fundamentals of salmon conservation. E. B. Powers. *Science* 97:242 Mr 12 '43
- Preserving Columbia River salmon fisheries; controlled migration creates new spawning grounds. D. A. Dedel. *Il map Civil Eng* 13:181-4 Ap '43
- Salmon pack, British Columbia, Canada, 1939, 1942, 1943. *For Comm W* 12:29 S 18 '43
- To concentrate salmon canning in Alaska. *Food Ind* 15:100 Ap '43

SALMONELLA enteritidis

- Salmonella enteritidis: experimental transmission by the Rocky Mountain wood tick *dermacentor andersoni* Stiles. R. R. Parker and E. A. Steinhaus. *Pub Health Rep* 58: 1010-12 JI 2 '43

SALT

- All-America package competition award; Morton salt co. *Il Mod Packaging* 16:92+ Ap '43
- Byproducts from Brazilian salt; abstract. M. da Silva Pinto. *Chem & Met Eng* 50:199 S '43
- Direct cotton dyes, common salt, and common sense. C. M. Whittaker. *Soc Dyers & Col J* 58:253-6 D '42; *Abstract. Textile Col* 65:195-6 My '43
- Effect of sodium chloride upon the ionization of boric acid at various temperatures. B. B. Owen and E. J. King. *biblog Am Chem Soc J* 65:1612-20 Ag '43
- Fluidity of electrolytes. E. C. Bingham and R. T. Foley. *biblog J Phys Chem* 47:511-27 O '43
- Influence of sodium chloride on the iron oxide content of molten soda-lime-silica glasses; abstract. *Glass Ind* 24:429+ O '43

Ionization constant of carbonic acid in water and the solubility of carbon dioxide in water and aqueous salt solutions from 0 to 50°. H. S. Harned and R. Davis, Jr. *biblog diags Am Chem Soc J* 65:2030-7 O '43

Isopiestic measurements in dilute solutions; the system potassium chloride-sodium chloride at 25° at concentrations from 0.03 to 0.10 molal. A. R. Gordon. *biblog diag Am Chem Soc J* 65:221-4 F '43

New Zealand's solar-evaporation salt project. *For Comm W* 12:26 JI 31 '43

Salt glazes for structural building units. H. D. Foster. *Il diags Am Cer Soc J* 26:60-7 F 1 '43

Salt glazes on structural clay building units. H. D. Foster. *Il diags Ohio State U Eng Exp Sta Bul* 113:1-40 *biblog*(p39-40) '42 (p4 40c)

Second dissociation constant of *p*-phenol-sulfonic acid and pH values of phenolsulfonate-chloride buffers from 0° to 60° C. R. G. Bates, G. L. Siegel and S. F. Acree. *biblog J Research Nat Bur Stand* 31:205-23 O '43

Thermodynamics of aqueous solutions of sodium chloride at temperatures from 15-45° from e.m.f. measurements on cells with transference. G. J. Janz and A. R. Gordon. *biblog Am Chem Soc J* 65:218-21 F '43

Vapor pressure of aqueous solutions of sodium chloride at 20, 25 and 30° for concentrations from 2 molal to saturation. P. Olynnyk and A. R. Gordon. *biblog Am Chem Soc J* 65:224-6 F '43

Zinc yellow in the inhibition of corrosion-fatigue of steel in sodium chloride solution. C. G. Fink, W. D. Turner and G. T. Paul. *biblog Il Electrochem Soc Trans* 83 (preprint 13):159-82 Ap '43

See also
Petroleum—Salt content

Analysis

Determination of chloride in the presence of hydrosulfide or sulfide ion. M. M. Maglio and E. Fazio. *Ind & Eng Chem Anal ed* 15:265-6 Ap 15 '43

Rapid determination of sodium chloride in the presence of protein; application to salt-cured food products. W. J. Dyer. *biblog Ind & Eng Chem Anal ed* 15:439-40 JI 15 '43

Therapeutic use

Experimental chemotherapy of burns and shock; effects of systemic therapy on early mortality. S. M. Rosenthal. *biblog Pub Health Rep* 58:513-22 Mr 26 '43

First aid for heat cramps; carbonated salt water. J. U. Buchanan. *Nat Safety N* 47:25 My '43

First aid treatment of shock in severe burns; salt drink treatment. J. Stafford. *Science* 97:sup12 Ap 23 '43

Heat. *Il Nat Safety N* 47:163-4+ Mr '43

SALT cake. See Sodium sulfates

SALT domes

Directional redrilling of piercement type dome to increase recovery. J. Zaba. *diags Oil & Gas J* 41:31-3 Ja 14 '43

Evidence of erosion of salt stock in Gulf Coast salt plug in late oligocene. M. A. Hanna. *Am Assn Pet Geologists Bul* 27:85-6 Ja '43

Problem of pre-Trinity deposits in south Texas. F. M. Getzenander. *maps Am Assn Pet Geologists Bul* 27:1228-44 S '43

Recent experimental and geophysical evidence of mechanics of salt-dome formation. L. L. Nettleton. *biblog Il diags Am Assn Pet Geologists Bul* 27:51-63 Ja '43

SALT glaze. See Glazes

SALT industry and trade

Advertising

Penn Salt campaign designed to create better feeling for war chiefs. E. M. Massey. *Ind Marketing* 28:54+ Ja '43

China

Salt production in China. *For Comm W* 12:26 S 11; 13:20 O 2 '43

SALT industry and trade—Continued**South Africa**

Salt production in Union of South Africa.
For Comm W 9:18-19 N 14 '42

SALT mines and mining**Kansas**

Mining salt beneath the Kansas prairies.
W. M. Veitch. il diags Explosives Eng 21:
180-2, 198 S '43

Louisiana

Blasting salt below sea level; Jefferson
Island salt mining company. W. H. Roll.
flow sheet il diags Explosives Eng 21:7-14
Ja '43

Salt lines begin 1,000 feet under; Jefferson
Island salt co. of Louisville, Ky. R. A.
Latimer. il Mod Packaging 16:112-15+ D
'42

Poland

Salt production in German-occupied Poland.
For Comm W 11:26 Ap 10 '43

West Virginia

Salt publicized; West Virginia hopes to at-
tract new chemical plants. Business Week
p64+ O 9 '43

SALTER, Sir James Arthur, 1881-
Portrait. Marine Eng 48:171 Ag '43

SALTING of fish. See Fish as food—Salting

SALTING out

Lyotropic order and the effects of sodium
salts on the miscibility of cyclohexane and
methyl alcohol. E. L. Eckfeldt and W. W.
Lucas. bibliog J Phys Chem 47:183-9 F '43

SALTPETER. See Potassium nitrate

SALTPETER, Chile. See Sodium nitrate

SALTS

Long wave-length spectra of saturated car-
boxylic acids, esters, and salts. H. L. Mc-
Murry. bibliog J Chem Phys 10:656-60 N '42

See also

Chlorides	Nitrates
Crystallization	Phosphates
Electrolytes	Salt
Halides	Silicates
Ionization, Electroly- tic	Sulfates

SALTS, Complex

Complex compounds; their derivation and
nomenclature. O. J. Stewart. J Chem Educ
20:230-1 My '43

Interchange of hydrogen isotopes with com-
plex salts; kinetics of the interchange with
platinous and palladous tetramines. J. S.
Anderson and others. diag Chem Soc J
p367-72 Ag '43

Interchange of hydrogen isotopes with com-
plex salts; kinetics of the interchange with
the luteocobaltic complex. J. S. Anderson,
H. V. A. Briscoe and N. L. Spoor. diag
Chem Soc J p361-7 Ag '43

Spectroscopic studies of the simpler porphy-
rins; the absorption and fluorescence spec-
tra of *ms*-tetra(3', 4'-methylenedioxyphe-
nyl) porphine of HCl number four and of its
AgC₁₀H₈N₄, Zn, and Ni complex salts. V. M.
Albers, H. V. Knorr and D. L. Fry. bibliog
J Chem Phys 10:700-5 D '42

Steric factors in quaternary salt formation.
W. G. Brown and S. Fried. Am Chem Soc
J 65:1841-5 O '43

SALTS, Molten

Distribution equilibria between molten metals
and molten salts, with reference to the
stability of intermetallic compounds in the
molten state. E. Heymann, R. J. L. Martin
and M. F. R. Mulcahy. bibliog J Phys
Chem 47:473-84 O '43

Nature of molten salts and their mixtures.
M. F. R. Mulcahy and E. Heymann. bib-
liog J Phys Chem 47:485-96 O '43

SALTS in sea water. See Sea water

SALTZMAN, Charles McKinley, 1871-1942

Sketch. por Inst Radio Eng Proc 31:88 Mr '43

SALVADOR*See also*

Bridges—Salvador
Budget—Salvador

Coffee trade—Salva-
dor

Economic conditions

News by countries. For Comm W 10:17 Ja 9;
11:23-4 My 22; 12:11-12 Jl 31; 19 S 18; 13:
18 O 16 '43

Economic policy

Government measures for improvement of
living standards in El Salvador. H. G.
Ainsworth. Monthly Labor R 57:233-6 Ag '43

SALVAGE

Argentine ship salvage case is held under
jurisdiction of U.S. East Underw 44:42 O 15
'43

Lafayette afloat; 18 months to right the
rechristened Normandie. il diags Business
Week p17-18 Ag 14 '43

New salvage methods put tankers back to
work in a hurry. il Nat Pet N 35:22 Ag 18
'43

Normandie floats down bay to be conditioned.
Weekly Underw 149:1009 N 6 '43

Normandie's salvage proves great success.
East Underw 44:26+ Ag 13 '43

Our comeback at Pearl Harbor. R. G. Sker-
rett. il map Comp Air M 48:7152-9 O '43

Outstanding record made in salvaging
damaged tankers. Marine Eng 48:228 O '43

Pearl Harbor ships fight again. il Marine
Eng 48:178-87 Je '43

Petroleum specialty protects Lafayette's
fittings and machinery. Oil & Gas J 42:56
Ag 26 '43

Raising of Normandie another great salvage
job; feat at Pearl Harbor. Weekly Underw
149:308+ Ag 14 '43

Refloating the ex-liner Normandie. R. G.
Skerrett. il diags Comp Air M 48:7178-83
N '43

Refloating the S.S. Normandie. H. W. Hunt.
il diags Eng N 131:264-8 Ag 12 '43

Salvage award reduced by court; services in
towing tug. East Underw 44:23 Ja 15 '43

Salvage of the Lafayette. il Engineering 156:
218-19 S 10 '43

Salvaging of the John Cadwallader. D. S.
Brierley. il diags plan Marine Eng 48:182-7
Jl '43

Salvaging the Normandie. il Marine Eng 48:
198-203+ S '43; Excerpt. Mech Eng 65:814-
15 N '43

Scraping bottom; ships sunk in Great Lakes
expected to yield harvest of steel scrap.
Business Week p57 Jl 31 '43

Ship salvage. A. P. Macfarlane. il Engineer-
ing 155:290, 297-300 Ap 9 '43

SALVAGE (fires)

National board tells graphic tale of rubber
salvaged at Fall River. East Underw 44:14
Ja 1 '43

SALVAGE (merchandise)

Salvage problems in wartime controls. Nat
' Underw 47:1+ Ap 8 '43

SALVAGE (waste, etc.)

Aircraft industry competing with oil for re-
claimed casing and tubing; jigs from re-
claimed pipes. R. N. Swanson. il Oil & Gas
J 41:42-3 Ja 14 '43

Auxiliary scrap hunt yields 13,000,000 pounds
in four months; General electric co. H. O.
Watjen. Am Mach 87:87-8 Ap 1 '43

Ball milling for metal reclamation. G. F.
Metz. flow sheet il Metals & Alloys 18:63-5
Jl '43

Bridge repairs and construction with salvage
material; Ohio highway department. R. E.
Teegarden. il diag Roads & Sts 86:60+ Ag
'43

Built on scrap; salvage recovers everything
of value from aircraft plant sweepings.
Business Week p82 Je 19 '43

Bushing salvage method wins \$25 war bond;
winner is M. F. Craney. Eau Claire trans-
portation company. il Bus Transportation
22:50-2 F '43

Butte mines stress maintenance and salvage
as vital under war conditions. S. Veazey,
jr. and H. M. Courtney. il Eng & Min J
144:51-4 Mr '43

Carburizing compounds reconditioned auto-
matically. S. H. Brams. il diag Iron Age
150:67-9 N 26 '42

Casing salvage aids steel conservation. W. A.
Sawdon. diags Pet Eng 14:100D, 102, 104
S '43

SALVAGE (waste, etc.)—Continued

- Chemical industry and the salvage campaign; abstract. J. A. Lee. Chem & Met Eng 50: 146-7 Ja '43
- CCC buildings salvaged for army camps. il Eng N 131:162-4 JI 15 '43
- Clay plant equipment goes to war in the form of salvage scrap. il Brick & Clay Rec 101:32-4 D '42
- Conservation starves the scrap barrel. C. C. Shafer. il diags Aviation 42:138-42+ Je '43
- Converting old cans into crowns; brewer gets 1,100 gross a week of extra-quota caps from reclaimed tinplate. A. H. Haffenreffer, Jr. flowsheet il Food Ind 15:80-1 S '43
- Copper deplating. Steel 112:64 Ja 11 '43
- Curtiss-Wright's scrap metal reclamation program. il Aero Digest 43:167, 173, 179-+ JI '43
- Cutting waste and loss, goal in Snow Hill materials reclamation. G. F. Bieler, D. Green and J. Kyle. Coal Age 48:53-4 Ja '43
- Desoldering gas meters with hot oil. G. E. Griffin, Jr. il Am Gas Assn Mo 25:403-4+ O '43
- Details of nylon salvage program. Rayon 23: 640 N '42
- Devoe salvages millions of used paint brushes to lick bristle famine. il Sales Management 52:20-3 Ja 1 '43
- Doing a bigger job, with less; Western electric co. A. von Auw. il Steel 112:66-7+ Mr 22 '43
- Equipment reclamation saves materials in Kansas refinery. N. Williams. Oil & Gas J 42:66, 68-9 My 20 '43
- 5,000 tons of steel salvaged and reclaimed by one company; Phillips petroleum co. A. L. Foster. il Oil & Gas J 41:177-8 Mr 25 '43
- Ford reclaims tungsten carbide chips. diag Iron Age 152:61 JI 15 '43
- From auto bodies to bomber noses. S. D. Kirkpatrick. flow sheet il Chem & Met Eng 50:98-101 JI '43
- Gas lines laid of salvaged pipe. F. H. Love. il Pet Eng 14:37-8 D '42
- General Electric salvages 100 train loads of waste. il Blast F & Steel Pl 30:1284-5 N '42
- General Motors standardizes tool salvage methods. il Aero Digest 42:215-16+ Ap '43
- Get a scrap-salvage manager in every metal producing and metalworking plant. H. E. Fleming. il Steel 111:72-4 N 23 '42
- Getting out the scrap; urgent need of effective collection systems. il Steel 113:76-7 Ag 9 '43
- House magazine a mouthpiece not merely a reporter; Fleetwings' News "pick up the pieces" and "clean sweep" drives. P. F. Biken. il Ptr Ink 202:20, 22+ Ja 1 '43
- How to salvage chips and oil; why it pays. W. Heymann. diags Factory Management 101:124-6 F '43
- How tungsten carbide chips are reclaimed. diag Automotive & Aviation Ind 88:42 My 1 '43
- Ideal salvage setup; materials handling system in disposal of machine tool cuttings. G. E. Stedman. il Steel 112:70-2, 74+ Ja 18 '43
- Industrial salvage by electrodeposition; abstract. O. G. Hogaboom. Iron Age 152:57-8 JI 22 '43
- Ingenuity and scrap solve still problem. H. F. Bjork. il Chem Ind 53:49 JI '43
- Intensify oil's salvage drive. Nat Pet N 35: 5-6 Ja 20 '43
- Little things to heave at Hitler; scrap collection at mill of J. & P. Coats, inc. G. H. Arris. il Textile World 92:75 D '42
- Making crowns do double duty; brewer reconditioning used bottle caps. A. H. Haffenreffer, Jr. flowsheet il Food Ind 15:76-7 Ag '43
- Manufacturers drive to recover used pump parts containing scarce alloys. Pet Eng 14:98 Mr '43
- Materials handling facilities play important part in segregation and reclamation; General electric co. F. E. Bliven. il Steel 112: 106-7, 109+ My 3; 104-6 My 10 '43
- Method by which refining plants may accumulate scrap metals using sound business principles. G. M. Dent. plan Pet Refiner 22: 67-9 Mr '43
- Methods used to salvage and recondition old line pipe and fittings. S. Terrell. Oil & Gas J 42:149-50 S 23 '43
- Operating a modern salvage department; Westinghouse electric and manufacturing co. K. A. Fowler. il Metals & Alloys 18: 282-6 Ag '43
- Outstanding scrap collection job; Philadelphia electric company. il Edison Elec Inst Bul 10:402 N-D '42
- Plant restored with salvaged penstock; emergency repairs of Washington water power station. N. W. Humphrey. il Elec West 39: 42-3 N '42
- Practical programs for reclamation of metal scrap. J. L. Cannon and others. il plan Metal Prog 43:561-9 Ap '43
- Progress of the salvage program in chemical process industries. J. R. Callahan. flow diag il Chem & Met Eng 50:113-15 Mr '43
- Railroad bridge salvaged for highway use; temporary superstructure. C. A. Rothrock. diag Eng N 130:695 My 6 '43
- Railroads get new tips on scrap and reclamation. il Ry Age 115:12-15+ JI 3 '43
- Reclaim it or scrap it; Puget Sound Power & Light demonstrates efficient procedure. L. A. Williams. il Elec West 90:57-8 My '43
- Reclaiming alloy still tubes; with cost data. il diags Nat Pet N 35 pt 2:R210-12 My 5 '43
- Reclaiming band iron. il Pulp & Pa of Can 44:287 F '43
- Reclaiming crown caps. il Mod Packaging 16:74-6+ Je '43
- Reclaiming Kirksite dies in aircraft manufacture; metal spraying. il Steel 111:66+ D 28 '42
- Reclaiming values from brass clad bullet-jacket scrap. Metal Prog 42:866+ N '42
- Reclaiming worn parts; London, Midland & Scottish railway workshops; maintenance in connection with road transport. il Automobile Eng 33:165-8 Ap '43
- Reclamation work on motor vehicles, London Midland and Scottish railway. il diag Engineering 155:245-6, 250 Mr 26 '43; Engineer 175:255-6 Mr 26 '43
- Reconditioning milling cutters. P. M. Matthews. il Mach 49:206-10 D '42
- Recovering scrap from slag dumps; salvage operations of E. H. Heckett. G. R. Reiss. il Steel 112:94-6 F 8 '43
- Recovery of coating overspray; abstract. J. J. Zolad. Metals & Alloys 17:1268+ Je '43
- Recovery of paint overspray. S. D. Perlman. il Paint Oil & Chem R 105:16+ F 11 '43; Same cond. Aero Digest 43:269+ N '43; Abstracts. Chem & Eng N 21:297 Mr 10 '43; Am Mach 87:148 Je 24 '43
- Refinishing salvaged crown shells with lacquers or enamels. A. H. Warth. il Metal Finishing 41:399-401 Je '43
- Salvage, a duty as well as good business. il Food Ind 15:62-3 Mr '43
- Salvage and conservation of materials. A. B. Zook. Paper Tr J 116:23-5 Mr 25 '43
- Salvage and conservation of materials; Salvage div. War production board. Paper Ind 25:648+ S '43
- Salvage and reclamation; discussion. Am Gas Assn Proc 1942:88-92
- Salvage campaign yields dividends; Westinghouse electric and manufacturing company. O. J. Greenway. il Am Mach 87:94-6 F 18 '43
- Salvage is the answer to scarcity of replacement parts; use of oxyacetylene welding and cutting. R. B. Aitchison. il Welding J 22: 5-9 Ja '43
- Salvage! is the word in Ohio Div. 7 shop. H. J. McKeever. il Roads & Sts 86:67-71 Je '43
- Salvage of materials at Kalamazoo vegetable parchment company. R. S. Clark. Paper Tr J 116:89-90 Je 24 '43; Same abr. Pulp & Pa of Can 44:813-14 O '43
- Salvage of reduction-gear bolts. M. Hamilton. diags Am Mach 87:124 Ap 15 '43
- Salvage of war materials in relation to municipal refuse collection; abstract. C. La Ferle. Water & Sewage 81:44 Ja '43
- Salvage value of materials fixes Sacramento garbage disposal fee. Eng N 129:7-2 N 19 '42

SALVAGE (waste, etc.)—Continued

Salvage wire, hardware, lamps, insulators; reclamation department of Puget Sound power & light company. *il Elec W* 119:1450-1 My 1 '43

Salvaging a Kettle River bridge. *F. A. Banks. il Civil Eng* 13:222-3 My '43

Salvaging aircraft structures in process of manufacture. *R. L. Schleicher. il Mech Eng* 65:711-18 O '43

Salvaging and reconditioning on the Detroit Edison system; illustrations, with text. *Elec W* 118:1778-80 N 28 '42

Salvaging insulation from wire and cable. *A. C. Mathews. il Factory Management* 101:72-5 Ap '43

Salvaging process scrap. 1942. *R. D. Bullard. Metals & Alloys* 17:89-90 Ja '43

Salvaging, rebuilding storage tanks. *il Nat Pet N* 34 pt 2:R404-6 N 25 '42

Salvaging waste paint. *il Comp Air M* 48:7094 JI '43

Scarce materials are vital to the war effort. *W. J. Clardy. Mech Eng* 65:567-72 Ag '43

Scrap bears no label. *Nat Safety N* 46:26+-N '42

Scrap drive helps plant efficiency; American screw company. *il Am Mach* 86:1291 N 12 '42

Scrap goes back to work; Bell aircraft corp., Buffalo, R. B. Cole. *il Factory Management* 101:120-3 JI '43

Scrap: here's how Standard of New Jersey has organized for continuous drive. *J. P. O'Donnell. il Oil & Gas J* 41:53-9+ My 6 '43

17-year-old Dresser-coupled line reclaimed. *il Gas Age* 91:14-15 Ja 28 '43

Simple splicing operation saves rubber hose; Canadian Pacific railway's Angus shops. *Rubber Age* 53:327 JI '43

Systematic methods improve scrap drive; American metal co. increases yield of salvaged material. *Eng & Min J* 143:50 D '42

\$3,500,000 saved; program for conservation of materials of Phillips petroleum co. *il Nat Pet N* 35 pt 2:R375-7 Ag 4 '43

Tool reclamation pays its way; International harvester company. *W. A. Johnson and L. Schultz. il Am Mach* 87:83-5 O 28 '43

Tool reclamation saves huge total of hours on war production job; International harvester co.; abstract. *W. A. Johnson. Iron Age* 151:90C Mr 18 '43

Tool salvage exhibit at General Motors. *il Iron Age* 151:62, 64 F 4 '43

Tool salvaging by low-temperature joining; with cost data; Castolin eutectic process. *B. Laune. Welding J* 22:423-5 Je '43

20-ton crane built of scrap saves 18-months production time. *il Blast F & Steel Pl* 31:548 My '43

Use it now, or scrap it; order at duPont. *C. Snyder. il Factory Management* 101:126-31 Ja '43

Use of salvaged solder for the repair of gas meters. *G. E. Hitz. Gas Age* 91:17-19 Je 3 '43

Use reclaimed parts, salvage copper wire; two machines developed. *A. H. Bardewyck. diags Elec W* 120:852 S 4 '43

Used armor rod salvaged for reuse. *S. Tjepkema. diag Elec W* 120:860 S 4 '43

Using equipment parts you formerly threw away. *E. W. Zick. Foundry* 71:138+-JI '43

Utilities are getting in the scrap; survey of the methods and results from 76 companies. *il Elec W* 118:1600-1 N 14 '42

Wartime housekeeping; conservation of time, manpower and materials; Pacific gas and electric co. *E. M. Seel. il Elec West* 89:39-41 N '42

Wide-open throttle on reclaiming materials. *il Ry Age* 113:870-4 N 28 '42

Your scrap job for 1943. *il Power* 87:41 Ja '43

See also

Oil reclamation	Refuse, Utilization of
Railroads—Scrap material	Scrap metal
Railroads—Track reclamation	Street railroads—
	Track reclamation

SALVIA officinalis. See Sage

SAMPLES, Textile. See Textile samples

SAMPLING

How to obtain accuracy in sampling. *C. Demond. Rock Prod* 46:78-9+ Mr; 65-6+ My '43

Standard sampling methods; checking the chemical analyses of steel shipments. *diags Steel* 112:128+- My 17 '43

See also

Air sampling	Sewage sampling
Dust sampling	Soil sampling
Gas, Natural—Sampling	Water sampling
Ore sampling	Wool sampling

SAMPLING (statistical methods)

Contents of Tippett's Random sampling numbers. *R. Gage. Am Stat Assn J* 33:223-7 Je '43

Efficiency of deep stratification in block sampling. *B. J. Tepping, W. N. Hurwitz and W. E. Deming. Am Stat Assn J* 33:33-100 Mr '43

Errors in card punching. *W. E. Deming, B. J. Tepping and L. Geoffrey. Am Stat Assn J* 37:625-36 D '42

Marketing and sampling uses of population and housing data. *A. R. Eckler and E. P. Staudt. Am Stat Assn J* 38:87-93 Mr '43

Opportunities in mathematical statistics, with special reference to sampling and quality control. *W. E. Deming. Science* 97:209-14 Mr 5 '43

Practical applications of theoretical sampling methods. *J. N. Webb, M. S. Northrop and S. L. Payne. Am Stat Assn J* 38:69-77 Mr '43

Quality assurance through sampling inspection. *H. Rissik. Engineer* 175:334-5, 346-7 Ap 23-30 '43

Size of samples. *R. H. Parsons. Engineering* 154:294-5, 395 O 9, N 13 '42

Some census aids to sampling. *M. H. Hansen and W. E. Deming. Am Stat Assn J* 38:353-7 S '43

Some sampling uses of data from the census of agriculture. *I. Holmes. Am Stat Assn J* 38:78-86 Mr '43

SAND

British non-ferrous minerals; quartz, sandstone, sand. *W. H. Reynolds. Chem Age (Lond)* 48:549-52 My 22 '43

Changing sand size distribution. *Rock Prod* 46:50-1 JI '43

Determination of sand in well water. *G. C. Bunker. diag Water Works & Sewerage* 90:223 Je '43

Dielectric constant and loss angle of dry and wet sand for centimetric waves; abstract. *E. Löb. Wireless Eng* 20:345 JI '43

Incendiary bomb protection with packaged sand. *L. S. Flint. il Rock Prod* 45:34-6+-N '42

Lateral pressure of sand. *A. A. Fordham. il diags Engineering* 155:341-2, 350 Ap 30 '43

Measuring intercept sphericity of sand grains. *G. Rittenhouse. diag Am J Sci* 241:109-16 F '43

Methods of determining absolute porosity. *G. M. Stearns. Oil & Gas J* 42:77 Ag 12 '43

Mineral dressing of Oregon beach sands; concentration of chromite, zircon, garnet, and ilmenite. *J. Dasher, F. Fraas and A. Gabriel. diags U S Bur Mines Rep of Invest* 3668:1-19 '42

Record sand and gravel production in 1942. *Rock Prod* 46:55 Ag '43

Relation of shape to the passage of grains through sieves. *G. Rittenhouse, bibliss, Ind & Eng Chem Anal ed* 15:153-5 F 15 '43

Sand blending; simple mathematical methods of determining size distribution. *F. C. Bond. Rock Prod* 45:60+-O '42; Discussion (Clarifying the sand blending problem). 46:55 Mr '43

Sand leaching at Nangodi; small-scale cyanidation enterprise in West Africa. *W. H. Dennis. diag Eng & Min J* 144:65-7 Mr '43

Skidproofing highways with chemically-treated sand in Ontario. *il Roads & Bridges* 81:112-14 O '43

Waves as a sand-transportation agent. *U. S. Grant. Am J Sci* 241:117-23 F '43

See also

Aggregates	Sand blast and other
Beaches	headings beginning
Bituminous sand	Sand
Concrete—Aggregate	Silica

SAND—Continued**Stone sand**

- Browtown silica meets growing war demands. R. S. Torgerson. *il Rock Prod* 46: 61-3+ O '43
- Crushing agricultural limestone by-product; Hillsville district. *il Rock Prod* 46:56+ Ap '43
- Million tons for Douglas dam; Birmingham slag company builds plant to produce aggregates and stone sand. B. Nordberg. *il Rock Prod* 45:54-8 D '42
- Reduce gravel to sand to meet specifications; River sand and gravel co. W. B. Lenhart. *il Rock Prod* 46:48-9 Je '43
- Span river with belt conveyors for Fontana Dam aggregates; rod mills reduce crushed stone to fine aggregate. W. B. Lenhart. flow sheet *il Rock Prod* 46:49-57+ S '43

SAND, Bituminous. See Bituminous sand

SAND, Filter

- Tentative standard specifications for filtering material. Am Water Works Assn J 35:455-70 Ap '43

SAND, Foundry

- Design of sand castings for quantity production. N. F. Hindle. *il diags Metals & Alloys* 17:770-5, 970-7, 1196-1202 bibliog (p1202) Ap-Je '43
- Foundry sands; properties of New Jersey and New York sands; plants of Whitehead brothers company. *il Rock Prod* 46:52-7+ F '43
- Light metal sand practice, inspection; abstracts of papers, A.F.A. aluminum and magnesium division. *Iron Age* 151:70-1+ My 6 '43
- Molding sand practice for magnesium foundries. C. Sanders. *Foundry* 71:209-10 Je '43
- Molding sands and materials; abstract. *Metals & Alloys* 18:104+ J1 '43
- Numerous factors included in sand refractoriness. F. B. Riggan. *Foundry* 71:171+ Ag '43
- Production of malleable-iron castings. J. Roxburgh. *Engineering* 156:236-7 S 17 '43
- Sand stretcher; resin binder used in molds. *Business Week* p62+ O 23 '43
- Second report of the moulding materials subcommittee of the Steel castings research committee. *Iron & Steel Inst J* 146:393-454, pl 38-9 no 2 '42; Excerpts. *Engineering* 154: 487-8 D 18 '42; Discussion. *Iron & Steel Inst J* 146:455-66 no 2 '42; *Engineering* 154: 514 D 25 '42
- Select proper grade of molding sand. D. E. Cutler. *Foundry* 71:142-3 Ja '43
- Shop course considers molding sand problems; A.F.A. annual meeting. *Foundry* 71: 126 J1 '43
- Skin dry sand for large glass molds. *Foundry* 71:149-50 Ja '43
- Steel foundry sands; abstract. E. C. Pigott. *Metals & Alloys* 18:850+ O '43
- Study of burnt-on or adhering sand; abstract. J. B. Caine. *Foundry* 71:125-6 J1 '43
- See also
- Molds (for casting)

Reclamation

- Core sand reclamation by the thermal method; Wright aeronautical corp. W. A. Phair. *il diags Iron Age* 150:43-8 D 17 '42

SAND and gravel association, National. See National sand and gravel association

SAND and gravel plants

- Foundry sands; properties of New Jersey and New York sands; plants of Whitehead brothers company. *il Rock Prod* 46:52-7+ F '43
- From boats to aggregates; Parker bros. & co., Houston, builds own boats, produces sand and gravel, dredges shell, and batches ready mixed concrete and shell road mix. *il Rock Prod* 46:64-6 J1 '43
- How California rock and gravel co. cleans aggregates, sells red clay and promotes efficiency. W. L. Netherby. *il Rock Prod* 46:52-4+ Mr '43
- Manufactures and sells all building supplies; J. P. Burroughs & sons. *il Rock Prod* 46: 79+ O '43

- Many sizes for New York market; Metropolitan sand and gravel corp. B. Nordberg. *il diags Rock Prod* 46:32-40+ F '43
- Produce 180 tons road mix per hour; Porter W. Yett, Portland, Ore. uses quarry methods in excavating sand and gravel. R. S. Torgerson. *il Rock Prod* 46:52-4 My '43
- Small plants serve big jobs; Yazoo-Tennessee gravel co. W. B. Lenhart. *il Rock Prod* 46: 44-6 J1 '43

Accidents

- Accident rates decline in sand and gravel industry. *Rock Prod* 46:52+ Ag '43

Directories

- Sand, gravel and crushed stone producers, Canada. *Roads & Bridges* 81:78-84 J1 '43

Equipment

- Bulldozer for short hauls; Graham bros. F. S. Bixby. *il Rock Prod* 46:69-70 Mr '43
- Million tons for Douglas dam; Birmingham slag company builds plant to produce aggregates and stone sand. B. Nordberg. *il Rock Prod* 45:54-8 D '42
- Preventing failures of equipment; Dresser sand co.'s Missouri River plant. E. Dresser. *il Rock Prod* 46:54-5 O '43
- Processing 250,000 tons of aggregates; Union sand and gravel co. R. S. Torgerson. *il diags Rock Prod* 45:44-5+ N '42
- Reduce gravel to sand to meet specifications; River sand and gravel co. W. B. Lenhart. *il Rock Prod* 46:48-9 Je '43
- Remove overburden by pumping; Fordyce gravel company. W. B. Lenhart. *il Rock Prod* 46:48-50 Ag '43
- Transportation units to fit the job; Andersen sand & gravel co. *il Rock Prod* 46:66, 68, 70+ S '43
- Two T.V.A. dams served from one plant. B. Nordberg. *il Rock Prod* 45:49-51 D '42
- Welding in sand and gravel plants. H. Barrett. *il Rock Prod* 46:56-7+ O '43

Safety measures

- Ideas at work; Victory sand and stone co. J. L. Roe. *il Nat Safety N* 47:30+ Ap '43
- Mining's foster child grows up. W. E. Hole. *il Nat Safety N* 48:76-7+ O '43
- Sand and gravel producer's methods pay dividends; Victory sand and stone company. J. L. Roe. *il Rock Prod* 46:38-40 Ap '43
- Winners of sand and gravel safety trophies. *il Rock Prod* 45:110 D '42

SAND bags. See Sandbags

SAND blast

- Abrasive blasts save time on production front. *il Comp Air M* 48:7146-7 S '43
- Blast cleaning equipment; its care and maintenance. D. C. Turnbull. *il Iron Age* 150: 36-9 D 31 '42
- Blast cleaning 500-lb. bombs. *il Iron Age* 151: 61 Mr 18 '43
- Blast cleaning greatly facilitates inspection of bomb casings. *il diags Steel* 112:86+ My 24 '43
- Cleaning castings in a midwestern shop. *il Foundry* 71:116+ Ja '43; Same. *Steel* 112: 92+ F 8 '43
- Cleaning castings with water and sand; hydroblast tumbling barrel. *Foundry* 71:134 Mr '43
- Compressed air in industry. E. F. Bramin. *il Steel* 112:100+ Mr 8 '43
- Conducting accurate test on abrasive performance. *Foundry* 71:166-7 Mr '43
- Drum reconditioning by Newark steel drum company; the sandblast process. *il Chem Ind* 52:215-16 F '43
- Dust-free grinding and blast cleaning; Lodge & Shipley machine tool company. F. Schoeffler. *il Nat Safety N* 47:18-19+ My '43
- Huge blast-cleaning room for locomotives. *il Mach* 49:187 F '43
- SAND drying**
- Rapid sand drying. *diag Rock Prod* 46:45 Mr '43

SAND dunes

- Continental drift and ancient dunes. J. R. Peters. *Science* 98:60 J1 16 '43

SAND handling

Changing sand size distribution. Rock Prod 46:50-1 J1 '43

Foundry plant & machinery sandslingers. Il Mech Handling 30:27-8 Ja '43

Gravity-bucket conveyors or pivoted-bucket carriers. W. H. Atherton. diag Mech Handling 30:65-6 F '43

Processing 250,000 tons of aggregates; Union sand and gravel co. R. S. Torgerson. Il diag Rock Prod 45:44-5+ N '42

Retaining fines in concrete sand; Montgomery gravel company. B. Nordberg. Il Rock Prod 45:52-3+ D '42

See also

Sand and gravel plants

SAND-lime brick association

Annual meeting, Chicago, Feb. 16-17. Rock Prod 46:95 Mr '43

SAND washing

Changing sand size distribution. Rock Prod 46:50-1 J1 '43

SANDBAGS

Milweproofing of military fabrics. C. W. Hock and M. Harris. bibliog Rayon 23:670, 711-12 N-D '42

Modern milweproofing. P. E. N. Cillium. Textile Col 65:363-5 Ag '43

Resistance of textiles to micro-organisms. Can Chem & Process Ind 27:480+ Ag '43

SAN DIEGO, California**Industry**

San Diego raises yellow chip fund to finance post-war plans. Sales Management 52:40+ Je 15 '43

Sewerage

Solving boom town San Diego's sewage problem. B. D. Phelps. Il diag plan map Pub Works 74:14-19 J1 '43

SAN DIEGO gas and electric company

Bonds offered. Comm & Fin Chr 158:1863 N 8 '43

SANDING machines

Counterpoise cancels vibration in sander. Il diags Product Eng 14:340-1 Je '43

SANDMEYER reaction

Interpretation of the Sandmeyer reaction; further evidence in favour of a mechanism involving anionoid halogen. H. H. Hodgson, S. Birtwell and J. Walker. Chem Soc J p720-3 N '42

SANDPAPER

Behr-Manning corporation; high pressure hot water heating system; drying system to facilitate production of abrasives and war materials. J. O. Amstutz and J. F. Gschwind. Il diag Heat & Ven 40:41-5 Ja '43

Printing colors with sandpaper. W. Van Gasbeek. Il Inland Ptr 111:47-8, 52-3 Ag '43

SANDSTONE

British non-ferrous minerals; quartz, sandstone, sand. W. H. Reynolds. Chem Age (Lond) 48:549-52 My 22 '43

Derivation of reservoir rocks. W. V. Howard. diags Oil & Gas J 42:158-60+ Je 24 '43

Permeability of porous solids to gases and liquids. L. Grunberg and A. H. Nissan. bibliog diags Inst Pet J 29:193-225 Ag '43

SAN FRANCISCO

San Francisco's post-war workpile: what it is and how it's being built. E. Gidlow. Sales Management 52:21-3 My 20 '43

Architecture

San Francisco's Radio City; views and plans. Arch Rec 92:37-40 N '42

Rapid transit

Market Street railway company. O. Ely. Pub Util 30:855 D 17 '42

See also

Motor bus lines—San Francisco

Sanitary affairs

Sanitary fill experience at San Francisco. Il Eng N 130:554-7 Ap 22 '43

Water supply

Plans for emergency distribution system repairs in San Francisco. G. W. Fracy. Am Water Works Assn J 35:69-70 Ja '43

SANGUINARINE

Sanguinarine rivals colchicine. Franklin Inst J 235:651 Je '43

SANITARY chemicals

See also

Cleaning compositions Insecticides
Disinfection and disinfectants Soap materials

SANITARY chemistry

See also

Air—Analysis Soap
Sewage disposal Water—Analysis

SANITARY districts

Illinois water litigation, 1940-1941; petition by state of Illinois for temporary increase in diversion from Lake Michigan. L. Pearce. bibliog map Am Soc C E Proc 68: 1689-1713 D '42; Discussion. 68:942-8 Je '43

Organizing and financing sewage treatment projects. S. A. Greeley. Il Am Soc C E Proc 68:1727-42 D '42; Discussion. 68:1801-6; 69: 587-8, 1109-14 D '42, Ap, S '43

See also

Water districts

SANITARY engineering

Municipal affairs and sanitation activities, 1942. E. J. Cleary. Il diag Eng N 130:190-3 F 11 '43

New York state sewage works association meeting and annual joint dinner with A.S.C.E.'s Sanitary engineering division. Water Works & Sewerage 90:56-60, 101-4 F-Mr '43

Sanitary engineer in the post-war world. A. Wolman. Water Works & Sewerage 90: 105-8 Mr '43

Sanitary engineering as a profession. E. S. Chase. J Eng Educ 33:514-19; Discussion. 520-5 Mr '43

Sanitary engineering division of the A.S.C.E. meeting, New York, Jan. 21-22. Water Works & Sewerage 90:56-60 F '43

Sanitation in Latin-America. G. M. Fair. Il Eng N 130:210-12 F 11 '43

See also

Drainage	Sewage disposal
Dust removal	Sewage disposal,
Factory sanitation	Rural
Filters and filtration	Sewerage
Heating	Smoke prevention
Military training	Snow removal
camps—Sanitation	Trade waste
Mosquitoes	Ventilation
Municipal engineering	Water pollution
Refuse collection	Water purification
Refuse disposal	Water supply
Sanitation	Water supply engi-
also National research council—Sanitary	neering
engineering committee	

SANITARY engineers

A.W.W.A. and procurement of sanitary engineers. Am Water Works Assn J 35:653-4 My '43

Needs, functions and objectives of the sanitary engineering procurement and assignment service. C. W. Klassen. Am Water Works Assn J 35:651-3 My '43; Same. Water Works & Sewerage 90:165-6 F '43; Abstract. Eng N 130:693-4 My 6 '43

See allocation of sanitary engineers as next WMC move. Eng N 130:87 Ja 21 '43

Wartime distribution of sanitary engineers; War manpower commission release. Am Water Works Assn J 35:265-6 F '43

SANITARY laws. See Public health laws**SANITARY supply association, National. See National sanitary supply association****SANITARY ware**

Production and testing specifications for sanitaryware. Cer Ind 41:64, 66 O '43

Manufacture

Use of ball clay in sanitary ware. J. R. Beam. Am Cer Soc Bul 21:253 N 15 '42

SANITATION

Canadian institute on sewage and sanitation 8th annual meeting, Toronto, Oct. 29-30. Water & Sewage 80:19-28, 64-6 N '42

Community sanitation in wartime, and some problems of the public health engineer. A. D. Weston. Water Works & Sewerage 90: 337-9 S '43

First-aid for sanitation needs; questions and answers prepared by U.S. Public health service. *il* Eng N 129:775-6 D 3 '42

Hemisphere betterment, health and sanitation. A. R. Dreisbach. *il* For Comm W 9: 4-5+ N 21 '42

Modern sanitation pays dividends; use of new solution (Roccal) on fresh produce reduces bacteria and retards dehydration. J. R. Adams. *il* Refrig Eng 44:383-4 D '42

Municipal sanitation associations organize central committee. Concrete 51:36-7 O '43

Polio; second crusade of our industry. *il* Dom Eng 162:58-9+ J1; 59-61 Ag; 59-61, 84+ S; 64-6 O '43

Recollections of a street corner pump and the progress of sixty years; some boys of Louisville. Y. Henderson. Science 98:25-8 J1 9 '43

Sanitation manual for land and air conveyances operating in interstate traffic. Pub Health Rep 58:159-93 Ja 29 '43

See also

Air conditioning	Mosquitoes
Air lines—Sanitation	Plumbing
Air purification	Public health
Airplanes—Sanitation	Refuse disposal
Disinfection and disinfectants	Sanitary engineering
Drinking fountains	Sewage disposal
Dust removal	Ships—Sanitation
Factory sanitation	Smoke prevention
Food factories—Sanitation	Trade waste
Hygiene	United States—Army
Hygiene, Industrial	—Medical and sanitary affairs
Laundries—Sanitation	Ventilation
Military training camps—Sanitation	Water purification
	Water supply

SANITATION, Household

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Heating	Plumbing
Lighting	Ventilation

SANITATION, Military. See Military training camps—Sanitation; World war, 1939—Medical and sanitary affairs

SANITATION, Rural

See also

Sewage disposal,
Rural
Water supply, Rural

SANITATION workers

Wartime personnel problems; discussion at meeting of Canadian institute on sewage and sanitation. Water & Sewage 80:67-8, 70+ N '42

SAN MIGUEL, Salvador

Sewerage

Treatment plant built of local materials. A. N. Carter. *il* diags plan Eng N 131:528-30 O 7 '43

SANSEVIERIA. See Bowstring hemp

SANTA ANA, California

Industries

Bombers via R.F.D.; rural towns supplying men, women, and buildings in newest subcontracting test. Business Week p52 D 12 '42

SANTA CLAUS. See Advertisements, Pictorial—Santa Claus

SANTA CRUZ, California

Santa Cruz formula for maintaining revenue; community publicized as haven for families non-essential to the war effort. Elec W News ed 119:9 Ja 2 '43

Santa Cruz solves the hegira problem; advertising campaign of Santa Cruz gas and electric co. under direction of Chamber of commerce. W. B. Stoddard. Am Gas J 159: 28 Ag '43

SANTA FE, New Mexico

Water supply

Earth-filled dam at Santa Fe; puddled core of Nichols dam uses material from reservoir. J. N. Van Sant. *il* Civil Eng 13:366-9 Ag '43

SANTA FE railway. See Atchison, Topeka and Santa Fe railway

SANTOMERSE

Studies on synthetic detergents. J. C. Harris. Soap & San Chem 19:21-4 Ag; 29-31+ S '43

SANTONIN

Studies in the santonin series; the two new desmotropo-santonins and the two new desmotropo-santonous acids. H. Minlon, C. Lo and L. J. Chu. bibliog Am Chem Soc J 65:1780-1 S '43

SANTOS, Brazil

Santos, free port for Paraguayan trade. M. B. MacKrell. *il* For Comm W 10:10-11 F 20 '43

SAPODILLA

Saponins from the species of the sapotaceae. C. D. Mell. Textile Col 65:107-8 Mr '43

SAPOGENINS

Sapogenins; the position of the carboxyl group in oleanolic and glycyrrhetic acids. G. A. R. Kon and W. C. J. Ross. Chem Soc J p741-4 D '42

Saponins and sapogenins; bethogenin and trillogenin, new sapogenins from trillium erectum. S. Lieberman and others. bibliog Am Chem Soc J 64:2581-3 N '42

Saponins and sapogenins; some color reactions of triterpenoid sapogenins. C. R. Noller and others. Am Chem Soc J 64:3047-9 D '42

Saponins and sapogenins; the composition and constitution of bethogenin. C. R. Noller and M. R. Barusch. Am Chem Soc J 65: 1435-6 J1 '43

Saponins and sapogenins; the constitution of bethogenin. C. R. Noller and M. R. Barusch. Am Chem Soc J 65:1786 S '43

Sterols; sapogenins; bethogenin. R. E. Marker and others. Am Chem Soc J 65: 1653-9 Ag '43

Sterols; sapogenins; isolation and structures of thirteen new steroidal sapogenins; new sources for known sapogenins. R. E. Marker and others. Am Chem Soc J 65:1199-1209 Je '43

Sterols; sapogenins; kryptogenin, a new type of sapogenin from Beth root. R. E. Marker and others. Am Chem Soc J 65:739 Ap '43

Sterols; sapogenins; pennogenin, nologenin and fesogenin, three new sapogenins from Beth root. R. Marker and others. Am Chem Soc J 65:1243 Je '43

Sterols; sapogenins; the sapogenin of trigonella foenum-graecum. R. E. Marker and others. Am Chem Soc J 65:1247 Je '43

Sterols; sapogenins; the steroidal sapogenin from balanites aegyptica (Wall.). R. E. Marker and others. Am Chem Soc J 65: 1248-9 Je '43

Sterols; sapogenins; the structure of lila-genin. R. E. Marker and others. Am Chem Soc J 65:1434 J1 '43

See also

Melanthigenin

SAPONIFICATION

Determination of the saponification number of fats and oils; elimination of the blank. W. Rieman, 3d. Ind & Eng Chem Anal ed 15:325-6 My 15 '43

Electrostatic influence of substituents on reaction rates; saponification of ethyl benzoate, ethyl toluate, ethyl anisate, ethyl *p*-chlorobenzoate, and ethyl *p*-nitrobenzoate. D. Price and F. H. Westheimer. J Chem Phys 11:150-3 Mr '43

Fatty acid saponification; abstract. C. V. Carden. Soap & San Chem 19:61 J1 '43

Rate of saponification in metal cleaning, a preliminary study; abstract. R. Twynning and E. M. Baker. Iron Age 152:67 J1 15 '43

SAPONINS

Saponin from the species of buddleia. C. D. Mell. Textile Col 65:114 Mr '43

Saponins from the species of the buckthorn family. C. D. Mell. Textile Col 65:108-9+ Mr '43

SAPONINS—Continued

Saponins from the species of the sapotaceae. C. D. Mell. Textile Col 65:107-8 Mr '43

SAPPHIRES, Artificial

American-made sapphires. *il* R Sci Instr 14: 121 Ap '43

Domestic synthetic sapphires. *il* Chem & Eng N 20:1666 D 25 '42; Marine Eng 48:218 Ja '43

Synthetic corundum; white sapphire now man-made-in-America. *il* Sci Am 168:62 F '43

Synthetic sapphire for war precision instruments. Science 95:sup10+ O 23 '43

Synthetic sapphire production reaches commercial scale in U.S. *il* Product Eng 14: 668-70 O '43

Synthetic white sapphire. J. M. Crowe. Chem Ind 51:869 D '42

SARAN

Acid-resistant rope. *il* Mod Plastics 20:71 My '43

Electroplating masks. R. R. Bradshaw. *il* Mod Plastics 20:78-9+ Mr '43

Extruded Saran pipe for industrial plants. *il* Mod Plastics 20:60+ Ja '43

PPHA to use plastic tubing. *il* Arch Rec 93:80+ Je '43

New plastic tube; made from Dow chemical co.'s Saran molding powder. *il* Business Week p73 N 21 '42

New textile applications for Saran. *il* Rayon 24:473 S '43

Now Saran and Velon for textiles; yarns derived from vinylidene chloride. *il* Textile World 92:83-4 D '42

Plastic pipe and power; Saran pipe is being utilized in rectifying and heat exchange installations in electrolytic mass production of magnesium. *il* Chem & Eng N 21:1052-3 J1 10 '43

Plastic pipe for rectifiers; Saran pipe and fittings on heat exchangers and rectifying units at Dow magnesium corp. plant. *il* Chem & Met Eng 50:116 J1 '43

Saran film, its properties and wartime uses; moisture proof packaging. W. R. Dixon and H. L. Schaefer. *il* Mod Packaging 16: 72-3+ J1 '43

Saran pipe and tubing; chemical resistance. *il* Chem & Eng N 20:1508-10 N 25 '42

Saran tubing and pipe. *il* Mod Packaging 16:88 J1 '43

Studies relating to use of Saran for water pipes in buildings and for service lines. F. M. Dawson and A. A. Kalinske. *il* Am Water Works Assn J 35:1058-64 Ag '43

Vinylidene chloride polymers. R. C. Reinhardt. bibliog(59 references) *il* diag Ind & Eng Chem 36:422-8 Ap '43

Vinylidene chloride polymers; characteristics of Saran. W. C. Goggin and R. D. Lowry. Am Gas J 159:23-5 O '43

SARCOSINE

Raman spectra of amino acids and related compounds; sarcosine, ethanolamine, choline, betaine and betaine derivatives. J. T. Edsall. bibliog Am Chem Soc J 65:1767-70 S '43

SARDIK food products corporation

Food and drink; National Distillers buying into Sardik, a firm specializing in dehydration. Business Week p67-8 S 4 '43

SARDINE oil

Sardine oil output put at 14,000,000 gallons. Oil Paint & Drug Rep 144:3+ Ag 2 '43

SARDINES

Sardines get a czar. Business Week p37-8 J1 31 '43

SARDINIA

See also
Hydroelectric plants
—Sardinia

SASHES, Steel

Steel sash; how to repair and re-use. J. B. G. Mesker. *il* Am Bld 64:56-7+ D '42

SATEEN

Manual of military fabrics; 9-oz. sateen. *il* Textile World 93:94-5 S '43

SATELLITES

Planet companions; three faint companions of stars are half way in mass between a star and a planet. H. N. Russell. *il* Sci Am 168:260-1 Je '43

SAUERKRAUT

Kraut is out; packers' stocks are frozen. Business Week p83 O 23 '43

SAULT SAINTE MARIE canal

New, MacArthur lock formally opened. Iron Age 152:104 J1 15 '43

To hasten ore; MacArthur lock will increase flow of iron ore through the Soo canal by 10,000 tons a day. *il* Business Week p24 J1 10 '43

SAUSAGES

Drying of meats; rate of dehydration of uncooked cured ground meats. E. C. Ritchell, E. L. Piret and H. O. Halvorson. *il* Ind & Eng Chem 35:1189-95 N '43

Pictures of processes; sausage making as done by Armour & co. Food Ind 15:66-7 Ja '43

Sausage is moving. Business Week p29-30 O 16 '43

SAVAGE arms corporation

Securities disturbing investors. J. S. Williams. Mag of Wall St 71:168 N 28 '42

SAVANNAH, Georgia**Rapid transit**

How Savannah handles 110 percent riding increase. *il* Transit J 86:444-5 D '42

SAVING

American people are saving money; disposition of individual income payments, 1939-1942. Mag of Wall St 72:41 Ap 17 '43

Cash for six million homes; wartime savings. Arch Forum 79:42-3 S '43

Components of individuals' liquid saving, 1940-1942; graph. Pub Util 31:433 Ap 1 '43

Effect of stored up purchasing power on our post-war economy. W. S. Landis. Comm & Fin Chr 158:1397+ O 7 '43

Estimates of capital formation and offsets to saving. M. Hoffenberg and M. S. Lewis. R Econ Stat 25:141-52, 164-5 My '43

Every 6d. in the kiddy counts; thrift in Britain's services. C. Deverell. *il* Banking 35:23-4 Ja '43

German Europe; savings week. Economist 143:608 N 14 '42

Gross saving by individuals in U.S. during 1940-1942. Nat City Bank p41-2 Ap '43

Helpful booklet attracted people to New York banks. E. B. Sturges, 2d. Bankers Mo 60: 414-15 S '43

Interest rate and saving. D. S. Tucker. Am Stat Assn J 38:101-2 Mr '43

Luxury of saving. Economist 144:170 F 6 '43

Nation must turn back to thrift to meet war debt. H. H. Heilmann. Comm & Fin Chr 158:1712 O 28 '43

New purpose in saving. Bankers Mo 59:492+ N '42

Our savings supply. H. G. Moulton. Trusts & Estates 77:331-2 O '43

Present savings and postwar markets. S. H. Slichter. Harvard Business R 22 no 1:1-73 pt 2 [O] '43

Revenue implications of a progressive-rate tax on expenditures; a study of selected aspects of Irving Fisher's proposal to eliminate savings from the income tax base. C. L. Harriss. bibliog R Econ Stat 25:175-91 Ag '43

Saving or spending? A. Gray. Ptr Ink 205: 22 O 29 '43

Savings and war finance. W. W. Aldrich. Bankers M 146:501-12 Je '43; Same abr. Comm & Fin Chr 157:1777+ My 13 '43

Savings stimulated by the war. L. P. Smith. Bankers Mo 59:540-1 D '42

They sell thrift in England. F. Whitmore. Banking 35:29 Je '43

Wartime savings and postwar inflation. E. T. Weiler. Survey of Cur Business, 23:13-18 J1 '43

Wartime savings and post-war markets. S. M. Livingston. Survey of Cur Business 23: 12-18 S '43

See also
Building and loan
associations
Christmas clubs
Hoarding
Insurance, Industrial

Old age pensions
Pensions, Industrial
Savings banks
Savings deposits

SAVING—Continued

Statistics

American economy in 1942: consumer income and savings; with comparisons for earlier years. C. A. R. Wardwell and R. B. Bangs. *Survey of Cur Business* 23:17-18 Ja '43
 Estimates of saving. M. Hoffenberg and M. S. Lewis. *R. Econ Stat* 26:128-41 My '43
 Individual savings up sharply in first quarter; only temporary accumulation of funds: SEC. *Comm & Fin Chr* 157:1986 My 27 '43
 Individual savings up sharply in third quarter. *Comm & Fin Chr* 156:1904 N 26 '42
 Large volume of savings presents definite threat of inflation declares SEC report covering fourth quarter of 1942. *Comm & Fin Chr* 157:737- F 25 '43
 Mutual savings banks; principal assets and liabilities, by states, Dec. 31, 1941 and 1942, and June 30, 1942. *Fed Res Bul* 29:685 JI '43
 Rise of individual savings. *Survey of Cur Business* 23:18-19 Mr '43
 Savings at unprecedented levels. *Survey of Cur Business* 22:7-9 D '42

SAVING, Compulsory

Asks Treasury to defer compulsory savings. F. D'Olier. *Ins Field (Life ed)* 72:3- JI 30 '43; *Abstract. Comm & Fin Chr* 158:411 JI 29 '43
 Compulsory savings fallacies. A. W. May. *Trusts & Estates* 76:232 Mr '43
 Danger, savings bonds and idle cash, detour, forced savings. H. Spero. *Bankers M* 146: 495-500 Je '43
 First National of Boston favors forced savings. *Comm & Fin Chr* 157:1781 My 13 '43
 Forced or induced saving: an exploration into its synonyms and homonyms. F. Machlup. bibliog. *R. Econ Stat* 26:26-39 F '43
 FDR denies approval of forced savings. *Comm & Fin Chr* 157:2270 Je 17 '43
 Need for refundable taxes. *Trusts & Estates* 75:536 D '42
 Opposes talk of compulsory saving. H. Morgenstern. *Nat Underw (Life ed)* 47:1 JI 30 '43
 Role of forced savings. *Trusts & Estates* 77: 102-3 Ag '43
 Treasury working on drastic new plan of overall rationing to force saving. E. Blair. *Barron's* 23:4 Mr 8 '43

SAVINGS and loan institute, American. See American savings and loan institute

SAVINGS banks

All New York savings banks get FDIC coverage. *Comm & Fin Chr* 158:119 JI 8 '43
 Dime savings bank of Brooklyn issues bank statement in new form. *Comm & Fin Chr* 157:186 Ja 14 '43
 Future of savings. E. V. Bell. *Comm & Fin Chr* 158:1591- O 21 '43
 Investment in government securities increased; report by National association of mutual savings banks. *Comm & Fin Chr* 157:584 F 11 '43
 Mutual savings banks fund found adequate. *Comm & Fin Chr* 157:1215 Ap '43
 Mutual savings unit established by FDIC. H. D. Ralph. *Burroughs Clearing House* 27:21- S '43

See also

Building and loan associations

Savings deposits

also National association of mutual savings banks

Costs

Savings bank cost experience. J. R. Dunkerley. *Banking* 36:40-1 Ag '43
 Savings cost analysis. J. R. Dunkerley. *Banking* 35:88-9 Ja '43

Insurance selling

Copy that clicked; Bowery savings bank insurance advertisement in newspapers. R. Manville. *Il Fr Ink* 204:30-1 P '43
 Extension of savings bank life insurance urged. C. B. Plantz. *Comm & Fin Chr* 158: 1426 O 7 '43
 New dividend scale for savings bank life insurance. *Comm & Fin Chr* 157:1211 Ap 1 '43
 N.Y. savings bank dividend scale. *Nat Underw (Life ed)* 47:18 Ap 9 '43

New York savings bank life insurance system shows large growth. *Comm & Fin Chr* 157:927 Mr 11 '43

New York savings banks to sell group business. *Ins Field (Life ed)* 72:3 F 12 '43
 Savings banks to extend group life insurance. *Comm & Fin Chr* 157:504 F 4 '43

Statistics

Mutual savings banks, principal assets and liabilities, by states, June 30 and Dec. 31, 1941 and June 30, 1942. *Fed Res Bul* 28: 1165 N '42
 Mutual savings banks; principal assets and liabilities, by states, Dec. 31, 1941 and 1942, and June 30, 1942. *Fed Res Bul* 29:685 JI '43

SAVINGS deposits

Bank plan; suggests life companies accept deposits in event limitation is changed. R. R. Lounsbury. *Weekly Underw* 149:689- O 2 '43
 Caretakers of peoples' savings. L. P. Smith. *Banking* 36:32 JI; 38-+ Ag '43
 Charge on savings; Merchants national bank of Mobile, Alabama. J. J. McCann. *Banking* 36:75-6 S '43
 Dead-as-a-door-nail accounts invited to convert to stamps. G. G. Ware. *Bankers Mo* 60:358-+ Ag '43
 How to reduce savings account activity. R. A. Bezoier. *Il Bankers Mo* 60:202-+ My '43
 Mutual savings bank deposits and bond sales at new records; first half year of 1943. *Comm & Fin Chr* 158:611 Ag 12 '43
 New charges to defray costs of savings accounts. *Burroughs Clearing House* 27:5 My '43
 No withdrawals from savings. H. E. Gall. *Bankers Mo* 60:401 S '43
 Over-active savings accounts should be penalized. R. A. Bezoier. *Bankers Mo* 60: 149-51 Ap '43
 Percentages of member bank income and expenses in 1942, grouped according to percentages of time deposits. *Bankers M* 146: 362-3 Ap '43
 Results of savings activity charges; Irvington national bank, Irvington, New Jersey. H. A. Berghof. *Il Burroughs Clearing House* 27:22-4-+ S '43
 Savings deposits in mutual and non-mutual banks, 1911-40. G. W. Cooke. bibliog. *J Business* 16:195-203 JI '43
 Savings deposits rise despite war bond sales. *Burroughs Clearing House* 27:5 Mr '43
 Savings deposits; savings banks in New York state, U.S. postal savings, 1938-1941. *Survey of Cur Business* 1942 Sup p65 [supplemented in monthly numbers]
 Savings stimulated by the war. L. P. Smith. *Bankers Mo* 59:540-1 D '42
 Trade views on savings bank issue. R. R. Lounsbury and C. E. Plantz. *Nat Underw (Life ed)* 47:10 O 22 '43

See also

Christmas clubs
 Savings banks

Interest

Committee cautions against abolishing interest. *Burroughs Clearing House* 27:4-5 My '43
 Uniform method for computing savings account interest recommended by State bankers assn. *Comm & Fin Chr* 157:2096 Je 3 '43

SAVINGS stamps. See War savings stamps

SAW palmetto

Serenoa surrullata, the saw palmetto, a trunkless palm. C. D. Mell. *Textile Col* 65:107 Mr '43

SAWDUST

Burning of sawdust. *diags Engineering* 155: 247 Mr 26 '43
 Burning sawdust. *Engineer* 175:139 F 12 '43

See also

Wood dust

SAWMILL waste. See Wood waste

SAWMILLS

Booth's new sawmill at Tee lake, Que. G. G. Biesenthal. *Il diag Pulp & Pa* of Can 44:28-33 Ja '43

Ford saws wood; expanding lumber output. *Business Week* p42-+ O 30 '43

SAWMILLS—Continued**Employees**

Labor situation in western logging camps and sawmills. M. R. Sugg. *Monthly Labor R* 55:125-33 D '42

SAWS

Some facts concerning band saws. H. J. Chamberland. *il Aero Digest* 43:232, 234, 307 Ag '43

SAWS, Electric

Home-made drag saw cuts farm firewood. *il Elec W* 119:488 F 6 '43

SAWS, Metal working

Blade waste minimized when sawing contours. H. Fox. *diags Am Mach* 87:109 Je 10 '43

Broadway 12-in. capacity hacksawing machine. *il diag Engineering* 155:126-7 F 12 '43; *Automobile Eng* 33:81-2 F '43

Contour metal sawing; abstract. H. J. Chamberland. *Metals & Alloys* 17:400 F '43

Extends bandsaw life when cutting contours. H. J. Chamberland. *diag Am Mach* 87:88 S 30 '43

Friction cutting; metals and other materials; bandsaw operated at extremely high speeds. A. A. Schwartz. *il Steel* 113:104-5 N 8 '43

High-speed method of sawing hard aircraft metals; abstract. A. A. Schwartz. *Science* 97:sup12 Ap 16 '43

Improved band saws. H. J. Chamberland. *il Automotive & Aviation Ind* 88:22-3, 44 My 15 '43

Increase life of saw blades. G. Phillips and R. K. Grant. *diags Am Mach* 86:1503-4 D 24 '42

Milling of extruded aluminum spars; cutting tools; sawing tool steel; abstract. A. A. Schwartz. *Iron Age* 151:64 Ap 1 '43

Mitering fixture for metal-cutting saws. W. H. Cochran. *il diag Am Mach* 87:103 Ag 5 '43

Unusual case of contour sawing. H. J. Chamberland. *Mach* 50:204 N '43

SCAFFOLDING

Movable scaffold solves problem; erecting towering arches of timber blimp hangar. *il Manuf Rec* 112:44-5 N '43

Timber arches for blimp dock erected from scaffold on flatcars. *il diags Eng N* 131:320-3 Ag 26 '43

Two timber blimp docks erected with traveling timber scaffolds. *il diags Eng N* 131:460-5 S 23 '43

Safety measures

Flying trapeze; swinging scaffolds. W. R. Stewart. *il Safety Eng* 85:13-14 Mr '43

Scaffolds for construction and maintenance work. *Nat Safety N* 47:81+-Mr '43

SCAFFOLDING, Steel

Time-saving assembly method; steel scaffolding used in attaching gondola to blimps. *il Rubber Age* 52:346 Ja '43; *Mach* 49:214 F '43

SCALE insects

See also

Kermes**SCALES**

Audio scale may open war work to blind; diagram. *Elec Eng* 62:40 Ja '43

Blind operators weigh material by ear; new Toledo scale. *il Steel* 112:98 F 15 '43

Electronic scale developed for the blind, has other applications. *diag Sci Am* 169:105 S '43

Homemade photographic scales. L. M. A. Roy. *il diags Am Phot* 37:15 Ja '43

Instruments in the pulp and paper industry. J. N. Franklin. *Pulp & Pa of Can* 44:499-500 Je '43

Modern weight control in steel mills; use of scales at blast furnaces, open-hearth shops and rolling mills. *il Steel* 113:92-4+ O 25 '43

Scale audibly indicates selected standard weight. *diag Electronics* 16:104 Ja '43

Scale installations for weighing aircraft. L. R. Hackney. *diag Aero Digest* 43:219-20+ Ag '43

War-hit sales staff aids public relations, serves war industries; Detecto scales, inc. *il Ptr Ink* 204:20 S 3 '43

See also

Balances

SCALING of metals. See Steel—Scaling

SCANDIUM

Energies of the γ -rays from radioactive scandium, gallium, tungsten, and lanthanum. C. E. Mandeville. *bibliog Phys R* 64:147-50 S 1 '43

Gamma-rays from Sc⁶⁵. C. E. Mandeville. *bibliog Phys R* 62:555-6 D 1 '42

SCARCITY ratings. See Raw materials

SCARLET fever

Extent of immunization and case histories for diphtheria, smallpox, scarlet fever, and typhoid fever in 200,000 surveyed families in 28 large cities. S. D. Collins and C. Council. *Pub Health Rep* 58:1121-51 bibliog(p1150-1) JI 23 '43

SCATCHARD, George, 1892-
Sketch. *por Chem & Eng N* 21:1717-18 O 25 '43

SCATTERING of electrons. See Electrons—Reflection, scattering, etc.

SCATTERING of light. See Light, Scattering of

SCATTERING of mesotrons. See Mesotrons—Scattering

SCATTERING of neutrons. See Neutrons—Scattering

SCATTERING of protons. See Protons—Scattering

SCHEDULES

Consolidated subcontract system coordinates schedules. H. G. Golem. *il Aviation* 42:195+-Ap '43

Organization and control of mass production; planning flow of materials. E. A. Boyan. *Factory Management* 101:102-5 S '43

Parts schedule for hardness testers; manufacture of Rockwell hardness tester by Wilson mechanical instrument company. A. A. Blue. *Am Mach* 87:102-3 O 28 '43

Planned engineering records aid production scheduling. P. Sheets. *il diags Product Eng* 14:400-5 JI '43

Use effective production control. *il Factory Management* 101:164-73 Ag '43

Why automotive manufacturers prefer balanced flow for materials control. E. L. Warner, jr. *Automotive & Aviation Ind* 87:17+-N 1 '42

See also

Building—Rapid construction	Hours of labor—Shift schedules
Control boards	Railroads—Schedules

SCHÉELE, Carl Wilhelm, 1742-1786

Carl Wilhelm Scheele. K. R. Webb. *bibliog Chem & Ind* 62:139-41 Ap 10 '43

SCHÉELETE

Detection of scheelite by ultraviolet radiation. D. C. McLaren. *il Can Min J* 64:494-500 Ag '43

Effect of chemical impurities on scheelite fluorescence. R. Greenwood. *bibliog Econ Geol* 38:56-64 Ja '43

Flotation of tungsten ores. D. C. McLaren. *il Can Min J* 64:8-13 Ja '43

New tungsten area in California. A. Thickstun. *il map Eng & Min J* 144:78-81 JI '43

Prospecting with ultra-violet; search for scheelite. *Chem Age (Lond)* 48:611-12 Je 5 '43

Scheelite in unexpected places. *Can Min J* 63:720 N '42

Tungsten; hints to prospectors. M. S. Hedley. *Can Min J* 64:491-3 Ag '43

Analysis

Determination of small amounts of molybdenum in tungsten and molybdenum ores. P. S. Grimaldi and R. C. Wells. *bibliog Ind & Eng Chem Anal* ed 15:315-16 My 15 '43

SCHIEER, Edwin, 1910-

Edwin and Mary Scheier. *pers Am Cer Soc Bul* 22:263-70 Ag 15 '43

SCHIEIER, Mary (Goldsmith) (Mrs Edwin Scheier) 1910-

Edwin and Mary Scheier. *pers Am Cer Soc Bul* 22:263-70 Ag 15 '43

SCHELL, Samuel Duvall, 1896-

Sketch. *por(p172) Marine Eng* 48:179 Ag '43

SCHENECTADY, New York**Rapid transit**

War worker transportation. il map Transit J 86:396-8 N '42

SCHENLEY distillers corporation

Annual report; gives war production first call on resources. Comm & Fin Chr 156:2045 D 7 '42

SCHIFF bases

Reactions of retenequinonimine and phenanthraquinonimine with Schiff bases; a new example of an aldol-type of condensation. C. W. C. Stein and A. R. Day. bibliog Am Chem Soc J 64:2569-73 N '42

SCHLESINGER, Frank, 1871-1943

Sketch. H. N. Russell. Science 98:123-5 Ag 6 '43

SCHMELKES, Franz Carl, 1899-1942

Sketch. Chem & Eng N 21:56, 58 Ja 10 '43
Sketch. L. Reiner. Science 97:153-4 F 12 '43

SCHMIDT, Bernhard

Theory of the Schmidt telescope. J. L. Synge. bibliog diags Opt Soc Am J 33:129-36 Mr '43

SCHMIDT lithograph company, San Francisco

Success story in zincograph. il Inland Ptr 111:47-8 S '43

SCHNEIDER, Charles Prosper Eugène, 1868-1942

Sketch. por Engineer 174:441-2 N 27 '42; Engineering 154:434 N 27 '42

SCHNEIDER, Edward Christian, 1874-

Personalities in science; Edward C. Schneider who originated the Schneider physical fitness index. por Sci Am 169:5 Jl '43

SCHNEIDER, Franz, 1887-

Sketch. Marine Eng 48:181-2 Ag '43

SCHNELL, Harry Julius, 1877-1942

Sketch. por Oil Paint & Drug Rep 142:3+ D 7 '42

SCHOLARSHIPS and fellowships

Abbott laboratories fellowships. Science 97:528 Je 11 '43

Du Pont fellowships in chemistry. Science 97:133 F 5 '43

E. L. Bernays establishes public relations fellowship. Comm & Fin Chr 157:673 F 18 '43

Edward Langley scholarships in architecture and others. Arch Rec 93:94+ Mr '43

Establishment by Gulf oil corporation of a fellowship in geology at the University of Chicago. Science 97:588 Ja 22 '43

Fellowships in health education for 1943; W. K. Kellogg foundation. Pub Health Rep 58:1214-15 Ag 6 '43

Graduate fellowship system. H. B. Hass. bibliog Ind & Eng Chem 35:223-5 F '43

Guggenheim fellowships, 1943. Science 97:324-5; 98:33-4, 338 Ap 9, Jl 9, O 15 '43

Gulf fellowship in geology. Econ Geol 38:90 Ja '43

Industrial fellowships in operation at Mellon institute during the fiscal year March 1, 1942 to March 1, 1943; tabulation. Chem & Eng N 21:476-8 Ap 10 '43

Institute of gas technology increases fellowship stipend. Am Gas J 158:36 Mr '43

Lewis Cass Ledyard, jr. fellowship of the Society of the New York hospital. Science 98:236 S 10 '43

National research fellowships in the natural sciences. Science 97:372-3 Ap 23 '43

No further coal mining scholarships but interest continues in the plan. G. H. Deike. Min & Met 24:83 F '43

Research grants by the Buhl foundation for basic studies in chemistry. il Chem & Eng N 21:359-64 Mr 25 '43

Science talent search. C. N. Fry. Science 97:238-9 Mr 12 '43

Third national-wide science talent search. Science 98:256-7 S 17 '43

SCHOLARSHIPS and fellowships, International Inter-American banking scholarships. Banking 36:84 Ag '43

Mexican trade trainees in U.S. earn as they learn. E. S. Hanson. il For Comm W 10:10+ Ja 30 '43

Mexico trade scholars in the U. S. il Chem & Eng N 21:378 Mr 25 '43

Refractories industry assists Pan-American training program. il Brick & Clay Rec 102:50-1 My '43

Training plan for Latin-Americans to aid homelands' industrialization. il Steel 112:62 F 15 '43

Training programs touch all phases of operations; Standard oil company of New Jersey gives scholarships and training to South American employees. il Oil & Gas J 41:79+ D 31 '42

SCHOLASTICISM

Aristotle, Newton, Einstein. E. T. Whittaker. Science 98:249-54, 267-70 S 17-24 '43

SCHOOL architecture. See School buildings—Designs and plans**SCHOOL buildings**

Brick selected for spirit of school; Crow Island school at Winnetka, Ill. il plan Brick & Clay Rec 103:23-5 O '43

Copper roofing for church and school. il diag Sheet Metal Worker 34:25-6 F '43

New schools after the war; building types study no. 74. N. L. Engelhardt. il plans Arch Rec 93:71-82 F '43

Normal school, Salvador, Bahia; elementary school, Niteroi, Rio de Janeiro. il Arch Rec 93:40-2 Ja '43

Planning the postwar school. J. E. Nichols; I. O. Friswold. il plans Arch Rec 93:63-6, 68 Mr '43

School in the Adirondacks; North country school, Lake Placid. il plans Arch Rec 92:28-35 D '42

Designs and plans

Community high school; Benjamin Franklin high school, Boys' junior high school, New York city. il plans Arch Rec 93:75-7 F '43

New buildings for 194X; high school. il plans Arch Forum 72:91-4 My '43

New buildings for 194X; trade school. il plans Arch Forum 72:95-7 My '43

Schools of Vanport City. il plans Arch Forum 79:58-9 Ag '43

Senior high school, Rock Island, Illinois; views and plans. Arch Rec 93:67 Mr '43

Insurance requirements

Michigan school survey program gets underway. Nat Underw 47:5 O 28 '43

Lighting

Must understand school procedure to prescribe proper school lighting. C. D. Gibson. Illum Eng 38:280-4 Je '43

SCHOOL buses. See Motor bus lines, School

SCHOOL children**Transportation****See also**

Motor bus lines,
School

SCHOOL employees

Salaries of school employees, 1942-43. Monthly Labor R 56:1198-1200 Je '43

SCHOOL lunches

To subsidize lunches in N.Y. high schools. Comm & Fin Chr 158:1622 O 21 '43

SCHOOL savings

School savings important. E. A. Richards. Bankers Mo 60:257 Je '43

War and school savings. Banking 35:60 D '42

SCHOOLCRAFT, Henry Rowe, 1793-1864

Schoolcraft and the American ethnological society. C. S. Osborn and S. Osborn. Science 97:161-2 F 12 '43

SCHOOLHOUSES. See School buildings**SCHOOLS**

School-neighborhood nucleus; residential community from the standpoint of the requirements of a modern educational program. N. L. Engelhardt, jr. plans Arch Forum 79:38-90 O '43

See also

Aeronautic schools
Colleges and universities
Dealer schools
Education
Engineering colleges

Mining schools and education
Nursery schools
Radio schools and training
Trade schools

SCHOOLS, Private. See Private schools

SCHOPPER strength tester

Instrumentation studies; the Schopper electrically driven strength tester measurement of the tensile strength of paper. II Paper Tr J 116:13-14 Mr 4 '43

SCHOTTKY effect. See Shot effect**SCHRÄGE motor.** See Electric motors, Induction**SCHUCHERT, Charles, 1859-1942**

Memorial. C. O. Dunbar. por(pl 11) Geol Soc Proc 1942:217-40 bibliog(p229-40) Ap '43
Sketch. C. O. Dunbar. Science 97:301-3 Ap 2 '43

Sketch. R. S. Lull. Am J Sci 241:130-3 F '43
Sketch. E. H. Sellards. por Am Assn Pet Geologists Bul 27:1027-9 Jl '43

SCHUMPETER, Joseph Alois, 1883-

Essays in honor of Professor Joseph A. Schumpeter. R Econ Stat 25:1-100 F '43

SCHUPPEL, William Carl, 1876-

Oregon Mutual president. por East Underw 44:8 F 19 '43

SCHWARTZ, Harry H.

Leiserson, Schwartz appointed to National mediation board. Ry Age 114:411-12 F 20 '43

SCIENCE

American association for the advancement of science; science, common sense and decency. I. Langmuir. Science 97:1-7 Ja 1 '43

Dr W. H. Dow voices techno-economic views at presentation of Charles Frederick Chandler medal. Oil Paint & Drug Rep 143:31- My 24 '43

Mobilization of science; text of Kilgore bill (S. 702). Science 97:407-12 My 7 '43; Discussion. 97:508-11, 552-4, 577-8 Je 4, 18-25 '43

Rediscover the rainbow; Chandler medal lecture. W. H. Dow. II Chem & Eng N 21: 846-52 Je 10 '43; Same cond. Metal Prog 44:75-7 Jl '43; Excerpts. Chem & Met Eng 50:114-15 Je '43

Science and politics. Chem & Ind 62:343, 370, 379-80, 387-8 S 4, 25-O 9 '43

Science and the censor. Science 97:443 My 14 '43

Science developments of the year 1942; ten most important advances. Science 96:sup 13 D 25 '42

Science in 1942. Science 97:sup8, 10 Ja 1; sup8, 10 Ja 8; sup 12 Ja 15 '43

Science mobilization bill. H. M. Kilgore. Science 98:151-2 Ag 13 '43; Reply. H. T. Stetson. 98:364-5 O 22 '43

Scientific knowledge and action. R. Gregory. Inst Chem Eng Trans 19:61-7 '41

See also

Anthropology

Astronomy

Bacteriology

Biological chemistry

Biology

Botany

Chemistry

Crystallography

Geology

Mathematics

Metallography

Meteorology

Microscope and

microscopy

also American association for the advancement of science

Optics

Paleobotany

Paleontology

Physical geography

Physics

Scientific research

Scientific societies

Technology

War and science

World war, 1939—Science and the war

Zoology

Congresses

American-Soviet scientific congress to be held at New York, Nov. 6-8. Science 98:359 O 22 '43

Dictionaries

Dictionary of science and technology in English-French-German-Spanish. M. Newmark. 386p \$6 Philosophical library, 15 E. 40th st, New York '43

International aspects

Internationalism in science. K. K. Darrow. Science 98:122-3 Ag 6 '43

Science and nationality. Engineering 156:276-7, 284 O 1-8 '43

Periodicals

Scientific publications of the government. A. Seidell and others. Science 97:339-46 Ap 16 '43

See also

Nature (periodical)

Social aspects

Managerial responsibility. H. S. Fries. Advanced Management 8:45-8 Ap '43

Science, and its changing social environment. P. W. Bridgman. Science 97:147-50 F 12 '43

Science and society. Science 98:34-5 Jl 23 '43

Science and society in the postwar world. J. B. Conant. II Tech R 45:366-7+ My '43

Science as a tool in the solution of social issues. G. R. Maybee. Can Chem & Process Ind 27:218 Ap '43

Science in national planning; application of science to current problems. R. K. Stratford. Can Chem & Process Ind 26:671-2, 674+ N '42

Science, scientists and society. M. G. Mellon. Science 97:361-3 Ap 23 '43

Science, social science and the humanities; abstract. J. B. Conant. Science 97:sup10 F 26 '43

Study and teaching

Individual versus demonstration method of teaching science. F. G. Lankford, jr. bibliog J Chem Educ 20:257-8 My '43

Science education and the contemporary world. R. W. Gerard. J Chem Educ 20:45-50 Ja '43

Some proposals for a united science front. M. W. Bosworth. J Chem Educ 20:562-3 N '43

Terminology

New words in science. H. Ward. Science 98: 174-5 Ag 20 '43

Canada

Science in national planning; application of science to current problems. R. K. Stratford. Can Chem & Process Ind 26:671-2, 674+ N '42

China

Advancement of science in China during the past thirty years. C. H. Liu. Science 98:47-51 Jl 16 '43

Joint annual meeting of scientific societies in China. Science 98:380-1 O 29 '43

Message from Chinese men of science. Tseng Chao-Lun. Science 98:102 Jl 30 '43

National academy of Peiping. Science 98:212 S 3 '43

Science in China. Chung Yu Wang. Science 98:376-8 O 29 '43

Great Britain

Science and the future. Economist 144:492 Ap 17 '43

See also Parliamentary and scientific committee

India

Minerals' share in the war; presidential address before thirtieth Indian science congress, Calcutta, 1943. D. N. Wadia. Science 98:351-6 O 22 '43

Russia

Academy of sciences of the U.S.S.R. V. Komarov. Science 98:357 O 22 '43

Branches of the Academy of sciences of the USSR. P. Kolesnikov. Science 98:205-8, 231-3 S 3-10 '43

Modern science in Russia. V. N. Ipatieff. J Chem Educ 20:159-66 Ap '43

Science in Soviet Russia; abstract. J. G. Crowther. Chem & Met Eng 50:179-82 Ag '43

SCIENCE and religion. See Religion and science

SCIENCE and state

Organization of American scientists for the war; Pilgrim Trust lecture. K. T. Compton. Science 98:71-5 Jl 23 '43

Science and government. H. G. Moulton. Science 96:523-7 D 11 '42

SCIENCE and state—Continued

- Scientific publications of the government. A. Seidell and others. Science 97:339-46 Ap 16 '43
 Scientific, technical, inventive industrial mobilization for war; proposals before Congress to mobilize under government direction technological manpower of the nation. G. Eglhoff. Nat Pet N 35 pt 2:R188-90 Ap 7 '43

See also

- | | |
|---------------------|----------------------|
| Government research | United States—Sci- |
| Parliamentary and | entific research and |
| scientific commit- | development, Office |
| tee | of |

Great Britain

- Scientific research; economic aspects. F. A. Lindemann, Lord Cherwell. Engineer 176: 108-9 Ag 6 '43
SCIENCE mobilization bill. See United States—Scientific and technical mobilization, Office of (proposed)
SCIENCE talent search
 Science talent search; forty boys and girls to receive science scholarships. C. N. Fry. Science 97:238-9 Mr 12 '43
 Third nation-wide science talent search. Science 98:266-7 S 17 '43
SCIENCE teachers
 Preparation of high-school science teachers. G. W. Warner. Science 96:536-7 D 11 '42
SCIENTIFIC and specialized personnel. National roster of. See National roster of scientific and specialized personnel
SCIENTIFIC and technical mobilization, Office of (proposed). See United States—Scientific and technical mobilization, Office of (proposed)
SCIENTIFIC apparatus and instruments
 Scarcity of scientific apparatus. Science 97: suppl 10+ Ap 23 '43
See also

Aeronautic instruments	Electric apparatus and appliances
Astronomical instruments	Electric instruments
Bacteriological apparatus	Medical instruments and apparatus
Cathode ray tubes	Optical instruments
Chemical apparatus	Physiological apparatus
Dental instruments and apparatus	Radio instruments
	Surgical instruments and apparatus

SCIENTIFIC education
See also
 Chemical education
 Science—Study and teaching
SCIENTIFIC expeditions
 Expedition exhibition of the New York zoological society. W. Beebe. Science 97: 574 Je 25 '43
SCIENTIFIC libraries
 Wartime problems in science libraries; a symposium. E. Brodman, E. Moyers and others. Special Lib 34:247-57 Jl-Ag '43
SCIENTIFIC literature
 Doctorates in science. E. A. Henry. Science 97:333-5 Ap 9 '43
 Scientific information; suggestions for centralized abstracting, bibliographic and information service. J. G. Crowther. Engineer 176:272-3 O 1 '43
 Scientific publications of the government. A. Seidell and others. Science 97:339-46 Ap 16 '43
 Streamlining production and distribution of current periodical articles. Z. Troy. Special Lib 34:287-92 Jl-Ag '43
SCIENTIFIC management. See Industrial management
SCIENTIFIC methods
 Biologist looks at man. J. Huxley. Il Fortune 26:138-41+ D '42
 Scientific method as applied to different fields of education. Sister M. Consilia Hannan. J Chem Educ 20:308-10 Je '43
SCIENTIFIC research
 Advancement of science in China during the past thirty years. C. H. Liu. Science 98:47-51 Jl 16 '43

- Awards of Sigma xi grants-in-aid of research. Science 98:214 S 3 '43
 Electron microscope, most recent research tool. V. K. Zworykin. Il diags Electronics 16:146-7+ Mr '43
 Initiative in research. C. G. Fink. Science 98:28-31 Jl 9 '43
 International organization of research. Engineering 156:171-2 Ag 27 '43
 Mobilization of science; war uses and pre-view of fundamental scientific research in peace. F. B. Jewett. Trusts & Estates 75: 445-60 N '42
 National survival through science. H. N. Holmes. Science 96:433-9 N 13 '42
 Organization of American scientists for the war; Pilgrim Trust lecture. K. T. Compton. Science 98:71-6, 93-8 Jl 23-30 '43
 Pooling research. Science 98:219-20 S 3 '43
 Report of the work of the Biochemical research foundation of the Franklin institute. E. McDonald. Il Franklin Inst J 235: 27-39 Ja '43
 Research; a general survey. O. W. Roskill. Engineering 156:263-4, 282-3, 303-5, 325, 343-5, 364, 385 O 1-N 12 '43
 Research and the war effort. V. Bush. Elec Eng 62:96-102 Mr '43
 Research in the United States. E. Simon. Science 98:78 Jl 23 '43
 Research in wartime. J. H. Simons. Science 97:390-2 Ap 30 '43
 Science and government. H. G. Moulton. Science 96:523-7 D 11 '42
 Science at work. W. H. Dow. Business Week p111 My 29 '43
 Scientific research; economic aspects. F. A. Lindemann, Lord Cherwell. Engineer 176: 108-9 Ag 6 '43
 Scientific research in Great Britain. Science 98:235-6 S 10 '43
 Scientific research in post-war Britain. Engineer 176:285 O 8 '43
 Serendipity. Chem & Eng N 21:608 Ap 25 '43
 Shape of things to come; abstract. W. Davis. Mod Packaging 16:70 My '43
 Virginia academy of science research endowment. Science 98:57 Jl 16 '43

See also

- | | |
|------------------------------------|------------------------------|
| Aeronautic research | Institutum Divi Thomae |
| Agricultural research | Laboratories |
| Bacteriological research | Medical research |
| Biological research | Metallurgical research |
| Chemical research | Microscope and microscopy |
| Colleges and universities—Research | Petroleum research |
| Electric research | Rubber research |
| Engineering research | Scholarships and fellowships |
| Government research | Textile research |
| Industrial research | |
- also* Australia—Council for scientific and industrial research; Carnegie institution of Washington; National research council; National research council of Canada; National science fund; United States—Standards, National bureau of
SCIENTIFIC research and development, Office of. See United States—Scientific research and development, Office of
SCIENTIFIC societies
 Attitudes of state academies toward wartime meetings. C. E. Mohr. Science 97: 217 Mr 5 '43
 Joint annual meeting of scientific societies in China. Science 98:380-1 O 29 '43
 Mobilization of scientific resources; wartime scientific agencies. Il J Ap Phys 14:373-405 Ag '43
 Organization of biology and agriculture. R. F. Griggs. chart Science 96:545-51 D 18 '42
See also

Academy of sciences of the USSR	American geophysical union
Acoustical society of America	Chemical societies
American association for the advancement of science	Royal society of London
	Sigma xi

SCIENTIFIC workers, Association of. See Association of scientific workers
SCIENTISTS
 Class distinction among American men of science. S. O. Mast. Science 97:465 My 21 '43; Discussion. 97:497, 511, 534-5; 98:281-2 My 28-Je 11, S 24 '43

SCIENTISTS—Continued

Committee of engineers and scientists appointed for WPE. Roads & Sts 85:40 N '42
Fuller utilization of scientific resources for total war. T. Rosebury. Science 96:571-5 D 25 '42

National learned society groups and the public interest. L. C. Karpinski. Science 97:422-3 My 7 '43

Number of scientific men engaged in war work. L. Carmichael. Science 98:144-5 Ag 13 '43

Organization of American scientists for the war; Pilgrim Trust lecture. K. T. Compton. Science 98:71-6, 94-8 Jl 23-30 '43

Science and nationality. Engineering 156:276-7, 284 O 1-8 '43

See also

Chemists Geologists
Creative ability Physicists
 also names of scientists, e.g.
Guericke, Otto von
Lavoisier, Antoine
Laurent

Australia

War status of Australian science. F. W. Wood. Science 97:224-5 Mr 5 '43

Great Britain

Birthday honors of the King of England; men of science and others associated with scientific development. Science 98:8 Jl 2 '43
Joint council of scientific men in Great Britain. Science 97:84 Ja 22 '43

See also

Association of scientific workers Royal society of London

Russia

Message received by the American association of scientific workers from the Soviet scientists antifascist committee. N. Derzhavin and S. Filippchuk. Science 97:162-3 F 12 '43

SCLERACTINIA. See Corals

SCOBAY, Frederick Charles, 1880-
Sketch. por Civil Eng 12:696 D '42

SCOPHONY corporation of America
Formed. Comm & Fin Chr 157:645 F 15 '43
Patents issued; large screen television. Comm & Fin Chr 158:1284 S 27 '43

SCOTLAND*See also*

Hydroelectric plants
—Scotland

Industries and resources

Scotland's future. Economist 145:454-5 O 2 '43
Scotland's industries. Economist 145:435-6 S 25 '43

SCOTT serigraph

Instrumentation studies; measurement of the tensile strength of paper; Scott serigraph, model J3. il Paper Tr J 115:14-16, 21 D 24 '42

SCOURING of textiles*See also*

Rayon scouring
Wool scouring

SCOURING powders. See Cleaning compositions**SCRANTON, Pennsylvania**

30,000 unemployed and 7000 empty houses in Scranton, neglected city. Iron Age 151:93-5 Mr 25 '43

Industries

Scranton prepares for industrial rebirth after bomber wing plant gets approval. J. H. Brislin. Iron Age 152:106 Jl 15 '43

SCRAP material

Petroleum industry sums up scrap drive. Ptr Ink 203:83-4 My 14 '43

Reasons why unused materials, equipment should be scrapped now. L. C. Reed. Steel 111:37 N 28 '42

Reclaim it or scrap it; Puget Sound Power & Light demonstrates efficient procedure. L. A. Williams. il Elec West 90:57-8 My '43

Salvage; a duty as well as good business. il Food Ind 15:62-3 Mr '43

Scrap campaigning reduces accident hazards. N. H. Dearborn. Marine Eng 48:192 M '43

Scrap goes back to work; Bell aircraft corp. Buffalo. R. B. Cole. il Factory Management 101:120-3 Jl '43

Scrap: here's how Standard of New Jersey has organized for continuous drive. J. P. O'Donnell. il Oil & Gas J 41:58-9+ My '43

Scrap pile; source of parts, equipment and guns. il Coal Age 43:64-5 Je '43

See also

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Rubber waste	Soap waste
Salvage (waste, etc.)	Waste paper
	Wood waste

SCRAP metal

Alloy steel scrap must be segregated to conserve alloys. W. C. Hirsch. Automotive & Aviation Ind 88:136 Mr 15 '43

Alloy turning utilization, scrap segregation are major problems; discussion at Open hearth conference. Iron Age 151:74-6 My '43

Ball milling for metal reclamation. G. E. Metz. flow sheet il Metals & Alloys 18:63-4 Jl '43

Borings and turnings boost scrap metal tonnage. W. C. Hirsch. il Automotive & Aviation Ind 89:17-18+ Ag 1 '43

Briquetting is found important aid in salvaging operations. A. W. Wood. il Steel 112:84, 85 F 8 '43

Collection of tin cans increases rapidly. Blast F & Steel Pl 31:207 F '43

Cupola melting of loose cast iron borings. S. L. Feduska. il Metals & Alloys 17:316-17 F '43

Curbs lie idle; scrap turnings situation. Business Week p61 Mr 13 '43

Curtiss-Wright's scrap metal reclamation program. il Aero Digest 43:167, 173, 179-180 Jl '43

Cycle of non-ferrous metals; recovery of prevailing types of scrap; classification of scrap. O. Eimerl and F. Neurath. Chem Age (Lond) 48:267-72, 371-4 Mr 6, Ap '43

Effect of light scrap on open hearth practice. E. H. Reyer. il Blast F & Steel Pl 31:205-7 F '43

Efficient disposal of swarf; Fischer bearing works. il plan Mech Handling 30:21-4 J '43

Fabricating special machine tools by welding; equipment used in machining Transit pipe made from scrap materials. J. M. Wiley. il Pet Eng 14:86, 88 Ap '43

Fall campaign necessitated by three unexpected developments. il Steel 113:108-9 S 2 '43

Gliding metal-clad steel scrap; recovery process. Mech Eng 64:904-5 D '42

Historic scrap metal; last of a beam engine that saved twelve lives. il Chem Age (Lond) 49:115 Jl 31 '43

Ideal salvage setup; materials handling system in disposal of machine tool cuttings. G. E. Stedman. il Steel 112:70-2, 74+ Ja 1 '43

Ingenuity and scrap solve still problem. E. F. Bjork. il Chem Ind 53:49 Jl '43

Keys go to war; keys yield 4,000,000 lb. of metal. Business Week p59-60 Ja 16 '43

Magnetic methods of sorting steel scrap. W. L. Nelson. il Oil & Gas J 41:42 D 24 '42

Making the most of scrap by segregation by alloy content, and scheduling use of standard grades. G. Soler. Blast F & Steel Pl 30:1359-60 D '42

Manufacturers drive to recover used pump parts containing scarce alloys. Pet Eng 14:98 Mr '43

Modifications in NE steels necessitated by unexpected nickel content of scrap. Steel 111:27 D 28 '42; Same. Iron Age 150:6 D 31 '42; Same. Blast F & Steel Pl 31:7 Ja '43; Same cond. S A E J 51:sup52 Ja '43

Non-ferrous secondary materials. F. W. Willard. il Metals & Alloys 17:752-9 Ap '43

Old tin cans as a war factor. Sheet Metal Worker 34:25 Mr '43

Practical programs for reclamation of metal scrap. J. L. Cannon and others. il plan Metal Prog 43:56-9 Ap '43

SCRAP metal—Continued

- Private enterprise?—and how! plant was built from scrap to produce for war; Thys and Miller electric steel foundry, R. O. McGowan, *il Elec West* 91:52-4 O '43
- Scrap in scrap; head of War materials, inc. resigns, *Business Week* p33+ Mr 6 '43
- Scrap metal; how industrial undertakings can help to meet the demand, *Electrician* 130: 343-4 Ap 2 '43
- Scrap rebounds; matériel wrecked in battle comes back as salvaged metal, *Business Week* p80+ Ap 10 '43
- Scrap recovery campaign in Michigan iron and copper country a model, *il Min & Met* 24:316-17 Jl '43
- Scrap sorting, nondestructive and rapid, W. L. Nelson, *il Oil & Gas J* 42:55-6 O 28 '43
- Scrap's return to supply American steel furnaces, *il Business Week* p19 F 6 '43
- Simple tests identify white metals, *il Iron Age* 150:45 N 19 '42
- Sparks fingerprint scrap metal, *il Power* 87: 118 F '43
- Stanley works gets in the scrap, E. W. Christ, *il Steel* 113:122+ Jl 5 '43
- Steel mills using household scrap rapidly as possible, R. W. Wolcott, *Steel* 111:105 D 7 '42
- Story of the newspapers' scrap drive, G. T. Eager, *il Adv & Sell* 36:15-16, 66, 68 Ja '43
- Swarf washing and oil-recovery plant, *il diag Engineering* 155:46-7 Ja 15 '43
- Turnings problem at Detroit analyzed, *Iron Age* 151:135-6 Mr 4 '43
- Use it now, or scrap it; order at duPont, C. Snyder, *il Factory Management* 101:126-31 Ja '43
- Use of alloy turnings only a start, *Iron Age* 151:106-8 Mr 25 '43
- WPB appeals for dormant scrap, *Nat Pet N* 35:22 S 22 '43
- WPB bungling of scrap threatens railroad steel supply, B. C. Moise, *Ry Age* 114:439-40 F 27 '43
- Wartime scrap problems, F. E. Vigor, *Blast F & Steel Pl* 31:1025-7 S '43
- Why scrap is so important; using 1942 steel requirements as an example; chart, *Factory Management* 101:116 Je '43
- Will scrap's burden be heavier? *il Steel* 112: 92-3 My 17 '43

See also

- | | |
|--------------------------|------------------------------------|
| Metal waste | Steel waste |
| Railroads—Scrap material | Street railroads—Track reclamation |
| Salvage (waste, etc.) | |

Prices

- Iron and steel scrap, Published in weekly numbers of *Iron age*
- Maximum scrap prices altered to encourage processing fields, *Iron Age* 151:90-1 Ja 21 '43
- Scrap steel composite price, monthly, 1929-1942; tabulations, *Iron Age* 151:200, 202 Ja 7 '43
- Steel, iron and scrap price composites, 1937-1942; tabulation, *Steel* 112:377 Ja 4 '43
- SCRAP metal baling.** See Baling presses
- SCRAP metal industry**
- Loss of scrap yard labor might reverse comfortable inventory situation, *Iron Age* 151: 134-5 Mr 4 '43
- Scrap metal from other Americas feeds U.S. furnaces, *For Comm W* 10:22 F 13 '43
- Scrap metals, 1942, S. Tzach, *Eng & Min J* 144:76-7+ F '43
- Wartime changes in the secondary metals industry, F. H. Wright, *Min & Met* 24: 227-30 My '43
- What about scrap? J. M. Kurtz, *il Steel* 113: 65-7 Jl 26 '43

Statistics

- Dealers move large scrap tonnage, 1942, *Iron Age* 151:160 My 20 '43
- Iron and steel scrap; consumption, exports, etc., tabulations, *Automotive & Aviation Ind* 88:74 Mr 15 '43
- Railroad scrap and total scrap, 1942, *Ry Age* 114:523 Mr 13 '43
- Scrap problems are far from solved at the start of 1943, D. R. James, *Iron Age* 151: 96-100 Ja 7 '43

Scrap; statistics, supply factors indicate real need for campaign, *il Iron Age* 152:102-3 O 7 '43

Short on scrap? Lake ore shipments fall short of goal, *Business Week* p42 Ag 14 '43

Steel and iron scrap, 1929-1942; tabulation, *Steel* 112:369 Ja 4 '43

SCRAP rubber. See Rubber waste

SCRAPERS

- Drag-scraper equipment for coal storage, *il diag Engineering* 156:145-8, 150 Ag 20 '43
- Drag scrapers offer safe, flexible solution to coal-storage problems, H. A. Roe, *il diag Power* 87:292-5, 444-5+ My, Jl '43
- Emergency scraper-hoist operation; clears stream bed and prevents flood, *il Comp Air M* 48:7068 Je '43
- 400-hp Tournapull tractor, J. F. Dillon, jr, *il diag Automotive & Aviation Ind* 88: 42-3+ Ap 15 '43
- Scraper meets stump; how Dane county, Wisconsin, repaired an 8-yd. LeTourneau, *il Roads & Sts* 86:71 Jl '43
- Scraper set-up for working a wide face effectively, *diag Eng & Min J* 144:90 O '43

See also

Road scrapers

SCRAPERS, Pipe

Design of batching scraper for crude-oil pipe lines; arc welding; with cost data, R. M. Carter, *diag Oil & Gas J* 41:30, 33-4 D 24 '42

Floating scraper used on WEP lines, *il Oil & Gas J* 42:64 O 14 '43

SCREEN printing. See Silk screen printing

SCREENING

Directions for laboratory mineral sizing, J. Dasher, *U S Bur Mines Information Circ* 7224:4-9 '42

New chart simplifies the study of crushing and screening problems, R. Gibbs, *Chem & Met Eng* 50:134 Je '43

Sand blending; simple mathematical methods of determining size distribution, F. C. Bond, *Rock Prod* 45:60+ O '42; Discussion (Clarifying the sand blending problem), 46:55 Mr '43

See also

- Coal screening
Sewage disposal—
Screening

SCREENS

Locker-Titan vibrating screen, *il Mech Handing* 30:28-30 Ja '43

Yarn for screens; plastic-coated yarn woven into screen cloth replaces galvanized steel wire and bronze mesh, *il Mod Plastics* 20: 70+ Mr '43

SCREENS, Nylon

Nylon screens will replace many metal screens after the war, *Sci Am* 168:264 Je '43

Screens without holes, *il Mod Plastics* 20: 64+ Jl '43

SCREW conveyors. See Conveying machinery—Screw conveyors

SCREW machine steel. See Steel—Sulfur content

SCREW machines

Automatic screw machines in war production; operations as performed on Acme-Gridley multiple-spindle automatics, *il diag Mach* 49:143-53 Mr '43

Automatics speed binocular production; Westinghouse electric & manufacturing company, J. Witchey, *il Am Mach* 87:92-3 Ag 5 '43

Eaglesfield twelve-spindle automatic screw machine, *il Mach* 49:181 Je '43

Gibbs automatic screw machine, *il Mach* 49: 216 Ag '43; *Am Mach* 87:129 Ag 19 '43

Gorton precision automatic screw machine, *il Mach* 49:222+ Jl '43; *Am Mach* 87:125 Je 24 '43; *Automobile Eng* 33:330-1 Ag '43

Micarta inserts for automatic screw machine clutches, *il Iron Age* 150:66 N 26 '42

Production of slender parts on Swiss type automatics, F. J. Oliver, *il diag Iron Age* 151:27-35 Ja 28 '43

Thirty billion parts a year, *Fortune* 28:6 S '43

Togstad screw machine, *il Steel* 112:132+ Je 7 '43; *Am Mach* 87:138 My 27 '43

SCREW threads

- Determining efficiency of screw threads; chart, R. D. Douglass and J. M. Dunford. *Machine Design* 15:83-4 Ja '43
- Effect of nut design on strength of threaded fastenings. M. Hetenyi. *diags Machine Design* 15:119-20 F '43
- Effect of screw threads on fatigue; a review of the literature. S. M. Arnold. *diags Mech Eng* 65:497-505 bibliog(167 titles, p503-5) Jl '43; Same cond. *Automobile Eng* 33:541-6 D '43
- Factors to be considered when designing die-castings. H. Chase. *il diags Product Eng* 14:376-9 Je '43
- Quick caliper of root diameter of Acme threads. *il Ry Mech Eng* 117:426 S '43
- Three-wire measurements of screw threads; reference book sheet. J. F. Heaton. *Am Mach* 87:121, 123 S 2; 121, 123 S 16 '43

See also

Thread cutting

Standards

- Aeronautical screw thread series; data sheet. *Mach* 49:155 F '43
- American national standard gas-cylinder valve-outlet threads; data sheet. *Mach* 49: 167 Mr '43; Same. *Instruments* 16:65 F '43
- Diameters, areas, and tap drill sizes; American standard screw threads; data sheet. H. R. Teegarden and C. F. Crisafulli. *comps. Mach* 50:219 N '43
- Modified standard thread for primary aircraft structures. M. Di Giovanni. *diags Product Eng* 14:641-2 O '43
- OCF uses standard hose couplings to assure interchangeability. *il Ind Stand* 13:277-8 N '42
- Screw thread gages and gaging; reference book sheet. *diags Am Mach* 86:1457, 1459, 1525, 1527; 87:109, 111, 114a D 10 '42-Ja 21 '43
- Screw threads and tap-drill sizes. *diags U S Nat Bur Stand Commercial Standard CS24-43:1-65; pa 10c Supt. of doc. '43*
- Straight screw threads for high-temperature bolting. *il Ind Stand* 13:275-6 N '42
- Truncated Whitworth thread proposed as American war standard. *il Ind Stand* 14: 130-1 Ap '43
- Wartime standards for screw threads for high-temperature bolting. *Nat Pet N* 35 pt 2:R 238 My 5 '43

Testing

- New Dardet thread tests. *Automotive & Aviation Ind* 89:54 S 1 '43
- Ordnance production gaging; thread gaging. R. A. Bowman. *il diags Instruments* 16:94-102 F '43

SCREWS

- Torque-stress-load relationship in bolts and screws; reference book sheets. A. H. Korn. *diag Product Eng* 14:752-4 N '43
- Typical bolts, screws, nuts and other fastening devices; illustrations; data sheet. E. J. Tangerman. *Power* 87:349, 421 My-Je '43

Manufacture

- Heat treating output doubled by installation of continuous furnace; Triplex screw co. H. White. *il Steel* 113:86+ O 25 '43

Testing

- Machine screws; fastening strengths in various materials. A. C. Millard. *il Mech Eng* 65:701-7 O '43

SCRUGHAM bill. *See Minerals—Stockpiling*

SCULPTURE, Ceramic. *See Ceramic sculpture*

SCURVY

- Vitamin C in evergreen-tree needles. M. Donnelly. *Science* 98:132 Ag 6 '43; Discussion. B. Schick; C. Macnamara. 98:241-2 S 10 '43

SCYMNOL

- Scymnol. W. Bergmann and W. T. Pace. *Am Chem Soc J* 65:477-8 Mr '43

SEA cucumbers. *See Holothurians*

SEA food

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- Crabs Mussels
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SEA ISLAND cotton. *See Cotton*

SEA mines. *See Mines, Submarine*

SEA OTTER (ship)

- Still kicking: Sea Otter, rechristened Seamo-bile, Diesel-powered light cargo ship. *Business Week* p30 My 8 '43

SEA power

- Equal British-American sea power proposed as means of preventing war. J. E. Otter-son. *Comm & Fin Chr* 158:1708 O 28 '43

See also

- United States—Air service, Navy
United States—Navy

SEA walls

See also

- Breakwaters

SEA water

- Acoustical tables for air and sea water. W. L. Woolf. *Acoustical Soc Am J* 15:83-6 O '43
- Distilling apparatus for ships' lifeboats. G. Keenan. *diags Engineer* 176:26-8 Jl 9 '43
- Dow goes down to the sea; magnesium and war are making it a major power. *il Fortune* 26:110-13+ D '42
- Magnesium from sea water and dolomite supplies war effort. G. A. Bilque. *il Min Cong J* 29:30-1 F '43
- New Zealand's solar-evaporation salt project. *For Comm W* 12:26 Jl 31 '43
- Rediscover the rainbow: bromine and magnesium from sea water. W. H. Dow. *Chem & Eng N* 21:349-50 Je 10 '43; Excerpts. *Chem & Met Eng* 50:114-15 Je '43
- Washing photographic films and prints in sea water. G. T. Eaton and J. I. Crabtree. *bibliog Soc Motion Picture Eng J* 40:380-91 Je '43

Bacteriology

See Bacteria, Marine

SEABEES. *See United States—Navy—Construction battalions*

SEABOARD air line railway

- Annual report. *Comm & Fin Chr* 157:2457 Je 28 '43
- Noteholders receive payment. *Comm & Fin Chr* 157:479 F 1 '43
- Railroad securities. *Comm & Fin Chr* 157: 1661+, 2165 My 6, Je 10 '43
- Railroad securities. *Comm & Fin Chr* 158: 1785+ N 4 '43
- Receivers make offer to underlying bondholders. *Comm & Fin Chr* 158:2310 D 28 '42
- Reorganization hearings. *Comm & Fin Chr* 158:1771 N 1 '43
- Reorganization plan. A. Jansen. *Barron's* 23: 15-16 Je 14 '43
- Seaboard All Florida bond purchases authorized. *Comm & Fin Chr* 156:1870 N 23 '42
- Seaboard installs 64 miles of centralized traffic control; reduces average running time of freight trains one hour. *il diag Ry Age* 114:942-6 My 15 '43
- Special master files reorganization plan. *Comm & Fin Chr* 158:397-8 Jl 26 '43
- Special master's report gets general approval, objections raised on specific points. *Comm & Fin Chr* 157:2353 Je 21 '43

SEABOARD oil company of Delaware

- Oil shares for inflation hedging. H. Lawrence. *Barron's* 22:20 D 21 '42

SEABROOK farms. *See Farms*

SEADROMES. *See Airports, Floating*

SEALING

- Advantages of duct seal bands; engine-supercharger system. *il Aero Digest* 43:229-30 Ag '43
- Heat sealing; practice and equipment for bags. J. E. Corcoran. *il diags Mod Packaging* 16:74-7+ Jl '43
- Sealing by electronics; mechanism that resembles a sewing machine. *il Mod Packaging* 16:78+ Jl '43

SEALING compositions

- Heat sealing; agents, their application and evaluation. F. S. Leinbach. *il Mod Packaging* 16:85-8+ My '43
- Heat sealing; techniques and mechanics. F. S. Leinbach. *il Mod Packaging* 16:91-4+ Je '43
- High-speed sealing for weatherproof cases. G. B. Cloran and F. C. Campins. *il diags Mod Packaging* 16:116, 118+ D '42

SEALING compositions—Continued

Method for inspection and control of liquid starch-base adhesives for bottle labeling and case sealing. A. Herman and F. M. Knowlton. *bibliog il Am Soc T M Proc* 42:956-61; Discussion. 962-7 '42
 Refinery use of joint-sealing and anti-seize compounds. *Pet Eng* 14:132, 134 S '43
 Sealing tube ends with plastic; Plastalloy process. *il Iron Age* 152:65 N 4 '43

SEALING rings. See Fruit jar rings**SEALS (animals)**

Sealskins sold; sealing resumes with record haul. *Business Week* p40+ N 6 '43

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Sealskins sold; sealing resumes with record haul. *Business Week* p40+ N 6 '43

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Louis Livingston Seaman fund. *Science* 98:277 S 24 '43

SEAMEN

Civilians needed to man small boats used by the army. *Marine Eng* 48:187 J1 '43
 Court holds shipyard employe not seaman within meaning of the Jones act. *East Underw* 43:38 N 20 '42

Draw plan for Merchant marine claims. *Weekly Underw* 148:365+ F 13 '43; *East Underw* 44:19 F 12 '43; *Nat Underw* (Life ed) 47:8 F 12 '43

Equality of treatment for Chinese seamen in Great Britain. *Int Labour R* 47:511-12 Ap '43

Ferguson heads shipbuilders' drive to support United seamen's service. *Marine Eng* 47:137 D '42

International meeting of seamen, London. *Int Labour R* 47:532-3 Ap '43

Maritime commission officials decorate heroes of the merchant service. *Marine Eng* 48:175 Je '43

National maritime union asks post-war social security for seamen at 4th biennial convention. *New York. Comm & Fin Chr* 158:339 J1 22 '43

Rates of pay and working hours of seafarers; conditions in Belgium, Great Britain, the Netherlands, and Norway. *Int Labour R* 48:23-42 J1 '43

Sailors frozen; fixed ratio of C.I.O. members on Great Lakes ore boats. *Business Week* p102+ Mr 13 '43

Seamen's coverage; explanatory bulletin issued by War shipping administration. *Weekly Underw* 148:998 My 8 '43

Shipowners liable if sailor hurt on leave. *Comm & Fin Chr* 157:1505 Ap 22 '43; *East Underw* 44:32 Ap 23 '43

War workers and seamen; welfare in port. *Economist* 143:796 D 26 '42

Welfare measures for Belgian seamen. *Int Labour R* 48:244-6 Ag '43

Will the captain continue to be captain of his ship? E. Hoyt. *Steel* 112:46-7 Ja 11 '43

See also

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Dedication of Merchant marine academy. *il Marine Eng* 48:186-91 O '43

Maritime school: West coast; views, plans, and construction outline. *Arch Forum* 79:55-9 S '43

Training centers constructed on a beach resort site; training schools and stations for the U.S. Coast guard, the U.S. Maritime service and a medical center for the U.S. Public health service. *il diags Eng N* 131:382-7 S 9 '43

SEAPLANE bases

Precast units cut cost and time on seaplane ramps. *diags Eng N* 130:306-9 F 25 '43

Slipways

Simplified methods of building paved seaplane slipways; Prepak concrete. C. F. Disney. *il diags Roads & Bridges* 81:16-16+ Ja '43

SEAPLANES

Consolidated retools the Coronado. E. P. Myers. *diags Am Mach* 87:83-90 Je 10 '43

See also

Flying boats

Floats

Seaplane floats go to war. *il Mod Plastics* 20:84 Je '43

Model testing

Work in an experimental seaplane tank. L. Smith. *il diags Roy Aeronautical Soc J* 47:290-314 S '43

SEAPORTS. See Ports**SEARCHES and seizures**

Seizure of private papers by government agents. W. M. Wherry and A. S. Bard. *Pub Util* 31:721-39 Je 10 '43

SEARCHLIGHTS

Die-formed sheet steel replaces cast aluminum; army's 60-in. dia. searchlight. *il diags Product Eng* 14:333-6 Je '43

SEARS, Roebuck and company

Base earnings. H. Lawrence. *Barron's* 23:5 Ap 5 '43

Growth picture of identical (almost) twins; pictograph. *Sales Management* 52:48 Mr 15 '43

How Sears, Roebuck produces mail-order copy that sells; issues advertising guide for its copy writers. *Ptr Ink* 202:72-4 Mr 5 '43

Is Sears Roebuck over-priced? J. C. Harrington. *il Mag of Wall St* 71:351-3+ Ja 9 '43

Mail-order books. *Business Week* p86-7 Je 26 '43

Sears goes South; opens buying office in Atlanta. *Business Week* p91-2 My 22 '43

Sears, Roebuck initiates monthly People's book club by mail order. *Ptr Ink* 204:44 J1 9 '43

Sears tries tab; has offered charge accounts to customers who use its telephone order service. *Business Week* p77-8 N 14 '42
 South offers greatest economic future of any section of the United States. J. Jeran. *Manuf Rec* 112:32-3+ N '43

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Encyclopaedia Britannica

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 Hats Summer business

SEASONAL variation (statistics)

Moving seasonal indexes. D. J. Cowden. *Am Stat Assn J* 37:523-4 D '42

New multiplicative seasonal index. J. Shiskin. *Am Stat Assn J* 37:507-16 D '42

New seasonal adjustment factors for money in circulation. *Fed Res Bul* 29:822-6 S '43

Seasonal factors determined by difference from average of adjacent months. H. A. Latané. *Am Stat Assn J* 37:517-22 D '42

SEATS

Restaurant seating; time-saver standards. W. J. Ward, jr. *plans Arch Rec* 94:83-4 Ag '43

SEATTLE**Rapid transit**

Old to new in Seattle produces results; comparison of operations before and after modernization of Municipal transit system. *Mass Transportation* 39:148 Ap '43

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SECRET service**United States**

Know your endorsers; program of the Secret service. F. J. Wilson. *il Am Inst Banking* Bul 25:5-7 Ja '43

SECRETARIES, Private

Almost-perfect secretaries. *Bankers* Mo 60: 12+ Ja '43
What is your employability? another test for secretaries. R. L. Cochran. *Bankers* Mo 60:58, 80 F '43

SECRIST, Horace, 1881-1943

Sketch. F. S. Deibler. *Am Stat Assn J* 38: 365-6 S '43

SECTS

See also

Jehovah's witnesses

SECURITIES

Coming peace, a security reappraisal; report by Kerr & company. *Comm & Fin Chr* 158: 901, 912-13 S 2 '43

Effect of inflation upon the values of securities. I. Wright. *Comm & Fin Chr* 157:1097+ Mr 25 '43

Investing for a widow, four years later; contest winners review and revise 1939 programs. M. W. Moore. *Barron's* 23:3-4 S 27; 3-4 O 11; 8 O 25 '43

Mid-year 1943 re-appraisals of earnings and dividend forecasts. *il Mag of Wall St* 72: 405-17+, 463-75+, 521-9+, 571-81+ J1 24-S 4 '43

1943 special re-appraisals of earnings and dividend forecasts. *Mag of Wall St* 71:471-84+, 533-43, 583-97+, 637-50+ F 6-Mr 20 '43

Securities business in the post-war period. W. W. Townsend. *Comm & Fin Chr* 158: 796+ Ag 26 '43

Securities disturbing investors. J. S. Williams. *Mag of Wall St* 71:14-15, 70-1+, 168-9, 233+, 529+, 600+; 72:586+ O 17-31, N 28-D 12 '42, F 20-Mr 6, S 4 '43

Three sound security portfolios for income, for capital growth. J. S. Williams. *Mag of Wall St* 72:458-9+ Ag 7 '43

Wiseest market policy now. A. T. Miller. *Mag of Wall St* 71:326-7+ Ja 9 '43 [cont bi-weekly]

See also

Airplane industry and trade—Securities

Automobile industry and trade—Securities

Banks and banking—Investments

Banks and banking—Stock

Bonds

Chemical industries—Securities

Electric utilities—Securities

Holding companies—Securities

Insurance companies—Investments

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Petroleum industry and trade—Securities

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Retail trade—Securities

Speculation

Steel industry and trade—Securities

Stock exchange

Stockholders

Taxation, Exemption from

Trusts and trustees—Investments

Advertising

Investment firm talks future products; uses run-of-paper copy. *il Ptr Ink* 203:26 My 21 '43

Competitive bidding

See Securities—Marketing

Exemption from taxation

See Taxation, Exemption from

Law

Attack on New Jersey securities act; power of Attorney General to compel appearance of non-residents for examination. *Comm & Fin Chr* 158:1591+ O 21 '43

Court rejects SEC contentions in dealer mark up case. *Comm & Fin Chr* 157:1570+ Ap 29 '43

SEC asks court to uphold revocation of registration of broker-dealer. *Comm & Fin Chr* 158:1798 N 4 '43

Stock subscription and the part payment.

Comm & Fin Chr 156:1795 N 19 '42
Toronto stock exchange opposes treaty on extraditions from Canada. *Comm & Fin Chr* 157:563 F 11 '43

When securities issued in one state, payable in another lead to conflict of laws. M. L. Hayward. *Barron's* 22:20 D 21 '42

See also

Securities—Regulation

Marketing

Bill requiring competitive bidding on all rail issues objected to by ICC. *Comm & Fin Chr* 157:2086 Je 3 '43

Block sales of securities; liquidation through new secondary market and special offerings. E. Barry. *Trusts & Estates* 76:165-6, 168-9 F '43

Competitive bidding in rail securities; briefs filed with ICC. *Comm & Fin Chr* 158:1228-9, 1424 S 23, O 7 '43

Competitive bidding in rail securities; reply states study fails to show ICC has lesser authority than other regulatory bodies. *Comm & Fin Chr* 158:1506 O 14 '43

Court rejects SEC contentions in dealer mark up case. *Comm & Fin Chr* 157:1570+ Ap 29 '43

Economics of competitive bidding in the sale of securities. J. F. Weston. *J Business* 16: 1-51 bibliog(p50-1) pt 2 Ja '43

Fight up to ICC; issue of competitive bids for railroad securities. *Business Week* p100+ O 2 '43

Hollow victory; Pennsylvania railroad gets ICC approval on sale of affiliate's bonds by negotiation. *Business Week* p103+ Ag 7 '43

Lessons in Erie: ICC sidestepped a decision on competitive bidding. *Business Week* p102-3 Mr 27 '43

NASD to take SEC unlisted decisions to court; Association opposes new requests. *Comm & Fin Chr* 158:591+ Ag 12 '43

New security firms formed in increasing numbers, NASD reports. *Comm & Fin Chr* 157:1966 My 27 '43

NYSE governors favor revising procedure on special offerings and secondary distributions. *Comm & Fin Chr* 157:1383 Ap 15 '43

Rockefeller sells; distribution of securities. *Business Week* p106-7 O 30 '43

Some whys and wherefores regarding dealer profits. *Comm & Fin Chr* 157:906+ Mr 11 '43

State commissioners urging care in licensing applicant dealers. H. G. Riter. *Comm & Fin Chr* 158:687+ Ag 19 '43

Unfair practices in securities business materially eliminated, NASD reports. *Comm & Fin Chr* 157:266 Ja 21 '43

Vie for rail bonds; western bankers resume fight for competitive bidding. *Business Week* p102+ J1 3 '43

See also

Bonds, Government—Marketing

Stock exchange

also National association of securities dealers

Over-the-counter marketing

Can the small dealers in securities be forced out of business in defiance of the will of Congress? *Comm & Fin Chr* 158:1781+ N 4 '43

Dealers set back; over-the-counter boys making big fees in listed securities. *Business Week* p102-3+ S 25 '43

Maintaining retail prices of over-the-counter securities. *Comm & Fin Chr* 156:2145 D 17 '42

NASD blunder; maximum profit decree affecting security transactions condemned. A. M. Metz and E. A. Kole. *Comm & Fin Chr* 158:1869+ N 11 '43

Over-the-counter sales as principal. A. M. Metz and E. A. Kole. *Comm & Fin Chr* 157:1858+ My 20 '43

Over-the-counter trading on the national securities exchanges. V. Hughes. *Comm & Fin Chr* 158:297+ J1 22 '43

Quotation sheets as evidence of market price. A. M. Metz and E. A. Kole. *Comm & Fin Chr* 158:100+ J1 8 '43

SECURITIES—Over-the-counter marketing—*Continued*

SEC bid and asked disclosure plan would snuff out small dealers and impair Nation's whole economy. *Comm & Fin Chr* 158:1870+ N 11 '43

Securities business could not survive under NASD rule limiting profits. *Comm & Fin Chr* 158:1685+ O 23 '43; Discussion. 158:1871+, 1991+, 2101+, 2103+, 2205+, 2207+, 2311+, 2415+, 2550, 2636, 2657 N 11, 18, 25, D 2, 9, 16, 23, 30 '43

Selling on a net vs. an agency basis in over-the-counter mart. J. J. Caffrey; F. Dunne. *Comm & Fin Chr* 158:999 S 9 '43

Unlisted rumpus; stock exchanges move to cut in on over-the-counter market's dealings. *Business Week* p107-8 Ag 14 '43

Urges abolition of over-the-counter markets. H. R. Taylor. *Comm & Fin Chr* 158:298+ J1 22 '43; Reply. 158:499+ Ag 5 '43

Prices

Abandonment by SEC of theory of mark-up; re-sale price of oil royalties. A. M. Metz and E. A. Kole. *Comm & Fin Chr* 158:322 J1 22 '43

Peace and security prices. E. W. Axe. *Comm & Fin Chr* 158:1398+ O 7 '43

Security prices, United States, United Kingdom, France, Germany, Netherlands, 1926, 1932-1941 and monthly, Nov. 1941-Nov. 1942. *Fed Res Bul* 29:107 Ja '43 [cont monthly]

See also

Bonds—Prices

Stocks—Prices

Private placement*See Securities—Marketing***Refunding**

Nonrefunding security flotations and capital structures, 1935-1937; comparison with companies issuing refunding securities. J. B. Hubbard. *R Econ Stat* 25:192-201 Ag '43

Possible refunding operations, \$3,350,000,000. O. Ely. *Pub Util* 32:364-5 S 16 '43

Regulation

Dealers fret; SEC is reported to have new full disclosure rule. *Business Week* p102-3+ My 15 '43

Over-the-counter sales as principal. A. M. Metz and E. A. Kole. *Comm & Fin Chr* 157:1858+ My 20 '43

SEC bid and asked disclosure plan would snuff out small dealers and impair Nation's whole economy. *Comm & Fin Chr* 158:1870+ N 11 '43

SEC should adopt program of self restraint. H. F. McGuire. *Comm & Fin Chr* 158:1487+ O 14 '43

Security dealers now have increased duties to investors; benefits to the public and securities industry through self-regulation. H. G. Riter, 3d. *Comm & Fin Chr* 157:561+ F 11 '43

Wrong formula; Regulation T of the Federal reserve board. I. R. Harris. *Comm & Fin Chr* 157:265+ Ja 21 '43

See also

New York stock exchange—Rules

Securities and exchange commission

Statistics

New corporate security issues; proposed uses of proceeds yearly 1934-1942, monthly Feb. 1941-Dec. 1942. *Fed Res Bul* 29:165 F '43 [cont monthly]

New security issues for new capital and for refunding domestic, totals, 1933-1942, by months, Jan. 1942-Jan. 1943. *Fed Res Bul* 29:246 Mr '43 [cont monthly]

Unlisted securities

Extension of credit on unlisted securities. O. V. Van Camp. *Comm & Fin Chr* 158:808-9 Ag 26 '43

Canada

Canadian holdings; British holdings of Canadian securities. *Economist* 145:55 J1 10 '43

Canadian securities. *Comm & Fin Chr* 157:572 F 11 '43 [cont in weekly Thursday numbers]

Canadian securities; earnings of industrials and utilities, 1941 and 1942. B. Williams. *Comm & Fin Chr* 157:1010 Mr 18 '43

Opportunities in Canadian public bonds. F. J. McDiarmid. *Barron's* 23:16 Ja 25 '43

Potential security profits from currency stabilization; Canadian and British stocks. G. Collingwood. *il Mag of Wall St* 72:123-5+ My 15 '43

Values in Canadian corporate bonds. F. J. McDiarmid. *Barron's* 23:18-19 F 8 '43

Europe

Watch the world go by, bull markets in Europe despite Nazi occupation. G. Riviere. *Mag of Wall St* 72:137+ My 15 '43

Germany

Idle money in the stock market; comparison of inflation bases in United States and Europe. L. A. Hahn. *Trusts & Estates* 76:455-6, 458-9 My '43

What German stock market control means for us. B. Ravits. *Barron's* 23:11 Ja 4 '43

Great Britain

Equities retain lead; industrial equities during 1942. *Economist* 144:20 Ja 2 '43

Four year comparison; actuaries' investment index. *Economist* 145:372 S 11 '43

Heavy industry shares. *Economist* 144:730-1 Je 5 '43

Hints from the London stock market. B. Ravits. *Barron's* 23:1+ F 22 '43

Lower capital issues, 1942. *Economist* 144:51-2 Ja 9 '43

Milestone for equities. *Economist* 144:186 F 6 '43

New capital issues in Great Britain, 1919-1942. *Comm & Fin Chr* 157:588 F 11 '43

New capital issues, 1942, and comparisons for earlier years. *Economist* 144:sup5 Mr 13 '43

Potential security profits from currency stabilization; Canadian and British stocks. G. Collingwood. *il Mag of Wall St* 72:123-5+ My 15 '43

Stock market rise held down by post-war uncertainties. D. Tyerman. *Barron's* 23:1+ Ag 16 '43

War and peace stocks in London. B. Ravits. *Barron's* 23:3 F 1 '43

See also

Bonds, Government—London stock exchange

Great Britain

Japan

Japanese security markets. *Bankers M* 145:531 D '42

Pennsylvania

Pennsylvania brevities. *Comm & Fin Chr* 157:1200-1+ Ap 1 '43

United States

Capital flotations in the United States during the month of December and for the calendar year 1942. *Comm & Fin Chr* 157:303-5 Ja 25 '43

Listings on the New York stock exchange for the year 1942. *Comm & Fin Chr* 157:634-5 F 15 '43

Securities issued, by type of security, type of issuer, etc. 1938-1941. Survey of Cur Business 1942 Sup p78-81 [supplemented in monthly numbers]

See also

Bonds, Government—New York stock exchange

—United States

New York curb exchange

SECURITIES and exchange commission

Abandonment by SEC of theory of mark-up; re-sale price of oil royalties. A. M. Metz and E. A. Kole. *Comm & Fin Chr* 158:322 J1 22 '43

Abolish the Securities and exchange commission. R. Williams. *Comm & Fin Chr* 158:903+ S 2 '43; Reply. T. F. Moloney. 158:2008 N 18 '43

Activities of the SEC in accounting and auditing. *J Account* 76:183-4 Ag '43

Another test of SEC policy on tenders. O. Ely. *Pub Util* 31:428-30 Ap 1 '43

Cooperation between SEC and public accountants. G. Purcell. *J Account* 76:155-8 Ag '43

SECURITIES and exchange commission—Cont.
 Elimination of detail in SEC statements. *J Account* 75:187-8 F '43
 Nice lunch; reporters hear blast on new proxy rules. *Business Week* p85-6 Ja 30 '43
 Partial peace; Investors syndicate and SEC enter consent decree. *Business Week* p111+ O 23 '43
 Prince; public utility holding companies victims of fashionable politics. *H. Fleming. Comm & Fin Chr* 157:1666-7 My 6 '43
 SEC announces five new proxy revisions; also revision of its forms and regulations. *Comm & Fin Chr* 156:2242 D 24 '42
 SEC eases up. *Business Week* p66 D 26 '42
 SEC set back; suit to enjoin Investors syndicate tossed out. *Business Week* p100-1+ JI 17 '43
 SEC should adopt program of self restraint. *H. F. McGuire. Comm & Fin Chr* 158:1487+ O 14 '43
 SEC study of 1942 utilities finances. *Comm & Fin Chr* 158:314 JI 22 '43
 Supreme court holds SEC ruling invalid; preferred stock held by officers and directors of a company in reorganization and similar stock held by other groups. *Comm & Fin Chr* 157:487 F 4 '43
 Warns dealers not to destroy bright future of investment business. *J. B. Geraghty. Comm & Fin Chr* 157:1208 Ap 1 '43
 What became of the stock market? and what of the SEC? *W. Dodge. Fortune* 26: 126-8+ D '42

SECURITIES dealers, National association of.
 See National association of securities dealers

SECURITY insurance company of New Haven
 Insurance stocks. *E. A. Van Deusen. Comm & Fin Chr* 157:2173-4 Je 10 '43

SECURITY traders association, National. See National security traders association

SECURITY traders association of New York
 1943 officers. *pers Comm & Fin Chr* 156:2050 D 10 '42

SEDIMENTATION

Effect of pH changes upon some of the properties of sodium thymonucleate solutions. *C. F. Vilbrandt and H. G. Tennent. Am Chem Soc J* 65:1806-9 O '43

Sedimentation and diffusion behavior of certain nucleic acid preparations. *H. G. Tennent and C. F. Vilbrandt. bibliog Am Chem Soc J* 65:424-8 Mr '43

See also

Particles

Sewage disposal—

Grit chambers

SEDIMENTATION and deposition

Archean sedimentation. *F. J. Pettijohn. Geol Soc Bul* 54:925-72, pl 1-12 bibliog(p969-72) JI '43

Compaction and some oilfield features. *G. D. Hobson. bibliog diags Inst Pet J* 29:37-54 F '43

Derivation of reservoir rocks. *W. V. Howard. diags Oil & Gas J* 42:158-60+ Je 24 '43

Ferriscan-Knoxville problem. *N. L. Taliaferro. bibliog diags maps Am Assn Pet Geologists Bul* 27:109-219, pl 1-7 F '43

Lithification processes and early oil formation in sediments. *W. V. Howard. il Oil & Gas J* 42:92-4 Je 17 '43

Method of determination of the direction of the magnetic field of the earth in geological epochs. *E. T. Benedikt. Am J Sci* 241:124-9 F '43

Stratigraphical analysis and environmental reconstruction. *T. G. Payne. flow diag bibliog diags map Am Assn Pet Geologists Bul* 26:1697-1770, pl 1 N '42

Tertiary sediments northeast of Morgan Hill, California. *C. M. Gilbert. maps diag Am Assn Pet Geologists Bul* 27:640-6 My '43

See also

Beaches

Erosion

Eskers

Loess

Rocks

Sand dunes

Silt

Varves

SEDIMENTATION apparatus

Particle size distribution; sedimentation methods. *H. E. Schweyer. diags Rock Prod* 45:56. 94-6 N '42

Photographic sedimentation apparatus for measuring articles; abstract. *C. J. Stairmand and W. F. Carey. Concrete (mill sec)* 51:204 JI '43
 Sedimentation analysis; an improved manometric method. *F. R. Jones and C. G. Barlow. diags Soc Chem Ind J* 62:129-32 S '43

SEDIMENTS

Chemistry of lake sediments from Indian Tibet. *G. E. Hutchinson, A. Wollack and J. K. Setlow. bibliog pl Am J Sci* 241:533-42 S '43

Distribution graphs of suspended-matter concentration. *J. W. Johnson. bibliog Am Soc C E Proc* 63:1383-93 O '42; Discussion. 69: 321-2, 571-4 F, Ap '43

Effect of turbulence on sedimentation. *W. E. Dobbins. il diags Am Soc C E Proc* 69:235-62 bibliog(p260) F '43; Discussion. 69:632, 779-82, 977-84, 1298-1306 bibliog(pl306) Ap-Je, O '43

Sedimentation in reservoirs. *B. J. Witzig. Am Soc C E Proc* 69:793-815 bibliog(p814-15) Je '43; Discussion. bibliog 69:1104-8, 1324-30, 1493-1500, 1630-3 S-D '43

Study of the plant microfossil succession in the bottom deposits of Crystal Lake, Vilas county, Wisconsin, and the peat of an adjacent bog. *L. R. Wilson and A. T. Cross. bibliog Am J Sci* 241:307-15 My '43

Use of turbidity determinations in estimating the suspended load of natural streams. *R. G. Grassy. bibliog diags Am Water Works Assn J* 35:439-53 Ap '43

See also

Mud

Silt

Water purification

SEED disinfection

Seed disinfection; the determination of the adhesiveness of seed dressings to cereal seeds. *M. Fitzgibbon. il Soc Chem Ind J* 62:8-11 Ja '43

Toxicity studies with the fungicide tetra-chloro-para-benzoquinone (spergon). *T. H. McGavack and others. bibliog il J Ind Hygiene* 25:98-111 Mr '43

SEED stores

Garden center, San Francisco; commercial building improves residential neighborhood. *il plans diags Arch Forum* 79:92-8 Ag '43

SEEDS

Chemical seed treatments. *K. S. Chester. Science* 93:261 S I 7 '43

Forest tree seed. *H. I. Baldwin. 240p \$4.75 Chronica botanica co. Waltham, Mass. '42; Review, by H. L. Shirley. Science* 96:560-2 D 18 '42

Impulse displays are keynote of Ferry-Morse victory garden drive. *D. Ferry. il Sales Management* 52:70+ Ap 15 '43

Seed disinfection; the determination of the adhesiveness of seed dressings to cereal seeds. *M. Fitzgibbon. il Soc Chem Ind J* 62:8-11 Ja '43

Seeds must sell themselves by pictures on packets. *il Mod Packaging* 16:67-8+ Ag '43

Seeds of victory; shipments to allies and fighting fronts. *Business Week* p78+ My 8 '43

Vegetables and products; seeds shipped to allied nations. *For Comm W* 10:23 Ja 9 '43

Victory garden publicity boosting seed, equipment sales to new high. *Ptr Ink* 202: 38-9 Mr 12 '43

Vitamins in dehydrated seeds and sprouts. *P. R. Burkholder. Science* 97:562-4 Je 18 '43

What you can use; materials suitable for various purposes in processing industries. *Oil Paint & Drug Rep* 143:42 Mr 29; 47 Ap 5; 46 Ap 12; 40 Ap 13 '43

See also

Cottonseed

Flaxseed

Germination

Sunflower seed

Advertising

Copy that clicked; Reid national corn company. *R. Manville. il Ptr Ink* 203:38 Ap 23 '43

SEGUIN formation. See Geology—Texas

SEISMOGRAPHS

Film-recording seismograph. *H. Benioff and others. il diags Electronics* 16:89-92 My '43

Magnetic separators
Ore treatment

SEPARATORS

Aircraft oil systems; high-altitude problems; removal of entrained air. H. E. Moerman. diags S A E J 51:396+ N '43
Centrifugal separation in process industries; Chem & Met report. diags Chem & Met Eng 50:119-26 J1 '43

Savings through use of stage separation. Oil & Gas J 42:91 My 20 '43

See also

Air separators	Evaporators
Centrifuges	Filters and filtration
Clarifiers	(technical chemistry)
Classifiers	
Dust collectors	Magnetic separators
Electrostatic separators	Screens
	Steam traps

SEPARATORS, Electrostatic. See Electrostatic separators

SEPARATORS, Magnetic. See Magnetic separators

SEPTIC tanks

Plain concrete septic tanks for small housing projects. J. Girard. il diags Eng N 131:538-9 O 7 '43

Septic tank system of sewage disposal. Consumers' Research Bul 12:24 Ag '43

Sewage treatment for public institutions. R. C. Wheeler. diags plan Pub Works 74:17-18+ F '43

Wood septic tank in Baltimore. Pub Works 73:30 N '42

SEQUOIA

Botanical name of the giant sequoia. G. N. Jones. Science 98:406-7 N 5 '43

SERENDIPITY (term)

Serendipity. Chem & Eng N 21:608 Ap 25 '43

SERENOA surrulata. See Saw palmetto

SERIAL publications*See also*

Periodicals

SERIES, Maclaurin. See Maclaurin series

SERIES, Statistical*See also*

Time series (statistics)

SERIGRAPH

Serigraph tests for yarn strength prove more reliable than skein or lea tests. G. West. Textile World 93:88-9 My '43

SERINE*Analysis*

Polarographic determination of formaldehyde in biological material; application to the determination of serine. M. J. Boyd and K. Bambach. bibliog Ind & Eng Chem Anal ed 15:314-15 My 15 '43

SERPENTINE

Maintenance of the furnace linings in large basic open-hearth tilting furnaces by the use of chrome ore, magnesite and serpentine. A. Jackson. Engineering 156:265 O 1 '43

SERUM

Apparatus for concentrating serum. G. M. Needham and P. F. Dwan. diag Science 97: 314 Ap 2 '43

Biological products; establishments licensed for the propagation and sale of viruses, serums, toxins, and analogous products. Pub Health Rep 57:1775-81 N 20 '42

Comparison of rabbit and horse serums in meningococcus infections. S. E. Branham. bibliog Pub Health Rep 58:478-83 Mr 19 '43

Influence of heat treatment on solutions of crystalline horse serum albumin. G. R. Cooper and H. Neurath. bibliog J Phys Chem 47:383-98 My '43

Jaundice following administration of human serum. J. W. Cliphant, A. G. Gilliam and C. L. Larson. bibliog Pub Health Rep 58: 1233-42 Ag 13 '43

Separation and concentration of the isohemagglutinins from human serums. L. Pillemer. Science 97:75-6 Ja 15 '43

Solubility and electrophoretic studies of serum globulins; gamma globulin. E. Jarneson and C. Alvarez-Tostado. il Am Chem Soc J 65:459-65 Mr '43

Ultracentrifugal and electrophoretic investigation of an ascitic fluid from a cancer patient. E. B. Saniger, L. E. Krejci and and E. O. Kraemer. bibliog Franklin Inst J 235:298-313 Mr '43

See also

Antigens and antibodies
Complement (immunity)

Analysis

Quantitative micro-estimation of antibodies in the sera of man and other animals. M. Heidelberger and C. F. C. MacPherson. bibliog Science 97:405-6 Ap 30 '43; Correction. 98:63 J1 16 '43

Testing

Mouse protective values of antimeningococcus serum in comparison with precipitation in immune serum agar plates. M. Pittman. Pub Health Rep 58:139-42 Ja 22 '43

SERUM THERAPY

Experimental chemotherapy of burns and shock; production of traumatic shock in mice; therapy with mouse serum and sodium salts. S. M. Rosenthal. bibliog Pub Health Rep 58:1423-36 S 24 '43

Protective antiserum against mouse pneumonitis virus. M. R. Hilleman and F. B. Gordon. bibliog Science 98:347-8 O 15 '43

Rocky Mountain spotted fever; further experience in the therapeutic use of immune rabbit serum. N. H. Topping. bibliog Pub Health Rep 58:757-75 My 14 '43

Treatment of young white mice infected with leptospira icterohaemorrhagiae with immune serum. C. L. Larson. bibliog Pub Health Rep 58:10-15 Ja 1 '43

See also

Antigens and antibodies
Toxins and antitoxins

SERVANTS

Retirement benefits for domestic servants in Uruguay. Monthly Labor R 56:1116-17 Je '43

See also

Housekeeping service
(social work)

SERVEL, inc.

Keeping the name alive though 100% busy; Nutrition in industry and fashions in ration campaigns. Adv & Sell 36:110+ Ag '43

Make every minute count is slogan of Servel war workers. Am Gas J 158:38 Ja '43

Servel sponsors post-war series on air conditioning. Gas Age 92:34, 36, 38 Ag 12 '43

What gas air conditioning means to the gas industry. Am Gas J 159:34-5 S '43

SERVICE (in industry)

Advertises free course in arc welding in industrial papers; prospects register by means of coupon; Hobart brothers company. il Ptr Ink 205:21+ O 22 '43

Coddle your business machines, they're equivalent to manpower! theme of IBM. Dictaphone, Remington Rand, and other office equipment makers. il Sales Management 51:24-6+, 30 D 1 '42

How tool-design service organizations speed war production. H. E. Linsley. Mach 49:173 Ja '43

Utility helps farmers surmount critical equipment shortages; Eastern Oregon Light and Power farm equipment clearing house and information center. Sales Management 52: 50+ J1 1 '43

See also

Airplane industry and trade—Service	Electric utilities—Service
Banks and banking—Service	Gas companies—Service
Customer relations	Printing machinery
Dealer helps	Industry—Service
Electric apparatus	Retail trade—Service
Industry—Service	Salesmanship—Service

SERVICE charge. See Banks and banking—Service charge

SERVICE industries

Replacement of men by women in New York service industries. Monthly Labor R 56: 486-7 Mr '43

See also

Banks and banking Garages
Beauty shops Hotels
Cleaning industry

Advertising

Mailing piece produces 80% returns in signed orders; Kleinzway wholesale fur cleaning, storage and repair service to quality department stores. G. M. Stern. il Ptr Ink 203:22+ Je 4 '43

Survey shows women weak in where-to-buy-it knowledge. il Sales Management 52:44+ Ja 15 '43

SERVICE men. See United States—Armed services

SERVICE men's centers

Service men's centers; Pepsi-Cola co., New York and Washington canteens. il plans Arch Forum 77:38-43 D '42

SERVICE organizations for national defense, United. See United service organizations for national defense

SERVO-MECHANISMS

Resonant electrical control systems. D. W. Moore, Jr. il diags Elec Eng 62:436-9 O '43; Same. diags J Aeronautical Sci 10: 285-8+ O '43; Same. Instruments 16:250-2+ My '43

Servomotor locking mechanism; patent assigned to Bendix aviation corp. diag Machine Design 15:180+ JI '43

SESAME

Nicaraguan yields of sesame seed. For Comm W 11:35 My 29 '43

SESAME oil

Sesame in insecticides. C. Eagleson. Soap & San Chem 18:125+ D '42

SESCI furnace

Production in rotary furnaces of steel for castings. F. A. Lemon and H. O'Neill. bibliog Iron & Steel Inst J 146:53-71, pl 3-4 no 2 '42; Same cond. Engineering 155:257-60, 279-80 Mr 26-Apr 2 '43; Abstract. Iron Age 151:32 Ja 14 '43; Discussion. Iron & Steel Inst J 146:71-2 no 2 '42

SETCHELL, William Albert, 1864-1943

Sketch. C. B. Lipman. Science 97:458 My 21 '43

SETTLING. See Sedimentation**SETTLING tanks**

Air lift removes grit from settling tank. diag Comp Air M 48:7123 Ag '43
Improved final settling tanks at Bowery Bay. R. H. Gould. il diags Civil Eng 13: 279-81 Je '43

See also

Sewage tanks

SEWAGE

Bio-chemical oxygen demand and dissolved oxygen; abstract and discussion. C. N. Sawyer. Water Works & Sewerage 89:485-6 N '42

High nitrate content in biologically purified sewage; abstract. K. Imhoff. Pub Works 74: 47 My '43

See also

Sewage sludge
Sewerage
Trade waste

Analysis

Chromium, a water and sewage problem. D. W. Graham. bibliog Am Water Works Assn J 35:159-64 F '43

Easier method for determining suspended solids. A. L. Mathis. il Water Works & Sewerage 90:386-7 O '43

Effect of river mud deposits on determination of B.O.D. of supernatant liquor. W. A. Moore and C. C. Euehoff. Ind & Eng Chem Anal ed 14:933-4 D 15 '42

pH zones of import in water supply and sewage treatment practice; pH conversion chart; effect of carbonate and bicarbonate alkalinity. Water Works & Sewerage 90: sup285-7 Je '43

Mathematics of B.O.D. determinations. H. M. Gift. chart Water Works & Sewerage 90: 313-15 Ag '43

Rapid method for determining grease in sewage and sludges. H. W. Gehm. Water Works & Sewerage 90:305-8 Ag '43

Bacteriology

Poliomyelitis virus in sewage. R. E. Thompson. Water & Sewage 81:24+ Mr '43

Relation between coliforms and enteric pathogens. R. W. Kehr and C. T. Butterfield. Pub Health Rep 58:589-607 bibliog(p606-7) Ap 9 '43; Abstract. Water & Sewage 81: 25-6+ Je '43

Sewage-sludge digestion; methane fermentation, Winnipeg plant. D. L. McLean. il plan Water & Sewage 81:13-14, 36-8 Ag '43

Gas recovery

See Sewage sludge—Gas production

SEWAGE, Utilization of

Dollars from sewers. E. J. Cleary. il Sci Am 169:106-8 S '43

Industrial waste disposal. F. W. Mohlman. il diags Chem & Met Eng 50:127-31 F '43

Waste disposal problems in wartime. F. W. Mohlman. il Chem & Met Eng 50:78-81 Ja '43; Same cond. Chem Age (Lond) 48:399-400 Ap 10 '43

See also

Sewage sludge—Gas Sewage sludge as
production fertilizer

SEWAGE disposal

Advances in sewage treatment and present status of the art; first progress report of the committee of the sanitary engineering division. Am Soc C E Proc 68:1559-84 bibliog(72 titles, p1580-4) N '42

Canadian institute on sewage and sanitation 9th annual meeting, Toronto, Oct. 29-30. Water & Sewage 80:19-28, 64-6 N '42

Chromium, a water and sewage problem. D. W. Graham. bibliog Am Water Works Assn J 35:159-64 F '43

Developments in sewerage and sewage treatment; a review of progress and change during 1942. C. G. Hyde and A. M. Rawn. il diags plan Water Works & Sewerage 90: 41-52 F '43

Disposal of sludge in small plants. G. A. Parkes. Water Works & Sewerage 90:384-5 O '43

Effect of industrial wastes on sewage disposal; textile waste, chromium and copper. C. E. Hoover. Pub Works 73:32 N '42

Hourly load variations in relation to sewage treatment plant operation. E. T. Killam. Water Works & Sewerage 90:sup235-6 Je '43

Illinois water litigation, 1940-1941; petition by state of Illinois for temporary increase in diversion from Lake Michigan. L. Pearse. bibliog map Am Soc C E Proc 68:1689-1713 D '42; Discussion. 69:772-4, 942-8 My-Je '43

Industrial waste disposal. F. W. Mohlman. il diags Chem & Met Eng 50:127-31 F '43

Joint sewerage facilities for 13 local units. E. M. Shafter and J. F. Gibbs. Pub Works 74:34 Ag '43

Low-cost sewage treatment facilities for a war plant. il plan Eng N 131:350-2 Ag 26 '43

Manitoba and Minnesota water and sewage works meeting. Water & Sewage 81:22-3+ Ag '43

Maryland-Delaware water and sewerage assn. 17th annual conference. Water Works & Sewerage 90:213-18 Je '43

Michigan communities in joint agreement to solve sewage disposal problem. Eng N 131:143 JI 15 '43

New England sewage works assn. spring conference. New Haven, May 26. Water Works & Sewerage 90:278-80 JI '43

New England sewage works assn. fall meeting. Boston, Sept. 22. Water Works & Sewerage 90:369-71 O '43

New Jersey sewage works association annual meeting, Trenton, March 25. Eng N 130: 449+ Ap 1 '43

New Jersey sewage works association holds victory council. Water Works & Sewerage 90:121-6 Ap '43

New problems created by the war; abstract and discussion. A. M. Rawn. Eng N 129: 713-14 N 19 '42

Olio conference on sewage treatment. Water Works & Sewerage 90:309-12 Ag '43

SEWAGE disposal—Continued

Operating results at the North Toronto sewage treatment plant, N. G. McDonald, flow diag il Water & Sewage 80:32-3, 58, 60+ N '42

Organizing and financing sewage treatment projects, S. A. Greeley, il Am Soc C E Proc 68:1727-42 D '42; Discussion, 68:1801-6; 69: 587-8, 1109-14 D '42, Ap '43

Pennsylvania sewage operators hear off the record talks, Water Works & Sewerage 90: 275-7 J '43

Settleable solids and suspended solids; abstract and discussion, A. J. Fischer, Water Works & Sewerage 89:486 N '42

Sewage disposal in South America, E. J. Cleary, il Eng N 131:551-2 O '43

Sewage disposal postwar prospects, Eng N 131:544-5 O '43

Sewage problems at Toronto; Board of control discusses possible temporary relief measures, map Water & Sewage 81:17+ O; 22+ D '43

Sewage purification by flotation; abstract, C. A. Hansen, Water Works & Sewerage 89:479 N '42

Sewage-sludge digestion; methane fermentation, Winnipeg plant, D. L. McLean, il plan Water & Sewage 81:13-14, 36-8 Ag '43

Sewage treatment at air-training schools in western Canada, R. A. McLellan, flow sheets il diags plans Water & Sewage 81: 13-19+ My '43

Sewage treatment problems in Cleveland; abstract, J. W. Ellms, Water Works & Sewerage 89:479-80 N '42

Theory and practice of sewage sludge digestion tank heating, N. C. Wittwer, diags Water Works & Sewerage 90:229-39 Je '43

Treatment of industrial wastes; information published by the U. S. Public health service on treatment of wastes from brewery, cannery, coal washing, coke, cotton, distillery, meat, milk, oil, paper and tannery industries, flow diag Pub Works 73:25-6 N '42

TNT wastes, S. Schott, C. C. Ruchhoff and S. Megregian, diag Ind & Eng Chem 35: 1122-7 O '43

Vacuum flotation; a new process for sewage and industrial waste treatment, A. J. Fischer, il diags Eng N 130:297-301 F '43

Waste disposal problems in wartime, F. W. Mohlman, il Chem & Met Eng 50:78-81 Ja '43; Same cond. Chem Age (Lond) 48: 399-400 Ap 10 '43

What you can use; materials suitable for processing industries, Oil Paint & Drug Rep 143:52 Je 28; 144:32C J1 5 '43

See also

Cesspools	Sewage flow
Committee on water and sewage works development	Sewage incinerators
Imhoff tanks	Sewage pumping
Plumbing	Sewage sludge
Refuse disposal plants	Sewer cleaning
Septic tanks	Sewerage
Sewage disposal plants	Sewers, Concrete
	Trade waste
	Water pollution

Activated sludge method

Activated sludge bulking; causes and corrective measures, L. H. Enslow, Water Works & Sewerage 90:sup239-42 Je '43

Activated sludge thickening, D. Travaini, diags Water Works & Sewerage 90:sup243-4 Je '43

Control of activated sludge bulking by chlorination, E. E. Smith, il Water Works & Sewerage 90:209-10 Je '43

Effect of activated sludge process on poliomyelitis virus, H. J. Carlson, G. M. Ride-nour and C. F. McKhann, diags Water & Sewage 81:23-4+ S '43

Oxidation index as an element of process control, E. B. Mallory, il Water Works & Sewerage 90:31-40 Ja '43

Three years' treatment of sewage at Celina, Ohio; activated sludge preceded by chemical treatment, P. A. Uhlmann, il Pub Works 74:13-17 Mr '43

Up-to-the-minute, Cranston, R. I. sewage disposal plant and sewerage system, E. W. Horne, il plan Pub Works 74:20-3, 40+ My '43

Aeration

Contact aeration for sewage treatment; Hays submerged contact aeration process, L. B. Griffith, flow diag il diags plan Eng N 130: 138-42 Ja 28 '43; Abstract, Water & Sewerage 81:20-1+ My '43

Economics of cleaning air-diffusion media, J. J. Wirts, il diags Water Works & Sewerage 90:205-8 Je '43

English view on contact aeration; Hays process, J. Hurley, Eng N 130:395 Je 17 '43

Bibliography

Dewatering, incineration and use of sewage sludge, Am Soc C E Proc 69:103-4 Ja '43

Information on water and sewage works problems; where to find it; revised, L. H. Enslow, Water Works & Sewerage 89:sup17-18 Je '42; 90:sup19-20 Je '43

Chemical treatment**See also**

Sewage disposal—
Coagulation

Chlorination

Chlorine in sewage treatment, A. E. Griffin, il Water & Sewage 80:30-1+; Discussion, 76, 78-9 N '42

Control of activated sludge bulking by chlorination, E. E. Smith, il Water Works & Sewerage 90:209-10 Je '43

Decreasing sewage; experiences with the aero-chlorination method, G. J. Wiest, il Water Works & Sewerage 90:sup211-14 Je '43

Effect of discontinuance of chlorination of sewage plant effluent, Pub Works 74:18 S '43

TNT wastes, S. Schott, C. C. Ruchhoff and S. Megregian, diag Ind & Eng Chem 35: 1122-7 O '43

Use of liquid chlorine in the treatment of water and sewage; memorandum of May 28, 1914, E. S. Chase, Water Works & Sewerage 90:345-6 S '43

Coagulation

Application of ferric salts in water and sewage treatment; with especial reference to ferrisul, F. K. Burr, bibliog il Water Works & Sewerage 90:347-51 S '43

Bentonite as a coagulant for sewage and industrial wastes, H. L. Olin, R. J. Box and R. E. Whitson, Water Works & Sewerage 89:535-8 D '42

Calculating coagulant requirements in sludge conditioning; abstract, A. L. Genter, Water Works & Sewerage 90:58-9 F '43

Effect of lime in coagulation of sewage; with cost data, W. Rudolfs, Pub Works 73:15-17+ N '42

Hydrated lime in sewage treatment, W. Rudolfs and W. A. Moggio, il Pub Works 74:11-13, 49, 51 Ja '43

Treatment of supernatant digester liquor; using ferric chloride and lime, W. Rudolfs and L. L. Faulk, Pub Works 74:13-15 Ag '43

Two-step lime addition for sewage coagulation and pH control, W. Rudolfs and G. B. Nickol, Pub Works 74:30, 32 S '43

Cost

See Sewage disposal plants—Costs

Filtration

Possible economies in sludge disposal practice; Minneapolis-St Paul plant; with cost data, G. J. Schroepfer, Am Soc C E Proc 69:56-69 Ja '43; Discussion, 69:323-32 F '43

Recent results of biofiltration; abstract, W. A. Darby, Water Works & Sewerage 90: 124-5 Ap '43

Sewage treatment for the R.C.A.F. by trickling filters, G. G. Reid, il Water & Sewerage 80:29+ N '42

Treatment of sewage and certain trade waste waters by a new system of alternating double filtration, A. Parker, il diag plan Inst Chem Eng Trans 19:82-92; Discussion, 92-7 '41

SEWAGE disposal—Filtration—Continued

Two-stage biofiltration sewage-treatment plant for an army camp. A. H. Jessup. *Il diag Civil Eng* 13:168-70 Ap '43
 Vacuum filters used in primary sludge dewatering; with cost data. R. E. Fuhrman. *Am Soc C E Proc* 69:50-5 Ja '43

Gas recovery

See Sewage sludge—Gas production

Grease and oil removal

Degreasing sewage; experiences with the aero-chlorination method. G. J. Wiest. *Il Water Works & Sewerage* 90:sup211-14 Je '43
 Dollars from sewers. E. J. Cleary. *Il Sci Am* 169:107 S '43
 Rapid method for determining grease in sewage and sludges. H. W. Gehm. *Water Works & Sewerage* 90:305-8 Ag '43

Grit chambers

Air lift pump used to clean sewage-disposal grit chambers. N. M. Fuller. *diag Eng* N 130:557 Ap 22 '43; Same. *Water & Sewerage* 81:30-1 Je '43

Odor removal

Cannery waste disposal by lagooning. *Pub Works* 73:28 N '42
 Ventilation features of the Minneapolis-St Paul sewage treatment plant. G. J. Schroeffer. *Il diag plans Water Works & Sewerage* 90:353-8 O '43

Patents

Water and sewage patents (cont). J. F. Smith. *Water Works & Sewerage* 89:528; 90:150, 187, 220, 372 D '42, Ap-Je, O '43

Screening

Screening, the solution of a troublesome trade waste problem. A. L. Boley. *plans Pub Works* 74:20-1+ Ag '43

Sludge and refuse mixing

Advances in sewage treatment and present status of the art; first progress report of the committee of the sanitary engineering division. *Am Soc C E Proc* 68:1577-8 N '42

SEWAGE disposal, Rural

Recommendations of joint committee on rural sanitation, rural sewage disposal, Dec. 1942. *diags Pub Health Rep* 58:417-48 Mr 12 '43

SEWAGE disposal plants

Chlorine in sewage treatment. A. E. Griffin. *Il Water & Sewerage* 80:30-1+; Discussion. 76, 78-9 N '42
 High-degree treatment for camp sewage. H. F. Porter. *Il diags Eng* N 130:38-42 Ja 14 '43
 Incinerator and sewage plant operated jointly; Fairport, N.Y. F. A. Cary. *Il plan Pub Works* 74:28-9+ Ja '43
 Institutional sewage treatment and water supply. H. R. Green. *Il layout Pub Works* 74:11-15+ Ap '43
 Sewage-sludge digestion; methane fermentation. Winnipeg plant. D. L. McLean. *Il plan Water & Sewerage* 81:13-14, 36-8 Ag '43
 Sewage treatment at army posts. L. H. Kessler and J. T. Norgaard. *Eng* N 129:714 N 19 '42
 Solving boom town San Diego's sewage problem. B. D. Phelps. *Il diag Pub Works* 74:17-19 Jl '43
 Toronto sewage-treatment plant. *plan Water & Sewerage* 81:11, 13, 20-2+, 44-5 S '43

See also

Sewage incinerators
 Sewage pumping

Costs

Low-cost sewage treatment facilities for a war plant. *Il plan Eng* N 131:350-2 Ag 26 '43
 Possible economies in sludge disposal practice; Minneapolis-St Paul plant; with cost data. G. J. Schroeffer. *Am Soc C E Proc* 69:56-69 Ja '43; Discussion. 69:323-32 F '43
 Sewage plant costs; per capita costs of small sewage treatment plants. F. Hansen. *Eng* N 131:585 O 21 '43

Design

Cokato sewage disposal plant; novel design for handling canning and domestic wastes. W. E. King. *flow diag Il plans Water Works & Sewerage* 90:359-65 O '43

Directories

Directory of sewage-treatment plants in Canada. *Water & Sewerage* 81:108-15 Je '43

Employees

Sewage plant operators strike at Buffalo, N.Y. *Water Works & Sewerage* 90:188 My '43

Equipment

Classified index of products used in the water works and sewerage fields. *Water Works & Sewerage* 90:sup8-18 Je '43
 Compact sewage treatment works units at Cranston, R.I. R. W. Horne. *flow diag Il Civil Eng* 13:417-20 S '43
 Cranston, Rhode Island, builds complete new sewerage works for 53,000 people. R. W. Horne. *Il diags plans Boston Soc C E J* 30:83-121 Ap '43
 Dorrico vacuator for removal of grease and light solids from sewage and trade wastes. *diag Water Works & Sewerage* 90:sup 96-8 O '43
 Dry cleaning air diffuser plates. A. M. Rawn. *Water Works & Sewerage* 90:sup265 Je '43
 Economics of cleaning air-diffusion media. J. J. Wirts. *Il diags Water Works & Sewerage* 90:205-8 Je '43
 Enlargement of disposal plant of Spartanburg, S.C. G. W. White. *Il flow diag plan Water Works & Sewerage* 90:241-5 Jl '43
 Improving the operation of a small treatment plant. C. G. Weber. *Il diags plan Water Works & Sewerage* 90:sup217-20 Je '43
 Improvised sewage treatment at an army camp. H. E. Porter. *diags plan Pub Works* 74:14-17+ Je '43
 Lubrication of machinery in water and sewage treatment plants. *Il diags table Pub Works* 74:20-1+ Je; 22-4+ Jl '43
 Modifications and operation of the Bergenfield-Dumont sewage treatment plant; abstract. J. Duane. *Water Works & Sewerage* 90:123-4 Ap '43
 Operating results at the North Toronto sewage treatment plant. N. G. McDonald. *flow diag Il Water & Sewerage* 80:32-3, 58, 60+ N '42
 Priorities session; Federation of sewage works associations. *Water Works & Sewerage* 89:476-9 N '42
 Products index; buyer's guide, with addresses of Canadian manufacturers and agents of sewerage and waterworks equipment. *Water & Sewerage* 81:116-23 Je '43
 Revised sewerage order P-141 just issued. *Water Works & Sewerage* 90:246-8 Jl '43
 Sewage plant maintenance in wartime; symposium. *Water Works & Sewerage* 89:481-5 N '42
 Sewage plant maintenance; Twin-Cities plant. S. J. Larsen. *Il diag Water Works & Sewerage* 89:457-64 N '42
 Sewage treatment plant for a home for mental defectives; with cost data. B. V. Howe. *diags Pub Works* 73:22-3+ D '42
 Sewage treatment plant operation. A. P. Banta. *Water Works & Sewerage* 90:sup 202-5 Je '43
 Simplified flow recorder for Parshall flumes; Wellsville sewage treatment plant. J. D. Slough. *Il Water Works & Sewerage* 90:285-6 Ag '43
 Sludge drying developments at Chicago. L. M. Johnson. *Il Am Soc C E Proc* 69:1015-23; Discussion. 1144-6 S '43
 Treatment plant built of local materials at San Miguel, El Salvador. A. N. Carter. *Il diags plan Eng* N 131:528-30 O 7 '43
 Trituration of sewage screenings; operating experiences and costs. W. W. Watkins. *Water Works & Sewerage* 90:sup194 Je '43
 Two-stage biofiltration sewage-treatment plant for an army camp. A. H. Jessup. *Il diag Civil Eng* 13:168-70 Ap '43
 Up-to-the-minute Cranston, R.I. sewage disposal plant and sewerage system. R. W. Horne. *Il plan Pub Works* 74:20-3, 40+ My '43

SEWAGE disposal plants—Equipment—Cont.

Vacuum flotation; a new process for sewage and industrial waste treatment. A. J. Fischer. *il* diags Eng N 130:297-301 F '25 '43

Waste gas burner of Kankakee. *il* diag Water Works & Sewerage 89:541 D '42

See also
Sewage tanks

Grounds

Grounds, including visitors and protection; abstract. A. B. Cameron. *Water Works & Sewerage* 89:483-4 N '42

Landscaping sewage treatment plants and sewers; Princeton borough, N.J. I. R. Riker. *il* Pub Works 74:17-18+ O '43

Heating and Ventilation

Ventilation features of the Minneapolis-St Paul sewage treatment plant. G. J. Schroeffer. *il* plans Water Works & Sewerage 90:353-8 O '43

Laboratories

Chemical control of sewage treatment plants. G. C. Laidlaw. *il* Water & Sewage 81:20-1+ O '43

Models

Sewage plant operation taught with a model; train engineers and operators in the operation of army sewage treatment plants. *flow diag il* Eng N 131:146-8 JI 15 '43

Power

Gas engine experience in sewage service at Madison, Wis.; with cost data. J. C. Mackin and W. H. Gottlieb. *il* map Power Pl Eng 47:60-4 Ap '43

Use of sewage gas aids fuel conservation; Southern plant of the Cleveland sewage disposal department. *il* Power Pl Eng 47:61 Ja '43

Records

Operating log for a small sewage plant. A. A. Hirsch. *il* Water Works & Sewerage 90:28-9 Ja '43

SEWAGE flow

Determination of Kutter's *n* for sewers partly filled. C. F. Johnson. *il* diags Am Soc C E Proc 69:187-203 F '43; Discussion. 69:609-14, 1063-4 Ap, S '43

Gaging and sampling Louisville's sewage. C. F. Johnson. *il* diags Civil Eng 13:97-100 F '43

Weir with flow proportional to head, for float-regulated chemical dosing of sewage effluent. E. G. Smith. *diags Eng N* 131:198-9 JI 29 '43

SEWAGE incinerators

Experience of Chicago, Ill. in the preparation of fertilizer and in drying sludge for incineration. W. A. Dundas and C. P. McLaughlin. *flow diags map Am Soc C E Proc* 69:30-102 Ja '43

Possible economies in sludge disposal practice; Minneapolis-St Paul plant; with cost data. G. J. Schroeffer. *Am Soc C E Proc* 69:56-69 Ja '43

Sewage sludge; drying and incineration; developments indicated by experience at Buffalo, N.Y.; with cost data. C. R. Velzy. *plan Am Soc C E Proc* 69:43-9 Ja '43

SEWAGE pumping

Cranston, Rhode Island, builds complete new sewerage works for 53,000 people. R. W. Horne. *il* plans Boston Soc C E J 30:83-95 Ap '43

Dry well replaces a wet one for pumping sewage. R. W. Halteman. *Pub Works* 73:40 D '42

Englewood's sewage pumping station. R. Hartley. *il* Pub Works 74:11-13 S '43

Maintenance of sewage pumping stations. A. L. Soden. *il* Water Works & Sewerage 90:sup27-9 Je '43

Pumping sludge to and from digestion tanks; abstract. D. C. Reybold. *Pub Works* 74:36 Mr '43

Sewage and sludge pumping. H. Ryon. *Water Works & Sewerage* 90:sup223-6 Je '43

Sludge pumping. S. E. Kappe. *diag Water Works & Sewerage* 90:sup231-3 Je '43

SEWAGE sampling

Gaging and sampling Louisville's sewage. C. F. Johnson. *il* diags Civil Eng 13:97-100 F '43

Sampling and preservation of samples; abstract and discussion. D. Bloodgood. *Water Works & Sewerage* 89:485 N '42

Sampling errors in water and sewage plant data. H. A. Thomas, jr. *Water Works & Sewerage* 90:182-4 My '43

SEWAGE sludge

Dewatering, incineration, and use of sewage sludge; symposium. C. R. Velzy and others. *bibliog Am Soc C E Proc* 69:42-104 Ja '43; Discussion. 69:907-10, 1055-62 Je, S '43

Disposal of sludge in small plants. G. A. Parkes. *Water Works & Sewerage* 90:384-5 O '43

Practice and economy of sludge concentration; a symposium. *Water Works & Sewerage* 90:59-60 F '43

Sewage and sludge pumping. H. Ryon. *Water Works & Sewerage* 90:sup223-6 Je '43

See also Sewage disposal—Activated sludge method

Drying

Experience of Chicago, Ill. in the preparation of fertilizer and in drying sludge for incineration. W. A. Dundas and C. P. McLaughlin. *flow diags map Am Soc C E Proc* 69:30-102 Ja '43

Porteous system of dewatering sewage sludge; abstract. C. Lumb. *Water & Sewerage* 81:40-3 S '43

Sewage sludge; drying and incineration; developments indicated by experience at Buffalo, N.Y.; with cost data. C. R. Velzy. *plan Am Soc C E Proc* 69:43-9 Ja '43

Sludge drying developments at Chicago, Ill. L. M. Johnson. *il* Am Soc C E Proc 69:1015-23 S '43; Discussion. 69:1144-6, 1307-8 S-O '43

Vacuum filters used in primary sludge dewatering; with cost data. R. E. Fuhrman. *Am Soc C E Proc* 69:50-5 Ja '43

Gas production

Design of sludge digesting tanks for efficient gas production. A. B. Kozma. *diag Water Works & Sewerage* 90:25-7 Ja '43; Correction. 90:55 F '43

Dollars from sewers. E. J. Cleary. *il* Sci Am 169:106-7 S '43

Gas engine experience in sewage service at Madison, Wis.; with cost data. J. C. Mackin and W. H. Gottlieb. *il* map Power Pl Eng 47:60-4 Ap '43

Operating experiences with gas producers. K. W. Williams. *il* Inst Mech Eng J & Proc 147:Proc 212-13 O '42

Scrubbing sewage gas; experiences with dry and wet methods at Peru, Indiana. H. E. Norris. *il* diags Water Works & Sewerage 90:61-4 F '43

Use of sewage gas aids fuel conservation; Southern plant of the Cleveland sewage disposal department. *il* Power Pl Eng 47:61 Ja '43

Waste gas burner of Kankakee. *il* diag Water Works & Sewerage 89:541 D '42

SEWAGE sludge as fertilizer

Advances in sewage treatment and present status of the art; first progress report of the committee of the sanitary engineering division. *Am Soc C E Proc* 68:1570-1 N '42

Experience of Chicago, Ill. in the preparation of fertilizer and in drying sludge for incineration. W. A. Dundas and C. P. McLaughlin. *flow diags map Am Soc C E Proc* 69:30-102 Ja '43

How effective are sewage sludges as soil fertilizers? W. Rudolfs and H. W. Gehm. *il* Water & Sewerage 80:21-3, 40, 42 D '42

Humus from rubbish and sludge. F. C. Temple. *Pub Works* 73:28 D '42

Sludge as fertilizer in the war emergency. L. W. Van Kleeck. *Water Works & Sewerage* 90:177-8 My '43

Use of sewage sludge as fertilizer. L. W. Van Kleeck. *il* Am Soc C E Proc 69:70-9 Ja '43

Waste disposal problems in wartime. F. W. Mohlman. *il* Chem & Met Eng 50:78-81 Ja '43; Same cond. *Chem Age (Lond)* 48:399-400 Ap 10 '43

SEWAGE tanks

Corrosion of sludge digester parts corrected by application of cathodic protection. G. A. Parkes. *il diags Water Works & Sewerage* 90:sup250-4 Je '43

Design of sludge digesting tanks for efficient gas production. A. B. Kozma. *diag Water Works & Sewerage* 90:25-7 Ja '43; Correction. 90:55 F '43

Improved final settling tanks at Bowery Bay. R. H. Gould. *il diags Civil Eng* 13:279-81 Je '43; Same, without *il. Water Works & Sewerage* 90:133-6 Ap '43

Inlet and outlet design for sedimentation tanks. J. H. L. Giles. *Water Works & Sewerage* 90:278-9 Jl '43

Low-cost sewage treatment facilities for a war plant. *il plan Eng N* 131:350-2 Ag 26 '43

Treatment plant built of local materials at San Miguel, El Salvador. A. N. Carter. *il diags plan Eng N* 131:528-30 O 7 '43

See also

Imhoff tanks
Septic tanks

Heating

Theory and practice of sewage sludge digestion tank heating. N. C. Wittwer. *diags Water Works & Sewerage* 90:229-39 Je '43

SEWAGE tanks, Brick

Brick arches for tank walls; sewage digester and clarifier tanks at eastern army camps. O. Albert. *il diags Eng N* 131:260-2 Ag 12 '43

SEWAGE tanks, Concrete

Plain concrete septic tanks for small housing projects. J. Girand. *il diags Eng N* 131:538-9 O 7 '43

Repairs save concrete tank after settlement causes cracks. *diags Eng N* 130:764-5 My 20 '43

SEWAGE tanks, Wood

Water-storage and sewage-treatment tanks built of wood. H. Harvey. *il Water & Sewage* 81:12-13 F '43

Wood Imhoff tanks serve an army camp. *il diags Eng N* 130:490-2 Ap 8 '43

SEWAGE works associations, Federation of.

See Federation of sewage works associations

SEWER cleaning

Cleaning encrusted pipe lines and vacuum filters with inhibited muriatic acid. K. L. Mick. *Water Works & Sewerage* 90:sup248 Je '43

Maintenance of sewers; abstract. R. L. Phillips. *Water Works & Sewerage* 89:484-5 N '42

Sewer cleaning with rubber beach balls. A. M. Rawn. *diag Water Works & Sewerage* 90:sup182 Je '43

SEWER design

Cranston, Rhode Island, builds complete new sewerage works for 53,000 people. R. W. Horne. *il diags Boston Soc C E J* 30:69-77 Ap '43

Determination of Kutter's n for sewers partly filled. C. F. Johnson. *il diags Am Soc C E Proc* 69:187-203 F '43; Discussion. 69:609-14, 1063-4 Ap, S '43

Sewer charts based on Scobey's formula. P. E. Whittington. *Eng N* 131:548-50 O 7 '43

SEWER pipes

Corrugated pipe sewer carried across river on bridge. *il diags Eng N* 131:43 Jl 1 '43

Trenching and laying sewer and water pipe. *il diags Pub Works* 74:11+ O '43

See also
Sewage flow

Cleaning

See Sewer cleaning

SEWER pipes, Concrete

Solving boom town San Diego's sewage problem. B. D. Phelps. *il map Pub Works* 74:14-15 Jl '43

SEWER pipes, Vitrified clay

Simplification practices outlined for clay pipe manufacturers. *Brick & Clay Rec* 103:9 O '43

See also Clay sewer pipe association

Manufacture

Biggest sewer pipe in the world: Pacific clay products co., Los Angeles. F. W. Fernholz. *il plan Brick & Clay Rec* 102:12-17 F '43

Hammermill grinding of dry pan tailings reduces pyrite specking in sewer pipe; Stillwater clay products co. *il Brick & Clay Rec* 102:33-4 Ja '43

Production losses are cut to a minimum at this sewer pipe plant; Lee clay products co. *il Brick & Clay Rec* 103:21-2 Jl '43

SEWERAGE

Cranston, Rhode Island, builds complete new sewerage works for 53,000 people. R. W. Horne. *il diags plans Boston Soc C E J* 30:66-121 Ap '43

Developments in sewerage and sewage treatment; a review of progress and change during 1942. C. G. Hyde and A. M. Rawn. *il diags plan Water Works & Sewerage* 90:41-52 F '43

Influence of this war upon sewerage problems; abstract. A. M. Rawn. *Water Works & Sewerage* 89:474-5 N '42

Landscaping sewage treatment plants and sewers; Princeton borough, N.J., I. R. Riker. *il Pub Works* 74:17-18+ O '43

Method of computing urban runoff. W. L. Hicks. *diag map Am Soc C E Proc* 69:461-97 Ap '43

Restoring streets after sewer construction. E. F. Durfee. *il Pub Works* 73:22-4 N '42

Solving boom town San Diego's sewage problem. B. D. Phelps. *il diag plan map Pub Works* 74:14-19 Jl '43

Some sewerage operating kinks. A. M. Rawn. *il diags Water Works & Sewerage* 90:sup 183-4 Je '43

Suspending seventeen hundred feet of sewer from a bridge. *diag Pub Works* 74:39 My '43; *Eng N* 131:43 Jl 1 '43

W.P.B. and sewerage. M. Maverick. *Water Works & Sewerage* 90:127-9 Ap '43; Excerpts. *Pub Works* 74:20 Ap '43

W.P.B. to have a special sewerage section. *Water Works & Sewerage* 90:92 Mr '43

Wartime maintenance of facilities for sewage disposal; abstracts of papers at Federation of sewage works associations' conference, Cleveland, Oct. 22-24. *Eng N* 129:713-15 N 19 '42

Water and sewerage works development; statement of the aims and objectives of the Inter-association committee on water and sewerage works development. *Am Water Works Assn J* 35:1156-60 S '43

Water works and sewerage: do these two utilities belong under single management? with financial and cost data. T. L. Amis. *Water Works & Sewerage* 89:515-16 D '42

Water works and sewerage reference and data section. *il diags Water Works & Sewerage* 90:sup1-287 Je '43

See also

Pipe laying	Sewer design
Plumbing	Sewers, Concrete
Sanitary engineering	Sewers, Wood
Sewage disposal	Trade waste
Sewage sludge	Water pollution

also subdivision Sewerage under names of cities, e.g. Buffalo, New York—Sewerage

also Federation of sewerage works associations

Bibliography

Sewerage digest. Published in monthly numbers of Public works

Cost

Contract unit bid prices; list of projects showing how contractors bid in 1942-1943. *Eng N* 130:sup226+ Ap 22 '43

Nonconnah basin sewers, Memphis, Tenn.; unit prices. *Eng N* 131:356+ Ag 26 '43

Sanitary sewer, Kansas City, Missouri; unit prices. *Eng N* 129:875 D 17 '42

Sewage treatment plant, sewers, Hopkinsville, Kentucky; unit prices. *Eng N* 131:416 S 9 '43

Sewer, Bloomfield, New Jersey; unit prices. *Eng N* 129:938 D 31 '42

Sewer tunnel, Michigan; unit prices. *Eng N* 131:224 Jl 29 '43

SEWERAGE—Cost—Continued

Storm and sanitary sewer, San Francisco; unit prices. Eng N 130:104 Mr 25 '43
 Storm water sewer, Washington, D.C.; unit prices. Eng N 131:358 Ag 26 '43
 Tunnel sewer, Fort Worth, Texas; unit prices. Eng N 130:766 My 20 '43

See also

Sewage disposal plants—Costs

Finance

Modern financing of sewage works; with tabulated data on rental experience. Water Works & Sewerage 90:sup195-9 Je '43
 Organizing and financing sewage treatment projects. S. A. Greeley. Il Am Soc C E Proc 68:1727-42; Discussion. 1801-6; 69:758-60, 1109-14 D '42, My, S '43
 Revenue plan for sewage works financing; joint billing of water and sewerage charges. J. A. Goetz. Water Works & Sewerage 90:366-8 O '43
 Sewage disposal postwar prospects. Eng N 131:544-5 O 7 '43
 Sewer rental laws and procedure; third progress report of the committee of the sanitary engineering division. bibliog Am Soc C E Proc 68:1585-1616 N '42

Laws and regulations

Sewer rental laws and procedure; third progress report of the committee of the sanitary engineering division. bibliog Am Soc C E Proc 68:1585-1616 N '42

Maintenance and repair

Chicago plans for emergency sewer repair. T. D. Garry and A. J. Schafmayer. Il maps Civil Eng 13:23-5 Ja '43
 Maintenance of sewers; abstract. R. L. Phillips. Eng N 129:715 N 19 '42
 Sewer maintenance. C. G. Andersen. Il diag map Water Works & Sewerage 90:sup177-81 Je '43

See also

Sewer cleaning

Canada

Directory of sewage-treatment plants in Canada. Water & Sewage 81:108-16 Je '43
 Sewered municipalities in Canada by provinces. Water & Sewage 81:106+ Je '43

Great Britain

Regionalization of sewage purification; suggestions by the (British) Institute of sewage purification for adoption in post-war reconstruction. Pub Works 74:35-7 Ap '43

Maryland

Maryland's war emergency water and sewerage problems. Pub Works 73:32+ N '42

Michigan

Joint sewerage facilities for 13 local units. E. M. Shaffer and J. F. Gibbs. Pub Works 74:34 Ag '43
 Michigan communities in joint agreement to solve sewage disposal problem. Eng N 131:143 Jl 15 '43

SEWERAGE departments**Accounting**

Revenue plan for sewage works financing; joint billing of water and sewerage charges. J. A. Goetz. Water Works & Sewerage 90:366-8 O '43

SEWERS, Concrete

Airfield storm sewer built of unreinforced concrete. diag Eng N 131:282 Ag 12 '43
 Wellpoints eliminate sheeting for sewer; with cost data. Il plan Eng N 130:357-9 Mr 11 '43

SEWERS, Wood

Wood sewer sound after carrying acids 17 years; W. J. Bush citrus products co. Eng N 130:495 Ap 8 '43

SEWING**Study and teaching**

Sewing success; Singer selling instruction instead of machines; McCall's also offers course. Business Week p68+ Mr 13 '43

SEWING machines

Sewing machines; an up-to-date study. Il diag Consumers' Research Bul 11:6-10 O '42
 Sewing machines, new or old, need adjustment for good and efficient sewing. bibliog Il Consumers' Research Bul 11:20-1 N '42

Safety measures

Photoelectric guard; protects fingers of sightless seamstresses. diag Sci Am 169:216 N '43
 Photoelectric safety control for electric sewing machines protect the fingers of sightless workers. Il diag Electronics 16:130+ Ag '43

SEWING thread. See Thread

SEX

Predetermination of sex. J. W. Gowen and R. H. Nelson. Science 96:558-9 D 18 '42

SEXTANT

Light-weight sextant improved by plastics and die-castings. Il diag Product Eng 13:689-91 D '42

SEYMOUR, James Alward, 1864-1943

Sketch. Mech Eng 65:623 S '43

SHADA. See Agriculture—Haiti

SHADOW pictures

Simple method for converting a line-record into a shadowgram. F. A. Gibbs. bibliog Science 97:145-6 F 5 '43

SHAFT sinking

Faster shaft sinking possible with air lift. S. F. Shaw. bibliog diag Eng & Min J 144:70-2 Ag '43

See also

Drilling and boring (earth and rocks)

SHAFTING

Barcus flexible shaft coupling. Il Engineering 155:476 Je 11 '43
 Electrical circuit analysis of torsional oscillations. L. A. Pipes. bibliog diag J Ap Phys 14:352-62 Jl '43
 Motor shafting arrangement. W. F. Schaphorst. diag Chem Ind 53:94 Jl '43
 Polar moment of inertia I_p and polar section modulus Z_p of solid circular sections; data sheets. R. Parkes. Mach 49:205 Jl '43

See also

Beltting
 Power transmission
 Pulleys

SHAFTS

Phototube measures twist in rotating shaft; patent assigned to the Westinghouse electric & manufacturing co. diag Machine Design 15:196+ Ag '43
 Reconditioning used equipment by metal-coating worn parts. C. K. Stipp. Il Oil & Gas J 41:65; 67-9 Mr 18 '43
 Single contact controls shaft rotation direction. Il diag Electronics 16:104+ Ja '43
 Six shafts ground instead of one. J. Gibson. diag Am Mach 87:88-9 Ja 7 '43
 Wet driveshaft doubles service; aircraft fuel pumps. R. B. Wallace. Il Machine Design 15:118+ Ap '43
 Worn compressor shaft metallized in place. Il diag Comp Air M 43:7118-19 Ag '43; Same cond. Roads & Bridges 81:62+ S '43

See also

Crankshafts

SHAKING apparatus

Speeding the shake-out step; abstract. G. M. Horn, K. L. Kaufman and S. G. Mittelstaedt. diag Chem Ind 53:97 Jl '43
 Vibratory shaker for laboratory use. A. R. Gilson. diag Chem & Ind 62:214-15 Je 5 '43

SHALE

Hydration-pressure relations in clays and heaving shale. H. H. Power, B. L. Towle and J. B. Plaza. bibliog Il diag Am Pet Inst Proc 23(4):64-76 '42; Same. Oil & Gas J 41:215+ N 12 '42; Discussion. Am Pet Inst Proc 23(4):76-7 '42

Review of recent advances in drilling-mud control; colloidal chemistry of clays and shales. P. E. Chaney. bibliog Oil & Gas J 41:81-2+ N 12 '42; Same. Pet Eng (Ref annual) 14:47-50+ Jl 1 '43

SHALE oil. See Oil shales

SHAMPOO

What you can use; materials suitable for various purposes in processing industries. Oil Paint & Drug Rep 143:25 My 24; 66 My 31; 57 Je 7; 62 Je 14 '43

SHANGHAI

Economic conditions

Shanghai under occupation. Economist 143: 702-4 D 5 '42

SHAPERS

Cutting large accurate keyways on vertical shapers. Il diag Mach 49:244 JI '43
Sales service and manufacturing co. precision shaper. Il Automobile Eng 33:82-3 F '43

SHAREHOLDERS. See Stockholders

SHARK leather

Plenty of sharks; fishermen and skimmers are bottleneck. Business Week p54+ N 6 '43
What you can use; reagents used in tanning shark skin. Oil Paint & Drug Rep 143:57 Je 7; 62 Je 14 '43

SHARK liver oil

Brazil's shark-liver-oil industry. For Comm W 11:27 Je 5 '43
Chemistry of shark liver oil; abstract. Chem Ind 52:628 My '43
Possible new member of the vitamins A₁ and A₂ group. N. D. Embree and E. M. Shantz. bibliog Am Chem Soc J 65:906-9 My '43
Shark-liver-oil production in India. For Comm W 11:28 My 15 '43
Stillage improved; addition of shark liver oil to distilling byproduct. Business Week p99 Ag 7 '43
α-Tocopherol, a natural antioxidant in a fish liver oil. C. D. Robeson and J. G. Baxter. bibliog Am Chem Soc J 65:940-3 My '43

Analysis

Methylene chloride; in the extraction and determination of vitamin A and oil in soup-fin shark livers. P. C. Tompkins and R. A. Bolomey. bibliog Ind & Eng Chem Anal ed 15:437-9 JI 15 '43

SHARKS

Plenty of sharks; fishermen and skimmers are bottleneck. Business Week p54+ N 6 '43

SHARKS, Fossil

Bradyodont sharks in the Permian of western Australia. C. Teichert. bibliog map Am J Sci 241:543-52, pl 1-3 S '43

SHARP & Dohme, inc.

Stocks in a strategic position. G. L. Merton. Mag of Wall St 71:489+ F 6 '43

SHARPENERS, Razor blade. See Razor blade sharpeners

SHARPENING

Colonial universal broach-sharpening machine. Il Mach 49:177-8 Ja '43; Steel 112: 118+ Mr 1 '43

Faster method for sharpening gun-chamber reamers; Barber-Colman combination sharpening machine. Il Mach 49:228+ D '42

Fixture sharpens thread hobs. R. Gerhart. diags Am Mach 86:1429 D 10 '42

Longer tool life by hand stoning. Il Iron Age 152:60 S 9 '43

Razor blade sharpeners. Il Consumers' Research Bul 11:9-10 D '42

SHASTA dam. See Dams, Concrete

SHAVER, John W.

New editor of Concrete. por Concrete 51:8 Ag '43

SHAW, Frank Henry

Hercules award to Shaw. por Chem & Eng N 21:1002 Je 25 '43

John Wesley Hyatt award for 1942. por Mod Plastics 20:56 JI '43

SHAW, Myril Clement, 1907-

Sketch. por bibliog Am Cer Soc Bul 22:355 O 15 '43

SHEAR. See Strains and stresses

SHEAVES

Control sheaves for continuous take-ups; woodflour phenolic. Il diags Mod Plastics 20:94-5+ Mr '43

Larger sheaves increase V-belt capacity for war. Il Power 87:306+ My '43

Larger sheaves permit using fewer V-belts. Il Factory Management 101:146 My '43
Reclaiming worn sheaves. F. L. Spangler. Il Oil & Gas J 41:55 F 11 '43; Same. Roads & Sts 86:86-7 F '43; Same. Safety Eng 85: 11-12 F '43; Same. Min Cong J 29:34 Je '43; Same cond. Steel 113:100+ Ag 16 '43

Manufacture

Centrifuging during pouring. A. Johnson. Il Iron Age 151:62-4 My 20 '43
Grinding fixtures for grooving tools. Il diags Am Mach 87:90-1 S 16 '43
Roller support speeds flame hardening; cable grooves of sheave wheels. Il Am Mach 87: 95 JI 22 '43
Steel sheaves are cast centrifugally. A. Johnson. Il diags Foundry 71:139-41+ Je '43

SHEBOYGAN, Wisconsin

Sewerage

Screening, the solution of a troublesome trade waste problem. A. L. Boley. plans Pub Works 74:20-1+ Ag '43

SHEEP

See also

Wool

SHEEPSKIN

Washing sheepskins. Textile Col 65:445 O '43

SHEET iron

See also

Sheet steel

SHEET metal

Data on various metal sheets. D. A. Graham. diag Sheet Metal Worker 33:26-7 N '42
Use of rolled zinc and zinc alloys. Iron Age 151:55-7+ Je 3 '43

See also

Roofing, Copper

Steel, Strip

Sheet steel

Tin plate

Standards

Metal gauge comparator; chart insert. R. R. Bostic. Iron Age 151:53-4 Ap 15 '43
Preferred sizes; wire and sheet metal; advantages. H. W. Robb. bibliog Steel 111: 76-8, 95-101 N 30 '42

Testing

Deep drawing tests; abstract. Metals & Alloys 17:852+ Ap '43
Hardness of aluminum sheet; tests and conversion charts. R. L. Templin. Il Metal Prog 44:86-8 JI '43

Mercury cracking test; abstract. R. G. Johnston. Metals & Alloys 18:608 S '43

Simple hydropress formability test for sheet metals. G. C. Barber. Il Mech Eng 65:643-6 S '43

SHEET metal, Enameled

Mechanics of enamel adherence. R. M. King. bibliog diags Am Cer Soc J 26:41-8, 358-60 F 1, O 1 '43

Relation of hydrogen to adherence of sheet-steel enamels. W. A. Deringer. bibliog Il Am Cer Soc J 26:151-9 My 1 '43

SHEET metal, Expanded

Expanded steel mesh backing up thin sheets developed for aircraft fuselage. Il Steel 111:96, 98+ D 7 '42

SHEET metal buildings

Heating industrial buildings with direct fired air system; corrugated sheet iron building. D. Henderson. diags Heating-Piping 15:587-9 N '43

SHEET metal contractors' national association
Sheet metal national association organized; constitution and by-laws. Sheet Metal Worker 34:20-1+ S '43

SHEET metal handling

Handling device for thin steel sheets. W. M. Halliday. diags Mech Handling 30:393-7 S '43

Mechanism for automatic picking-up and feeding thin sheets. W. M. Halliday. diags Mech Handling 29:231-3 D '42

Trucks for improved storing methods. Il Iron Age 151:70 My 20 '43

SHEET metal houses

See also

Steel houses

SHEET metal shops

How change-over to product layout cut unit costs; oil measure department, Huffman manufacturing company, Dayton. E. Finsley, *il plan Factory Management* 101: 87-9 S '43
Trend to shop work. *il Sheet Metal Worker* 34:56-7 O '43

Costs

Overhead of Pennsylvania contractors. *Sheet Metal Worker* 34:17 F '43

Equipment

Continuous finishing setup facilitates production of steel landing mats. W. R. Baxter and D. M. Wilkinson. *il plan Steel* 113:122-5 S 20 '43
Handling device for thin steel sheets. W. M. Halliday. *diags Mech Handling* 30:393-7 S '43

Production short cuts; conveyor for handling sheet metal parts; Vultee aircraft, inc.; illustrations. *Iron Age* 151:54-5 Ap 8 '43

See also

Sheet metal handling

SHEET metal trade

ABC's of MPR no. 251 for plumbing and sheet metal contractors. *Sheet Metal Worker* 34:28-9 My '43

Construction and business outlook. *Sheet Metal Worker* 34:17-18+ JI '43

Dealers urged to unite in business. C. P. Balsam. *Sheet Metal Worker* 33:36+- N '42

How to procure materials under CMP. *Sheet Metal Worker* 34:14+ My '43

Illinois favors national association; 30th annual convention of the Sheet metal contractors association of Illinois, Peoria, May 5-6. *Sheet Metal Worker* 34:51-4 Je '43

More steel for sheet metal workers. *Sheet Metal Worker* 34:14+ Ap '43

N.Y. group insurance makes good start; group compensation insurance for members of New York state sheet metal, roofing and air conditioning contractors' association; questions and answers. *Sheet Metal Worker* 33:23-4+ D '42

Sheet metal contractors' national association organized; constitution and by-laws. *Sheet Metal Worker* 34:20-1+ S '43

Directories

Directory section; names and addresses of manufacturers of equipment and products used in warm-air heating, air conditioning, ventilation and sheet metal work. *Sheet Metal Worker* 34:117-34 Ja '43

SHEET metal work

Bead designs studied for standardization; sheet aluminum aircraft parts. F. M. Mallett. *diags Product Eng* 14:708-11 N '43

Brave new world, F.O.B.; from Kansas City. Butler manufacturing co. ships ready-made airports of sheet metal, thinks of shipping practically everything. *il Fortune* 28:124-7, 146+ Ag '43

Casting die wedges for light metal flanging; wedge made of Kirksite. L. C. Costello. *il diag Iron Age* 152:70-3 O 28 '43

Checking sheet metal welding procedure. G. G. Landis. *diags Marine Eng* 47:148, 150+ N '42

Composite stampings relieve critical shortages. G. W. Birdsall. *diags Machine Design* 14:113-15+ D '42

Contouring sheet metal. *il diags Sheet Metal Worker* 34:33-4 S '43

Control of flange wrinkles in hydro-pneumatic forming. W. H. Snow. *il diags Iron Age* 152:40-2 S 30 '43

Design-strengthened materials. R. S. Smith and H. Gray. *il diag J Aeronautical Sci* 10:213-17 JI '43

Designs of deep-drawn shapes made by simple dies and welding. E. H. Hautz. *il diags Product Eng* 13:728-30 D '42

Die-formed sheet steel replaces cast aluminum; army's 60-in. dia. searchlight. *il diags Product Eng* 14:333-6 Je '43

Douglas drop hammer technique; use of Cecostamps, rubber pads and Kirksite dies. P. Stayboldt. *il Iron Age* 152:58-61 JI 8 '43

Fabricating methods for magnesium alloys. bibliog *il diags Product Eng* 14:568-73 S '43

Flange welding of light metal sheets; Weibel process of joining aluminum and magnesium. W. Flatow. *diags Iron Age* 151:59 Ap 1 '43

Formability of aluminum alloys used in aircraft fabrication. G. A. Brewer. *il diags Automotive & Aviation Ind* 87:32-5 D 15 '42

Getting more product from less metal; abstract. J. F. Cunningham. *Management R* 32:339-40 S '43

How Lockheed builds steel drop tanks. R. A. Von Hake. *il Aviation* 42:123-33 Je '43

Jig speeds sheet metal welding; radiator grille frames. *il Sheet Metal Worker* 34:26 My '43

Larger electrodes more than double welding speed; Bryant heater co. G. Wood. *il diag Steel* 113:104-5+ S 6 '43

Lockheed mass-produces droppable steel tanks. *il Aero Digest* 42:151-3 My '43; Same abr. *Automotive & Aviation Ind* 88: 26-9+ My 15 '43

Lockheed practice in stretching aircraft structural parts. F. C. Hoffman. *il diags Mach* 50:149-58 S '43

Lockheed sheds tears for the Axis; manufacturing auxiliary gasoline tanks for fighter planes. M. W. Coker. *il Mach* 49:161-7 My '43

Low-cost dies for aircraft parts; use of semi-plastic materials, such as masonite and bakelite. E. Schlenzig. *il diags Am Mach* 86:1307-14 N 12 '42

Metal stitching of aircraft parts. M. Barbe. *il Aero Digest* 41:118+ N '42

Methods for cutting aircraft sheet metal; reference book sheet. *il diags Am Mach* 87:109, 111 S 30; 141, 143 O 14 '43

Methods for forming aircraft sheet metal; reference book sheet. *diags Am Mach* 87: 117, 119 O 28 '43 (to be cont)

Plastic reduces cost of piercing dies; Vega aircraft corporation. R. Kennedy. *il diags Am Mach* 87:83-6 My 27 '43

Plastic working of magnesium alloy sheet; Dowmetal Ma and Dowmetal J-ia. C. E. Lehnhardt. *il diags Aeronautical Eng* R 2:21+ My '43; Same abr. *Iron Age* 151:45-51 Mr 18 '43

Preparation for welding. *diags Sheet Metal Worker* 34:29-32 Mr '43

Pressing metal into service. *il Sci Am* 169: 208-10 N '43

Properties of rubber as used in metal drawing and pressing. L. J. Brown. *diags Steel* 113:130, 132+ JI 19; 80, 82, 105-6 JI 26 '43

Punch and die; all-plastic punch and noncritical metal die. *Mech Eng* 65:818 N '43

Range of drop hammer operations. C. J. Frey and S. S. Kogut. *il diags Aviation* 41:118-21+ N '42

Remodeling a spray booth. R. L. Grayford. *diags Sheet Metal Worker* 34:38-9+ Ja '43

Sheet metal shapes classified as to formability. L. D. Dame. *il Product Eng* 14: 558-60, 633-5 S O '43

Sheet metal work at the Puget Sound navy yard. F. J. Oliver. *il Iron Age* 152:45-9 Ag 19; 48-52 Ag 26 '43

Some recent developments in sheet metal fabrication. P. L. Smith and V. L. Brooks. *il diags Automotive & Aviation Ind* 88:22-3+ Mr 1 '43

Special resistance welders speed sheet metal fabrication. *il Steel* 112:108, 110+ Ap 12 '43

Technical developments in high-production sheet metal forming. W. Schroeder and T. H. Hazlett. *il diags S A E J* 51:170-92 My '43

Technique of stretching aluminum. C. L. Fenn. *il diags Am Mach* 87:92-5 S 16 '43

Test questions on sheet metal. G. H. Klay. *Sheet Metal Worker* 33:30+ N '42

Two hooding experiences. P. R. Jordan. *diags Sheet Metal Worker* 34:27+ My '43

Welded display holder for printed matter. V. P. Weidner. *il Welding J* 22:322 My '43

Welding procedure in sheet metal. G. G. Landis. *il diags Sheet Metal Worker* 33:25-7+ D '42

See also

Air conditioning equipment
Air pipes
Dies
Dust collectors

Exhaust systems
Metal drawing
Pipe elbows
Pipes
Presses

SHEET metal work—See also—Continued

Rolling (metal work)	Stamping
Rolling mills	Tin cans
Sheet metal, Enam-	Tin plate
eled	Tubes
Sheet metal shops	Ventilators
Sheet steel	Water tanks

Pattern making

Laying out rectangular ducts and fittings (cont). O. W. Kothe, diags Sheet Metal Worker 33:28-30 D '42; 34:40-1+ Ja; 23-4 F; 24-5 Mr; 24-5 Ap; 24-6 My; 25-6+ Je; 22-3 JI; 30-1 Ag; 28-30 O '43

Paper patterns save vital materials; General electric company. il Iron Age 151:62 F 25 '43

Tables, calculations, etc.

Mensuration for sheet metal workers. diags Sheet Metal Worker 33:27-9+ N '42; Correction. 33:43 D '42

Permanent buckling strains in flat compression panels. F. N. Platt. diags Product Eng 14:211-13 Ap '43

Predicting stiffener and stiffened panel crippling stresses. H. B. Crockett. biblog diags J Aeronautical Sci 9:501-9 N '42

SHEET metal work, Architectural

Making metal last with paint. il Sheet Metal Worker 34:33-4 O '43

Sheet metal workers' catechism (cont). W. Neubecker. diags Sheet Metal Worker 34: 21+ F; 30 Ap; 30 Je; 29-30 JI; 27 O '43

Steel penthouses for storage rooms; Dayton Biltmore hotel. il Sheet Metal Worker 33:33 N '42

See also

Copperwork, Archi-	Roofing, Copper
tectural	Steel houses

SHEET metal workers

Women as sheet metal workers. E. Stein. Sheet Metal Worker 34:21 Mr '43

SHEET metal working machinery

Cecostamping; a new technique for producing formed parts in sheet metals. il Automobile Eng 33:104-6 Mr '43

Development in stretch presses. C. L. Fenn. il Am Mach 87:99-102 Ag 19 '43

Hydraulic Fastraverse sheet metal deep drawing press. il Am Mach 87:140 F 18 '43

New equipment. il Iron Age 152:65-8 S 2 '43

Selection of stretch-press form blocks; with particular reference to laminated wood. C. L. Fenn. il Am Mach 87:83-6 Ag 5 '43

Shaping metal with air under pressure; Southern engineering company. il diags Comp Air M 48:692-3 F '43

Sheridan stretching press. il Automobile Eng 33:205-6 My '43

Stitch in time, modern version; metal stitching machines. R. J. Niederhauser. il diags Machine Design 15:87-90+ My '43

Stitching machines for metal. Engineering 154:366 N 6 '42

See also

Presses

SHEET mills. See Rolling mills**SHEET piling**

Cellular cofferdam serves as wall of ship construction basins. il diags Eng N 131: 588-94 O 21 '43

Fighting water in a bridge foundation. il diags Eng N 130:806-10 Je 3 '43

Submerged shipways with steel sheeting walls. A. J. Ackerman; C. B. Jansen. il diags Civil Eng 13:309-14 JI '43

SHEET steel

Armco develops aluminized sheet steel. Mach 49:212 Ap '43

Bonderized and lacquered steel sheet; German investigations; substitute for tinplate in fabrication of food cans. Iron Age 151: 39+ Ja 14 '43; Abstract. Chem Age (Lond) 48:179-81 F 6 '43

Composite stampings relieve critical shortages. G. W. Birdsall. diags Machine Design 14:113-15+ D '42

Design-strengthened materials. R. S. Smith and H. Gray. il diag J Aeronautical Sci 10:213-17 JI '43

Die-formed sheet steel replaces cast aluminum; army's 60-in. dia. searchlight. il diags Product Eng 14:333-6 Je '43

Hot rolled, cold rolled and galvanized sheets. Pittsburgh; prices, 1929-1942; tabulation. Steel 112:371 Ja 4 '43

More steel for sheet metal workers. Sheet Metal Worker 34:14+ Ap '43

Thin sheet stainless steel welded into lightweight water storage tanks. il diag Product Eng 14:622 O '43

WPB curtails sheet steel deliveries. Sheet Metal Worker 34:54+ S '43

See also

Containers, Steel	Steel, Strip
Rolling (metal work)	Steel plates
Steel, Automobile	Tanks, Steel

Testing

Absolute measurement of the energy loss in a single strip of sheet iron or steel under alternating magnetization. W. E. Shenk. biblog il diags Am Soc T M Proc 42:595-618; Discussion. 619-21 '42

Fatigue tests as a means of evaluating corrosion damage of sheet metals. W. H. Mutchler and J. A. Kies. il diag Am Soc T M Proc 42:568-72; Discussion. 573-5 '42

Test for measuring drawability of deep-drawing steels; abstract. F. W. Boulger and F. B. Dahle. Iron Age 152:73-4 Ag 5 '43

SHEETS

Advantages of a blanket-and-sheet combination for outdoor use. H. F. Schiefer. J Research Nat Bur Stand 30:209-14 Mr '43

SHELL mounds. See Kitchen middens**SHELL oil company**

Shell Oil sponsors roadshow for servicemen in western camps. il Sales Management 52: 46+ F 1 '43

SHELLAC

Elimination of leaks in submerged pipe lines; shellac forced through pipes. L. E. Palmer. Gas Age 90:16 D 17 '42

Lac research in India; record of chemical progress. Chem Age (Lond) 49:79 JI 24 '43

New uses for shellac developed in India. For Comm W 12:25 JI 24 '43

Reversible hardening of shellac in storage. L. McCulloch. Ind & Eng Chem 35:825-6 JI '43

Shellac; its uses in modern industry and in war-time. A. J. Gibson. Chem & Ind 62: 346-8 S 11 '43

What you can use; materials suitable for various purposes in processing industries. Oil Paint & Drug Rep 144:40 Ag 23; 74 S 6; 52 N 29 '43 (to be cont)

Prices

Shellac varnish price ceilings revised. Oil Paint & Drug Rep 143:5+ F 15 '43

SHELLFISH**See also**

Crabs
Mussels
Oysters

Law

Possession of shellfish received from unregistered shipper. Pub Health Rep 58:790-1 My 14 '43

SHELLS

From boats to aggregates; Parker bros. & co., Houston, builds own boats, produces sand and gravel, dredges shell, and batches ready mixed concrete and shell road mix. il Rock Prod 46:64-6 JI '43

Undersea housing; photographs. Arch Forum 78:4 Mr '43

SHELLS (metal work)

Tests of cylindrical shells. W. M. Wilson and E. D. Olson. il diags Ill U Eng Exp Sta Bul 331:1-129 '41 (pa \$1); Excerpts. Welding J 22:sup163-8 Ap '43

SHELLS (metal work)—*Continued*

Tests of thin hemispherical shells subjected to internal hydrostatic pressure; reprint of University of Illinois Engineering experiment station bulletin 295. W. M. Wilson and J. Marlin. *il* diags Welding J 22:sup214-20 M '43

See also

Boilers

Sheet metal work

Tanks, Steel

SHELLS (projectiles)

Aircraft cannon; factors in design and operation of aircraft cannon; shell and ammunition. L. Bruchiss. *il* diags Steel 111:78-9+ N 16 '42

Precision coating of shell cases; spraying equipment applies thin coating of phenolic varnish. R. H. Smutzer. *il* Am Mach 87:80-1 A p 1 '43

Spinning brass primer tubes; Wolverine tube division, Calumet and Hecla consolidated copper co. H. A. Knight. *il* Metals & Alloys 18:298-301 Ag '43

Why of shell metallurgy specifications; abstract. H. H. Zornig. S A E J 51:147-8 Ap '43

Loading plants

Distribution design under difficult conditions; shell-loading plant. H. A. Lynette. diags Elec W 118:1770-2 N 28 '42

Ordnance plant; shortens time between powder and ultimate shell loading by use of dehumidifier. Heat & Ven 40:55 Ap '43

Manufacture

Annealing four 75-mm shells simultaneously; Thermionic induction generator. *il* Iron Age 150:54 N 19 '42

Automatic forging of 90-mm. shells; General American transportation corporation. *il* Mach 49:181-3 Ap '43

Automatic units for heat treating high explosive shells. D. H. Gardner and J. Walarius. *il* diags Metal Prog 42:861-6 N '42

Carbide dies for steel shell cases. E. Glen. *il* diags Metals & Alloys 17:536-8 Mr '43

Cast dies for forging shells. P. Attenborough. diags Metals & Alloys 18:287-91 Ag '43

Cleaning 20 and 155 mm. shells. S. G. Hawley. *il* Iron Age 151:42-5 Ja 21 '43

Continuous treating furnace for shells. *il* diag Iron Age 150:61 N 19 '42

Designed for varying requirements; machine for removing cutting or rust-preventive oils and metal chips from shells. W. Nekola. *il* Machine Design 15:118 Ap '43

Forging of the 7.2 in. shell; Canadian car and foundry company. Mech Handling 29:222 N '42

Forging 75mm. and 90mm. shell bodies. *il* diags Am Mach 87:94-106 Ja 7 '43

Forging shell at Ambridge. A. F. Macconochie. *il* diags Steel 113:82-4, 86, 95 Ag 30 '43

Gadsden feeds the 105's. W. N. Howley. *il* diags Am Mach 87:101-16 Mr 4 '43

Gage gives weight factor of holes. F. Speke and C. Reynolds. *il* diags Am Mach 87:131-2 F 18 '43

Gage that weighs shell forgings. R. J. Fittness. *il* diags Instruments 16:406 J1 '43

How army ordnance forges 105-mm. high-explosive shell at Gadsden ordnance plant. A. F. Macconochie. *il* diags Steel 113:72-6+ J1 26 '43

Hydraulic operation of lathes for the production of shells. W. L. Philip. *il* diags Engineering 155:396-9, 410, 418-20 My 14-21 '43; Same cond. Engineer 175:367-9, 396-8 My 7-14 '43; Discussion. Engineering 155:374-5 My 7 '43; Engineer 175:371-2 My 7 '43

Ingenious shell cavity gage. F. Speke and C. Reynolds. diags Metals & Alloys 18:81 J1 '43

Making shells for the largest mobile howitzer in the world. H. L. Horton. *il* diags Mach 50:133-48 S '43

Millions of 155-millimeter shells by Willys-Overland production methods. J. W. Frazer. *il* diag Mach 49:152-67 Ap '43

Mortar shell; Lempco products inc. G. E. Sears. *il* diag Steel 113:74-5+ O 25; 92-4, 96, 98+ N 1 '43

New slants on carbide tools; typical failures in shell machining operation and how to overcome them. G. G. Thompson. diags Iron Age 151:59-63 Mr 25 '43

Notes on shell forging. J. B. Nealey. *il* diag Am Mach 86:1383-6 N 26 '42

Shell, cutting fixtures; diagrams with explanatory text. Iron Age 152:43 O 21 '43

Shell forging on bulldozers. W. Trinks. *il* diags Mech Eng 65:639-42 S '43

Shell lathe design jumps ahead. K. Tech. *il* diags Machine Design 14:59-62 N '42

Shell made in small shop; Anderson brass works. E. G. Collins. *il* Am Mach 87:113-21 Ap 15 '43

Shells annealed by r.f. induction heating machine. *il* Electronics 16:110 Ja '43

Simplified training speeds shell production; Holfast rubber company. H. L. Samuel. Am Mach 87:78-9 S 30 '43

Special research committee of A.S.M.E. improves forging of steel shells. Mech Eng 65:531-2 J1 '43

Steel shell case coating. *il* Mod Plastics 21:74+ S '43

See also

Fuses—Manufacture

Testing

Automatic shell gaging. J. F. Maher. diags Instruments 16:34-5 Ja '43

SHELTERS, Air raid. See Air raid shelters

SHENANDOAH, Iowa

Seed and nursery industry in Shenandoah has wartime boom. Fortune 28:90 N '43

SHEPHERD, Benjamin Franklin, 1893-
Sauveur medalist for 1942. T. A. Serrill. por Metal Prog 42:858-60 N '42

SHEPPARD'S corrections. See Frequency distribution (statistics)

SHERMAN, Harry A.

Portrait. Business Week p101 S 11 '43

SHERMAN antitrust law

See also

Trusts, Industrial—
Law

SHERWIN-WILLIAMS company

Cited by FTC. Comm & Fin Chr 157:261 Ja 18 '43

SHEWHART, Walter A.

Opportunities in mathematical statistics, with special reference to sampling and quality control. W. E. Deming. Science 97:209-14 Mr 5 '43

Quality control; its demands grow tighter as war gets tougher. por Fortune 28:126-7 O '43

SHIFT schedules. See Hours of labor—Shift schedules

SHIGELLA dysenteriae. See Dysentery

SHINGLES, Asbestos

Asbestos shingle coating protects woods piling. Eng N 130:670 My 6 '43

SHINGLES, Cotton-cement

Develop molds for roofing shingles of cotton-cement. *il* Concrete 51:22 Je '43

SHIP model tanks

Effect of size of towing tank on model resistance; abstract and discussion. J. P. Comstock and C. H. Hancock. Marine Eng 47:146-9 D '42

Stevens towing tank expands. K. S. M. Davidson. Marine Eng 48:228+ Ap '43

Webb Institute towing tank. M. Costagliola. diags Marine Eng 48:186, 188 F '43

Welding tubular structures with sphere type joints; towing carriages. F. Waldo. *il* Steel 112:110, 112+ Je 7 '43

SHIP models

Model making as an aid to shipbuilding and planning. S. B. Besse. *il* Marine Eng 48:152-5 F '43; Discussion. 47:149 D '42

SHIP plates

Armor plate for ships and tanks. diags Metal Prog 43:383-7 Mr '43

Layout of welded deck plating around hatches. L. Grover. plan Marine Eng 48:188-9 J1 '43

Navy relaxes specifications on steel plate for ships. Eng N 130:643 Ap 29 '43

Steel plate for shipbuilding. R. E. Zimmerman. Metal Prog 43:919-22 Je '43

SHIP plates—Continued

Strength of welded T-joints for ships' bulkhead plates. H. B. Fergusson. *Il diags* Welding J 22:sup57-62 F '43

SHIP propellers. See Propellers**SHIP propulsion**

British shipbuilding and marine engineering. *Il* Engineer 176:384-6 My 14 '43

Coefficient of propulsive efficiency. K. C. Barnaby. Engineer 175:472-5 Je 11 '43

From paddle to screw in the navy. F. C. Bowen. Engineer 176:12-13 Jl 2 '43

Hobbing marine gearing. M. Kennedy. *Il* Marine Eng 48:214-20 Ap '43

Some types of propelling machinery available to shipowners. C. C. Pounder. *diags* Engineer 175:48-9+, 77-80 Ja 15-22 '43

See also

Boilers, Marine Motor ships

Diesel engines, Marine Propellers

Gas and oil engines, Marine Steam turbines, Marine

Marine engines Steamboats

SHIP propulsion, Electric

Diesel electric ferry. *Il* Electrician 130:466-7 My 7 '43

Electric ship. A. C. Hardy. Electrician 130:371-3 Ap 9 '43

Electric ships; location of machinery. A. C. Hardy. Electrician 129:547-8 N 20 '42

Marine electric drive. A. C. Hardy. Electrician 130:133-4 F 5 '43

Turbine-electric drive tankers. J. A. Wasmund. *Il* Marine Eng 48:202-6 Ag '43

SHIP subsidies

Subsidy system should be ended. H. J. Kaiser. Weekly Underw 149:666 S 25 '43

SHIPBUILDING

Automatic fastener for ship assembly. H. F. Lowe. *Il* Marine Eng 48:212-13 Ap '43

Boss; Andrew Jackson Higgins knows how to get men to do what he wants them to do. *Il* Fortune 28:101-3+ Jl '43

British merchant shipbuilding programme in North America, 1940-42. R. C. Thompson and H. Hunter. Engineer 174:458-9, 482-3, 507-8 D 4-18 '42; Same, with *diags*. Engineering 155:36-40, 58-60 Ja 8-15 '43

Building concrete ships in prefabricated forms. *Il* Eng N 129:902-6 D 31 '42

Building Liberty ships in record time; North Carolina shipbuilding company. R. G. Skerrett. *Il* Comp Air M 48:7079-84 Jl '43

Building ships in Indiana. G. E. Stedman. *Il* Steel 112:102-4+ My 17 '43

Bushey-built commission tugs. H. J. Barbour. *Il* Marine Eng 48:206-9+ My '43

Construction men build fighting ships; destroyer escort vessels for the navy. *Il* *diags* plan Eng N 131:12-17 Jl 1 '43

Engineering outlook. Engineering 155:215-16 Mr 12 '43

Fabricating shop operations at Bethlehem-Fairfield shipyard. flow chart *Il* plan Marine Eng 48:140-51 F; 154-62 Mr '43

Gas cutting in shipbuilding. R. F. Helmkamp. *Il* Welding J 21:827-33 D '42; Excerpts. Marine Eng 47:156 N '42

How Kaiser builds Liberty ships; line assembly of deck houses at the Richmond shipyards. *Il* *diags* plans Am Mach 86:1299-1306 N 12 '42

Mass production methods in shipyards. A. J. Ackerman. *Il* *diags* plan Civil Eng 13:201-4, 261-4 My-Je '43

Model making as an aid to shipbuilding and planning. S. B. Besse. *Il* Marine Eng 48:152-5 F '43

Negroes in a war industry; the case of shipbuilding. H. E. Northrup. bibliog J Business 16:160-72 Jl '43

Newport News builds famous men-of-war. H. L. Norton. *Il* Mach 50:148-57 N '43

No keel laying needed for ships built by prefabrication method. Marine Eng 48:182+ F '43

Principles of shrinking and straightening distorted low carbon steel used in shipbuilding. M. D. Offen. *diags* Welding J 22:14-16 Ja '43

Production line shipbuilding with preassembled sections; Dravo corporation. *Il* *diags* Eng N 131:200-3 Jl 29 '43

Production notes on C-3 ships. R. H. Macy. *Il* Marine Eng 48:192-6 Je '43

Production welding and cutting at West Coast yards. G. V. Slottman. *Il* plans Marine Eng 47:218-26 O; 128-37 D '42; 48:167-74 Mr; 176-88 My '43

Shipbuilding and marine engineering in 1942. *Il* *diags* Engineer 175:35-7, suppl 2, 55-7, 73-4 Ja 8-22 '43

Shipbuilding at Ashtabula. G. R. Reiss. *Il* Steel 111:78-9 D 14 '42

Shipbuilding stabilization committee appoints sub-committees. Marine Eng 48:220 Ap '43

Stern frames cast in cores; Penn steel castings co. P. Dwyer. *Il* Foundry 71:99-101+ O '43

Strength of pins subject to shearing and bending. H. A. Alvig. *diags* Marine Eng 47:130-1 N '42

Tank lighter building at Greenport. *Il* Marine Eng 48:142-5 Ja '43

Utility sells customers' abilities to produce bits and pieces; machine shops in Oregon and Washington supplying parts for Liberty ships. D. B. Leonard. *Il* Elec W 118:2098-100 D 26 '42

Yesterday and today in ship production. H. Pearlman. Marine Eng 48:209-11 Jl '43

See also

Barges Ships

Boat building Ships, Concrete

Freight ships Ships, Wooden

Launching Shipways

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Motor ships Steam turbines, Marine

Naval architecture rine

Navy yards and naval Steamboats

stations Submarine boats

Propellers Tank ships

Ship model tanks Towboats

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Costs

Truman report on shipbuilding; man-hours and cost versus speed producing Liberty ships. Marine Eng 48:197-200 Je '43

Labor conditions

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Materials

Castings for ships and marine engines; meehanite. C. E. Herington. *Il* Marine Eng 47:150-3 D '42

Conservation and substitution in marine engineering. J. L. Kimberley. Marine Eng 47:257-9 O; 133-5 N '42

Huge castings for naval vessels from Birdsborg's new foundry. C. O. Herb. *Il* Mach 50:164-71 N '43

Ryertex design improves resin bonded marine bearings. *Il* *diags* Marine Eng 48:222, 224 O '43; Mod Plastics 21:78-9 N '43

Ship's backbone now made of one piece of laminated wood. *Il* Sci Am 169:174 O '43

Synthetic rubber in aircraft indicates possibilities for marine uses. Marine Eng 48:200-1 Jl '43

Use of high elastic steel in ship construction; with cost data. E. P. Trask. *diag* Marine Eng 48:167-73 F '43; Discussion. 47:144-6 D '42

Painting

See Ships—Painting

Safety measures

See Shipyards—Safety measures

Standards

Standard models speed shipbuilding. H. G. Smith. *Il* Ind Stand 14:278-80 O '43

War-time standardisation. C. Le Maistre. Engineering 155:135-6 F 12 '43; Same. Engineer 175:97-8 Ja 29 '43

Statistics

Shipbuilding exceeds President's quota. E. S. Land. Marine Eng 48:118-20 Ja '43

Shipbuilding in war periods compared. Marine Eng 48:124-6 Ja '43

Shipbuilding records. Business Week p67 D 26 '42

Todd-Bath yard completes British shipbuilding contract; production time schedules. Marine Eng 47:165-6+ D '42

Truman report on shipbuilding; man-hours and cost versus speed producing Liberty ships. Marine Eng 48:197-200 Je '43

SHIPBUILDING—Continued

Welding operations

- All-welded Liberty ship construction at Delta shipbuilding company, New Orleans. E. B. Williams. *il* Welding J 22:241-5 Ap '43
- All-welded shipbuilding. *il* Manuf Rec 111: 24-5 N '42
- America's wartime merchant fleet. *il* Engineer 175:262-4, 282-3, 302-4, 322-4; 176:4-6, 24-6, 54-5, 62-4, 85, 87, 104-8 Ap 2-23, JI 2-Ag 6 '43
- America's wartime merchant fleet; welding and the training of welders. *il* Engineer 175:302-4, 322-4 Ap 16-23 '43
- Application of welding in submarine construction. E. H. Ewertz and R. D. West. *il* Welding J 22:10-13 Ja '43
- Arc stud welding speeds shipbuilding; Mare Island navy yard. J. C. Beckett. *il* diags Marine Eng 48:201-7 Je '43
- Arc welding at Houston shipyard. G. W. Curry. *il* Marine Eng 47:136-8 N '42; Same. Steel 111:88, 90 N 16 '42; Same. Welding J 21:851-2 D '42
- British prefabricated tugs. *il* plan Engineer 175:336-8 Ap 23 '43
- Control of residual stresses through welding sequence. M. Q. Cellers. diags Iron Age 152:50-6 S 2 '43
- Control of welding in shipbuilding. L. Grover. *il* diags Welding J 22:227-38 Ap '43; Same cond. Marine Eng 48:190-9 Ag '43
- Deep fillet welding applied to ship construction. M. H. MacKusick, J. B. Hiatt and R. V. Anderson. *il* diags Iron Age 152:46-53 S 30 '43; Same. Welding J 22:998-1004 D '43
- Deep fillet welding technique and application. M. H. MacKusick, J. B. Hiatt and R. V. Anderson. *il* diags Welding J 22:401-8 Je '43
- Design of joints for arc and gas welding processes; joints which may be used in marine construction; diagrams. Welding J 21:758-66 N '42
- Development in welded fabrication for merchant shipbuilding; abstracts. R. B. Shephard, R. Boardman and C. J. Jensen. *il* Electrician 130:349-50, Ap 2 '43; Elec R (Lond) 132:452 Ap 2 '43
- Developments in welded ship construction. J. L. Adam. Engineering 154:425-6, 465-6 N 27, D 11 '42
- Electric arc unit speeds stud welding. *il* Iron Age 152:61 S 30 '43
- Fractures in welded ships. J. Tutin. *il* diags Engineer 176:28-9 JI 9 '43; Same. Marine Eng 48:200-1+ Ag '43; Same. Metal Prog 44:448+ S '43; Same. Welding J 22:721-3 S '43; Discussion. 22:723-4, 1004-5 S, D '43
- Improved welded joint saves time and materials; H. H. Robertson company. diag Marine Eng 48:218 Je '43
- Layout of welded deck plating around hatches. L. Grover. plan Marine Eng 48:188-9 JI '43
- Murex deck welder. diag Engineer 175:179-80 F 26 '43; Engineering 155:186 Mr 5 '43
- Notes on shipbuilders technique for release of welding stresses. Eng N 131:409-10 S 9 '43
- Organizing facilities to promote production welding in shipyards. G. V. Slottman. *il* plans Marine Eng 47:128-37 D '42
- Planning for production welding and cutting in a modern shipyard. W. B. Bowen. *il* plan Welding J 22:904-11 N '43
- Prefabricated tugs. *il* plan Engineering 155: 306-7, 310 Ap 16 '43
- Report on structural failure of tanker S.S. Schenectady. Welding J 22:225-6 Ap '43; Same. Marine Eng 48:207-8 Ap '43; Same. Mech Eng 65:365-6 My '43; Same. Metal Prog 43:922-4 Je '43; Same. Engineer 175: 413-14 My 21 '43; Abstract. Eng N 130:405 Mr 25 '43
- Residual stresses in welded structures; challenging problem. E. Chapman. *il* diags Iron Age 152:46-50 JI 29 '43
- Setting of ship bulwarks cut from 72 to 6 hours. S. L. Daniels and G. S. Williams. diag Am Mach 87:110-11 S 16 '43
- Shipbuilding in North America; abstracts. H. Hunter and R. C. Thompson. Electrician 129:603 D 4 '42; Elec R (Lond) 131:782-3 D 18 '42

- Ships welded on a production line; Dravo corp. G. F. Wolfe. *il* diag Metal Prog 43: 550-4 Ap '43
- Shipyard lay-out for welded construction; abstracts. R. B. Shephard. *il* Engineer 175:504-5 Je 25 '43; Engineering 155:496 Je 18 '43
- Simplified welding tool. *il* Mod Plastics 20: 66+ My '43
- Some observations on ship welding. D. Arnot. *il* diags Welding J 22:73-92 F '43; Same abr. Marine Eng 48:132-41, 179-83, 203-5 Ja, Mr-Apr '43; Discussion. 48:160, 162+ Ja '43
- Steel fabrication methods at Calship. *il* Eng N 130:116-20 Ja 28 '43
- Strength of welded T-joints, for ships' bulkhead plates. H. B. Fergusson. *il* diags Welding J 22:sup57-62 F '43
- Structural design of welded hulls. J. Turnbull. diags Engineering 155:447-8 Je 4 '43
- Stud welding. *il* diags Steel 113:84-6+ Ag 9 '43
- Subassembly welding and erection. G. V. Slottman. *il* Marine Eng 48:176-88 My '43
- Thermit-welding stern frames. J. H. Deppler. *il* diag Marine Eng 47:139-42 N '42
- Training welders for shipbuilding; Dravo corporation. M. Evancho. *il* Marine Eng 48: 164-6+ Mr '43
- Types of electric plant installed for arc welding in various shipyards and marine engine works. J. Hogg. Electrician 130:541-2 My 28 '43
- Welded cargo ships. W. S. Burn. Elec R (Lond) 131:729-30 D 4 '42
- Welding contraction; locked-up stresses. diags Electrician 130:536-8 My 28 '43
- Welding in shipbuilding; report of the thermal stress subcommittee of the A.W.S.; abstract. Iron Age 152:64-5 O 28 '43
- Welding in shipyards. F. R. Mansell. Electrician 130:365-6 Ap 9 '43
- Welding of America's cargo ships. A. F. Davis. *il* Welding J 22:430 Je '43
- What can cause breakage of a welded ship? J. F. Lincoln. Steel 112:84 Mr 29 '43

Canada

- Canadian production. For Comm W 10:26 F 13 '43
- Gold mining and shipbuilding; program of wartime merchant shipping limited in eastern Canada's gold mine machine shops. R. C. Rowe. *il* Can Min J 64:627-40 O '43
- Shipbuilding expands in Canada. Marine Eng 48:138-9 F '43
- War shipbuilding in Canada. *il* Marine Eng 48:203-4 O '43

Colombia

- Shipbuilding at Cartagena. For Comm W 13: 26 O 30 '43

Europe

- European shipbuilding in wartime. *il* Marine Eng 47:146-7+ N '42
- Shipbuilding developments in Europe. *il* Marine Eng 48:193-5 My '43

Great Britain

- British mercantile shipyard practice. *il* Engineering 155:365-7, 370 My 7 '43
- British shipbuilding and marine engineering. *il* Engineer 175:364-6, 384-6 My 7-14 '43
- Merchant shipbuilding. Economist 143:584 N 7 '42
- Merchant shipbuilding and repairs; report from the Select committee on national expenditure; recommendations on technique, design, and research. Engineer 174:405-6 N 13 '42

Pacific coast

- Shipbuilding, aircraft and women; dominant war problems on the Pacific coast. Iron Age 151:159+ Ja 7 '43

Spain

- Construction in Spain. For Comm W 10:31-2 Mr 13 '43

United States

- American shipbuilding industry at war. H. G. Smith. Marine Eng 47:118-20 N '42
- America's wartime merchant fleet. *il* Engineer 175:262-4, 282-3, 302-4, 322-4; 176:4-6, 24-6, 54-5, 62-4, 84-7, 104-8 Ap 2-23, JI 2-Ag 6 '43

SHIPBUILDING—United States—Continued

Construction of special type ships by the United States Maritime commission. *il* Marine Eng 48:152 Ja '43

Donne fleet; big strides in shipbuilding on Great Lakes since last war. *il* Business Week p34+ My 15 '43

Doubling tankers; Alabama dry dock & shipbuilding co. hires two construction companies for management and consultation. Business Week p29-30 Ag 7 '43

Earth movers; they turn to shipbuilding and change the face of the West. *il* Fortune 28: 113-23+ S '43

15-million-ton post-war fleet. E. S. Land. Marine Eng 48:172-5 Je '43

Fight over ships; speed of postwar fleet. Business Week p 18 Ag 28 '43

Hog Island ship record cut in half. Business Week p37 F 20 '43

Landing vessel production speeded at Charleston. *il* Manuf Rec 112:30-1 F '43

Merchant fleet vital to welfare of America. J. L. Luckenbach. Weekly Underw 149: 208+ JI 31 '43; Same. Marine Eng 48:208-9 Ag '43

Merchant shipbuilding ahead of quota at mid-year. Eng N 131:305 Ag 19 '43

Merchant shipping of the U.S. in wartime. *il* For Comm W 13:5-10, 30-1 O 2 '43

New Liberty ship has been designed to out-speed subs, carry more in war and peace. Am Mach 86:1460J D 10 '42

19,000,000 deadweight tons of merchant vessels goal for 1943. Steel 112:99 Ap 5 '43

Number of steel merchant vessels over 2000 gross tons constructed by shipyards of the United States during the war years 1939-1943 (up to June 1); tabulation. Marine Eng 48:222 Je '43 [cont monthly]

Our growing sea-air power. Marine Eng 48: 181-5 O '43

Review of shipbuilding in 1942. H. G. Smith. Marine Eng 48:121-2 Ja '43

Set ship schedule; Maritime commission's new program. Business Week p28 Mr 6 '43

Shipbuilders meet President's directive for war production. Marine Eng 48:201 My '43

Shipbuilding finds its stride, 1942. N. A. Bowers. *il* Eng N 130:200-2 F 11 '43

Shipbuilding in World war II. H. L. Vickery. *il* Marine Eng 48:182-90 Ap '43

Shipbuilding takes 20 per cent of 1942 steel production. Steel 112:407-8 Ja 4 '43

Ships for victory. H. L. Vickery. *il* Heat & Ven 40:30-1 F '43

Ships level off. Business Week p18 Ag 7 '43

Ships to win. *il* Business Week p17-18 N 21 '42

Shipyard production during 1942. J. L. Luckenbach. Marine Eng 48:148-9 Mr '43

Some design problems of the Liberty cargo ships. H. C. E. Meyer. J Eng Educ 33:454-62 Ja '43

Tampa launches 7 ships on December 7. *il* Manuf Rec 111:26-7+ D '42

Truman report on shipbuilding; man-hours and cost versus speed producing Liberty ships. Marine Eng 48:197-200 Je '43

United States only nation whose new shipbuilding exceeds losses. Steel 113:174-5 S 20 '43

Victory fleet winning its battle at sea and on the production line. *il* Marine Eng 48: 172-8 O '43

War effort of the maritime industry. E. S. Land. Marine Eng 48:173-5 My '43

War problems of the merchant marine. E. S. Land. Marine Eng 47:114-16 N '42

World's greatest cargo fleet; United States will finish 1943 with record number of commercial vessels. F. B. Dezendorf. Barron's 23:21+ Ja 11 '43

Yards get no respite; 1944 program stepped up. *il* Steel 113:31-2 Ag 30 '43

Year's shipbuilding smashes all records. J. L. Luckenbach. Marine Eng 48:122-3 Ja '43

See also Newport News shipbuilding and drydock company

SHIPLEY, John Wesley, 1873-1943
Sketch. por O. J. Walker. Can Chem & Process Ind 27:488 Ag '43

SHIPMENT of goods
Fix alkali shipping zones. map Soap & San Chem 19:59+ Mr '43

Letter from the front. Mod Packaging 16:78 Je '43

Marking of army shipments. G. Wallerschein. Paper Tr J 117:27-8 N 18 '43; Same cond. Paper Ind 25:793-4 O '43

Overseas shipments must be marked right. *il* Mod Packaging 17:60-4 O '43

Perfect shipping. J. E. Eastman and others. *il* Manuf Rec 112:29-39+ Ap '43

Preparing shipments to Bolivia. E. W. Skartvedt. *il* For Comm W 10:7-10+ F 13 '43

Shipper cooperation brings results. *il* Ry Age 114:1046-8 My 22 '43

Shipping. *il* Factory Management 101:111-12 JI '43

Some important recent court decisions involving chemicals; shipper liable for freight charges. L. T. Parker. Chem Ind 53:346 S '43

Speeding the meat; elimination of backhauls. Business Week p32+ F 20 '43

Tag-writing plan cuts costs; releases typewriters; White motor co. uses Addressograph to meet War department requirements for tagging spare parts. W. G. Graf. *il* Am Business 13:22-3 Mr '43

Tools for marking overseas shipments. *il* Mod Packaging 17:70-3+ N '43

See also

Air lines—Freight service	Loading and unloading—Cars
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SHIPPERS advisory boards, National association of. *See* National association of shippers advisory boards

SHIPPING

Post-war shipping. Economist 145:53 JI 10 '43

Post-war shipping. Economist 145:529-30 O 16 '43

Post-war shipping problems. Nat City Bank p 105-7 S '43

Shipping after the war; views of British shipowners. Int Labour R 47:619-22 My '43

See also

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Maritime law	Transportation
Merchant marine	Waterways
Ports	World war, 1939—
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Claims

British commentator sees more comprehensive future agreements with United States government. D. King-Page. Weekly Underw 148:544+ Mr 6 '43

No-litigation plan favorably received; United States-United Kingdom agreement. Weekly Underw 148:377 F 13 '43

Procedure under arbitration act outlined in federal court case. East Underw 44:35 My 7 '43

Specification of negligence or unseaworthiness not fatal to libel. East Underw 44: 23 Ag 20 '43

Tug held not liable for loss of cargo on a barge which capsized. East Underw 44:27 Mr 19 '43

Unseaworthiness, rather than sea perils, held to be cause of loss. East Underw 44: 23 O 29 '43

Vessel absolved from damage to oil; tanks are held seaworthy and clean. East Underw 44:27 Mr 12 '43

See also Insurance, Marine—Adjustment of claims

Finance

Outlook for motor transport, water carriers and pipe lines. P. T. Sheldrick. *il* Mag of Wall St 71:410-11+ Ja 23 '43

Law

See Maritime law

Rates

Barge rates set. Nat Pet N 35:26 JI 21 '43

Ocean rate regulation. World war II. H. S. Perry. Harvard Business R 21 no3:238-52 [Ja] '43

SHIPPING—Rates—Continued

Rates of hire for tramps. Economist 144:309, 370 Mr 6, 20 '43
 Sea freights on oil, other liquids cut. Nat Pet N 35:24 S 29 '43
 WSA establishes rates from east Mediterranean. Oil Paint & Drug Rep 143:5+ My 3 '43

Chile

New shipping company organized. For Comm W 11:24 My 1 '43

Germany

German shipping lines merged; Norddeutscher Lloyd and Hamburg-Amerika Linie. For Comm W 10:16 F 6 '43

Great Britain

Air and sea transport. Economist 144:309 Mr 6 '43
 British position after war concerns ship men. Lord Rotherwick; J. W. Booth. Weekly Underw 149:260+ Ag 7 '43
 Chamber of shipping, annual reports. Economist 144:276 F 27 '43
 Post-war shipping policy. Economist 145:101-2 JI 24 '43

See also
 World war, 1939—
 Shipping

Great Lakes

Big year on Lakes. Business Week p40 Mr 13 '43
 Great Lakes record. Weekly Underw 148:190-1, 331 Ja 16, F 6 '43
 Iron ore or grain? Business Week p19 Je 19 '43
 Lake ore shippers strain to make up early season tonnage deficit. Steel 113:74-5 JI 19 '43
 Lakes' ore record. Business Week p 17-18 D 19 '42
 Largest fleet in history will operate on Great Lakes in 1943. Steel 112:69-70 F 22 '43
 Ore fleet can do it, if—; Great Lakes waterway problem and alternative route across the upper Michigan peninsula. F. M. Patterson. Pub Util 31:225-8 F 18 '43
 Ore goal sighted; Great Lakes' iron ore fleet 1943 quota. Business Week p34+ O 23 '43
 Ore season cut; ice halts Lake Superior shippers. II Business Week p46 Ap 24 '43
 Record ore movement, 92,000,000 tons. Iron Age 151:91-2+ Ja 7 '43
 Reviews season of Great Lakes traffic. J. B. Eastman. Weekly Underw 147:1479+ D 26 '43
 Will the captain continue to be captain of his ship? E. Hoyt. Steel 112:46-7 Ja 11 '43

See also
 Iron ores—Transportation

United States

Chamber of commerce appoints committee for post-war shipping. Marine Eng 48:178-9 S '43
 Group named to study post-war shipping. Comm & Fin Chr 158:711 Ag 19 '43
 Maritime commission surveying post-war shipping problems. Marine Eng 48:191-2 My '43
 Our post-war role in world shipping. II For Comm W 11:7+ My 8 '43
 Outlines future American shipping plan. F. J. Taylor. Weekly Underw 149:453 S 4 '43
 Ship clearances in foreign trade, 1938-1941. Survey of Our Business 1942 Sup p99
 Shipping dividend; likely to be an off-again-on-again proposition. Business Week p18 JI 17 '43
 Tangled trade; South American export licenses temporarily clamped to ease backlogs. Business Week p33-4+ Ja 16 '43
 Transportation for war. G. E. Talmage, jr. Harvard Business R 21 no 3:336-43 [Ap] '43

See also
 Merchant marine—
 United States
also United States—Maritime commission; War shipping administration
SHIPPING containers. *See* Containers (for shipping)

SHIPS

Aircraft delivery vessel. J. C. Lord. plan Marine Eng 48:209-10+ Je '43

See also
 Airplane carriers Salvage
 Barges Seamen
 Dredges Ship propulsion
 Freight ships Shipbuilding
 Lighters Shipping
 Loading and unloading—Ships Steamboats
 Maritime law Steering
 Merchant marine Tank ships
 Motor ships Torpedo boat destroyers
 Naval architecture Towboats
 Propellers Transports
 Refrigeration on ships Warships
 Safety at sea

Air conditioning

Warship ventilating, heating and air conditioning. T. H. Urdahl and W. C. Whittlesey. II Heating-Piping 15:105-10 F '43; Same. Marine Eng 48:212+ My '43

Auxiliary machinery

Marine-Diesel auxiliaries. R. L. Boyer. Mech Eng 65:431-2 Je '43

Cargo

See also
 Freight ships

Cleaning

Chemical cleaning of marine power equipment. J. D. Holmes. Marine Eng 48:222+ JI '43

Communication

Electronic megaphones; units using vacuum-tube amplifiers used by navy in maintaining communication among convoys. II diags Electronics 16:125-7 N '43

Electric equipment

Dry-type distribution transformers. H. C. Coleman and J. H. Chiles. II Marine Eng 48:192-4 JI '43
 Electric couplings for marine Diesels. J. A. Wasmund. II Machine Design 15:138-9 Ap '43
 Electrical developments of 1942; marine equipment. G. Bartlett. II Gen Elec R 46:40-2 Ja '43
 How to repair water-damaged electrical apparatus. H. J. Chase. II Marine Eng 48:226, 228+ S '43

See also
 Ship propulsion, Electric

Equipment

Down-East handwheels for destroyers. W. E. Parsons. II Mod Plastics 20:61+ Ag '43
 Josam blends headwork with footwork to crack a new market in wartime; Cleveland maker of valves, drains and related products breaks into marine field with a custom-built plan. W. S. Allen. II Sales Management 52:48+ N 1 '43
 Machinery installation. G. K. Marple. Marine Eng 48:180+ F '43
 Machinery weights; data for estimating weights of ship machinery. E. A. Stevens, jr. Marine Eng 47:134-7 Ag; 156-9 S; 143-5 N; 167-8 D '42; 48:170, 172 Ja; 190, 192 F '43
 Marine activity during 1942. J. W. Belanger. II Marine Eng 48:166+ Ja '43
 More ship work. Business Week p30+ O 2 '43
 New design of fuel oil heaters conserves material. H. S. Card. II Welding J 22:513-14 JI '43
 Performance of 1200-pound reheater installation on S.S. Examiner. B. Fox and R. H. Tingey. Marine Eng 47:163-5 D '42
 Streamlining the ore carrier. K. C. Thornton. II diags plans Marine Eng 48:180-97 S '43

See also
 Boilers, Marine Refrigeration on ships
 Davits ships
 Lifeboats Ships—Piping
 Propellers

SHIPS—Continued

Fires and fire protection

- Claims against Panuco and pier to be decided in same proceeding. East Underw 43: 30 D 18 '42
- Fire fighting show; demonstration aboard an American merchant vessel. Safety Eng 86: 76-7 O '43
- Smoke eaters of the navy; how selected crews are trained to fight fires at sea. A. D. Rathbone. 4th. il Sci Am 168:150-3 Ap '43

Fouling

- Corrosion and fouling of ships. G. D. Bengough and V. G. Shephard. Engineering 155:358-60, 378-80, 416-17 Ap 30-May 7, 21 '43; Excerpts. Engineer 175:327-9 Ap 23 '43; Discussion. Engineering 155:354-5, 363-4 Ap 30-May 7 '43; Engineer 175:331-2 Ap 23 '43
- Marine corrosion; first report of a joint committee of the Iron and steel institute and the British Iron and steel federation. Engineer 175:416 My 21 '43

See also

Paint, Anti-fouling

Heating and ventilation

- Heating the ships for victory. J. Clarke. il diags Heating-Piping 15:117-21, 180-4, 240-1 Mr-May '43
- Huge press draws cowl ventilators for Liberty fleet. A. R. Boone. il Steel 112:104, 106+ Mr 15 '43
- Standardized heating and ventilating equipment for fighting ships. T. H. Urdahl, J. Everetts, Jr. and W. C. Whitlesey. il diag Heating-Piping 15:333-6, 419-21 Jl-Aug '43; Discussion. 15:458-60 S '43
- Ventilation and convection heating for living and working spaces on ships. G. M. Cody. il Marine Eng 48:202-5 Jl '43
- Ventilation and heating of Maritime commission ships. J. W. Markert. il diags plans Heat & Ven 40:32-57 F '43
- Why ship ventilation? J. W. Markert. il diags Heat & Ven 40:38-45 O '43

Launching

See Launching

Model testing

- Steering experiments. R. W. L. Gawn. diags Engineer 176:97-8 Jl 30 '43

See also

Ship model tanks

Officers

- Commanding a ship is like running a business; letter of a commander to his officers. il Am Business 13:17-18 Apr '43

Painting

- Antifouling paints; test procedures and general observations. G. H. Young, G. W. Gerhardt and W. K. Schneider. bibliog il Ind & Eng Chem 35:432-6 Ap '43
- Corrosion and fouling of ships. G. D. Bengough and V. G. Shephard. il Engineering 155:358-60, 378-80, 416-17 Ap 30-May 7, 21 '43; Excerpts. Engineer 175:327-9 Ap 23 '43; Discussion. Engineering 155:354-5, 363-4 Ap 30-May 7 '43; Engineer 175:331-2 Ap 23 '43
- Flight deck stains; abstract. H. H. Nelson. Oil Paint & Drug Rep 144:70 N 1 '43
- Marine corrosion; first report of a joint committee of the Iron and steel institute and the British Iron and steel federation. Engineer 175:415-16 My 21 '43; Discussion. Engineering 155:435-6 My 28 '43
- Navy specifications; abstract. H. L. Aldrich. Oil Paint & Drug Rep 143:40+ My 17 '43
- New anti-corrosive and anti-fouling ship bottom paint. il Marine Eng 48:208 Ja '43
- U.S. Navy develops plastic ship-bottom paint. Marine Eng 48:218+ Ag '43; Same. Paint Oil & Chem R 106:29 Jl 29 '43
- Ventilation for ships under construction; exhaust of fumes, compartment ventilation, and ventilating closed spaces during painting. H. E. Packard. il diag Heating-Piping 14:711-14 D '42

Piping

- America's wartime merchant fleet; pipe work. Engineer 176:25-6 Jl 9 '43

- Cold bending of pipe for fighting ships. J. Klein. diag Heating-Piping 15:590-1 N '43
- How Kaiser builds ships; pipe shop of the Oregon shipbuilding co. il Mach 49:189-92 F '43
- Machinery weights; data for estimating weights of ship machinery. E. A. Stevens, Jr. Marine Eng 47:167-8 D '42

Portlights

- Osten pressed portlight and cover. diags Marine Eng 48:218 Ja '43

Repair

- Broken ships made new; fast work by Navy yard hull superintendents. D. O. Woodbury. il Sci Am 167:262-6 D '42
- Building and maintaining the greatest navy in history. E. L. Cochrane. il Mach 50: 132-9+ N '43
- Keeping them sailing. il Manuf Rec 112:26-7+ Mr '43
- Lead hazard occurring during repair of a burned ship. W. E. Fleischer and F. J. Viles. Ind Med 12:713-14 O '43
- Todd shipyards make new records in ship repairs. il Marine Eng 48:204-10 S '43

See also

Repair ships

Safety

- See Lifeboats; Safety at sea; Ships—Fires and fire protection

Sanitation

- Variations in rat infestation on vessels. R. Olesen and G. C. Sherrard. Pub Health Rep 57:1966-70 D 25 '42

Speed

- Fast or less fast ships. J. R. Gebbie. Engineering 155:196 Mr 5 '43; Same. Engineer 175:196-7 Mr 5 '43; Same. Marine Eng 48:199-200 Jl '43

Stability

- Streamlining curves of form. L. K. Losee. Marine Eng 48:212-14 Ag '43

Stern tubes

- Drill head for stern tubes. C. A. Bloom and M. Harkless. il diag Am Mach 87:90-1 Ag 5 '43

Strains and stresses

- Strength of pins subject to shearing and bending. H. A. Alvig. diags Marine Eng 47: 130-1 N '42

Subdivision

- Subdivision of ships, as a protection against foundering; abstract and discussion. J. G. Tawresey. Marine Eng 48:154-6 Ja '43
- Subdivision of United States Maritime commission vessels. J. L. Bates and I. J. Wanless. Marine Eng 48:146-8; Discussion. 153-4 Ja '43

Testing

- Getting the most out of trial trips. H. J. Chase. il Marine Eng 48:127-30 Ja '43

See also

Ship model tanks

SHIPS, Concrete

- Concrete afloat; three self-propelled concrete ships ready. il Business Week p34+ Jl 17 '43
- Concrete I is launched; the first since 1920. il Concrete 50:34 D '42
- Experimental concrete tanker shows its mettle. il Eng N 130:8 Ja 7 '43
- First powered concrete ship of World war II. il Eng N 131:171 Jl 22 '43
- Five yards building 115 concrete ships. il Marine Eng 47:159-60 D '42
- Paint and waterproofing applied to concrete ships. Am Concrete Inst J 14:593-4 Je '43
- Seagoing concrete. H. W. Hunt. il Sci Am 169:205-7 N '43
- Ship construction basins of thin concrete for building concrete ships at Tampa, Fla. il Eng N 131:152-5 Jl 15 '43

See also

Barges, Concrete

SHIPS, Troop. See Transports

SHIPS, Wooden

Common problems of the wooden-boat builder and the lumber industry. C. A. Rishell. *Marine Eng* 48:219-20, 222+ S '43

SHIPSHAW power development. See Hydro-electric plants—Quebec

SHIPWAYS

Cellular cofferdam serves as wall of ship construction basins. *il diags Eng N* 131:588-94 O 21 '43

Submerged shipways with steel sheeting walls. A. J. Ackerman; C. B. Jansen. *il diags Civil Eng* 13:309-14 J1 '43

SHIPWRECKS

See also

Salvage

SHIPYARD eye. See Eye—Diseases and defects

SHIPYARDS

Building ships in Indiana. G. E. Stedman. *il Steel* 12:102-4+ My 17 '43

Defoe building destroyer escorts. *il Marine Eng* 48:207-8 Ag '43

Delta shipyard. E. B. Williams. *il diags Marine Eng* 48:192-202 Ap '43

Federal shipyard is building quality ships in record time. L. H. Korndorff. *Marine Eng* 48:188-9 Ag '43

Steel fabrication methods at Calship; training courses, equipment. *il Eng N* 130:116-20 Ja 28 '43

Todd shipyards make new records in ship repairs. *il Marine Eng* 48:204-10 S '43

Yesterday and today in ship production. H. Pearlman. *Marine Eng* 48:209-11 J1 '43

See also

Navy yards and naval Shipbuilding stations Shipways

Accidents

Causes and prevention of injuries from falls in shipyards. F. S. McElroy and A. L. Svenson. *Monthly Labor R* 57:766-72 O '43

Electric equipment

Electrical equipment of shipyards; abstracts. H. M. Coatsworth. *Electrician* 129:655-6 D 18 '42; *Elec R (Lond)* 131:817-18 D 25 '42

Welding in shipyards. F. R. Mansell. *Electrician* 130:365-6 Ap 9 '43

Employees

Absenteeism in commercial shipyards, 1942. E. V. Kennedy. *Monthly Labor R* 56:211-22 F '43

Administrative and working relationships between the Georgia industrial hygiene service and the United States maritime commission. L. M. Petrie. *bibliog Ind Med* 12:500-2 J1 '43

All aboard! all aboard! but where are the passengers? rail line to get shipworkers to Terminal island, California. J. H. Collins. *Pub Util* 31:815-21 Je 24 '43

Case for the navy? labor trouble at Cramp shipyards; congressman asks navy to take over. *Business Week* p104+ O 23 '43

Causes of lost time among shipyard workers; abstract. P. Drinker. *Science* 97:sup9 Ja 29 '43

Court holds shipyard employee not seaman within meaning of the Jones act. *East Underw* 43:38 N 20 '42

DeShetler is back; C.I.O. organizer reopens membership drive to win A.F.L. boiler-makers at Kaiser yards. *Business Week* p77-8 Je 5 '43

Earnings in ship-construction yards, fall of 1942. W. C. Quant. *Monthly Labor R* 57:315-36 Ag '43

Effect of unannounced quits on absenteeism in shipbuilding. *Monthly Labor R* 56:1047-8 Je '43

Employment of women in shipyards, 1942. E. V. Kennedy. *Monthly Labor R* 56:277-82 F '43

Fizzle in Portland; DeShetler abdicates job of wrestling Kaiser workers from A.F.L. for C.I.O. *Business Week* p54-5 My 8 '43

Housing shipyard workers at Marinship. *il plans Marine Eng* 48:158-60 F '43

Ideas speed the battle of production; Federal shipbuilding and drydock company. *il Marine Eng* 47:129-30 N '42

It's C.I.O. at Sun; union wins by a nose. *Business Week* p92+ J1 17 '43

Kaiser doctrine. *Business Week* p88+ F 20 '43

Kaiser medical problem. J. H. Fitzgibbon. *Ind Med* 12:42-4 Ja '43

Kaiser's contracts; NLRB charges against Coast shipbuilder. *Business Week* p94-5 N 28 '42

Marine electrical training streamlined; home study course for men and women at Moore shipyards, Oakland. H. S. Dusenbery. *Elec West* 31:52-3 J1 '43

Negroes in a war industry; the case of shipbuilding. H. R. Northrup. *bibliog J Business* 16:160-72 J1 '43

No on ship pay. *Business Week* p79 Ag 14 '43

Now comes pay showdown; case of 1,200,000 shipyard workers demanding 15c an hour increase. *Business Week* p15-16 J1 3 '43

One ingredient of Henry J. Kaiser's formula: employee morale. B. Durkee. *il Ptr Ink* 201:20-2 N 13 '42

Pay rise voted. *Business Week* p90+ S 4 '43

Plan for group insurance on shipyard employees. *Nat Underw* 47:21 Mr 4 '43

Settlement of 38 suits in California approved. *East Underw* 44:50 O 15 '43

Shipyard labor turnover creates serious production problem. *Marine Eng* 48:226 Mr '43

Sources of labor supply in West Coast shipyards and aircraft-parts plants. T. P. Kanninen. *Monthly Labor R* 55:926-31 N '42

Suggestions for improvements rewarded at Cramp yard. *Marine Eng* 48:206 J1 '43

Tampa yard adopts plan to cut down absenteeism. *Marine Eng* 48:234+ Ap '43

Trigger finger and chipper's palsy. G. W. Richmond. *Safety Eng* 86:41-2+ J1 '43

Wartime industrial services; with special comment on Permanente foundation, California physicians' service and Procurement and assignment service. *Ind Med* 12:174-7 Mr 43

Wartime training of shipbuilders. G. G. Via. *il Marine Eng* 48:163-6 F; 188+ Mr '43; *Discussion*. 48:159-60 Ja '43

Women in shipbuilding. *Economist* 144:767-8 Je 12 '43

Women shipbuilders. *il Elec R (Lond)* 132:848 Je 25 '43

Women workers in the shipyards. B. Oppenheim. *il Marine Eng* 48:221-2, 224 Ap '43

Workers' ideas speed up ship production. T. K. Quinn. *il Marine Eng* 48:179-80+ O '43

Equipment

Assembly-line plate cutting at West Coast shipyards. G. V. Slottman. *il Marine Eng* 48:167-74 Mr 43

British mercantile shipyard practice. *il Engineering* 155:365-7, 370 My 7 '43

Brush engineering speeds up ship construction work; Osborn manufacturing company. *il Marine Eng* 48:155-7 F '43

Building Liberty ships in record time; North Carolina shipbuilding company. R. G. Skerrett. *il Comp Air M* 48:7079-84 J1 '43

Fabricating shop operations at Bethlehem-Fairfield shipyard. flow chart *il plan Marine Eng* 48:140-51 F; 154-62 Mr '43

Newport News builds famous men-of-war. H. L. Norton. *il Mach* 50:148-57 N '43

Planning for production welding and cutting in a modern shipyard. W. B. Bowen. *il plan Welding J* 22:904-11 N '43

Plumbing and heating in a modern shipyard. *il Dom Eng* 161:53-5 Ja '43

Producing serrated angle beams; specially designed oxy-acetylene cutting machine. S. O. Jones. *il Marine Eng* 48:163-4 Mr '43

Production line shipbuilding with preassembled sections. Dravo corporation. *il diags Eng N* 131:200-3 J1 29 '43

Repair yard facilities expanded. *il Marine Eng* 48:222+ My '43

Ship construction basins of thin concrete for building concrete ships at Tampa, Fla. *il Eng N* 131:152-5 J1 15 '43

Shipyard adopts deck-high outfitting dock; Marinship corp. *il diags Eng N* 130:474-8 Ap 8 '43

Shipyard lay-out for welded construction; abstracts. R. B. Shephard. *il Engineer* 175:504-5 Je 25 '43; *Engineering* 155:496 Je 18 '43

Speeds ship assembly. *il Factory Management* 101:106 J1 '43

Straddle trucks in shipyards. *il Marine Eng* 47:135 N '42

SHIPYARDS—Equipment—Continued

- Subassembly welding and erection. G. V. Slottman. *il* Marine Eng 48:176-88 My '43
 Timber derricks for shipyard use. *il* diags Eng N 130:742-3 My 20 '43
 Todd-Bath basin-type shipyard; with layout plan. W. S. Newell. *il* diags Marine Eng 48:192-9 O '43
 Why Kaiser is the world's number one ship-builder; Oregon shipbuilding co. C. O. Herb. *il* Mach 49:132-43 N '42; 189-92 F '43

See also

Launching**Layout**

- Construction men build fighting ships; destroyer escort vessels for the navy. *il* diags plan Eng N 131:12-17 JI 1 '43
 Fabricating shop operations at Bethlehem-Fairfield shipyard. Marine Eng 48:142-3 F '43
 Organizing facilities to promote production welding in shipyards. G. V. Slottman. *il* plans Marine Eng 47:128-37 D '42
 Plant layout for ship construction. *il* diags plan Eng N 130:730-5 My 20 '43
 Todd-Bath basin-type shipyard. W. S. Newell. *il* diags Marine Eng 48:192-9 O '43

Libraries

- Library at Cramp shipyard helps train workers. *il* Marine Eng 48:230 S '43

Lighting

- Lighting the ways for victory. R. G. Clark. *il* diags Marine Eng 48:175-8 Mr '43
 Shipyard light. *il* Elec West 90:80 Ap '43

Management

- Mass production methods in shipyards. A. J. Ackerman. *il* diags plan Civil Eng 13:201-4, 261-4 My-Je '43
 Production notes on C-3 ships. R. H. Macy. *il* Marine Eng 48:192-6 Je '43

See also

Launching**Safety measures**

- Building a victory fleet. F. W. Johnson. *il* Nat Safety N 47:10-11+ Ap '43
 Crane overload warning device prevents accidents in shipyards. Eng N 129:853 D 17 '42
 Gases in war-time plants; compressed dissolved and liquefied gases used mainly in shipyards. W. R. Stewart. *il* Safety Eng 86:43, 50-2 O '43
 Industrial injuries in shipyards. M. D. Kosoris. Monthly Labor R 57:5-8 JI '43
 Marine safety men discuss shipyard safety problems, etc. C. E. Holmes. Weekly Underw 148:744-5+ Ap 3 '43
 Minimum requirements for safety and industrial health in contract shipyards. Ind Med 12:259-63 Ap '43
 Safety plus style for the shipyards; clothing for women workers. *il* Nat Safety N 47:68 Ja '43
 Shipyard grows up; Jeffersonville boat and machine company. J. E. Glass. *il* Nat Safety N 48:14-15+ JI '43
 64 life savers from proposed shipyards safe practices manual. W. E. Lawrence. *il* Safety Eng 86:17-18+ S '43
 Ventilation for ships under construction; exhaust of fumes, compartment ventilation, and ventilating closed spaces during painting. H. E. Packard. *il* diag Heating-Piping 14:711-14 D '42

SHIRTING

- Manual of military fabrics; 6-oz. cotton twill; manufacturing and processing details for shirting fabrics. *il* Textile World 93:72-4 Mr '43

SHIRTS**Advertising**

- Shirt campaign shoots at army officers. *il* Ptr Ink 202:60 Ja 1 '43

Rating

- Men's broadcloth shirts. *il* Consumers' Research Bul 11:5-7 Je '43

SHOCK

- Chemistry and uses of blood substitutes. O. F. Denstedt. Can Chem & Process Ind 27:322-4 Je '43

- Experimental burns; the influence of a gelatin-glucose-salts solution on the hemoconcentration of burns. J. O. Ely and A. W. Angulo. Franklin Inst J 235:197-204 F '43
 Experimental chemotherapy of burns and shock; effects of systematic therapy on early mortality. S. M. Rosenthal. bibliog Pub Health Rep 58:513-22 Mr 26 '43

- Experimental chemotherapy of burns and shock; methods; effect of local therapy upon mortality from shock. S. M. Rosenthal. bibliog Pub Health Rep 57:1923-35 D 18 '42

- Experimental chemotherapy of burns and shock; production of traumatic shock in mice; therapy with mouse serum and sodium salts. S. M. Rosenthal. bibliog Pub Health Rep 58:1429-36 S 24 '43

- Possible substitute for blood plasma; hydrolyzed proteins from beef blood or casein; abstract. R. Elman and C. E. Lischer. Science 97:sup10+ F 19 '43

- War vitamin; ascorbic acid finds place in shock treatment. Sci Am 168:179-80 Ap '43

See also

- Electricity, Injuries from

SHOCK absorbers

- Menasco manufacturing company; manufacture of airplane engines and shock absorbers. W. G. Wood. *il* Aeronautical Eng R 1:85 N '42

- Mosquito legs equipped with rubber pack to absorb shock. diags Automotive & Aviation Ind 89:29 Ag 15 '43

See also

- Resilient

SHODDY

- Dyeing of Morley goods. G. Webster. Soc Dyers & Col J 59:54-6 Mr '43

SHOE industry and trade

- Cobblers rushed. Business Week p48+ Ap 10 '43

- Joyce sales strategy stresses quality as answer to rationing. Sales Management 52:75-6 Ap 1 '43

- Shift in shoes. Business Week p80-1 Ag 7 '43

- Shoe styles, 1943. Business Week p66+ N 14 '42

- Shoes by mail. Business Week p60+ My 8 '43

Advertising

- Frozen shoes; Wolverine's demonstration stunt. *il* Ptr Ink 201:84 D 4 '42
 Shoe rationing order pulled copy writers out of bed. *il* Ptr Ink 202:20-1 F 19 '43

Insurance requirements

- 500,000,000 pairs of shoes; insurance protection. E. V. Sullivan. Spectator (Property ed) 9:12-13+ O 7 '43

Regulation

- Ration followup; shoe order modifications and amendments. Business Week p62-4 F 27 '43
 Standard soles. Business Week p101-2 N 6 '43

Securities

- Shoe stocks. J. S. Williams. Mag of Wall St 71:529 F 20 '43

Statistics

- Boots, shoes, and slippers, 1938-1941. Survey of Cur Business 1942 Sup p131 [supplemented in monthly numbers]
 Shoe story; graphs. Business Week p94 O 23 '43

Argentina

- Argentine journal reports notable growth in local shoe and leather industry. For Comm W 13:28 O 16 '43
 Manufacture of footwear in Argentina. For Comm W 11:27 Ap 3 '43

Great Britain

- Boot and shoe results, 1940-1942. Economist 144:188, 369 F 6, Mr 20 '43
 Footwear and leather. Economist 145:26 JI 3 '43

Guatemala

- Shoe production in Guatemala. For Comm W 12:23-4 S 25 '43

SHOE industry and trade—Continued

Haiti

Shoe production in Haiti. For Comm W 12:30-1 S 18 '43

Sweden

Shoe production and repair in Sweden. For Comm W 12:27 Ag 7 '43

United States

Restrict shoe price lines; ease play shoes rationing. Comm & Fin Chr 157:925 Mr 11 '43

Shoe rationing's effects; impact in tanning, manufacturing and distributing fields will vary. Barron's 23:6 F 15 '43

Shoes are tight; overdue ration control sets off buying rush in other lines. Business Week p92-3+ F 13 '43

Uruguay

Shoe production in Uruguay. For Comm W 11:34 Je 26 '43

SHOE polish

Observations on polishes; new and substitute raw materials. G. S. Collingridge. Chem Age (Lond) 47:462 N 28 '42; Excerpt. Soap & San Chem 19:69 F '43

Tailored for custom made shoe polish. il Mod Packaging 16:58-9+ D '42

Rating

Shine 'em up! il Consumers' Research Bul 12:9-12 S '43

SHOE repairers floater. See Insurance, Bailors' customers

SHOES

Fitting your shoes to your feet. M. B. Howorth. diags Consumers' Research Bul 11:9-12 My '43

Replacements for shoe leather. W. Gallay. il Can Chem & Process Ind 27:551-4 O '43

What to look for in buying shoes. M. B. Howorth. Consumers' Research Bul 12:22-5 JI '43

What's wrong with your feet? minor foot ailments and how to deal with them. M. B. Howorth. il Consumers' Research Bul 11:13-20 Je '43

Woodies; streamlined versions of the sabot now help keep Europe on its feet. C. R. Budd. il For Comm W 12:10-11 JI 10 '43

Care

Shine 'em up! il Consumers' Research Bul 12:9-12 S '43

What you can use; materials suitable for various purposes in processing industries; shoe care. Oil Paint & Drug Rep 144:40 Ag 23; 52 N 29 '43

Rating

Low-heel walking shoes for women. il Consumers' Research Bul 12:18-20 S '43

Street or walking shoes for women. il Consumers' Research Bul 12:5-8 JI '43

Rationing

Joyce sales strategy stresses quality as answer to rationing. Sales Management 52:75-6 Ap 1 '43

OPA announces rules for safety shoe purchases. Nat Safety N 47:96 My '43

OPA grants special ration stamps for safety shoes. il Ind Stand 14:190 Je '43

Ration followup; shoe order modifications and amendments. Business Week p62-4 F 27 '43

Restrict shoe price lines; ease play shoes rationing. Comm & Fin Chr 157:925 Mr 11 '43

Shoe rationing effects. Comm & Fin Chr 157:2395 Je 24 '43

Shoe rationing order pulled copy writers out of bed. il Ptr Ink 202:20-1 F 19 '43

Shoe rationing's effects; impact in tanning, manufacturing and distributing fields will vary. Barron's 23:6 F 15 '43

Shoes rationed at three pairs a year. Comm & Fin Chr 157:758 F 25 '43

Shoes stretched. Business Week p94+ O 23 '43

Repair

Cobblers rushed. Business Week p48+ Ap 10 '43

Shoe repairs. Economist 145:535 O 16 '43; Correction 145:564 O 23 '43

SHOES, Children's

Rating

Children's shoes. il Consumers' Research Bul 12:5-8 Ag '43

SHOES; Rubber

New lacquers for rubber footwear; research in Russia. India Rubber W 108:286+ Je '43

Rationed arctics? rubber footwear industry faces rationing of its civilian products. Business Week p 18-19 D 26 '42

Rubber footwear manufacturing affected by emergency; abstract. J. E. Robinson. Rubber Age 53:60 Ap '43

Wartime rubber footwear repairs in Great Britain. India Rubber W 107:298 D '42

Statistics

Rubber and canvas footwear, 1933-1941. Survey of Cur Business 1942 Sup p161

SHOES, Safety

Fortified feet. il Nat Safety N 47:18-19 Mr '43

Now they're safe; steel-toed shoes for women war workers. il Business Week p98-9 Ag 7 '43

OPA announces rules for safety shoe purchases. Nat Safety N 47:96 My '43

OPA grants special ration stamps for safety shoes. il Ind Stand 14:190 Je '43

Safety shoe standards. Nat Safety N 47:104-6 My '43; Same cond. Safety Eng 85:38 Ap '43

Safety shoes in the paper industry. H. G. Lamb. il Paper Ind 25:378-80 JI '43

War standards for industrial safety shoes. M. L. Chandross and A. J. Truelson. il Ind Stand 14:49-52 F '43

Wear safe shoes. il Safety Eng 86:31-2 S '43

Standards

War standards on women's safety shoes. E. R. Granniss. il Ind Stand 14:211-12 JI '43

Women's shoe standards. il Safety Eng 88:31-3 JI '43; Same cond. Nat Safety N 48:19+ Ag '43

SHOPPING

Gasless shopping; department stores try mail order and phone schemes. Business Week p90-1 N 21 '43

SHOPPING areas

Is there a law of retail gravitation? P. D. Converse. map Ptr Ink 204:36, 40-1+ S 10 '43

Newspapers and retail gravitation determine trading area boundaries; results of study in Laurel, Md. and one in 20 Illinois towns. J. P. Converse. map Sales Management 52:21-3 O 15 '43

Study of retail trade areas in east central Illinois. P. D. Converse. map Ill U Bur of Econ and Business Res, Business Studies 2:1-68 '43

SHOPPING centers

More cars, superhighways will set post-war pattern for commercial building. K. C. Welch. il diags plans Am Bld 65:39-41, 45+ Je '43

Neighborhood shopping centers; shopping requirements of average residential communities. R. W. Dowling. il Arch Forum 79:76-8 O '43

New buildings for 194X; shopping center. il diags plans Arch Forum 72:101-3 My '43

Seven commercial units for Rodeo drive, Hollywood. il plans Arch Forum 78:97-102 Je '43

Shopping centres? rationalising retail distribution in the post-war world. Economist 144:357-8 Mr 20 '43

SHOPS

See also

Air lines—Shops
Car shops
Highway department—Shops
Locomotive shops
Machine shops
Mine shops

Motor bus lines—Shops
Plumbing shops
Railroads—Shops
Repair shops
Sheet metal shops

SHORE lines

See also

Coast changes

SHORE protection

See also

Breakwaters
Flood control
Levees

SHORING and underpinning

- Buenos Aires underground railway. E. Kindel. *diags Engineer* 175:184-7 Mr 5 '43
 New foundations provided for a nineteenth century cathedral; St. Joseph's cathedral, in Hartford, Conn. G. F. Flay, jr. and D. B. McKinley. *il diags Civil Eng* 13:85-7 F '43
 Trenching and laying sewer and water pipe. *il diags Pub Works* 74:30+ O '43

See also

Building
 Foundations

SHORT, Mac, 1897-

Sketch. *por S A E J* 51:sup35 F '43

SHORT circuits

- Formulas for calculating short-circuit forces between conductors of structural shape. T. J. Higgins. *bibliog diags Elec Eng* 62: Trans 659-63 O '43
 How to clean up services to reduce short circuits. *diags Elec W* 120:1030 S 18 '43
 How to determine short-circuit current and interrupting capacity of interrupting devices. W. A. Holland. *Gen Elec R* 46:499-500 S '43
 Interrupting capacity; what it means and how it is calculated. W. A. Holland. *il diags Power Pl Eng* 47:68-71, 79 My '43
 Motor controls need short-circuit protection. R. M. Eichner. *il diag Factory Management* 101:135-8 Je '43
 New formulas for calculating short-circuit stresses in bus supports for rectangular tubular conductors. T. J. Higgins. *diag J Ap Phys* 14:151-4 Mr '43
 Short-circuit analysis; faults between two phases. T. F. Wall. *diags Elec R (Lond)* 133:43-4 Jl 9 '43
 Short-circuit calculations. *diag Elec R (Lond)* 132:72 Ja 15 '43
 Short-circuit currents; how such currents in low-voltage a-c systems can be reliably calculated. A. E. Anderson. *bibliog diag Gen Elec R* 46:316-19, 399-401 Je-Jl '43
 Short-circuit rating and testing of current-limiting reactors. J. G. Wellings and R. V. Wheeler. *diags Inst E E J* 89 pt 2:473-9; Discussion. 479-84 O '42
 Short-circuit values; an application of symmetrical component analysis. T. F. Wall. *diags Elec R (Lond)* 132:281-2 F 26 '43
 Symmetrical component analysis; vectorial treatment for standard short-circuit solutions. R. N. Buttrely. *diags Elec R (Lond)* 132:113-15 Ja 22 '43
 Use of interrupting devices in the clearing of electrical circuits. W. A. Holland. *il Pet Refiner* 22:105-6 Jl '43
 Where a short is not a short. J. K. Masten. *diags Power Pl Eng* 47:112, 114+ Ap '43

SHORT line railroads. *See* Railroads, Short line

SHORTENING

- All-America package competition award; Humko co. *il Mod Packaging* 16:91 Ap '43
 Bakers win fats. *Business Week* p82 My 8 '43

SHORTER process. *See* Case hardening—Shorter process

SHOT

- Heat treatment of solid armor-piercing (A.P.) and semi-armor-piercing (S.A.P.) shot. *il Steel* 112:90-1+ Je 21 '43

SHOT blasting

- Abrasive blasts save time on production front. *il Comp Air M* 48:7146-7 S '43
 New trails in surface finishing aircraft engine parts. *Steel* 113:102, 104+ Jl 5 '43
 Pangborn installation overhauls locomotive in two days; steel-blast cleaning room. *il Steel* 111:74 D 28 '42
 Shotblasting aircraft engine parts. *diags Am Mach* 87:88-9 Je 24 '43
 Surface finishing methods for aircraft engines. F. M. Reck. *il Aero Digest* 42:213, 215+ Je '43

See also

Metal finishing

SHOT effect

- Evidence of a periodic deviation from the Schottky line; correction. T. E. Phipps. *Phys R* 62:554-5 D 1 '42
 Shot-effect in space-charge-limited diodes. D. M. Surdin. *Wireless Eng* 20:127-30 Mr '43

SHOT putting

- Shot-put and the earth's rotation. P. Kirkpatrick. *Science* 97:138 F 5 '43

SHOVELING machines

- Chaseside mechanical shovel. *il diag Mech Handling* 30:307-10 Jl '43
 Hints on emergency shovel repairs. *il Roads & Sts* 86:82-3 F '43
 Maintenance tips for shovel operators. G. E. Miller. *il Roads & Sts* 86:76-8 Jl '43
 Provides overload release; patent assigned to International harvester co. *diag Machine Design* 15:122+ Ja '43
 Salvaging shovel teeth and buckets. *il Roads & Bridges* 81:58 Mr '43
 Three pits; even production in outcrop stripping; F. B. Wood coal mining co. *il Coal Age* 48:70-1 Ag '43

See also

Electric shovels
 Excavating machinery

SHOW cases

- Show and display cases; design data. *Arch Forum* 79:96 S '43

SHOW windows

- Ask Tony, the pushcart man. R. J. Ingram. *il Mod Packaging* 16:67-9+ F '43
 Duration window units. *il Mod Packaging* 16: 72 F '43
 Ingenious display; still getting by. *Business Week* p40+ Ag 28 '43
 Libbey-Owens-Ford glass co. storm window display. *il Mod Packaging* 16:107 Ap '43

See also

Banks and banking— Electric utilities—
 Show windows Show windows

SHOWER baths

- Concrete shower bases save critical metals. R. S. Torgerson. *il Rock Prod* 46:104, 106 Je '43
 Employers cast stone molds for mass output of shower-bath bases; Badger concrete company. *Concrete* 51:18 My '43

SHOWER curtains

- How Para built a merchandising program for shower curtains. *il Sales Management* 52: 28, 30 Ja 15 '43

SHREVEPORT, Louisiana

- Economic development of the Shreveport trade area. S. A. Caldwell. (Louisiana business bul. v 5, no 2) 30p Bur. of business research, College of commerce, Louisiana state university, Baton Rouge, La. My '43

SHRIMPS

- Fewer shrimp. *Business Week* p58+ My 15 '43

SHRINK fits. *See* Fits (machinery)

SHRINKAGE of metals

- Flame shrinking galvanized plates without generating obnoxious fumes. A. Lake. *il Steel* 112:108-9+ Ap 19 '43
 Plate shrinker; galvanized metal plates shrunk without burning, and fumes. *Business Week* p78+ F 20 '43
 Principles of shrinking and straightening distorted low carbon steel used in shipbuilding. M. D. Offen. *diags Welding J* 22:14-16 Ja '43

Shrinking over-expanded rings. W. Boyle and A. Yitli. *Metals & Alloys* 17:1221 Je '43

Theory of shrinkage in gray cast iron. G. A. Timmons. *il diag Foundry* 70:82-3+ D '42; 71:80-1+ Ja '43

SHRINKAGE of textiles

- Effect of alkaline treatments on the felting properties of wool. J. W. Creely and G. C. Le Compte. *Am Dyestuff Rep* 31:667-70, 682 D 21 '42
 Imitation camel's hair. *Textile Col* 65:434 O '43

See also

Wool, Unshrinkable
 Woolen and worsted fabrics—Shrinkage

SHUTTLES

- Progress in designing shuttles for rayon weaving. R. Makepeace. *il Rayon* 24:484-6 S '43

SIAM. *See* Thailand

SICILY

Sicilian cities. Science 98:sup8 J1 23 '43

*See also*Sulfur mines and World war, 1939—
mining—Sicily Sicily**Economic conditions**

Sicilian economy. Economist 145:77-8 J1 17 '43

SICILY, Battle of

Gains in Sicily. map Business Week p14 J1 17 '43

President says invasion of Sicily marks beginning of the end. Comm & Fin Chr 158: 228 J1 15 '43

SICK*See also*

Sickness

SICKNESS

Absence due to sickness. D. L. Lynch. Ind Med 12:575-82 S '43

Disability table for urban workers. H. F. Dorn. Pub Health Rep 57:1761-75 N 20 '42

Disabling morbidity among industrial workers, third quarter of 1942, with a note on the occurrence of the respiratory diseases, 1933-42. W. M. Gafafer. Pub Health Rep 58:232-4 F '43

Emergency sickness and immediate care. H. Bartle. Ind Med 12:606+ S '43

Frequency and duration of disabilities causing absence from work among the employees of a public utility, 1933-42; Boston Edison company. W. M. Gafafer. bibliog Pub Health Rep 58:1554-60 O 15 '43

Industrial health and the war; statistical analysis of the medical causes of absenteeism. D. L. Lynch. Ind Med 12:236+ Ap '43

Medical service statistics; Standard Oil's ten-year review. Ind Med 11:593-4 D '42

Morbidity and mortality from specific causes during 1942 and recent preceding years. Pub Health Rep 58:730-44 My 7 '43

Sickness absenteeism among industrial workers, final quarter of 1942, with a note on the occurrence of bronchitis and pneumonia, 1933-42. W. M. Gafafer. Pub Health Rep 58:677-9 Ap 23 '43

Sickness absenteeism among industrial workers, first quarter of 1943, with an inquiry into the occurrence of the respiratory diseases, 1934-43. W. M. Gafafer. Pub Health Rep 58:1273-7 Ag 20 '43

Sickness absenteeism among male and female industrial workers, 1933-42, inclusive. W. M. Gafafer. Pub Health Rep 58:1250-4 Ag 13 '43

Studies on the duration of disabling sickness; duration of disability from the nonrespiratory-nondigestive diseases among male employees with particular reference to the older worker. W. M. Gafafer and R. Sitgreaves. Pub Health Rep 58:969-79 Je 25 '43

Variation in hospitalization with size of city, family income, and other environmental factors, based on records for 9,000 families in 18 states visited periodically for 12 months, 1928-31. S. D. Collins. bibliog Pub Health Rep 57:1635-59 O 30 '42

See also

Diseases

Hygiene

Infectious diseases

Insurance, Health

Medical service

Mortality

Public health

SIDE LINES*See also*

Gasoline service stations—Side line selling

SIDERITE

Tailings re-treatment plant produces flux for lead smelter; Bunker Hill & Sullivan company recovers siderite. J. B. Huttli. flow sheet Eng & Min J 143:56+ N '42

SIDEWALKS, Brick

Brick sidewalks in Chicago; old street reconstructed by Museum of science and industry. il Brick & Clay Rec 103:23 Ag '43

SIDING (building)

How to apply non-critical corrugated asphalt siding on various jobs. diags Am Bld 65: 48 F '43

How to figure siding jobs quickly. H. F. Lotz. Am Bld 65:58+ Ap '43

SIEVES

Relation of shape to the passage of grains through sieves. G. Rittenhouse. bibliog Ind & Eng Chem Anal ed 15:153-5 F 15 '43

See also

Screéns

Standards

Tentative standard specifications for filtering material; calibration of sieves. Am Water Works Assn J 35:460-4 Ap '43

SIGHT

Eyes have it! J. R. Wittekind. il Safety Eng 85:25-8 Ja; 29-32 F '43

Factors in human visual resolution. G. L. Walls. diags Opt Soc Am J 33:487-505 bibliog(p503-5) S '43

Industrial vision. J. R. Wittekind. Illum Eng 38:99-105 F '43

Oxford ophthalmological congress, 1943; discussion on illumination in industry. D. Wilson; H. C. Weston; E. R. Merewether. Light & Lighting 36:113-16 Ag '43

Range of vision. G. H. Draper and R. F. Haupt. Aero Digest 43:473 J1 '43

Some current problems in visual functions and visual perception; abstract. F. C. Bartlett. Light & Lighting 36:86 Je '43

Split-second recognition, a new allied weapon; identification of planes, ships, and armored land vehicles at speeds up to 1/100 of a second. il Aviation 42:119+ J1 '43

Studies on peripheral visual acuity. F. N. Low. Science 97:586-7 Je 25 '43

Summary of researches in seeing at low brightness-levels. M. Luckiesh and A. H. Taylor. Illum Eng 38:189-207 Ap '43

Vision at low brightness-levels. A. H. Taylor. bibliog il Illum Eng 38:89-98 F '43

Vision, hearing, and aeronautical design. L. D. Carson, W. R. Miles and S. S. Stevens. J Aeronautical Sci 10:127-30 Ap '43

Visual observations in the infra-red. J. M. Preston. il Soc Dyers & Col J 59:141-3 J1 '43

See also

Color blindness

Color sense

Eye

Lighting

Optical illusions

Spectacles

Visibility

SIGHTS, Telescopic. *See* Telescopic sights**SIGHTS for firearms.** *See* Firearms—Sights**SIGMA XI**

Awards of Sigma xi grants-in-aid of research. Science 98:214 S 3 '43

Radcliffe chapter. Science 97:437-8 My 14 '43

Society of the Sigma xi; officers, new chapters, etc. Science 97:304 Ap 2 '43

Tufts college chapter of the society of the Sigma xi. N. Y. Wessell. Science 97:347-8 Ap 16 '43

SIGNAL corps. *See* United States—Army—Signal corps**SIGNALS and signaling**

McElroy chart of codes and signals. Radio N 29:284-5 Je '43

Standard signals for linework. il Elec W 119: 1984 Je 12 '43

See also

Air raid signals

Light signals

Military fireworks

Radio signals

Railroads—Signals

Smoke signals

Traffic signals

SIGNIFICANT difference (statistics)

Experience with tests of significance; a reply to Professor R. A. Fisher. J. Berkson. Am Stat Assn J 38:242-6 Je '43

Note on Dr Berkson's criticism of tests of significance. R. A. Fisher. Am Stat Assn J 38:103-4 Mr '43

Time series significance tests based on signs of differences. G. H. Moore and W. A. Wallis. Am Stat Assn J 38:153-64 Je '43

SIKORSKI, Wladyslaw, 1881-1943

Roosevelt and Churchill laud late Polish premier. Comm & Fin Chr 158:234 J1 15 '43

SILBERLING, Norman John, 1892-1942

Sketch. Am Stat Assn J 38:112 Mr '43

SILICA

Browntown silica meets growing war demands. R. S. Torgerson. il Rock Prod 46: 61-3+ O '43

SILICA—Continued

Compound merwinite ($3\text{CaO} \cdot \text{MgO} \cdot 2\text{SiO}_2$) and its stability relations within the system $\text{CaO} \cdot \text{MgO} \cdot \text{SiO}_2$ (preliminary report). E. F. Osborn. bibliog diags Am Cer Soc J 26:321-32 O 1 '43

Equilibrium relationships on the liquidus surface in part of the $\text{MnO} \cdot \text{Al}_2\text{O}_3 \cdot \text{SiO}_2$ system. R. B. Snow. bibliog il diags Am Cer Soc J 26:11-20 Ja 1 '43

Fertilizer by fusion of rock phosphate with olive. J. H. Walthall and G. L. Bridger. bibliog Ind & Eng Chem 35:774-7 Jl '43

Fine structure of metallic surfaces with the electron microscope; two-step replica process utilizes molded polystyrene and evaporated silica. R. D. Heidenreich and V. G. Peck. bibliog il diag J Ap Phys 14:23-9 Ja '43

Interpretation of electron micrographs of silica surface replicas. R. D. Heidenreich. bibliog il J Ap Phys 14:312-20 Jl '43

Preparation of purified inorganic compounds for use in spectrographic standards. R. C. Hughes. bibliog il Opt Soc Am J 33:49-60 Ja '43

Properties of low reflection films produced by the action of hydrofluoric acid vapor. F. H. Nicoll and F. E. Williams. il Opt Soc Am J 33:434-5 Ag '43

Reactions in solid state; reaction between sodium carbonate and quartz. G. Gibson and R. Ward. bibliog Am Cer Soc J 26:239-46 Jl 1 '43

Silica and semi-silica refractories. J. H. Chesters. il diags Iron Age 151:36-41 Ja 21; 44-9 bibliog (p47-9) Ja 28 '43

Silica sol as auxiliary coagulant with copers; graphical determination of optimum proportions of dual coagulants in water treatment. A. A. Hirsch. bibliog Ind & Eng Chem 35:811-14 Jl '43

Silicon oxide bands. L. H. Woods. bibliog il Phys R 63:426-30 Je 1 '43

See also

Cheert	Sand
Glass	Silica gel
Quartz	Tridymite
Quartzite	Tripoli

Analysis

New method for the determination of free silica in industrial dusts. A. Salazar and L. Silverman. bibliog il diag J Ind Hygiene 25:139-48 Ap '43

Photometric determination of silica in the presence of phosphates. M. C. Schwartz. bibliog Ind & Eng Chem Anal ed 14:893-5 N 15 '42

Studies in filter photometry. M. C. Schwartz and L. W. Morris. bibliog il diags Ind & Eng Chem Anal ed 15:20-3 Ja 15 '43

SILICA, Fused

Fused quartz; a growing engineering material. W. M. Johnson. il Chem Ind 53:515-16 O '43

Glass windows for iron engines. E. W. Landen. bibliog diag Glass Ind 24:21-3, 33 Ja '43

Method of sealing fused silica tubes. W. McGavock. diags J Chem Educ 20:20 Ja '43

Société quartz & silice fused silica patents. Glass Ind 24:211 My '43

SILICA aerogel. See Silica gel**SILICA brick**

Observations on solid-phase inversions of calcium orthosilicate, constituent of dolomite-silica brick. S. Zerfoss and H. M. Davis. bibliog Am Cer Soc J 26:302-7 S 1 '43

Silica and semi-silica refractories. J. H. Chesters. il diags Iron Age 151:36-41 Ja 21; 44-9 bibliog (p47-9) Ja 28 '43

Vitreous silica in refractories. C. G. Harman and A. E. Badger. Brick & Clay Rec 102:51 My '43

Color

Factors influencing the staining of silica brick. L. J. Trostel. bibliog Am Cer Soc J 26:368-73 N 1 '43

Mottled or colored silica brick. S. M. Phelps and R. W. Limes. bibliog 2 col pls Am Cer Soc J 26:378-87 N 1 '43

Mottled silica brick, facts, fancies and fallacies. F. A. Harvey and C. L. Thompson. bibliog col pl Am Cer Soc J 26:361-4 N 1 '43

Plant investigation of variables affecting color of silica brick. J. S. McDowell. Am Cer Soc J 26:364-7 N 1 '43

Testing

Influence of water on silica brick at high temperatures. F. A. Harvey. bibliog il diags Am Cer Soc J 26:373-7 N 1 '43

SILICA gel

Adsorption of propane and propylene by silica gel and metallized silica gel. L. H. Reyer-son and M. R. Cines. bibliog diag J Phys Chem 46:1060-3 D '42

Keep your engine dry. il Mod Plastics 20:89-91+ My '43

Modification of the silica gel method for the determination of atmospheric organic solvent vapors. L. V. Cralley, T. E. Shea and L. J. Cralley. bibliog J Ind Hygiene 25:172-4 Ap '43

New package dehydrator; granular silica gel used in packaging guns, planes, and machinery. H. H. Wilkinson. il Chem & Eng N 21:1054-5 Jl 10 '43; Same. Marine Eng 48:220+ Ag '43

Silica gel prevents engine corrosion. il Iron Age 152:45 Jl 29 '43

Sorption and surface area in silica aerogel. S. S. Kistler, E. A. Fischer and I. R. Freeman. bibliog Am Chem Soc J 65:1909-19 O '43

Manufacture

Production of silica aerogel; pictured flow sheet. Chem & Met Eng 50:144-7 F '43

Silica gel produced in Canada. Can Chem & Process Ind 27:567 O '43

SILICATE glasses. See Glass**SILICATES**

Isomorphism and isotypism among silicates and phosphates. D. McConnell. bibliog Science 97:98-9 Ja 22 '43

Petrology and silicate technology. N. L. Bowen. bibliog diags Am Cer Soc J 26:285-301 S 1 '43

See also

Braunite	Rocks
Calcium silicates	Serpentine
Cordierite	Sillimanite
Fuller's earth	Slag
Glass	Sodium silicates
Kaolin	Spodumene
Mica	Vermiculite
Pumice	Zeolites
Pyroxenes	

SILICOMANGANESE

Silicomanganese used to conserve manganese and aluminum; abstract. B. Good. Iron Age 151:74 My 6 '43

SILICOMOLYBDIC acid

Studies in filter photometry. M. C. Schwartz and L. W. Morris. bibliog il diags Ind & Eng Chem Anal ed 15:20-3 Ja 15 '43

SILICON

Further tests of the atom-annihilation hypothesis as to the origin of the cosmic rays. R. A. Millikan, H. V. Neher and W. H. Pickering. Phys R 63:234-45 Ap 1 '43

Silicon loss between the rod and the deposited metal in oxyacetylene welding of cast iron. R. M. Allen, F. F. Dennis and G. Swartz. Welding J 22:sup179-81 Ap '43

Analysis

Perchloric acid method for determination of silicon in ferrosilicon. L. Waldbauer and S. O. Rue. bibliog Ind & Eng Chem Anal ed 15:131 F 15 '43

Photometric estimation of silicon in magnesium and magnesium alloys. A. J. Boyle and V. V. Hughey. bibliog Ind & Eng Chem Anal ed 15:618-19 O 15 '43

Spectrochemical determination of silicon, iron, and aluminum in mineral powders with a high voltage direct current arc. H. I. Oshry, J. W. Ballard and H. H. Schrenk. bibliog il diags Opt Soc Am J 32:672-80 N '42

See also

Silica—Analysis

SILICON alloys**See also**

Silicomanganese
Silicon steel

SILICON bronze

Handling copper-silicon alloys efficiently. *diags Foundry* 71:146, 148+ O '43

Silicon bronze castings. E. Portman. *il Metals & Alloys* 17:528-32 Mr '43

Substitute for 90 Cu, 10 Sn bearings; for Bofors anti-aircraft gun; abstracts. M. F. Garwood and E. H. Stilwell. *Metal Prog* 43:396 Mr '43; *Automotive & Aviation Ind* 88:18-19 F '43

Thermal expansion of some bronzes. P. Hidnert. *bibliog J Research Nat Bur Stand* 30: 75-88 Ja '43

Tin-saving bronzes and brasses; abstract. *Metals & Alloys* 16:954+ N '42

SILICON carbide

Contact non-linearity, with reference to the metal rectifier and the carborundum ceramic non-linear resistor. A. Fairweather. *il diags Inst E E J* 89 pt 1:499-518 *bibliog*(p517-18) N '42

Silicon carbide linings in water gas generators. T. F. Papen. *il diags Am Gas J* 159: 37-9 O '43

Silicon carbide refractories; abstract. C. Bruchhausen. *Metals & Alloys* 18:98+ Jl '43

Silicon carbide solid linings for water-gas generators. A. S. Hall. *diags Gas Age* 91: 24-6 Je 17 '43

Temperature compensation of instruments with negative coefficient resistors; use of semi-conducting materials as series neutralizers. J. R. Pattee. *bibliog il Electronics* 16:102-5+ Ag '43

SILICON compounds

See also

Silica

Silicates

SILICON dioxide. *See* Quartz; Silica**SILICON halides**

Halides and oxyhalides of silicon. W. C. Schumb. *bibliog Chem R* 31:587-95 D '42

SILICON oxides

See also

Silica

SILICON steel

Better magnetic core steel aids transformer engineer; *Hipersil steel*. C. C. Horstman. *il Product Eng* 14:28-30 Ja '43

Rolled steel cores for radio transformers; *Hipersil*. C. C. Horstman. *il diags Electronics* 16:110-11 Je '43

Vacuum fusion analysis of silicon steels. G. Derge and T. T. Omori. *bibliog Blast F & Steel Pl* 31:988-9+ Ag '43

SILICON tetrachloride

Suggested method for replaceable hydrogen. H. A. Liebhafsky. *Am Chem Soc J* 65: 1778 S '43

SILICOSIS

Correlation of X-ray findings with breathing function in silicosis; abstract. G. W. Wright. *Ind Med* 12:22-3 Ja '43

Silicosis: general considerations and survey in Coeur d'Alene mining district of Idaho; abstract. P. M. Ellis and others. *J Ind Hygiene* 25:sup99-100 My '43

Silicosis; occurrence and control. W. M. Pierce. *bibliog il Chem & Met Eng* 49:110-12 N '42

Treat silicosis effectively with aluminum powder. J. L. Blaisdell. *Concrete (mill sec)* 51:114 Ja '43; *Same*. *Can Chem & Process Ind* 27:40 Ja '43; *Same*. *Nat Safety N* 47:38+ Je '43

Tripoli and silicosis. C. P. McCord, S. F. Meek and G. C. Harrold. *bibliog Ind Med* 12:373-8 Je '43

SILK

Chinese develops silk in southern California. *Textile Col* 65:304 Jl '43

Dielectric properties of animal fibers. J. Errera and H. S. Sack. *bibliog diags Ind & Eng Chem* 35:712-16 Je '43

Home-grown silk. *Business Week* p72 Ag 21 '43

Pest damage to silk. E. Hardy. *Textile Col* 65:136-8 Mr '43

Proteins of natural silk; abstract. D. Colman and F. O. Howitt. *Chem & Ind* 62: 166 My 1 '43

See also

Fibroin

Silk trade

Silk weaving

Testing

Wearing qualities of similar brands of silk and nylon hose compared. G. M. Smith and H. M. Fletcher. *bibliog Rayon* 23:671-2, 722-4 N-D '42

SILK, Artificial. *See* Rayon; Textile fibers, Synthetic

SILK fabrics

Wearing qualities of rayon hose compared with silk and nylon hose. H. M. Fletcher. *Rayon* 24:537-8, 601-3 O-N '43

SILK manufacture

See also

Rayon manufacture

Silk weaving

SILK screen printing

Commercial silk-screen and its use in the graphic arts field. V. Singer. *il Inland Ptr* 110:31-3 N '42

Screen printing of rayons. *il Rayon* 23:353-4, 400-1, 547-8, 666-7; 24:89-90, 136-7, 193-4, 251-2, 421-2, 539-40 Je-Jl, S, N '42, F-My, Ag, O '43 (to be cont)

SILK trade**Statistics**

Silk, 1938-1941. *Survey of Cur Business* 1942 Sup p167-8

India

Development of silk industry in India. *For Comm W* 9:33 D 12 '42

Nicaragua

Silk industry for Nicaragua? *For Comm W* 11:25 Je 19 '43

Serbia

Sericulture in Serbia. *For Comm W* 11:35 My 22 '43

SILK weaving

Loomfixers' manual; rayon and silk section (cont). H. E. Wenrich. *diags Textile World* 92:124 N '42; 93:136 F; 136 Ap; 110 Je '43

SILK weighting

Silk weighting. *Textile Col* 65:453-7 O '43

SILLIMANITE

Sillimanite in South Carolina. L. L. Smith. *Eng & Min J* 144:75 Ag '43

SILOS

Buried treasure; underground silos. *il Business Week* p19 Mr 13 '43

SILT

Device for sampling material carried by silt-bearing streams. H. F. Weaver. *pl U S Bur Mines Information Circ* 7249:1-2 '43

High silt content of Colorado river. *map Eng N* 130:502-3 Ap 8 '43

Measurements of pore-water pressure in silt and clay; use of the elastic-wire strain meter. K. Terzaghi. *diags Civil Eng* 13:33-6 Ja '43

Sedimentation in reservoirs. B. J. Witzig. *Am Soc C E Proc* 69:793-815 *bibliog*(p814-15) Je '43; *Discussion*. *bibliog* 69:1104-8, 1324-30, 1493-1500, 1630-3 S-D '43

See also

Varves

SILVE, David

These exponents of one type now outstanding stylists. R. N. McArthur. *Inland Ptr* 111:42 My '43

SILVER

Adsorption of gases at low temperature and pressure on smooth silver. M. H. Armbruster. *bibliog Am Chem Soc J* 64:2545-58 N '42

Change in potential of silver-silver chloride electrodes with time. E. R. Smith and J. K. Taylor. *Am Chem Soc J* 64:3053 D '42

Coordination of silver ion with unsaturated compounds; *cis-* and *trans*-2-pentene. H. J. Lucas, R. S. Moore and D. Pressman. *bibliog Am Chem Soc J* 65:227-9 F '43

SILVER—Continued

Coordination of silver ion with unsaturated compounds; mixtures of trimethylethylene and cyclohexene. H. J. Lucas, F. W. Billmeyer, Jr. and D. Fressman. *bibliog Am Chem Soc J* 65:230-1 F '43

Exchange of radioactive silver and bromide with silver bromide suspensions. A. Langer. *bibliog J Chem Phys* 11:11-15 Ja '43

Investigations of ferromagnetic impurities. F. W. Constant, R. E. Faires and H. E. Lenander. *bibliog Phys R* 63:441-5 Je 1 '43

Mechanism of the formation of Kohlschütter's silver sol. H. B. Weiser and M. F. Roy. *J Phys Chem* 47:325-9 Ap '43

Potential of silver concentration cells with liquids of low dielectric constant. A. Gemant. *bibliog diag J Chem Phys* 10:723-30 D '42

See also

Silver as money

Analysis

Detection and semiquantitative estimation of group I cations. S. S. Leikind, R. Maurmeyer and M. Cutler. *Ind & Eng Chem Anal* 14:871 N 15 '42

Occurrence of lead, tin, and silver in wheat and its milling products. N. L. Kent. *bibliog Il Soc Chem Ind J* 61:183-6 D '42

Industrial applications

FDR approves Treasury sale of silver. *Comm & Fin Chr* 158:313 J1 22 '43

OPA amends silver rule. *Comm & Fin Chr* 158:615 Ag 12 '43

Passage of Green silver bill criticized as favoring unsound currency. W. E. Spahr. *Comm & Fin Chr* 158:227 J1 15 '43

Release of silver for war purposes voted. *Comm & Fin Chr* 157:2110 Je 7 '43

Silver in industry. *Chem Age (Lond)* 48:374-5 Ap 3 '43

Silver in peace and war; force of silver's wartime development as an industrial raw material has crashed into an immovable political wall. *Il Sci Am* 169:151-3+ O '43

Silver replaces scarce metals in soft solders. *Mach* 49:137 F '43

Silver use by Congress approved by Senate. *Comm & Fin Chr* 158:30 J1 1 '43

Uses of silver in wartime; abstract. R. H. Leach and J. L. Christie. *Chem & Met Eng* 49:166+ N '42

WPB tightens controls on use of silver. *Comm & Fin Chr* 158:523 Ag 5 '43

See also

Silver solder

Prices

OPA amends silver rule. *Comm & Fin Chr* 158:615 Ag 12 '43

Statistics

Monetary statistics, 1938-1941. Survey of Cur Business 1942 Sup p72-3 [supplemented in monthly numbers]

SILVER acetate

Role of neighboring groups in replacement reactions; retention of configuration in the reaction of some dihalides and acetoxy-halides with silver acetate. S. Winstein and R. E. Buckles. *bibliog Am Chem Soc J* 64:2780-6 D '42

Role of neighboring groups in replacement reactions; the effects of small amounts of water on the reaction of silver acetate in acetic acid with some butene and cyclohexene derivatives. S. Winstein and R. E. Buckles. *bibliog Am Chem Soc J* 64:2787-90 D '42

SILVER alloys

New alloy for five-cent coins; copper-silver-manganese. *Franklin Inst J* 235:285-8 Mr '43

See also

Silver solder

SILVER as money

See also

Bimetallism

Great Britain

United States to lend Britain and Australia silver for coinage. *Comm & Fin Chr* 156:2243 D 24 '42

India

Silver situation in India. C. L. Wood. *Il For Comm W* 10:10-11, 34-5 Ja 16 '43

Mexico

Mexico to keep silver. *Comm & Fin Chr* 158:694 Ag 19 '43

United States

Economists oppose Green bill as converting silver certificates to irredeemable currency. *Comm & Fin Chr* 157:1883 My 20 '43

Passage of Green silver bill criticized as favoring unsound currency. W. E. Spahr. *Comm & Fin Chr* 158:227 J1 15 '43

SILVER azide

Chlorine azide; interaction of chlorine azide and silver azide, azino silver chloride, NaAgCl . W. J. Frierson and A. W. Browne. *bibliog Am Chem Soc J* 65:1698-1700 S '43

SILVER brazing. See Silver solder**SILVER bromate**

Complex ions; monammine-silver ion. W. C. Vosburgh and R. S. McClure. *Am Chem Soc J* 65:1060-3 Je '43

SILVER bromide

Exchange of radioactive silver and bromide with silver bromide suspensions. A. Langer. *bibliog J Chem Phys* 11:11-15 Ja '43

Photographic latent image; lattice energy and related quantities for a hypothetical silver bromide crystal having the cubic ZnS type of structure. M. L. Huggins. *bibliog J Chem Phys* 11:412-19 S '43

SILVER chloride

Change in potential of silver-silver chloride electrodes with time. E. R. Smith and J. K. Taylor. *Am Chem Soc J* 64:3053 D '42

pH values of certain phosphate-chloride mixtures, and the second dissociation constant of phosphoric acid from 0° to 60° C. R. G. Bates and S. F. Acree. *bibliog pls diag J Research Nat Bur Stand* 30:129-55 F '43

Influence of age and surface conditions on the reactivity of certain precipitates. T. H. James. *bibliog J Phys Chem* 46:1068-76 D '42

Potential of silver concentration cells with liquids of low dielectric constant. A. Gemant. *bibliog diag J Chem Phys* 10:723-30 D '42

Silver chloride as a medium for study of ingot structures; abstracts. K. L. Fetter and M. Dienes. *Iron Age* 151:60-1 F 25 '43; *Metals & Alloys* 17:854+ Ap '43

Silver chloride electrode. O. Redlich and L. F. Maranville. *bibliog J Chem Educ* 20:10 Ja '43

SILVER compounds

See also

Silver nitrate

SILVER erythrosinate

Optical sensitizing of silver halides by dyes; the optical sensitizing properties of fluorescein dyes in relation to their spectral absorption and constitution. S. E. Sheppard, R. H. Lambert and R. D. Walker. *bibliog J Chem Phys* 11:263-75 Je '43

SILVER halides

Optical sensitizing of silver halides by dyes; the optical sensitizing properties of fluorescein dyes in relation to their spectral absorption and constitution. S. E. Sheppard, R. H. Lambert and R. D. Walker. *bibliog J Chem Phys* 11:263-75 Je '43

See also

Photographic emulsions

Silver bromide
Silver chloride

SILVER industry and trade

Foreign silver; new rules by War production board. *For Comm W* 12:19 Ag 28 '43

Silver is fungible; foreign supplies, Treasury stock, and domestically mined metal are physically identical, but don't confuse them! *Business Week* p94 Ag 7 '43

Silver shortages. *Metal Prog* 43:249-50+ F '43

See also

Silver as money

SILVER industry and trade—Continued**Statistics**

Silver, 1942. D. H. Leavens. Eng & Min J 144:79-80 F '43

Transition of silver to war use in 1942 outstanding feature, says Handy & Harman in annual review of the market. Comm & Fin Chr 157:365 Ja 23 '43

India

Silver situation in India. C. L. Wood. Il For Comm W 10:10-11, 34-5 Ja 16 '43

Mexico

Metal production in Mexico. For Comm W 12:35 S 4 '43

Peru

Production of silver in Peru. For Comm W 11:40 My 1 '43

United States

Silver—at a price: Green bill would allow Treasury to sell metal at 71.11c an ounce. Business Week p19 Je 5 '43

Silver at work in the war program. Min Cong J 29:48-9 F '43

SILVER iodate

Complex ions; monammine-silver ion. W. C. Vosburgh and R. S. McClure. Am Chem Soc J 65:1060-3 Je '43

SILVER metallurgy

See also

Cyanide process

SILVER mines and mining**Alaska**

Geology and ore deposits of the Chichagof mining district. J. C. Reed and R. R. Coats. Il diags maps U S Geol S Bul 929: 1-148, pl 1-33 [13pls in separate pocket]; pa \$3.25 Supt. of doc. '41

SILVER nitrate

Quantitative determination of hypo in photographic prints with silver nitrate. J. I. Crabtree, G. T. Eaton and L. E. Muehler. bibliog Franklin Inst J 235:351-60 Ap '43

Rapid determination of sodium chloride in the presence of protein; application to salt-cured food products. W. J. Dyer. bibliog Ind & Eng Chem Anal ed 15:439-40 Jl 15 '43

Reactions of group IV R,M compounds with silver and copper salts. H. Gilman and L. A. Woods. bibliog Am Chem Soc J 65: 435-7 Mr '43

Study of diffusion in glass. J. A. Pask and C. W. Parmelee. bibliog Il Am Cer Soc J 26:267-77 Ag 1 '43

SILVER oxalate

Some factors affecting the reduction of silver oxalate. T. H. James. bibliog J Chem Phys 10:744-6 D '42

SILVER oxides

Mechanism of the formation of Kohlschütter's silver sol. H. B. Weiser and M. F. Roy. J Phys Chem 47:325-9 Ap '43

SILVER plating

Bearing inspection without contact; silver-plated and lead-indium plated bearings checked by Air-O-Limit and Electrolimit gages. Il diags Am Mach 87:86-9 Ag 19 '43

Breaker contacts plated in place. A. C. Zeese. Il Elec W 119:1478 My 1 '43

Corrosion resistance of silver plated steel; phosphating the steel plating. P. J. Lo Presti. Il Electrochem Soc Trans 84 (preprint 3):19-24 O '43; Abstract. Iron Age 152:72 N 11 '43

Electrodeposition of silver on magnesium. F. J. Bowen and L. I. Gilbertson. Electrochem Soc Trans 83 (preprint 1):1-4 Ap '43; Same. Steel 112:100 Ap 19 '43; Same. Metal Finishing 41:271-4 My '43

Rapid silver plating; abstract. R. A. Schaefer and J. B. Mohler. Iron Age 152:68 Jl 8 '43

Studies of the adherence and corrosion resistance of silver plate on steel; abstract. F. C. Mesle. Iron Age 152:68-9 Jl 8 '43

See also

Silvering

SILVER polish

Cleaning of silverware; new product. Amron. Consumers' Research Bul 12:3 Ag '43

SILVER process of water purification. See Water purification—Silver process

SILVER solder

Assembly by silver brazing; William R. Bootz manufacturing company; assembling army field range fire units. H. Chase. Il Am Mach 86:1426-8 D 10 '42

Carbide tools tipped by induction brazing. P. Miller. Il Am Mach 87:106-7 O 14 '43

Electro-brazing with water-cooled tongs. G. E. Prussien. Il diag Iron Age 151:67 Mr 4 '43

High-speed steel tools; Silver Brazing; Armstrong cork co. Il Steel 113:78 S 27 '43

Silver alloy brazing with high-speed localized gas heating. J. I. Butzner. Il Iron Age 152: 38-44 S 23 '43

Silver brazing and its application in war work. C. M. Robbins. Il Welding J 22:410-11 Je '43

Two methods of brazing high speed steel tips; copper brazing and hardening with a hydrogen atmosphere furnace; silver soldering and tempering with an oxyacetylene torch. B. S. Lement and W. B. Kennedy. Il Iron Age 150:55-8 N 19 '42

SILVER sulfate

Complex ions; monammine-silver ion. W. C. Vosburgh and R. S. McClure. Am Chem Soc J 65:1060-3 Je '43

SILVER thiocyanate

Influence of age and surface conditions on the reactivity of certain precipitates. T. H. James. bibliog J Phys Chem 46:1068-76 D '42

SILVER thiosulfate

Removal of hypo and silver salts from photographic materials as affected by the composition of the processing solutions. J. I. Crabtree, G. T. Eaton and L. E. Muehler. Soc Motion Picture Eng J 41:9-68 bibliog(p63-8) Jl '43

SILVERFISH (insect)

Death to the silverfish. Il Textile World 93: 88 Jl '43

Protecting textiles from silverfish. C. L. Mantell and E. May. Il Mod Plastics 20:51-3+ F '43

SILVERING

Aluminum saved; silvered-glass reflectors. Il Gen Elec R 45:711 D '42

SILVERWARE

Dealers swap slow items for goods in demand; International silver company helps dealers exchange non-selling patterns. Il Ptr Ink 204:30+ S 10 '43

See also

Silver plating

Silver polish

SIMMONDS aerocessories, inc.

Aeronautical accessories and equipment. W. J. Morrison. Il Aeronautical Eng R 1:145 N '42

SIMMONS company

Another look. Mag of Wall St 72:195 My 29 '43

Market leaders for 1943. Mag of Wall St 71: 344+ Ja 9 '43

War and peace prospects. H. Lawrence. Barron's 22:13 D 7 '42

War casualty companies that will revive with peace. J. C. Clifford. Mag of Wall St 72: 597-8 S 4 '43

SIMMONS saw and steel company

War stocks with good peace prospects. Il(p420) Mag of Wall St 72:419 Jl 24 '43

SIMPLICITY publications

These professors aren't unrealistic; home economists influence the buying habits of practically every literate American. F. Nye. Ptr Ink 203:78+ Ap 23 '43

SIMPLIFICATION in industry

Britain simplifies production for victory; utility program of British Board of trade; civilian clothing. D. M. Keezer. Il Dun's R 51:13-19+ Je '43

Canada standardizes for better use of manpower; simplification to cut out non-essential industry. J. B. Vaughan. Ind Stand 13:279-81 N '42

Continuing need for the conservation of resources. H. Cooley. Mech Eng 65:785-8 N '43; Excerpts. Ind Stand 14:281-3 O '43

SIMPLIFICATION in industry—Continued

Eliminates unnecessary items; no real threat to trade names. *Steel* 112:71 Ap 12 '43

Fewer frills; standardization roster. *Business Week* p30-3 My 1 '43

Off come product frills; trend toward standardization and simplification. *Business Week* p15-17 N 28 '42

Paint colors simplification proposed. *Oil Paint & Drug Rep* 114:5+ Ag 16 '43

Selective selling helps Sunshine build now for post-war prosperity; Loose-Wiles sales policies will be altered permanently. L. M. Hughes, *il Sales Management* 52:18-20 Jl 1 '43

Simpler things to come. H. Coonley, *il Dun's* R 51:7-10+ F '43

Simpler war; simplification of ordinance requirements. *Business Week* p32 Ja 9 '43

Simplification makes giant strides. *For Comm* W 11:12-14+ Je 26 '43

Simplification program under way. *Textile World* 93:68 Ja '43

Victory models; government trying to solve problems of trade-marks, simplification and standardization. L. D. H. Weld, *il Ptr Ink* 201:46, 48+ D 25 '42

What will government-imposed standardization mean to advertising? A. G. Mezerik. *Ptr Ink* 202:64-6+ Ja 15 '43

SIMS, James, 1795-1862

James Sims and the compound engine. T. R. Harris, *Engineering* 155:294-5 Ap 9 '43

SIMULTANEOUS equations. See Equations, Simultaneous**SINK-and-float process**

Batch testing for heavy-media separations; apparatus and procedure for laboratory sink-and-float work. C. E. Wuensch, *diag Eng & Min J* 144:58-9 Mr '43

Differential-density cone at Mascot gets coarser feed. flow sheet *Eng & Min J* 144:50+ Ja '43

New heavy-media mill at Leadville. E. Just, *il diag Eng & Min J* 144:68-9+ S '43

SINTERING

Furnacemen look to your sinter. J. D. Knox, *il Steel* 112:254-6, 258 Ja 4 '43

Propose use of rotary cement kilns to increase steel production; sintering iron ore; pig iron production; Basset process. Concrete (mill sec) 51:200-1 Jl '43

Reduction of iron ores in clay plants. C. Austin, *Brick & Clay Rec* 102:17-18 Mr '43

Rotary kilns for agglomerating ores. S. G. Thyrrer, *il Steel* 113:116-18+ Jl 5 '43

Sinter, its development and use. C. E. Agnew, *il Steel* 112:84-6, 88, 102 My 31; 119-20+ Je 7; 112+ Je 14; 103-4+ Je 21 '43

Sintering plant practice and the use of sinter in the blast furnace. M. E. Nickel, *Blast F & Steel Pl* 31:sup65+ Ap '43

Sintering practice for open hearth ores; abstract. L. F. Reinartz, *Iron Age* 151:57 F 25 '43

Study of the reducibility of ores and blast furnace sinter. W. O. Philbrook, *bibliog il diags table(insert) Blast F & Steel Pl* 31: 890-7+, 1019-24, 1141-7 Ag-O '43 (to be cont)

Utilizing idle rotary cement kilns in the war effort; sintering iron ore fines, blast furnace flue dust and other iron bearing materials. A. B. Andersen, *il Rock Prod* 46: 88+ Ag '43

Wartime developments in powdered metal parts. *il diags Product Eng* 14:472-5 Ag '43

Youngstown Sheet and Tube now making sinter at Campbell works. *il Blast F & Steel Pl* 31:109-12+ Ja '43; Same, *Steel* 112: 102, 105+ Mr 1 '43; Same *abr. Iron Age* 150: 32-5 D 31 '42

SIPHONS

Utilizing siphon principles in culvert design. *diags Pub Works* 74:22-4+ Je '43

SIRENS. See Whistles**SIRUPS**

Sirup grows up. *Business Week* p20 D 26 '42

Sirup in glass. *il Mod Packaging* 16:64+ D '42

See also

Apple sirup
Corn sirup

SISAL hemp

How to determine safe loads for sisal rope. *Elec W* 120:334 Jl 24 '43

Tanganyika, world's greatest sisal source. C. A. Riches, *il For Comm* W 9:6-7+ D 26 '42

SIX companies, incorporated, 1931-1942

Earth movers. *il Fortune* 28:98-107+ Ag; 118-23+ S; 138-44+ O '43

SIZE analysis. See Granular materials**SIZING**

Neutral sizing material for insulating board. L. K. Arnold and J. B. McLeod, *Paper Ind* 25:156 My '43

What you can use; materials suitable for various purposes in processing industries. *Oil Paint & Drug Rep* 114:60 Jl 26; 74 S 6 '43 (to be cont)

SIZING (textiles)

Flexible anti-snagging size for nylon knitting yarns patented. *Rayon* 24:359-60 Jl '43

See also

Cotton sizing
Rayon sizing

SIZING of paper. See Paper sizing**SKATING rinks**

Ice skating rink at Buenos Aires. G. Joselevic and J. R. Joselevic, *Engineer* 176: 193-4 S 3 '43

Lighting

Riverside skating rink, Indianapolis, Ind. *il Illum Eng* 38:74 F '43

SKATOLE

Preparation of certain 3-substituted indoles. R. H. Cornforth and R. Robinson, *Chem Soc J* p680-2 N '42

SKELLY oil company

Thumbnail stock appraisal. *Mag of Wall St* 72:253 Je 12 '43

SKF industries, inc.

Aircraft ball bearings; ten years' progress. S. F. Wollmar, *diags Aeronautical Eng R* 1:147 N '42

To one-millionth of an inch; at SKF as much as 40 per cent of the man-hours go into quality control. *il Fortune* 28:128-9+ O '43

SKIDS

Handles billets and forgings by lift-truck-skid system; Wyman-Gordon co. G. E. Stringfellow, *il Steel* 111:83-4+ D 28 '42

Skid, pallet handling system; Union metal mfg. co. W. Shea, *il Steel* 112:52, 54 Ja 25; 114, 117+ F 1 '43

SKILL

Conversion of non-essential skills fills essential jobs. *il Am Mach* 87:87-9 Jn 22 '43

SKIMMIANINE

Alkoxy interchange by γ -alkoxyquinoline derivatives in alcoholic alkali. B. Berinzaghi and others, *Am Chem Soc J* 65:1357-9 Jl '43

SKIN

Demonstrating the presence of sulfonamides in the tissues. G. M. MacKee and others. *Science* 98:66-8 Jl 16 '43

Effect of cleansing materials on the human skin; abstract. O. Schnorr; M. Schnitzler. *J Ind Hygiene* 25:sup86-8 Ap '43

Effect of soap on skin; abstract. O. Schnorr. *Soap & San Chem* 19:69 O '43

Experimental skin sensitization with war gases. R. W. Linton, *Franklin Inst J* 235: 641-3 Je '43

New penetrating vehicles and solvents. F. Herrmann, M. B. Sulzberger and R. L. Baer, *Science* 96:451-2 N 13 '42

Diseases

Chloracne from cutting oils. L. Schwartz and F. A. Barlow, *Pub Health Rep* 57:1747-52, pl 1-6 N 20 '42

Contact dermatitis. N. P. Anderson, *bibliog(49 titles) Ind Med* 12:584-8 S '43

Cutting oils and the skin. C. Leggo, *Ind Med* 12:102-8 F '43

Dermatitis due to the formaldehyde resins; prevention and methods of control. K. E. Markuson, T. F. Mancuso and J. S. Soet, *Ind Med* 12:383-6 Je '43

SKIN—Diseases—Continued

- Dermatitis from new synthetic resin fabric finishes. L. Schwartz. Rayon 24:309-10 Je '43; Abstract. Can Chem & Process Ind 27:366 Je '43
- Dermatitis from resin glue in war industries. L. Schwartz. S. M. Peck and J. E. Dunn. Pub Health Rep 58:899-904, pl 1-2 Je 11 '43
- Dermatitis in industry; abstract. A. N. Currie. Chem & Ind 62:83-4 F 27 '43
- Dermatitis in war industries. C. A. Weslager. *il* Safety Eng 84:36-8, 42 N '42
- Dermatitis prevention. Soap & San Chem 19:67 O '43
- Effect of cleansing materials on the human skin; in skin diseases; abstract. M. Schnitzler. J Ind Hygiene 25:sup87-8 Ap '43
- Few dermatitis cases in rubber plants; abstract. W. E. Obetz. Nat Pet N 35 pt 2: R538 N 3 '43
- Film of protection; applications to guard skin against industrial irritants. C. A. Weslager. *il* Nat Safety N 47:22+ Je '43
- Hand soaps in a war time market; protective ointments. F. Reilly. *il* Soap & San Chem 19:28-9+ F '43
- Health hazards in the fur industry. H. Heilmann. bibliog (34 titles) J Ind Hygiene 24: 322-31 D '42
- Health hazards of cutting oils. C. L. Weirich. *il* Safety Eng 85:36-40 Mr '43
- How important is dermatitis? C. A. Weslager. *il* Nat Safety N 48:86, 88+ O '43
- How to prevent dermatitis in war industries; abstract. L. Schwartz. Ind Med 12:18 Ja '43
- Hypersensitivity to adhesive tape; report of four cases showing its variable etiology. H. Keil. bibliog *il* J Ind Hygiene 25:238-42 Je '43
- Industrial dermatitis; diagnosis and treatment; abstract. A. D. K. Peters. J Ind Hygiene 25:sup105-6 My '43
- Industrial dermatitis; 431 cases. H. J. Davis. Ind Med 12:381-3 Je '43
- Observations on the toxic effects resulting from exposure to chlorinated naphthalene and chlorinated phenyls with suggestions for prevention. H. Von Wedel, W. A. Holla and J. Denton. bibliog *il* Rubber Age 53: 419-26 Ag '43
- Occupational dermatitis. L. Schwartz. Nat Safety N 47:174+ Mr '43
- Occupational dermatoses. D. G. Welton. Ind Med 12:562-4 Ag '43
- Outbreak of dermatitis from airplane engine covers. L. Schwartz and S. M. Peck. Pub Health Rep 58:625-31, pl 1-2 Ap 16 '43
- Practical plan for the treatment of superficial fungus infections. S. M. Peck and L. Schwartz. Pub Health Rep 58:337-45 F 26 '43
- Preventing dermatitis; creams which protect workers. *il* Electrician 130:391 Ap 16 '43
- Prevention of dermatitis; simplicity and effectiveness of barrier creams. Chem Age (Lond) 48:223 F 20 '43; Abstract. Soap & San Chem 19:59 Ap '43
- Prevention of skin rashes; the practical solution of the cutting-oil problem. J. H. Biram. Ind Med 12:208-10 Ap '43
- Save your skin; methods of preventing and treating industrial diseases. L. Tulpan. *il* Safety Eng 85:45-8 Je '43
- Skin disease detectives; U.S. Public health service dermatoses investigation section. *il* Safety Eng 85:50-4 Ap '43
- Skin hazards in the manufacture of glass wool and thread. L. Schwartz and I. Botvinick. Ind Med 12:142-4 Mr '43
- Soap and dermatitis. Soap & San Chem 19: 57-8 Ap '43
- Tetryl; hazards and precautions. Nat Safety N 47:44, 46+ Ap '43
- Treatment of impetigo. Science 98:sup12 O 1 '43

See also

Pellagra
Ringworm

SKIN effect

- Eddy-current losses in single-conductor paper-insulated lead-covered unarmoured cables of a single-phase system. A. H. M. Arnold. Inst E E J 89 pt 2:636-45 D '42

Skin effect in bimetallic conductors; copper-covered steel conductor. B. R. Teare, Jr. and J. R. Webb. bibliog *il* diags Elec Eng 62:Trans 297-302 Je '43

SKRAUP, Zdenko Hans, 1850-1910

Chapter of the history of chemistry in Vienna. M. Kohn. por J Chem Educ 20:471-3 O '43

SKULL

- Ivory dome; baldness may be caused by calcification of the skull. Sci Am 167:269 D '42
- Pseudo-fossil man; not all human skulls that look primitive are those of ancient primitive man. L. C. Elseley. *il* Sci Am 168: 118-19 Mr '43
- Skillful skull; example of efficient architecture. M. F. Ashley-Montagu. *il* diags Tech R 45:483-6+ JI '43
- Tantalum to replace pieces of skull lost in war wounds; abstract. R. H. Pudenz. Science 97:sup12-13 F 19 '43

SKY

- Illumination from a non-uniform sky. P. Moon and D. E. Spencer. diags Illum Eng 37:707-22; Discussion. 722-6 D '42
- Light of the night sky. C. T. Elvey. bibliog *il* Rs Mod Phys 14:140-50 Ap-JI '42
- Observations of night sky brightness and lunar with special reference to coastal dim-out requirements. H. A. Breeding. Illum Eng 37:830-4 D '42

SKYSCRAPERS. See High buildings

SLABS, Concrete. See Concrete slabs

SLAG

- Blast furnace metallurgy. C. D. Smith. bibliog *il* Steel 112:86-8, 91-2 Mr 29 '43; Same. Blast F & Steel Pl 31:529-34+ My '43
- Blast furnace slag in 1942. Blast F & Steel Pl 31:934 Ag '43
- Chemistry at 1600. J. Chipman. Am Soc for Metals Trans 30:830-40 D '42
- Desulphurization with acid slags. R. Durrer and B. Marincek. Iron Age 150:40-1 D 31 '42
- Desulphurizing with acid slags; abstract. W. Oelsen and H. Maetz. Iron Age 152:42 S 30 '43
- Electrical conductivity of molten blast furnace slags; abstract. A. E. Martin and G. Derge. Iron Age 151:59-60 F 25 '43
- Granulating slag at Noranda mines for back-filling. R. C. Rowe. *il* Can Min J 64:490-1 Ag '43
- Investigations on falling blast-furnace slags. T. W. Parker and J. F. Ryder. bibliog Iron & Steel Inst J 146:21-51, pl 1-2 no 2 '42
- 100 percent conveyor belt plant; Birmingham slag company ready mix concrete plant as part of slag plant. B. Nordberg. *il* Rock Prod 45:46-8+ D '42
- Open-hearth slag control for manganese. C. F. Quest, A. E. Martin and T. L. Joseph. Metals & Alloys 17:767-9 Ap '43
- Recovering scrap from slag dumps; salvage operations of E. H. Heckett. G. R. Reiss. *il* Steel 112:94-6 F 8 '43
- Slag aggregates for concrete block. B. Nordberg. *il* Rock Prod 45:96-7+ D '42
- Slag control through blast furnace tuyeres; abstract. C. G. Hogberg. Metals & Alloys 17:1010 My '43
- Steelmaking slags; abstract. W. Oelsen and H. Wiemer. Metals & Alloys 18:544+ S '43
- Utilisation of phosphatic open-hearth slag; effect of rapid cooling on the solubility of phosphoric acid. F. E. Lathe. bibliog Soc Chem Ind J 62:24-8 F '43
- Utilisation of phosphatic open-hearth slag; the availability of phosphoric acid as measured by yield and phosphorus recovery in barley and clover. L. E. Wright, A. Leahey and R. C. Turner. Soc Chem Ind J 62:28-31 F '43

SLAG (in boilers)

Boiler furnace provides novel place for mining iron. *il* Locomotive 44:170-2+ Ap '43

SLAG as fertilizer

Steelworkers use blast furnace slag to fertilize victory gardens. Steel 112:95 My 17 '43

SLANDER. See Libel and slander

SLATE

Mastic used to seal leaky brick walls; made from gilsonite asphaltic mixture and slate granules, Pennsylvania railroad's harbor-side terminal warehouse, J. E. Nicholson. *il Eng N* 129:716-17 N 19 '42

SLAUGHTERING and slaughterhouses

See also

Electrocution of animals

SLEEP

Anticipatory cardiac acceleration during sleep. M. M. Jackson. *Science* 96:564-5 D 18 '42

How well do you sleep? Importance of sound slumber. E. L. Scott. *Ins Field (Fire ed)* 72:18 O 21 '43

SLEEPING bags

Arctic conditions reproduced in army research laboratory for testing clothing and equipment. *Heat & Ven* 40:69 J1 '43

SLEEPING cars

Exhibit Pullman troop sleeper. *il Ry Age* 115:420 S 11 '43

Pullman preparing for post-war; will reach down into the lower-budget travel market; luxury sleeping car service at low cost. G. A. Kelly. *Ry Age* 115:600-1 O 16 '43

Pullman-Standard builds triple-deck troop sleepers. *il Ry Mech Eng* 117:456-9 O '43; Same cond. *Ry Age* 115:449-51 S 18 '43

Pullman to build new car in quantity after the war. *Ry Age* 114:842 Ap 24 '43

Troop sleepers and kitchen cars. *Business Week* p30+ Ap 3 '43

See also

Pullman company

SLEEPING sickness (epidemic encephalitis).

See Encephalitis, Epidemic

SLEPIAN, Joseph, 1891-

Joseph Slepian, Lamme medalist; presentation addresses by S. B. Williams and L. W. Chubb; address by J. Slepian. *por Elec Eng* 62:400-4 S '43

SLIDE films

Carboloy visual training slidefilm program is sold at cost to users. *il Ind Marketing* 28:46, 48+ F '43

Color slide presentation pre-viewed by Mutual. *Ptr Ink* 203:26 Je 11 '43

First aid first slide film instruction outfit. L. S. Metcalfe. *il Safety Eng* 85:37 F '43

First aid taught with slidefilm. L. S. Metcalfe. *il Gas Age* 90:25-6 D 17 '42; *Textile World* 93:124, 126 F '43

Foreman training sound slidefilm made available to glass industry. L. S. Metcalfe. *il Glass Ind* 24:166-7 Ap '43

Get the most from your sound slide films. E. J. Hegarty. *il Ptr Ink* 203:78+ Ap 16 '43

Movies and slidefilms speed wartime training of technicians. L. S. Metcalfe. *il Electronics* 16:98-9 J1 '43

Slidefilm fundamentals in war production training. L. S. Metcalfe. *il Paper Ind* 25:722-3 O '43

Slidefilms for foreman training. L. S. Metcalfe. *il Paper Ind* 25:274-5 Je '43

Slidefilms teach first aid. L. S. Metcalfe. *il Am Mach* 87:108-9 My 13 '43

Slides tell how to plan and run a successful film meeting. *il Sales Management* 52:78 F 15 '43

Sound-film training program for supervisors. L. S. Metcalfe. *il Gas Age* 92:11-12 J1 '43

Sound slide films help safety training. L. S. Metcalfe. *il Elec W* 119:1334-5 Ap 17 '43

Stunts for wartime; amateur-made talker film slide. H. C. McKay. *Am Phot* 37:47-8 Ap '43

Tips on slide films. L. S. Metcalfe. *il Safety Eng* 86:25 S '43

Training with the aid of the picture screen. L. S. Metcalfe. *il Welding J* 22:120 F '43

Use of slidefilms in libraries. F. M. Brown. *Special Lib* 33:363-4 D '42

Visual aids speed mechanic's training; Casey Jones school of aeronautics correlates slidefilms with tests. L. S. Metcalfe. *il Aviation* 42:269+ Ja '43

Visual education; bulletin boards and film strips teach safety to new and old employees. *il Nat Safety N* 47:185 Mr '43

SLIDE rule

Computation of flows in distribution systems. W. Gavett. *bibliog il diags Am Water Works Assn J* 35:267-87 Mr '43

Designing special slide rules; abstract. R. C. Odell. *Electronics* 16:172 My '43

How to use the slide rule in calculations. R. P. Turner. *il diag Radio N* 29:22-3, 52, 54 F '43

Slide rule applications to algebraic equations. A. R. Weber. *J Eng Educ* 33:775-80 Je '43

Slide rule decimals; simple and practicable method of determining position. P. F. Marx. *il Pet Eng* 14:78, 80 J1 '43

Slide rule for carbonate equilibria and alkalinity in water supplies. A. A. Hirsch. *bibliog Ind & Eng Chem Anal* 14:943-6 D 15 '42

Slide rule for square roots. L. Jordan. *Eng N* 130:764 My 20 '43

Vapor pressure slide rule. F. T. Miles. *bibliog Ind & Eng Chem* 35:1052-61 O '43

SLIDING doors. See Doors, Sliding**SLIDING metals. See Friction****SLINGS and hitches**

Choosing the right sling; Kearney & Trecker corp. C. E. Hochmuth. *il Steel* 113:117+ J1 12 '43

How to determine safe loads for manila rope slings. *Elec W* 119:2161 Je 26 '43

How to determine safe loads for wire rope slings. *Elec W* 120:1022 S 18 '43

Safe sling practice. F. L. Spangler. *il Nat Safety N* 47:22-3+ Ap '43

Sling for lifting smoke-stack extensions. *diags Ry Mech Eng* 117:477-8 O '43

Slings; new approach to an old problem. *il Mech Handling* 29:226-7 D '42

SLIPPERINESS. See Floors—Anti-slip surfaces**SLIPS (ceramics)**

Casting slip control. A. S. Watts. *Am Cer Soc Bul* 22:298 Ag 15 '43

Influence of sodium silicate composition on its behavior with sodium carbonate as a casting slip deflocculant. A. E. Currier. *Am Cer Soc J* 26:67-71 F 1 '43

SLIPWAYS

Largest side-haul marine railway built for U.S. navy. *il Marine Eng* 48:214+ Je '43

Ship launching by marine railway; use of long cast-steel chain. *il Comp Air M* 48:7041 My '43

See also

Seaplane bases

SLOGANS

Recent additions to P.I. slogan file. *Ptr Ink* 204:73 J1 9 '43

Slogans and the war effort; recent prize winners. *Pul Util* 31:281 Mr 4 '43

This little slogan went to war; this little slogan stayed home! C. Norton. *il Ptr Ink* 203:18-20+ Ap 16 '43

SLOTS

Ball-bearing indexing fixture for slotting heavy work. *diags Mach* 49:188-9 D '42

Square toolbit slots simply made. R. A. Dickson. *diag Am Mach* 86:1296 N 12 '42

SLOTTING machines

Rockford Hy-Draulic slotter. *il Mach* 50:188+ O '43

SLUB dyeing. See Dyes and dyeing—Wool**SLUDGE, Sewage. See Sewage sludge****SLUMS**

Appraising slums for redevelopment. *il Am Bid* 65:62+ N '43

How private enterprise can rebuild blighted areas. *il Am Bid* 65:102-4+ O '43

Post-war urban building must include redevelopment of blighted areas. H. Potter. *Comm & Fin Chr* 153:1807 N 4 '43

Study by governors and mayors of Wagner bill for redevelopment of blighted areas sought. *Comm & Fin Chr* 153:317 J1 22 '43

See also

Housing
Municipal improvement

SMALL business. See Business—Small business**SMALL claims courts**

Policing snagged; enforcement of ceilings slowed by limitations imposed by poor man's courts. *Business Week* p63 Ap 3 '43

SMALL loans. See Loans, Bank—Small loans; Loans, Small

SMALL space advertisements. See Advertisements, Small space

SMALLER war plants corporation

Activities of the Smaller war plants corporation. V. Fabian. *Mod Plastics* 20:59-60 Je '43

Aids small plants; drive on retail outlets to patronize small manufacturers. *Business Week* p17-18 Ap 10 '43

Furniture fizzle; SWPC's contract with Michigan furniture manufacturers. *Business Week* p28+ Je 12 '43

Johnson resigns as small plants head; cites five problems still facing SWPC. *Comm & Fin Chr* 153:1714 O 23 '43

Little man's pal. *Business Week* p30+ F 20 '43

Michigan group resigns, scoring organization. *Comm & Fin Chr* 153:1430 O 7 '43

NACM locals respond to appeal for assistance by SWPC. *Credit & Fin Management* 45:20+ O '43

New hope for small business in war program aroused by Johnson appointment. E. Blair. *Barron's* 23:4 Ja 25 '43

Reports sharp gain in loans and leases. *Steel* 113:79 J 5 '43

Small business' new problem. *Business Week* p15-17 O 16 '43

Small war plants may use ads to reach one another; Colonel Johnson plan. *Ptr Ink* 203:24 Ap 2 '43

Smaller war plants corp. given independent status. *Comm & Fin Chr* 157:1395 Ap 15 '43

SWPC plan for guaranteed bank loans to small business. H. D. Ralph. *Burroughs Clearing House* 28:43 N '43

SWPC starts releasing contracts. *Iron Age* 152:99 N 4 '43

38 loans totaling \$2.5 million made by Smaller war plants corp. *Iron Age* 151:97 F 25 '43

SMALLPOX

Extent of immunization and case histories for diphtheria, smallpox, scarlet fever, and typhoid fever in 200,000 surveyed families in 28 large cities. S. D. Collins and C. C. Connell. *Pub Health Rep* 58:1121-51 bibliog(p1150-1) J 23 '43

Parental and familial factors in the acceptance of diphtheria and smallpox immunization. L. Breslow, P. R. Shalit and G. W. Anderson. *Pub Health Rep* 58:384-96 Mr 5 '43

SMELL

See also

Odors

SMELTING

New smelting process; patented by Thomas V. Moore of Houston, Tex. *Science* 97:suppl 2e 18 '43

Production of low-phosphorus charging stock by direct reduction; synthetic scrap produced by the Harman process. *Diags plans* *Steel* 113:83-90, 92+ Ag 30 '43

Smelting iron ores electrically. H. Cowes. *Diags Iron Age* 150:41-4 D 3; 50-4 D 10 '43

Smelting of vanadium-bearing titaniferous sinter in an experimental blast furnace. C. E. Wood, T. L. Joseph and S. S. Cole. *bibliog* *Diag U S Bur Mines Rep of Invest* 5679:1-24 '43

Smelting sinter in the blast furnace. C. E. Agnew. *Diag Steel* 112:100-2+ F 15; 88-90, 94, 97 F 22 '43

Trends in reverberatory smelting of copper. R. W. Chambers. *Diags plan Can Min J* 64:210-18, 296-300 bibliog(p300) Ap-Mr '43

See also

Flast furnaces

Furnaces, Metallurgical

Metallurgy

Ore treatment

Slag

SMELTING, Electric. See Electrometallurgy

SMELTING works

Longhorn tin smelter. C. B. Henderson. *Flow sheets* *Diag Min & Met* 24:196-200 Ap '43

Systematic methods improve scrap drive; American metal co. increases yield of salvaged material. *Eng & Min J* 145:50 D '42

See also

Blast furnaces

Equipment

Arc welding in a copper smelter; with cost data. G. B. Forbes. *Diag Eng & Min J* 144:66-7 Ja; 75-6 Mr '43

Longhorn tin; new Texas smelter handling lowest grade concentrates from Bolivia. R. H. Ramsey. *Diag Eng & Min J* 144:56-61 Je '43

SMELTS

Fish mystery; smelts disappear from Lake Michigan. *Diag Business Week* p42+ Mr 30 '43

Sorry; no smelt. *Business Week* p60+ My 15 '43

SMITH, Cyril Stanley, 1903-

Chairman. Institute of metals division. A.I.M.E. por Min & Met 24:435 O '43

SMITH, H. D.

Portrait. *Burroughs Clearing House* 27:20 F '43

SMITH, Howard Ira, 1884-

Chairman. Industrial minerals division. A.I.M.E. por Min & Met 24:271 Je '43

SMITH, L. C., and Corona typewriters, inc.

Maintains \$2 dividend. H. Lawrence. *Barron's* 23:8 Mr 8 '43

SMITH, Loughton T. 1894-1943

Sketch. T. J. V. Cullen. por *Spectator* (Life ed) 151:40 J '43; *Spectator* (Property ed) 8:8 J 8 '43

SMITH, Nelson Lee, 1899-

N. L. Smith made a power regulator. por *Ry Age* 115:464 S 18 '43; *Elec W* 120:1004 S 18 '43

SMITH, Sydney S.

Portrait. *Nat Pet N* 35 pt 2:R356 S 1 '43

SMITHSONIAN institution

Explorations and field work, 1942. *Science* 97:451 My 25 '43

SMOKE

Effect of Diesel fuel on exhaust smoke and odor. R. S. Wermiller and L. E. Endsley. *Diags S A E J* 50:509-20 D '42

Efficiencies, for particle determination, of the Electrotror meter, the ultramicroscope, and the settlement counter. S. C. Blacktin. *Soc Chem Ind J* 61:161-2 O '42

Improves oil combustion with photo-electric smoke alarm. B. Meyer. *Diag Heating-Piping* 15:303 Je '43

Smoke as guide to boiler control. M. Fielden. *Engineer* 174:423 N 20 '42

Wood smoke as a means of visualising boundary layer flow at high Reynolds numbers. J. H. Preston and N. E. Sweeting. *bibliog* *Diags Roy Aeronautical Soc J* 47:93-102 Mr '43

See also

Combustion

Flue dust

Fuel

Fumes

SMOKE, Chemical

Chemical agents as screening smokes. D. G. Nicholson. *Diags J Chem Educ* 20:499-501 O '43

SMOKE bombs. See Bombs, Smoke

SMOKE houses. See Smokehouses

SMOKE meter

Photovolt photoelectric smoke meter. *Diag Instruments* 16:575 S '43

SMOKE prevention

Overfire air jets. R. B. Engdahl and W. C. Horton. *bibliog* *Diags A S M E Trans* 65:741-51 O '43; *Abstract. Heating-Piping* 15:431 S '43; *Discussion. A S M E Trans* 65:731-4 O '43

Overfire air performance applied to stationary plants. H. C. Carroll. *Diags Power Pl* *Eng* 47:51-3 N '43

Performance characteristics of a downdraft coking furnace. J. R. Fellows. *Diag Mech Eng* 65:321-4 Mr '43

Smoke abatement. *Gas J (Lond)* 240:339 D 15 '43

Smoke prevention association of America 37th annual convention. Pittsburgh, June 9-11. *Coal Age* 48:118-23 J '43

Smokeless heat; Fellows new down-draft furnace. *Diag Business Week* p44+ Ap 17 '43

SMOKE prevention—Continued

Use of the down-draft coking method for smokeless combustion. J. R. Fellows and J. C. Miles. *il* diags Heating-Piping 15:431-5 Ag '43; Abstract. Sheet Metal Worker 34: 38, 40 S '43; Discussion. Heating-Piping 15:435-7 Ag '43

See also

Chimneys
Combustion
Electric precipitation

SMOKE recorders

Combustion indicator tests Diesel engine exhaust smoke. *il* diag Electronics 16:116+ My '43
Improved Penn State smokemeter. P. H. Schweitzer. *il* diags Instruments 15:346-50 S '42; Same cond. Oil & Gas J 41:182-3+ Ja 28 '43
Photoelectric smoke meter. *il* diag Diesel Power 21:408 My '43

SMOKE screens

Chemical agents as screening smokes. D. G. Nicholson. *il* diags J Chem Educ 20:499-501 O '43
Protective concealment for reservoirs and exposed aqueducts; experiments with smoke screens. *il* Eng N 131:595-7 O 21 '43

SMOKE signals

Colored signal smokes. J. M. Crowe. Chem Ind 53:357 S '43

SMOKEHOUSES

How to build a farm smokehouse. diags Am Bld 65:58+ J1 '43

SMOKELESS fuel. See Fuel—Smokeless fuel**SMOKELESS powder**

Smokeless powder balls. *il* Chem & Met Eng 50:206+ My '43

Manufacture

Ball powder; smokeless propellant now made under water. J. M. Olin. *il* Sci Am 169:59 Ag '43
Hercules adapts wood pulp for powder. Paper Tr J 115:18 D 24 '42
Surveys of liquid wastes from munitions manufacturing; smokeless powder wastes. R. S. Smith and W. W. Walker. Pub Health Rep 58:1373-9 S 10 '43

SMOKER'S equation. See Distillation—Tables, calculations, etc.**SMOKING**

There's a double standard on office smoking; pictograph. Sales Management 52:55 O 15 '43

To smoke or not to smoke; how companies handle this problem. H. L. Nunn and others. Am Business 12:13, 24-5 N '42; Same cond. Management R 32:136-8 Ap '43

See also

Cigaretts
Tobacco—Physiological effect

SMYTH, Earl B. 1890-1943

Sketch. por Nat Underw (Life ed) 47:13 My 21 '43

SNAKE bite kit

Snake bite kit. *il* diag Mod Plastics 20:74-5+ F '43

SNAKES

Figments of the imagination; tropical snakes and poisonous plants. E. D. Merrill. Science 97:41-2 Ja 8 '43

SNIDER packing corporation

General foods corporation to acquire Snider packing corporation. Comm & Fin Chr 157: 1943 My 24 '43

SNOW, F. Herbert, 1865-1942

Sketch. Water Works & Sewerage 89:510 D '42

SNOW

Progress in engineering knowledge during 1942; plastic replicas of snowflakes and metallographic specimens. P. L. Alger and J. Stokley. *il* Gen Elec R 46:91-3 F '43

Snow; protection of crops. F. Thone. Science 97:sup10 F 5 '43

SNOW barriers

Snowfence and permanent hedges; Manitoba's effective means of winter road maintenance. M. A. Lyons. *il* Roads & Bridges 81:43+ O '43

SNOW fences

Snowfences for drift control; their use by the counties of Ontario. Roads & Bridges 81: 110-12 O '43

*See also***Snow barriers**

Snow photography. See Photography—Landscape

SNOW plows

Airport snow removal. W. M. Fletcher. *il* Aero Digest 41:85-8+ D '42
Diesel-electric snow plough. *il* Electrician 130:238 Mr 5 '43

Equipment for winter road maintenance; eighteen county engineers give their views. *il* Roads & Bridges 81:48-50+ O '43

Fighting snow to keep 'em flying. H. W. Hunt. *il* map Eng N 129:641-8 N 5 '42;

Same. Aviation 42:98-9, 263+ Ja '43

Old snow plow adapted to heavier duty. R. E. Teegarden. *il* Roads & Sts 86:51-2 Ag '43

Snow plowing economies; suggestions for saving strain, wear and damage. Roads & Sts 85:60 D '42

Variation of climate adds to snow-removal problems in the province of British Columbia. A. Dixon. *il* Roads & Bridges 81:42+ O '43

Winter maintenance by snow-plowing associations; experiences of three counties in Ontario. Roads & Bridges 81:47+ O '43

SNOW protection. See Snow fences**SNOW removal**

Burlington's strange hybrid machines; reconstructed equipment for snow removal, street cleaning, etc. *il* Roads & Sts 86:79-80 Ap '43

Cold weather problems; last winter and next. R. Robinson; R. E. Teegarden. *il* Roads & Sts 86:48-52 Ag '43; S; 69-72 O '43

Ohio extends use of chemicals to free highways of ice and snow. Eng N 131:539 O 7 '43

Radio keeps 'em plowing; radio transmitters and receivers speed snow removal on California mountain highway. T. M. Dennis. *il* Radio N 29:14-15+ F '43

Winter road maintenance. *il* Roads & Bridges 81:35, 37-50+ O '43

See also

Airports—Snow protection and removal
Street railroads—Snow protection and removal

SNOW slides. See Avalanches**SNYDER, John Otterbein, 1867-1943**

Sketch. W. H. Rich. Science 98:356 O 22 '43

SOAP

Army's government issue laundry soap. *il* Soap & San Chem 19:28-9+ Ja '43

Case for abrasive hand soaps. *il* Soap & San Chem 19:28-9+ Mr '43

Cold process soaps; abstract. R. Child. Soap & San Chem 19:69 O '43

Effect of NaOH on dissolved soap. C. A. Snell and others. Soap & San Chem 19:63+ N '43

Effect of soap on skin; abstract. O. Schnorr. Soap & San Chem 19:69 O '43

Good hand soap defined; abstract. N. F. Allemeier. Soap & San Chem 19:77 O '43

Hand cleaners. L. Schwartz. Soap & San Chem 19:61 S '43

Hand soaps in a war time market; protective ointments. F. Reilly. *il* Soap & San Chem 19:28-9+ F '43

History of synthetic detergents. C. J. Sunde. bibliog Soap & San Chem 19:30-1+ J1 '43

Lubricants containing soap and soap solutions. Mach 49:166 Mr '43

Naphthenic acids and soaps; abstract. Inst Pet J 29:235A Je '43

Oil ban hits kosher soap. A. Rokeach. Soap & San Chem 19:37 F '43

Old stand-by, soap; its use in paper making. G. Leffingwell and N. Radin. bibliog Paper Ind 24:1035-6 Ja '43

192 pounds of soap in a rubber pontoon bridge. Textile Col 65:459 O '43

Phase behavior of lithium palmitate with water and with lithium chloride and water. M. J. Vold. bibliog Am Chem Soc J 65: 465-9 Mr '43

Plastics and soap combined in water-base paints. Iron Age 151:57 Je 17 '43

SOAP—Continued

Properties of detergent solutions; comparison of detergent action and whiteness retention of laundry soap builders. T. H. Vaughn and A. Vittone, Jr. *bibliog Ind & Eng Chem* 35:1094-8 O '43

Role of soap in the rubber program. G. Leffingwell and N. Radin. *bibliog Rubber Age* 52:235-6 D '42

Soap, an important dispersing agent. G. Leffingwell. *bibliog* (56 references) *il Chem Ind* 52:337-40 Mr '43

Soap and dermatitis. *Soap & San Chem* 19: 57-8 Ap '43

Soap phase diagrams; abstract. J. W. McBain and W. W. Lee. *Soap & San Chem* 19:61 Ap '43

Soap serves the shop. *Am Mach* 87:102 Je 24 '43

Soap which indicates the presence of mercury fulminate. H. S. Mason and I. Botvinick. *bibliog Pub Health Rep* 58:1183-6 J1 30 '43

Soap X-ray studies; abstract. K. Hess, H. Kiessig and W. Philippoff. *Soap & San Chem* 19:69 Mr '43

Soap X-ray studies; abstract. H. Kiessig. *Soap & San Chem* 19:65 Ja '43

Soap's role in the plastics industry. G. Leffingwell. *bibliog Mod Plastics* 21:87-8+ O '43

Sorption of water vapor by soap curd. J. W. McBain and W. W. Lee. *bibliog Ind & Eng Chem* 35:734-7 J1 '43

Spontaneous soap heating; abstract. W. H. Simmons. *Soap & San Chem* 19:63 Je '43

Surface-active agents. F. D. Snell. *bibliog il Ind & Eng Chem* 35:107-17 Ja '43

Synthetic detergents. F. D. Snell. *il Soap & San Chem* 19:27-30 O '43 (to be cont)

What you can use; materials suitable for various purposes in processing industries (cont). *Oil Paint & Drug Rep* 143:42 Mr 29; 47 Ap 5; 46 Ap 12; 40 Ap 19; 49 Ap 26; 66 My 3; 63 My 10; 25 My 24; 66 My 31; 52 Je 28; 144:32C J1 5; 60 J1 26; 40 Ag 23; 74 S 6; 52 N 29; 62 D 13 '43 (to be cont)

See also

Cleaning compositions	Sodium palmitate
Saponification	Sodium stearate
Sodium laurate	

Analysis

Analysis of war soap; abstract. R. Lucentini and A. Picozzi. *Soap & San Chem* 19:67 My '43

Conservation

Raise soap quotas. *Soap & San Chem* 19: 25-6, 78+ O '43

Soap joins the economy parade. A. P. Ames. *il Ptr Ink* 205:29-30 O 8 '43

Prices

Revise soap ceilings. *Soap & San Chem* 18: 43+ D '42

See also

Soap materials—
Prices

Rationing

Soap rationing; system in Britain for control of soap and cosmetic sales. M. Pye. *Soap & San Chem* 19:29-31 Je '43

Specifications

Amend federal soap specifications. *Soap & San Chem* 19:65 Je '43

New army specification for all-purpose soap. *Soap & San Chem* 19:25-7+ J1 '43

Offer new specification for low-titer soap. W. S. Marsh and A. E. Duske. *Soap & San Chem* 18:73 D '42

Offer saddle soap specification. *Soap & San Chem* 19:65 F '43

Testing

Comparison of an aryl sulfonate and soap for the washing in hard water of cotton, linen, spun cellulose-acetate rayon, spun regenerated-cellulose rayon, silk, and wool. V. Ester and others. *bibliog Am Dyestuff Rep* 32:121-2, 135-41 Mr 15 '43

SOAP, Floating

Floating soap patent suit. *Soap & San Chem* 19:25-7 Ap '43

SOAP, Liquid

Trinitrotoluene (TNT); its effective removal from the skin by a special liquid soap. W. D. Norwood. *Ind Med* 12:206-8 Ap '43

SOAP, Metallic

Rot-proofing textiles. J. C. Townner. *Textile Col* 65:415, 418 S '43

SOAP, Powdered

Soap powder methods; abstract. N. G. Weir. *Soap & San Chem* 19:58 Ja '43

SOAP, Textile

Rot-proofing textiles. J. C. Townner. *Textile Col* 65:415, 418 S '43

Soap in textile finishes; U.S. patent 2,171,475. *Textile Col* 65:220 My '43

War widens soap usage in textiles. G. W. Lyfingwell. *bibliog Textile Col* 65:83-4 F '43

SOAP bubbles and films

Rapid determination of very small gas flows; soap-bubble method. L. Silverman and R. M. Thomson. *diags Ind & Eng Chem Anal* ed 14:928 D 15 '42

SOAP factories**Equipment**

Experimental soap kettle; abstract. N. G. Weir. *Soap & San Chem* 19:59 F '43

Soap equipment trend; abstract. G. C. Downie. *Soap & San Chem* 19:59 My '43

SOAP industry and trade

Civilian soap output faces 15% cut in 1943. *Soap & San Chem* 19:21-3+ F '43

Exhibit soaps at toiletries show. *Soap & San Chem* 19:39 Ag '43

How Lightfoot Schultz put gift appeal into a line of soap. *il Sales Management* 52:54 Ap 15 '43

Rubber uses soap; causing scramble for fancy grade of tallow. *Business Week* p66 My 15 '43

Soap industry outlook; what appears to be ahead in production and sales for 1943? *Soap & San Chem* 18:29-31+ D '42

Soap output increase to benefit civilians. *Oil Paint & Drug Rep* 144:7+ S 27 '43

Soap sales off; need raw materials. *Business Week* p24 My 15 '43

Soap sales program. *Soap & San Chem* 19: 25-8+ S '43

Soapers face new curbs on edible oils, glycerine yields, appoint industry committee. *Soap & San Chem* 19:37 Ja '43

Soaps for men. *il Soap & San Chem* 19:21-4+ J1 '43

What soap output? *Soap & San Chem* 19: 23-9 Ap '43

See also

Procter and Gamble

Advertising

Soap joins the economy parade. A. P. Ames. *il Ptr Ink* 205:29-30 O 8 '43

Regulation

Raise soap quotas. *Soap & San Chem* 19:25-6, 78+ O '43

Soap formula changes; new soap fast-stretching order FDO-86 issued by WFA. *Soap & San Chem* 19:25-7+ N '43

Soap formulas ordered modified. *Oil Paint & Drug Rep* 144:3+ O 25 '43

Canada

Increased production in Canada. *For Comm* W 12:29 J1 3 '43

Great Britain

Soap rationing; system in Britain for control of soap and cosmetic sales. M. Pye. *Soap & San Chem* 19:29-31 Je '43

SOAP kettles

Experimental soap kettle; abstract. N. G. Weir. *Soap & San Chem* 19:59 F '43

SOAP manufacture

Application of the phase rule to soap boiling; kettle wax in the ternary system soap-water-salt. J. W. McBain and W. W. Lee. *bibliog Ind & Eng Chem* 35:917-21 Ag '43

Evaluation of rosins in soaps; abstract. J. N. Borgin and others. *Soap & San Chem* 19:57-8 Ag '43

Fatty acid soap process. A. Treffler. *Soap & San Chem* 19:32-3+ S '43

SOAP manufacture—Continued

Fatty acids; preparation, physical and chemical properties used in soaps and protective coatings. A. G. H. Reimold. *Il Can Chem & Process Ind* 26:632-8 N '42; Same abr. *Chem Age (Lond)* 48:123-7 Ja 23 '43
 Linseed oil, a possible replacement in the soap kettle. *Il Soap & San Chem* 19:24-7+ F '43

Research dispels some myths about rosin in soap. *Il Chem Ind* 52:369+ Mr '43

Research; its place in the modern soap plant. A. P. Lee. *Il Soap & San Chem* 19:25-7 Mr '43

Rosin in soap. P. Mayfield. *Il Soap & San Chem* 19:21-4+ Ap '43

Rosin in soap contributes many desirable properties. *Sci Am* 168:200 My '43

Rosin replacement of coconut. *Soap & San Chem* 18:61-2 D '42

Rosin to ease shortage of soap oils. F. J. Van Antwerpen. *Il Chem & Eng N* 21:376-7 Mr 25 '43

Soap flake equipment; abstract. N. G. Weir. *Soap & San Chem* 19:57 F '43

Soap from southern pines. N. G. Farquhar. *Il Chem & Met Eng* 50:108 Ap '43

Solid soap phases. R. H. Ferguson, F. B. Rosevear, and R. C. Stillman, bibliog *Il Ind & Eng Chem* 35:1005-12 S '43

War and the soap plant. C. R. Kemp. *Il Soap & San Chem* 18:25-8 D '42

See also

Soap factories
 Soap materials

By products

See also

Glycerin

Patents

Coating soap granules; British patent. *Soap & San Chem* 19:65-6 O '43

Floating soap patent suit. *Soap & San Chem* 19:25-7 Ap '43

New patents. *Soap & San Chem* 19:63+ Ja '43 [cont monthly]

Rapid soap manufacture; abstract. *Soap & San Chem* 19:59 Ap '43

Wool grease soap; abstract. H. W. Smith and S. G. Campbell. *Soap & San Chem* 19:65 S '43

Perfuming

Soap perfuming. *Il Soap & San Chem* 19:21-3 My '43

SOAP materials

ABC of chemical derivatives from petroleum; detergents and lubricants. R. L. Wakeman and E. H. Weil. *Il Nat Pet N* 35 pt 2: R161-4, R166-7, R170-1 Ap 7 '43

Akron Soap fat salvage plan. *Il Soap & San Chem* 19:28-9 Jl '43

Civilian soap output faces 15% cut in 1943. *Soap & San Chem* 19:21-3+ F '43

Linseed oil, a possible replacement in the soap kettle. *Il Soap & San Chem* 19:24-7+ F '43

More soap oils. *Business Week* p28+ Jl 17 '43

Oil and fat outlook. *Il Soap & San Chem* 18:32-5+ D '42

Raw materials for potash soaps. A. P. Fed-erline. *Soap & San Chem* 19:34-5+ Je '43

Rosin to ease shortage of soap oils. F. J. Van Antwerpen. *Il Chem & Eng N* 21:376-7 Mr 25 '43

Soap fat use declines. *Soap & San Chem* 19:43 Jl '43

Soap perfuming. *Il Soap & San Chem* 19:21-3 My '43

Tall oil in soap. R. Hastings, A. Pollak and J. M. Wafer, bibliog *Il Soap & San Chem* 19:24-7, 70 My '43

See also

Tall oil

Prices

Raw material prices as of Jan. 4, 1943. *Soap & San Chem* 19:53, 55 Ja '43 [cont monthly]

SOAP perfuming. *See Soap manufacture—Perfuming*

SOAP research

Research; its place in the modern soap plant. A. P. Lee. *Il Soap & San Chem* 19:25-7 Mr '43

Soap from southern pines. N. G. Farquhar. *Il Chem & Met Eng* 50:108 Ap '43

SOAP waste

Re-use of soap scrap; abstract. *Soap & San Chem* 19:59 Ja '43

SOAPBARK tree

Industrial applications of chemicals and related materials. *Oil Paint & Drug Rep* 142:33 N 23 '42

SOARING. See Gliders**SOCIAL ethics**

Toward a durable society. R. M. Hutchins. *Fortune* 27:158-60+ Je '43

See also

Responsibility

SOCIAL hygiene

See also

Veneral diseases

SOCIAL insurance. *See Insurance, Social*

SOCIAL laws and legislation

See also

Family allowances

Insurance, Social

Insurance, Unem-

ployment

Labor laws and legis-

lation

Minimum wage

Old age pensions

Public health laws

Unemployment—

Relief measures

Workmen's com-
pensation

Canada

Cradle-to-grave. *Business Week* p58-9 Mr 27 '43

Social-security proposals for Canada. *Monthly Labor R* 57:60-2 Jl '43

Chile

Social security in Chile. *Il For Comm W* 10:6-7+ F 6 '43

Colombia

Problem of social security in Colombia. E. Herrnstadt. *Int Labour R* 47:426-49 Ap '43

Salvador

Government measures for improvement of living standards in El Salvador. H. G. Ainsworth. *Monthly Labor R* 57:233-6 Ag '43

SOCIAL planning

Progress in social security; review of National resources planning board report and Beveridge report. A. A. Bright, jr. *Mech Eng* 65:588-9 Ag '43

Social planning in a democracy. C. E. Noyes. *Advanced Management* 7:146-51 O-D '42

Social planning in Sweden. *Int Labour R* 48:308-15 S '43

See also

Social welfare

SOCIAL problems

See also

Child labor

Child welfare

Cost of living

Housing

Insurance, Social

Labor and laboring

classes

Liquor traffic

Medical service

SOCIAL psychology

See also

Ethnopsychology

Public opinion

SOCIAL research

Over 137 government and private agencies engaged in research on post-war problems. *Comm & Fin Chr* 157:2088 Je 3 '43

SOCIAL revolution

Road away from revolution; reprinted from *Atlantic monthly*, April 1923. Woodrow Wilson. *Trusts & Estates* 77:19-20 Jl '43

SOCIAL science research council

Awards. *Science* 98:34 Jl 9 '43

SOCIAL sciences

Address of the chairman of the Social science research council. E. B. Wilson. *Science* 97:169-72 F 19 '43

See also

Economics

SOCIAL security, Inter-American conference on. See Inter-American conference on social security

SOCIAL security act, 1935

See also
Insurance, Social—United States
Insurance, Unemployment—United States
Old age pensions

SOCIAL security board

Libraries

OASI library and the war; Old age and survivors insurance branch, Social security board library, Baltimore. A. S. Tannen. Special Lib 34:417-18 O '43

SOCIAL statistics

Comment on Deming's Classification of problems of inference. L. A. Salter, Jr. Am Stat Assn J 37:540-2 D '42

Social statistics; object of derision or desire. N. R. Deardorff. Special Lib 34:297-300 JI-Ag '43

See also
Employment—Statistics
Labor and laboring classes—Statistics
Population—Statistics
Wages—Statistics

SOCIAL surveys

See also
Standard of living

SOCIAL welfare

Future social advances should be financed with savings from better management. T. E. Dewey. Comm & Fin Chr 158:1423 O 7 '43

People's peace in the colonies. W. Benson. Int Labour R 47:141-68 F '43

Postwar mass employment in public works. T. B. Spitzer. Pub Util 32:20-4 JI 8 '43

See also
Public welfare departments
Social planning
also National resources planning board
Social work
Standard of living

SOCIAL work

American social work and the World war II. D. S. Howard. Ann Am Acad 229:138-44 S '43

See also
Child welfare
Poor relief
Psychological clinics
Public welfare departments
Social planning
Social research
Unemployment—Relief measures

Directories

Social work year book, 1943. R. H. Kurtz, ed. v7 764p \$3.25 Russell Sage foundation, New York '43

SOCIALISM

Customer makes a prophecy; socialism not in demand by the masses. K. I. Jack. Pub Util 30:703-14 N 19 '42

Labor has a choice; it can be swallowed by the state, or remain free in society. J. Chamberlain. Il Fortune 27:124-7+ Je '43

SOCIETIES

See also
Benefit societies
Chemical societies
Engineering societies
Insurance associations
Medical societies
Scientific societies
Trade associations
Trade unions

SOCIETY buildings

American institute of physics building; early history of the building. R. V. Hutchisson. Il plans J Ap Phys 14:501-9 O '43

SOCIETY for establishing useful enterprises

After 150 years; firm founded by Alexander Hamilton will be sold to New Jersey city. Business Week p113-14 O 23 '43

SOCIETY for the promotion of engineering education

Annual meeting, 50th, Chicago, June 18-20. Eng N 131:41-2 JI 1 '43

Committees for 1943-44; reports of conferences. J Eng Educ 34:116-32 O '43

Minutes of Council meetings; and minutes of the 50th anniversary meeting, members elected, etc. J Eng Educ 34:13-25 S '43

State of the Society; report for the year 1942-43. H. T. Heald. J Eng Educ 34:10-12 S '43
Year book; list of members. J Eng Educ 33:1-227 F '43

SOCIETY of automotive engineers

Aircraft standards for victory; résumé of the SAE aeronautical standards program; committee members. J. D. Redding. S A E J 51:sup20-1, 25-36 Ap '43

Government agencies requesting war necessity engineering projects of the Society of automotive engineers; chart. S A E J 51: insert F '43

Important technical topics discussed at SAE meetings in Cleveland and Detroit. J. Geschelein. Automotive & Aviation Ind 89: 40-3 JI 1 '43

National aeronautic meeting, New York, April 8-9. S A E J 51:sup17-21, 25-37 My '43; Automotive & Aviation Ind 88:30-4+ My 1 '43

National aircraft engineering and production meeting, Los Angeles, Sept. 30-Oct. 2. S A E J 51:sup20, 25-7 N '43

National tractor meeting, Milwaukee, Sept. 23-24. S A E J 51:sup21-2, 50-4 N '43

National transportation and maintenance meeting, New York, May 5-6. S A E J 51:sup17-19, 25-7 Je '43

On the SAE battlefronts. M. Short. S A E J 51:sup17-19+ Ag '43

President for 1943, councilors, vice presidents, portraits and sketches, reports of committees. S A E J 51:sup35-48 F '43

Section officers and chairmen for 1943-1944; portraits. S A E J 51:sup30-1+ S '43

Student branch faculty advisers; portraits and brief sketches. S A E J 51:sup44-6+ Ag '43

W.E.B. Detroit! agenda of SAE's War engineering board run gamut of technology. V. H. Scales. Il S A E J 50:sup 18-21, 25-9 D '42

War engineering production meeting, Detroit, Jan. 11-15. S A E J 51:sup28-34, 57-76 F '43; Am Mach 87:425h-428J Ja 21 '43; Iron Age 151:54, 56 Ja 21 '43; Oil & Gas J 41: 20-2 Ja 21 '43; Steel 112:39-40+ Ja 18 '43; Automotive & Aviation Ind 88:17-19, 36-8+ F 1 '43

War material meeting, Detroit, June 9-10. S A E J 51:sup26-7+ JI '43

West coast transportation and maintenance meeting, San Francisco, Aug. 19-21. S A E J 51:sup17-19+ O '43

SOCIETY of chemical industry

Annual meeting, 62d, London, July 9. Chem Age (Lond) 49:51-4 JI 17 '43

History of the American (formerly New York) section of the Society of chemical industry. D. D. Berolzheimer. Chem & Ind 61:438-41 O 31 '42

President of the Society of chemical industry, W. P. Cohoe. Science 98:104-5 JI 30 '43

Report of council, May 14, 1943. Chem & Ind 62:203-4 My 29 '43

Sixty-second annual report of council, 1942-43. Chem & Ind 62:246-51, 253-6 JI 3 '43

Wallace Patten Cohoe of New York, Inducted as president. Science 98:381-2 O 29 '43

SOCIETY of dyers and colourists

Annual dinner. Soc Dyers & Col J 59:116-19 Je '43

SOCIETY of economic geologists

Annual meeting, 28d, New York, Feb. 15-17. Econ Geol 38:167-70 Mr '43

SOCIETY of economic paleontologists and mineralogists

Annual meeting, Fort Worth. Nat Pet N 35:34-6 Ap 14 '43; Oil & Gas J 41:46-7 Ap 15 '43

SOCIETY of exploration geophysicists

Annual meeting, Fort Worth. Nat Pet N 35:34-6 Ap 14 '43; Oil & Gas J 41:46-7 Ap 15 '43

SOCIETY of individualists

Inaugural meeting, Jan. 21. Chem Age (Lond) 48:164-5 Ja 30 '43

SOCIETY of motion picture engineers

Officers and governors of the society; portraits; committee members; constitution and by-laws. Soc Motion Picture Eng J 40: 248-66 Ap '43

SOCIETY of motion picture engineers—Cont.

Report of the theater engineering committee.
Soc Motion Picture Eng J 40:71-87 F '43
Semi-annual meeting, 53d, New York, May 4-6; program and highlights. Soc Motion Picture Eng J 40:392-6 Je '43

SOCIETY of naval architects and marine engineers

Annual meeting, 50th, New York, Nov. 12-13.
Marine Eng 47:138-49+ D '42; 48:153-60, 162+ Ja '43

SOCIETY of plastics engineers

Meeting, Detroit section, Oct. 8. Mod Plastics 21:95-100 N '43

SOCIETY of the plastics industry

Annual spring conference, Chicago, May 13-14. Mod Plastics 20:55-65 Je '43
Pacific coast conference, Los Angeles, Feb. 23. Mod Plastics 20:98A-98D Mr '43

SOCIETY of vertebrate paleontology

Proceedings of second annual (business) meeting at Princeton, New Jersey, December 29, 1942; list of members. G. L. Jepsen. Geol Soc Proc 1942:267-76 Ap '43

SOCIOLOGY

Where angels fear to tread: a contribution from general sociology to human ethics. W. C. Allee. bibliog Science 97:517-25 Je 11 '43

See also

Anthropology	Liquor traffic
Cities and towns	Poor relief
Economics	Population
Labor and laboring classes	Socialism
	Unemployment

SOCIOLOGY, Animal. See Animals, Habits and behavior of

SOCIOLOGY, Rural

Fortune survey; farmers tell what they think of farming as a way of life, attitudes toward the war and problems. Fortune 27:8-10+ Mr; 8-10, 14+ Ap '43

SOCKS. See Hosiery**SOCONY-VACUUM oil company**

Annual report. Comm & Fin Chr 157:1565-6 Ap 26 '43

Another look. Mag of Wall St 72:96 My 1 '43

Another look. Mag of Wall St 72:693 O 2 '43

Case, Faust new Socony directors. por Oil & Gas J 42:14 Je 3 '43

Low-priced stocks for large percentage gains. Mag of Wall St 71:672 Mr 20 '43

Market leaders for 1943. Mag of Wall St 71:372 Ja 9 '43

Socony-Vacuum; fights the war from Kokomo (Ind.) to Kirkuk (Iraq). il map Fortune 26:110-15+ N '42; 27:114-19+ F '43

Socony-Vacuum oil company, inc.; aviation gasoline and lubricants; ten years' progress. W. F. Burt. il Aeronautical Eng R 1:149 N '42

Socony-Vacuum oil company, inc.; aviation gasoline and lubricants; ten years' progress. W. F. Burt. il Aeronautical Eng R 1:149 N '42

Socony-Vacuum oil company, inc.; aviation gasoline and lubricants; ten years' progress. W. F. Burt. il Aeronautical Eng R 1:149 N '42

Socony-Vacuum oil company, inc.; aviation gasoline and lubricants; ten years' progress. W. F. Burt. il Aeronautical Eng R 1:149 N '42

Socony-Vacuum oil company, inc.; aviation gasoline and lubricants; ten years' progress. W. F. Burt. il Aeronautical Eng R 1:149 N '42

Socony-Vacuum oil company, inc.; aviation gasoline and lubricants; ten years' progress. W. F. Burt. il Aeronautical Eng R 1:149 N '42

Socony-Vacuum oil company, inc.; aviation gasoline and lubricants; ten years' progress. W. F. Burt. il Aeronautical Eng R 1:149 N '42

Socony-Vacuum oil company, inc.; aviation gasoline and lubricants; ten years' progress. W. F. Burt. il Aeronautical Eng R 1:149 N '42

Socony-Vacuum oil company, inc.; aviation gasoline and lubricants; ten years' progress. W. F. Burt. il Aeronautical Eng R 1:149 N '42

Socony-Vacuum oil company, inc.; aviation gasoline and lubricants; ten years' progress. W. F. Burt. il Aeronautical Eng R 1:149 N '42

Socony-Vacuum oil company, inc.; aviation gasoline and lubricants; ten years' progress. W. F. Burt. il Aeronautical Eng R 1:149 N '42

Socony-Vacuum oil company, inc.; aviation gasoline and lubricants; ten years' progress. W. F. Burt. il Aeronautical Eng R 1:149 N '42

Socony-Vacuum oil company, inc.; aviation gasoline and lubricants; ten years' progress. W. F. Burt. il Aeronautical Eng R 1:149 N '42

Socony-Vacuum oil company, inc.; aviation gasoline and lubricants; ten years' progress. W. F. Burt. il Aeronautical Eng R 1:149 N '42

Socony-Vacuum oil company, inc.; aviation gasoline and lubricants; ten years' progress. W. F. Burt. il Aeronautical Eng R 1:149 N '42

Socony-Vacuum oil company, inc.; aviation gasoline and lubricants; ten years' progress. W. F. Burt. il Aeronautical Eng R 1:149 N '42

Socony-Vacuum oil company, inc.; aviation gasoline and lubricants; ten years' progress. W. F. Burt. il Aeronautical Eng R 1:149 N '42

Socony-Vacuum oil company, inc.; aviation gasoline and lubricants; ten years' progress. W. F. Burt. il Aeronautical Eng R 1:149 N '42

Socony-Vacuum oil company, inc.; aviation gasoline and lubricants; ten years' progress. W. F. Burt. il Aeronautical Eng R 1:149 N '42

Socony-Vacuum oil company, inc.; aviation gasoline and lubricants; ten years' progress. W. F. Burt. il Aeronautical Eng R 1:149 N '42

Socony-Vacuum oil company, inc.; aviation gasoline and lubricants; ten years' progress. W. F. Burt. il Aeronautical Eng R 1:149 N '42

Socony-Vacuum oil company, inc.; aviation gasoline and lubricants; ten years' progress. W. F. Burt. il Aeronautical Eng R 1:149 N '42

Socony-Vacuum oil company, inc.; aviation gasoline and lubricants; ten years' progress. W. F. Burt. il Aeronautical Eng R 1:149 N '42

Socony-Vacuum oil company, inc.; aviation gasoline and lubricants; ten years' progress. W. F. Burt. il Aeronautical Eng R 1:149 N '42

Socony-Vacuum oil company, inc.; aviation gasoline and lubricants; ten years' progress. W. F. Burt. il Aeronautical Eng R 1:149 N '42

Socony-Vacuum oil company, inc.; aviation gasoline and lubricants; ten years' progress. W. F. Burt. il Aeronautical Eng R 1:149 N '42

Socony-Vacuum oil company, inc.; aviation gasoline and lubricants; ten years' progress. W. F. Burt. il Aeronautical Eng R 1:149 N '42

Socony-Vacuum oil company, inc.; aviation gasoline and lubricants; ten years' progress. W. F. Burt. il Aeronautical Eng R 1:149 N '42

Socony-Vacuum oil company, inc.; aviation gasoline and lubricants; ten years' progress. W. F. Burt. il Aeronautical Eng R 1:149 N '42

Socony-Vacuum oil company, inc.; aviation gasoline and lubricants; ten years' progress. W. F. Burt. il Aeronautical Eng R 1:149 N '42

Socony-Vacuum oil company, inc.; aviation gasoline and lubricants; ten years' progress. W. F. Burt. il Aeronautical Eng R 1:149 N '42

Socony-Vacuum oil company, inc.; aviation gasoline and lubricants; ten years' progress. W. F. Burt. il Aeronautical Eng R 1:149 N '42

Socony-Vacuum oil company, inc.; aviation gasoline and lubricants; ten years' progress. W. F. Burt. il Aeronautical Eng R 1:149 N '42

Socony-Vacuum oil company, inc.; aviation gasoline and lubricants; ten years' progress. W. F. Burt. il Aeronautical Eng R 1:149 N '42

Socony-Vacuum oil company, inc.; aviation gasoline and lubricants; ten years' progress. W. F. Burt. il Aeronautical Eng R 1:149 N '42

Socony-Vacuum oil company, inc.; aviation gasoline and lubricants; ten years' progress. W. F. Burt. il Aeronautical Eng R 1:149 N '42

Socony-Vacuum oil company, inc.; aviation gasoline and lubricants; ten years' progress. W. F. Burt. il Aeronautical Eng R 1:149 N '42

Socony-Vacuum oil company, inc.; aviation gasoline and lubricants; ten years' progress. W. F. Burt. il Aeronautical Eng R 1:149 N '42

Socony-Vacuum oil company, inc.; aviation gasoline and lubricants; ten years' progress. W. F. Burt. il Aeronautical Eng R 1:149 N '42

Formation of cyclopropanes from mono-halides; some reactions of 1-chloro-2-methyl-2-phenylpropane (neophyl chloride). F. C. Whitmore, C. A. Weisgerber and A. C. Shabica, jr. bibliog Am Chem Soc J 65:1469-71 Ag '43

Hydrogenation of the triple bond. A. L. Henne and K. W. Greenlee. Am Chem Soc J 65:2020-3 O '43

New selective reagent for lithium; application to the rapid volumetric estimation of lithium in the presence of potassium and sodium. L. B. Rogers and E. R. Caley. Ind & Eng Chem Anal ed 15:209-11 Mr 15 '43

Polymerization of mixtures of olefins and diolefins in presence of metallic sodium. V. N. Lvov. Oil & Gas J 42:38-9+ Jl 8 '43

Reduction of quinoline and certain substituted quinolines in liquid ammonia. C. M. Knowles and G. W. Watt. bibliog Am Chem Soc J 65:410-12 Mr '43

Analysis

Colorimetric method for the determination of sodium. E. A. Arnold and A. R. Pray. Ind & Eng Chem Anal ed 15:294-6 Ap 15 '43

Determination of alkalies in glass; denatured alcohols as substitutes for U.S.P. grain alcohol. P. A. Webster and R. M. Crane. Ind & Eng Chem Anal ed 15:36 Ja 15 '43

Determination of small quantities of sodium in soil solutions and soil extracts. M. Y. Shwarbi and A. G. Pollard. Soc Chem Ind J 62:71-3 My '43

Determination of sodium in the presence of molybdenum. C. H. Hale. bibliog Ind & Eng Chem Anal ed 15:516-17 Ag 15 '43

New reagents for sodium in presence of lithium. E. R. Caley and L. B. Rogers. bibliog Ind & Eng Chem Anal ed 15:32-6 Ja 15 '43

Ultramicromethod for sodium employing the polarograph. C. Carruthers. bibliog Ind & Eng Chem Anal ed 15:70-1 Ja 15 '43

Isotopes

Angular correlation of successive gamma-rays. R. Beringer. bibliog diags Phys R 63:23-8 Ja 1 '43

Branching ratio of Na²². H. Weltin. Phys R 64:128 Ag 1 '43

Disintegration scheme of Na²⁴. L. G. Elliott, M. Deutsch and A. Roberts. Phys R 63:386-7 My 1 '43

Gamma-rays from Na²⁴ and La¹⁴⁰. C. E. Mandeville. bibliog Phys R 63:387-8 My 1 '43

Manufacture

Improved production of sodium. A. G. Arend. diag Electrician 130:4-6 Ja 1 '43

SODIUM acetate

Tracer studies with radioactive carbon; the exchange between acetic anhydride and sodium acetate. S. Ruben, M. B. Allen and P. Nahinsky. Am Chem Soc J 64:3050 D '42

SODIUM ammonium pectate

Research finds substitute for bacteriological agar. W. E. Baier and T. C. Manchester. bibliog il Food Ind 15:94-6 Jl '43

SODIUM arsenate

Effect of arsenates on the storage of lead. L. T. Fairhall, J. W. Miller and F. L. Weaver. Pub Health Rep 58:955-9 Je 18 '43

SODIUM bismuth thioglycollate. See Thio-bismol

SODIUM bromate

Adsorption at the crystal-solution interface; an electron-diffraction investigation of crystal surfaces of pure sodium bromate and sodium bromate with adsorbed dyes. J. H. Blomquist and W. G. France. bibliog J Phys Chem 46:1044-50 D '42

SODIUM bromide

Distribution equilibria between molten metals and molten salts, with reference to the stability of intermetallic compounds in the molten state. E. Heymann, R. J. L. Martin and M. F. R. Mulcahy. bibliog J Phys Chem 47:473-84 O '43

Equilibria in a carbonaceous cation exchanger. H. F. Walton. bibliog J Phys Chem 47:371-82 My '43

SODIUM cacodylate**Analysis**

Iodometric semimicroprocedure for determination of arsenic in sodium cacodylate and cacodylic acid. V. Levine and W. M. McNabb. *Ind & Eng Chem Anal* ed 15:76-7 Ja 15 '43

SODIUM carbonates

After boiling-out—use bicarbonate; advantages over customary acid sour. A. L. Dubeau and G. P. Vincent. *il Textile World* 83:79 My '43

Effect of sodium bicarbonate on the thiamine content of peas. H. J. Deuel, Jr. and others. *Science* 97:50-1 Ja 8 '43

Influence of sodium silicate composition on its behavior with sodium carbonate as a casting slip deflocculant. A. E. Currier. *Am Cer Soc J* 26:67-71 F 1 '43

Reactions in solid state; reaction between sodium carbonate and quartz. G. Gibson and R. Ward. *bibliog Am Cer Soc J* 26: 239-46 J1 1 '43

See also

Soda ash

Analysis

Determining an alkali carbonate in the presence of an alkali bicarbonate; a colorimetric method. W. T. Sumnerford, D. Dalton and R. Johnson. *bibliog Ind & Eng Chem Anal* ed 15:38-9 Ja 15 '43

Manufacture

Nicolas Leblanc (1742-1806). R. E. Oesper. *J Chem Educ* 19:567-72; 20:11-20 bibliog(p19-20) D '42-Ja '43

Nicolas Leblanc, and the founding of the soda industry. T. S. Patterson. *Chem & Ind* 62:174-7 My 8 '43

SODIUM cellulose glycolate

Sticky substitute; Germans making more than 40 different preparations. V. Kinnard. *For Comm W* 11:11-1 My 15 '43; Same. *Chem & Met Eng* 50:192-4 Je '43; Same *abr. Chem Ind* 53:35-6 J1 '43

SODIUM cetyl sulfate

Energy relations in film penetration. J. Schubert and G. E. Boyd. *bibliog J Chem Phys* 11:215 Ap '43

SODIUM chlorate

Activity and osmotic coefficients of sodium chlorate by an isopiestic method. J. H. Jones. *bibliog Am Chem Soc J* 65:1353-4 J1 '43

Some isotherms of the system sodium chromate-sodium chlorate-water. J. E. Ricci and C. Weltman. *bibliog Am Chem Soc J* 64:2746-8 D '42

SODIUM chloride. See Salt**SODIUM chlorite**

Bleaching rag stock with chlorite activated by hypochlorite. J. E. Brennan, J. D. MacMahon and G. P. Vincent. *Paper Tr J* 115:25-6 N 19 '42

Sodium chlorite, an oxidant for vat and sulfur dyes. G. P. Vincent. *Chem & Eng N* 21: 1176-7 J1 25 '43

Sodium chlorite as pulping agent; applicable to rye straw, esparto, potato stalks, and to other annual crops; abstract. A. W. Sohn and F. Reiff. *Paper Ind* 25:444 J1 '43

See also

Textone

SODIUM chromate

Some isotherms of the system sodium chromate-sodium chlorate-water. J. E. Ricci and C. Weltman. *bibliog Am Chem Soc J* 64:2746-8 D '42

Use of inhibitors for aluminum chemical equipment. R. B. Mears and G. G. Eldredge. *il Electrochem Soc Trans* 83 (preprint 16):201-15 Ap '43

See also

Sodium dichromate

SODIUM compounds

Experimental chemotherapy of burns and shock; production of traumatic shock in mice; therapy with mouse serum and sodium salts. S. M. Rosenthal. *bibliog Pub Health Rep* 58:1429-36 S 24 '43

Liquid-liquid phase equilibria of the system cyclohexane-methyl alcohol in the presence of various salts as third components. E. L. Eckfeldt and W. W. Lucasse. *bibliog J Phys Chem* 47:164-83 F '43

Lyotropic order and the effects of sodium salts on the miscibility of cyclohexane and methyl alcohol. E. L. Eckfeldt and W. W. Lucasse. *bibliog J Phys Chem* 47:133-9 F '43

Monosulfonation of 2-methylnaphthalene. R. N. Shreve and J. H. Lux. *bibliog il Ind & Eng Chem* 35:306-12 Mr '43

Preparation of purified inorganic compounds for use in spectrographic standards. R. C. Hughes. *bibliog il Opt Soc Am J* 33:49-60 Ja '43

Properties of detergent solutions; comparison of detergent action and whiteness retention of laundry soap builders. T. R. Vaughn and A. Vittone, Jr. *bibliog Ind & Eng Chem* 35: 1094-8 O '43

Raman spectra of ascorbic acid, tetrone acid and related compounds. J. T. Edsall and E. L. Sagall. *bibliog Am Chem Soc J* 65:1312-16 J1 '43

Studies of sulfonates; conductances and densities of sodium ethyl-, n-butyl-, n-octyl-, and n-dodecylbenzene-p-sulfonate solutions. R. G. Paquette, E. C. Langstaffer and H. V. Tartar. *bibliog diags Am Chem Soc J* 65: 686-92 Ap '43

SODIUM dichromate

Economy in the use of sodium dichromate when dyeing wool with mordant dyestuffs. L. P. Rendell. *Textile Col* 65:20 Ja '43

SODIUM ethyl

Reactions of organometallic compounds with alkyl halides; the action of sodium ethyl on (—)-2-bromooctane. N. G. Brink, J. F. Lane and E. S. Wallis. *bibliog Am Chem Soc J* 65:943-9 My '43

SODIUM ferrocyanide

Cause of the variation of the colour of crystals of commercial sodium and potassium ferrocyanide (cyanoferrate(II)). H. E. Williams. *Chem Soc J* p223-7 My '43

SODIUM fluoride

Caries-fluorine hypothesis and a suggested study to test its application. D. R. Ast. *Pub Health Rep* 58:557-79 bibliog(31 titles, p877-9) Je 4 '43

Fluorine insecticides. R. H. Carter and E. L. Gooden. *bibliog il Soap & San Chem* 19:99, 101-1 Mr '43

Program of treatment of public water supply to correct fluoride deficiency. D. B. Ast. *bibliog Am Water Works Assn J* 55:1191-7 S '43

Roach powders; what composition for poisonous and non-poisonous types. *il Soap & San Chem* 19:97-8-1 Ap '43

Sodium fluoride crayons for roach control. J. M. Hutzel. *bibliog Soap & San Chem* 19: 107, 109-10 Ag '43

SODIUM fluosilicate

Fluorine insecticides. R. H. Carter and E. L. Gooden. *bibliog il Soap & San Chem* 19:99, 101-1 Mr '43

Roach powders; what composition for poisonous and non-poisonous types. *il Soap & San Chem* 19:97-8-1 Ap '43

SODIUM glutamate

Monosodium glutamate; patent. *Food Ind* 15: 121 Mr '43

SODIUM hexametaphosphate

Brine stabilization with sodium hexametaphosphate. F. W. Jessen and J. L. Battle. *bibliog il Ind & Eng Chem* 35:650-4 Je '43

Calgon treatment as applied in water quality control for the solution of four problems. O. Rice. *Water Works & Sewerage* 90:sup 167 Je '43

Control of corrosion. R. S. Weston. *bibliog il Water Works & Sewerage* 90:323-7 S '43

Effect of various chemical agents affecting permeability of the mucosa on the formation of ulcers. R. L. Driver, G. S. Dozier and H. C. Denham. *bibliog Science* 95:153-9 Ag 13 '43

Making a phosphate control system work. J. W. Odium. *diags Power Pl Eng* 46:70-3-4 D '42

SODIUM hexametaphosphate—Continued

Value of sodium hexametaphosphate in the control of difficulties due to corrosion in water systems; committee report, bibliog Am Water Works Assn J 34:1807-28; Discussion, F. E. Hale. 1828-30 D '42

SODIUM hydrosulfide

Cooking process; action of aqueous solutions of pure sodium hydrosulfide on aspen wood. R. L. Hossfeld, R. A. Gortner and F. H. Kaufert. bibliog diag Ind & Eng Chem 35:717-20 Je '43

Analysis

Determination of chloride in the presence of hydrosulfide or sulfide ion. M. M. Maglio and F. Fazio. Ind & Eng Chem Anal ed 15: 265-6 Ap 15 '43

SODIUM hydroxide

Absorption of carbon dioxide by sodium hydroxide solutions in a packed column. J. B. Tepe and E. F. Dodge. bibliog diag Am Inst Chem Eng Trans 39:255-76 Ap '43

Caustic in vapor stream halts corrosion; West Coast natural gasoline plant. Il Pet Refiner 22:111 Ap '43

Caustic soda crosshaul zones; map. Oil Paint & Drug Rep 143:4 F 8 '43

Chemical separation of the isotopes of hydrogen by the addition of metals and compounds of metals to water, acids and bases; relative efficiencies of specific reactions; the effects of certain factors other than temperature. H. L. Johnston and C. O. Davis. bibliog diag Am Chem Soc J 64: 2613-20 N '42

Effect of NaOH on dissolved soap. C. A. Snell and others. Soap & San Chem 19:63+ N '43

Fix alkali shipping zones. map Soap & San Chem 19:59+ Mr '43

How to handle chemicals safely. diag Textile World 93:102-3 S '43

pH factor in the hypochlorite bleaching of wood pulp; single-stage treatment of sulphite pulp. F. Casclani and G. K. Storin. Paper Tr J 115:33-40 N 12; 27-31 N 19 '42

New industry; caustic soda supply in Brazil. Business Week p48 Mr 6 '43

Polymorphism of bismuth trioxide. W. C. Schumb and E. S. Rittner. bibliog Am Chem Soc J 65:1055-60 Je '43

Proper methods of handling caustic soda. G. P. Vincent. Il diags Chem Ind 51:728-31 N '42

Removal of water-insoluble turbine deposits by caustic washing. W. L. Webb and R. G. Call. diags A S M E Trans 65:713-17 O '43

Second dissociation constant of *p*-phenolsulfonic acid and pH values of phenolsulfonate-chloride buffers from 0 to 60° C. R. G. Bates, G. L. Siegel and S. F. Acree. bibliog J Research Nat Bur Stand 31:205-23 O '43

Stability of β -methylmaltoide toward hot alkali. T. J. Schoch, E. J. Wilson, jr. and C. S. Hudson. bibliog Am Chem Soc J 64:2871-2 D '42

Turbine blade deposits. F. G. Straub. Blast F & Steel Pl 31:1166, 1168-9 O '43

Manufacture

Electrolytic chlorine and caustic soda; pictorial flow sheet. Il Chem & Met Eng 49: 114-17 D '42

Statistics

Alkalis and chlorine, 1942. Chem & Met Eng 50:104-5 F '43

SODIUM iodoacetate

Preparation of sodium iodoacetate. L. Goldberg. Science 98:386 O 29 '43

SODIUM isethionate

Isethionic acid. A. A. Goldberg. Chem Soc J p716-18 N '42

SODIUM laurate

Diffraction of X-rays by sodium laurate and sodium palmitate at higher temperatures. O. E. A. Bolduan, J. W. McBain and S. Ross. bibliog Il J Phys Chem 47:528-35 O '43

Interfacial-tension studies of sodium laurate solutions. J. K. Davis and F. E. Bartell. bibliog J Phys Chem 47:40-50 Ja '43

X-ray diffraction of sodium laurate, palmitate and stearate at room temperature. J. W. McBain, O. E. A. Bolduan and S. Ross. 2 pls Am Chem Soc J 65:1873-6 O '43

SODIUM lauryl sulfate

Cooperative studies on a laboratory method for evaluating synthetic detergents. J. B. Crowe. Am Dyestuff Rep 32:237-41 My 24 '43

SODIUM malonic ester

Malonic ester synthesis and Walden inversion. W. E. Grigsby and others. bibliog Am Chem Soc J 64:2606-10 N '42

Reaction between quinones and metallic enolates; dibromo-*p*-xyloquinone and sodiomalonic ester. L. I. Smith and J. Nichols. bibliog Am Chem Soc J 65:1739-47 S '43

SODIUM metaphosphate

Metaphosphate increases the washing efficiency of chemical pulps. E. R. Lang and E. T. Laurin. Paper Tr J 116:33-6 My 20 '43; Excerpts. Paper Ind 25:802+ O '43

Sodium metaphosphate; its use in the textile industry. H. Seymour. Chem Age (Lond) 48:151-3 Ja 30 '43

See also

Sodium hexametaphosphate

SODIUM methoxide

Nuclear methylation of phenols by means of methanolic sodium methoxide. J. W. Cornforth, R. H. Cornforth and R. Robinson. Chem Soc J p682-4 N '42

Quantitative estimation of acetyl in carbohydrate acetates. R. L. Whistler and A. Jeanes. bibliog diag Ind & Eng Chem Anal ed 15:317-18 My 15 '43

SODIUM nitrate

Chilean nitrates tonnage is requested by WFA. Oil Paint & Drug Rep 144:3+ Ag 23 '43

Humidity measurements in presence of water-soluble salts. G. C. Williams and R. J. Williams. bibliog Ind & Eng Chem 35: 730-2 Je '43

Nitrates in glass batches. S. R. Scholes. Glass Ind 24:256+ Je '43

Origin of Chilean nitrate deposits. J. T. Singewald, jr. bibliog Econ Geol 37:627-39 N '42

Practical way to prevent embrittlement cracking; use of sodium nitrate, quebracho extract, waste sulphite liquor and elimination of caustic alkalinity. A. A. Berk and W. C. Schroeder. diag A S M E Trans 65: 701-4; Discussion. 704-11 Ag '43

Sodium nitrate released for fall agricultural needs. Oil Paint & Drug Rep 144:3+ O 4 '43

SODIUM nitrite

New type rustproof lining for drums; Nidex. A. Wachter and N. Stillman. flow plan Il Oil & Gas J 41:214, 219, 221 Mr 25 '43

Nitrite field method for the determination of oxides of nitrogen except N₂O and N₂O₅. F. A. Patty and G. M. Petty. bibliog J Ind Hygiene 25:361-5 O '43

Preventing internal corrosion of pipe lines; sodium nitrite treatment for gasoline lines. A. Wachter and S. S. Smith. bibliog Il diags Ind & Eng Chem 35:358-67 Mr '43

Products pipe-line developments; removing and preventing corrosion scale; sodium nitrite inhibitor-injection. S. S. Smith. diags Am Pet Inst Proc 23(4):54-60; Discussion. 60-3 '42

SODIUM oleate

Effect of NaOH on dissolved soap. C. A. Snell and others. Soap & San Chem 19:63+ N '43

SODIUM oleyl sulfate

Cooperative studies on a laboratory method for evaluating synthetic detergents. J. B. Crowe. Am Dyestuff Rep 32:237-41 My 24 '43

SODIUM oxides**See also**

Sodium peroxide

SODIUM palmitate

Diffraction of X-rays by sodium laurate and sodium palmitate at higher temperatures. O. E. A. Bolduan, J. W. McBain and S. Ross. bibliog Il J Phys Chem 47:528-35 O '43

SODIUM palmitate—Continued

Phase behavior of lithium palmitate with water and with lithium chloride and water. M. J. Vold. *bibliog* Am Chem Soc J 65:465-9 Mr '43

Solid soap phases. R. H. Ferguson, F. B. Rosevear and R. C. Stillman. *bibliog* *il Ind & Eng Chem* 35:1005-12 S '43

X-ray diffraction of sodium laurate, palmitate and stearate at room temperature. J. W. McBain, O. E. A. Bolduan and S. Ross. 2pls Am Chem Soc J 65:1873-6 O '43

SODIUM pentachlorophenate

Acclimatization of bacteria to disinfectants used in the paper and paperboard industry. J. W. Appling and E. F. Shema. *il Paper Tr J* 117:101-4 S 30 '43; Same cond. *Paper Ind* 25:906, 908-9 N '43

Observations on the fate of pentachlorophenol in the animal organism. W. Machle, W. Deichmann and G. Thomas. *bibliog* *J Ind Hygiene* 25:192-4 My '43

SODIUM peroxide

Semimicrodetermination of chlorine, bromine, and iodine in organic compounds. E. W. Peel, R. H. Clark and E. C. Wagner. *bibliog* *Ind & Eng Chem Anal* ed 15:149-51 F 15 '43

Semimicrodetermination of phosphorus in organic compounds. M. D. Bachofer and E. C. Wagner. *bibliog* *Ind & Eng Chem Anal* ed 15:601-2 S 15 '43

SODIUM phenylbromoacetate

Kinetics of the aqueous hydrolysis of sodium phenylbromoacetate and sodium phenylchloroacetate. W. R. Bulcraig and H. M. Dawson. *Chem Soc J* p80-4 Mr '43

SODIUM phenylchloroacetate

Kinetics of the aqueous hydrolysis of sodium phenylbromoacetate and sodium phenylchloroacetate. W. R. Bulcraig and H. M. Dawson. *Chem Soc J* p80-4 Mr '43

SODIUM phosphates

Manual of dairy detergents and cleaning practices. M. E. Parker. *Food Ind* 15:171-2+ Ag '43

Mono-sodium phosphate for silica scale. *Elec W* 118:1644 N 14 '42

New phosphate coatings with unusual corrosion resistance. G. Jernstedt. *il Electrochem Soc Trans* 83 (preprint 30):223-35 Ap '43; *Abstract. Steel* 113:93-6 D 27 '43

New phosphating treatment revealed to electrochemists. F. J. Van Antwerpen. *Chem & Eng N* 21:710+ My 10 '43

Protection against caustic embrittlement by coordinated phosphate-pH control. T. E. Purcell and S. F. Whirl. *bibliog* *il diag Electrochem Soc Trans* 83 (preprint 25):279-95 Ap '43

See also

Sodium hexameta-phosphate Sodium metaphosphate

SODIUM propionate

Effect of propionic acid and of Na propionate on parameria. H. E. Potts. *Franklin Inst J* 236:99-100 JI '43

SODIUM silicates

pH factor in the hypochlorite bleaching of wood pulp; single-stage treatment of sulphite pulp. F. Casciani and G. K. Storin. *Paper Tr J* 115:33-40 N 12 '42

Influence of sodium silicate composition on its behavior with sodium carbonate as a casting slip deflocculant. A. E. Currier. *Am Cer Soc J* 26:67-71 F 1 '43

Sodium silicate mud used to drill deep shale and salt water zone. C. C. Pryor. *il Pet Eng* 14:108, 110, 112 Je '43

Use of inhibitors for aluminum chemical equipment. R. B. Mears and G. G. Eldredge. *il Electrochem Soc Trans* 83 (preprint 16):201-15 Ap '43

SODIUM stearate

Diffraction of X-rays by sodium stearate at room temperature. J. W. McBain, A. de Bretteville, jr. and S. Ross. *bibliog* *il J Chem Phys* 11:179-83 Ap '43

Solid soap phases. R. H. Ferguson, F. B. Rosevear and R. C. Stillman. *bibliog* *il Ind & Eng Chem* 35:1005-12 S '43

X-ray diffraction investigation of sodium stearate from room temperature to the melting point. A. de Bretteville, jr. and J. W. McBain. *bibliog* *il J Chem Phys* 11:426-9 S '43

X-ray diffraction of sodium laurate, palmitate and stearate at room temperature. J. W. McBain, O. E. A. Bolduan and S. Ross. 2pls Am Chem Soc J 65:1873-6 O '43

X-ray evidence for a third polymorphic form of sodium stearate. A. de Bretteville, jr. and J. W. McBain. *Science* 96:470-1 N 20 '42

SODIUM sulfates

Role of sodium sulphate in glass manufacture. W. A. Weyl. *bibliog* *Glass Ind* 24:17-20+, 65-8, 108-11 Ja-Mr '43

Sodium sulphate for India. H. B. Dunncliff. *Chem Age (Lond)* 43:603 Je 5 '43

Some further observations on the interchange of heavy oxygen between water and certain inorganic oxy-anions. E. R. S. Winter and H. V. A. Briscoe. *Chem Soc J* p631-7 O '42

Turbine blade deposits. F. G. Straub. *Blast F & Steel* P1 31:1166, 1168-9 O '43

See also

Paper making—Sulfate process

Sodium thiosulfate

SODIUM sulfathiazole

Experimental Rocky Mountain spotted fever; results of treatment with certain drugs. E. A. Steinhilber and R. R. Parker. *Pub Health Rep* 58:351-2 F 26 '43

SODIUM sulfides

Copper and sulfide in developers; fogging action; polarographic analysis. R. M. Evans, W. T. Hanson and P. K. Glasoe. *bibliog* *Soc Motion Picture Eng J* 40:88-96 F '43

Monoreduction of dinitronaphthalenes in acid solution and of 1:5- and 1:6-dinitronaphthalene by aqueous sodium sulphide. H. H. Hodgson and H. S. Turner. *Chem Soc J* p318-19 JI '43

Separation and determination of protein sulfur, sulfide sulfur, and sulfur in sodium sulfide dispersions of keratins. E. F. Potter and C. B. Jones. *bibliog* *diag Ind & Eng Chem Anal* ed 15:15-17 Ja 15 '43

See also

Sodium hydrosulfide

SODIUM sulfites

Action of sulfites on wool. A. J. Hall. *Textile Col* 65:311-13 JI '43

Collection and estimation of traces of formaldehyde in air. F. H. Goldman and H. Yagoda. *bibliog* *Ind & Eng Chem Anal* ed 15:377-8 Je 15 '43

Further comparison of sodium- and calcium-base sulphite acids; effect of decreasing time to maximum temperature with corresponding reduction in total cooking time. M. O. Schur and E. G. Ingalls. *Paper Tr J* 117:34-8 S 16 '43; *Excerpts. Paper Ind* 25:438 JI '43

More about sulphite, and the induction period in development. T. H. James. *Am Phot* 37:24-6 S '43

Reaction of indene and styrene bromohydrins with sodium sulfite; cleavage of alkali sulfonates with sodium in liquid ammonia. C. M. Suter and H. B. Milne. *Am Chem Soc J* 65:582-4 Ap '43

Sulphite is necessary! T. H. James. *Am Phot* 37:12-13 My '43

SODIUM sulfonates

Comparison of an aryl sulfonate and soap for the washing in hard water of cotton, linen, spun cellulose-acetate rayon, spun regenerated-cellulose rayon, silk, and wool. V. Ester and others. *bibliog* *Am Dyestuff Rep* 32:121-2, 135-41 Mr 15 '43

Reaction of indene and styrene bromohydrins with sodium sulfite; cleavage of alkali sulfonates with sodium in liquid ammonia. C. M. Suter and H. B. Milne. *Am Chem Soc J* 65:582-4 Ap '43

Analysis

Colorimetric determination of alkyl benzene sulfonates. J. C. Harris. *bibliog* *Ind & Eng Chem Anal* ed 15:254-6 Ap 15 '43

SODIUM sulfosuccinate

See also

Aerosol-OT

SODIUM tetraiodophenolphthalein

Determination of iodine in tetraiodophenolphthalein. S. Weiner, B. E. Leach and M. J. Bratz. *bibliog Ind & Eng Chem Anal ed* 15:373-4 *Je* 15 '43

SODIUM thiosulfate

Determination of iodate in the presence of bromate and chlorate. I. M. Kolthoff and D. N. Hume. *Ind & Eng Chem Anal ed* 15:174-5 *Mr* 15 '43

Disappearance of thiosulfate in solutions of maleic acid; catalysis of *cis-trans* isomerization. H. Taube. *bibliog Am Chem Soc J* 65:526-31 *Ap* '43

Effect of sodium thiosulphate in the sodium sulphite pulping process. K. A. Kobe and J. M. Hanson. *Paper Tr J* 117:25-6 *Jl* 8 '43

Removal of hypo and silver salts from photographic materials as affected by the composition of the processing solutions. J. I. Crabtree, G. T. Eaton and L. E. Muehler. *il diags Soc Motion Picture Eng J* 41:9-68 *bibliog*(p63-8) *Jl* '43

Thiosulphate solutions used to prevent discolorization of the cut surfaces of fruit and vegetables; patent. *Food Ind* 15:108 *Ja* '43

Analysis

Quantitative determination of hypo in photographic prints with silver nitrate. J. I. Crabtree, G. T. Eaton and L. E. Muehler. *bibliog Franklin Inst J* 235:351-60 *Ap* '43

SODIUM thymonucleate

Effect of pH changes upon some of the properties of sodium thymonucleate solutions. C. F. Vilsbrandt, and H. G. Tennent. *Am Chem Soc J* 65:1306-9 *O* '43

SODIUM tungstate

Electrodeposition of cobalt-tungsten alloys from an acid plating bath. M. L. Holt, R. E. Black and P. F. Hoglund. *Electrochem Soc Trans* 84 (preprint 15):139-47 *O* '43

SODIUM zinc-uranyl acetate

Ultramicromethod for sodium employing the polarograph. C. Carruthers. *bibliog Ind & Eng Chem Anal ed* 15:70-1 *Ja* 15 '43

SOFTENING agents

Softeners for government synthetic rubber. *Rubber Age* 52:406 *F* '43

Warp sizing of man-made yarns; defoamed gelatin; effect of different types of softeners. *il Rayon* 24:590-2 *N* '43

SOFTENING points

Rapid method of estimating the A.S.T.M. ring-and-ball softening point of asphalts. A. B. Hersberger and C. Overbeck. *il diag Am Soc T M Proc* 42:389-94; *Discussion*. 895 '42

Rapid ring and ball softening-point test. D. M. Wilson. *diag Soc Chem Ind J* 62:140-1 *S* '43

Report of A.S.T.M. subcommittee I on softening point of rosin. *Am Soc T M Proc* 42:443-6 '42

SOIL acidity

Fifteen million tons of limestone needed to sweeten Wisconsin soils. C. J. Chapman. *il Rock Prod* 46:61+ *Ap* '43

Putting lime on a war basis. F. E. Bear. *Rock Prod* 46:49 *Ap* '43

Sour soils and liming. J. W. White. *Rock Prod* 46:54-6 *Ap* '43

SOIL analysis

Concentration methods in spectrographic analysis; recovery of cobalt, nickel, molybdenum, copper, and zinc from plant materials and soil extracts by 8-hydroxyquinoline. R. O. Scott and R. L. Mitchell. *bibliog Soc Chem Ind J* 62:4-8 *Ja* '43

Determination of small quantities of sodium in soil solutions and soil extracts. M. Y. Shavarbi and A. G. Pollard. *Soc Chem Ind J* 62:71-3 *My* '43

Determining magnesium in plants and soils; adaptation of the 8-hydroxyquinolate micro-method. M. E. Weeks and J. R. Todd. *bibliog Ind & Eng Chem Anal ed* 15:297-9 *Ap* 15 '43

Rapid determination of soluble nutrients in soil and plant extracts by means of a photoelectric colorimeter. B. Wolf. *bibliog diags Ind & Eng Chem Anal ed* 15:248-51 *Ap* 16 '43

Semimicroanalysis of saline soil solutions. R. F. Reitemeyer. *bibliog Ind & Eng Chem Anal ed* 15:393-402 *Je* 15 '43

Soil analysis. G. W. Robinson. *Chem & Ind* 62:171-3; *Discussion*. 173-4 *My* 8 '43

See also

Ocean bottom—

Sediment analysis

SOIL avalanches. See Landslides**SOIL bacteriology**

Bacterial wildcat; detecting oil by means of gases present in samples of earth. *Business Week* p61 *Jl* 24 '43

Soil areas corrosive to metallic iron through activity of anaerobic sulfate-reducing bacteria. R. L. Starkey and K. M. Wight. *bibliog Am Gas Assn Mo* 25:223-8 *My* '43

SOIL-cement pavements. See Pavements, Soil-cement**SOIL-cement roads**. See Roads, Soil-cement**SOIL colloids**

Laws of soil colloidal behavior; constitution of the pedosphere and soil classification; abstract. S. Mattson. *Am Cer Soc Bul* 22 (Cer A 22):84 *My* 15 '43

SOIL conservation

Rebuilding America's primary wealth—the soil. M. L. Cooke. *Franklin Inst J* 236:363-72 *O* '43

Soil conservation in a farm program. H. V. Odle. *il Burroughs Clearing House* 27:22-5, 36-40 *Jl* '43

SOIL corrosivity. See Soils—Corrosive properties**SOIL disinfection**

Promising new soil amendment and disinfectant; mixture of 1-3 dichloropropylene and 1-2 dichloropropane. W. Carter. *Science* 97:383-4 *Ap* 23 '43

What you can use; materials suitable for various purposes in processing industries. *Oil Paint & Drug Rep* 144:40 *Ag* 23 '43

SOIL erosion. See Erosion**SOIL fertility**

Increasing the food output of Great Britain. G. H. Bates. *Chem & Ind* 61:505-8; *Discussion*. 508 *D* 12 '42

Liming essential for maximum production. W. H. Pierre. *Rock Prod* 46:44+ *Ap* '43

Philosophy about liming the land. E. Jones. *Rock Prod* 46:45+ *Ap* '43

Soil fertility and the human species. W. A. Albrecht. *il maps Chem & Eng N* 21:221-7 *F* 25 '43

SOIL heating

See also

Hobbeds, Electric

SOIL mechanics

Application of soil mechanics in designing building foundations. A. Casagrande and R. E. Fadum. *bibliog il diags Am Soc C E Proc* 68:1487-1520 *N* '42; *Discussion*. 69:449-55 *bibliog*(p450-1), 927-41, 1065-93 *Mr, Je, S* '43

Earth pressure and shearing resistance of plastic clay; symposium. K. Terzaghi, R. B. Peck and W. S. Housel. *diags Am Soc C E Proc* 68:857-950 *Je* '42; *Discussion*. 68:1216-24; 69:589-96, 733-6, 915-23 *S* '42, *Ap-Je* '43

Engineering study of glacial drift for an earth dam, near Fergus, Ontario. R. F. Leggat. *il plan map Econ Geol* 37:531-56 *N* '42

Importance of soil mechanics in design of compressor foundations. H. R. Marsh. *diags Nat Pet N* 35 pt 2:R544-9 *N* 3 '43

Introduction to soil mechanics. W. L. Lowe-Brown. *bibliog diags Engineer* 175:104-6, 124-6, 144-6 *F* 5-19 '43

Pendleton levee failure. K. E. Fields and W. L. Wells. *il diags Am Soc C E Proc* 68:1763-76 *D* '42; *Discussion*. 68:1797-1800; 69:949-59 *D* '42, *Je* '43

Relation of undisturbed sampling to laboratory testing. P. C. Rutledge. *diags Am Soc C E Proc* 68:1531-58 *bibliog*(p1557-8) *N* '42; *Discussion*. 68:1833-9; 69:577-83, 985-94 *bibliog*(p993-4), 1133-7 *D* '42, *Ap, Je, S* '43

SOIL mechanics—Continued

Role of moisture in soil mechanics. R. K. Schofield. *bibliog Chem & Ind* 62:339-41 S 4 '43

Role of moisture in soil mechanics; abstract. R. K. Schofield. *Roads & Bridges* 81:75 Ap '43; Same. *Pub Works* 74:34 Ag '43

See also

Earth pressure Landslides
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SOIL moisture

Liquid distribution in porous materials. R. K. Schofield. *Chem Age (Lond)* 48:313-15 Mr 20 '43

Radio to measure moisture content of soil; crystal-controlled oscillator unit. S. R. Winters. *il diag Radio-N* 30:23+ S '43

Role of moisture in soil mechanics. R. K. Schofield. *bibliog Chem & Ind* 62:339-41 S 4 '43

Role of moisture in soil mechanics; abstract. R. K. Schofield. *Roads & Bridges* 81:75 Ap '43; Same. *Pub Works* 74:34 Ag '43

SOIL permeability

Permeability of Mud Mountain Dam core material. A. S. Cary, B. H. Walter and H. T. Harstad. *diag Am Soc C E Proc* 68: 1089-98 S '42; Discussion. 68:1843-6; 69:615-18 D '42, Ap '43

SOIL sampling

Relation of undisturbed sampling to laboratory testing. P. C. Rutledge. *diags Am Soc C E Proc* 68:1531-58 *bibliog*(p1557-8) N '42; Discussion. 68:1833-9; 69:433-4, 577-83, 985-94 *bibliog*(p993-4), 1133-7 D '42, Mr-Ap, Je, S '43

SOIL stabilization

Building foundations on compacted fill; with cost data. W. E. King. *diag Eng N* 131:403-5 S 9 '43

Emergency pavement patching with pre-stabilized soil-aggregate mixes. R. L. Fosburg. *il Roads & Bridges* 81:25+ Je '43

How to design stabilized soil mixtures for airport and highway construction. R. G. Hennes. *Eng N* 130:761-2 My 20 '43

Stabilized earth blocks for protective construction. R. G. Hennes. *il diags Washington U Eng Exp Sta Bul* 111:1-24 '43 (pa 25c)

Studies of stabilized bases; Highway research board meeting. *Eng N* 130:146-7 Ja 28 '43

Tests on soil stabilized with asphalt or tar and treated to permit wide range of moisture. *Roads & Sts* 86:72 F '43

Use of deliquescent materials in road construction. *Roads & Bridges* 81:96+ JI '43

See also

Roads—Subgrades
Roads, Gravel—
Stabilization
Roads, Soil-cement

SOILS

Cation and anion interchange with zinc montmorillonite clays. M. M. Elgabaly and H. Jenny. *bibliog J Phys Chem* 47:399-408 My '43

Fundamental formula of soil formation. C. C. Nikiforoff. *bibliog Am J Sci* 240:847-66 D '42

Health of the coming generation lies in today's fields and pastures; abstract. W. A. Albrecht. *Science* 96:sup 12 D 25 '42

Riboflavin-vitamin B₂ in soil. C. C. Carpenter. *Science* 98:109-10 JI 30 '43

Soil fertility and the human species. W. A. Albrecht. *il maps Chem & Eng N* 21:221-7 F 25 '43

Soil phenomena as evidence of climatic changes. K. Bryan and C. C. Albritton, jr. *Am J Sci* 241:469-90 *bibliog*(p489-90) Ag '43

Soil science; aspects that should be understood by road surveyors. J. R. Scott. *Roads & Bridges* 81:44 Mr '43

Soils and nutrition. C. E. Kellogg. *Ann Am Acad* 225:17-21 Ja '43

See also

Agriculture Earthwork
Base exchanging Erosion
compounds Fertilizers
Clay Foundation soils
Drainage Highway engineering

Irrigation

Loess
Roads—Subgrades
Sand

Silt

Soil analysis
Soil mechanics

Analysis

See Soil analysis

Classification

Soil classification changes proposed; abstract. C. A. Hogentogler and E. S. Barber. *Eng N* 131:159 JI 15 '43

Consolidation

Pressure and consolidation measurements at a western earth-fill dam. E. L. Armstrong. *il diags plan Civil Eng* 12:682-4 D '42

Corrosive properties

Soil areas corrosive to metallic iron through activity of anaerobic sulfate-reducing bacteria. R. L. Starkey and K. M. Wight. *bibliog Am Gas Assn Mo* 25:223-8 My '43

Electric properties

Determination of the electrical properties of soil at a wavelength of 5 metres (frequency 60 mc./s.). J. S. McPetrie and J. A. Saxton. *bibliog diag Inst E E J* 90 pt 3:33-5 Mr '43

Freezing

Some problems of road construction and maintenance in Alaska. S. Taber. *Pub Roads* 23:248-9 JI '43

Testing

Evaluating soils for specific road uses; methods developed in Kansas. D. L. Lacey. *Eng N* 130:312-15 F 25 '43

Relation of undisturbed sampling to laboratory testing. P. C. Rutledge. *diags Am Soc C E Proc* 68:1531-58 *bibliog*(p1557-8) N '42; Discussion. 68:1833-9; 69:433-4, 577-83, 985-94 *bibliog*(p993-4), 1133-7 D '42, Mr-Ap, Je, S '43

Soil tester aids army engineers. P. O. Malmberg. *il diag Machine Design* 15:94-6 Mr '43

See also

Foundation soils—
Testing

SOILS, Fossil

Introduction to paleopedology. C. C. Nikiforoff. *Am J Sci* 241:194-200 Mr '43

SOLANIDINE

Solanine, glycoside of the potato; its isolation and determination. H. S. Rooke and others. *bibliog Soc Chem Ind J* 62:20-4 F '43

Veratrine alkaloids; surface film studies. A. Rothen and L. C. Craig. *bibliog il Am Chem Soc J* 65:1102-6 Je '43

SOLANINE

Solanine; glycoside of the potato, its distribution in the potato plant. L. H. Lam-pitt and others. *bibliog Soc Chem Ind J* 62: 48-51 Ap '43

Solanine, glycoside of the potato; its isolation and determination. H. S. Rooke and others. *bibliog Soc Chem Ind J* 62:20-4 F '43

SOLANUM

Veratrine alkaloids; the correlation of the veratrine alkaloids with the solanum alkaloids. L. C. Craig and W. A. Jacobs. *bibliog Science* 97:122 Ja 29 '43

SOLAR eclipses. See Eclipses, Solar**SOLAR heat. See Sun—Temperature****SOLAR heating**

It's here, solar heating for post-war homes. *il diag plan Am Bld* 65:34-6+ S '43

Solar heating; survey proves large windows, properly oriented, save fuel even in rigorous climates. *il diag plan Arch Forum* 79:6-8+ Ag '43

Solar house cuts fuel bill 30%; heating system supplemented by sun effect. *il Dom Eng* 162:73 O '43

Sun-exposed glass walls provide test for solar heating. *il Glass Ind* 24:384-5 S '43

Sun heat tested; Libbey-Owens-Ford studying use of extraneous windows on southern exposure. *il Business Week* p64, 66 Ag 28 '43

SOLAR observatories. *See* Astronomical observatories

SOLAR radiation

Effects of solar activity on the ionosphere and radio communications. H. W. Wells. bibliog. il maps Inst Radio Eng Proc 31:147-57 Ap '43

Measurements of ultraviolet solar radiation in Washington, 1936 to 1942. W. W. Coblenz and R. Stair. bibliog J Research Nat Bur Stand 30:435-47 Je '43

Year-round sun angles for the U.S.; reference data. map Heat & Ven 39:58a-58b D '42

See also

Insolation Spectrum, Solar
Solar heating Ultraviolet rays

SOLAR system

Cepheid theory of the origin of the solar system. A. C. Banerji. Phys R 63:56-6 Ja 1 '43

See also

Earth
Sun

SOLARIZATION. See Photography—Reversal process**SOLDER and soldering**

Any pots to mend today? Consumers' Research Bul 11:22-4 Ap '43

Appeal for better solder; unsatisfactory experiences with the so-called Victory solders. Sheet Metal Worker 34:24 Jl '43

Better brazed and soldered joints made possible by induction heating. J. P. Jordan. il diags Product Eng 14:102-5 F '43

British standard soft solders with reduced tin content; data sheet. Mach 50:209 O '43

Casting lugs on ends of wire rope. C. R. Hochmuth. il diag Power Pl Eng 47:92 F '43; Same. Pet Eng 14:111 F '43; Same. Roads & Sts 86:84 F '43; Same. Marine Eng 48:202 Mr '43; Same. Min Cong J 29:33 Mr '43; Same. Civil Eng 13:284 Je '43

Conservation of solder and tin. G. L. Moses and E. A. Fox. Ry Age 113:891-2 N 23 '42

Conservation of tin in soft solders; abstract. D. L. Colwell and W. C. Lang. Pub Works 74:22; Discussion. C. A. Hill. 22 O '43

Desoldering gas meters with hot oil. G. E. Griffin, jr. il Am Gas Assn Mo 25:403-4+ O '43

Emergency cable has 17 splices; silfos soldering technique. diags Elec W 119:312+ Ja 23 '43

Future of tin in solder. il Sheet Metal Worker 34:57 O '43

G.P.O. example; reducing amount of solder to be used on cable joints. Electrician 129:550 N 20 '42; Same. Chem Age (Lond) 47:506 D 5 '42

How to solder cast iron. A. Eyles. Am Mach 87:108 S 16 '43

Lead-silver substitute solder safe for food can. Steel 113:127 Ag 23 '43

Metallurgy of fillet wiped soldered joints. E. E. Schumacher, G. M. Bouton and G. S. Phipps. il Bell System Tech J 22:73-9 Ja '43

Meter soldering; experiments point to new method of conserving tin. J. E. Godsoe. Am Gas Assn Mo 24:431-2 D '42

New soft solder; lead-arsenic-antimony alloy. R. L. Dowdell and others. il Metal Prog 43:56-9+ Ja '43

Pipe soldering to save tin; metallic ribbon helps the fusion of shaped joints. diag Chem Age (Lond) 47:505 D 5 '42

Possible toxicity of lead alloys; experiments on the rat with solder. G. R. Cowgill and K. Salomon. bibliog J Ind Hygiene 25:81-90 Mr '43

Reclaiming solders when tinning coppers. A. Eyles. il Am Mach 87:104 Ag 19 '43

Researches for improved solder fluxes. H. Peters and B. Gonser. il Welding J 22:sup373-4 Ag '43

Safe substitute solder for food cans; report of War metallurgy committee on lead-silver solder. H. W. Gillett, E. J. Cameron and R. F. Griggs. Metal Prog 44:420-1+ S '43; Abstract. Metals & Alloys 18:596+ N '43

Saving tin in solder. J. Horn. Sheet Metal Worker 33:33+ N '42

Silver replaces scarce metals in soft solders. Mach 49:187 F '43

Sleeve for dip-soldering leads of small generator rotors. diag Ry Mech Eng 117:184 Ap '43

Soft silver solder. Chem Age (Lond) 48:14 Ja 2 '43

Soldering aluminum alloys. diags Iron Age 151:52-7 My 27 '43

Soldering electrical aircraft instruments. J. J. Schiller. diags Instruments 16:491-4 Ag '43

Soldering of aluminum. O. Einerl and F. Neurath. il diag Chem Age (Lond) 47:401-5 N 7 '42

Tin conservation in Britain. J. Ireland. il Metals & Alloys 17:544-6 Mr '43

Tin-conserving solders. G. F. Beard. Steel 113:97+ S 13 '43; Abstract. Metals & Alloys 18:108 Jl '43

Tin content in solder. H. B. Andersen. Am Gas Assn Proc 1942:262-3; Discussion. 263-8

Tips on using war-time solders. Ry Mech Eng 117:431 S '43

Today's solder and soldering technique. Elec W 120:1368 O 16 '43

Use of salvaged solder for the repair of gas meters. G. E. Hitz. Gas Age 91:17-19 Je 3 '43

Using substitute solders. E. H. Tovee. Gas Age 92:20+ S 9 '43

Wartime soldering. R. Arbib. Elec R (Lond) 131:777-9 D 18 '42

See also

Brazing
Silver solder
Welding

Analysis

Some observations on the use of powders in spectrochemical analysis; lead-tin solders. A. E. Ruehle and E. K. Jaycox. bibliog il Opt Soc Am J 33:109-12 F '43

SOLDERING apparatus

Electric soldering irons. H. C. Hoban. il Elec R (Lond) 132:681-3 My 21 '43

Holder prevents waste of soldering flux. C. F. Fitz. diag Am Mach 87:99-100 Mr 4 '43

Soldering iron used as a soldering pot. diag Elec W 120:502 Ag 7 '43

SOLDIERS

Help for cannery; soldiers encamped nearby permitted to volunteer. Business Week p20 Jl 31 '43

Soldier's faith; a remarkable testament from Mr Justice Oliver Wendell Holmes on the values in high and dangerous action; excerpts from his address delivered at Harvard in 1895. Fortune 27:99 Ap '43

See also

Military market
Military service

Pay, allowances, etc.

See also
Canada—Army— Great Britain—Army
Pay, allowances, —Pay, allowances,
etc. etc.

Suffrage

V-mail votes; plans to change rules on 1944 election. Business Week p20+ Jl 31 '43

SOLDIERS, Disabled

Myrtle Meritt French; work with hospitalized soldiers and sailors. Am Cer Soc Bul 22:275-6 Ag 15 '43

See also

United States—Veterans' administration

Rehabilitation

Plan for employing incapacitated ex-servicemen; Gray mfg. co. Mach 50:207 S '43

Re-education of the returned soldier and sailor. M. A. Cartwright. Ann Am Acad 227:111-21 My '43

Rehabilitating ex-servicemen; battle-scarred veterans look to industry. J. M. Kurtz. il Steel 112:84-4+ Je 14 '43; Abstract. Management E 32:337-8 S '43

Starts plan to employ disabled veterans; North American aviation. il Ptr Ink 204:78 S 24 '43

SOLDIERS, Discharged

Back to his job. Business Week p18-20 O 16 '43

Employment of repatriated prisoners of war and demobilised men in France. Int Labour R 46:749-51 D '42

Homes for veterans considered by NAHB. Am Bid 65:30-1 Je '43

SOLDIERS, Discharged—Continued

Jobs after the war; reemployment of veterans. Factory Management 101:88-92 J1 '43
Our servicemen and economic security. R. H. Skilton, ed. Ann Am Acad 227:94-151 My '43
Selective service in reverse; proposal that draft organization be utilized to train and channel veterans into useful civilian jobs; abstract. C. A. Gray. Il Steel 113:78 O 4 '43

WMC states policy on reemployment of war veterans. Comm & Fin Chr 158:711 Ag 19 '43

See also
Demobilization

SOLDIERS, Gifts for

How to send parcels to prisoners of war and interned civilians. For Comm W 11:41-3 Je 19 '43

Let him buy it at the post exchange. Consumers' Research Bul 12:5-7 N '43

What the men overseas want for Christmas. Adv & Sell 36:102, 106 O '43

SOLDIERS' and sailors' civil relief act. See Military service—Protective legislation**SOLDIERS' bonuses**

Bonus should help service men, not politicians. D. Emery. Comm & Fin Chr 158:839 Ag 26 '43

Financial recognition of ex-servicemen. J. G. Herndon. bibliog Ann Am Acad 227:122-7 My '43

SOLDIERS' pensions. See Pensions, Military**SOLDIERS' wives**

Maternity care for wives of men in military service. East Underw 44:13+ J1 9 '43

SOLENOIDS

Braking an inclined cableway with solenoid. R. C. Newhouse. diag Rock Prod 46:34 Ap '43

Manifold-solenoid de-icer systems with electronic control. M. L. Taylor and W. B. Pond. Il diags Aviation 42:144-7 N '43

Testing

Method for correlating duty-cycle tests on solenoids. J. E. Ryan. Elec Eng 62:Trans 579-81 S '43

SOLES

Replacements for shoe leather. W. Gallay. Il Can Chem & Process Ind 27:551-4 O '43

Standard soles; WPB puts leather, rubber, and synthetics on approximately same quality basis. Business Week p101-2 N 6 '43

SOLES, Plastic

Plastic soles, research overcoming many drawbacks. Il Business Week p70+ Ag 21 '43

SOLES, Rubber

Victory heels; reprocessing cost is greater than for crude. Business Week p34+ Je 12 '43

SOLID solutions. See Solutions, Solid**SOLIDS**

Frictional phenomena. A. Gemant. bibliog Phys J Ap Phys 13:688-96, 732-44; 14:204-16, 258-70, 456-64, 510-21 N-D '42, My-Je, S-O '43

See also

Crystals	Particles
Expansion (heat)	Powders
Granular materials	Solutions, Solid
Melting points	

SOLOMON islands

Solomon islanders. Sci Am 168:78-9 F '43

SOLS. See Colloids**SOLUBILITY**

Action of some aqueous solutions on clays of the montmorillonite group. P. G. Nutting. U S Geol S Professional Pa 197-F:219-35; pa 10c Supt. of doc. '43

Activity coefficients of lead chloride determined from e. m. f. and solubility data at 25° in ethylene glycol-water solutions. A. B. Garrett, R. Bryant and G. P. Kiefer. Am Chem Soc J 65:1905-7 O '43

Activity coefficients of thalious chloride in ethylene glycol-water solutions determined by e.m.f. and solubility data at 25°. O. D. Black and A. B. Garrett. bibliog Am Chem Soc J 65:862-5 My '43

Aqueous solubilities of *r*- and *l*-mandelic acids and three *O*-acyl-*r*-mandelic acids. W. R. Angus and R. P. Owen. Chem Soc J p231-2 My '43

Complex ions; monammine-silver ion. W. C. Vosburgh and R. S. McClure. Am Chem Soc J 65:1060-3 Je '43

Determination of the solubility of hydrogen in iron and iron alloys. J. H. Andrew, H. Lee and A. G. Quarrell. plan Iron & Steel Inst J 146:181-92 no 2 '42

Diffusion of solubilized dyes in water and through membranes. R. B. Dean and J. R. Vinograd. bibliog J Phys Chem 46:1091-8 D '42

Effect of gelatin on the solubility of thalious salts at 40° C. W. G. Eversole and F. S. Thomas. J Phys Chem 47:421-4 Je '43

Effect of pH on the solubility of calcium oxalate. W. H. McComas, Jr. and W. Rieman. 3d. Am Chem Soc J 64:2948-9 D '42

Hydrothermal study of equilibria in the system alumina-water. A. W. Laubengayer and R. S. Weisz. bibliog Il Am Chem Soc J 65:247-50 F '43

Ionization constant of carbonic acid in water and the solubility of carbon dioxide in water and aqueous salt solutions from 0 to 50°. H. S. Harned and R. Davis. jr. bibliog diags Am Chem Soc J 65:2030-7 O '43

Nature of the soluble and insoluble forms of gelatin. S. C. Goddard. Soc Chem Ind J 61:176-8 N '42

Polymorphism of bismuth trioxide. W. C. Schumb and E. S. Rittner. bibliog Am Chem Soc J 65:1055-60 Je '43

Solubility and electrophoretic studies of serum globulins; gamma globulin. E. Jameson and C. Alvarez-Tostado. Il Am Chem Soc J 65:459-65 Mr '43

Solubility effect in solvents of low dielectric constant; a study of the solubility effect in benzene. A. A. Vernon and J. F. Masterson. bibliog Am Chem Soc J 64:2822-3 D '42

Solubility of calcium oxalate monohydrate in pure water and various neutral salt solutions at 25°. W. H. McComas, Jr. and W. Rieman. 3d. bibliog Am Chem Soc J 64:2946-7 D '42

Solubility of hydrogen at low pressure in iron, nickel and certain steels at 400 to 600°. M. H. Armbruster. Am Chem Soc J 65:1043-54 Je '43

Solubility of melamine in water. R. P. Chapman, P. R. Averell and R. R. Harris. diag Ind & Eng Chem 35:137-8 F '43

Solubility of metals in mercury. abstract. C. H. Prescott, jr. Metals & Alloys 17:626 Mr '43

Solubility of potassium iodide in potassium hydroxide solutions at 20°. H. D. Kirschman and R. Pomeroy. Am Chem Soc J 65:1695-6 S '43

Solubility of solids in water vapor. G. W. Morey. Am Soc T M Proc 42:980-8 '42

Solubility of sulphur in butadiene-styrene copolymer. I. Williams. India Rubber W 108:35-6 Ap '43

Solubility product of barium chromate at various ionic strengths. G. L. Beyer and W. Rieman. 3d. bibliog Am Chem Soc J 65:971-3 My '43

Solubility studies; the solubilities of some isomeric ketones in water. J. H. Saylor, V. J. Baxt and P. M. Gross. bibliog Am Chem Soc J 64:2742-4 D '42

Some isotherms of the system sodium chromate-sodium chlorate-water. J. E. Ricci and C. Weltman. bibliog Am Chem Soc J 64:2746-8 D '42

Studies on high molecular weight aliphatic amines and their salts; the behavior of various salts of dodecylamine in water, ethanol and benzene. C. W. Hoerr and A. W. Ralston. bibliog Am Chem Soc J 64:2824-9 D '42

Study of heterogeneous equilibria in aqueous solutions of the sulfates of tetravalent vanadium at 30°. C. S. Rohrer, O. E. Lanford and S. J. Kiehl. bibliog Am Chem Soc J 64:2810-16 D '42

See also

Electrolytes
Solution (chemistry)

SOLUTION (chemistry)

Distribution equilibria between molten metals and molten salts, with reference to the stability of intermetallic compounds in the molten state. E. Heymann, R. J. L. Martin and M. F. R. Mulcahy. *bibliog J Phys Chem* 47:473-84 O '43

Electron transfer spectra and their photochemical effects. E. Rabinowitch. *bibliog* (84 references) *diags Rs Mod Phys* 14: 112-31 Ap-Jl '42

Molar polarizations in extremely dilute solutions. R. Davis, H. S. Bridge and W. J. Svirbely. *bibliog Am Chem Soc J* 65:857-62 My '43

Properties of rubber solutions and gels. M. L. Huggins. *bibliog Ind & Eng Chem* 35: 216-20 F '43

Rate of solution of magnesium in acids. T. H. James. *bibliog Am Chem Soc J* 65:39-41 Ja '43

Reactions of atoms and free radicals in solution; decomposition of acetyl peroxide in aliphatic acids, a new synthesis of succinic acid and its substitution derivatives. M. S. Kharasch and M. T. Gladstone. *bibliog Am Chem Soc J* 65:15-17 Ja '43

Spectra of ions in crystals and solutions; spectra of ions in fields of various symmetry in crystals and solutions. S. Freed. *bibliog Il Rs Mod Phys* 14:105-11 Ap-Jl '42

System ethyl alcohol-glycerol-carbon tetrachloride at 25°C. H. J. McDonald, A. F. Kluender and R. W. Lane. *J Phys Chem* 46:946-8 N '42

System water-*n*-butanol-toluene at 30°. R. M. Fuoss. *Am Chem Soc J* 65:78-81 Ja '43

Ternary liquid and binary vapor-liquid system; a method of tie line interpolation for phase equilibrium relations. C. E. Dryden. *bibliog Ind & Eng Chem* 35:492-4 Ap '43

Ultraviolet photometer for analysis of solutions. I. M. Klotz. *diag Ind & Eng Chem Anal ed* 15:277-8 Ap 15 '43

Vapor-liquid equilibria for commercially important systems of organic solvents; binary systems ethanol-*n*-butanol, acetone-water and isopropanol-water. A. S. Brunjes and M. J. P. Bogart. *bibliog Ind & Eng Chem* 35:255-60 F '43

Viscosities of polyester solutions; application of the melt viscosity-molecular weight relationship to solutions. P. J. Flory. *bibliog J Phys Chem* 46:370-7 N '42

Viscosity of dilute solutions of long-chain molecules; dependence on the solvent. M. L. Huggins. *bibliog J Ap Phys* 14:246-8 My '43

See also

Boiling points
Colloids
Crystallization
Diffusion
Electrolysis
Electrolytes

Ions
Precipitation
Raoult's law
Solubility
Solvents

Vapor pressure

See Vapor pressure

SOLUTION, Heat of

Induction furnace as a high temperature calorimeter and the heat of solution of silicon in liquid iron. J. Chipman and N. J. Grant. *bibliog Am Soc for Metals Trans* 31:365-78; Discussion. 378-9 Je '43

Phase equilibria in hydrocarbon systems; heat of solution of ethane and propane. R. A. Budenholzer, B. H. Sage and W. N. Lacey. *bibliog Il diag Ind & Eng Chem* 35:1214-20 N '43

Solubility studies; the solubilities of some isomeric ketones in water. J. H. Saylor, V. J. Baxt and P. M. Gross. *bibliog Am Chem Soc J* 64:2742-4 D '42

SOLUTIONS, Solid

Effect of elements in solid solution on hardness and response to heat treatment of iron binary alloys. C. R. Austin. *bibliog Am Soc for Metals Trans* 31:321-35; Discussion. 335-9 Je '43

Magnetic properties of solid solutions; the paramagnetic alloys of copper and nickel. A. R. Kaufmann and C. Starr. *bibliog Phys R* 63:445-50 Je 1 '43

Studies on aging and coprecipitation: the distribution coefficient of arsenate between magnesium ammonium phosphate and solution. I. M. Kolthoff and C. W. Carr. *J Phys Chem* 47:148-52 F '43

See also

Isomorphism

SOLUTIONS, Standard

Stability of the cupric-ammonia color system. J. P. Mehlig. *Ind & Eng Chem Anal ed* 14: 903 N 15 '42

SOLVENT extraction. See Extraction processes

SOLVENTS

ABC of chemical derivatives from petroleum; solvents and plasticizers. R. L. Wakeman and B. H. Weil. *Il Nat Pet N* 35 pt 2:R107-12 Mr 3 '43

Action of cuprous oxide on diazotised amines; reactions in solutions of various alcohols and organic solvents; preparation of 1:6-dinitronaphthalene. H. H. Hodgson and H. S. Turner. *Chem Soc J* p86-9 Mr '43

Alcohol and acetone by solvent extraction; heat requirements of distillation and of combined distillation and extraction processes. D. F. Othmer and R. L. Katchiffe, jr. *Il diags Ind & Eng Chem* 35:798-805 Jl '43

Alcohol and solvents, 1942. *Chem & Met Eng* 50:114-15 F '43

Attempted asymmetric syntheses involving the Grignard reagent in optically active solvents. D. S. Tarbell and M. C. Paulson. *bibliog Am Chem Soc J* 64:2842-4 D '42

Binary solvents for zein. R. H. Manley and C. D. Evans. *bibliog Ind & Eng Chem* 35: 661-5 Je '43

Chemical removal of scale from heat-exchange surfaces. G. F. Williams. *Il diag Power* 87:20-2 Ja '43

Classification of solvents and naphthas. W. L. Nelson. *Oil & Gas J* 41:134-5 Ap 15 '43

Compounding neoprene latex; effect of solvents on films containing various materials. B. Dales, R. H. Walsh and H. H. Abernathy. *India Rubber W* 108:146-7 My '43

Determination of monoalkyl ethers of ethylene glycol. H. W. Werner and J. L. Mitchell. *bibliog Ind & Eng Chem Anal ed* 15:375-6 Je 15 '43

Dissociation constants of some acids in mixed solvents. J. C. Speakman. *Chem Soc J* p270-3 Je '43

Effect of dielectrics and solvent upon the regeneration in acid solution of alkali-faded bromophenol blue. E. S. Amis and J. B. Price. *bibliog J Phys Chem* 47:338-48 Ap '43

Effect of petroleum solvents on the cold resistance of synthetic vulcanizates. R. E. Morris and others. *Il India Rubber W* 108: 553-5+ S '42

Effect of solvents on the absorption spectra of dyes; some dyes other than cyanines. S. E. Sheppard and P. T. Newsome. *Am Chem Soc J* 64:2937-46 D '42

Effect of temperature on liquid-liquid equilibrium; benzene-acetone-water system and dodecane-1,6-diphenylhexane-furfural system. S. W. Briggs and E. W. Comings. *Il diags Ind & Eng Chem* 35:411-17 Ap '43

Ground glass for spot testing in solvent extractions. A. Edeler. *Ind & Eng Chem Anal ed* 15:282 Ap 15 '43

Hezene and its implications; solvent distilled from scrap rubber; abstract. F. N. Pickett. *India Rubber W* 107:298 D '42

Homogeneous catalysis and solvent effects in a diene synthesis. A. Wassermann. *Chem Soc J* p623-6 O '42

Industrial applications of the nitroparaffins. W. E. Scheer. *Chem Ind* 52:473-4 Ap '43

Influence of addenda on the inversion of l-menthone with acids in benzene; the effect of solvents in chemical reactions. A. Weissberger. *Am Chem Soc J* 65:242-5 F '43

Inversion of menthone with trichloroacetic acid in aprotic solvents. A. Weissberger. *bibliog Am Chem Soc J* 65:102-10 Ja '43

Magneto-optic rotation; acetic and chloroacetic acids in polar and non-polar solvents. C. E. Waring, S. Steingiser and H. H. Hyman. *Am Chem Soc J* 65:1066-8 Je '43

SOLVENTS—Continued

- Micro-scale extractions by organic solvents. F. F. Hight and E. J. Callow. *diag Soc Chem Ind J* 62:32 F '43
- Mixed solvent extraction; analytical method; application of analytical geometry. J. H. Wiegand. *bibliog Ind & Eng Chem Anal ed* 15:380-3 Je 15 '43
- Modification of the silica gel method for the determination of atmospheric organic solvent vapors. L. V. Cralley, T. E. Shea and L. J. Cralley. *bibliog J Ind Hygiene* 25:172-4 Ap '43
- Molal depression constant for camphor. W. B. Meldrum, L. E. Saxer and T. O. Jones. *bibliog Am Chem Soc J* 65:2023-5 O '43
- New uses for solvent processes. G. F. Fitzgerald. *bibliog Pet Refiner* 22:93-4 O '43
- Organic industrial solvents; in terms of their fire hazards. W. H. Easton. *bibliog Ind Med* 12:647-9 O '43
- Orientation of molecules produced photochemically in rigid solvents. G. N. Lewis and J. Bigeleisen. *Am Chem Soc J* 65:520-6 Ap '43
- Rate of conversion of ammonium cyanate to urea in non-aqueous solvents. W. J. Svirbely and S. Peterson. *Am Chem Soc J* 65:166-70 F '43
- Reactions of cellulose in liquid sulfur dioxide. P. C. Scherer, Jr. and L. C. Brooks. *bibliog Rayon* 23:657-8, 718-20 N-D '42
- Round-table discussion on the solvent action of water vapor at high temperature and pressure. M. Hecht and others. *Am Soc T M Proc* 42:977-1022 *bibliog* (58 titles, p 1020-2) '42
- Solubility effect in solvents of low dielectric constant; a study of the solubility effect in benzene. A. A. Vernon and J. P. Master-son. *bibliog Am Chem Soc J* 64:2822-3 D '42
- Solvent effects in association equilibria. A. Wassermann. *Chem Soc J* p621-3 O '42
- Solvent extraction; removing undesirable constituents from oils; abstract. H. ter Meulen. *diag Chem Age (Lond)* 43:131-2 Ja 23 '43
- Solvent polarization error and its elimination in calculating dipole moments. I. F. Hal-verstadt and W. D. Kumlner. *bibliog Am Chem Soc J* 64:2988-92 D '42
- Solvent properties of C₆ aromatic hydrocarbons. P. D. Hammond and E. H. Mc-Ardle. *bibliog Ind & Eng Chem* 35:809-10 Ji '43
- Solvents in extraction of tung oil. A. F. Freeman, F. C. Pack and R. S. McKinney. *bibliog J Ind & Eng Chem* 35:1156-9 N '43
- Solvents in industry (cont). *Metal Finishing* 41:56-7, 192-3 Ja, Mr '43
- Solvents; papers presented at 105th meeting of American chemical society, Detroit. *Jl diags Ind & Eng Chem* 35:1019-77 O '43
- Solvents used to remove moisture from timbers. *Eng N* 129:721 N 19 '42
- Some effects of solvents upon the absorption spectra of dyes; chiefly polymethine dyes. S. E. Sheppard, P. T. Newsome and H. R. Brigham. *bibliog diags Am Chem Soc J* 64:2923-37 D '42
- Spot reaction experiments; solvent effects. F. Feigl. *J Chem Educ* 20:300-1 Je '43
- Strength of nitrocellulose solvents; reprinted from *Ind & Eng Chem*, Feb. '38. A. K. Doolittle. *Metal Finishing* 41:45-50, 52 *bibliog* (p57) Ja '43
- Vapor-liquid equilibria for commercially important systems of organic solvents; binary systems ethanol-n-butanol, acetone-water and isopropanol-water. A. S. Brunjes and M. J. P. Bogart. *bibliog Ind & Eng Chem* 35:255-60 F '43
- Viscosity of n-paraffin solutions; viscosity and structural relations of linear polymers. A. R. Kemp and H. Peters. *bibliog Ind & Eng Chem* 35:1108-12 O '43
- War-time developments in solvents. A. M. Peake. *Chem Age (Lond)* 43:55-9 Ja 9 '43

See also

Acetone
Alcohol
Alcohols
Ammonia

Benzene
Butanone
Butyl alcohol
Carbon tetrachloride

Chloroform
Cleaning composi-
tions
Cyclohexane
Furfural

Glycol
Methyl chloride
Propane
Trichloroethylene

Physiological effect

- Acute toxicity of vapors of certain solvents containing appreciable amounts of benzene and toluene. J. L. Svirbely, R. C. Dunn and W. F. von Oettingen. *bibliog J Ind Hygiene* 25:366-73 O '43
- Acute toxicity of vapors of several monoalkyl ethers of ethylene glycol. H. W. Werner and others. *bibliog diag J Ind Hygiene* 25:157-63 Ap '43
- Carbon tetrachloride, from the health viewpoint. H. P. Quadland. *Rubber Age* 53:141-2 My '43
- Chlorinated solvent exposures at degreasing operations. K. M. Morse and L. Goldberg. *bibliog J Ind Med* 12:706-13 O '43
- Chlorinated solvents in common wartime use. D. H. Byers. *bibliog Ind Med* 12:440-3 Ji '43
- Effects of repeated exposures of rats to vapors of monoalkyl ethylene glycol ethers. H. W. Werner and others. *bibliog J Ind Hygiene* 25:374-9 O '43
- Hazards and control of industrial toxic solvents. W. M. Pierce. *bibliog Chem & Met Eng* 49:85-7 D '42
- Hazards of organic solvents; data sheet. H. P. Quadland. *Factory Management* 101:164, 166 O '43
- Investigation into the effects of continued exposure to the vapor of volatile solvents. E. M. Killick and R. S. F. Schilling. *bibliog J Ind Hygiene* 24:307-14 D '42
- Sensory response to certain industrial solvent vapors. K. W. Nelson and others. *bibliog J Ind Hygiene* 25:282-5 S '43
- Toxic anemia. E. Browning. *bibliog J Ind Hygiene* 25:124-31 Mr '43
- Ventilation for control of solvent exposures in fabricating rubber military equipment. T. R. Thomas and B. D. Tebbens. *bibliog diags Heating-Piping* 15:122-6 Mr '43; *Same*. *Ind Med* 12:255-9 Ap '43
- Ventilation requirements for solvents in industrial tanks. *bibliog diags J Ind Hygiene* 25:306-19 S '43

Recovery

- Companies engaged in solvent recovery service; list. *Metal Finishing* 40:664-5 D '42
- New York daily news; rotogravure printing plant recovers ink-solvent, employing activated carbon adsorption method. T. F. J. Moffett. *flow diag J Heat & Ven* 40:33-6 Ap '43
- Problems in filter operation. *Textile Col* 65:127-8 Mr '43
- Recovery of solvents used in the chemical determination of thiamine. M. Pader. *Ind & Eng Chem Anal ed* 15:25 Ja 15 '43
- SOMERVELL, Brehon Burke, 1892-
Commanding general, Army service forces; portrait. *Ry Age* 115:128 Ji 24 '43
- Sketch. *por Civil Eng* 13:51-3 Ja '43

SONGS

See also
Music publishing

SONIC interferometers. *See* Interferometers, Sonic

SOO canal. *See* Sault Sainte Marie canal

SOOT

Chemical fuel-savers and soot-removers. *Jl Consumers' Research Bul* 12:21-2 O '43

See also
Smoke

SOOT blowers

Soot blower, with special reference to the present position of power and automatic operation of mechanical blowers. R. J. Glinn. *bibliog Jl diags Inst E E J* 89 pt 2: 533-48 D '42; *Same* *abr. Engineering* 154: 75, 87-8, 105 Ji 24-Ag 7 '42; *Same* *cond. Inst Mech Eng J & Proc* 149:Proc 89-98, pl 1-2 Je '43; *Discussion. Inst E E J* 89 pt 2:548-54; 90 pt 2:259-61 D '42, Ag '43; *Engineering* 154:14 Ji 3 '42

SORBITOL

Mannitol and sorbitol; the development of a new electrochemical industry. H. J. Creighton, *il plan Can Chem & Process Ind* 26:690-6 D '42

Sorbityl glycosides and 2,3,4,5,6-O-penta-methyl sorbitol. M. L. Wolfson and T. S. Gardner, *bibliog Am Chem Soc J* 65:750-2 My '43

SORGHUM

Production of waxy corn and waxy sorghum starches; abstract. M. M. Mc Masters and G. E. Hilbert, *Chem & Met Eng* 50:175-6 Ag '43

Research promises relief from starch troubles. R. S. McBride, *il Food Ind* 15:56-7 Ja '43

See also

Kafir**SORCABANA railway**

Sorocabana electrification; electric operation of meter gage line in Brazil will liquidate investment in less than ten years. D. Muylaert, *diags map Ry Age* 114:956-8 My 15 '43

SORTING devices

Aircraft rivets sorted by machine. *Iron Age* 151:106 F 18 '43

Automatic sorters for aircraft rivets. H. O. Mills and L. Donner, *il diags Am Mach* 87:105-8 Jl 8 '43

Electronic sorting and testing; Cyclograph. *il Iron Age* 152:57-8 N 4 '43

Magnetic methods of sorting steel scrap. W. L. Nelson, *il Oil & Gas J* 41:42 D 24 '42

Rivet sorting machines. *il Aero Digest* 42:370+ Mr '43; Same cond. *Mach* 49:179 My '43; Excerpts. *Steel* 112:52 Mr 29 '43

SOUND

General reactance theorem for electrical, mechanical, and acoustical systems. D. Maa, *bibliog diags Inst Radio Eng Proc* 31:365-71 Jl '43

Transient analysis of linear systems. M. F. M. Osborne, *bibliog J Ap Phys* 14:180-4 Ap '43

Under water sound of natural origin. E. O. Hulburt, *Acoustical Soc Am J* 14:173-4 Ja '43

See also

Acoustics, Archi-

tectural

Doppler effect

Hearing

Music

Noise

Sound waves

Soundproofing

Television broadcast-

ing—Sound prob-

lems

Tones

Ultrasonic waves

Vibration

Absorption

Application of sound absorption to factory noise problems. H. J. Sabine and R. A. Wilson, *Acoustical Soc Am J* 15:27-31 Jl '43

Supersonic measurements in CO₂ and H₂O at 98°C. W. H. Pielemier and W. H. Byers, *bibliog Acoustical Soc Am J* 15:17-21 Jl '43

Use of the Pierce interferometer for measuring the absorption of sound in gases. H. C. Hardy, *bibliog diags Acoustical Soc Am J* 15:91-5 O '43

See also

Sound absorbent materials

Apparatus

Automatic frequency-controlled oscillator and amplifier for driving mechanical vibrators. E. V. Potter, *diags U S Bur Mines Rep of Invest* 3702:1-10 '43; Same, *R Sci Instr* 14:207-15 Jl '43; Abstract. *Electronics* 16:194+ N '43

Conditions for wide angle radiation from conical sound radiators. R. W. Carlisle, *Acoustical Soc Am J* 15:44-9 Jl '43

Encephalophone converts brain potentials into sounds. *diag Electronics* 16:144+ My '43

Mechanical impedance bridge. A. M. Wiggins, *il diags Acoustical Soc Am J* 15:50-3 Jl '43

Rochelle salt crystal devices of low impedance; Monobar unit. R. W. Tibbetts, *il diags Electronics* 16:88-90+ Ap '43

Scale audibly indicates selected standard weight. *diag Electronics* 16:104 Ja '43

See also

Acoustic patents

Hearing aids, Me-

chanical

Interferometers,

Sonic

Kundt tube

Loud speaking appa-

ratus

Microphones

Moving pictures,

Talking

Phonograph

Radio apparatus

Sound—Measure-

ment

Sound—Recording

and reproducing

Sound filters

Telephone

Bibliography

Current publications on acoustics. *Acoustical Soc Am J* 14:195-7 Ja '43 [cont quarterly]

Measurement

Improved telephone receiver analysis. R. D. Pay, *diag Acoustical Soc Am J* 15:32-40 Jl '43

Measurements pertaining to the co-ordination of radio reception with power apparatus and systems. C. M. Foust and C. W. Frick, *Elec Eng* 62:Trans 284-6 Je '43

Recording audio analyzer. *il diags Electronics* 16:100-3+ Jl '43

Sound; accurate measuring equipment. W. Mikelson, *il Gen Elec R* 45:685-90 D '42

Sound attenuation in air ducts. B. G. Church-er and A. J. King, *il diags Engineering* 156:221-2 S 17 '43

Use of the Pierce interferometer for measuring the absorption of sound in gases. H. C. Hardy, *bibliog diags Acoustical Soc Am J* 15:91-5 O '43

Recording and reproducing

All-electronic sound reproducer. F. M. Parry, *diag Electronics* 16:280-2 Ag '43

Details of the Vultee flight test recorder. *il diags Aero Digest* 42:255-6, 258, 261-2 F '43

Flight recorder for aircraft. H. D. Giffen, *il diags Radio N* 29:14-17+ Ap '43

M-G-M recorder and reproducer equipment units. W. C. Miller, *il diags Soc Motion Picture Eng J* 40:301-26 My '43

New flight testing apparatus radios precise plane data; instrument developed by the Consolidated-Vultee aircraft corporation. *il diags Product Eng* 14:395-9, 512-16 Jl-Ag '43

Recording war news with the SX-28. O. Read, *il diags Radio N* 29:18-21+ F '43

Saves film in sound recorder; sprocket and film drum; patent assigned to the Radio corp. of America. *diag Machine Design* 15:172+ Je '43

Selected problems in architectural acoustics; problems pertaining to recording studios and conditions of microphone pickup. M. Rettinger, *Inst Radio Eng Proc* 31:18-22 Ja '43

Some recent developments in record reproducing systems. G. L. Beers and C. M. Sinnott, *diags Inst Radio Eng Proc* 31:138-46 Ap '43; Same, *Soc Motion Picture Eng J* 40:222-41 Ap '43

Sound and projection equipment in War department theaters. G. L. Bub, *il Soc Motion Picture Eng J* 40:35-51 Ja '43

Sound-on-film, new recorder operates for eleven hours. *il Sci Am* 168:225 My '43

Sound recording depends upon electronics. C. R. Keith, *il Electronics* 16:114-15 Mr '43

Sound through magnetism. *Fortune* 28:6+ S '43

Techniques of sound recording. F. E. Butler, *il plan Radio N* 30:21-3+ N '43

Versatile recorder for military and civilian use. O. Read, *il diag Radio N* 28:14-17+ O '42

Vultee radio recorder. H. D. Giffen, *il diags Aeronautical Eng R* 2:9+ Jl '43; Same abr. *Automotive & Aviation Ind* 89:24-8 Ag 15 '43

Wire recorders for army. *il Electronics* 16:234+ O '43

See also

Moving picture sound recording

Moving pictures,

Talking

Phonograph

SOUND—Continued

Tables

Acoustical tables for air and sea water. W. L. Woolf. *Acoustical Soc Am J* 15:83-6 O '43

Velocity

Supersonic measurements in CO₂ and H₂O at 38°C. W. H. Pielemeier and W. H. Byers. *bibliog Acoustical Soc Am J* 15:17-21 JI '43

Supersonic measurements in CO₂ at 0° to 100°C. W. H. Pielemeier. *bibliog Acoustical Soc Am J* 15:22-6 JI '43

Velocity of sound as a bond property. R. T. Lagemann and J. E. Corry. *J Chem Phys* 10:769 D '43

SOUND absorbent materials

Making light weight acoustic block; Haydite products co. R. S. Torgerson. *il Rock Prod* 46:87-8 Ap '43

What to do about noise. *Fortune* 28:14+ JI '43

See also

Soundproofing

SOUND filters

Filtered thermal noise; fluctuation of energy as a function of interval length. S. O. Rice. *Acoustical Soc Am J* 14:216-27 Ap '43

SOUND laboratories

Acoustic laboratory in the new RCA laboratories. H. F. Olson. *il plans Acoustical Soc Am J* 15:96-103 O '43

SOUND perception. See Hearing

SOUND production by animals

See also

Insects—Sound production

SOUND recording, Moving picture. See Moving picture sound recording

SOUND waves

Observations on the vibrations of piano strings. O. H. Schuck and R. W. Young. *bibliog il diags Acoustical Soc Am J* 15:1-11 JI '43

Properties and applications of phase-shifted rectified sine waves. J. T. Tykociner and L. R. Bloom. *il diags III U Eng Exp Sta Bul* 339:1-82 '42 (pa 60c)

Specular reflection of plane wave pulses in media of continuously variable refractive properties. M. E. Rose. *Phys R* 63:111-20 F 1 '43

See also

Ultrasonic waves

SOUNDING

Air pressure bag plots stream bed; taking soundings in connection with pipe-line crossing of Sacramento river. J. A. Oldham. *il diag Elec W* 120:1364 O 16 '43

Dredged depth measurements aided by double target row. *il Eng N* 129:846 D 17 '42

SOUNDPROOFING

Comfortization of military aircraft. A. A. Arnheim. *il diags Aero Digest* 41:202+ N '42

Conditioned air can't go on the air at Hollywood Radio City; maintenance of sound-proof system. H. C. Alber. *il Heating-Piping* 15:476 S '43

Discussion of acoustic cells for airplane engine test buildings. D. Fitzroy. *diags Acoustical Soc Am J* 15:106-13 O '43

Engine test cells designed for sound reduction. *il plans Eng N* 130:812-13 Je 3 '43

Haydite units supply sound insulation in NBC building. *il Concrete* 51:21 JI '43

Jobs for builders in sound conditioning war plants. *il Am Bld* 65:50+ S '43

Shell soundproofs test well. L. P. Stockman. *il Oil & Gas J* 41:55-6, 59 F 25 '43

Sound attenuation in air ducts. B. G. Churcher and A. J. King. *il diags Engineering* 156: 221-2 S 17 '43

Sound-proof airplane motor test chambers. I. E. Katel. *diags Acoustical Soc Am J* 15: 114-15 O '43

See also

Acoustics, Architectural

Sound absorbent materials

SOUP, Dried

All-America package competition award; Shellmar products company paper-and-cellophane pouch for soup mixes. *il Mod Packaging* 16:86+ Ap '43

Army specifications for dehydrated foods; cream of Swiss cheese soup. *Food Ind* 15: 53+ Mr '43

Army specifications for dehydrated foods; soup mixtures—dehydrated, powdered, pastes. *Food Ind* 15:71+ F '43

SOUTH

History

Tutwiler collection of southern history and literature. S. A. Maxwell. *Special Lib* 33: 367-9 D '42

Industries and resources

Deep South looks up; it sees an opportunity, with northern aid, to join the Union. *il Fortune* 28:94-100+ JI '43

New geography of American business; industrialization of southern states. W. H. Hillier. *map Barron's* 23:4 Je 28 '43

South offers greatest economic future of any section of the United States; plans of Sears, Roebuck southern merchandise office. *J. Jernan. Manuf Rec* 112:32-3+ N '43

South produces for the navy, for the army, for the merchant marine. C. C. Bloch; W. S. Knudsen; E. S. Land. *Manuf Rec* 112:38-9 S '43

South's industrial war effort. *il maps Manuf Rec* 112:47-58 S '43

See also

Building—Southern states

Lumber trade—Southern states

Forests and forestry

—Southern states

SOUTH AFRICA

See also

Chemical industries

—South Africa

Electric industries—

South Africa

Fruit trade—South

Africa

Platinum mines and

mining—South

Africa

Radio apparatus in-

dustry—South

Africa

Rubber industry and

trade—South

Africa

Economic conditions

News by countries. *For Comm W* 11:26-7 My 22; 26 Je 12; 12:21 JI 10; 29-30 Ag 21; 24 S 11; 13:27 O 23 '43

South Africa in 1942. *Economist* 144:sup10 Mr 13 '43

Economic policy

Union of South Africa National supply council formed. *For Comm W* 11:25 Ap 17 '43

Industries and resources

Antipodes come of age industrially; upsurge in South Africa, Brazil, Australia and the Argentine. G. Riviere. *Mag of Wall St* 72:360-1+ JI 10 '43

SOUTH AMERICA

See also

Cooperation—South

America

Latin America

Mines and mineral

resources—South

America

Waterways—South

America

Commerce

BEW rules for exports to South America revised. *Oil Paint & Drug Rep* 143:7+ Mr 15 '43

See also

Latin America—

Commerce

Industries and resources

South America's wine industry. A. J. Mullen. *il For Comm W* 11:5-7+ Je 12 '43

See also

Maté

Sanitary affairs

Sewage disposal in South America. E. J. Cleary. *il Eng N* 131:551-2 O 7 '43

SOUTH AUSTRALIA, Royal society of. See Royal society of South Australia

SOUTH CAROLINA

See also Mines and mineral resources—
South Carolina

Industries and resources

- Industrial development in the Carolinas. W. T. White. Manuf Rec 112:80-1+ O '43
- SOUTH CAROLINA electric and gas company**
Files \$20,000,000 proposal with SEC. Comm & Fin Chr 158:34 J1 5 '43
Invites bids for sale of \$20,000,000 bonds. Comm & Fin Chr 158:398 J1 26 '43
Lexington water power co. merger approved. Comm & Fin Chr 157:2349-50 Je 21 '43
\$20,000,000 bonds offered; consolidation and merger of Lexington water power co. into the company. Comm & Fin Chr 158:493 Ag 2 '43
- SOUTH Porto Rico sugar company**
Another look. Mag of Wall St 71:197 N 28 '42
- SOUTHEASTERN underwriters association**
Annual meeting, 62d, New York, May 26. Weekly Underw 148:1146-7 My 29 '43
Fire companies file rebuttal argument to government charges. East Underw 44:1+ My 21 '43; Nat Underw 47:1+ My 20 '43; Nat Underw (Life ed) 47:1+ My 21 '43
Fire insurance indictment; text of action brought by the federal government. Spectator (Property ed) 8:20-1, 44-6+ D 10 '42
History and functions. L. T. Wheeler. Nat Underw 47:3+ J1 8 '43
SEUA companies take firm stand at Atlanta. F. C. Crowell, jr. and J. B. Hosmer. Ins Field (Fire ed) 72:5-6+ My 27 '43
S.E.U.A. demurrer raises the fundamental issues. Nat Underw 47:3 Ja 21 '43
S.E.U.A. files brief supporting its demurrer. Nat Underw 47:7 Ap 22 '43
S.E.U.A. indicted by federal grand jury. East Underw 43:14+ N 27 '42; Ins Field (Fire ed) 71:7 N 26 '42; Nat Underw 46:1+ N 26 '42; Weekly Underw 147:1237+ N 28 '42
S.E.U.A. scores complete victory in Atlanta case; with text of Judge Underwood decision. Nat Underw 47:1+ Ag 12 '43; Same. Nat Underw (Life ed) 47:1+ Ag 13 '43
Text of Judge Underwood decision in Southeastern underwriters association, et al. case. East Underw 44:17+ Ag 13 '43; Same. Ins Field (Fire ed) 72:6-7 Ag 12 '43; Same. Spectator (Property ed) 9:12-13 Ag 19 '43; Same. Weekly Underw 149:293+ Ag 14 '43
Underwriters pleased over SEUA action. Weekly Underw 149:293+ Ag 14 '43
- SOUTHERN Bell telephone and telegraph company**
Earnings, 1939-1942. Comm & Fin Chr 157:822 Mr 1 '43
- SOUTHERN brick and tile manufacturers association**
Practical promotion helps sell clay products. G. H. Merry. il diags Brick & Clay Rec 102:24-8 Ap '43
- SOUTHERN California Edison company**
Annual report. Comm & Fin Chr 157:998 Mr 15 '43
FPC approves change in plant account. Comm & Fin Chr 157:559 F 8 '43
- SOUTHERN Colorado power company**
New plan drafted by SEC unit. Comm & Fin Chr 157:350 Ja 25 '43
- SOUTHERN combed yarn spinners association**
Annual meeting, Charlotte, N.C. Sept. 17. Textile World 93:79 O '43
- SOUTHERN Pacific railroad**
Annual report. Comm & Fin Chr 157:822-3 Mr 1 '43
Equipment trusts offered. Comm & Fin Chr 156:2140 D 14 '42
Investment audit. P. R. Bretey. Mag of Wall St 72:144-6+ My 15 '43
Operations and financial affairs of the Southern Pacific company and affiliated companies for the year ended Dec. 31, 1942. Ry Age 114:964-7 My 15 '43
Railroad securities. Comm & Fin Chr 157:357-4 Ja 28 '43
Railroad securities. Comm & Fin Chr 158:5+ J1 1; 689 Ag 19 '43
Record freight volume in 1942; last year's activities reviewed. Comm & Fin Chr 157:173 Ja 11 '43

Southern Pacific handles a staggering load. il map Ry Age 114:706-9, 779-83 Ap 10-17 '43

SOUTHERN Pacific transportation system

Operations and financial affairs of the Southern Pacific company and affiliated companies for the year ended Dec. 31, 1942. Ry Age 114:964-7 My 15 '43

SOUTHERN railway

Annual report, 1942. Comm & Fin Chr 157:1358-9, 1366 Ap 12 '43
Investment audit. P. R. Bretey. Mag of Wall St 72:79-81+ My 1 '43
Thumbnail stock appraisal. Mag of Wall St 71:179 N 28 '42
War stocks with good peace prospects. Mag of Wall St 72:420 J1 24 '43

SOUTHERN union gas company

Merger effective, stock subscriptions, bonds placed privately. Comm & Fin Chr 156:1370-1 N 23 '42
Offers revised plan. Comm & Fin Chr 158:295 J1 19 '43
Plan approved. Comm & Fin Chr 158:1863 N 8 '43

SOUTHWESTERN light and power company

Hearing on plan. Comm & Fin Chr 157:1653-4 My 3 '43

SOVEREIGN immunity. See Immunity (law)

SOYA food research council

Organization. Food Ind 15:111 J1 '43

SOYBEAN flour

Control of thermophilic bacteria in canned meat mixtures. L. B. Jensen and W. R. Hess. il Food Ind 15:66-7 Mr '43
Determination of the stability of oils and fats. N. D. Sylvester, L. H. Lampitt and A. N. Ainsworth. bibliog il diags Soc Chem Ind J 61:165-9 N '42
Fortification of oil, fat, and flour; stability of added carotene and effect of antioxidants. P. W. Morgal, L. W. Byers and E. J. Miller. bibliog Ind & Eng Chem 35:794-7 J1 '43
Nutritive value of cotton, peanut, and soy seeds. T. F. Zucker and L. Zucker. bibliog Ind & Eng Chem 35:868-72 Ag '43
Soya flour for bread requires FDO order. Food Ind 15:112-13 N '43
Soybean battle; WFA's plans run afoul Food & drug administration standard. Business Week p94+ S 18 '43

SOYBEAN meal

Challenge to food technologists; oil-seed meals offer opportunity for preparing high-protein foods. il Food Ind 15:53 Ap '43
Lipid oxidase in soybean meals. R. J. Sumner and D. K. Tressler. Ind & Eng Chem 35:921 Ag '43
Soybean-modified phenolic plastics. L. L. McKinney and others. Ind & Eng Chem 35:905-8 Ag '43

Prices

Cottonseed, soybean, peanut meals ceiled. Oil Paint & Drug Rep 144:7+ Ag 9 '43

SOYBEAN oil

Deterioration of lubricating oils; soybean lecithin as an inhibitor. J. J. Jacobs and D. F. Othmer. bibliog il diags Ind & Eng Chem 35:883-9 Ag '43
Dr Marcus W. Hinson to study soybean damage. Soap & San Chem 19:69 J1 '43
Drying oils from liquid fats; fractionation by solvent extractions. A. W. Kleinsmith and H. R. Kraybill. bibliog Ind & Eng Chem 35:674-6 Je '43
Vegetable oils and products, 1938-1941. Survey of Cur Business 1942 Sup p109 [supplemented in monthly numbers]

SOYBEANS

Agripol from soy beans. Rubber Age 52:243-4 D '42
Coming soon: aggressive promotion for soya, that miracle bean. L. B. Colby. il Sales Management 52:88+ S 15 '43
Commercial production of chemurgic rubber Agripol, made from soybeans and alcohol. India Rubber W 107:283 D '42
Corn comes back; soybeans also gain. Business Week p66 O 16 '43
Development of soybean fiber by Ford. L. Stouffer. il Rayon 23:649-52 N '42

SOYBEANS—Continued

- Fibers for tomorrow; protein fibers: soybean. N. Clarey, jr. Textile Col 65:438 O '43
- Lecithin, mystery element of soya. A. Semrad. Barron's 23:28+ S 20 '43
- Microscopical identification of Lanital, Aralac and soybean fibers. G. L. Royer. *Il Am Dyestuff Rep* 32:165-6 Mr 29 '43
- Oil content of soybeans; abstract. R. S. Davis. Soap & San Chem 19:62 Je '43
- Soya rubber; Reichhold chemicals, inc. of Detroit, is in mass production of Agripol. Business Week p68+ N 28 '42
- Soybean, cottonseed control bands tightened; WFA soybean program issued. Oil Paint & Drug Rep 144:5+ S 27 '43
- Soybean inventories limited by CCC. Oil Paint & Drug Rep 143:5+ F 22 '43
- Soybean plastics. G. H. Brother. *Il Chem & Eng N* 20:1511-12 N 25 '42
- Soybean protein dispersions as printing ink vehicles. A. F. Schmutzler and D. F. Othmer. *bibliog il Ind & Eng Chem* 35: 1196-1202 N '43
- Soybean tangle. Business Week p88+ Ag 7 '43
- Soybeans used to produce laminated board; abstract. G. H. Brother. Science 97:sup9 Ja 29 '43
- Supplemental soy. Franklin Inst J 236:233 Ag '43
- Synthetic rubber from soy beans. *il Manuf Rec* 111:24+ D '42
- Vegetable oils and products, 1938-1941. Survey of Cur Business 1942 Sup p109 [supplemented in monthly numbers]
- Vitamins in edible soybeans. P. R. Burkholder. *bibliog Science* 98:188-90 Ag 27 '43

Prices

- Soybeans celled at \$1.66 per bushel. Oil Paint & Drug Rep 143:5 F 22 '43

SPACE

- Cellular division of space with minimum area. J. Lifshitz. *diags Science* 97:268 Mr 19 '43

SPACE (architecture)

- Freedom and space in small house planning; building types study. *il diags plans Arch Rec* 92:57-64 N '42

SPACE, Interstellar

- Galactic gas clouds; complex system of enormous rarefied clouds of gas moving at high velocity has been discovered. H. N. Russell. *il Sci Am* 169:62-3 Ag '43

SPACE charge

- Fluctuations in space-charge-limited currents. D. A. Bell. *bibliog Inst E E J* 89 p23:207-12 D '42
- Shot-effect in space-charge-limited diodes. D. M. Surdin. *Wireless Eng* 20:127-30 Mr '43

SPACE rationing. See Advertising mediums—Space rationing**SPACE selling.** See Advertising, Soliciting of**SPACING (machine work).** See Locating (machine work)**SPAIN**

See also

- Insurance, Social— World war, 1939—
Spain Spain

Commerce

- Spain planning to pay frozen U.S. claims. Comm & Fin Chr 157:2288 Je 17 '43
- Spain to pay on U.S. commercial debts. Comm & Fin Chr 158:126 JI 8 '43
- Spanish commercial debt to American creditors. For Comm W 12:32-3 JI 10 '43

Foreign relations**United States**

- Spain and Portugal reassured by FDR. Comm & Fin Chr 156:1984 D 3 '42
- Sumner Welles issues statement regarding U.S. oil and food shipments to Spain. Comm & Fin Chr 157:847 Mr 4 '43

SPANISH Americans. See Latin America**SPANISH Americans in the United States**

- Regional patterns of dietary deficiency; Spanish-Americans of New Mexico and Arizona. C. A. Heller. Ann Am Acad 226:49-51 Ja '43

SPANISH language

- 20 schools give air training in Spanish. Civil Aero J 4:26 Mr 15 '43

Glossaries, vocabularies, etc.

- English-Spanish, Spanish-English dental vocabulary, including many medical terms. J. S. F. Marie. 159p \$4 Jaques Cattell press, Lancaster, Pa. '43

SPARK arresters

- Modern spark arrester design; abstract. A. I. Chipley and H. H. Darbo. *il diags Marine Eng* 48:216, 218+ O '43
- Removable spark arrester for locomotives. S. H. Kahler. *il Ry Mech Eng* 116:325 JI '43

SPARK gap

- Dielectric-recovery characteristics of large air gaps. G. D. McCann and J. J. Clark. *bibliog il diags Elec Eng* 62:Trans 45-52 Ja '43
- Electric spark in air. J. M. Meek. Inst E E J 89 pt 1:335-51 *bibliog*(p350-1) Ag '42; Discussion. 89 pt 1:352-6; 90 pt 1:197-202 Ag '42, My '43

- Modified protective gap for transmitting antennas. A. Leeman. *diags Electronics* 16:125+ My '43

- Self-clearing gaps reduce service calls. W. L. Manton. *il Elec W* 120:668 Ag 21 '43

- Spark gap circuits used in induction heating units. *il diag Electronics* 16:126+ JI '43

- Time lag of impulse breakdown at high pressures. J. D. Cobine and E. C. Easton. *bibliog J Ap Phys* 14:321-31 JI '43

SPARK photography. See Photography, Spark**SPARK plugs**

- BC corporation; ten years' progress. C. B. Bunch. *il Aeronautical Eng R* 1:107 N '42
- Cylinder temperatures; accurate readings by means of thermo-couple sparking plugs. *diag Automobile Eng* 33:228 Je '43

SPARTANBURG, South Carolina**Sewerage**

- Enlarge of disposal plant of Spartanburg. G. W. White. *il flow diag plan Water Works & Sewerage* 90:241-5 JI '43

SPECIAL assessments

- Decreasing practice of assessing for street paving. Pub Works 74:44 S '43

SPECIAL collections. See Libraries—Special collections**SPECIAL libraries.** See Libraries, Special**SPECIAL libraries association**

- Choosing our officers. H. L. Stebbins. Special Lib 34:24-5 Ja '43
- Elects officers. Comm & Fin Chr 158:143 JI 8 '43

- Greetings for the new year! E. S. Cavanaugh. Special Lib 34:22-3 Ja '43

- Highlights of S.L.A. executive board and advisory council meetings. E. S. Cavanaugh. Special Lib 33:339-41 N '42

- New membership campaign. R. H. Morrison. Special Lib 33:376-7+ D '42

- President's report 1942-1943 and other reports. Special Lib 34:311-45 JI-Ag '43

- Report of the president to S. L. A. members. E. S. Cavanaugh. Special Lib 34:418-19 O '43

- Ruth Miller heads financial librarians; other officers. Comm & Fin Chr 158:28 JI 1 '43

- S. L. A. chapter presidents, group and standing committee chairmen, special representatives and editors, 1943-1944. Special Lib 34:420-2 O '43

- War-time conference, New York, June 22-24; program, committees, etc. Special Lib 34:147-56+ My '43

National advertising group

- Advertising librarians plan national meeting. Ptr Ink 203:58 My 21 '43

National war activities committee

- SLA war activities committee; a progress report. P. Temple. Special Lib 34:58-62 F '43

SPECIAL sales

- White sales, 1943. Business Week p34+ Ja '43

SPECIAL weeks. See Advertising campaigns—Special weeks

SPECIALIST corps. See United States—Army—
Specialist corps

SPECIALTY flexible container manufacturers institute

Container institute formed. *Chem Ind* 53:
367 S '43

Specialty bag makers form institute. *Paper*
Tr J 117:14 S 2 '43

SPECIALTY stores

Department and specialty store trade in
1942. *J Retailing* 19:86-8 O '43

See also

Cosmetic shops

SPECIES, Origin of

Systematics and the origin of species, from
the viewpoint of a zoologist, by E. Mayr.
Review, by G. L. Jepsen. *Am J Sci* 241:521-
8 Ag '43

SPECIFIC gravity

Aliphatic hydrocarbon densities; correlation
in the critical region. T. G. Stevenin and
J. G. Allen. *bibliog Ind & Eng Chem* 35:
788-9 JI '43

Balance method of determining specific
gravity of natural gas. G. M. Stearns.
diag Oil & Gas J 41:47 D 24 '42

Baumé-dextrose equivalent-dry substance
tables for corn sirup and corn sugar. E. E.
Fausser and others. *bibliog diags Ind &*
Eng Chem Anal ed 15:193-200 Mr 15 '43

Baumé-dry substance tables for starch sus-
pensions. J. E. Cleland, E. E. Fausser and
W. R. Fetzler. *diags Ind & Eng Chem Anal*
ed 15:334-6 My 15 '43

Calculations based on natural gas analysis.
G. M. Stearns. *Oil & Gas J* 41:57 D 10
'42

Centrifuge technique in research of glass
cords; Preston laboratories new density
measurement technique uses fine powder.
L. G. Ghering. *Cer Ind* 40:58-9 Je '43

Density of selenium. A. N. Campbell and S.
Epstein. *Am Chem Soc J* 64:2679-80 N
'42

Determination of specific gravity of dry paint
pigments. I. Baker and G. Martin. *Ind &*
Eng Chem Anal ed 15:279 Ap 15 '43

Determining the density of mixed acids. C.
McKinley. *Chem & Met Eng* 50:115-16 JI
'43

Determining the specific gravity of gas by
the effusion method. G. M. Stearns. *diag*
Oil & Gas J 41:51 D 17 '42

Freezing points, densities, and refractive in-
dexes of the system glycerol-ethylene
glycol-water. J. A. Spangler and E. C. H.
Davies. *bibliog Ind & Eng Chem Anal* ed
15:96-9 F 15 '43

Isopropyl alcohol-water system; density-com-
position data and pycnometric technique.
W. M. Langdon and D. B. Keyes. *bibliog*
Ind & Eng Chem 35:459-64 Ap '43

Paraffin hydrocarbons; correlation of physical
properties. A. W. Francis. *bibliog Ind &*
Eng Chem 35:442-9 Ap '43

Portable pressure-gravity test unit checks
evaporation losses. N. Williams. *il diags*
Oil & Gas J 42:43-4 My 13 '43

Relation of specific gravity, viscosity to dip-
ping consistency of enamel. M. Reiss. *diag*
Cer Ind 41:34-6 S '43

Removal of air from powders in density de-
termination. E. L. Gooden. *diag Ind & Eng*
Chem Anal ed 15:578-9 S 15 '43

Specific gravity relationships of australites.
G. Baker and H. C. Forster. *bibliog Am*
J Sci 241:377-406 Je '43

Standard temperature for specific gravity
determination and volume correction. *Inst*
Pet J 29:190-1 JI '43

Surface tensions, densities and parachors of
the aliphatic nitroparaffins. G. E. Boyd and
L. E. Copeland. *bibliog Am Chem Soc J* 64:
2540-3 N '42

Thermal expansivity and density of indium.
P. Hidnert and M. G. Blair. *bibliog J Re-*
search Nat Bur Stand 30:427-33 Je '43

See also

Gravity

SPECIFIC heat

Electronic energy bands in body-centered
iron. M. F. Manning. *bibliog Phys R* 63:
190-202 Mr 1 '43

Frequency spectrum of crystalline solids. E.
W. Montroll. *J Chem Phys* 10:218-29; 11:
481-95 Ap '42, O '43

Heat capacities and entropies of molybdenum
and tungsten trioxides. H. Seltz, F. J.
Dunkerley and E. J. DeWitt. *bibliog Am*
Chem Soc J 65:600-2 Ap '43

Heat capacities at higher temperatures of
ethane and propane. B. P. Dailey and W. A.
Felsing. *bibliog Am Chem Soc J* 65:42-4
Je '43

Heat capacities of and hindered rotation in
n-butane and isobutane. B. P. Dailey and
W. A. Felsing. *bibliog Am Chem Soc J*
65:44-6 Ja '43

Heat capacities of hydrocarbon gases. D. R.
Stull and F. D. Mayfield. *bibliog Ind & Eng*
Chem 35:639-45 Je '43

Heat capacities of molecular lattices; some
simple molecular solids. W. F. Brucksch,
jr. and W. T. Ziegler. *bibliog J Chem Phys*
10:740-3 D '42

Heat capacity and entropy, heats of transi-
tion, fusion and vaporization and the vapor
pressures of cyclohexane; the vibrational
frequencies of alicyclic ring systems. J. G.
Aston, G. J. Szasz and H. L. Fink. *bibliog*
Am Chem Soc J 65:1135-9 Je '43

Heat capacity and entropy, heats of transi-
tion, fusion and vaporization and the
vapor pressures of cyclopentane; evidence
for a non-planar structure. J. G. Aston,
H. L. Fink and S. C. Schumann. *Am Chem*
Soc J 65:341-6 Mr '43

Heat content of manganese dioxide and car-
bonate at high temperatures. G. E. Moore.
bibliog Am Chem Soc J 65:1398-9 JI '43

Heat contents at high temperatures of the
anhydrous chlorides of calcium, iron, mag-
nesium and manganese. G. E. Moore. *Am*
Chem Soc J 65:1700-3 S '43

Specific heat and viscosity nomographs for
calcium chloride brines. D. S. Davis. *Ind &*
Eng Chem 34:1532 D '42

Specific heat of pure iron at low tempera-
tures. K. K. Kelley. *J Chem Phys* 11:16-18
Ja '43

Specific heat ratios in CO₂. L. Katz. *bibliog*
J Chem Phys 11:496-7 O '43

Specific heats at low temperatures of anhy-
drous chlorides of calcium, iron, magnesium
and manganese. K. K. Kelley and G. E.
Moore. *bibliog Am Chem Soc J* 65:1264-7
Jl '43

Specific heats at low temperatures of an-
hydrous sulfates of iron, magnesium, man-
ganese, and potassium. G. E. Moore and
K. K. Kelley. *bibliog Am Chem Soc J* 64:
2949-51 D '42

Specific heats at low temperatures of man-
ganese carbide and manganese dioxide. K.
K. Kelley and G. E. Moore. *bibliog Am*
Chem Soc J 65:782-5 My '43

Specific heats at low temperatures of
magnesium orthosilicate and magnesium
metasilicate. K. K. Kelley. *bibliog Am*
Chem Soc J 65:339-41 Mr '43

Specific heats of carbon tetrafluoride from
supersonic measurements. W. H. Byers.
bibliog J Chem Phys 11:348-50 Ag '43

Specific heats of foodstuffs. B. E. Short, W.
R. Woolrich and L. H. Bartlett. *Refrig Eng*
44:385-8 D '42

Specific heats of gases. G. M. Stearns. *Oil*
& Gas J 41:129 Ja 7 '43

Specific heats of gases; abstract. F. O.
Ellenwood, N. Kulik and N. R. Gay. *Mech*
Eng 65:365 My '43

Specific heats of mixed acids at higher tem-
peratures. J. J. Morgan, D. A. Bender and
R. G. Capell. *bibliog diags Chem & Met*
Eng 60:122-4 Je '43

Specific heats of various substances; tables.
Heat & Ven 40:74a-74b Ag; 86a-86b S '43

Spherical furnace calorimeter for direct
measurement of specific heat and thermal
conductivity. J. R. Winckler. *bibliog il diag*
Am Cer Soc J 26:339-49 O 1 '43

Thermal data; the heat capacity and entropy
of isopentane; the absence of a reported
anomaly. G. B. Guthrie, jr. and H. M.
Huffman. *Am Chem Soc J* 65:1139-43 Je '43

Thermal data; the heat capacity, entropy,
and free energy of formation of cyclo-
hexane; a new method of heat transfer in
low temperature calorimetry. R. A.
Ruehrwein and H. M. Huffman. *bibliog*
diag Am Chem Soc J 65:1620-5 Ag '43

SPECIFIC heat—Continued

Thermodynamics of the liquid state; generalized prediction of properties. K. M. Watson. *bibliog Ind & Eng Chem* 35:398-406 Ap '43

SPECIFIC surface

Specific external surface of pulp; TAPPI suggested method T 226 sm-43. diag chart Paper Tr J 117:29-32 S 23 '43

Specific surface measurements on compact bundles of parallel fibers. R. R. Sullivan. *bibliog J Ap Phys* 13:725-30 N '42

Specific surface of powders; a modification of the air-permeability method for rapid routine testing. P. J. Rigden. *diag Soc Chem Ind J* 62:1-4 Ja '43

SPECIFIC volume

Additive physical properties in hydrocarbon mixtures. R. M. Deanesly and L. T. Carleton. *bibliog J Phys Chem* 46:859-70 N '42

Phase equilibria in hydrocarbon systems; methane-decane system. H. H. Reamer and others. *bibliog Ind & Eng Chem* 34:1528-31 D '42

Phase equilibria in hydrocarbon systems; volumetric behavior of methane. R. H. Olds and others. *il Ind & Eng Chem* 35:922-4 Ag '43

Pressure-volume-temperature relations of 2,2-dimethylbutane. W. A. Felsing and G. M. Watson. *bibliog Am Chem Soc J* 65:1889-91 O '43

Pressure-volume-temperature relations of 2,2,4-trimethylpentane. W. A. Felsing and G. M. Watson. *bibliog Am Chem Soc J* 65:780-1 My '43

SPECIFICATIONS

Function of specifications in conservation and substitution. A. F. Maconochie. *il Steel* 112:88-9+ P '43; 80-3+ F 8 '43

Why specifications? R. T. Retz. *Civil Eng* 13:457-8 O '43

Worried about specifications? here's Washington answer. C. S. Cole. *Machine Design* 15:104-6+ My '43

SPECTACLES

Eyes have it; fitting soldiers with a million pairs of glasses a year. *Business Week* p28+ Mr 20 '43

Ophthalmic lens testing instrument. K. N. Ogle and A. Ames, jr. *il diags Opt Soc Am J* 33:137-42 Mr '43

See also

Goggles
Lenses
Lenses, Contact

SPECTRA. See Spectrum**SPECTROGRAPH**

Application of the spectrograph at Gary works; abstract. A. D. Beers. *Iron Age* 151:150-1 My 6 '43

Applications of the spectrograph to steelworks analysis. H. T. Shirley and E. Elliott. *il Engineering* 155:437-40, 456-7 My 28-Je 4 '43

Construction and use of reflection echelons. W. E. Williams. *bibliog Rs Mod Phys* 14:64; Discussion. S. Mrozowski. 65 Ap-Jl '42

Depolarization studies of Raman lines; a simplified method. G. Glockler and H. T. Baker. *bibliog diags J Chem Phys* 11:446-9 O '43

Determining open hearth residuals by routine spectrographic analysis. J. T. Rozsa. *il diag Iron Age* 151:58-62 Mr 11 '43

Grating spectrograph of fabricated steel. J. W. Forrest and H. W. Straat. *il diag Opt Soc Am J* 32:669-71 N '42

Identification of orders and ghosts in grating spectra by diffracting slits. H. S. Pommerance and H. G. Beutler. *il Rs Mod Phys* 14:66-7 Ap-Jl '42

Improved electrode holder for spectrographic analysis. E. F. Scribner and C. H. Corliss. *bibliog diags pls J Research Nat Bur Stand* 30:41-5 Ja '43; Same. *Opt Soc Am J* 33:515-18 S '43

Improvement in the design of the concave grating spectrograph. G. P. Brewington. *diag R Sci Instr* 13:501-2 N '42

Infra-red prism spectrograph as a precision instrument. R. A. Oetjen, C. Kao and H. M. Randall. *bibliog il diag R Sci Instr* 13:515-23 D '42

Photoelectric absorptiometer, the polarograph, and the spectrograph; a critical review. H. K. Whalley. *Chem & Ind* 61:495-7 D 5 '42

Plate calibration problems. R. A. Sawyer and H. B. Vincent. *bibliog Opt Soc Am J* 33:247-51 My '43

Slotted cylindrical rotors for photometric calibration. J. R. Platt and others. *diags R Sci Instr* 14:35-8 Ap '43

Spectrochemical light source errors and their compensation. H. H. Grossman, R. A. Sawyer and H. B. Vincent. *bibliog Opt Soc Am J* 33:185-93 Ap '43

Stigmatic grating spectrograph for industrial laboratories. R. F. Jarrell. *diag Opt Soc Am J* 32:666-9 N '42

Theory of the electrostatic beta-particle energy spectrograph. F. T. Rogers, jr. and C. W. Horton. *bibliog R Sci Instr* 14:216-20 Jl '43

Use of spectrograph speeds production; has high accuracy; abstract. G. T. Motock. *Iron Age* 151:76+ My 6 '43

See also

Diffraction gratings
Spectrophotometers

SPECTROGRAPH, Mass

Mass spectrograph; measurement of atomic mass and energy. *il diag Chem Age (Lond)* 47:425-6 N 14 '42

SPECTROGRAPHY

Spectrographic analysis; photographic aspects of the internal standard method. A. C. Coates and E. H. Armstein. *bibliog Soc Chem Ind J* 61:21-9; 62:51-8 F '42, Ap '43; Correction. 62:32 Je '43

SPECTROMETERS

Beta-ray spectrum of antimony (124). E. B. Hales and E. B. Jordan. *bibliog Phys R* 64:202-6 O 1 '43

SPECTROMETERS, Mass

Electronic chemist will speed production testing in synthetic rubber plants; abstract. J. A. Hipple. *il Sci Am* 169:172-3 O '43

Experimental mass spectrometer. N. D. Coggeshall and E. B. Jordan. *bibliog diags R Sci Instr* 14:125-9 My '43

Gas analysis by means of the mass spectrometer. O. L. Roberts. *il diag Pet Refiner* 22:107-9 My '43

Mass spectrometer aids research. J. A. Hipple. *il diags Electronics* 16:120-4 N '43

Mass spectrometer analysis of gasoline. *il Pet Eng* 14:44 Ap '43

Mass spectrometer as an analytical tool. H. W. Washburn, H. F. Wiley and S. M. Rock. *il diag Ind & Eng Chem Anal* 15:541-7 S 15 '43

Mass spectrometer for butadiene analysis developed by J. A. Hipple. *il Electronics* 16:142 S '43; *Chem Ind* 53:232 Ag '43; *Science* 98:sup 8-9 Ag 20 '43

Mass spectrometry; new quantitative method for determining light hydrocarbons in process control. *il diag Nat Pet N 35 pt* 2:1258-62 Je 2 '43

Quantitative analysis by mass spectrometry. O. L. Roberts. *il diag Pet Eng* 14:109-11, 114+ My '43

SPECTROPHOTOMETERS

Analysis of plant extracts for chlorophylls a and b using a commercial spectrophotometer. C. L. Comar. *Ind & Eng Chem Anal* 14:877-9 N 15 '42

Applications of near infra-red spectrophotometry. E. I. Stearns. *Opt Soc Am J* 33:27-30 Ja '43

Color; qualitative and quantitative color analysis by the recording photoelectric spectrophotometer. N. F. Barnes. *il diags Gen Elec R* 45:645-8 N '42

Construction of monochromator cams for recording spectrophotometers. J. M. Moran. *bibliog diag R Sci Instr* 14:287-93 O '43

Determination of permissible tolerances in color matching. J. H. Skinkle and W. W. Platt. *Am Dyestuff Rep* 31:537-41 N 9 '42

Evaluation of light fastness by means of a spectrophotometer; presented for the A.A.T.C.C. Northern New England section by E. S. Chapin. *Am Dyestuff Rep* 31:600-2 D 7 '42

G.E. recording photoelectric spectrophotometer for the graphic measurement of color. *il diag Ravon* 24:15-16 Ja '43; *Chem Ind* 51:301 D '42

SPECTROPHOTOMETERS—Continued

- Modification of Cenco spectrophotometer permitting measurements of reflection and fluorescence spectra. H. J. Dutton and G. F. Bailey. *bibliog il diag Ind & Eng Chem Anal ed* 15:275-7 Ap 15 '43
- Null-reading photoelectric microdensitometer for use in turbidimetry and abridged spectrophotometry. J. G. Baier, jr. *bibliog il diag Ind & Eng Chem Anal ed* 15:144-8 F 15 '43
- Rapid infra-red analytical method for hydrocarbon mixtures and a routine spectrophotometer for plant control. R. R. Brattain and O. Beeck. *il diag J Ap Phys* 13:699-705 N '42
- Some uses of infra-red spectroscopy for hydrocarbon analysis. R. R. Brattain. *il diag Oil & Gas J* 41:37-8+ Ap 1 '43
- Spectrophotometer in the textile industry. C. Monago and W. von Bergen. *bibliog il diag Am Dyestuff Rep* 32:1-8, 17-23 Ja 4 '43
- Wave-length calibration of spectrophotometers. J. A. Van den Akker. *Opt Soc Am J* 33:257-9 My '43

SPECTROPHOTOMETRY

- Most pleasing white papers from unbleached sulphite pulps. A. K. Ames. *Pulp & Pa of Can (Convention no)* 44:123-30 [F] '43
- Spectral characteristics of optical wedges. M. H. Sweet. *il diag Opt Soc Am J* 33:194-208 Ap '43
- Spectrophotometric analyses of starches. R. W. Kerr and O. R. Trubell. *bibliog Paper Tr J* 117:25-8 O 7 '43
- Spectrophotometric and biological assay of vitamin A in oils. N. H. Coy, H. L. Sassaman and A. Black. *bibliog Ind & Eng Chem Anal ed* 15:441-3 Jl 15 '43
- Spectrophotometric determination of iron with *o*-phenanthroline and with nitro-*o*-phenanthroline. J. P. Mehlh and H. R. Huelt. *bibliog Ind & Eng Chem Anal ed* 14:869-71 N 15 '42
- Spectrophotometric determination of magnesium by titan yellow. E. E. Ludwig and C. R. Johnson. *bibliog Ind & Eng Chem Anal ed* 14:895-7 N 15 '42
- Spectrophotometric determination of the dissociation constants of diphenylselenium dibromide and diphenylselenium diiodide. J. D. McCullough. *bibliog Am Chem Soc J* 64:2672-6 N '42
- Spectrophotometric method for the analysis of multicomponent mixtures and its infra-red application. R. R. Brattain, R. S. Rasmussen and J. M. Cravath. *bibliog il diag J Ap Phys* 14:418-23 Ag '43
- Tristimulus specification of the Munsell book of color from spectrophotometric measurements. K. L. Kelly, K. S. Gibson and D. Nickerson. *bibliog charts Opt Soc Am J* 33:355-76 Jl '43; Same. *J Research Nat Bur Stand* 31:55-76 Ag '43

SPECTRORADIOMETRY

- Analytical representation of standard response curves. P. Moon and D. E. Spencer. *bibliog Opt Soc Am J* 33:89-103 F '43

SPECTROSCOPE

- See also*
Diffraction gratings

SPECTROSCOPY

- Conference on spectroscopy. *Rs Mod Phys* 14:57-340 Ap-Jl '42
- Light-and-shadow box as a visual aid in measuring spectra. J. J. Hopfield. *il diag Opt Soc Am J* 33:113-14 F '43
- New spectroscopic source unit. M. F. Hasler and H. W. Dietert. *il diag Opt Soc Am J* 33:218-28 Ap '43
- Personalities in science; Mary E. Wurga, director of Co-operative spectroscopic laboratory at the University of Pittsburgh. *Sci Am* 168:99 Mr '43
- Spectroscopic evidence of intermolecular transfer of protons. D. Williams and W. D. Stallcup. *Am Chem Soc J* 64:2684-6 N '42
- Use of iron lines as intensity standards. G. H. Dieke and H. M. Crosswhite. *Opt Soc Am J* 33:425-34 Ag '43

- See also*
Spectrum analysis

SPECTRUM

- Arc spectrum of bismuth Bi I. S. Mrozowski. *il Phys R* 62:526-33 D 1 '42

- Atomic beam apparatus for studying the atomic spectra of gases, especially hydrogen. J. E. Mack and E. C. Barkofsky. *bibliog il diag Rs Mod Phys* 14:82-93 Ap-Jl '42

- Atomic beam spectra; application of atomic beams in spectroscopy. K. W. Meissner. *bibliog il diag Rs Mod Phys* 14:68-78 Ap-Jl '42

- Electronic structures and spectra of triatomic oxide molecules. R. S. Mulliken. *bibliog il diag Rs Mod Phys* 14:204-15 Ap-Jl '42

- Emission spectrum of the ion CO⁺. S. Mrozowski. *Rs Mod Phys* 14:216-18 Ap-Jl '42

- Gamma-rays from As⁷⁶. C. E. Mandeville. *bibliog Phys R* 63:91-3 F 1 '43

- Identification of orders and ghosts in grating spectra by diffracting slits. H. S. Pomerance and H. G. Beutler. *il Rs Mod Phys* 14:66-7 Ap-Jl '42

- Isotope shifts in some lines of nitrogen. J. R. Holmes. *bibliog il Phys R* 63:41-6 Ja 1 '43

- Line spectra; atomic spectra of rare earth elements. W. F. Meggers. *bibliog Rs Mod Phys* 14:96-103 Ap-Jl '42

- Long wave-length spectra of saturated carboxylic acids, esters, and salts. H. L. McMurry. *bibliog J Chem Phys* 10:655-60 N '42

- On the configurations W's. G. Racah. *Phys R* 62:523-5 D 1 '42

- Spectra of dye molecules. L. G. S. Brooker. *Rs Mod Phys* 14:275-93 Ap-Jl '42

- Spectra of ions in crystals and solutions; spectra of ions in fields of various symmetry in crystals and solutions. S. Freed. *bibliog il Rs Mod Phys* 14:105-11 Ap-Jl '42

- Spectra of the rare gases and their Zeeman effects. J. B. Green. *bibliog Phys R* 64:151-5 S 1 '43

- Spectroscopic methods; the primary standard of wave-length. W. F. Meggers. *bibliog Rs Mod Phys* 14:59-63; Discussion. 63 Ap-Jl '42

- Theory of complex spectra. G. Racah. *Phys R* 61:186-97; 62:438-62; 63:367-82 F 1, N 1 '42, My 1 '43

- Thermodynamics and molecular structure of benzene and its methyl derivatives; the vibration frequencies of toluene, *o*-*m*- and *p*-xylenes and mesitylene. K. S. Pitzer and D. W. Scott. *bibliog Am Chem Soc J* 65:817-24 My '43

- Thermodynamics and molecular structure of benzene and its methyl derivatives; vibration frequencies of benzene. K. S. Pitzer and D. W. Scott. *bibliog Am Chem Soc J* 65:814-17 My '43

See also

- | | |
|----------------------|-------------------|
| Comets—Spectra | Spectrum analysis |
| Diffraction gratings | Stars—Spectra |
| Light | Ultraviolet rays |
| Raman effect | |

Absorption spectra

- Absorption spectra and the structures of pyrethrins I and II. A. E. Gillam and T. F. West. *Chem Soc J* p671-6 N '42

- Absorption spectra of a series of dienes. E. P. Carr, L. W. Pickett and H. Stücklen. *bibliog Rs Mod Phys* 14:260-4 Ap-Jl '42

- Absorption spectra of potassium, rubidium, and caesium. H. R. Kratz and J. E. Mack. *Rs Mod Phys* 14:104 Ap-Jl '42

- Absorption spectra of some double salts containing cobaltous chloride. M. L. Schultz and E. F. Lillek. *bibliog Am Chem Soc J* 64:2748-51 D '42

- Absorption spectra of some *m*-substituted phenols, and the influence of nucleophilic substituents on electronic mobility. H. H. Huisson. *Chem Soc J* p380-2 Ag '43

- Absorption spectrum of Na in the extreme ultraviolet. R. E. Worley. *bibliog il Phys R* 64:207-24 O 1 '43

- Absorption tube for the investigation of gases at low pressures. P. A. Leighton and D. H. Volman. *diag Opt Soc Am J* 33:79-80 F '43

- Calculation of the absorption spectrum of Wurster's salts. M. G. Mayer and K. J. McCallum. *bibliog Rs Mod Phys* 14:248-57; Discussion. R. S. Mulliken. 257-8 Ap-Jl '42

SPECTRUM—Absorption spectra.—*Continued.*

- Carotenoids of yellow corn grain. J. W. White, Jr., F. P. Zscheile and A. M. Brunson. *bibliog* Am Chem Soc J 64:2603-6 N '42
- Dimeric and other forms of methylene blue: absorption and fluorescence of the pure monomer. G. N. Lewis and others. *Am Chem Soc J* 65:1150-4 Je '43
- Effect of solvents on the absorption spectra of dyes; some dyes other than cyanines. S. E. Sheppard and P. T. Newsome. *Am Chem Soc J* 64:2937-46 D '42
- Effects of environment and aggregation on the absorption spectra of dyes. S. E. Sheppard. *bibliog* (60 references) *il* Rs *Mod Phys* 14:303-40 Ap-Jl '42
- Electron transfer spectra and their photochemical effects. E. Rabinowitch. *bibliog* (84 references) *diags* Rs *Mod Phys* 14:112-31 Ap-Jl '42
- Electronic absorption spectra of benzene and its derivatives. A. L. Sklar. *bibliog* *il* Rs *Mod Phys* 14:232-45 Ap-Jl '42
- Electronic spectra and structure of organic molecules; ultraviolet absorption spectra of substituted benzenes. H. Sponer. *il* Rs *Mod Phys* 14:224-31 Ap-Jl '42
- Fluorescence and phosphorescence of thallium-activated potassium-halide phosphors. P. Pringsheim. *bibliog* *il* Rs *Mod Phys* 14:132-8 Ap-Jl '42
- Infra-red absorption of pyridine vapor. J. Turkevich and P. C. Stevenson. *J Chem Phys* 11:328-9 Jl '43
- Infra-red and Raman spectra of polyatomic molecules; methyl-*ds*-alcohol-*d* and methyl-*ds*-alcohol. H. D. Noether. *J Chem Phys* 10:693-9 D '42
- Methylene blue and other indicators in general acids; the acidity function. G. N. Lewis and J. Bigeleisen. *bibliog* Am Chem Soc J 65:1144-50 Je '43
- Near infra-red absorption spectrum of methyl iodide. E. T. Lagemann and H. H. Nielsen. *bibliog* J Chem Phys 10:668-71 N '42
- Remarks on the absorption spectra of phenylalanine and tyrosine in connection with the absorption in toluene and paracresol. H. Sponer. *bibliog* J Chem Phys 10:672-6 N '42
- Some effects of solvents upon the absorption spectra of dyes; chiefly polymethine dyes. S. E. Sheppard, P. T. Newsome and H. R. Brigham. *bibliog* *diags* Am Chem Soc J 64:2923-37 D '42
- Spectroscopic studies of the simpler porphyrins; the absorption and fluorescence spectra of *ms*-tetra(3', 4'-methyleneedioxyphenyl)porphine of HCl number four and of its AgC₆H₅N, Zn, and Ni complex salts. V. M. Albers, H. V. Knorr and D. L. Fry. *bibliog* J Chem Phys 10:700-5 D '42
- Studies on lignin and related compounds; the ultraviolet absorption spectra of compounds related to lignin. R. F. Patterson and H. Hibbert. *bibliog* Am Chem Soc J 65:1862-9 O '43
- Studies on lignin and related compounds; the ultraviolet absorption spectra of ethanol lignins. R. F. Patterson and H. Hibbert. *bibliog* Am Chem Soc J 65:1869-73 O '43
- Ultraviolet absorption spectra of aromatic hydrocarbons. R. N. Jones. *Chem R* 32:1-46 *bibliog* (262 references, p41-6) F '43
- Ultraviolet absorption spectra of arylethylenes. R. N. Jones. *Am Chem Soc J* 65:1818-24 O '43
- Ultraviolet absorption spectra of nitrogenous heterocycles. J. R. Loofbourow, M. M. Stimson and others. *bibliog* Am Chem Soc J 65:148-55 F '43
- Ultraviolet absorption spectra of protein solutions. R. N. Jones and H. J. Creech. *bibliog* Opt Soc Am J 33:209-18 Ap '43
- Ultraviolet absorption spectra of some derivatives of chrysene. R. N. Jones. *bibliog* Am Chem Soc J 65:1815-18 O '43
- α,β -Unsaturated aminoketones; color and constitution. N. H. Cromwell and R. S. Johnson. *Am Chem Soc J* 65:316-19 Mr '43

Band spectra

- Continuum in the 1849A region in the afterglow spectrum of mercury. A. Wattenberg and H. W. Webb. *Phys R* 64:39-40 Jl 1 '43

- Intensity anomalies and perturbations in the CN bands. A. T. Wager. *bibliog* *il* *diag* *Phys R* 64:18-31 Jl 1 '43
- Rotational structure of the near ultra-violet bands of benzene. A. Turkevich and M. Fred. *il* Rs *Mod Phys* 14:246-7 Ap-Jl '42
- Silicon oxide bands. L. H. Woods. *bibliog* *il* *Phys R* 63:426-30 Je 1 '43
- Spin doubling in the doublet sigma states of CO. L. H. Woods. *bibliog* *Phys R* 63:431-2 Je 1 '43

Excitation

- Dietert electrical multisource unit. *il* *Chem Ind* 53:222 Ag '43; *Ind & Eng Chem Anal* ed 15:538 Ag 15 '43

Fluorescence spectra

- Modification of Cenco spectrophotometer permitting measurements of reflection and fluorescence spectra. H. J. Dutton and G. T. Easley. *bibliog* *il* *diag* *Ind & Eng Chem Anal* ed 15:275-7 Ap 15 '43
- Spectroscopic studies of the simpler porphyrins; the absorption and fluorescence spectra of *ms*-tetra(3', 4'-methyleneedioxyphenyl)porphine of HCl number four and of its AgC₆H₅N, Zn, and Ni complex salts. V. M. Albers, H. V. Knorr and D. L. Fry. *bibliog* J Chem Phys 10:700-5 D '42

Intensity

- Determination of the nuclear spin of Cl³⁷. E. F. Shrader. *diag* *Phys R* 64:57-9 Ag 1 '43
- Intensity measurements on emission bands in cometary spectra. A. McKellar. *bibliog* R. *Mod Phys* 14:179-89; *Discussion*. S. Mrozowski. 189 Ap-Jl '42
- Use of iron lines as intensity standards. G. H. Dieke and H. M. Crosswhite. *Opt Soc Am J* 33:425-34 Ag '43

Mass spectra

- Ionization and dissociation by electron impact; butene-1. D. P. Stevenson. *Am Chem Soc J* 65:209-12 F '43
- Ionization and dissociation by electron impact; isobutylene, propane, and propylene. D. P. Stevenson and J. A. Hipple. *bibliog* Am Chem Soc J 64:2769-72 D '42
- Ionization and dissociation by electron impact; normal propyl chloride and tertiary butyl chloride. D. P. Stevenson and J. A. Hipple. *bibliog* Am Chem Soc J 64:2766-8 D '42

Multiplets

- Theory of complex spectra. G. Racah. *Phys R* 61:186-97; 62:438-62; 63:367-82 F 1, N 1 '42, My 1 '43

Tables, etc.

- Nature's cross-word puzzles; method by which spectra are analyzed. H. N. Russell. *Sci Am* 168:210-11 My '43
- Near infra-red spectrum of water vapor; the parallel bands $\nu_1 + \nu_2 - \nu_3$ and the perpendicular band ν_1 . H. H. Nielsen. *bibliog* *Phys R* 62:422-33 N '42
- Spectrum of neutral tungsten. W. I. O. Laporte and J. E. Mack. *bibliog* *Phys R* 63:246-97 Ap '43

SPECTRUM, Infrared

- Analysis by infrared spectroscopy; a new method applied to mixtures of nitroparaffins. J. R. Nielsen and D. C. Smith. *bibliog* *Ind & Eng Chem Anal* ed 15:609-15 O 15 '43
- Infra-red absorption of pyridine vapor. J. Turkevich and P. C. Stevenson. *J Chem Phys* 11:328-9 Jl '43
- Infra-red absorption spectrum and configuration of cyclohexane. R. S. Rasmussen. *bibliog* J Chem Phys 11:249-52 Je '43
- Infra-red and Raman spectra of polyatomic molecules; acetaldehyde and acetaldehyde-*d*. J. C. Morris. *bibliog* J Chem Phys 11:230-5 My '43
- Infra-red and Raman spectra of polyatomic molecules; cyclobutane. T. P. Wilson. *bibliog* J Chem Phys 11:369-78 Ag '43
- Infra-red and Raman spectra of polyatomic molecules; methyl-*ds*-alcohol-*d* and methyl-*ds*-alcohol. H. D. Noether. *J Chem Phys* 10:693-9 D '42

SPECTRUM, Infrared—Continued

- Infrared and Raman spectra of polyatomic molecules; trideuteronitromethane. T. P. Wilson. bibliog J Chem Phys 11:361-8 Ag '43
- Infrared prism spectrograph as a precision instrument. R. A. Oetjen, C. Kao and H. M. Randall. bibliog il diag R Sci Instr 13: 515-23 D '42
- Infrared spectra as a tool in investigating molecular structure; abstract. G. B. E. M. Sutherland. Chem & Ind 62:95 Mr 6 '43
- Infrared spectroscopy as an organic analytical tool. R. C. Gore. bibliog diags J Chem Educ 20:223-9 My '43
- Infrared spectrum of furan. L. W. Pickett. bibliog J Chem Phys 10:660-3 N '42
- Infrared spectrum of polyatomic molecules; methyl-*d*₃-chloride and methyl-*d*₃-bromide. H. D. Noether. bibliog J Chem Phys 10: 664-8 N '42
- Magnetic rotatory power of crystalline nickel sulphate in the short infrared spectrum. S. Breen, J. N. Humphrey and L. R. Ingersoll. bibliog diag Phys R 64:76-7 Ag 1 '43
- Near infrared absorption spectrum of methyl iodide. R. T. Lagemann and H. H. Nielsen. bibliog J Chem Phys 10:668-71 N '42
- Near infrared spectrum of water vapor; the parallel bands ν_3 , $\nu_1 + \nu_3$, $\nu_2 + \nu_3$ and the perpendicular band ν_1 . H. H. Nielsen. bibliog Phys R 62:422-33 N 1 '42
- Rapid infrared analytical method for hydrocarbon mixtures and a routine spectrophotometer for plant control. R. R. Brattain and O. Beek. il diags J Ap Phys 13:699-705 N '42
- Some uses of infrared spectroscopy for hydrocarbon analysis. R. R. Brattain. bibliog il diag Pet Refiner 22:92-8 Ap '43; Same abr. Oil & Gas J 41:34-8+ Ap 1 '43
- Spectra of simple molecules; the infrared spectra of triatomic molecules. E. F. Barker. diags Rs Mod Phys 14:198-203 Ap-Jl '42
- Spectrophotometric method for the analysis of multicomponent mixtures and its infrared application. R. R. Brattain, R. S. Rasmussen and A. M. Cravath. bibliog il diag J Ap Phys 14:418-28 Ag '43
- Synthetic rubber; spectroscopic method for analysis and control. R. B. Barnes, U. Liddel and V. Z. Williams. bibliog il diags Ind & Eng Chem Anal ed 15:83-90 F 15 '43
- SPECTRUM, Solar**
- Dream almost attained; astrophysics nearer to solution of a major problem. H. N. Russell. Sci Am 168:116-17 Mr '43
- Gold discovered in the sun. R. S. Richardson. Science 97:sup10 Ap 23 '43
- SPECTRUM, Ultraviolet**
- Absorption spectrum of N₂ in the extreme ultraviolet. R. E. Worley. bibliog il Phys R 64:207-24 O 1 '43
- Absorption tube for the investigation of gases at low pressures. P. A. Leighton and D. H. Volman. diags Opt Soc Am J 33:79-80 F '43
- Assay of potassium *p*-phenolsulfonate, its pH range, and its ultraviolet absorption spectrum. E. E. Sager, M. R. Schooley and S. F. Acree. J Research Nat Bur Stand 31:197-204 O '43
- Atomic beam light sources applied to the structure of the magnesium I resonance line. R. A. Fisher. bibliog il diags Rs Mod Phys 14:79-81 Ap-Jl '42
- Electronic spectra and structure of organic molecules; ultraviolet absorption spectra of substituted benzenes. H. Spomer. il Rs Mod Phys 14:224-31 Ap-Jl '42
- On $s^{1/2}P^1S$ and $s^{3/2}P^1P$ in the S I isoelectronic sequence. B. Edlén. bibliog Phys R 62: 434-5 N 1 '42
- Structure and ultraviolet spectra of ethylene, butadiene, and their alkyl derivatives. R. S. Mulliken. bibliog Rs Mod Phys 14:265-74 Ap-Jl '42
- Studies on lignin and related compounds; the ultraviolet absorption spectra of compounds related to lignin. R. F. Patterson and H. Hibbert. bibliog Am Chem Soc J 65:1862-9 O '43

- Studies on lignin and related compounds; the ultraviolet absorption spectra of ethanol lignins. R. F. Patterson and H. Hibbert. bibliog Am Chem Soc J 65:1869-73 O '43
- Ultraviolet absorption spectra of aromatic hydrocarbons. R. N. Jones. Chem R 32:1-46 bibliog(262 references, p41-6) F '43
- Ultraviolet absorption spectra of arylolethyl- enes. R. N. Jones. Am Chem Soc J 65: 1818-24 O '43
- Ultraviolet absorption spectra of nitrogenous heterocycles. J. R. Loofbourow, M. M. Stimson and others. bibliog Am Chem Soc J 65:148-55 F '43
- Ultraviolet absorption spectra of protein solutions. R. N. Jones and H. J. Creech. bibliog Opt Soc Am J 33:209-18 Ap '43
- Ultraviolet absorption spectra of some derivatives of chrysene. R. N. Jones. bibliog Am Chem Soc J 65:1815-18 O '43

SPECTRUM, X ray

- Precision determination of h/e by means of the short wave-length limit of the continuous X-ray spectrum. il J Ap Phys 14:19-20 Ja '43
- Probable X-ray mass absorption coefficients for wave-lengths shorter than the K critical absorption wave-length. J. A. Victoreen. bibliog J Ap Phys 14:95-102 F '43

Satellites

- Origin of the M_K and M_L X-ray satellite groups. F. R. Hirsh, jr. Phys R 64:39 Jl 1 '43

SPECTRUM analysis

- Aldol condensation; detection of carbonyl groups in aldols by use of Raman spectra. R. H. Saunders and others. bibliog Am Chem Soc J 65:1309-11 Jl '43
- Analysis by infrared spectroscopy; a new method applied to mixtures of nitroparaffins. J. R. Nielsen and D. C. Smith. bibliog Ind & Eng Chem Anal ed 15:609-15 O 15 '43
- Analysis of plant extracts for chlorophylls *a* and *b* using a commercial spectrophotometer. C. L. Comar. Ind & Eng Chem Anal ed 14:877-9 N 15 '42
- Briquetting press and electrode loader for spectrochemical analysis. H. C. Harrison and C. C. Ralph. bibliog il diag Ind & Eng Chem Anal ed 15:466-7 Jl 15 '43
- Calibration of a photoelectric colorimeter for the determination of chlorophyll; relation between spectra of standards and accuracy of analytical results. C. L. Comar, E. J. Benne and E. K. Buteyn. bibliog Ind & Eng Chem Anal ed 15:524-6 Ag 15 '43
- Carbon arc in oxygen for the spectrochemical determination of potassium. L. T. Steadman. Phys R 63:322 Ap 1 '43; Correction. 63:399 Je 1 '43
- Concentration methods in spectrographic analysis; recovery of cobalt, nickel, molybdenum, copper, and zinc from plant materials and soil extracts by 8-hydroxyquinoline. R. O. Scott and R. L. Mitchell. bibliog Soc Chem Ind J 62:4-8 Ja '43
- Determination of aluminum in biological material. J. Cholak, D. M. Hubbard and R. V. Story. bibliog Ind & Eng Chem Anal ed 15:57-60 Ja 15 '43
- Determining free and acetylated sulfanilamide. S. Anderson. diag Ind & Eng Chem Anal ed 15:29-30 Ja 15 '43
- Dietert electrical multisource unit. il Chem Ind 53:222 Ag '43; Ind & Eng Chem Anal ed 15:538 Ag 15 '43
- Effect of chemical impurities on scheelite fluorescence. R. Greenwood. bibliog Econ Geol 38:56-64 Ja '43
- Elementary spark spectrum analysis. C. C. Kiplinger. il J Chem Educ 20:234 Mr '43
- Improved electrode holder for spectrographic analysis. E. F. Scribner and C. H. Corliss. bibliog diags pls J Research Nat Bur Stand 30:41-5 Ja '43; Same. Opt Soc Am J 33:515-18 S '43
- Improved method of examination of spectrographic plates taken in forensic work. L. C. Nickolls. Soc Chem Ind J 62:31-2 F '43
- Infrared spectroscopy as an organic analytical tool. R. C. Gore. bibliog diags J Chem Educ 20:223-9 My '43
- New spectroscopic source unit. M. F. Hasler and H. W. Dietert. il diag Opt Soc Am J 33:218-28 Ap '43

SPECTRUM analysis—Continued

- Occurrence of lead, tin, and silver in wheat and its milling products. N. L. Kent. bibliog il Soc Chem Ind J 61:183-6 D '42
- Plate calibration problems. R. A. Sawyer and H. B. Vincent. bibliog Opt Soc Am J 33: 247-51 My '43
- Precision in spectrochemical analysis. H. B. Vincent and R. A. Sawyer. Opt Soc Am J 32:686-92 N '42
- Preliminary spectrographic study of normal and arthritic human blood. J. S. Hepburn, C. A. Hall and J. A. Doane. Franklin Inst J 235:167 F '43
- Preparation of purified inorganic compounds for use in spectrographic standards. R. C. Hughes. bibliog il Opt Soc Am J 33:49-60 Ja '43
- Quantitative spectral analysis of fats. J. H. Mitchell, jr., H. R. Kraybill and F. P. Zscheile. bibliog Ind & Eng Chem Anal ed 15:1-3 Ja 15 '43
- Quantitative spectrographic analysis of stainless steels. M. F. Hasler, C. E. Harvey and H. W. Dietert. diags Ind & Eng Chem Anal ed 15:102-7 F 15 '43
- Quantitative spectroscopy applied to some impurities in 70-30 cupro-nickel. W. D. France. Opt Soc Am J 32:681-5 N '42
- Raman spectra of *l*-ascorbic acid, tetronic acid and related compounds. J. T. Edsall and E. L. Sagall. bibliog Am Chem Soc J 65:1312-16 J1 '43
- Rapid infra-red analytical method for hydrocarbon mixtures and a routine spectrophotometer for plant control. R. R. Brattain and O. Beeck. il diags J Ap Phys 13:699-705 N '42
- Recent developments in analytical chemistry. bibliog diags Chem Age (Lond) 48:624-6 Je 12 '43
- Some observations on the use of powders in spectrochemical analysis; lead-tin solders. A. E. Ruehle and E. K. Jaycox. bibliog il Opt Soc Am J 33:109-12 F '43
- Some uses of infra-red spectroscopy for hydrocarbon analysis. R. R. Brattain. bibliog il diag Pet Refiner 22:92-8 Ap '43; Same abr. Oil & Gas J 41:34-8+ Ap 1 '43
- Spectrochemical assay for traces of tungsten. A. G. Scobie. Ind & Eng Chem Anal ed 15:79-80 Ja 15 '43
- Spectrochemical determination of silicon, iron, and aluminum in mineral powders with a high voltage direct current arc. H. I. Oshry, J. W. Ballard and H. H. Schrenk. bibliog il diags Opt Soc Am J 32:672-80 N '42
- Spectrochemical light source errors and their compensation. H. H. Grossman, R. A. Sawyer and H. B. Vincent. bibliog Opt Soc Am J 33:185-93 Ap '43
- Spectrochemical procedure in clay analysis. A. E. Austin and L. B. Bassett. bibliog diags Am Cer Soc J 26:185-8 Je 1 '43
- Spectrographic analysis of alloy steel; Bethlehem steel co. P. R. Irish. il plan Steel 113:100-2, 105+ Ag 9 '43
- Spectrographic analysis of cast iron. F. B. Ling, J. McPheat and J. Arnott. il diag Engineer 176:76-8 J1 23 '43
- Spectrographic analysis of New England granites and pegmatites. J. A. Shimer. bibliog maps Geol Soc Bul 54:1049-66 Ag '43
- Spectrographic analysis of rat tissues for ingested vanadium. E. P. Daniel, E. M. Hewston and M. W. Kies. Ind & Eng Chem Anal ed 14:921-2 N 15 '42
- Spectrographic analysis; photographic aspects of the internal standard method. A. C. Coates and E. H. Amstein. bibliog Soc Chem Ind J 61:21-9; 62:51-8 F '42, Ap '43; Correction. 62:92 Je '43
- Spectrographic detection and determination of the halogens. W. W. A. Johnson and D. P. Norman. bibliog Ind & Eng Chem Anal ed 15:119 F 15 '43
- Spectrographic limit of identification of potassium. D. P. Norman and W. W. A. Johnson. bibliog Ind & Eng Chem Anal ed 15:152-3 F 15 '43
- Spectrographic measurements. B. Mulvey. Gen Elec R 45:643 N '42

- Spectrophotometric method for the analysis of multicomponent mixtures and its infrared application. R. R. Brattain, R. S. Rasmussen and A. M. Cravath. bibliog il diag J Ap Phys 14:418-28 Ag '43
- Spectroscopic analysis of hydrocarbon mixtures; abstract. G. B. B. M. Sutherland. Chem & Ind 62:234 Je 19 '43
- Study of the applicability of the pressed pellet electrode method to the spectrographic analysis of nickel alloys. C. J. Neuhäus. il diag Opt Soc Am J 33:167-74 Mr '43
- Synthetic rubber; spectroscopic method for analysis and control. R. B. Barnes, U. Liddel and V. Z. Williams. bibliog il diags Ind & Eng Chem Anal ed 15:83-90 F 15 '43
- Ultraviolet absorption spectra of protein solutions. R. N. Jones and H. J. Creech. bibliog Opt Soc Am J 33:209-18 Ap '43

SPECTRUM of comets. See Comets—Spectra

SPECTRUM of stars. See Stars—Spectra

SPECTRUM of sun. See Spectrum, Solar

SPECULATION

- German Europe; curbing speculators. Economist 143:769 D 19 '42
- Investment information, please; will there be a major revival in common stock investment and speculation? Mag of Wall St 71: 286-8+ D 26 '42
- Speculating for financial security. G. W. Smith. Barron's 23:3 J1 5 '43; Reply. J. R. Bancroft. 23:7-8 Ag 23 '43
- Speculative investment program aided by new tax law on capital gains and losses. J. K. Williams. Comm & Fin Chr 156:2239 D 24 '42

See also

- Investments
Securities
Stock exchange

SPEECH**See also**

- Language and languages

SPEECHES**See also**

- Public speaking

SPEED

- Centrifugal-pump performance as a function of specific speed. A. J. Stepanoff. bibliog diags A S M E Trans 65:629-36; Discussion. 636-47 Ag '43

- Determining speeds. W. F. Schaphorst. chart Am Gas J 153:25 Ap '43

See also

- | | |
|-----------------------|-------------|
| Airplanes—Speed | Ships—Speed |
| Railroads—Train speed | Velocity |

SPEED indicators

- Graphical analysis of delay of response in air-speed indicators. K. J. DeJuhasz. bibliog diags J Aeronautical Sci 10:91-7 Mr '43

SPEED variation

- Aeroproducts constant-speed propeller. J. F. Haines. il Aero Digest 42:219-20+ Ap '43
- Amplidyne-electronic equipment increases versatility of paper machine. G. V. Kullgren. il Paper Tr J 115:57 N 26 '42
- Amplidyne; what it does for power control and how it does it. F. Felix. il diags Power 87:504-6+ Ag '43
- Automatic fan speed control for unit coolers. S. C. Segal. diags Refrig Eng 46:177-9 S '43
- Automatic synchronizer controls engine speed. il Aero Digest 43:207 J1 '43
- Comparison of API Std. 11-E and AGMA practice on steel helical and herringbone geared speed reducers. E. N. Kemler. Am Pet Inst Proc 23(4):213-19 '42
- Correct selection prevents gear speed-reducer headaches. W. F. Plume. diags Power 87:169-72 Mr '43
- Design and manufacture of Curtiss propellers. il Aero Digest 42:179-80+ Ap '43
- Direct-current adjustable-speed drives for machine tools. G. A. Caldwell. diags Mach 49:207-11 Ap; 173-6 My; 208-11 J1 '43
- Do you want your gear speed reducers to run better longer? W. F. Plume. il Power 87:615-17 S '43

SPEED variation—Continued

Electronic control of d-c motors. E. E. Moyer. *il* diags Electronics 16:98-103+ My; 119-25 Je; 118-22 Jl; 133-8+ S; 128-33+ O '43

Electronic motor control has excellent characteristics for new machine-tool drive. S. D. Fendley. *il* diags Steel 112:100, 103-4+ My 24 '43

Electronic tubes power adjustable-speed drives. *il* diag Power 37:462-3 Jl '43

Features of adjustable-speed electric drives to meet the requirements of the paper industry. R. R. Baker. *il* diags Paper Tr J 116:28-32 Mr 25 '43

Fundamentals of wind tunnel control. R. R. Longwell. *il* diag Aviation 42:162-3+ O '43

Hub transmission provides multiple speeds; patent assigned to Sturmev-Archer gears *ltd*. diag Machine Design 15:180+ Ap '43

Liquid rheostat for continuous control; centrifugal pump and draft fan motors. G. R. Shaw. *diag* Elec W 119:788+ Mr 6 '43

Maintains constant driven speed; patent assigned to General Motors corp. diags Machine Design 14:138+ N '42

Measurement of transcription-turntable speed variation. H. E. Roys. *il* diags Inst Radio Eng Proc 31:52-5 F '43

Method for the exact regulation of fixed rotational speeds of an axle; abstract. F. Kirschstein. *Wireless Eng* 20:258 Mr '43

Mot-O-Trol electronic adjustable-speed drive. *il* Am Mach 87:124+ Ap 29 '43

New electronic variable-speed drive; Thy-motor. S. D. Fendley. *il* diags Power Pl Eng 47:64-8 F '43; Same. Paper Tr J 116:33-7 F 11 '43; Same. Gen Elec R 46:225-30 Ap '43; Same cond. Iron Age 151:58-61 Mr 18 '43; Same cond. Radio N 29:11-13+ My '43; Excerpts. Concrete (mill sec) 51:139-40 Mr '43; Automotive & Aviation Ind 88:32-3+ Mr 1 '43; Power 87:178-9+ Mr '43; Abstract. Electronics 16:138-9+ Mr '43

New type of adjustable-speed drive for a-c systems. A. G. Conrad, S. T. Smith and P. F. Ordnung. *diags Elec Eng* 62:Trans 7-10, 522-5 Ja, Ag '43

Oil-well pumping practices; speed reducers. J. Zaba. *bibliog* diag Oil & Gas J 42:53, 60+ O 28 '43

Operating characteristics of electric motor drives. L. H. Berkley. *Product Eng* 14:370-3 Je '43

Precise control enhances machine performance. F. Felix. *il* diags Machine Design 15:132-4+ Ap '43

Processing lines for electrolytic tinning. J. R. Erbe. *il* diags Steel 111:128-30+ D 7 '42

Provides cyclic speed variation; patent assigned to the United shoe machinery corp. *diags Machine Design* 15:176+ J1 '43

Recommended specification for prime-mover speed governing; joint A.I.E.E.-A.S.M.E. committee. *Mech Eng* 65:86+8 S '43

Reeves combines variable speed mechanism and gear reducer in single compact unit. *il* Water Works & Sewerage 90:73-4 Mr '43

Ring- and cone design of an infinitely variable speed drive. *il* diag Machine Design 15:87-8 Mr '43

Rotol four-bladed variable-pitch airscrew. *il* diags Engineering 156:125-8 Ag 13 '43

Rototrol provides operating advantages in the pulp and paper industry. W. R. Harris. *il* diags Paper Tr J 115:35-6, 38+ N 26 '42

Schrage motor. O. E. Mainer. *diags Elec R (Lond)* 133:77-9 J1 16 '43

Selection and maintenance of speed reducers. F. A. Westbrook. *il* Power Pl Eng 47:73-4 J1 '43

Speed control assumes added weight under wartime impetus. *il* diags Rayon 24:93-6, 149-51 F-Mr '43

Speed control of a-c motors with thyratrons. *il* diag Electronics 16:314 Je '43

Stepless speed control governed electronically; new Westinghouse drive. *diag Product Eng* 14:412 J1 '43

Tank turrets machined faster on mills equipped with variable voltage speed control. *il* diag Product Eng 14:76-7 F '43

Thyratron motor control. E. E. Moyer and H. L. Palmer. *diags Elec Eng* 62:Trans 706-12 N '43

Two motors solve multispeed problem. C. Bachmann. *diag Power* 37:691 O '43

VDM propeller pitch changing mechanism. *diags Automotive & Aviation Ind* 88:40-1 F 15 '43

Variable rake speed improves classifier output. H. S. Maxwell and W. B. Clark. *il* Eng & Min J 144:73-4 Ap '43

Variable speed a.c. motors. *diags Electrician* 130:289-92 Mr 19 '43

Variable-speed control; use of magnetic coupling for recovering power used on engine test beds. *diag Elec R (Lond)* 133:337-8 S 10 '43

Variable speed drives extend use of machines. F. A. Westbrook. *il* Power Pl Eng 47:89-90 Ja '43

What is a magnetic variable speed drive? *diags Power Pl Eng* 46:96+ D '42

What the amplydium has contributed to reversing mill drives. C. B. Huston. *il* diags Blast F & Steel Pl 31:654-8 Je '43

Wide motor speed range with alternating-current supply; Mot-O-Trol. T. R. Lawson. *il* diags Steel 112:106, 108+ Je 21 '43; Same abr. Concrete (mill sec) 51:182-3 Je '43; Same abr. Rayon 24:311-13 Je '43; Excerpts. Iron Age 151:55, 56 Ap 15 '43; Elec W 119:1638+ My 15 '43

See also

Electric motors—Governors (machinery)
Control

SPEKKER absorptiometer. *See* Absorptiometer

SPENCER, Adam
Benjamin Franklin and the mysterious Dr. Spence; the date and source of Franklin's interest in electricity. I. B. Cohen. *bibliog* *il* Franklin Inst J 235:1-25 Ja '43

SPENCER, Kenneth Aldred, 1902-
Sketch. *por Explosives Eng* 21:74-5 My '43

SPENDING. *See* Consumption (economics); Government expenditures

SPENDING tax
Advocates income tax collection-at-source and spendings tax. R. E. Paul. *Comm & Fin Chr* 156:1801+ N 19 '42

How a spendings tax might work; three family budgets. *Fortune* 27:81 Mr '43

Immediate adoption of spending tax to replace income tax urged. I. Fisher and W. Vickrey. *Comm & Fin Chr* 157:1672 My 6 '43

Spending tax; abstract. R. Paul. *Bankers M* 145:530 D '42

SPERDON. *See* Tetrachloroquinone

SPERRY, Elmer Ambrose, 1860-1930
Elmer Sperry and his magic top. F. S. Wickware. *por Sci Am* 169:66-7+ Ag '43

SPERRY corporation
Sperry's peace outlook. M. Pescatello. *Baron's* 23:9 Ja 13 '43

War stocks with good peace prospects. *il* Mag of Wall St 72:419-20 J1 24 '43

SPERRY gyroscope company
Contributions to aviation 1932-1942. P. R. Bassett. *il* Aeronautical Eng R 1:151 N '42

SPERTI, George Speri, 1900-
Biodynes; miracle of wound healing and tissue repair. L. M. Miller. *il* Sci Am 163:14-16 Ja '43

Sperti's Institutum; irradiation expert heads research of Dominican school. *por Business Week* p20+ S 18 '43

SPHALERITE
Floating chalcopryrite from galena and sphalerite. flow sheet Min Cong J 29:30 S '43

SPHERICAL surfaces
Lathe equipped to machine spheres. E. J. Heyman. *diag Am Mach* 87:107 J1 22 '43

SPHERICITY
Measuring intercept sphericity of sand grains. G. Rittenhouse. *diag Am J Sci* 241:109-16 F '43

SPHEROGRAPHICAL system. *See* McMillen, Drury A.

SPICER manufacturing corporation
Thurman stock appraisal. *Mag of Wall St* 71:423 Ja 23 '43

SPICES
Churgic conference discusses drugs, spices. *Oil Paint & Drug Rep* 143:7-4 Mr 29 '43

Possibilities of growing spices in the United States. M. L. Van Norden. *Oil Paint & Drug Rep* 142:7, 66-7+ N 30 '42

SPICES—Continued

- Spice delivery quotas continued. Oil Paint & Drug Rep 143:4+ F 15 '43
 Spice makers pull promotion assets out of wartime food turmoil. E. M. Kelley. *il Sales Management* 52:84+ N 1 '43
 Spice quotas in M-order revised. Oil Paint & Drug Rep 143:7 Ja 11 '43
 Vigor in spices. *Business Week* p60+ Mr 20 '43

SPIEGEL incorporated

- War casualty companies that will revive with peace. J. C. Clifford. *Mag of Wall St* 72: 597 S 4 '43

SPIEGELEISEN

- Monthly price averages for twelve years, 1929-1942; tabulation. *Steel* 112:366 Ja 4 '43

SPIES

- FBI war investigative jurisdiction. J. T. Madigan. *N E Water Works Assn J* 57: 163-8 Je '43
 Supreme Court rule on saboteurs civil trial. *Comm & Fin Chr* 156:1893 N 26 '42

SPILLWAYS

- Aeration of spillways. G. H. Hickox. *il diags Am Soc C E Proc* 68:1777-96 D '42; Discussion 69:422-4, 785-8, 868-70, 1461-2 Mr, My-Je, N '43
 Creosoted wood dam for water supply. *il Pub Works* 74:22 Ag '43
 Creston, Iowa, bought water works, doubled capacity and eliminated shortage; with cost data. J. B. Russell. *il Pub Works* 74: 14-15 My '43
 Design and construction of the concrete multiple arch bridge over the spillway of Grand Coulee dam. E. R. Dexter. *il diags Am Concrete Inst J* 14:149-63 Ja '43; Discussion. 14:sup164-164' Je '43
 Design of circular spillway modified to cure pulsating discharge; San Pablo reservoir. J. W. Trahern. *il Eng N* 131:25-7 Jl 1 '43
 Design of Shasta dam. K. B. Keener. *il diags Civil Eng* 13:317-20, 427-30 Jl, S '43
 Earth-filled dam at Santa Fe, New Mexico; puddled core of Nichols dam uses material from reservoir. J. N. Van Sant. *il Civil Eng* 13:366-8 Ag '43
 Entrainment of air in flowing water; open channel flow at high velocities. L. S. Hall. *il Am Soc C E Proc* 68:1100-40 S '42; Discussion. 69:761-71, 847-57 My-Je '43

See also

Dams**SPINACH, Dried**

- Dehydrated spinach; changes in color and pigments during processing and storage. H. J. Dutton, G. F. Bailey and E. Kohake. *bibliog il Ind & Eng Chem* 35:1173-7 N '43

SPINACH, Frozen

- Brief summaries of grade standards. *Food Ind* 15:70+ Ja '43
 7,000,000 pounds of spinach. A. F. Joy. *il Mod Packaging* 17:98-100 O '43

SPINAL fluid. See Cerebrospinal fluid**SPINASTEROL**

- Steroids with double bonds between quaternary carbon atoms; the structure of α -spinasterol. H. E. Staveland and G. N. Bollenback. *bibliog Am Chem Soc J* 65: 1600-3 Ag '43

SPINDLES (machine tools)

- Spindles drilled faster; use of turret lathes. D. H. Samuelson. *il Am Mach* 87:74-5 Ja 7 '43

SPINNERETTES**Manufacture**

- Progress in spinnerette manufacture. *Rayon* 24:474 S '43

SPINNING

- Control of spinning room labor. C. McElroy and M. Gross. *Textile World* 92:80-1 N '42
 Fiber from the spinner's viewpoint. C. D. Brandt. *Rayon* 24:351-3 Jl '43
 Rayon blends on worsted system; modifications needed in drawing and spinning. R. A. Smith. *Textile World* 92:78-9+ N '42

See also

- Cotton spinning
 Rayon spinning
 Yarn

Tables, calculations, etc.

- Hank-cloth production constants. C. McElroy and M. Gross. *Textile World* 93:131-2 Ap '43
 Twist nomograph for spinning. M. C. Bishop. *Textile World* 93:84-5 Jl '43
 Yarn-count constants. C. McElroy and M. Gross. *Textile World* 92:85 D '42

SPINNING machinery

- Characteristics and power requirements of spinning frames. E. A. Untersee. *Elec Eng* 59:Trans 1-4, 336-8 Ja, Je '40; Abstract. *Textile World* 93:98-9 S '43
 Maintenance of spinning frames. *il Textile World* 93:82-3 Mr '43
 Partington slubbing attachment. *diag Textile World* 93:114 Je '43
 Reclaiming worn spindles with metallizing. *il diags Rayon* 24:611-12 N '43

Lubrication

- Lubrication of spindles. *Textile World* 92: 102+ D '42

SPIRAL gearing. See Gearing, Spiral**SPIRAL compounds**

- Conversion of A²-cyclohexenones and cyclohexanones into spirohydantoin. H. R. Henze, R. C. Wilson and R. W. Townley. *bibliog Am Chem Soc J* 65:963-5 My '43

SPICES. See Knots and splices**SPLINES.** See Keys and keyways (machinery)**SPODUMENE**

- Tin-spodumene belt of the Carolinas; a preliminary report. T. L. Kesler. *fold maps U S Geol S Bul* 936-J:245-69 *bibliog* (p248-50); *pa* 50c *Supt. of doc.* '42

SPOILAGE

- Salvaging aircraft structures in process of manufacture. R. L. Schleicher. *il Mech Eng* 65:711-18 O '43

See also

- Salvage (waste, etc.)

SPONGE

- Sponge situation serious, says WPE. *For Comm W* 10:5 Mr 6 '43
 Sponges for war; Latin America is yielding small supply of loofah substitute. *Business Week* p30+ Ap 10 '43

SPONGE iron. See Iron, Sponge**SPONSORED periodicals.** See Advertising mediums—Periodicals, Sponsored**SPONTANEOUS combustion**

- Burn your coal in the firebox and not in the coal pile; hot spot indicators and dry ice protect against spontaneous combustion. *diag Steel* 113:104+ Ag 2 '43; Same cond. *Nat Safety N* 48:152-5 O '43; Excerpt. *Blast F & Steel Pl* 31:244 F '43
 Coal dump heating; precautions which should be taken. H. Mitchell. *Elec R (Lond)* 133: 83-4 Jl 16 '43
 Protecting wartime stockpiles of coal from fire; hot spot indicators. *diags Min Cong J* 29:67 S '43
 Self-ignition temperature. *Safety Eng* 85:30 Ap '43
 Self-ignition temperature of cellulose and magnesium. *Franklin Inst J* 234:492-3 N '42
 Storage of coal; revised and expanded edition of information circular 7211. J. F. Barkley. *diags U S Bur Mines Information Circ* 7235:1-14 '43; Same. *Am Water Works Assn J* 35:325-34 Je '43
 Storage of industrial coal. R. A. A. Taylor. *Engineering* 155:256 Mr 26 '43
 Storage of industrial coals. *il Steel* 113:110-11, 113, 116+ Ag 23 '43

SPOROTRICHOSIS

- Sporotrichosis on the Witwatersrand; abstract. C. J. du Toit. *J Ind Hygiene* 25:sup 100-1 My '43

SPORTING goods

See also

- Golf balls

SPORTS

See also

- Bowling alleys

SPOT radio. See Radio advertising—Spot radio**SPOT tests.** See Microanalysis**SPOT welding.** See Electric welding

SPRAINS

Ankle sprains; incidence, treatment, diagnosis, and lost time incurred. R. W. Bohnsack and J. E. Andes. *Ind Med* 12:588 S '43

SPRAY canopies. See Roofs—Water cooling

SPRAY painting. See Paint spraying

SPRAY residue on fruits and vegetables

Spray residues of tartar emetic on citrus leaves; determination by iodometric titration. R. L. Busbey and R. A. Fulton. *Ind & Eng Chem Anal ed* 15:37-8 Ja 15 '43

SPRAYING apparatus

Alloy-sprayer coats new work, regalanizes old material, patches weld-burned areas. *Il Steel* 113:116+ JI 19 '43

Arming the civilian against foe that creeps, crawls, flies, chews and bites. *Il Mod Plastics* 20:69+ My '43

Descaling steel by spray system. R. Trautschold. *Il diag Steel* 113:112-13+ S 13 '43

Develop sprayer plans. *Soap & San Chem* 19:129D Je '43

Development of the hot spraying of powdered materials. W. E. Ballard. *Il diag Chem & Ind* 62:190-4 My 22 '43

Housewife's helper. *Il Mod Plastics* 20:67+ JI '43

How much overload by spray-cooling transformers? V. M. Montsinger and P. M. Ketchum. *Elec W* 119:57-8 Ja 9 '43

Million small sprayers promised. *Soap & San Chem* 19:121 S '43

Practical method provides water spray for curing concrete pavement slabs. H. F. Clemmer. *Il Concrete* 50:8+ D '42

Refrigerator charger becomes mosquito gun. *Refrig Eng* 45:105 F '43

Simple way to clean spray heads. A. P. Schultze. *Factory Management* 100:126, 128 D '42

Spray nozzle machined out of polystyrene. *Il diag Product Eng* 14:623 O '43

Victory garden insect spray. *Il Mod Plastics* 21:83+ S '43

SPRAYING materials

See also

Insecticides

SPRAYING of metals. See Metal coating

SPREADING

Wetting and spreading; a laboratory experiment. L. J. Bircher. *bibliog diag J Chem Educ* 20:428-30 S '43

See also

Films

SPRINGFIELD, Illinois**Streets**

High school boys helped repair Springfield's streets. *Il Roads & Sts* 86:60 My '43

SPRINGFIELD, Massachusetts**Architecture**

Permanent housing for New England; Lucy Mallary Village. *Il plans Arch Rec* 94:49-51 O '43

SPRINGFIELD, Vermont**Water supply**

Reservoir roof of unreinforced arches. *Il diag Eng N* 131:479-81 S 23 '43

SPRINGS (furniture)

Modern designs from Chicago; wooden furniture springs. L. Moholy-Nagy. *Il Mod Plastics* 20:62-5+ D '42

Welding metal bed springs. E. H. Atkinson. *diag Welding J* 22:239-41 Ap '43

Wood springs pinch hit for steel. *Il Sales Management* 52:35-6 Je 1 '43

SPRINGS (mechanism)

Commercial tolerances for springs. H. Carlson. *Product Eng* 14:156-7 Mr '43; *Correction* 14:247 Ap '43

Nickel alloy springs; abstract. B. B. Betty, E. C. MacQueen and C. Rolle. *Metals & Alloys* 17:190+ Ja '43

Predicting spring performance of beryllium copper wire and strip. H. G. Williams. *Il Iron Age* 152:62-7 JI 8 '43

Spring material substitutes have unconsidered qualities. W. W. Boyd. *Il diag Product Eng* 14:112-13 F '43

Spring removes slack from equipment leads. *diag Elec W* 118:1968 D 12 '42

War products consultation: temporary set in heavy springs. *Metal Prog* 43:54-5 Ja '43

Which spring material? A. M. Wahl. *Il Machine Design* 14:87-9 N '42

See also

Airplanes—Springs

and suspension

Design

Design method for volute springs. H. O. Fuchs. *Il diag S A E J* 51:317-28 S '43

Designing ring springs. A. M. Wahl. *Il diag Machine Design* 15:124-7+ Ag '43

Forced vibrations of non-linear springs. C. R. Wylie, jr. *bibliog Franklin Inst J* 236: 273-84 S '43

Secondary stresses in volute springs. H. O. Fuchs. *bibliog Il diag S A M E Trans* 65: 543-9; Discussion. 550-1 JI '43

Simplifying design of volute springs. A. M. Wahl. *Il diag Machine Design* 15:103-7 F '43

Space limitations and optimum conditions in aircraft spring design. R. H. Carter. *J Aeronautical Sci* 10:51-7 F '43

Torsional rod springs and how they are designed. H. E. Simi. *Il diag Product Eng* 13:710-12 D '42

Volute-spring formulas. C. J. Holland. *diag S A M E Trans* 65:533-9; Discussion. 539-41 JI '43

When helical springs buckle! A. M. Wahl. *bibliog diag Machine Design* 15:96-9 My '43

Manufacture

Dies for stirrup springs for 40-mm. percussion fuze. *Il diag Am Mach* 86:1522-4 D 24 '42

Tables, calculations, etc.

Calculating buckling load of helical compression springs; with chart. C. P. Nachod. *diag Machine Design* 15:133-4 S '43

Calculating spiral springs. A. M. Wahl. *bibliog Il diag Machine Design* 15:128-32+ N '43

Helical compression springs; radial chart and nomograph. C. P. Nachod; J. S. Swearingen. *Product Eng* 14:681-2 O '43

Testing

Modification of the C.F.R. bouncing pin spring-tension balance and instructions for use. P. Draper. *diag Inst Pet J* 29:253-7 O '43

Spring tension balance for C.F.R. bouncing pin. P. Draper. *Il diag plan Inst Pet J* 28: 209-13 S '42

Testing of volute springs. B. Sterne. *Il diag S A M E Trans* 65:523-30; Discussion. 530-2 JI '43

SPRINGVILLE, Utah

Springville, where all the contractors come from. *Roads & Sts* 86:66 Ag '43

SPRINKLER leakage insurance. See Insurance, Sprinkler leakage

SPRINKLING systems

Spray of safety. *Safety Eng* 84:32+ N '42

Sprinkler system efficiency holds down fire loss in Dayton warehouse. H. E. Stokes. *East Underw* 44:16+ JI 9 '43

Sprinkler water heating. *Dom Eng* 161:62+ Ja '43

SPROCKETS

Flame cutting and hardening aid tank sprocket production. *Il Mach* 49:182-3 D '42

Saves film in sound recorder; sprocket and film drum; patent assigned to the Radio corp. of America. *diag Machine Design* 15: 172+ S '43

SPROUTS

Vitamins in dehydrated seeds and sprouts. P. R. Burkholder. *Science* 97:562-4 Je 18 '43

SPRUCE

Effect of mature yellow birch upon spruce and fir understorey. W. M. Robertson. *Pulp & Pa. of Can* 44:36 Ja '43

Influence of cooking and bleaching upon the chain length distribution of the carbohydrate fraction in pulpwood. J. E. Atchison. *bibliog Paper Tr J* 116:23-34 Je 3 '43

SPRUCE—*Continued*

Nitrated wood; fractionation and molecular magnitudes. S. Coddick and E. C. Jahn. bibliog *il Ind & Eng Chem* 35:890-4 Ag '43
North for spruce; Alaskan forest wood needed for airplanes. *il Business Week* p58+ J 17 '43

Studies on lignin and related compounds; isolation of 1-(4-hydroxy-3-methoxyphenyl)-2-propanone and 1-ethoxy-1-(4-hydroxy-3-methoxyphenyl)-2-propanone from the ethanolysis products of spruce wood. E. West, A. S. MacInnes and H. Hibbert. bibliog *Am Chem Soc J* 65:1187-92 Je '43

Studies on lignin and related compounds; the course of formation of native lignin in spruce buds. J. R. Bower, jr, L. M. Cooke and H. Hibbert. bibliog *Am Chem Soc J* 65:1195-8 Je '43

Studies on lignin and related compounds; the ultraviolet absorption spectra of ethanolic lignins. R. F. Patterson and H. Hibbert. bibliog *Am Chem Soc J* 65:1869-73 O '43

Wood influence on pulp quality. H. J. Ostrowski. *Pulp & Pa of Can* 44:807-9 O '43

SPRUCE bark beetle

Estimation of forest insect damage; with particular reference to dendroctonus piceaperda Hopk. R. E. Balch. bibliog *Pulp & Pa of Can* 43:900-6; Comments. S. A. Graham. 906 N '42

SPRUCE sawfly

European spruce sawfly in 1942. R. E. Balch. *il Pulp & Pa of Can* 44:279+ F '43

SQUABS. See Pigeons**SQUARE D company**

Ten years of Kollsman development. J. C. Carr. *il Aeronautical Eng* R 1:125 N '42
Thumbnail stock appraisal. *Mag of Wall St* 71:424; 72:367 Ja 23, J 10 '43

SQUARE root

Chart for determining square root of a complex number; transmission line and filter calculations; reference sheet. R. G. Nisler. *Electronics* 16:127-8 Ag '43

Slide rule for square roots. L. Jordan. *Eng N* 130:764 My 20 '43

Square root by short method. L. O'Shaughnessy. *Eng N* 130:823 Je 3 '43

SQUIBB, E. R., and sons

Medical packs help reduce war casualties. D. Guernsey. *il Mod Packaging* 16:51-4+ Ag '43

Stocks offered. *Comm & Fin Chr* 158:1863 N 8 '43

STABILIZATION in industry

See also

Business cycles.	Millinery stabilization commission
Economic planning	Unemployment—Relief measures
Economic policy	
Industry	

STABILIZATION of petroleum. See Petroleum —Stabilization**STABILIZERS**. See Airplane stability and stabilizers; Gyroscope**STABLES**. See Barns and stables**STACKING machines**

Morris stacking machines. *il Mech Handling* 29:240 D '42

STAFF manuals. See Libraries, Special—Staff manuals**STAGGERED hours**

Beating the bus shortage; Davenport, Rock Island and Moline area. C. A. Du Bois. *Bus Transportation* 22:25-6 J 1 '43

How the Boston elevated railway is following up on the subject of staggered hours. *il Bus Transportation* 22:43-4 O '43

If staggered hours fail, what then? H. G. Morris. *Bus Transportation* 22:24-6 Ja '43
Jersey's staggered-hour plan. J. E. Conlon. *Pub Util* 31:201-6 F 18 '43

New Jersey's staggering problem. B. Welbourne. *map Bus Transportation* 22:34-6 Ja '43

Staggered hours; a national challenge; survey of many cities. M. Buck. *Transit J* 86:434-9 D '42

Staggered hours just had to work in Portland, Oregon. G. G. Steele. *il Bus Transportation* 22:32-4 Ag '43

Streamlined planning for staggered hours in Boston. H. S. Knowlton. *il Transit J* 86:405-7 N '42

Summer shift; Philadelphia stores drop staggered hours for season. *Business Week* p92 My 22 '43

War worker transportation in Schenectady. *il map Transit J* 86:396-8 N '42

STAINLESS clad steel. See Steel, Stainless clad**STAINLESS steel**. See Steel, Stainless**STAINS****Removal**

Leather stain removal; abstract. L. G. Stockdale. *Soap & San Chem* 19:61 Ja '43

See also

Cleaning**STAINS and staining (microscopy)**

Demonstration of the protozoan parasite of quail malaria by fluorescence microscopy. R. L. Patton and R. L. Metcalf. *Science* 98:184 Ag 20 '43

Detergents and staining of bacteria. S. F. Snieszko. *bibliog Science* 96:589 D 25 '43

Giemsa stain of quite constant composition and performance, made in the laboratory from eosin and methylene blue. R. D. Lillie. *Pub Health Rep* 58:449-52 Mr 12 '43

Microchemistry of pulp fibers; the significance of fiber ballooning in the pulping process. W. M. Harlow. bibliog *il Paper Tr J* 117:27-9 J 18 '43

Nature of fiber staining by iodine stains. H. W. Rowe. bibliog *Paper Tr J* 116:26-34 Mr 11 '43; Abstract. *Paper Ind* 24:873-7 N '42

New fixative for animal tissues. M. A. Cleverdon. *Science* 97:168 F 12 '43

Staining of yeast spores. L. S. McClung. *Science* 93:159-60 Ag 13 '43

Swelling-staining reagent for studying fiber structure. W. M. Harlow. *il Paper Tr J* 116:52 Ap 15 '43

STAINS and staining, Vital

Vital stains; dye as carrier of iodine or arsenic into site of tumour. A. A. Goldberg. *Chem Soc J* p713-16 N '42

STAIRWAYS

Lighting for safety; New York's subway stations. E. E. Dorting. *il diag Illum Eng* 38:426-32 S '43

Stairway accidents. *Nat Safety N* 47:21-2+ My '43

Stairways and ramps; safety aspects. *il Nat Safety N* 47:101-2 Mr '43

STAIRWAYS, Concrete

Portable precast concrete stairway of unusual design protects fire wall. H. Nelson. *il diag Oil & Gas J* 42:144 S 23 '43

STAIRWAYS, Portable

Portable precast concrete stairway of unusual design protects fire wall. H. Nelson. *il diag Oil & Gas J* 42:144 S 23 '43

STAMFORD, Connecticut**Hospitals**

St Joseph's hospital, Stamford. *il plans Arch Rec* 93:71-3 My '43

STAMMERING

Stuttering. *Sbi Am* 168:69 F '43

STAMP plan. See Food stamp plan**STAMP tax**

Elimination of stamps in payment of federal transfer taxes; stock exchange announcement. *Comm & Fin Chr* 158:1803 N 4 '43

Moot points in stamp tax law. *Nat Underw* 47:1+ Ja 28 '43

Receipts from bills and cheques, 1938-39 to 1942-43. *Economist* 144:732 Je 5 '43

See also

Stock transfer tax**STAMPING**

Cast ordinance parts redesigned for fabrication as welded stampings. *diags Product Eng* 14:206-7 Ap '43

Cecostamping; a new technique for producing formed parts in sheet metals. *il Automobile Eng* 33:104-6 Mr '43

Composite stampings relieve critical short-ages. G. W. Birdsall. *diags Machine Design* 14:113-15+ D '42

STAMPING—Continued

- Conservation through the use of stampings in ordinance. K. Rose. *Il Metals & Alloys* 18:778-83 O '43
 Design of stampings to facilitate production. R. A. Wagner. *diags Mach* 50:159-62 S; 153-3 O '43
 Piping connections for cooling stamping blocks by refrigeration. F. F. Stevenson. *Il Heating-Piping* 15:91-2 F '43
 Pressing metal into service. *Il Sci Am* 169: 208-10 N '43
 Stampings eliminate machining in roller bearing retainers. R. R. Kilian. *Il Product Eng* 14:504-5 Ag '43
 Stampings producers; directory. *Machine Design* 15:204-6 O '43
 Stampings thrive. *Business Week* p64+ S 11 '43

STAMPING presses

- Air-operated impact-type stamping machines. *Il Comp Air M* 48:7097 J1 '43

STAMPS, Hand. See Hand stamps**STAMPS, Poster. See Poster stamps****STANDARD brands, inc.**

- Acquisitions. *Comm & Fin Chr* 157:47 Ja 4 '43
 Expansion. *Barron's* 23:1+ Ag 23 '43
 Long road back; new policies improving results. *Business Week* p102-3 S 11 '43
 Low-priced stocks for large percentage gains. *Mag of Wall St* 71:635 Mr 20 '43
 Peace-time leaders. *Mag of Wall St* 72:508 Ag 21 '43
 Thumbnail stock appraisal. *Mag of Wall St* 72:310 Je 26 '43

STANDARD costs. See Cost accounting—Standard costs**STANDARD deviation. See Variation (statistics)****STANDARD frequency radio stations. See Radio stations, Standard frequency****STANDARD gas and electric company**

- Annual report; changes in capital structures. *Comm & Fin Chr* 158:585-6 Ag 9 '43
 Description of holding companies. O. Ely. *Pub Util* 31:827-9 Je 24 '43
 Files recapitalization plan with SEC; provides for one class of stock. *Comm & Fin Chr* 157:1189 Mr 29 '43
 New light on values in Standard Gas; bond trustee presents conservative estimate. W. T. Hyde, jr. *Barron's* 23:15 S 13 '43
 New status for holding company debts; Standard Gas is saving \$1,500,000 in taxes through change in law. W. T. Hyde, jr. *Barron's* 22:19 D 14 '42
 Program of recapitalization defended. *Comm & Fin Chr* 157:2354-5 Je 21 '43
 Public utility securities. *Comm & Fin Chr* 158:1596 O 21 '43
 What are Standard Gas & Electric issues worth? W. T. Hyde, jr. *Barron's* 23:7-8 Mr 29 '43

STANDARD of living

- Adequate living standard for all; Goals for America. S. Chase. *Bankers M* 145:447-8 N '42
 Government measures for improvement of living standards in El Salvador. H. G. Ainsworth. *Monthly Labor R* 57:233-6 Ag '43
 Higher living standards as a dominant objective. L. L. Lorwin. *For Comm W* 9:9 D 26 '42
 Minimum welfare standards as a post-war objective. E. R. Walker. *bibliog Int Labour R* 48:417-33 O '43
 Postwar evolution to new high living standards seen by industry. *Comm & Fin Chr* 157:1579 Ag 29 '43
 Postwar goals for Americans; review of Twentieth Century trends study. M. R. T. Carter. *Credit & Fin Management* 45:9-10 Mr '43
 Standard of living. *Economist* 145:325-6+ S 4 '43
 Standard of living in wartime. F. M. Williams. *Ann Am Acad* 229:117-27 S '43
 Wages, hours, and living standards in India. R. K. Das. *Monthly Labor R* 57:689-99 O '43

See also

Budget, Household
 Cost of living

STANDARD oil company (Kentucky)

- Securities disturbing investors. J. S. Williams. *Mag of Wall St* 71:600 Mr 6 '43

STANDARD oil company (N.J.)

- Amends divestment plan. *Comm & Fin Chr* 158:398 J1 26 '43
 Annual report. *Comm & Fin Chr* 157:2354 Je 21 '43
 Distribution of Consolidated natural gas co. stock approved by SEC. *Comm & Fin Chr* 153:154 O 18 '43
 Files divestment plan with SEC. *Comm & Fin Chr* 158:1077 S 13 '43
 Rockefeller's plan to sell part of his oil stocks abandoned. *Comm & Fin Chr* 158:1772 N 1 '43
 Special offering. *Comm & Fin Chr* 156:2141 D 14 '42

- Training programs touch all phases of operations; Standard oil company of New Jersey gives scholarships and training to South American employees. *Il Oil & Gas J* 41:79+ D 31 '42
 \$25,000,000 Rockefeller holding in oil companies to be sold. *Comm & Fin Chr* 158: 1675 O 25 '43
 Vice-President Wallace charges company with delaying synthetic rubber production; Answer to Wallace charge. *Comm & Fin Chr* 158:1179-80 S 20 '43

STANDARD oil company of California

- New Elk Hills contract looms. *Nat Pet N* 35:34+ S 15 '43
 President Roosevelt ends Elk Hills deal. *Comm & Fin Chr* 158:1077. S 13 '43
 Secretary Knox terminates Elk Hills oil deal. *Comm & Fin Chr* 157:2458 Je 28 '43
 Standard of California and Navy defend propriety of Elk Hills contract. *Oil & Gas J* 42:34+ Je 27 '43
 To continue Elk Hills work. *Comm & Fin Chr* 158:1179 S 20 '43

STANDARD oil company of Indiana

- Commission agents get boost; NWLB raises commissions of Standard of Indiana agents. *Nat Pet N* 35:38-9 S 1 '43

STANDARD oil company of New York. See Socony-Vacuum oil company**STANDARD solutions. See Solutions, Standard****STANDARD steel spring company**

- Listing; earnings, 1939-1942. *Comm & Fin Chr* 157:1654 My 3 '43
 Stock offering. *Comm & Fin Chr* 157:2053 My 31 '43

STANDARD time. See Time, Standard**STANDARDIZATION**

- American water works association tentative standardization procedure. *Am Water Works Assn J* 35:1097-1100 Ag '43
 Britain simplifies production for victory; utility program of British Board of trade; civilian clothing. D. M. Keezer. *Il Dun's R* 51:13-19+ Je '43
 British standards institution annual general meeting, July 20. *Science* 98:170 Ag 20 '43
 China's plans for post-war standardization. *Ind Stand* 14:132 Je '43
 Continuing need for the conservation of resources. H. Cooley. *Mech Eng* 65:785-8 N '43; Excerpts. *Ind Stand* 14:281-3 O '43
 Do standards stifle individualism? J. Gallard. *Il Mod Packaging* 16:37-9+ Mr '43
 Fewer frills; standardization roster. *Business Week* p30-3 My 1 '43
 How standards are developed in Brazil. M. E. Souza. *Il Ind Stand* 14:161-3 My '43
 Inter-American co-operation in the development of standards. R. E. Zimmerman. *Elec Eng* 62:390-2 S '43
 Inter-American standards for goods of commerce; abstract. A. Magno-Rodriguez. *Science* 98:sup10+ J1 2 '43
 Large saving made possible by equipment standardization. *Oil & Gas J* 41:59 N 19 '42
 New developments in inter-American standards program. *Il Ind Stand* 14:159-60 My '43
 Off come product frills; trend toward standardization and simplification. *Business Week* p15-17 N 28 '42
 Place of standardization in modern life. A. V. Whitney. *Il Ind Stand* 14:21-5 Ja '43
 Reports of central A.P.I. committees on the standardization of oil-field equipment. *diags Am Pet Inst Proc* 23(4):128-234 '42

STANDARDIZATION—Continued

- Simpler things to come. H. Coonley. *Il Dun's R* 51:7-10+ F '43
- Standard models speed shipbuilding. H. G. Smith. *Il Ind Stand* 14:278-80 O '43
- Standardization and grade-labeling in World war II. Adv & Sell 36:16-16+ JI '43
- Standardization and the Liberty ship. H. C. E. Meyer. *Machine Design* 14:142+ N '42
- Standardization in Britain. D. V. Baker. *Il Steel* 112:66, 68, 72 Ja 11 '43
- Standardization of gas testing. N. Williams. *Il diag Oil & Gas J* 42:41-2 Je 10 '43
- Victory models: plans for standardization. *Business Week* p34+ F 27 '43
- War standards important in 1942 work; annual report. H. S. Osborne. *Ind Stand* 14:5-7 Ja '43
- War-time standardisation. C. Le Maistre. *Engineering* 155:76-7, 117-18, 135-6 Ja 22, F 5-12 '42; Excerpts. *Engineer* 175:97-8 Ja 29 '43
- What the American ceramic society can and should do in the field of standardization. A. S. Watts. *Am Cer Soc Bul* 22:5-6; Discussion 8-8 Ja 15 '43
- Writing standards that work. J. Gaillard. *Il Mod Packaging* 16:153-5 Ap '43

See also

- | | |
|---|----------------------------|
| Color—Standards | Heating—Standards |
| Cutting tools—Standards | Simplification in industry |
| Electric equipment—Standards | Standards, Engineering |
| Electric standards | |
| also American standards association; | |
| United States—Standards, National bureau of | |

STANDARDS

- ASTM acts on new standards. *Il Ind Stand* 14:287-90 O '43
- ASTM issues 32 new standards; some to save vital materials. *Steel* 112:50+ Ja 25 '43
- British standard specifications. *Mech Handling* 30:125-6 Mr '43
- Commercial standards cement Inter-American trade. S. C. Saunders. *For Comm W* 12:9-11+ Ag 28 '43
- Congress acts in controversy over standards and labeling; OPA denied authority to require grade labeling of any commodity; statement of W. S. MacLeod before Boren subcommittee. *Il Ind Stand* 14:205-10 JI '43
- Do standards stifle individualism? J. Gaillard. *Il Mod Packaging* 16:37-9 Mr '43
- Emergency revisions bring ASTM standards in line with war needs. *Ind Stand* 14:100-1 Mr '43
- How standards are used in price and rationing control. W. S. MacLeod. *Il Ind Stand* 14:96-9 Mr '43
- Maintenance of A.P.I. oil field equipment standards. H. W. Ladd. *Pet Eng (Ref annual)* 14:41-2, 44-5 JI 1 '43
- OPA retains standards; drops grade labeling. *Ind Stand* 14:263-4 S '43
- OWI announces savings through simplification and standards. *Il Ind Stand* 14:135 Ap '43
- Radio program tells why standards are essential to war effort. *Il Ind Stand* 13:273-5 N '42
- Standard samples issued or in preparation by the National bureau of standards. *U S Nat Bur Stand Circ* C398Sup:1-12 '42
- Standard tests and specifications in WPB and OPA orders. *Ind Stand* 13:291-3, 317-21; 14:31-3, 90-2, 128-9, 200-1, 240-1 N '42-Ja, Mr-Apr, Je, Ag '43
- Standards and labeling in controversy. *Il Ind Stand* 14:140-5 My '43
- Standards provide accuracy, boost production, cut costs in mass production. W. S. Potter. *Il Instruments* 16:331-3 Je '43
- WPB chief outlines new policy on standards. *Ind Stand* 14:191 Je '43
- What will government-imposed standardization mean to advertising? A. G. Mezerik. *Pir Ink* 202:64-6+ Ja 15 '43

See also

- | | |
|--------------------------------|---------------------|
| Cost accounting—Standard costs | Quality of products |
| Electric standards | Safety standards |
| Grade marks | Textile standards |
| | Time study |

- | | |
|---|--|
| United States—Standards, National bureau of | Weights and measures |
| also subdivision | Standards under various subjects, e.g. |
| Canned food | Food, Dried |
| Color | Photography |
| Cutting tools | Pipes |
| Filters and filtration | Screw threads |
| Food | |

Bibliography

- ASA standards activities; approved standards available since October. *Ind Stand* 13:294-5 N '42 [cont monthly]
- American standards; with price list and index. *Ind Stand* 14:1-20 pt 2 Ap '43
- Argentine standards in English now available from ASA. *Ind Stand* 14:194 Je '43
- Index to A.S.T.M. standards; including tentative standards, as of December, 1942. 198p Am. soc. for testing materials, 260 S. Broad st, Philadelphia '42
- New foreign standards now in ASA library (cont). *Ind Stand* 14:58, 89, 197-8, 230, 243, 290 F-Mr, Je, Ag-O '43
- Standards issued by associations and government (cont). *Ind Stand* 14:64-6, 93-5, 132-3, 172-8, 195-6, 220-1, 261-2, 291, 312-13 F-JI, S-N '43

STANDARDS, Electric. See Electric standards**STANDARDS, Engineering**

- American standard symbols for heat and thermodynamics. S. A. Moss. *Mech Eng* 65:669-70 S '43; Excerpts. *Chem & Eng N* 21:2035-6 D 10 '43
- Coordinating standards work with design and production. B. C. Boulton. *Product Eng* 14:565-7 S '43

- New standard aids legibility in engineering graphs. C. D. Hanscom. *Ind Stand* 14:245-6 S '43

- Standard letter symbols help clarify engineering literature. S. A. Moss. *Ind Stand* 14:256-9 S '43

See also

- | | |
|----------------------|---|
| Electric standards | United States—Standards, National bureau of |
| Standardization | also subdivision Standards under special subjects, e.g. |
| Airplanes | Gearing |
| Boilers | Heating |
| Electric instruments | |

STANDARDS, International

- American standard letter symbols for heat and thermodynamics; international symbols standardization. S. A. Moss. *Science* 98:343-4 O 15 '43

- Hemisphere system of standards to aid trade and industry. *For Comm W* 11:46-7 Je 26 '43

- Inter-American program of the American standards association. *Science* 96:554 D 13 '42

- International systems and standards. R. Gregory. *Assn of Sp Lib & Inf Bur Proc* 1942:14-20

See also International standards association**STANDARDS, National bureau of. See United States—Standards, National bureau of****STANDARDS association, American. See American standards association****STANDARDS of measurement. See Measurement; Weights and measures****STANDPIPES****Standards**

- Revisions in standard specifications for elevated steel water tanks, standpipes and reservoirs. *Am Water Works Assn J* 34:1915-16 D '42; Same. *N E Water Works Assn J* 56:supl-2 D '42

- STANTON, Charles Ingram, 1893-Administrator Stanton, E. H. Forbes, por Air Transport 1:93-5 S '43 (to be cont)
- Portrait. *Radio N* 29:83 Je '43

STAPHYLOCOCCI

- Increased synthesis of p-aminobenzoic acid associated with the development of sulfonamide resistance in staphylococcus aureus. M. Landy and others. *bibliog Science* 97:265-7 Mr 19 '43

STAPHYLOCOCCI—Continued

- Pigment production by sulfonamide-resistant staphylococci in the presence of sulfonamides. W. W. Spink and J. J. Vivino. *Science* 98:44-5 J1 9 '43
- Study of an outbreak of food poisoning in a hospital in Galveston, Tex. L. L. Lumsden, C. A. Nau and F. M. Stead. *Pub Health Rep* 58:1497-1507 O 8 '43

STAPLE fibers, Rayon. See Rayon fibers**STARCH**

- Action of macerans amylase on the fractions from starch. E. J. Wilson, Jr, T. J. Schoch and C. S. Hudson. *bibliog Am Chem Soc J* 65:1380-3 J1 '43
- Advances in starch study. E. Hardy. *Chem & Eng N* 20:1688 D 25 '42
- Application of the mercaptalation assay to synthetic starch. M. L. Wolfrom, C. S. Smith and A. E. Brown. *bibliog Am Chem Soc J* 65:255-9 F '43
- Baumé-dry substance tables for starch suspensions. J. E. Cleland, E. E. Fauser and W. R. Fetzer. *diags Ind & Eng Chem Anal ed* 15:334-6 My 15 '43
- Cinderella starch. R. S. Bear. *il diags Tech R* 45:363-5, 376, 380+ My '43
- Configuration of starch and the starch-iodine complex; optical properties of crystalline starch fractions. E. E. Rundle and D. French. *bibliog il Am Chem Soc J* 65:558-61 Ap '43
- Configuration of starch and the starch-iodine complex; the dichroism of flow of starch-iodine solutions. R. E. Rundle and R. R. Baldwin. *bibliog diags Am Chem Soc J* 65:554-8 Ap '43
- Configuration of starch in the starch-iodine complex; X-ray diffraction studies of the starch-iodine complex. R. E. Rundle and D. French. *bibliog il Am Chem Soc J* 65:1707-10 S '43
- Constitution of the amidon. E. Bois. *bibliog Can Chem & Process Ind* 27:362+ Je '43
- Derivatives of starch; plasticization studies of starch triacetate films. C. A. Burkhard and E. F. Degering. *Rayon* 23:676-8 N '42
- Ether soluble fraction of navy beans and the digestion of starch; retarding influence of bean oil. D. E. Bowman. *Science* 98:308-9 O 1 '43
- Fractionation of starch by selective precipitation with butanol. T. J. Schoch. *bibliog il Am Chem Soc J* 64:2957-61 D '42
- Gelatinization mechanism of starch granules. R. S. Bear and E. G. Samsa. *bibliog il diags Ind & Eng Chem* 35:721-6 Je '43
- Lamination of weatherproof solid fiberboard with starch and resin adhesives. J. E. Killinger. *Paper Tr J* 117:25-30 N 4 '43
- Method for inspection and control of liquid starch-base adhesives for bottle labeling and case sealing. A. Herman and F. M. Knowlton. *bibliog il Am Soc T M Proc* 42:956-61; Discussion. 962-7 '42
- Middle West contributes new starch supplies. R. S. McBride. *flow sheet il Chem & Met Eng* 49:113-15 N '42
- Orientation in stretched films of amylose triacetate. R. L. Whistler and N. C. Schieletz. *il Am Chem Soc J* 65:1436-7 J1 '43
- Research promises relief from starch troubles. R. S. McBride. *il Food Ind* 15:56-7 Ja '43
- Rival for tapioca; waxy sorghum promises to bid for tapioca market. *Business Week* p37 My 22 '43
- Significance of the degradation of starch by macerans amylase. R. W. Kerr. *bibliog Am Chem Soc J* 65:188-93 F '43
- Solution viscosities of the amylose components of starch. J. F. Foster and R. M. Hixon. *Am Chem Soc J* 65:618-22 Ap '43
- Some aspects of starch chemistry in relation to tubsizing. R. W. Kerr. *bibliog il Paper Tr J* 115:30-4 D 3 '42
- Stability of β -methylmaltoide toward hot alkali. T. J. Schoch, E. J. Wilson, Jr, and C. S. Hudson. *bibliog Am Chem Soc J* 64:2871-2 D '42
- Starch industry advisers named. *Oil Paint & Drug Rep* 143:35 My 31 '43
- Starch shortage creates problem. *Textile World* 93:80 J1 '43

- Starch studies; possible industrial utilization of starch esters in coating, sizing, and adhesive industries. J. W. Mullen, 2d and E. Pacsu. *bibliog flow sheets il Ind & Eng Chem* 35:381-4 Mr '43
- Starch studies; preparation and properties of starch triesters. J. W. Mullen, 2d and E. Pacsu. *bibliog(65 references) il Ind & Eng Chem* 34:1209-17 O '42; *Abstract. Textile Col* 65:145-6 Ap '43
- Starch viscosity or strength. W. L. Morgan and N. L. Vaughn. *bibliog il diags Ind & Eng Chem* 35:233-8 F '43
- Viscosity of starches; determination in a rotating cylinder viscometer. H. N. Barham, J. A. Wagoner and G. N. Reed. *diag Ind & Eng Chem* 34:1490-5 D '42
- Waxy, tuberous and glutinous starches. A. G. Olsen. *Food Ind* 15:124-5 Ap '43

See also

Cassava starch
Cornstarch
Potato starch

Analysis

- Amylose and amylopectin content of starches determined by their iodine complex formation. F. L. Bates, D. French and R. E. Rundle. *bibliog Am Chem Soc J* 65:142-8 F '43
- Determination of moisture in starch and its modifications. L. Sair and W. R. Fetzer. *bibliog Ind & Eng Chem Anal ed* 14:843-5 N 15 '42
- Estimation of carbonyl groups in chromic anhydride oxystarch and oxycellulose by means of hydroxylamine. E. K. Gladding and C. B. Purves. *bibliog diags Paper Tr J* 116:26-31 Ap 8 '43; Same cond. *Paper Ind* 25:306-9 Je '43
- Multiple amylose concept on starch; the isolation of an amylose in crystalline form. R. W. Kerr and G. M. Severson. *il Am Chem Soc J* 65:193-8 F '43
- Non-carbohydrate substances in the cereal starches. T. J. Schoch. *Am Chem Soc J* 64:2954-6 D '42
- Quantitative estimation of acetyl in carbohydrate acetates. R. L. Whistler and A. Jeanes. *bibliog diag Ind & Eng Chem Anal ed* 15:317-18 My 15 '43
- Rapid colorimetric method for the quantitative determination of starch in textile fabrics. R. L. McEwen. *Am Dyestuff Rep* 32:371-3 Ag 16 '43
- Rapid determination of starch; index to maturity in starchy vegetables. J. P. Nielsen. *bibliog Ind & Eng Chem Anal ed* 15:176-9 Mr 15 '43
- Spectrophotometric analyses of starches. R. W. Kerr and O. R. Trubell. *bibliog Paper Tr J* 117:25-8 O 7 '43
- Sugar determination in starch hydrolyzates by yeast fermentation and chemical means. A. S. Schultz and others. *bibliog Ind & Eng Chem Anal ed* 15:496-8 Ag 15 '43

See also

Potato starch—
Analysis

Moisture content

- Determination of moisture in starch and its modifications. L. Sair and W. R. Fetzer. *bibliog Ind & Eng Chem Anal ed* 14:843-5 N 15 '42
- STARK, Harold Raynsford, 1880-
Sketch, por(cover) *Spectator* (Life ed) 150:66 My '43
- STARRETT, L. S., company
Thumbail stock appraisal. *Mag of Wall St* 71:424 Ja 23 '43
- War stocks with good peace prospects. *Mag of Wall St* 72:419 J1 24 '43
- STARS
Constellation of Cepheus. *Science* 98:sup 10 S 3 '43
- Red stars; abstract. O. J. Lee. *Science* 98:sup 8 Ag 20 '43
- Sigma XI lectures. *Science* 97:sup 10 Ja 15 '43
- Star of A. D. 1054; Crab nebula. H. N. Russell. *il Sci Am* 168:18-19 Ja '43

STARS—Continued

Star populations; have our existing means of observation given us true samples of spatial objects? H. N. Russell. *Sci Am* 167: 258-9 D '42

See also
Astronomy
Astrophysics
Nebulae

Clusters

Galactic clusters; abstract. S. Chandrasekhar. *Science* 98:sup 10 JI 16 '43

Spectra

Galactic gas clouds; complex system of enormous rarefied clouds of gas moving at high velocity has been discovered. H. N. Russell. *il Sci Am* 169:62-3 Ag '43
Spectrum of Nova Puppis. *Science* 96:sup8 N 20 '42

STARS, Multiple

Multiple stars; 59D Serpente. C. A. Federer, Jr. *Science* 97:sup10 Je 11 '43

STARS, New

Discovery of Nova Puppis. *Science* 96:sup8 N 20; sup8 N 27 '42
Nova in constellation Aquila. *Science* 98:sup 10 O 15 '43

Two new discoveries; a new star in southern constellation, Puppis. H. N. Russell. *il Sci Am* 168:64-5 F '43

STASSEN, Harold Edward, 1907-

Sketch. *por Spectator* (Life ed) 151:66 JI '43

STATE, The

See also
Industry and state
Railroads and state
Science and state

STATE advertising

Advertising by the states in 1934. *Adv & Sell* 36:14 My '43

Maine wins markets and prestige in Super spuds campaign. *Sales Management* 52:66 Mr 1 '43

1943 state advertising plans. *Ptr Ink* 203:60+ Ap 30 '43

Small plants, too, can profit by selling house-organ contracts; New Mexico, a state-sponsored publication. F. Kutniewsky. *il Inland Ptr* 111:27-8 Ap '43

STATE banks. See Banks and banking, State**STATE bonds**

Tax shelter; state and municipal bonds hit all-time highs. *Business Week* p107-8 JI 24 '43

STATE debts. See State finance**STATE employees**

Governmental employment, January 1939 to July 1942; federal and state and local. F. L. Christman. *Monthly Labor R* 55:935-40 N '42

STATE farm mutual automobile insurance

Convention examination. *Nat Underw* 47:24 S 16 '43

STATE finance

Local bond woes. *Business Week* p96+ N 28 '42

State and local financing lowest since 1918; state debts cut \$202 million during 1942 fiscal year. *Comm & Fin Chr* 156:1792-3 N 19 '42

State revenue problems. *Bankers M* 145:528+ D '42

Trend of state and municipal finances. *Nat City Bank* p19-20 F '43

also state subdivisions under heading Finance, e.g. Finance—North Carolina

STATE governments

Distribution of health services in the structure of state government (cont.). J. W. Mountin and E. Flook. *Pub Health Rep* 57: 1791-1821; 58:33-58, 249-78, 541-77 N 27 '42, Ja 8, F 12, Ap 2 '43

Pattern of successful property tax administration; the Wisconsin experience; state supervision. H. M. Groves and A. E. Goodman. *J Land & Pub Util Econ* 19:141-52 My '43

See also
Highway depart-
ments

Public utilities com-
missions
State legislatures

STATE institutions. See Institutions, Public**STATE insurance. See Insurance, State****STATE laws**

Black market in peacetime; a review of legislation affecting sale of goods by employers to employees. *il Ptr Ink* 204:16-17 Ag 6 '43
High court limits a method of lending; holds state laws govern use of trade accounts as security. W. H. Hillyer. *Barron's* 23:9 Mr 29 '43

Principal features of workmen's compensation laws, as of September 1943. A. Acee. *Monthly Labor R* 57:729-43 O '43

Progress of state minimum-wage legislation in 1942. L. Stitt and L. Sullivan. *Monthly Labor R* 56:442-9 Mr '43

Recent state legislation affecting fiduciaries. *Trusts & Estates* 76:387-9 Ap '43 [cont monthly thru August]

Retention of records still a problem. *il Bankers Mo* 69:487-9 N '42

State codes; well drilling. *Am Water Works Assn J* 35:957-9 JI '43

State law index; an index to the legislation of the states of the United States enacted during the biennium 1941-1942. 9th biennial v 765p Library of Congress, Legislative reference service; \$1.75 Supt. of doc, Washington, 25, D.C. '43

State laws and women workers. M. Anderson. *il Bus Transportation* 22:35-7 My '43

State legislation affecting trusts and estates. E. R. Lewis. *Trusts & Estates* 77:237-45 S '43

Summary of state laws pertaining to explosives. 5 pts U S Bur Mines Information Circ 7251:1-118; 7252:1-73; 7253:1-91; 7254:1-75; 7255:1-106 '43

Trends in labor relations bills in state legislatures. *Personnel J* 22:49-53 Je '43

Wartime state legislation. C. K. Withers. *Banking* 35:88 D '42

See also

Inheritance tax
Interstate commerce

STATE legislatures

1943 legislative sessions. *Weekly Underw* 148: 8 Ja 2 '43

STATE liability

Michigan law drops state immunity in negligence suits. *Nat Underw* 47:26 O 28 '43

STATE planning

Building's postwar pattern; with survey by states and cities. *Arch Forum* 77:70-2 N '42

California provides funds to speed planning of postwar projects. *Eng N* 130:900 Je 17 '43

Effective war planning by state agencies. *Eng N* 130:315 F 25 '43

Putting postwar plans into reality; New York State developing plans and specifications for public works project. *Eng N* 130:496-7 Ap 8 '43

STATE rights

Necessity of Attorneys General helping to preserve American dual system of government. A. P. Staples. *East Underw* 43:4+ D 11 '42

Strong stand on preserving dual government system taken by State Attorneys General. *East Underw* 43:3+ D 11 '42

See also

Insurance companies
—Regulation

STATESMEN

School for statesmen. H. Beukema. *Fortune* 27:108-9+ Ja '43

STATIC electricity. See Electricity, Static**STATICS****See also**

Dynamics Electrostatics
Elasticity Strains and stresses

STATIONARY engineers. See Steam engineers**STATIONERY**

Stationery in wartime. *il Mod Packaging* 16: 52+ Mr '43

STATISTICAL inequalities. See Inequalities, Statistical**STATISTICAL mechanics**

Kinetic theory of rubber. F. C. Auluck and D. S. Kothari. *J Chem Phys* 11:387-92 Ag '43

STATISTICAL mechanics—Continued

Memorial to the classical statistics. K. K. Darrow. *Bell System Tech J* 22:108-35 Ja '43

Partition function for liquids from the harmonic oscillator model. F. A. Matsen and G. M. Watson. *bibliog diag J Chem Phys* 11:343-8 Ag '43

Propagation of order in crystal lattices. J. Ashkin and W. E. Lamb, jr. *bibliog Phys R* 64:159-78 S 1 '43

Statistical mechanics of binary mixtures. T. Alfrey and H. Mark. *J Chem Phys* 11:496 O '43

Statistical mechanics of binary mixtures. F. Kottler. *J Chem Phys* 11:153-5 Mr '43

Statistical mechanics of processes observed in cosmic-ray phenomena. G. Wataghin. *Phys R* 64:248 O 1 '43

Statistical theory of liquids. G. Jaffe. *bibliog Phys R* 62:463-76; 63:313-21 N 1 '42, Ap 1 '43

Statistics of two-dimensional lattices with four components. J. Ashkin and E. Teller. *Phys R* 64:178-84 S 1 '43

Thermoelectromotive force. K. F. Herzfeld. *Phys R* 64:37-8 Jl 1 '43

See also

Wave mechanics

STATISTICAL methods

Application of the control chart method to the analysis of fisheries data. W. H. Rich. *bibliog Science* 97:269-70 Mr 19 '43

Bonus on quality. A. S. Wharton. *Elec R (Lond)* 133:536-8 O 22 '43

Comprehensive assessment of telephone communication efficiency. J. R. Hughes. *bibliog il Inst E E J* 89 pt 3:195-206 D '42

Determination by statistical methods of the average service life of 6-inch cast-iron water mains in Brooklyn, New York. A. V. Ruggles. *tables N E Water Works Assn J* 56:361-84; Discussion. 384-9 S '42

Evaluation of fungicides; a study in quantitative toxicology; bio-assay and the physico-chemical methods. H. Martin. *bibliog Soc Chem Ind J* 62:67-70, 112 My, Jl '43; Discussion. 62:70-1, My '43

Interpretation of statistical data. W. F. Cooper. *Inst E E J* 90 pt 1:83-8 F '43

Quality control will reduce costs; manufacturing operations at Westinghouse. J. Manuele. *il diags Am Mach* 87:78-81 Ap 29 '43

Rating the machinability of bullet core steel. N. G. Meagley. *il Metal Prog* 44:67-71 Jl '43

Refined quality control. J. Gaillard. *il Am Mach* 86:1430-2, 1498-1500 D 10-24 '42; Same cond. *Ind Stand* 14:123-7, 155-8 Ap-May '43

Simple method of estimating flood frequency. R. W. Powell. *Civil Eng* 13:105-7 F '43

Simplifications in the statistical analysis of physical-chemical data. G. Egloff and R. C. Kuder. *bibliog J Phys Chem* 46:926-33 N '42

Statistical analysis in hydrology. L. R. Beard. *Am Soc C E Proc* 68:1077-88 S '42; Discussion. 68:1458-64, 1661-9, 1847-9; 69:299-305, 995-1005 O-D '42, F, Je '43

Statistical comparison of the methods for the determination of the oxidation tendency of insulating oils. A. E. Flowers and S. A. Fruchtmann. *Am Soc T M Proc* 42: 896-913 '42

Statistical handling of laboratory data. E. U. Condon. *bibliog Product Eng* 14:615-17 O '43

Statistical method for the estimation of average service life of physical property. C. B. Benson. *N E Water Works Assn J* 56: 390-6 S '42

Statistical method in determining the effects of music in industry. R. L. Cardinell. *Acoustical Soc Am J* 15:133-5 O '43

Statistical methods; practical application in the factory. A. S. Wharton. *Elec R (Lond)* 132:743-5 Je 4 '43

Statistical quality control in the aircraft industry. E. A. Pinto. *Aero Digest* 43:313-15, 317-4 Jl '43

Statistical study of the precision of methods for analysis of coal and coke. H. H. Lowry and C. O. Junge, Jr. *Am Soc T M Proc* 42:870-85; Discussion. 886-8 '42

Ten years' progress in management; statistical control in applied science. W. A. Shewhart. *A S M E Trans* 65:222-5 Ap '43

Use of the discriminant function for more than two groups; estimating age class of deer. B. E. Day and M. M. Sandomire. *bibliog Am Stat Assn J* 37:461-72 D '42

Utility of statistical method in aerodynamics. H. G. Smith. *Am Stat Assn J* 38:341-5 S '43

See also

Business forecasting	Probabilities
Correlation (statistics)	Sampling (statistical methods)
Errors, Measurement of	Seasonal variation (statistics)
Frequency distribution (statistics)	Significant difference (statistics)
Graphic methods	Time series (statistics)
Index numbers (economics)	Trend measurement
Least squares	Variation (statistics)

Bibliography

Recent publications on statistical methods. H. A. Freeman. *Mech Eng* 65:277 Ap '43

Study and teaching

Tools of science and the war industry; Stanford University course in statistical methods of quality control, and improved methods of sampling. H. Working. *Science* 96: 494-5 N 27 '42

STATISTICS

What price glory? number of printed lines in obituary as measure of prominence or achievement. W. T. Vaughan. *Science* 97: 183-4 F 19 '43

See also

Business statistics	Market statistics
Census	Sampling (statistical methods)
Commercial statistics	Seasonal variation (statistics)
Correlation (statistics)	Statistical mechanics
Economic statistics	Statistical methods
Frequency distribution (statistics)	Time series (statistics)
Index numbers (economics)	Variation (statistics)
Industrial statistics	

also subdivision Statistics under various subjects, e.g.
 Accidents, Industrial Mortality
 Cancer Population
 Cotton trade Production
 Employment Railroads
 Labor and laboring classes

Bibliography

Estimates of national output; list of estimators' source materials cited in text. M. Hoffenberg and M. S. Lewis. *R Econ Stat* 25:171-3 My '43

STATISTICS, Mathematical. *See* Mathematical statistics

STATORS

Close-quarter stator stacking. J. E. Waugh. *il Am Mach* 87:101 S 16 '43

STATURE

Food and physique. T. D. Stewart. *bibliog Ann Am Acad* 225:22-8 Ja '43

STATUTE of limitations. *See* Limitation of actions

STEADYRESTS

Accurate adjustment of steadyrests. F. E. McLane. *diag Am Mach* 87:91-2 F 4; 108 Je 10 '43

Accurate adjustment of steadyrests. W. S. Rowell. *il Am Mach* 87:96 Ap 1 '43

Steadyrest that holds irregular shapes. F. H. Colvin. *diag Am Mach* 87:98 Mr 4 '43

STEAM

Computations on the denitration of aqueous mixtures of sulphuric and nitric acids with steam. G. E. Stephenson. *Soc Chem Ind J* 62:17-20 F '43

Corrosion of stressed alloy-steel bars by high-temperature steam. H. L. Solberg and others. *il diags A S M E Trans* 65: 47-52 Ja '43

Drainage and steam for paper machine driers. R. O'Donoghue. *bibliog diags Paper Tr J* 117:31-6 Jl 22 '43; Same cond. *Paper Ind* 25: 635-4 S '43

Electrolytic gases in steam. D. Roberts. *Pulp & Pa of Can* 44:737-8+ S '43

STEAM—Continued

Heat transmission in surface condensers. T. Petty. bibliog Inst Mech Eng J & Proc 145: Proc 106-14 Je '41; Discussion. 148: Proc 113-19 Ja '43

Heat utilization in sulphate mills; use of flash steam from the digester blow to heat hot water for pulp washing. H. T. Baker. Paper Tr J 117:32-4 Jl 15 '43

High-pressure steam cured concrete products. Rock Prod 46:95 Mr '43

Importance of a recovery unit as steam generating equipment in the pulp mill. F. H. Rosencrants. Paper Tr J 116:85-8 Je 24 '43; Same cond. Paper Ind 26:652+ S '43

Mechanism of the steam-carbon reaction. B. R. Warner. bibliog Am Chem Soc J 65: 1447-51 Ag '43

More steam—how? control steam temperature. A. Iddles. Elec W 118:2136+ D 26 '42

Principles of stripping operations; particularly steam distillation. H. J. Garber and F. Lerman. bibliog Am Inst Chem Eng Trans 39: 113-31 F '43

Problem of the high pressure stills; raising temperature of steam supply. diag Power Pl Eng 47:95 S '43; Solutions. diags 47: 94-6 N '43

Renewing heat transfer properties of fouled and inaccessible heating surfaces. J. H. Dittmar. Il diag Chem & Met Eng 50:137-8 F '43

Solubility of solids in water vapor. G. W. Morey. Am Soc T M Proc 42:980-8 '42

Steam for water heating. diags Power 87: 126-8 F '43

See also

Boilers	Steam distribution
Condensers (steam)	Steam heating
Electric plants (central stations)	Steam pipes
Evaporators	Steam plants
Exhaust steam	Steam turbines
Feed water purification	Thermodynamics

Tables, calculations, etc.

Steam consumption of engines. G. M. Stearns. Oil & Gas J 41:63 D 3 '42

Steam consumption of reciprocal pumps. W. L. Nelson. Oil & Gas J 41:46 Mr 11 '43

STEAM, Superheated. See Superheated steam

STEAM automobiles. See Automobiles, Steam

STEAM boilers. See Boilers

STEAM condensers. See Condensers (steam)

STEAM distribution

Are you planning to sell steam to a neighbor plant? franchises, rates, etc. R. H. Emerick. Heat & Ven 39:22-4 D '42

See also

Electric plants (central stations)—	Piping (power plants)
Steam distribution	Steam pipe lines
	Steam pipes

STEAM ejectors. See Steam jets

STEAM engineering

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Boiler plants	Steam engines
Electric plants (central stations)—	Steam fitting
Steam distribution	Steam heating
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Marine engineering	Steam pipes
Mechanical engineering	Steam plants
	Steam turbines
Power (mechanics)	Steamboats
	Superheated steam

History

Steam cultivation in England. G. E. Fussell. Engineering 156:83-5, 134 Jl 30, Ag 13 '43

Study and teaching

Questions and answers for power engineers; boiler regulations and methods of study. A. Higgins. diags Power 87:198-9+, 270-3, 340-2 Mr-May '43

STEAM engineers

Stationary license, passport to sea duty; Training division of U.S. Maritime service. Il Power 87:222-4 Ap '43

STEAM engines

Engine foundation trouble. diags Power 87: 696-7+ O '43

Engine taps badly at all loads. Power 86: 909+ D '42

For the steam engine operator. diags Power Pl Eng 47:98 Je '43

Operating precautions for a compound engine. R. E. Fontaine. diags Power 86:903 D '42

Steam consumption of engines. G. M. Stearns. Oil & Gas J 41:63 D 3 '42

Steam engines going strong after 41 years of service; power plant in the Mutual life insurance building, New York. Il Power 87:607-10 S '43

See also

Automobiles, Steam	Marine engines
Boilers	Steam plants
Condensers (steam)	Steam turbines
Exhaust steam	Steamboats
Locomotives	

Efficiency

Steam engine thermal efficiency. G. M. Stearns. Oil & Gas J 41:64 D 3 '42

Failures

Engine piston rod breaks. Power 87:146c+ F '43

Steam engine accidents. Il Locomotive 44: 214-17 Jl '43

History

First steam engines in South Africa. diags Engineer 176:112-13 Ag 6 '43

James Sims and the compound engine. T. R. Harris. Engineering 155:294-5 Ap 9 '43

John Edwards, Cornish industrialist; copper smelting and application of steam engines. T. R. Harris. Engineering 154:365, 416-17 N 6, 20 '42

Manufacture

Building Liberty-ship steam engines. Il Mach 49:143-5 Ja '43

Repair

Method of permanent repair for loose engine cranks. H. J. Vander Eb. Il Locomotive 44: 168-9 Ap '43

Quick repair of a large engine bearing; with cost data. Il diag Power Pl Eng 47:52-3 Ag '43

Testing

Engine cylinder clearance. G. M. Stearns. Oil & Gas J 41:158 N 26 '42

Uniflow engines

Reciprocating engines for marine power. K. W. Van Eman. Il Power 87:600-1+ S '43

Valves

Adjustment of slide valves. G. M. Stearns. diags Oil & Gas J 41:239 N 12 '42

Indicator checks steam engine valve operation. G. M. Stearns. diags Oil & Gas J 41:157 N 26 '42

Setting piston-type and D steam engine slide valves. G. M. Stearns. diags Oil & Gas J 41:63-4 N 19 '42

STEAM engines, Marine. See Marine engines

STEAM fitting

Detailed layouts and accurate planning required for efficient piping installations. diags plans Heat & Ven 40:47-52 Ag '43

Typical troubles with steam piping. C. C. Custer. diags Power Pl Eng 46:61-3 D '42

See also

Piping (power plants)	Steam pipes
	Steam traps

STEAM flow

How to size piping for steam, gases and vapors. E. N. Kemler. 14 charts Heat & Ven 40:52-4+ O '43

See also

Steam meters

STEAM gages

Questions and answers for power engineers; steam gages and water columns. diags Power 87:698-700 O '43

STEAM generators. See Boilers

STEAM hammers

Method of measuring waste steam. Il Engineer 176:153-4 Ag 20 '43; Engineering 156: 155 Ag 20 '43

STEAM heaters

- Glenn L. Martin company's new building heated by oil-fired direct heaters. R. V. Mehaffey. *il* plans Heat & Ven 39:30-2 D '42
How heaters are made for American flag-ships. *il* Aviation 42:236-7+ My '43
How to meet war time restrictions in heating and air conditioning design; unit heaters. T. W. Reynolds. Heat & Ven 40:60F-60G F '43
Maintenance of steam heater sections. W. K. Metcalfe. Paper Ind 25:658+ S '43
Unit heater maintenance. *il* Heating-Piping 15:179 Ap '43

STEAM heating

- Bearings company of America reviews fuel records since installation of stokers. F. A. Westbrook. *il* Heat & Ven 39:34 D '42
Carnegie-Illinois armor plate plant. R. E. Hattis. plans Heat & Ven 40:68-73 Je '43
Chrysler corp. builds Dodge-Chicago plant; heating, ventilating and air conditioning equipment. G. S. Whittaker. *il* Heat & Ven 40:40-5 S '43
Converting from oil to district steam. L. W. Mauger. *il* Heating-Piping 15:468-70 S '43
Field study of comfort reactions of apartment dwellers under fuel oil rationing. S. Hamilton. *il* diag plan Heating-Piping 15:311-18 Je '43
General electric company; plant for aircraft part gear assemblies; air conditioned gauge room; ventilation and heating. D. Adams. *il* diags Heat & Ven 40:46-50 S '43
Heating and air conditioning a windowless factory. R. U. Berry. *il* Gen Elec R 46:545-8 O '43
Heating and ventilating a Rochester museum. D. K. Smith. *il* plan Gas Age 92:55-8 O 21 '43
Heating the ships for victory. J. Clarke. *il* diags Heating-Piping 15:117-21, 180-4 Mr-Ap '43
Heating the world's largest incubator for bombers; Ford bomber plant at Willow Run. *il* Dom Eng 161:78-80 Je; 55-7 Jl '43
Heat's off but it's warm! shutting off bedroom radiators to conserve fuel. Dom Eng 161:60+ Ja '43
How to meet war time restrictions in heating and air conditioning design. T. W. Reynolds. Heat & Ven 40:60B-60L F '43
Hudson naval ordnance plant; heated by central steam system with unit heaters. G. S. Whittaker and R. V. Mehaffey. *il* Heat & Ven 40:42-50 Jl '43
Kansas bomber plant has 13 air conditioning systems. *il* Heat & Ven 40:46-50 Ja '43
Milwaukee Journal modernizes its fleet garage with boiler-burner units and unit heaters. *il* Heat & Ven 39:33 D '42
Plumbing and heating in a modern shipyard. *il* Dom Eng 161:53-5 Ja '43
Pontiac gun plant. G. S. Whittaker. *il* Heat & Ven 40:36-41 Jl '43
Proper steam trap maintenance aids fuel conservation. Heat & Ven 40:56-8 Jl '43
Rochester museum of arts and sciences air conditioning equipment and heating plant on roof. A. S. Crocker. *il* plan Heat & Ven 40:33-7 Ag '43
Small arms munitions; design considerations for the heating and ventilating of plants. J. J. Woolfenden. *il* diags Heat & Ven 40:38-51 Je '43
Tests at Cornell show insulation affects radiator heat output. D. Dropkin. *il* plan Heat & Ven 39:26-7 N '42
Twin Cities ordnance plant. J. J. Woolfenden. *il* Heat & Ven 40:52-5 Je '43
Ventilation and heating of Maritime commission ships. J. W. Markert. *il* diags plans Heat & Ven 40:32-57 F '43

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- | | |
|-------------------|------------------|
| Boilers, Heating | Steam pipes |
| Heating | Steam plants—By- |
| Hot water heating | product power |
| Radiators | Steam traps |
| Steam heaters | |

Control

- Automatic heat for a hospital. *il* Dom Eng 160:70-1 N '42
How an air conditioned office building reduced its heating system consumption; International harvester company. W. C. Helmbeck and M. Ehrlich. *il* Heating-Piping 15:189 Ap '43

- Proof of the pudding is in the heating; value of controls. W. R. Metz. *il* Dom Eng 160:69-70 N '42

Return systems

- Can oxygen be removed; condensate from radiators returned to feedwater tank. diags Power 87:196-7+ Mr '43
Correcting a troublesome vacuum return line. W. F. Fischer. diags Heat & Ven 39:59-61 D '42
High temperature of condensate causes trouble in factory heating. S. R. Lewis. Heating-Piping 15:465-6 S '43
Vacuum pump trouble in district heating system. S. R. Lewis. diag Heating-Piping 15:513 O '43
Water legs improve heating-system operation. A. Fischer. *il* diag Power 87:263 Ap '43

STEAM jets

- Elliott company speeds processing of plasma; steam jet ejector for high vacuum drying. Refrig Eng 46:247 O '43
Overfire air jets. R. E. Engdahl and W. C. Holton. bibliog diags A S M E Trans 65:741-51; Discussion. 751-4 O '43
Overfire air performance applied to stationary plants. H. C. Carroll. diags Power Pl Eng 47:81-3 N '43
Steam jet vacuum cooling units. L. S. Stinson. *il* diags Refrig Eng 46:316-20 N '43

STEAM locomotives. See Locomotives**STEAM meters**

- Method of measuring waste steam. *il* Engineer 176:153-4 Ag 20 '43; Engineering 156:155 Ag 20 '43

STEAM pipe coverings

- Economy in steam production in industrial plants. Mech Handling 30:52-3 F '43
Insulation for industrial fuel conservation program. *il* Dom Eng 162:68-9 O '43

Testing

- Tests of steam-pipe insulation; rock wool, glass wool and corrugated asbestos. E. A. Allcut. bibliog *il* diags A S M E Trans 65:407-17; Discussion. 417-19 Jl '43

STEAM pipe lines

- Armco men fight steam from big broken main. *il* diag Power 87:602-3 S '43
Cost of an arc welded pipe line. W. A. McGee. Heating-Piping 15:359 Jl '43
Design of steam transmission piping. A. McCutchan. *il* Heating-Piping 15:401-4, 450-5 Ag-S '43
Draining superheated steam line with thermostatic bellows traps. Heating-Piping 15:580 N '43

See also

- Piping (power plants)
Steam distribution

STEAM pipes

- Central station supplies steam to industrial plant for war use; piping arrangements for steam supply and metering. flow diag *il* Heating-Piping 15:1-4 Ja '43

See also

- | | |
|-----------------------|---------------|
| Pipe fittings | Steam heating |
| Pipe flanges | Steam traps |
| Piping (power plants) | |

Tables, calculations, etc.

- How to size piping for steam, gases and vapors. E. N. Kemler. 14 charts Heat & Ven 40:52-4+ O '43
Steam pipe sizing chart. Heat & Ven 40:76a-76b F '43

STEAM plants

- Power engineers find new means for boosting steam output. J. G. Coutant. *il* diag Blast F & Steel Pl 31:126, 128-9, 148-9, 152-3 Ja '43

See also

- | | |
|--------------------------------|-----------------------|
| Boiler plants | Piping (power plants) |
| Boilers | Power plants |
| Electric plants | Steam |
| Feed water | Steam distribution |
| Hydroelectric plants | Steam engines |
| —Combination with steam plants | Steam turbines |

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Auxiliaries

- Insuring auxiliary energy supply. *diag Elec W 119:63 Ja 9 '43*
 Steam vs. electrically driven auxiliaries; problem. *diag Power Pl Eng 47:92 Mr '43*;
 Solutions. *diags 47:92-6 My '43*
 Turbines lend versatility to auxiliary drive.
 F. K. Fischer. *diags Power 87:467-9 Jl '43*

By-product power

- Industrial power supply; some arguments in support of private generation. T. E. Houghton. *Electrician 131:331-2 O 15 '43*
 Private generation scheme; electricity as a by-product in meeting factory heating demands. *il Elec R (Lond) 131:741-4 D 11 '42*

Combined heating and process steam

- Wartime boiler plant design; Allis-Chalmers mfg. co. *il Power Pl Eng 47:62-4 Ja '43*

Combined power and heating

- Heat economy in large hotels. P. L. Geiringer. *Power Pl Eng 47:67-9 Ag '43*

See also

- Electric plants (cen- Steam plants—By-
 tral stations)— product power

Steam distribution

Combined power and process steam

- Effective use of wood waste cuts purchased power needs; Lane co., inc. *il diags plan Power Pl Eng 47:58-62 F '43*
 Heat balance in a brewery. C. M. Sieben. *il diags Refrig Eng 45:410-12+ Je '43*
 Mammoth utilities of unusual design installed at Port Neches plant. J. P. O'Donnell. *il Oil & Gas J 42:49-50, 53-4 Ag 12 '43*
 Planning the post-war power plant; take advantage of high-pressure boiler and high-temperature hot water heating. P. L. Geiringer. *diags Textile World 93:90-1 Mr '43*
 Steam helps make synthetic rubber. J. R. Carlson. *diags Power 87:166-8 Mr '43*
 Utilizing exhaust steam at Cast armor plant; plant supplies steam for compressed air requirements, low-pressure process and heating. F. Preuthun and P. N. Choporis. *il diag Power Pl Eng 47:62-5 N '43*

- See also Electric plants (central stations)
 —Steam distribution

Costs

- Odd job costs in steam plants, 1939-1941; tabulation. *Elec W 118:1979 D 12 '42*

Design

- Harbor plant designed for economy, quick pick-up; with cost data; Los Angeles bureau of power and light. W. C. Rowse. *il diag Elec W 119:54-6 Ja 9 '43*
 Power for the National portland cement co. of Brazil. *flow diag il plans Power Pl Eng 47:62-70 Mr '43*
 Small plants need good engineering too; power plant, Newberry, Mich. state hospital. E. R. Little. *plans Power Pl Eng 47:76-7 Ja '43*

Efficiency

- Efficient use of fuel; committee's suggestions for economies in plant. *Chem Age (Lond) 48:154-6 Ja 30 '43*
 How evaporator hookup affects heat rate. M. G. J. Boissevain and A. H. Shapiro. *diags Power 87:82-3 F '43*
 Mechanical equipment of the turbine house. F. Shakeshaft. *il diag Engineer 175:325-7 Ap 23 '43*

Equipment

- Centralized control for pump house. *il diag Elec W 118:2138 D 26 '42*
 Condenser deaerates Trenton Channel feed. R. Briscoe. *plan Elec W 119:1775 My 29 '43*
 Eugene, Oregon's new plant cashes in on old system's experience; using wood waste as fuel. R. B. Boals. *il diags Power 87:434-6+ Jl '43*
 Extension to Cape Fear station adds 60,000 kw. W. F. Friend. *il diag Power Pl Eng 47:50-3 Ja '43*
 Harbor steam plant goes on the line. C. P. Garman and W. C. Rowse. *il diags Power Pl Eng 47:64-9, 114, 116+ Je '43*

- Hog fuel-handling equipment improved; Portland General electric company. *il Elec W 118:1660-1 N 14 '42*

- Instruments in the pulp and paper industry; the steam plant. J. N. Franklin. *diag Pulp & Pa of Can 44:441-4 My '43*
 Mechanical equipment of the turbine house. F. Shakeshaft. *il diag Engineer 175:325-7 Ap 23 '43*

- Natal's new power station; steam-raising plant. *diag Mech Handling 30:117-19 Mr '43*
 Power needs met by equipment for using exhaust steam; Dering coal co. *il diags Coal Age 48:63-4 Jl '43*

- Quick pickup, economy at Harbor plant; underwrites Boulder Dam power supply to southern California. C. P. Garman. *il diag Elec West 91:65-9 O '43*

- Reducing valve wear by hard-facing. R. L. Lerch. *il Power Pl Eng 47:71-3 Mr '43*

- Simplicity and versatility stressed in Akron addition. G. C. Daniels. *il diags plans Elec W 120:384-7 S 18 '43*

- Trebbling air supply with 20% power rise; fan and heat exchanger installation. J. Cassie. *diags Elec W 119:782+ Mr 6 '43*

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- | | |
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| Pumps, Feed water | Stokers, Mechanical |

High pressure

- Adapting an auxiliary turbine for higher pressure. E. G. Baker. *il diags Power 87:154-6+ Mr '43*

- Operation of high pressure boilers. F. D. Mosher. *il Heat & Ven 40:37-41 Ap '43*

- Studies of heat transmission through boiler tubing at pressures from 500 to 3300 pounds. W. F. Davidson and others. *il diags A S M E Trans 65:553-79; Discussion. 579-91 Ag '43*

- Water problems in high-pressure boilers. D. B. Jones. *il diag Elec W 119:1118-20 Ap 3 '43*

See also

- Steam plants—Superposition

Maintenance and repair

- Boiler and turbine inspection check-list. *Elec W 118:1659-60 N 14 '42*

- Deterioration and maintenance of power plant structures. S. J. Pearson. *il diags Power Pl Eng 47:60-6 Ag '43*

- More steam—how? spare parts. A. Iddles. *Elec W 118:1638+ N 14 '42*

- Story of the empty chair. W. F. Heiwig. *il Power Pl Eng 47:88-9 Ag '43*

- Turbine maintenance in Hawaii. A. F. Wallace. *il diag Power Pl Eng 47:63-5 Jl '43*

Process steam

- Steam traps for chemical processes; factors governing selection to attain fuel efficiency. D. D. Howat. *diags Chem Age (Lond) 47:519-25 D 12 '42*

- See also Steam plants—Combined power and process steam

Superposition

- 1825-lb-pressure topping unit with special reference to forced-circulation boiler. F. S. Clark, F. H. Rosencrans and W. H. Armacost. *il diags A S M E Trans 65:461-74 Jl '43*; Same cond. *Blast F & Steel Pl 30:1335-7, 1390-3+ D '42*; Same cond. *Engineer 175:356-8, 377-8 Ap 30-My 7 '43*; Abstract. *Engineering 155:385-8 My 14 '43*; Discussion. *diags A S M E Trans 65:474-7 Jl '43*

- Topping program at Sherman Creek. R. T. Roberts; H. Knecht. *il diags plan Power Pl Eng 47:76-81+ S; 66-70 O; 66-8 N '43*

Tables, calculations, etc.

- How to calculate central station heat balance. G. B. Gregg. *Power 87:174-7, 211b+ Mr '43*

STEAM plants, Outdoor

- Outdoor steam plants save materials, cut costs; details of 12 geographically diversified installations. L. Elliott. *il plan Elec W 119:936-9 Mr 20 '43*

- STEAM pressure cookers. See Pressure cookers

STEAM rates

Are you planning to sell steam to a neighbor plant? franchises, rates, etc. R. H. Emerick. Heat & Ven 39:22-4 D '42

STEAM research

Round-table discussion on the solvent action of water vapor at high temperature and pressure. M. Hecht and others. Am Soc T M Proc 42:977-1022 bibliog(58 titles, p 1020-2) '42

STEAM traps

Draining superheated steam line with thermo-static bellows traps. Heating-Piping 15:580 N '43

Efficient use of fuel; committee's suggestions for economies in plant. Chem Age (Lond) 48:154-6 Ja 30 '43

Inverted bucket trap. N. T. Pef. diag Power Pl Eng 46:95 D '42

Maintenance insures reliable trap operation. P. W. Swain and E. W. Feller. diags Power 86:876-7 D '42

Proper steam trap maintenance aids fuel conservation. Heat & Ven 40:56-8 Jl '43

Steam trap installation. il diag Dom Eng 161:56 Ja '43

Steam traps for chemical processes; factors governing selection to attain fuel efficiency. D. D. Howat. il diags Chem Age (Lond) 47:519-25 D 12 '42

STEAM turbines

American society of mechanical engineers; power plant papers. Elec W 118:1936-7 D 12 '42

Cooling increases bolt strength in steam turbines; patent assigned to Westinghouse electric & manufacturing co. diag Machine Design 15:174+ S '43

De Laval velocity-stage turbines. il Mech Eng 65:sup23-4 N '43

Electrical developments of 1942; power generation. G. Bartlett. il Gen Elec R 46:8-10 Ja '43

Mechanical equipment of the turbine house. F. Shakeshaft. il diag Engineer 175:325-7 Ap 23 '43; Excerpts. Elec R (Lond) 132:481-2 Ap 9 '43; Electrician 130:366 Ap 9 '43

Round-table discussion on the solvent action of water vapor at high temperature and pressure. M. Hecht and others. Am Soc T M Proc 42:977-1022 bibliog(58 titles, p 1020-2) '42

Turbine maintenance in Hawaii. A. F. Wallace. il diag Power Pl Eng 47:63-5 Jl '43

Turbines lend versatility to auxiliary drive. F. K. Fischer. diags Power 87:467-9 Jl '43

Bearings

Through trouble to improvement; thrust bearings. H. L. Guy. diags Inst Mech Eng J & Proc 147:Proc 220-3 O '42

Blades

Leveler holds turbine blade for milling. B. Litzman. diag Am Mach 86:1439-40 D 10 '42

Milling operations on ship turbine blades. E. L. Spray. il diags Mach 49:154-7 Mr '43

Turbine blade deposits. F. G. Straub. Blast F & Steel Pl 31:1166, 1168-9 O '43

Cleaning

Removal of water-insoluble turbine deposits by caustic washing. W. L. Webb and R. G. Call. diags A S M E Trans 65:713-17 O '43

Control

Application of turbine-supervisory instruments to power-generating equipment. J. L. Roberts and H. M. Dimond. il A S M E Trans 65:803-7 O '43; Abstract. Power 86:966 Mid-D '42; Discussion. C. C. Franck. A S M E Trans 65:807-8 O '43

Instrument analyzes governor performance. A. F. Schwendner. il Elec W 119:1814+ My 29 '43

Recommended specification for prime-mover speed governing; joint A.I.E.E.-A.S.M.E. committee. Mech Eng 65:664-8 S '43

Design

Through trouble to improvement; development of steam turbines through a period of thirty years. H. L. Guy. diags Inst Mech Eng J & Proc 147:Proc 214-30, pl 1-2 O '42

Efficiency

Alter valve sequence for steam economy. R. F. Davis. diags Elec W 119:980 Mr 20 '43

How vacuum affects turbine capacity. G. L. Graiff. chart Power 87:8-9 Ja '43

Indexes for non-condensing turbine overhaul; how to detect faulty conditions by comparison of stage pressures, temperatures, flows and loads with values accepted for normal conditions. E. E. Harris. graphs Elec W 120:1514-18 O 30 '43

Short cut to turbine cycle heat rates. J. K. Salisbury. Power 87:664-74, 734-7 O-N '43

Extraction

Adapting an auxiliary turbine for higher pressure. R. G. Baker. il diags Power 87:154-6+ Mr '43

How evaporator hookup affects heat rate. M. G. J. Boissevain and A. H. Shapiro. diags Power 87:82-3 F '43

Turbine extraction chart. H. Steen-Johnsen. diag Power Pl Eng 47:110 Ag '43

Utilities debate fixing turbine bleed pressures; discussion at meeting of American society of mechanical engineers. Power 86:968 Mid-D '42

Heat rates

See Steam turbines—Efficiency

Lubrication

Check your turbine oil to make it last longer. W. G. Forbes. diags Power 87:439-41+ Jl '43

Is your turbine-oil care good, bad or indifferent? W. G. Forbes. il diag Power 87:539-40 Ag '43

Test for oxidation characteristics of steam-turbine oils is proposed. Nat Pet N 35 pt 2:3437-8 S 1 '43

Through trouble to improvement; oil pumps and governors. H. L. Guy. diags Inst Mech Eng J & Proc 147:Proc 216-20, pl 1 O '42

Manufacture

Heat tightens turbine bolts safely. E. F. Miller. il Power 87:42-4 Ja '43

Welding large turbine spindle. il diags Power 87:368-9 Je '43

Reconstruction

Adapting an auxiliary turbine for higher pressure. R. G. Baker. il diags Power 87:154-6+ Mr '43

Repair

Blading repair on a 100,000-kw. unit; Long Beach station of the Southern California Edison company. C. T. Hoyt. diags Elec W 119:1441-2 My 1 '43

Cracked casting permanently repaired; Metalock process. diags Elec W 118:2097 D 26 '42

Cracking of turbine expansion joint. R. R. Hawkins. Elec W 119:640 F 20 '43

Expediting inspection and overhaul of steam turbine generators. R. A. Hake. il Power Pl Eng 47:65-7 Ap '43

Metallizing kills turbine tip losses. diag Elec W 120:1532 O 30 '43

Turbine maintenance and repair work; abstracts. R. N. Tucker. il diags Power Pl Eng 47:68-71 Ap '43; Power 87:442-3 Jl '43

Testing

Indexes for non-condensing turbine overhaul; how to detect faulty conditions by comparison of stage pressures, temperatures, flows and loads with values accepted for normal conditions. E. E. Harris. graphs Elec W 120:1514-18 O 30 '43

Vibration

Electronic apparatus for vibration testing. R. O. Fehr and C. Shabtach. il diags Electronics 16:94-6 Je '43

STEAM turbines, Marine

G-E will produce 11,000,000 hp. of propulsion equipment in 1943. E. O. Shreve. Blast F & Steel Pl 31:1016 S '43

Manufacture

Building turbines for ships in our permanent merchant fleet; Merchant marine division, Westinghouse electric & mfg. co. E. L. Spray. il diags Mach 49:172-9 N '42; 154-7 Mr '43

STEAM turbines, Marine—Manufacture—Cont.
Builds West coast foundry in record time;
Joshua Hendy iron works. *Il Foundry* 71:
104-6+ Ag '43
General Electric builds turbine generators for
the navy; illustrations. *Mach* 50:158-63 N
'43

Mass production methods used on turbines
and gears; Westinghouse company. *Il Ma-*
rine Eng 48:161-2 F '43
Women building ships' turbines. *Il Marine*
Eng 47:132 N '42

STEAM valves. See Valves

STEAM water heaters

Developments in the design of storage water
heaters; with cost data. S. A. Smith. *Il*
diags Welding J 22:327-34 My '43

STEAMBOAT lines

Steamship industry's war and post-war prob-
lems. R. P. Stewart. *Barron's* 23:9+ Je 23
'43

See also

Merchant marine—

United States

Safety at sea

also Cunard steam ship company

Airplane auxiliaries

Sea-air lines? case for making transportation
by ships and planes a joint enterprise.
Business Week p30+ *Jl* 31 '43

STEAMBOATS

Justine, steam tug. E. A. Hodge. *Il Marine*
Eng 48:205-6 O '43

Machinery weights; data for estimating
weights of ship machinery. E. A. Stevens.
Jr. Marine Eng 47:134-7 Ag; 156-9 S; 143-5
N; 167-8 D '42; 48:170, 172 Ja; 190, 192
F '43

Performance of 1200-pound reheat installation
on S.S. Examiner. B. Fox and R. H. Tingey.
Marine Eng 47:163-5 D '42

Some types of propelling machinery available
to shipowners. C. C. Pounder. *diags Engi-*
neer 175:48-9+, 77-80 Ja 15-22 '43

Streamlining the ore carrier. K. C. Thornton.
Il diags plans Marine Eng 48:180-97 S '43

See also

Boilers, Marine

Freight ships

Marine engines

Naval architecture

Ship propulsion

Shipping

Shipbuilding

Ships

Steam turbines, Ma-

rine

Towboats

Warships

History

First steam engines in South Africa. *Engi-*
neer 176:112-13 Ag 6 '43

From paddle to screw in the navy. F. C.
Bowen. *Engineer* 176:12-13 *Jl* 2 '43

Great Britain; first iron ship. *Il Engineering*
156:77 *Jl* 23 '43

John Fitch, 1743-1798. E. C. Smith. *Engineer-*
ing 155:44 Ja 15 '43

Steamboat round the bend. W. M. Angas. *Il*
Tech R 45:25-7+ N; 79-80+ D '42

STEARIC acid

Rates of evaporation of water through com-
pressed monolayers on water. I. Langmuir
and V. J. Schaefer. *bibliog Il Franklin*
Inst J 235:119-62 F '43

See also

Dihydroxystearic acid

Manufacture

Stearic acid, red oil and glycerine, flow sheet
Il Chem & Met Eng 50:132-5 S '43

STEATITE

American ceramic society, meeting of White-
ware division, Uniontown, Pa. Sept. 17-18;
abstracts of papers. *Cer Ind* 41:60-3 O '43

Canadian talc for use in steatite insulators.
H. S. Spence, J. G. Phillips and W. T. Tur-
rall. *Am Cer Soc Bul* 22:295-8 Ag 15 '43

Physical chemistry of firing steatite ceramics.
R. L. Stone. *Am Cer Soc J* 26:333-6 O 1 '43

Dielectric use of ferruginous talcs in steatite
dielectrics. L. E. Kane and H. G. Ueltz.
Am Cer Soc J 26:389-92 N 1 '43

Second war standard in series covers steatite
radio insulators. H. R. Wilsey. *Il Ind Stand*
14:273-5 O '43

STECKEL, Abram P.

Portrait. *Business Week* p56 O 2 '43

STECKEL mill

Government action seeks to void Cold metal
process co.'s patents of the Steckel mill.
Steel 113:66 Ag 2 '43

STEDLER, William, 1884-1943

Sketch. *por Weekly Underw* 148:214 F 6 '43

STEEL

American steel and wire co. develops steel for
use in machine guns. *Blast F & Steel Pl*
31:444 Ap '43

Factors affecting the design of d-c mag-
nets. L. T. Rader. *diags Elec Eng* 62:Trans
307-10 Je '43

Graphic story of steel. *Il J Chem Educ* 20:
94-9 F '43

Grating spectrograph of fabricated steel. J.
W. Forrest and H. W. Straat. *Il diag Opt*
Soc Am J 32:669-71 N '42

Idle steel sought. *Il Business Week* p92+ D 12
'42

Plain carbon replaces alloy steels. A. S.
Jameson. *Il diags Iron Age* 151:47-56 My 6;
59-65 My 13 '43

Properties of steel in various forms; table.
R. S. Burpo, *Jr. Metals & Alloys* 17:554
Mr '43

Report of A.S.T.M. committee A-1 on
steel. *Am Soc T M Proc* 42:73-94 '42

Republic develops special steel. *Blast F &*
Steel Pl 31:sup52-3 Ap '43

Resilience of duralumin vs. steel; abstract.
L. P. Dudley. *Metals & Alloys* 17:840+ Ap
'43

Significant steels commonly used for spe-
cific articles. *Iron Age* 150:51-4 N 19 '42

Solubility of hydrogen at low pressure in
iron, nickel and certain steels at 400 to
600°. M. H. Armbruster. *Am Chem Soc J*
65:1043-54 Je '43

Steel for brass in the big guns. *Fortune* 27:
76 Je '43

Steel for sale; billion dollars' worth of fin-
ished metal and equipment, offered by
WPB. *Business Week* p20 N 6 '43

Steel, plastics and zinc used in combination
die set. J. C. Wright. *Il diags Iron Age*
151:68-70 Je 17 '43

Steel replaces brass in 0.45-caliber ammuni-
tion. *Steel* 112:90 Ap 5 '43

Steel versus light metals. B. Ravits. *Barron's*
23:11+ Ag 16 '43

US, Britain, Canada form joint steel com-
mittee. *Comm & Fin Chr* 156:2340 D 31 '42

See also

Annealing

Bessemer process

Bridges, Iron and

steel

Case hardening

Chromium nickel

steel

Chromium steel

Concrete, Reinforced

Corrosion and anti-

corrosives

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sisting

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Steel, Reinforcing

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Steel, Structural

Steel alloys

Steel castings

Steel construction

Steel forgings

Steel houses

Steel ingots

Steel metallurgy

Steel plates

Steel works

Tool steel

Tubes, Steel

Aging

Strain aging of killed low-carbon steel, with
particular reference to the effect of
titanium; abstract. G. F. Comstock. *Iron*
Age 152:70-1 Ag 5 '43

Analysis

Application of the spectrograph at Gary
works; abstract. A. D. Beers. *Iron Age* 151:
150-1 My 6 '43

Applications of the spectrograph to steel-
works analysis. H. T. Shirley and E.
Elliott. *Il Engineering* 155:437-40, 456-7 My
23-Je 4 '43

STEEL—Analysis—Continued

- Carbide and nitride particles in titanium steels. W. Hume-Rothery, G. V. Raynor and A. T. Little. *Iron & Steel Inst J* 145: 129-39, pl 20; Discussion. 140-1 no 1; 146: 431-8 no 2 '42
- Cobalt determination by photo-electric comparison. W. W. Clarke. *Iron Age* 150:45 D 3 '42
- Colorimetric determination of boron in steel using quinalizarin reaction. G. A. Rudolph and L. C. Flickinger. *il Steel* 112:114+ Ap 5 '43; Same. *Foundry* 71:168-70 My '43
- Computing strength of normalized steel from its analysis. *Metal Prog* 43:76 Ja '43
- Determines carbon in cast iron and steel. J. G. Donaldson. *diag Foundry* 71:117-18 Mr '43
- Determining open hearth residuals by routine spectrographic analysis. J. T. Rozsa. *il diag Iron Age* 151:63-62 Mr 11 '43
- Electrographic detection of molybdenum in steel alloys. J. A. Calamari, R. Hubata and P. B. Roth. *bibliog Ind & Eng Chem Anal ed* 15:71 Ja 15 '43
- First report of the standard methods of analysis sub-committee of the committee on the heterogeneity of steel ingots. *Iron & Steel Inst J* 145:279-93 no 1 '42; Abstract. *Engineering* 153:365 My 8 '42; Discussion. *Iron & Steel Inst J* 145:294-302 no 1; 146: 467-79 no 2 '42
- Methods for analyzing boron content in steel discussed. *Steel* 111:49 D 23 '42; Same cond. *Foundry* 71:157-8 Mr '43
- Microdetermination of carbon in steels; modification of the standard carbon-hydrogen train. E. W. Balis, H. A. Liebhafsky, and E. H. Winslow. *diags Ind & Eng Chem Anal ed* 15:68-9 Ja 15 '43
- Polarographic determination of lead in lead-bearing steels. G. Haim and W. C. E. Barnes. *bibliog Ind & Eng Chem Anal ed* 14:367 N 15 '42
- Quantitative spectrographic analysis of stainless steels. M. F. Hasler, C. E. Harvey and H. W. Dieter. *diags Ind & Eng Chem Anal ed* 15:102-7 F 15 '43
- Rapid analysis of oxygen in molten iron and steel; abstract. G. Derge. *Iron Age* 151:59 F 25 '43
- Rapid identification tests for manganese and sulphur in steel. W. O. Philbrook. *Metal Prog* 43:572 Ap '43
- Rapid photometric determination of cobalt in steels using nitroso-R-salt. F. W. Haywood and A. A. R. Wood. *bibliog Soc Chem Ind J* 62:37-9 Mr '43
- Scrap steel analysis; the development of chemical and spark methods. J. W. Langley. *il Chem Age (Lond)* 47:497-500 D 5 '42
- Simplifies control analysis; method of determining molybdenum. C. G. Hummon. *Steel* 112:115 Je 21 '43
- Spectrographic analysis of alloy steel; Bethlehem steel co. P. R. Irish. *il plan Steel* 113:100-2, 105+ Ag 9 '43
- Spot test for chromium. W. O. Philbrook. *il Metal Prog* 42:1035-7 D '42
- Spot test for manganese in steel. *Metal Prog* 43:746-7 My '43
- Spot test for molybdenum in steel. J. A. Duma and W. F. Everett. *Metals & Alloys* 17:788 Ap '43
- Standard sampling methods; checking the chemical analyses of steel shipments. *diags Steel* 112:128+ My 17 '43
- Use of spectrograph speeds production; has high accuracy; abstract. G. T. Motock. *Iron Age* 151:76+ My 6 '43
- Vacuum fusion analysis of silicon steels. G. Derge and T. T. Omori. *bibliog Blast F & Steel Pl* 31:888-9+ Ag '43
- Vanadium in steel; improved yield of ferrovanadium. B. S. Evans. *Chem Age (Lond)* 47:504 D 5 '42
- Why determine FeO? F. G. Norris. *Blast F & Steel Pl* 31:sup41-2+ Ap '43

Bibliography

- Review of iron and steel literature for 1942. E. H. McClelland. *Blast F & Steel Pl* 31: 95-101 Ja '43 [reprinted by Carnegie library, Pittsburgh]
- Survey of literature on the manufacture and properties of iron and steel, and kindred subjects. *Iron & Steel Inst J* 145:1A-258A no 1; 146:1A-233A no 2 '42

Blackening

- Black oxide treatment of steel; abstract. W. H. Price, Jr. *Iron Age* 152:55 JI 22 '43
- Blackening steel parts. A. F. Hill. *il Metal Finishing* 41:428-9 JI '43
- Chemical blackening process for steel finds new favor as production tool. A. P. Hill. *il Steel* 113:100+ N 1 '43
- Chemical surface treatment for steel. F. C. Hirdler, Jr. *il Automotive & Aviation Ind* 89:18-20+ S 15 '43

Brittleness

- Brittleness in alloy steels; abstract. E. Maurer, O. H. Wilms and Kiessler. *Metals & Alloys* 18:118+ JI '43
- Bursting tests on notched alloy steel tubing. G. Sachs and J. D. Lubahn. *bibliog il diags Am Soc for Metals Trans* 31:71-86; Discussion. 87-8 Mr '43
- Caustic embrittlement; results of investigations into steel failures. E. W. Colbeck, S. H. Smith and L. Powell. *Chem Age (Lond)* 48:273-4 Mr 6 '43
- Elimination of the apparent hot brittleness of 0.60 molybdenum steel. C. L. Clark and J. W. Freeman. *il Am Soc for Metals Trans* 30:1284-99; Discussion. 1299-1302 D '42
- Zinc, saboteur of steel at elevated temperatures; abstract. F. Page, Jr. *Iron Age* 152: 71 JI 8 '43

Case hardening**See Case hardening****Cleaning**

- Cleaning and finishing cartridge cases. A. J. Lehman. *il Iron Age* 152:40-2 O 21 '43
- Cleaning steps for painting and plating. C. W. Smith. *diags Am Mach* 87:97-8 Ag 19 '43
- Descaling pipe the modern way; use of Wheelabrator. A. M. Hoffmann. *il Comp Air M* 47:6918-19 D '42
- Descaling steel by spray system. R. Trautschold. *il diag Steel* 113:112-13+ S 13 '43
- Pickling steel cartridge cases. A. J. Lehman. *il Steel* 113:98, 100 Ag 23 '43

Color**See Also****Steel—Blackening****Conservation**

- A.P.I. activities and cooperation with the War production board in the simplification of steel specifications and steel conservation. C. A. Dunlop. *Pet Eng (Ref annual)* 14:75-6+ JI 1 '43
- Casing salvage aids steel conservation. W. A. Sawdon. *diags Pet Eng* 14:100D, 102, 104 S '43
- Design of concrete pavements with a minimum of steel; committee of Highway research board recommendations. *diags Roads & Bridges* 81:34-7, 62+ My '43
- Emergency steel savings; increasing unit stresses in tension and bending but not in compression. C. T. Bishop. *Eng N* 129:898 D 31 '42
- How to break piping bottlenecks; steel and its substitutes. G. W. Hauck. *il diags Pet Refiner* 22:71-6 F '43; Same cond. *Heating-Piping* 15:224-8 My '43; Same. *Chem & Eng N* 21:756-9 My 25 '43
- National emergency specifications for the design of reinforced concrete buildings to conserve steel. *Am Concrete Inst J* 14:86-92 N '42
- Railroad bridge salvaged for highway use; temporary superstructure. C. A. Rothrock. *diag Eng N* 130:695 My 6 '43
- Redesign of the Quebec bridge; new structure to illustrate how steel can be conserved. *il diags Roads & Bridges* 81:17-22+ F '43
- Structural steel; conservation measures. W. C. Voss. *diags Boston Soc C E J* 30:197-204 JI '43
- Why scrap is so important; using 1942 steel requirements as an example; chart. *Factory Management* 101:116 Je '43

Decarburization

- Avoiding decarburization. C. G. Segeler. *Am Gas Assn Mo* 25:78-80 F '43
- Decarb in complex alloy steel. M. A. Scheil. *il Metal Prog* 43:746 My '43

STEEL—Decarburization—Continued

- Decarburized zones. F. J. Altmann. *Metal Prog* 43:570-1 Ap '43
 Measuring decarburization. R. D. Chapman. *il Metal Prog* 44:621 O '43
 Steel carburization and decarburization: a theoretical analysis. J. K. Stanley. *Iron Age* 151:31-5 Ja 21; 36-9 Ja 28; 49-55 bibliog (69 references, p54-5) F 4 '43

Defects

- Defects in cast and wrought steel caused by hydrogen. C. A. Zapffe. *il Metal Prog* 42: 1051-6 D '42
 Flakes in NE steel billets. E. O. Dixon. *il Metal Prog* 43:72-3 Ja '43
 Formation of hair-line cracks. J. H. Andrew and others. bibliog diags *Iron & Steel Inst J* 146:193-243, pl 6-16 no 2 '42; Excerpt. *Engineering* 154:357-60 O 30 '42; Discussion. *Iron & Steel Inst J* 146:244-82, pl 16a-16b no 2 '42
 Formation of hair-line cracks: discussion on recent metallurgical papers. *Chem Age (Lond)* 48:16 Ja 2 '43
 Magnetic powder method of inspecting weldments, and castings for subsurface defects. C. H. Hastings. bibliog diags *Welding J* 22:sup43-51 Ja '43

See also

Steel—Hydrogen effect

Deoxidation

- Effect of deoxidation practice on creep strength of carbon-molybdenum steel at 850 and 1000 F. R. F. Miller. bibliog *il A S M E Trans* 65:309-14; Discussion. 314-16 My '43
 Why determine FeO? F. G. Norris. *Blast F & Steel Pl* 31:sup41-2+ Ap '43

Desulfurization

See Steel—Sulfur content

Failure

- Caustic embrittlement: results of investigations into steel failures. E. W. Colbeck, S. H. Smith and L. Powell. *Chem Age (Lond)* 48:273-4 Mr 6 '43
 Crack-up of tanker attributed to weather, steel quality, welding, other factors. *il Iron Age* 151:89-90, 90A-90B Mr 18 '43
 Report on structural failure of tanker S.S. Schenectady. *Welding J* 22:225-6 Ap '43; Same. *Marine Eng* 43:207-8 Ap '43; Same. *Mech Eng* 65:365-6 My '43; Same. *Engineer* 175:413-14 My 21 '43; Same. *Metal Prog* 43:922-4 Je '43
 Residual stresses in wire loops at anchorage shoes or grommets. G. Brewer. *il diags Metal Prog* 44:441-7 S '43
 Schenectady failure. J. A. McAleer. *Marine Eng* 48:240+ My '43
 What can cause breakage of a welded ship? J. F. Lincoln. *Steel* 112:84 Mr 29 '43

Finishing

- Continuous finishing setup facilitates production of steel landing mats. W. R. Baxter and D. M. Wilkinson. *il plan Steel* 113:122-5 S 20 '43
 Effect of moderate cold rolling on the hardness of the surface layer of 0.34 per cent carbon steel plates. H. K. Herschman. bibliog *il Am Soc for Metals Trans* 31:501-13 Je '43; Same. *J Research Nat Bur Stand* 29:57-67 J1 '42; Discussion. *Am Soc for Metals Trans* 31:513-16 Je '43
 Electrostatic detearing; helps control drain-off when baking finish on dipped steel cartridge cases. H. P. Ransburg. *Steel* 113: 106+ Ag 9 '43
 Finishing 57-millimeter gun barrels; Yoder co. J. Lucas. *il Mach* 49:140-7 My '43
 Flame conditioning steel mechanically. I. H. Such. *il Steel* 113:112+ N 8 '43
 Grinding steel crankcases for aircraft engines; Bryant internal chucking grinders. P. C. Durland. *il diags Mach* 49:129-39 My '43
 New method of tool finishing. *il Automotive & Aviation Ind* 89:68 J1 '43
 Production surface grinding to micro-inch finish; machine requirements; magnetic chuck usage; proper selection of coolant. H. J. Chamberland. *il Iron Age* 152:54-6 N 11 '43

- Shot blasting to increase fatigue resistance. J. O. Almen. bibliog *il diags S A E J* 61: 248-68 J1 '43; Same cond. *Mech Eng* 65:553-63 Ag '43
 Stainless steel and the metal finishing foreman. S. J. Ophie. *Metal Finishing* 41:266-7 My '43
 Super grinding prolongs tool life. R. Traut-schold. *Steel* 112:112 Je 21 '43

See also

Steel—Blackening

Flakes

See Steel—Defects

Graphitization

See Steel—Metallography

Hydrogen content

- Determination of the solubility of hydrogen in iron and iron alloys. J. H. Andrew, H. Lee and A. G. Q. Fell. *plan Iron & Steel Inst J* 146:181-92 no 2 '42

Hydrogen effect

- Defects in cast and wrought steel caused by hydrogen. C. A. Zapffe. *il Metal Prog* 42:1051-6 D '42
 Effect of moisture in blast air. R. J. Cowan. *diag Iron Age* 150:46-50 N 19 '42
 Fish-eyes in steel welds; hydrogen effect questioned. P. E. Jerabek. *il Metal Prog* 44:640-2 O '43
 Formation of hair-line cracks. J. H. Andrew and others. bibliog diags *Iron & Steel Inst J* 146:193-243, pl 6-16 no 2 '42; Excerpt. *Engineering* 154:357-60 O 30 '42; Discussion. *Iron & Steel Inst J* 146:244-82, pl 16a-16b no 2 '42
 Sources of hydrogen in steel and means for its elimination. C. A. Zapffe. *il Metal Prog* 43:397-401 Mr '43
 Tool life increased by improved chromium plating process; relieving inherent hydrogen embrittlement through use of oil treatment. T. E. Lloyd. *il Iron Age* 150:43-9 D 10 '42

Inclusions

- Casting-pit refractories as source of non-metallic inclusions in steel; abstracts. J. R. Rait. *Am Cer Soc Bul* 22 (Cer A 22):154-5 S 15 '43; *Iron Age* 152:45 S 30 '43; *Metals & Alloys* 18:834+ O '43
 Determination of inclusions; abstract. A. G. Arend. *Iron Age* 151:56 My 6 '43

Lead content

- Microstructure of lead-bearing steels; etching method. A. von Vegesack. *Engineering* 155:388 My 14 '43

Machinability

See Steel cutting

Metallography

- Alpha iron lattice parameter as affected by molybdenum, and an introduction to the problem of the partition of molybdenum in steel. F. E. Bowman, R. M. Parke and A. J. Herzog. bibliog *Am Soc for Metals Trans* 31: 487-95; Discussion. 495-500 Je '43
 Annealing of steel. P. Payson. bibliog *il Iron Age* 151:44-7+ Je 24; 152:43-54 J1 1; 74-7 J1 8; 70-7 J1 15; 60-7 J1 22 '43
 Atomic structure of martensite. N. J. Petch. *Metal Prog* 43:762 My '43
 Carbide and nitride particles in titanium steels. W. Hume-Rothery, G. V. Raynor and A. T. Little. *Iron & Steel Inst J* 145: 129-39, pl 20; Discussion. 140-1 no 1; 146: 431-8 no 2 '42
 Effect of deoxidation practice on creep strength of carbon-molybdenum steel at 850 and 1000 F. R. F. Miller. bibliog *il A S M E Trans* 65:309-14; Discussion. 314-16 My '43
 Effect of microstructure upon the work hardening characteristics of a 0.74 per cent carbon strip steel. N. P. Goss and W. Brenner. *il Am Soc for Metals Trans* 30:336-45; Discussion. 945-6 D '42
 Electrical resistance method for the determination of isothermal austenite transformations. F. E. Rote, W. C. Trucken-miller and W. P. Wood. bibliog *il diags Am Soc for Metals Trans* 30:1359-73; Discussion. 1373-6 D '42

STEEL—Metallography—Continued

- Hardening of tool steels.** P. Payson and J. L. Klein. bibliog il Am Soc for Metals Trans 31:218-45; Discussion. 245-56 Mr '43
- Influence of alloying elements on the critical points of steels as measured by the dilatometer.** R. N. Gillmor. il Am Soc for Metals Trans 30:1377-1404; Discussion. 1404-18 D '42
- Interlamellar spacing of pearlite.** G. E. Pellissier and others. bibliog il diags Am Soc for Metals Trans 30:1049-31; Discussion. 1081-6 D '42
- Investigation of the behaviour of metals under deformation at high temperatures; structural changes in carbon steels caused by creep and graphitization.** C. H. M. Jenkins, G. A. Mellor and E. A. Jenkinson. bibliog Iron & Steel Inst J 145:51-86, pl 1-12 no 1 '42
- Kinetics of austenite decomposition in high speed steel.** P. Gordon, M. Cohen and R. S. Rose. bibliog il diags Am Soc for Metals Trans 31:161-98; Discussion. 198-217 Mr '43
- Lattice spacings and crystal structure of cementite.** W. Hume-Rothery, G. V. Raynor and A. T. Little. diags Iron & Steel Inst J 145:143-9; Discussion. 150-1 no 1 '42
- Martensite and superstructure.** A. M. Portevin. Metal Prog 44:645-6 O '43
- Mechanism and the rate of formation of austenite from ferrite-cementite aggregates.** G. A. Roberts and R. F. Mehl. bibliog (42 titles) il Am Soc for Metals Trans 31:613-50 S '43
- Metallographic examination of 18 per cent chromium, 8 per cent nickel steel.** il Am Soc T M Proc 42:134-43 '42
- Positions of the carbon atoms in austenite.** N. J. Petch. bibliog Iron & Steel Inst J 145:111-23; Discussion. 124-8 no 1 '42
- Quantitative study of austenite transformation.** R. A. Flinn, E. Cook and J. A. Fellows. bibliog il diags Am Soc for Metals Trans 31:41-66; Discussion. 66-70 Mr '43
- Repeated stress relieving treatments on steel plate.** F. Eberle and T. Brick. il Metals & Alloys 16:894-901 N '43
- Role of nitrogen in 18-8 stainless steel.** H. Uhlig. bibliog il Am Soc for Metals Trans 30:947-80; Discussion. 980-2 D '42
- S-curve for 0.89% carbon steel; chart and photomicrographs.** Metal Prog 44:772 O '43
- S-curve for S.A.E. 4140 steel; chart and photomicrographs.** Metal Prog 44:734 O '43
- Shepherd grain size fracture standards; stereoscope photographs.** G. K. Manning. Metal Prog 44:594 O '43
- Silver chloride as a medium for study of ingot structures; abstracts.** K. L. Fettes and M. Dienes. Iron Age 151:60-1 F 25 '43; Metals & Alloys 17:354-49 N '43
- Solidification and cooling of steel ingots.** E. F. Law and V. Harbord. il Engineering 156: 318-20, 338-40 O 15-22 '43; Discussion. 156: 374 N 5 '43
- Some factors affecting longitudinal bend tests on fine-grained, cold-rolled annealed carbon strip steel.** A. F. Sprankle and M. A. Hughes. bibliog il Am Soc for Metals Trans 31:257-80; Discussion. 280-3 Je '43
- Spheroidize annealing of S.A.E. 52100 steel.** R. J. Hafsten. il Metal Prog 42:869-73 N '42
- Structure of butt-welded steel tubing.** H. J. Mastenbrook and H. J. Steffen. bibliog il Welding J 22:sup1-6 Ja '43
- Study of martensite formation by a photometric method.** E. R. Saunders and J. F. Kahles. bibliog il Am Soc for Metals Trans 30:1139-53; Discussion. 1153-8 D '42
- Supposed graphite in carburized NE and S.A.E. steels; effect of calcium and barium.** J. Welchner and R. W. Roush. il Metal Prog 43:889-96 Je '43
- Tempering of two high-carbon, high-chromium steels.** O. Zmeskal and M. Cohen. bibliog il Am Soc for Metals Trans 31:380-408; Discussion. 408-22 Je '43
- Tempering of two high-carbon, high-vanadium high speed steels.** B. S. Lement and M. Cohen. bibliog Am Soc for Metals Trans 30:1021-42; Discussion. 1042-8 D '42
- Tensile properties of pearlite, bainite, and spheroidite.** M. Gensamer and others. il diags Am Soc for Metals Trans 30:983-1019; Discussion. 1019-20 D '42
- Third element effects on hardenability of a pure hypereutectoid iron-carbon alloy.** C. R. Austin, W. G. Van Note and T. A. Prater. bibliog il Am Soc for Metals Trans 31:517-50; Discussion. 550-8 S '43
- Wartime metallurgy conserves strategic materials.** R. E. Orton and W. F. Carter. bibliog il diags Machine Design 14:70-4+ S; 69-73 O; 82-6 N; 91-5 D '42; 15:58-62 Ja '43

See also

Piping (power plants)
—Graphitization**Nitrogen content**

- Diagram of nitrogen-bearing steels; abstract.** H. Krainer and O. Mirt. Metals & Alloys 17:1064 My '43
- Limit nitrogen in stabilized stainless.** J. H. G. Monypenny. Metal Prog 43:241-2 F '43
- Nitrogen bearing Cr and Cr-Mn steels; abstract.** H. Krainer and O. Mirt. Iron Age 151:63 Ap 8 '43
- Role of nitrogen in 18-8 stainless steel.** H. Uhlig. bibliog il Am Soc for Metals Trans 30:947-80; Discussion. 980-2 D '42

Oxygen content

- Oxygen concentrations linked with acid open hearth process.** Iron Age 150:44 D 3 '42
- Vacuum fusion analysis of silicon steels.** G. Derge and T. T. Omori. bibliog Blast F & Steel Pl 31:888-9+ Ag '43
- Why determine FeO?** F. G. Norris. Blast F & Steel Pl 31:sup41-2+ Ap '43

Prices

- Are extra charges on NE steels out of line?** Iron Age 151:82 Ap 22 '43
- Average monthly quotations in 1942.** Steel 112:365 Ja 4 '43
- Celling prices established for seven additional zones by OPA.** Steel 113:148-9 O 11 '43
- Comparison of prices; market prices at date, and one week, one month, and one year previous.** Published in weekly numbers of Iron age
- Conference clarifies warehouse pricing.** Iron Age 151:99 Je 24 '43
- Finished steel prices, monthly, 1929-1942; tabulations.** Iron Age 151:205-8, 210 Ja 7 '43
- Finished steel; prices, 1929-1942; tabulation.** Steel 112:370-2 Ja 4 '43
- Iron and steel scrap prices; finished and semi-finished iron and steel prices; iron and steel warehouse prices.** Published in weekly numbers of Iron age
- Market prices.** Published in weekly numbers of Steel
- New OPA digest of price regulations; iron and steel.** Iron Age 152:110+ Ag 5 '43
- OPA announces warehouse price zones in six new areas by June 22.** map Iron Age 151:145 Je 3 '43
- OPA issues new price interpretations.** Iron Age 152:114+ J1 1 '43
- Pricing procedure for secondary iron and steel explained.** Iron Age 151:151-4 Mr 4 '43
- Steel, iron and scrap price composites, 1937-1942; tabulation.** Steel 112:377 Ja 4 '43
- Zone basis price schedule announced for heavy line steel warehouses by OPA.** il map Iron Age 151:108-10 Ap 15 '43
- Zone price plan for eastern area to be inaugurated soon by OPA.** Steel 112:31 Ap 5 '43

See also

Steel, Structural—
Prices
Steel bars—Prices**Protection**

- Accelerated and retarded phosphatizing methods; abstract.** W. Machu. Iron Age 150:60 D 10 '42
- Advantages and limitations of black-oxide coatings.** M. Weisberg and E. A. Parker. il Product Eng 14:294-7 My '43; Correction. 14:455 J1 '43
- Donderized and lacquered steel sheet; German investigations; substitute for tinplate in fabrication of food cans.** Iron Age 151: 39+ Ja 14 '43
- Buick improves plating practices.** H. Chase. il Am Mach 87:97-8 My 27 '43

STEEL—Protection—Continued

- Chemical surface treatment for steel. F. C. Hirdler, jr. *Il Automotive & Aviation Ind* 89:18-20+ S 15 '43; *Iron Age* 151:61-2+ Je 3 '43
- Chromium plate, its thickness and finish requirements. T. G. Coyle. *Steel* 113:118+ S 6 '43; Excerpts. *Iron Age* 152:72-3 Ag 5 '43; *Machine Design* 15:184+ S '43
- Conserving critical alloys in heat-treating equipment; steel annealing covers sprayed with molten aluminum. H. S. Ingham. *Il Steel* 112:94, 96 F 15 '43
- Corrosion of lead-indium diffusion alloys. J. M. Freund, H. B. Linford and P. W. Schutz. *diags Electrochem Soc Trans* 84 (preprint 7):61-5 O '43
- Corrosion of tin-nickel alloy coatings on steel in canned foodstuffs; abstract. H. R. Copson and W. A. Wesley. *Iron Age* 152:53-4 O 21 '43
- Corrosion protection of storage tanks; gunite lining, galvanized and aluminum roofs, etc. F. L. Newcomb, E. S. Dixon and C. F. Kelly. *Il diags Am Pet Inst Proc* 23(3):38-58 '42; Excerpts. *Nat Pet N* 34 pt 2:R397-403 N 25 '42
- Corrosion resistance of silver plated steel; phosphating the steel plating. P. J. Lo Presti. *Il Electrochem Soc Trans* 84 (preprint 3):19-24 O '43; Abstract. *Iron Age* 152:72 N 11 '43
- Distribution system for slushing oils; Union drawn steel division of the Republic steel corporation. *Comp Air M* 48:6963 F '43
- Effect of copper on hot-dip zinc coatings. W. G. Imhoff. *bibliog Metal Finishing* 40:636-40+ D '42
- Electroplated zinc saves critical materials. *Iron Age* 150:60 N 19 '42
- Fire-retardant paints for steel surfaces, by New York club. *Oil Paint & Drug Rep* 144:52+ N 1 '43
- Flame-priming method of preparing steel surfaces for painting. E. W. Deck. *bibliog Il diags Iron Age* 150:80-2 O 22; 44-8 O 29 '42; Same. *Metal Finishing* 41:186-8, 249-52 Mr-Apr '43
- German substitutes for tin plate; abstract. L. Schuster. *Metals & Alloys* 17:1056+ My '43
- Importance of phosphate treatment and paint in rustproofing. G. H. Pimbley. *Metal Finishing* 41:473-4+, 536-7+ Jl-Ag '43
- Lead-coated steel; abstract. G. Soderberg. *Metals & Alloys* 13:586+ S '43
- Lead coating on iron and steel. *Sheet Metal Worker* 34:52 Ag '43
- Lundbye process can produce 300% increase in tool life; Lundbye chromium-plating process. G. W. Birdsall. *Il Steel* 112:100-2, 104+ Je 14; 84-6, 88+ Je 28 '43
- Marine corrosion; first report of a joint committee of the iron and steel institute and the British iron and steel federation. *Engineer* 175:415-16 My 21 '43; Discussion. *Engineering* 155:435-6 My 28 '43
- Metal spraying solves a finishing problem; manufacture of Speed nuts. R. C. Overstreet. *Il Metal Finishing* 41:634-6 O '43
- New mill treated rust resistant sheets and strip; bonderized zinc-flash. *Il Metal Finishing* 41:327 My '43
- New phosphate coatings with unusual corrosion resistance. G. Jernstedt. *Il Electrochem Soc Trans* 83 (preprint 30):323-35 Ap '43; Abstract. *Steel* 113:95-6 D 27 '43
- New type rustproof lining for drums; Nidex. A. Wachter and N. Stillman. *flow plan Il Oil & Gas J* 41:214, 219, 221 Mr 25 '43
- Plated lead coatings on steel. G. Soderberg. *Steel* 113:98, 100+ O 18 '43; Abstract. *Iron Age* 152:71-2 Ag 5 '43
- Precision coating of shell cases; spraying equipment applies thin coating of phenolic varnish. R. H. Smutzer. *Il Am Mach* 87:80-1 Ap 1 '43
- Protective finish is applied to steel without the use of critical materials; Pentrate process. *Il Steel* 112:106+ F 22 '43
- Protective painting of structural steel. *Iron & Steel Inst J* 145:87-100, pl 13-16 no 1 '42
- Protective painting of submerged steel; hydraulic turbine headgates, Gattineau power company. *Engineering* 155:167-8 Ag 27 '43
- Restoring a corroded penstock; oxyacetylene flame-priming to remove rust and scale before applying protective paint. *Il Power Pl Eng* 47:86-7 Je '43
- Small, tools; results of the Macromere treatment. *Automobile Eng* 33:169 Ap '43
- Some modern rustproof coatings; corrosioning and lead plating. H. Simon. *Chem Age (Lond)* 48:481 My 1 '43
- Steel chromizing. C. M. Cosman. *bibliog Il diag Iron Age* 150:49-53 N 26 '42
- Steel poles, keep 'em standing; proper maintenance essential. L. W. Birch. *Il Transit J* 86:414-16 N '42
- Steel shell case coating. *Il Mod Plastics* 21:74+ S '43
- Studies of the adherence and corrosion resistance of silver plate on steel; abstract. F. C. Mesle. *Iron Age* 152:68-9 Jl 8 '43
- Study of some soluble inhibitors, with special reference to heat transfer and water-line attack. R. S. Thornhill and U. R. Evans. *diags Iron & Steel Inst J* 146:73-103, pl 5; Discussion. 103-5 no 2 '42
- Zinc yellow in the inhibition of corrosion-fatigue of steel in sodium chloride solution. C. G. Fink, W. D. Turner and G. T. Paul. *bibliog Il Electrochem Soc Trans* 83 (preprint 13):159-82 Ap '43; Abstract. *Chem & Met Eng* 50:178-9 S '43
- See also
Lead coating
Steel—Blackening
Steel, Stainless clad
- ### Quenching
- See Steel, Quenching of
- ### Rimmed steel
- Ingot of rimmed steel made by the basic open-hearth process. D. Binnie. *Iron & Steel Inst J* 146:283-94, pl 17-24 no 2 '42; Excerpts. *Iron Age* 151:65 F 18 '43; Discussion. *Iron & Steel Inst J* 146:363-86 no 2 '42
- Research of rimming steel; abstracts of five papers at autumn meeting of the Iron and steel institute. *Engineering* 154:476-7 D 11 '42; Discussion. 154:494 D 18 '42
- Rimming steel; additional studies of the composition variation from outside to centre; note on diffusion on soaking at about 1300° C. T. Swinden and W. W. Stevenson. *diags Iron & Steel Inst J* 146:345-62, pl 30-7; Discussion. 363-91 no 2 '42
- Rimming steel; comparative study of three ingots received from Soc. anon. des hauts fourneaux, forges et aciéries de Denain et d'Anzin, at Denain, France; report on four ingots of British manufacture. J. Mitchell. *Iron & Steel Inst J* 146:295-344, pl 25-9; Discussion. 363-88 no 2 '42
- ### Scaling
- Avoiding scale on end-quench test piece. G. F. Comstock. *Metal Prog* 43:225 F '43
- Descaling steel by spray system. R. Trautschold. *Il diag Steel* 113:112-13+ S 13 '43
- Desirability of removing sulphur from gaseous fuels for heating ferrous metal. A. Preece. *Engineering* 155:405-6 My 21 '43; Abstract. *Metals & Alloys* 18:870+ O '43
- Iron alloy scaling. M. J. Day and G. V. Smith. *diag Ind & Eng Chem* 35:1098-1103 O '43
- ### Specifications
- Aeronautical material specifications; tables. *Iron Age* 151:47-53 Ap 29 '43
- Alloy steel specifications based on analysis or performance? use of Jominy end quench hardenability test. G. Van Dyke. *Il Iron Age* 152:71-3 O 14 '43; Same. *Steel* 113:88, 90+ O 18 '43; Same. *Blast F & Steel Pl* 31:1381-4 D '43
- A.P.I. activities and cooperation with the War production board in the simplification of steel specifications and steel conservation. C. A. Dunlop. *Pet Eng (Ref annual)* 14:75-6+ Jl 1 '43
- Functions of specifications in conservation and substitution. A. F. Macconochie. *Il Steel* 112:80-3+ F 8 '43
- Latest list of AMS (aeronautical material specifications) steels and nonferrous alloys. *Steel* 113:92, 94, 96+ Ag 9 '43

STEEL—Specifications—Continued

Specifications issued for NE (national emergency) carbon steels. Steel 112:90-2, 94, 96, 98 Mr 8 '43
 Use of alternate steels is provided in 1942 pressure vessel code addenda. E. F. Brummerstedt. Nat Pet N 35 pt 2:R302-3 Jl 7 '43

Standards

A.I.S.I. standard steel compositions, revised Sept. 22, 1942; tabulation. Metal Prog 42: 877 N '42

A.I.S.I. standard steel compositions, rev. Feb. 1, 1943; tabulations. Metal Prog 44:666 O '43

ASTM committees report important new standards. Steel 113:116, 119+ Ag 2 '43

Applications of the NE steels, 1942. C. M. Parker. Metals & Alloys 17:94 Ja '43

Automotive user reports on experience with NE (national emergency) alloy steels. W. J. Diederichs. Steel 111:62 N 30 '42

Calculation of Jominy end-quench curve from analysis; study of NE steels. J. Field. il diags Metal Prog 43:402-5 Mr '43

Carburizing test on NE 8620 and 8817. G. A. Nelson. Metal Prog 42:867 N '42

Comparison data showing relationship between standard steels and NE alloy steels. Steel 112:102-5 F 22 '43

Effect of boron containing additions on NE steel. A. S. Jameson. diags Iron Age 151: 45-50 Mr 25 '43

Emergency steels for wartime mining. il Min Cong J 29:34-5, 38+ Mr '43

Experience of an aircraft manufacturer with NE (national emergency) alloy steels. W. Kahn, Jr. Steel 113:107 Ag 23 '43

Experience with NE (national emergency) alloy steels; Allis-Chalmers mfg. co. F. Horak and E. Champlin. il Steel 112:106-8 Je 7; 98-9, 126 Je 14; 92-4 Je 21 '43

Experience with NE (national emergency) alloy steels for industrial gearing. E. J. Wellauer. il Steel 113:106-8, 110+ S 6 '43

Experience with NE (national emergency) alloy steels; gears for heavy duty automotive transmissions. S. L. Widrig. il Steel 112:60-2 Ja 11 '43

Experience with NE (national emergency) alloy steels; medium carbon NE-9440 and NE-9640 steels. A. S. Jameson. Steel 112: 96-8, 100, 102+ Mr 15 '43

Experience with NE (national emergency) alloy steels; NE-9437 as a bolting material. A. S. Jameson. il diags Steel 113:66-8, 70, 72 Ag 30 '43

Experience with NE (national emergency) alloy steels; procedure followed at Glenn L. Martin co. W. J. Pierce. Steel 113:120-1, 134-6 S 20 '43

Experience with NE (national emergency) alloy steels; type NE-9420. A. S. Jameson. il diags Steel 112:100-1, 103-4, 106, 134 F 1 '43

Experience with NE (national emergency) alloy steels; Warner electric brake mfg. co. F. Born. diags Steel 113:110 N 8 '43

Facts and figures for practical use of NE (national emergency) alloy steels. il diags Steel 112:76, 78, 80, 82 Mr 29; 116 Ap 5 '43

Flakes in NE steel billets. E. O. Dixon. il Metal Prog 43:72-3 Ja '43

Hardenability in evaluating physical properties of NE (national emergency) alloy steels. C. Nilson and A. W. Herbenar. Steel 112:118-19+ Ap 5 '43

How to predict success of alternative steels. J. H. Staiger and F. G. Wheeler. il Machine Design 15:113-15 My '43

How to use the NE (national emergency) alloy steels with information on the end-quench test. il Steel 112:78+ Mr 22 '43

In selecting substitute steels watch for toughness; abstract. H. B. Knowlton. Metal Prog 42:1050 D 42

Intensifying NE-9440 alloy steel; addition of Grainal. Iron Age 152:56-7 Jl 1 '43; Steel 113:100+ S 27 '43

Intensifying of NE 9422 steel; addition of Grainal. Iron Age 152:50-1 Ag 19 '43

Introducing new NE 8600 grade. Steel 113: 77 S 6 '43; Same. Iron Age 152:98 S 9 '43

Iron Age NE steel; standard steel chart. J. I. Butzner, comp. Iron Age 151:supp My 6 '43

List of national emergency alloy steels, rev. August 15, 1943; tabulations. Metal Prog 44:572 O '43

Machinability of national emergency alloy steels. O. W. Boston. il Metal Prog 43:543-7 Ap '43

Machinability of NE steels; abstract. O. W. Boston. Iron Age 151:63-4 Ap 1 '43

Manufacturers expand use of NE steels in aircraft. Steel 113:100 Ag 2 '43

Metallurgical aspects of the national emergency steels. W. E. Jominy and others. il diags Metal Prog 43:77-89 Ja '43

Metallurgical study of some NE (national emergency) alloy steels. T. A. Frischman. Steel 111:93, 119-23 D 14 '42

Modifications in NE steels necessitated by unexpected nickel content of scrap. Steel 111:27 D 28 '42; Same. Iron Age 150:69 D 31 '42; Same. Blast F & Steel Pl 31:73 Ja '43

NE (national emergency) alloy steels for truck parts. J. Sorenson. il Steel 112:72-3 Mr 29 '43

NE (national emergency) alloy steels in aircraft engines. M. Young and H. H. Hanink. Steel 112:84-5+ Ap 26 '43

NE (national emergency) alloy steels in the oil well drilling and equipment industries. B. B. Wescott. Steel 112:66, 69 Ja 18 '43

NE (national emergency) alloy steels; list is revised as of Dec. 17, 1942. Steel 112:84-5 Ja 25 '43; Same. Metal Prog 43:90 Ja '43

NE (national emergency) alloy steels; steel castings vs. forgings. A. Zwald. il Steel 113:94-5+ Ag 2 '43; Same. Foundry 71: 175-7 S '43

NE (national emergency) alloy steels; successful applications of NE-8000 series. A. S. Jameson. il diags Steel 111:112-14, 116, 118 D 7; 119-2+ D 21 '42

NE steel compositions revised. Machine Design 15:110 F '43

National emergency steels. il Mach 49:144-5 D '42

NE steels; composition and other data, tabulated. Automotive & Aviation Ind 88:75 Mr 15 '43

National emergency steels; NE 1300 series. il Metal Prog 43:711-15 My '43

N.E. steels replacing alloy steels for many purposes. W. C. Hirsch. Automotive & Aviation Ind 89:54 O 15 '43

NE steels revised; some withdrawn. Iron Age 152:87-8 Ag 26 '43

New standard steel classifications; current SAE steels and NE steels; tabulation. Machine Design 15:186-7 O '43

Production experience with national emergency steels. R. W. Roush. il S A E J 51:34-93 Mr '43; Same. Steel 112:94, 96, 98+ Mr 1; 109-10+ Mr 8 '43; Same cond. Iron Age 151:57-61 Mr 4 '43; Abstract. Machine Design 15:108-10 F '43

Specifications for carbon steel plates reduced to twenty-five. Steel 112:49 Mr 29 '43

Specifications issued for NE (national emergency) carbon steels. Steel 112:90-2, 94, 96, 98 Mr 8 '43

Substitute steels for ordnance; with charts showing end-quench hardenability curves of NE steels. Metal Prog 42:856-7 N '42

Successful applications of NE (national emergency) alloy steels; Caterpillar tractor co. G. C. Riegel. Steel 111:90+ N 23 '42

Successful applications of NE (national emergency) alloy steels in gear making. E. J. Wellauer. diags Steel 111:106-7+ N 16 '42

Supplementary national emergency (N.E.) steels; 9400, 9500, and 9600 steels. Oil & Gas J 41:53 F 18 '43

W.E.B. iron and steel committee accelerates comparative tests on NE 9400 series steels. S A E J 51:supp20-1, 37-8 Ag '43

Wartime standards are adopted for refinery still tubes. Nat Pet N 35 pt 2:R66-7 F 3 '43

Weldability of NE 1330 and NE 1335; laboratory tests. O. E. Harder and C. B. Voldrich. Metal Prog 43:409-10 Mr '43

Strength

Computing strength of normalized steel from its analysis. Metal Prog 43:76 Ja '43

STEEL—Strength—Continued

- Effect of deoxidation practice on creep strength of carbon-molybdenum steel at 850 and 1000 F. R. F. Miller, bibliog il A S M E Trans 65:309-14; Discussion. 314-16 My '43
- Effect of titanium on creep strength; abstract. E. Houdermont and G. Bandel. Iron Age 151:58 Mr 25 '43
- Fatigue strength and elastic limit; abstract. M. Hempel and H. Krug. Metals & Alloys 17:843 Ap '43
- Fatigue strength of butt welds in ordinary bridge steel. diags Welding J 22:sup189-211 My '43
- Fatigue strength of normalized and tempered versus as-forged full size railroad car axles. O. J. Horgner and T. V. Buckwalter, bibliog il diag Am Soc for Metals Trans 31:559-76; Discussion. 576-81 S '43
- How to use heat-treated carbon steel bolts. A. E. R. Peterka. il diags Steel 112:86-8, 90-1 My 10 '43
- Impact resistance and tensile properties of metals at subatmospheric temperatures. H. W. Gillett. Welding J 22:sup375 Ag '43
- Izod toughness vs. tensile strength of heat treated steels; charts. Metal Prog 44:798 O '43
- Obtaining maximum bolt strength. G. Sachs, P. S. Cole and R. A. Roth. il diags Machine Design 15:144-6 N '43
- Some considerations in the design of thick-wall pressure cylinders. C. W. Comstock. bibliog Am Inst Chem Eng Trans 39:239-312; Discussion. 312-18 Je '43
- Some tensile shock properties of carbon steels. F. V. Warnock and J. B. Brennan. diags Engineer 176:206-7, 233-4 S 10-17 '43
- Strength of steel anchors in concrete. H. E. Graham. diags Eng N 130:560-1 Ap 22 '43
- Stress concentration factors in practical design. R. E. Peterson. bibliog il diags Machine Design 15:104-8 Jl '43

Sulfur content

- Desulphurization with acid slags. R. Durrer and B. Marincek. Iron Age 150:40-1 D 31 '42
- Screw machine steels as alloy steel substitutes. A. S. Jameson. il diags Iron Age 152:52-8 S 16; 46-50 S 23; 69 O 28 '43

Testing

- Alloy steel specifications based on analysis or performance? use of Jominy end quench hardenability test. G. Van Dyke. il Iron Age 152:71-3 O 14 '43; Same. Steel 113:83, 90-1 O 18 '43; Same. Blast F & Steel Pl 31:1381-4 D '43
- Carburizing characteristics of 0.20 per cent carbon alloy and plain carbon steels. G. K. Manning. il Am Soc for Metals Trans 31:8-32; Discussion. 33-40 Mr '43
- Ductility under polydimensional stress. il Welding J 22:sup325-8 Jl '43
- Effect of moderate cold rolling on the hardness of the surface layer of 0.34 per cent carbon steel plates. H. K. Herschman. bibliog il Am Soc for Metals Trans 31:501-13 Je '43; Same. J Research Nat Bur Stand 29:57-67 Jl '42; Discussion. Am Soc for Metals Trans 31:513-16 Je '43
- Effect of quenching temperature on the results of the end-quench hardenability test; abstract. C. E. Jackson and A. L. Christenson. Iron Age 152:67-8 O 28 '43
- Effect of zinc on corrosion-fatigue of steels. N. Stuart and U. R. Evans. Engineering 155:336-7 Ap 23 '43
- Effects of tin in carbon steel. J. W. Halley. Metal Prog 43:936 Je '43
- Evaluation of fatigue damage of steel by supplementary tension-impact tests. J. A. Kies and W. L. Holshouser, bibliog il Am Soc T M Proc 42:556-64; Discussion. 565-7 '42
- Hardenability of low carbon steel; abstract. S. von Hofsten. Iron Age 152:59 N 11 '43
- Hardenability testing of steels. S A E J 51:sup15, 22-3 S '43
- How to interpret Jominy test results. diags Iron Age 151:64-6 F 11 '43
- How to predict success of alternative steels. J. H. Staiger and F. G. Wheeler. il Machine Design 15:113-15 My '43

Influence of stress on the corrosion pitting of steel in distilled water. D. J. McAdam, Jr. and G. W. Geil. bibliog il Am Soc for Metals Trans 30:1159-98; Discussion. 1198-1201 D '42

- Investigation of the static notched bar behavior of steel with reference to tri-axial stress and the technical cohesive strength. O. H. Henry and J. G. Farmer. bibliog il diags Welding J 22:sup150-62 Ap '43
- Mechanical properties of NE, S.A.E. and other hardened steels. W. G. Patton. il Metal Prog 43:726-33 My '43
- Notched bar tensile tests on heat treated low alloy steels. G. Sachs and J. D. Lubahn. il diags Am Soc for Metals Trans 31:125-57 bibliog(51 titles, p156-7) Mr '43; Abstract. Machine Design 14:104-7+ D '42; Discussion. Am Soc for Metals Trans 31:158-60 Mr '43
- Progress report on the effect of size of specimen on fatigue strength of three types of steel. H. F. Moore and D. Morkovin. diags Am Soc T M Proc 42:145-53 '42
- Proposed tentative tests for metal arc weldability of steels. diags Welding J 22:433-8 Je '43
- Recording dilatometer for metal specimens. L. R. Stanton. diags Engineering 155:518-19 Je 25 '43
- Screw machine steels as alloy steel substitutes. A. S. Jameson. il diags Iron Age 152:52-8 S 16; 46-50 S 23; 69 O 28 '43
- Some tensile shock properties of carbon steels. F. V. Warnock and J. B. Brennan. diags Engineer 176:206-7, 233-4 S 10-17 '43; Abstract. Metal Prog 44:937+ N '43
- Special addition agent steels; extensive data on recent laboratory tests of steels treated and untreated. R. B. Schenck. Iron Age 152:88-93 O 14 '43
- Steel identifier. il Business Week p58 Je 5 '43
- Strength of steel subjected to biaxial fatigue stresses. J. Marin. il diags Welding J 21:sup554-9 N '42
- Study of martensite formation by a photometric method. E. R. Saunders and J. F. Kahles. bibliog il Am Soc for Metals Trans 30:1139-53; Discussion. 1153-8 D '42
- Supposed graphite in carburized NE and S.A.E. steels; effect of calcium and barium. J. Welchner and R. W. Roush. il Metal Prog 43:889-96 Je '43
- Tensile properties of pearlite, bainite, and spheroidite. M. Gensamer and others. il diag Am Soc for Metals Trans 30:953-1019; Discussion. 1019-20 D '42
- W.E.B. iron and steel committee accelerates comparative tests on NE 9400 series steels. S A E J 51:sup20-1, 37-8 Ag '43
- See also
- | | |
|---------------------------|------------------------|
| Steel, Aircraft—Testing | Steel alloys—Testing |
| Steel, Stainless—Testing | Steel castings—Testing |
| Steel, Strip—Testing | Steel ingots—Testing |
| Steel, Structural—Testing | Tool steel—Testing |
- Spark testing**
- Separation of high speed steels by spark testing. L. P. Tarasov. Metal Prog 42:868 N '42
- Sparks fingerprint scrap metal. il Power 87:118 F '43
- Sparks reveal identity of alloy steel. il Comp Air M 47:6900 N '42
- Temperature effects**
- Balancing the composition of cast 25 per cent chromium-12 per cent nickel type alloys. J. T. Gow and O. E. Harder. il diags Am Soc for Metals Trans 30:855-919; Discussion. 919-35 D '42
- Corrosion of stressed alloy-steel bars by high-temperature steam. H. L. Solberg and others. il diags A S M E Trans 65:47-52 Ja '43
- Corrosion of unstressed specimens of alloy steel by steam at temperatures up to 1800 F. G. A. Hawkins and others. il A S M E Trans 65:301-7; Discussion. 307-8 My '43
- Creep resistance of superheater tube steels in tube and bar form. J. A. Jones and W. E. Bardgett. diags Engineer 176:6-8 Jl 2 '43

STEEL—Testing—Temperature effects—Cont.

- Creep strength in alloy steels traced to zenes. W. Holtman. *Iron Age* 150:53 N 26 '42
- Cyclic temperature acceleration of strain in heat resisting alloys. G. R. Brophy and D. E. Furman. *il diags Am Soc for Metals Trans* 30:1115-30; Discussion. 1130-8 D '42
- Dynamic hardness testing of metals and alloys at elevated temperatures. E. Fetz. *il diags Am Soc for Metals Trans* 30:1313-61 bibliog(p1459-61); Discussion. 1461-2 D '42
- Effect of deoxidation practice on creep strength of carbon-molybdenum steel at 850 and 1000 F. R. F. Miller. bibliog *il A S M E Trans* 65:309-14; Discussion. 314-16 My '43
- Effect of peening temperature on weld metal. R. E. Somers. *diags Welding J* 22:sup570-2 N '43
- Effect of titanium on creep strength; abstract. P. Bardenheuer and W. Fischer. *Iron Age* 151:43 Ja 25 '43
- Effect on the endurance limit of submerging fatigue specimens in a cold chamber. O. H. Henry and A. A. Stirba, jr. *Welding J* 22:sup372-3 Ag '43
- 11½-year creep test. *Engineering* 155:357 Ap 30 '43
- Elimination of the apparent hot brittleness of 0.50 molybdenum steel. C. L. Clark and J. W. Freeman. *il Am Soc for Metals Trans* 30:1284-99; Discussion. 1299-1302 D '42
- Hardness testing of high speed steel at high temperatures. E. C. Bishop and M. Cohen. *diag Metal Prog* 43:413-16+ Mr '43
- High-temperature wear resistance; abstract. W. Rädcker. *Metals & Alloys* 17:1060 My '43
- Improved 12 per cent chromium steel containing molybdenum. *il Metals & Alloys* 18:55-62 Ji '43
- Investigation of the behaviour of metals under deformation at high temperatures; structural changes in carbon steels caused by creep and graphitisation. C. H. M. Jenkins, G. A. Mellor and E. A. Jenkinson. bibliog *Iron & Steel Inst J* 145:51-86, pl 1-12 no 1 '42; Summary. *Iron Age* 149:48 Ap 23 '42
- Low-temperature fatigue of steels; abstract. M. Hempel and J. Luce. *Metals & Alloys* 17:846 Ap '43
- Low temperature impact resistant steel castings. N. A. Ziegler and H. W. Northrup. bibliog *il Am Soc for Metals Trans* 30:1087-1109 D '42; Abstract. *Oil & Gas J* 42:38 S 2 '43; Discussion. *Am Soc for Metals Trans* 30:1109-14 D '42
- Mechanical properties of arc-welded chromium-nickel steel at low temperatures. V. S. Chernyak, Z. I. Golubeva and I. A. Steinberg. *il diags Welding J* 22:sup437-8 S '43
- 100,000-hour creep test. E. L. Robinson. *il Mech Eng* 65:166-8 Mr '43
- Properties of NE steels at room and subnormal temperatures. J. H. Jones. *Metal Prog* 43:83-5 Ja '43
- Résumé of high temperature investigations conducted during 1941-42. C. L. Clark. *Nat Pet N 35 pt 2:R120-1 Mr 3 '43*

See also

Steel, Heat resisting

Transportation

- Give steel to railroads or face desperate situation, WPB is warned; freight cars lacking for transportation of steel. *Iron Age* 151:85-6 Ap 15 '43

See also

Steel handling

Welding

- Adaptation of welded steel to the paper machine. R. S. Conabee. *il diags Welding J* 22:504-12 Ji '43
- Aircraft welders need special training; welding aluminum and chromium molybdenum steel. *il Am Mach* 87:112-13 My 13 '43
- A.W.S. emergency standard; recommended practice for the spot welding and seam welding of low carbon steel. *Welding J* 22:431-2 Je '43; Same. *Steel* 113:117+ O 4 '43
- Ammonia converter of welded 5% chromium steel. J. Schuyten. *il diags Metal Prog* 43:218-23 F '43; Same cond. *Nat Pet N 35 pt 2:R406, R408-9 S 1 '43*

- Arc welding stainless steel. C. Pettit. *diags Am Mach* 87:96-7 Ji 22 '43
- Arc welding tool steel with stainless electrodes. H. W. Rushmer. *il diags Iron Age* 151:51-5 Mr 11 '43
- Common mechanical properties of carbon-steel weld metal in electric arc welding. O. T. Barnett. *diags Welding J* 22:108-13 F '43
- Determination of the effect of various types of weld metals on the internal damping characteristics of steel specimens. O. H. Henry, E. R. Felt and J. A. Falcon. *diags Welding J* 22:sup266-9 Je '43
- Dished cast iron heat exchanger head is replaced with arc-welded steel. H. F. Steinman. *il Nat Pet N 35 pt 2:R354 Ag 4 '43*
- Effect of normalizing on the properties of welds in carbon-molybdenum steel pipe. I. A. Rohrig, D. H. Corey and S. Crocker. *il Welding J* 22:sup521-7 O '43; Abstract. *Heating-Piping* 15:591 N '43
- Effect of peening temperature on weld metal. R. E. Somers. *diags Welding J* 22:sup570-2 N '43
- Effect of welding on the shear and hardness properties of mild steel bars. W. D. Lewis. *diags Welding J* 21:sup559-61 N '42
- Effects of cooling rate on the properties of arc-welded joints in carbon-moly 0.50 plate. W. F. Hess. *il Welding J* 21:sup608-19 D '42
- Establishment of cooling curves of welds by means of electrical analogy. V. Paschakis. bibliog *diags Welding J* 22:sup462-83 O '43
- Fabricating steel coke oven doors; with cost data. H. A. Immisch. *il diags Steel* 113:113-14+ Ag 2 '43
- Fabrication of pressure vessels; abstract. S. H. Griffiths. *Metals & Alloys* 18:370+ Ag '43
- Fabrication of tear drop tanks; Lockheed Lightning P-38. *il Iron Age* 151:64-5 Je 17 '43
- Fatigue strength of welded aircraft joints. T. V. Buckwalter and O. J. Horger. bibliog *il diags Welding J* 21:sup525-39 N '42
- First report on stress corrosion cracking of stainless steel in chloride solutions. M. A. Scheil and others. *il diags Welding J* 22:sup493-506 O '43
- Fish-eyes in steel welds; hydrogen effect questioned. P. E. Jerabek. *il Metal Prog* 44:640-2 O '43
- Guide to weldability of steels. *diag tables Welding J* 22:sup333-52 Ag '43
- Lockheed sheds tears for the Axis; manufacturing auxiliary gasoline tanks for fighter planes. M. W. Coker. *il Mach* 49:161-7 My '43
- Measurement of cooling rates associated with arc welding and their application to the selection of optimum welding conditions. W. F. Hess and others. *il diags tables Welding J* 22:sup377-422 S '43
- Metallurgy of spot welding. H. Lawrence. *diags Steel* 112:100-1, 103+ Mr 29 '43
- New fabrication procedures approved in pressure vessel code addenda. E. F. Brummerstedt. *Nat Pet N 35 pt 2:R410, R414 S 1 '43*
- Preheat temperatures; chart. *Welding J* 21:781-2 N '42
- Preheating steel before welding. A. G. Voetter. *il Metals & Alloys* 18:321 Ag '43
- Preheating temperatures for welding. *Automobile Eng* 33:359 S '43
- Proposed code of minimum requirements for instruction of welding operators; Part B-1, oxyacetylene welding of steel-aircraft. *il diags Welding J* 22:522-44 Ji '43
- Proposed tentative tests for metal arc weldability of steels. *diags Welding J* 22:433-8 Je '43
- Resistance welding of tool steel. *il diags Iron Age* 152:78 Ji 8 '43
- Spot welding aluminum-clad steel. J. D. Rosenblatt. *il Iron Age* 151:72-4 Je 10 '43
- Spot welding of S.A.E. 1020, 1035 and 1045 steels in the 0.040 in. thickness; automatic tempering in welding machine. W. F. Hess and D. C. Herrschaft. *il Welding J* 22:sup451-61 O '43; Abstract. *Iron Age* 152:63 O 28 '43

STEEL—Welding—Continued

- Stainless steel aircraft exhausts; performance and fabricating technique for titanium or columbium-stabilized stainless steel. H. A. Campbell. *bibliog Iron Age* 151:56-8 Je 24 '43
- Steel-penstock erection at a western hydro-electric project. L. G. Christofferson. *Il plan Civil Eng* 13:409-12 S '43
- Stored energy welding of mild steel. J. M. Diebold. *Il Welding J* 22:sup484-93 O '43; Abstract. *Iron Age* 152:62-3 O 28 '43
- Stress relieving in welded construction. H. Lawrence. *Steel* 113:94, 96+ Ag 16 '43
- Structure of butt-welded steel tubing. H. J. Mastenbrook and H. J. Steffen. *bibliog Il Welding J* 22:sup51-6 Ja '43
- Swiss standards on weldability of steel. *diags Welding J* 22:sup94-6 F '43
- Tentative system for preserving ductility in weldments. G. E. Doan, R. D. Stout, J. H. Frye, jr. and S. S. Tör. *bibliog Il diags Welding J* 22:sup278-99, sup423-37 Jl, S '43; Excerpts (pt 1). *Steel* 113:136, 138+ N 15 '43
- Tests on NE 8630 steels for welded air frames. M. Hill. *Metal Prog* 43:555-9 Ap '43; Same. *Welding J* 22:sup300-4 Jl '43
- Utility characteristics of aircraft arc-welding electrodes. C. B. Voldrich and R. D. Williams. *Il diags Welding J* 21:sup540-53 N '42
- Weld-bead hardness tests on some carbon, nickel and nickel-chromium War department steels. O. E. Harder and C. B. Voldrich. *Il diags Welding J* 22:sup441-50 O '43; Correction. 22:sup615 D '43
- Weld cracks minimized by preheating. *Il Iron Age* 152:53 Ag 5 '43
- Weldability of NE 1330 and NE 1335; laboratory tests. O. E. Harder and C. B. Voldrich. *Metal Prog* 43:409-10 Mr '43
- Weldability of (NE-8339) manganese molybdenum steel piping. R. W. Emerson. *Il Welding J* 22:sup170-8 Ap '43; Same cond. *Steel* 113:88-9, 92, 95-6 Jl 26 '43
- Weldability of NE 8630 steel for aircraft structures and a suggested specification for weld metals. A. R. Lytle and K. H. Koopman. *Il Welding J* 22:sup82-93 F '43
- Weldability of some low-alloy steels. J. S. Vatchagandhy and G. P. Contractor. *Il diags Welding J* 21:sup561-72 N '42
- Weldability tests of carbon-manganese steels. C. E. Jackson, M. A. Pugacz and G. G. Luther. *Il Welding J* 21:sup477-84 O '42; Discussion. A. P. Edsall. 22:sup78-9 F '43
- Welded forming dies made from steel plate replace castings; with cost data. W. E. Klauber. *diags Am Mach* 87:85-6 Ap 1 '43
- Welded ladles help increase steel output. G. R. Reiss. *Il Steel* 112:112, 115 My 17 '43
- Welded-steel tubing and its applications in war production. H. S. Card. *Il diags Welding J* 21:846-51 D '42
- Welding highlights of National metal congress. J. V. Kielb. *Il Metal Prog* 42:885-6 N '42
- Welding low-alloy high-strength steel; a review of the literature from January 1, 1938 to January 1, 1941. W. Spragen and H. H. Chiswick. *bibliog Il diags Welding J* 22:sup225-63, sup439-40 Je, S '43
- Welding methods for national emergency steels. A. N. Kugler. *Mach* 49:176 Je '43; Same. *Welding J* 22:432 Je '43
- Welding of 4 to 6% chromium molybdenum titanium steel; resultant hardness. E. H. Wyche. *diags Welding J* 22:sup142-4 Mr '43
- Welding tubular structures with sphere type joints; towing carriages. F. Waldo. *Il Steel* 112:110, 112+ Je 7 '43
- Welding wrought iron, high carbon steel and cast steel. H. R. Morrison. *Il Welding J* 22:418-20 Je '43
- See also* Steel, Structural—Welding
- Steel construction—Welding
- STEEL, Aircraft**
- Aeronautical material specifications; tables. *Iron Age* 151:47-53 Ap 29 '43
- Aircraft steel warehouse program contains changes to ease shortages. *Il Iron Age* 151:87-9 My 27 '43
- Allegheny Ludlum steel corporation; ten years' progress in aircraft steel. C. A. Scharschu. *Aeronautical Eng* R 1:103 N '42
- Alternative steels for aircraft engines. Automobile Eng 33:380-1 S '43
- Automobile graveyard steel analyzed for alloy content. W. C. Hirsch. *Automotive & Aviation Ind* 87:52 N 15 '42
- Carbon steel replaces dural in airplane fuselage stringers. *Il Iron Age* 151:58-61 My 20 '43
- Expanded steel mesh backing up thin sheets developed for aircraft fuselage. *Il Steel* 111:96, 98+ D 7 '42
- Experience of an aircraft manufacturer with NE (national emergency) alloy steels. W. Kahn, jr. *Il Steel* 113:107 Ag 23 '43
- Experience with NE (national emergency) alloy steels; procedure followed at Glenn L. Martin co. W. J. Pierce. *Steel* 113:120-1, 134-6 S 20 '43
- How the new aircraft steel warehousing program operates. *flow chart Aero Digest* 42:156-9 Je '43; Same cond. *Automotive & Aviation Ind* 88:42+ Je 15 '43
- Introducing new NE 8600 grade. *Steel* 113:77 S 6 '43; Same. *Iron Age* 152:98 S 9 '43
- Latest list of AMS (aeronautical material specifications) steels and non-ferrous alloys. *Steel* 113:92, 96+ Ag 9 '43
- Machine work saved by Buick change in heat-treating and specifications; crankshafts and other engine parts. H. Chase. *Il Am Mach* 87:75-7 Ap 1 '43
- Manufacturers expand use of NE steels in aircraft. *Steel* 113:100 Ag 2 '43
- Matériel command changes steel warehousing program to expedite deliveries. *Aero Digest* 43:249 S '43
- Mechanical properties of austenitic stainless steels. R. A. Lincoln and W. H. Mather. *J Aeronautical Sci* 10:253-60+ O '43
- Methods for forming aircraft sheet metal; reference book sheet. *diags Am Mach* 87:117, 119 O 23 '43 (to be cont)
- New materials for aircraft engines. M. Young and H. H. Hanink. *Il S A E J* 51:157-62 My '43; Same. *Steel* 112:84-5+ Ap 26 '43
- New steel warehousing program aims to solve supply shortages. *Steel* 112:56-7 My 31 '43
- Nickel contributes to the progress of the aviation industry. T. H. Wickenden. *Aeronautical Eng* R 1:121 N '42
- Purchasing manual for aircraft tubing. *Steel* 112:122+ Mr 15 '43; *Aviation* 42:189, 191 Ap '43
- Relative merits of materials used for lightweight structures. F. Platt. *Il Product Eng* 14:67-72 F '43
- Removal of one jam on aircraft steel reveals appearance of others. D. James. *Il Iron Age* 151:82-4 Ap 29 '43
- Republic steel corporation; ten years' progress in aircraft steel. E. R. Johnson. *Aeronautical Eng* R 1:140 N '42
- Significance of the secant and tangent moduli of elasticity in structural design. D. S. Wolford. *bibliog Il diags J Aeronautical Sci* 10:169-79 Je '43
- Stainless steel aircraft exhausts; performance and fabricating technique for titanium or columbium-stabilized stainless steel. H. A. Campbell. *bibliog Iron Age* 151:56-8 Je 24 '43
- Time cycle for procurement of typical aircraft alloy steel drop forgings; *flow chart. Automotive & Aviation Ind* 89:31 N 1 '43; Same. *Iron Age* 152:89 S 23 '43
- Time cycle for procurement of typical aircraft alloy steel products; *chart. Iron Age* 151:97 Je 3 '43
- Time cycles important in ordering alloy steels; *charts. Automotive & Aviation Ind* 88:27 My 1 '43
- Timken metallurgist, Martin Fleischmann, creates a new steel. *Blast F & Steel Pl* 31:1048 S '43
- Weldability of NE 8630 steel for aircraft structures and a suggested specification for weld metals. A. R. Lytle and K. H. Koopman. *Il Welding J* 22:sup82-93 F '43

Testing

- Tests on NE 8630 steels for welded air frames. M. Hill. *Metal Prog* 43:555-9 Ap '43; Same. *Welding J* 22:sup300-4 Jl '43

STEEL, Aircraft—Testing—Continued

Weldability tests of aircraft structural steels. C. B. Voldrich and R. D. Williams. *diags* Welding J 22:sup545-54 N '43

STEEL, Aluminum clad

Spot welding aluminum-clad steel. J. D. Rosenblatt. *il* Iron Age 151:72-4 Je 10 '43

STEEL, Automobile

Fatigue of metals as influenced by design and internal stresses. J. O. Almen. *il* *diags* Metal Prog 43:209-15-, 737-40; 44:254-61, 435-40 F, My, Ag-S '43; Same cond. Automotive & Aviation Ind 88:28-32+ F 1; 28-31+ F 15 '43; Same cond. Steel 112:88-9+ Mr 8; 112, 146-9 Ap 5 '43

Low-alloy steels. Automobile Eng 32:543-5 D '42

Testing

Substitute materials; have we gone the limit? J. G. Wood and R. F. Sanders. *il* S A E J 51:78-83+ Mr '43; Same cond. Iron Age 151:68-70 Mr 4 '43; Abstract. Automotive & Aviation Ind 88:36-7 F 1 '43

STEEL, Brass clad

Gilding metal-clad steel scrap; recovery process. *Mech Eng* 64:904-5 D '42

Reclaiming values from brass clad bullet-jacket scrap. *Metal Prog* 42:866+ N '42

Steel clad with gilding metal for bullet jackets. T. C. Campbell. *il* Iron Age 151:33-4 Ja 14 '43

STEEL, Clad

Cladding methods in Germany. *Metals & Alloys* 16:930+ N '42

Hot rolling clad steel; abstract. A. Pomp and W. Leug. *Metals & Alloys* 18:544 S '43

See also

Steel, Aluminum clad

Steel, Brass clad

Steel, Stainless clad

STEEL, Cold working of

Annealing of cold-worked steel; abstract. A. Pomp and G. Niebsch. *Metals & Alloys* 17:532+ Ap '43

Effect of cold drawing on mechanical properties of welded steel tubing. W. E. Black. *bibliog* *il* III U Eng Exp Sta Bul 341:1-32 '43 (pa 40c); Conclusions. *Iron Age* 152:53 S 23 '43

Effect of microstructure upon the work hardening characteristics of a 0.74 per cent carbon strip steel. N. P. Goss and W. Brenner, Jr. *il* Am Soc for Metals Trans 30:936-45; Discussion. 945-6 D '42

Effect of moderate cold rolling on the hardness of the surface layer of 0.34 per cent carbon steel plates. H. K. Herschman. *bibliog* *il* Am Soc for Metals Trans 31:501-13 Je '43; Same. *J Research Nat Bur Stand* 29:57-67 JI '42; Discussion. *Am Soc for Metals Trans* 31:513-16 Je '43

New development in cold drawing of steel. *il* Automotive & Aviation Ind 89:96 JI 15 '43

Some factors affecting longitudinal bend tests on fine-grained, cold-rolled annealed carbon strip steel. A. F. Sprankle and M. A. Hughes. *bibliog* *il* Am Soc for Metals Trans 31:257-80; Discussion. 280-3 Je '43

STEEL, Corrosion resisting

A-B-C of corrosion and heat resisting steels; tabulation. F. R. Palmer. *Metal Prog* 44:662 O '43

Castings for corrosion resistance. *il* Product Eng 14:[725] insert 9 N '43

Corrosion-resistant alloys; tabulation. *Product Eng* 14:[728-9] insert 12-13 N '43

Cypriitic steels; acid-resisting properties; abstract. W. H. Hatfield. *Chem Age (Lond)* 48:482 My 1 '43

English chemical industry uses high carbon 18-8 Ti. F. H. Keating. *Metal Prog* 43:73-4 Ja '43

Neutralization, alloy steels used in handling sour crudes. J. P. O'Donnell. *il* Oil & Gas J 42:27-8+ Je 3 '43

See also

Chromium nickel steel

Chromium steel
Steel, Stainless

STEEL, Effect of temperature on. See Steel—Testing—Temperature effects; Steel, Heat resisting**STEEL, Galvanized**

Electro-galvanizing; abstract. G. G. J. Adey. *Metals & Alloys* 17:398+ F '43

Flame shrinking galvanized plates without generating obnoxious fumes. A. Lake. *il* Steel 112:108-9+ Ap 19 '43

Sheet metal workers' catechism (cont). W. Neubecker. *diags* Sheet Metal Worker 34:21+ F; 30 Ap; 30 Je; 29-30 JI; 27 O '43

STEEL, Hardening of

Alloy steel has advantages in rock drilling; controlled oil-hardening required. C. G. Kemsley. *il* *diag Eng & Min J* 144:82-3 Ag '43

Alloy steel specification based on analysis or performance? use of Jominy end quench hardenability test. G. Van Dyke. *il* Iron Age 152:71-3 O 14 '43; Same. Steel 113:88, 90+ O 18 '43; Same. Blast F & Steel Pl 31:1381-4 D '43

Armor plate for ships and tanks. *diags* Metal Prog 43:383-7 Mr '43

Automotive user reports on experience with NE (national emergency) alloy steels. W. J. Diederichs. *Steel* 111:62 N 30 '42

Boron plus titanium in heat-treated steels. G. F. Comstock. *bibliog* *Metals & Alloys* 17:978-83 My '43

Boron, steel alloying agent. T. W. Lippert. *il* Iron Age 150:41-4 N 19 '42

Boron steels increasingly favored. N. F. Tisdale. *Iron Age* 151:40-4 F 4 '43

Braze-hardening high-speed-steel tipped tools; controlled atmosphere electric furnace, using Drycolene. *il* Steel 112:108 My 10 '43; Same. Welding J 22:274+ Ap '43; Same. *Iron Age* 152:47 JI 1 '43

Calculation of Jominy end-quench curve from analysis; study of NE steels. J. Field. *il* *diags* Metal Prog 43:402-5 Mr '43

Cold treatment of metals; refrigerating apparatus used in producing shrink fits, in hardening processes and in retarding aging in aluminum rivets. W. A. Phair. *il* *diag* Iron Age 151:40-3 F 25 '43

Comparative effects of boron and manganese on some properties of heat treated steel. G. F. Comstock. *Iron Age* 152:48-52 S 9 '43

Comparison data showing relationship between standard steels and NE alloy steels. *Steel* 112:102-5 F 22 '43

Computations of hardenability; effect of undissolved carbides. G. A. Roberts. *Metal Prog* 43:745-6 My '43

Die distortion and cracking. A. L. Olson. *il* *Metals & Alloys* 18:322 Ag '43

Effect of boron containing additions on NE steel. A. S. Jameson. *diags* Iron Age 151:45-50 Mr 25 '43

Effect of carbon on alloy steel ductility. M. F. Hawkes. *Iron Age* 152:49-50 JI 22 '43

Effect of microstructure upon the work hardening characteristics of a 0.74 per cent carbon strip steel. N. P. Goss and W. Brenner, Jr. *il* Am Soc for Metals Trans 30:936-45; Discussion. 945-6 D '42

Effect of some alloying elements on hardenability; abstract. W. Crafts and J. L. Lamont. *Iron Age* 152:66-7 O 28 '43

End-quench hardenability curves of NE steels; charts. *Metal Prog* 44:682 O '43

End-quench test and its application. W. E. Jominy. *diags* Metal Prog 43:77-9 Ja '43; Same, without *diags*. Steel 112:84-5 Ja 25 '43

Experience with NE (national emergency) alloy steels; Allis-Chalmers mfg. co. F. Horak and E. Champlin. *il* Steel 112:106-8 Je 7; 98-9, 126 Je 14; 92-4 Je 21 '43

Experience with NE (national emergency) alloy steels in the NE-8000 series. A. S. Jameson. *il* Steel 111:70-2+ D 21 '42

Experience with NE (national emergency) alloy steels; medium carbon NE-9440 and NE-9640 steels. A. S. Jameson. *Steel* 112:96-8, 100, 102+ Mr 15 '43

Experience with NE (national emergency) alloys steels for industrial gearing. E. J. Wellauer. *il* Steel 113:106-8, 110+ S 6 '43

Facts and figures for practical use of NE (national emergency) alloy steels. *il* *diag* Steel 112:76, 78, 80, 82 Mr 29; 116 Ap 5 '43

Guide for the selection of tool steel. W. E. Bruse. *diags* Iron Age 151:63-8 Je 24 '43

Hard spots formed during inspection. E. F. Green. *Metal Prog* 43:747-8 My '43

STEEL, Hardening of—Continued

Hardenability calculated from composition; charts. M. A. Grossmann. *Metal Prog* 44: 742 O '43

Hardenability control at the mill; abstract. G. R. Barrow and G. Soler. *Metals & Alloys* 17:362+ F '43

Hardenability in evaluating physical properties of NE (national emergency) alloy steels. C. Nilson and A. W. Herbenar. *Steel* 112:118-19+ Ap 5 '43

Hardenability notes. R. S. Burpo, jr. *Metals & Alloys* 17:559 Mr '43

Hardenability of common toolsteels; charts. S. M. DePoy. *Metal Prog* 44:818 O '43

Hardenability of shallow hardening steels. C. B. Post, O. V. Greene and W. H. Fenstermacher, bibliog il diags *Am Soc for Metals Trans* 30:1202-47; Discussion. 1247-54 D '42

Hardenability testing of steels. S. A. E. J. 51: sup15, 22-3 S '43

Hardening cracks avoided. W. P. Matthew. *diags Metal Prog* 43:748 Mr '43

Hardening high speed taps and dies in the electric salt bath. P. C. Farren. *il Metal Prog* 44:625-31 O '43

Hardening of tool steels. P. Payson and J. L. Klein, bibliog il *Am Soc for Metals Trans* 31:218-45; Discussion. 245-56 Mr '43

Hardening titanium steels; abstract. E. Houdremont, F. K. Naumann and H. Schrader. *Metals & Alloys* 18:570+ S '43

Hardening tool steels; abstract. H. B. Chambers. *Metals & Alloys* 18:600 S '43

Hardness conversion chart for steels. *Metal Prog* 44:852 O '43

Hardness traverses of Amola steels; tabulation. *Metal Prog* 44:694 O '43

Heat treater looks at tool design. A. S. Eves. *Iron Age* 152:45+ S 23 '43

Heat treatment of solid armor-piercing (A.P.) and semi-armor-piercing (S.A.P.) shot. *il Steel* 112:90-1+ Je 21 '43

Heat-treatment with boric acid. J. H. Sperman. *Am Mach* 87:107 S 16 '43

How to estimate hardening depth in bars; Jominy end quench hardenability test. J. L. Lamont, bibliog diags *Iron Age* 152:64-70 O 14 '43

How to interpret Jominy test results. diags *Iron Age* 151:64-6 F 11 '43

How to predict success of alternative steels. J. H. Staiger and F. G. Wheeler. *il Machine Design* 15:113-15 My '43

How to use the Jominy end-quench test. G. Van Dyke. *il diag Steel* 112:106, 108, 110 Mr 17 '43

How to use the NE (national emergency) alloy steels; with information on the end-quench test. *il Steel* 112:78+ Mr 22 '43

Intensifying NE-9440 alloy steel; addition of Grainal. *Iron Age* 152:56-7 J 1 '43; *Steel* 113:100+ S 27 '43

Intensifying of NE 9422 steel; addition of Grainal. *Iron Age* 152:50-1 Ag 19 '43

Jominy ratings; Ryerson will furnish them with alloys as aid to customers in pre-determining response to heat treatment. *Business Week* p70+ S 25 '43

Machine work saved by Buick change in heat-treating and specifications; crankshafts and other engine parts. H. Chase. *il Am Mach* 87:75-7 Ap 1 '43

Martempering; heat treating operation whereby martensite is produced with a minimum of residual hardening strains. B. F. Shepherd. *Iron Age* 151:50-2 Ja 28; 45-8 F 4 '43

Mechanical properties of NE, S.A.E. and other hardened steels. W. G. Patton. *il Metal Prog* 43:726-33 Mr '43

Metallurgical control through calculated hardenability. W. R. Patterson. *Iron Age* 152:40-2+ J 1 '43

Metallurgical study of some NE (national emergency) alloy steels. T. A. Frischman. *Steel* 111:99, 119-23 D 14 '42

Minimizing hardening strains. B. F. Shepherd. *Metal Prog* 44:105 J '43

NE (national emergency) alloy steels in aircraft engines. M. Young and H. H. Hanink. *Steel* 112:84-5+ Ap 26 '43

Nomogram for calculating hardenability. C. K. Donoho and W. W. McCulloch. *Metal Prog* 44:440D S '43

Plain carbon replaces alloy steels. A. S. Jameson. *il diags Iron Age* 151:47-56 My 6; 59-65 My 13 '43

Production experience with national emergency steels. R. W. Roush. *il S A E J* 51: 84-93 Mr '43; Same. *Steel* 112:94, 96, 98+ Mr 1; 109-10+ Mr 8 '43; Same cond. *Iron Age* 151:57-61 Mr 4 '43; Abstract. *Machine Design* 15:108-10 F '43

Properties of hardened steels. J. E. Erb, bibliog il diags *Iron Age* 151:39-47 My 27 '43

Properties of NE steels at room and sub-normal temperatures. J. H. Jones. *Metal Prog* 43:83-5 Ja '43

Quench-hardened steel castings. *il Product Eng* 14:[722] insert 6 N '43

Represents hardenability of steels; abstract. M. Hill. *Machine Design* 15:170+ My '43

Saving alloys in steel by using addition agents; extra hardenability obtainable in a treated steel. G. F. Comstock. *Metal Prog* 42:1068-9+ D '42

Saving alloys in steel by using addition agents; what alloys can be saved? W. Crafts. *Metal Prog* 42:1063-4 D '42

Selection of toolsteel by its hardenability. S. M. DePoy, charts *Metal Prog* 43:917-18, 918a Je '43

Significance of mechanical test properties of metals. H. O'Neill. *Engineering* 156:18-20, 38-40, 56-8 J 1-2 16 '43; Discussion. 156: 15-16, 34-5 J 1-2 3 '43

Some aspects of strain hardenability of austenitic manganese steel. D. Nicolson. *il Am Soc for Metals Trans* 31:716-34; Discussion. 734-8 S '43

Special addition agent steels. R. B. Schenck. *S. A. E. J* 51:355-93 N '43; Same abr. *Steel* 113:96-8, 100+ O 4 '43

Special addition agent steels; extensive data on recent laboratory tests of steels treated and untreated. R. B. Schenck. *Iron Age* 152:88-93 O 14 '43

Special alloy addition agents. *Steel* 112:94-5, 117-18+ Mr 15 '43

Specifications issued for NE (national emergency) carbon steels. *Steel* 112:90-2, 94, 96, 98 Mr 8 '43

Steel making and minor matters; report of National metal congress papers. F. G. Norris. *Metal Prog* 42:883-4 N '42

Substitute steels for ordnance; with charts showing end-quench hardenability curves of NE steels. *Metal Prog* 42:856-7 N '42

Sub-zero refrigeration of high alloy steels; abstract. G. B. Berlien. *Iron Age* 152:44 O 21 '43

Successful applications of NE (national emergency) alloy steels; Caterpillar tractor co. G. C. Riegel. *Steel* 111:90+ N 23 '42; Same. *Metal Prog* 43:82-3 Ja '43

Successful applications of NE (national emergency) alloy steels in gear making. E. J. Wellauer. *diags Steel* 111:106-7+ N 16 '42; Same abr. [with some additions]. *Machine Design* 14:66-9+ N '42

Third element effects on hardenability of a pure hypereutectoid iron-carbon alloy. C. R. Austin, W. G. Van Note and T. A. Prater, bibliog il *Am Soc for Metals Trans* 31:517-50; Discussion. 550-8 S '43

Two methods of brazing high speed steel tips; copper brazing and hardening with a hydrogen atmosphere furnace; silver soldering and tempering with an oxycetylene torch. B. S. Lement and W. B. Kennedy. *il Iron Age* 150:55-8 N 19 '42; Same. *Steel* 112:90, 92+ F 15 '43; Same cond. *Mach* 49:201-3 D '42

Under-hardening of steel. *Metal Prog* 43:570 Ap '43

Wartime metallurgy conserves strategic materials. R. E. Orton and W. F. Carter, bibliog il diags *Machine Design* 14:91-5 D '42; 15:58-62 Ja; 111-15 F; 109-14 J; 145-50+ Ag '43

Welding of 4 to 6% chromium molybdenum titanium steel; resultant hardness. E. H. Wyche. *diags Welding J* 22:sup142-4 Mr '43

See also
Case hardening
Steel, Heat treatment of
Steel, Quenching of

STEEL, Heat resisting

A-B-C of corrosion and heat resisting steels; tabulation. F. R. Palmer. *Metal Prog* 44: 662 O '43

STEEL, Heat resisting—Continued

- Balancing the composition of cast 25 per cent chromium-12 per cent nickel type alloys. J. T. Gow and O. E. Harder. *il* diags Am Soc for Metals Trans 30:855-919; Discussion. 919-35 D '42
- Castings for high temperatures. *il* Product Eng 14:[726-7] insert 10-11 N '43
- Columbium in high temperature steel. D. W. Rudorff. *Metals & Alloys* 17:186+ Ja '43; Same. Oil & Gas J 41:123 My 6 '43
- Creep and heat resistant steel castings. F. Schulte. *il* Iron Age 152:64-8 S 30; 64-8 O 7 '43
- Cyclic temperature acceleration of strain in heat resisting alloys. G. R. Brophy and D. E. Furman. *il* diags Am Soc for Metals Trans 30:1115-30; Discussion. 1130-8 D '42
- 15 years of high temperature research on steels for the refining industry. C. L. Clark and A. E. White. *Nat Pet N* 35 pt 2: R402, R404 S 1 '43
- Lessons from boiler explosions; steel with superior physical properties at high temperatures and syphons both contribute to safety. R. McBrian. *il* diag Ry Age 115: 47-9 Jl 10 '43; Same. *Ry Mech Eng* 117:353-5 As '43
- Pressure-temperature ratings raised for steel flanges, fittings, valves. *Nat Pet N* 35 pt 2: R122-5 Mr 3 '43
- Résumé of high temperature investigations conducted during 1941-42. C. L. Clark. *Nat Pet N* 35 pt 2:R120-1 Mr 3 '43
- Use of alternate steels is provided in 1942 pressure vessel code addenda. E. F. Brummstedt. *Nat Pet N* 35 pt 2:R302-3 Jl 7 '43

See also

Steel—Testing—Temperature effects

STEEL, Heat treatment of

- Annealing of cold-worked steel; abstract. A. Pomp and G. Niebsch. *Metals & Alloys* 17: 832+ Ap '43
- Annealing of steel. P. Payson. *bibliog il* Iron Age 151:44-7+ Je 24; 152:48-54 Jl 1; 74-7 Jl 8; 70-7 Jl 15; 60-7 Jl 22 '43
- Bursting tests on notched alloy steel tubing. G. Sachs and J. D. Lubahn. *bibliog il* diags Am Soc for Metals Trans 31:71-86; Discussion. 87-8 Mr '43
- Diffusion in rimming steel on soaking at about 1300 C. T. Swinden and W. W. Stevenson. *Iron & Steel Inst J* 146:357-62, pl 34-7 no 2 '42
- Effect of normalizing on the properties of welds in carbon-molybdenum steel pipe. I. A. Rohrig, D. H. Corey and S. Crocker. *il* Welding J 22:sup521-7 O '43
- Experience with NE (national emergency) alloy steels; procedure followed at Glenn L. Martin co. W. J. Pierce. *Steel* 113:120-1, 134-6 S 20 '43
- Fatigue strength of normalized and tempered versus as-forged full size railroad car axles. O. J. Horgor and T. V. Buckwalter. *bibliog il* diag Am Soc for Metals Trans 31:559-76; Discussion. 576-81 S '43
- Flame shrinking galvanized plates without generating obnoxious fumes. A. Lake. *il* Steel 112:108-9+ Ap 19 '43
- Forging and heat-treating shot for anti-tank projectiles; Axelson mfg. co. R. M. Pease. *il* diags Mach 49:148-55 My '43
- Formation of austenite in heat treatment; composite of abstracts. *Metals & Alloys* 17: 598+ Mr '43
- Formation of hair-line cracks. J. H. Andrew and others. *bibliog diags Iron & Steel Inst J* 146:193-243, pl 6-16 no 2 '42; Excerpt. *Engineering* 154:357-60 O 30 '42; Discussion. *Iron & Steel Inst J* 146:244-82, pl 16a-16b no 2 '42
- Heat treating cartridge links; abstract. *Metals & Alloys* 16:948+ N '42
- Heat treating for machinability; NE steels. L. E. Webb. *il* Metal Prog 43:87-9 Ja '43
- Heat treating in army ordnance. *il* Mach 49:148-9 D '42
- Heat treating small arms parts; abstracts. *Metals & Alloys* 17:834+ Ap '43
- Heat treating tank track components; Tank production committee recommendations. *Steel* 113:102+ Ag 2 '43

- Heat treatment of high-speed steel tools. W. A. Schlegel. *il* Steel 112:106, 109+ Je 28 '43
- Heat treatment of small gun barrels. T. Denness. *Metal Prog* 43:242-3 F '43
- Heat treatment of steel, 1942. O. W. McMullan. *il* Metals & Alloys 17:74-5 Ja '43
- Heat treatment of tool steels; composite of abstracts. *Metals & Alloys* 16:1136+ D '42
- Heating data; guide in many low-temperature heat treating operations; use of Tempills or Tempilstiks. *Steel* 111:104, 107 D 14 '42
- High-speed heat treatments how possible with newly modified burner designs. F. O. Hess. *il* diags Steel 113:114, 116+ N 8 '43
- How to use heat-treated carbon steel bolts. A. E. R. Peterka. *il* diags Steel 112:86-8, 90+ My 10 '43
- Increase of performance of hot work tools. W. Hauffer. *Iron Age* 152:44-8 S 2 '43
- Influence of alloying elements on the critical points of steels as measured by the dilatometer. R. N. Gilmor. *il* Am Soc for Metals Trans 30:1377-1404; Discussion. 1404-18 D '42
- Interlamellar spacing of pearlite. G. E. Pellissier and others. *bibliog il* diags Am Soc for Metals Trans 30:1049-81; Discussion. 1081-6 D '42
- Izod toughness vs. tensile strength of heat treated steels; charts. *Metal Prog* 44:798 O '43
- Low temperature impact resistant steel castings. N. A. Ziegler and H. W. Northrup. *bibliog il* Am Soc for Metals Trans 30:1087-1109; Discussion. 1109-14 D '42
- Martempering; heat treating operation whereby martensite is produced with a minimum of residual hardening strains. B. F. Shepherd. *Iron Age* 151:50-2 Ja 28; 45-8 F 4 '43
- Mechanism and the rate of formation of austenite from ferrite-cementite aggregates. G. A. Roberts and R. F. Mehl. *bibliog* (42 titles) *il* Am Soc for Metals Trans 31:613-50 S '43
- Network of shops for heat treating small armor. L. Stouffer. *il* Metal Prog 43:390-1 Mr '43
- Notched bar tensile tests on heat treated low alloy steels. G. Sachs and J. D. Lubahn. *il* diags Am Soc for Metals Trans 31: 125-57 *bibliog* (51 titles, pl56-7) Mr '43; Abstract. *Machine Design* 14:104-7+ D '42; Discussion. *Am Soc for Metals Trans* 31:158-60 Mr '43
- Planning heat treatment by S-curves. R. L. Rickett. *Metal Prog* 43:79-81 Ja '43
- Pressure quenching subsequent to heating prevents distortion in steel. *il* Steel 113:180 O 11 '43
- Principles of heat treating steel. H. L. Walker. *il* Cer Ind 39:31-2+ D '42; 40:18-21 Fe; 32-3 Mr; 80, 82 Ap; 48, 50+ My; 48-9 Je; 41-23-5 Jl; 43-4, 46 Ag; 37-8 S; 42-4 *bibliog* (p44) D '43
- Progressive developments Temp-A-Trol forge welder which combines spot welding and heat-treating. *il* Am Mach 86:1320 N 12 '42
- Quantitative study of austenite transformation. R. A. Flinn, E. Cook and J. A. Fellows. *bibliog il* diags Am Soc for Metals Trans 31:41-66; Discussion. 66-70 Mr '43
- Recording dilatometer for metal specimens. L. R. Stanton. *diags Engineering* 155:518-19 Je 25 '43
- Repeated stress relieving treatments on steel plate. F. Eberle and T. Erick. *il* Metals & Alloys 16:894-901 N '42
- Resistance welding; Temp-A-Trol forge welder, combined spot welding and heat-treating. *il* Sci Am 167:256 D '42
- Salt bath heat treatments for emergency steels. E. I. Valyi, tr. *diags Iron Age* 151: 60-2 Je 24 '43
- Saving alloys in steel by using addition agents; what types of steel can be benefited? A. W. Demmler. *il* Metal Prog 42: 1065-7 D '42
- Some factors affecting longitudinal bend tests on fine-grained, cold-rolled annealed carbon strip steel. A. F. Sprankle and M. A. Hughes. *bibliog il* Am Soc for Metals Trans 31:257-80; Discussion. 280-3 Je '43
- Spheroidize annealing of S.A.E. 52100 steel. R. J. Hafsten. *Metal Prog* 42:869-73 N '42

STEEL, Heat treatment of—Continued

- Spot welding of S.A.E. 1020, 1035 and 1045 steels in the 0.040 in. thickness; automatic tempering in welding machine. W. F. Hess and D. C. Herrschaft. *Il Welding J* 22:sup 451-61 O '43
- Straightening heat-treated parts. G. B. Berlien. *Il diags Steel* 112:114-4 Mr 15; 74-4 Mr 29; 112-4 Ap 12; 93-4 My 3 '43
- Stress relieving in welded construction. H. Lawrence. *Steel* 113:94, 96+ Ag 16 '43
- Study of martensite formation by a photometric method. E. R. Saunders and J. F. Kahles. bibliog *Il Am Soc for Metals Trans* 30:1139-53; Discussion. 1153-8 D '42
- Tensile properties of pearlite, bainite, and spheroidite. M. Gensamer and others. *Il diag Am Soc for Metals Trans* 30:983-1019; Discussion. 1019-20 D '42
- Tool life increased by improved chromium plating process; relieving inherent hydrogen embrittlement through use of oil treatment. T. E. Lloyd. *Il Iron Age* 150:43-9 D '42
- Useful temperature data; charts. R. S. Burpo, jr., comp. *Metals & Alloys* 17:781-2 Ap '43
- War accelerates technical progress. *Steel* 112:311-12+ Ja 4 '43
- Wartime metallurgy conserves strategic materials; heat-treating equipment. R. E. Orton and W. F. Carter. bibliog *Il diags Machine Design* 15:111-15 F '43
- What the war period is doing to metal treating with gas. J. P. Brosius. *Gas Age* 91:29-30+ Mr 25 '43; Same. *Am Gas Assn Mo* 25:162-4 Ap '43
- See also
- | | |
|--------------------|---------------------|
| Annealing | Electric furnaces, |
| Case hardening | Steel making |
| Electric furnaces, | Furnaces Heat |
| Heat treating | treating |
| | Steel, Quenching of |

STEEL, Molten

- Calibration of the platinum/13 per-cent.-rhodium-platinum thermocouples over the liquid-steel temperature range. C. R. Barber. *Engineering* 155:187-8, 205 Mr 5-12 '43; Abstract. *Metal Prog* 43:598+ Ap '43
- Chemistry at 1600. J. Chipman. *Am Soc for Metals Trans* 30:817-54 D '42
- Quick immersion technique for molten steel temperatures. J. H. G. Monypenny. *Metal Prog* 43:67-8 Ja '43

STEEL, Nickel clad

- Role of clad-steel plate in petroleum industry war effort. M. J. Conway. *Il diags Pet Eng* 14:103-4, 106 Je '43

STEEL, Quenching of

- Avoiding quench-cracking. W. P. Matthew. *diags Metals & Alloys* 17:996 My '43
- Avoiding scale on end-quench test piece. G. F. Comstock. *Metal Prog* 43:221 F '43
- Calculation of Jominy end-quench curve from analysis; study of NE steels. J. Field. *Il diags Metal Prog* 43:402-5 Mr '43
- Cooling power of quenching baths; chart. M. Asimow and M. A. Grossmann. *Metal Prog* 44:730 O '43
- Double hardening; process for motor car transmission gear wheels, involving two quenches; abstract. H. Glaubitz. *Automobile Eng* 33:296 JI '43
- Effect of quenching temperature on the results of the end-quench hardenability test; abstract. C. E. Jackson and A. L. Christenson. *Iron Age* 152:67-8 O 28 '43
- End-quench test and its application. W. E. Jominy. *diags Metal Prog* 43:77-9 Ja '43; Same. without diags. *Steel* 112:84-5 Ja 25 '43
- Facts and figures for practical use of NE (national emergency) alloy steels. *Il diag Steel* 112:76, 78, 80, 82 Mr 29; 116 Ap 5 '43
- Flame shrinking galvanized plates without generating obnoxious fumes. A. Lake. *Il Steel* 112:108-9+ Ap 19 '43
- Ford engineers develop new method for straightening armor plate. *Il Automotive & Aviation Ind* 87:52 D 1 '42
- How to estimate hardening depth in bars; Jominy end quench hardenability test. J. L. Lamont. bibliog *diags Iron Age* 152:64-70 O 14 '43
- How to interpret Jominy test results. *diags Iron Age* 151:64-6 F 11 '43

How to use the Jominy end-quench test. G. Van Dyke. *Il diag Steel* 112:106, 108, 110 My 17 '43

- How to use the NE (national emergency) alloy steels; with information on the end-quench test. *Il Steel* 112:78-+ Mr 22 '43
- Kinetics of austenite decomposition in high speed steel. P. Gordon, M. Cohen and R. S. Rose. bibliog *Il diags Am Soc for Metals Trans* 31:161-98; Discussion. 198-217 Mr '43
- Martempering; heat treating operation whereby martensite is produced with a minimum of residual hardening strains. B. F. Shepherd. *Iron Age* 151:50-2 Ja 28; 45-8 F 4 '43
- New oil aids production of low-alloy steels. *Franklin Inst J* 235:576 Je '43
- Piping and cooling quenching fluids. F. F. Stevenson and N. U. Stryker. *Il Heating-Piping* 15:16-19 Ja '43
- Pressure quench for armor plate. F. P. Peters. *Il diags Metals & Alloys* 13:789-94 O '43
- Pressure quenching subsequent to heating prevents distortion in steel. *Il Steel* 113:180 O 11 '43
- Principles of heat treating steel. H. L. Walker. *Cer Ind* 40:48, 50+ My; 48-9 Je '43

- Quench control pays; Ross gear & tool co. R. Trauttschold. *Il Steel* 112:106+ Mr 1 '43
- Quench on rising or falling heat? *Metal Prog* 43:715+ My '43
- Quench out! *Metal Prog* 44:94-5 JI '43
- Quench-straightening of armor plate. *Il Iron Age* 151:54 Ap 21 '43
- Quench-time control for cast armor; Brown system. J. P. Vollrath. *plan Iron Age* 151:59 Ap 22 '43
- Quenching oil developed on art of ancient Damascus. *Sci Am* 168:157 Ap '43
- Role of nitrogen in 18-8 stainless steel. H. H. Uhlig. bibliog *Il Am Soc for Metals Trans* 30:947-80; Discussion. 980-2 D '42
- Substitute steels for ordnance; with charts showing end-quench hardenability curves of NE steels. *Metal Prog* 42:856-7 N '42

STEEL, Reinforcing

- Bond strength of reinforcing bars embedded horizontally in concrete; abstract. R. C. Robin, P. E. Olsen and R. F. Kinnane. *Am Concrete Inst J* 14:458-9 Ap '43
- Chart for determining the area of reinforcing steel required in concrete floor slabs. *Pet Refiner* 22:88 JI '43
- Economy method of computing steel for reinforced concrete columns. O. Albert. *diags Civil Eng* 13:104-5 F '43
- Electric prestressing of reinforcing steel. K. P. Billner and R. W. Carlson. *Il Am Concrete Inst J* 14:585-92 Je '43; Discussion. 14:sup592-592 N '43
- Electric prestressing of reinforcing steel used for small house construction; passage of low voltage current through rods coated with thermoplastic material. K. P. Billner. *Il Eng N* 131:406-8 S 9 '43
- Heating arch ties for a concrete roof; electric ovens utilized in construction of wharf shed at St John harbor. F. E. Sterns. *Il diags Civil Eng* 13:253-6 Je '43
- Load test of a slab with all bars lapped. H. M. Hadley. *Il diag Civil Eng* 13:435-6 S '43
- Prefabricated reinforcing steel for tunnel lining. L. M. Leedom. *Il Civil Eng* 13:282-3 Je '43
- Prestressed steel in reinforced concrete. F. E. Richart. *Am Concrete Inst J* 14:126-7 N '42
- Reinforcing bar restrictions relaxed on construction. *Eng N* 130:271 F 25 '43
- See also
- Concrete, Reinforced

Standards

- National emergency specifications for the design of reinforced concrete buildings to conserve steel. *Am Concrete Inst J* 14:85-92 N '42

STEEL, Sheet. See Sheet steel**STEEL, Stainless**

- Chip-breaker groove of radical design for machining stainless steel diags. *Mach* 49:232 D '42; *Iron Age* 151:41 Ja 21 '43

STEEL, Stainless—Continued

Design analysis of the Fleetwings BT-12; America's only stainless steel airplane. D. Baker. *il diags Aviation* 42:119-32+ O '43

First report on stress corrosion cracking of stainless steel in chloride solutions. M. A. Scheil and others. *il diags Welding J* 22: sup493-506 O '43

Formula revised for computing ferrochromium requirements. *Steel* 112:36 Mr 29 '43

German stainless steels; abstract. G. Riedrich. *Metals & Alloys* 18:380+ Ag '43

High-manganese stainless steels; correlated abstract. D. J. Mack. *bibliog il Metals & Alloys* 18:506-12, 1081-4 S, N '43

Limit nitrogen in stabilized stainless. J. H. G. Monypenny. *Metal Prog* 43:241-2 F '43

Quantitative spectrographic analysis of stainless steels. M. F. Hasler, C. E. Harvey and H. W. Dietert. *diags Ind & Eng Chem Anal ed* 15:102-7 F 15 '43

Rustless makes stainless steel from chrome ore by direct reduction. *Blast F & Steel Pl* 31:238 F '43

16-2 stainless steel. S. P. Watkins. *il diags Metal Prog* 44:99-103 JI '43

Stainless steel aircraft exhausts; performance and fabricating technique for titanium or columbium-stained stainless steel. H. A. Campbell. *bibliog Iron Age* 151:56-8 Je 24 '43; *Excerpts. S A E J* 51:sup32-3+ Ag '43

Stainless steel and the metal finishing foreman. S. J. Ophie. *Metal Finishing* 41:266-7 My '43

Stainless steel pipe, valves, and fittings resist corrosion of hormone process; Ciba pharmaceutical co. plant. *il Heating-Piping* 15:589 N '43

Stainless steels; AISI types 302, 303 and 304; physical properties, applications and other data. *Machine Design* 15:155-8 N '43

Thin sheet stainless steel welded into lightweight water storage tanks. *il diag Product Eng* 14:622 O '43

Transition state theory of the formation of thin oxide films on metals. E. A. Gulbransen. *diags Electrochem Soc Trans* 83 (preprint 4):53-65 Ap '43

See also

Chromium nickel steel	Nickel steel
Chromium steel	Steel, Corrosion resisting

Prices

See Steel—Prices

Testing

Corrosion of metals and alloys by flue gases. L. Shnidman and J. S. Yeaw. *bibliog il diags Ind & Eng Chem* 34:1436-44 D '42

Corrosion of unstressed specimens of alloy steel by steam at temperatures up to 1800 F. G. A. Hawkins and others. *il A S M E Trans* 65:301-7; Discussion. 307-8 My '43

STEEL, Stainless clad

Clad steel sandwiches welded by the carbon arc; with cost data. T. S. Fitch and L. W. Townsend. *il diags Iron Age* 151:54-9 F 18 '43; Correction. 151:41 Ap 29 '43

STEEL, Strip

Cold and hot rolled strip, Pittsburgh; prices, 1929-1942, tabulation. *Steel* 112:372 Ja 4 '43

Design of wide-strip mills. H. P. Lemm. *Blast F & Steel Pl* 31:144-5, 246-7, 360-1+ Ja-Mr '43

Effect of microstructure upon the work hardening characteristics of a 0.74 per cent carbon strip steel. N. P. Goss and W. Brenner, Jr. *il Am Soc for Metals Trans* 30:336-45; Discussion. 945-6 D '42

Electroaluminizing of strip steel. E. H. Lyons, Jr. *bibliog diag Electrochem Soc Trans* 84 (preprint 12):101-10 O '43; *Excerpt. Steel* 113:98, 100 D 20 '43; Abstract. *Iron Age* 152: 54-5 O 21 '43

European adaptations of wide strip mills; report by committee of Verein Deutscher eisenhüttenleute. *diags Iron Age* 150:35-9 D 24 '42

Forged gun parts from steel strip; Murray Ohio mfg. co. G. W. Birdsall. *il diags Steel* 113:194-6+ O 11 '43

Planning and designing of wide strip mills. *Blast F & Steel Pl* 30:1248-50 N '42

Sendzimir mill rolls strip to close tolerance. T. Sendzimir. *il diags Steel* 111:64, 67-8+ N 30 '42

Testing

Some factors affecting longitudinal bend tests on fine-grained, cold-rolled annealed carbon strip steel. A. F. Sprankle and M. A. Hughes. *bibliog il Am Soc for Metals Trans* 31:257-80; Discussion. 280-3 Je '43

STEEL, Structural

Emergency specifications established by the War production board on Oct. 23 in Limitation order L-211. *Mech Eng* 64:903 D '42

Physical properties that affect the behavior of structural members. W. M. Wilson. *il Am Soc C E Proc* 68:1715-25 D '42; Discussion. 69:446-8, 775-8, 858-60, 1049-54, 1319-20, 1587-93 Mr, My-Je, S-O, D '43

Post-war competition. C. G. Conley. *Manuf Rec* 111:23, 46+ N '42

Protective painting of structural steel. *Iron & Steel Inst J* 145:87-100, pl 13-16 no 1 '42

Ship work aids fabricators. L. E. Browne. *il Steel* 113:59-61 Ag 2 '43

Steel fabricators facing lean year; backlogs dwindling. *Steel* 112:408-12 Ja 4 '43

Structural steel shapes as a.c. conductors. S. C. Killian and A. K. Alsaker. *diags Elec W* 118:1773-5 N 28 '42

Use of high elastic steel in ship construction; with cost data. E. P. Trask. *diag Marine Eng* 48:167-73 F '43; Discussion. 47: 144-6 D '42

See also

Bridges, Iron and steel	Steel, Automobile
Concrete, Reinforced	Steel, Reinforcing
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Prices

Structural shapes, Pittsburgh; prices, 1929-1942; tabulation. *Steel* 112:371 Ja 4 '43

Testing

Effect of speed of loading upon the ductility of steel structural members. W. M. Wilson. *il diags Welding J* 22:sup317-25 JI '43

Tests of cylindrical shells. W. M. Wilson and E. D. Olson. *il diags Ill U Eng Exp Sta Bul* 331:1-129 '41 (pa. \$1); *Excerpts. Welding J* 22:sup163-8 Ap '43

Tests of thin hemispherical shells subjected to internal hydrostatic pressure; reprint of University of Illinois Engineering Experiment station bulletin 295. W. M. Wilson and J. Marin. *il diags Welding J* 22:sup 214-20 My '43

Welding

Arc-welded T-beams for use in residences. E. J. Slygh. *il diags W Soc E J* 48:59-67 Je '43

Effect of cold drawing on mechanical properties of welded steel tubing. W. E. Black. *bibliog il Ill U Eng Exp Sta Bul* 341:1-32 '43 (pa. 40c); Conclusions. *Iron Age* 152:53 S 23 '43

Fatigue strength of butt welds in ordinary bridge steel. *diags Welding J* 22:sup189-211 My '43

Investigation of the behavior of residual stresses under external load and their effect on safety. J. T. Norton and D. Rosenthal. *bibliog il Welding J* 22:sup63-78 F '43

Manual welding technique developed for thick steel plates. *il diags Eng N* 131:696-7 N 4 '43

Plant weldery; with cost data; Austin company. L. H. Burr. *Welding J* 22:421-3 Je '43

Requirements for first class welds in Switzerland. M. Roß. *Welding J* 22:sup93 F '43

Splicing 18-in. beams by arc welding; with cost data. F. Horowitz. *diags Sheet Metal Worker* 34:31 S '43

Spot welding of N-A-X high-tensile steel. C. R. Schroder. *Welding J* 21:690-4 O '42; Same. *Steel* 112:98+ F 8 '43

Standards for welded plate eyebars. J. Jones. *diag Eng N* 131:546-7 O 7 '43

Study of the effects caused by arc welding upon axially loaded structural steel bars. J. Neustadt, G. D. Lodvick and D. P. Schultz. *il diags Welding J* 22:sup363-61 Ag '43

STEEL, Structural—Welding—Continued

Technical aspects of postwar construction; abstract. C. F. Goodrich. *Steel* 113:46 O 25 '43

Tests of riveted and welded joints in low-alloy structural steels. W. M. Wilson, W. H. Bruckner and T. H. McCrackin, Jr. *diags* *Ill U Eng Exp Sta Bul* 337:1-73 '42 (pa 80c)

Use of tubular steel sections in structures; review of the literature from Jan. 1, 1930 to July 1, 1942. A. Quisling and C. M. Cosman. *bibliog*(85 references) *il diags* *Welding J* 22:sup101-34 Mr '43

Working out techniques for welding armor plate. E. G. Biederman. *diags* *Iron Age* 151:46-50 Ja 21 '43

See also

Bridges—Welding Steel construction
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STEEL, Tool. See Tool steel

STEEL alloys

Alloy economies in steel production. W. D. Wilkinson. *il Blast F & Steel Pl* 31:71-3 Ja '43

Alloy steel has advantages in rock drilling; controlled oil-hardening required. C. G. Kemsley. *il diag* *Eng & Min J* 144:82-3 Ag '43

Alloy-steel situation. *Mech Eng* 64:905-7 D '42

Alloy steel specifications based on analysis or performance? use of Jominy end quench hardenability test. G. Van Dyke. *il Iron Age* 152:71-3 O 14 '43; Same. *Steel* 113:88, 90+ O 18 '43; Same. *Blast F & Steel Pl* 31:1381-4 D '43

Alloy steel time cycles. *Aero Digest* 42:258, 260 Ap '43

Alloys by Byers; old wrought iron producer adds electric-furnace capacity. *Business Week* p64 My 29 '43

Alloys for planes; supply problem. *Business Week* p16-17 Mr 13 '43

Alloys get easier. *Business Week* p68+ S 11 '43

A.I.S.I. standard steel compositions, rev. Feb. 1, 1943; tabulations. *Metal Prog* 44:666 O '43

Automotive user reports on experience with NE (national emergency) alloy steels. W. J. Diederichs. *Steel* 111:62 N 30 '42

Balancing the composition of cast 25 per cent chromium-12 per cent nickel type alloys. J. T. Gow and O. E. Harder. *il diags* *Am Soc for Metals Trans* 30:855-919; Discussion. 919-35 D '42

Boron assumes a position of importance as an alloying element in steel. A. F. Macconochie. *Steel* 113:106, 108+ O 18 '43

Boron found to be a very beneficial alloying element. N. F. Tisdale. *Blast F & Steel Pl* 31:93-4 Ja '43

Boron in steel; a composite of abstracts. *Metals & Alloys* 17:1228+ Je '43

Boron steels increasingly favored. N. F. Tisdale. *Iron Age* 151:40-4 F 4 '43

Carburizing characteristics of 0.20 per cent carbon alloy and plain carbon steels. G. K. Manning. *il Am Soc for Metals Trans* 31:8-32; Discussion. 32-40 Mr '43

Comparative effects of boron and manganese on some properties of heat treated steel. G. F. Comstock. *Iron Age* 152:48-52 S 9 '43

Comparison data showing relationship between standard steels and NE alloy steels. *Steel* 112:102-5 F 22 '43

Cyclic temperature acceleration of strain in heat resisting alloys. G. R. Brophy and D. E. Furman. *il diags* *Am Soc for Metals Trans* 30:1115-30; Discussion. 1130-8 D '42

Effect of boron containing additions on NE steel. A. S. Jameson. *diags* *Iron Age* 151:45-50 Mr 25 '43

Effect of carbon on alloy steel ductility. M. F. Hawkes. *Iron Age* 152:49-50 JI 22 '43

Effect of hardness on the machinability of six alloy steels; abstract. O. W. Boston and L. V. Colwell. *diags* *Automotive & Aviation Ind* 87:34-5, 78+ N 1 '42

Effect of some alloying elements on hardenability; abstract. W. Crafts and J. L. Lamont. *Iron Age* 152:66-7 O 28 '43

Experience with alloy steels in boilers. A. G. Trumbull. *Ry Mech Eng* 117:77-9 F '43

Experience with NE (national emergency) alloy steels; Allis-Chalmers mfg. co. F. Horak and E. Champlin. *il Steel* 112:106-8 Je 7; 98-9, 126 Je 14; 92-4 Je 21 '43

Experience with NE (national emergency) alloy steels for industrial gearing. E. J. Wellauer. *il Steel* 113:106-8, 110+ S 6 '43

Experience with NE (national emergency) alloy steels; gears for heavy duty automotive transmissions. S. L. Widrig. *il Steel* 112:60-2 Ja 11 '43

Experience with NE (national emergency) alloy steels; medium carbon NE-9440 and NE-9640 steels. A. S. Jameson. *Steel* 112:96-8, 100, 102+ Mr 15 '43

Experience with NE (national emergency) alloy steels; NE-9437 as a bolting material. A. S. Jameson. *il diags* *Steel* 113:66-8, 70, 72 Ag '43

Experience with NE (national emergency) alloy steels; procedure followed at Glenn L. Martin co. W. J. Pierce. *Steel* 113:120-1, 134-6 S 20 '43

Experience with NE (national emergency) alloy steels; type NE-9420. A. S. Jameson. *il diags* *Steel* 112:100-1, 103-4, 106, 134 F 1 '43

Experience with NE (national emergency) alloy steels; Warner electric brake mfg. co. F. Born. *diags* *Steel* 113:110 N 8 '43

Facts and figures for practical use of NE (national emergency) alloy steels. *il diag* *Steel* 112:76, 78, 80, 82 Mr 29; 116 Ap 5 '43

Hardenability in evaluating physical properties of NE (national emergency) alloy steels. C. Nilsson and A. W. Herbenar. *Steel* 112:118-19+ Ap 5 '43

How to use the NE (national emergency) alloy steels; with information on the end-quench test. *il Steel* 112:78+ Mr 22 '43

Influence of tin on alloy steels. G. R. Bolsover and S. Barraclough. *Iron & Steel Inst J* 146:141-55 no 2 '42; Excerpt. *Engineering* 155:128 F 12 '43

Intensifying NE-9440 alloy steel; addition of Grainal. *Iron Age* 152:56-7 JI 1 '43; *Steel* 113:100+ S 27 '43

Intensifying of NE 9422 steel; addition of Grainal. *Iron Age* 152:50-1 Ag 19 '43

Iron Age NE steel; standard steel chart. J. I. Butzner, comp. *Iron Age* 151:supp My 6 '43

Jominy ratings; Ryerson will furnish them with alloys as aid to customers in pre-determining response to heat treatment. *Business Week* p70+ S 25 '43

Ladle metallurgy; discussion. *Iron Age* 151:46-9 Ap 15 '43

List of national emergency alloy steels, rev. August 15, 1943; tabulations. *Metal Prog* 44:672 O '43

Low-alloy steels. *Automobile Eng* 32:543-5 D '42

Machinability of national emergency alloy steels. O. W. Boston. *il Metal Prog* 43:543-7 Ap '43

Making alloy steel by arc welding; coated electrodes used in reclaiming tools and dies; Agile process. J. A. Neumann. *il Steel* 112:74-6, 78+ Ja 11 '43

Making the most of scrap by segregation by alloy content, and scheduling use of substandard grades. G. Soler. *Blast F & Steel Pl* 30:1359-60 D '42

Manufacturers expand use of NE steels in aircraft. *Steel* 113:100 Ag 2 '43

Metallurgical aspects of the national emergency steels. W. E. Jominy and others. *il diags* *Metal Prog* 43:77-89 Ja '43

Metallurgical control through calculated hardenability. W. R. Patterson. *Iron Age* 152:40-2+ JI 1 '43

Metallurgical study of some NE (national emergency) alloy steels. T. A. Frischman. *Steel* 111:99, 119-23 D 14 '42

Metallurgy; army ordnance. *il Mach* 49:139-53 D '42

NE (national emergency) alloy steels for truck parts. J. Sorenson. *il Steel* 112:72-3 Mr 29 '43

NE (national emergency) alloy steels in aircraft engines. M. Young and H. H. Hanink. *Steel* 112:84-5+ Ap 26 '43

NE (national emergency) alloy steels in the oil-well drilling and equipment industries. B. B. Wescott. *Steel* 112:66, 69 Ja 18 '43

STEEL alloys—Continued

NE (national emergency) alloy steels; list is revised as of December 17, 1942. Steel 112: 84-5 Ja 25 '43; Same. Metal Prog 43:90 Ja '43

NE (national emergency) alloy steels; steel castings vs. forgings. A. Zwald. *il* Steel 113:94-6+ Ag 2 '43; Same. Foundry 71:175-7 S '43

NE (national emergency) alloy steels; successful applications of NE-8000 series. A. S. Jameson. *il* diag. Steel 111:112-14, 116, 118 D 7; 70-2+ D 21 '42

NE steel compositions revised. Machine Design 15:110 F '43

NE steels; composition and other data, tabulated. Automotive & Aviation Ind 88:75 Mr 15 '43

National emergency steels; NE 1300 series. *il* Metal Prog 43:711-15 My '43

New standard steel classifications; current SAE steels and NE steels; tabulation. Machine Design 15:186-7 O '43

Production experience with national emergency steels. R. W. Roush. *il* S A E J 51: 84-93 Mr '43; Same. Steel 112:94, 96, 98+ Mr 1; 109-10+ Mr 8 '43; Same cond. Iron Age 151:57-61 Mr 4 '43; Abstract. Machine Design 15:108-10 F '43

Saving alloys in steel by using addition agents. F. M. Washburn and others. *il* Metal Prog 42:1061-9+ D '42

Scrap steel analysis; the development of chemical and spark methods. J. W. Langley. *il* Chem Age (Lond) 47:497-500 D 5 '42

Screw machine steels as alloy steel substitutes. A. S. Jameson. *il* diags Iron Age 152:52-3 S 16; 46-50 S 23; 69 O 28 '43

Segregated production scrap cuts alloy demands. C. H. Herty, Jr. Iron Age 151:36-8 Ja 14 '43

Significant steels commonly used for specific articles. Iron Age 150:51-4 N 19 '42

Special addition agent steels. R. B. Schenck. S A E J 51:385-93 N '43; Same abr. Steel 113:96-8, 100+ O 4 '43

Special alloy addition agents. Steel 112:94-5, 117-18+ Mr 15 '43

Specific effects of alloys in steel; tabulation. Metal Prog 44:674 O '43

Specifications for alloy steels studied in Great Britain. C. H. S. Tupholme. Chem & Eng N 21:163-4 F 10 '43

Specifications issued for NE (national emergency) carbon steels. Steel 112:90-2, 94, 96, 98 Mr 8 '43

Spheroidize annealing of S.A.E. 52100 steel. R. J. Hafsten. *il* Metal Prog 42:869-73 N '42

Steel goes on a leaner diet. Fortune 27:38 My '43

Steel looks to its future; learning about more economical alloys. *il* Business Week p17-18 F 6 '43

Steels for railway rolling stock. C. Dinsdale. table Engineer 175:482-3 Je 18 '43

Successful applications of NE (national emergency) alloy steels; Caterpillar tractor co. G. C. Riegel. Steel 111:90+ N 23 '42

Successful applications of NE (national emergency) alloy steels in gear making. E. J. Wellauer. diags Steel 111:106-7+ N 16 '42; Same abr. [with some additions]. Machine Design 14:66-9+ N '42

Thermal reactions in ferro-alloy metallurgy, the basis of alloy steel development; abstract. B. D. Saklatwalla. Iron Age 152:52-3 O 21 '43

Time cycles important in ordering alloy steels; charts. Automotive & Aviation Ind 88:27 My 1 '43

Use of alloy turnings only a start. Iron Age 151:106-8 Mr 25 '43

Use of steel alloys as unknowns in elementary qualitative analysis. A. F. Schmeltzle. J Chem Educ 20:183-4 Ap '43

War gives tremendous lift to alloy grades. R. L. Hartford. *il* Steel 113:49-50+ Ag 9 '43

Wartime metallurgy conserves strategic materials; effects of alloying additions. R. E. Orton and W. F. Carter. bibliog *il* diags Machine Design 15:109-14 Jl; 145-50+ Ag '43

Weldability of some low-alloy steels. J. S. Vatchagandhy and G. P. Contractor. *il* diags Welding J 21:sup561-72 N '42

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Chromium molybdenum steel	Silicon steel
Chromium nickel steel	Steel, Automobile
Chromium steel	Steel, Corrosion resisting
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Molybdenum steel	Tungsten steel
Nickel steel	Vanadium steel

Analysis

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Testing

Accelerated fatigue tests on NE steels. J. G. Wood and R. F. Sanders. Iron Age 151:68-70 Mr 4 '43

Dynamic hardness testing of metals and alloys at elevated temperatures. E. Fetz. *il* diag Am Soc for Metals Trans 30:1419-61 bibliog(p1459-61); Discussion. 1461-2 D '42

Influence of alloying elements on the critical points of steels as measured by the dilatometer. R. N. Gillmor. *il* Am Soc for Metals Trans 30:1377-1404; Discussion. 1404-13 D '42

Low temperature impact resistant steel castings. N. A. Ziegler and H. W. Northrup. bibliog *il* Am Soc for Metals Trans 30:1087-1109; Discussion. 1109-14 D '42

STEEL balls. See Balls, Steel

STEEL barrels. See Barrels, Steel

STEEL bars

Controversy grows warm over which mills will roll bars. Iron Age 151:64 Ja 14 '43

Effect of welding on the shear and hardness properties of mild steel bars. W. D. Lewis. diags Welding J 21:sup559-61 N '42

Heating of heavy forging billets. *il* Metal Prog 43:724-5 My '43

How to estimate hardening depth in bars; Jominy end quench hardenability test. J. L. Lamont. bibliog diags Iron Age 152:64-70 O 14 '43

Study of the effects caused by arc welding upon axially loaded structural steel bars. J. Neustadt, G. D. Lodvick and D. P. Schultz. *il* diags Welding J 22:sup353-61 Ag '43

War puts pressure on bars. B. K. Price. *il* Steel 113:55-7 Ag 16 '43

War trends in steel bar production expected to disappear when peace comes. *il* Iron Age 152:86-7 O 21 '43

Prices

Finished steel; prices, 1929-1942; tabulation. Steel 112:370, 371, 372 Ja 4 '43

Semifinished steel; prices, 1929-1942; tabulation. Steel 112:368-9 Ja 4 '43

Testing

Creep resistance of superheater tube steels in tube and bar form. J. A. Jones and W. E. Bardgett. diags Engineer 176:6-8 Jl 2 '43

STEEL buildings

Sectional steel buildings of rigid-frame type. C. H. Louree. *il* diag Civil Eng 13:436 S '43

Transformer housings superior to platforms; portable steel house set on a concrete mat. G. H. Landis. *il* diags Elec W 118:2092-4 D 26 '42

STEEL cars. See Cars, Steel

STEEL castings

Alloy steel castings, their properties and field of application; abstract. H. Juretzek. Roy Aeronautical Soc J 47:sup217-18 My '43

American steel foundries casts armor for tanks. F. G. Steinebach. *il* Foundry 71:78-82+ Jl '43

Balancing the composition of cast 25 per cent chromium-12 per cent nickel type alloys. J. T. Gow and O. E. Harder. *il* diags Am Soc for Metals Trans 30:855-919; Discussion. 919-35 D '42

STEEL castings—Continued

- Centrifugal casting; symposium. C. W. Briggs and others. *Il diags Iron Age* 151: 53-8 My 13; 62-8 My 20 '43
- Centrifugally cast cylinder barrels for airplane engines; Ford motor co. E. F. Cone. *Il Metals & Alloys* 16:1062-6 D '42
- Centrifugally cast steel; American cast iron pipe co. C. K. Donoho. *Il Iron Age* 151:52-8 Ap 1 '43; Same. *Foundry* 71:130-4+ Ap '43
- Centrifuging after the mold is filled with steel. W. F. Wright and J. B. Caine. *Il diags Foundry* 71:90-3+ My '43
- Comparative quality of converter cast steel. C. E. Sims and F. B. Dahle. *bibliog il diags Am Soc T M Proc* 42:532-50 '42; Same cond. *Foundry* 70:88-9+ S '42; Same cond. *Steel* 111:125-6+ S 14 '42; Discussion. *Am Soc T M Proc* 42:551-5 '42
- Continuous production of manganese-steel castings from the Tropenas converter. L. W. Bolton and J. H. diags *Engineering* 156:159-60, 177-8 Ag 20-27 '43
- Converting to steel castings; Saginaw malleable iron division, General motors corporation. J. H. Smith. *Il diags Iron Age* 151:45-50 Ap 22 '43
- Cores for steel castings; abstract. S. W. Brinson and J. A. Duma. *Metals & Alloys* 18:552+ S '43
- Creep and heat resistant steel castings. F. Schulte. *Il Iron Age* 152:54-8 S 30; 64-8 O 7 '43
- Ford triplexing installation. W. A. Phair. *Il diags plan Iron Age* 151:63-5 Mr 11 '43
- Ford's centrifugal cast cylinders. C. S. Ricker. *Il diags plan Aviation* 42:134-7+ Je '43
- Foundry metallurgy in the castings industry. J. W. Bolton. *bibliog il Foundry* 71:84-5, 180-4 JI; 100-1+ Ag '43
- Gating and risering of steel castings; round table discussion. *Foundry* 71:122 JI '43
- Hot tear formation in steel castings; discussion. *Foundry* 71:180-1 S '43
- Huge castings for naval vessels from Birdsboro's new foundry. C. O. Herb. *il Mach* 50: 164-71 N '43
- Hydraulic drive spins steel casting machines. E. Bremer. *Il Foundry* 71:154, 157 N '43
- Hydrogen and nitrogen in ferrous castings; abstract. C. A. Zapffe and C. E. Sims. *Iron Age* 151:174 My 6 '43
- Ladle practice for the steel foundry. E. Vance. *Foundry* 71:185-8 O '43
- Large castings support 16-inch gun. *Il Foundry* 71:116+ O '43; Same. *Steel* 113:94+ O 18 '43
- Making graphitic steel castings; abstract. C. F. Joseph. *Metals & Alloys* 16:1106+ D '42
- Melting practice for acid electric steel. *Foundry* 71:131-2 My '43
- NE (national emergency) alloy steels; steel castings vs. forgings. A. Zwald. *Il Steel* 113:94-5+ Ag 2 '43; Same. *Foundry* 71:175-7 S '43
- New steel foundry makes navy castings; Birdsboro steel foundry and machine co. P. Dwyer. *il plan Foundry* 71:114-17+ N '43 (to be cont)
- New trends in steel casting production; A.F.A. committee report. *Iron Age* 151:173-4 My 6 '43
- Panel discussion on the production of steel castings centrifugally. *Foundry* 71:95+ Mr '43
- Pours steel in cores spun vertically; Wehr steel company, Milwaukee. A. T. Baumer. *Il Foundry* 71:94-5+ JI '43
- Pours triplex steel on conveyor; Rouge plant of Ford motor co. A. H. Allen. *Il Foundry* 71:94-5+ S '43
- Production in rotary furnaces of steel for castings. F. A. Lemon and H. O'Neill. *bibliog Iron & Steel Inst J* 146:53-71, pl 3-4 no 2 '42; Same cond. *Engineering* 155:257-60, 279-80 Mr 26-Ap 2 '43; Abstracts. *Metals & Alloys* 17:576+ Mr '43; *Iron Age* 151:22 Ja 14 '43; Discussion. *Iron & Steel Inst J* 146:71-2 no 2 '42
- Production of uniform steel for a light castings foundry. C. H. Kain and L. W. Sanders. *Engineer* 174:38-40 JI 10 '42; Same. *Foundry* 71:82, 141-7 F '43; Same cond. *Iron Age* 150:101-2+ O 1 '42
- Second report of the moulding materials subcommittee of the Steel castings research committee. *Iron & Steel Inst J* 146:393-454, pl 38-9; Discussion. 455-66 no 2 '42
- Steel castings for Canadian arms; abstract. G. L. White. *Metals & Alloys* 17:1018+ My '43
- Steel castings for present and post-war products. *il Product Eng* 14:[717-32] insert 1-16 N '43
- Steel castings, 1942. C. W. Briggs. *Il Metals & Alloys* 17:61-2 Ja '43
- Steel foundries study progress of industry; abstracts of papers, A.F.A. annual meeting. *Foundry* 71:180+ Je '43
- Steel foundry sands; abstract. E. C. Pigott. *Metals & Alloys* 18:850+ O '43
- Steel sheaves are cast centrifugally. A. Johnson. *Il diags Foundry* 71:139-41+ Je '43
- Stern frames cast in cores; Penn steel castings co. P. Dwyer. *il Foundry* 71:98-101+ O '43
- Trench mortar bombs pass critical inspection. P. Dwyer. *il Foundry* 71:66-9, 151-2 Ja '43
- Unusual war-production problem handled by Canadian foundry; cast-steel chain. *il Roads & Bridges* 81:84 Ap '43
- War spurs foundry research. *Il diags Iron Age* 151:148-53 Ja 7 '43
- Welding wrought iron, high carbon steel and cast steel. H. R. Morrison. *Il Welding J* 22:418-20 Je '43
- See also
Steel ingots
- Statistics**
- Steel castings, 1938-1941. Survey of Cur Business 1942 Sup p139 [supplemented in monthly numbers]
- World production of steel ingots and castings by countries, 1929-1942; tabulation. *Steel* 112:357 Ja 4 '43
- Testing**
- Investigation of the influence of mould friction on tearing in castings. J. H. Andrew and H. T. Protheroe. *diags Iron & Steel Inst J* 145:101-9, pl 17-19 no 1 '42
- Low temperature impact resistant steel castings. N. A. Ziegler and H. W. Northrup. *bibliog il Am Soc for Metals Trans* 30:1087-1109; Discussion. 1109-14 D '42
- STEEL columns.** See Columns, Steel
- STEEL construction**
- Amounts of steel required for steel mill buildings; study made by the Specifications branch, Conservation division, War production board. *diags Eng N* 129:722-8 N 19 '42
- Good organization and local materials help speed construction; steel framework with concrete foundation and walls; Mid-west war plant. *Il Eng N* 131:298-9 Ag 19 '43
- Prefabricated house; steel prominent in early experiments. *Il diags Arch Forum* 78:71-82 Mr '43
- Special features mark addition to May company building, Denver; combination of steel columns and reinforced concrete slabs without drop panels. W. H. Wheeler. *Il diags Civil Eng* 13:73-5 F '43
- Steel-frame portable airplane hangars. W. B. Larkin. *il Eng N* 130:675-7 My 6 '43
- Structural steel; conservation measures. W. C. Voss. *diags Boston Soc C E J* 30:197-204 JI '43
- See also
- | | |
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| Columns, Steel | Roofs, Steel |
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| Concrete construction | Steel, Structural |
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- Cost**
- Cost comparison of wood, steel and concrete warehouses. A. F. Comstock. *diags Eng N* 130:626-9 Ap 22 '43
- Design**
- Emergency steel savings; increasing unit stresses in tension and bending but not in compression. C. T. Bishop. *Eng N* 129:895 D 31 '42

STEEL construction—Design—Continued

- Perforated cover plates for steel columns; compressive properties of plates having a net-to-gross cross-sectional-area ratio of 0.33. A. H. Stang and M. Greenspan. diags J Research Nat Bur Stand 30:411-26, pl 1-2 My '43
- Perforated cover plates for steel columns; compressive properties of plates having circular perforations and a width-to-thickness ratio of 53. A. H. Stang and M. Greenspan. bibliog pl diags J Research Nat Bur Stand 30:177-202 Mr '43
- Perforated cover plates for steel columns; compressive properties of plates having ovaloid perforations and a width-to-thickness ratio of 53. A. H. Stang and M. Greenspan. diags pl J Research Nat Bur Stand 30:15-39 Ja '43
- Practical design of welded steel structures. H. M. Priest. bibliog il diags Welding J 22:677-711 S '43
- Simple trussed beams. J. J. O'Donovan. Engineering 156:303 O 15 '43
- Strength of slender beams. G. Winter. diags Am Soc C E Proc 69:817-45 bibliog(p843) Je '43; Discussion. bibliog 69:1094-6, 1634-6 S, D '43
- There is a time for less steel and a time for more. C. M. Goodrich. Roads & Bridges 81: 42, 58+ My '43

Erection

- Blimp hangers built by contrasting methods. il Eng N 129:841-6 D 17 '42

Testing

- Riveted and pin-connected joints of steel and aluminum alloys. L. S. Moisseff, E. C. Hartmann and R. L. Moore. il diags Am Soc C E Proc 69:3-40 Ja '43; Discussion. 69:576-6, 1463-4 Ap, N '43

Welding

- Application of welding in structural design; with list of cities whose building codes have welding and cutting provisions in general conformity with the provisions of the A.W.S. code. S. A. Greenberg. Welding J 22:409-10 Je '43
- Builds welded blast furnace in eight months; riveting and welding costs compared. R. F. Fey. il diags Steel 113:144-50+ S 20 '43; Same cond. Iron Age 151:48-55, 130 Je 24 '43
- Control of residual stresses through welding sequence. M. Q. Cellers. diags Iron Age 152:50-6 S 2 '43
- Efficiently rigid arc-welded connections. R. P. V. Marquardsen. diags Welding J 22: 256-61 Ap '43
- Inspection of welded structures. R. B. Lincoln. Welding J 22:919-20 N '43
- Outdoor substation structure designed for welding; with cost data. R. W. DeVore. il diags Welding J 22:593-9 Ag '43
- Physical properties that affect the behavior of structural members. W. M. Wilson. il Am Soc C E Proc 68:1715-25 D '42; Discussion. 69:775-8, 858-60, 1049-54, 1587-93 My-Je, S, D '43
- Plug welding facilitates changeover from bolted to welded construction. D. B. Tschudy. diags Steel 112:96, 98+ My 24 '43
- Practical design of welded steel structures. H. M. Priest. bibliog il diags Welding J 22:677-711 S '43
- Residual stresses in welded structures. R. E. Kinkead. Metal Prog 43:924-6; Addendum on tri-axial stresses. 946 Je '43; Same abr. Machine Design 15:109-10 Je '43; Same. Welding J 22:514-15 Jl '43
- Residual stresses in welded structures; challenging problem. E. Chapman. il diags Iron Age 152:46-50 Jl 29 '43
- Welded caissons for naval dry docks; with cost data. C. A. Trexel and A. Amirikian. il diags Welding J 22:157-64 Mr '43; Same cond. Steel 111:100-2+ D 14 '42
- Welded frames cut cost and save steel; one-story industrial plant. F. W. Mettler. il Eng N 129:700-1 N 19 '42

See also

Bridges—Welding operations

STEEL construction, Subaqueous

- Protective painting of submerged steel; hydraulic turbine headgates, Gattineau power company. Engineering 156:167-8 Ag 27 '43
- Steel caissons support New Orleans dock; use of concrete filled cylinders. C. G. Cappei. il Civil Eng 13:459-61 O '43
- Steel-shell piles for unusual foundation; concrete filled pipes for coal dock. H. T. Immerman. il diags Eng N 130:801-3 Je 3 '43

STEEL construction in mines

- Harris pit prop. diag Mech Handling 30:218 My '43

STEEL containers. See Containers, Steel**STEEL cutting**

- Abrasive wheel salvages steel for ships. il Am Mach 87:83 S 30 '43
- Angle of chip breaker in reverse. M. F. Judkins. diags Metals & Alloys 16:1095 D '42
- Assembly-line plate cutting at West Coast shipyards. G. V. Slottman. il Marine Eng 48:167-74 Mr '43
- Chip-breaker groove of radical design for machining stainless steel. diags Mach 49: 232 D '42; Iron Age 151:41 Ja 21 '43
- Cone sawed from bar stock. H. J. Chamberland. diag Am Mach 87:96 Ap 15 '43
- Cutting of steel, and tools therefor; report of National metal congress papers. O. W. Boston. Metal Prog 42:887-9+ N '42
- Effect of hardness on the machinability of six alloy steels; abstract. O. W. Boston and L. V. Colwell. diags Automotive & Aviation Ind 87:34-5, 78+ N 1 '42
- Flame cutting applications greatly expanded by improvised setups. F. Waldo. il Steel 113:82-3+ O 18 '43
- Flame cutting; use of oxy-acetylene on rolled armour plate. Automobile Eng 33: 211-13 My '43
- Free-machining Invar alloy. il Mach 49:218+ Ap '43
- Free machining 36% nickel alloy steel; new type of Invar developed by Carpenter steel company. G. V. Luerksen. il Aero Digest 42: 229, 231 Mr '43
- Gas cutting in steel mills. S. D. Baumer. il Welding J 21:836-8 D '42
- Heat treating for machinability; NE steels. L. E. Webb. il Metal Prog 43:87-9 Ja '43
- High speed milling in aircraft production; data on milling of alloy steel and of aluminum. il diags table Iron Age 152:74-83 O 14 '43
- Hot trimming of shell forgings. il Iron Age 151:51 Je 17 '43
- How to use shear type tools. F. W. Lucht. il diags Steel 112:106, 124+ Je 14 '43
- How to utilize most effectively the flame cutting of parts for arc welding. W. J. Brooking. il diags Steel 112:96, 98+ Je 21; 102-3+ Je 28 '43
- Hyper-milling; abstract. M. F. Judkins. Iron Age 151:64 Ap 1 '43
- Improved methods of machine flame-cutting. H. E. Rockefeller. il diags Welding J 22: 93-9 F '43
- Investigation of the lateral distortion produced in mild steel plates by oxyacetylene cutting. C. C. Osgood. il diags Welding J 22:sup308-16 Jl '43
- Machinability of national emergency alloy steels. O. W. Boston. il Metal Prog 43:543-7 Ap '43; Excerpt. Automotive & Aviation Ind 88:52+ Ap 15 '43
- Machinability of NE steels; abstract. O. W. Boston. Iron Age 151:63-4 Ap 1 '43
- Machining allowances for seamless tubing; reference book sheet. diags Am Mach 87: 125, 127 Ag 19 '43
- Machining 37-millimeter armor-piercing shot; how Bullard Mult-Au-Matics have been adapted. H. L. Horton. il diags Mach 49: 156-60 My '43
- New abrasive wheel for cutting rails. il Mass Transportation 39:256-6 Jl '43
- Plumbism resulting from oxyacetylene cutting of painted structural steel. I. R. Tabershaw. B. P. W. Ruotolo and R. P. Gleason. bibliog J Ind Hygiene 25:189-91 My '43
- Producing serrated angle beams; specially designed oxy-acetylene cutting machine. S. O. Jones. il Marine Eng 48:163-4 Mr '43
- Rating the machinability of bullet core steel. N. G. Meagley. il Metal Prog 44:67-71 Jl '43

STEEL cutting—Continued

Standard lathe fitted with controls to form-turn parts automatically; forged steel parts for torpedoes. *il* Steel 112:119 Ap 26 '43
 Toolholders for turret machining. *il* diags Am Mach 87:113-18 S 16 '43
 Unusual case of contour sawing. H. J. Chamberland. Mach 50:204 N '43
 War speeds propane cutting progress. G. E. Stedman. *il* Steel 111:80-2+ D 14 '42

See also

Cutting tools
 Machine tools
 Metal cutting

STEEL drums. *See* Containers, Steel

STEEL forgings

Advantages and limitations of die-forged machine parts. C. L. Tutt, jr. *il* diags Product Eng 14:521-5 Ag '43
 ASTM approves seven standards on forgings. Steel 112:142 Ap 12 '43
 Automatic forging of 90-mm. shells; General American transportation corporation. *il* Mach 49:181-3 Ap '43
 Draw temperatures for S.A.E. 1050 basic steel forgings; chart. J. A. Duma. Metal Prog 44:782 O '43
 Forged projectile nose saves steel, time, cost; N. J. Bardell receives Chicago Tribune's diamond studded pin award for notable achievement. Steel 112:84 Ap 5 '43
 Forging an 84-lb. connecting rod for Diesel engine. *il* Automotive & Aviation Ind 89:26-7 O 1 '43
 Forging and heat-treating shot for anti-tank projectiles; Axelson mfg. co. R. M. Pease. *il* diags Mach 49:148-55 Mr '43
 Forging and welding 1000-lb. aerial bombs. J. B. Nealey. *il* diags Iron Age 151:49-54 F 11 '43
 Forging shell at Ambridge. A. F. Macconochie. *il* diags Steel 113:82-4, 86, 95 Ag 30 '43
 Fuse adaptors made by forging. J. H. Frye. *il* Iron Age 151:50-2 Ap 15 '43
 Gadsden feeds the 105's. W. N. Howley. *il* diags Am Mach 87:101-16 Mr 4 '43
 Heating of heavy forging billets. *il* Metal Prog 43:724-5 My '43
 Hot trimming of shell forgings. *il* Iron Age 151:51 Je 17 '43
 How army ordnance forges 105-mm. high-explosive shell at Gadsden ordnance plant. A. F. Macconochie. *il* diags Steel 113:72-6+ J 26 '43
 Making shells for the largest mobile howitzer in the world. H. L. Horton. *il* diags Mach 50:133-48 S '43
 Notes on shell forging. J. B. Nealey. *il* diags Am Mach 86:1383-6 N 26 '42
 Shell forging on bulldozers. W. Trinks. *il* diags Mech Eng 65:639-42 S '43
 Special handling of forgings halves the quenching time. *il* Mech Handling 30:440-1 O '43
 Special research committee of A.S.M.E. improves forging of steel shells. Mech Eng 65:531-2 J 1 '43
 Steel artillery cartridge cases now produced by 50 manufacturers. H. R. Turner. Steel 111:42 D 21 '42
 Time cycle for procurement of typical aircraft alloy steel drop forgings; flow chart. Automotive & Aviation Ind 89:31 N 1 '43; Same. Iron Age 152:89 S 23 '43
 Why not forged engine mounts? C. Frey. diags Aviation 42:176+ My '43

Testing

Fatigue strength of normalized and tempered versus as-forged full size railroad car axles. O. J. Horger and T. V. Buckwalter. bibliog *il* diags Am Soc for Metals Trans 31:559-76; Discussion. 576-81 S '43

STEEL founders' society of America

Annual meeting, Chicago, Feb. 10-11. Foundry 71:95+ Mr '43; Steel 112:57 F 22 '43

STEEL handling

Improved methods speed storing of materials at General Electric plant. *il* Blast F & Steel Pl 31:456-8 Ap '43
 Load grab hooks the big ones; accelerates handling of steel tubing. *il* Steel 113:256+ O 11 '43
 Material handling system pays for itself in 10 months; Oliver farm equipment co. *il* Iron Age 152:64-5 J 15 '43

STEEL houses

House with no bearing walls; The Perch, an experimental steel frame house. *il* diags plans Arch Rec 93:46-7 Mr '43
 Prefabricated house; steel prominent in early experiments. *il* diags Arch Forum 78:71-82 Mr '43

STEEL industry and trade

Light metals and plastics vs. steel; potential competition over-emphasized. L. S. Hamaker. *il* Steel 113:57-9 N 1 '43
 Steel and the post-war world. F. Juraschek. *il* Iron Age 151:82-4+ Je 10 '43
 War gives tremendous lift to alloy grades. R. L. Hartford. *il* Steel 113:49-50+ Ag 9 '43

See also

Iron industry and trade	Steel, Structural
Rolling mills	Steel using industries
Sheet steel	Steel workers
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Finance

Decline in steel industry profits unique achievement among other groups. Iron Age 152:116 Ag 12 '43
 Earnings below peacetime year; output, taxes, payrolls at peak. Steel 112:51 Ap 26 '43
 Impact of soaring corporate taxes upon steel is analyzed. W. W. Ruch. Iron Age 152:102+ O 28 '43
 Lower steel earnings reflect tax, wage increases; product shifts; reports for 1942. Steel 112:53-5 F 1 '43
 Operating expenses absorb 96 cents of steel sales dollar. Steel 112:95 Je 14 '43
 Payrolls now ten times net profit; steel industry financial reports. Steel 112:53-4 F 8 '43
 Peak steel sales, full production, huge investments, yet lower '42 returns. D. C. MacDonald. Iron Age 151:90-1 Ap 1 '43
 Record sales, production, bring steel lower net; financial returns from 22 producers for 1942. supp (table) Steel 112:96 Ap 12 '43
 Richard Thomas; statement. Economist 145:212, 217-18 Ag 14 '43
 Steel company earnings under 1942 and below peace-time level, first half of 1943. Comm & Fin Chr 158:1435 O 7 '43
 Steel producers' first half net earnings slightly below year ago. Steel 113:79 Ag 9 '43
 Steel prospects after the war. B. Ravits. Barron's 23:4 O 18 '43
See also
 Bethlehem steel corporation
 United States steel corporation

History

See also
 Ryerson, Joseph T., and son, inc.
 Taylor-Wharton iron and steel company

Securities

Are the steels over-sold? R. Carleson. Mag of Wall St 71:284-5+ D 26 '42
 Investment audit of Allegheny Ludlum steel corp. F. Dobbs. Mag of Wall St 71:184-5 N 25 '42
 Market appraisal of steel stocks. H. Lawrence. Barron's 23:6 Ap 12 '43
 Steel industry marketwise; U.S. Steel comparison with other steel companies. W. Gates. Mag of Wall St 72:301-3+ Je 26 '43
 Steel shares retarded by post-war doubts; position of leading stocks. Mag of Wall St 71:594-5+ Mr 6 '43
 Steel stocks in World War II. Comm & Fin Chr 157:1860 My 20 '43

Statistics

Analysis of steel product distribution in 1942; tabulation. Steel 113:36 Ag 30 '43
 Cost-output relation for the U.S. steel corporation. C. A. Smith. R Econ Stat 24:166-76 N '42
 Estimate for steel for 1943. Metal Prog 43:100+ Ja '43
 Expansion feats in steel have shortened the war, complete figures as of May 1. H. G. Batcheller. Iron Age 151:85-6, 86A-86B My 27 '43
 First half plate production heavy. Steel 113:54 Ag 9 '43

STEEL industry and trade—Statistics—Cont.

- Industry tightens its belt for second year of war; statistical survey; charts. Steel 112: 202-9 Ja 4 '43
- Iron, steel exports and imports of principal countries, 1937-1941; tabulation. Steel 112: 357 Ja 4 '43
- 1942; creditable industrial performance. T. W. Lippert. flow chart Iron Age 151:48-54 Ja 7 '43
- Plate production 3,257,917 tons in first quarter; tabulation. Iron Age 151:152 My 20 '43
- Record sales, production, bring steel lower net; financial returns from 22 producers for 1942. supp(table) Steel 112:96 Ap 12 '43
- Shipbuilding takes 20 per cent of 1942 steel production. Steel 112:407-8 Ja 4 '43
- Ships, no. 1 consumer, to take more in 1943; steel distribution, 1942. Steel 112:57-9 Ap 19 '43
- Short on scrap? Lake ore shipments fall short of goal. Business Week p42 Ag 14 '43
- Six-months' steel output sets record; 1942 and 1943 compared. Iron Age 152:105 Jl 15 '43
- Steel capacity now over 89 million tons. D. M. Nelson. Iron Age 150:80-1 D 31 '42
- Steel comes in. Business Week p28-30 F 27 '43
- Steel; consumption, production; tables and charts. Automotive & Aviation Ind 88:72-3 Mr 15 '43
- Steel, crude, semimanufactured, and manufactured products, 1938-1941. Survey of Cur Business 1942 Sup p139-41 [supplemented in monthly numbers]
- Steel industry achievements of year appraised; charts. J. A. Kinney. Iron Age 151:90-3+ Je 3; 115 Je 10 '43
- Steel industry's consumption huge. Steel 112: 69 Je 14 '43
- Steel output; graph giving figures for U.S., Germany, Great Britain, and Russia, 1870-1940. Barron's 23:1 F 8 '43
- Steel production in 1942 sets peak of 86,092,209 tons; statistics by months, 1941-1942. Iron Age 151:89 Ja 14 '43
- Steel; training period gives way to war phase. T. C. Campbell. Iron Age 151:85-8 Ja 7 '43
- United States' production to double Axis' by middle of year. flow chart Steel 112:48-50 Ja 11 '43
- See also*
- | | |
|---------------------------|-------------------------|
| Steel castings—Statistics | Steel ingots—Statistics |
|---------------------------|-------------------------|
- California**
- Regional warehouse control plan sanctioned by WPB for northern California. Steel 112: 85 Mr 15 '43
- Canada**
- Dominion doubles steel output. Steel 113:88 S 20 '43
- Dominion's steelmaking capacity doubled since outbreak of war. C. D. Howe. Steel 113:94 Jl 5 '43
- Two of three primary steel producers involved in strike; wage-control formula jeopardized. For Comm W 10:14-15 Mr 6 '43
- Colombia**
- Steel for Colombia. Business Week p58 S 25 '43
- Germany**
- German steel production cut by bombings, absenteeism. J. A. Horton. II Steel 112:63-4 Ap 12 '43
- Great Britain**
- Iron and steel industries in 1942. Engineer 175:6-7 Ja 1 '43
- Offensive war places heavier burden on British steel mills. J. A. Horton. II Steel 112:358-61 Ja 4 '43
- Steel industry; a case-study in industrial policy. Economist 145:312-14 S 4 '43
- Italy**
- Allies study possibility of using Italy's steel furnaces for final drive. S. H. Barnasol. maps Iron Age 152:96-8 Jl 22 '43
- Have not in raw materials. Steel 113:63+ Ag 2 '43

Mexico

\$6,000,000 United States credit for Mexican steel production. For Comm W 9:35 N 14 '42

Pacific coast

Ores key to steel's future in Northwest. J. D. Knox. II maps Steel 113:114-17 S 20 '43

Steel goes West; Kaiser and Columbia add to Pacific facilities. Business Week p52+ N 21 '42

Peru

Steel industry for Peru. Economist 143:767-8 D 19 '42

South America

South American steel industry, aided by U.S., gaining stature. Iron Age 152:98-9 Jl 22 '43

Texas*See also*

Steel works—Texas

United States

- Attainment of 1943 production goal challenges Nation's steelmakers. W. J. Campbell. II Steel 112:49-51 Je 28 '43
- Clarifying CMP: how it affects steel producers, fabricators and warehouses. N. E. Stearns. Iron Age 150:91-2+ D 17 '42
- Domestic market summary. II Steel 112:362-3, 392 Ja 4 '43
- Easier to plan in 1943, due to more centralized control. B. K. Price. II Steel 112:210-15, 431-2 Ja 4 '43
- Famine in steel. Business Week p20+ Je 5 '43
- Greatest year in steel. W. S. Tower. Iron Age 150:67-8 D 31 '42
- How the new aircraft steel warehousing program operates. flow chart Aero Digest 42: 156-9 Je '43
- Iron and steel, 1942. F. B. Foley. II Min & Met 24:106-8 F '43
- Is steel a laggard? plastics, light metals and plywood are challenging rolled steel's dominance. F. D. Foote. II Iron Age 151:49-53 Mr 4 '43
- Labor and management plunge into campaign for more steel at rallies in Chicago and Pittsburgh. II Iron Age 152:103-5 Jl 8 '43
- More steel for war. H. G. Batcheller. II Min & Met 24:264-7 Je '43
- More steel if—. Business Week p76 Je 19 '43
- 1942; creditable industrial performance; 1943 brings new and untried emergencies. T. W. Lippert. flow chart II Iron Age 151: 48-65, 65A-65B Ja 7 '43
- Post-war competition. C. G. Conley. Manuf Rec 111:23, 46+ N '42
- Raw materials; new records set in all supplies for steel industry. II Steel 112:261-2 Ja 4 '43
- Steel; increased demands of the war economy. Survey of Cur Business 23:5-8 Jl '43
- Steel industry. Survey of Cur Business 23: 3-5 Ap '43
- Steel industry and the war effort. C. F. Hood. Blast F & Steel Pl 30:1271-3 N '42
- Steel industry's contribution to the war effort. W. S. Tower. Blast F & Steel Pl 31: 635-6 Je '43
- Steel looks to its future; learning about more economical alloys. II Business Week p17-18 F 6 '43
- Steel must go where most needed. B. F. Fairless. Iron Age 150:100+ D 17 '42
- Steel plants give 100 per cent support to war program in 1942. Blast F & Steel Pl 31: 131-2+ Ja '43
- Steel supplies adequate for direct military requirements; Truman committee report. Steel 112:50-1 F 8 '43
- Steel; training period gives way to war phase. T. C. Campbell. Iron Age 151:85-8 Ja 7 '43
- Truman committee report expects barely enough steel for war in '43. Iron Age 151: 123-9+ F 4 '43
- WMC flayed for creating intolerable situation in steel industry with its 48-hr. week policies. Iron Age 152:92-4 Jl 22 '43
- WPB bungling of scrap threatens railroad steel supply. B. C. Moise. Ry Age 114:439-40 F 27 '43

STEEL industry and trade—United States—*Continued*

- War production board's aid to industry in expediting production of coke and pig iron. S. Weiss. *Il Blast F & Steel Pl* 30:1245-7 N '42
- Warehouse problems with CMP answered. *Iron Age* 152:126+ Ag 26; 102+ S 2 '43
- Warehouse steel; inventory position improves. J. C. Sullivan. *Il Steel* 113:86-7 S 20 '43
- Windows of Washington; year's developments summarized. *Il Steel* 112:226-7, 230, 233+ Ja 4 '43
- See also*
Steel workers
Steel works
also Carnegie-Illinois steel corporation;
Republic steel corporation; United States steel corporation; Youngstown sheet and tube company

Utah

- Utah steel expansion presents postwar possibilities. J. D. Knox. *Il Steel* 113:88-90 O 4 '43

Western states

- Future of new steel plant in West dependent upon period of adjustment, say observers in Utah. *Il Iron Age* 152:85-6 S 23 '43

STEEL ingots

- Effects of temperature on blooming mill production of hot-topped steel. H. J. Forsyth. *Blast F & Steel Pl* 31:638-40, 767-70 Je-Jl '43
- Electric arc hot topping on ingots and castings developed many years ago by International nickel co. G. F. Sullivan. *Il diag Iron Age* 151:56-60 F 11 '43
- Scabs on ingot butts; abstract. T. J. Woods. *Metal Prog* 43:903+ Je '43
- Sleevebrick and nozzle problems. F. F. Franklin. *Il Steel* 112:94, 96+ Ap 26 '43
- Solidification and cooling of steel ingots. E. F. Law and V. Harbord. *Il Engineering* 156: 318-20, 338-40 O 15-22 '43; Discussion. 156: 374 N 5 '43
- Studying ingot structures; silver chloride as a material for models; abstract. K. L. Fetter and M. Dienes. *Metals & Alloys* 17:854+ Ap '43

Molds

- Amorphous graphite in the open-hearth; mold coating. R. J. Zemanek. *Il diag Steel* 111:86-7, 89 N 23 '42

Statistics

- Steel ingot production and operating rates, monthly, 1929-1942; tabulation. *Steel* 112: 364 Ja 4 '43
- Steel ingot production, monthly, 1918-1942; tabulations. *Iron Age* 151:204 Ja 7 '43
- World production of steel ingots and castings by countries, 1929-1942; tabulation. *Steel* 112: 357 Ja 4 '43
- Year's ingot output up 4 per cent; monthly, 1941-1942. *Steel* 112:26-7 Ja 11 '43

Testing

- Ingot of rimmed steel made by the basic open-hearth process. D. Binnie. *Iron & Steel Inst J* 146:283-94, pl 17-24 no 2 '42; Excerpts. *Iron Age* 151:65 F 18 '43; Discussion. *Iron & Steel Inst J* 146:363-86 no 2 '42
- Rimming steel; additional studies of the composition variation from outside to centre; note on diffusion on soaking at about 1300° C. T. Swinden and W. S. Stevenson. *diag Iron & Steel Inst J* 146:345-62, pl 30-7; Discussion. 363-91 no 2 '42
- Rimming steel; comparative study of three ingots received from Soc. anon. des hauts fourneaux, forges et aciéries de Denain et d'Anzin, at Denain, France; report on four ingots of British manufacture. J. Mitchell. *Iron & Steel Inst J* 146:295-344, pl 25-9; Discussion. 363-88 no 2 '42

STEEL landing mats. See Aviation landing stations—Portable landing mats**STEEL lining**

- Corrosion control in refinery pressure vessels by arc welded stainless steel linings; with cost data. W. W. McCloy. *Il diag Nat Pet N* 35 pt 2:R10-14 Ja 6 '43

STEEL metallurgy

- Achievements in metal production. E. F. Cone. *Il Metals & Alloys* 18:768-70 O '43
- Alloy economies in steel production. W. D. Wilkinson. *Il Blast F & Steel Pl* 31:71-3 Ja '43
- Applications of the spectrograph to steelworks analysis. H. T. Shirley and E. Elliott. *Il Engineering* 155:437-40, 456-7 My 28-Je 4 '43
- Boron assumes a position of importance as an alloying element in steel. A. F. Macconochie. *Steel* 113:106, 108+ O 13 '43
- Boron; effects as alloying element in steel interest metallurgists. *Steel* 112:83 Mr 15 '43
- Boron found to be a very beneficial alloying element. N. F. Tisdale. *Blast F & Steel Pl* 31:93-4 Ja '43
- Boron in steel; a composite of abstracts. *Metals & Alloys* 17:1228+ Je '43
- Boron plus titanium in heat-treated steels. G. F. Comstock. *bibliog Metals & Alloys* 17:978-83 My '43
- Boron, steel alloying agent. T. W. Lippert. *Il Iron Age* 150:41-4 N 19 '42
- Boron steels increasingly favored. N. F. Tisdale. *Iron Age* 151:40-4 F 4 '43
- Calcium in steelmaking; abstract. L. Sanderson. *Metals & Alloys* 18:842 O '43
- Chemistry at 1600. J. Chipman. *Am Soc for Metals Trans* 30:817-54 D '42; Excerpts. *Iron Age* 150:53-5 O 22 '42
- Comparative effects of boron and manganese on some properties of heat treated steel. G. F. Comstock. *Iron Age* 152:48-52 S 9 '43
- Comparative quality of converter cast steel. C. E. Sims and F. B. Dahle. *bibliog Il diag Am Soc T M Proc* 42:532-50 '42; Same cond. *Foundry* 70:88-9+ S '42; Same cond. *Steel* 111:125-6+ S 14 '42; Discussion. *Am Soc T M Proc* 42:551-5 '42
- Conservation of steelmaking raw materials. C. M. Parker. *diag Welding J* 21:747-55 N '42
- Development of research and quality control in a modern steel mill. L. F. Reinartz. *Il diag Blast F & Steel Pl* 31:409-18, 522-8+ Ap-May '43
- Effect of moisture in blast air. R. J. Cowan. *Il diag Iron Age* 150:43-50 N 12; 46-50 N 19 '42
- Effects of tin in carbon steel. J. W. Halley. *Metal Prog* 43:936 Je '43
- Film refining process of steel making; Merle refiner and process. J. M. Merle. *diag Steel* 111:92-4, 96+ D 14; 84, 87+ D 21 '42
- Ford triplexing installation. W. A. Phair. *Il diag plan Iron Age* 151:63-5 Mr 11 '43
- Foundry metallurgy in the castings industry. J. W. Bolton. *bibliog Il Foundry* 71:84-5, 180-4 JI; 100-1+ Ag '43
- Furnacemen look to your sinter; steelmakers make various improvements. J. D. Knox. *Steel* 112:258 Ja 4 '43
- Great boron mystery lends zest to progress of NE steels. *Il Steel* 112:67-8 F 15 '43
- Hardenable control at the mill; abstract. G. R. Barrow and G. Soler. *Metals & Alloys* 17:362+ F '43
- Iron and steel, 1942. F. B. Foley. *Il Min & Met* 24:106-8 F '43
- Is tin in steel harmful? abstract. J. W. Halley. *Metals & Alloys* 16:1148+ D '42
- Ladle metallurgy; discussion. *Iron Age* 151: 45-9 Ap 15 '43
- Making the most of scrap by segregation by alloy content, and scheduling use of sub-standard grades. G. Soler. *Blast F & Steel Pl* 30:1359-60 D '42
- Metallurgical control through calculated hardenability. W. R. Patterson. *Iron Age* 152: 40-2+ JI 1 '43
- Metallurgy at war. W. A. Phair. *Iron Age* 151:118-25+ Ja 7 '43
- Modern weight control in steel mills; use of scales of blast furnaces, open-hearth shops and rolling mills. *Il Steel* 113:92-4+ O 25 '43
- Panel discussion on boron in steel, held by the Iron and steel division, A.I.M.E. *Iron Age* 151:56-7 F 25 '43
- Points of theoretical interest; report of National metal congress papers. M. F. Hawkes. *Metal Prog* 42:895-8+ N '42
- Pours triplex motor on conveyor; Rouge plant of Ford motor co. A. H. Allen. *Il Foundry* 71:94-5+ S '43

STEEL metallurgy—Continued

Production in rotary furnaces of steel for castings. F. A. Lemon and H. O'Neill. *bibliog Iron & Steel Inst J* 146:53-71, pl 3-4 no 2 '42; Same cond. *Engineering* 155:257-60, 279-80 Mr 26-Apr 2 '43; Discussion. *Iron & Steel Inst J* 146:71-2 no 2 '42

Production of low-phosphorus charging stock by direct reduction; synthetic scrap produced by the Harman process. *diags plans Steel* 113:83-90, 92+ Ag 30 '43

Production of uniform steel for a light castings foundry. C. H. Kain and L. W. Sanders. *Engineer* 174:38-40 *Jl* 10 '42; Same. *Foundry* 71:82, 141-7 F '43; Same cond. *Iron Age* 150:101-2+ O 1 '42

Recent trends in steel manufacture. G. A. V. Russell. *Blast F & Steel Pl* 30:1264-70, 1369-76 N-D '42

Saving alloys in steel by using addition agents. F. M. Washburn and others. *Il Metal Prog* 42:1061-3+ D '42

Scrap steel analysis; development of chemical and spark methods. J. W. Langley. *Il Chem Age (Lond)* 47:497-500 D 5 '42

Silicomanganese used to conserve manganese and aluminum; abstract. B. Good. *Iron Age* 151:74 My 6 '43

Special addition agent steels. R. B. Schenck. S A E J 51:385-93 N '43; Same abr. *Steel* 113:96-8, 100+ O 4 '43; Excerpts. *Elec W* 120:1706+ N 13 '43

Special addition agent steels; extensive data on recent laboratory tests of steels treated and untreated. R. B. Schenck. *Iron Age* 152:88-93 O 14 '43

Spices for wartime steel; addition agents. *Fortune* 28:90+ N '43

Sponge iron process in the production of steel, by advisory committee on metals and minerals. *Il Metal Prog* 42:1043-7+ D '42

Steel making and minor matters; report of National metal congress papers. F. G. Norris. *Metal Prog* 42:879-84 N '42

Steelmaking slags; abstract. W. Oelsen and H. Wiemer. *Metals & Alloys* 13:544+ S '43

Strain aging of killed low-carbon steel, with particular reference to the effect of titanium; abstract. G. F. Comstock. *Iron Age* 152:70-1 Ag 5 '43

Thermal reactions in ferro-alloy metallurgy, the basis of alloy steel development; abstract. B. D. Saklatwalla. *Iron Age* 152:52-3 O 21 '43

War accelerates technical progress. *Steel* 112:293-300+ Ja 4 '43

Wartime metallurgy conserves strategic materials. R. E. Orton and W. F. Carter. *bibliog Il diags Machine Design* 14:63-7+ Ag; 70-4+ S; 69-73 O; 82+ N; 91-5 D '42; 15-58-62 Ja; 111-15 P; 97-100 Mr; 123-31+ Ap; 107-10 My; 111-14 Je; 109-14 *Jl*; 145-50+ Ag '43

Wartime scrap problems. F. E. Vigor. *Blast F & Steel Pl* 31:1025-7 S '43

See also

Bessemer process	Steel, Hardening of
Case hardening	Steel, Heat treatment of
Furnaces, Steel making	Steel alloys
Iron metallurgy	Steel castings
Open hearth furnaces	Steel ingots
Open hearth process	Steel works

Duplex process

Recent trends in steel manufacture. G. A. V. Russell. *Blast F & Steel Pl* 30:1371-6 D '42

Electrometallurgy

Alloys by Byers; old wrought iron producer adds electric-furnace capacity. *Business Week* p64 My 29 '43

Electric furnace steel committee, Iron and steel division, A.I.M.E. 1st annual meeting. Pittsburgh. Oct. 1-2. *Iron Age* 152:50-1, 136A-136D O 21 '43; *Metal Prog* 44:941-4 N '43

Electric furnace steels, 1942. W. J. Priestley. *Metals & Alloys* 17:53-4 Ja '43

First annual conference of the Electric furnace steel committee, Iron and steel division, American Institute of Mining and Metallurgical Engineers, Pittsburgh, Oct. 1-2. *Steel* 113:145 O 11 '43; *Foundry* 71:118+ N '43

Melting practice for acid electric steel.

Foundry 71:131-2 My '43

W.P.B. asks buyers to use electric alloy steel. *Blast F & Steel Pl* 31:1184+ O '43

Wartime production of constructional steels in the basic electric furnace. H. W. McQuaid. *Blast F & Steel Pl* 31:641-4, 776-9 Je-Jl '43; Same abr. *Steel* 113:112-14+ *Jl* 12 '43

See also

Electric furnaces,
Steel making

STEEL plates

Hot strip mills double plate tonnage. F. Felix. *Il diags Steel* 111:110-11+ D 7 '42

Plate shipments-by type of mill; graph. *Iron Age* 152:101 N 11 '43

Repeated stress relieving treatments on steel plate. F. Eberle and T. Brick. *Il Metals & Alloys* 16:894-901 N '42

Role of clad-steel plate in petroleum industry war effort. M. J. Conway. *Il diags Pet Eng* 14:103-4, 106 Je '43

Senate committee, C-1 employees, President Perry mix it on defective plate charges against Carnegie-Illinois steel corp. *Iron Age* 151:130-1 Mr 25 '43

Specifications for carbon steel plates reduced to twenty-five. *Steel* 112:49 Mr 29 '43

Square-tread floor plate rolled on 4-high mill; Jones & Laughlin steel corp. *Il Steel* 113:79 S 27 '43

Steel plate for shipbuilding. R. E. Zimmerman. *Metal Prog* 43:919-22 Je '43

Suit brought over charges that tests of steel plate were falsified. *Eng N* 130:451 Ap 1 '43

Tank plates, Pittsburgh; prices, 1929-1942; tabulation. *Steel* 112:370 Ja 4 '43

Testing troubles; two indictments plus two suits for Carnegie-Illinois steel in sub-specification plates case. *Business Week* p27-8 O 23 '43

See also

Armor plate

Testing

Effect of moderate cold rolling on the hardness of the surface layer of 0.34 per cent carbon steel plates. H. K. Herschman. *bibliog Il Am Soc for Metals Trans* 31:501-13 Je '43; Same. *J Research Nat Bur Stand* 29:57-67 *Jl* '42; Discussion. *Am Soc for Metals Trans* 31:513-16 Je '43

Investigation of the lateral distortion produced in mild steel plates by oxyacetylene cutting. C. C. Osgood. *Il diags Welding J* 22:sup308-16 *Jl* '43

STEEL rails. *See Rails*

STEEL research

Chemistry at 1600. J. Chipman. *Am Soc for Metals Trans* 30:817-54 D '42; Excerpts. *Iron Age* 150:53-5 O 22 '42

Comparative quality of converter cast steel. C. E. Sims and F. B. Dahle. *bibliog Il diags Am Soc T M Proc* 42:532-50 '42; Same cond. *Foundry* 70:88-9+ S '42; Same cond. *Steel* 111:125-6+ S 14 '42; Discussion. *Am Soc T M Proc* 42:551-5 '42

Development of research and quality control in a modern steel mill. L. F. Reinartz. *Il diags Blast F & Steel Pl* 31:409-18, 522-8+ Ap-May '43

15 years of high temperature research on steels for the refining industry. C. L. Clark and A. E. White. *Nat Pet N* 35 pt 2:R402, R404 S 1 '43

Formation of hair-line cracks. J. H. Andrew and others. *bibliog diags Iron & Steel Inst J* 146:193-243, pl 6-16 no 2 '42; Excerpt. *Engineering* 154:357-60 O 30 '42; Discussion. *Iron & Steel Inst J* 146:244-82, pl 16a-16b no 2 '42

Metallurgists learn of recent progress in research at A.I.M.E. Iron and steel division meetings. *Min & Met* 24:157-8 Mr '43

Metallurgy at war. W. A. Phair. *Iron Age* 151:118-25+ Ja 7 '43

Points of theoretical interest; report of National metal congress papers. M. F. Hawkes. *Metal Prog* 42:895-8+ N '42

Research on rimming steel; abstracts of five papers at autumn meeting of the Iron and steel institute. *Engineering* 154:476-7 D 11 '42; Discussion. 154:494 D 18 '42

STEEL research—Continued

Solidification and cooling of steel ingots. E. F. Law and V. Harbord. *il Engineering* 156:318-20, 338-40 O 15-22 '43; Discussion. 156:374 N 5 '43

STEEL rods

New 3-strand mill in California delivers rods at mile-a-minute. *il Steel* 112:52-3 Ap 26 '43

Semifinished steel; prices, 1929-1942; tabulation. *Steel* 112:368-9 Ja 4 '43

Unified drives increase rod mill production. F. R. Grant and G. L. Beaver. *il Steel* 113:120-2+ S 6 '43

STEEL roofs. See Roofs, Steel**STEEL sashes. See Sashes, Steel****STEEL straps**

Ault & Wiborg corp. finds advantages in use of steel strapping. J. W. Scobie. *il Chem & Eng N* 21:1068 JI 10 '43

Reclaiming band iron. *il Pulp & Pa of Can* 44:287 F '43

STEEL tanks. See Tanks, Steel; Water tanks, Steel**STEEL tubes. See Tubes, Steel****STEEL using industries**

Analysis of steel product distribution in 1942; tabulation. *Steel* 113:36 Ap 30 '43

Classifications of billings of steel products by consumers for 1942 as reported by companies producing more than 96 per cent of the year's output—net tons; table. *Iron Age* 152:88-9 Ag 19 '43

Consumers to get 1,000,000 more tons of steel in first half of '43. *Iron Age* 150:73-4 D 24 '42

Ships, no. 1 consumer, to take more in 1943; steel distribution, 1942. *Steel* 112:57-9 Ap 19 '43; Abstract. *Iron Age* 151:128 Ap 15 '43

Steel consumers' combined net declines; tabulations. *Steel* 112:89 Mr 15; 62 Mr 22; 80 Ap 26 '43

Steel fabricators facing lean year; backlogs dwindling. *Steel* 112:408-12 Ja 4 '43

STEEL waste

Alloy turning utilization, scrap segregation are major problems; discussion at Open hearth conference. *Iron Age* 151:74-6 My 6 '43

Automobile graveyard steel analyzed for alloy content. W. C. Hirsch. *Automotive & Aviation Ind* 87:52 N 15 '42

5,000 tons of steel salvaged and reclaimed by one company; Phillips petroleum co. A. L. Foster. *il Oil & Gas J* 41:177-8 Mr 25 '43

German process compacts steel swarf by auto-combustion. *diag Automotive & Aviation Ind* 89:82+ S 1 '43

Ideal salvage setup; materials handling system in disposal of machine tool cuttings. G. E. Stedman. *il Steel* 112:70-2, 74+ Ja 18 '43

Identifying steel scrap; colors used to identify various grades. *Iron Age* 151:68 Je 24 '43

Melting of bushy steel turnings; abstract. F. Köhler. *Iron Age* 151:50 Ap 22 '43

Presses for briquetting and baling steel scrap. W. L. DeLaney. *il Steel* 112:102, 104+ My 3 '43

Reclaim tool steel scrap. *Steel* 113:95 JI 12 '43

Recovering scrap from slag dumps; salvage operations of E. H. Heckett. G. R. Reiss. *il Steel* 112:94-6 F 8 '43

Segregated production scrap cuts alloy demands. C. H. Herty. *il Iron Age* 151:36-8 Ja 14 '43

Steel swarf; a method of compacting by auto-combustion for scrap disposal. *Automobile Eng* 33:120 Mr '43

Turnings charged with pusher boxes. *il Iron Age* 151:44-5+ Ap 29 '43

STEEL water pipes. See Water pipes, Steel**STEEL water tanks. See Water tanks, Steel****STEEL wire. See Wire, Steel****STEEL work**

All steel emergency stretchers. F. W. Klay. *il diags Welding J* 21:757-8 N '42

Carbide dies for steel shell cases. E. Glen. *il diags Metals & Alloys* 17:536-8 Mr '43

Corcoran-Brown, automobile headlamp maker, now producing steel cartridge cases in large quantities. J. Geschelin. *il Automotive & Aviation Ind* 89:22-5+ O 15 '43

Hot cupping used by Buick for 75-mm. steel cartridge cases. *il diags Am Mach* 87:121-8 My 13 '43

How Lockhead builds steel drop tanks. R. A. Von Hake. *il Aviation* 42:128-33 Je '43

Making hollow steel drills. E. N. Simons. *il Metals & Alloys* 17:320-5 F '43

Manufacture of bayonets. J. B. Nealey. *il diag Iron Age* 151:62-6 Mr 4 '43

Manufacture of steel cartridge cases. H. R. Turner. *il Metals & Alloys* 18:771-7 O '43

One-piece hollow steel propeller blades produced at American Propeller plant. J. Geschelin. *il Automotive & Aviation Ind* 88:18-22+ Ja 15 '43

Principles of shrinking and straightening distorted low carbon steel used in shipbuilding. M. D. Offen. *diags Welding J* 22:14-16 Ja '43

Steel cartridge cases. R. B. Schenck. *il S A E J* 51:229-33 JI '43; Same abr. *Iron Age* 151:58-61 My 6 '43; Same cond. *Metal Prog* 43:912-16 Je '43; Same cond. *Mech Eng* 65:815-17 N '43

Steel cartridge cases and how Buick makes them. *Steel* 113:52-5+ My 3 '43

Steel cartridge cases are made successfully as small as .30-caliber. *il Steel* 113:126+ S 20 '43

Steel cartridge cases for artillery ammunition. H. R. Turner. *il Metal Prog* 43:49-53 Ja '43

Steel cartridge cases for 37-mm. shell. C. L. Patterson and H. R. Turner. *il diags Am Mach* 87:113-24 JI 22 '43

Steel cartridge cases from a Chase brass plant. C. O. Herb. *il diags Mach* 50:137-52 O '43

Steel cartridge cases; wartime developments to have far-reaching influence on future deep-drawing practice. H. R. Turner. *Steel* 112:46-8+ Ja 18 '43

Steel in switchgear saves 75 to 80 per cent of copper formerly required. L. F. Dyrt. *il Steel* 112:56-7+ Ja 11 '43

Two-piece case design, heavy bombs; Ralston steel co. *il Steel* 113:106-8+ N 8 '43

STEEL workers

Big Steel; U.S. steel corporation digest and analysis of 41st annual report. *Personnel J* 22:18-23 My '43

Bonuses in court; C.I.O.'s row with Mesta. *Business Week* p100-2 O 23 '43

Carroulaged wage increase circumvents Little Steel. *il Steel* 112:49-50+ My 10 '43

Effect of the war on employment in the iron and steel industry. R. H. Lewis. *Monthly Labor R* 56:258-67 F '43

Employees' fakes in rushing steel bring swift correction. *Steel* 112:32-3 Mr 29 '43

48-hr. week in steel deemed confusing. *Iron Age* 151:124 My 20 '43

Hidden pay rise? *Business Week* p90 My 8 '43

Industrial-injury experience in the iron and steel industry, 1941. F. S. McElroy and H. J. Butler. *Monthly Labor R* 55:1191-9 D '42

Jobs, labor's first postwar aim; manpower stabilization in U.S. steel co. plants. J. A. Stephens. *il Steel* 113:158-9+ O 11 '43

Labor shortage eased by women taking many heavy jobs in mills. *il Steel* 112:51-2 My 10 '43

Steel advisory committee holds WMC hours regulation confusing. *Steel* 112:72+ Je 7 '43

Steel industry employment figures complicated by high turnover, absences. *Iron Age* 151:102-3 My 13 '43

Steel union given consultative rights in hiring and firing. *Steel* 112:72 Je 7 '43

Steel union to have voice in hiring, firing, on 6-day week basis. *Comm & Fin Chr* 157:2086 Je 3 '43

Steelmakers approve 48 hour week; hope for modifications. *il Steel* 112:70 My 17 '43

Use of manning tables in steel outlined at production conference. *Iron Age* 151:129 My 13 '43

Wages outrun living costs. *Steel* 113:59-60 Ar 23 '43

WPB group arrails WMC steel order. *Comm & Fin Chr* 157:2281 Je 17 '43

STEEL workers—Continued

- Why 48 hours? steel industry not convinced longer work-week is necessary. *Business Week* p88+ J1 31 '43
- Wildcat tamer? army and navy at Gary uses personal wire, eloquence, and individual appeal to strikers. *Business Week* p98+ Je 12 '43
- Women in steel mills. *Iron Age* 151:75 My 6 '43
- Women workers meet heavy duty requirements of Buffalo steel mills. *Iron Age* 151:152-3 My 20 '43

See also United steelworkers of America

Canada

- Canadian steel strike. *Economist* 144:298-9 Mr 6 '43
- Canadian steel strike settled but results prove that wage increase is unsatisfactory to all. K. R. Wilson. *Inland Ptr* 110:64-5 Mr '43
- Ottawa's deal; steel strike compromise may upset the anti-inflation program. *Business Week* p32+ Ja 30 '43
- Present negotiations to settle steel wage dispute threaten Canadian wage-and-price freeze. K. R. Wilson. *Inland Ptr* 110:55-6 F '43

STEEL works

- Association of iron and steel engineers annual meeting, Chicago; abstract of papers. *Steel* 113:102-4 O 18 '43
- Federal steel; giant steel mill at Provo, Utah. *il Arch Forum* 79:43 S '43
- First steel poured at new Homestead Works expansion. *Steel* 112:83 Je 21 '43
- Future of new steel plant in West dependent upon period of adjustment, say observers in Utah. *il Iron Age* 152:85-6 S 23 '43
- Geneva works to operate by year's end. *il Steel* 112:94-5 Je 7 '43
- More steel soon; new mill at Geneva, Utah. *Business Week* p82+ Ag 28 '43
- New pattern for a steel foundry; plant group for American steel foundries company. *il Arch Rec* 94:62-7 O '43
- Precedent unsaluted at Kaiser steelworks; Fontana plant. J. D. Knox. *il maps Steel* 113:72-5+ S 27 '43
- Steel mills using household scrap rapidly as possible. R. W. Wolcott. *Steel* 111:105 D 7 '42
- Steel to be made at Kaiser Fontana plant early in May; with layout plans. *Blast F & Steel Pl* 31:sup38+ Ap '43

See also

- | | |
|----------------|------------------|
| Blast furnaces | Steel metallurgy |
| Foundries | Steel workers |
| Rolling mills | |

Accidents

- Steel mills' accident prevention record equals that of 1940-41. *Steel* 111:37 D 21 '42

Costs

- Builds welded blast furnace in eight months; riveting and welding costs compared. R. F. Fey. *il diags Steel* 113:144-50+ S 20 '43

Electric equipment

- Electrical developments in the steel industry during 1942. F. Mohler. *il Blast F & Steel Pl* 31:76-80 Ja '43; Same cond. *Steel* 112:98+ F 1 '43
- Electricity is prime mover in steel mill; Fontana plant of Kaiser co. *il Elec West* 91:37-40 J1 '43
- Rectifiers for steel mills; abstract. A. D. Howry. *Metals & Alloys* 18:836+ O '43

Employees

See Steel workers

Equipment

- Brazil will make steel in a Brazilian plant from Brazilian minerals. C. Longenecker. *il plan Blast F & Steel Pl* 31:1129-40 O '43
- Compressed air in the steel mill; with flow chart of steel making. *il Comp Air M* 48:7043-4 My '43
- Counting devices find wide use in steel industry. S. H. Fuller. *il Steel* 113:106, 108+ Ag 16 '43
- Kaiser's plant begins initial operation. *il Steel* 112:76-8+ Ja 18 '43

- Modern sintering plant handles fine ores and fine dust; Youngstown sheet & tube co. *il Steel* 112:102, 105+ Mr 1 '43
- Modern weight control in steel mills; use of scales of blast furnaces, open-hearth shops and rolling mills. *il Steel* 113:92-4+ O 25 '43

- Oil handling accomplished efficiently by specially designed system; Union drawn steel division of Republic steel corp. *il plan Steel* 111:71, 73 N 30; 132, 135+ D 7 '42

- Review of basic open-hearth practice at an Australian plant. R. L. Knight. *diags Blast F & Steel Pl* 31:1012-16, 1148-51, 1190 S-O '43

- Steel for a western empire; equipment and steam plant, Kaiser company's Fontana plant. S. A. Tucker. *il Power* 87:720-2 N '43
- Steel making receives electronic science with open arms. O. H. Caldwell. *Sci Am* 168:60-1 F '43

- Three-mile conveyor aids test work; Bethlehem steel company spectrographic laboratory, connected by conveyor systems to open hearth and electric furnace units. W. Barnett. *il Steel* 112:34+ Je 28 '43
- Utilizing exhaust steam at Cast armor plant; plant supplies steam for compressed air requirements, low-pressure process and heating. P. Preuthun and P. N. Choporis. *il diag Power Pl Eng* 47:62-5 N '43

See also

- Blast furnaces

Fuel

- Beehive coke industry revived. J. A. Kelley. *il map Min Cong J* 29:22-5 S '43
- Beehive coke production. S. Weiss. *Blast F & Steel Pl* 31:1028-9 S '43
- Coking coals and their importance in winning the war. H. M. Chapman. *il Blast F & Steel Pl* 30:1378-9 D '42
- Desirability of removing sulphur from gaseous fuels for heating ferrous metal. A. Preece. *Engineering* 155:405-6 My 21 '43
- Gas at the new Kaiser company steel plant at Fontana, California. F. A. Herr. *il Am Gas J* 159:11-13+ S '43
- Oklahoma supplies coking coals for new Texas blast furnaces. J. G. Puterbaugh. *map Steel* 113:264+ O 11 '43

Heating and ventilation

- Ventilation for steel mill buildings. G. E. Wallin. *il diags Steel* 112:102+ My 10; 120-2+ My 17; 91-2, 94 My 24 '43

Lighting

- Engineered seeing for the modern steel mill. W. H. Kahler. *il diags Steel* 113:90-1, 93-4 S 27 '43
- Light for a steel plant. *il Elec West* 90:82 Ap '43

Management

- Development of research and quality control in a modern steel mill. L. F. Reinartz. *il diags Blast F & Steel Pl* 31:409-18, 522-8+ Ap-My '43

Power

- Automatic combustion control for steel plant boilers; firing with blast furnace gas with coal as auxiliary fuel. M. J. Boho. *il plan Blast F & Steel Pl* 31:430, 432-4, 447-8 Ap '43
- Elimination of carry-over under steel-mill operating conditions. H. M. Rivers and W. P. Hill. *diags A S M E Trans* 65:149-54 Ap '43; Same cond. *Blast F & Steel Pl* 30:1151-4 O '42; Discussion. *A S M E Trans* 65:154-8 Ap '43
- Geneva steel plant will generate own power. *il Elec West* 91:86+ Ag '43
- Modern boilers for steel-mill plants; designed to burn blast-furnace gas and supplementary fuels efficiently. M. H. Kuhner. *diags Power* 87:650-7 O '43
- Power engineers find new means for boosting steam output. J. G. Coutant. *il diag Blast F & Steel Pl* 31:126, 128-9, 148-9, 152-3 Ja '43
- Power for the new Geneva, Utah, steel mill. *il Power Pl Eng* 47:110+ J1 '43

STEEL works—Continued

Safety measures

Competition is tough; Wheeling Steel establishes new safety records while converting for war. C. Fish. *il* Nat Safety N 48:18-19-L S '43
 Safeguard women war workers in two steel works. *il* Safety Eng 86:10-12 Ag '43

Australia

Review of basic open-hearth practice at an Australian plant. R. L. Knight. *diags* Blast F & Steel Pl 31:1012-16, 1148-51, 1190 S-O '43

Brazil

Brazil will make steel in a Brazilian plant from Brazilian minerals. C. Longenecker. *il* plan Blast F & Steel Pl 31:1139-40 O '43
 Brazilian steel project pushed; Volta Redonda steel plant. M. Soares E Silva. *il* Steel 113: 88-9 N 8 '43

California

Kaiser Fontana plant pours first steel ever made on Coast. *il* Iron Age 151:97 My 20 '43
 Steel for a western empire; equipment and steam plant, Kaiser company's Fontana plant. S. A. Tucker. *il* Power 87:720-2 N '43

Gary, Indiana

Women work effectively in many occupations in Gary steel mills. *il* Steel 112:65-6 Mr 29 '43

Italy

Steel plants of Italy. Iron Age 152:96-7 JI 22 '43

Mexico

Moves blast furnace to Mexico; Mississippi Valley iron company. R. R. Hetz. *il* Steel 112:98-100+ Je 28 '43

South Africa

Steel-making expansion in South Africa. *il* Engineer 175:157-9 F 19 '43
 Vanderbil steel works, Transvaal. Engineer 176:9 JI 2 '43; Same *abr.* Blast F & Steel Pl 31:808+ JI '43

Texas

Steel pot boils; Texas wants its integrated mill at Daingerfield, not just a blast furnace. Business Week p22+ O 16 '43

Turkey

Karabuk steel symbolizes Turkey's economic advance. For Comm W 12:36 S 4 '43

STEELE, J. C., and sons

J. C. Steele & sons. *por*s Am Cer Soc Bul 22:109-10 Ap 15 '43

STEEL ROCK iron mines, Ltd., Toronto, Ont.

Securities offered. Comm & Fin Chr 157: 1276-7 Ap 5 '43
 Steel Rock. *il* Fortune 28:114-15 JI '43
 Steel Rock lake, Canada's first big iron mine. H. C. Rickaby. *il* *diags* map Min & Met 24:436-9 O '43
 Steel Rock; roads, bridges, earth and rock moving, pumping—then an iron mine. *il* map Roads & Bridges 81:42-3 S '43

STEELPROCK lake, Ontario

Iron from a lake bed. C. H. Vivian. *il* maps Comp Air M 48:7002-5 Ap '43
 Steel Rock. *il* Fortune 28:114-15 JI '43
 Steel Rock; drain lake to expose ore body. *il* map Steel 113:48-9 S 27 '43

STEERING

Steering experiments. R. W. L. Gawn. *diags* Engineer 176:97-8, 116-18, 135-6, 145-7, 175-6 JI 30-Ag 27 '43; Discussion. Engineering 155:394, 493-4 My 14-21 '43

STEERING gear

Steering gear; hydraulic type. R. C. Lamond. *il* *diag* Marine Eng 48:174-7 F '43

See also

Motor trucks—Steering gear

STEFFEN'S waste. See Sugar factories—Waste

STEJNEGER, Leonhard, 1851-1943

Sketch. P. Bartsch. *bibliog* Science 98:51-4 JI 16 '43

STELLITE

Hard-facing hot trimming dies. *il* *diags* Am Mach 87:98-100 S 16 '43

STEMMING. See Blasting

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STENCILS and stencil cutting

Tools for marking overseas shipments. *il* Mod Packaging 17:70-3+ N '43

STEPHENSON, George, 1781-1848

Institution of mechanical engineers and George Stephenson. *por* Engineer 174:519 D 25 '42; Engineering 154:514, 515 D 25 '42

Portrait. Inst Mech Eng J & Proc 148:front Ja '43

STEPS, Motor bus. See Motor buses—Steps

STEREOCHEMISTRY

Heterocyclic nitrogen compounds and the stereochemistry of tervalent nitrogen. H. H. Hatt and E. F. H. Stephenson. Am Chem Soc J 65:1785-6 S '43

Malonic ester synthesis and Walden inversion. W. E. Grigsby and others. *bibliog* Am Chem Soc J 64:2606-10 N '42

Stereochemical relationships of the 9:10-oxidostearic acids and the 9:10-dihydroxy-stearic acids. D. Atherton and T. P. Hilditch. Chem Soc J p204-8 My '43
 Stereochemistry of coordination number eight. L. E. Marchi, W. C. Fernelius and J. P. McReynolds. Am Chem Soc J 65: 329-33 Mr '43

Stereochemistry of coordination number eight; optical activity of potassium tetraoxalato-uranium-IV. L. E. Marchi and J. P. McReynolds. *bibliog* Am Chem Soc J 65:333-5 Mr '43

Stereochemistry of labile compounds. W. H. Mills. Chem Soc J p194-9 Ap '43

Stereochemistry of square complexes. D. P. Mellor. *diags* Chem R 33:137-83 *bibliog*(155 references, p180-3) O '43

Structure of fibrous proteins. M. L. Huggins. *bibliog*(60 references) Chem R 32: 195-218 Ap '43

Studies in stereochemistry; steric strains as a factor in the relative stability of some ethers of boron fluoride. H. C. Brown and R. M. Adams. *bibliog* *diag* Am Chem Soc J 64:2557-63 N '42

Studies in stereochemistry; the preparation of *d*-1-deutero-2-methylbutane and the study of its optical rotation. H. C. Brown and C. Groot. Am Chem Soc J 64:2563-6 N '42

See also

Atoms
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 Isomerism
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Molecular rearrange-
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STEREISOMERISM. See Isomerism

STEREOPHOTOGRAPHY. See Photography, Stereoscopic

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Homemade stereoscope for color slides. J. Wright. *il* Am Phot 37:26-7 JI '43

STEREOSCOPIC photography. See Photography, Stereoscopic

STERIC hindrance

Grignard reactions; enolization of aliphatic hindered carbonyl compounds. F. C. Whitmore and C. E. Lewis. Am Chem Soc J 64: 2964-6 D '42

Mechanism of the reaction between hindered carbonyl compounds and the Grignard reagent. R. T. Arnold and R. W. Liggett. *bibliog* Am Chem Soc J 64:2875-7 D '42

Quinoxaline formation and the ortho effect. R. C. Fuson and others. *bibliog* Am Chem Soc J 65:1028-9 Je '43

Steric factors in quaternary salt formation. W. G. Brown and S. Fried. Am Chem Soc J 65:1841-5 O '43

Studies in stereochemistry; steric strains as a factor in the relative stability of some ethers of boron fluoride. H. C. Brown and R. M. Adams. *bibliog* *diag* Am Chem Soc J 64:2557-63 N '42

Vinyl alcohols; hindrance at the β -carbon atom. R. C. Fuson and Q. F. Soper. *bibliog* Am Chem Soc J 65:915-17 My '43

STERILAMPS. See Ultraviolet rays—Lamps

STERILIZATION

Small-tube heat exchangers offer many advantages. J. W. Courtis. *bibliog* *il* Food Ind 15:58-60+ S '43

Soft drink sterilisation; Sterilamp installation for bottle cleaning and syrup protection; Pepsi-Cola company. *il* Electrician 131:294 S 24 '43

See also
Disinfection and disinfectants

STERILIZERS, Electric

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Pasteurizers, Electric

STERLING drug, inc.

Fletcher's Castoria production resumed. Oil Paint & Drug Rep 143:7+ J 28 '43

Plans merger of subsidiaries. *Comm & Fin* Chr 156:2311 D 28 '42

Resumes production of Castoria. *Comm & Fin* Chr 157:2458 Je 28 '43

Sterling drug absorbs sixteen subsidiaries. Oil Paint & Drug Rep 142:3+ D 28 '42

Two subsidiaries merge. *Comm & Fin* Chr 157:174 Ja 11 '43

Ultimate test; Castoria ordered off market; win government praise. *Business Week* p98+ My 15 '43

STERN tubes. See Ships—Stern tubes**STERNBERG, Charles Hazelius, 1850-1943**

Sketch. C. M. Sternberg and R. S. Lull. *Am J Sci* 241:647-8 O '43

STERIODS

Acy migration in steroids. V. A. Petrow, O. Rosenheim and W. W. Starling. *Chem Soc J* p135-9 Mr '43

Steroids with double bonds between quaternary carbon atoms; the oxidation of α -ergosteronyl acetate. H. E. Stavely and G. N. Bollenback. *bibliog* *Am Chem Soc J* 65:1285-9 JI '43

Steroids with double bonds between quaternary carbon atoms; the structure of α -dihydroergosterol. H. E. Stavely and G. N. Bollenback. *bibliog* *Am Chem Soc J* 65:1290-4 JI '43

Steroids with double bonds between quaternary carbon atoms; the structure of α -spinasterol. H. E. Stavely and G. N. Bollenback. *bibliog* *Am Chem Soc J* 65:1600-3 Ag '43

STEROLS

See also
Casterol
Cholesterol

STETHOSCOPE

Acoustic stethoscope detects sounds within the body heretofore unheard. *il* Sci Am 169:131-2 S '43

Data on new acoustic stethoscope. H. F. Olson. *diags* *Electronics* 16:184+ Ag '43

Electrical amplifying stethoscope and phonoelectrocardiograph. G. E. Donovan. *bibliog* *il* *diags* *Inst E E J* 90 pt 3:38-49 Je '43; *Abstract. Electrician* 129:638 D 11 '42; *Discussion. Inst E E J* 90 pt 3:49-52, 149-50 Je, S '43

STEVENS, John Frank, 1853-1943

Sketch. *por* *Civil Eng* 13:341 JI '43; *Eng N* 130:851 Je 10 '43

STEVENS hotel, Chicago. See Chicago—Hotels**STEWART-WARNER corporation**

Annual report. *Comm & Fin* Chr 157:1189 Mr 29 '43

Low-priced stocks for large percentage gains. *Mag of Wall St* 71:635 Mr 20 '43

Stewart-Warner sells for net quick assets. H. Lawrence. *Barron's* 23:1 My 10 '43

Stewart Warner sets up liberal reserves. H. Lawrence. *Barron's* 23:5 Mr 22 '43

STIFFNESS tester

Tensiometer stiffness test for elastomers at low temperatures. B. K. Green, R. G. Chollar and G. J. Wilson. *il* *diags* *Rubber Age* 53:319-27 JI '43

STIGMASTERYL methyl ether

Oxidative degradation of *t*-stigmasteryl methyl ether. B. Riegel, E. W. Meyer and J. Beiswanger. *Am Chem Soc J* 65:325-8 Mr '43

STILBENE

Bromination of diphenylalkanes and the preparation of some stilbene derivatives; β -diphenyl-*n*-butane. H. J. Barber, R. Slack and A. M. Woolman. *Chem Soc J* p99-101 Mr '43

Bromination of diphenylalkanes and the preparation of some stilbene derivatives; α -diphenylethane. S. Bance, H. J. Barber and A. M. Woolman. *Chem Soc J* p1-4 Ja '43

Optical crystallographic studies with the polarizing microscope; axial dispersion with change of sign; other dispersion measurements. W. M. D. Bryant. *bibliog* *il* *Am Chem Soc J* 65:96-102 Ja '43

STILBENE acetic acid

Synthesis of derivatives of diphenylethane related to materials occurring naturally; stilbene-2-acetic acid. S. Natelson and S. P. Gottfried. *Am Chem Soc J* 64:2962-8 D '42

STILBESTROLS

Synthesis of polyenes; a new synthesis of diethylstilbestrol. M. S. Kharasch and M. Kleiman. *bibliog* *Am Chem Soc J* 65:11-15 Ja '43

STILLWATER, Minnesota

Keep customers; Stillwater war industries, inc. *il* *Business Week* p32+ N 6 '43

STIRRERS

See also
Agitators

STOCK bonus. See Bonus system (for executives)

STOCK control. See Inventories; Retail trade—Stock; Stores systems

STOCK dividends. See Dividends

STOCK exchange

At what price should your stocks sell? L. O. Hooper. *Mag of Wall St* 71:216-18+ D 12 '42

Battle for investment survival; fallacies in the current market. G. M. Loeb. *Barron's* 23:7 S 13 '43

Boom in stocks; its origins and what may become of it. H. J. Nelson. *Barron's* 23:3 Ap 19 '43

British view; stock market rise held down by post-war uncertainties. D. Tyerman. *Barron's* 23:1+ Ag 16 '43

Capital gains tax and the stock market. H. S. Koster. *Trusts & Estates* 77:138-9 Ag '43

First quarter market outlook. A. T. Miller. *Mag of Wall St* 71:396-7+ Ja 23 '43

Has stock market volume touched bottom? B. Ravits. *Barron's* 23:3 Je 14 '43

Hints from the London stock market. B. Ravits. *Barron's* 23:1+ F 22 '43

How securities profits can be preserved. A. A. Mol. *Barron's* 22:8-9 N 30 '42

How to reduce your taxes; security sales and switches. L. O. Hooper. *Mag of Wall St* 71:163-5+ N 28 '42

Idle money in the stock market; comparison of inflation bases in United States and Europe. L. A. Hahn. *Trusts & Estates* 76:455-6, 458-9 My '43

Is the market high? *Comm & Fin* Chr 157:1955+ My 27 '43

It's up—finally. *Business Week* p62+ D 26 '42

Length of the war as a market factor. H. Lawrence. *Barron's* 22:13 N 16 '42

Making money in stock trading. *Barron's* 22:7-8 O 26; 9 N 2; 9 N 9; 20 N 16; 20 N 23; 9 N 30; 8 D 7; 7 D 14; 7-8 D 21; 7 D 28 '42; 23:20 Ja 4; 44 Ja 11; 8 F 1; 7 F 8 '43

Market and the prospect of peace; stock prices kept on advancing after last war. A. A. Mol. *Barron's* 23:1 Ag 16 '43

More secondary offerings than special offerings shields study shows. *Comm & Fin* Chr 157:662 F 18 '43

NASD to take SEC unlisted decisions to court; Association opposes new requests. *Comm & Fin* Chr 158:591+ Ag 12 '43

Over-the-counter trading on the national securities exchanges. V. Hughes. *Comm & Fin* Chr 158:297+ JI 22 '43

SEC rule would make over-the-counter issues eligible for unlisted trading on exchanges. F. Dunne. *Comm & Fin* Chr 158:293 JI 22 '43

STOCK exchange—Continued

Security markets fail to stage demonstration to celebrate good news all along line. F. L. Brokaw. Weekly Underw 147:1119+ N 14 '42

Sees upward pattern of market now broken. G. G. Munn. Comm & Fin Chr 158:403 JI 29 '43

Stock market outlook and investment policy. W. F. Edwards. Comm & Fin Chr 158:401+ JI 29 '43

Stock market prospects for 1943. H. J. Nelson. Barron's 23:35+ Ja 11 '43

Successful investing formulas; case for automatic timing. L. Tomlinson. Barron's 23:3+ My 24; 9 My 31; 7 Je 7; 6+ Je 14; 6+ Je 21; 9 JI 5; 8 JI 19; 4+ Ag 2 '43

Successful investing formulas; volatility a consideration in selection of individual stock issues. L. Tomlinson. Barron's 23:6 Ag 30 '43

Unlisted rumpus; stock exchanges move to cut in on over-the-counter market's dealings. Business Week p107-8 Ag 14 '43

Urges abolition of over-the-counter markets. H. R. Taylor. Comm & Fin Chr 158:298+ JI 22 '43; Reply. 158:499+ Ag 5 '43

Urges elimination of restrictions on exchange trading privileges. H. R. Taylor. Comm & Fin Chr 158:2+ JI 1 '43

Vitality of market augurs well but urges caution. E. Schram. Comm & Fin Chr 157:905+ Mr 11 '43

Wall Street's cash-and-carry traders; bull market rolling along without benefit of margins. O. J. Gingold. Barron's 23:3 Mr 1 '43

War, inflation and the stock market. Comm & Fin Chr 158:498+ Ag 5 '43

Watch the world go by; bull markets in Europe despite Nazi occupation. G. Riviere. Mag of Wall St 72:137+ My 15 '43

What German stock market control means for us. B. Ravits. Barron's 23:11 Ja 4 '43

What's ahead for the stock market? bearish signal by moving-average indicator. H. M. Gartley. Barron's 23:6 Ag 9 '43; Correction. 23:7 Ag 16 '43

Wisest market policy now. A. T. Miller. Mag of Wall St 71:326-7+ Ja 9 '43 [cont bi-weekly]

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<i>also names of</i>	<i>exchanges, e.g.</i>
Boston stock exchange	New York curb exchange
Chicago stock exchange	New York stock exchange
London stock exchange	Philadelphia stock exchange
Montreal stock exchange	

Law

Duties of a seller. Economist 143:739 D 12 '42

Law for the layman; diary of the disputed stock. M. L. Hayward. Barron's 23:30 Ja 11 '43

See also

Brokers—Law

Quotations

See Stocks—Prices

Regulation

Proposed rule X-3A12-4. Comm & Fin Chr 158:401+ JI 29 '43

Securities acts harmful to regional exchanges. H. Taylor. Comm & Fin Chr 157:1376 Ap 15 '43

SEC denies purported intention to close stock exchanges. Comm & Fin Chr 157:561+ F 11 '43

Securities laws should be changed now to remove unnecessary hindrances. E. Schram. Comm & Fin Chr 157:1872 My 20 '43

Stock market control, SEC report. Bankers M 146:248-9 Mr '43

See also

Securities and exchange commission	Stocks—Margin buying
------------------------------------	----------------------

Special offerings

Block sales of securities; liquidation through new secondary market and special offerings. E. Barry. Trusts & Estates 76:165-6, 168-9 F '43

NYSE amended special offering plan declared effective by SEC. Comm & Fin Chr 158:320 JI 22 '43

NYSE governors favor revising procedure on special offerings and secondary distributions. Comm & Fin Chr 157:1383 Ap 15 '43

STOCK liquidation agreements

Business and life insurance trusts; considerations from drafting and taxation angles. J. McCormack. Trusts & Estates 75:573-9 D '42

Current problems in business purchase plans. Trusts & Estates 76:242-3 Mr '43

Profit sharing-stock purchase plan. H. S. Koster. Trusts & Estates 77:35-6 JI '43

See also Insurance, Business—Stock liquidation agreements

STOCK transfer tax

Changes in payment of NY stock transfer taxes by stamps. Comm & Fin Chr 157:2170 Je 10 '43

New method for paying NY stock transfer tax. Comm & Fin Chr 158:407 JI 29 '43

N.Y. repeals law requiring stamps on stock transfers. Comm & Fin Chr 157:1682 My 6 '43

STANY fight to amend Cole ruling on incoming drafts proves successful. Comm & Fin Chr 157:1293 Ap 8 '43

Stock transfer by federal agency tax exempt. Comm & Fin Chr 157:182 Ja 14 '43

STOCKHOLDERS

Defends stockholders right to be heard. L. Criscuolo. Comm & Fin Chr 157:2366 Je 24 '43

Inarticulate stockholder; Wall Street responsibility to encourage participation in corporate affairs. O. J. Gingold. Barron's 22:3 Ap 26 '43

Ownership and control. Economist 145:471 O 2 '43

Plea for the stockholder; dangers from general application of the SEC Jacksonville Gas formula. H. H. Frank. Pub Util 30:781-7 D 3 '42

Rights of preferred stockholders. M. L. Hayward. Barron's 23:4 My 17 '43

Small investor called forgotten man. M. Griswold. Comm & Fin Chr 158:924 S 2 '43

<i>See also</i>	
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STOCKHOLDERS, Reports to. See Corporations—Reports and yearbooks

STOCKPILING. See Minerals—Stockpiling

STOCKS

Advantages of buying for capital appreciation today. L. O. Hooper. Mag of Wall St 71:568-9+ Mr 6 '43

Another look at American Rolling Mill, Homestake Mining, Jewel Tea, National Gypsum, Westaco Chlorine. Mag of Wall St 71:298-300 D 26 '42

Another look at American Tobacco; Good-year Tire; Commercial Credit; National dairy products. Mag of Wall St 72:638+ S 18 '43

Another look at American type foundries; Ingersoll-Rand; Lorillard; U.S. Industrial Alcohol; Youngstown Sheet & Tube. Mag of Wall St 71:428-9+ Ja 23 '43

Another look at Barber Asphalt, Oliver farm equipment company, Simmons company, United merchants & manufacturers, inc., U.S. Plywood. Mag of Wall St 72:194-5+ My 29 '43

Another look at Electric storage battery co., International telephone & telegraph corp., Purity bakeries corp., South Porto Rico sugar co., Tennessee corp. Mag of Wall St 71:173+ N 28 '42

Another look at Inspiration Copper, Oliver farm equipment, J. C. Penney, Remington Rand, United Drug. Mag of Wall St 71:356-8+ Ja 9 '43

STOCKS—Continued

Another look at previous recommendations among low-priced stocks. *Il* Mag of Wall St 72:362-4+ *Jl* 10 '43

Another look at Socony-Vacuum, Ohio Oil, Youngstown Sheet & Tube, U.S. Plywood, Ingersoll-Rand, Barber Asphalt. *Mag* of Wall St 72:693+ *O* 2 '43

Another look at Socony-Vacuum, Warner Bros., United drug. *Mag* of Wall St 72:96+ *My* 1 '43

Another look at Thompson products, Continental Steel, Inspiration Copper, United merchants & manufacturers, Bond stores, General Cable, General Cigar, Wheeling Steel, J. C. Penney, Alpha Portland Cement. *Mag* of Wall St 72:473-80+ *Ag* 7 '43

Better-than-average annual reports lately published; tabulation. *Mag* of Wall St 71:707 *Ap* 3 '43

Book value increase vs. price advance; tabulation. *Mag* of Wall St 72:249 *Je* 12 '43

Boom in stocks; its origins and what may become of it. *H. J. Nelson. Barron's* 23:3 *Ap* 19 '43

Comment on stock in the news. *R. Colston. Mag* of Wall St 72:189+ *My* 29 '43

Companies favored by highly liquid positions. *J. S. Williams. Mag* of Wall St 72:626-7+ *S* 18 '43

Companies to emerge stronger from the war than before. *L. O. Hooper. Mag* of Wall St 71:656-8 *Mr* 20 '43

Companies with record high earnings. *J. C. Harrington. Mag* of Wall St 71:526-7, 556 *F* 20 '43

Divergence investing; method of switching based on fluctuations in group averages. *F. R. Uhlig. Barron's* 23:6 *My* 3 '43

Divergent trends in second quarter earnings. *W. Gates. Mag* of Wall St 72:466-7, 493-4 *Ag* 7 '43

Earnings now what they seem; 1943 first half earnings compared with 1942. *Barron's* 23: 9 *Ag* 2; 16 *Ag* 9; 9 *Ag* 16; 2 *Ag* 23 '43

50 stocks investment companies prefer. *L. Tomlinson. Barron's* 23:3 *F* 22 '43

First quarter earnings disclose divergent trends. *W. Gates. Mag* of Wall St 72:69-71+, 129-31 *My* 1-15 '43

Five stocks in a strategic position; Fairchild aviation corp., Fansteel metallurgical corp., Grehound corp., Philco corp., Sharp & Dohme, Inc. *G. L. Merton. Mag* of Wall St 71:488-9+ *F* 6 '43

Growth companies and their future. *H. F. Travis. Il* *Mag* of Wall St 72:126-8+ *My* 15 '43

How to evaluate management in common stock selection. *L. O. Hooper. Mag* of Wall St 71:518-19+ *F* 20 '43

Illustrating selective market trends; 20 stocks which have advanced during past 12 months and 20 stocks which have declined; tabulation. *Mag* of Wall St 71:361 *Ja* 9 '43

Investment information, please; will there be a major revival in common stock investment and speculation? *Mag* of Wall St 71:286-8+ *D* 26 '42

Low priced dividend-payers; tabulation. *Mag* of Wall St 71:487 *F* 6 '43

Mid-year 1943 re-appraisals of earnings and dividend forecasts. *Il* *Mag* of Wall St 72: 405-17+, 463-75+, 521-9+, 571-81+ *Jl* 24-S 4 '43

1943 special re-appraisals of earnings and dividend forecasts. *Mag* of Wall St 71:471-84+, 533-43, 583-97+, 637-50+ *F* 6-Mr 20 '43

Per share earnings and tax rates; tabulation. *Mag* of Wall St 72:143 *My* 15 '43

Percentage that stock groups are still under their 1937 peak; chart. *Mag* of Wall St 72: 7 *Ap* 17 '43

Re-appraisal of companies in the news; American air lines, Celotex corporation, Climax Molybdenum, Thompson Products, White motors co., Borg-Warner co. *Mag* of Wall St 72:33-5+ *Ap* 17 '43

Recent earnings reported for a dozen peace issues; tabulation. *Mag* of Wall St 72:193 *My* 29 '43

Search for post-war growth stocks. *H. Lawrence. Barron's* 22:16 *D* 28 '42

Second quarter reports in light of today's situation. *W. Gates. Mag* of Wall St 72: 516-17, 549 *Ag* 21 '43

Secondary stocks vs. leaders. *R. Colston. Mag* of Wall St 72:421+ *Jl* 24 '43

Securities disturbing investors; Anaconda copper mining company, Armour & company, common, Postal telegraph, inc. preferred. *J. S. Williams. Mag* of Wall St 71: 359, 376-7 *Ja* 9 '43

Securities disturbing investors; Boeing Airplane; Timken Detroit Axle; Market Street Railway prior preferred. *J. S. Williams. Mag* of Wall St 72:586+ *S* 4 '43

Securities disturbing investors; Childs company, Motor Products, American Woolen. *Mag* of Wall St 72:690+ *O* 2 '43

Securities disturbing investors; New York, Chicago & St. Louis; Niagara Hudson Power. *J. S. Williams. Mag* of Wall St 71:529+ *F* 20 '43

Securities disturbing investors; Newport News shipbuilding & dry dock company, United gas improvement company. *J. S. Williams. Mag* of Wall St 71:233+ *D* 12 '42

Securities disturbing investors; Savage arms corp., A. Hollander & son, Chicago & eastern Illinois railroad. *J. S. Williams. Mag* of Wall St 71:168-9 *N* 28 '42

Securities disturbing investors; Standard oil of Kentucky, Collins & Aikman. *J. S. Williams. Mag* of Wall St 71:600+ *Mr* 6 '43

Seven war stocks with good peace prospects. *Il* *Mag* of Wall St 72:418-20 *Jl* 24 '43

Six companies favored by research. *Mag* of Wall St 73:32-4 *O* 16 '43

Six companies on the upgrade; thumbnail stock appraisals. *Mag* of Wall St 72:631-3 *S* 18 '43

Six companies with outstanding futures; thumbnail stock appraisals. *Mag* of Wall St 72:365-7 *Jl* 10 '43

Six low-priced stocks for capital building. *Mag* of Wall St 71:240-2 *D* 12 '42

Six peace stocks with high earnings now. *Mag* of Wall St 71:422-4 *Ja* 23 '43

Six profit situations with good dividend yield; thumbnail stock appraisals. *Mag* of Wall St 72:90-2 *My* 1 '43

Six small companies with large earnings. *Mag* of Wall St 72:196-8 *My* 29 '43

Six sound low-price stocks for appreciation; thumbnail stock appraisals. *Mag* of Wall St 72:309-11 *Je* 26 '43

Six sound stocks offering good yields. *Mag* of Wall St 72:261-3 *Je* 12 '43

Six stocks with good peace prospects. *Mag* of Wall St 71:289-31 *D* 26 '42

Six stocks with three-way profit prospects. *Mag* of Wall St 71:708-10+ *Ap* 3 '43

Six strategic habit stocks; United States Tobacco, United States playing card, Life-Savers, William Wrigley Jr. co, National Distillers, Coca-Cola. *J. C. Clifford. Mag* of Wall St 72:530-1, 542 *Ag* 21 '43

Some outstanding performers in 1942; tabulation. *Mag* of Wall St 71:295 *D* 26 '42

Stock market prospects for 1943. *H. J. Nelson. Barron's* 23:35+ *Ja* 11 '43

Stocks at new highs since 1938; tabulation. *Mag* of Wall St 71:599 *Mr* 6 '43

Stocks in line for higher dividends. *O. Ely. Mag* of Wall St 71:166-7+ *N* 28 '42

Stocks in line for year-end dividends. *J. C. Clifford. Mag* of Wall St 73:14-15+ *O* 16 '43

Stocks now selling above their 1936-1937 highs; tabulation of 25 stocks. *L. O. Hooper. Mag* of Wall St 72:230-1 *Je* 12 '43

Stocks which have receded less than 10 percent from their 1943 high and stocks which have receded 25 percent; tabulation. *Mag* of Wall St 72:533 *Ag* 21 '43

Strategic investment program for 1943. *J. S. Williams. Mag* of Wall St 71:274-6+ *D* 26 '42

Ten market leaders for 1943. *Mag* of Wall St 71:342-4, 372 *Ja* 9 '43

Ten selected peace-time leaders. *Mag* of Wall St 72:507-9, 550+ *Ag* 21 '43

Ten selected stocks for market opportunity; thumbnail stock appraisals. *Mag* of Wall St 72:683-7 *O* 2 '43

Twenty backward stocks; tabulation. *Mag* of Wall St 72:477 *Ag* 7 '43

20 low-priced stocks for large percentage gains. *Mag* of Wall St 71:633-6, 671-2 *Mr* 20 '43

20 war-active companies financially ready for peace. *J. C. Clifford. Mag* of Wall St 72:454-5+ *Ag* 7 '43

STOCKS—Continued

Ups and downs in recent earnings reports; tabulation. Mag of Wall St 72:305 Je 26 '43
 What is a war baby? Comm & Fin Chr 158: 1401 O 7 '43
 What is the wisest investment policy now? L. Stern. Mag of Wall St 72:9-11+ Ap 17 '43
 Which companies are building up equity values? J. S. Williams. Mag of Wall St 72:176-7+ My 29 '43
 Which stock groups will lead? which lag? F. K. Dodge. Mag of Wall St 72:85-7, 110 My 1 '43
 Wisest investment policy now; new war factors in the market outlook and changed character of demand for common stocks. A. T. Miller. Mag of Wall St 72:166-9+ My 29 '43
 Wisest market policy now. A. T. Miller. Mag of Wall St 71:326-7+ Ja 9 '43 [cont bi-weekly]

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Airplane industry and trade—Securities	Insurance companies —Securities Investments
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also names of exchanges, e.g. New York curb exchange; New York stock exchange

Leverage

Bank stocks; leverage ratios of leading New York City bank stocks. E. A. Van Deusen. Comm & Fin Chr 157:2073+ Je 3 '43
 Leverage investing shares back in fashion. L. Tomlinson. Barron's 23:9 Mr 15 '43
 Promising leverage stocks. G. W. Mathis. Mag of Wall St 72:38-9+ Ap 17 '43
 Six stocks with high leverage. Mag of Wall St 71:177-9 N 28 '42

Margin buying

Extension of credit on unlisted securities. O. V. Van Camp. Comm & Fin Chr 158: 808-9 Ag 26 '43
 Low-priced stocks on cash basis NYSE rules. Comm & Fin Chr 157:1205 Ap 1 '43
 Wall Street's cash-and-carry traders; bull market rolling along without benefit of margins. O. J. Gingold. Barron's 23:3 Mr 1 '43
 Wrong formula; Regulation T of the Federal reserve board. I. R. Harris. Comm & Fin Chr 157:265+ Ja 21 '43

Preferred stocks

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Price-earnings ratios

At what price should your stocks sell? L. O. Hooper. Mag of Wall St 71:216-18+ D 12 '42
 How highest grade common stocks are priced; tabulation. Mag of Wall St 71: 655 Mr 20 '43
 How to evaluate common stocks today. F. K. Dodge. Mag of Wall St 72:401-3+ JI 24 '43
 Market position of peace stocks. H. Lawrence. Barron's 23:9 Ja 4 '43
 Market valuation of industrial shares; cross-section of price-earnings ratios and yields. H. Lawrence. Barron's 23:6 Mr 8 '43
 Reported earnings may be too high. H. Lawrence. Barron's 23:5 Mr 15 '43

Price indexes and averages

Few stock groups advance since mid-summer; changes in Barron's group averages. Barron's 23:3, 14 N 1 '43
 Industrial average behind all industries. Barron's 23:9 Mr 29 '43
 Magazine of Wall Street's common stock price index; seventeenth annual revision. Mag of Wall St 71:436-7+ Ja 23 '43
 Market and the prospect of peace; stock prices kept on advancing after last war. A. A. Mol. Barron's 23:1 Ag 16 '43

Price trends, 1933-1943; chart. Pub Util 31: 567 Ap 29 '43
 Sharp rise in low-priced stock index. Barron's 23:3 F 22 '43
 Stock prices, 1939-1941 average; monthly Nov. 1941-Nov. 1942; weekly Dec. 1942. Fed Res Bul '29:68 Ja '43 [cont monthly]
 Stocks; prices, 1938-1941. Survey of Cur Business 1942 Sup p85-6 [supplemented in monthly numbers]
 Wall Street bets on victory; eleven-month rise in stocks, led by peace shares. Business Week p15-16 Ap 8 '43
 What's ahead for the stock market? bearish signal by moving-average indicator. H. M. Gartley. Barron's 23:6 Ag 9 '43; Correction. 23:7 Ag 16 '43

Prices

At what price should your stocks sell? L. O. Hooper. Mag of Wall St 71:216-18+ D 12 '42
 Five-year downtrends in prices of three share groups. H. Lawrence. Barron's 23:5 My 31 '43
 Hints from the London stock market; causes of 2½-year British price rise present here. B. Ravits. Barron's 23:1+ F 22 '43
 Monthly range of prices on the New York stock exchange. Comm & Fin Chr 157:401-10 Ja 28 '43
 Over-priced growth stocks. M. D. Popovic. Comm & Fin Chr 158:1295+ S 30 '43
 Quotation sheets as evidence of market price. A. M. Metz and E. A. Kole. Comm & Fin Chr 158:100+ JI 8 '43
 Seasonal tendencies in stock price movements. Comm & Fin Chr 156:2239 D 24 '42
 Securities market price; effects of early peace talks in two world wars. Comm & Fin Chr 158:1223 S 23 '43
 Wholesale price movement and cost of living compared with stock market for war years. Comm & Fin Chr 157:1486 Ap 22 '43

Quotations

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Short selling

Making money in stock trading; importance of a familiarity with short selling. Barron's 22:7 D 14 '42

Statistics

Security markets, 1938-1941. Survey of Cur Business 1942 Sup p85-7 [supplemented in monthly numbers]

Valuation

Appraising the annual reports and balance sheets. J. C. Clifford. Mag of Wall St 71: 459-61+, 520-2+, 579-81+, 651-3+ F 6-Mr 20 '43
 Are cyclical stocks undervalued? Are stable-income stocks overvalued? L. O. Hooper. Mag of Wall St 71:354-5+ Ja 9 '43
 How to evaluate common stocks today. F. K. Dodge. Mag of Wall St 72:401-3+ JI 24 '43
 How to select bargains in preferred stocks. S. Devlin. Mag of Wall St 72:567+ S 4 '43
 Investors and break-up values. Economist 144:531-2 Ap 24 '43; Excerpts. Trusts & Estates 77:73-4 JI '43

Volatility

Successful investing formulas; volatility a consideration in selection of individual stock issues. L. Tomlinson. Barron's 23:6 Ag 30 '43

Yields

Another look at stock yields as compared with yields on bonds. J. S. Williams. Mag of Wall St 72:241+ Je 12 '43

Stocks; yields, 1938-1941. Survey of Cur Business 1942 Sup p87 [supplemented in monthly numbers]

STOCKS, Preferred

Another look at preferred stocks with arrears. H. F. Travis. Mag of Wall St 73:23+ O 16 '43

How to select bargains in preferred stocks. S. Devlin. Mag of Wall St 72:567+ S 4 '43

Nonfunding security flotations and capital structures, 1935-1937. J. B. Hubbard. R Econ Stat 25:192-201 Ag '43

STOCKS, Preferred—Continued

- Preferred stocks and bonds attractive for income; tabulation. *Mag of Wall St* 72:208 *My* 29 '43
- Preferred stocks for income and appreciation. *O. Ely. Mag of Wall St* 71:528+ *F* 20 '43
- Preferred stocks with arrears; which are most likely to pay off? *R. Colston. Mag of Wall St* 71:705+ *Ap* 3 '43
- SEC on redeeming preferred stock. *Comm & Fin Chr* 158:209 *Jl* 15 '43
- Seven bonds and preferred stocks for a 6% yield. *O. Ely. Mag of Wall St* 71:362-3+ *Ja* 9 '43
- Utility preferreds for income. *W. Andrews. Barron's* 23:7 *My* 31 '43

Convertible stocks

- Making money in stock trading; when to buy convertible securities. *Barron's* 23:20 *Ja* 4 '43

Redemption premiums

- Premiums paid on the redemption of preferred stock; Securities and exchange commission opinion. *J Account* 76:182-3 *Ag* '43

STOCKYARDS

See also

- Live stock

STODOLA, Aurel, 1859-1942

- Sketch. *por Engineering* 155:334-5 *Ap* 23 '43

STOICHIOMETRY

- Mixed solvent extraction; analytical method; application of analytical geometry. *J. H. Wiegand. bibliog Ind & Eng Chem Anal ed* 15:380-3 *Je* 15 '43

STOKELY foods, inc.

- Trusts to foods; Public utility holding co. now canning Stokely's fruits and vegetables. *Business Week* p105-6 *S* 18 '43

STOKER manufacturers' association

- Annual meeting, 24th, Lake Wawasee, Ind. June 12-13. *Dom Eng* 162:75-6 *Jl* '43

STOKERS, Mechanical

- Avoiding high stoker maintenance, retaining good combustion. *A. R. Mumford. bibliog Mech Eng* 65:119-24 *F* '43

- Bearings company of America reviews fuel records since installation of stokers. *F. A. Westbrook. il Heat & Ven* 39:34 *D* '42

- Bigwood automatic stoker. *il diag Mech Handling* 30:409-11 *S* '43

- Coal stokers for core ovens. *A. Roberts, jr. il diag Foundry* 70:75+ *D* '42

- Continuous-cleaning grate extends spreader applications. *R. L. Beers. diag Power* 86: 972 *Mid-D* '42

- Conversion from oil to coal fired steam generation. *S. I. Rottmayer. chart Heating-Piping* 15:220-4 *My* '43

- Converting to coal? stoker application to oil conversion. *H. E. Winkler. il Heating-Piping* 15:190-1 *Ap* '43

- Effect of coal sizing on efficiency and operation of mechanical stokers. *O. De Lorenzi. Blast F & Steel Pl* 31:910, 912-13, 1042, 1044-5+ *Ag-S* '43; Same cond. *diags Power Pl Eng* 47:96-7+ *Je* '43

- Enlarged slots increase stoker capacity. *G. Holman. diag Power* 87:37 *Ja* '43

- Fly ash from domestic stoker fires; abstract. *T. S. Spicer, R. G. Bowman and C. C. Wright. diag Coal Age* 48:98+ *Mr* '43

- Modern applications of overfire air. *H. C. Carroll. il diags S M E Trans* 65:73-7; Discussion. 77-86 *F* '43

- Modern stokers due to research, well designed for current demand. *T. F. J. Moffet. il Heat & Ven* 40:62-4 *Jl* '43

- Modernized firing methods in powder plant. *T. A. Marsh. il diag Power Pl Eng* 47:80-1 *Je* '43

- New coal chute that eliminates stoker-hopper segregation is easy to make; patent. *P. B. Richardson and M. R. Boye. diags Power* 87:507-9 *Ag* '43

- Oil to coal conversion; reference section. *il diags Heat & Ven* 40:44-74 *My* '43

- Overfire air performance applied to stationary plants. *H. C. Carroll. diags Power Pl Eng* 47:81-3 *N* '43

- Pneumatic spreader stokers solve conversion problems, save \$25,000; Hunt-Rankin leather co. *W. Macmichael. il diag Power* 87:598-9+ *S* '43

- Problems of conversion to coal; experience of typical companies. *H. S. Knowlton. il plans Elec W* 120:626-9 *Ag* 21 '43

- Ready reminders for stoker operators. *H. C. Linderman. Power* 87:373 *Je* '43

- Recent developments in spreader-stoker firing. *R. L. Beers. il diags Mech Eng* 64:867-71 *D* '42; Discussion. 85:440-1 *Je* '43

- Recommended dimensions of stoker-fired heaters. *Sheet Metal Worker* 34:36 *O* '43

- Ruling opens new stoker market. *Dom Eng* 162:54+ *S* '43

- 600 miles and 10,000 pounds; boiler gains efficiency by added waterwalls and new stoker; Russell-Miller milling co. *F. S. Rieder. il diags Power* 87:594-6 *S* '43

- Stoker field is wide open; production quota plans. *Dom Eng* 161:47+ *F* '43

- Stoker firing requires little attention and is dependable in operation; plant of Belden brick co. *il Brick & Clay Rec* 102:19-20 *Mr* '43

- Stokers' place in the changeover; abstract. *O. De Lorenzi. Power* 87:359b+ *My* '43

- Stokers promote wartime economies in fuel utilization. *T. F. J. Moffett. Heat & Ven* 40:38-40 *Ag* '43

- What causes grate burning? *diags Power* 87: 128-9+ *F* '43

Advertising

- Conservation theme in industrial copy isn't always easy; Combustion Engineering persevered. *il Ptr Ink* 201:46+ *N* 27 '42

Installation

- Oil to coal conversion; installing the stoker. *il diags Heat & Ven* 40:56-8+ *My* '43

Merchandizing

- Stoker sales prospects good as WPB urges rush production of big quotas. *Dom Eng* 161:43+ *Ja* '43

- Stokers, a job to be done. *W. Sormane. Dom Eng* 161:73+ *My* '43

- Stokers; directing the sales effort. *C. A. Potts. Dom Eng* 161:76+ *My* '43

- Stokers, something to sell. *il Dom Eng* 161: 48-9 *Mr* '43

Statistics

- Mechanical stokers, sales, 1938-1941. Survey of Cur Business 1942 *Sup* p145 [supplemented in monthly numbers]

STOKES' law

- Critical analysis of Stokes' law as a basis for the determination of particle size of clays and nonplastic materials. *R. M. King. bibliog Am Cer Soc Bul* 21:258-60 *N* 15 '42

- Measurement of the fineness of powdered materials. *P. J. Rigden. bibliog il diags Chem & Ind* 62:393-6 *O* 16 '43

STOMACH

- Recording blood flow in stomach with thermocouples and phototubes. *Electronics* 16: 190+ *Jl* '43

Diseases

- Effect of various chemical agents affecting permeability of the mucosa on the formation of ulcers. *R. L. Driver, G. S. Dozier and H. C. Denham. bibliog Science* 98:158-9 *Ag* 13 '43

- External trauma and peptic ulcer; analysis of their relationship. *R. H. Fowler. bibliog Ind Med* 12:614+ *S* '43

STOMATITIS

- Deficiency stomatitis. *H. R. Sandstead. (Public health rep supp 169) 7p, pl 1-2* U.S. Public health service, Washington; *pa* 10c *Suppt. of doc.* '43

STONE, Ellery Wheeler, 1894-

- Sketch. *por Inst Radio Eng Proc* 31:391 *Ag* '43

STONE, John Stone, 1869-1943

- Sketch and tributes. *por Inst Radio Eng Proc* 31:463, 521-3 *S* '43

STONE

See also

- | | |
|-----------|------------------------|
| Blasting | Pulpstones |
| Dolomite | Quarries and quarrying |
| Granite | Road materials |
| Limestone | Rocks |

STONE—Continued**Testing**

Load required to compress concrete and rock. G. B. Sowers. *il* Civil Eng 13:389-90 Ag '43

STONE, Crushed

Alcan highway aggregates. H. J. McKeever. *il* Rock Prod 46:55-8+ Ja '43
Big Rock in Little Rock, Arkansas; quarry and crushing plant. J. M. Daugherty. *il* Explosives Eng 21:130, 151 Jl '43
Construction plant for Fontana project. R. E. Martin. *il* diag Civil Eng 13:533-6 N '43
Crushing agricultural limestone by-product; Hillsville district, Ohio. *il* Rock Prod 46:56+ Ap '43
Rolls do the entire job; crushing at Paul Frank quarries. W. B. Lenhart. *il* diag Rock Prod 46:48-51 Mr '43
Sand, gravel and crushed stone producers, Canada. Roads & Bridges 81:78-84 Jl '43
Wet system keeps stone plant clean; General crushed stone co. B. Nordberg. *il* Rock Prod 46:52-3 Jl '43

STONE, Powdered. See Stone, Crushed

STONE cutting

Conserving heat in exhaust system. diag Sheet Metal Worker 34:23+ Ap '43

See also

Granite cutting

STONE sand. See Sand—Stone sand

STONE walls. See Walls, Stone

STONEWARE

Are your best dishes china or earthenware? *il* Consumers' Research Bul 11:5-7 N '42
Ceramic parts in design. *il* diags Machine Design 15:120-3 Ag '43
Heat shock resisting bodies now produced by stoneware manufacturers. J. M. Robitschek. Cer Ind 41:48, 50-1 Jl; 64, 66 S '43

See also

Glazes

STOPCOCKS

Leakproof stopcock for regulation of take-off during distillation. M. S. Newman. diag Ind & Eng Chem Anal ed 14:902 N 15 '42
Pressure stopcock. J. A. Connelly. bibliog diag Ind & Eng Chem Anal ed 15:200 Mr 15 '43

Recommended specifications for microchemical apparatus; correction in design of the Dumas nitrogen stopcock. diags Ind & Eng Chem Anal ed 15:476 Jl 15 '43

STOPPING methods. See Mining methods

STORAGE

Modern methods of handling and storing dies and fixtures. B. C. Brosheer. *il* Am Mach 87:88-91 O 23 '43

To and from storage; better handling in warehousing areas means faster service to production departments. *il* Factory Management 101:109-10 Jl '43

See also

Coal storage	Oil storage
Cold storage	Petroleum storage
Food—Storage	Racks
Food, Frozen—Storage	Stores systems
Gasoline storage	Tanks
	Warehouses

STORAGE batteries

Accumulator batteries; the results of freezing the electrolyte. Automobile Eng 33:337 Ag '43

Batteries; how to keep them from dying young. A. E. Harrold. *il* Bus Transportation 22:47-8 Je '43

Battery retainer made from byproducts of plastics manufacture. L. E. Lighton. Sci Am 169:204 N '43

Care and feeding of storage batteries. diags Diesel Power 21:218 Mr '43

Encephalopathy from inhaling fumes from burning storage battery boxes. W. D. McNally. J Ind Hygiene 25:29-30 Ja '43

Guard against freezing of automobile storage batteries. Consumers' Research Bul 12:15 N '43

How to make your batteries last longer. Roads & Sts 85:59 D '42

New battery case; Philco container from ceramics. Business Week p58 Mr 13 '43

Nife traction battery. *il* Mech Handling 30:316-17 Jl '43

Storage battery dopes, stay away from them. Consumers' Research Bul 11:26 Ap '43

Storage battery performance at low temperatures. J. H. Little and R. A. Daily. *il* diags S A E J 51:149-56+ My '43

Truck work period doubled by increased battery capacity. G. E. Stringfellow. *il* Steel 112:98+ F 22 '43

Use distilled water, not tap water, for batteries. *il* Consumers' Research Bul 11:12 Ap '43

Charging

Automatic battery charging. *il* diag Elec R (Lond) 132:790 Je 11 '43

Batteries of A card holders require extra recharging. *il* Nat Pet N 35:37-8 Ja 27 '43

Charging sets on rails in the yards of the Jacksonville terminal company. *il* Ry Mech Eng 117:233-4 My '43

Metropolitan-Vickers battery-charge timing relay. *il* diags Electrician 130:416-17 Ap 23 '43

Redesigned charger saves critical material. *il* diags Product Eng 14:20 Ja '43

Manufacture

Control of the lead hazard in the manufacture of storage batteries. A. W. Elsten and G. Winn. *il* Med 12:276-8 My '43

Health of lead-exposed storage battery workers. W. C. Dreessen. bibliog flow sheet J Ind Hygiene 25:60-70 F '43

STORAX

Styrax and oil of styrax. E. Guenther. bibliog *il* Soap & San Chem 19:33-6+ O; 34-6+ N '43

STORE buildings

Selecting the surface texture for Sears architectural concrete building. *il* Concrete 51:5-6 F '43

Special features mark addition to May company building, Denver, Colo. W. H. Wheeler. *il* plans Civil Eng 13:73-5 F '43

See also

Department stores
Shopping centers

Designs and plans

Designs for suburban stores; prize-winning designs. Beaux arts institute of design. *il* plans Arch Rec 93:67-70 F '43

Kawneer competition shows future trends in commercial design. *il* diags plans Am Bld 65:42-4 Je '43

New buildings for 194X; projected designs. *il* diags plans Arch Forum 72:98-107 My '43

Electric equipment

Electrical industrial installations. L. C. Grant. diags Inst E E J 89 pt 2:616-17; Discussion. 617-35 D '42

Electricity in retail stores; abstract. A. W. Jervis. Elec R (Lond) 132:723 My 28 '43

Lighting

Light for a grocery and for a variety store. *il* Elec West 89:68 D '42

Simple and inexpensive methods for blackout control of small store lighting; illustrated instructions. Elec W 118:2142 D 26 '42

STORE employees. See Retail workers

STORE lighting. See Store buildings—Lighting

STORE management. See Retail trade—Store management

STORE windows. See Show windows

STOREHOUSES**See also**

Cold storage warehouses
Warehouses

STOREHOUSES, Concrete

Munitions storage facilitated by design of new, economical beehives. *il* Sci Am 169:108 S '43

STORES (retail trade)

Progressive ideas born of war pressure will change commercial and industrial building. *il Am Bld* 65:48-51 N '43

See also

Bakers and bakeries	Market stores
Candy stores	Plumbing shops
Company stores	Retail trade
Chain stores	Seed stores
Department stores	Show windows
Drug stores	Store buildings
Hardware stores	

STORES, Company. *See* Company stores

STORES systems

Inventory control to save millions for government; system at Eclipse machine division of Bendix aviation corporation. *il Am Business* 13:14-15+ S '43

Raw materials control at the Wm. S. Merrell company. F. J. Messmann. *il Chem Ind* 53: 194-6 Ag '43

Systematic stock-keeping of non-productive items; Cadillac motors car division of General Motors. F. M. Reck. *il Aero Digest* 43:179-81 Ag '43

Your weave-room supply system; proper bin arrangement and card index system. W. A. Newell. *il Textile World* 93:80-1 Ap '43

See also

Inventories	Tool rooms
Railroads—Stores	Tools
systems	

STORMS

Primary rôle of meteorology in flood flow estimating. M. Bernard. maps *Am Soc C E Proc* 69:105-44 bibliog (p141-2) Ja '43; Discussion. bibliog 69:597-608, 1006-12, 1309-16, 1480-2 Ap, Je, O-N '43

See also

Hurricanes	Thunderstorms
Lightning	Tornadoes
Rain and rainfall	Winds

STOUT, William Bushnell, 1880-

Sky cars as designed by W. B. Stout. *por Aero Digest* 43:128-30 Ag '43

Stout designs peacetime air cars. *il Aviation* N 1:22 Ag 2 '43

STOVAINE

Some stovaine analogs. W. T. Olson and F. M. Whitacre. bibliog *Am Chem Soc J* 65: 1019-20 Je '43

STOVES

Auxiliary heating for fuel-oil users; stove in open fireplace. *il Consumers' Research Bul* 11:16-17 F '43

Burning of sawdust. *diags Engineering* 155: 247 Mr 26 '43

Concentration of the stove industry. T. Gelger. *Harvard Business R* 22 no 1:19-28 [O] '43

Ways to obtain additional heat this winter. *diag Consumers' Research Bul* 11:10-11 N '42

See also

Electric stoves	Heaters
Gas stoves	Oil stoves
Gasoline stoves	

History

Early cast iron stove plates of Pennsylvania. F. T. Sisco. *il Min & Met* 24:18-19 Ja '43

Rationing

Coal and oil heating stoves rationed. *Comm & Fin Chr* 156:2258 D 24 '42

Domestic heating and cooking stoves; plan for nation-wide rationing. *Am Gas J* 159: 24-6 S '43

How stove rationing will work. *Gas Age* 92: 28-30+ Ag 26 '43

More stoves due; concentration program to give way to rationing. *Business Week* p35-6 Je 5 '43

Nation-wide rationing of stoves. *Sheet Metal Worker* 34:50 S '43

Stove ration due. *Business Week* p40+ Ag 7 '43

STOVES, Ceramic

Heat, à la European. *il Business Week* p62 Je 26 '43

Market for million stoves open to ceramic manufacturers. *il diags Brick & Clay Rec* 103:10-12 Ag '43; Same. *Cer Ind* 41:71-2 Ag '43

STOVES, Electric. *See* Electric stoves

STOVES, Gas. *See* Gas stoves

STOVES, Gasoline. *See* Gasoline stoves

STOWAGE

Holds improper stowage constitutes unseaworthiness in plant life case. *East Underv* 44:30 S 24 '43

STRAIGHTENING

Bending fatigue strength of machined crankshafts after straightening, with notes on the stress distribution obtained by extensometer and X-ray measurements; abstract. R. Schmidt. *Roy Aeronautical Soc J* 47: sup353-5 J '43

Distortion and shrinkage problems in ships and other large structures; cold and hot straightening. L. Grover. *il diags Welding J* 21:776-81 N '42

Oxyacetylene flame straightening. L. Grover. *il diags Eng N* 131:21-4 J 1 '43

Straightening heat-treated parts. G. B. Barlien. *il diags Steel* 112:114+ Mr 16; 74+ Mr 29; 112+ diags; 98+ My 3 '43

Straightening steel in drill sharpener. *diags Eng & Min J* 144:87 J '43

Warpage corrected by flame. C. W. Hale. *diags Am Mach* 87:91 Ap 15 '43

STRAIGHTENING machines

Ford engineers develop new method for straightening armor plate. *il Automotive & Aviation Ind* 87:52 D 1 '42

Quench-straightening of armor plate. *il Iron Age* 151:54 Ap 29 '43

STRAIN gages

Airframe stress analysis by the electrical strain gage. W. T. Thomson. *diags Aero Digest* 42:259, 261, 263 My '43

Hammer test for welded pressure vessels; an investigation. C. O. Dohrenwend. *il diags Welding J* 22:sup507-21 O '43

Load indicator for launching triggers. A. R. Anderson. *il diags Marine Eng* 48:204-5 My '43

Measurement of stresses in parts and structures. R. G. Anderson. *il diags Product Eng* 14:712-16 N '43

Measurements of pore-water pressure in silt and clay; use of the elastic-wire strain meter. K. Terzaghi. *diags Civil Eng* 13:33-6 Ja '43

Methods of stress determination in engine parts. C. Lipson. *il diags S A E J* 51:105-24 Ap '43

New pathways in engineering. A. V. de Forest. bibliog *il diags Metal Prog* 43:719-23+ My '43

Recording unit for strain and timing functions; dynamic performance of heavy machines recorded by combination of electronic and photographic equipment. J. H. Meier. *il diags Electronics* 16:79-83+ Ap '43

Vibration; stress determination by electrical means. *Automobile Eng* 33:184 My '43

STRAINERS

Brassett automatic self-cleaning strainer. *il Blast F & Steel Pl* 31:1180-1 O '43

Strainer for sea water and ammoniacal liquor as well as river, lake, canal and well water; Brassett self-cleaning water strainer. S. P. Kinney. *il Blast F & Steel Pl* 31:223 F '43

See also

Air filters	Oil filters
Filters and filtration	Screens

STRAINERS, Plastic

Funnels and strainners of plastic. *il Consumers' Research Bul* 11:22 My '43

STRAINS and stresses

Analysis of stresses in simple and continuous beams and girders. H. L. Wagner. *il diags Roads & Bridges* 81:19-23+ Je '43

Bullet footprints in lacquer aid search for better weapons; use of Stresscoat. *il Metal Finishing* 41:539 Ag '43

Chart for computing tensile stress. J. C. Gould. *Metal Prog* 44:431-2 S '43

Code for working stresses facilitates design. J. Marin. bibliog *il Machine Design* 14:70-4+ N; 99-103 D '42

Control of residual stresses through welding sequence. M. Q. Cellers. *diags Iron Age* 152:50-6 S 2 '43

STRAINS AND STRESSES—Continued

- Creep of metals at elevated temperatures; the hyperbolic-sine relation between stress and creep rate. P. G. McVetty, bibliog A S M E Trans 65:761-7; Discussion. 767-9 O '43
- Cyclic temperature acceleration of strain in heat resisting alloys. G. R. Brophy and D. E. Furman, il diags Am Soc for Metals Trans 30:1115-30; Discussion. 1130-8 D '42
- Ductility under polydimensional stress. il Welding J 22:sup325-8 JI '43
- Effect of material and loading in calculating design stress. G. H. Neugebauer, bibliog Product Eng 14:31-4 Ja '43
- Effect of nut design on strength of threaded fastenings. M. Hetenyi, diags Machine Design 15:119-20 F '43
- Effect of welding on the shear and hardness properties of mild steel bars. W. D. Lewis, diags Welding J 21:sup559-61 N '42
- Evaluating torsional stresses by membrane analogy. J. Marin, bibliog il diags Machine Design 15:118-23+ Je '43
- General stress-strain-time formula. P. G. Nutting, bibliog Franklin Inst J 235:513-24 My '43
- Glass strain; method for determining and analyzing strains in electronic tubes and other glass forms. H. J. Nolte, diags Gen Elec R 46:275-80 My '43
- Graphical analysis of stresses in three-dimensional loading. C. R. Freberg and E. N. Kemler, il diags Product Eng 13:714-17 D '42
- Increase of performance of hot work tools. W. Hauffer, Iron Age 162:44-8 S 2 '43
- Influence charts for computation of stresses in elastic foundations. N. M. Newmark, diags fold charts III U Eng Exp Sta Bul 338:1-25 '42 (pa 35c)
- Influence of stress on the corrosion pitting of steel in distilled water. D. J. McAdam, jr. and G. W. Geil, bibliog il Am Soc for Metals Trans 30:1159-98; Discussion. 1198-1201 D '42
- Influence of the combination of principal stresses in fatigue of metals. D. J. McAdam, jr. Am Soc T M Proc 42:576-90 bibliog(p591-2); Discussion. 593-4 '42
- Introduction to the theory of photoelasticity and its application to problems of stress analysis. R. E. Arthur, il diags Roy Aeronautical Soc J 47:263-72 Ag '43
- Investigation of the behavior of residual stresses under external load and their effect on safety. J. T. Norton and D. Rosenthal, bibliog il Welding J 22:sup63-78 F '43
- Investigation of the static notched bar behavior of steel with reference to tri-axial stress and the technical cohesive strength. O. H. Henry and J. G. Farmer, bibliog il diags Welding J 22:sup150-62 Ap '43
- Methods of stress determination in engine parts. C. Lipson, il diags S A E J 51:105-24 Ap '43; Abstract. Automotive & Aviation Ind 88:37-8 F 1 '43
- Notes on shipbuilders technique for release of welding stresses. Eng N 131:409-10 S 9 '43
- Percentage stress-strain diagram as an index to the comparative behavior of materials under load. H. J. Gilkey and G. Murphy, Iowa Eng Exp Sta (Ames) Bul 159:1-43 bibliog(p41-3) '43
- Permanent buckling strains in flat compression panels. F. N. Platt, diags Product Eng 14:211-13 Ap '43
- Photoelastic detection of strains. J. Delmonte and W. Dewar, il Mod Plastics 21:121-3 N '43
- Practical application of stress strain theory in fabrication of aircraft parts; abstract. F. C. Hoffman, il diag S A E J 51:sup27, 39 O '43
- Predicting stiffener and stiffened panel crippling stresses. H. B. Crockett, bibliog diags J Aeronautical Sci 9:501-9 N '42
- Problem of combined stress. J. J. Guest, Engineering 155:21-3, 101-2, 222, 281-2, 303-4 Ja 8, F 5, M 19, Ap 9-16 '43
- Repeated stress relieving treatments on steel plate. F. Eberle and T. Brick, il Metals & Alloys 16:894-901 N '42
- Residual stresses in welded structures. R. E. Kinkaid, Metal Prog 43:924-6; Addendum on tri-axial stresses. 945 Je '43; Same abr. Machine Design 15:109-10 Je '43; Same. Welding J 22:514-15 JI '43
- Residual stresses in welded structures; challenging problem. E. Chapman, il diags Iron Age 152:46-50 JI 29 '43
- Residual stresses in wire loops at anchorage shoes or grommets. G. Brewer, il diags Metal Prog 44:441-7 S '43
- Residual stresses; report of Welding research council. Welding J 22:sup220-2 My '43; Discussion. H. C. Boardman. 22:sup 263-5 Je '43
- Resin method of indicating yield. J. S. Blair, Engineer 174:455-6 D 4 '42
- Secondary stresses in volute springs. H. O. Fuchs, bibliog il diags A S M E Trans 65:543-9; Discussion. 550-1 JI '43
- Selecting working stresses for combined loading. J. Marin, bibliog Machine Design 15:151-3 N '43
- Significance of mechanical test properties of metals. H. O'Neill, Engineering 156:18-20, 38-40, 56-8 JI 2-16 '43; Discussion. 156:15-16, 34-5 JI 2-9 '43
- Simplifying strain-rossette analysis. J. H. Meier, diags Machine Design 15:111-12 My '43
- Some aspects of strain hardenability of austenitic manganese steel. D. Niconoff, il Am Soc for Metals Trans 31:716-34; Discussion. 734-8 S '43
- Some considerations in the design of thick-wall pressure cylinders. C. W. Comstock, bibliog Am Inst Chem Eng Trans 39:299-312; Discussion. 312-18 Je '43
- Some secondary stresses in thin-walled box beams. E. Reissner, diags J Aeronautical Sci 9:538-42 D '42
- Strain-hardening and recrystallization. C. H. Mathewson, diags Iron Age 152:54-8 O 28 '43
- Strain-rossette analysis is effective design aid. J. Marin, bibliog diags Machine Design 15:101-4+ Mr '43
- Strains, stresses, and shear in engineering problems. S. H. Woodard, diag Am Soc C E Proc 69:177-86 F '43; Discussion. bibliog 69:562-70, 871-91, 1120-4, 1501-2, 1597-8 Ap, Je, S, N-D '43
- Stress analysis of passenger-car trucks. J. C. Travilla, jr. and W. E. Burdick, il diags A S M E Trans 65:297-300 My '43
- Stress analysis of tall towers; four methods for calculating stresses and required shell thicknesses for vessels used in refineries; towers designed for high winds or seismic forces. E. F. Brummerstedt, bibliog il diags Nat Pet N 35 pt 2:R539-40, R542-3 N 3 '43
- Stress concentration factors in practical design. R. E. Peterson, bibliog il diags Machine Design 15:104-8 JI '43
- Stress cracking of brass. H. P. Croft and G. Sachs, il Iron Age 151:47-50 Mr 11; 62-7 bibliog(103 titles, p65-7) Mr 18 '43
- Stress in straight pipes and pipe bends under internal pressure; charts. H. W. Hamm, Product Eng 14:125-6 F '43
- Stress-strain measurements in the drawing of cylindrical cups. E. L. Bartholomew, jr. il diag Am Soc for Metals Trans 31:582-93; Discussion. 593-8 S '43
- Stresses and displacements from loads over rectangular areas. H. Gray, Civil Eng 13:227-9 My '43
- Stresses in the corner region of concrete pavements. M. G. Spangler, il diags Iowa Eng Exp Sta (Ames) Bul 147:1-96 bibliog(p95-6) '42
- Structural design of concrete pavements; experimental study of the Westergaard analysis of stress conditions in concrete pavement slabs of uniform thickness. L. W. Teller and E. C. Sutherland, bibliog il diags Pub Roads 23:167-212 Ap '43
- Tension-compression device for quantitative X-ray diffraction evaluation of strain in metals and a calibrated series of aluminum alloys. G. L. Clark, G. Fish and R. Seabury, bibliog il diags J Ap Phys 14:284-90 Je '43
- Testing designs of machine parts by the brittle lacquer method. R. G. Anderson, il diags Product Eng 14:611-14 O '43

STRAINS and stresses—Continued

Tests reveal stress raiser effects. G. Sachs and J. D. Lubahn. *il Machine Design* 14: 104-7+ D '42

Torque-stress-load relationship in bolts and screws; reference book sheets. A. H. Korn. *diag Product Eng* 14:752-4 N '43

Torsion combined with compression. P. W. Bridgman. *il diags J Ap Phys* 14:273-83 Je '43

Welding contraction and locked-up stresses. *il diags Engineer* 175:423-5 My 28 '43; Same. *Metal Prog* 44:249-51 Ag '43

Working stresses in aluminium-alloy structures. E. W. Thomas. *Engineering* 155:101 F 5 '43

See also

Airplanes—Design

Airplanes—Stresses

Beams

Bridge design

Bridges—Load

Building

Columns

Concrete, Reinforced

—Testing

Concrete construction—Design

Creep of materials

Creep of metals

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STRAPS, Car. *See* Car straps

STRATEGY*See also*

World war, 1939—

Strategy

STRATIGRAPHIC geology. *See* Geology, Stratigraphic

STRATOSPHERE. *See* Atmosphere, Upper

STRAUS, Michael Wolf, 1897—
Sketch. *por Nat Pet N* 35:9 Mr 3 '43

STRAUS, S. W., and company
S. W. Straus bonds. *Comm & Fin Chr* 158: 125-6 Jl 8 '43

STRAW

Enzymic degradation of cell wall substances. D. H. F. Clayton. *bibliog Chem & Ind* 62:298-300; Discussion. 300-1 Ag 7 '43

Special chlorination unit based on the Celdec-Pomilio process for bleached straw pulp. *il Paper Tr J* 115:32-4 N 26 '42

Straw and paper. *Economist* 143:614 N 14 '42

Straw filters remove oil waste from locomotive wash water. E. Sunergren. *diags Eng N* 131:413 S 9 '43

STRAW hats

Straw hat, now world style, was an old Roman custom. *For Comm W* 12:30 Jl 3 '43

STRAWBERRIES

Preserving fruits with SO₂ to aid lend-lease program; Good jams can be made from SO₂ treated fruits; peaches, strawberries and youngberries. J. G. Woodroof and S. R. Cecil. *il Food Ind* 15:59-61 My; 67-8+ Je '43

STRAWBERRIES, Frozen

Brief summaries of grade standards. *Food Ind* 14:67+ D '42

STRAWBERRY hulling machine

Berries come clean; strawberry capping done with new machine. *il Business Week* p68 S 4 '43

STREAM flow

Effect of turbulence on sedimentation. W. E. Dolbins. *il diags Am Soc C E Proc* 69:235-62 bibliog(p260) F '43; Discussion. 69:632, 779-82, 977-84, 1298-1306 bibliog(p1306) Ap-Je, O '43

Entrainment of air in flowing water; open channel flow at high velocities. L. S. Hall. *il Am Soc C E Proc* 68:1100-40 S '42; Discussion. 69:761-71, 847-57 My-Je '43

Flow around bends in stable channels. C. A. Mockmore. *bibliog il diags Am Soc C E Proc* 69:335-60 Mr '43; Discussion. 69:1147-53, 1317-18 S-O '43

Profile curves for open-channel flow. D. F. Gunder. *diags Am Soc C E Proc* 68:535-42 Ap '42; Discussion. 68:1413-23, 1646-8; 69:297-8 O-N '42, F '43

Testing theoretical losses in open channel flow. J. G. Jobs and J. H. Douma. *il Civil Eng* 12:613-15, 667-9 N-D '42

See also

Stream measurement

Water flow

STREAM measurement

Bridge and culvert flow areas; current practice in determining runoff. F. W. Greve. *il Civil Eng* 13:381-2 Ag '43

Early contributions to Mississippi River hydrology. C. S. Jarvis. *Am Soc C E Proc* 68:421-44 Mr '42; Discussion. 68:1232-6, 1670-4; 69:545-61 S, N '42, Ap '43

Flow diversion at Niagara falls. C. G. Cline. *il maps Civil Eng* 13:359-62 Ag '43

Hydraulic structures; model-prototype conformity. J. E. Warnock and H. G. Dewey, Jr. *il diags Am Soc C E Proc* 68:1269-94 O '42; Discussion. 69:316-20 F '43

Nomograph for the integration of stream-flow records. P. B. Johnson. *Civil Eng* 13: 494-5 O '43

STREAM pollution. *See* Water pollution

STREAM sampling. *See* Water sampling

STREET accidents

Traffic safety in wartime. L. J. Schrenk. *Illum Eng* 38:353-68 Jl '43

See also

Automobile accidents

Street lighting—Accidents

Safety aspects

STREET cars

War babies vs. standards. *il Mass Transportation* 39:11-12 Ja '43

Wartime inspection of P.C.C. cars. N. H. Wilby. *il Transit J* 86:446-8 D '42

Wartime seating arrangement increases carrying capacity; Market Street Railway also conducts campaign to secure cooperation of patrons. *il Mass Transportation* 39:250 Jl '43

See also

Cars, Electric rail-

road

Street railroads

Trolley buses

Handstraps

See Car straps

Reconstruction

Goat glands for old cars; Los Angeles railway. J. H. Collins. *Pub Util* 31:420-3 Ap 1 '43

Statistics

New transit equipment production restricted; statistics. E. J. Murphy. *Mass Transportation* 39:104-7 Mr '43

STREET cleaning

Albany speeds spring street cleaning with snow loader. *il Roads & Sts* 86:57 Ap '43

See also

Refuse collection

Snow removal

STREET cleaning apparatus

Burlington's strange hybrid machines; reconstructed equipment for snow removal, street cleaning, etc. *il Roads & Sts* 86:79-80 Ap '43

STREET lighting

Blackout and dimout of street lighting and traffic signals. K. M. Reid. *diags Illum Eng* 37:849-56 D '42

Blackout spraying at low cost; spraying about 25,000 incandescent street-lighting bulbs. *il Elec W* 118:2118 D 26 '42

Experiences with the dimout. S. G. Hibben. *il diags Illum Eng* 38:251-63 My '43

Public lighting; conference of the Association of public lighting engineers, London, Sept. 22-23. *Elec R (Lond)* 133:431-3 O 1 '43

Public lighting; preparations for ultimate restoration. E. J. Stewart. *Light & Lighting* 36:38, 58 Mr-Apr '43

Review of post-war public lighting possibilities; abstracts. E. J. Stewart. *Electrician* 131:324-6 O 1 '43; *Light & Lighting* 36: 151-2 O '43

STREET lighting—Continued

Standardization on 6.6 ampere lamps for series street lighting. Edison Elec Inst Bul 11:19+ Ja '43
 Street and highway lighting for 194X. R. C. Engelken. *il* diags Arch Forum 79:100-2 O '43

Street lighting; review of past, present and future developments; abstracts. J. M. Waldram. Electrician 131:327-8 O 1 '43
 Light & Lighting 36:152-3 O '43; Discussion. Electrician 131:328-9 O 1 '43

See also
 Roads—Lighting

Control

Area street lights have blackout control. W. A. Upham. diags Elec W 119:1472 My 1 '43
 Hot-spot indicator monitors series lights. J. R. Toomey. diag Elec W 119:800 Mr 6 '43
 Pilot wire controls 110-volt street lights and off-peak water heaters. *il* diags Elec W 119:1638 My 15 '43
 Rhythmic control. S. A. Daines. *il* Elec R (Lond) 133:167-9 Ag 6 '43
 Tripping device on time switch for blackouts. diags Edison Elec Inst Bul 11:14 Ja '43

Safety aspects

Effect of after-dark traffic accidents on the war effort. D. M. Diggs. Roads & Bridges 81:36 Ja '43
 Role of lighting in accident prevention. H. L. Logan. bibliog Elec Eng 62:143-7 Ap '43
 Traffic safety in wartime. L. J. Schrenk. Illum Eng 38:353-68 Jl '43
 Wartime lighting and safety. E. Vennard. bibliog Edison Elec Inst Bul 11:93-101 Ap '43

STREET lighting fixtures

Bright-way units welded—reused. *il* Elec W 120:1392-1 O 16 '43
 Dimout control devices for street lighting; illustrations. Elec W 118:1612-13 N 14 '42
 Meeting street light dimout requirements. *il* Elec W 119:106+ Ja 9 '43
 Public lighting equipment; maintenance of fittings; lamp replacement records. F. H. Pulvermacher. Elec R (Lond) 133:371-2 S 17 '43
 Residential street lighting; design of lamp fitting. J. A. Avery-Fowler. *il* diag Elec R (Lond) 133:25 Jl 2 '43
 Review of post-war public lighting possibilities. E. J. Stewart. Electrician 131:324-6 O 1 '43

STREET openings

Restoring streets after sewer construction. E. F. Durfee. *il* Pub Works 73:22-4 N '42
 Trenching and laying sewer and water pipe. *il* diags Pub Works 74:11+ O '43

STREET railroads

Local transit lines (including bus operations), 1933-1941. Survey of Cur Business 1942 Sup p96 [supplemented in monthly numbers]

See also
 Electric railroads Street cars
 Rapid transit Subways
also subdivision Rapid transit under names of cities, e.g. Baltimore—Rapid transit; Boston—Rapid transit
also Chicago surface lines

Accidents

Accident prevention tools. T. Fitzgerald. Mass Transportation 39:312-13 S '43

Advertising

How Portland Traction gets cooperation. *il* Transit J 86:400-1 N '42

Car loading

Loading vehicles at heavy points; urging passengers to move to the rear. Transit J 86:416-19 N '42

Costs

Capital expenditures in 1942. E. J. Murphy. Mass Transportation 39:102-3 Mr '43

Employees

Can we use women operators? *il* Mass Transportation 38:331-6 N '42
 Los Angeles railway meets manpower shortage; women are being trained. *il* Transit J 86:432-3 D '42

New Orleans' women keep 'em rolling. T. C. Wicker. *il* Mass Transportation 39:275-8 Ag '43

Wage rates of union street-railway employees, June 1, 1942. Monthly Labor R 56:119-27 Ja '43

Women operators in Washington, D.C. A. Shapiro. Mass Transportation 39:330-1 S '43

Training

Los Angeles goes courting; getting girls who do a good job. *il* Mass Transportation 39:183-5 My '43

Equipment and supplies

See also
 Rapid transit—
 Equipment and supplies

Fare collection

See also
 Fare registers

Finance

Old to new in Seattle produces results; comparison of operations before and after modernization of Municipal transit system. Mass Transportation 39:148 Ap '43

See also
 Pittsburgh railways Third avenue transit company corporation
 Rapid transit—Finance

Information service

See also
 Rapid transit—Information service

Inspection

Wartime inspection of P.C.C. cars. N. H. Willby. *il* Transit J 86:446-8 D '42

Maintenance and repair

Steel poles, keep 'em standing; proper maintenance essential. L. W. Birch. *il* Transit J 86:414-16 N '42
 Wartime inspection of P.C.C. cars. N. H. Willby. *il* Transit J 86:446-8 D '42
 Winners in maintenance contest; ideas for improvements in shop practices. *il* diags Transit J 86:410-13 N '42

Management

How mass transportation is conducted in Montreal. *il* Mass Transportation 39:21-9+ Ja '43
 How mass transportation is conducted in Toronto. *il* Mass Transportation 39:61-72 F '43
 How mass transportation is conducted in Vancouver. *il* map Mass Transportation 39:136-43 Ap '43
 How mass transportation is conducted in Winnipeg. *il* Mass Transportation 39:109-16 Mr '43
 How Savannah handles 110 percent riding increase. *il* Transit J 86:444-5 D '42
 Ralls come back to Sacramento. Transit J 86:443 D '42
 Strategy for transit; overcoming wartime difficulties. *il* Mass Transportation 39:4-19 Ja '43

See also
 Street railroads—
 Car loading

Public relations

Bad news made good; Cincinnati street railway's public relations job. E. F. Theisinger. *il* Bus Transportation 22:48-51 S '43
 St Louis trains its voice; employees trained in telephone technique. *il* Mass Transportation 39:186-8 My '43

Telling the story in Birmingham; women representatives give talks to riders. *il* Transit J 86:399 N '42

Transit industry and the modern competition. *il* Mass Transportation 39:177-80 My '43

Wartime seating arrangement increases carrying capacity; Market Street Railway also conducts campaign to secure cooperation of patrons. *il* Mass Transportation 39:250 Jl '43

STREET railroads—*Continued***Shops**

Car inspection pit of new design; Cincinnati street railway. *il* Mass Transportation 39: 150 Ap '43

Snow protection and removal

Application of electric snow melters to street railway track switches. R. C. Sutton. *il* Mass Transportation 39:76-7 F '43

Stops

War stops in Fort Wayne. *il* Transit J 86:408-9 N '42

Track reclamation

Memphis wins rail salvage fight, then drops injunction against WPB. Eng N 130:262 F 18 '43

New device developed for salvaging steel rails. D. L. Morris. *il* Min & Met 24:201 Ap '43

Profitable removal of tram rails; Montreal tramways co. W. M. Gardner. *il* Mass Transportation 39:220-1 Je '43

Salvaging street railway rails. *il* Roads & Sts 85:48 D '42

Simple lifter removes rails without digging. *il* Eng N 129:892 D 31 '42

Traffic

Rubber tired vehicles show phenomenal traffic increase; 10-year record of transit traffic in the United States by types of service, 1933 to 1942. E. J. Murphy. Mass Transportation 39:100-1 Mr '43

Traffic reaches new all-time peak. E. J. Murphy. Mass Transportation 39:94-5 Mr '43

Transit upsurge, trolleys and buses doing record business. Business Week p106-7+ My 29 '43

War worker transportation in Schenectady. *il* map Transit J 86:396-8 N '42

STREET railroads in war*See also*

Rapid transit in war

STREET traffic

Cleveland freeways a major problem; reconditioning state's system by the Ohio department of highways. R. C. Chaney. *il* diags map Roads & Sts 86:40-4 Je '43

Davison limited highway, Wayne county, Mich. H. A. Shuprine and J. C. Mead. *il* diag map Civil Eng 12:673-6 D '42

Department store hours; opening and closing hours changed for relief of traffic congestion; reports of various transit companies. Transit J 86:453-4 D '42

More food for post-war thought; automobile as a means of urban transportation. J. Perry. Mass Transportation 39:120-1 Mr '43

Parking problem as a factor in roadway design. *il* diags Roads & Bridges 81:28-30, 54, 56, 58 F '43

Urban street traffic and rural truck highway travel in Minnesota. Roads & Sts 85: 32 D '42

See also

Automobile laws and regulations
Tunnels and tunneling—Vehicular tunnels
Automobile parking
Road traffic

STREETER, George Linius, 1873-
Testimonial volume. Science 97:64 Ja 15 '43

STREETS

Municipal control of streets for new developments. F. E. Harley. *il* diag Pub Works 74:26, 28-9 Ap '43

Step-by-step photos of street job; Burlington, Vermont. G. C. Stanley. Roads & Sts 86: 51-3 Je '43

Traffic and the neighborhood plan. G. D. Clarke and M. Rapuano. diags plans Arch Forum 79:130-2 O '43

Typical curb sections and cul-de-sacs; time-saver standards. A. Geiffert, Jr. Arch Rec 93:83, 86 Ja '43

See also

City planning
Pavements
Pipe lines
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Cost

Street improvements, Cincinnati; unit prices. Eng N 130:766 My 20 '43

Ice control

Old man winter's whiskers; how they trim 'em in Milwaukee; snow plow and ice-cutting equipment. *il* Bus Transportation 22: 37 F '43

Intersections

California project involves novel intersectional design; channelization structures combined with traffic-actuated signals. A. G. Lindley. diags Pub Works 74:13+ F '43
Curved box girders for highway overpass. *il* diags Eng N 129:698-9 N 19 '42

Maintenance and repair

Built 1921, rebuilt 1941; city phase. G. H. Sandenburgh. Roads & Sts 86:70 Mr '43

High school boys helped repair Springfield's streets. *il* Roads & Sts 86:60 My '43

Madison has long-range plan; street projects; with cost data. T. F. Harrington. Roads & Sts 86:49-50 Jl '43

Maintaining 750 miles of streets and alleys; Cincinnati's wartime street program. C. E. Brokaw. *il* Roads & Sts 86:35-9 Ag '43

Maintenance of bituminous concrete and oil penetration urban roads; borough of Princeton, N.J. I. R. Riker. *il* Pub Works 74: 22-3+ Mr '43

Mixed-in-place resurfacing in Whitman, Mass. J. C. Boynton. *il* diag Pub Works 73:28 N '42

Restoring streets after sewer construction. E. F. Durfee. *il* Pub Works 73:22-4 N '42

Spring maintenance of streets in Bangor. J. E. MacLeod. *il* Pub Works 74:11-12+ Mr '43

Street improvements in Webster City, Iowa; with cost data. H. A. Little. *il* diags Pub Works 74:21-2 Ap '43

Street repair expenditures justified by weighted estimates. *il* Eng N 130:821-2 Je 3 '43

Track removal, street repairs, Seattle; unit prices. Eng N 129:734 N 19 '42

See also

Pavements—Main-
tenance and repair
Pavements, Asphalt
Pavements, Concrete
—Maintenance and
repair

STRENGTH of materials

Basic physical properties of laminates; reinforced with paper, glass and asbestos. F. M. Field. Mod Plastics 20:91-102, 126, 128+ Ag '43

Bearing strength of plastics and plywood. J. Bond. *il* A S M E Trans 65:9-12 Ja '43; Same. Mod Plastics 19:70-3+ Jl '42; Discussion. A S M E Trans 65:12-14 Ja '43

Bending fatigue strength of machined crankshafts after straightening, with notes on the stress distribution obtained by extensometer and X-ray measurements; abstract. R. Schmidt. Roy Aeronautical Soc J 47: sup353-5 Jl '43

Bending strength in the plastic range. F. P. Cozzone. diags J Aeronautical Sci 10:137-51 My '43

Buckling of aluminum-alloy columns and plates. H. L. Langhaar. diags J Aeronautical Sci 10:218-22 Jl '43

Control of life expectancy in airplane structures. R. B. Bland and P. E. Sandorff. bibliog Aeronautical Eng R 2:7+ Ag '43

Creep strength; its relation to fatigue strength; abstract. V. Dehlinger. Automobile Eng 33:202 My '43

Design of highly stressed studs to improve their fatigue strength. *il* diags Product Eng 14:288-90 My '43

Design-strengthened materials. R. S. Smith and H. Gray. *il* diag J Aeronautical Sci 10:213-17 Jl '43

Dynamic loading in design. C. O. Dohrenwend and W. R. Mehafeey. bibliog *il* diags Machine Design 15:99-104 Je '43

Effect of scratches on fatigue strength of Alclad sheet. H. J. Andrews and G. W. Stickley. *il* diag Aviation 42:154-5, 157 Je '43

Engineering properties of plastics. F. B. Fuller. Mod Plastics 20:95-7+ Je '43

STRENGTH of materials—Continued

Improving fatigue strength of machine parts; abstracts. J. O. Almen. bibliog il diags Iron Age 151:65-9+ Je 10 '43; Machine Design 15:124-9+ Je '43

Influence of temperature on the mechanical properties of molded phenolic materials. T. S. Carswell, D. Telfair and R. U. Haslinger. bibliog Am Soc T M Proc 42:944-53 '42; Same. Mod Plastics 19:65-9 Jl '42; Discussion. Am Soc T M Proc 42:954-5 '42

Investigation of the static notched bar behavior of steel with reference to tri-axial stress and the technical cohesive strength. O. H. Henry and J. G. Farmer. bibliog il diags Welding J 22:sup150-62 Ap '43

Magnesium properties as they affect design. il diags Product Eng 14:359-65 Je '43

Mechanics of materials and some details of boiler construction; questions and answers. A. Higgins. diags Power 87:552-4 Ag '43

New pathways in engineering. A. V. de Forest. bibliog il diags Metal Prog 43:719-23+ My '43

Physical properties that affect the behavior of structural members. W. M. Wilson. il Am Soc C E Proc 68:1715-25 D '42; Discussion. 69:446-8, 775-8, 858-60, 1049-54, 1587-93 Mr, My-Je, S, D '43

Plastic-bonded cotton fiber. M. A. Goldman and C. A. Olsen. il Mod Plastics 20:100, 130+ My '43

Plasticity ratio of concrete and its effect on the ultimate strength of beams. V. P. Jensen. bibliog diags Am Concrete Inst J 14:565-82 Je '43

Prescriptions for head cracks in 24ST rivets; laboratory tests of strengths, corrosion resistance, heat treatments, and aging. E. C. Hartmann, C. F. Westcoat and M. W. Brennecke. il Aviation 42:139-43+ N '43

Properties of laminated phenolics. L. E. Caldwell. diags Mod Plastics 20:82-7+ Ag '43

Riveted and pin-connected joints of steel and aluminum alloys. L. S. Moisseiff, E. C. Hartmann and R. L. Moore. il diags Am Soc C E Proc 69:3-40 Ja '43

Shot blasting to increase fatigue resistance. J. O. Almen. bibliog il diags S A E J 51:248-68 Jl '43; Same cond. Iron Age 151:65-9+ Je 10 '43; Same cond. Machine Design 15:124-9+ Je '43; Same cond. Mech Eng 65:553-63 Ag '43; Excerpts. Aero Digest 42:217-18, 223+ Je '43

Spot welding of light alloys; comparison with riveted joints. G. H. Field, H. Sutton and H. E. Dixon. bibliog il diags Welding J 22:sup573-92 N '43

Strength characteristics of plastic-bonded plywood. G. B. Parsons. bibliog diags A S M E Trans 65:1-7 Ja '43; Same. Mod Plastics 19:74-9, 110, 112+ Ag '42; Same. Aero Digest 41:160, 162, 165+ Jl; 140+ Ag '42

Strength of nailed plywood joints subjected to lateral loading. diag Eng N 130:691-3 My 6 '43

Strength properties of Plexiglas. W. F. Bartoe. il diags Aviation 42:128-9, 131, 135 Ja; 140+ Mr '43

Tests of cylindrical shells. W. M. Wilson and E. D. Olson. il diags III U Eng Exp Sta Bul 331:1-129 '41 (pa \$1); Excerpts. Welding J 22:sup163-8 Ap '43

See also

Building materials
Concrete—Strength
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Fatigue in metals
Glass—Strength
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Metals—Testing
Screws—Testing
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Steel—Testing
Strains and stresses
Testing
Trusses
Wood—Testing

STREPTOCOCCI

Comparative study of the presumptive and confirmative media for bacteria of the coliform group and for fecal streptococci; abstract. A. A. Hajna and C. A. Perry. Am Water Works Assn J 35:1358 O '43

Identity of a lethal agent in broth filtrates of hemolytic streptococci with erythrogenic toxin. G. E. Foley. Science 98:370-1 O 22 '43

New growth factor for streptococcus lactis. J. C. Keresztesy, E. L. Rickes and J. L. Stokes. Science 97:465 My 21 '43

STRESSES. See Strains and stresses**STRETCHERS (litters)**

All steel emergency stretchers. F. W. Klay. il diags Welding J 21:757-8 N '42

STRICKER, A. H.

Government offices try Stricker plan; Ranspeck committee probing methods to reduce red tape. por Am Business 13:16-17 O '43

STRIKE and dip, Determination of. See Dip and strike, Determination of

STRIKES

A.F.L. hits stores; 3-day strike, closing Gimbel's and crippling two competitors in Pittsburgh. Business Week p98 N 14 '42

Barrow strike; Vickers-Armstrongs' works. Engineering 156:314-16, 323-5 O 15-22 '43

Brewster's tangle; Coast guard seizure of defiant plant guards precipitated Hathor strike. il Business Week p88+ S 4 '43

Building trades strike ended by FPHA's drastic action. Eng N 131:509+ O 7 '43

Collective bargaining in public utility service. S. Bent. Pub Util 31:531-8 Ap 29 '43

Gadget strike; NWLB panel acts quickly on walkout caused by introduction of timing device in forge shop. Business Week p87 N 28 '42

Mechanics educational society of America kicks up; Matt Smith's independent union gets into row at Briggs works. Business Week p91-2 N 14 '42

President to ask rise in draft age to 65 to prevent future work stoppages. Comm & Fin Chr 158:28 Jl 1 '43

Should employees of utilities be allowed to strike? M. M. Rice. Pub Util 31:399-405 Ap 1 '43

Strike decision hits union's unlawful seizure; National labor relation board's decision in the Mid-continent refinery case. Nat Pet N 35:3, 35 Ag 4 '43

Strikes probed; Alcoa's Cleveland works investigated by NWLB. Business Week p89-90+ Ap 10 '43

Supervisory employees stage first foremen's strike at Ford. Automotive & Aviation Ind 89:50+ Jl 15 '43

Teamsters balk. il Business Week p98 O 23 '43

See also

Arbitration, Industrial
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Labor disputes
Picketing
Trade unions

Law

Antilabor law? Connally-Smith act. Business Week p94 Jl 3 '43

Anti-strike bill provides basis for revising national labor policy, says Guaranty Trust. Comm & Fin Chr 158:33 Jl 1 '43

Attorney General Biddle upholds right of minority to demand and obtain strike vote. Comm & Fin Chr 158:612 Ag 12 '43

Congress overrides President's veto of anti-strike bill. Comm & Fin Chr 158:25+ Jl 1 '43

Hat union takes 1st action under anti-strike bill. Comm & Fin Chr 158:133 Jl 8 '43

In the middle; Allis-Chalmers caught by antistrike law. Business Week p96+ S 4 '43

Labor urges veto of anti-strike bill. Comm & Fin Chr 157:2287 Je 17 '43

Miners indicted; first prosecutions under Connally-Smith act. Business Week p17-18 Jl 31 '43

President authorizes War labor board to enforce sanctions against strikers. Comm & Fin Chr 158:832 Ag 26 '43

Seeks repeal of Smith-Connally anti-strike bill. W. Green. Comm & Fin Chr 158:314 Jl 22 '43

Shaping the law; industry commissions of NWLB regain authority under first interpretation of Connally-Smith act. Business Week p75-6 Ag 7 '43

Strike law wins; coal miners sentenced. Business Week p17 S 4 '43

Trouble on the way; strike vote at Allis-Chalmers illustrates how minority unions will reap advantage from Connally-Smith act. il Business Week p15-16 Ag 7 '43

What the antistrike bill provides. Business Week p110 Je 19 '43

STRIKES—Continued**Municipal employees**

Bar civil servant's right to strike; New Jersey civil service commission. Eng N 129: 814 D 10 '42

Sit-down strikes

Echo of the past; NLRB to decide whether Tulsa stay-in was a sitdown. Business Week p78+ S 25 '43

Statistics

Industrial disputes; strikes, man days idle, 1928-1942; charts and tables. Automotive & Aviation Ind 88:70-1 Mr 15 '43
 Man-days idle and workers involved in strikes, 1940-May 1943; chart. Survey of Cur Business 23:2 Ag '43
 Strikes in 1942. D. Q. Crowther. map Monthly Labor R 56:959-78 My '43
 Strikes in November 1942. Monthly Labor R 56:68 Ja '43 [cont monthly]
 Strikes in the United States in 1942. Int Labour R 48:504-7 O '43
 Trade disputes; number of working days lost, 1913-1919, and 1936-1942. Economist 144:768 Je 12 '43
 WLB to discontinue strike statistics. Comm & Fin Chr 157:102 Mr 18 '43

Canada

Strike insurance; federal board conducts open hearings. Business Week p50 My 15 '43

STRINGED instruments

See also

Plano

STRIP steel. See Steel, Strip

STRIPPER wells. See Petroleum—Stripper wells

STRIPPING agents. See Dyes and dyeing—Stripping

STRIPPING operations. See Coal mines and mining—Stripping operations; Mining methods—Stripping operations

STROBOSCOPIC instruments

Inexpensive stroboscope for high speed photography. S. Silverman and W. H. Warhus. il diags R Sci Instr 14:273-5 S '43

New devices for industry. W. Moody. diags Radio N 29:31 F '43

Precision stroboscopic frequency meter. E. L. Kent. il diags Electronics 16:120-1 S '43

Stroboscope unmasks fuel injection; Diesel laboratory of Pennsylvania state college. P. H. Schweitzer. il diag Automotive & Aviation Ind 89:32-4 S 1 '43

Stroboscopic equipment. G. Windred. il Engineering 155:401-2 My 21 '43

Use of stroboscopic patterns in the determination of speeds of rotation. D. A. MacInnes. bibliog diags R Sci Instr 14:14-16 Ja '43; Abstract. Electronics 16:166+ Ap '43

STROMBERG-CARLSON telephone manufacturing company

Sales executive slant helps boost Stromberg-Carlson war production. Sales Management 52:52-5 My 1 '43

STRONTIUM

Addition of metals to some phenylated olefins in liquid ammonia solution. H. Gilman and J. C. Bailie. Am Chem Soc J 65:267-8 F '43

STRONTIUM carbonate

Strontium carbonate; conversion from strontium sulfate by metathesis with alkali carbonate solution. K. A. Kobe and N. J. Deiglmeier. bibliog il Ind & Eng Chem 35:323-6 Mr '43

STRONTIUM compounds

Organostrontium compounds. H. Gilman and others. bibliog Am Chem Soc J 65:268-70 F '43

STRONTIUM sulfate

Barium and strontium sulfate decomposition in aqueous solution. R. N. Shreve and H. F. Wiegandt. bibliog Ind & Eng Chem 35:608-13 My '43

Strontium carbonate; conversion from strontium sulfate by metathesis with alkali carbonate solution. K. A. Kobe and N. J. Deiglmeier. bibliog il Ind & Eng Chem 35:323-6 Mr '43

STRUCTURAL aluminum. See Aluminum, Structural

STRUCTURAL clay products institute

Annual SCPI board of directors meeting elects new officers. Brick & Clay Rec 101:14-15 N '42

SCPI outlines research program in current subscription drive. Brick & Clay Rec 103:8-9 Ag '43

War council. D. Whitlock. Am Cer Soc Bul 22:214-17 Jl 15 '43

War council construction program swings into high gear; first series of conferences, between Structural clay products institute engineers and staffs of regional, district, and state offices of government construction agencies. Brick & Clay Rec 102:35-6 Ap '43

STRUCTURAL engineering

Engineering outlook; structural engineering. Engineering 155:222-3 Mr 19 '43

Notable practices on war construction, 1942. H. W. Hunt. il Eng N 130:204-6 F 11 '43

Pictorial record of engineered construction in 1942. Eng N 130:229-42 F 11 '43

Recent developments in structural engineering. R. H. Evans. Engineering 155:155-6, 176 F 19-26 '43

See also

Bridge design

Building

Civil engineering

Concrete construction

Foundations

Gas holders

Steel construction

Strains and stresses

Strength of materials

Wind pressure

Design

Analysis of stresses in simple and continuous beams and girders. H. L. Wagner. il diags Roads & Bridges 81:19-23+ Je '43

Application of soil mechanics in designing building foundations. A. Casagrande and R. E. Fadum. bibliog il diags Am Soc C E Proc 68:1487-1520 N '42; Discussion. 69:449-55 bibliog (p450-1), 927-41, 1065-93 Mr, Je, S '43

Determination of moments in continuous beams with concentrated loads. O. Albert. Civil Eng 13:545-6 N '43

How to analyze continuous beams for combined dead and live loading; Hardy Cross method. J. Zalkin. diags Eng N 130:486-9 Ap 8 '43

Importance of soil mechanics in design of compressor foundations. H. R. Marsh. diags Nat Pet N 35 pt 2:R544-9 N 3 '43

Method of design of steel stacks and foundation. S. Levine. diags Pet Refiner 22:104-5 Ap '43

Moment balance; a self-checking analysis of rigidly jointed frames. R. J. Cornish. diags Am Soc C E Proc 68:683-90 My '42; Discussion. 68:775-80, 1067-70, 1239-43, 1449-51, 1649-54, 1826-30; 69:705-14 My-Je, S-D '42, My '43

Sloping chord open panel frames by moment distribution method. F. N. Weaver. diags Boston Soc C E J 30:51-65 Ap '43

Strength of slender beams. G. Winter. diags Am Soc C E Proc 69:817-45 bibliog (p843) Je '43; Discussion. bibliog 69:1094-6, 1634-6 S, D '43

Stresses and displacements from loads over rectangular areas. H. Gray. Civil Eng 13: 227-9 My '43

Study in modern methods of rigid frame analysis. G. A. Maney. W Soc E J 47:259-73 D '42

Symmetrically loaded base slab on an elastic foundation. S. U. Benscoter. diags Am Soc C E Proc 69:691-704 My '43; Discussion. 69: 1125-32, 1503-4 S, N '43

Tapered and stepped columns designed for minimum weight. A. H. Church. diags Product Eng 14:499-502 Ag '43

See also

Airplanes—Design

Concrete construction

Petroleum refineries

—Design

Steel construction—

Design

Strength of materials

Models

See also

Bridge models

STRUCTURAL engineering—Continued**Tables, calculations, etc.**

Analogy for horizontal forces on partially buried structures. H. M. O'Neil. *diags Eng N* 131:324-5 Ag 26 '43

Fixed-end moments simplified by calculator. G. C. Brookhart. *Civil Eng* 13:283-4 Je '43

General solution for earth pressures. A. R. Brown. *Civil Eng* 12:685-7 D '42

Influence charts for computation of stresses in elastic foundations. N. M. Newmark. *diags fold charts Ill U Eng Exp Sta Bul* 338:1-25 '42 (pa 35c)

Numerical procedure for computing deflections, moments, and buckling loads. N. M. Newmark. *bibliog diags Am Soc C E Proc* 68:691-718 My '42; *Discussion* 68:783-7, 1037-8, 1247-60, 1455-7, 1655-8; 69:153-62, 427-30, 789-90 My-Je, S-N '42, Ja, Mr, My '43

Pressures on unsymmetrical pile groups. R. B. B. Moorman. *Civil Eng* 13:326-7 Jl '43

See also

Bridge design	Steel construction—
Concrete construction—Design	Design

Terminology

Energy method, which one? A. S. Niles. *bibliog J Eng Educ* 33:698-706 My '43

STRUCTURAL glass. *See* Glass, Structural

STRUCTURAL steel. *See* Steel, Structural

STRUCTURES, Theory of

Applications of the operational calculus to the theory of structures. L. A. Pipes. *J Ap Phys* 14:486-95 S '43

See also

Building	Strength of materials
Load (mechanics)	Structural engineering
Strains and stresses	ing

STRUTS, Airplane. *See* Airplane struts

STUCCO

Contractor explains detailed procedure for placing stucco overcoating. W. Spengler. *Concrete* 51:18 Je '43

How to refinish old stucco. *il Am Bld* 65:60 Ja '43

STUDEBAKER corporation

Annual report. *Comm & Fin Chr* 157:998-9 Mr 15 '43

Low-priced stocks for large percentage gains. *Mag of Wall St* 71:635 Mr 20 '43

Progress. *Barron's* 23:9 Ag 2 '43

STUDENTS*See also*

Chemistry students
College students
Engineering students

STUDIOS

Group studio, Los Angeles. *il plans Arch Forum* 78:56-7 F '43

See also

Moving picture studios	Radio broadcasting studios
	Television studios

STUDS. *See* Bolts and nuts

STUDY, Method of

Some hints on how to study. C. J. Heimerzheim. *J Chem Educ* 20:508-10 O '43

STUFFING boxes

Why mechanical seals improve centrifugal pump operation. H. Hornschuck. *il diags Power* 87:524-6 Ag '43

STUTTERING. *See* Stammering

STUYVESANT Town housing project. *See* Housing—New York (city)

STYRACITOL

Lead tetraacetate oxidations in the sugar group; the rates of oxidation of trehalose, levoglucosan, α -methyl-L-sorbosepyranoside, polygalitol and styracitol in glacial acetic acid. R. C. Hockett, M. T. Dienes and H. E. Ramsden. *bibliog Am Chem Soc J* 65:1474-7 Ag '43

Ring structure of polygalitol. N. K. Richtmyer and C. S. Hudson. *bibliog Am Chem Soc J* 65:64-7 Ja '43

STYRALOY 22. *See* Rubber, Substitutes for

STYRAX. *See* Storax

STYRENE

Advances in plastics during 1942; styrene and polystyrene. R. F. Boyer. *bibliog* (123 titles, p 126, 128) *il Mod Plastics* 20:97-8, 126, 128 Ja '43

Battery retainer made from byproducts of plastics manufacture. L. E. Lighton. *Sci Am* 169:204 N '43

Copolymerization of styrol and methylmethacrylate. *India Rubber W* 107:604-Mr '43

Economy of petroleum processes compared to alcohol base guided Canadian rubber program. C. D. Howe. *Oil & Gas J* 42:88-9 Jl 15 '43

Ester groups in polystyrene made with chloro- and bromobenzoyl peroxides. P. D. Bartlett and S. G. Cohen. *Am Chem Soc J* 65:543-6 Ap '43

Fine structure of metallic surfaces with the electron microscope; two-step replica process utilizes molded polystyrene and evaporated silica. R. D. Heidenreich and V. G. Peck. *bibliog il diag J Ap Phys* 14:23-9 Ja '43

Formation of biradicals in the non-catalyzed polymerization of styrene. G. Goldfinger, H. Naidus and H. Mark. *Am Chem Soc J* 65:995-6 My '43

Interpretation of electron micrographs of silica surface replicas. R. D. Heidenreich. *bibliog il J Ap Phys* 14:312-20 Jl '43

Plastic bottles? new blowing method. *il diags Mod Packaging* 17:65-7 N '43

Plastics go a-fishing; polystyrene applied to fishing net floats and needles. *il Am Gas J* 159:26 O '43

Polymerization of styrene in the presence of nitrobenzene, 2,4-dinitrochlorobenzene and nitromethane. C. C. Price and D. A. Durham. *bibliog Am Chem Soc J* 65:757-9 My '43

Polymerization of styrene in the presence of 3,4,5-tribromobenzoyl peroxide. C. C. Price and B. E. Tate. *bibliog Am Chem Soc J* 65:517-20 Ap '43

Polystyrene for wartime electronics. F. E. Wiley. *bibliog il Mod Plastics* 20:80-1-Ag '43

Reaction of indene and styrene bromohydrins with sodium sulfite; cleavage of alkali sulfonates with sodium in liquid ammonia. C. M. Suter and H. B. Milne. *Am Chem Soc J* 65:582-4 Ap '43

Solubility of sulphur in butadiene-styrene copolymer. I. Williams. *India Rubber W* 108:35-6 Ap '43

Some physical properties of butadiene and styrene. L. A. Wood and C. F. Higgins. *bibliog India Rubber W* 107:475-6 F '43

Spray nozzle machined out of polystyrene. *il diags Product Eng* 14:623 O '43

Styrene for rubber made from benzene, alcohol or ethylene. *il Oil & Gas J* 41:43 N 26 '42

Thermodynamics of styrene (phenylethylene), including equilibrium of formation from ethylbenzene. L. Guttman, E. F. Westrum, jr. and K. S. Pitzer. *Am Chem Soc J* 65:1246 Je '43

Analysis

Cryoscopic analysis of styrene, indene, and dicyclopentadiene. E. H. Smoker and P. E. Burchfield. *Ind & Eng Chem Anal ed* 15:128-9 F 15 '43

Determination of monomeric styrene in air. V. K. Rowe and others. *diags J Ind Hygiene* 25:348-53 O '43

Unsaturation of butadiene and related polymers as determined by iodine chloride addition. A. R. Kemp and H. Peters. *bibliog Ind & Eng Chem Anal ed* 15:453-9 Jl 15 '43

Manufacture

Full-scale production in new Dow styrene plant. *Chem & Eng N* 21:1086 Jl 10 '43

Government synthetic rubber plant at Institute, W.Va. R. G. Seaman. *flow charts il India Rubber W* 108:359-62, 457-60, 466 Jl-Ag '43

GR-S rubber; West Virginia's synthetic rubber plantation. J. A. Lee. *il Chem & Met Eng* 50:98-102 Je '43

Petroleum refining processes adapted to styrene manufacture. *il Pet Refiner* 22:121-3 Jl '43

STYRENE—Manufacture—Continued

- Progress of styrene production. W. Dow. *Ind & Eng Chem* 34:1267-8 N '42; Same. *Chem Age (Lond)* 48:21-3 Ja 2 '43
- Safety in styrene production. H. K. Eckert. *il Nat Pet N 35 pt 2:R530 N 3 '43*
- Styrene plant placed in operation. C. C. Pryor. *il Pet Eng* 14:37-8 Ag '43
- Texas City styrene plant gets underway. *il Chem & Met Eng* 50:133 Je '43
- Texas City styrene plant is nearing capacity output. *Oil & Gas J* 42:43 Je 17 '43
- U.S. synthetic rubber program moves forward; government plant at Institute, West Virginia. W. J. Murphy. *il Chem & Eng N* 21:864-77 Je 10 '43
- Utilities are a major factor in synthetic-rubber operations; government project for production of butadiene and styrene by Carbide & carbon chemicals corp. and manufacture of Buna-S by United States rubber co. C. O. Willson. *il Oil & Gas J* 42:29-30, 32 Je 3 '43

Physiological effect

- Response of laboratory animals to monomeric styrene. H. C. Spencer and others. *bibliog J Ind Hygiene* 24:295-301 D '42

STYROL. See Styrene**STYRYLACRIDINES**

- Preparation and therapeutic properties of certain acridine derivatives; 5-methylacridines, further 5-styrylacridines and their quaternary salts; with note on antiseptic and trypanocidal action by C. H. Browning and K. M. Calver. W. Sharp, M. M. J. Sutherland and F. J. Wilson. *Chem Soc J* p344-7 Ag '43

- Preparation and therapeutic properties of certain acridine derivatives; 5-styrylacridines and their quaternary salts. W. Sharp, M. M. J. Sutherland and F. J. Wilson. *Chem Soc J* p5-7 Ja '43

SUBAQUEOUS welding. See Electric welding—Subaqueous welding**SUBCONTRACTING**

- Fantasy in lights; Lights inc., Alhambra, California; products include large part of all U.S. airplane lights and portable air-field-lighting equipment. *il Fortune* 27:132-3 Je '43

- Subcontracting; a device for expansion. A. J. Schwiager. *Harvard Business R* 22 no 1:88-92 [O] '43

- Subcontracting by a tube mill; Summerill tubing co. D. E. Lukens. *il Aviation* 42:201, 203+ Je '43

See also

- Contracts, Government—Subcontracting

SUBDIVISION of land. See Land—Subdivision**SUBJECT headings**

- Catholic subject headings; a list designed for use with Library of Congress subject headings or the Sears list of subject headings for small libraries; first supplement. O. L. Kapsner, ed. 69p pa 25c St John's abbey press, Collegeville, Minn. '43

- Subject headings for the information file. L. M. Wenman and M. O. Ball, comps. 5th ed 110p pa \$1.25 H. W. Wilson co, New York '43

- Subject headings used in the dictionary catalogs of the Library of Congress. M. W. MacNair, ed. 4th ed 2v 1566p; 1177p \$10 Supt. of doc. '43

- War subject headings for information files. 2d ed 69p pa \$2 Special Libraries assn, 31 E. 10th st, New York '43

- World war II subject headings for pamphlets and clippings in the War information center. 31p Cleveland public lib, War and defense information center, Cleveland '42

SUBLIMATION

- Vacuum sublimation. M. H. Hubacher. *diags Ind & Eng Chem Anal ed* 15:448-50 J1 15 '43

- Vacuum sublimation and molecular distillation apparatus. B. Riegel, J. Beiswanger and G. Lanzl. *il diags Ind & Eng Chem Anal ed* 15:417-21 J1 15 '43

SUBMARINE boats

- Application of welding in submarine construction. E. H. Ewertz and R. D. West. *il Welding J* 22:10-13 Ja '43
- Electrolytic hydrogen engine; its use in German submarines; abstract. *Chem Age (Lond)* 48:559 My 22 '43
- Japanese midget submarines. *il Engineering* 156:276 O 1 '43
- Simon Lake, submarine genius. H. Manchester. *il diag Sci Am* 168:120-3 Mr '43

SUBMARINE chasers

- Down to the sea for subs; chasers of World war one come back as YP boats. A. D. Rathbone. *il Sci Am* 168:4-6 Ja '43

SUBMARINE destroyers

- Iron sea horse built by York corporation; marine steam engines used in boats for sub-hunting. *Refrig Eng* 46:247 O '43

SUBMARINE mines. See Mines, Submarine**SUBMARINE valleys. See Canyons, Submarine****SUBMARINE warfare**

- Aboard a Mitchell bomber. R. C. Picinich, jr. *il Aero Digest* 42:114-15 My '43
- Blimps on patrol. R. G. Picinich, jr. *il Aero Digest* 43:116-17+ J1 '43
- Convair patrol; flying boat for anti-submarine duty. *il diags Automotive & Aviation Ind* 89:26-7+ Ag 1 '43
- Helicopter proves worth as anti-submarine weapon. *il Aero Digest* 42:311+ Je '43
- Killing subs. *Steel* 112:67 My 31 '43
- Sub hunting by the coastal air patrol. *il Aero Digest* 42:113-14 My '43

History

- Submarine in New York harbor in 1776. *Comp Air M* 48:7169 O '43

SUBMERGED combustion. See Combustion, Submerged**SUBMERSIBLE pumps. See Pumps, Submersible****SUBROGATION**

- Subrogation suit for \$583,223 filed in Chicago; warehouse fire. *Nat Underw* 47:27 N 4 '43

SUBSIDENCES (earth movement)**See also****Landslides****SUBSIDIES**

- Another subsidy row in prospect; analysis of our food program. J. S. Davis. *Barron's* 23:6 O 4 '43

- Behind the CCC; battle to prolong life of lending agency. *Business Week* p22+ O 9 '43

- British food subsidies; weapon against inflation. J. Backman. *il Dun's R* 51:12-16, 36-7 Mr '43

- Buy-sell arrives; proposed subsidy to roll back food prices. *Business Week* p17-18 S 18 '43

- Canadian subsidies ease pressure on prices. J. Backman. *il Dun's R* 51:14-20+ Ap '43

- Case for subsidies in price control. J. Backman. *Barron's* 23:16 My 10 '43

- Combination of price roll-back with subsidies expected to appease labor unions. E. Blair. *Barron's* 23:4 My 10 '43

- Crisis on the home front; effects of new OPA price regulations and subsidies on retailing profits. L. Stern. *Mag of Wall St* 72: 173-5+ My 29 '43

- Defends use of subsidies in new plan for food price control. P. M. Brown. *Comm & Fin Chr* 157:2386 Je 24 '43

- Doubts value of subsidies as permanent check on inflation. C. C. Davis. *Comm & Fin Chr* 157:2076 Je 3 '43

- Ethyl alcohol subsidy set to protect price ceilings. *Oil Paint & Drug Rep* 144:3+ J1 5 '43

- Food costs and subsidies in Great Britain. *Monthly Labor R* 57:816-17 O '43

- Food subsidies in Canada. *Economist* 144: 145 Ja 30 '43

- Food subsidy program. *Nat City Bank* p62-5 Je '43; *Excerpts. Comm & Fin Chr* 157: 2172 Je 10 '43

- House acts to discontinue OPA subsidy program and abolish operations of OWI. *Comm & Fin Chr* 157:2388 Je 24 '43

SUBSIDIES—Continued

House sustains President's veto of bill banning subsidy payments; Senate again rejects plan. *Comm & Fin Chr* 153:129, 132-3 J1 8 '43

Increased milk subsidy for N.Y. distributors. *Comm & Fin Chr* 156:1804 N 19 '42

Inflation being pushed by powerful congressional coalition. *E. Blair. Barron's* 23:5+ Je 21 '43

Middlemen and subsidies. *Barron's* 23:8 My 24 '43

OPA roll-back program only way to hold the line. *D. H. Humphries. Comm & Fin Chr* 157:2295 Je 17 '43

Operators express views on OPA subsidization, proposals. *Oil & Gas J* 42:34-6 My 13 '43

Playing price control politics; administration wins on subsidies, but they can't be used for new rollbacks. *Business Week* p15-16 J1 17 '43

Poor base for subsidies. *Trusts & Estates* 76:492 Je '43

President favors food subsidies but rejects plan for food czar. *Comm & Fin Chr* 158:28 J1 1 '43

President seeks subsidies, defends program as anti-inflation measure; message to Congress. *Comm & Fin Chr* 158:1805, 1810-11 N 4 '43

Price roll-back questions studied; liability for subsidies to food processors. *Nat Underw* 47:1 My 20 '43

Senate quits effort to ban subsidies. *Comm & Fin Chr* 158:232 J1 15 '43

Subsidies, an aid to proper price controls. *Trusts & Estates* 77:6 J1 '43

Subsidies and lend-lease. *Trusts & Estates* 77:104-5 Ag '43

Subsidies delusion not solution. *P. S. Willis. Comm & Fin Chr* 158:98+ J1 8 '43

Subsidies in British and Canadian price control. *J. H. Barkmeier and W. R. Maroney. For Comm W* 13:6-10 O 30 '43

Subsidies or higher prices? *Trusts & Estates* 76:103-4 F '43

Subsidies or wage boosts. *Business Week* p15-16 Je 26 '43

Subsidized control of living costs in Canada and Great Britain. *Monthly Labor R* 56:32 Ja '43

Subsidy payments on 4 canned vegetables. *Comm & Fin Chr* 157:2294 Je 17 '43

Subsidy plan for food under consideration by administration; congressmen protest action. *Comm & Fin Chr* 157:1933 My 27 '43

Tough fight ahead on subsidies. *Business Week* p15-16 N 6 '43

Vote to end food subsidy payments. *Comm & Fin Chr* 158:22 J1 1 '43

What subsidies? rollback on food items hangs fire; box score on wartime subsidies. *Business Week* p16-17 My 22 '43

Wider subsidies; Ottawa plans to extend payments to meats. *Business Week* p82+ My 29 '43

See also
Ship subsidies

SUBSISTENCE homesteads
Back to the land? subsistence farming as cure for some social ills. *E. T. Peterson. Fortune* 28:62+ N '43

SUBSISTENCE research laboratory. See United States—Quartermaster corps—Subsistence research laboratory

SUBSTITUTES
Alternate materials for luminaires. *E. H. Robinson. il diag Illum Eng* 37:691-9 D '42; *Excerpts. Elec W* 118:1446-7 O 31 '42

Alternates of the baking industry; abstract. *T. J. Otterbacher. Can Chem & Process Ind* 27:235 Ap '43

Arms' economies; substituting noncritical items. *Business Week* p76+ F 20 '43

Between the lines; substitute containers. *Chem Ind* 51:704-5 N '42

British food technologists improvise to meet shortages; manufacturers of frozen desserts kept on making products acceptable to consumers without "essential" ingredients. *H. B. Cronshaw. Food Ind* 15:57+ F '43

Ceramics as substitutes; abstract. *Metals & Alloys* 17:622 Mr '43

Compressor and condensing unit substitutions. *S. R. Hirsch. il Refrig Eng* 45:160-2 Mr '43

Conservation and substitution in marine engineering. *J. L. Kimberley. Marine Eng* 47:257-9 O; 133-5 N '42

Conservation of critical materials. *H. Hill and H. B. Zackrisson. Civil Eng* 13:83-4 F '43

Conservation of critical materials by redesign. *J. B. Nealey. Mach* 49:165-7 D '42

Conservation problems in the toilet goods industry. *E. C. Merrill. Oil Paint & Drug Rep* 143:61-3 My 17 '43

Conserving the use of critical materials; developing scrap-saving methods as a means of supporting the war effort; General Motors corporation. *B. D. Kunkle. il Mech Eng* 65:267-73 Ap '43

Continuing need for the conservation of resources. *H. Coonley. Mech Eng* 65:785-8 N '43; *Excerpts. Ind Stand* 14:281-3 O '43

Coolerator metal-less (almost) ice box beats materials shortage; has distribution in 7,000 stores in all 48 states and Alaska. *J. H. Ganzer. il Sales Management* 52:66+ F 15 '43

Corrosion test data; guide to the selection of substitute materials. *R. T. Barnes, jr., J. W. Wing and T. E. Lagerstrom. il diag Pulp & Pa of Can (Convention no) 44:135-8 [F] '43*

Critical materials list revised; issue no. 8. *Oil Paint & Drug Rep* 143:7+ Ap 26 '43

Critical materials listed by conservation unit; sixth material substitution and supply list. *Oil Paint & Drug Rep* 142:3+ N 16 '42

Critical materials supply list; seventh issue. *Oil Paint & Drug Rep* 143:7+ F 15 '43

Doing a bigger job, with less; Western electric co. *A. von Auw. il Steel* 112:66-7+ Mr 22 '43

Don't apologize for substitutes, brag about them! *A. P. Ames. il Ptr Ink* 204:18-19 J1 16 '43

Encyclopedia of substitutes and synthetics. *M. D. Schoengold, ed. 382p \$10 Philosophical lib, 15 E. 40th st, New York '43*

Ersatz in the gas business. *G. Wehrle. Am Gas J* 158:9-10 Mr '43

Essential war metals saved by the lighting industry. *D. P. Caverly. il diag Illum Eng* 38:133-40 Mr '43

Fiber cans as substitute packages in wartime. *R. P. Bigger, F. H. Eopp and T. E. Dobbins. Paper Tr J* 116:33-5 Mr 4 '43; *Same. Pulp & Pa of Can* 44:660-2 Ag '43

Five postwar trade problems; synthetic substitutes. *A. E. Taylor. Harvard Business R* 21 no2:156-8 [Ja] '43

Folding carton and fiberboard substitutes for metal containers. *J. D. Malcolmson. Paper Tr J* 115:21-2 O 8 '42; *Same. Pulp & Pa of Can* 44:263-4 F '43

German chemical notes; substitutes developed to meet war-time shortages. *Chem Age (Lond)* 47:559-60 D 19 '42

German substitutes for tin plate; abstract. *L. Schuster. Metals & Alloys* 17:1056+ My '43

Lead, savior of critical materials. *Min Cong J* 29:17 Ja '43

Little woman looks at the substitutes. *J. Griffiths. il Adv & Sell* 36:106 Ag '43

Luxury slumber; ersatz blanket market. *Business Week* p67 F 6 '43

Manila rope substitute suggested; weldless chains. *Oil & Gas J* 42:52 My 27 '43

Material substitution and supply list No. 9 issued. *Oil Paint & Drug Rep* 144:7+ Ag 2 '43

Materials substitution and supply list No. 10. *Oil Paint & Drug Rep* 144:7+ O 18 '43

Metal substitution list. *W. L. Nelson. Oil & Gas J* 42:43 My 13 '43

Non-metallics on the march. *H. R. Simonds. Metals & Alloys* 17:99-100 Ja '43

Plastics help conserve strategies; Curtiss-Wright corp. *C. G. Trimbach. il Machine Design* 15:116-18 S '43

Possible substitutes for metal finishing materials; list. *Metal Finishing* 41:354-5, 432-3 Je-J1 '43

Post-war competition; steel and substitutes. *C. G. Conley. Manuf Rec* 111:23, 46+ N '42

Products for postwar; new and substitute materials. *P. James. il Adv & Sell* 36:13-15+ Mr '43

SUBSTITUTES—Continued

- Proud of its substitutes; Crane co. develops line of galvanized iron plumbing fittings and earthenware sinks and bath tubs. H. E. Fleming. *il Ptr Ink* 204:18-20 J1 23 '43
- Proxy metallurgy. D. L. Colwell. *il Min & Met* 24:142-5 Mr '43
- Scarce materials are vital to the war effort. W. J. Clardy. *Mech Eng* 65:567-72 Ag '43
- Spring material substitutes have unconsidered qualities. W. W. Boyd. *il diag Product Eng* 14:112-13 F '43
- Sticky substitute, sodium cellulose glycolate; Germans making more than 40 different preparations. V. Kinnard. *For Comm W* 11: 11+ My 15 '43; Same. *Chem & Met Eng* 50: 192-4 Je '43; Same abr. *Chem Ind* 53:85-6 J1 '43
- Substitute materials; discussion. *Inst Mech Eng J & Proc* 149:Proc 161-2 S '43
- Substitute materials; have we gone the limit? J. G. Wood and R. F. Sanders. *il S A E J* 51:78-83+ Mr '43; Abstract. *Automotive & Aviation Ind* 88:36-7 F 1 '43
- Substitute materials in the water works field. R. Bennett. *Am Water Works Assn J* 35: 37-52 Ja '43
- Substitutes for leaded bearing bronze. R. W. Dayton, H. W. Gillett and L. E. Balch. *bibliog Metals & Alloys* 16:1072-9 D '42
- Substitutes for nonfibrous chemical raw materials. E. N. Poor. *Paper Ind* 25:380-1 J1 '43
- Substitution and conservation; use of paper and paper products. R. J. Zaumeyer. *Paper Tr J* 117:31-4 N 4 '43; Same cond. *Paper Ind* 25:912-16 N '43
- Substitution challenges skill of designer. A. W. Meyer. *il diag Machine Design* 15:93-5+ My '43
- Substitution of materials; plumbing and heating equipment. *Dom Eng* 161:49 Ja '43
- Substitutions to save critical building materials; list. *Eng N* 130:189 F 11 '43
- Successful applications of NE (national emergency) alloy steels in gear making. E. J. Wellauer. *diag Steel* 111:106-7+ N 16 '42; Same abr. [with some additions]. *Machine Design* 14:66-9+ N '42
- Suggestions for saving critical materials; revised summary of methods of and conservation of and substitution for critical materials compiled by Engineering committee, Technical section, C.P. & P.A. Pulp & Pa of Can 44:16-26 Ja '43
- Wartime priorities bring substitute materials il municipal services. *Eng N* 130:762 My 20 '43
- See also*
- | | |
|---------------------|--------------------|
| Raw materials | Steel—Conservation |
| Rubber, Substitutes | tion |
| for | Synthetic products |
- SUBSTITUTION (chemistry)**
- Absorption spectra of some *m*-substituted phenols, and the influence of nucleophilic substituents on electronic mobility. H. H. Hodgson. *Chem Soc J* p380-2 Ag '43
- Catalytic debenzoylation; the effect of substitution on the strength of the O-benzyl and N-benzyl linkages. R. Baltzly and J. S. Buck. *Am Chem Soc J* 65:1984-92 O '43
- Conversion of Δ^2 -cyclohexenones and cyclohexanones into spirohydantoin. H. R. Henze, R. C. Wilson and R. W. Townley. *bibliog Am Chem Soc J* 65:963-5 My '43
- Effect of substituents on the acid strength of benzoic acid; the cyano group. M. Kilpatrick and R. D. Eanes. *Am Chem Soc J* 65:589-90 Ap '43
- Electrostatic influence of substituents on reaction rates; saponification of ethyl benzoate, ethyl toluate, ethyl anisate, ethyl *p*-chlorobenzoate, and ethyl *p*-nitrobenzoate. D. Price and F. H. Westheimer. *J Chem Phys* 11:150-3 Mr '43
- Formation of anhydro structures by the alkaline de-acylation of a partly substituted cellulose acetate *p*-toluenesulfonate. T. S. Gardner and C. B. Purves. *bibliog Am Chem Soc J* 65:444-9 Mr '43
- Influence of *p*-substituents on the decomposition of zinc chloride double salts of diazonium chlorides by acetic anhydride. H. H. Hodgson and C. K. Foster. *Chem Soc J* p747-8 D '42

- Ionization constants of aci and nitro forms of some nitroparaffins. D. Turnbull and S. H. Maron. *bibliog Am Chem Soc J* 65: 212-13 F '43
- N-substituted 2-methoxy-6-chloro-9-amino-acridines. J. H. Burckhalter and others. *Am Chem Soc J* 65:2012-15 O '43
- Number of structural isomers in simple ring compounds. T. L. Hill. *bibliog J Phys Chem* 47:253-60 413-21 Mr Je '43
- Substitution reactions of neopentyl halides; abstract and discussion. E. D. Hughes and I. Dostrovsky. *Chem & Ind* 62:53 F 6 '43

See also

- | | |
|--------------|--------------|
| Alkylation | Methyl group |
| Bromination | Nitration |
| Chlorination | |

SUBURBAN development

- Municipal control of streets for new developments. F. E. Harley. *il diag Pub Works* 74: 26, 28-9 Ap '43
- Rural development, 65 families, Boston; protected neighborhood which exploits advantages of a wooded, lake-side site. *il plans maps Arch Forum* 79:133-9 O '43
- Satellite town for the Detroit area; proposal for a complete residential community of 15,000. *il plans Arch Forum* 79:91-9 O '43

See also

- | |
|------------------|
| Housing projects |
| Land—Subdivision |

SUBURBAN homes

- Suburban house; modern acceptable to laymen; views, plans, and construction outline. *Arch Forum* 79:56-7 J1 '43

SUBWAY cars. *See Cars, Subway***SUBWAY stations**

- Buenos Aires underground railway. E. Kindel. *diag map Engineer* 175:166-9, 184-7 F 26-Mr 5 '43
- Ceramic construction distinguishes new Chicago subway. *il Cer Ind* 40:60, 62+ My '43
- Chicago's first subway placed in operation. *il map Eng N* 131:598-501 O 21 '43
- Clay products construction featured in new Chicago subway; stations and station areas. *il Brick & Clay Rec* 102:26-8 My '43

Lighting

- Lighting for safety; New York's subway stations. E. E. Dorting. *il diag Illum Eng* 38:421-32 S '43

SUBWAYS*See also*

- Rapid transit
- also* subdivision Subways under names of cities, e.g. Chicago—Subways; Moscow—Subways; New York (city)—Subways; Philadelphia—Subways

Construction

- Above and under ground; incidents from a long engineering experience around New York. J. H. Myers. *il diag plan Civil Eng* 13:377-80 Ag '43
- Buenos Aires underground railway. E. Kindel. *diag map Engineer* 175:166-9, 184-7 F 26-Mr 5 '43
- Ceramic construction distinguishes new Chicago subway. *il Cer Ind* 40:60, 62+ My '43
- Chicago's first subway placed in operation. *il map Eng N* 131:598-601 O 21 '43
- Relocation of utility substructures; Chicago subway. J. B. Jackson. *il diag W Soc E J* 48:2-13 Mr '43

Cost

- Pedestrian passageways subway, Chicago; unit prices. *Eng N* 129:938 D 31 '42

Safety measures

- Lighting for safety; New York's subway stations. E. E. Dorting. *il diag Illum Eng* 38:421-32 S '43

Train dispatching

- Train timing; photo cell and film keep Philadelphia subway runs evenly spaced and on schedule. *Business Week* p40+ F 27 '43

Ventilation

- Development of formulae for calculating ventilation for the Chicago subways. E. Brock. *diag W Soc E J* 48:76-91 Je '43

SUBWAYS—Ventilation—Continued

Ventilating the new Chicago subway. W. E. Rasmus. *il diags plan Heating-Piping* 15: 393-9 Ag '43

SUBWAYS (streets)

Pedestrian subway approaches, Chicago; unit prices. *Eng N* 130:386 Mr 11 '43

See also

Grade crossing
elimination

SUCCESS

How to succeed in advertising and practically anywhere; 12 time-tested rules for personal conduct. G. Toogood. *Ptr Ink* 205:24 O 22 '43

See also

Business management

Efficiency, Industrial
Personality

SUCCESSION. *See* Inheritance and succession

SUCCESSOR trustees. *See* Trusts and trustees—Successor trustees

SUCCINIC acid

Dissociation constants of some acids in mixed solvents. J. C. Speakman. *Chem Soc J* p270-3 Je '43

Modified basic succinate estimation of aluminum in magnesium alloys. A. J. Boyle and D. F. Musser. *Ind & Eng Chem Anal* ed 15:621-2 O 15 '43

Reactions of atoms and free radicals in solution; decomposition of acetyl peroxide in aliphatic acids, a new synthesis of succinic acid and its substitution derivatives. M. S. Kharasch and M. T. Gladstone. *bibliog Am Chem Soc J* 65:15-17 Ja '43

SUCCINIC anhydride

Phenanthrene derivatives; acetylation and succinoylation of 3-methylphenanthrene. W. E. Bachmann and G. D. Cortes. *bibliog Am Chem Soc J* 65:1329-34 Jl '43

SUCCINOYLATION

Phenanthrene derivatives; acetylation and succinoylation of 3-methylphenanthrene. W. E. Bachmann and G. D. Cortes. *bibliog Am Chem Soc J* 65:1329-34 Jl '43

SUCCINYLSULFATHIAZOLE

Role of folic acid and biotin in the utilization of pantothenic acid by the rat. L. D. Wright and A. D. Welch. *bibliog Science* 97:426-7 My 7 '43

SUCKER rods

Analysis of optimum sucker-rod pumping; abstract. D. O. Johnson. *Oil & Gas J* 42: 88 My 20 '43

Care lengths service life of rods in Lagunillas field. W. B. Hopkins. *Oil & Gas J* 41:118+ D 31 '42

Oil-well pumping practices. J. Zaba. *bibliog il diags Oil & Gas J* 42:67, 70+ Jl 15; 34, 36-7 Jl 22; 229-30+ Jl 29; 49-50+ Ag 5; 69-70+ Ag 12; 60, 63, 65 Ag 19; 57, 59 S 16; 242+ S 23; 51-3 S 30 '43

Reduction of sucker-rod expense. *Oil & Gas J* 42:81 My 27 '43

Report on manufacturers' sales of polished rods, 1940-1941, inclusive. *Am Pet Inst Proc* 23(4):202-10 '42

SUCROSE. *See* Sugar**SUDAN, Egyptian**

Anglo-Egyptian Sudan economic conditions. *For Comm W* 11:14 My 29 '43

SUDBURY, Ontario**Sewerage**

Complicated municipal drainage problem; flooding remedial measures; with cost data. N. B. MacKostie. *il Water & Sewage* 81: 20-2+ Mr '43

SUEZ canal

Suez canal. *il map Comp Air M* 47:6887-9 N '42

SUFFOLK, Virginia

Field notes from the farm country. *Fortune* 27:230 Je '43

SUFFRAGE

See also

Soldiers—Suffrage

SUGAR

More for the table; supplies of coffee, sugar, and cocoa improving. *Business Week* p80+ Jl 17 '43

Photoelectric grading of sugars. H. Seymour. *diags Electrician* 131:137-8 Ag 6 '43

Staples paradox: coffee supply improves; sugar may get tighter. *Business Week* p22 My 1 '43

See also

Beets and beet sugar Sugar industry and
Invertase trade
Molasses Sugars

Analysis

See Sugar analysis

Color

Grading of soft sugars; photoelectric reflectance measurements. T. R. Gillett and A. L. Holven. *bibliog il diags Ind & Eng Chem* 35:210-14 F '43

Conservation

Let 'em eat cake; argument for equal sugar ration for all its products without discrimination. *Business Week* p22+ S 4 '43

Using sugar to best advantage under rationing. J. Micka. *il Food Ind* 15:69-71+ Je; 74-5 Jl '43

Manufacture and refining

Brazilian bauxite for sugar refining; abstract. F. J. Maffei. *Chem & Met Eng* 50:191 Mr '43

Defecation with phosphates; abstract. K. Loewy. *Chem & Met Eng* 50:187-8 O '43

Early Philadelphia sugar refiners and technologists. C. A. Browne. *bibliog il J Chem Educ* 20:522-30 N '43

Sugar, a chemically-pure food; production of beet sugar. R. H. Cottrell. *il Sci Am* 169: 9-11 Jl '43

See also

Sugar factories

By-products

See also
Glutamic acid

Rationing

Preview in sugar. *Business Week* p14 N 28 '42

Sugar rationing should benefit health. *Science* 96:sup10 N 13 '42

Too much liquor; output of spirits from Caribbean molasses curtails our sugar supply. *Business Week* p65 N 6 '43

Transportation

Can paper replace jute bags for raw sugar? *il Mod Packaging* 16:73+ Mr '43

SUGAR, Invert

See also

Invertase

SUGAR analysis

Azoyl derivatives of sugars and separation by chromatographic adsorption. G. H. Coleman and C. M. McCloskey. *bibliog Am Chem Soc J* 65:1588-94 Ag '43

Baumé-dextrose equivalent-dry substance tables for corn sirup and corn sugar. E. E. Fauser and others. *bibliog diags Ind & Eng Chem Anal* ed 15:193-200 Mr 15 '43

Determination of sugars in apple tissue; some modifications of the usual procedures. R. H. Leonard, R. C. Meade and R. B. Dustman. *bibliog Ind & Eng Chem Anal* ed 15:579-82 S 15 '43

Sugar analysis by alkaline ferricyanide method; determination of ferrocyanide by iodometric and other procedures. D. T. Englis and H. C. Becker. *bibliog Ind & Eng Chem Anal* ed 15:262-4 Ap 15 '43

Sugar determination in starch hydrolyzates by yeast fermentation and chemical means. A. S. Schultz and others. *bibliog Ind & Eng Chem Anal* ed 15:496-8 Ag 15 '43

SUGAR cane

See also

Bagasse

SUGAR charcoal. *See* Charcoal

SUGAR factories

Employees

Wages in southern cane-sugar refineries, winter of 1942-43. J. W. Bloch. *Monthly Labor R* 56:982-5 My '43

SUGAR factories—Continued

Equipment

Combination acid-alkaline treatment—speeds cleaning of clogged filter screens. J. H. Dittmar and F. L. Harvey. *il Chem & Met Eng* 50:117-18 S '43

Renewing heat transfer properties of fouled and inaccessible heating surfaces. J. H. Dittmar. *il diag Chem & Met Eng* 50:137-8 F '43

Sprayed metal saves material; American sugar reining co. *il Power* 87:115-17 F '43

Waste

Glutamic acid content of Steffen's waste. D. W. O'Day and E. Bartow. *bibliog Ind & Eng Chem* 35:1152-5 N '43

SUGAR industry and trade

Five postwar trade problems. A. E. Taylor. *Harvard Business R* 21 no2:150-63 [Ja] '43

Sugar industry in wartime; a few lessons from events in Europe during 1914-24. C. A. Browne. *bibliog il Chem & Eng N* 21:1243-8 Ag 10 '43

Sugar; world conditions. Index 23 no 1:9-16 [Mr] '43

Sweets for all. *Business Week* p110 Ag 14 '43

See also

Beets and beet sugar

Sugar—Rationing

Statistics

Raw sugar and refined sugar, 1938-1941. Survey of Cur Business 1942 Sup p125-6 [supplemented in monthly numbers]

Dominican Republic

Dominican Republic's sugar industry. *For Comm W* 10:34 F 27 '43

Ecuador

Sugar production in Ecuador, 1927-1942. *For Comm W* 11:26 Ap 3 '43

Germany

Sugar industry in wartime; a few lessons from events in Europe during 1914-24. C. A. Browne. *bibliog il Chem & Eng N* 21:1244-5 Ag 10 '43

Mexico

Mexico supplying sweets to U.S. *For Comm W* 10:23-4 F 20 '43

Puerto Rico

Outlook for Puerto Rican sugar companies. *Barron's* 23:10 Mr 15 '43

Uruguay

Sugar production in Uruguay; with statistics, 1937-1943. *For Comm W* 10:27 Mr '43

SUGAR workers

Wages and conditions in the Jamaican sugar industry. *Int Labour R* 48:240-2 Ag '43

See also

Sugar factories—Employees

SUGARS

Action of diazomethane upon acyclic sugar derivatives; halogen derivatives. M. L. Wolfrom and R. L. Brown. *bibliog il Am Chem Soc J* 65:1516-21 Ag '43

Action of diazomethane upon acyclic sugar derivatives; ketose synthesis. M. L. Wolfrom, R. L. Brown and E. F. Evans. *bibliog il Am Chem Soc J* 65:1021-7 Je '43

Alkaline degradation of phenylglycosides; a new method for determining the configuration of glycosides and sugars. E. M. Montgomery, N. K. Richtmyer and C. S. Hudson. *bibliog Am Chem Soc J* 65:3-7 Ja '43

Alkaline degradation of phenyl- β -lactoside, phenyl- β -cellobioside and phenyl- β -gluco- β -D-gulo-heptoside. E. M. Montgomery, N. K. Richtmyer and C. S. Hudson. *bibliog Am Chem Soc J* 65:1848-54 O '43

Azoyl derivatives of sugars and separation by chromatographic adsorption. G. H. Coleman and C. M. McCloskey. *bibliog Am Chem Soc J* 65:1588-94 Ag '43

Calcium chloride compounds of D- α -gluco-heptose (D-glycero-D-gulo-aldoheptose). H. S. Isbell and H. L. Frush. *bibliog J Research Nat Bur Stand* 31:163-8 S '43

Crystalline β -D-glucosyl-L-talo-octose (syn. D-glucosyl-L-talo-octose). A. T. Merrill, R. M. Hann and C. S. Hudson. *Am Chem Soc J* 65:994-5 My '43

Crystalline 4-methyl-D-mannose and some of its derivatives. W. T. Haskins, R. M. Hann and C. S. Hudson. *bibliog Am Chem Soc J* 65:70-3 Ja '43

Derivatives of the aldehydrol form of sugars; rotatory power. M. L. Wolfrom and R. L. Brown. *bibliog Am Chem Soc J* 65:951-3 My '43

Determination of fermentable sugars in sulphite wastes; abstract. G. Menzinsky. *Paper Ind* 25:323 Je '43

Lead tetraacetate oxidations in the sugar group; the rates of oxidation of trehalose, levoglucosan, α -methyl-L-sorbofuranoside, polygalactitol and styrcitol in glacial acetic acid. R. C. Hockett, M. T. Dienes and H. E. Ramsden. *bibliog Am Chem Soc J* 65:1474-7 Ag '43

Lead tetraacetate oxidations in the sugar group; triphenylmethyl ethers of β -methyl-D-arabinopyranoside and of α -methyl-L-fucopyranoside; the determination of their structures. R. C. Hockett and D. F. Mowery, jr. *bibliog Am Chem Soc J* 65:403-9 Mr '43

Preparation of β -primeverose heptaacetate and β -vicianose heptaacetate. C. M. McCloskey and G. H. Coleman. *bibliog Am Chem Soc J* 65:1778-80 S '43

Storage of synthetic citrus powders; carmelization by citric or tartaric acid and various sugars at high temperatures. W. E. Isaac. *il Ind & Eng Chem* 35:470-4 Ap '43

Studies on agar-agar; mode of attachment and configuration of the L-galactose residues isolated as 2:4-dimethyl 3:6-anhydro- β -methyl-L-galactoside by methylation of the hydrolysis products of methylated agar. E. G. V. Percival and T. G. H. Thomson. *Chem Soc J* p750-5 D '42

Synthesis of amino sugars. W. H. Myers and G. J. Robertson. *bibliog Am Chem Soc J* 65:8-11 Ja '43

See also

Carbohydrates

Dextrose

Disaccharides

Fermentation

Glucose

Glucosides

Glucosido arabinose

Invertase

Mannose

Optical rotation

Polysaccharides

Sugar

Trisaccharides

Analysis

See Sugar analysis

SUGGESTION systems

Advertising spreads practical ideas for relieving chokes in production; Warner & Swasey's ideas for victory campaign. D. M. Pattison. *Sales Management* 52:74- Ag 1 '43

Coin your ideas; prize winners contribute to refinery efficiency; Standard oil co. (New Jersey). *diags Oil & Gas J* 42:62 Ag 12 '43

Costs, building time for Consolidated planes reduced by suggestions. *Steel* 112:82 My 3 '43

Employees' suggestions are one of America's secret weapons. *Steel* 111:32-3, 36-7 N 30 '42

Helping the boss. *Business Week* p82-3 D 19 '42

How Swift puts more life in suggestion system. N. Green. *il Am Business* 13:27-8 Ag '43

Idea jackpot; WPB maintains file of 500 prize suggestions for alleviating production snarls. *il Business Week* p76-7 F 6 '43

Ideas speed the battle of production; Federal shipbuilding and drydock company. *il Marine Eng* 47:129-30 N '42

Ideas win awards for workers. *Business Week* p29 D 12 '42

Implementing war production with labor-management committees. W. F. Todd. *Ind Marketing* 28:46, 48 Ag '43

Making the suggestion system work; Hamermill paper company. W. A. Gleason. *Paper Ind* 24:821 N '42

SUGGESTION systems—Continued

- Pandora's suggestion box.** Fortune 27:44 Ja '43
- Processing short-cuts developed by workers. Steel 113:108 Ag 23 '43
- Production short cuts suggested by employees; Douglas aircraft co.; illustrations with text. Iron Age 151:56-7 Mr 11 '43
- Safety program in natural-gasoline plant built around suggestion system. R. A. Schuster. *Oil & Gas J* 42:55, 58 O 7 '43
- Salesmen might suggest ways to cut costs of distribution. E. C. Morse. *Ptr Ink* 205:24 O 29 '43
- Save time and materials; international exchange planned; suggestions received by labor-management committees in war plants. Steel 112:34-5 Ja 25 '43
- Suggestion box psychology. C. F. Westermann. *Personnel J* 22:63-70 Je '43
- Suggestion plan proves valuable to company and employee alike; Pacific gas and electric company. Elec W 120:632 Ag 21 '43
- Suggestion plans speed war work, sell workers on management. L. M. Hughes. *Sales Management* 52:27-8 F 1 '43
- Suggestion system holds employee interest; Pennsylvania water and power company. H. B. Lankford. *Elec W* 118:1941-3 D 12 '42
- Suggestion system turns up thousands of efficiency ideas for Illinois Central. H. C. Marmaduke. *Il Sales Management* 52:24-64 Mr 1 '43
- Suggestions for improvements rewarded at Cramp yard. *Marine Eng* 48:206 JI '43
- Suggestions from workers. K. F. Westermann. *Personnel J* 21:371-2 Ap '43
- Suggestions, instruments of progress; Pacific gas and electric co. *Elec West* 91:51 O '43
- Suggestions of G-E workers set new mark; winners honored by Westinghouse. *Marine Eng* 48:196+ Mr '43
- Swift employees turn in 17,588 ideas in '42; 3,044 are accepted. *Sales Management* 52:56-8 Ap 15 '43
- Victorian railways' suggestions scheme. *Ry Age* 114:214 Ja 16 '43
- When the suggestion system needs a shot in the arm. *Am Business* 12:14-15 N '42
- Workers' ideas speed up ship production. T. K. Quinn. *Il Marine Eng* 48:179-80+ O '43
- Workers' ideas that will help lick the Axis; report on results. D. Wharton. *Il Factory Management* 100:86-7+ D '42

SUICIDE

- Effort to break through Missouri suicide wall fails. *Nat Underw* 47:15+ Ja 28 '43; Same. *Nat Underw (Life ed)* 47:1+ Ja 29 '43

Statistics

- War-time prosperity lowers suicide rate. T. J. V. Cullen. *Il map Spectator (Life ed)* 151:8-15, 61 Ag '43

- SUITING fabrics, Men's.** See Men's suiting fabrics

- SULFA drugs.** See Sulfadiazine; Sulfaguanidine; Sulfanilamide; Sulfapyridine; Sulfathiazole; Sulfonamides

SULFADIAZINE

- Antibacterial action of several sulfonamide compounds on hemophilus influenzae type b. M. Pittman. *bibliog Pub Health Rep* 57:1899-1910 D 11 '42
- Bacteriostatic action of sulfadiazine on *E. typhosa* in carriers and cases. A. V. Hardy. *Pub Health Rep* 58:833-9 My 28 '43
- Chemical side of chemotherapy. E. H. Northey. *bibliog Il Ind & Eng Chem* 35:829-36 Ag '43; Excerpt (*Sulphadiazine production*). *Chem Age (Lond)* 49:311-13 S 25 '43
- Experimental Rocky Mountain spotted fever; results of treatment with certain drugs. E. A. Steinhaus and R. R. Parker. *Pub Health Rep* 58:351-2 F 26 '43
- Meningitis in training camps; abstract. H. M. Thomas, Jr. *Science* 98:sup12 O 8 '43
- Sulfa drug film for surgical dressing on burns. J. Stafford. *Science* 96:sup 10+ D 4 '42
- Toxic effects of atabrine and sulfadiazine in growing rats. C. I. Wright and R. D. Lillie. *Pub Health Rep* 58:1242-50 Ag 13 '43
- Treatment of impetigo. *Science* 98:sup12 O 1 '43

- Treatment of *pasteurella pestis* infection in mice; abstract. R. L. Phillips and L. H. Barnes. *Franklin Inst J* 235:94-7 Ja '43

SULFAGUANIDINE

- Experimental Rocky Mountain spotted fever; results of treatment with certain drugs. E. A. Steinhaus and R. R. Parker. *Pub Health Rep* 58:351-2 F 26 '43

SULFAMERAZINE

- New sulfa drug. J. M. Crowe. *Chem Ind* 53:85 JI '43
- Sulfamerazine, known chemically as 2-sulfanilamido-4-methylpyrimidine, is related to sulfadiazine. *Chem & Eng N* 21:894 Je 10 '43

SULFAMIC acid

- Sulfamic acid and its uses. L. B. Clapp. *J Chem Educ* 20:189-91 Ap '43

Physiological effect

- Studies on the physiological effects of sulfamic acid and ammonium sulfamate. A. M. ville. *bibliog J Chem Educ* 20:238 My '43

SULFAMIDE

- Potential industrial process for sulfamide. E. F. Degering and G. C. Gross. *bibliog diags Ind & Eng Chem* 35:751-3 JI '43

SULFANILAMIDE

- 5-Acetamidosalicylic acid, a derivative of sulfanilamide. O. G. Backeberg and J. L. C. Marais. *Chem Soc J* p78-9 F '43
- Action of sulfanilamide compounds on the lethal factor of bacterial toxins. S. H. Hutner and P. A. Zahl. *Science* 96:563-4 D 18 '42
- Antibacterial action of several sulfonamide compounds on hemophilus influenzae type b. M. Pittman. *bibliog Pub Health Rep* 57:1899-1910 D 11 '42
- New reaction of sulfanilamide. W. T. Somerville. *bibliog J Chem Educ* 20:233 My '43
- Studies in chemotherapy: a theory of the relation of structure to activity of sulfanilamide-type compounds. P. H. Bell and E. O. Roblin, Jr. *bibliog Am Chem Soc J* 64:2905-17 D '42
- Studies in chemotherapy; sulfanilamido heterocycles. G. W. Anderson and others. *Am Chem Soc J* 64:2902-5 D '42
- Sulfanilamide compounds; homologs of 2-sulfanilamidothiazoline. A. H. Nathan, J. H. Hunter and H. G. Kolloff. *bibliog Am Chem Soc J* 65:949-50 My '43
- Sulfanilamide compounds; thiazoline derivatives. J. H. Hunter and H. G. Kolloff. *bibliog Am Chem Soc J* 65:156-9 F '43
- Sulfanilamide derivatives; sulfanilylamidines. E. H. Northey, A. E. Pierce and D. J. Kertesz. *Am Chem Soc J* 64:2763-5 D '42
- Sulfanilamide in the treatment of leprosy. G. H. Faget, F. A. Johansen and Sister Hilary Ross. *Pub Health Rep* 57:1892-9 D 11 '42
- Sulfalimines derived from sulfanilamide. C. W. Todd, J. H. Fletcher and D. S. Tarbell. *bibliog Am Chem Soc J* 65:350-4 Mr '43
- Synthetic application of α - β -bromoethylbenzyl bromide; sulfanilamide derivatives of 1:2:3:4-tetrahydroisoquinoline. F. G. Holliman and F. G. Mann. *Chem Soc J* p737-41 D '42

Analysis

- Determining free and acetylated sulfanilamide. S. Anderson. *diag Ind & Eng Chem Anal ed* 15:29-30 Ja 15 '43
- Ultraviolet photometer for analysis of solutions. I. M. Klotz. *diag Ind & Eng Chem Anal ed* 15:277-3 Ap 15 '43

SULFANILAMIDO compounds

- Properties of the nitrogen-carbon-nitrogen system in N²-heterocyclic sulfanilamides. R. G. Shepherd, A. C. Bratton and K. C. Blanchard. *bibliog Am Chem Soc J* 64:2532-7 N 42

SULFANILAMIDOINDAZOLE

- Preparation of sulfanilamidoindazoles. C. E. Kwartier and P. Lucas. *Am Chem Soc J* 65:1804-6 O '43

SULFANILIC acid

- Sulfonation of aniline; application of partial-pressure distillation. J. J. Jacobs, Jr., D. F. Othmer and A. Hokanson. *Ind & Eng Chem* 35:321-3 Mr '43

SULFANILYLAMIDINE

New synthesis of sulfanilylamidines. C. E. Kwarter and P. Lucas. *Am Chem Soc J* 65:354-5 Mr '43

Sulfanilamide derivatives; sulfanilylamidines. E. H. Northey, A. E. Pierce and D. J. Kertesz. *Am Chem Soc J* 64:2763-5 D '42

SULFAPYRIDINE

Antibacterial action of several sulfonamide compounds on hemophilus influenzae type b. M. Pittman. *bibliog Pub Health Rep* 57:1899-1910 D 11 '42

Properties of the nitrogen-carbon-nitrogen system in N¹-heterocyclic sulfanilamides. R. G. Shepherd, A. C. Bratton and K. C. Blanchard. *bibliog Am Chem Soc J* 64:2532-7 N '42

SULFATES

Physical properties and chemical constitution; alkyl sulphides, disulphides, sulphites, sulphates, and orthophosphates. A. I. Vogel and D. M. Cowan. *Chem Soc J* p16-24 Ja '43

See also

Ammonium sulfate	Paper making—
Copper sulfate	Sulfate process
Gypsum	Sodium sulfates

Analysis

Agar-agar as a coagulant for barium sulfate. E. J. Bogan and H. V. Moyer. *bibliog Ind & Eng Chem Anal* 14:849-50 N 15 '42

Soluble sulfate content of pottery bodies during preparation. H. R. Shell and W. P. Cortelyou. *Am Cer Soc J* 26:179-85 Je 1 '43

SULFATHIAZOLE

Estimation of the sulfonamides; a rapid and accurate micromethod. S. W. Lee, N. B. Hannay and W. C. Hand. *bibliog Ind & Eng Chem Anal* 15:403-6 Je 15 '43

Experimental Rocky Mountain spotted fever; results of treatment with certain drugs. E. A. Steinhaus and R. R. Parker. *Pub Health Rep* 58:351-2 F 26 '43

Properties of the nitrogen-carbon-nitrogen system in N¹-heterocyclic sulfanilamides. R. G. Shepherd, A. C. Bratton and K. C. Blanchard. *bibliog Am Chem Soc J* 64:2532-7 N '42

Sulfas grow up; FDA permits sale of nose drops and bandages without prescription or warning label. *Business Week* p30+ My 22 '43

Treatment of pasteurilla pestis infection in mice; abstract. R. L. Phillips and L. H. Barnes. *Franklin Inst J* 235:94-7 Ja '43

Treatment of the common cold. H. J. Davis. *Ind Med* 12:426-7 Jl '43

SULFATHIAZOLINE

Sulfanilamide compounds; homologs of 2-sulfanilamidothiazoline. A. H. Nathan, J. H. Hunter and H. G. Koloff. *bibliog Am Chem Soc J* 65:949-50 My '43

SULFHYDRYL compounds. See Mercapto compounds**SULFIDES**

Absence of coprecipitation of barium ion with the chlorides of the silver group and the sulfides of the copper and tin groups in the presence of ammonium ion. L. Lehrman and I. Mandel. *bibliog J Phys Chem* 47:264-6 Mr '43

Determination of chloride in the presence of hydrosulfide or sulfide ion. M. M. Maglio and F. Fazio. *Ind & Eng Chem Anal* 15:265-6 Ap 15 '43

Origin of sulphides in the nickel deposits of Mount Prospect, Connecticut. E. N. Cameron. *diags Geol Soc Bul* 54:651-86, pl 1-7 *bibliog*(p679-80) My '43

Physical properties and chemical constitution; alkyl sulphides, disulphides, sulphites, sulphates, and orthophosphates. A. I. Vogel and D. M. Cowan. *Chem Soc J* p16-24 Ja '43

Reaction of carbon disulfide with amine sulfides. E. S. Blake. *bibliog Am Chem Soc J* 65:1267-9 Jl '43

See also

Arsenopyrite	Molybdenite
Bravoite	Ore deposits
Disulfides	Pentlandite
Galena	Pyrites
Hydrogen sulfide	Pyrrhotite
Iron sulfides	

Analysis

Copper and sulfide in developers; fogging action; polarographic analysis. R. M. Evans, W. T. Hanson and P. K. Glasoe. *bibliog Soc Motion Picture Eng J* 40:88-96 F '43

Determination of sulfur in acid-soluble sulfides. H. C. Froelich. *Ind & Eng Chem Anal* 14:900 N 15 '42

Qualitative analysis of microgram samples; separation, estimation, and identification of the more common ions of the hydrogen sulfide group. A. A. Benedetti-Pichler and M. Cefola. *bibliog Ind & Eng Chem Anal* 15:227-30 Mr 15 '43

SULFILIMINES

Sulfilimines derived from sulfanilamide. C. W. Todd, J. H. Fletcher and D. S. Tarbell. *bibliog Am Chem Soc J* 65:350-4 Mr '43

SULFITE liquor

Alcohol from waste sulfite liquor. *Chem Ind* 52:284 Mr '43; Same *abr. Pulp & Pa* of *Can* 44:550-1 Je '43

Alcohol from waste sulphite liquor. *Manuf Rec* 112:30 Jl '43

Cooperative research on sulphite waste liquor. J. P. Weidner. *Pulp & Pa* of *Can* 44:739-40 S '43

Critical evaluation of sulphite waste liquor in tanning; abstract. K. H. Gustavson. *Paper Ind* 25:96 Ap '43

Determination of fermentable sugars in sulphite wastes; abstract. G. Menzinsky. *Paper Ind* 25:323 Je '43

Ethyl alcohol from sulphite waste liquor. F. S. Hanson. *bibliog Paper Tr J* 115:37-40 D 10 '42

Fermentability of sulphite waste liquors; abstract. E. Hagglund, H. Heiwinkel and T. Berge. *Paper Ind* 25:559 Ag '43

Liquid fuel from sulphite waste liquor; abstract. J. Juschtin. *Paper Ind* 24:984 D '42

Mill converts sulphite waste to alcohol. *Il Pulp & Pa* of *Can* 44:588 Jl '43

Minor by-products of the pulp industry. L. E. Wise. *bibliog Paper Ind* 24:1223-7 Mr '43

Plastic plates; foundry pattern bases made from paper mill waste liquor; Marathon paper mills Lignolite. *Business Week* p66+ Ag 14 '43

Practical way to prevent embrittlement cracking; use of sodium nitrate, quebracho extract, waste sulphite liquor and elimination of caustic alkalinity. A. A. Berk and W. C. Schroeder. *diags A S M E Trans* 65:701-4, Discussion. 704-11 Ag '43

Reduction of aromatic nitro compounds by sulfite waste liquor; abstract. I. A. Pearl and H. F. Lewis. *Am Dyestuff Rep* 32:391 Ag 30 '43

Sulphite waste liquor studies; abstract. H. Erdtman. *Paper Ind* 25:96-7 Ap '43

Waste liquor pilot plant starts operations. *Paper Tr J* 117:9+ Ag 5 '43; *Paper Ind* 25:480+ Ag '43

Waste sulphite liquor recovery. M. W. Davis. *flow diags Pulp & Pa* of *Can* 44:656-9 Ag '43

Woodpulp-alcohol sale may affect newsprint prices. *For Comm W* 12:25 Ag 7 '43

Analysis

Nature of lignosulphonic acids fractionated by chemical and physical methods. W. A. Schenck. *bibliog Paper Tr J* 117:97-100 S 30 '43

SULFITE pulp process. See Paper making—Sulfite process

SULFITES

Physical properties and chemical constitution; alkyl sulphides, disulphides, sulphites, sulphates, and orthophosphates. A. I. Vogel and D. M. Cowan. *Chem Soc J* p16-24 Ja '43

SULFOBENZOIC acid

Identification of o- and p-sulphobenzoic acids as their S-benzylthiuronium salts. E. Campagne and C. M. Suter. *Am Chem Soc J* 64:3040-1 D '42

SULFONAMIDES

Acidity and activity of sulfonamides. I. M. Klotz. *Science* 98:62-3 Jl 16 '43

5-Amino-2-hydroxybenzenesulphonamide and some related compounds. R. T. Williams. *Chem Soc J* p708-9 N '42

SULFONAMIDES—Continued

Antibacterial action of several sulfonamide compounds on hemophilus influenzae type b. M. Pittman, bibliog Pub Health Rep 57:1899-1910 D 11 '42

Attempts to protect against influenza virus with various sulfonamides, acridines and antibiotics. bibliog Science 98:348-9 O 15 '43

Bacteriostatic action of sulfonamide compounds upon clatridia. S. M. Rosenthal, bibliog Pub Health Rep 58:5-9 Ja 1 '43

Chemical side of chemotherapy. E. H. Northey, bibliog Ind & Eng Chem 35:329-36 Ag '43

Demonstrating the presence of sulfonamides in the tissues. G. M. MacKee and others. Science 98:66-8 Jl 16 '43

Disinfectants and antiseptics; a summary of scientific advances during 1942. E. G. Klarman. Soap & San Chem 19:99, 101 Ja '43

Economic impact of the sulfonamides on the drug industry. J. S. Zinsser. Il Chem & Eng N 21:1159-62 Jl 25 '43

Increased synthesis of *p*-aminobenzoic acid associated with the development of sulfonamide resistance in staphylococcus aureus. M. Landy and others. bibliog Science 97:265-7 Mr 19 '43

Pigment production by sulfonamide-resistant staphylococci in the presence of sulfonamides. W. W. Spink and J. J. Vivino. Science 98:44-5 Jl 9 '43

Preparation of some *N*-substituted 3-pyridine-sulfonamides. F. E. Reinhart. Franklin Inst J 236:316-20 S '43

Production and treatment of granulocytopenia and anemia in rats fed sulfonamides in purified diets. A. Kornberg, F. S. Daft and W. H. Sebrell. Science 98:20-2 Jl 2 '43

Properties of *p*-hydroxylaminobenzenesulfonamide and a related molecular complex. M. G. Sevag. bibliog Am Chem Soc J 65:110-13 Ja '43

Properties of the nitrogen-carbon-nitrogen system in *N*-heterocyclic sulfanilamides. R. G. Shepherd, A. C. Bratton and K. C. Blanchard. bibliog Am Chem Soc J 64:2532-7 N '42

Successful treatment of granulocytopenia and leukopenia in rats with crystalline folic acid. F. S. Daft and W. H. Sebrell. bibliog Pub Health Rep 58:1542-5 O 15 '43

Sulfonamide depression of inorganic catalytic action. P. J. Hanzlik and W. C. Cutting. Science 98:389-91 O 29 '43

Sulfonamides in the treatment of war wounds and burns. C. L. Fox, jr. Special Lib 34:244-7 Jl-Ag '43

Synthesis of 2-methyl-1,4-naphthoquinone-8-sulfonic acid. A. Bendich and B. Charga. bibliog Am Chem Soc J 65:1568-9 Ag '43

Treatment of burns and wounds. Science 98: sup9 Jl 30 '43

See also

Sulfadiazine	Sulfapyridine
Sulfanilamide	Sulfathiazole

Analysis

Estimation of the sulfonamides; a rapid and accurate micro method. S. W. Lee, N. B. Hannay and W. C. Hand. bibliog Ind & Eng Chem Anal ed 15:403-6 Je 15 '43

Rapid and accurate micro method for the estimation of the sulfonamides. S. W. Lee, N. B. Hannay and W. C. Hand. Science 97: 359-60 Ap 16 '43

SULFONATED oils

Sulfonated oil products; properties and uses in textile processing. Textile Col 65:283-7+ Jl '43

SULFONATES

Comparison of an aryl sulfonate and soap for the washing in hard water of cotton, linen, spun cellulose-acetate rayon, spun regenerated-cellulose rayon, silk, and wool. V. Ester and others. bibliog Am Dyestuff Rep 32:121-2, 135-41 Mr 15 '43

Electrolytic properties of aqueous solutions of octyltrimethylammonium octane-sulfonate and decyltrimethylammonium decane-sulfonate. A. B. Scott, H. V. Tartar and E. C. Lingafelter. bibliog Am Chem Soc J 65:698-701 Ap '43

Studies of sulfonates; conductances and densities of sodium ethyl-, *n*-butyl-, *n*-octyl-, and *n*-dodecylbenzene-*p*-sulfonate solutions. R. G. Paquette, E. C. Lingafelter and H. V. Tartar. bibliog diags Am Chem Soc J 65: 686-92 Ap '43

Surface-active agents. F. D. Snell. bibliog Il Ind & Eng Chem 35:107-17 Ja '43

SULFONATION

Monosulfonation of 2-methylnaphthalene. R. N. Shreve and J. H. Lux. bibliog Il Ind & Eng Chem 35:306-12 Mr '43

Sulfonation index test for road tars. R. H. Lewis and W. J. Halstead. Pub Roads 23: 141-54+ Ja '43; Conclusions. Pub Works 74: 32 Jl '43

Sulfonation of aniline; application of partial-pressure distillation. J. J. Jacobs, jr., D. F. Othmer and A. Hokanson. Ind & Eng Chem 35:321-3 Mr '43

Sulfonation of methallyl chloride; mobility of the olefinic linkage in unsaturated sulfonic acids. C. M. Suter and F. G. Bordwell. Am Chem Soc J 65:507-17 Ap '43

Sulfonation of naphthalene; application of partial-pressure distillation. D. F. Othmer, J. J. Jacobs, jr. and W. J. Buschmann. bibliog diags Ind & Eng Chem 35:326-9 Mr '43

Sulfonation process for oils; British patent. Soap & San Chem 19:66 O '43

See also

Sulfonated oils

SULFONES

Several alkyl- β -thioethylamines and the corresponding ureas, sulfoxides and sulfones. K. W. Brighton and E. E. Reid. Am Chem Soc J 65:458-9 Mr '43

See also

Diasone

SULFONIC acids

Identification of some sulphonic acid reduction products of azo dyes. P. Chen and E. J. Cross. bibliog Soc Dyers & Col J 59: 144-8 Jl '43

Monosulfonation of 2-methylnaphthalene. R. N. Shreve and J. H. Lux. bibliog Il Ind & Eng Chem 35:306-12 Mr '43

Sulfonation of methallyl chloride; mobility of the olefinic linkage in unsaturated sulfonic acids. C. M. Suter and F. G. Bordwell. Am Chem Soc J 65:507-17 Ap '43

Thallous salts as derivatives of sulfonic acids. H. Gilman and R. K. Abbott, jr. Am Chem Soc J 65:123-4 Ja '43

SULFONIUM compounds

Tribenzylsulfonium hydrogen sulfate and hydroxide. O. Haas and G. Dougherty. Am Chem Soc J 65:1238-9 Je '43

SULFONYL compounds

Some sulphonyl derivatives of amidines and imino-ethers. H. J. Barber. Chem Soc J p101-4 Mr '43

SULFOXIDES

Several alkyl- β -thioethylamines and the corresponding ureas, sulfoxides and sulfones. K. W. Brighton and E. E. Reid. Am Chem Soc J 65:458-9 Mr '43

SULFUR

Direct replacement of oxygen in hydantoins and barbiturates by sulfur. H. R. Henze and P. E. Smith. bibliog Am Chem Soc J 65:1090-2 Je '43

Fe-Ni-S system; an introduction with new data on the crystallization of pyrrhotite and pentlandite. J. E. Hawley, G. L. Colgrove and H. F. Zurbrigg. bibliog Il Econ Geol 38:335-88 Ag '43

Formation of insoluble sulfur in the presence of gases other than sulfur dioxide. E. A. Fehnel. Am Chem Soc J 64:3041-2 D '42

Measurement of the activity of radiolabeled sulfur in barium sulfate. R. H. Hendricks and others. bibliog diags J Phys Chem 47:469-73 O '43

Physical properties and chemical constitution; alkyl sulphides, disulphides, sulphites, sulphates, and orthophosphates. A. I. Vogel and D. M. Cowan. Chem Soc J p16-24 Ja '43

Properties of liquid sulfur. R. E. Powell and H. Eyring. bibliog Am Chem Soc J 65:648-54 Ap '43

SULFUR—Continued

Radiosulfur tracer study of sulfurized lubrication addition agents. G. L. Clark, S. G. Gallo and B. H. Lincoln. bibliog diags J Ap Phys 14:428-34 Ag '43

Solubility of sulphur in butadiene-styrene copolymer. I. Williams. India Rubber W 108: 35-6 Ap '43

Sources of sulphur. Economist 144:601 My 8 '43

Sulphur fires. Safety Eng 35:24 Ap '43

Sulphur in furnace atmospheres; abstract. A. Preece. Metals & Alloys 18:870+ O '43

Viscosity of sulfur. R. F. Bacon and R. Fanelli. bibliog diags Am Chem Soc J 65: 639-48 Ap '43

See also

Gas—Sulfur content	Steel—Sulfur content
Gasoline—Sulfur content	Wool—Sulfur content
Petroleum—Sulfur content	

Analysis

Determination of small amounts of combined sulfur in cellulose derivatives. C. J. Malm and L. J. Tanghe. bibliog Ind & Eng Chem Anal ed 14:940-2 D 15 '42

Determination of sulfur in acid-soluble sulfides. H. C. Froelich. Ind & Eng Chem Anal ed 14:900 N 15 '42

Determination of sulfur in pyrites; abstract. H. Doering. Paper Ind 24:984 D '42

Determination of sulfur residues from sulfur application on citrus foliage. F. A. Gunther, R. L. Beier and J. P. Ladue. bibliog Ind & Eng Chem Anal ed 15:574-5 S 15 '43

Determination of total sulfur in rubber. C. L. Lauke. diag Ind & Eng Chem Anal ed 15:602-4 S 15 '43

Determination of total sulfur in rubber and rubberlike materials. L. E. Cheyney. bibliog Ind & Eng Chem Anal ed 15:164-5 Mr 15 '43

Modification of the Carius combustion tube to minimize losses by explosion: pressures attained on heating nitric acid to 300° C. C. L. Gordon. bibliog diag J Research Nat Bur Stand 30:107-11 F '43

New technique for the ultimate microanalysis of organic compounds. R. Belcher and C. E. Spooner. diags Chem Soc J p313-16 JI '43

Rapid determination of water in by-product sulfur. L. Shnidman. II Ind & Eng Chem Anal ed 15:430-3 JI 15 '43

Recent developments in analytical chemistry. Chem Age (Lond) 43:626-7 Je 12 '43

Report on recommended specifications for microchemical apparatus; sulfur and halogens. diags Ind & Eng Chem Anal ed 15: 230-4 Mr 15 '43

Separation and determination of protein sulfur, sulfide sulfur, and other sulfur in sodium sulfide dispersions of keratins. E. F. Potter and C. B. Jones. bibliog diag Ind & Eng Chem Anal ed 15:15-17 Ja 15 '43

Sulphur and phosphorus in copper; two methods of determination. D. J. Bullivant. Chem Age (Lond) 43:181-2 F 6 '43

Three-minute determination of sulfur in coke and ash. Am Gas Assn Mo 25:222 My '43

Moisture content

Rapid determination of water in by-product sulfur. L. Shnidman. II Ind & Eng Chem Anal ed 15:430-3 JI 15 '43

Statistics

Sulphur production (quarterly). Texas and Louisiana, 1938-1941. Survey of Cur Business 1942 Sup p102 [supplemented in monthly numbers]

SULFUR compounds

Associating effect of the hydrogen atom; hydrogen bonds involving the sulphur atom; the S-H-N bond. G. Hopkins and L. Hunter. Chem Soc J p638-42 O '42

Behavior of trimethylamine, trimethylamino-sulfur trioxide and trimethylamine oxide toward sulfur dioxide. A. B. Burg. bibliog diags Am Chem Soc J 65:1629-35 Ag '43

Hydrogenation of some sulphur compounds. C. M. Cawley and C. C. Hall. bibliog Soc Chem Ind J 62:116-19 Ag '43

Hydrogenolysis of sulfur compounds by Raney nickel catalyst. R. Mazingo and others. bibliog Am Chem Soc J 65:1013-16 Je '43

Liquid dielectrics; sixty-cycle power factors, conductivities, and polar contents of systems containing sulfur or nitrogen compounds in liquid paraffin. J. D. Piper and others. bibliog Ind & Eng Chem 34:1505-9 D '42

Mineral insulating oils; effect of additives on electrical and chemical stability. A. G. As-saf and J. C. Balsbaugh. bibliog II Ind & Eng Chem 35:909-16 Ag '43

Nomenclature of the nitrogen compounds of phosphorus and of sulfur. L. F. Audrieth, R. Steinman and A. D. F. Toy. bibliog Chem R 32:99-108 F '43

Organic sulfur compounds in water gas and coke oven gas. W. A. Kemper and E. W. Guernsey. Am Gas Assn Proc 1942:364-74

Sulfur studies; alkyl esters of phenylthiocarbamic acid. R. W. Bost and E. R. Andrews. Am Chem Soc J 65:900-1 My '43

Sulphur products from the aluminum-chloride complex obtained in refining high-sulphur gasolines. I. I. Tsyganok and L. A. Vanyukova. Pet Eng 14:75-6 JI '43

Troublesome compounds and reactions of sulphur encountered in the sulphite process. C. F. B. Stevens. bibliog diags Paper Tr J 117:25-30 Ag 5 '43

See also

Cystine	Sulfur dyes
Mercaptans	Sulfuric acid
Sulfates	Thiocyanates
Sulfides	Thiosulfates
Sulfones	

Analysis

Automatic apparatus for determination of small concentrations of sulfur dioxide in air; application to hydrogen sulfide, mercaptan, and other sulfur and chlorine compounds. M. D. Thomas and others. bibliog diags Ind & Eng Chem Anal ed 15:287-90 Ap 15 '43

Separation of CO₂. diag Chem Ind 53:234 Ag '43

Sulphur compounds from Panuco gasoline. W. Friedmann and C. Canseco. bibliog Pet Refiner 22:61-5 Ja '43

SULFUR dioxide

Activity coefficient of potassium iodide in sulfur dioxide from vapor-pressure measurements. W. G. Eversole and A. L. Hanson. bibliog diag J Phys Chem 47:1-9 Ja '43

Addition compounds of sulfur dioxide. N. F. Albertson and W. C. Fernelius. bibliog Am Chem Soc J 65:1687-90 S '43

Behavior of trimethylamine, trimethylamino-sulfur trioxide and trimethylamine oxide toward sulfur dioxide. A. B. Burg. bibliog diags Am Chem Soc J 65:1629-35 Ag '43

Cleaning filter sand in place with sulphur dioxide; abstract. H. E. Channon. Water Works & Sewerage 89:523-4 D '42

Cooling sulfur dioxide gas; SO₂ waste heat boiler. diags Pulp & Pa of Can 44:320 Mr '43

Electronic structures and spectra of triatomic oxide molecules. R. S. Mulliken. bibliog II diags Rs Mod Phys 14:204-15 Ap-JI '42

Heat of adsorption of ethyl chloride and of sulphur dioxide on sugar charcoal. S. J. Gregg. Chem Soc J p351-5 Ag '43

Mechanism of the reaction between hydrogen sulfide and sulfur dioxide in liquid media. N. F. Albertson and J. P. McReynolds. bibliog Am Chem Soc J 65: 1690-1 S '43

Molecular surface energy of sulfur dioxide addition compounds. J. R. Bright and J. J. Jasper. bibliog Am Chem Soc J 63:3486-8; 65:1262-3 D '41, JI '43

Preserving fruits with SO₂ to aid lend-lease program. J. G. Woodroof and S. R. Cecil. II Food Ind 15:59-61 My '43

Principles of reactor design; gas-solid interface reactions. D. M. Hurt. bibliog II Ind & Eng Chem 35:522-8 My '43

Sulphite blow heat and gas recovery. J. N. Swartz. II diag Pulp & Pa of Can (Convention no) 44:139-42 [F] '43

Temperature-concentration equilibria in the system dimethylaniline-sulfur dioxide. J. R. Bright and W. C. Fernelius. bibliog Am Chem Soc J 65:637-9 Ap '43

SULFUR dioxide—Continued**Analysis**

Automatic apparatus for determination of small concentrations of sulfur dioxide in air; application to hydrogen sulfide, mercaptan, and other sulfur and chlorine compounds. M. D. Thomas and others. *bibliog diags Ind & Eng Chem Anal* ed 15:287-90 Ap 15 '43

Contact sulfuric acid manufacture; evaluation of the Reich test. G. Dragt and K. W. Greenan. *bibliog diag Ind & Eng Chem Anal* ed 14:883-5 N 15 '42

Determination of sulfur dioxide in beer; a modification of Monier-Williams method. B. H. Nissen and R. B. Petersen. *Ind & Eng Chem Anal* ed 15:129-30 F 15 '43

Sulphite acid testing; the Palmrose iodate and the Winkler tests. D. R. McMasters. *bibliog Paper Tr J* 117:30-5 JI 8 '43

SULFUR dioxide, Liquid

Dehydration of cholesterol in liquid sulfur dioxide. R. H. Levin. *bibliog Am Chem Soc J* 65:627-8 Ap '43

Liquid sulfur dioxide; manufacture, handling and use. C. S. Willson and others. *il diags Chem Ind* 52:178-86 F '43

Reactions of cellulose in liquid sulfur dioxide. P. C. Scherer, Jr. and L. C. Brooks. *bibliog Rayon* 23:657-8, 718-20 N-D '42

SULFUR dust

Study of industrial workers exposed to sulfur dust. S. S. Pinto, R. A. Brown and B. H. Carlton. *J Ind Hygiene* 25:140-51 Ap '43

SULFUR dyes

Dyeing to government specifications with sulfur colors. *Am Dyestuff Rep* 32:109-14 Mr 1 '43; Same. *Textile Col* 64:534-5, 539-41 N '42

Reducing time of vat dyeing with textone. A. L. Dubeau, E. G. Fenrich and G. P. Vincent. *Am Dyestuff Rep* 32:175-6 Ap 12 '43; Abstract. *Textile World* 93:90 Je '43

Report of committee on accelerated ageing tests for sulfur-dyed materials. T. R. Smith. *Am Dyestuff Rep* 32:380-4 Ag 30 '43

Report of the committee on accelerated ageing tests for sulfur dyed materials. T. R. Smith and A. H. Gaede. *Am Dyestuff Rep* 31:650-1 D 7 '42

Sodium chlorite, an oxidant for vat and sulfur dyes. G. P. Vincent. *Chem & Eng N* 21:1176-7 JI 25 '43

SULFUR hydride. See Hydrogen sulfide**SULFUR industry and trade**

Axis loses Sicily and sulfur. V. Kinnard. *il For Comm W* 12:3-5 Ag 14 '43; Same abr. *Chem Ind* 53:347-8 S '43

Sulphur and pyrites in 1942. *Can Chem & Process Ind* 27:456 Ag '43

Sulphur mining provides sinews of war. W. W. Duecker. *il Min Cong J* 29:55, 58 F '43

Statistics

Statistical reviews of minerals and chemicals in 1942. *Chem Ind* 53:266 Ag '43

Sulphur in 1942 and 1943. W. W. Duecker; L. M. Williams, Jr. *Comm & Fin Chr* 157:388, 398 Ja 28 '43

Sulphuric acid and sulphur, 1942. *Chem & Met Eng* 50:103-4+ F '43

Sicily

Chemical industries of Sicily. A. H. Bennett. *Chem & Ind* 62:318-21 Ag 21 '43

SULFUR miners

Study of industrial workers exposed to sulfur dust. S. S. Pinto, R. A. Brown and B. H. Carlton. *J Ind Hygiene* 25:149-51 Ap '43

SULFUR mines and mining

Softener works better with recirculated sludge; Jefferson Lake sulphur co. M. Brooke. *diag Power* 87:367 Je '43

Sicily

Sicilian sulfur mines. *Science* 98:sup8 JI 30 '43

SULFUR oxides

See also

Sulfur dioxide
Sulfur trioxide

SULFUR trioxide

Dew point of flue gases of fuels containing sulfur. J. S. Yeaw and L. Shnidman. *bibliog Power Pl Eng* 47:68-71 Ja; 69-71 F; 73-5 Mr '43

Troublesome compounds and reactions of sulphur encountered in the sulphite process. C. F. B. Stevens. *bibliog diags Paper Tr J* 117:25-30 Ag 5 '43

SULFURETTED hydrogen. See Hydrogen sulfide**SULFURIC acid**

Acid pump problems involving long suction lines. W. E. Pratt. *diag Chem & Met Eng* 50:104-7 Mr '43

Action of cuprous oxide on diazotised amines in ethyl-alcoholic acid solution. H. H. Hodgson and H. S. Turner. *Chem Soc J* p748-9 D '42

Action of strong acid on various fibers. H. C. Haller. *Am Dyestuff Rep* 31:681-2 D 21 '42

Chemical separation of the isotopes of hydrogen by the addition of metals and compounds of metals to water, acids and bases; relative efficiencies of specific reactions; the effects of certain factors other than temperature. H. L. Johnston and C. O. Davis. *bibliog diag Am Chem Soc J* 64:2613-20 N '42

Computations on the denitration of aqueous mixtures of sulphuric and nitric acids with steam. G. E. Stephenson. *Soc Chem Ind J* 62:17-20 F '43

Conductivity of sulfuric acid in methanol at 25°. E. W. Kanning, E. G. Bobalek and J. B. Byrne. *bibliog Am Chem Soc J* 65:1111-16 Je '43

Development of an accelerated method for the anodic oxidation of aluminum alloys in sulphuric acid; abstract. G. B. Akimov, N. D. Tomashov and M. N. Tiukina. *Chem & Met Eng* 50:188-9 O '43

Improvements in concentrating sulfuric acid. M. J. Kalous. *diags Ind & Eng Chem* 35:387-90 Ap '43

Kinetics in acid media; condensation of o-benzoylbenzoic acid. C. W. Deane and J. R. Huffman. *bibliog (73 references) il Ind & Eng Chem* 35:684-94 Je '43

Methylene blue and other indicators in general acids; the acidity function. G. N. Lewis and J. Bigeleisen. *bibliog Am Chem Soc J* 65:1144-50 Je '43

Preparation of symmetrical azo-compounds, the positional influence of the nitro-group on the decomposition of nitronaphthalene-diazonium sulphates by cuprous hydroxide, and an improved method for the production of 2-nitronaphthalene. H. H. Hodgson, E. Leigh and G. Turner. *Chem Soc J* p744-6 D '42

Selecting construction materials for centrifugal acid pumps. W. E. Pratt. *il Chem & Met Eng* 50:135-6 F '43

Selection of pumps for oleum and strong sulphuric acid. W. E. Pratt. *diag Chem & Met Eng* 50:86-9+ Ja '43

Specific heats of mixed acids at higher temperatures. J. J. Morgan, D. A. Bender and R. G. Capell. *bibliog diags Chem & Met Eng* 50:122-4 Je '43

Study of the sulfuric acid carbonizing bath used in carbonizing the government 32 oz. olive-drab overcoating. K. S. LaFleur. *il Am Dyestuff Rep* 32:473-6, 485-9 N 8 '43

Tar elimination in pyroigneous acid; removal of tar-forming constituents by polymerization and condensation. D. F. Othmer and R. Katzen. *bibliog flow sheets il Ind & Eng Chem* 35:288-96 Mr '43

Unusual stuffing box problems encountered in acid pumping. W. E. Pratt. *bibliog diags Chem & Met Eng* 50:109-13 Ap '43

Manufacture

Building the world's largest Mills-Packard acid plant near Tampa. A. M. Fairlie. *il diag Chem & Met Eng* 50:103-5 S '43

Contact sulfuric acid manufacture; evaluation of the Reich test. G. Dragt and K. W. Greenan. *bibliog diag Ind & Eng Chem Anal* ed 14:883-5 N 15 '42

Modern developments in the design of plant for the concentration of sulphuric acid. P. Parrish. *il diags plans Inst Chem Eng Trans* 19:1-19; Discussion. 19-24 '41

SULFURIC acid—Continued**Statistics**

Sulphuric acid and sulphur, 1942. Chem & Met Eng 50:103-4+ F '43
Sulfuric acid (fertilizer manufacturers), 1938-1941. Survey of Cur Business 1942 Sup p103 [supplemented in monthly numbers]

SULFURIC anhydride. See Sulfur trioxide

SULFUROUS acid

Preservation of citrus juices with sulphurous acid. A. W. E. Downer. bibliog Soc Chem Ind J 62:124-7 Ag '43

SULFURYL chloride

Behavior of phosphoryl chloride, thionyl chloride and sulfuric chloride toward boron halides. A. B. Burg and M. K. Ross. Am Chem Soc J 65:1637-8 Ag '43
Potential industrial process for sulfamide. E. F. Degering and G. C. Gross. bibliog diags Ind & Eng Chem 35:751-3 Jl '43

SULPHUR. See Sulfur

SULPRENE. See Rubber, Substitutes for

SUMAC

Sprouting of sumac in dry storage. W. W. Diehl. Science 96:448-9 N 13 '42; Same. Textile Col 64:564 D '42

Sumach substitute from wattle. T. Woodhead. Chem Age (Lond) 47:380 O 31 '42

SUMAC oil

Sumac oil; abstract. H. B. Huddle. Soap & San Chem 18:65 D '42

SUMMER business

Summer slump in advertising? not likely this year. L. D. H. Weld. Ptr Ink 203:15-16 Ap 30 '43

SUN

Gold discovered in the sun. R. S. Richardson. Science 97:sup10 Ap 23 '43

Year-round sun angles for the U.S.; reference data. map Heat & Ven 39:58a-58b D '42

See also

Eclipses, Solar Solar radiation
Insolation Sunspots
Solar heating

Atmosphere

Dream almost attained; astrophysics nearer to solution of a major problem. H. N. Russell. Sci Am 168:116-17 Mr '43

Prominences

Rare luminous clouds of gas on the sun. R. S. Richardson. Science 96:sup 10+ D 25 '42

Temperature

Cause of the sun's heat. H. P. Gillette. Roads & Sts 86:49-50 Mr '43

SUN life assurance company of Canada

Sun life insurance growth address to policyholders. Comm & Fin Chr 157:574 F 11 '43

SUN spots. See Sunspots

SUNBURN

Protecting aviators from sunburn. Mod Plastics 20:112 F '43

SUNDAY labor

Sunday work in factories. Economist 144:156 Ja 30 '43

SUNFLOWER seed

Argentina's sunflower-seed crop. For Comm W 10:29 Mr 27 '43

Sunflower seed production small. Oil Paint & Drug Rep 144:4+ O 25 '43

SUNFLOWER seed oil

Oil seed tested for edible oil. Business Week p77-8 O 16 '43

Sunflower-seed oil. Science 97:sup8+ Mr 19 '43

SUNLIGHT

Measurements of ultraviolet solar radiation in Washington, 1936 to 1942. W. W. Coblenz and R. Stair. bibliog J Research Nat Bur Stand 30:435-47 Je '43

Simplified formulae for scattered and re-scattered sunlight. L. Silberstein. Opt Soc Am J 33:526-32 S '43

See also

Daylight Photosynthesis
Insolation Solar radiation

SUNSHINE

Insolation in the polar atmosphere. A. Court. bibliog fold chart Franklin Inst J 235:169-78 F '43

New electronic eye to measure U.S. sunfall. il Heat & Ven 39:61 D '42; Sci Am 167:274+ D '42

SUNSHINE, Artificial

Simulated sunlight; new generator used for testing purposes. il Sci Am 169:219 N '43

SUNSPOTS

First sunspot of the new cycle. Science 97:sup12 F 26 '43

Influence of sunspots on weather. Science 97:sup10 F 5 '43

New sunspot cycle. Science 97:sup10 My 28 '43

Relation of the cosmic radiation to geomagnetic and heliophysical activities. J. W. Broxon. bibliog diags Phys R 62:508-22 D 1 '42

SUNSPOTS, Photography of. See Astronomical photography

SUPERCARGERS

Cabin supercharging in scheduled airline operation. R. L. Ellinger. S A E J 51:241-7 Jl '43

Positive-displacement supercharger. J. L. Ryde. il diag S A E J 50:304-13 Jl '42

See also

Airplane engines— Gas and oil engines—
Superchargers Superchargers
Diesel engines—
Superchargers

Manufacture

Air conditioning makes 24 hour a day war production possible. C. G. Lauckner, 3d. il Heating-Piping 15:510-12 O '43
Machining supercharger impellers at General Electric; illustrations with text. Iron Age 152:66-7 S 9 '43

Testing

Controlled air supply for supercharger, carburetor and engine testing. C. S. Leopold. flow diags Refrig Eng 46:85-7+ Ag '43

SUPERHEATED steam

Corrosion of unstressed specimens of alloy steel by steam at temperature up to 1800 F. G. A. Hawkins and others. il A S M E Trans 65:301-7; Discussion. 307-8 My '43

Draining superheated steam line with thermostatic bellows traps. Heating-Piping 15:580 N '43

Improvements in concentrating sulfuric acid. M. J. Kalous. diags Ind & Eng Chem 35:387-90 Ap '43

Treatment with superheated steam as a possible means of improving the resistance to corrosion of the magnesium alloy A8. N. Parkinson and J. W. Cuthbertson. diag Soc Chem Ind J 61:155-7 O '42

SUPERHEATER company

Heavy machinery builder. H. Lawrence. Barron's 22:20 N 23 '42

SUPERHEATERS

Compact headers save front-end space. diags Ry Mech Eng 117:341 Jl '43

Creep resistance of superheater tube steels in tube and bar form. J. A. Jones and W. E. Bardgett. diags Engineer 176:6-8 J 2 '43

Modern locomotive superheating. B. Reed. diags Engineer 175:283-5+, 304-5 Ap 9-16 '43

Superheater changes extend capacity. E. J. Drewelow. Elec W 120:459 Ag 7 '43

Superheater response to fuel conversion. E. R. Kilsby. il diags Power Pl Eng 47:78-80 N '43

SUPERHIGHWAYS. See Roads—Superhighways

SUPERIOR, Lake*See also*

Iron ores—Lake
Superior region

SUPERIOR oil company of California

Big crude oil producer. H. Lawrence. Barron's 23:11 Ap 26 '43

SUPERIOR water, light and power company

Merger and sale of securities. Comm & Fin Chr 157:1469-70 Ap 19 '43

Merger proposed to SEC. Comm & Fin Chr 157:823 Mr 1 '43

SUPERMARKETS. See Market stores

SUPEROXOL

Chlorination of 2,4-diketotetrahydropyrimidines by action of a mixture of superoxol and hydrochloric acid. T. B. Johnson. *Am Chem Soc J* 65:1218-19 Je '43

Sensitive color reaction for the detection of uracil and cytosine. T. B. Johnson. *Science* 98:90-2 Ji 23 '43

SUPERPHOSPHATES. See Phosphates**SUPERSONIC waves.** See Ultrasonic waves**SUPERVISORY workers**

Factory council makes foremen managers; Huffman manufacturing company, Dayton. H. M. Huffman, jr. *il Factory Management* 101:111-13 Je '43

How to supervise. R. W. Adams and A. W. Pond. *Personnel J* 21:223-7 D '42

Internal revenue bureau joggles supervisor pay; formula for determining allowable pay increases for supervisory employees going to a 48-hour week. *Nat Pet N* 35:14 Ji 7 '43

Man and job evaluation. D. Pollard. *Personnel J* 21:344-8 Ap '43

Selection of wartime supervisors; abstract. R. O. Beckman. *Management R* 32:245-7 Ji '43

Shortage of supervision holds back production. G. S. Goodrich. *Mach* 49:186 My '43

Why untrained job instructors fail. *Paper Ind* 25:273 Je '43

Women as supervisors. *Management R* 32:78-80 F '43

See also

Executives

Foremen

Training

America's wartime merchant fleet; training shipyard workers. *il Engineer* 175:302-4 Ap 16 '43

Employee rotation, an executive development program for supervisory personnel; Consolidated Edison company of New York. *Am Gas Assn Mo* 25:349-50 S '43

Erie teaches supervisors to teach. *il Ry Age* 114:198-201 Ja 16 '43

Erie trains mechanical supervisors. *Ry Mech Eng* 117:349-51 Ag '43

How to teach an employee; training supervisors to teach their subordinates. M. Banks. *J Retailing* 19:93-5 O '43

On-the-job training for supervisors. *Nat Pet N* 35:33-4 Ag 26; 38-9 S 8; 39-40+ S 22 '43

Self-expression and industry. H. Greaves. *Electrician* 130:340 Ap 2 '43

Sound-film training program for supervisors. L. S. Metcalfe. *il Gas Age* 92:11-12 Ji 1 '43

Stanolind gears supervisor and employee training to war-accelerated needs. *il Oil & Gas J* 42:18-20 S 2 '43

Training personnel for new positions aided by training within industry methods. *Iron Age* 151:74 Ja 21 '43

Training trainers. *Safety Eng* 85:35-6 My '43

Training within industry. W. Dietz. *il Factory Management* 101:106-8 O '43

Training woman leaders for production-line work. *Monthly Labor R* 57:101 Ji '43

Using the case method in supervisory training. R. J. Greenly and E. B. Mapel. *Factory Management* 101:112-13 Mr; 69 Ap; 117 My; 117 Je; 119 Ji; 128 S; 121 O '43

SUPPLY and demand

Money illusion and demand analysis. J. Marschak. *R Econ Stat* 25:40-8 F '43

See also

Competition

Consumption (economics)

Prices

SUPRARENAL bodies

Influence of adrenal cortical secretion on blood elements. T. F. Dougherty and A. White. *Science* 98:367-9 O 22 '43

SUPREME court. See United States—Supreme court**SURETY and fidelity insurance.** See Insurance, Surety and fidelity**SURETY bond producers.** National association of. See National association of surety bond producers**SURETYSHIP and guaranty**

Illinois judges boost corporate suretyship. *Nat Underw* 47:19 F 11 '43

See also

Insurance, Surety and fidelity

SURFACE active substances

ABC of chemical derivatives from petroleum; detergents and lubricants. R. L. Wakeman and B. H. Well. *il Nat Pet N* 35 pt 2:R161-4, R166-7, R170-1 Ap 7 '43

Non-ionic surface active agents display unique characteristics. H. A. Goldsmith. *il Chem Ind* 52:326-8 Mr '43

Pigment dispersion with surface-active agents. E. K. Fischer and C. W. Jerome. *bibliog il Ind & Eng Chem* 35:336-43 Mr '43

Surface-active agents. *il Textile World* 92:96-1 D '42

Surface-active agents. F. D. Snell. *bibliog il Ind & Eng Chem* 35:107-17 Ja '43

Surface-active agents manufactured in America and commercially available; tabulation. *Ind & Eng Chem* 35:126-30 Ja '43

Wetting agents. J. M. Crowe. *Chem Ind* 52:54-5 Ja '43

See also

Aerosol-OT
Cleaning compositions

Dispersing agents
Penetrating agents
Wetting agents

SURFACE energy

Molecular surface energy of sulfur dioxide addition compounds. J. R. Bright and J. J. Jasper. *bibliog Am Chem Soc J* 63:3486-8; 65:1262-3 D '41, Ji '43

SURFACE phenomena

Method of thin films for the study of inter-metallic diffusion and chemical reactions at metallic surfaces. H. S. Coleman and H. L. Yeagley. *il diags Am Soc for Metals Trans* 31:105-21; Discussion. 121-4 Mr '43

Reaction of gases on the surface of a single crystal of copper. A. T. Gwathmey and A. F. Benton. *bibliog il J Phys Chem* 46:969-80 N '42

Spot reaction experiments; protective layer effects. F. Feigl. *J Chem Educ* 20:298-301 Je '43

Surface recombination of H atoms and OH radicals. W. V. Smith. *diags J Chem Phys* 11:110-25 Mr '43

See also

Accommodation coefficients
Adsorption
Catalysis
Contact angle

Electric contacts
Films
Friction
Surface tension

SURFACE tension

Definition of surface tension. G. Antonoff. *J Phys Chem* 47:463-4 Je '43

Statistical theory of liquids. G. Jaffé. *Phys R* 63:314-18 Ap 1 '43

Surface tension and vapor pressure. L. Z. Pollara. *J Phys Chem* 46:1163-7 D '42

Surface tension of *n*-heptane and *n*-butane containing dissolved nitrogen. G. J. Reno and D. L. Katz. *bibliog Ind & Eng Chem* 35:1091-3 O '43

Surface tension of micelle-forming solutions. A. E. Alexander. *bibliog J Chem Phys* 10:691 N '42

Surface tension of solutions of electrolytes as a function of the concentration; magnesium sulfate. G. Jones and W. A. Ray. *Am Chem Soc J* 64:2744-5 D '42

Surface tensions, densities and parachors of the aliphatic nitroparaffins. G. E. Boyd and L. E. Copeland. *bibliog Am Chem Soc J* 64:2540-3 N '42

Surface tensions of methane-propane mixtures. C. F. Weinaug and D. L. Katz. *bibliog il diags Ind & Eng Chem* 35:239-46 F '43

Wetting and spreading; a laboratory experiment. L. J. Bircher. *bibliog diag J Chem Educ* 20:428-30 S '43

See also

Interfacial tension

SURFACES

Concave surfaces can be milled; proper setting of milling cutters. C. Havranek. *diags Am Mach* 87:97 Je 24 '43

SURFACES—Continued

Designing aerodynamic surfaces by the use of algebraic and trigonometric functions to permit easy manufacture. J. J. Apalategui and W. B. White. *diags Aeronautical Eng R* 2:69, 71-2, 5 Ag '43

Detecting surface flaws in non-ferrous and non-magnetic materials; Zyglo fluorescent penetrant method. G. Ellis. *il Iron Age* 150:56-9 D 17 '42

Electron diffraction. G. P. Thomson. *Engineering* 155:436, 444-5 My 28-Je 4 '43; Same *abr. Engineer* 175:409 My 21 '43

Fine structure of metallic surfaces with the electron microscope; two-step replica process utilizes molded polystyrene and evaporated silica. R. D. Heidenreich and V. G. Peck. *bibliog il diag J Ap Phys* 14:23-9 Ja '43

How to secure fine surfaces by grinding. H. J. Wills. *Mach* 49:202-4 Ap; 169-72 My; 171-3 Je; 201-3 Ag; 50:172-4 S; 164-7 O '43

Identification of carbon black by surface area measurements. F. H. Amon, W. R. Smith and F. S. Thornhill. *bibliog Ind & Eng Chem Anal ed* 15:256-8 Ap 15 '43

Interpretation of electron micrographs of silica surface replicas. R. D. Heidenreich. *bibliog il J Ap Phys* 14:312-20 Jl '43

Metal spraying now extended to all flat and irregular surfaces; Fuse-bond process. C. K. Wilson. *il Steel* 112:98+ My 10 '43

Ploughing and adhesion of sliding metals. F. P. Bowden, A. J. W. Moore and D. Tabor. *il diags J Ap Phys* 14:80-91 F '43

Sorption and surface area in silica aerogel. S. S. Kistler, E. A. Fischer and I. R. Freeman. *bibliog Am Chem Soc J* 65:1909-19 O '43

Surface area of oxide coated cathodes by adsorption of gas at low pressures. L. A. Wooten and C. Brown. *diag Am Chem Soc J* 65:113-18 Ja '43

Surface consistency characteristics of asphalts; penetration test of asphalt surfaces ranging in thickness from 0.04 to 0.30 cm. E. C. Knowles and F. C. McCoy. *bibliog il Ind & Eng Chem* 35:1118-22 O '43

Surface hardness of metals; measuring method involving reduction of optical reflectivity after sand impact. *il diag Iron Age* 152: 43-5 S 30 '43

Surface replicas containing dye for use in the light microscope. V. J. Schaefer. *il Metal Prog* 44:72-4 Jl '43

Variable angle surface illuminator for microscopic inspection of surface texture of materials. J. H. Graff. *il diags Paper Tr J* 115:97-100 N 26 '42

Zinc oxide pigments; the surface area and catalytic activity. C. W. Siller. *bibliog il Am Chem Soc J* 65:431-4 Mr '43

See also

Boundary value problems Films
Electric double layer Metal finishing

Smoothness testing

Brush surface roughness analyzer. *diag Chem Ind* 52:477 Ap '43

Measurement of degree of roughness of high quality surfaces; abstract. W. Lueg. *Roy Aeronautical Soc J* 47:sup21-2 Ja '43

Oiliness and surface roughness. J. J. Bikerman. *diag Soc Chem Ind J* 62:41-2 Mr '43

Profile surfaces; method of evaluating roughness numerically. G. Schmaltz. *Automobile Eng* 32:518 D '42

SURFACES, Spherical. See Spherical surfaces

SURGEONS*See also*

Reid, Mont Rogers

SURGERY

Doctor's war aid; tantalum now used by surgeons. *Business Week* p28-9 O 23 '43

Finger surgery; analysis of 1000 cases. L. G. Simon. *bibliog Ind Med* 11:517-18 N '42

Surgical emergencies in industries. B. R. Beltran. *Ind Med* 12:431-4 Jl '43

Surgical management of industrial injuries. J. J. Moorhead. *Ind Med* 12:140-2 Mr '43

Tantalum to replace pieces of skull lost in war wounds; abstract. R. H. Pudenz. *Science* 97:sup12-13 F 19 '43

See also

Amputation Ointments
Anesthesia Shock
Fractures

SURGERY, Military

Surgery under fire; Portable surgical hospital at Buna. C. Edmundson. *Fortune* 28: 156+ Jl '43

SURGERY, Plastic

Supplementing surgery with vinyls. E. F. Lougee. *il Mod Plastics* 21:80-1+ N '43

SURGES. See Electric transient phenomena

SURGICAL instruments and apparatus

Surgical applications for electronic metal locator. *diag Electronics* 16:114 My '43

Vacuum in a modern hospital. J. Naab. *il Comp Air M* 48:6958-9 F '43

See also

Dental instruments
and apparatus

Advertising

This ad clicked, too; Berman Locator. *il Ptr Ink* 203:70 Je 4 '43

SURGICAL sutures. See Sutures

SURINAM. See Dutch Guiana

SURPLUS

Computation of earnings and profits included in invested capital. V. H. Maloney. *J Account* 75:414-25 My '43

Distribution of surplus on reduction of capital. *J Account* 76:87-8 Jl '43

Treatment of created surplus in corporate reorganization. *J Account* 76:351 O '43

SURPLUS of war materials. See Munitions—Surplus problem

SURPLUS products

How should postwar surpluses be marketed? *Ind Marketing* 28:17-18+ O '43

SURVEYING

Mapping Canada in peace and war. F. H. Peters. *il Civil Eng* 13:215-18 My '43

Relative angular, linear, and traverse accuracies in city surveys. S. A. Bauer. *Am Soc C E Proc* 68:737-50 My '42; Discussion. 68:1439-48, 1659-60; 69:511-14 O-N '42, Ap '43

Surveying in the tropics. R. W. Michael. *Eng & Min J* 143:70 N '42

300-ft. contour canal line. J. F. Pownall. *maps Engineering* 156:281-3 O 8 '43

See also

Area measurement
Leveling

SURVEYING, Aerial

Construction of tax maps from aerial survey plats; Warwick, R. I. A. E. McGuinness. *il diag map Pub Works* 74:16-19 My '43

Speeding-up the Alaska highway by aerial-survey methods. R. N. Johnston. *il map Roads & Bridges* 80:17-23+ N '42

Three-stage surveying procedure for post-war road projects. W. J. Fulton. *il Roads & Bridges* 81:42-3+ Mr '43

Transect method of estimating forests area from aerial photograph index sheets. P. R. Kramer and E. E. Sturgeon. *Pulp & Pa of Can* 44:34-6 Ja '43

SURVEYORS

Engineer, the architect, and the surveyor in town and country planning. H. J. Manzoni. *Engineer* 176:303-4 O 15 '43

SURVEYS, Building. See Housing surveys

SURVEYS, Geological. See Geological surveys

SURVEYS, Market. See Market surveys

SUSPENDERS

New design quirks ease rubber headache on garters and braces. *il Sales Management* 52:50-1 My 1 '43

SUSPENSION bridges. See Bridges, Suspension

SUSPENSIONS

Analysis of commercial oil emulsions and wax dispersions. F. M. Biffen and F. D. Snell. *il Ind & Eng Chem Anal ed* 15:517-19 Ag 15 '43

SUSPENSIONS—Continued

Analysis of the thixotropy of pigment-vehicle suspensions; basic principles of the hysteresis loop. H. Green and R. N. Weltmann. *bibliog Ind & Eng Chem Anal* ed 15:201-6 Mr 15 '43

Distribution graphs of suspended-matter concentration. J. W. Johnson. *bibliog Am Soc C E Proc* 68:1383-98 O '42; Discussion. 69: 321-2, 571-4 F, Ap '43

Laminar flow of oil-coal suspensions. F. J. Gradishar, W. L. Faith and J. E. Hedricks. *bibliog diags Am Inst Chem Eng Trans* 39:201-22 Ap '43; Abstract. *Chem & Met Eng* 50:147-8 Ja '43

Pressure drop data as applied to pulp suspensions. J. Cooper, jr. *bibliog Paper Tr J* 115:32-6 N 19 '42

See also

Sedimentation

SUSQUEHANNA railroad. *See* New York, Susquehanna and western railroad

SUTURES

Process plant for surgical sutures; factory for Johnson suture corporation. *il Arch Rec* 94:72-3 O '43

SVERDLOVSK, Russia

New Sverdlovsk; symbol of dramatic change. *For Comm W* 12:25 S 4 '43

SWAMPS. See Marshes**SWANSON, Carl A.**

Big butter-and-egg man. *por Fortune* 28:122-5+ O '43

SWARTS, Frederic, 1866-

Portrait. *J Chem Educ* 20:front Mr '43

SWEATERS

Knit goods for military purposes; cotton and wool socks, wool hose-tops and sweaters. *Textile World* 93:69 Ja '43

Sweaters of the future; will they be all wool, Aralac, or nylon? *Consumers' Research Bul* 11:24-5 O '42

SWEDEN

Impressions of a recent visitor to Sweden. G. Godwin. *Pulp & Pa of Can* 44:583-7 Jl '43

See also

Chemical industries— Railroads—Sweden
Sweden Wages—Sweden

Electricity supply—
Sweden

Commercial policy

Germany-Sweden agreement governing trade and payments during 1943. *For Comm W* 10:14-15 Ja 23 '43

Sweden and gold; trade between Sweden and Germany. *Economist* 145:83-4 Jl 17 '43

Economic conditions

News by countries. *For Comm W* 12:25+ S 18 '43

Sweden; the home front. *Economist* 144:527-8 Ap 24 '43

Swedish income and purchasing power during the war years. *Comm & Fin Chr* 158: 913 S 2 '43

Economic policy

Post-war planning in Sweden. *Int Labour R* 47:483-5 Ap '43

Swedish social policy in wartime. T. Erlander. *Int Labour R* 47:297-311 Mr '43

Tackling inflation in Sweden. *Economist* 144: 79 Ja 16 '43

Foreign relations

Sweden's foreign policy. *Economist* 144:542-4 My 1 '43

Industries and resources

Swedish forest products. O. Cyren. *Science* 97:394-5 Ap 30 '43

Social conditions

Social planning in Sweden. *Int Labour R* 48:308-15 S '43

SWEET POTATOES

Develops new foods from sweet potatoes. *Food Ind* 15:93 S '43

Yam dehydrated; sweet potato as stock feed crop. *Business Week* p65-6 Ja 30 '43

SWEETENING agents

Making apple syrup, glycerine, and sugar substitute. *flow sheet Chem & Met Eng* 50: 104+ Ag '43

New sweetener from apples; method for making it. *flow sheet Food Ind* 14:62-3 D '42

See also

Saccharin

Sugar

SWELLING

Gelatinization mechanism of starch granules. R. S. Bear and E. G. Samsa. *bibliog il diags Ind & Eng Chem* 35:721-6 Je '43

See also

Coal—Swelling

Expansion (heat)

SWIFT and company

Annual report. *Comm & Fin Chr* 157:47 Ja 4 '43

SWIMMING pools

Pattern for postwar pools; Swope Park swimming pools, Kansas City, Mo. *il plans Arch Rec* 94:56-7 Ag '43

Swimming pool operator held liable for drowning. *Nat Underw* 47:32 Ag 12 '43

Heating

Heat pump. T. F. Wall. *diags Engineering* 155:221 Mr 19 '43

SWINDLERS and swindling

See also

Fraud

Insurance—Fraudulent claims

Insurance, Accident—

Fraudulent statements

Insurance, Fire—

Fraudulent statements

SWINE

Argentina's hog industry. *For Comm W* 10:23 F 20 '43

Argentina's hog industry establishes new records. *For Comm W* 9:29 D 5 '42

Corn for war; urge cut in hog feeding next year. *Business Week* p78+ O 23 '43

Hogs in hiding. *Business Week* p110 O 16 '43

Metropolitan aids tenant farmers in boosting Nation's pork supply. *East Underw* 44:11 Je 15 '43

Mexico producing more hogs. *For Comm W* 9:27 D 12 '42

See also

Pork products

Prices

Hog ceiling proves no hit. *il Business Week* p15-16 Jl 24 '43

Hog ceilings will protect packers' margins. *Barron's* 23:6 S 20 '43

Pigs in a pickle; hog prices decline below government support levels. *Business Week* p46+ Jl 10 '43

SWINE brooders, Electric

Heat lamp brooders save the bacon and chicken. D. McGuire. *il Elec W* 120:1396+ O 16 '43

SWINE houses

Build farm structures every farmer can use. *il diag Am Bld* 65:76-9 My '43

Farm market, structures in demand. *diags plans Am Bld* 65:52-3+ Je '43

How to build an individual hog house. *il diags Am Bld* 65:55 S '43

More healthy pigs with this hog house. *il diags Am Bld* 65:44 Ag '43

SWING bridges. See Bridges, Swing**SWITCHBOARDS**

Control panels. J. H. M. Sykes. *Elec R (Lond)* 132:711-13 My 28 '43

SWITCHBOARDS, Telephone. See Telephone switchboards

SWITZERLAND

See also

Gold as money—

Switzerland

Hydroelectric plants

—Switzerland

Unemployment—

Switzerland

Wages—Switzerland

land

Commerce

Goods still move; even landlocked Swiss take to the sea. *Business Week* p49-50 Ag 14 '43

Economic conditions

Annual report of the Swiss national bank, 1942. *Fed Res Bul* 29:841-7 S '43

SWIVELS

Conductor swivel; streamlined assembly aids in line stringing. A. A. Osipovich. diags Elec West 90:41 Ja '43

SWOPE, Gerard, 1872-

Gerard Swope, Hoover medalist; address by K. T. Compton, with response by G. Swope. por Elec Eng 62:154-8 Ap '43

SYENITE

See also
Nephelite syenite

SYKES, Wesley Pope, 1893-

Distinguished metallurgist. H. A. Schwartz. por Metal Prog 44:252-3 Ag '43

SYLVANIA electric products inc.

Common stock offered. Comm & Fin Chr 157: 1751 My 10 '43

Files stock offering; report for 1942. Comm & Fin Chr 157:1470 Ap 19 '43

News and views on investments; potential growth in electronics. Barron's 23:5 Ja 18 '43

Thumbnail stock appraisal. Mag of Wall St 72:367 Jl 10 '43

SYMBOLS

American standard letter symbols for heat and thermodynamics; international symbols standardization. S. A. Moss. Science 98:343-4 O 15 '43

American standard symbols for heat and thermodynamics. S. A. Moss. Mech Eng 65: 669-70 S '43; Excerpts. Chem & Eng N 21: 2035-6 D 10 '43

Does your numbering system need revamping? unified system for numbering machine parts, subassemblies and catalog items; used by Taylor Instrument company. R. T. Soule. il diag Machine Design 15:113-16+ N '43

Standard letter symbols help clarify engineering literature. S. A. Moss. Ind Stand 14: 256-9 S '43

See also
Electric symbols
Radio symbols

SYMINGTON, William Stuart

Yaleman and communist worked things out together for the good of Emerson Electric—and the war. por Fortune 28:146-9+ N '43

SYMMETRY, Dynamic

Applying principles of dynamic symmetry; machine design. R. S. Elberty. il diags Machine Design 15:135-7 N '43

Dynamic symmetry improves photography. W. E. Burton. il diags Am Phot 37:8-11 F '43

SYMONS, George Edgar, 1903-

Introducing our new editor. por Water Works & Sewerage 90:93 Mr '43

SYNCHRONIZING

Automatic frequency and phase control of synchronization in television receivers. K. R. Wendt and G. L. Fredendall. il diags Inst Radio Eng Proc 31:7-15 Ja '43

Automatic synchronizer controls engine speed. il Aero Digest 43:207 Jl '43

Curtiss autosynchronizes engines; eases pilot's job. G. W. Brady and M. Meyer. il diags Aviation 42:144-9 S '43

Device permits practice synchronizing. L. E. Ludekins and H. C. Austin. il diag Elec West 90:40 Mr '43

Signal converter; thermionic discharge tube for production of time base deflection potentials of a cathode-ray tube. P. Nagy and M. J. Goddard. bibliog il diags Wireless Eng 20:273-99 Je '43; Abstract. Electronics 16:198-200+ O '43

Speed control assumes added weight under wartime impetus. il diags Rayon 24:93-6, 149-51 F-Mr '43

Synchronizes speeds of multiple engines; patent assigned to Woodward governor co. diag Machine Design 15:278+ O '43

Synchronizing wound-rotor motors. A. F. Metzger. Elec W 119:1798, 1986, 2152+ My 29-Je 26 '43

SYNCHRONOUS converters. See Electric converters, Synchronous

SYNCHROPHONE

New method of teaching; synchrophone as mechanical aid to technical instruction. il Electrician 131:19-20 Jl 2 '43

Synchrophone method of audio-visual instruction. il Engineering 155:157-8 F 19 '43

SYNCLINES

Development of the northern Allegheny synclorium and adjoining regions. G. M. Kay. maps Geol Soc Bul 53:1601-57, pl 1-3 bibliog(p1651-7) N '42

SYNERESIS

Reversible aggregations of colloidal particles; isothermal reversible sol syneresis. W. Heller. bibliog J Phys Chem 46:783-93 O '42

SYNTHESIS

Action of diazomethane upon acyclic sugar derivatives; ketose synthesis. M. L. Wolfrom, R. L. Brown and E. F. Evans. bibliog il Am Chem Soc J 65:1021-7 Je '43

Alkamine esters of fluorenonecarboxylic acids. F. E. Ray and G. Rieveschl, jr. bibliog Am Chem Soc J 65:836-9 My '43

Aromatic cyclodehydration; 9,10-dialkylphenanthrenes. C. K. Bradsher and S. T. Amore. bibliog Am Chem Soc J 65:2016-17 O '43

Attempted asymmetric syntheses involving the Grignard reagent in optically active solvents. D. S. Tarbell and M. C. Paulson. bibliog Am Chem Soc J 64:2342-4 D '42

Chemistry of vitamin E; synthesis and properties of 2-isopropyl-4,6,7-trimethyl-5-hydroxycoumaran. L. I. Smith and J. A. King. bibliog Am Chem Soc J 65:441-4 Mr '43

Dialkylation of naphthalene; the synthesis of 2,6-diphenylnaphthalene. C. C. Price and A. J. Tomisek. bibliog Am Chem Soc J 65:439-40 Mr '43

Diels-Alder diene synthesis. J. A. Norton. Chem R 31:319-523 bibliog(427 references, p515-23) O '42

Experiments on the synthesis of purine nucleosides; a new and convenient synthesis of adenine. J. Baddiley, B. Lythgoe and A. R. Todd. Chem Soc J p336-7 Ag '43

Experiments on the synthesis of purine nucleosides; model experiments on the synthesis of 9-alkylpurines. J. Baddiley and others. Chem Soc J p333-6 Ag '43

Experiments on the synthesis of substances related to the steroids; the preparation of 2:7-dihydroxyphenanthrene and certain derivatives; further observations on the reduction of 1- γ -ketobutyl-2-naphthol. J. W. Cornforth and R. Robinson. Chem Soc J p684-9 N '42

Factors determining the course and mechanism of Grignard reactions; a new synthesis of hexestrol dimethyl ether (3,4-dianisylhexane). M. S. Kharasch and K. Kleiman. Am Chem Soc J 65:491-3 Ap '43

General method for the synthesis of *t*-butyl esters. B. Abramovitch and others. Am Chem Soc J 65:986 My '43

Homogeneous catalysis and solvent effects in a diene synthesis. A. Wassermann. Chem Soc J p625-6 O '42

Homogeneous catalysis of diene syntheses; a new type of third-order reaction. A. Wassermann. Chem Soc J p618-21 O '42

Improved syntheses of aminoacridines; 2:5-diamino-7-ethoxyacridine, the base of rivanol. A. Albert and W. Gledhill. bibliog Soc Chem Ind J 61:159-60 O '42

Instance of the diene synthesis with an isobenzothiophene. C. F. H. Allen and J. W. Gates, jr. bibliog Am Chem Soc J 65:1283-5 Jl '43

Ketone synthesis; the condensation of acid anhydrides with olefins. A. C. Byrns and T. F. Doumanl. bibliog il diag Ind & Eng Chem 35:349-53 Mr '43

Kinetics of ammonia synthesis. P. H. Emmett and J. T. Kummer. bibliog il Ind & Eng Chem 35:677-83 Je '43

Mechanism of additions to double bonds; the nature of the activated complex in bimolecular diene syntheses. A. Wassermann. Chem Soc J p612-17 O '42

Model experiments on the use of cyclopentadiene in the synthesis of sterol-like compounds. C. F. Koelsch and F. J. Lucht. Am Chem Soc J 65:1240-2 Je '43

New modification of the Ullmann synthesis of fluorene derivatives. W. C. Lothrop and P. A. Goodwin. bibliog Am Chem Soc J 65:363-7 Mr '43

SYNTHESIS—Continued

New syntheses of heterocyclic compounds; 2-phenyl-3:4:6:7-dibenzo-1:5-naphthyridine. V. A. Petrow, M. V. Stack and W. R. Wrage. *Chem Soc J* p316-18 J1 '43

New syntheses of heterocyclic compounds; 2:3-dialkylquinolines. V. A. Petrow. *Chem Soc J* p693-6 N '42

New synthesis of the pentacene ring system. C. F. H. Allen and J. W. Gates, jr. *bibliog Am Chem Soc J* 65:1502-3 Ag '43

Polarographically controlled syntheses, with particular reference to organic chemistry. J. J. Lingane, C. G. Swain and M. Fields. *bibliog diag Am Chem Soc J* 65:1348-53 J1 '43

Preparation of derivatives of chrysene by means of the Robinson-Manich base synthesis of unsaturated ketones. A. L. Wilds and C. H. Shunk. *Am Chem Soc J* 65:469-75 Mr '43

Preparation of mixed, secondary aliphatic amines, RR'/NH. H. R. Henze and D. D. Humphreys. *bibliog Am Chem Soc J* 64:2878-80 D '42

Sterical course and the mechanism of the diene reaction. F. Bergmann and H. E. Eschmazi. *bibliog Am Chem Soc J* 65:1405-11 J1 '43

Synthesis and rearrangement of some decahydro- and tetrahydromaphthalenediols. J. English, Jr. and G. Cavaglieri. *bibliog Am Chem Soc J* 65:1085-9 Je '43

Synthesis of a tetrahydrothiophene with substituted amino groups in the 2- and 5-positions. G. B. Brown and G. W. Kilmer. *bibliog Am Chem Soc J* 65:1674-5 S '43

Synthesis of aldehydes from acylhydrazides. C. Niemann and J. T. Hays. *bibliog Am Chem Soc J* 65:482-4 Mr '43

Synthesis of 3'-alkyl-1,2-cyclophenanthrenes. B. Riegel, M. H. Gold and M. A. Kubice. *bibliog Am Chem Soc J* 65:1772-6 S '43

Synthesis of amino sugars. W. H. Myers and G. J. Robertson. *bibliog Am Chem Soc J* 65:8-11 Ja '43

Synthesis of aminobenzoyleneureas and of dihydroxyquinoxalines isomeric with luminol. E. H. Huntress and J. V. K. Gladding. *bibliog Am Chem Soc J* 64:2644-9 N '42

Synthesis of an epimeric pair of trisaccharides containing mannose units. E. A. Talley and W. L. Evans. *Am Chem Soc J* 65:573-4 Ap '43

Synthesis of certain disaccharide acetates in the mannose series. E. A. Talley, D. D. Reynolds and W. L. Evans. *bibliog Am Chem Soc J* 65:575-82 Ap '43

Synthesis of derivatives of diphenylethane related to materials occurring naturally; stilbene-2-acetic acid. S. Natelson and S. P. Gottfried. *Am Chem Soc J* 64:2962-3 D '42

Synthesis of 2,6-diphenylcyclooctandione-1,5. S. Wawzonek. *Am Chem Soc J* 65:839-43 My '43

Synthesis of methacrylic acid. T. White. *Chem Soc J* p238-9 My '43

Synthesis of 2-methyl-1,4-naphthoquinone-8-sulfonic acid. A. Bendich and E. Charga. *bibliog Am Chem Soc J* 65:1568-9 Ag '43

Synthesis of olefin hydrocarbons by catalytic condensation and dehydration of aliphatic aldehydes. V. I. Komarewsky and T. H. Kritchevsky. *Am Chem Soc J* 65:547-8 Ap '43

Synthesis of polyenes; a new synthesis of diethylstilbestrol. M. S. Kharasch and M. Kleiman. *bibliog Am Chem Soc J* 65:11-15 Ja '43

Synthesis of some α -acyltetronic acids. W. Baker, K. D. Grice and A. B. A. Jansen. *Chem Soc J* p241-2 My '43

Synthesis of 1-substituted aminobenzo(f) quinolines. A. C. Mueller and C. S. Hamilton. *bibliog Am Chem Soc J* 65:1017-18 Je '43

Use of N¹⁵ as a tracer element in chemical reactions; the mechanism of the Fischer indole synthesis. C. F. H. Allen and C. V. Wilson. *Am Chem Soc J* 65:611-12 Ap '43

Vitamin E; long chain aliphatic compounds with recurring isoprene units. L. I. Smith and G. F. Rouault. *bibliog Am Chem Soc J* 65:745-50 My '43

Vitamin E; synthesis of 1-chloro-3,7,11,15-tetramethylhexadecanol-3, and its condensation with trimethylhydroquinone to form α -tocopherol. L. I. Smith and J. A. Sprung. *bibliog Am Chem Soc J* 65:1276-83 J1 '43

See also
Friedel-Crafts reaction
Fischer-Tropsch process
Gattermann synthesis
Perkin reaction
Photosynthesis

SYNTHETIC organic chemical manufacturers association

Annual meeting, New York, Dec. 15. Oil Paint & Drug Rep 142:3+ D 21 '42

SYNTHETIC products

Encyclopedia of substitutes and synthetics. M. D. Schoengold, ed. 382p \$10 Philosophical lib, 15 E. 40th st, New York '43

Synthetic organic chemicals, 1942. *Chem & Met Eng* 50:112-13 F '43

See also
Chemurgy
Neoprene
Resinous products
Rubber, Artificial
Textile fibers, Synthetic

SYPHILIS

Amide-substituted phenylarsine oxides and their derivatives; a group of compounds of possible utility in the treatment of syphilis. H. Eagle and others. *Am Chem Soc J* 65:1236-7 Je '43

Blood tests ordered; California federation of labor. *Business Week* p106 Je 26 '43

Influence of methyl chalone of hesperidin on the toxicity of mapharsen in rabbits. D. H. Goldstein, A. Stolman and A. E. Goldfarb. *bibliog Science* 98:245-6 S 10 '43

Routine serologic testing of 15,000 employees of the home office of the Metropolitan life insurance company. C. R. Rein and M. G. Stephens. *Ind Med* 12:364-7 Je '43

Syphilis; an approach, in industry. E. G. Baxter. *Ind Med* 12:419-21 Je '43

Syphilis in industry; its relationship to industrial dermatoses; abstract. L. Schwartz and J. Markel. *J Ind Hygiene* 25:sup29-30 F '43

SYRACUSE, New York

Analyzing obsolescent neighborhoods; sampling technique by which Syracuse is accumulating background data for redevelopment and reconstruction plans. W. P. Crane. *plans Arch Forum* 79:120-2 O '43

Preparation of plans for redevelopment after the war. *plan Arch Forum* 72:71 My '43

Syracuse tackles its future. *il map Fortune* 27:120-3+ My '43

SYRIA**Economic conditions**

News by countries. *For Comm W* 11:24-5 Ap 17 '43

SYRINGES Hypodermic. *See* Hypodermic syringes

T

TNT. *See* Trinitrotoluene

TABLE top photography. *See* Photography, Table top

TABLES

Navy barracks table. *il diags Arch Forum* 79:40 J1 '43

New buildings for 194X: restaurant, with individual moving tables. *il diag plans Arch Forum* 72:116-19 My '43

TABLETS (medicine)

All-America package competition award; Bayer company. *il Mod Packaging* 16:94+ Ap '43

TABLEWARE

Are your best dishes china or earthenware? *il Consumers' Research Bul* 11:5-7 N '42

Dishes and dining. C. Atherton. *Am Cer Soc Bul* 22:311-12 S 15 '43

See also
Pottery

Manufacture

Production methods are compared for five chinas of the world. *il Cer Ind* 41:68, 70, 72+ N '43

TABLEWARE—Manufacture—Continued

Use of ball clay in vitreous hotel china bodies. R. E. Gould. *Am Cer Soc Bul* 21: 253-4; Discussion, 254 N 15 '42

Rating

If you are buying dinnerware. *il Consumers' Research Bul* 11:10-13 Ja '43

See also

Glassware—Rating

TABULATING machines

See also

Punched card system

TACHOMETERS

Adjustable stand for mounting tachometers. G. Schaffer. *il Elec W* 120:332 J1 24 '43

Tachometers for fast trains. F. MacGahan. *il diag Ry Mech Eng* 117:429-30 S '43

Tachometers guide precise operation. B. R. Hill. *il diag Machine Design* 15:151-3 Ag '43

Trouble-shooting chart for chronometric tachometers. F. E. Honeycutt. *Instruments* 16: 276+ My '43

Trouble-shooting the electrical tachometer system. H. E. Geddes. *il Instruments* 16: 271-2 My '43

TACOMA, Washington**Bridges**

Engineers improvise machinery to dismantle wrecked Narrows bridge. *il Steel* 112:64-5 My 24 '43

TAFT, Robert Alphonso, 1889-

Sketch. por(cover) *Spectator* (Life ed) 151: 66 O '43

TAGS

Certified facts tags give new personnel quick sales training; Western auto supply company. B. Bigelow. *il Ptr Ink* 202:58+ Mr 5 '43

Injection-molded tag holders. *il Mod Plastics* 20:67+ Ap '43

Tag-writing plan cuts costs, releases typewriters; White motor co. uses Addressograph to meet War department requirements for tagging spare parts. W. G. Graf. *il Am Business* 13:22-3 Mr '43

TAILINGS

Tailings re-treatment plant produces flux for lead smelter; Bunker Hill & Sullivan company recovers siderite. J. B. Hutt. *il flow sheet Eng & Min J* 143:56+ N '42

TAILORING

Electricity in tailoring trade. *Electrician* 131: 270-2 S 17 '43

TALBOT, Walter Le Mar, 1870-1943

Sketch. por East Underw 44:3+ F 26 '43

TALC

Beneficiation of domestic talcs. S. Gottlieb. *il bibliog flow sheets Am Cer Soc Bul* 22:223-5 J1 15 '43

Canadian talc for use in steatite insulators. H. S. Spence, J. G. Phillips and W. T. Turrall. *Am Cer Soc Bul* 22:295-8 Ag 15 '43

Ceramic parts in design. *il diags Machine Design* 15:120-3 Ag '43

Domestic talcs. T. A. Klinefelter. *Am Cer Soc Bul* 22:225-7 J1 15 '43

Petrographic study of domestic talcs. L. H. Berkelhamer. *il bibliog il Am Cer Soc Bul* 22: 227-30 J1 15 '43

Possible use of ferruginous talcs in steatite dielectrics. L. E. Kane and H. G. Ueltz. *Am Cer Soc J* 26:389-92 N 1 '43

Some Transvaal minerals. *Chem Age* (Lond) 43:401-2 Ap 10 '43

Talc from north Georgia. A. H. Hubbell. *flow sheets. il Eng & Min J* 143:45-9 N '42

Talc supply eases. *Business Week* p75-6 Je 12 '43

Western talcs. W. W. Roff. *Am Cer Soc Bul* 22:292-5 Ag 15 '43

See also

Steatite

Testing

Physical testing of talc for high-frequency ceramics. S. Speil. *il bibliog Am Cer Soc J* 26:336-8 O 1 '43; Abstract. *Cer Ind* 40:33 My '43

TALISAY. See Almond oil

TALKING moving pictures. See Moving pictures, Talking

TALL oil

Rosin replacement of coconut. Soap & San Chem 18:61-2 D '42

Tall oil; by-product of the kraft pulping process; patents. L. E. Wise. *Paper Ind* 24:822-6 bibliog(p331) N '42

Tall oil for the war effort. J. M. Wafer, A. Pollak and R. Hastings. *flow sheet diags map Paper Tr J* 117:26-31 J1 22 '43; Same cond. *Paper Ind* 25:196+ My '43

Tall oil in soap. R. Hastings, A. Pollak and J. M. Wafer. *bibliog il Soap & San Chem* 19:24-7, 70 My '43

Tall oil recovery. F. J. Cirves. *diag Paper Ind* 25:149-51 My '43

TALLOW

Rubber uses soap; causing scramble for fancy grade of tallow. *Business Week* p66 My 15 '43

Prices

Tallows, greases ceiling now uniform. Oil Paint & Drug Rep 143:3+ F 1 '43

TANGANYIKA Territory

Tanganyika, world's greatest sisal source. C. A. Riches. *il For Comm W* 9:6-7+ D 26 '42

TANGEMAN, Walter W.

Portrait. *Mach* 49:158 Ja '43

TANGIER, Morocco

More trouble in Tangier. *Economist* 144:720 Je 5 '43

TANHAM, James, 1895-

Named to War labor board. *por Nat Pet N* 35:2 Ag 4 '43

TANK automotive center, Detroit

Field modifications of ordnance vehicles. H. O. Mathews. *S A E J* 51:sup22-4, 39 Ag '43

Where war surprises are born. M. Folsom. *il Sci Am* 168:249-51 Je '43

TANK barges

Barge program under way. *il Nat Pet N* 35: 28 Je 23 '43

Barge rates set. *Nat Pet N* 35:26 J1 21 '43

Barge shipments on inland waterways to be expanded. Oil & Gas J 41:88+ Ja 28 '43

Barges dropped. *Business Week* p48 Ag 21 '43

More steel barges for oil movement. *Ry Age* 114:959 My 15 '43

Oil-by-water program rolling. *Nat Pet N* 35:24 J1 14 '43

Ok barge program; WPB gives approval. *Nat Pet N* 34:22 D 23 '42

Shift from wood to steel for inland oil carrying vessels. *Steel* 112:77 My 17 '43

TANK cars

All-welded tank wagons for the Swedish state railways. *il Engineering* 155:26 Ja 8 '43

Bad order cars; A.A.R. revises estimate of number of tank cars out for repairs. *il Nat Pet N* 35:28 Mr 10 '43

Boxcar tankers. *Business Week* p80 F 27 '43

Coupler and draft gear report; A.A.R. Mechanical division committee. *il Ry Mech Eng* 117:460-3 O '43

Failure to furnish tank cars restricts WEP throughput. P. Reed. *il Oil & Gas J* 41:27 Ap 8 '43

Largest tank car yards completed; Central of New Jersey builds terminal at Tremley, N.J. *il plan Nat Pet N* 35:24-5 Ag 18 '43

List many steps freeing tank cars. *Ry Age* 115:105-6 J1 17 '43

New record set in oil movement. *il Ry Age* 114:1140-2 Je 5 '43

New York Central handles Big Inch oil. *il Ry Age* 115:446-8+ S 18 '43

Norris City loads 1,049 cars in day. *Ry Age* 114:834+ Ap 24 '43

ODT orders faster tank car movement. *Ry Age* 113:1005-6 D 19 '42

146,000 tank cars, all regimented. *Nat Pet N* 35:28+ Ag 4 '43

Railroad oil movement near peak. J. J. Pelley. *Ry Age* 113:931+ D 5 '42

Revise tank car loading rules; API accident-prevention manual no. 12. *il Nat Pet N* 35:40-2 Ag 25 '43

Rules for cleaning and patching tank car tanks. *il diags Ry Mech Eng* 117:133-4 Mr '43

TANK cars—Continued

Safe handling of leaky tank cars. Ry Mech Eng 117:176-7 Ap '43
 Some problems of tank-car maintenance. P. J. Hogan. Ry Mech Eng 117:87 F '43
 Special directives to speed up transportation of materials moving in tank cars. R. W. Lahey. Chem & Eng N 21:1470, 1472 S 10 '43

Storage and handling of anhydrous ammonia in tank car quantities. L. H. Brandt. bibliog. il plan Chem Ind 53:200-6 Ag '43

Tank car efficiency; ODT to require special permits for commodities not on essential list. Nat Pet N 35:32-3 Jl 28 '43

Tank car rules. Nat Pet N 34:15 D 16 '42
 Tank cars aided; three organizations move to reduce breakdowns. Business Week p34+ N 14 '42

To convert cement carriers to haul kerosine; oil-tight gondolas, with wood compartments, proposed. il Nat Pet N 35:30 F 10 '43

Transport by tank car; increasing use in chemical industry. Chem Age (Lond) 48: 667-8 Je 26 '43

Transporting and storing liquefied petroleum gases. P. M. Baigorodsky. Chem & Met Eng 50:134 F '43

WPB's regulation of freight begins. Ry Age 114:330-1 F 6 '43

See also
 Loading and unloading—Tank cars
 Tank trucks

Repair

Tank car repairs heavy on C.N.J.; Elizabethport, N.J. car shop. il Ry Age 115:208-10 Jl 31 '43

Testing

Spherical containers for transporting gas under high pressure; transportation of helium under 2000 lb. pressure in multiple-sphere tank cars, reprinted from Mechanical engineering, Dec. 1929. il Welding J 22:sup304-7 Jl '43

TANK destroyers. *See* Tanks, Military—Tank destroyers

TANK ships

Crack-up of tanker attributed to weather, steel quality, welding, other factors. il Iron Age 151:89-90, 90A-90B Mr 18 '43

Doubling tankers; Alabama dry dock & ship-building co. hires two construction companies for management and consultation. Business Week p29-30 Ag 7 '43

Experimental concrete tanker shows its mettle. il Eng N 130:8 Ja 7 '43

Flaming tanker is salvaged by firemen of the fleet after fierce 37-hour battle. il Nat Pet N 35:17+ Ag 25 '43

Great Britain releases photos of new wartime oil tankers. il Nat Pet N 35:13, 20 S 29 '43

Inspection rules altered for tanker equipment; rules pertaining to alarm bells. Marine Eng 48:204 O '43

New design for tanker bulkheads. diags Engineer 175:231 Mr 19 '43

New salvage methods put tankers back to work in a hurry. il Nat Pet N 35:22 Ag 18 '43

Outstanding record made in salvaging damaged tankers. Marine Eng 48:223 O '43

Postwar fate of new tankers among worries of oil men. Nat Pet N 35:26+ O 6 '43

Report of findings of special subcommittee appointed by American bureau of shipping to investigate structural failure of tanker S.S. Schenectady. Welding J 22:225-6 Ap '43; Same. Marine Eng 48:207-8 Ap '43; Same. Mech Eng 65:365-6 My '43; Same. Engineer 175:413-14 My 21 '43; Same. Metal Prog 43:922-4 Je '43; Abstract. Eng N 130: 405 Mr 25 '43

Schenectady failure. J. A. McAleer. Marine Eng 48:240+ My '43

16,500-ton tanker launched in 115 days; Oregon shipbuilding co. il Eng N 129:744-5 N 26 '42

Tank lighter building at Greenport. il Marine Eng 48:142-5 Ja '43

Tanker interruptions react against all oil operations. J. F. O'Donnell. il Oil & Gas J 41:36, 88 D 31 '42

Tanker program dwarfs all previous building efforts. J. P. O'Donnell. Oil & Gas J 41:84 Ja 28 '43

Turbine-electric drive tankers. J. A. Wasmund. il Marine Eng 48:202-6 Ag '43

Use of high elastic steel in ship construction; with cost data. E. P. Trask. Marine Eng 48:169-71 F '43

See also

Tank barges
 War emergency tankers, inc.

TANK trucks

Chemicals on the road; transport of chemicals in bulk. il Chem Age (Lond) 48:671-2 Je 26 '43

400 new tank trailers okayed; PAW puts up fight for adequate oil trucks. Nat Pet N 35: 24+ S 15 '43

How Tide Water obtains maximum efficiency from truck fleet. R. D. Rogers. il Nat Pet N 35:30-2+ S 1 '43

New tank trailers authorized. Nat Pet N 35: 30 Jl 28 '43

ODT promotes trailer sales; amortization of cost of 892 tank semi-trailers which WPB ordered manufactured is allowed. Nat Pet N 35:34 F 3 '43

States warned against revival of truck barriers. J. B. Eastman. Nat Pet N 35:26+ Ag 4 '43

Tank trucks handle big war job. Nat Pet N 35:20+ Jl 21 '43

Truck speed: to be 35 or 45? PAW suggests that 45 m.p.h. is most efficient. Nat Pet N 35:24 F 17 '43

Truck, trailer purchasers aided; through amortization plan, U.S. encourages purchase of tank trucks, trailers for war purposes. Nat Pet N 35:26+ F 10 '43

Trucker outlook; ODT tells Chicago meeting that more regulation and troubles are in store. Nat Pet N 35:4 Mr 24 '43

Trucks in war. Nat Pet N 34:20 D 9 '42

Trucks take over, relieving short-haul rail movement. Nat Pet N 35:24 My 5 '43

Wartime problems of petroleum carriers. J. F. Winchester. Am Pet Inst Proc 23(1):76-80 '42

Wartime regulations of petroleum carriers. S. F. Niness. Am Pet Inst Proc 23(1):69-71 '42

TANKS

Balanced-tank tie dipper prevents splashing. il diag Coal Age 48:97 O '43

Simple cleaning tanks for small-lot metal washing. R. W. Mitchell and M. T. Zinty. diags Am Mach 37:94-6 My 27 '43

Vacuum breaker prevents tank collapse. S. H. Coleman. diag Factory Management 101: 142 Je '43

See also

Airplanes—Fuel tanks
 Boilers
 Gas holders
 Gasoline tanks
 Hot water tanks
 Imhoff tanks
 Oil tanks
 Pressure vessels

Septic tanks
 Sewage tanks
 Tank cars
 Tank ships
 Tank trucks
 Tanks, Steel
 Tanks, Wood
 Water tanks

Cleaning

Safe practice in repainting tanks. diags Sheet Metal Worker 34:26-9 Ap '43; Abstract. Chem Age (Lond) 48:425-6 Ap 17 '43

Lining

Lining fuel storage tanks with synthetic rubber sheet. J. W. Crosby. il Rubber Age 53:240-1 Je '43

Tank linings made of synthetic rubber bonded in place. Sci Am 169:13 Jl '43

Thiokol-lined underground tanks. il Chem Ind 53:528 O '43

Measurement

Calibration of horizontal cylindrical tanks. H. David. diag Oil & Gas J 41:49-50 Mr 4 '43

Capacity chart for horizontal cylindrical fuel oil tanks. Power Pl Eng 47:104 Mr '43

Chart facilitates determination of tank capacities. L. T. Monson. Oil & Gas J 41: 44+ D 10 '42

TANKS—Measurement—Continued

Chart for calibrating horizontal tanks with standard or non-standard dished ends. D. G. Williams. Chem & Met Eng 50:118 JI '43

Contents of horizontal cylinders. J. Tarrant. chart Water Works & Sewerage 90:sup274-5 Je '43

Contents of horizontal cylindrical tanks. W. F. Schaphorst. chart Pulp & Pa of Can 44:451-2 My '43

To figure horizontal tank capacities. chart India Rubber W 107:377 Ja '43

Repair

Safe practice in repairing tanks. diag Sheet Metal Worker 34:26-9 Ap '43

Ventilation

Ventilation requirements for solvents in industrial tanks. bibliog diag J Ind Hygiene 25:306-19 S '43

TANKS, Brick

See also

Sewage tanks, Brick

TANKS, Concrete

Big field open for unreinforced concrete in industrial tanks and basins. H. Moore. II diag plan Concrete 50:2-3 D '42

Claim 66-90% steel saving with concrete storage; abstract. C. Dobell. Nat Pet N 35:4 Ap 21 '43

Concrete tanks for fuel oils. Am Concrete Inst J 14:311-12 F '43

How to build a concrete milk-cooling tank. diag Am Bld 64:45+ N '42

Make precast fuel-oil storage tanks of unreinforced concrete. II Concrete 51:28 Ja '43

Navy builds prestressed concrete tanks. R. E. Garraabrant. II Eng N 130:135-7 Ja 28 '43

Oil-resistant linings for concrete tanks. Eng N 130:800 Je 3 '43

100,000-barrel concrete tanks for fuel oil built by prestressing reinforcing rods. II diag Nat Pet N 35 pt 2:R20 Ja 6 '43

Theory of pre-stressed design of concrete tanks is described. C. Dobell. Nat Pet N 35 pt 2:R448 O 6 '43

Wisconsin contractor promotes contracts on large farms; concrete watering tanks and troughs. diag Concrete 50:16+ D '42

See also

Gasoline tanks, Concrete
Sewage tanks, Concrete

Water tanks, Concrete

TANKS, Military

Armoured fighting vehicles in 1942. II Engineer 175:16-17, 19, supp 1 Ja 1 '43; Abstract. Metal Prog 43:389+ Mr '43

British Matilda tank. II Automotive & Aviation Ind 88:37 Ap 15 '43

Churchill tank. W. Churchill. Engineer 174:498-9 D 18 '42

Engines for tanks. R. J. Icks. S A E J 51:sup39-41, 56-7 JI '43; Excerpts. Machine Design 15:208+ Ag '43

Field modifications of ordnance vehicles. H. O. Mathews. S A E J 51:sup22-4, 39 Ag '43

German Mark IV tank; illustrations. Automotive & Aviation Ind 88:39 Ap 1 '43

Our tanks and tank production as viewed by our Ordnance chief. Automotive & Aviation Ind 87:46, 64 N 1 '42

Power for tanks. J. R. Custer. II Automotive & Aviation Ind 89:17-19+ S 1 '43

Suspension for track-laying vehicles; abstract. J. M. Colby. S A E J 51:sup64 JI '43

Tank armor; abstract. G. M. Barnes. Metal Prog 43:389 Mr '43

U.S. tanks unequaled in fire-power, mobility and armor; abstract. J. M. Colby. Steel 111:49-50 N 23 '42

V-8 for victory; Ford engine for medium tanks is army's choice. Business Week p 14 D 19 '42

Where war surprises are born; Tank-automotive center, Detroit. M. Folsom. II Sci Am 168:249-51 Je '43

See also

Armor plate

Equipment

Eyes of the tank; plastic lens holder for periscopes. II Mod Plastics 21:75-7 O '43

Equipment mounting

Protective engineering for delicate military equipment; mounting instruments and other vital equipment in planes, tanks, and ships.

P. C. Roche. II diag Mech Eng 65:581-7 Ag '43; Same. Rubber Age 53:515-22 S '43; Same cond. Machine Design 15:124-9+ JI '43

Manufacture

American steel foundries casts armor for tanks. F. G. Steinebach. II Foundry 71:78-82+ JI '43

Auto dealer becomes army tank subcontractor; Youngstown Buick co. G. R. Reiss. II Steel 111:78, 80 N 23 '42

Automatic machines for operations on tank turret rings. II Mach 49:200+ Mr '43

Flame hardening tank turret ring races. T. E. Lloyd. II Iron Age 151:64-5 Mr 25 '43

General steel castings corp. applies direct-fired oil heaters in plant manufacturing tank castings. E. F. Hyde. diag Heat & Ven 40:88-90 Je '43

Heat treating tank track components; Tank production committee recommendations. Steel 113:102+ Ag 2 '43

Induction hardened parts for desert warfare. II Iron Age 152:60 JI 15 '43

Network of shops for heat treating small armor. L. Stouffer. II Metal Prog 43:390-1 Mr '43

Ordnance flame hardening. S. Smith. II Welding J 22:911-19 N '43

Symington-Gould corp. installs simple but effective system in tank castings foundry. A. S. Crocker. II plans Heat & Ven 40:84-7 Je '43

Tank production being held to December, 1942, schedules. Automotive & Aviation Ind 88:45+ F 1 '43

Tank turrets machined faster on mills equipped with variable voltage speed control. II diag Product Eng 14:76-7 F '43

Toolholders for turret machining. II diag Am Mach 87:113-18 S 16 '43

Transition from riveted to welded construction of light combat tanks. W. Osha and J. W. Sheffer. II diag Welding J 22:780-3 O '43

U.S. automobile manufacturers outdo German tank builders. Automotive & Aviation Ind 87:64+ D 1 '42

United States rubber co. leases four buildings of Hupp motor plant to handle assembly of tank treads and tracks; tank drive units in mass production. II Steel 112:49-50+ Mr 22 '43

Welding armor plate for combat tanks; superiority of welded over riveted construction; abstracts. E. Brooker and L. L. Elliot. II diag Iron Age 151:23-7 Ja 14 '43; Metal Prog 43:392-5+ Mr '43

Welding tank hulls; women as welders. G. R. Reiss. II Steel 112:106+ Ap 26 '43

Working out techniques for welding armor plate. E. G. Biederman. diag Iron Age 151:46-50 Ja 21 '43; Same. Welding J 22:516-19 JI '43

Tank destroyers

Tank destroyer fabricated from armor plate. II Blast F & Steel Pl 31:443-4 Ap '43

Transmission

Gear sets for medium tanks on the production line; Buick motor car division, General motors corp. J. Geschelin. II Automotive & Aviation Ind 89:22-7 JI 1 '43

Spicer's new transmission plant. J. Geschelin. II Automotive & Aviation Ind 88:20-3+ My 1 '43

Vibration

Protective engineering for delicate military equipment; mounting instruments and other vital equipment in planes, tanks, and ships.

P. C. Roche. II diag Mech Eng 65:581-7 Ag '43; Same. Rubber Age 53:515-22 S '43; Same cond. Machine Design 15:124-9+ JI '43

TANKS, Plastic

Jettison tanks for ferry service; urea-impregnated glass fiber cloth or canvas. *il Mod Plastics* 21:75-7+ S '43

TANKS, Ship model. See Ship model tanks**TANKS, Steel**

Corrosion protection of storage tanks; gunite lining, galvanizing and aluminum roofs, etc. F. L. Newcomb, E. S. Dixon and C. F. Kelly, *il diags Am Pet Inst Proc* 23(3):38-58 '42; Excerpts. *Nat Pet N* 34 pt 2:R397-403 N 25 '42

Unusual type of storage vessel; spherical steel tank. *diags Engineer* 176:96-7 JI 30 '43

See also

Water tanks, Steel

Protection

Cost of protective coating at lease tanks versus replacement. *Oil & Gas J* 42:91 O 21 '43

TANKS, Wood

Proposed API tentative specification for wooden tanks. *diag Am Pet Inst Proc* 23(4):229-34 '42

Report of A.P.I. committee on the standardization of tanks for oil storage. *Am Pet Inst Proc* 23(4):226-7 '42

Wood in pulp and paper mill construction. F. W. Gottschalk. *il Paper Ind* 25:39-40 Ap '43

Wood septic tank in Baltimore. *Pub Works* 73:30 N '42

Wooden tanks for sour crude save money. *Oil & Gas J* 41:77 Mr 18 '43

See also

Sewage tanks, Wood

Water tanks, Wood

TANNERIES**Electric equipment**

Old tannery goes streamline; tannery of Poetsch & Peterson. *il plan Elec West* 91:56-8 O '43

Equipment

Ever-ready maintenance plan for round-the-clock production; American oak leather company, Cincinnati. M. Raymond. *il Factory Management* 101:150-2 O '43

Waste

Screening, the solution of a troublesome trade waste problem. A. L. Boley. *plans Pub Works* 74:20-1+ Ag '43

TANNERS' council of America

Annual meeting, New York, Oct. 28-29. *Oil Paint & Drug Rep* 144:7 N 8 '43

TANNIC acid

Industrial burns treated with tannic acid in new package. *Sci Am* 169:175 O '43

TANNING

Chrome tanning leather; flow sheet. *il Chem & Met Eng* 50:112-15 Ja '43

Chromium conservation in the leather industry. E. R. Theils and F. O'Flaherty. *Can Chem & Process Ind* 27:13 Ja '43

Critical evaluation of sulphite waste liquor in tanning; abstract. K. H. Gustavson. *Paper Ind* 25:96 Ap '43

Leather tanning requirements being met by research. *Sci Am* 168:256 Je '43

See also

Hides and skins

Leather

TANNING materials

Chemical constitution and the tanning effect; pentagalates of glucose and mannose. A. Russell, W. G. Tebbens and W. F. Arey. *Am Chem Soc J* 65:1472-4 Ag '43

Chestnut extract substitute. A. Russell. *Oil Paint & Drug Rep* 143:7 Mr 22 '43

Dyestuffs, textile and leather chemicals, 1942. *Oil Paint & Drug Rep* 143:78+ Ja 11 '43

Iron salts replace chromes in tanning. *Oil Paint & Drug Rep* 144:40 O 25 '43

Serenoa surculata, the saw palmetto, a trunkless palm. C. D. Mell. *Textile Col* 65:107 Mr '43

Sumach substitute from wattle. T. Woodhead. *Chem Age (Lond)* 47:380 O 31 '42

Tanners study requisitions for armed forces, civilians. *Oil Paint & Drug Rep* 143:7+ My 31 '43

Tanning materials and their chemurgic interest. R. M. Lollar and F. O'Flaherty. *Chem Ind* 51:862-4 D '42

Vegetable tanning materials under control. *Oil Paint & Drug Rep* 143:5+ F 8 '43

See also

Quebracho

Sulfamic acid

TANTALUM

Doctor's war aid; tantalum now used by surgeons. *Business Week* p28-9 O 23 '43

Rare element prospecting in pegmatites. T. T. Quirke and H. E. Kremers. *bibliog Econ Geol* 38:173-87 My '43

Tantalum in chemical industry; resistance to chemical action; valuable physical properties. H. Seymour. *Chem Age (Lond)* 47:441-3 N 21 '42

Tantalum processed from New Mexico ores. *Steel* 112:70 My 10 '43

Tantalum to replace pieces of skull lost in war wounds; abstract. R. H. Pudenz. *Science* 97:supl2-13 F 19 '43

Thermal and electrical conductivities of tungsten and tantalum. M. Cox. *bibliog Phys R* 64:241-7 O 1 '43

Metallography

Tantalum-carbon system. F. H. Ellinger. *il Am Soc for Metals Trans* 31:89-102; Discussion. 102-4 Mr '43

TANTALUM carbide

Tantalum-carbon system. F. H. Ellinger. *il Am Soc for Metals Trans* 31:89-102; Discussion. 102-4 Mr '43

TANTALUM oxides

Elimination of sorption-desorption hysteresis in hydrous oxide gels; tantalum pentoxide, stannic oxide, and titanium dioxide. H. B. Weiser, W. O. Milligan and W. C. Simpson. *bibliog J Phys Chem* 46:1051-9 D '42

TAPE

Pressure-sensitive tape on the battlefield. *il Mod Packaging* 16:40-2+ Mr '43

TAPE, Insulating. See Insulating tape**TAPIOCA**

Rival for tapioca; waxy sorghum promises to bid for starch market. *Business Week* p37 My 22 '43

Tapioca dextrin use is restricted. *Oil Paint & Drug Rep* 144:5+ S 20 '43

TAPPING

Drilling and tapping fuse bodies; operations performed on Kingsbury machines. *il diags Mach* 49:127-40 Mr '43

Housings for tapping attachments. *il diags Mod Plastics* 21:110-12 N '43

Radial drill press operations; time-data sheet. *Am Mach* 87:109, 111 Ap 1 '43

Simplifies hand tapping of nuts. A. George. *diag Am Mach* 87:108 JI 22 '43

Tapping fixture for small part. A. S. Arnot. *diags Mach* 49:160-1 Ja '43

TAPPING machines

Bakewell no. O precision tapping machine. *il Am Mach* 87:120 Ap 29 '43; *Mach* 49:184 Je '43

Bakewell precision radial tapping machine. *il Engineering* 154:406 N 20 '42

Bakewell strut tapping machine. *il Aero Digest* 42:346-7 Ja '43

Detroit tap and tool co. precision tappers. *il Am Mach* 86:1461 D 10 '42; *Steel* 111:155-6 D 7 '42

Jones and Shipman electrotrap tapping machine. *Automobile Eng* 33:241 Je '43

Waterbury-Farrel nut-tapping machine of improved design. *il Mach* 49:182 Mr '43; *Steel* 112:130-1 Mr 8 '43; *Am Mach* 87:126 Mr 18 '43

TAPS

Basic thread dimensions and tap drill sizes; table. *Am Mach* 87:110 Ap 15 '43

Fixture prevents breakage of small taps. *N. Hall, diag Am Mach* 86:1506-7 D 24 '42

Hardening high speed taps and dies in the electric salt bath. P. C. Farren. *il Metal Prog* 44:625-31 O '43

Reducing tap breakage; abstract. *Metals & Alloys* 17:162+ Ja '43

TAR

Sweden produces tar from tree stumps. For Comm W 9:26 D 19 '42

Tar elimination in pyroligneous acid; removal of tar-forming constituents by polymerization and condensation. D. F. Othmer and E. Katzen. bibliog flow sheets il Ind & Eng Chem 35:288-96 Mr '43

See also

Coal tar Road tar
Coal tar products Roads, Tarred

Dehydration

Lynn gas and electric company procedure of dehydrating bunker "C" tar emulsion and coke oven tar emulsion. C. J. Leuders. Am Gas Assn Proc 1942:310-11

TAR acids

British tar acids to channel through DSC. Oil Paint & Drug Rep 143:3+ My 10 '43

Analysis

Determination of phenol and *m*-cresol in coal distillation products by means of the Spek-ker photo-electric absorptiometer. T. S. Harrison. Soc Chem Ind J 62:119-23 Ag '43

Prices

Imported tar acids under OPA control. Oil Paint & Drug Rep 143:4+ Ap 26 '43

TAR distillation

Association of tar distillers annual report. Gas J (Lond) 241:429+ Ap 7 '43

TAR sand. See Bituminous sand**TARA spinosa**

Tara, new source of income for Peru. For Comm W 10:25 F 20 '43

TARDINESS (employees)

Rewards for dependable employees; bonus for steady attendance coupled with penalty for absenteeism. C. G. Baumes. Am Business 13:13+ F '43

TARIFF

Never ending tariff controversy. E. S. Pillsbury. Comm & Fin Chr 158:498+ Ag 5 '43
Unilateral tariff policy is thing of past. E. P. Thomas. Comm & Fin Chr 158:1688 O 28 '43

See also

Balance of payments Free ports and zones
Commerce Free trade and protection
Commercial policy
Commercial treaties
and agreements

Canada

Vanishing duties; agreement on production and distribution of agricultural commodities may signal end of U.S.-Dominion barriers. Business Week p40 Ja 16 '43

Germany

Import and export duties on most trade with occupied areas abolished. For Comm W 10:19 Ja 9 '43

Mexico

Mexico-U.S. trade agreement is signed. Oil Paint & Drug Rep 143:3+ Ja 4 '43
New trade agreement between United States and Mexico. For Comm W 10:3-5, 30-1 Ja 16 '43

Paraguay

Paraguay; increased customs surtax and other tariff changes affect wide range of merchandise. For Comm W 13:25-6 O 23 '43

United States

Changes in import duties since 1930. For Comm W 11:34 My 8 '43

House group favors trade pacts renewal. Comm & Fin Chr 157:1593+ Ap 29 '43

New trade agreement between United States and Mexico. For Comm W 10:3-5, 30-1 Ja 16 '43

Renewal of trade agreements act urged upon Congress by American economic association. Comm & Fin Chr 157:1579 Ap 29 '43

Tariff, reciprocal trade and mining. E. Just. Eng & Min J 144:76-8+ Ap '43

See also

Commercial treaties
and agreements

TARPAULINS

How to apply waterproof tarpaulin to cable joints. diags Elec W 120:1038 S 18 '43

TARRED roads. See Roads, Tarred

TARTAGLIA, Nicolò, c. 1506-1559
Four on war; from the writings of earlier scientists. M. F. Ashley-Montagu. por Tech R 45:315-16 Ap '43

TARTAR emetic

Spray residues of tartar emetic on citrus leaves; determination by iodometric titration. R. L. Busbey and R. A. Fulton. Ind & Eng Chem Anal ed 15:37-8 Ja 15 '43

TARTARIC acid

Storage of synthetic citrus powders; caramelization by citric or tartaric acid and various sugars at high temperatures. W. E. Isaac. il Ind & Eng Chem 35:470-4 Ap '43

TARTRATES

Polarographic characteristics of stannous and cupric tartrate complexes and amperometric titration of tin with cupric ion in tartrate medium. J. J. Lingane. bibliog Am Chem Soc J 65:866-72 My '43

Tartrates from domestic wineries. J. M. Crowe. il Chem Ind 53:336-7 S '43

Tartrates recovered from wine vats by new American process. Sci Am 169:162 O '43

TASTE

See also

Flavor
Water purification—
Taste and odor removal

TAURINE

Taurine; a new synthesis. A. A. Goldberg. Chem Soc J p4-5 Ja '43

TAUTOMERISM

See also

Isomerism

TAX administration

Pattern of successful property tax administration: the Wisconsin experience; state supervision. H. M. Groves and A. B. Goodman. J Land & Pub Util Econ 19:141-52 My '43

Plan to end tax conflicts; program presented by intergovernmental fiscal relations committee. East Underw 44:11 My 7 '43

Urges Congressional control of revenue and appropriation of public funds. T. I. Parkinson. Comm & Fin Chr 157:1670 My 6 '43

TAX consultants

Tax returns and the practice of law. J Account 76:2-4 Jl '43; Discussion. T. G. Thurston. 76:155 Ag '43

Tax returns and the practice of law; Lowell bar association v. Birdie T. Loeb, et al. J. W. Morton. J Account 76:84-6 Jl '43

TAX court. See United States—Tax court**TAX delinquency**

Tax delinquents may make weekly payments Comm & Fin Chr 156:2173 D 17 '42

TAX evasion and avoidance

Family partnership may save taxes. L. J. Freeman. Barron's 23:9 My 17 '43

How securities profits can be preserved. A. A. Mol. Barron's 22:8-9 N 30 '42

Trusts to foods; Public utility holding co. now canning Stokely's fruits and vegetables. Business Week p105-6 S 18 '43

TAX-exempt securities. See Taxation, Exemption from**TAX exemption.** See Taxation, Exemption from**TAX liens**

Superiority of the estate tax lien over sub-sequence mortgages; over liens for local taxes. P. G. Evans. Trusts & Estates 76: 198 F '43

TAX maps. See Assessment maps**TAX refunds**

Expert points to opportunities for refunds under 1942 Revenue law. J. K. Lasser. Banking 35:44-5+ F '43

TAXATION

Calls for courageous tax program to prevent inflation. F. M. Vinson. Comm & Fin Chr 158:1886-7 N 11 '43

Effects of income redistribution. L. A. Metzler. R Econ Stat 25:49-57 F '43

TAXATION—Continued

Impact of taxes on credit. C. E. Fernald. Credit & Fin Management 45:10-12+ Je '43
Municipal news; overlapping federal, state and local taxation; Committee on inter-governmental fiscal relations report. Comm & Fin Chr 157:1207 Ap 1 '43

Personal income taxes in the United States, Canada, and the United Kingdom; differences in other taxes. R. A. Musgrave. Fed Res Bul 28:1192-6 D '42

Revenue implications of a progressive-rate tax on expenditures; a study of selected aspects of Irving Fisher's proposal to eliminate savings from the income tax base. C. L. Harriss. bibliog R Econ Stat 25:175-81 Ag '43

Taxation and municipal engineering. E. M. Beardslee. Civil Eng 13:351-2 Ag '43

Taxation, yesterday, today and tomorrow. C. J. Siegel. Credit & Fin Management 45:8-10 N '43

See also

Chain stores—Taxation	Insurance companies—Taxation
Cigarette industry and trade—Taxation	Mine taxation
Corporations—Taxation	Motor vehicles—Taxation
Debts, Public	Municipal finance
Excess profits tax	Municipal taxation
Gasoline—Taxation	Poll tax
Gift tax	Public utilities—Taxation
Government expenditures	Sales tax
Income tax	Special assessments
Inheritance tax	Spending tax
Insurance, Life—Taxation	Stamp tax
	Stock transfer tax
	Tariff

Accounting

Problems in tax accounting. T. D. Williams. J Account 74:500-2 D '42

Systematized tax work in the business office; abstract. B. V. Tornborgh. Management R 32:93-4 Mr '43

Tax adjustment control. H. W. Funk. J Account 75:137-9 F '43

Tax clinic. J. K. Lasser, ed. Published in monthly numbers of Journal of accountancy Your new taxes; proper order of calculation simplifies task of computing corporate levies. L. J. Freeman. Barron's 22:8 D 14 '42

See also

Income tax—Accounting	Transportation tax—Accounting
-----------------------	-------------------------------

Payment financing

Problems in the funding of tax and other reserves. W. A. Hosmer. N A C A Bul 24:1049-75 My 1 '43

See also

Excess profits tax—Accounting	Income tax—Payment financing
-------------------------------	------------------------------

Africa, North

African taxes up. Business Week p76+ N 6 '43

Canada

Isley tax plan. Business Week p50+ Mr 13 '43

Pay-as-you-earn tax in Canada's new budget; other proposals. For Comm W 11:3-4+ Ap 17 '43

Colombia

Colombian tax and fiscal legislation for 1943. H. P. Crawford. Il For Comm W 11:8-9+ Ap 10 '43

Connecticut

What a group of Connecticut business men are doing about taxes. C. L. Campbell. Edison Elec Inst Bul 11:45-6 F '43

Cuba

Cuba imposes new taxes and increases some existing taxes. For Comm W 11:17-18 My 29 '43

President submits new tax bill to Congress. For Comm W 10:22 F 27 '43

Great Britain

Higher customs and excise duties; purchase tax. Economist 144:507 Ap 17 '43

Paying and saving in Great Britain. N. Crump. Comm & Fin Chr 157:1778 My 13 '43

See also

Budget—Great Britain	Income tax—Great Britain
----------------------	--------------------------

New York (city)

New York City business tax regulations published in booklet form. Comm & Fin Chr 157:2188 Je 10 '43

Real estate securities; tentative tax rolls for 1943-1944. Comm & Fin Chr 157:484 F 4 '43

New York (state)**See also**

Income tax—New York (state)

Philadelphia

Philadelphia's income tax brings heavy revenue. Comm & Fin Chr 157:360 Ja 28 '43
Wage tax cut. Business Week p20 D 26 '42

United States

Appraisal of Treasury's tax program. Trusts & Estates 77:317-18 O '43

Asking price; Morgenthau's request for 10½ billions in new taxes leaves room for bargaining. Business Week p16-17 O 9 '43

Baruch would like to see much more drastic taxes and civilian standardization. E. Blair. Barron's 23:4 Je 7 '43

Business, investment and post-war taxes. R. Magill. Trusts & Estates 77:327-30 O '43

Business taxes often take more than net earnings. Conference board finds. Comm & Fin Chr 158:611 Ag 12 '43

Catching up with the American radical; taxes deny family security. J. S. Myrick. Comm & Fin Chr 158:1086+ S 16 '43

Coordination of federal-state-local taxes in several fields urged in government report. Comm & Fin Chr 157:1603 Ap 29 '43

Corporate taxes near peak. W. Gates. Mag of Wall St 73:50-2+ O 30 '43

Current federal tax notes. P. G. Evans. Trusts & Estates 76:198 F '43 [cont monthly]

Declares war taxes low in comparison to Canada and Britain. H. Morgenthau, Jr. Comm & Fin Chr 158:611 Ag 12 '43

Effects of present income and estate tax policy. R. Magill. Comm & Fin Chr 158:1685+, 1694-5 O 28 '43; Abstract. Weekly Underw 149:385+ O 23 '43

Employees' pension trusts and annuity plans under section 162. Revenue act of 1942. M. Kurtz. J Account 76:124-30 F '43

Federal revenue act of 1942. F. L. Morton. Spectator (Life ed) 149:4-7, 67-70 D '42

Federal tax collections 75% higher in 1942 fiscal year. Comm & Fin Chr 156:2153 D 17 '42

Federal tax law changes in past year as they affect life insurance. J. V. Bloys. East Underw 44:32+ pt 2 O 1 '43

Fiscal problems; report of Committee on inter-governmental fiscal relations. Bankers M 146:421-3 My '43

House group votes increased excise taxes, rejects rise in personal, estate and gift taxes. Comm & Fin Chr 158:1712 O 28 '43

How the new taxes affect banks. C. H. Mylander. Banking 35:41-5 D '42

Inflation can still be checked. Il Fortune 27:78-81+ Mr '43

Internal revenue bureau issues regulations relating to transportation tax. Steel 112:65+ F 15 '43

Keep America American; urges revamping of country's tax system. L. Saltonstall. Comm & Fin Chr 158:1795 N 4 '43

Major changes in federal taxation effected by the Revenue act of 1942. J. A. Phillips. J Account 74:490-9 D '42

More about taxes; investment company literature. Comm & Fin Chr 156:1879 N 26 '42

New administration tax program will seek out extra income in low brackets. E. Blair. Barron's 23:4 Je 14 '43

1942 Revenue act. F. L. Pearce. N A C A Bul 24:761-75 Mr 1 '43

Plan to end tax conflicts; program presented by intergovernmental fiscal relations committee. East Underw 44:11 My 7 '43

TAXATION—United States—Continued

- Post-war tax program advanced. R. Magill. Comm & Fin Chr 158:1293, 1310-11 S 30 '43
- Problem of new taxes. Nat City Bank p124-7 N '43
- Proposal for commission on tax integration in U.S. approved by N.Y. building congress. Comm & Fin Chr 157:502 F 4 '43
- Raising the money. Nat City Bank p17-18 F '43
- Reorganization of tax system outlined; recommendations of Committee on inter-governmental fiscal relations. Trusts & Estates 76:335 Ap '43
- Revenue act of 1942. Fed Res Bul 28:1068-70 N '42
- Revenue act of 1942. Survey of Cur Business 22:4-6 N '42
- Revenue act of 1942; changes affecting estates and trusts outlined. H. N. Andrews. Trusts & Estates 75:515-18+ N '42
- Revenue act of 1942; text. Comm & Fin Chr 157:81-119 sec 3 Ja 7 '43
- Tax bill accomplishments and omissions. Trusts & Estates 75:442 N '42
- Tax bill snagged. Business Week p18-19 S 11 '43
- Tax correlation to the fore. Trusts & Estates 77:319-20 O '43
- Tax legislation should promote, not repress initiative. W. W. Aldrich. Comm & Fin Chr 157:186-7 Ja 14 '43
- Tax policy and the inflation problem; the Treasury view. R. Blough. Trusts & Estates 75:545-6 D '42
- Taxation and consumer spending. R. E. Paul. Trusts & Estates 76:319-20 Ap '43
- Taxation and war; non-partisan commission to determine a permanent tax policy proposed. J. Account 75:510-20 Je '43
- Taxation of municipals. T. Graham. Comm & Fin Chr 156:1799 N 19 '42
- Taxes against inflation. Banking 35:13-14 D '42
- Taxes as they affect our customers; points credit men should consider. J. J. Lang. Credit & Fin Management 45:15-17+ J1 '43
- Taxes, 1943 style. Business Week p20 N 14 '42
- Treasury asks \$10.5 billion in new taxes. Comm & Fin Chr 158:1415 O 7 '43
- Treasury seeks to simplify tax laws, also studying revision of estate and gift taxes. Comm & Fin Chr 158:609 Ag 12 '43
- Treasury's views on taxes. R. E. Paul. Trusts & Estates 77:118-19 Ag '43
- Trends of taxation during and after the war. R. R. Neuhoof. Credit & Fin Management 45:11-14+ J1 '43; Excerpts. Trusts & Estates 77:197-8 S '43
- Urges support for proposed bill to set up National tax integration commission. Comm & Fin Chr 156:2072 D 10 '42
- Washington: both sides of the curtain; Administration's new tax bill. E. Blair. Barron's 23:1 O 4 '43
- Your new taxes. L. J. Freeman. Barron's 22:3+ N 2; 3-4 N 9; 7 N 16; 7+ N 23; 7+ D 7; 8 D 14; 13 D 21 '42; 23:19 Ja 4; 8-10 Ja 11; 7 Ja 25; 5 F 1; 3 F 15; 7 Mr 1 '43

See also

- | | |
|--------------------------|----------------------|
| Corporations— | Inheritance tax |
| Taxation | Mine taxation |
| Excess profits tax | Sales tax |
| Gift tax | Spending tax |
| Income tax—United States | Tariff—United States |

Bibliography

- Taxation, 1943. Cleveland Pub Lib Business Information Bur v 14, no 1:1-4 Ja '43

Wisconsin

- Pattern of successful property tax administration: the Wisconsin experience; state supervision. H. M. Groves and A. B. Goodman. J Land & Pub Util Econ 19:141-52 My '43

TAXATION, Exemption from

- Bond exemption, an unjustified subsidy to state and local borrowing. P. Studenski. Trusts & Estates 76:460 My '43
- Denies Treasury efforts to abrogate tax-free status. Comm & Fin Chr 157:1877 My 20 '43
- FFHA discovers Columbus; Ohio Supreme court denies tax-exemption to Columbus housing authority. Arch Forum 77:34 D '42

- Government handouts to publicly owned utility plants. T. N. Sandifer. Pub Util 31:135-42 F 4 '43
- Municipal news; tax-exempt status of the instruments of the Port of New York authority. Comm & Fin Chr 157:1494 Ap 22 '43
- Tax exemption seems safe for 1943. J. D. Kelly. Barron's 23:28 Ja 11 '43
- Taxation of municipals. T. Graham. Comm & Fin Chr 156:1799 N 19 '42

TAXATION, Municipal. See Municipal taxation**TAXATION, State**

- State taxes rise. Business Week p90+ J1 24 '43

See also

- Sales tax
- also state subdivisions under Taxation, e.g. Taxation—Connecticut

TAXATION of securities

- Federal reserve bank stock tax on dividends. Fed Res Bul 28:1085-6 N '42

See also

- Stock transfer tax
- Taxation, Exemption from

TAXICABS

- Taxi dilemma; profits soaring; problem of manpower. Business Week p24+ F 27 '43

TAYLOR, Amos E.

- Portrait. Banking 36:16 S '43

TAYLOR, Archibald Wellington, 1877-

- Urges creation of board of economic strategy. A. W. Taylor. por Comm & Fin Chr 158:1091 S 16 '43

TAYLOR, Nelson Woodsworth, 1899-

- Sketch and bibliography. por bibliog(46 titles) Am Cer Soc Bul 22:50-1 F 15 '43

TAYLOR, Robert L.

- Robert L. Taylor made editor of Chemical industries. por Chem & Eng N 21:158 F 10 '43

TAYLOR, Stevenson, 1843-1926

- Liberty ships named after American bureau of shipping officials. Marine Eng 48:220 Je '43

TAYLOR system. See Industrial management**TAYLOR-WHARTON iron and steel company**

- Steel company 200 years old. il Comp Air M 47:6895-6 N '42

- Two-hundredth anniversary. Mach 49:162 D '42

TEA

- Coffee and tea production; abstract. G. Son-nedecker. Science 96:sup10 N 13 '42

See also

- Maté

TEA industry and trade

- How U.S. tea supply is distributed in war-time; chart. Business Week p65 Je 19 '43

- New tea agreement. Economist 144:472 Ap 10 '43

- OPA watches tea. il Business Week p72 Mr 27 '43

- Tea supplies. Economist 145:249 Ag 21 '43

Statistics

- Tea, 1938-1941. Survey of Cur Business 1942 Sup p126

Peru

- Tea plantations taking new hold in South America. For Comm W 13:16 O 9 '43

TEACHERS

- Subrogation ruled on by N.Y. court in interesting teacher's liability case. Nat Underw 47:32 Ag 12 '43

- Wartime maintenance of scientific production. J. S. Nicholas. Science 96:393-5 O 30 '42; Same abr. Mech Eng 64:907-8 D '42

See also

- College professors and instructors
- Science teachers

Salaries

- Salaries of school employees, 1942-43. Monthly Labor R 56:1198-200 Je '43

- State minimum salaries for teachers. Monthly Labor R 56:793-4 Ap '43

TEACHING

Scientific method as applied to different fields of education. Sister M. Consilia Hannan. J Chem Educ 20:308-10 Je '43

See also
Engineering colleges Industrial education
Engineering educa- Lecture method
tion

also subdivision Study and teaching
under special subjects, e.g. Chemistry—
Study and teaching; Science—Study and
teaching

TECHNICAL association of the pulp and paper industry

Abridgement of papers at annual meeting. New York, Feb. 16-19. Paper Ind 23:1260+; 24:74+, 180+, 306-17, 430, 432+, 534-41, 636-8+, 762-4+, 974-9, 1068-76, 1162-6+ Mr-O, D '42-F '43

Abridgement of papers at annual meeting. New York, Feb. 15-18, 1943. Paper Ind 24: 1282-6+; 25:64+, 180+, 300+, 430+, 536+, 638+, 800+ Mr-O '43

Abridgement of papers at fall meeting, Boston, Sept. 29-Oct. 1. Paper Ind 24:742+, 870-80, 968+, 1060-6, 1156-61 O '42-F '43

Annual meeting, New York, Feb. 15-18; with briefs of technical papers. Paper Ind 24: 1242+ Mr '43; Pulp & Pa of Can 44:310-19 Mr '43

Annual meeting, 28th, New York, Feb. 15-18. Paper Tr J 116:115-19 F 18 '43; Oil Paint & Drug Rep 143:7+ F 22 '43

Army and navy requirements conference, Chicago, Sept. 21-24. Paper Ind 25:726+ O '43; Chem & Eng N 21:1745-6 O 25 '43

Army and navy requirements conference, Chicago, Sept. 21-24; with attendance list. Paper Tr J 117:47-50+ S 30 '43

Graphic arts committee report, 1942. M. S. Kantrowitz. Paper Tr J 116:25-7 Ja 21 '43
Standards committee report, 1942. Paper Tr J 116:23-4 Ap 22 '43

Ten years of fundamental research in the pulp, paper, and paperboard industry. H. F. Lewis. Paper Tr J 115:32-6 D 31 '42

Chemical methods committee

Report of the Chemical methods committee 1942. B. L. Browning. Paper Tr J 116:35 Mr 18 '43

TECHNICAL books. See Technical literature; Technology—Bibliography**TECHNICAL chemistry.** See Chemistry, Technical**TECHNICAL education**

Army, navy outline plan for technical training program. Eng N 129:877-8 D 24 '42

Development of engineering education and technical training. T. R. Cave-Browne-Cave. Inst Mech Eng J & Proc 148:101-3 D '42; Same. Engineering 154:516 D 25 '42

Education and training of engineers; summaries of four papers. Engineer 175:190-1 Mr 5 '43; Discussion. 175:191, 206-8 Mr 5-12 '43

Educational institutions also convert to war production; change expected to have profound effect on postwar methods. Steel 111: 44+ D 21 '42

New method of teaching; synchrophone as mechanical aid to technical instruction. Il Electrician 131:19-20 Jl 2 '43

Training speeded; G.M. output over 2,000 trainees a month. Business Week p74+ Ja 16 '43

Training women operators for chemical industry; University of Pittsburgh trains women for butadiene-styrene plant of Koppers united co. J. P. Coull. Il diags Chem & Met Eng 50:116-18 Je '43

War-training center of New York university. Science 97:111 Ja 29 '43

See also

Aeronautic schools
Agricultural educa-
tion
Apprentices
Chemical education
Chemistry—Study
and teaching
Employees, Training
of

Engineering colleges
Engineering educa-
tion
Illinois institute of
technology
Industrial education
Massachusetts in-
stitute of tech-
nology

Mining schools and
education
Northwestern uni-
versity—Institute
of technology

Radio schools and
training
Trade schools
Vocational education

Engineering, science and management war training

Activities in the current ESMWT program.

G. W. Case. J Eng Educ 33:580-7 Ap '43

Effect of the ESMWT program upon estab-
lished evening engineering curricula. H. P.

Dutton. J Eng Educ 33:422-5 Ja '43

Engineering colleges' contribution to ESMWT.

G. W. Case. J Eng Educ 33:479-81 Mr '43

Engineering schools in the war. J. K. Finch.

Eng N 130:133-4 Ja 28 '43

ESMWT, an experiment in engineering educa-
tion. F. W. Oevirk. J Eng Educ 33:465-9

Ja '43

Inspectors in ten weeks; Johns Hopkins
course in precision inspection in aircraft
work. D. H. Fax. Il Factory Management

101:118-19+ Ja '43

Results of training under the engineering,
science, and management defense training
program. G. W. Case. J Eng Educ 33:318-51

D '42

Training of water works personnel under
the E.S.M.W.T. program. N. C. Ebaugh.

Am Water Works Assn J 35:199-200 F '43

Training of workers for the war industries.

Science 96:464 N 20 '42

Training technical personnel for war indus-
try. W. C. White. Elec Eng 62:247-50 Je '43

U.S. Civil service commission accepts ESMWT.

G. W. Case. J Eng Educ 33:210-11 N '42

What more can engineering colleges do
through ESMWT? G. W. Case. Science 97:

79-82 Ja 22 '43

Brazil

United States lecturers in Brazil; to give
lectures on fundamental metallurgy. Sci-
ence 98:127 Ag 6 '43

China

Chinese National central institute of tech-
nology. Engineer 175:431 My 28 '43

Great Britain

Educational reforms; proposed facilities for
technical training. Elec R (Lond) 133:146
Jl 30 '43

Engineering cadetship training in Great
Britain. Monthly Labor R 56:722-3 Ap '43

Skilled men for the services. Economist 145:

502 O 9 '43

Technical education plans; Oil and colour
chemists' discussion. Chem Age (Lond) 49:

35-6 Jl 10 '43

Technical training of engineering apprentices.

Engineer 176:232 S 17 '43

Training of engineers; abstract. J. C. Haze-
lip. Electrician 130:621 Je 18 '43

Russia

Education in Russia. G. Mather. Elec R
(Lond) 131:759-60 D 11 '42

TECHNICAL libraries

Information service; the creation and de-
velopment of an industrial library or in-
formation bureau. B. J. Ledoux. Automobile

Eng 33:29-30 Ja '43

Special library for telecommunications; Post-
master-General's department, Melbourne,
Australia. B. Robertson. Special Lib 34:89-
93 Mr '43

Symposium on technical library techniques.
J Chem Educ 20:531-53 N '43

Technical books war issue. Library Journal
[R. R. Bowker co, New York] 68:377-440 My
15 '43

See also

Engineering societies
Library, New York

TECHNICAL literature

Keeping up with technical books. E. Port-
man. J Chem Educ 20:542-4 N '43

Republication of technical books of Axis ori-
gin. Science 97:303-4 Ap 2 '43

See also

Scientific literature
Technology—Bib-
liography

TECHNICAL manuals. See Instruction in use of product

TECHNICAL observers. See Munitions industry—Service

TECHNICAL periodicals
Business press in wartime Britain. R. Woolley. Adv & Sell 36:42+ N '43

TECHNICAL products

See also

Equipment industries

Industrial market

Machinery industry

also names of technical products, e.g. Bearings; Belting; Gearing

Advertising

Can animation illustrate your hidden product? Artzybasheff's drawings for Wickwire Spencer steel co. R. H. Ganly. Ptr Ink 204:24-6 Ag 27 '43

How Micro Switch attains its objective; sales grew in relation to amount of product information given in advertising copy. J. J. Lawler. Il Ind Marketing 28:22-5+ My '43

See also

Advertising, Industrial

Bearings, Anti-friction—Advertising

TECHNICAL schools. See Technical education

TECHNICAL societies

See also

Engineering societies

Trade associations

Directories

Directory of professional, scientific, technical and trade associations and societies. Chem & Met Eng 50:142+ O '43

TECHNICAL workers

Committee on military affairs gets bill for Office of technological mobilization. Chem Ind 51:851-2+ D '42

Consolidated manpower regulations in Canada. Can Chem & Process Ind 27:77+ F '43

Employment of professional and technical personnel in contract construction. Monthly Labor R 55:932-5 N '42

Remarkable resourcefulness paves the way for industrial progress in Middle West. map Chem & Met Eng 49:80-1 N '42

Technical manpower and selective service. A. B. Newman. Il Chem Ind 52:591-3 My '43; Discussion. R. B. Semple. 52:725 Je '43

Technical personnel; annual report of War-time bureau of technical personnel. Can Chem & Process Ind 27:475-3 Ag '43

Technical personnel; their training and allocation in total warfare; a realistic British point of view. H. Hetherington. Can Chem & Process Ind 26:703-4+ D '42

See also

Aeronautic workers

Engineers

Chemists

Radio workers

Electric workers

TECHNICAL writing

Expression as an engineering technique. J. J. O'Neill. J Eng Educ 33:407-9 Ja '43

How can we improve engineering books? J. S. Thompson. J Eng Educ 34:193-203 O '43

Preparation of technical articles. B. Dudley. Inst Radio Eng Proc 30:523-34 D '42

Relating writing to the engineering curriculum. C. A. Brown and J. P. Riebel. J Eng Educ 33:687-90 My '43

Short words carry a punch; secret of good writing for every engineer. C. M. Ripley. Il Power 87:160-1 Mr '43

Technically trained man and his writing. C. E. Rogers. Paper Ind 25:152-4 My '43

Written word; fundamental considerations in conveying technical intelligence in writing. J. D. Goodell. Radio N 30:120+ N '43

See also

Abstracts

Chemical writing

Engineering reports

TECHNOLOGY

Bottleneck in ideas; still missing: a technical agency for lost ideas and full technical mobilization. Fortune 27:82-5+ My '43

Design futures; revolution foreseen with return of peace. C. P. Hornung. Il Tech R 45:176-8, 201-2+ F '43

Future as seen by an engineer looking ahead. P. Thomson. Chem & Met Eng 49:96-7 N '42; Same abr. Sci Am 168:175-7 Ap '43

Mobilization of science; text of Kilgore bill (S. 702). Science 97:407-12 My 7 '43; Discussion. 97:508-11, 552-4, 577-8 Je 4, 18-25 '43

Peacetime values from a war technology. G. Egloff. Science 97:101-8 Ja 29 '43; Same. Chem & Eng N 21:141-9 F 10 '43; Same. Inst Pet J 29:135-45 My '43

Prefabrication; technical advances; present and postwar. H. P. Vermilya. Il diags Arch Rec 93:70-4 Je '43

Science in 1942. Science 97:sup8+ Ja 8 '43

Technical force; economic stress; basic influences of technological innovation on economy emphasize need for freedom of trade. R. E. Freeman. Tech R 45:423-4, 452+ Je '43

Technology and political organization. H. C. Havighurst. Advanced Management 8:49-55 Ap '43

Technology and postwar life. Fortune 26:sup18-20 D '42

War accelerates technical progress. A. C. Denison and others. Steel 112:80, 83 Ja 25 '43

See also

Brickmaking

Building

Ceramics

Chemistry, Technical

Clay industries

Concrete

Dyes and dyeing

Electric engineering

Engineering

Glass manufacture

Industrial education

Inventions

Machinery

Manufactures

Metallurgy

Mineral industries

Oil industries

Paper making

Pottery

Printing

Railroad engineering

Rubber

Rubber technology

Sosp

Steel

Technical education

Testing

Textile industry

Bibliography

ASLIB book-list; quarterly recommendations of recently published scientific and technical books. Published by Association of special libraries and information bureaux, 81 Museum st, London, W.C. 1

Current exhibitions of recent technical books. New York public library; most important technical books of the month by American publishers. R. R. Hawkins. N Y Pub Lib Bul 47:71-3 F '43 [cont monthly]

Technical books and the war; an exhibition. R. R. Hawkins. N Y Pub Lib Bul 47:310-22 My '43

Dictionaries

Dictionary of science and technology in English-French-German-Spanish. M. Newmark. 386p bibliog (pv-vi) \$5 Philosophical library, 15 E. 40th st, New York '43

Study and teaching

See also

Technical education

TECTITES. See Tektites

TECTORIGENIN

Synthesis of tectorigenin dimethyl ether. R. L. Shriner and R. W. Stephenson. bibliog Am Chem Soc J 64:2737-8 D '42

TEEPOL. See Cleaning compositions

TEETH

See also

Dental instruments

and apparatus

Dentifrices

Diseases and defects

AWWA's wartime conference; symposium on fluorides and dental health. Water Works & Sewerage 90:302-3 Ag '43

Caries-fluorine hypothesis and a suggested study to test its application. D. B. Ast. Pub Health Rep 58:857-79 bibliog (91 titles, p877-9) Je 4 '43

Domestic water and dental caries. H. T. Dean. Am Water Works Assn J 35:1161-83 bibliog (86 titles, p1180-3); Discussion. 1184-6 S '43

TEETH—Diseases and defects—Continued

Influence of acid fumes upon the teeth of workers in pickle, accumulator and acid works in Westphalia; abstract. W. Ludewig. *J Ind Hygiene* 25:sup35-6 F '43
 Program of treatment of public water supply to correct fluoride deficiency. D. B. Ast. *bibliog Am Water Works Assn J* 35:1191-7 S '43

Public health significance of dental deficiencies. H. J. Knapp. *Am Water Works Assn J* 35:1187-90 S '43

Survey of the relationship of fluorine in drinking water to dental health. R. E. Thompson. *Water & Sewage* 81:23-4+ O '43

Tooth decay; abstract. J. D. Boyd. *Science* 97:sup10+ My 28 '43

What are the responsibilities of public water supply officials in the correction of dental deficiencies. A. Wolman. *Am Water Works Assn J* 35:1198-1200 S '43

TEETH, Artificial

Teeth for the army. *Il Business Week* p44 S 25 '43

See also

Dental plates

TEKTITES

Specific gravity relationships of australites. G. Baker and H. C. Forster. *bibliog Am J Sci* 241:377-406 Je '43

TELECOMMUNICATION. *See* Electric communication**TELEGRAPH**

Electronic tubes in wire telegraphy; Postal telegraph-cable company. A. F. Connery. *Il Electronics* 16:166+ Mr '43

Telegraph and cable carriers, 1938-1941. Survey of Cur Business 1942 Sup p101 [supplemented in monthly numbers]

Tubes drive relay in telegraph repeater circuit. A. F. Connery. *diag Electronics* 16:226+ Je '43

See also

Electric communication Radio telegraph
 Military telegraph Railroads—Telegraph

TELEGRAPH, Carrier current

International telecommunications. A. S. Angwin. *Engineering* 156:357 O 29 '43

Sending train orders by facsimile telegraphy. *Il diag Electronics* 16:148+ S '43

Varioplex telegraph patent is granted with 107 claims. *Electronics* 16:190+ My '43

TELEGRAPH, Military. *See* Military telegraph**TELEGRAPH, Submarine**

Postwar merger? consolidation of cable and radio facilities discussed. *Business Week* p34+ My 29 '43

TELEGRAPH codes

Use of the A.B.A. code in wartime. M. C. Miller. *Banking* 35:49 Je '43

TELEGRAPH companies

Federal and state powers in relation to merger of telegraph companies. *Pub Util* 32:653-4 N 11 '43

Giant communications triumvirate planned; Postal-Western merger foreshadows reshuffling of 'phone, telegraph and world services. O. J. Gingold. *Barron's* 23:3 Je 7 '43

Telegraph merger bill signed by President. *Comm & Fin Chr* 157:916 Mr 11 '43

Telegraph merger plan. O. J. Gingold. *Barron's* 23:1 My 17 '43

Wanted: a bright young octopus; need and suggested plans for consolidation of American international communication companies. H. Corey. *Pub Util* 31:143-51 F 4 '43

Western Union faces new era. O. J. Gingold. *Barron's* 23:3 JI 26 '43

See also

American telephone Western union tele-
 and telegraph com- graph company
 pany

International tele-
 phone and tele-
 graph corporation

TELEGRAPH in business

Wires on returned items often unnecessary. *Bankers Mo* 60:8-9+ Ja '43

TELEGRAPH lines

Review of the operation and inductive coordination of telegraph systems. A. L. St Cyr and J. R. North. *Edison Elec Inst Bul* 11:107-12 Ap '43

Subcenter switching systems for teleprinter tie lines. F. L. Currie. *Il diag Elec Eng* 62:Trans 635-41 O '43

TELEMETERING

New resonant-circuit method of remote positioning or remote operation. D. W. Moore, jr. *diags Instruments* 16:250-2+ My '43

To show that pumps are pumping. E. R. Bonds. *diag Elec W* 120:838+ S 4 '43

Using phone line for remote indication of overmodulation. A. Leeman. *diags Electronics* 16:144+ JI '43

TELEPATHY

Has telepathy ever occurred? A. G. Ingalls. *Sci Am* 168:206 My '43

TELEPHONE

How to measure the potential value of your radio advertising; telephone one of standard tools of radio research. R. Manville. *Sales Management* 52:50+ Je 1 '43

Large-scale program of postwar construction and new capital financing forecast. C. P. Cooper and M. R. Sullivan. *Pub Util* 31:494-5 Ap 15 '43

See also

Electric communication	Railroads—Telephone
Electric utilities—	Telephone, Carrier
Telephone	current
Gas companies—	Telephone cables
Telephone	Telephone companies
Microphones	Telephone in busi-
Military telephone	ness
Radio telephone	Telephone lines

also American telephone and telegraph company; International telephone and telegraph corporation

Apparatus and supplies

Doing a bigger job, with less; Western electric co. A. von Auw. *Il Steel* 112:66-7+ Mr 22 '43

War communication systems in boxes; Western electric co. expert packers. *Il Mod Packaging* 17:76-80 O '43

International aspects

International telecommunications. A. S. Angwin. *Engineering* 156:316-17, 357 O 15, 29 '43; Excerpts. *Engineer* 176:310-11 O 15 '43; Same cond. *Electrician* 131:373-5 O 15 '43

Long distance

Independent telephone companies espouse station-to-station theory; distribution of revenues from telephone toll service. F. X. Welch. *Pub Util* 31:41-2 Ja 7 '43

Municipal ownership

Public ownership of telephones in U.S.; a survey of the Brookings, S.D. telephone system. F. R. Simpson. *J Land & Pub Util Econ* 19:99-103 F '43

Noise

Less noise, less clanging on despatching phones. M. C. Westrate. *Il diag Elec W* 118:1934-5 D 12 '42

Rectifier circuit power factors, harmonics and wave shapes. R. D. Evans. *diag Elec W* 120:1345-8 O 16 '43

Radio telephone connection

Telephone and telegraph vast users of electronics. F. A. Cowan. *Il map Electronics* 16:88-91, 162, 165 Mr '43

Rates

American telephone and telegraph company to show cause why its long-distance telephone rates and other charges should not be substantially reduced. *Pub Util* 30:851-2 D 17 '42

Federal communications commission and telephone toll reductions. *J Land & Pub Util Econ* 19:104-5 F '43

Independent telephone companies espouse station-to-station theory; distribution of revenues from telephone toll service. F. X. Welch. *Pub Util* 31:41-2 Ja 7 '43

TELEPHONE—Rates—Continued

Rates under fire. *Business Week* p106 S 4 '43

Repeaters

International telecommunications. A. S. Angwin. *Engineering* 156:357 O 29 '43
Telephone and telegraph vast users of electronics. F. A. Cowan. *il map Electronics* 16:88-91, 162, 165 Mr '43

Statistics

Telephone carriers, 1938-1941. Survey of Cur *Business* 1942 Sup p101 [supplemented in monthly numbers]

Tables, calculations, etc.

Attenuation and phase-shift equalisers; semi-graphical method of designing equalising networks. W. Saraga. *diags Wireless Eng* 20:163-81 Ap '43
Design for dissymmetrical T pads. E. Y. Webb, Jr. *charts Electronics* 16:123-4 JI '43

Testing

Comprehensive assessment of telephone communication efficiency. J. R. Hughes. *bibliog il Inst E E J* 89 pt 3:195-206 D '42

Great Britain

Development of the trunk telephone service. *Engineer* 176:174 Ag 27 '43
Telephones in war-time. *il Electrician* 130: 591-3 Je 11 '43

Sweden

Sweden's telephone service conveys air-raid warnings. *il For Comm W* 9:6+ N 14 '42

TELEPHONE, Carrier current

Carrier current can provide more kwh; various applications to transmission line operation. G. S. Lunge. *il Elec West* 90:52-4 My '43

Carrier current coupling circuits for civilian defense networks. *diags Electronics* 16:144+ Ag '43

Carrier telephone saves distribution labor and travel; communicating with company's trucks serving rural area; Potomac Edison company, Hagerstown, Md. W. C. Feaster. *il diags map Elec W* 118:1602-5 N 14 '42

Frequency modulation for power-line carrier current. E. W. Kenefake. *bibliog diags Elec Eng* 62:Trans 616-20 O '43

Less noise, less clanging on despatching phones. M. C. Westrate. *il diags Elec W* 118:1934-5 D 12 '42

Measurement of the characteristics of concentric cables at frequencies between 1 and 100 megacycles per second. T. I. Jones. *Inst E E J* 89 pt 3:213-20 D '42

Power company uses of electronic equipment. W. H. Blankmeyer. *il Electronics* 16:134-5, 169-70+ Mr '43

Railroad telegraph and telephone construction in 1942. J. H. Dunn. *il Ry Age* 114:138-40 Ja 2 '43

Telephone and telegraph vast users of electronics. F. A. Cowan. *il map Electronics* 16:88-91, 162, 165 Mr '43

Telephone service over rural power lines studied. M. M. Samuels and R. G. McCurdy. *Elec W* 119:444 F 6 '43

Train communication. L. O. Grondahl and P. N. Bossart. *il diags Elec Eng* 62:Trans 493-500 JI '43

Broadcasting

See Radio broadcasting—Wired radio

TELEPHONE, Military. See Military telephone

TELEPHONE, Portable

Portable telephone for surveyors. *il Eng N* 130:454 Ap 1 '43

TELEPHONE, Radio. See Radio broadcasting; Radio telephone

TELEPHONE cables

Buried telephone talk; plowing the new transcontinental telephone cable into the ground. T. C. Smith. *il Sci Am* 168:161-3 Ap '43

Measurement of the characteristics of concentric cables at frequencies between 1 and 100 megacycles per second. T. I. Jones. *Inst E E J* 89 pt 3:213-20 D '42

Voice communication by underground transcontinental cable. *Pub Util* 31:97 Ja 21 '43

Testing

Telephone cables tested with compressed air. *Comp Air M* 48:7175 O '43

TELEPHONE companies

Bell takes over; Keystone Telephone. *Business Week* p24 Mr 6 '43

See also

American telephone and telegraph company Bell telephone system
Bell telephone laboratories International telephone and telegraph corporation

Advertising

Humor drives home the point; etiquette for wartime telephone usage. *il Ptr Ink* 204: 23 JI 2 '43

No information please; New York telephone company's campaign. *il Ptr Ink* 204:84 JI 8 '43

Employees

Army of first aiders; Bell system. E. S. Miner. *il Nat Safety N* 47:14-16+ Ap '43

Finance**See also**

New York telephone company

Regulation

Communications chief reviews effect of telephone limitation orders. L. H. Peebles. *Pub Util* 31:508-10 Ap 15 '43

Critical telephone materials and equipment; limitation order U-2. *Pub Util* 31:493-4 Ap 15 '43

Federal vs. state regulation of telephone service. F. R. Simpson. *J Land & Pub Util Econ* 18:500-1 N '42

How cooperation works in communications regulation; cooperation between regulatory authorities has grown. P. A. Walker. *Pub Util* 32:267-74 S 2 '43

WPB council of communications; abstract. L. H. Peebles. *Pub Util* 31:240-2 F 18 '43

TELEPHONE company buildings

Wartime face-lifting shows how for later; control office of Southern California telephone co. *il diags Am Bld* 65:41 Ag '43

TELEPHONE exchanges

Telephones in war-time. *il Electrician* 130: 591-3 Je 11 '43

Power

Diesel stand-by plants in the telephone industry. T. H. Batt. *il Diesel Power* 21:605-6 JI '43

TELEPHONE in business

Handling 10,000 phone calls daily; Aetna Life affiliated companies. J. S. Daniel. *East Underw* 43:28 D 11 '42

Sears tries tab; has offered charge accounts to customers who use its telephone order service. *Business Week* p77-8 N 14 '42

Telephone plan successful. R. E. Richman. *Nat Underw (Life ed)* 47:9-10 S 3 '43

When the busy signal holds up business; Standard register company reduces number of personal calls. *Am Business* 13:13+ JI '43

Why not let the telephone deliver added premium volume for you? M. L. Lane. *East Underw* 44:38 pt 2 My 21 '43

See also

Gas companies—Telephone

Telephone operators

TELEPHONE laboratories**See also**

Bell telephone laboratories

TELEPHONE lines

Buried telephone talk; plowing the new transcontinental telephone cable into the ground. T. C. Smith. *il Sci Am* 168:161-3 Ap '43

Graphical-vector solution and study of the coil-loaded line. A. K. Robinson. *Inst E E J* 90 pt 3:115-28 S '43

TELEPHONE lines—Continued

Through a frozen hell on time; construction of carrier line to Fairbanks, Alaska. H. Corey. Pub Util 32:399-405 S 30 '43

See also

Telephone, Carrier

current

Telephone cables

TELEPHONE operators

St Louis trains its voice; employees trained in telephone technique. *il* Mass Transportation 39:186-8 My '43

TELEPHONE rates. See Telephone—Rates**TELEPHONE receivers**

Improved telephone receiver analysis. R. D. Fay. *diag* Acoustical Soc Am J 15:32-40 J1 '43

TELEPHONE switchboards

Installing a giant switchboard; War department's Pentagon building, Arlington, Va. *il* Manuf Rec 111:32+ D '42

TELEPHONE wire

Cellulose acetate yarn replaces silk for wire insulation. D. R. Brobst. *il* Rayon 24:467-8 S '43

TELESCOPE

Cutting worm gear for telescope drive. R. Clark. *il* Sci Am 167:298-301 D '42

Cyril G. Wates's Newtonian reflector dedicated to University of Alberta. A. G. Ingalls. *il* Sci Am 169:140 S '43

Empirical approach to lens designs; the Huygens eyepiece. W. M. Stempel. *Opt Soc Am J* 33:278-92 My '43

Telescopes; for the amateur telescope maker. A. G. Ingalls. *il* Published in monthly numbers of Scientific American

Theory of the Schmidt telescope. J. L. Synge. *bibliog* *diags* *Opt Soc Am J* 33:129-36 Mr '43

See also

Collimation

Mirrors

Cassegrainian secondary. A. G. Ingalls. *Sci Am* 169:44-5 J1 '43

TELESCOPIC sights

Hobby goes to war; amateur telescope makers make roof prisms. A. G. Ingalls. *il* *Sci Am* 168:202-5 My '43

TELETYPE

International telecommunications. A. S. Angwin. *Engineering* 156:357 O 29 '43

Railroad telegraph and telephone construction in 1942. J. H. Dunn. *il* *Ky Age* 114:138-40 Ja 2 '43

Subcenter switching systems for teletypewriter lines. F. L. Currie. *il* *diags* *Elec Eng* 62:Trans 635-41 O '43

Teletype editor new short-cut in ATC work. *Civil Aero J* 4:113+ S 15 '43

Use of subcarrier frequency modulation in communication systems. W. H. Bliss. *il* *diags* *Inst Radio Eng Proc* 31:419-23 Ag '43

TELEVISION

Factors determining the choice of carrier frequency for an improved television system; discussion. *Inst E E J* 90 pt 3:147-8 S '43

Post-war FM and television. B. Dudley. *il* *Electronics* 16:94-7+ N '43

Postwar television. R. R. Beal. *Inst Radio Eng Proc* 31:521 S '43

Promise of television. *il* *Fortune* 28:140-4+ Ag '43

Television; far-seeing eye of the future. R. E. Shelby. *bibliog* *il* *diags* *Electronics* 16:96-9+ Mr '43

Television prospects; abstracts. W. R. G. Baker. *Inst Radio Eng Proc* 31:305 Je '43; *Comm & Fin Chr* 167:1474+ Ap 22 '43

Wartime progress in electronics. R. Eichberg. *il* *Radio N* 28:71-2 D '42

Wide-band oscilloscope for problems in television and other fields. E. D. Cook. *il* *diags* *Inst Radio Eng Proc* 31:410-19 Ag '43

See also

Photoelectric cells

Radio communication

Color

Color television. P. C. Goldmark and others. *bibliog* (23 patents, 49 titles) *il* *diags* *Inst Radio Eng Proc* 30:162-82; 31:465-78 Ap '42, S '43; Same (pt 1). *Soc Motion Picture Eng J* 38:311-52 *bibliog* (p348-52) Ap '42; Same abr. (pt 1). *J Ap Phys* 13:666-77 N '42

New step in television; colored stereoscopic pictures. *diag* *Electrician* 130:7 Ja 1 '43

Photographic aspects

See also

Television cameras

Stereoscopic reproduction

New step in television; colored stereoscopic pictures. *diag* *Electrician* 130:7 Ja 1 '43

TELEVISION advertising

Coming to life; television's future as an advertising medium. *il* *Business Week* p 104+ Ag 28 '43

Television invites advertisers to help formulate sponsorship idea. *Ptr Ink* 203:72 Ap 30 '43

To train models for television commercials. *Ptr Ink* 204:34 Ag 27 '43

TELEVISION antennas

FM circular antenna. M. W. Scheldorf. *il* *diags* *Gen Elec R* 46:163-70 Mr '43

TELEVISION apparatus

Color television. P. C. Goldmark and others. *bibliog* (23 patents, 49 titles) *il* *diags* *Inst Radio Eng Proc* 30:162-82; 31:465-78 Ap '42, S '43; Same (pt 1). *Soc Motion Picture Eng J* 38:311-52 *bibliog* (p348-52) Ap '42

Errors in the deflection of a cathode-ray beam by deflecting systems of single symmetry; abstract. G. Wendt. *Wireless Eng* 20:91 F '43

Experimental television system. R. Mautner and F. Somers. *bibliog* *il* *diags* *Electronics* 15:68-71+ D '42

Iron-core components in pulse amplifiers. R. Lee. *diags* *Electronics* 16:115-17+ Ag '43

Signal converter; thermionic discharge tube for production of time base deflection potentials of a cathode-ray tube. P. Nagy and M. J. Goddard. *bibliog* *il* *diags* *Wireless Eng* 20:273-99 Je '43; *Abstract. Electronics* 16:198-200+ O '43

Wide band amplifier design. E. J. Bukstein. *diags* *Radio N* 30:21-2+ Ag '43

See also

Electron multipliers

Television antennas

Television apparatus

Television cameras

Patents

Wartime progress in electronics. R. Eichberg. *il* *diags* *Radio N* 29:24-5, 62-5 F '43

Power supply

Radio-frequency-operated high-voltage supplies for cathode-ray tubes. O. H. Schade. *il* *diags* *Inst Radio Eng Proc* 31:158-63 Ap '43

TELEVISION apparatus, Portable

See also

Television stations,

Portable

TELEVISION broadcasting

Radio progress during 1942; television broadcasting. *bibliog* *Inst Radio Eng Proc* 31:130-1 Ap '43

Some engineering aspects of portable television pick-ups. H. R. Lubcke. *il* *Soc Motion Picture Eng J* 39:384-90 D '42

Television production at Du Mont television station W2XWV. A. C. Lescarbourea. *Radio N* 30:112+ N '43

Three years of television relaying. R. L. Smith. *il* *diags* *Electronics* 16:122-5+ S '43

Sound problems

Contemporary problems in television sound. C. L. Townsend. *il* *Inst Radio Eng Proc* 31:3-7 Ja '43

TELEVISION cameras

Focusing view-finder problem in television cameras. G. L. Beers. *diags* *Inst Radio Eng Proc* 31:100-6 Mr '43; Same. *Soc Motion Picture Eng J* 40:181-96 Mr '43

TELEVISION projection

General Electric television film projector. E. D. Cook. *Il diags Soc Motion Picture Eng J* 41:273-91 O '43

Methods of projecting television images; patent. *diag Electronics* 16:184+ S '43

TELEVISION receiving apparatus

Automatic frequency and phase control of synchronization in television receivers. K. R. Wendt and G. L. Fredendall. *Il diags Inst Radio Eng Proc* 31:7-15 Ja '43

Cathode-ray control of television light valves. J. S. Donal, Jr. *Il diags Inst Radio Eng Proc* 31:195-208 My '43

Type of light valve for television reproduction. J. S. Donal, Jr. and D. B. Langmuir. *diags Inst Radio Eng Proc* 31:208-14 My '43

TELEVISION stations

Three years of television relaying. R. L. Smith. *Il diags Electronics* 16:122-5+ S '43

TELEVISION stations, Portable

Some engineering aspects of portable television pick-ups. H. R. Lubcke. *Il Soc Motion Picture Eng J* 39:384-90 D '42

TELEVISION studios

Contemporary problems in television sound. C. L. Townsend. *Il Inst Radio Eng Proc* 31:3-7 Ja '43

Lighting

Mercury lighting for television studios. H. A. Breeding. *Il diags Inst Radio Eng Proc* 31:106-12 Mr '43

TELLERS. See Banks and banking—Tellers**TELLURIUM**

Coppers containing selenium, tellurium, and bismuth. G. L. Bailey and A. P. C. Hallows. *Engineering* 155:276 Ap 2 '43

Effect of selenium, tellurium, and bismuth on copper. M. Cook and G. Parker. *Engineering* 155:338, 345 Ap 23-30 '43

Analysis

Determination of small amounts of tellurium in high-lead and tin-base alloys. R. A. Schaefer. *bibliog Ind & Eng Chem Anal ed* 15:379 Je 15 '43

Tellurium determination; abstract. B. S. Evans. *Chem Age (Lond)* 47:589 D 26 '42

TELPHERAGE. See Cableways; Monorail conveyors**TEMPERATURE**

Effect of temperature on liquid-liquid equilibrium; benzene-acetone-water system and dodecane-1,6-diphenylhexane-furfural system. S. W. Briggs and E. W. Comings. *Il diags Ind & Eng Chem* 35:411-17 Ap '43

Influence of nonuniform development of heat upon the temperature distribution in electrical coils and similar heat sources of simple form. M. Jakob. *bibliog A S M E Trans* 65:593-602; Discussion. 602-5 Ag '43

Reversible chromatic thermosensitivity. E. W. Blank. *bibliog J Chem Educ* 20:171-4 Ap '43

Sorption of carbon monoxide by metals; temperature variation experiments. C. W. Griffin. *bibliog Am Chem Soc J* 64:2610-13 N '42

Standard temperature for specific gravity determination and volume correction. *Inst Pet J* 29:190-1 Jl '43

Useful temperature data; charts. R. S. Burpo, Jr., comp. *Metals & Alloys* 17:781-2 Ap '43

See also

Air conditioning

Atmospheric temperature

Bearings—Temperature

Boiling points

Cooling

Electric cables—

Temperature

Electric machinery—

Temperature

Freezing

Freezing points

Melting points

Mine temperature

Paper, Effect of temperature on

Petroleum—Well

temperature

Plants, Effect of

temperature on

Rubber—Temperature

Softening points

Thermochemistry

Thermodynamics

Ventilation

Measurement

Accommodation coefficients of He, Ne, Ar, H₂, D₂, O₂, CO₂, and Hg on platinum as a function of temperature. L. B. Thomas and F. Olmer. *bibliog diags Am Chem Soc J* 65:1036-43 Je '43

Automatic temperatures of crystallization. G. L. Seavey. *diags Instruments* 16:2-3 Ja '43

Chimney loss measurements without CO₂ meters; nomogram for determining losses by temperature measurements. R. H. Parsons. *Engineer* 175:165-6 F 26 '43

Electronics applied to heat transfer tests; circuits employ Wheatstone bridge and photoelectric relay; units applicable to other measurement and control problems. R. V. Brown. *Il diags Electronics* 16:113-15 Jl '43

Instruments for measuring and controlling process variables. *diags Chem & Met Eng* 50:108-11 My '43

Measurement of cooling rates associated with arc welding and their application to the selection of optimum welding conditions. W. F. Hess and others. *Il diags tables Welding J* 22:supp377-422 S '43

Measurement of high temperatures in high-velocity gas streams. W. J. King. *bibliog diags A S M E Trans* 65:421-8; Discussion. 423-31 Jl '43

Measurement of wet-bulb temperatures below freezing. J. Neuhoff. *Il diag Chem & Met Eng* 50:135 Je '43

Opportunities for electronics in industrial temperature instrumentation. M. F. Béhar. *Electronics* 15:72-4+ D '42

Sunvic ambient temperature recorder. *Il diag Engineering* 155:206 Mr 12 '43

Temperature rise in boiler-feed pumps. I. Karassik and R. Carter. *chart Power* 87: 611, 635 S '43

Thermometric lag determination for cylindrical primary elements. M. J. Zucrow. *Instruments* 15:398-400, 402+ O '42

Use of inwall temperatures in determining improper gas flow. L. Tofft. *Blast F & Steel Pl* 31:759-66 Jl '43

See also

Boiling points

Calorimeters and

calorimetry

Pyrometers and

pyrometry

Thermocouples

Thermometers and

thermometry

Physiological effect

Clothing, room temperature, and comfort. W. Schweisheimer. *Rayon* 24:408 Ag '43

How to save fuel and keep comfortable.

Heating-Piping 15:552-4 O '43

Limits of human heat regulation. L. H. Newburgh, L. P. Herrington and A. P. Gagge. *J Aeronautical Sci* 10:197-9 Je '43

Physiological reactions applicable to workers in hot industries. F. C. Houghten, C. Gutberlet and M. B. Ferderber. *bibliog Il Heating-Piping* 15:205-8 Ap '43

See also

Cold—Therapeutic

use

Regulation

Aluminum parts gaged at constant temperature. *diag Iron Age* 152:53 S 9 '43

Automatic temperature control for heat exchanger. *Il Blast F & Steel Pl* 31:437 Ap '43

Automatic temperature control of rotary kilns. A. A. Blackman. *Il diag Rock Prod* 46:72-3+ Ag '43

Avoiding heat losses in multiple-burner furnaces. *diag Steel* 111:76 D 28 '42

Effects of temperature on blooming mill production of hot-topped steel. H. J. Forsyth. *Blast F & Steel Pl* 31:638-40, 767-70 Je-Jl '43

Experimental details for a precision high temperature control utilizing the Hull circuit. C. E. Waring and G. Robison. *Il diags R Sci Instr* 14:143-6 My '43; Abstract. *Electronics* 16:202+ Jl '43

Forced-oscillation approach to the problem of the automatically-controlled continuous process. P. R. Ewald. *diags Instruments* 16: 474-6, 506 Ag '43

Fundamental principles of automatic control. J. C. Peters and T. R. Olive. *bibliog diags Chem & Met Eng* 50:98-101 My '43

TEMPERATURE—Regulation—Continued

Hydraulic control of aircraft engine temperature. W. A. Ray. *Il Automotive & Aviation Ind* 89:25+ N 1 '43

Nonferrous foundries need temperature control. D. F. O'Connor. *Foundry* 71:95+ Ag '43

Positive jacket-water temperature control by variable-pitch fans; road and dirt-moving machinery. K. W. Anderson. *Il Diesel Power* 21:944-6 O '43

Progressive develops Temp-A-Trol forge welder which combines spot welding and heat-treating. *Il Am Mach* 86:1320 N 12 '42

Solving control-valve pressure-drop problems. H. C. McRae. *diags Instruments* 16:399-400+ JI '43

Space-heating machines; controlling hot-water radiator type. R. Grierson. *Elec R (Lond)* 131:681-2 N 27 '42

Special surface plate reduces gaging rejects of aluminum parts caused by temperature changes. *diag Product Eng* 14:342 Je '43

Temperature control of galvanizing; abstract. H. Halstead. *Metals & Alloys* 17:420+ F '43

Wheelco temperature control used for furnace or salt bath. *diag Am Mach* 87:126 F 4 '43; *Steel* 111:60 D 28 '42; *Concrete (mill sec)* 51:115 Ja '43; *Metal Finishing* 41:154 Mr '43

See also

Temperature regulators
Thermostats

TEMPERATURE, Animal and human

Limits of human heat regulation. L. H. Newburgh, L. P. Herrington and A. P. Gage. *J Aeronautical Sci* 10:197-9 Je '43

TEMPERATURE, Low

Arctic armament; tests under conditions of extreme cold, shed light on fuels and lubricants. *Business Week* p78+ Ap 3 '43

Characteristics of greases at low temperatures. T. A. Maxwell. *Il diags Nat Pet* N 35 pt 2:R42-4 Ja 6 '43

Cold conquest; research keeps military motors running. *Sci Am* 168:198 My '43

Cranking power and torque requirements at subzero temperatures. H. L. Knudsen. *Il S A E J* 51:280-4 Ag '43

Evaluating low-temperature stiffness and brittle point in elastomers. F. L. Graves and A. R. Davis. *Il India Rubber W* 109: 41-4 O '43

Industrial sub-zero machine for testing aircraft instruments, batteries, wire, metals and various devices. *Il Electronics* 16:300-1 Mr '43

Insulation for low temperatures. J. F. Stone. *charts Refrig Eng* 46:31-7 bibliog(p36); *Discussion*. 37-8 JI '43

Low temperature test cabinet for industrial use. R. E. Borden. *Il Refrig Eng* 44:372 D '42

Low temperature impact resistant steel castings. N. A. Ziegler and H. W. Northrup. *bibliog Il Am Soc for Metals Trans* 30: 1087-1109 D '42; *Abstract. Oil & Gas J* 42:38 S 2 '43; *Discussion. Am Soc for Metals Trans* 30:1109-14 D '42

Low temperature refrigeration requirements in war production. C. L. Olin. *Il diags Refrig Eng* 45:83-7, 172-5 F-Mr '43

Low temperature synthetics. F. A. Anderson. *Il Aero Digest* 41:184+ D '42

Low temperatures by means of multi-stage and other compression systems. H. Sloan. *diags Refrig Eng* 45:419-25 Je '43

Measurement of wet-bulb temperatures below freezing. J. Neuhoof. *Il diag Chem & Met Eng* 50:135 Je '43

One hundred degrees below zero; Ferro-Therm steel insulation applied in altitude testing chambers. J. G. Macormack. *Il Refrig Eng* 45:239-42+ Ap '43

Physical properties of lubricating oils at low temperatures. A. Bondi. *bibliog Il diags Pet Refiner* 22:97-104 S '43

Storage battery performance at low temperatures. J. H. Little and R. A. Dally. *Il diags S A E J* 51:149-56+ My '43

Sub-zero hurricanes to test new U.S. strato planes; new tunnel to be built at Wright field; abstracts. J. G. Bergdoll, Jr. *Refriger Eng* 45:360 My '43; *Heat & Ven* 40:88 My '43

Sub-zero temperatures in industry. G. F. Forsthoefel. *flow chart Il Refrig Eng* 46: 164-7 S '43

Tensilemeter stiffness test for elastomers at low temperatures. B. K. Green, R. G. Chollar and G. J. Wilson. *Il diags Rubber Age* 53:319-27 JI '43

Testing ordnance at 40 below. A. F. Macconchie. *Il Steel* 113:94-5+ O 4 '43

Thermodynamic properties of air at low temperatures. V. C. Williams. *bibliog Am Inst Chem Eng Trans* 39:93-111 F '43

Utilizing subzero temperatures in design. J. W. Greve. *Il Machine Design* 15:94-8 O '43

See also

Cold—Therapeutic use
Freezing points
Refrigeration and re-
frigerating machinery

TEMPERATURE regulators

Constant heating rate control by the thermocouple-rectifier bias principle. R. J. Smith. *diags Metal Prog* 44:613-16 O '43

Electronics applied to heat transfer tests; circuits employ Wheatstone bridge and photoelectric relay; units applicable to other measurement and control problems. R. V. Brown. *Il diags Electronics* 16:113-15 JI '43

Green light for sale of controls. *Sheet Metal Worker* 34:21 O '43

Improved vapor thermoregulator. J. Y. Yee. *diag Ind & Eng Chem Anal* ed 15:462-3 JI 15 '43

Opportunities for electronics in industrial temperature instrumentation. M. F. Béhar. *Electronics* 15:72-4+ D '42

Polymerization control. *diag Chem Ind* 53:90 JI '43

Process lags in automatic-control circuits. J. G. Ziegler and N. B. Nichols. *bibliog diags A S M E Trans* 65:433-40; *Discussion*. 440-4 JI '43

Water thermoregulator. W. E. Boyd. *diag Ind & Eng Chem Anal* ed 15:523 Ag 15 '43

See also

Temperature—Regulation
Thermostats

TEMPERING

Principles of heat treating steel; tempering of quenched steels. H. L. Walker. *Cer Ind* 41:23-5 JI '43

Spot welding of S.A.E. 1020, 1035 and 1045 steels in the 0.040 in. thickness; automatic tempering in welding machine. W. F. Hess and D. C. Herrschaft. *Il Welding J* 22: sup451-61 O '43

Tempering of two high-carbon, high-chromium steels. O. Zmeskal and M. Cohen. *bibliog Il Am Soc for Metals Trans* 31:380-408; *Discussion*. 408-22 Je '43

Tempering of two high-carbon, high-vanadium high speed steels. B. S. Lement and M. Cohen. *bibliog Am Soc for Metals Trans* 30:1021-42; *Discussion*. 1042-8 D '42

Tempering reconditioned detachable bits. W. A. Vickers. *diags Eng & Min J* 144:85-6 Ap '43

See also

Steel, Hardening of
Steel, Heat treatment of

TEMPORARY bridges. *See* Bridges, Temporary

TEMPORARY buildings. *See* Buildings, Temporary

TEMPORARY national economic committee. Fact and fancy in the T.N.E.C. monographs. J. Scoville and N. Sargent, comps. 812p \$3 for sale by Wilson, H.W. '42; *Review. Nat Underw (Life ed)* 47:1+ Ja 1 '43; *Pub Util* 31:307-10 Mr 4 '43

TENDEROMETERS

Judging the maturity of raw lima beans. F. A. Lee. *Il Food Ind* 15:70-1+ S '43

TENITE II. *See* Cellulose acetate butyrate

TENNESSEE

See also

Finance—Tennessee
Geology—Tennessee
Mines and mineral resources—Tennessee

Phosphate rock—Tennessee

TENNESSEE academy of science

Meeting, 51st, Nashville, Nov. 27-28. Science
97:224 Mr 5 '43

TENNESSEE corporation

Another look. Mag of Wall St 71:197+ N 28
'42

TENNESSEE river

Design of recent TVA projects; Watts Bar
and Fort Loudoun. T. Mundal. il diags plan
Civil Eng 13:205-8 My '43

TENNESSEE valley**Antiquities**

Indian kitchen middens in Tennessee ex-
cavated, flooded. Sci Am 168:209 My '43

TENNESSEE Valley authority

Administration of federal power projects. C.
H. Pritchett. J Land & Pub Util Econ 18:
379-90 N '42

Broad appraisal of the TVA; review of Ten-
nessee Valley authority, by J. S. Rans-
meier. Pub Util 31:303-6 Mr 4 '43

Congress gets third TVA rate report. Ry Age
114:687+ Ap 3 '43

Democracy and the TVA. L. Olds. Pub Util
31:375-8 Mr 18 '43

Economic laws govern TVA as well as
others; trend of use of electricity by resi-
dential customers. Edison Elec Inst Bul 11:
132 My '43

Government handouts to publicly owned uti-
lity plants. T. N. Sandifer. Pub Util 31:135-
42 F 4 '43

Supreme court bars land award on profit
basis; rules in favor of TVA on land con-
demned for Hiwassee dam. Elec W News
ed 119:1711 My 22 '43

TVA apportions cash in lieu of tax on power
properties. Eng N 130:877 Je 17 '43

TVA capacity increased one-third during 1942.
Elec W 119:77 Ja 9 '43

TVA; its evolution and representations. J.
A. Whitlow. Pub Util 32:597-604, 677-85 N
11-25 '43; Reply. W. C. Fitts, jr. 32:795-805
D 23 '43

Trailer house; TVA's new approach to mo-
bile shelter. il plan Arch Rec 93:49-52 F '43

See also

Electric home and
farm authority

Bibliography

Indexed bibliography of the Tennessee Valley
authority; cumulative supplement, January
1941-December 1942. H. C. Bauer and B. L.
Foy, comps. 30p Technical lib, Tennessee
Valley authority, Knoxville, Tenn. '43

Employees

Union-management administration of em-
ploye training; the experience of TVA.
W. J. McGlothlin. Advanced Management 8:
38-44 Ap '43

Power contracts

Kentucky accepts T.V.A. power. A. T. Edel-
mann. J Land & Pub Util Econ 18:481-4 N
'42

TENNESSEE Valley project

Construction plant for Fontana project. R.
E. Martin. il diag Civil Eng 13:533-6 N
'43 (to be cont)

Design of recent TVA projects. G. R. Rich
and others. il diags plans Civil Eng 13:144-
7, 165-7, 205-8, 257-60, 305-8, 373-6, 413-16,
465-8 Mr-O '43

Hydraulic-turbine practice of the T.V.A. H.
J. Petersen and J. F. Roberts. il diags
Mech Eng 65:237-44 Ap '43

Ten years of TVA achievements. il map Eng
N 130:710-11 My 13 '43

TVA's safety measures on dam construction.
il Eng N 130:819-20 Je 3 '43

TVA's ten years. il map Business Week p19-
20+ My 8 '43

TENSILE METERS

Tensilemeter stiffness test for elastomers at
low temperatures. B. K. Green, R. G.
Chollar and G. J. Wilson. il diags Rubber
Age 53:319-27 Jl '43

TENSION control. See Winding machines—

Tension control

TENSORS

Equivalent circuits for oscillating systems and
the Riemann-Christoffel curvature tensor.
G. Kron. bibliog diags Elec Eng 62:Trans
25-32 Ja '43

TENTS

Factors producing carbon monoxide from
camp stoves. P. F. Scholander, L. Irving
and G. A. Edwards. bibliog J Ind Hygiene
25:132-6 Mr '43

Finish for army tent duck. Textile Col 65:189
My '43

TEPHROSIN

Occurrence of rotenone and related substances
in the seeds of the berbera tree; pro-
cedure for the separation of deguelin and
tephrosin. E. P. Clark. Am Chem Soc J
65:27-9 Ja '43

**TERMINAL bonds. See Railroads—Terminal
bonds**

TERMINALS

River terminal dedicated in Tennessee. il
map Manuf Rec 112:70 S '43

See also

Express service—	Petroleum pipe lines
Terminals	—Terminals
Freight handling	Ports
Locomotive terminals	Railroads—Terminals
Motor bus lines—	
Terminals	

TERMINOLOGY. See subdivision Terminology
under special subjects, e.g. Accounting;
Structural engineering; Textile fabrics;
Textile industry

TERMITES

Guarding cotton from mildew, dry rot, and
termites. il Business Week p48 My 8 '43
Suggested caste taxonomy for the common
termite. A. L. Pickens. Science 97:116-18
Ja 29 '43

TERPENES

Developments in terpene chemicals. R. C.
Palmer. bibliog il Ind & Eng Chem 34:
1028-34 S '42; Abstract. Chem Age (Lond)
47:397-9 N 7 '42

From the pine; naval stores production. il
Sci Am 169:202-4 N '43

Physical properties of terpenes; the system
 α - and β -pinene. R. E. Fugitt, W. D.
Stallcup and J. E. Hawkins. bibliog Am
Chem Soc J 64:2978-81 D '42

Solvents from pine. R. C. Palmer. il Ind &
Eng Chem 35:1023-5 O '43

TERPHENYL

Chemistry of *o*-terphenyl; derivatives pre-
pared from the hydrocarbon. C. F. H. Allen
and F. P. Pingert. bibliog Am Chem Soc J
64:2639-43 N '42

TERPYRIDYL

Colorimetric determination of cobalt with
terpyridyl. M. L. Moss and M. G. Mellon.
Ind & Eng Chem Anal ed 15:74-5 Ja 15
'43

Colorimetric determination of iron with
2,2'-bipyridyl and with 2,2',2"-terpyridyl.
M. L. Moss and M. G. Mellon. bibliog, Ind
& Eng Chem Anal ed 14:862-5 N 15 '42

TERRA cotta**Manufacture**

Simplified thermal-expansion rings for pro-
duction control in terra cotta manufacture.
T. E. Nicholson and F. L. Goin. bibliog il
diags Am Cer Soc J 26:163-7 My 1 '43

TERRAZZO

Physical properties of terrazzo aggregates.
Franklin Inst J 236:308-9 S '43

TERRE HAUTE**Industries**

Find status of safety in Terre Haute plants;
questionnaire. R. C. Tuttle. Nat Safety N
48:90+ O '43

**TERRESTRIAL magnetism. See Magnetism,
Terrestrial**

TERRY fabrics

Comparison of methods for the determination
of water absorbency by terry towels. V.
B. Holland. il Am Dyestuff Rep 32:167-70
Ap 12 '43

**TERTIARY period. See Geology, Stratigraphic
—Tertiary**

TERZAGHI, Karl, 1883-

Sketch. por(p46) Civil Eng 13:45 Ja '43

TESLA, Nikola, 1857-1943

Nikola Tesla's achievements in the electrical art. C. F. Scott; L. P. Wheeler. bibliog por Elec Eng 62:351-7 Ag '43

Sketch. Engineering 155:54-5 Ja 15 '43; Electronics 16:162 F '43; por Elec W News ed 119:143 Ja 16 '43; por Inst Radio Eng Proc 31:194 My '43

TESTIMONY. See Evidence (law)**TESTING**

Fluorescent method detects leaks in process vessels; Zyglo. F. Catlin. il Chem & Met Eng 50:116 Ag '43

Hydro crack-detection process. Engineering 155:357 Ap 30 '43

New pathways in engineering. A. V. de Forest. bibliog il diags Metal Prog 43:719-23+ My '43

Rapid non-destructive material testing with the cathode-ray oscilloscope. W. A. Knoop, Jr. diags Instruments 16:14-15 Ja '43

Statistical handling of laboratory data. E. U. Condon. bibliog Product Eng 14:615-17 O '43

See also

Electric testing	Strains and stresses
Engineering labora-	Strength of materials
tories	Testing laboratories
Laboratories	Testing machines
Magnetic testing	Textile testing

Ore testing
also subdivision Testing under various subjects, e.g.

Cast iron	Insulation (electric)
Cement	Metals
Coal	Paper
Corrosion and anti-	Steel
corrosives	Tool steel

Hardness
also American society for testing materials; United States—Standards, National bureau of

TESTING laboratories

Modern finish testing laboratories; Servel, Inc. G. E. Stedman. il Metal Finishing 41:391-4 Je '43

Pressed pistons; control methods employed by Specialoid limited. il Automobile Eng 33:397-404 O '43

Supply company becomes a general research agency; Waugh laboratories. il Ry Age 114:1238-9 Je 19 '43

Testing transparent plane sections under operating conditions; Rohm & Haas plastics testing laboratory. il Aero Digest 42:295, 299 Je '43

United States navy materials testing laboratory; applications of air conditioning, ventilating and heating. F. J. Rice. il diags Heat & Ven 40:54-61 Ja '43

See also Rochester university—Industrial X ray laboratory; Underwriters' laboratories

Cold rooms

Air conditioned firing range for testing bomber gun turrets. L. W. Greenblatt. il Heat & Ven 40:27-32 O '43

One hundred degrees below zero; Ferro-Therm steel insulation applied in altitude testing chambers. J. G. Macormack. il Refrig Eng 45:239-42+ Ap '43

Recent engineering developments in strato-chambers. J. G. Bergdoll, Jr. il diags Refrig Eng 45:25-32 Ja '43; Excerpts. Heating-Piping 15:183-4 Ja '43; Discussion. Refrig Eng 45:32-3 Ja '43

Sub-zero tests solve problems of cold weather flying; Wright aeronautical corp. il Aero Digest 41:90 N '42

Unique test building for army equipment; hot and cold rooms for testing mechanized equipment under conditions ranging from those of the tropics to the Arctic. il Eng N 131:400-2 S 9 '43

Use of dry ice for testing; Douglas aircraft corp. Aero Digest 43:222 S '43

Utilizing subzero temperatures in design. J. W. Greve. il Machine Design 15:94-5 O '43

Wright tests plane engines at stratosphere temperatures. il Heat & Ven 40:41 My '43

TESTING machines

Abrasion resistance of flexible vinyl plastics. F. W. Duggan. il diags Product Eng 14:44-9 Ja '43

Avery dynamic testing machines. il Automobile Eng 33:276 J '43; Elec R (Lond) 132:858 Je 25 '43

Dead-weight machines of 111,000- and 10,100-pound capacities. B. L. Wilson, D. R. Tate and G. Borkowski. il diags U S Nat Bur Stand Circ C446:1-14; pa 5c Supt of doc. '43

Electrical developments of 1942; testing equipments. G. Bartlett. il diags Gen Elec R 46:44-5 Ja '43

Fatigue resistance of flexible plastic sheetings. F. W. Duggan and K. K. Fligor. il diags Ind & Eng Chem 35:173-6 F '43

How test unit simulates flight conditions; aircraft magnetos. V. Blasutta. il diags Machine Design 15:107-11 Ap '43

Hydraulically supported spherically seated compression testing machine platens. R. L. Templin. il diags Am Soc T M Proc 42:968-76 '42

Industrial sub-zero machine for testing aircraft instruments, batteries, wire, metals and various devices. il Electronics 16:300-1 Mr '43

Low temperature flexing apparatus for synthetic rubber. S. M. Martin, Jr. il Rubber Age 52:237-8 D '42

Machine developed to test mass concrete in place. il Eng N 131:537 O 7 '43

Mechanical tests of cellulose acetate. W. N. Findley. il diags Mod Plastics 20:99-105+ Mr '43

New tester for bottle cap liners. J. D. Charlton and C. L. Lovell. il diags Mod Packaging 16:86, 88+ F '43

Performance quality control in the manufacture of hydraulic parts. H. A. Zimmerman. il diags Aero Digest 41:361-2+ D '42

Pulsator fatigue testing machine. il diag Engineer 174:517-18 D 25 '42

Rapid and accurate inspection of spot welds. L. L. Anderson. il diag Metal Prog 44:433-4+ S '43

Soil tester aids army engineers. P. O. Malmberg. il diag Machine Design 15:94-6 Mr '43

Some mechanical properties of plastics and metals under sustained vibrations; mild steel, duralumin, laminated plastics, polymethyl methacrylate. B. J. Lazan. bibliog il diags A S M E Trans 65:87-98 F '43; Same cond. Mod Plastics 20:83-8+ N '43; Discussion. A S M E Trans 65:98-104 F '43

Some tensile shock properties of carbon steels. F. V. Warnock and J. B. Brennan. diags Engineer 176:206-7, 233-4 S 10-17 '43

Static friction; machine for measuring friction between contacting surfaces separated by thin lubricating films. W. Claypoole. il diag A S M E Trans 65:317-22; Discussion. 322-4 My '43

Strength of steel subjected to biaxial fatigue stresses. J. Marin. il diags Welding J 31:sup554-9 N '42

Test unit simulates shock loading; belt testing machines. C. O. Mitchell. il Machine Design 15:116-17 Ap '43

Testing machine for aeroplane auto-pilot gear. il Engineering 154:385-6, 390 N 13 '43

Vibration, humidity, temperature and pressure test generators and chambers. W. W. MacDonald. il diags Electronics 16:82-6+ F '43

See also

Dynamometers	Scott serigraph
Gear testing machines	Textile testing machines

TESTOSTERONE

Effect of castration and testosterone propionate on d-amino acid oxidase activity in the mouse. L. C. Clark, Jr., C. D. Kochakian and R. P. Fox. bibliog Science 98:89 J 23 '43

TESTS. Ability. See Ability tests**TESTS. Personality. See Personality tests****TESTS of significance. See Significant difference (statistics)****TETRACHLOROANISIDINE**

Polyhalogeno-o-anisidines and their derivatives. W. S. W. Harrison, A. T. Peters and F. M. Rowe. Chem Soc J p235-7 My '43

TETRACHLOROBENZENE

Derivatives of 1:2:4:5-tetrachlorobenzene; *N*-nitroamino-compounds. A. T. Peters, F. M. Rowe and D. M. Stead. *Chem Soc J* p372-3 Ag '43

Derivatives of 1:2:4:5-tetrachlorobenzene; nitro- and amino-compounds. A. T. Peters, F. M. Rowe and D. M. Stead. *Chem Soc J* p233-5 My '43

TETRACHLOROETHYLENE

Analytical data for the systems carbon tetrachloride-acetic acid-benzene and carbon tetrachloride-tetrachloroethylene. W. R. McMillan and H. J. McDonald. *Ind & Eng Chem Anal ed* 15:114-16 F 15 '43

Chlorinated solvent exposures at degreasing operations. K. M. Morse and L. Goldberg. *bibliog J Ind Med* 12:706-13 O '43

Industrial degreasing agents. H. P. Quadland. *II Metal Finishing* 41:463-5 JI '43

Liquid-liquid extraction. O. Bergelin, F. J. Lockhart and G. G. Brown. *bibliog flow sheet II Am Inst Chem Eng Trans* 39:173-200 Ap '43

TETRACHLOROMETHANE. See Carbon tetrachloride**TETRACHLOROQUINONE**

Toxicity studies with the fungicide tetrachloro-para-benzoquinone (sperguson). T. H. McGavack and others. *bibliog J Ind Hygiene* 25:98-111 Mr '43

TETRACOSANE

Premelting anomalies of some long chain normal paraffin hydrocarbons. A. Van Hook and L. Silver. *bibliog J Chem Phys* 10:686-90 N '42

TETRADECANE

Premelting anomalies of some long chain normal paraffin hydrocarbons. A. Van Hook and L. Silver. *bibliog J Chem Phys* 10:686-90 N '42

TETRAETHYL lead

Absorption of lead tetraethyl with radioactive lead as indicator. R. A. Mortensen. *bibliog J Ind Hygiene* 24:285-8 N '42

Response ability of gasoline to various concentrations of tetraethyl lead. R. G. Lovell. *II diags Pet Refiner* 22:97-104 O '43

Analysis

Determination of tetraethyl lead in gasoline. L. Schwartz. *Ind & Eng Chem Anal ed* 15:499-501 Ag 15 '43; Same. *Pet Refiner* 22:123-5 O '43

TETRAHYDROCANNABINOL

Cannabis indica; some analogues and a water-soluble derivative of tetrahydrocannabinol. F. Bergel and others. *Chem Soc J* p286-7 Je '43

Tetrahydrocannabinol analogs with marihuana activity. R. Adams and others. *bibliog Am Chem Soc J* 64:2653-5 N '42

TETRAHYDROISQUINOLINE

Synthetic application of α - β -bromoethylbenzyl bromide; sulphanilamide derivatives of 1:2:3:4-tetrahydroisquinoline. F. G. Holliman and F. G. Mann. *Chem Soc J* p737-41 D '42

α,β -Unsaturated aminoketones; the mechanisms of the reactions of secondary amines with α -bromo- α,β -unsaturated ketones. N. H. Cromwell and D. J. Cram. *Am Chem Soc J* 65:301-8 Mr '43

TETRAHYDRONAPHTHALENE. See Tetralin**TETRAHYDRONAPHTHALEDIOL**

Synthesis and rearrangement of some decahydro- and tetrahydronaphthalenediols. J. English, Jr. and G. Cavaglieri. *bibliog Am Chem Soc J* 65:1085-9 Je '43

TETRAHYDROPYRAN

Tetrahydropyranyl amino alcohols. G. H. Harnest and A. Burger. *bibliog Am Chem Soc J* 65:370-2 Mr '43

TETRAHYDROTHIOPHENE

Synthesis of a tetrahydrothiophene with substituted amino groups in the 2- and 5-positions. G. B. Brown and G. W. Kilmer. *bibliog Am Chem Soc J* 65:1674-5 S '43

TETRAHYDROXYQUINONE

Hexahydroxybenzene and some of its derivatives. I. E. Neifert and E. Bartow. *Am Chem Soc J* 65:1770-2 S '43

TETRALIN

Catalytic dehydrogenation of 2-substituted-5,6,7,8-tetrahydronaphthalene derivatives. M. S. Newman and H. V. Zahn. *bibliog Am Chem Soc J* 65:1097-1101 Je '43

Catalytic oxidations of naphthalene series. R. N. Shreve and R. W. Weilborn. *bibliog II diags Ind & Eng Chem* 35:279-83 Mr '43

Reaction of furoic acid with tetralin. C. C. Price and N. C. Deno. *bibliog Am Chem Soc J* 64:2601-2 N '42

Synthesis and rearrangement of some decahydro- and tetrahydronaphthalenediols. J. English, Jr. and G. Cavaglieri. *bibliog Am Chem Soc J* 65:1085-9 Je '43

TETRALONE

Preparation of β -tetralone from β -naphthol and some analogous transformations. J. W. Cornforth, R. H. Cornforth and R. Robinson. *Chem Soc J* p689-91 N '42

TETRAMETHYLANTHRACENE

1,2,9,10-tetramethylantracene. R. B. Sandlin, R. Kitchen and L. F. Fieser. *bibliog Am Chem Soc J* 65:2018-20 O '43

TETRAMETHYL lead

Stable self-quenching Geiger-Müller counters containing organo-metallic compounds. A. S. Keston. *R Sci Instr* 14:293-5 O '43

TETRANITRONAPHTHALENE

1:3:5:7-Tetranitronaphthalene and the isomeric tetranitro-derivatives obtained from 2:6-dinitronaphthalene by nitration. J. Chatt and W. P. Wynne. *Chem Soc J* p33-6 Ja '43

TETRAPHENYLARSONIUM compounds

Tetra-aryl-phosphonium, -arsonium and -stibonium salts; the mechanism of their formation by the aluminium chloride reaction. D. R. Lyon and F. G. Mann. *Chem Soc J* p666-71 N '42

TETRAPHENYLCYCLOPENTADIENONE

Thermal decomposition of certain polyarylated carbinols. C. F. H. Allen and J. A. Van-Allan. *bibliog Am Chem Soc J* 65:1384-9 JI '43

TETRAPHENYLENE

Benzocyclooctatetraenes; diphenylene and tetraphenylene. W. S. Rapson, R. G. Shuttleworth and J. N. van Niekerk. *Chem Soc J* p326-7 JI '43

TETRAPHENYLHYDRAZINE

Initial step in the action of acids on tetra-arylhydrazines. G. N. Lewis and J. Bigeleisen. *Am Chem Soc J* 64:2808-10 D '42

Reversible photochemical processes in rigid media: the dissociation of organic molecules into radicals and ions. G. N. Lewis and D. Lipkin. *bibliog Am Chem Soc J* 64:2801-3 D '42

TETRAPHENYLPORPHINE

Dipole moment of *ms*-tetraphenylporphine. W. D. Kumler. *bibliog Am Chem Soc J* 64:2993-4 D '42

Spectroscopic studies of the simpler porphyrins; the absorption and fluorescence spectra of *ms*-tetra(3', 4'-methylenedioxyphenyl)porphine of HCl number four and of its AgC₁₀H₈N₂ Zn, and Ni complex salts. V. M. Albers, H. V. Kuor and D. L. Fry. *bibliog J Chem Phys* 10:700-5 D '42

TETRATHIONATES

Bacterial reduction of tetrathionate; abstract. M. R. Pollock, R. Knox and P. G. H. Gell. *Am Water Works Assn J* 35:640-1 Mr '43

TETRONIC acid

Raman spectra of *L*-ascorbic acid, tetronic acid and related compounds. J. T. Edsall and E. L. Sagall. *bibliog Am Chem Soc J* 65:1312-16 JI '43

Synthesis of some α -acyltetronic acids. W. Baker, K. D. Grice and A. B. A. Jansen. *Chem Soc J* p241-2 My '43

TETRYL

Estimation of minute amounts of tetryl in the atmosphere. F. H. Goldman and D. E. Rushing. *J Ind Hygiene* 25:195-6 My '43

Some toxic reactions of common explosives. J. H. Eddy, Jr. *Ind Med* 12:483-6 JI '43

Tetryl; hazards and precautions. *Nat Safety N* 47:44, 46+ Ap '43

TETRYL—Continued**Manufacture**

Surveys of liquid wastes from munitions manufacture; tetryl wastes, R. S. Smith. Pub Health Rep 58:1404-9 S 17 '43

TEUTOPOLIS, Illinois**Water supply**

New type of plant may solve many water-softening problems; Spiractor process, R. E. Thompson. *il diags Water & Sewage* 80:18-19+ D '42

TEXAS*See also*

Agriculture—Texas
Gas, Natural—Texas
Geology—Texas
Iron industry and trade—Texas
Mines and mineral resources—Texas
Petroleum—Texas
Petroleum industry and trade—Texas
Steel works—Texas
Water, Underground—Texas

Industries and resources

Industrial Texas, J. A. Mabry. *il Manuf Rec* 112:30-1+ Ag '43
Industry comes to Texas. *il map Business Week* p18-20 Ap 24 '43
New geography of American business; chemicals, aircraft and shipbuilding changing economics of Texas area. W. H. Hillyer. *Barron's* 23:7 S 27 '43
Sabine district's enduring industrial development. J. C. Watkins. *il Manuf Rec* 112:42+ J1 '43

TEXAS academy of science

Annual meeting, Nov. 12-14. *Science* 96:539 D 11 '42

TEXAS and Pacific railway

Texas & Pacific railway strengthens credit. M. Howe. *Barron's* 23:19 Mr 8 '43

TEXAS company

Annual statement. *Comm & Fin Chr* 157:1013 Mr 13 '43
Consolidated income account, 1939-1942. *Comm & Fin Chr* 157:1093 Mr 22 '43

TEXAS Pacific coal and oil company

Crude oil producer yielding 6.9%. H. Lawrence. *Barron's* 22:13 D 7 '42

TEXAS university**Medical school**

Semi-centennial. *Science* 96:577 D 25 '42

TEXTBOOKS

U.S. text-books for students in Latin American universities. E. R. Hall. *Science* 98:15-16 J1 2 '43

See also

Aeronautics—Text-books
Engineering—Text-books

TEXTILE analysis

Determination of the pH of textile materials. H. R. R. Wakeham and E. L. Skau. *bibliog Ind & Eng Chem Anal* 15:616-18 O 15 '43

Methods of analysis and of reporting fiber composition of textile products. 2d ed U S Nat Bur Stand Commercial Standard CS65-43:1-18; pa 10c Supt. of doc. '43; Same abr. Rayon 24:127-8+ Mr '43; Same. *Textile Col* 65:221-3+ My '43

Rapid colorimetric method for the quantitative determination of starch in textile fabrics. R. L. McEwen. *Am Dyestuff Rep* 32:371-3 Ag 16 '43

See also

Dye analysis
Rayon—Analysis
Textile fabrics—Analysis

TEXTILE chemicals

Alphabetical list of new products developed since October 1941. *Am Dyestuff Rep* 31:660-6 D 7 '42

Chlorinated textile agents; abstract. G. Heron. *Soap & San Chem* 19:69 J1 '43
Cholesterol in the rayon industry. L. I. Conrad. *bibliog il Rayon* 23:675-6 N '42

Glycerine paces textile progress. G. Leffingwell and M. A. Lesser. *bibliog Rayon* 24:493, 543-4 S-O '43

Historical notes on glycerine and its uses in textiles. G. Leffingwell and M. A. Lesser. *bibliog Textile Col* 65:5-6 Ja '43

How to handle chemicals safely. *il Textile World* 93:96-7 O '43

Nitroparaffins and their derivatives; their use in the chemical processing of textiles. H. Robinette. *Am Dyestuff Rep* 31:575-80 N 23 '42

Phosphates finding new spheres of usefulness in the textile field. J. Wakelin. *Textile Col* 64:511-12+ N '42

Sodium metaphosphate; its use in the textile industry. H. Seymour. *Chem Age (Lond)* 48:151-3 Ja 30 '43

Substitute materials. *Am Dyestuff Rep* 32:439 O 11 '43

Surface-active agents. *il Textile World* 92:96+ D '42

See also

Dyes and dyeing
Starch
Textile oils
Textone
Wetting agents

TEXTILE chemistry

ABC of chemical derivatives from petroleum; textile fibers and finishing agents. R. L. Wakeman and B. H. Weil. *il Nat Pet N* 35 pt 2:R60-5 F 3 '43
Copper compounds and cellulose. R. F. York. *bibliog Chem Age (Lond)* 48:243-4 F 27 '43
Optimum conditions for cross-linking animal fibres with formaldehyde and quinone. J. B. Speakman and P. L. D. Peill. *bibliog Textile Inst J* 34:T70-6 S '43

See also

Bleaching
Dyes and dyeing—Chemistry
Fireproofing of textiles
Mercerizing
Nylon
Resinous products—Textile uses
Textile analysis
Textile chemicals
Textile finishing
Textile oils
Waterproofing of textiles
Wetting agents
Wool—Chemistry

TEXTILE chemists

American contemporaries; Louis A. Olney. N. A. Johnson. *Chem & Eng N* 21:1620 O 10 '43

TEXTILE design

Styling and designing consumer fabrics for post-war markets. T. O. Ott, jr. *il Textile World* 93:79-82 S; 70-2 O '43 (to be cont)

See also

Rayon printing
Textile printing
Weaving

TEXTILE drying

Drying of textiles. A. C. Walker. *A S M E Trans* 65:329-36 My '43

Drying of textiles. A. C. Walker. *diags Textile Col* 65:389-95, 422-4 S '43

Scientifically applied radiant heat in the textile industry. M. R. Weiss. *il diags Rayon* 24:499-501 S '43

Use of gas-fired infra-red units in textile drying. *il Textile World* 93:60-1 Ja '43

See also

Drying apparatus—Textiles
Rayon drying

TEXTILE education

Plan research-education tie-up. *Textile World* 93:96 S '43

TEXTILE fabrics

Now Saran and Velon for textiles; yarns derived from vinylidene chloride. *il Textile World* 92:83-4 D '42

Styling and designing consumer fabrics for post-war markets. T. O. Ott, jr. *il Textile World* 93:79-82 S; 70-2 O '43 (to be cont)

Textiles easing; no shortage. *Business Week* p38+ Mr 6 '43

What the consumer seeks from the textile manufacturer. L. C. Pfeiffe. *Am Dyestuff Rep* 32:224-5 My 10 '43

See also

Airplane fabrics
Army fabrics
Bags
Blankets
Bleaching
Camel's hair
Carpets
Cleaning
Coating fabrics
Cotton fabrics
Crepe
Denim
Dress goods
Dry goods
Duck (textile)
Felt
Filter cloth
Fireproofing of textiles
Knit goods

TEXTILE fabrics—See also—*Continued*

Linen fabrics	Rubberized fabrics
Marquissette	Rugs
Men's suiting fabrics	Terry fabrics
Mildew	Textile fibers
Military fabrics	Textile finishing
Napping of textiles	Textile industry
Navy fabrics	Textile research
Nylon	Tire fabrics
Paper textiles	Upholstery
Parachute fabrics	Waterproofing of
Pile fabrics	textiles
Raincoats	Woolen and worsted
Rayon fabrics	fabrics
Resilite	

Analysis

Graphical method for obtaining oven dry cotton percentages in government lining fabrics. H. C. Haller and A. Feigendreger. *bibliog* Am Dyestuff Rep 32:301-2, 311-14 J 5 '43

Quantitative analysis of linen in part linen fabrics. W. Krauss. *bibliog* il Rayon 23: 653-4, 713-14 N-D '42

Antiseptic treatment

Self-antiseptic properties in clothing. L. H. James and A. C. Lundell. *bibliog* il Soap & San Chem 19:93, 95-7+ Mr '43

Bibliography

Abstracts. Published in monthly numbers of Journal of the Textile Institute
Review of periodicals. Published in monthly numbers of Rayon textile monthly

Cleaning

See Cleaning compositions; Laundry

Coating

Application of vinyl resins and plastics to textiles. C. W. Patton. il Am Dyestuff Rep 32:124-7+ Mr 15 '43

Coated fabrics for variety of military uses. il Textile World 93:92-3 S '43

Ersatz canvas; blue denim impregnated with Detroit Graphite's Cemtex found substitute in railroad uses. *Business Week* p54 Mr 13 '43

Phenol resins and resin emulsions and their application to textiles. W. H. Butler. il *diags* Am Dyestuff Rep 32:128-33 Mr 15 '43

Plastic coatings in the post-war era. J. B. Cleveland. il Textile World 93:59-61 My '43

Replacements for rubber coated fabrics. A. F. Schildhauer. il *Mod* Plastics 21:89-91+ N '43

Warmth without weight achieved by applying heat-reflecting metallic coatings to various fabrics. C. Kirkpatrick. *Textile World* 93: 78 My '43

See also

Pyroxylin coated fabrics

Defects

Damage to textile fibers and fabrics in finishing processes. *Textile Col* 65:379-82 S '43

Defects in Jacquard fabrics. T. Nelson. il *Textile World* 93:82-3 O '43

Fabric defects charted. S. C. Veney. il *Textile World* 92:88-9 D '42

Imperfections in woven fabrics. T. Nelson. il *Textile World* 93:93 My '43

Point system for grading fabrics. R. E. Spear. *Textile World* 93:78 O '43

Heat transmission

Advantages of a blanket-and-sheet combination for outdoor use. H. F. Schiefer. *J Research Nat Bur Stand* 30:209-14 Mr '43

Factors influencing thermal transmission of blanket materials. E. Freedman. il Rayon 24:527-8, 568-9 O-N '43; Same. *Textile Col* 65:477-80 N '43; Abstract. *Textile World* 93:77+ O '43

Munsingwear, Inc. sponsors research on insulating properties of underwear at University of Minnesota. *Heat & Ven* 39:53 N '42

Part-wool blankets for use in barracks. H. F. Schiefer, L. R. Mizell and F. T. Mosedale. *J Research Nat Bur Stand* 30:203-8 Mr '43

Thermal insulating properties of clothing. S. Baxter and A. B. D. Cassie. *diags* *Textile Inst* J 34:T41-64 J 1 '43

Warmth without weight achieved by applying heat-reflecting metallic coatings to various fabrics. C. Kirkpatrick. *Textile World* 93:78 My '43

Moisture absorption

Comparison of methods for the determination of water absorbency by terry towels. V. B. Holland. il *Am Dyestuff Rep* 32:167-70 Ap 12 '43

See also

Textile fabrics—
Water resistance

Moisture content

Determination of the pH of textile materials. H. R. R. Wakeham and E. L. Skau. *bibliog* Ind & Eng Chem Anal ed 15:616-18 O 15 '43

Permeability

New method for testing gas permeability. il *Mod Packaging* 16:84+ F '43

Prices

Latest W.P.B. and O.P.A. pronouncements; amendment to maximum price regulation no. 127; finished piece goods. Rayon 23:702-3 D '42

Protection

Flameproofing military fabrics; processes which afford protection against fire, water, mildew. W. W. Chase. *Textile World* 93:90 Ap '43

Fungi, molds and mildews in textiles. E. Hardy. il Rayon 24:138-40 Mr '43; Same abr. *bibliog* *Textile Col* 65:256, 262+ Je '43

Modern mildew proofing. P. E. N. Cillium. *Textile Col* 65:359-65+ Ag '43

New process prevents mildew damage in textiles; Puratizing process. Rayon 24:609-10 N '43

Preservatives used in Australia; rotproofing and waterproofing of textiles. *For Comm* W 12:40 Ag 21 '43

Process for protecting textile material against rot, corrosion and the like. *Textile Col* 65: 30 Ja '43

Protecting textiles from silverfish. C. L. Mantell and E. May. il *Mod* Plastics 20:51-3+ F '43

Rot-proofing textiles. J. C. Townner. *Textile Col* 65:415, 418 S '43

See also

Cotton fabrics—Pro-
tection

Repair

Mending and patching the new way. il *Consumers' Research Bul* 11:12-14 Mr '43

Shrinkage**See also**

Shrinkage of textiles Woolen and worsted Wool, Unshrinkable fabrics—Shrinkage

Specifications

What the government buys; digest of finishing specifications. *Textile World* 93:70-1 J 1 '43

What the government buys; digest of textile specifications. *Textile World* 93:86-90 F '43

Strength

Cloth strength testing; experimental investigation of inertia error in a constant rate of traverse pendulum type cloth tester; with a mathematical appendix. A. W. Bayes. *diags* *Textile Inst* J 33:S53-62 O '42

Fatigue of fabrics. W. F. Busse and others. *bibliog* *diag* J Ap Phys 13:715-24 N '42

Relation of tensile strength units; grams per denier and pounds per square inch. M. A. Sieminski. *bibliog* Rayon 24:585-7 N '43

Terminology

Cotton tire cord terms. *Textile World* 92:95 D '42

Origin of fabric names. B. Brown. *Textile Col* 64:513-14+ N '42

TEXTILE fabrics—Continued

Testing

Cloth strength testing; experimental investigation of inertia error in a constant rate of traverse pendulum type cloth tester; with a mathematical appendix. A. W. Bayes. *diags Textile Inst J* 33:853-62 O '42

Color fastness of certain types of dyes on women's and children's wearing apparel fabrics. H. E. Borton and others. *bibliog il diags Am Dyestuff Rep* 31:603-27 D 7 '42

Comparison of an aryl sulfonate and soap for the washing in hard water of cotton, linen, spun cellulose-acetate rayon, spun regenerated-cellulose rayon, silk, and wool. V. Ester and others. *bibliog Am Dyestuff Rep* 32:121-2, 135-41 Mr 15 '43

Fabric-weight determinations facilitated by use of self-calculating dies and templates. L. Shapiro. *il Textile World* 93:87 O '43

Fatigue of fabrics. W. F. Busse and others. *bibliog diag J Ap Phys* 13:715-24 N '42

Friction meter for determining the coefficient of kinetic friction of fabrics. E. C. Dreby. *bibliog diag J Research Nat Bur Stand* 31:237-46 O '43

Soil suspension method for testing mildew resistance of treated fabrics. M. S. Furry and M. Zametkin. *bibliog il Am Dyestuff Rep* 32:395-8 S 13 '43

See also

Army fabrics—Testing
Carpets—Testing
Cotton fabrics—Testing

Rayon fabrics—Testing
Woolen and worsted fabrics—Testing

Water resistance

Waterproof and water repellent finishes. P. Wengraf and E. W. K. Schwarz. *diags Am Dyestuff Rep* 31:551-8 N 9 '42

Wear

See also

Carpets—Testing

TEXTILE fabrics, Laminated

Disappearing marine; ponchos of water-repellent cloth bonded with polyvinyl butyral resin filler. *il Mod Plastics* 20:68 Je '43

TEXTILE fibers

A-B-C of the fiber situation today. *il For Comm W* 11:6-4 Ap 24 '43

Chemical products from seaweeds; algin as a textile raw material. E. M. Delf. *Chem Age (Lond)* 48:555 My 22 '43

Cultivation of strategic fibers in Central America planned. *For Comm W* 9:9 N 21 '42

Damage to textile fibers and fabrics in finishing processes. *Textile Col* 65:379-82 S '43

Dyeing of redwood fibers. H. Luttringhaus. *il Rayon* 24:489-90 S '43

Fiber from the spinner's viewpoint. C. D. Brandt. *Rayon* 24:351-3 Jl '43

Fibre industries. F. D. Snell. *Chem & Ind* 61:448-50 O 31 '42

Fibre refractometer. K. Freeman and J. M. Preston. *bibliog il Textile Inst J* 34:T19-28 My '43

Great variety of textile plants and fibers in Cuba. M. L. Blanco. *il Rayon* 24:533-4, 605-7 O-N '43

Jute and manila fibers; sansevieria, hibiscus esculente (okra), hibiscus cannabinus, and urena lobata as substitutes. A. C. Whitford. *Textile Col* 64:526-7 N '42

Microbiology of textile fibers. W. S. Marsh. *Am Dyestuff Rep* 31:563; *Discussion*. 563-9 N 23 '42

Molecular mechanics; the new textile technology. E. R. Schwarz. *il Rayon* 24:290-2 Je '43; *Same*. *Textile Col* 65:342-4 Ag '43

New source of fiber in Ecuador's El Oro province. *For Comm W* 12:34 Jl 3 '43

Principal characteristics of the important textile fibers. W. von Bergen. *il Mech Eng* 65:183-90 Mr '43

Redwood fiber fills war needs. *Textile Col* 65:299 Jl '43

Specific surface measurements on compact bundles of parallel fibers. R. R. Sullivan. *bibliog J Ap Phys* 13:725-30 N '42

Survey of the American textile fiber shortage; replacement fibers for jute and manila hemp. A. C. Whitford. *il Rayon* 24:17-18, 73-5 Ja-F '43

Weeds to rescue; milkweed and cattails answer demand for kapok. *Business Week* p55-6+ D 5 '42

See also

Camel's hair
Cashmere
Cotton fibers
Flax
Hemp
Istle
Jute

Manila hemp
Mohair
Nettle fiber
Ramie
Rayon fibers
Silk
Wool

Coating

See also

Textile fabrics—Coating

Electric properties

Electrical properties of fibers. J. W. Illingworth. *Textile Col* 65:269-73 Je '43

Identification

Color chart for identification, stain Colotex B. Rayon 24:104 F '43

Methods for the detection of Aralac. Rayon 23:656 N '42

Microscopical identification of Lanital, Aralac and soybean fibers. G. L. Royer. *il Am Dyestuff Rep* 32:165-6 Mr 29 '43

Processing of Aralac. H. E. Millson. *il Textile Col* 65:161-3, 198-203, 206, 208-10 Ap-May '43

Quantitative analysis of linen in part linen fabrics. W. Krauss. *bibliog il Rayon* 23:653-4, 713-14 N-D '42

Measurement

Relationship of microns, millimeters and the inch. H. R. Mauersberger. *Rayon* 24:344 Jl '43

Moisture content

Drying of textiles. A. C. Walker. *A S M E Trans* 65:329-36 My '43

Drying of textiles. A. C. Walker. *diags Textile Col* 65:389-95, 422-4 S '43

Electrical properties of fibers. J. W. Illingworth. *Textile Col* 65:269-73 Je '43

See also

Cotton yarn—Moisture content

Testing

Autographic load-elongation apparatus for fibers. A. M. Sookne and H. A. Rutherford. *bibliog pls diags J Research Nat Bur Stand* 31:25-31 Jl '43; *Same*. *Rayon* 24:342-3, 414-15 Jl-Ag '43

Resistance of various textile fibers to mildew. N. E. Borlaug. *il Rayon* 24:416-18, 475-6 Ag-S '43

TEXTILE fibers, Effect of acids on
Action of strong acid on various fibers. H. C. Haller. *Am Dyestuff Rep* 31:681-2 D 21 '42

TEXTILE fibers, Synthetic
ABC of chemical derivatives from petroleum; textile fibers and finishing agents. R. L. Wakeman and B. H. Weil. *il Nat Pet N* 35 pt 2:R60-5 F 3 '43

Algin, its uses in the textile industry and its possibilities of spinning into filaments. *Rayon* 23:679-80 N '42

Celanese produces $\frac{1}{4}$ of a denier Fortisan filament. *Rayon* 23:640 N '42

Classification of man-made fibers; chart. H. R. Mauersberger. *Textile World* 93:137 Ap '43

Development of soybean fiber by Ford. L. Stouffer. *il Rayon* 23:649-52 N '42

Effect of relative humidity on load-elongation properties of certain fibers. H. Hindman and K. R. Tox. *bibliog il Rayon* 24:235-6, 287-9 My-Je '43

Elastic vinyl resin yarn. *Textile Col* 65:41 Ja '43

Fibers for tomorrow. N. Clarey, jr. *Textile Col* 65:437-40 O '43 (to be cont)

Germans claim development of new type of fiber. *For Comm W* 13:27 O 2 '43

List of new man made fibers, filaments and yarns, their trade names, producers and fabricators. *Rayon* 24:320 Je '43

Molecular mechanics; the new textile technology. E. R. Schwarz. *il Rayon* 24:290-2 Je '43; *Same*. *Textile Col* 65:342-4 Ag '43

TEXTILE fibers, Synthetic—Continued

- Now Saran and Velon for textiles; yarns derived from vinylidene chloride. *il* Textile World 92:83-4 D '42
- Peanut protein textile fiber, a possibility. Rayon 24:112 Mr '43
- Postwar fibers, colors, finishes. *Am Dyestuff Rep* 32:440-1 O 11 '43
- Principal characteristics of the important textile fibers. W. von Bergen. *il* Mech Eng 65: 183-90 Mr '43
- Processing of synthetic textile fabrics. C. Heydon. *Am Dyestuff Rep* 32:172-4 Ap 12 '43
- Progress in new synthetic textile fibers. H. R. Mauersberger. Textile Col 65:211, 216-19 My '43; Same abr. Rayon 24:181-4 Ap '43; Abstract. India Rubber W 108:36 Ap '43
- Properties of synthetic fibers; charts. Textile World 93:108-20 S '43
- Rayolanda X. A. J. Hall. Textile Col 65: 431-2 O '43
- Substitute fibers gaining knit goods leadership. W. B. Dall. *il* Textile World 93:100-1 Ap '43
- Symposium of man-made fibers. J. Leeming and others. Textile Col 65:9-14+, 102-4, 133 Ja, Mr '43
- Synthetic fibers for the post-war world. D. G. Woolf and W. W. Chase. Textile World 93:105-7 S '43

See also

- | | |
|-----------|------------------|
| Aralac | Rayon |
| Nylon | Wool, Artificial |
| Rayolanda | |

TEXTILE finishing

- After boiling-out—use bicarbonate; advantages over customary acid sour. A. L. Dubeau and G. P. Vincent. *il* Textile World 93:79 My '43
- Clarifying radiant heat applications in textile finishing. G. R. Van Kampen. *il* Rayon 24:431-2 Ag '43
- Damage to textile fibers and fabrics in finishing processes. Textile Col 65:379-82 S '43
- Dermatitis from new synthetic resin fabric finishes. L. Schwartz. Rayon 24:309-10 Je '43; Abstract. Can Chem & Process Ind 27:366 Je '43
- Dyeing and finishing of Aralac fabrics. *il* Rayon 24:146 Mr '43
- Future of finishing. J. G. Evans. Textile Inst J 34:P125-9 S '43; Same. *Am Dyestuff Rep* 32:462-4 O 25 '43; Discussion. Textile Inst J 34:P129-30 S '43
- Impact of war-time requirements on post-war finishes; presented for the A.A.T.C.C. Rhode Island section by H. S. Travis. *Am Dyestuff Rep* 31:634-7+ D 7 '42
- Modern mulew proofing. P. E. N. Cillium. Textile Col 65:359-65+ Ag '43
- Phenol resins and resin emulsions and their application to textiles. W. H. Butler. *il* diags *Am Dyestuff Rep* 32:128-33 Mr 15 '43
- Processing of Aralac. H. E. Millson. *il* Textile Col 65:151-9, 198-203, 206, 208-10, 245-52, 280-2, 294-3 Ap-Jl '43
- Processing of synthetic textile fabrics. C. Heydon. *Am Dyestuff Rep* 32:172-4 Ap 12 '43
- Protecting textiles from silverfish. C. L. Mantell and E. May. *il* Mod Plastics 20:51-3+ F '43
- Soap in textile finishes; U.S. patent 2,171,475. Textile Col 65:220 My '43
- Some textile finishing machines. K. S. Laurie. *il* diags Engineer 175:176-8, 198-200, 218-20 F 26-Mr 12 '43; Same abr. Engineering 155:218-20, 237-40 Mr 12-19 '43; Discussion. Engineer 175:170-1 F 26 '43; Engineering 155:203-4 Mr 12 '43
- Synthetic plastics and the textile industry. F. B. Sarkar. Textile Col 64:530, 532-3 N '42
- Waterproof and water repellent finishes. P. Wengraf and E. W. K. Schwarz. bibliog diags *Am Dyestuff Rep* 31:551-3 N 9 '42
- What the government buys; digest of finishing specifications. Textile World 93:70-1 Jl '43

See also

- | | |
|------------------|--------------------------|
| Bleaching | Fireproofing of textiles |
| Cotton finishing | Napping of textiles |
| Dyes and dyeing | |

- | | |
|---------------------------|------------------------------|
| Rayon finishing | Woolen and worsted finishing |
| Textile fabrics | |
| Textile oils | |
| Waterproofing of textiles | |

TEXTILE foundation

- Textile foundation and Textile research institute. E. T. Pickard and J. S. Jacobs. Textile Col 65:190-3 My '43

TEXTILE industry

- Kendall salesmen prepare for tomorrow by re-training today. S. D. Chamberlain. Sales Management 52:48+ My 20 '43
- Meeting changing conditions. R. W. Jacoby. *Am Dyestuff Rep* 32:192-3; Discussion. 198-9 Ap 26 '43
- Post-war changes in textiles. R. Chisholm. Textile World 93:96 Ap '43
- Post war textiles. J. E. Bullard. *Am Dyestuff Rep* 32:255-6 My 24 '43
- Relation of the A.S.T.M. to the textile industry. H. J. Ball. *Am Dyestuff Rep* 32: 419-22+ S 27 '43
- Renegotiation seen from two sides; prospects of concentration. E. Stubblefield. Textile World 93:62-3 Ja '43
- Role of textiles in rehabilitation. G. Montgomerie. Textile World 93:69+ O '43
- Simplification program under way. Textile World 93:68 Ja '43
- Textile raw materials, 1942. Economist 144: sup22 Mr 13 '43
- Textiles easing; no shortage. Business Week p38+ Mr 6 '43
- War's impact on techniques. W. W. Chase. *il* Textile World 93:79-82 F '43

See also

- | | |
|--------------------|----------------------------|
| Bleaching | Rayon industry |
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| Clothing trade | Silk trade |
| Cotton | Spinning |
| Cotton manufacture | Textile fabrics |
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| Flax | Weaving |
| Hosiery | Wool trade |
| Knit goods | Woolen and worsted fabrics |
| Linen | Yarn |
| Mercerizing | |
| Rayon | |

Advertising

- Llama, the vicuna, the camel help Stroock sell its quality story. E. M. Murphy. *il* Sales Management 52:76+ O 15 '43

Bibliography

- Abstracts. Published in monthly numbers of Journal of the Textile Institute
- Abstracts from British and foreign journals and patents. Published in monthly numbers of Society of dyers and colourists journal
- Free for the asking. Published in monthly numbers of Textile world
- Review of periodicals. Published in monthly numbers of Rayon textile monthly

Statistics

- '42 textile fiber use reaches new high. Comm & Fin Chr 157:651 F 18 '43
- Textile mill activity levels off. D. G. Woolf. Textile World 93:65 Jl '43

Terminology

- Textile terms and definitions. Textile Inst J 33:P103-5 N '42

Afghanistan

- Furs and textiles in Afghanistan. M. E. Wambsgans. *il* For Comm W 12:10-11 S 18 '43

British Guiana

- Imports into British Guiana, first 6 months, 1941 and 1942. For Comm W 9:33 D 19 '42

Canada

- Canadian textile accomplishments; financial statistics. E. Mann. Rayon 24:112 Mr '43

Cuba

- Great variety of textile plants and fibers in Cuba. M. L. Blanco. *il* Rayon 24:533-4, 605-7 O-N '43

TEXTILE industry—Continued**Germany**

Germany at war; textiles and clothing. Economist 144:16 Ja 2 '43

Great Britain

Britain's flourishing flax industry. M. Benedetta. *il Rayon* 24:425-6 Ag '43

England plans post-war export now. A. W. Williams. *Textile World* 93:97 Ag '43

Post-war industry and quality control. E. H. Wildon. *Soc Dyers & Col J* 59:161-4 Ag '43

War production can't be blitzed! J. T. Chirung. *Textile World* 93:64 Mr '43

See also

Cotton trade—Great Britain Wool trade—Great Britain

India

Control of textiles and yarn inaugurated. For Comm W 12:19-20 Ag 7 '43

Latin America

Good-neighbor policy is needed; South American textile situation. J. J. Reutlinger. *il Textile World* 93:76-7 Mr '43

Mexico

Postwar fizzle? *Business Week* p50+-S 18 '43

Morocco

War's impact spurs Morocco's textile making. For Comm W 11:29 My 8 '43

Southern states

Southern textile companies; present output and post war prospects. Comm & Fin Chr 157:651-2 F 18 '43

United States

Allocation of textiles for export. For Comm W 13:22 O 2 '43

Army cuts may not affect output. G. Montgomery. *Textile World* 93:90-1 S '43

Cutting the cloth; Washington is pushing simplification program. *Business Week* p58-60 Ja 2 '43

Fibre industries. F. D. Snell. *Chem & Ind* 61:448-50 O 31 '42

Four-year record is in the bag; nine months textile output. D. G. Woolf. *Textile World* 92:82 N '42

Fourth record down, fifth to go. D. G. Woolf. *Textile World* 93:75-7 F '43

Lend-lease need is big but vague; outlook for textiles. B. Stubblefield. *Textile World* 93:104 F '43

Post-war and the textile industry. J. Schmitz, Jr. *Rayon* 24:446-7 S '43

Post-war planning marches on. *Textile World* 93:74-5 O '43

Procurement of textiles for foreign shipment; some illuminating facts; abstract. F. L. Walton. For Comm W 12:21 JI 24 '43

Textiles stretch; army gives up bit of its scheduled takings. *Business Week* p19 Ag 21 '43

What CMP means to textile men. B. Stubblefield. *Textile World* 92:62-4 D '42

See also

Cotton trade—United States Wool trade—United States

United States—Army
—Textile requirements

TEXTILE laboratories

Burlington Mills Laboratory. *il Textile World* 93:84-5 My '43

TEXTILE machinery

How to conserve throwing plant equipment. C. W. Bendigo. *il Textile World* 92:92-3 N '42

Some textile finishing machines. K. S. Laurie. *il diags Engineer* 175:176-8, 198-200, 218-20 F 26-Mr 12 '43; Same abr. *Engineering* 155:218-20, 237-40 Mr 12-19 '43; Discussion. *Engineer* 175:170-1 F 26 '43; *Engineering* 155:203-4 Mr 12 '43

War's impact on techniques. W. W. Chase. *il Textile World* 93:79-82 F '43

See also

Cotton machinery
Drying apparatus—
Textiles
Dyeing machines
Electric driving—
Textile mills
Hosiery machines
Knitting machines
Looms

Rayon machinery
Spinning machinery
Textile testing machines
Twisting machines
Winding machines
Woolen and worsted machinery

Lubrication

Modern lubrication effects revolutionary improvements. *il Rayon* 24:41-2 Ja '43

See also

Cotton machinery—
Lubrication

TEXTILE machinery industry**Statistics**

War work drops machine sales. *Textile World* 93:77-8 F '43

Great Britain

Engineering outlook; textile machinery. *Engineering* 155:115-16 F 5 '43

TEXTILE mills

Adhesive requirements of the textile industry. G. B. Cloran. *Rayon* 24:422-3 Ag '43; Same cond. *Textile World* 93:98 O '43

Air express in war-time; textile industry avoids production delays by speed in getting samples, parts, dyes, etc. *il Textile World* 93:142 O '43

Dry rot in the textile industry. E. Hardy. *Am Dyestuff Rep* 31:541-2 N 9 '42

Little things to heave at Hitler; scrap collection at mill of J. & P. Coats, Inc. G. H. Arris. *il Textile World* 92:75 D '42

See also

Cotton mills Textile industry
Dyehouses Textile machinery
Electric driving— Textile workers
Textile mills Water supply for textile mills
Hemp mills Woolen and worsted mills
Hosiery mills
Knitting mills
Rayon mills

Air conditioning

Evaporative-cooling primer for textile management. M. H. Irons. *Mech Eng* 65:115-18 F '43; Same. *Rayon* 24:261-5 My '43; Abstract. *Textile World* 93:71 Ja '43

Electric equipment

Don't let your transformers get like this. M. H. Bates. *il Textile World* 93:106-8 Je '43

Keep your motors running by preventive maintenance. J. Z. Linsemeyer and W. W. McCullough. *il Textile World* 93:64-71 Ag '43

More production from present electrical equipment. *Textile World* 93:115-16 Ap '43

New servant for textile mills; electronic equipment. A. P. Mansfield. *il diags Textile World* 93:66-9 Mr '43

Employees**See Textile workers****Equipment**

Automatic controls speed up production. F. Mettish. *Textile World* 93:76 O '43

How to check up on condition of auxiliary equipment. *diag Textile World* 92:102-6 N '42

How to organize a maintenance department. E. Mauldin. *Textile World* 92:34-5 N '42

How to prolong life of weave-room equipment. A. C. Wayman. *diags Textile World* 92:96-7 N '42

Infra-red in textile industry. *il Textile World* 93:56-61 Ja '43

Instrumentation under wartime demands revolutionizes manufacturing procedures. *il diag Rayon* 24:151-3 Mr '43

Non-corrosive materials; plastics and resins in the textile mill. R. Trautschold. *il Rayon* 23:729-32 D '42

Pumps and valves; new engineering materials replace basic standbys; neoprene products. R. Trautschold. *il Rayon* 23:681-4 N '42

TEXTILE mills—Equipment—Continued

Scientifically applied radiant heat in the textile industry. M. R. Weiss. *il* diags Rayon 24:499-501 S '43

See also

Drying apparatus—

Textiles

Textile machinery

Lighting

Lighting for wool sorting. G. G. Cousins and C. H. Brooks. *il* plan Illum Eng 38:433-7 S '43

See also

Cotton mills—Lighting

Maintenance and repair

Keep 'em running; annual mill check-up section. *il* Textile World 93:83-106 N '42
Mill water-treatment plant; maintenance of pumps, motors, controls, and feeds. H. Nix. *il* Textile World 93:134-5 Ap '43

Bibliography

Maintenance articles published in Textile world during 1940-1942. Textile World 93: 85 Ja '43

Management

Absenteeism. A. W. Williams and others. *il* Textile World 93:74-9 Ap '43
Control of spinning room labor. C. McElroy and M. Gross. Textile World 92:80-1 N '42
Foremen; go all out! H. Heyman. Textile World 93:98-9 Ja '43
How to reduce loom stoppages. A. R. Kandler. *diag* Textile World 93:106-7 F '43
Keep 'em running; annual mill check-up section. *il* Textile World 92:83-106 N '42
Some tips for those who handle men. E. H. Helliwell. *il* Textile World 93:60-1 Mr '43

See also

Cotton mills—Management Knitting mills—Management

Manufacture

Styling and designing consumer fabrics for post-war markets; with organization charts. T. O. Ott, jr. Textile World 93:79-82 S '43

Power

It starts in the boiler house. F. D. Mosher. *il* Textile World 93:112-13 F '43
Planning the post-war power plant; take advantage of high-pressure boiler and high-temperature hot water heating. F. L. Geiringer. *diags* Textile World 93:90-1 Mr '43
Small textile plant power tests. W. F. Schaphorst. *Am Dyestuff Rep* 32:404 S 13 '43

See also

Electric driving—
Textile mills

Records

How to establish a maintenance tickler system. F. J. Fales. Textile World 92:86-7 N '42
Your weave-room supply system; proper bin arrangement and card index system. W. A. Newell. *il* Textile World 93:80-1 Ap '43

Safety measures

Accident prevention in wartime; annual meeting of the National safety council. Textile section. Textile World 93:81-2 Ja '43
Clean floor is a safe floor; cleaning compounds for textile mills. R. W. Mitchell. Textile World 93:86 O '43
Conserving physical efforts of inexperienced textile mill workers. E. A. Dench. Rayon 24:424 Ag '43
How to handle chemicals safely. *il* Textile World 93:96-7 O '43
Safety organization in the mill. J. F. Holmes. Textile Col 64:589-94+ D '42
Textile bleaching compounds. Textile Col 65: 328-9 Jl '43
Toluene and xylene. Textile Col 65:348-9 Ag '43

Water supply

See Water supply for textile mills

TEXTILE oils

Effect of ageing on rayon yarn; effect of oil. C. B. Weil. *il* Textile World 92:74-5 N '42

New rayon hosiery oils. Rayon 24:91 F '43
Oil notes in rayon processing. Textile Col 65: 63-5 F '43

Solving a rayon hosiery problem; 51 gauge rayon stocking has badly streaked boot. Rayon 24:37-8 Ja '43

See also

Cotton oiling
Sulfonated oils

TEXTILE patents

Abstracts from British and foreign journals and patents. Published in monthly numbers of Society of dyers and colourists journal
Flexible anti-snagging size for nylon knitting yarns patented. Rayon 24:359-60 Jl '43
Patent reports. Published in monthly numbers of Rayon textile monthly

See also

Dye patents
Rayon—Patents

TEXTILE printing

Application of azoic dyes to cellulose materials. A. J. Hall. Textile Col 65:293+ Jl '43

Application of water dispersed pigment colors to textiles. F. G. La Piana. *Am Dyestuff Rep* 32:261-3; Discussion, 263-4 Je 7 '43

Glycerine in newer dyeing and finishing processes. G. Leffingwell and M. A. Lesser. *bibliog* Textile Col 65:398, 400-2 S '43

Hints on printing napped fabrics. M. Mackay. Textile World 93:89 O '43

New use for urea in printing discharge. A. J. Hall. Textile Col 65:51-2 F '43

Pitfalls in print preparation. F. Newton. *il* Textile World 93:80 Mr '43

Printing with azoic dyes. E. P. 466846. A. J. Hall. Textile Col 65:196-7+ My '43

Rubbing and bleeding of dyestuff in printing and dyeing of textiles. Textile Col 64:373-6, 411-12, 424-8, 467-71+; 65:34-7 Ag-O '42, Ja '43

Shade matching in dyeing and textile printing. Textile Col 65:235-8, 274 Je '43

Textile printing faults. Textile Col 65:117, 123-6+ Mr '43

Textile printing; the rise in temperature of the ager. A. B. Meggy. *Soc Dyers & Col J* 59:192-6 S '43

See also

Dyes and dyeing
Rayon printing
Textile fabrics

TEXTILE research

Comparison of an aryl sulfonate and soap for the washing in hard water of cotton, linen, spun cellulose-acetate rayon, spun regenerated-cellulose rayon, silk, and wool. V. Ester and others. *bibliog* *Am Dyestuff Rep* 32:121-2, 135-41 Mr 15 '43

Development and research in the Q. M. C. F. M. Steadman. *Am Dyestuff Rep* 32:244-7 My 24 '43

German textile research; studies of molecular structure and viscosity. *Chem Age (Lond)* 48:157 Ja 30 '43

Molecular mechanics; the new textile technology. E. R. Schwarz. *il* Rayon 24:290-2 Je '43; Same. Textile Col 65:342-4 Ag '43

Munsingwear, inc. sponsors research on insulating properties of underwear at University of Minnesota. *Heat & Ven* 39:53 N '42

Organization of textile research for war. F. S. Blanchard. *Mech Eng* 65:205-7 Mr '43
Post war textiles. J. E. Bullard. *Am Dyestuff Rep* 32:255-6 My 24 '43

Textile research and development. R. H. Pickard. Textile Inst J 34:P95-102 Je '43; Same. *Am Dyestuff Rep* 32:399-404 S 13 '43

See also

Cotton research Textile laboratories
Nylon Wool research
Rayon research

TEXTILE research institute

Annual meeting, 13th, New York, Nov. 13. Rayon 23:698 D '42; Textile Col 64:562 D '42; Textile World 92:66-8 D '42

Douglas G. Woolf joins Textile research institute. Textile World 93:121 O '43

TEXTILE research institute—Continued

- Intensive textile research program to be launched; board of directors. Rayon 24:278 Je '43; Same. Textile World 93:81 Je '43
 Plan research-education tie-up. Textile World 92:96 S '43
 R. R. West to head economic research. Textile World 93:96 S '43
 Textile foundation and Textile research institute. E. T. Pickard and J. S. Jacobs. Textile Col 65:190-3 My '43

TEXTILE samples

- Hand loom for making samples. F. W. Sterling. il diag Textile World 93:85 Jl '43

TEXTILE shearing machines

- Curtis & Marble electronic timer for shear. il Textile World 93:113 Je '43

TEXTILE soap. See Soap, Textile**TEXTILE standards**

- Methods of analysis and of reporting fiber composition of textile products. 2d ed U S Nat Bur Stand Commercial Standard C85-43:1-18; pa 10c Supt. of doc. '43; Same abbr. Rayon 24:127-8+ Mr '43; Same. Textile Col 65:221-3+ My '43
 Relation of the A.S.T.M. to the textile industry. H. J. Ball. Am Dyestuff Rep 32:419-22+ S 27 '43
 Tentative textile standard no. 1a. 1942: standard method for determining resistance to shrinkage of wool fabrics. diags Textile Inst J 33:S41-8 O '42; Same. Soc Dyers & Col J 59:19-20 Ja '43

TEXTILE terms. See Textile fabrics—Terminology; Textile industry—Terminology**TEXTILE testing**

- Identification of fiber damage; chemical and microscopic tests. W. Krauss. il Textile World 92:90-1 D '42; 93:76-7 Ja '43
 New method for quantitative determination of moth damage to textile fibers. W. J. Hamburger and K. R. Fox. il Am Dyestuff Rep 32:357-60, 373-4 Ag 16 '43
 Report of committee on fastness to dry cleaning. C. A. Seibert. Am Dyestuff Rep 32:362-5 Ag 16 '43
 Resistance of textiles to micro-organisms. Can Chem & Process Ind 27:480+ Ag '43
 Textile testing in the war effort. F. T. Mosedale. Textile Col 65:33+ Ja '43
 Use of effective gage length in elongation measurement. W. J. Hamburger and E. R. Kaswell. il diag Rayon 24:579-84 N '43

See also

- Textile fabrics— Textile testing machines
 Testing chins

TEXTILE testing machines

- Autographic load-elongation apparatus for fibers. A. M. Sookne and H. A. Rutherford. bibliog pls diags J Research Nat Bur Stand 31:25-31 Jl '43; Same. Rayon 24:342-3, 414-15 Jl-Ag '43; Abstract. Electronics 16:192+ O '43
 Calibration of inclined plane constant load rate strength testers. H. R. Mauersberger. Rayon 23:709-10 D '42
 Cloth strength testing; experimental investigation of inertia error in a constant rate of traverse pendulum type cloth tester; with a mathematical appendix. A. W. Bayes. diags Textile Inst J 33:S53-62 O '42
 Kinematic errors in inclined plane testers and methods for eliminating them. S. L. Gerhard. diags Rayon 24:237-9; Discussion. 239-40 My '43
 New design of cloth wearing tester. J. G. Martindale. diag 2pls Textile Inst J 33: T151-8 S '42; Abstract. Textile Col 65:147 Ap '43
 Tentative textile standard no. 7. 1942: specification for a Bundesmann type water-repency testing machine. diags Textile Inst J 33:S50-2 O '42; Same. Soc Dyers & Col J 59:43-4 F '43
 Wear testing of carpets. H. F. Schiefer. pls J Research Nat Bur Stand 29:333-79 N '42
- TEXTILE workers**
 Absenteeism. A. W. Williams and others. il Textile World 93:74-9 Ap '43
 Conserving physical efforts of inexperienced textile mill workers. E. A. Dench. Rayon 24:424 Ag '43
 Cotton and woolen mills feel labor shortage. Barron's 23:12 F 8 '43

- Employee-morale boosters. il Textile World 93:66-7 My; 84-5 Je; 80-1 Ag; 88-9 S '43
 Employment of women in the textile industry to replace men who have entered the armed services; Rhode Island section forum. Am Dyestuff Rep 32:78-84 F 15 '43
 48-hour and work-or-fight orders: textile status clarified. Textile World 93:59 Mr '43
 Handbook for employees. il Textile World 93:91-102 F '43
 Help wanted; female. Textile World 93:55 Ja '43
 Human relations in the mill; safety, employee training, and absentee problems discussed by Eastern Carolina division of the Southern textile association. Textile World 92: 117 D '42
 Is textile work a strain on the eyes? W. Schweisheimer. Rayon 24:549 O '43
 Life story of a textile worker. E. Tooley. il Textile World 92:86-7 D '42
 Making a transportation survey to assist employees in securing rides. L. S. Flint. il Textile World 93:75 Mr '43
 Manpower moves help in textiles. Textile World 93:65 My '43
 New employees trained quickly; WMC training within industry program. T. O. Ott, jr. il Textile World 92:72-3 D '42
 100,000 women needed in 1943 to replace men in textile mills. Textile World 93:63 Mr '43
 Recruitment and training for the textile industry. H. G. Greg. Textile Inst J 34: P64-6 Mr '43
 Recruitment, selection and training for the textile industry. Textile Inst J 33:P119-23 D '42
 Streamlined training; WMC's job instructor training program. Textile World 93:63 Jl '43
 Training new employees quickly. Textile World 93:59-62 Jl '43
 Walsh-Healey act covers most mills. W. B. Smith. Textile World 92:69 D '42
- See also
 Cotton mills—Em- Hosiery mills—Em-
 ployees ployees
- TEXTILE world (periodical)**
 Edwin D. Powle becomes editor of Textile world. Textile World 93:64 O '43
- TEXTOLITE**
 Molded dairy equipment. il Mod Plastics 21: 80 S '43
- TEXTONE**
 Reducing time of vat dyeing with textone. A. L. Dubeau, E. G. Ferich and G. F. Vincent. Am Dyestuff Rep 32:175-6 Ap 12 '43; Abstract. Textile World 93:90 Je '43
- THAILAND (Siam)**
 Japan's new gifts to Thailand. J. R. Andrus. il map For Comm W 12:3-9+ S 4 '43
 Thailand. K. P. Landon. Ann Am Acad 226: 112-19 Mr '43
- THALLIUM**
 Fluorescence and phosphorescence of thallium-activated potassium-halide phosphors. P. Pringsheim. bibliog il Rs Mod Phys 14: 132-8 Ap-Jl '42
- THALLIUM chlorides**
 Activity coefficients of thallous chloride in ethylene glycol-water solutions determined by e.m.f. and solubility data at 25°. O. D. Black and A. B. Garrett. bibliog Am Chem Soc J 65:862-5 My '43
 Direct thallation of dibenzofuran. H. Gilman and R. K. Abbott, jr. bibliog Am Chem Soc J 65:122-3 Ja '43
- THALLIUM compounds**
 Effect of gelatin on the solubility of thallous salts at 40°C. W. G. Eversole and F. S. Thomas. J Phys Chem 47:421-4 Je '43
 Thallous salts as derivatives of sulfonic acids. H. Gilman and R. K. Abbott, jr. Am Chem Soc J 65:123-4 Ja '43
- THALLIUM iodide**
 Spot reaction experiments; protective layer effect of thallium iodide and lead iodide on underlying sulfides. F. Feigl. J Chem Educ 20:299 Je '43
- THANKSGIVING day**
 President leads Thanksgiving services. Comm & Fin Chr 156:1983 D 3 '42

THAWING

Influence of sands, cements, and manipulation upon the resistance of concrete to freezing and thawing. W. C. Hansen. *Am Concrete Inst J* 14:105-23 N '42; Discussion. 14:sup124-124³ Je '43

THAWING, Electric

Application of electric snow melters to street railway track switches. R. C. Sutton. *il Mass Transportation* 33:76-7 F '43
Thawing ice on distributing lines. C. G. Darrah. *diag Elec W* 119:974 Mr 20 '43

THAYNES formation

Thaynes formation, Bear Lake valley, Idaho. B. Kummel, jr. *bibliog diag map Am J Sci* 241:316-32 My '43

THEATER

Great Britain

See also Moving picture industry—Great Britain

THEATERS

See also
Auditoriums Radio broadcasting studios
Moving picture theaters

Fires and fire protection

Theater critic flays cretin minds. B. Rascoe. *Weekly Underw* 148:640-1 Mr 20 '43

THEFT

See also
Embezzlement Tires, Automobile—
Insurance, Burglary Theft
Insurance, Theft

THEFT insurance. See Insurance, Theft

THERAPEUTIC research, Merck institute for. See Merck institute for therapeutic research

THERAPEUTICS

Research and therapeutics. A. E. Smith. *Science* 98:161-4 Ag 20 '43

See also
Chemotherapy Salt—Therapeutic
Cold—Therapeutic use
Medicine Serumtherapy
Radiotherapy X rays—Therapeutic use

THERMAL expansion. See Expansion (heat)

THERMIONIC emission. See Electrons—Thermionic emission

THERMIONIC valves. See Vacuum tubes

THERMIT welding. See Welding—Thermit process

THERMOCHEMISTRY

Chemistry at 1600. J. Chipman. *Am Soc for Metals Trans* 30:817-54 D '42; Excerpts. *Iron Age* 150:53-5 O 22 '42

Heat capacity and entropy, heats of transition, fusion and vaporization and the vapor pressures of cyclohexane; the vibrational frequencies of alicyclic ring systems. J. G. Aston, G. J. Szasz and H. L. Fink. *bibliog Am Chem Soc J* 65:1135-9 Je '43

Heats of formation of manganomanganic oxide and manganese dioxide. C. H. Shomate. *bibliog Am Chem Soc J* 65:785-90 My '43

Heats of formation of MgO , $MgCl_2$, $MgCl_2 \cdot H_2O$, $MgCl_2 \cdot 2H_2O$, $MgCl_2 \cdot 4H_2O$, and $MgCl_2 \cdot 6H_2O$. C. H. Shomate and E. H. Huffman. *Am Chem Soc J* 65:1625-9 Ag '43

Heats of organic reactions; the digestion of β -lactoglobulin by pepsin. G. Haugaard and R. M. Roberts. *Am Chem Soc J* 64:2664-71 N '42

New thermoanalytical methods. D. Kaplan. *Chem & Ind* 61:431-2 O 24 '42; Same. *Can Chem & Process Ind* 27:39-40 Ja '43

Quantitative determination of benzene in the presence of cyclohexane. R. L. Bishop and E. L. Wallace. *il diag Ind & Eng Chem Anal ed* 15:563-5 S 15 '43

Thermal analysis of liquefied gases. H. S. Booth and D. R. Martin. *diag Chem R* 33:57-88 *bibliog*(p87-8) O '43

Thermal data; the heat capacity, entropy, and free energy of formation of cyclohexane; a new method of heat transfer in low temperature calorimetry. R. A. Ruehrwein and H. M. Huffman. *bibliog diag Am Chem Soc J* 65:1620-5 Ag '43

See also

Adsorption, Heat of Melting points
Boiling points Paper, Effect of temperature on
Combustion Solution, Heat of
Combustion, Heat of Specific heat
Dilution, Heat of Thermodynamics
Dissociation Vapor pressure
Distillation Vaporization, Heat of
Entropy
Evaporation of
Freezing points

Study and teaching

Simplified calorimetric studies of various types. D. B. Pattison, J. G. Miller and W. W. Lucasse. *bibliog J Chem Educ* 20:319-26 J1 '43

THERMOCOUPLES

Automatic kiln draft control with thermocouple as primary element. O. J. Parrett. *diag Instruments* 16:4 Ja '43

Calibration of the platinum/13 per-cent.-rhodium-platinum thermocouples over the liquid-steel temperature range. C. R. Barber. *Engineering* 155:187-8, 205 Mr 5-12 '43; Abstract. *Metal Prog* 43:598-4 Ap '43

Constant heating rate control by the thermocouple-rectifier bias principle. R. J. Smith. *diag Metal Prog* 44:513-16 O '43

Cylinder temperatures; accurate readings by means of thermocouple sparking plugs. *diag Automobile Eng* 33:228 Je '43

Infra-red tunnel temperature measurements. D. E. Andersen. *il Instruments* 16:28 Ja '43
Measurement of high temperatures in high-velocity gas streams. W. J. King. *bibliog diag A S M E Trans* 65:421-8; Discussion. 428-31 J1 '43

Protecting thermocouple of r-f. ammeter during overhaul. R. H. Burt. *diag Instruments* 16:124-5 Mr '43

Quick immersion technique for molten steel temperatures. J. H. G. Monypenny. *Metal Prog* 43:67-8 Ja '43

Recent work with the quick-immersion thermocouple in the steelworks of Sheffield. F. H. Schofield. *diag Iron & Steel Inst J* 145:222-34, pl 23-4; Discussion. 260-77 no 1 '42

Thermocouples; calibrating thermocouples at fixed points with tin, lead, and aluminum freezing-point furnaces. H. B. Lancaster and A. W. Brunot. *il diag Gen Elec R* 45:649-52 N '42

THERMODYNAMICS

American standard symbols for heat and thermodynamics. S. A. Moss. *Mech Eng* 65:69-70 S '43; Excerpts. *Chem & Eng N* 21:2035-6 D 10 '43

Cerium amalgam electrode and the thermodynamics of aqueous cerium(III) sulfate solutions. G. C. Walters and T. De Vries. *bibliog Am Chem Soc J* 65:119-22 Ja '43

Chemistry at 1600. J. Chipman. *Am Soc for Metals Trans* 30:817-54 D '42; Excerpts. *Iron Age* 150:53-5 O 22 '42

Dielectric dispersion and absorption of water and some organic liquids. W. P. Conner and C. F. Smyth. *bibliog diag Am Chem Soc J* 65:382-9 Mr '43

Empirical equation for thermodynamic properties of light hydrocarbons and their mixtures; mixtures of methane, ethane, propane, and n-butane. M. Benedict, G. B. Webb and L. C. Rubin. *bibliog J Chem Phys* 10:747-58 D '42

Frequency spectrum of crystalline solids. E. W. Montroll. *J Chem Phys* 10:218-29; 11:481-95 Ap '42, O '43

Gas compression and expansion. G. M. Stearns. *Oil & Gas J* 41:69 Mr 11 '43

Heat capacity and entropy, heats of transition, fusion and vaporization and the vapor pressures of cyclopentane; evidence for a non-planar structure. J. G. Aston, H. L. Fink and S. C. Schumann. *Am Chem Soc J* 65:341-6 Mr '43

Heat content of manganese dioxide and carbonate at high temperatures. G. E. Moore. *bibliog Am Chem Soc J* 65:1398-9 J1 '43

THERMODYNAMICS—Continued

Interior of the earth viewed in relation to earthquake causes; what we learn from thermodynamics. J. Lynch. *J Ap Phys* 14: 134-6 Mr '43

Isopiestic measurements in dilute solutions; the system potassium chloride-sodium chloride at 25° at concentrations from 0.03 to 0.10 molal. A. R. Gordon. bibliog diag *Am Chem Soc J* 65:221-4 F '43

Kinetic theory of rubber. F. C. Auluck and D. S. Kothari. *J Chem Phys* 11:387-92 Ag '43

Properties of rubber solutions and gels. M. L. Huggins. bibliog *Ind & Eng Chem* 35: 216-20 F '43

Raman effect; thermodynamic properties. G. Glockler. *Rs Mod Phys* 15:138-45 Ap '43

Second law of thermodynamics. E. M. Fernald. *J Eng Educ* 33:214-16 N '42

Steel carburization and decarburization, a theoretical analysis. J. K. Stanley. *Iron Age* 151:31-5 Ja 21; 36-9 Ja 28; 49-55 bibliog(p54-5) F 4 '43

Symmetry of certain thermodynamic relations. J. W. Creely, G. C. Le Compte and W. W. Lucasse. *Franklin Inst J* 235:617-22 Je '43

Theory of stress due to collapse of vapour bubbles in a liquid. R. S. Silver. *Engineering* 154:501-2 D 25 '42

Thermodynamic considerations in the corrosion of metals. J. C. Warner. bibliog *Electrochem Soc Trans* 83 (preprint 5):67-80 Ap '43

Thermodynamic properties of air at low temperatures. V. C. Williams. bibliog *Am Inst Chem Eng Trans* 39:93-111 F '43; Discussion. 39:433-8 bibliog(p435, 437) Ag '43

Thermodynamic properties of propane. W. V. Stearns and E. J. George. bibliog *Ind & Eng Chem* 35:602-7 My '43; Same. *Pet Eng* (Ref annual) 14:262-3+ J1 1 '43

Thermodynamics and molecular structure of benzene and its methyl derivatives. K. S. Pitzer and D. W. Scott. bibliog *diag Am Chem Soc J* 65:803-29 My '43

Thermodynamics of aqueous solution of potassium bromide at 25° from e.m.f. measurements on cells with transference. E. A. MacWilliam and A. R. Gordon. bibliog *Am Chem Soc J* 65:984-5 My '43

Thermodynamics of aqueous solutions of sodium chloride at temperatures from 15-45° from e.m.f. measurements on cells with transference. G. J. Janz and A. R. Gordon. bibliog *Am Chem Soc J* 65:218-21 F '43

Thermodynamics of styrene (phenylethylene), including equilibrium of formation from ethylbenzene. L. Guttman, E. F. Westrum, Jr. and K. S. Pitzer. *Am Chem Soc J* 65: 1246 Je '43

Thermodynamics of the liquid state; generalized prediction of properties. K. M. Watson. bibliog *Ind & Eng Chem* 35:398-406 Ap '43

Volume of mixing and the thermodynamic functions of benzene-carbon tetrachloride mixture. S. E. Wood and J. P. Brusie. bibliog *diags Am Chem Soc J* 65:1891-5 O '43

See also

Adsorption, Heat of

Entropy

Equation of state

Evaporation

Free energy

Gas and oil engines—

Combustion re-

search

Gas flow

Refrigeration and

refrigerating ma-

chinery

Specific heat

Steam

Vapor pressure

Study and teaching

Presentation of the thermodynamic functions in beginning physical chemistry. S. E. Wood. *J Chem Educ* 20:80-1 F '43

THERMOELASTICITY. See Elasticity**THERMOELECTRICITY**

Thermoelectric tester for checking the composition of metals. B. A. Rogers and others. pls U S Bur Mines Rep of Invest 3690:1-6 '43

Thermoelectromotive force. K. F. Herzfeld. *Phys R* 64:37-8 J1 1 '43

See also

Thermocouples

THERMOID company

Securities offered. *Comm & Fin Chr* 158:1772-3 N 1 '43

THERMOLUMINESCENCE. See Luminescence**THERMOMETERS and thermometry**

Cylinder walls; a method of recording rapidly changing temperatures; abstract. H.

Pfriem. *Automobile Eng* 33:125 Mr '43

Miniature steel mill aids Uncle Sam; makes Kovar for thermometers to measure heat in airplane engines and wings. *Steel* 112:84 Mr 29 '43

Navy-type thermometer. *il Mod Plastics* 20: 70 My '43

Pitfalls of temperature measurement. C. O.

Fairchild. *Instruments* 15:498-9+ D '42

Precalibration filling of remote-reading thermometer systems. P. S. White. *Instruments* 16:197 Ap '43

Stem lag of industrial thermometers. B. Noyes. bibliog *diags Instruments* 15:449-52, 454+ N '42

See also

Calorimeters and

calorimetry

Pyrometers and

pyrometry

Temperature—Meas-

urement

Standards

War-time specifications for I.P. thermometers. *diag Inst Pet J* 29:insert 1-11 S '43

Testing

Electric thermometer tester. J. G. Nycholt. *diags Instruments* 16:356 Je '43

Tester for ratio type dual and single thermometer. P. S. White. *diags Instruments* 16:271 My '43

Thermometer installation tester. M. J. Wiggins. *diags Instruments* 16:354 Je '43

THERMOPILES

Thermopile for tests of heating equipment. L. W. Winbolt. *diags Instruments* 16:3-4 Ja '43

See also

Thermocouples

THERMOREGULATOR. See Temperature regulators**THERMOS bottles**

Vacuum or thermos bottles. *diag Consumers' Research Bul* 11:11-12 F '43

THERMOSTATS

Controls plugged; Minneapolis-Honeywell stages contest for personalized heating. *Business Week* p71-2 S 18 '43

Special metals in the electrical industry. F. R. Hensel and J. W. Wiggs. *il Elec Eng* 62:297-8, 299 J1 '43

Thermostat control for triple-rated transformers. H. A. Morgan. *il diags Power Pl Eng* 47:72-3 N '43

Thermostatic control system. J. G. Roof. *diags Electronics* 16:166+ O '43

See also

Temperature—Regu-

lation

THESES. See Dissertations, Academic**THIALKENE**

Radiosulfur tracer study of sulfurized lubrication addition agents. G. L. Clark, S. G. Gallo and B. H. Lincoln. bibliog *diags J Ap Phys* 14:428-34 Ag '43

THIAMINE. See Vitamins—Vitamin B₁**THIANTHRENE**

Metalation of thianthrene and dibenzo-p-dioxin. H. Gilman and C. G. Stuckwisch. bibliog *Am Chem Soc J* 65:1461-4 Ag '43

THIAZINE

Red cell degeneration caused by thiazines and related compounds; abstract. C. Siebenmann. *Can Chem & Process Ind* 27:220 Ap '43

THIAZINOCYANINES

Thiazinocyanines; cyanines containing the dihydro-1:3-thiazine nucleus. F. M. Hamer and R. J. Rathbone. *Chem Soc J* p243-9 My '43

THIAZOLES

Conversion of 2-phenyl-4-chloromethylthiazole to 2-phenyl-4-hydroxymethyl-5-chlorothiazole. E. H. Huntress and K. Pfister. *3d. Am Chem Soc J* 65:1667-70 S '43

THIAZOLES—Continued

Researches on thiazoles; a thiazole analog of hydnocarpic acid. F. Brody and M. T. Bogert. *bibliog Am Chem Soc J* 65:1080-2 Je '43

Researches on thiazoles; some acyl derivatives of 2-aminothiazole. E. J. Masters and M. T. Bogert. *Am Chem Soc J* 64:2712-13 N '42

Researches on thiazoles; some new thiazolidinopyrimidines of barbituric acid type. E. J. Masters and M. T. Bogert. *flow sheet bibliog Am Chem Soc J* 64:2709-12 N '42

Thiazoles and their uses in industry and medicine. R. F. Hunter. *Chem & Ind* 62: 118-21 Mr 27 '43

See also

Sulfathiazole

THIAZOLIDINOPYRIMIDINE

Researches on thiazoles; some new thiazolidinopyrimidines of barbituric acid type. E. J. Masters and M. T. Bogert. *flow sheet bibliog Am Chem Soc J* 64:2709-12 N '42

THIAZOLINE

Sulfanilamide compounds; thiazoline derivatives. J. H. Hunter and H. G. Kolloff. *bibliog Am Chem Soc J* 65:156-9 F '43

THICKENERS

Dorr Torq recorder to provide an accurate continuous record of thickener operation. *diag Paper Tr J* 117:18 J1 8 '43

See also

Concentrators

THINNERS. See Paint materials; Varnish and varnishing

THIOAMIDES

Reaction between thioamides and primary amines. M. J. Schlatter. *bibliog Am Chem Soc J* 64:2722 N '42

THIOBARBITURATES

Direct replacement of oxygen in hydantoins and barbiturates by sulfur. H. R. Henze and P. E. Smith. *bibliog Am Chem Soc J* 65:1090-2 Je '43

THIOBENZOPHENONE

Photo-reactions; photo-oxidation of non-ionisable thioketones in sunlight. A. Schönberg and A. Mostafa. *Chem Soc J* p275-6 Je '43

THIOBISMOL

Bismuth and recovery from malaria; abstract. M. D. Young, S. B. McLendon and R. G. Smarr. *Science* 97:sup8-9 Je 25 '43

THIOCARBIMIDE. See Thiourea

THIOCARBINE

Photographically interesting fine chemicals as specific spot test reagents. A. Steigmann. *Soc Chem Ind J* 62:42-3 Mr '43

THIOCHROME

Determination of thiamine in bread by the thiochrome method; a comparison of phosphatase-containing enzyme preparations. D. F. Clausen and R. E. Brown. *bibliog Ind & Eng Chem Anal* ed 15:100-1 F 15 '43

Determination of vitamin B₁ (thiamine) in extracts and concentrates; comparison of biological and chemical methods. R. A. Brown and others. *bibliog Ind & Eng Chem Anal* ed 15:494-5 Ag 15 '43

THIOCYANATES

Analytical reactions involving ignition with manganous nitrate. M. J. Preising, O. F. Slonek and J. H. Reedy. *bibliog Ind & Eng Chem Anal* ed 14:875-7 N 15 '42

Some of the recent developments in the field of thiocyanates. J. H. Clayton and E. Bann. *bibliog Chem & Ind* 61:420-2 O 17 '42; Abstract. *Textile Col* 65:50-1 F '43

Thiocyanate compounds for pea aphid control. H. F. Wilson and E. J. Campau. *bibliog Soap & San Chem* 19:105, 107+ F '43

Toxicity of two organic thiocyanate insecticides. R. J. Main and H. B. Haag. *Ind Med* 11:531-3 N '42

Analysis

Toxicology of acrylonitrile (vinyl cyanide); determination of thiocyanates in blood and urine. A. H. Lawton, T. R. Sweeney and H. C. Dudley. *bibliog J Ind Hygiene* 25:13-19 Ja '43

THIOCYANOGEN

Component glycerides of linseed oil; segregation by chromatography; the thiocyanogen value of linolenic acid. F. T. Walker and M. R. Mills. *bibliog Soc Chem Ind J* 62: 108-9 J1 '43

Thiocyanogen absorption of linoleic and linolenic acids and composition of linseed oils. E. P. Painter and L. L. Nesbitt. *bibliog Ind & Eng Chem Anal* ed 15:123-8 F 15 '43

THIODIPHENYLAMINE. See Phenothiazine

THIOETHERS. See Sulfides

THIOETHYLAMINES

Several alkyl- β -thioethylamines and the corresponding ureas, sulfoxides and sulfones. K. W. Brighton and E. E. Reid. *Am Chem Soc J* 65:458-9 Mr '43

THIOFURAN. See Thiophene

THIOGERMANIC acid

Preparation and properties of potassium thiogermanate and thiogermanic acid. H. H. Willard and C. W. Zuehlke. *Am Chem Soc J* 65:1887-9 O '43

THIOGLYCOL

Monothiolglycol; reagent for protein investigations. H. S. Olcott. *Science* 96:454 N 13 '42

THIOGLYCOLIC acid. See Mercaptoacetic acid

THIOHYDANTOINS

Direct replacement of oxygen in hydantoins and barbiturates by sulfur. H. R. Henze and P. E. Smith. *bibliog Am Chem Soc J* 65:1090-2 Je '43

THIOKOL

Blends of Thiokol FA with neoprene GN, Hycar OR-15, and Perbunan 26. S. M. Martin, Jr. and A. E. Laurence. *Ind & Eng Chem* 35:986-91 S '43

Concrete tanks leak-proofed for gasoline storage with synthetic rubber latex. F. R. Stones, Jr. *Il Nat Pet N* 35 pt 2:R446-7 O 6 '43

Ethyl converts plants to make thiokol ingredient. *Il Nat Pet N* 34:16 D 23 '42

Lining fuel storage tanks with synthetic rubber sheet. J. W. Crosby. *Il Rubber Age* 53:240-1 Je '43

Preparation of Thiokol; a lecture demonstration. E. M. Baker. *J Chem Educ* 20:427 S '43

Sheet linings of synthetic rubber for concrete gasoline tanks. *Il Nat Pet N* 35 pt 2: R200, R202 My 5 '43; Same. *Aero Digest* 42:266, 269 Je '43; Same, with additional *Il Chem & Eng N* 21:580, 582-3 Ap 25 '43

Synthetic rubber fuel storage tanks, collapsible and portable for advanced bases. *Il Aero Digest* 43:212+ J1 '43

Synthetic rubber type GR-P; Rubber reserve co. circular. *India Rubber W* 108:173-4 My '43

Thiokol. B. Longstreth. *Il Chem & Eng N* 20:1362 N 10 '42

Thiokol-lined underground tanks. *Il Chem Ind* 53:528 O '43

Thiokol manufacture in Canada. W. H. Pitcher. *Il Can Chem & Process Ind* 27:497-9+ S '43

Thiokol, rapidly developed commercial synthetic rubber. J. W. Crosby. *Il Pet Eng* 14:96, 98, 100 Je '43

Thiokol TP-90; a low temperature plasticizer. *Rubber Age* 53:34 Ap '43

Thiokol's retreat; doomed by process odor and availability of reclaim rubber. *Business Week* p26+ My 1 '43

THIOKOL corporation

Fixes price of stock. *Comm & Fin Chr* 157: 903 Mr 8 '43

THIOLS

See also

Mercaptans

THIONYL chloride

Behavior of phosphoryl chloride, thionyl chloride and sulfurlyl chloride toward boron halides. A. E. Burg and M. K. Ross. *Am Chem Soc J* 65:1637-8 Ag '43

Cleavage of the ethylene linkage by the action of thionyl chloride. A. Schönberg and W. Asker. *Chem Soc J* p725 N '42

THIONYL chloride—Continued

Saponins and sapogenins; some color reactions of triterpenoid sapogenins. C. R. Noller and others. *Am Chem Soc J* 64: 3047-9 D '42

THIOPENOL. See Benzenethiol**THIOPHENE**

Hydrogenation of some sulphur compounds. C. M. Cawley and C. C. Hall. *bibliog Soc Chem Ind J* 62:116-19 Ag '43

THIOPHOSPHORYL bromide

Fluorination of thiophosphoryl bromide; the thiophosphoryl bromofluorides. H. S. Booth and C. A. Seabright. *bibliog Am Chem Soc J* 65:1834-5 O '43

THIOSEMICARBAZIDES

Some allyl nitrophenyl thiosemicarbazides and their analytical properties. A. W. Scott and J. T. Andrews. *Am Chem Soc J* 64: 2873-4 D '42

THIOSULFATES

Disappearance of thiosulfate in solutions of maleic acid; catalysis of *cis-trans* isomerization. H. Taube. *bibliog Am Chem Soc J* 65:526-31 Ap '43

Electrolytic oxidation of thiosulfate in ethylene glycol solution. S. Glasstone, V. V. Barr and B. O. Heston. *bibliog Electrochem Soc Trans* 84 (preprint 10):79-86 O '43

See also

Ammonium thiosulfate

Sodium thiosulfate

THIOURACIL

Thiouracil in the treatment of thyrotoxicosis. R. H. Williams and G. W. Bissell. *bibliog Science* 98:166-8 Ag 13 '43

THIOUREA

Optical crystallographic studies with the polarizing microscope; axial dispersion with change of sign; other dispersion measurements. W. M. D. Bryant. *bibliog Am Chem Soc J* 65:96-102 Ja '43

Preparation of thiourea from HCN. *Can Chem & Process Ind* 27:374 Je '43

See also

Ethylene thiourea

THIOURETHANS

Sulfur studies; alkyl esters of phenylthiocarbamic acid. R. W. Bost and E. R. Andrews. *Am Chem Soc J* 65:900-1 My '43

THIRD avenue transit corporation

Status of bonds. W. Andrews. *Barron's* 23:15 My 3 '43

THIRD International. See International, Third**THIXOTROPY**

Analysis of the thixotropy of pigment-vehicle suspensions; basic principles of the hysteresis loop. H. Green and R. N. Weltmann. *bibliog Ind & Eng Chem Anal* ed 15: 201-6 Mr 15 '43

Breakdown of thixotropic structure as function of time. R. N. Weltmann. *bibliog J Ap Phys* 14:343-50 Jl '43

Reversible aggregations of colloidal particles; isothermal reversible sol syneresis. W. Heller. *bibliog J Phys Chem* 46:783-93 O '42

Thixotropic behavior of oils. R. N. Weltmann. *bibliog Ind & Eng Chem Anal* ed 15:424-9 Jl 15 '43

THOMAJAN, Zareh. See Zareh, incorporated**THOMPSON, Clyde Lowry, 1903-**

Sketch. *por bibliog Am Cer Soc Bul* 22:321 S 15 '43

THOMPSON, James S. 1887-

S.P.E.E. elects a new treasurer. *por J Eng Educ* 33:209-10 N '42

THOMPSON products, inc.

Another look. *Mag of Wall St* 72:478 Ag 7 '43

New financing in prospect. *Comm & Fin Chr* 158:1676 O 25 '43

Re-appraisal of companies in the news. *Mag of Wall St* 72:34-5 Ap 17 '43

Ten years' progress in airplane valves and fuel devices. A. T. Colwell. *il Aeronautical Eng R* 1:153 N '42

THOMSON, Elihu, 1853-1937

Elihu Thomson, in retrospect. E. D. Wallace. *Franklin Inst J* 235:479-81 My '43

First voyage; temporary orphanhood from formal education. D. O. Woodbury. *il Tech R* 45:489-90+ Jl '43

THOMSON, Sir Joseph John, 1856-1940

Biography of J. J. Thomson; reviewed by J. D. Cockcroft. *por Elec R (Lond)* 132:417-18 Mr 26 '43

THORIUM

Colorimetric determination of fluoride in natural waters with thorium and alizarin. N. A. Talvite. *bibliog Ind & Eng Chem Anal* ed 15:620-1 O 15 '43

Discovery of thorium in the sun. *Science* 97: sup10 F 26 '43

Effect of thorium on cast iron. W. Baukloh and H. Meierling. *Iron Age* 150:41 D 31 '42

Helium age measurement; preliminary magnetite index. P. M. Hurley and C. Goodman. *bibliog Geol Soc Bul* 54:305-23 Mr '43

Monazite; extraction of thorium and cerium. L. Sanderson. *Can Chem & Process Ind* 27:451-2 Ag '43; Same. *Can Min J* 64:208-9 Ap '43

Monazite sand. L. G. Houk. *U S Bur Mines Information Circ* 7233:1-19 '43

THOUGHT and thinking

Some reflections, statistical and other, on a non-material universe. A. J. Lotka. *Am Stat Assn J* 38:1-15 Mr '43

THREAD

Rating

Sewing thread, a small but important item for successful home sewing. *il Consumers' Research Bul* 11:25-7 N '42

THREAD cutting

Basic thread dimensions and tap drill sizes; table. *Am Mach* 87:110 Ap 15 '43

Chaser tool speeds duplicate threading. S. H. Easterday. *diags Am Mach* 87:104 Jl 8 '43

Clean-cut threads make tight, long-lived joints. F. W. Swain and E. W. Feller. *il diags Power* 86:855-7 D '42

Cutting left-hand threads accurately. E. N. Olson. *Am Mach* 87:103-4 Mr 18 '43

Getting the most out of die chasers. C. A. Reimschuessel. *il diags Am Mach* 87:83-5 Mr 18 '43

How to run an engine lathe. *il diags Am Mach* 87:113-28 Jl 8 '43

Lathe set-up for threading leadscrew nuts. A. Silvester. *diag Am Mach* 87:90 Ja 7 '43

Multiple threads cut with the compound. J. H. Codd. *diags Am Mach* 87:96 Ap 29 '43

Radius improves threading operations. G. C. Masters. *Am Mach* 87:91 Ag 5 '43

Spring chuck speeds milling of threads. A. George. *diags Am Mach* 87:112 O 14 '43

See also

Screw threads

Taps

THREAD rolling

National hydraulic precision thread rolling machine. *il Am Mach* 87:134 Jl 8 '43

Watson-Flagg precision thread rolling machine. *il Am Mach* 87:126 S 2 '43; *Mach* 50:182+ S '43

THREADING machines

Bakewell vertical tapping and threading machines. *il Am Mach* 87:122 Mr 4 '43

Morey thread-milling machine equipped to handle propeller hubs. *il Mach* 49:180 Mr '43

Precision grinders; Wickman-Horstmann thread-grinding machines. *il Automobile Eng* 33:317-20 Ag '43

Sheffield precision thread grinder. *il Automotive & Aviation Ind* 89:42 S 1 '43; *Mach* 50:182 S '43

Waltham thread-milling machine. *il Engineering* 155:475 Je 11 '43

Wickman-Horstman no. 2 thread-grinding machine; new machine designed for repetition production. *il Automobile Eng* 32:533-4 D '42

Wickman-Horstman thread-grinding machine. *il Engineering* 154:427 N 27 '42

THRIFT. See Saving**THROMBIN**

Use of thrombin to stop bleeding. B. Kudryashov. *Science* 96:sup 10 N 27 '42

THROMBOSIS

Coronary thrombosis; certain medicolegal aspects. F. A. Willius. *Ind Med* 11:513-14 N '42

THRUST bearings

Through trouble to improvement; thrust bearings. H. L. Guy. diags *Inst Mech Eng J & Proc* 147:Proc 220-3 O '42

THRUST faults. See **Faults** (geology)**THRUSTORS**

Electro-hydraulic thruster. *il diags Mech Handling* 29:212-14 N '42

THUNDERSTORMS

Meteorological characteristics of thunderstorms. G. N. Brancato. *il diags Aviation* 41:101-3+ O; 101-3, 331-2+ N '42

Thunderstorm characteristics and flight procedures. J. A. Browne. diags *Aeronautical Eng R* 1:5+ D '42

See also

Lightning**THYRATRON**

Applications of electronics to physiology. W. E. Gilson. bibliog diags *Electronics* 16:86-9+ Ja '43

Deionization considerations in a harmonic generator employing a gas-tube switch. W. G. Shepherd. diags *Inst Radio Eng Proc* 31:66-74 F '43

Direct-current amplifier and its application to industrial measurements and control. D. C. Gall. *il diags Inst E E J* 89 pt 2:434-43; Discussion. 443-6 O '42; Abstract. *Electrician* 128:249-51 Mr 20 '42

Electronic control of d-c motors. E. E. Moyer. diags *Electronics* 16:119-25 Je; 118-22 Jl; 133-8+ S; 128-33+ O '43

Electronic motor control has excellent characteristics for new machine-tool drive. S. D. Fendley. *il diags Steel* 112:100, 103-4+ My 24 '43

Electronic tubes power adjustable-speed drives. *il diag Power* 87:462-3 Jl '43

Experimental details for a precision high temperature control utilizing the Hull circuit. C. E. Waring and G. Robison. *il diags R Sci Instr* 14:143-6 My '43; Abstract. *Electronics* 16:202+ Jl '43

Improved current integrator. J. M. Blair. bibliog diag *R Sci Instr* 14:64-7 Mr '43

New electronic variable-speed drive; Thyatron. S. D. Fendley. *il diags Power Pl Eng* 47:64-8 F '43; Same. Paper Tr J 116:33-7 F 11 '43; Same. Gen Elec R 46:225-30 Ap '43; Same cond. *Radio N* 29:11-13+ My '43; Same cond. *Iron Age* 151:53-61 Mr 18 '43; Excerpts. *Automotive & Aviation Ind* 88:32-3+ Mr 1 '43; Concrete (mill sec) 51:139-40 Mr '43; Power 87:178-9+ Mr '43

New servant for textile mills; electronic equipment. A. P. Mansfield. *il Textile World* 93:67 Mr '43

Operation of a thyatron as a rectifier. L. A. Ware. diags *Inst Radio Eng Proc* 30:500-2 N '42

Speed control of a-c motors with thytrons. *il diag Electronics* 16:314 Je '43

Thyatron motor control. E. E. Moyer and H. L. Palmer. diags *Elec Eng* 62:Trans 706-12 N '43

Thyatron thermal relay. D. Rittenberg and I. Sucher. diag *R Sci Instr* 14:51 F '43

Thyatron tube tester. V. P. McKinney. diag *Electronics* 16:128+ Jl '43

Thyatron tube tester. W. D. Stewart. *il diag Radio N* 29:20-1 Mr '43

THYROID gland**Diseases**

Thiouracil in the treatment of thyrotoxicosis. R. H. Williams and G. W. Bissell. bibliog *Science* 98:156-8 Ag 13 '43

THYROTOXICOSIS. See **Thyroid gland—Diseases****TIBET**

See also

Lakes—Tibet

TICKS

Anticicola new genus, amblyomma gertschii new species, and notes on ixodes spinipalpis (acarina: ixodoidea). R. A. Cooley and G. M. Kohls. diags *Pub Health Rep* 57:1733-6, pl 1 N 13 '42

Ixodes baergi, a new species of tick from Arkansas (acarina: ixodoidea). R. A. Cooley and G. M. Kohls. diags *Pub Health Rep* 57:1869-72, pl 1-2 D 4 '42

Rickettsioses in India. N. H. Topping, R. Heilig and V. R. Naidu. bibliog *Pub Health Rep* 58:1208-10 Ag 6 '43

Rocky Mountain spotted fever; spontaneous infection in the tick amblyomma americanum. R. R. Parker, G. M. Kohls and E. A. Steinhilber. bibliog *Pub Health Rep* 58:721-9 My 7 '43

See also

Dermacentor andersoni

Ornithodoros

TIDEWATER associated oil company

Investment audit. S. Devlin. *Mag of Wall St* 71:180-1+ N 28 '42

TIES. Mine. See **Mine ties****TILE construction**

Aluminum co. of America finds clay products simplify industrial construction. *Brick & Clay Rec* 103:32 Ag '43

Breathing walls of brick and tile, a new masonry conception; Douglas aircraft plant at Oklahoma City. *il diag Brick & Clay Rec* 102:14-16 Ap '43

Circular clay tile grain bins solve farm storage problem. *diags Brick & Clay Rec* 103:26 Jl '43

Clay products are doing a big job on military and housing projects. plans *Brick & Clay Rec* 102:27-8 Ja '43

Clay products cut building time by two weeks on WAAC barracks at Des Moines. *il Brick & Clay Rec* 101:19-20 N '42

European structural clay products. F. E. Sonnenschein. diags *Brick & Clay Rec* 102:29-31 Mr '43

Hospital construction in winter weather. *il Eng N* 131:693-5 N 4 '43

Practical promotion helps sell clay products; Southern brick & tile manufacturers assn. G. H. Merry. *il diags Brick & Clay Rec* 102:24-8 Ap '43

Precast tile slabs save time and money. *il Brick & Clay Rec* 103:30-1 Ag '43

Structural tile barracks for the WAACS. *il Eng N* 129:338-40 D 17 '42

Tile most suitable for cold storage locker. *il Brick & Clay Rec* 103:44 S '43

TILE floors. See **Floors, Tile****TILE industry****History**

Development of the tile industry in the United States. E. Townsend. *Am Cer Soc Bul* 22:126 My 15 '43

TILE roofs. See **Roofs, Tile****TILES**

Clay products construction featured in new Chicago subway; stations and station areas. *il Brick & Clay Rec* 102:26-8 My '43

Clay products for durability, quality, simplicity and truthfulness; Mercy hospital school of nursing. W. Koehl. *il Brick & Clay Rec* 103:28-9 Ag '43

Some physical procedures used in ceramic research; sonic properties of structural clay tile. G. A. Bole and G. A. Loomis. *J Ap Phys* 14:445-6 S '43

See also

Drain tile

Tile industry—History

Manufacture

Denison family; structural tile and brick. *Am Cer Soc Bul* 22:168-72 Je 15 '43

Proper cooling of kilns helps control salt glazed tile color; Metropolitan brick co. *il Brick & Clay Rec* 102:18-19 Je '43

Standards

Structural tile manufacture in Germany is rigidly standardized. F. E. Sonnenschein. diags *Brick & Clay Rec* 103:25 Jl '43

TILES, Decorative

Ceramic tile for exterior mural selected for permanence and color brilliance; National broadcasting company building, San Francisco. *il Cer Ind* 40:544- Mr '43

TILGHMAN, Benjamin Chew, 1821-1901

Benjamin Chew Tilghman, and the origin of the sulfate process for delignification of wood. M. Phillips. bibliog *por J Chem Educ* 20:444-7 S '43

TILLAGE

Design for farming; furrow farming. *il*
Business Week p66 O 16 '43

TIMBER

See also

Dry rot Pine
Lumbering Wood
Mine timber

TIME, Standard

Electronic time. G. Dexter. *il* Radio N 28:
22-5, 66-70 D '42

TIME deposits. See Bank deposits; Savings deposits

TIME limit relays. See Relays, Time limit

TIME measurement

Electronic time. G. Dexter. *il* Radio N 28:
22-5, 66-70 D '42

General Electric electronic time meter. *il* R
Sci Instr 14:265 Ag '43

Time. J. Anderson. *J Eng Educ* 33:663-9 My
'43

24-hour clock. *il* Business Week p22 My 15 '43

See also

Clocks
Clocks, Electric

Timing devices

TIME perception

Apparent time acceleration with age of the
individual. F. W. Nitardy. *Science* 98:110
Jl 30 '43; Discussion. 98:300-2, 407-8 O 1, N
5 '43

TIME saving

Few timesaving methods; National oil prod-
ucts company library. Harrison, N.J. M.
J. Hoyler. *Special Lib* 34:403-7 O '43

Library time-savers. L. Keller. *Special Lib*
34:401-3 O '43

Save time and materials; international ex-
change planned; suggestions received by
labor-management committees in war
plants. *Steel* 112:34-5 Ja 25 '43

Simplification of library technique due to
increased work and depleted staffs. *Special*
Lib 34:399-401 O '43

TIME series (statistics)

Evidence for periodicity in short time series.
T. L. Kelley. *Am Stat Assn J* 38:319-26
S '43

Retiro charts. K. Karsten and E. Brooks. *Am*
Stat Assn J 38:302-10 S '43

Seasonal factors determined by difference
from average of adjacent months. H. A.
Latané. *Am Stat Assn J* 37:517-22 D '42

Statistical testing of business-cycle theories.
T. Haavelmo. *R Econ Stat* 25:13-18 F '43

Time series significance tests based on signs
of differences. G. H. Moore and W. A.
Wallis. *Am Stat Assn J* 38:153-64 Je '43

TIME signals, Radio

Electronic time. G. Dexter. *Radio N* 28:66-70
D '42

TIME study

Assigning card-room jobs to women; time
studies and analysis. E. H. Helliwell. *il*
Textile World 93:62-3 Mr '43

Effort rating; reprinted from fall, 1939, issue
of *Advanced Management*. R. Presgrave.
Advanced Management 8:104-11 Jl '43

Extra-time allowances; abstract. *Manage-*
ment R 31:421-3 D '42

How group bonus works; wood box shop. P.
Bernstein. *Factory Management* 101:81+ Ja
'43

More pay=more production; Murray corp.
of America proves it at the Ecorse plant.
il *Fortune* 28:138-40+ S '43

Process charts point way to man-hour sav-
ing; dating and filling 100-lb. paper bags;
Diamond crystal salt. G. A. Hornberger.
Factory Management 101:126-7 S '43

Production planning through time study
analysis. E. F. Smith. *Aero Digest* 43:265+
Ag '43

Rhythm in time and motion study. C. Bab-
bits. *bibliog* *diags* *Advanced Management*
8:6-16+ Ja '43

Time and motion studies for chemists. J.
Bjorksten. *bibliog* (45 titles) *il* *Chem & Eng*
N 21:1324-9 Ag 25 '43

Time and motion study accepts new obliga-
tions. L. A. Sylvester. *il* *Factory Manage-*
ment 101:97-101 O '43

Time standards by formula on job-order op-
erations; Corrigan, Osburne, & Wells. V. C.
Stephens. *Factory Management* 101:96 F '43

Time study and clerical incentives; ab-
stract. H. B. Rogers. *Management R* 32:
329-30 S '43

Time-study procedure. R. A. Trumpis. *il* *Fac-*
tory Management 100:89-96 D '42

Time-study refresher. A. B. Cummins. *Fac-*
tory Management 101:117-18 Jl '43

What is the measure of a fair day's work?
P. Carroll, Jr. *Advanced Management* 7:152-
6+ O-D '42

See also

Job analysis

Motion study

Rate setting

TIME study (of machinery)

Charting man and machines. H. M. Huston.
Factory Management 101:92-3 S '43

Improved hydraulic presses for wartime re-
quirements; analysis of indicator cards
and time-cycle studies. J. H. Maude. *diags*
A S M E Trans 65:291-3 My '43

Proposed procedure for determining machine
capacity. V. D. Geers. N A C A Bul 24:
249-59 N 1 '42

Radial drill press operations; time-data
sheet. *Am Mach* 87:109, 111 F 4; 133, 135 F
18; 117, 119 Mr 4; 121, 123 Mr 18; 109, 111
Ap 1; 125, 127 Ap 16; 113, 115 Ap 29; 129,
131 My 13 '43

TIMEPIECES

See also

Clocks

Clocks, Electric

Watches

TIMING devices

Automatic control of riveting; Murray Time-
Air. *il* *Aero Digest* 41:184 N '42; *Iron Age*
150:39 D 24 '42

Automatic process control and cycle timers.
B. M. Mills. *il* *diags* *Pet Refiner* 22:119-22
O '43

Automatic timing on furnace loads; General
Electric type TSA-10 timer; use to mea-
sure elapsed distance in travel of conveyor.
Blast F & Steel Pl 31:sup49 Ap '43

Combination timer-safelight. R. W. Olsen. *il*
diags *Am Phot* 37:16-17 O '43

Contact bounce. P. H. Estes. *il* *diags* *Gen*
Elec R 46:321-3 Je '43

Cramer electronic timers and reset timers. *il*
Electronics 16:298 Mr '43

Curtis & Marble electronic timer for shear.
il *Textile World* 93:113 Je '43

Delay and timing circuits. R. P. Turner. *diags*
Radio N 30:32-4+ Ag '43

Electronic interval-measurer. *il* *diag* *Elec-*
tronics 16:152 Ag '43

Fast clock switch for automatic control
circuits. M. L. Yeater. *diags* *R Sci Instr*
14:146-7 My '43

Gadget strike; NWLB panel acts quickly on
walkout caused by introduction of timing
device in forge shop. *Business Week* p87
N 28 '42

Instrument for the determination of contact
making and breaking time. W. Richter and
W. H. Elliot. *il* *diags* *Elec Eng* 62:Trans
14-16 Ja '43

Methods of obtaining a time-linear voltage
rise in saw-tooth oscillations; abstract.
Johannsen. *Wireless Eng* 20:96-7 F '43

Metropolitan-Vickers battery-charge timing
relay. *il* *diags* *Electrician* 130:416-17 Ap 23
'43

Microlineometer; crystal-controlled frequency
standard and square-wave generator. E.
F. Travis. *il* *diags* *Gen Elec R* 46:345-8 Je
'43

Murray pneumatic timers for riveting. *il* *diag*
Machine Design 15:56-7 Ja '43

Photoelectric timer controls X-ray film ex-
posure. *diags* *Electronics* 16:178+ Jl '43

Quench-time control for cast armor; Brown
system. J. P. Vollrath. *plan* *Iron Age* 151:
59 Ap 22 '43

Recording unit for strain and timing func-
tions; dynamic performance of heavy ma-
chines recorded by combination of elec-
tronic and photographic equipment. J. H.
Meier. *il* *diags* *Electronics* 16:79-83+ Ap '43

TIMING devices—Continued

Signal converter; thermionic discharge tube for production of time base deflection potentials of a cathode-ray tube. P. Nagy and M. J. Goddard, biblig il diags Wireless Eng 20:273-99 Je '43; Abstract, Electronics 16:193-200+ O '43

Simple pulse-generating circuits. L. E. Greenlee, diags Electronics 16:113+ Ja '43

Why the weld recorder. J. R. Fletcher and J. Van Den Beemt, il diags Welding J 22:815-18 O '43

See also

Chronograph

TIMIRYAZEV, Klimenty

Timiryazev centenary. A. Popov. Chem & Ind 62:301-2 Ag 7 '43

TIMKEN Detroit axle company

Securities disturbing investors. J. S. Williams. Mag of Wall St 72:586 S 4 '43

TIMOSHENKO, Semyon Konstantinovich, 1895-

Portrait. Business Week p92 F 27 '43

TIN

Catalytic activity of intermetallic compounds in the vapor-phase reduction of nitrobenzene. B. Berk and O. W. Brown, biblig diag J Phys Chem 46:964-8 N '42

Effects of tin in carbon steel. J. W. Halley. Metal Prog 43:936 Je '43

Influence of tin on alloy steels. G. R. Bolsover and S. Barraclough. Iron & Steel Inst J 146:141-55 no 2 '42; Excerpt, Engineering 155:128 F 12 '43

Is tin in steel harmful? abstract. J. W. Halley. Metals & Alloys 16:1148+ D '42

Texas tin: international pawn? il Business Week p19-20+ Ja 30 '43

What about tin? il Manuf Rec 111:20-2+ N '42

Analysis

Determination of small amounts of arsenic, antimony, and tin in lead and lead alloys. C. L. Luke, biblig il Ind & Eng Chem Anal ed 15:626-9 O 15 '43

Determination of tin coating weights on tin plate. G. H. Bendix, W. C. Stammer and A. H. Carle, il diag Ind & Eng Chem Anal ed 15:501-4 Ag 15 '43

Determination of tin in babbitts, white metal alloys, and bronze. E. T. Saxer and R. E. Minto. Ind & Eng Chem Anal ed 15:261-2 Ap 15 '43

Determination of tin with mercuric chloride. J. G. Fairchild, biblig Ind & Eng Chem Anal ed 15:625-6 O 15 '43

Importance, composition, and analysis of Bolivian tin concentrates. S. Kallmann, biblig Ind & Eng Chem Anal ed 15:166-74 Mr 15 '43

Occurrence of lead, tin, and silver in wheat and its milling products. N. L. Kent, biblig il Soc Chem Ind J 61:183-6 D '42

Polarographic characteristics of stannous and cupric tartrate complexes and amperometric titration of tin with cupric ion in tartrate medium. J. J. Lingane, biblig Am Chem Soc J 65:866-72 My '43

Recent developments in analytical chemistry. Chem Age (Lond) 49:205-6 Ag 28 '43

Systematic polarographic metal analysis; characteristics of arsenic, antimony, bismuth, tin, lead, cadmium, zinc, and copper, in various supporting electrolytes. J. J. Lingane, biblig Ind & Eng Chem Anal ed 15:583-90 S 15 '43

Conservation

Cancelling detinning plants, DPC winds up first large-scale program. Iron Age 162: 85 J1 29 '43

Conservation of solder and tin. G. L. Moses and E. A. Fox, Ry Age 113:891-2 N 28 '42

Conserving the tin stock pile. A. F. Macconochie, il diags Steel 112:86-7+ F 15 '43

Future of tin in solder. il Sheet Metal Worker 34:57 O '43

Lead alone, or alloyed with small amounts of tin or zinc, replacement coating for hot galvanizing and hot tinning. J. M. Crowe. Chem Ind 52:612 My '43

Low-tin and tin-free bronzes and brasses. F. Hudson, biblig il diags Iron Age 150: 46-50 D 3; 62-4 D 10 '42

Metallurgy of fillet wiped soldered joints. E. E. Schumacher, G. M. Bouton and G. S. Phipps, il Bell System Tech J 22:73-9 Ja '43

Meter soldering; experiments point to new method of conserving tin. J. E. Godsoe. Am Gas Assn Mo 24:431-2 D '42

New era in tin; Washington (Pa.) tin plate company old hot mill to close Sept. 1; electroplating process gains rapidly. il Business Week p80+ Ag 28 '43

Producers believe restrictions on tin can be eased. R. L. Hartford, il Steel 113:62-3 J1 5 '43

Reclaiming tin from scrap brass; large scale operation an essential. A. G. Arend, il Chem Age (Lond) 49:11-14 J1 3 '43

Recovery of tin from tin cans. R. E. Oesper. J Chem Educ 20:406 Ag '43

Save tin by use of aluminum bronze. Oil & Gas J 41:53 F 18 '43

Save tin, help to win campaign for metal salvage. il Mod Packaging 16:60 F '43

Saving tin on cans. Metal Prog 42:376+ N '42

Science stretches the supply of tin. Gas Age 92:15+ Ag 26 '43

Substitute alloys for bearings may save tons of tin, Battelle reports. Steel 112:71 Mr 1 '42

Tin conservation in Britain. J. Ireland, il Metals & Alloys 17:336-8, 544-7 F-Mr '43

Tin-conserving solders. G. F. Beard. Steel 113:97+ S 13 '43; Abstract, Metals & Alloys 18:108 J1 '43

Tin content in solder. H. B. Andersen. Am Gas Assn Proc 1942:262-3; Discussion. 263-8

Tin substitutes prove satisfactory in bronzes. J. F. Pelly and J. Worth. Steel 112:81 My 31 '43

Tin use further reduced; content in solder limited to 20 per cent. Steel 112:36 Ja 18 '43

Tin use restrictions eased. Barron's 23:7 Je 14 '43

See also

Tin cans

Prices

Price, wholesale, Straits (New York) 1938-1941. Survey of Cur Business 1942 Sup p143 [supplemented in monthly numbers]

Straits tin at New York, monthly, 1929-1942; tabulation. Iron Age 151:212 Ja 7 '43

TIN alloys

Corrosion of tin-nickel alloy coatings on steel in canned foodstuffs; abstract. H. R. Copson and W. A. Wesley. Iron Age 152: 53-4 O 21 '43

Thermal diagram of the system iron-tin. W. F. Ehret and D. H. Gurinsky, biblig il diag Am Chem Soc J 65:1226-30 Je '43

See also

Bearing metals—
Bronze
Iron alloys—Tin
alloys

Solder and solder-
ing

Analysis

Some observations on the use of powders in spectrochemical analysis; lead-tin solders. A. E. Ruehle and E. K. Jaycox, biblig il Opt Soc Am J 33:109-12 F '43

See also

Bearing metals—
Analysis

TIN cans

Cans restrictions eased on paints and chemicals. Oil Paint & Drug Rep 143:7+ Je 14 '43

Cans for copper. il Business Week p44 O 30 '43

Collection of tin cans increases rapidly. Blast F & Steel P1 31:207 F '43

Converting old cans into crowns; brewer gets 1,100 gross a week of extra-quota caps from reclaimed tinplate. A. H. Haffenreffer, jr. flowsheet il Food Ind 15:80-1 S '43

Future of tinplate; with tabulated data on comparative performance of electrolytic and hot dipped tinplate. Iron Age 152:55 J1 29 '43

New can order poses difficulties; electrolytic plate ruled mandatory. Iron Age 152:84 J1 29 '43

Old tin cans as a war factor. Sheet Metal Worker 34:25 Mr '43

Recovery of tin from tin cans. R. E. Oesper. J Chem Educ 20:406 Ag '43

TIN cans—Continued

Save tin, help to win campaign for metal salvage. *il Mod Packaging* 16:60 F '43

Saving tin on cans. *Metal Prog* 42:876+ N '42

Tin can offensive; producers plan campaign to recapture markets. *Business Week* p82+ O 9 '43

Tin shortage spurs electrolytic plating; 26 lines under way. *Steel* 112:420-5 Ja 4 '43

Tin use in cans further restricted. *Oil Paint & Drug Rep* 142:5+ D 14 '42

See also

American can com- Continental can
pany company

Manufacture

Cans butt-welded. *Business Week* p37-8 Jl 10 '43

TIN industry and trade

Mixup in tin; Justice dept. will look into world-wide cartel. *Business Week* p16-17 Jl 31 '43

Tin quotas upped; International committee adds two American members. *Business Week* p106 N 21 '42

Tin supplies. *Economist* 143:682 N 28 '42

Tin supplies. *Economist* 144:376 Mr 20 '43

Regulation

See also

Tin—Conservation
Tin cans

Statistics

Tin, 1938-1941. Survey of Cur Business 1942 Sup p143

Tin, 1942. H. H. Wanders. *Eng & Min J* 144:68 F '43

Bolivia

New deal in Bolivia. *Economist* 145:369 S 11 '43

Great Britain

Tin conservation in Britain. J. Ireland. *il Metals & Alloys* 17:336-8, 544-7 F-Mr '43

TIN metallurgy

German metallurgy in wartime; smelting bell bronze. W. J. Kroil. *Eng & Min J* 144:50-1 S; 82-3 O '43

Longhorn tin; new Texas smelter handling lowest grade concentrates from Bolivia. R. H. Ramsey. *il Eng & Min J* 144:56-61 Je '43

Longhorn tin smelter. C. B. Henderson. *flow sheets il Min & Met* 24:196-200 Ap '43

Metallurgist recalls some efforts to recover tin by gaseous reduction of concentrates. C. R. Hayward. *Eng & Min J* 144:63-4 Mr '43

New Texas tin smelter most modern in the world; photographs. *Chem Ind* 52:42-3 Ja '43; *Eng & Min J* 144:54-5 Ja '43

Secondary tin and lead; the metallurgy of refining. G. E. Behr. *bibliog Chem Age (Lond)* 48:605-8 Je 5 '43

TIN miners

Aid for Bolivia; joint commission tells of labor's needs. *Business Week* p52+ My 1 '43

TIN mines and mining**Mexico**

Tin deposits of the Republic of Mexico. W. F. Foshag and C. Fries, jr. *U S Geol S Bul* 935-C:99-176, pl 25-31; pa 40c Supt. of doc. '42

Virginia

Tin deposits of Irish Creek, Virginia. A. H. Koschmann, J. J. Glass and J. S. Vhay. *bibliog maps U S Geol S Bul* 936-K:271-96, pl 43-4; pa 10c Supt. of doc. '42

TIN ores

Geology and mineralization of the San Antonio mine, Santa Eulalia district, Chihuahua, Mexico. W. P. Hewitt. *bibliog maps Geol Soc Bul* 54:173-204, pl 1-2 F '43

Importance, composition, and analysis of Bolivian tin concentrates. S. Kallmann. *bibliog Ind & Eng Chem Anal* ed 15:166-74 Mr 15 '43

Tin and tungsten deposits at Silver Hill, Spokane county, Washington. L. R. Page. *maps U S Geol S Bul* 931-H:177-203, pl 32-6; pa 30c Supt. of doc. '42

Tin in Manitoba; discovery of metal in commercial quantities still being sought. J. D. Bateman. *il Can Min J* 64:273-8 My '43

Tin-spodumene belt of the Carolinas; a preliminary report. T. L. Kesler. *fold maps U S Geol S Bul* 936-J:245-69 bibliog(p248-50); pa 50c Supt. of doc. '42

TIN oxides

Elimination of sorption-desorption hysteresis in hydrous oxide gels; tantalum pentoxide, stannic oxide, and titanium dioxide. H. B. Weiser, W. O. Milligan and W. C. Simpson. *bibliog J Phys Chem* 46:1051-9 D '42

Tin oxide manufacture and use banned. *Oil Paint & Drug Rep* 142:7+ N 30 '42

TIN plate

Constitution of the iron-tin alloys. O. E. Romig. *bibliog il Metal Prog* 42:899-904 N '42

Corrosion of tin-nickel alloy coatings on steel in canned foodstuffs; abstract. H. R. Copson and W. A. Wesley. *Iron Age* 152:53-4 O 21 '43

Developments in electrolytic tin plate from the can manufacturer's experience; abstract. K. W. Brighton. *Steel* 113:66 O 25 '43

Future of tinplate; with tabulated data on comparative performance of electrolytic and hot dipped tinplate. *Iron Age* 152:55 Jl 29 '43

Post-war uses for electrolytic plate projected; opportunity for producers seen. D. C. MacDonald. *Iron Age* 152:102 N 4 '43

Richard Thomas; statement. *Economist* 145:212, 217-18 Ag 14 '43

Tin plate, Pittsburgh; prices, 1929-1942; tabulation. *Steel* 112:371 Ja 4 '43

See also

Tin cans

Manufacture

Conserve tin stocks by electrolytic plating; abstract. J. H. Hopper. *Power* 86:921c+ D '42

Electrolytic tinning lines help solve tin shortage. R. A. Geuder. *il diags Steel* 113:126-8 Jl 19 '43

Electronic generators extend induction heating field; electrolytic process of coating sheet steel with tin. H. C. Humphrey. *il diags Electronics* 16:56-9+ Ja '43

Electroplating and its new position. F. A. Lowenheim. *bibliog il diags Metals & Alloys* 18:795-801 O '43

High frequency heating conserves critical tin. G. E. Stoltz. *diags Blast F & Steel* Pl 30:1357-8 D '42; Same. *Metal Finishing* 40:648-9 D '42; Excerpts. *Power* 87:73b-73c+ Ja '43

Improvement in the electrolytic tin-plating process. *Automotive & Aviation Ind* 88:206 Mr 15 '43

Induction heating conserves tin. G. E. Stoltz. *diags Elec W* 119:628 F 20 '43

Induction heating helps conserve critical tin. *il diags Product Eng* 14:16-17 Ja '43

New applications of electric equipment for electro-tinning lines. J. H. Hopper. *il diags Blast F & Steel* Pl 31:423-7, 449-50 Ap '43

New era in tin; Washington (Pa.) tin plate company old hot mill to close Sept. 1; electroplating process gains rapidly. *il Business Week* p80+ Ag 28 '43

New use for cottonseed oil; substitute for imported palm oil in making tin plate. W. W. Skinner. *il diag Manuf Rec* 112:34-5 Jl '43

Process lines developed for electrolytic tin plating and flowing. J. R. Erbe. *il diags Metal Finishing* 40:645-8 D '42; Same. *Steel* 111:128-30+ D 7 '42

Radio tubes for heat treating by high-frequency induction; electrolytic tin plate. H. C. Humphrey. *il diags Steel* 112:111-12 F 1 '43

Selenium rectifiers for tin plating. *Electronics* 16:176+ O '43

Speeding the tin thin; rapid recent development of tin-plating processes. A. P. Peck. *il diags Sci Am* 168:7-9 Ja '43

Technique of electrolytic tin plating; abstract. W. B. Cooper. *Iron Age* 152:61 Jl 1 '43

Tin fusing by radio waves. *Electrician* 130:451 Ap 30 '43

TIN plate—Manufacture—Continued

Tin shortage spurs electrolytic plating; 26 lines under way. Steel 112:420-5 Ja 4 '43
Westinghouse induction heating process for flowing tin plate makes continuous production possible. *il plan Am Mach* 86:1394 N 26 '42; *Iron Age* 150:59-60 N 19 '42

Testing

Determination of tin coating weights on tin plate. G. H. Bendix, W. C. Stammer and A. H. Carle. *il diag Ind & Eng Chem Anal ed* 15:501-4 Ag 15 '43
Porosity of electro-tin plate; abstract. R. Kerr. *Metals & Alloys* 18:926+ O '43
Testing of continuity of thin tin coatings on steel. R. Kerr. *pl Soc Chem Ind J* 61:181-3 D '42; *Abstract. Paint Oil & Chem R* 105:12 F 11 '43
Thickness of tin coatings. *Metals & Alloys* 18:388+ Ag '43
Tin economies; measuring and testing the quality of tin coatings. *Chem Age (Lond)* 48:376 Ap 3 '43

TIN plating

Electrolytic tinning; abstract. S. Baier. *Metals & Alloys* 16:1132+ D '42
Tin plating from the potassium stannate bath. M. M. Sternfels and F. A. Lowenheim. *bibliog il Electrochem Soc Trans* 82 (preprint 24):265-83 O '42; 84 (preprint 13):111-25 O '43
Tin shortage spurs electrolytic plating; 26 lines under way. Steel 112:420-5 Ja 4 '43

TIN research

Metallurgist recalls some efforts to recover tin by gaseous reduction of concentrates. C. R. Hayward. *Eng & Min J* 144:63-4 Mr '43

TIN tartrate

Polarographic characteristics of stannous and cupric tartrate complexes and amperometric titration of tin with cupric ion in tartrate medium. J. J. Lingane. *bibliog Am Chem Soc J* 65:866-72 My '43

TIPPETT, Leonard Henry Caleb, 1902-

Contents of Tippet's Random sampling numbers. R. Gage. *Am Stat Assn J* 38:223-7 Je '43

TIPPING

State minimum-wage law prohibits consideration of tips as wages; California decision. *Monthly Labor R* 57:555-6 S '43

TIRE chains

Use tire chains with care. *Consumers' Research Bul* 11:6 Ja '43

TIRE fabrics

Army proves rayon cord superiority over cotton for tires. *Rayon* 23:641 N '42
B. F. Goodrich co. maintains constant relative humidity in creel room. *il Heat & Ven* 40:56-7 Ag '43
Cotton cord conditioned in manufacture of tires; Goodrich company. *Refrig Eng* 45:343 My '43
Cotton tire cord terms. *Textile World* 92:95 D '42
Cotton vs. rayon tires a hot potato. B. Stubbsfield. *Textile World* 92:64-5 N '42
Expansion of rayon plants to provide tire cord for army decreed by Jeffers. *il Rubber Age* 52:143-4 N '42
Rayon-cotton tire cord controversy flares up again in official circles. *Rubber Age* 53:443-4 Ag '43
Seven year record proved intrinsic merit of rayon cord for tires. *Rayon* 24:394-5 Ag '43
Truman committee reports on rayon. *Textile Col* 65:461 O '43

Testing

Fatigue of fabrics. W. F. Busse and others. *bibliog diag J Ap Phys* 13:715-24 N '42

TIRE factories

Plant is exported; Ford's tire factory knocked down and shipped to Russia. *Business Week* p28 Ap 17 '43

See also

Rubber factories
Tires, Automobile—
Manufacture

Air conditioning

B. F. Goodrich co. maintains constant relative humidity in creel room. *il Heat & Ven* 40:56-7 Ag '43

Electric equipment

Tyre manufacture; selected drives from a large rubber mixing and handling installation. *il diag Elec R (Lond)* 131:543-7 O 30 '42

Employees

Wages in rubber tire and tube plants, August 1942. H. M. Douty. *Monthly Labor R* 56:233-54 F '43

TIRE industry and trade

Firestone in mail-order business. *Ptr Ink* 201:46 D 11 '42
Problems shift from raw materials to manpower and trade facilities. *Rubber Age* 54:51-3 O '43
Tire production to be increased by existing equipment and facilities. *Rubber Age* 53:533-4 S '43
Tires to ease up. *Business Week* p18-19 O 2 '43

See also

Rubber industry and
trade

Good Firestone tire and rubber company; Goodyear tire and rubber company

Finance

Rubber's war and peace outlook. J. A. McWethy. *Barron's* 23:7+ Mr 8 '43

Regulation*See also*

Tires, Automobile—
Rationing

Securities

War and peace prospects for autos, accessories and tires. *Mag of Wall St* 71:642-5+ Mr 20 '43
War and post-war potentials for the motors, accessories, tires; position of leading stocks. F. R. Walters. *il Mag of Wall St* 72:464-8+ Ag 7 '43

Statistics

Tires and tubes, 1938-1941. Survey of *Cur Business* 1942 Sup p161

Russia

US to buy Ford tire plant for Russia. *Comm & Fin Chr* 156:1894 N 26 '42

TIRES, Airplane

Airplane tire bead-loosening tool. *il Aeronautical Eng R* 2:179-80 Ag '43
Non-skid tire for airplanes has wire thread. *il Sci Am* 168:224-5 My '43
Nylon in tires giving good service under severe conditions. *il Sci Am* 169:78 Ag '43
Pre-rotation of landing wheel tires; abstract and discussion. C. R. Mason and W. H. Elliott. *S A E J* 51:sup36 My '43
Tire changer for big bombers; Tucson division modification center of Consolidated Vultee aircraft corp. *il Automotive & Aviation Ind* 89:35 S 15 '43
Wire spirals in airplane tire treads prevent skidding. *il Manuf Rec* 112:42 Mr '43

TIRES, Automobile

Automobile tire situation. *Consumers' Research Bul* 12:19-20 N '43
Camel tread sand tires for use in the desert. *India Rubber W* 108:494 Ag '43
Demonstration of tubeless tire. V. Barnett and J. B. McGay. *Am Pet Inst Proc* 23(1):26-9 '42
Facts on rubber. *Business Week* p18 My 8 '43
Famous Eighth army's special-tread tires. *For Comm W* 12:23 Ag 7 '43
Frictional phenomena; technical applications of the internal friction of solids. A. Gernant. *diags J Ap Phys* 14:264-7 Je '43
How good are synthetic rubber tires? E. L. Warner, jr. *il Automotive & Aviation Ind* 89:26-7+ O 15 '43
Idle tire plan turns up 8,000,000 tires; additional tire news. *Rubber Age* 52:249-51 D '42
Kok-saghyz tires; experiments carried out by the Russians. *India Rubber W* 108:490+ Ag '43
McGay tubeless tire. *diags Automotive & Aviation Ind* 87:47 D 15 '42
1943 critical year in civilian rubber supply. *Oil & Gas J* 41:145 N 26 '42

TIRES, Automobile—Continued

Petroleum industry war council orders test of tubeless tire. *Nat Pet* N 34:8 N 11 '42

Pooling for Buna; triumph for smaller tire companies. *Business Week* p29-30 D 12 '42

Production handicaps are synthetic tire bottleneck. *il Nat Pet* N 35:24-6 Ag 11 '43

Report of committee on operation of public utility motor vehicles. *Am Gas Assn Proc* 1942:417-21

Tires and tubes of artificial rubber; abstract. O. J. Lang. *Rubber Age* 53:61 Ap '43

Tires for all? synthetic output to reach goal by Jan. 1. *Business Week* p36+ J1 24 '43

Tubeless tire affords little relief in current emergency. Oil & Gas J 41:16 Ja 21 '43

Tubeless tire experiments draw considerable attention. *Rubber Age* 52:251 D '42

Tubeless tire goes to Capitol Hill. *il Nat Pet* N 34:33-4 D 9 '42

Tubeless tire not fully developed. *Automotive & Aviation Ind* 88:45+ F 1 '43

Tubeless-tire plan gains support of oil industry. H. S. Norman. *il Oil & Gas J* 41:19 N 19 '42

Tubeless tires being tested. *India Rubber W* 107:283 D '42

Tubes from coal; Marvinol, vinyl plastic processed in rubber mills. *il Business Week* p66+ S 25 '43

2900 miles without tubes. *il Nat Pet* N 35:9 Ja 27 '43

See also

Rubber industry and trade

Tire fabrics

Care

How to stretch life of rubber; tires, hose, belts and gloves. *il Food Ind* 15:58-60 F '43

Important tire conservation method revealed; checking air pressure. *India Rubber W* 107:393 Ja '43

Industry responds to tire drive. *Nat Pet* N 35:20 Ag 18 '43

Save carcass drive gains momentum. *Nat Pet* N 35:27 Ag 25 '43

Watch the road for tire life; abstract. W. M. Jeffers. *Nat Safety* N 47:91 Ap '43

See also

Tires, Motor bus Tires, Motor truck
—Care —Care

Inspection

OPA issues manual on tire inspection. *Nat Pet* N 34:28+ N 11 '42

Oil men protest 25c tire inspection as a wholly unprofitable imposition. *Nat Pet* N 34:30 N 18; 30-2 N 25 '42

Manufacture

Carbon black in all-reclaim tire treads. L. H. Cohan and J. F. Mackey. *India Rubber W* 107:469-70+ F '43

Now it's tires; new facilities and more labor needed to make castings. *Business Week* p18-19 S 4 '43

Ridbo 369, fortifying plasticizer for GR-S. C. R. Johnson. *Rubber Age* 54:40 O '43

See also

Tire fabrics

Tire factories

Merchandizing

See Tire industry and trade

Preservatives

Tire-saving preparations. Consumers' Research Bul 11:18-19 N '42

Rationing

Accent on recaps; OPA's new regulations on tires. *Business Week* p24+ N 28 '42

Additional tires for motorists holding B or C books. *Comm & Fin Chr* 157:1307 Ap 8 '43

Car owners to get tires and recaps. *Comm & Fin Chr* 156:1803 N 19 '42

Changes in consumer buying practices resulting from tire and gas rationing. P. D. Converse. (Bur. of economic and business research special bul. 2) 8p Univ. of Illinois, Urbana. '43

Emergency tires are made available for rationing as spares. *Rubber Age* 53:346-7 J1 '43

OPA issues its regulations on tire-gas rationing. *Nat Pet* N 34:11 N 18 '42

Revisions on tire prices and rationing. *India Rubber W* 107:286-7 D '42

Tire-recapping and renewing permits. *Gas Age* 91:34 Mr 25 '43

Tire situation considerably improved but not yet solved. *Rubber Age* 52:147-9 N '42

Utility transportation, yesterday, today and tomorrow. C. S. Worley. *Gas Age* 90:14-16, 30 D 3 '42

Repair

Repairing synthetic tires and tubes requires new technique, more care. H. Taylor. *il Nat Pet* N 35:34-6 O 27 '43

Save your tires; sealing puncture holes protects fabric. A. L. Murray. *diags Sci Am* 168:170 Ap '43

Retreading and recapping

Better recaps; use of 40% synthetic in camel-back. *Business Week* p47-8 S 25 '43

Carpet pile retreading material developed by Alexander Smith co. *Rubber Age* 53:538 S '43

Recaps keep 'em rolling; health and safety precautions. *il Nat Safety* N 48:78+ O '43

Thiokol's retreat; doomed by process odor and availability of reclaim rubber. *Business Week* p26+ My 1 '43

Testing

GR-S tires. *India Rubber W* 107:582-3 Mr '43

GR-S tires; standard methods of compound evaluation and for reporting test data. *India Rubber W* 107:497-8 F '43; Same. *Rubber Age* 52:305-7 Ja '43

Heat generation in flexed rubber. S. D. Gehman, P. J. Jones and D. E. Woodford. *bibliog il diags Ind & Eng Chem* 35:964-71 S '43

Micro-poise tire balancing machine. *il Rubber Age* 53:557 S '43

Role of zinc oxide in compounding government synthetic rubber; flexometer tests simulating road tests on tires. R. S. Havenhill and J. J. Rankin. *il India Rubber W* 107:365-8+ Ja '43

Theft

Tire registration ends theft wave in auto field. *Nat Underw* 47:11 F 18 '43

TIRES, Kiln

Big annual saving from all-welded tires for kilns, driers and coolers; with cost data. T. N. Haffner. *il diags Concrete* (mill sec) 51:118-21 F '43

TIRES, Motor bus

Experience with synthetic tires on buses. *il Mass Transportation* 38:339 N '42

Facts about rubber. H. L. Frentz. *Mass Transportation* 39:319 S '43

How good are synthetic rubber tires? E. L. Warner, Jr. *il Automotive & Aviation Ind* 89:26-74 O 15 '43

Keeping track of tires. *il Bus Transportation* 22:32-3 Ap '43

Synthetic tires pass rigid bus test. *Nat Pet* N 35:24 Ag 4 '43

Care

Forecasting flat tires. *il Bus Transportation* 22:76 Ja '43

Magnet-equipped truck saves tire damage; clearing the streets of metal pieces; Chicago surface lines. W. C. Wheeler. *il Mass Transportation* 38:363 D '42

TIRES, Motor truck

Getting the most miles out of truck tires. *il Food Ind* 15:61-2 F '43

How good are synthetic rubber tires? E. L. Warner, Jr. *il Automotive & Aviation Ind* 89:26-7+ O 15 '43

Truck owners warned to expect less in synthetic tires. *Nat Pet* N 35:26 Ag 11 '43

Truck tire blues; truckers face problem of hunting for tires. O. Knight. *Nat Pet* N 35:20 Ap 14 '43

Care

Are you conserving rubber? campaign of Whitehead brothers company. *il Rock Prod* 46:106-8 J 1 '43

Careful maintenance quadruples tire life at Camp Lee, Virginia. *il Rubber Age* 53:354 J1 '43

TIRES, Motor truck—Care—Continued

Contractors and other truck owners must immediately practice preventive maintenance. Roads & Bridges 81:62, 64 Ja '43

How trucking company cut tire replacements 52%. R. F. Jones, Roads & Ss 85:50-2 D '42

Tire problem stirs truckers. Nat Pet N 35: 28 Ag 11 '43

Truck-tire conservation. J. T. Staker. Roads & Bridges 81:86-4 Ap '43

Records

Records of tire usage keep trucks rolling. A. A. Kuehn. Factory Management 101:76-4 Ap '43

TIRES, Rubber

Field service and repair depots for large size tires. Roads & Ss 85:68 N '42

Generation of electric charges by moving rubber-tired vehicles. S. S. Mackeown and V. Wouk. diags Elec Eng 62:Trans 207-10 My '43

See also

Tires, Automobile

Care

Care of construction equipment tires. C. T. Carlson. Roads & Ss 85:58 N '42

Conserving rubber on industrial truck tires. Iron Age 151:51 My 20 '43

TIRES, Tractor

Tractor tire developments for war, post-war period; abstract and discussion. E. F. Brunner. S A E J 51:sup50-2 N '43

TIRES, Wooden

Refinery fire-fighting equipment wooden-wheeled. II diags Oil & Gas J 41:40-1 Ja 7 '43

Resin impregnated wood for truck wheels. Mech Handling 29:221 N '42

Wooden tires being used on ship-yard trailers. II Sci Am 167:276 D '42

TISSUE paper

Tissue machines. J. E. Goodwillie. Paper Ind 25:528+ Ag '43

See also

Toilet paper

TISSUES

Demonstrating the presence of sulfonamides in the tissues. G. M. MacKee and others. Science 98:66-8 JI 16 '43

Digestion of living tissues by proteolytic enzymes. C. A. Dragstedt. Science 98:131-2 Ag 6 '43

Macromolecular components of normal embryonic and adult brain tissue. A. R. Taylor, D. G. Sharp and B. Woodhall. bibliog Science 97:226-7 Mr 5 '43

Microelectrodes for measuring local oxygen tension in animal tissues. P. W. Davies and F. Brink, Jr. bibliog II diag R Sci Instr 13:524-33 D '42

See also

Plant cells and tissues

Analysis

Microdetermination of magnesium with the polarograph. C. Carruthers. bibliog Ind & Eng Chem Anal ed 15:412-14 Je 15 '43

Spectrographic analysis of rat tissues for ingested vanadium. E. P. Daniel, E. M. Hewston and M. W. Kies. Ind & Eng Chem Anal ed 14:921-2 N 15 '42

Subclinical vitamin deficiency. M. H. Carleen and others. bibliog Science 97:47-9 Ja 8 '43

Culture

Successful production of a mammalian tumor with a virus-like principle. A. Taylor. Science 97:123 Ja 29 '43

TITAN yellow

Spectrophotometric determination of magnesium by titan yellow. E. E. Ludwig and C. R. Johnson. bibliog Ind & Eng Chem Anal ed 14:895-7 N 15 '42

TITANIA. See Titanium oxides**TITANIUM**

Boron plus titanium in heat-treated steels. G. F. Comstock. bibliog Metals & Alloys 17:978-83 My '43

Carbide and nitride particles in titanium steels. W. Hume-Rothery, G. V. Raynor and A. T. Little. Iron & Steel Inst J 145: 129-39, pl 20; Discussion. 140-1 no 1; 146: 481-8 no 2 '42

Century-old iron workings now yield titanium; National lead company. C. H. Vivian. II Comp Air M 48:7100-5 Ag '43

Determination of iron in the presence of chromium and titanium with the Jones reductor. F. S. Grimaldi, R. E. Stevens and M. K. Carron. bibliog Ind & Eng Chem Anal ed 15:387-8 Je 15 '43

Effect of titanium on creep strength; abstract. P. Bardenheuer and W. Fischer. Iron Age 151:43 Ja 28 '43

Effect of titanium on creep strength; abstract. E. Houdremont and G. Bandel. Iron Age 151:58 Mr 25 '43

National Lead, du Pont indicted on titanium trust charges. Oil Paint & Drug Rep 144:7-4 JI 5 '43

New source of titanium for American industry; abstract. I. V. Hagar. Chem & Met Eng 50:187-8 F '43

New source of titanium; MacIntyre mine. Fortune 27:46-4 Mr '43

Strain aging of killed low-carbon steel, with particular reference to the effect of titanium; abstract. G. F. Comstock. Iron Age 152:70-1 Ag 5 '43

Thermal expansion of titanium. P. Hidnert. bibliog J Research Nat Bur Stand 30:101-5 F '43

Titanium resources of Virginia. Eng & Min J 143:52 N '42

Analysis

Simplified technique in the use of liquid amalgam reducers. G. F. Smith and L. T. Kurtz. bibliog diags Ind & Eng Chem Anal ed 14:854-5 N 15 '42

TITANIUM carbide

Carbide and nitride particles in titanium steels. W. Hume-Rothery, G. V. Raynor and A. T. Little. Iron & Steel Inst J 145: 129-39, pl 20; Discussion. 140-1 no 1; 146: 481-8 no 2 '42

TITANIUM dioxide. See Titanium oxides**TITANIUM nitride**

Carbide and nitride particles in titanium steels. W. Hume-Rothery, G. V. Raynor and A. T. Little. Iron & Steel Inst J 145: 129-39, pl 20; Discussion. 140-1 no 1; 146: 481-8 no 2 '42

TITANIUM ores

See also

Ilmenite

TITANIUM oxides

Absolute method for the determination of the area of a fine crystalline powder. W. D. Harkins and G. Jura. J Chem Phys 11:430 S '43

Adsorption of simple and complex cobalt ions on titanium dioxide. D. G. Nicholson. Am Chem Soc J 64:2820-2 D '42

Catalytic reduction by formic acid under pressure; the preparation of aldehydes from carboxylic acids with titanium dioxide as catalyst. R. R. Davies and H. H. Hodgson. Chem Soc J p84-6 Mr '43

Conservation of titanium dioxide by the selection of inerts and vehicles. Paint Oil & Chem R 104:5 N 19 '42

Effect of binder on hiding power of enamels. A. Lightbody and D. H. Dawson. bibliog Ind & Eng Chem 34:1452-6 D '42

Elimination of sorption-desorption hysteresis in hydrous oxide gels; tantalum pentoxide, stannic oxide, and titanium dioxide. H. E. Weiser, W. O. Milligan and W. C. Simpson. bibliog J Phys Chem 46:1051-9 D '42

Ilmenite and magnetite produced in quantity at National Lead's new MacIntyre development; titanium dioxide recovered for ilmenite. I. D. Hagar. II Min & Met 23:594-6 D '42

MacIntyre development; new source of titanium. I. D. Hagar. II Eng & Min J 143: 47-9 D '42

Rutile titanium dioxide in specification paints. D. H. Dawson. Paint Oil & Chem R 105: 12 Mr 11 '43

TITANIUM oxides—Continued

Smelting of vanadium-bearing titaniferous sinter in an experimental blast furnace. C. E. Wood, T. L. Joseph and S. S. Cole. bibliog il diag U S Bur Mines Rep of Invest 3679:1-24 '43; Excerpts. Iron Age 151: 59, 131 Je 24 '43

TITANIUM sulfate

Hydrolysis of titanium sulfate solutions; abstract. A. W. Hixson. Chem Ind 52:606-7 My '43

TITLE blocks. See Drafting room practice

TITLES of honor and nobility

Birthday honors of the King of England; men of science and others associated with scientific development. Science 98:8 JI 2 '43
British New Year honors list. Science 97: 154-5 F 12 '43

TITRATION. See Volumetric analysis

TITROMETER. See Volumetric analysis—Apparatus

TNT. See Trinitrotoluene

TOBACCO

Boost for tobacco; permission to increase acreage pleases farmers. map Business Week p40+ Mr 27 '43

Paper lug cap on glass tobacco jar. il Mod Packaging 16:53+ F '43

See also

Cigaretts
Nicotine

Diseases and pests

See also

Tobacco mosaic virus

Manufacture

Glycerin replaced; apple sirup as moistening agent in tobacco processing. Business Week p86-7 F 27 '43

Physiological effect

Defense of smokers. R. H. Feldt. East Underw 44:9 S 3 '43

Some chemical and pharmacological observations on low nicotine tobacco. H. B. Haag and P. S. Larson. bibliog Science 97:187-8 F 19 '43

TOBACCO industry and trade

Tobacco auctions evaluated. P. D. Converse. J Business 16:147-59 JI '43

See also

Cigar industry and trade	Cigaret industry and trade
	Cigaretts
also names of companies, e.g.	
American tobacco company	British-American tobacco company
Axon-Fisher tobacco company	Reynolds, R. J., tobacco company

Advertising

See also

Cigaret industry and trade—Advertising

Finance

Working capital needs of tobacco companies. Barron's 23:4 F 15 '43

Securities

Further tobacco sales gains for 1943; position of leading stocks. Mag of Wall St 71:480+ F 6 '43

Tobacco profits point lower; position of leading tobacco shares. R. Carleson. Mag of Wall St 72:581+ S 4 '43

Statistics

International distribution of flue-cured tobacco. For Comm W 12:36 Ag 21 '43

Leaf and manufactured products, 1938-1941. Survey of Cur Business 1942 Sup p127-8 [supplemented in monthly numbers]

Great Britain

Cigarettes, munitions of war. Adv & Sell 36: 86 Je '43

India

India keeps the hookahs bubbling. E. M. Schwarztrauber. il For Comm W 9:10-11, 34-6 D 12 '42

Mexico

Mexico's 1943 tobacco crop. For Comm W 12: 29 JI 31 '43

Mexico's smokes. C. R. Budd. il For Comm W 12:9-11 S 25 '43

Mexico's tobacco industry. For Comm W 10:34 Ja 23 '43

Mozambique

Mozambique's tobacco industry. For Comm W 10:26+ F 6 '43

Sweden

Situation in Sweden. For Comm W 12:27-8 JI 24 '43

TOBACCO mosaic virus

Basic amino acids in strains of tobacco mosaic virus. C. A. Knight. bibliog Am Chem Soc J 64:2734-6 D 42

Denaturation of tobacco mosaic virus by urea; kinetic aspects. M. A. Lauffer. bibliog Am Chem Soc J 65:1793-1802 O '43

TOBACCO pipes. See Pipes, Tobacco

TOBACCO warehouse insurance. See Insurance, Tobacco warehouse

TOBACCO workers

Employment conditions on Connecticut tobacco plantations. Monthly Labor R 56: 267-9 F '43

TOCOPHEROLS

Biological potency of the natural tocopherols and certain derivatives. M. Joffe and P. L. Harris. bibliog Am Chem Soc J 65:925-7 My '43

Crystalline natural α - and γ -tocopherols. C. D. Robeson. Am Chem Soc J 65:1660 Ag '43

Natural α -, β - and γ -tocopherols and certain esters of physiological interest. J. G. Baxter and others. bibliog pl Am Chem Soc J 65:918-24 My '43

α -Tocopherol, a natural antioxidant in a fish liver oil. C. D. Robeson and J. G. Baxter. bibliog Am Chem Soc J 65:940-3 My '43

Vitamin E; synthesis of 1-chloro-3,7,11,15-tetramethylhexadecanol-3, and its condensation with trimethylhydroquinone to form α -tocopherol. L. I. Smith and J. A. Sprung. bibliog Am Chem Soc J 65:1276-83 JI '43

See also

Vitamins—Vitamin E

TOILET float balls

Blowing process for thermoplastics. il Mod Plastics 20:46 D '42

TOILET goods

Conservation problems in the toilet goods industry. E. C. Merrill. Oil Paint & Drug Rep 143:61-3 My 17 '43

How Seaforth built he-man appeal into a line of toiletries. il Sales Management 51: 34, 36 D 15 '42

Legislation; toilet goods industry. H. Mock. Oil Paint & Drug Rep 143:60-1 My 17 '43
Toilet goods assn. promotes voluntary standardization. Mod Packaging 16:100+ Je '43

See also

Cosmetics	Perfumery
Dentifrices	Soap
Lotions	

Advertising

Palmolive building Mexican market on policy of permanent friendship; combination seal and slogan. F. D. Gonda. il Ptr Ink 202:40+ Mr 26 '43

TOILET goods association

Annual meeting. 8th. New York, May 12-13. Oil Paint & Drug Rep 143:57-67+ My 17 '43
Outlook for containers and closures as revealed in panel discussion at T.G.A. convention. Mod Packaging 16:54-5, 96, 98+ JI '43

TOILET paper

Set new ceiling prices on toilet tissue and paper towels. Paper Tr J 115:11-12 N 19 '42

Advertising

Scott campaigns promote war program and aid customers during scarcity. L. M. Hughes. il Sales Management 52:18-20 F 15 '43

TOILET rooms

See also

Bathrooms
Lavatories

TOKENS

900 million points; OPA order for ration tokens. *Business Week* p32+ O 16 '43

TOLAN committee. See Migration of workers

TOLEDO**Water supply**

Toledo water supply. *il diag map Engineer* 175:136-8, 146-9, 164-5 F 12-26 '43

Toledo's water system can take it: daily pump capacity $\frac{1}{2}$ billion gallons. G. J. Van Dorp and E. M. Wilgus. *il Power* 87:364-6+ Je '43

TOLEDO, Peoria and western railroad

Continued operation by government asked by Labor board. *Comm & Fin Chr* 156:1871 N 23 '42

Effects of featherbed rules on Toledo, Peoria & Western. *Ry Age* 114:862-4 My 1 '43

President McNear asks Eastman to return road to private management. *Comm & Fin Chr* 155:1078 S 13 '43

Remember Toledo, Peoria and western. H. T. Newcomb. *Comm & Fin Chr* 158:1013+ S 9 '43

TOLERANCE

Dimensioning to control sizes and to reduce scrap loss. S. C. Bliss. *diags Product Eng* 14:103-11 F '43

Shrink fit tolerances for various metals and needs. *il Product Eng* 14:214-16 Ap '43

Standard tolerances for forgings up to 100 lb. *Metal Prog* 44:804 O '43

Tolerance and dimensional control; its effect upon airplane production. H. Adams. *Mech Eng* 65:739-40 O '43

Tolerances for bevel and hypoid gears; reference book sheets. *Am Mach* 87:125, 127 J1 22 '43

Tolerances for worms and worm gears; reference book sheet. *Am Mach* 87:121, 123 Je 24; 129, 131 J1 8 '43

Wear allowances and gagemakers tolerances; reference book sheet. A. Sprung. *Am Mach* 86:1389 N 26 '42

TOLIDIN

Army water testing method simplifies chlorine residual check; method employs orthotolidine in tablet form. *Eng N* 130:908 Je 17 '43

Colorimetric determination of chlorine residuals up to 10 ppm. with ortho-tolidine. N. S. Chamberlin and J. R. Glass. *bibliog Am Water Works Assn J* 35:1065-84, 1205-21 *bibliog* (p1083-4, 1221) Ag-S '43

Determination of high chlorine residuals; chemistry of the ortho-tolidin reactions. N. S. Chamberlin. *Water Works & Sewerage* 89:496-9 N '42

Estimation of high chlorine residuals. A. E. Griffin and N. S. Chamberlin. *bibliog Am Water Works Assn J* 35:571-8 My '43

Modification of the flash color test to control break-point chlorination. P. C. Laux and J. B. Nickel. *Am Water Works Assn J* 34:1785-6 D '42; Abstract. *Water Works & Sewerage* 89:531 D '42

TOLL bridges. See Bridges—Tolls

TOLL system. See Telephone—Long distance

TOLUENE

Condensations by sodium; metalation of benzene, toluene and xylene; the orienting influence of sodium and the influence of alkyl groups on metalation. A. A. Morton, E. L. Little, Jr. and W. O. Strong. *jr. bibliog Am Chem Soc J* 65:1339-46 J1 '43

Determination of benzene; detection and estimation of benzene in the presence of toluene, xylene, and other substances. B. H. Dolin. *bibliog Ind & Eng Chem Anal ed* 15:242-7 Ap 15 '43

Determination of high pressure vapor-liquid equilibria; the vapor-liquid equilibrium of benzene-toluene. J. Griswold, D. Andres and V. A. Klein. *bibliog diags Am Inst Chem Eng Trans* 39:223-40 Ap '43; Same. *Pet Refiner* 22:99-106 Je '43

Effect of paraffins on the nitration of toluene. W. L. Glowacki. *bibliog il diag Blast F & Steel Pl* 31:659-64, 771-5 Je-J1 '43

Equilibrium still for miscible liquids; data on ethylene dichloride-toluene and ethanol-water. C. A. Jones, E. M. Schoenborn and A. P. Colburn. *bibliog il diag Ind & Eng Chem* 35:666-72 Je '43

Extraction of furfural-water solutions with toluene in a packed column. O. S. Knight. *bibliog il diag Am Inst Chem Eng Trans* 39:433-56 Ag '43

Liquid extraction in perforated-plate and packed towers. J. Allerton, B. O. Strom and R. E. Treybal. *bibliog diags Am Inst Chem Eng Trans* 39:361-83; Discussion. 383-4 Je '43

New uses for solvent processes. G. F. Fitzgerald. *bibliog Pet Refiner* 22:93-4 O '43

Remarks on the absorption spectra of phenylalanine and tyrosine in connection with the absorption in toluene and paracresol. H. Spöner. *bibliog J Chem Phys* 10:672-6 N '42

System water—*n*-butanol—toluene at 30°. R. M. Fuoss. *Am Chem Soc J* 65:78-81 Ja '43

Thermodynamics and molecular structure of benzene and its methyl derivatives. K. S. Pitzer and D. W. Scott. *bibliog diag Am Chem Soc J* 65:803-29 My '43

Toluene and xylene. *Textile Col* 65:348-9 Ag '43

Analysis

Photometric determination of benzene, toluene, and their nitro derivatives. H. D. Baernstein. *bibliog Ind & Eng Chem Anal ed* 15:251-3 Ap 15 '43

Manufacture

Molecular magic at Baton Rouge. F. J. Van Antwerpen. *flow sheets il diag Chem & Eng N* 21:950-9 Je 25 '43

Physiological effect

Acute toxicity of vapors of certain solvents containing appreciable amounts of benzene and toluene. J. L. Svirbely, R. C. Dunn and W. E. von Oettingen. *bibliog J Ind Hygiene* 25:366-73 O '43

TOLUENESULFONYL group

Formation of anhydro structures by the alkaline de-acylation of a partly substituted cellulose acetate *p*-toluenesulfonate. T. S. Gardner and C. B. Purves. *bibliog Am Chem Soc J* 65:444-9 Mr '43

TOLUIDINE

p-Toluidine salts of monoaryl sulfates. A. D. Barton and L. Young. *Am Chem Soc J* 65:294-5 F '43

TOLUIDINE hydrochloride

Nuclear alkylation of aromatic bases; the action of methyl alcohol on *m*-toluidine hydrochloride. R. W. Cripps and D. H. Hey. *Chem Soc J* p14-15 Ja '43

TOLNITRILE

Study of some Michael reactions. C. F. Koelsch. *Am Chem Soc J* 65:437-9 Mr '43

TOLUOL. See Toluene**TOLYLDIPHENYLMETHYL**

Disproportionation of *o*-tolylidiphenylmethyl. P. W. Selwood and R. F. Preckel. *bibliog diag Am Chem Soc J* 65:895-9 My '43

TOLYL methyl ether

Kinetics of aromatic halogenation; bromination. P. W. Robertson, P. E. D. de la Mare and W. T. G. Johnston. *Chem Soc J* p276-9 Je '43

TOMATO juice

Army specifications for dehydrated foods; tomato juice cocktail. *Food Ind* 15:127 F '43

Better ways to make nonsettling juices. R. H. Lueck. *Food Ind* 15:122 S '43

TOMATOES

Crop is saved; recruiting labor saves hundreds of tons of tomatoes. *Business Week* p20+ Ag 28 '43

Increased tomato yields in Argentina. *For Comm W* 9:25 N 21 '42

Seedless tomatoes. *Science* 97:sup6 Ja 29 '43

TONES

Experimental study of the tone quality of the Boehm clarinet. C. S. McGinnis, H. Hawkins and N. Sher. *il diags Acoustical Soc Am J* 14:228-37 Ap '43

Subjective tones. J. D. Trimmer. *Acoustical Soc Am J* 15:136 O '43

TONGS

- Electro-brazing with water-cooled tongs. G. E. Prussien. *il diag Iron Age* 151:67 Mr 4 '43
 Water-cooled brazing tongs. *il Am Mach* 87: 94-5 Ap 15 '43

TONING (photography) See Photography—Developing and developers**TONNAGE**

- Term "tonnage" proves confusing in capital. Weekly Underw 148:995 My 8 '43

TOOL engineers, American society of. See American society of tool engineers**TOOL rooms**

- Carbide tool crib system used by Warner & Swasey. T. E. Lloyd. *il Iron Age* 150:45-7 D 24 '42
 Tool control. C. H. Brown. *il Aero Digest* 42:229-30+ Ja '43
 Toolroom milling practice. H. A. Frommelt. *il Am Mach* 87:90-1 S 2; 102-3 S 16; 84-5 S 30; 94-6 O 28 '43

TOOL steel

- Alloy steel has advantages in rock drilling; controlled oil-hardening required. C. G. Kemsley. *il diag Eng & Min J* 144:82-3 Ag '43
 Cutting of steel, and tools therefor; report of National metal congress papers. O. W. Boston. *Metal Prog* 42:887-9+ N '42
 Guide for the selection of tool steel. W. E. Bruse. *diag Iron Age* 151:63-8 Je 24 '43
 Hardenability of common toolsteels; charts. S. M. DePoy. *Metal Prog* 44:818 O '43
 Hardening high speed taps and dies in the electric salt bath. P. C. Farren. *il Metal Prog* 44:625-31 O '43
 Hardening of tool steels. P. Payson and J. L. Klein. *bibliog il Am Soc for Metals Trans* 31:218-45; Discussion. 245-56 Mr '43
 Hardening tool steels; abstract. H. B. Chambers. *Metals & Alloys* 18:600 S '43
 Heat treater looks at tool design. A. S. Eves. *Iron Age* 152:45+ S 23 '43
 Heat treatment of high-speed steel tools. W. A. Schlegel. *il Steel* 112:106, 109+ Je 28 '43
 Heat treatment of tool steels; composite of abstracts. *Metals & Alloys* 16:1136+ D '42
 High-speed tool steels; surface hardening by the cyaniding process; abstract. H. Scharmann. *Automobile Eng* 33:340 Ag '43
 Increase of performance of hot work tools. W. Hauffer. *Iron Age* 152:44-8 S 2 '43
 Kinetics of austenite decomposition in high speed steel. P. Gordon, M. Cohen and R. S. Rose. *bibliog il diags Am Soc for Metals Trans* 31:161-98; Discussion. 198-217 Mr '43
 Liquid nitriding. J. G. Morrison. *il Iron Age* 151:41-5 Ap 15 '43
 Proper grinding and inspection of tool steels. J. E. Erb. *il Iron Age* 151:28-32 Ja 14 '43
 Recent developments in carbides vs. high-speed steel. H. A. Oldenkamp and J. McFadyen. *il diags Mech Eng* 65:253-6 Ap '43
 Reclaim tool steel scrap. *Steel* 113:95 Ji 12 '43
 Resistance welding of tool steel. *il diag Iron Age* 152:78 Ji 8 '43
 Role of toolsteel in the war effort. S. C. Spalding. *il Metal Prog* 44:425-30 S '43
 Tool hardener; watch that anneal! T. E. Lewis and C. Verdi. *Metal Prog* 42:867-8 N '42
 Tool steel foundry operated by Gorham tool co. *il Foundry* 71:120, 122 Ag '43
 Two methods of brazing high speed steel tips; copper brazing and hardening with a hydrogen atmosphere furnace; silver soldering and tempering with an oxyacetylene torch. B. S. Lement and W. B. Kennedy. *il Iron Age* 150:55-8 N 19 '42

See also

- | | |
|------------------|----------------|
| Cutting tools | Steel alloys |
| Machine tools | Tungsten steel |
| Molybdenum steel | |

Testing

- Hardness testing of high speed steel at high temperatures. E. C. Bishop and M. Cohen. *diag Metal Prog* 43:413-16+ Mr '43
 Lundbye process can produce 300% increase in tool life; Lundbye chromium-plating process. G. W. Birdsall. *il Steel* 112:100-2, 104+ Je 14 '43

- Selection of toolsteel by its hardenability. S. M. DePoy. *charts Metal Prog* 43:917-18, 918a Je '43
 Separation of high speed steels by spark testing. L. P. Tarasov. *Metal Prog* 42:868 N '42

- Tempering of two high-carbon, high-chromium steels. O. Zmeskal and M. Cohen. *bibliog il Am Soc for Metals Trans* 31:380-408; Discussion. 408-22 Je '43

- Tempering of two high-carbon, high-vanadium high speed steels. B. S. Lement and M. Cohen. *bibliog Am Soc for Metals Trans* 30:1201-42; Discussion. 1042-8 D '42

TOOLS

- Aircraft tool planning. R. H. Luders. *il Aviation* 42:144-5, 147+ Ap; 179, 181+ My '43
 British tool plan; distributors of industrial goods organize along regional lines. *Business Week* p42+ Ap 10 '43
 Chromium plating of dies and tools. D. A. Cotton. *il Metal Finishing* 41:343-7 Je '43
 Dark era for the tool buyer. *Consumers' Research Bul* 12:23-4 O '43
 Hand tools are wartime casualty; proper use and care. *il Nat Pet N* 35 pt 2:R510-13 N 3 '43
 Hand tools; get the best obtainable and take care of them. *Nat Safety* N 47:110+ Mr '43
 How eight Wisconsin utilities allocate cost of hand tools used by employees. *Elec W* 119:158 Ap 3 '43
 How tool-design service organizations speed war production. H. E. Linsley. *Mach* 49:173 Ja '43
 Making alloy steel by arc welding; coated electrodes used in reclaiming tools and dies; Agile process. J. A. Neumann. *il Steel* 112:74-6, 78+ Ja 11 '43
 Malleable tools; giving heat-treated iron more heat, achieving great hardness. *Business Week* p72-3 S 18 '43
 New equipment. *il diags Iron Age* 150:72-4 N 26; 66-70 D 10; 46-7 D 31 '42; 151:67-70 Mr 26; 68-72 Ap 8; 152:79-82 Ji 8; 78-80 Ji 15; 63-6 Ag 19 '43
 Review of power and mechanical equipment; wrenches and other tools. *il Power* 86:974 Mid-D '42
 30th buyers reference number; tools and accessories. *il diags Am Mach* 87:221-46 Ja 21 '43
 Tool check-up system that works; Gogebic County, Michigan, highway shop. G. W. Koronski. *il Roads & Sts* 86:74 Je '43
 Tool design gains importance; Fleetwings, inc. J. J. Scheppe. *diags Aviation* 41:129+ N '42
 Tooling data service speeds war program. *il Iron Age* 150:145-6 D 3 '42
 Tools of our trade; special section on elementary shop practice. *il Am Mach* 87: T05-20 F 18 '43
 Tools revived; hard chrome-plating. *Business Week* p74+ Mr 6 '43
 Unprecedented year experienced by tool engineers. *Steel* 112:405-7 Ja 4 '43
 War advertising programs can now begin to talk results! *il Ptr Ink* 202:25-6, 30+ Ja 15 '43

See also

- | | |
|--------------------------|-----------------|
| Cutting tools | Pneumatic tools |
| Electric tools, Portable | Saws |
| Files and rasps | Tool rooms |
| Machine tools | Tool steel |
| Machinery | Wrenches |

History

- Antiquity of tools. J. D. Little. *il Metal Finishing* 41:495-7, 562-3, 699-701 Ag-S, N '43
 Some old tools in Hereford museum; craft of the cooper and craft of wooden pump making. F. C. Morgan. *Engineer* 174:477-9 D 11 '42

TOOLS, Machine. See Machine tools**TOOTH paste and powder.** See Dentifrices**TOOTHBRUSHES****Rating**

- Toothbrushes and tooth care. *il Consumers' Research Bul* 12:5-8 S '43

TOP dyeing. See Dyes and dyeing—Wool

TOPAZ

- Marketing kyanite and allied minerals. N. C. Jensen. U S Bur Mines Information Circ 7234:13-15 '43
- Substitution of topaz, domestic kyanite, and synthetic mullite-corundum for India kyanite. T. N. McVay and H. Wilson. bibliog map Am Cer Soc J 26:252-66 Ag 1 '43
- Topaz deposits near the Brewer mine, Chesterfield county, South Carolina. C. Fries, jr. map U S Geol S Bul 936:C-59-73, pl 6-9; pa 30c Supt. of doc. '42

TOPEKA**Water supply**

- Concentric-ring concrete tank for Topeka. il diags Eng N 131:194-7 Jl 29 '43

- TOPEY, William Whiteman Carlton**, 1886-Royal medal award. H. Dale. Science 97:30 Ja 8 '43

TOPOGRAPHICAL drawing

- Suggestions for making topographic sketches from contour maps. W. A. White. diag maps Am J Sci 241:491-7 Ag '43

TOPOLOGY

- Moscow school of topology. A. Kolmogorov. Science 97:579-80 Je 25 '43

TORNADO insurance. See Insurance, Tornado**TORNADOES**

- Tornado discoverers asked to report them. Weekly Underw 148:689 Mr 27 '43

TORONTO, Ontario**Rapid transit**

- How mass transportation is conducted in Toronto. il Mass Transportation 39:61-72 F '43

Sewerage

- Operating results at the North Toronto sewage treatment plant. N. G. McDonald. flow diag il Water & Sewage 80:32-3, 53, 60+N '42

- Sewage problems at Toronto; Board of control discusses possible temporary relief measures. map Water & Sewage 81:17+ O; 22+ D '43

- Toronto sewage-treatment plant. plan Water & Sewage 81:11, 13, 20-2+, 44-5 S '43

Water supply

- Improved technique in taste and odor control at Toronto. N. J. Howard. il Water & Sewage 81:36, 60+ Ap '43

TORONTO stock exchange

- Weekly record. Published in weekly Monday numbers of Commercial & financial chronicle

TORPEDO boat destroyers

- Destroyers in World war II. F. J. McDiarmid. Barron's 23:9 Ap 19 '43

See also

- Submarine chasers

TORPEDO boats

- World-wide field service maintained by Packard for PT boat engines. E. L. Warner, jr. il Automotive & Aviation Ind 88:25+ Mr 1 '43

TORPEDES

- Tin fish by American Can. il Business Week p66 My 15 '43
- Torpedo. Steel 112:69 My 31 '43

Manufacture

- Machining operations help put Harvester's torpedo output ahead. il Steel 112:64-5 F 22 '43

- Pontiac gun plant. G. S. Whittaker. il Heat & Ven 40:36-41 Jl '43

- Standard lathe fitted with controls to form-turn parts automatically; forged steel parts for torpedoes. il Steel 112:119 Ap 26 '43

- Tooling for boring and facing torpedo ends. I. F. Yeoman. il Mach 49:152-4 Je '43

TORQUE

- Steering experiments; rudder torque. R. W. L. Gawn. Engineer 176:135-6, 145 Ag 13-20 '43

- Torque-stress-load relationship in bolts and screws; reference book sheets. A. H. Korn. diag Product Eng 14:752-4 N '43

TORQUE converters

- Fluid torque converter and coupling. R. Eksergian. diags Franklin Inst J 235:441-73, pl 1 My '43

TORQUE meters

- Cruise control for flying efficiency. R. D. Speas, J. T. Farrah and S. Hinton. diag Aviation 42:204-5 S '43

- Electric torque meters for aircraft engines. R. L. Findley. il diags Aero Digest 42:285, 291+ Je '43

- Hydraulic bellows measure torque; patent assigned to Owens-Illinois glass co. diag Machine Design 15:154 Mr '43

TORREY botanical club

- Officers. Science 97:134 F 5 '43

TORSION

- Approximate mathematical methods of applied physics as exemplified by application to Saint-Venant's torsion problem. T. J. Higgins. bibliog(72 titles) J Ap Phys 14:469-80 S '43

- Design office problem in the estimation of the torsional resonance characteristics of small marine Diesel-propulsion units. R. W. S. Mitchell. diag Inst Mech Eng J & Proc 149:Proc 133-42 S '43

- Dynamic stiffness and effective inertia methods in modern torsional vibration theory. R. G. Manley. bibliog diags Roy Aeronautical Soc J 47:5-21 Ja '43

- Electrical circuit analysis of torsional oscillations. L. A. Pipes. bibliog diags J Ap Phys 14:352-62 Jl '43

- Evaluating torsional stresses by membrane analogy. J. Marin. bibliog il diags Machine Design 15:118-23+ Je '43

- Measurement of torsional vibrations. R. Stansfield. diags Inst Mech Eng J & Proc 148:Proc 176-93 Mr '43; Same abr. Engineering 154:178-80, 193-200 Ag 28-S 4 '42; Same abr. Engineer 174:77-9, 101-2 Jl 24-31 '42; Discussion. Engineering 154:74 Jl 24 '42; Inst Mech Eng J & Proc 150:Proc 17-29 N '43

- Torsion analysis of open shell structures. E. H. Spaulding. il diags Product Eng 13:718-21; 14:25-7 D '42-Ja '43

- Torsion combined with compression. P. W. Bridgman. il diags J Ap Phys 14:273-83 Je '43

- Torsional and aileron flutter. Z. Krzywoblocki. bibliog J Aeronautical Sci 10:161-8 My '43

- Torsional damping capacity of solid magnesium-alloy rods as affected by cold-working. A. U. Kutsay and A. J. Yorgiadis. bibliog il diag J Aeronautical Sci 10:303-10 O '43

- Two-dimensional boundary value problems in potential theory. I. S. Sokolnikoff and R. D. Specht. J Ap Phys 14:91-5 F '43

- Vector solution of the three-degree case of wing bending, wing torsion, aileron flutter. L. Arnold. diags J Aeronautical Sci 9:497-500 N '42

TORSION meters

- Measurement of torsional vibrations. R. Stansfield. diags Inst Mech Eng J & Proc 148:Proc 176-93 Mr '43; Same abr. Engineering 154:178-80, 193-200 Ag 28-S 4 '42; Same abr. Engineer 174:77-9, 101-2 Jl 24-31 '42; Discussion. Inst Mech Eng J & Proc 150:Proc 17-29 N '43

TORTS

- Drawee bank not liable in contract to holder of check for failure to honor check. Banking Law J 60:537-43 Jl '43

See also

- Damages Negligence, Contributory Fraud tory

TOTAQUINE

- Totaquine evaluation asked of N.R.C. Oil Paint & Drug Rep 143:3+ Je 14 '43

Prices

- Totaquine price ceiling set. Oil Paint & Drug Rep 142:3+ D 7 '42

TOURIST cabins. See Cabins**TOURIST camps, hostels, etc.**

- New buildings for 1942; motor camp. il diags plans Arch Forum 72:120-2 My '43

TOURIST trade

Tourist-trade decline reflects war-time restrictions in Canada. For Comm W 12:14-15 JI 10 '43

See also

Travel—Advertising

TOWBOATS

British prefabricated tugs. il plan Engineer 175:336-8 Ap 23 '43

Bushey-built commission tugs. H. J. Barbour. il Marine Eng 48:206-9+ My '43

Charles W. Snider river towboat. il Marine Eng 48:191 Je '43

Chrysler designs new form of marine tug; Sea Mule marine tractor. il Marine Eng 48:226+ O '43

Egg-beaters ply Ol' Man River, speeding products of oil to war; Diesel-propeller towboats on the Mississippi. F. Way, Jr. il Nat Pet N 35:26-7, 30, 32-3, 35 My 26 '43

Fresh-water shipyards race winter in government oil towboat program. il Nat Pet N 35:20+ S 22 '43

Harbor fleet. il Fortune 27:98-105+ My '43

Henry S. Sturgis, Diesel towboat. il Marine Eng 48:200-2 O '43

Justine, steam tug. E. A. Hodge. il Marine Eng 48:205-6 O '43

Justine, steam tug, launched at Pusey and Jones yard. il Marine Eng 48:222+ Ag '43

Navy tugs built by Bushey. il Marine Eng 48:151+ Ja '43

Prefabricated tugs. il plan Engineering 155:306-7, 310 Ap 16 '43

Sohioan, triple-screw towboat. il Marine Eng 48:151-3+ Mr '43

Tractors afloat; Chrysler's novel tugboat. il Business Week p92 Mr 27 '43

What the river will be wearing; new towboat, Sohioan, capable of pushing 10 10,000-barrel barges upstream at 4 m.p.h. il Nat Pet N 35:36 F 17 '43

TOWELS

Comparison of methods for the determination of water absorbency by terry towels. V. B. Holland. il Am Dyestuff Rep 32:167-70 Ap 12 '43

TOWELS, Paper. See Paper towels**TOWER, Walter Sheldon, 1881-**

Portrait. Iron & Steel Inst J 145:front c no 1 '42

TOWERS

Design of foundations for stacks and towers. V. O. Marshall. il diags Pet Refiner 22:101-18 Ag '43; Discussion. S. Garnett. 22:128 O '43

Stress analysis of tall towers; four methods for calculating stresses and required shell thicknesses for vessels used in refineries; towers designed for high winds or seismic forces. E. F. Brummerstedt. bibliog il diags Nat Pet N 35 pt 2:R539-40, R542-3 N 3 '43

See also

Electric lines—Poles

and towers

Water towers

TOWERS, Steel

Dismantling Tacoma Narrows bridge towers. C. E. Andrew. il Eng N 131:602-3 O 21 '43

TOWING

Marine tractor unit fills tug shortage. il Product Eng 14:208-9 Ap '43

See also

Towboats

TOWING tanks. See Ship model tanks**TOWN planning.** See City planning**TOWNS, Model.** See Model towns**TOWNSEND, William Subers, 1889-**

Townsend's method of mass persuasion and 27 points on lease basis. Ptr Ink 205:49-50 O 15 '43

TOXIC anemia. See Anemia**TOXICOLOGY, Industrial.** See Poisons, Industrial**TOXINS and anti-toxins**

Biological products; establishments licensed for the propagation and sale of viruses, serums, toxins, and analogous products. Pub Health Rep 57:1775-81 N 20 '42

Identity of a lethal agent in broth filtrates of hemolytic streptococci with erythrogenic toxin. G. E. Foley. Science 98:370-1 O 22 '43

Mechanism of antitoxic immunity in clostridium perfringens (welchii) infections in guinea pigs. S. E. Stewart. Pub Health Rep '58:1277-80, pl 1-2 Ag 20 '43

See also

Immunity

TOY industry and trade

New York toy show demonstrates ingenuity of manufacturers. Ptr Ink 202:66 Mr 19 '43

Outsiders invade toy industry; ingenuity sidesteps shortages. il Sales Management 52:23-4, 26 My 1 '43

Toy conversion. il Business Week p58+ N 28 '42

Chile

Chilean toy imports, 1940 and 1941. For Comm W 12:27 S 25 '43

TOYS

This year's toys; next year's will not be so good. Consumers' Research Bul 11:12-14 N '42

TRACE analysis

Concentration methods in spectrographic analysis; recovery of cobalt, nickel, molybdenum, copper, and zinc from plant materials and soil extracts by 8-hydroxyquinoline. R. O. Scott and R. L. Mitchell. bibliog Soc Chem Ind J 62:4-8 Ja '43

Spectrochemical assay for traces of tungsten. A. G. Scobie. Ind & Eng Chem Anal ed 15:79-80 Ja 15 '43

TRACERS, Radioactive. See Radioactivity**TRACING paper**

Selecting engineering department papers. H. A. Perkins and D. H. Hunter. il Machine Design 15:69-71 Ja '43

TRACK circuits

Modern railway signaling practice in America; coded track circuits. O. S. Nock. il diags Engineer 176:243-5 S 24 '43

TRACKLESS trolley. See Trolley buses**TRACTOR industry and trade****Advertising**

Caterpillar to maintain broad service advertising program in '43; traveling instruction schools, army training school, movies, slidefilms, etc. J. Reichart. il Ind Marketing 28:30-1+ Mr '43

Fram plugs tractor care; will introduce new Victory cartridge. Sales Management 52:63 Ja 15 '43

Special center-spread insert personalizes booklet used by 125 different distributors! F. R. Jolly. il Ptr Ink 204:24-5 Ag 20 '43

Canada

Crawler-type tractors placed on quarterly allocation basis; used equipment released from the U.S. Roads & Bridges 81:30+ JI '43

TRACTORS

Bulldozer for short hauls; Graham bros. F. S. Bixby. il Rock Prod 46:69-70 Mr '43

Rotation of track rollers. diags Roads & Bridges 81:48 Ag '43

SAE National tractor meeting, Milwaukee, Sept. 23-24. S A E J 51:sup21-2, 50-4 N '43

Substitutes will be standard materials, tractor men told: SAE Milwaukee section tractor meeting. diags S A E J 50:sup30-2 D '42

Versatility of the modern tractor. S. J. Wright. il Mech Handling 30:293-9 JI '43

Gearing

Casehardening large gears with high frequency current. G. C. Riegel. il Metal Prog 44:78-83 JI '43

Maintenance and repair

Reclaiming worn tractor parts. il diags Roads & Bridges 81:42, 44+ Ap '43

Salvaging worn tractor running gear parts; building up and hard surfacing by electric welding. A. D. Williscroft. Pulp & Pa of Can 43:962-4 D '42

TRACTORS—Continued**Manufacture**

- Earnings in manufacture of tractors, 1942. V. L. Amonette. Monthly Labor R 55:1048-52 N '42
- 400-hp Tournapull tractor. J. F. Dillon, Jr. il diags Automotive & Aviation Ind 88:42-3+ Ap 15 '43
- Hardening by induction process speeds production; Tocco machine for hardening heavy sprockets. il Sci Am 168:10 Ja '43; Iron Age 150:31 D 31 '42
- Proposed procedure for determining machine capacity. V. D. Geers. N A C A Bul 24:249-59 N 1 '42

Trailers

See Trailers

Transmission

- Operating conditions used to select tractor bearings; abstract and discussion. J. Borland. S A E J 51:sup21-2 N '43

Wheels

- Arc-welded tractor tyre adapters. Mech Handling 30:265 Je '43

TRACTORS, Amphibian

- Amphibian tractor. A. H. Allen. Steel 111:91 D 7 '42

TRACTORS, Industrial

- Hibberd & co. tractors. il Mech Handling 30:263-5 Je '43

- Intrajoint transportation systems; Diesel-powered track-type tractor. B. W. Reynolds. Diesel Power 20:1010+ D '42

- Tractor equipped with a bulldozer speeds unloading of ships. il Steel 111:86 N 16 '42

See also

- Motor trucks, Industrial

TRACTORS, Military

- Amphibian tractor. A. H. Allen. Steel 111:91 D 7 '42

- Dust problems in military vehicle operation. L. F. Overholt. il S A E J 51:381-4 O '43

- German military tractor with motorcycle steering. il Automotive & Aviation Ind 89:21 S 15 '43

See also

- Tanks, Military

TRADE acceptances. See Acceptances, Trade**TRADE agreements**

- Authority of Labor relations board to investigate validity of collective agreements. Monthly Labor R 57:471-2 S '43

- Collective bargaining and re-employment of veterans. R. P. Brecht. Ann Am Acad 227:94-103 My '43

- Contract at stake; NWLB weighing appeal from Cleveland decision which invalidates A.F.L.'s union shop at Trailer co. of America. Business Week p98-9 Jl 24 '43

- Ford sets pace; signs with labor for the duration. Business Week p101 N 14 '42

- Labor relations and collective bargaining in chemical industry; Chem & Met report. Chem & Met Eng 50:99-106 Ja '43

- Looking ahead; U.A.W. demands contract embodying postwar security fund. Business Week p82 My 15 '43

- Military-service and war-job clauses in union agreements. H. Cannon. Monthly Labor R 55:1147-55 D '42

- Pay differentials for night work under union agreements. C. Williams. Monthly Labor R 57:133-44 Jl '43

- Pensions in ILGWU contract. Nat Underw (Life ed) 47:7 Jl 2 '43

- Swedish master wage agreement, 1943. T. O. Klath. Monthly Labor R 56:792 Ap '43

- Temporary truce; department store pacts signed in Pittsburgh. Business Week p86+ O 2 '43

- To halt turnover; California pact has stabilized state's construction labor. Business Week p102-3 O 30 '43

- Union agreements with municipalities. J. Silver. Monthly Labor R 56:1165-70 Je '43

- Vacation and holiday provisions in union agreements. Monthly Labor R 56:924-31 My '43; Excerpt. Management R 32:177-8 My '43

See also

- Arbitration, Industrial

- Collective bargaining

Maintenance of membership clauses

- See Trade unions—Maintenance of membership

- TRADE agreements, Commercial.** See Commercial treaties and agreements

- TRADE agreements act.** See Commercial treaties and agreements

TRADE associations

- Citadel of monopoly; design for guilds. Economist 144:583 My 8 '43

- Germany's CMP; trade associations in charge of allotments. Business Week p44+ My 15 '43

- Industrial embassies in Washington. H. Bratter. Pub Util 31:663-75 My 27 '43

- Post-war reconstruction; employers' need of organization. Engineering 155:383-4 My 14 '43

See also

- Advertising, Association

- Export associations

- Import associations

- also names of associations, e.g.

- American paper and pulp association

- American petroleum institute

- American society for metals

- Cotton textile institute

- Insurance associations

- Paper associations

- Trade unions

- also names of associations, e.g.

- Edison electric institute

- National paint, varnish and lacquer association

- National rural electric co-operative association

Directories

- Alphabetical list of scientific and trade organizations in the chemical and allied fields. Chem Ind 51:582-4 pt 2 (Buyer's guidebook) O '42

- Associations and trade groups; a list of those in the fields of advertising, distribution, sales, marketing, media and graphic arts. Ptr Ink 202:139-41 F 5 '43

- Directory of professional, scientific, technical and trade associations and societies. Chem & Met Eng 50:142+ O '43

- Market data book number, 1943. Ind Market- ing 27:1-415 O 25 '42

Law

- F.T.C. puts ban on trade group sales restraint; case against Wire rope and strand manufacturers association. Credit & Fin Management 45:16 F '43

- How trade bodies may keep within letter of federal law. J. M. F. Donovan, Jr. Ptr Ink 200:78, 82 S 25; 201:64+ N 20 '42

Service

- News print service bureau's silver anniversary. Pulp & Pa of Can 44:436-8 My '43

Great Britain

- Extension of monopoly? perfumery, toilet and medicinal preparations trade. Economist 144:818 Je 26 '43

- Produce federation. Economist 144:277+ F 27 '43

- Right of association. Economist 145:1-2 Jl 3 '43

- TRADE balance.** See Balance of payments

- TRADE barriers.** See Commercial policy; Interstate commerce; Tariff

- TRADE catalogs.** See Catalogs

- TRADE characters.** See Advertising characters

TRADE directories

- Aero equipment digest index; items described in Aero equipment digest section from November 1942 to April 1943; addresses for manufacturers. Aero Digest 42:407-8+ Ap '43

- Buyers' directory; equipment, machinery, materials and allied products required by users of portland cement. Concrete 51:69-77 F '43

TRADE directories—Continued

Buyers guide of refinery equipment. Oil & Gas J 41:B1-B91 Mr 25 '43

Buyer's guidebook number, 18th annual revision. W. J. Murphy, ed. Chem Ind 51:1-828 pt 2 (Buyer's guidebook) O '42 (pa \$2)

Chemicals buying section; an alphabetical list of chemicals with their formulas, physical and chemical properties, uses, containers, tariff, shipping regulations, with a buyer's guide of manufacturers and distributors. Chem Ind 51:127-426 pt 2 (Buyer's guidebook) O '42

Classified index of products used in the water works and sewerage fields. Water Works & Sewerage 90:sup8-18 Je '43

Directory of aircraft and engine materials; manufacturers' addresses. Aero Digest 43:333-47 Jl '43

Directory of materials. Machine Design 15:157-214 O '43 [reprints pa 25c]

Directory of suppliers; machinery and equipment for rock products industries. Rock Prod 46:149-64, 164A-164D Ja '43

Holds gift-show-in-print via buyers' directory. Ptr Ink 204:28 S 3 '43

1942 year book, American welding society; complete roster of the Society's members. Welding J 21:33-115 sec 2 D '42

1943 directory of heating, piping and air conditioning equipment for industry and large buildings; classified by products, trade names and manufacturers' addresses. Heating-Piping 15:211-305 Ja '43

1943 directory of manufacturers; buyers' guide of over 400 power products. Power 86:sup201-84 Mid-D '42

1943 Instruments index. Instruments 16:11-121 pt 2 Ja '43

Products index; buyer's guide, with addresses of Canadian manufacturers and agents of sewerage and waterworks equipment. Water & Sewage 81:116-28 Je '43

Products index; with addresses of manufacturers and agents. Roads & Bridges 81:86-96, 100-12 Jl '43

Raw materials buying section; an alphabetical list of natural raw materials, such as gums, metals, minerals, ores, naval stores, oils, natural pigments, etc. with their physical and chemical properties, uses, containers, tariff, shipping regulations, with a buyer's guide of suppliers. Chem Ind 51:41-125 pt 2 (Buyer's guidebook) O '42

Where to buy; manufacturers of metals and metal working equipment. Metal Prog 43:C8-C62 sec 2 Ja '43

Where to buy; manufacturers of metals and metal working equipment. Metal Prog 44:B9-B50 sec 2 Jl '43

Where-to-buy; products directory section of steel advertisers. Steel 112:1-32 sec 2 Ja 4 '43 [issued quarterly]

See also

Airplane accessories industry—Directories	Food, Frozen—Directories
Airplane industry and trade—Directories	Heating industry—Directories
Diesel engines—Directories	Radio apparatus industry—Directories

Bibliography

Business reference publications. Ind Marketing 27:109-10 O 25 '42

TRADE-in policies

See also Automobile industry and trade—Used cars

TRADE journals

Advertisers may point way to publishers; waste in sending free copies of Trade Journals. H. Farrington. Ptr Ink 203:100 My 21 '43

Business press in wartime Britain. R. Woolley. Adv & Sell 36:42+ N '43

Editor's viewpoint on publicity material in wartime. J. C. Penson. Ind Marketing 28:29+ Ag '43

Effect of the war on British business papers. O. Pawsey. Ind Marketing 28:82+ Ag '43

New trend in magazine reading shown by 300,000 library visitors; facts and thought-provoking articles favored by callers at New York's library. G. M. Flanagan. Sales Management 52:78+ Ag 1 '43

President's magazine day. Adv & Sell 36:148 O '43

Rising volume of business-paper advertising reflects the impact of war on the utility of advertising; over 700 business papers report how they fare in wartime. V. H. Van Diver, jr. Ptr Ink 202:103-4+ F 5 '43

Sixteen business editors receive awards for editorial achievement. Il Ind Marketing 28:64, 66+ O '43

See also

Advertising mediums	Business periodicals
—Trade journals	House organs
Associated business papers	

Directories

Market data book number, 1943. Ind Marketing 27:1-415 O 25 '42

TRADE marks

New trade marks. Soap & San Chem 19:47+ Ja '43 [cont monthly]

New trade marks of the month. Chem Ind 52:117-18 pt 2 Ja '43 [cont monthly]

New trade-marks of the textile industry. Il Published in monthly numbers of Rayon textile monthly

Patents and trade marks. Published in monthly numbers of India rubber world

Talking trade-mark tickles employees. Il Sales Management 52:39 Ag 15 '43

Victory models; government trying to solve problems of trade-marks, simplification and standardization. L. D. H. Weld. Il Ptr Ink 201:46, 48+ D 25 '42

See also

Patent laws and legislation	Private brands
Patents	Trade names

Advertising

Remember us when you bake your own; B & M advertises to maintain name and quality identity of baked beans. C. S. Morrill. Il Mod Packaging 16:61+ F '43

These things we fight for; silverware manufacturer solves problem of how to keep brand name alive. E. B. Bedford. Il Ptr Ink 202:142 F 5 '43

Trade-marks don't detract from messages donated to government. Il Ptr Ink 201:58 N 27 '42

Law

See also

Patent laws and legislation

TRADE names

Carter on the pan; Federal trade commission says Little Liver Pills don't benefit the liver. Business Week p90 Je 12 '43

Condensed review of some recently developed materials, arranged alphabetically by trade names. Mach 50:177-81 O; 189-93 N '43

Index and trade name dictionary. Chem Ind 51:701-826 pt 2 (Buyer's guidebook) O '42

Iron, steel and nonferrous metals listed by tradenames, by products and by principal constituents. Machine Design 15:158-85 O '43

Merchandising problem of the moment: what to do with trade-name when war alters quality? 20 advertisers and advertising agencies answer to P.I. inquiry. F. La-Clave. Il Ptr Ink 203:13-15+ Je 4 '43

Plastics and other nonmetals listed by tradenames and by producers. Machine Design 15:188-203 O '43

Secondary meaning of trade names. A. Gray. Adv & Sell 36:77+ N '43

33 check points for finding a name for that new product. P. H. Erbes, jr. Ptr Ink 205:28, 32+ O 1; 33+ O 15 '43

See also

Business names	Products, New—Names
Elasti-glass	Trade marks

Advertising

Fabric house wins brand identity with dealers and consumers; Arlington Mills labels are carried after re-manufacture for their sales potency with consumers. Il Sales Management 52:23-5 S 15 '43

Pooling threatens brands. C. J. Swan. Il Ptr Ink 201:16-18+ N 13 '42

TRADE names—Advertising—Continued

What is your brand's equity in postwar America? M. Harper, Jr. Adv & Sell 36:24+ Ja '43

TRADE practices

Black market in peacetime; a review of legislation affecting sale of goods by employers to employees. Il Ptr Ink 204:16-17 Ag 6 '43

Minnesota outlaws discount selling; bill designed to do away with fraudulent practices in connection with so-called wholesale sales. Elec W News ed 119:1384 Ap 24 '43

Standard buying and selling agreement drafted by industry. Ind Marketing 28:108, 110 S '43

See also

Dealer relations	Price fixing
Premiums (merchandizing)	Price policies
Price cutting	Restraint of trade
Price discrimination	Sales policies
	Trade secrets

TRADE relations*See also*

Dealer helps	Jobber relations
Dealer relations	Marketing
Federal trade commission	Sales policies
	Trade practices

TRADE schools

Federally-aided vocational schools; list. Sheet Metal Worker 34:24+ F '43

New buildings for 194X; trade school. Il plans Arch Forum 72:66-7 My '43

Policies on war-training production work in vocational schools. Monthly Labor R 56:72-3 Ja '43

Small vocational school; shop and music building, Holland, Mich. Il plans Arch Rec 93:82 F '43

Trade school in Berne, Switzerland. Il diag plans Arch Rec 93:78-81 F '43

See also

Nautical training schools

TRADE secrets

Procter & Gamble wins in trade secrets suit. Oil Paint & Drug Rep 143:42 F 15 '43

TRADE tests. See Ability tests**TRADE union insurance. See Insurance, Trade union****TRADE union insurance agency, New York**

Labor union agency a factor in placing big group cases. Nat Underw 47:19 Jl 1 '43; Same. Nat Underw (Life ed) 47:4 Jl 2 '43

TRADE unions

Admission of women to union membership; boilermakers' union; British engineering union. Monthly Labor R 55:1006-7 N '42

Current developments on the labor front. R. W. Stone. Mod Plastics 20:58-9 Je '43

Featherbedding hampers the war effort; railroad union rules force use of extra workers. J. Patric and F. J. Taylor. Barron's 23:3 F 8 '43

Foremen freed; Shell's supervisors finally withdrawn from workers' bargaining unit. Business Week p84+ S 18 '43

Fortune survey; labor speaks up about unions. Fortune 27:12+ Ja '43

Future of organized labor, L. Stern. Mag of Wall St 71:570-2+ Mr 6 '43

How much trade unionism as usual? abstract. S. H. Slichter. Management R 32:46-8 F '43

Labor relations and collective bargaining in chemical industry; Chem & Met report. Chem & Met Eng 50:99-106 Ja '43

Labor unions and the engineer. H. F. Peckworth. Min & Met 24:20-1 Ja '43

NLRB should be empowered to review union membership restrictions. R. A. Newman. Comm & Fin Chr 157:673 F 18 '43

Relationship between the unions and engineers; unions' attitudes toward the industrial-engineering profession. W. Gomborg. bibliog Mech Eng 65:425-30 Je '43

Union membership and collective bargaining by foremen. Monthly Labor R 56:1049-53 Je '43

Unionization of foremen. H. R. Northrup. Harvard Business R 21 no4:496-504 [Jl] '43

Unions and grievances. S. Barkin. Personnel J 22:38-48 Je '43

Unions move up; two independents seek to organize Ford's plant guards. Business Week p98-9 Ap 10 '43

Unity. G. A. Burkart. Chem & Eng N 20:1682+ D 25 '42

Women engineers; Amalgamated engineering union and admission of women members. Economist 143:628-9 N 21 '42

See also

American federation of labor	Insurance, Trade union
Arbitration, Industrial	Insurance agents—Unions
Check-off system	Labor and laboring classes
Collective bargaining	Open and closed shop
Congress of industrial organizations	Picketing
Cooperation	Strikes
Industrial relations	Trade agreements

also names of unions, e.g.

Foreman's association of America	Mine officials union of America
International association of machinists	United automobile workers of America
International brotherhood of electrical workers	United mine workers of America
Mechanics educational society of America	United steelworkers of America

Advertising

Car card wrangle; C.I.O.'s effort to sign up Kaiser workers. Business Week p17 Je 19 '43

Bibliography

Trade union library 1943. H. C. Benjamin. 4th ed 42p pa 40c Ind. relations section, Princeton univ, Princeton, N.J. '43

Dues and fees

Footing the bill; members working outside their trade, contribute 3% of earnings. Business Week p88 Jl 31 '43

Educational work

Union-management administration of employee training: the experience of TVA. W. J. McGlothlin. Advanced Management 8:38-44 Ap '43

Health service

Blood tests ordered; California federation of labor. Business Week p106 Je 26 '43

Jurisdictional disputes

A.F.L. ratifies pact to arbitrate jurisdictional disputes with C.I.O. Business Week p79 Ja 30 '43

Ganging Douglas? A.F.L.-C.I.O. truce in aircraft plants. Business Week p75-6 Ap 3 '43

In the middle; Allis-Chalmers caught by anti-strike law. Business Week p96+ S 4 '43

Machinists union ends AFL tie. Comm & Fin Chr 157:2083 Je 3 '43

Picketing in dispute between rival unions held illegal by N.Y. Court of appeals. Comm & Fin Chr 157:925 Mr 11 '43

Reds face fight; jurisdictional dispute at New Orleans may erupt C.I.O. convention. Business Week p90+ O 9 '43

Rift in chemicals; showdown battle looms between C.I.O. and U.M.W. district 50. Business Week p67-8 Ja 23 '43

See also

Trade unions—Portland, Oregon

Law

Job or union? worker must make choice under recent decisions of state unemployment compensation boards where union is issue. Business Week p92+ Ag 28 '43

Kansas and Texas enact union-control legislation. Comm & Fin Chr 157:1291 Ap 8 '43

R. J. Thomas enters appeal following charges of violating Texas law governing organizing. Comm & Fin Chr 158:1305 S 30 '43

Recent state legislation on labor relations. Monthly Labor R 56:941-4; 57:778-80 My, O '43

TRADE unions—Law—Continued

Regulation labor unions through laws of anti-trust type urged. D. Emery. Comm & Fin Chr 158:3+ J1 1 '43
 Three state legislatures pass measures to regulate unions. Steel 112:72 Ap 5 '43
 Trends in labor relations bills in state legislatures. Personnel J 22:49-53 Je '43
 Unions face growing regulation. J. L. Wick. Barron's 23:3+ S 20 '43

Maintenance of membership

Chrysler weapon; case against m. of m. documented by compilation of U.A.W.'s strike record. Business Week p98+ Ag 28 '43
 Decisions of National war labor board, Aug. and Sept. 1942; union security. Monthly Labor R 56:64-6 Ja '43
 Maintenance-of-membership awards of National war labor board. F. Joiner and others. Monthly Labor R 57:524-33 S '43
 M. of M. plus; NWLB adds maintenance of membership to preferential shop in Shell case. Business Week p114+ Je 19 '43
 M. of M. revised. Business Week p110-11 Mr 20 '43
 NWLB rule to protect union maintenance. Comm & Fin Chr 156:2256 D 24 '42
 Sailors frozen; fixed ratio of C.I.O. members on Great Lakes ore boats. Business Week p102+ Mr 13 '43
 Still a big issue; membership maintenance. Business Week p94-5+ J1 24 '43
 Strange interlude: industry members of NWLB support checkoff and maintenance of membership. Business Week p88-9 My 8 '43
 Toward a national wartime labor policy; the union-security issue. E. B. McNatt. bibliog J 16:64-9 Ja '43
 Union in soup; Campbell's fear that dues buttons would contaminate product ignored by NWLB. Business Week p90 Ag 21 '43
 U.S. gypsum co. challenges WLB order on union membership and dues check-off. Comm & Fin Chr 158:1327 S 30 '43
 WLB sued on union order; Montgomery Ward & co. puts maintenance decree up to court. Comm & Fin Chr 158:1420 O 7 '43

Public relations

Public looks at labor unions. E. Roper. Harvard Business R 21 no4:425-31 [J1] '43

Publications

American labor publications in the library; some special problems. E. M. Grieder. bibliog Special Lib 34:39-44 F '43

Research work

Research work of trade-unions. N. M. Bortz. Monthly Labor R 56:296-307 F '43

Service

More union men in WPB urged to smooth path for shifting workers. Business Week p80+ J1 31 '43
 Rationing aides; union members serving on local boards help OPA. Business Week p92+ Ap 10 '43

Belgium

Dissolution of trade associations in Belgium. Int Labour R 47:491-2 Ap '43

California

How much progress are unions making in organizing salesmen? answer from southern California area. J. H. Collins. Sales Management 52:84+ Ag 1 '43
 Unions have substantial foothold among 'Frisco sales organizations. E. Gidlow. Sales Management 52:66+ O 1 '43

Canada

Trade-unions in Canada, 1941. Monthly Labor R 56:955-8 My '43
 Trades and labor congress of Canada 59th annual convention, Quebec, Aug. 30-Sept. 3. Int Labour R 48:672-4 N '43
 Unions in politics. Business Week p52+ O 9 '43

See also
 Canadian congress of labor

China

Labor organization in China. Monthly Labor R 57:533-4 S '43

Egypt

Recognition of trade unions in Egypt. Int Labour R 48:216-17 Ag '43; Same cond. Monthly Labor R 57:534-5 S '43

Great Britain

Barrow strike; Vickers-Armstrongs' works. Engineering 156:314-16 253-5 O 15-22 '43
 British production committees. M. E. Murphy. Personnel J 22:114-22 O '43
 British trades union congress. Int Labour R 46:771-7 D '42
 British trades union congress of 1942. Monthly Labor R 55:1223-5 D '42
 Constructive trade unionism. Economist 145:321-2+ S 4 '43
 First national conference of women shop stewards of the Amalgamated engineering union in Great Britain. Int Labour R 48:399-400 S '43
 Rule of law. Economist 144:717-13 Je 5 '43
 Seventy-fifth annual session of the British trades union congress. Int Labour R 48:669-72 N '43
 Trade-union membership in Great Britain and Northern Ireland, 1941. Monthly Labor R 56:736-7 Ap '43
 Trade union turning-point. Economist 144:580-1 My 8 '43
 Trade unionists. Economist 144:41-2 Ja 9 '43
 Trade unions and technicians; position of supervisory and technical staffs. Economist 144:142 Ja 30 '43
 Women trade unionists. Economist 145:499-500 O 9 '43

Mexico

Workers' organizations in Mexico. Monthly Labor R 57:535-6 S '43

Portland, Oregon

DeShetler is back; C.I.O. organizer reopens membership drive to win A.F.L. boiler-makers at Kaiser yards. Business Week p77-8 Je 5 '43
 Fizzle in Portland; DeShetler abdicates job of wrestling Kaiser workers from A.F.L. for C.I.O. Business Week p94-5 My 8 '43
 Leaders ousted; Portland (Ore.) Local 72 of the A.F.L. boilermakers' union. Business Week p73 Ja 16 '43
 Portland revolt; Tommy Ray's control of Local 72 of the A.F.L. boilermakers' union. Business Week p78+ F 13 '43

Texas

R. J. Thomas enters appeal following charges of violating Texas law governing organizing. Comm & Fin Chr 158:1305 S 30 '43

United States

Foe of the reds; Pittsburgh attorney leads fight against Communists in unions. Business Week p99-101 S 11 '43
 Labor goes on the defensive. Business Week p15-16 Mr 13 '43
 Labor has a choice; it can be swallowed up by the state, or remain free in society. J. Chamberlain. Il Fortune 27:124-7+ Je '43
 Negroes in a war industry; the case of shipbuilding. H. R. Northrup. bibliog J 16:160-72 J1 '43
 Return of the prodigal. Business Week p17-19 My 23 '43
 Rivalry ditched; A.F.L. and C.I.O. unions join forces. Business Week p96-7 D 19 '42
 Trade union movement in the United States. Int Labour R 47:534-6 Ap '43
 Types of union recognition in effect in January 1943. Monthly Labor R 56:284-91 F '43
 Union suicide; A.F.L. local at Louisville mayonnaise company. Business Week p96-7 My 1 '43
 Unions fight back; hold-the-line order stirs flood of protests. Business Week p14 Ap 24 '43
 Where is labor headed? W. Williams. Factory Management 101:81+ F '43

See also
 American federation of labor
 Farmers' unions
 Trade unions—Jurisdictional disputes
 Congress of industrial organizations

TRADE waste

- Acid waste disposal; abstract and discussion. W. Rudolfs. Eng N 129:715 N 19 '42
- Acid waste treatment with lime. W. Rudolfs. Ind & Eng Chem 35:227-30 F '43
- Bentonite as a coagulant for sewage and industrial wastes. H. L. Olin, R. J. Box and R. E. Whitson. Water Works & Sewerage 89:535-8 D '42
- Chromium, a water and sewage problem. D. W. Graham. bibliog Am Water Works Assn J 35:159-64 F '43
- Disposal of trinitrotoluene (TNT) waste waters and its relation to public water supplies; abstract. P. Hansen. Water Works & Sewerage 89:469-70 N '42
- Effect of industrial wastes on sewage disposal; textile waste, chromium and copper. C. R. Hoover. Pub Works 73:32 N '42
- Glue works waste recovery system. Pub Works 74:55 My '43
- How to meet the demand for better waste disposal. E. S. Fenelon. Il plans Food Ind 15:84-6 JI '43
- Industrial waste disposal. F. W. Mohlman. Il diags Chem & Met Eng 50:127-31 F '43
- New vacuum flotation process aids liquid waste disposal. A. J. Fisher. Il diags Food Ind 15:87-9+ JI '43
- Surveys of liquid wastes from munitions manufacturing. R. S. Smith and W. W. Walker. Pub Health Rep 58:1365-79, 1393-1412 S 10-17 '43
- Treatment of a defense plant waste. R. Eliassen and C. N. Sawyer. Il diag Water Works & Sewerage 89:532-4 D '42
- Treatment of industrial wastes; information published by the U. S. Public health service on treatment of wastes from brewery, cannery, coal washing, coke, cotton, distillery, meat, milk, oil, paper and tannery industries. flow diag Pub Works 73:25-6 N '42
- TNT wastes. S. Schott, C. C. Ruchhoff and S. Megregian. diag Ind & Eng Chem 35:1122-7 O '43
- Vacuum flotation; a new process for sewage and industrial waste treatment. A. J. Fischer. Il diags Eng N 130:297-301 F 25 '43
- Wartime industrial wastes; discussion at meeting of Canadian institute of sewage and sanitation. Water & Sewage 80:72-4 N '42
- See also*
- | | |
|--------------------------------------|-----------------------|
| Canneries—Waste | Refuse disposal |
| Chemical plants—Waste | Sewage disposal |
| Coal mines and mining—Waste disposal | plants |
| Gas works—Waste | Sewerage |
| Paper mills—Waste | Sugar factories—Waste |
| Petroleum—Water problem | Sulfite liquor |
| Petroleum refineries—Waste | Tanneries—Waste |
| | Waste, Utilization of |
| | Water pollution |

TRADEMARKS. See Trade marks**TRADES** and labor congress of Canada

Annual convention, 59th, Quebec, Aug. 30-Sept. 3. Int Labour R 48:672-4 N '43

TRADES union congress. See Trade unions—Great Britain

TRADING areas. See Market areas; Shopping areas

TRADING with the enemy

Book about trading with enemy interests marine underwriters. M. Domke. Weekly Underw 149:166-7 JI 24 '43

Foreign funds control. Published in Federal reserve bulletin

WDC outlines attitude toward nationals of Germany and Japan. East Underw 44:20 Ja 15 '43

TRAFFIC. See Air lines—Traffic; Airways—Traffic control; Communication and traffic; Motor bus lines—Traffic; Railroads—Traffic

TRAFFIC audit bureau

Billboards tallied; Traffic audit bureau to intensify check on readership. Business Week p73+ JI 10 '43

T.A.B. will issue semi-annual audit. Ptr Ink 204:35+ JI 2 '43

Urban traffic up 6% despite war, outdoor circulation audit shows. Ptr Ink 204:62 Ag 6 '43

TRAFFIC lines

Asphaltic pavement bars protect safety zones. Il Eng N 131:141 JI 15 '43

Bead striping for dimout areas now regular California practice. Il Concrete 51:38 O '43

Concrete traffic-lane separator without reinforcing. diags Pub Works 74:42-3 Ap '43

Factors influencing the reflectivity of white portland cement concretes. C. W. Muhlenbruch and E. H. Miller. diag Am Soc T M Proc 42:775-85; Discussion. 786 '42

Glass-beaded paint for blackout traffic control. E. A. Mitchell. Il Eng N 129:720-1 N 19 '42

Highway signs and markings for blackout conditions; test using cars equipped with lights approved by the War department. G. J. Fisher and O. K. Normann. Il diags map Pub Roads 23:105-24, 135-6 O '42

New design of standard for traffic stripe flags. T. W. Martin. Il diags Roads & Sts 86:82 Ap '43

Road markings for blackout conditions; embedding glass beads in paint more than doubles visibility. Pub Works 74:47-8 S '43

Substitutes for white-paint road markings; new British developments; plastic and surface dressed lines. Il Roads & Bridges 81:31-2 Je '43

Surface-dressed road markings. diags Roads & Bridges 81:41+ S '43

Three traffic paint tests approved by A.S.T.M. Paint Oil & Chem R 106:12 JI 15 '43

TRAFFIC management, industrial

Effecting transportation conservation while maintaining distribution; G-E lamp department conserves clerical effort, warehouse labor and transportation facilities. F. Blumer. Il Ind Marketing 28:21-2 JI '43

General Electric jobbers line up to help break war bottlenecks; traffic manager Ruehl of G-E, laid out plan for saving railroad equipment, trucks, tires, gas and manpower. Sales Management 51:57-9 N 15 '42

Traffic manager's woes. Fortune 27:46 Ap '43

See also
National industrial traffic league

TRAFFIC regulations

Wartime traffic problems; abstract. S. J. Williams. Eng N 129:730 N 19 '42

See also

Automobile laws and regulations	Road traffic
Automobile parking	Street traffic
Motor bus lines—Laws and regulations	Traffic signals
Motor trucks—Laws and regulations	Tunnels and tunneling—Vehicular tunnels

TRAFFIC signals

Blackout and dimout of street lighting and traffic signals. K. M. Reid. diags Illum Eng 37:849-56 D '42

California project involves novel intersectional design; channelization structures combined with traffic-actuated signals. A. G. Lindley. diags Pub Works 74:13+ F '43

Mobile traffic signal. Il diag Elec R (Lond) 133:447-8 O 1 '43

Traffic signals during blackouts. C. T. Bakeman. Illum Eng 37:857-61 D '42

Standards

Standards for traffic control devices. D. M. McNeil. Ind Stand 14:116-17 Ap '43

TRAFFIC surveys

Amount and characteristics of trucking on rural roads. J. T. Lynch and T. B. Dimmick. Il tables map Pub Roads 23:213-46 JI '43

Traffic count printed hourly by photoelectric recorder. diags Electronics 16:130+ My '43

Traffic growth and composition, 1937-1941. L. E. Peabody. Pub Roads 23:155-6+ Ja '43

TRAFFIC world (periodical)

No apologies. Sales Management 52:100 JI 15 '43

TRAILERS

Air conditioned trailer for engineers building advance bases. Il Refrig Eng 46:119 Ag '43

TRAILERS—Continued

Converts food trailer to bus for workers; will carry 89 volunteer farm laborers to Seabrook farms. *il* plans Food Ind 15:64-5 Mr '43

Easy way to schedule trailer maintenance. *il* Food Ind 15:72-3 O '43

400 new tank trailers okayed. Nat Pet N 35:24 S 15 '43

Grocery trailers cut store delivery costs. *il* Food Ind 15:68-9 Ja '43

New tank trailers authorized. Nat Pet N 35:30 Ji 28 '43

Trailer fire unit; Dennis no. 3 two-stage centrifugal pump. *il* diags Automobile Eng 32:511-17 D '42

Transportation units to fit the job; Andersen sand & gravel co. *il* Rock Prod 46:66, 68, 70+ S '43

Truck, trailer purchasers aided; through amortization plan, U.S. encourages purchase of tank trucks, trailers for war purposes. Nat Pet N 35:26+ F 10 '43

Truck-trailers furnish maximum transportation. Roads & Bridges 81:126 Mr '43

See also

Automobile trailers

TRAILERS, Automobile. *See* Automobile trailers

TRAILERS, Motor bus. *See* Motor bus trailers

TRAIN dispatching. *See* Railroads—Train dispatching; Subways—Train dispatching

TRAIN speed. *See* Railroads—Train speed

TRAINS. *See* Railroads—Trains

TRANS-CANADA air lines

Canada plans world air role; government-owned company prepares to fly ocean routes. J. Montagnes. maps Barron's 23:3 Ag 30 '43

TRANSCONTINENTAL and western air, inc. Ten years' progress. J. C. Franklin. *Aeronautical Eng R* 1:101 N '42

TWA filing for foreign routes; reports over 1,000 ocean flights. M. Mickel. *Aviation N* 1:28-9 S 6 '43

TRANSDUCERS, Electric. *See* Electric transducers

TRANSFORMERS, Electric. *See* Electric transformers

TRANSITE pipe. *See* Pipes, Asbestos cement

TRANSITION points

See also

Freezing points

Melting points

TRANS-JORDAN

Trans-Jordan's economy. *Economist* 145:522-3 O 16 '43

TRANSLITERATION

Further note on Russian names. K. S. Chester. *Science* 98:302 O 1 '43

Names, Russian and other. K. Dunlap. *Science* 97:400-1 Ap 30 '43

Russian names; need of a definite rule. A. Hrdlička. *Science* 97:243 Mr 12 '43

Transliteration of English names in Russian. A. Hrdlička. *Science* 98:219 S 3 '43

Transliteration of English names into Russian. V. Krotkov. *Science* 98:344-5 O 15 '43

Transliteration of Russian names. D. G. Nichols; R. M. Strong. *Science* 98:132-3 Ag 6 '43

Transliteration once more. P. H. Furfey. *Science* 98:153 Ag 13 '43

TRANSMISSION, Electric. *See* Electric transmission

TRANSMISSION, Radio. *See* Radio transmission

TRANSMISSION lines. *See* Electric lines

TRANSMITTERS, Radio. *See* Radio transmitters

TRANSMUTATION (chemistry)

Putting tagged atoms to work. J. A. Timm. *bibliog J Chem Educ* 20:54-9 F '43

See also

Atoms—Disintegration

Radioactivity

TRANSPARENCY

Transparencies for optical comparators. *il* Iron Age 151:61 F 25 '43

TRANSPARENT gages. *See* Gages

TRANSPARENT plastics. *See* Plastic materials, Transparent

TRANSPLANTATION (physiology)

Wound healing. N. Egorov. *Science* 97:162 F 12 '43

TRANSPORTATION

Neglected cycle: the transport-building cycle. W. Isard. *bibliog R Econ Stat* 24:149-58 N '42

Tempo of transport. L. K. Sillcox. *Harvard Business R* 22 no 1:29-39 [O] '43

See also

Aeronautics, Commercial

Air lines

Aircraft

Airplanes

Automobile trailers

Automobiles

Barges

Bridges

Cableways

Canals

Carriers

Coal handling

Commerce

Delivery of goods

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Employees, Transportation of

Freight car service

Freight cars

Freight ships

Gasoline pipe lines

Highway transportation

Mechanical handling

Merchant marine

Mine haulage

Motor bus lines

Motor ships

Motor trucks

also subdivision names of products, e.g.

Chemicals—Transportation

Gasoline—Transportation

Transportation

Federal aid

Big money in land-grant discount; exhibit from study board; other public-aids statements; highway and waterway data. *Ry Age* 114:161-3+ Ja 9 '43

B.I.R. progressing on fiscal '44 funds. *Ry Age* 114:1108 My 29 '43

See also

Roads—Federal aid

Laws and regulations

Lesson in tank cars; WPB's order points to sterner control over all transportation. *Business Week* p15 F 6 '43

See also

Automobile laws and regulations

Interstate commerce

Maritime law

Motor trucks—Laws and regulations

Railroad law

Waterways

Rates

See also

Motor trucks in freight service—Rates

Railroads—Rates

Shipping—Rates

Statistics

American economy in 1942: transportation; with comparisons for earlier years. C. A. R. Wardwell and R. B. Bangs. *Survey of Cur Business* 23:13 Ja '43

Indexes of volume of transportation, all types; annually, 1929-38, and monthly, 1939-42; revised series. *Survey of Cur Business* 23:26-7 My '43

Transportation, first half of 1943 and figures for other periods. *Survey of Cur Business* 23:7-8+ Ag '43

What the war has done to transportation; graphs. *Business Week* p38 N 28 '42

California

M-day still has a place on the drawing board; California war worker transportation. J. H. Collins. *Pub Util* 31:267-74 Mr 4 '43

TRANSPORTATION—Continued

China

Improving communications in China. Tseng Yang-fu. Engineer 176:89 J1 30 '43

Europe

Transport in fortress Europe as it moves under Hitler's goads. For Comm W 10:12 Ja 2 '43

Germany

Festung Europa; Germany's interior lines have become her long-stretched roads to defeat. maps Fortune 28:109-11+ Ag '43
Nazi transport system seriously impaired? S. Saunders. il For Comm W 9:13+ D 19 '42
Transport bottlenecks. Economist 145:144 J1 31 '43

Great Britain

Britain tightens up on long-haul trucks. Ry Age 114:254 Ja 23 '43
Control of road transport. Economist 143:570, 583, 646 N 7, 21 '42
Progress of road haulage scheme. Economist 144:535-6 Ap 24 '43
Road haulage scheme. Economist 144:338 Mr 13 '43
Road transport in Great Britain; full co-operation between railways and all truck and bus operators. P. T. Cole. il Roads & Bridges 80:24-5+ N '42
Sleepy stations become busy junctions; all forms of transportation in Britain have been brought into an integrated service. J. Marchbank. il Pub Util 32:355-9 S 16 '43
Threshold of a new era in transport. W. V. Wood. Engineer 176:305 O 15 '43

India

Transport in India. Economist 144:396-7 Mr 27 '43

Ireland

Northern Ireland transport. Economist 145:271-2 Ag 28 '43

Persia

Transport miracle in Persia. J. F. Chapman. il Business Week p48, 50+ O 30 '43

Peru

Railway operations; coastal and inland shipping, highway transport, 1941-1942. For Comm W 10:19-20 Mr 20 '43

South America

See also

Pan-American highway

United States

Annual report of Board of investigation and research. Ry Age 115:488-90 S 25 '43
Equipment needs of carriers; U.S. Chamber of commerce committee report. Ry Age 113:789-90 N 14 '42
New age for transportation. P. R. Bretey; W. Gates; P. T. Sheldrick. il Mag of Wall St 71:401-11+ Ja 23 '43
New over-all federal transportation agency for post-war period recommended in report of National resources planning board. Roads & Sts 85:68 N '42
Post-war planning for all transportation; recommendations of National resources planning board. T. N. Sandifer. Pub Util 31:282-7 Mr 4 '43
Post-war transportation readjustment. Trusts & Estates 76:321 Ap '43
Recast transportation laws to end monopoly. H. A. Wallace. Comm & Fin Chr 158:1696-7 O 28 '43
Resources board views on transport. Ry Age 114:521 Mr 13 '43
Transportation during 1942. Survey of Cur Business 23:8-10 My '43
Transportation in wartime; role of carriers within the United States. Index 23 no 1:1-8 [Mr] '43

Transportation under war conditions, 1942. V. T. Boughton. il Eng N 130:197-9 F 11 '43

See also

Railroads—Com-
petitive transpor-
tation
Railroads—United
States
Shipping—United
States

Transportation in
war
United States—De-
fense transpor-
tation, Office of

Venezuela

Today's transport problems in Venezuela. For Comm W 11:25 Je 12 '43

TRANSPORTATION, Military

Army shipping record surpasses last war's. Comm & Fin Chr 158:135 J1 8 '43
Beating a path to Russia's back door; Persian war supply corridor. W. G. Bowman. il map Eng N 131:520-7, 668-73 O 7, N 4 '43
L.c.l. for army; Army-navy consolidating station. Business Week p34+ Ag 14 '43
Transport miracle in Persia. J. F. Chapman. il Business Week p48, 50+ O 30 '43
War without adequate railroads? abstracts. F. K. Mitchell. Ry Age 114:466-8+ Mr 6 '43; Ry Mech Eng 117:163-5 Ap '43

See also

Automobiles, Mili-
tary
Hospital trains
Motor bus lines—Mili-
tary use
Motor trucks, Mili-
tary
Railroads—Military
use
Railroads, Military
Roads, Military
Tractors, Military
Transports
United States—Army
—Transportation
United States—Army
—Transportation
corps

TRANSPORTATION advertising, National association of. See National association of transportation advertising

TRANSPORTATION as a profession

See also

Transportation work-
ers

TRANSPORTATION in war

All buses and other local passenger vehicles frozen. Comm & Fin Chr 157:1319 Ap 8 '43
Army won't let ODT limit trucks. Ry Age 113:886-9 N 28 '42
Control of road transport. Economist 143:570, 583 N 7 '42
Crosshaul and tankcar limits placed on chemical shipments. Oil Paint & Drug Rep 143:3+ F 1 '43
Cross-haul control scope explained. Oil Paint & Drug Rep 143:4 F 8 '43
Evolution of transportation under war stress. S. A. Swensrud. il Nat Pet N 35:32, 54-7 Ap 21 '43
Freight rates in wartime. G. L. Wilson. Harvard Business R 21 no2:230-7 [Ja] '43
Further restrictions on travel, shipments forseen by Nelson. Comm & Fin Chr 156:2327 D 31 '42
M-day still has a place on the drawing board; California war worker transportation. J. H. Collins. Pub Util 31:267-74 Mr 4 '43
O.W.I. reports on transportation. il Ry Age 114:870-8, 904-7 My 1-8 '43
Pan-American highway; wartime key to inter-American transport. E. W. James. il maps For Comm W 9:3-9 D 5 '42; Same. Explosives Eng 20:358-64 D '42; Same, without maps. Oil & Gas J 41:91+ D 31 '42
Perfect shipping. J. B. Eastman and others. il Manuf Rec 112:29-39+ Ap '43
Progress of road haulage scheme. Economist 144:535-6 Ap 24 '43
Road transport in Great Britain; full co-operation between railways and all truck and bus operators. P. T. Cole. il Roads & Bridges 80:24-5+ N '42
Sleepy stations become busy junctions; all forms of transportation in Britain have been brought into an integrated service. J. Marchbank. il Pub Util 32:355-9 S 16 '43
38 chemicals, vegetable oils in WPE cross-haul pool. Oil Paint & Drug Rep 143:3+ Ja 18 '43
Transportation in wartime; role of carriers within the United States. Index 23 no 1:1-8 [Mr] '43
Transportation sells victory; truck and bus lines aid recruiting, selling bonds, etc. il Am Business 13:14-15 Ap '43

TRANSPORTATION in war—Continued

Transportation system shows increased efficiency. Survey of Cur Business 22:7-8 N '42

Transportation's job in wartime; papers at annual meeting of Academy of political science. map Ry Age 113:773-6 N 14 '42

Wartime transportation problems. J. B. Eastman. Trusts & Estates 76:461 N '42

See also

Employees, Trans- World war, 1939—

portation of Shipping

Railroads in war World war, 1939—

Rapid transit in war Transportation

TRANSPORTATION of employees. See Employees, Transportation of

TRANSPORTATION tax

Support proposal for repeal of 3% tax on for-hire transport. V. P. Ahearn. Concrete 51:33+ N '43

Accounting

Accounting for collections of the federal 3% transportation tax. W. J. Hamby. J Account 76:74 JI '43

TRANSPORTATION workers

WMC says oil transportation is essential to the war effort. Nat Pet N 35:34+ F 10 '43

See also

Motor bus drivers Railroads—Employees

Motor bus lines—Em- Street railroads—Em-

ployees employees

Motor truck drivers

TRANSPORTS

Luxury liner answers war call; plans for gay passenger ship changed to troop carrier. il Manuf Rec 112:28-9+ Je '43

TRANSVAAL*See also*

Gold mines and min-

ing—Transvaal

TRAPS, Steam. See Steam traps

TRAPUNTO work. See Embroidery

TRAUMA

External trauma and peptic ulcer; analysis of their relationship. R. H. Fowler. bibliog Ind Med 12:614+ S '43

TRAUMATIC shock. See Shock

TRAUX-TRAEER coal company

Listing of additional stock. Comm & Fin Chr 157:647 F 15 '43

TRAVEL

Travel, 1938-1941. Survey of Cur Business 1942 Sup p100 [supplemented in monthly numbers]

See also

Insurance, Life— Railroads—Passenger

Travel risks traffic

Advertising

British Columbia continues tourist advertising to protect past investment. il Ptr Ink 205:96 O 22 '43

California sells travel dreams now, to be realized post war. il Ptr Ink 202:32+ Mr 19 '43

See also

Railroads—Advertis-

ing

TRAVEL risks. See Insurance, Life—Travel risks

TRAVELING waves. See Electric transient phenomena

TRAVERSE rocks. See Rocks

TREASURY department. See United States—Treasury department

TREASURY notes. See Bonds, Government—United States

TREATIES

President cannot commit U.S. to post-war international bank. W. E. Spahr. Comm & Fin Chr 158:401+ JI 29 '43

TREATIES, Commercial. See Commercial treaties and agreements

TREES*See also*

Forest fires

Forests and forestry

Wood

also names of trees, e.g.

Birch Pine

Douglas fir Poplar

Maple Spruce

*Diseases and pests**See also*

Elm—Diseases and

pests

TRENCHING machinery

Buckeye drainage ditcher. il Mech Handling 30:257-9 Je '43

Cable-laying plough. P. K. Davis. il diags

Elec R (Lond) 133:99-101 JI 23 '43

Ditchers operating in tandem speed trenching operations. S. L. Penote. Eng N 129:936 D 31 '42

Land drainage machinery. il Engineer 175: 420-1, 442-3 My 28-Je 4 '43

TREND measurement

Automatized statistical control; trend analyzer. H. Ziebolz. diags Instruments 16:18-19 Ja '43

Long-term freight traffic trend; method suggested whereby probable volume of freight service (ton-miles) in post-war years may be estimated. A. F. Stuebing. Ry Age 115: 211-15 JI 51 '43

TRESTLES

Huge concrete trestle assures continuous rail traffic in flood emergency; with cost data. il Concrete 51:10-11, 16+ JI '43

See also

Bridges

TRIAMINES. See Amines

TRIAZINES*See also*

Melamine

TRIBENZYLSULFONIUM hydroxide

Tribenzylsulfonium hydrogen sulfate and hydroxide. O. Haas and G. Dougherty. Am Chem Soc J 65:1238-9 Je '43

TRIBENZYLSULFONIUM sulfate

Tribenzylsulfonium hydrogen sulfate and hydroxide. O. Haas and G. Dougherty. Am Chem Soc J 65:1238-9 Je '43

TRIBROMOBENZOYL peroxide

Polymerization of styrene in the presence of 3,4,5-tribromobenzoyl peroxide. C. C. Price and B. E. Tate. bibliog Am Chem Soc J 65:517-20 Ap '43

TRICALCIUM aluminate. See Calcium aluminates

TRICHINA and trichinosis

Experiments in the cooking of garbage for the destruction of trichinae in pork scraps. W. H. Wright and J. Bozicevich. Pub Health Rep 58:396-404 Mr 5 '43

Summary of the findings of trichinella spiralis in a random sampling and other samplings of the population of the United States. W. H. Wright, K. E. Kerr and L. Jacobs. Pub Health Rep 58:1293-1313 bibliog(p1312-13) Ag 27 '43

TRICHLOROACETIC acid

Influence of addenda on the inversion of l-menthone with acids in benzene; the effect of solvents in chemical reactions. A. Weissberger. Am Chem Soc J 65:242-5 F '43

Inversion of menthone with trichloroacetic acid in aprotic solvents. A. Weissberger. bibliog Am Chem Soc J 65:102-10 Ja '43

TRICHLOROANISIDINE

Polychlorogeno-o-anisidines and their derivatives. W. S. W. Harrison, A. T. Peters and F. M. Rowe. Chem Soc J p235-7 My '43

TRICHLOROETHYLENE

Chlorinated solvent exposures at degreasing operations. K. M. Morse and L. Goldberg. bibliog il Ind Med 12:706-13 O '43

Chlorinated solvents in common wartime use. D. H. Byers. bibliog Ind Med 12:440-3 JI '43

Fraser-Heller metal degreasing system. il diag Engineering 155:146-7 F 19 '43

Industrial degreasing agents. H. P. Quadland. il Metal Finishing 41:463-5 JI '43

TRICHLOROETHYLENE—Continued

Inflammability of trichloroethylene-oxygen-nitrogen mixtures. G. W. Jones and G. S. Scott. U S Bur Mines Rep of Invest 3666:1-5 '42

TRIDYMIT

Equilibrium relationships on the liquidus surface in part of the $\text{MnO-Al}_2\text{O}_3\text{-SiO}_2$ system. R. B. Snow, bibliog il diags Am Cer Soc J 26:11-20 Ja '43

TRIETHANOLAMINE

Soap which indicates the presence of mercury fulminate. H. S. Mason and I. Botwinick, bibliog Pub Health Rep 58:1183-6 J1 30 '43

TRIETHYLAMINE

Molecular surface energy of sulfur dioxide addition compounds. J. R. Bright and J. J. Jasper. Am Chem Soc J 65:1262-3 J1 '43

TRIETHYLENE glycol

Chemical sterilization of the air; abstract. B. H. Jennings and E. Bigg. Science 98: sup10+ O 15 '43

Lethal effect of triethylene glycol vapor on air-borne bacteria and influenza virus. O. H. Robertson and others. bibliog Science 97:142-4 F 5 '43

TRIFLUORODIAZOETHANE

2,2,2-Trifluoroethylamine and 2,2,2-trifluorodiazethane. H. Gilman and R. G. Jones. bibliog Am Chem Soc J 65:1458-60 Ag '43

TRIFLUOROETHYLAMINE

2,2,2-Trifluoroethylamine and 2,2,2-trifluorodiazethane. H. Gilman and R. G. Jones. bibliog Am Chem Soc J 65:1458-60 Ag '43

TRIFLUOROETHYL iodide

2,2,2-Trifluoroethyl iodide. H. Gilman and R. G. Jones. Am Chem Soc J 65:2037-8 O '43

TRIFLUOROMETHYL compounds

Preparation and properties of some new trifluoromethyl compounds. J. H. Simons and E. O. Ramler. Am Chem Soc J 65:389-92 Mr '43

TRIKETOHYDRINDENE

Studies on indene derivatives; triketohydrindene. A. Schönberg and R. Moubacher. Chem Soc J p71-2 F '43

TRILLIUM erectum

Saponins and sapogenins; bethogenin and trilligenin, new sapogenins from trillium erectum. S. Lieberman and others. bibliog Am Chem Soc J 64:2581-3 N '42

TRILLOGENIN

Saponins and sapogenins; bethogenin and trilligenin, new sapogenins from trillium erectum. S. Lieberman and others. bibliog Am Chem Soc J 64:2581-3 N '42

TRIMETHYLAMINE

Addition compounds of trimethylamine with boron fluoride and its methyl derivatives. A. B. Burg and A. A. Green. Am Chem Soc J 65:1838-41 O '43

Behavior of trimethylamine, trimethylamino-sulfur trioxide and trimethylamine oxide toward sulfur dioxide. A. B. Burg. bibliog diags Am Chem Soc J 65:1629-35 Ag '43

TRIMETHYLAMINO sulfur trioxide

Behavior of trimethylamine, trimethylamino-sulfur trioxide and trimethylamine oxide toward sulfur dioxide. A. B. Burg. bibliog diags Am Chem Soc J 65:1629-35 Ag '43

TRIMETHYLBENZOFURANONE

Polyalkylbenzenes; 4,6,7-trimethylcoumaran-3-one and its conversion into 2-isopropyl-4,6,7-trimethyl-5-hydroxycoumaran. L. I. Smith and others. bibliog Am Chem Soc J 65:1594-9 Ag '43

TRIMETHYLBENZOYLNAPHTHOIC acid

Polyethylbenzoylnaphthoic acids. R. H. Martin. Chem Soc J p239-41 My '43

TRIMETHYLBENZYL phenylglyoxal

2,4,6-Trimethylbenzylphenylglyoxal. R. P. Barnes and R. J. Brown. Am Chem Soc J 65:412-15 Mr '43

TRIMETHYLCARBINOL. See Butyl alcohol**TRIMETHYLETHYLENE**

Coordination of silver ion with unsaturated compounds; mixtures of trimethylethylene and cyclohexene. H. J. Lucas, F. W. Billmeyer, Jr. and D. Pressman. bibliog Am Chem Soc J 65:230-1 F '43

Polymerization of mixtures of olefins and diolefins in presence of metallic sodium. V. N. Lvov. Oil & Gas J 42:38-9+ J1 8 '43

TRIMETHYLHYDROQUINONE

Vitamin E; synthesis of 1-chloro-3,7,11,15-tetramethylhexadecanol-3, and its condensation with trimethylhydroquinone to form α -tocopherol. L. I. Smith and J. A. Sprung. bibliog Am Chem Soc J 65:1276-83 J1 '43

TRIMETHYLPENTANE. See Isooctane**TRIMETHYLENOPYRAZOLIDINE**

Configuration of tervalent nitrogen; bicyclic hydrazine derivative. E. L. Buhle, A. M. Moore and F. Y. Wiselogle. bibliog Am Chem Soc J 65:29-32 Ja '43

TRIMMINGS (for drapery, upholstery, etc.)

Consolidated tunes new products to wartime needs of housewives; manufacturer of trimmings is finding new markets for new products. C. D. Carver. il Sales Management 52:80+ O 1 '43

TRINIDAD

See also

Petroleum—Trinidad
Petroleum industry
and trade—Trinidad

TRINITRO compounds. See Nitro compounds**TRINITROBENZENE**

Structure of molecular compounds; the crystal structure of 2-iodoaniline-8-trinitrobenzene. H. M. Powell, G. Huse, and P. W. Cooke. Chem Soc J p153-7 Ap '43

Analysis

Colorimetric determination of trinitrobenzene in dinitrobenzene. M. L. Moss and M. G. Mellon. bibliog Ind & Eng Chem Anal ed 14:861-2 N 15 '42

TRINITROBENZOIC acid

Electrolytic reduction of trinitro aromatic compounds to triamines by use of a carrier catalyst. R. W. Lewis and O. W. Brown. bibliog Electrochem Soc Trans 84 (preprint 1):1-9 O '43

Kinetics of the decomposition of trinitrobenzoic acid in dioxane-water mixtures. D. Trivich and F. H. Verhoek. Am Chem Soc J 65:1919-24 O '43

TRINITROTOLUENE

Disposal of trinitrotoluene (TNT) waste waters and its relation to public water supplies; abstract. P. Hansen. Water Works & Sewerage 39:469-70 N '42

Effect of paraffins on the nitration of toluene. W. L. Glowacki. bibliog il diag Blast F & Steel Pl 31:663-4, 771-5 Je-J1 '43

Pathology of experimental trinitrotoluene poisoning. R. D. Lillie. bibliog Pub Health Rep 58:1436-8 S 24 '43

Some toxic reactions of common explosives. J. H. Eddy, Jr. Ind Med 12:483-6 J1 '43

Surveys of liquid wastes from munitions manufacturing; trinitrotoluene (TNT) wastes. R. S. Smith and W. W. Walker. Pub Health Rep 58:1365-73 S 10 '43

T.N.T.; excerpts from Afternoon with a T.N.T. man, by F. C. Painton, in February issue of Esquire. Nat Safety N 47:46+ My '43

Trinitrotoluene (TNT); hazards and precautions. bibliog Nat Safety N 48:25-6+ Ag '43

Trinitrotoluene (TNT); its effective removal from the skin by a special liquid soap. W. D. Norwood. Ind Med 12:206-8 Ap '43

TNT wastes. S. Schott, C. C. Ruchhoff and S. Megregian. diag Ind & Eng Chem 35: 1122-7 O '43; Abstracts. Chem Ind 52:608 My '42+ Ag; Chem & Met Eng 50:180-1 Ap '43; Eng N 131:338 Ag 26 '43

Analysis

Determination of TNT content of air; abstract. Roy Aeronautical Soc J 47:sup491 S '43

Diethylaminoethanol as a reagent for the detection and colorimetric determination of small amounts of trinitrotoluene in air. F. H. Goldman and D. E. Rushing. J Ind Hygiene 25:164-71 Ap '43

TRIODES. See Vacuum tubes

TRIOXANE

Trioxane. J. F. Walker and P. J. Carlisle. *bibliog* *il Chem & Eng N* 21:1250-1 Ag 10 '43

TRIPHENYLCYCLOPENTENEDIONE

Ring enlargement of 2,4,4-triphenylcyclopentenedione. C. F. Koelsch and S. Wawzonek. *Am Chem Soc J* 65:755-7 My '43

TRIPHENYLETHYLENE

Addition of metals to some phenylated olefins in liquid ammonia solution. H. Gilman and J. C. Bailie. *Am Chem Soc J* 65:267-8 F '43

TRIPHENYLLINDENE

Thermal isomerization of some indene derivatives. C. F. Koelsch and P. R. Johnson. *Am Chem Soc J* 65:567-73 Ap '43

TRIPHENYLMETHANE

Mechanism of formation of leuco-triphenylmethane dyes, and an analogy in the Perkin reaction. R. R. Davies and H. H. Hodgson. *bibliog Soc Dyers & Col J* 59: 196-8 S '43

TRIPHENYLMETHYL

Addition of triphenylmethyl to 2-methylbuten-1-yne-3. A. F. Thompson, jr. and D. M. Surgenor. *Am Chem Soc J* 65:486-7 Mr '43

TRIPHENYLQUINONE

Ring enlargement of 2,4,4-triphenylcyclopentenedione. C. F. Koelsch and S. Wawzonek. *Am Chem Soc J* 65:755-7 My '43

TRIPLE BONDS

Hydrogenation of the triple bond. A. L. Henne and K. W. Greenlee. *Am Chem Soc J* 65:2020-3 O '43

TRIPOLI

Tripoli and silicosis. C. P. McCord, S. F. Meek and G. C. Harrold. *bibliog Ind Med* 12:373-8 Je '43

TRIPTANE

Process perfected for synthesis of triptane, aviation superfuel. A. L. Foster. *Oil & Gas J* 42:14-15 S 2 '43

Triptane on commercial scale; Universal claims development of process. *Nat Pet N* 35:18 S 1 '43

Triptane process discovered by Universal oil products co. *Chem & Eng N* 21:1560+ S 25 '43; *Chem Ind* 53:343 S '43; *Pet Eng* 14:81 S '43; *Pet Refiner* 22:132 S '43

Warning to Axis; triptane, new superfuel for aircraft. *Business Week* p75-6 S 11 '43

TRIPTYCENE

Triptycene (9,10-o-benzenoanthracene). P. D. Bartlett, M. J. Ryan and S. G. Cohen. *bibliog Am Chem Soc J* 64:2649-53 N '42

TRISACCHARIDES

Synthesis of an epimeric pair of trisaccharides containing mannose units. E. A. Talley and W. L. Evans. *Am Chem Soc J* 65:573-4 Ap '43

TRITIUM. See Hydrogen—Isotopes

TRIUMPH explosives, incorporated

Navy returns plant to company management. *Comm & Fin Chr* 157:903 Mr 8 '43

New management selected. *Comm & Fin Chr* 157:261 Ja 18 '43

Settlement with Navy. *Comm & Fin Chr* 157: 2355 Je 21 '43

Voting trust amendment. *Comm & Fin Chr* 158:682 Ag 16 '43

TROBRIAND ISLANDS

Trobriand islanders shun clothes, play cricket, bleach hair, and ship yams. *For Comm W* 12:15 Jl 17 '43

TROFFERS. See Lighting fixtures

TROLLEY buses

Three-way triumph; Wilmington, Del. switched from trolley cars to trolley coaches. G. J. MacMurray. *il Bus Transportation* 22:60-2 S '43

Trolley coach operating experience in St Joseph. F. N. Hill. *il Mass Transportation* 39:216-18 Je '43

Cost of operation

Capital expenditures in 1942. E. J. Murphy. *Mass Transportation* 39:102-3 Mr '43

Overhead construction

Wheel to shoe conversion for electric cars and trolley buses. L. F. Brahmmer. *il Mass Transportation* 39:286-7 Ag '43

Statistics

New transit equipment production restricted; statistics. E. J. Murphy. *Mass Transportation* 39:104-7 Mr '43

Rubber tired vehicles show phenomenal traffic increase; 10-year record of transit traffic in the United States by types of service, 1933 to 1942. E. J. Murphy. *Mass Transportation* 39:100-1 Mr '43

Traffic reaches new all-time peak. E. J. Murphy. *Mass Transportation* 39:94-5 Mr '43

Trolley bus operations in the United States; tabulation. *Bus Transportation* 22:62 Ja '43

TROLLEY cars. See Cars; Street cars

TROLLEY wire

Protecting trolleys ups tonnage, prevents fires and shocks; automatic reclosing circuit breakers. G. W. Creech. *il Coal Age* 48:75-6 Je '43

TROOP carrier command. See United States—Army—Troop carrier command

TROOP ships. See Transports

TROPENAS process. See Converters

TROPIC acid

Synthetic mydriatics. F. F. Blicke and H. M. Kaplan. *bibliog Am Chem Soc J* 65:1967-70 O '43

TROPICAL hygiene. Ross institute of. See Ross institute of tropical hygiene

TROPICAL medicine. American foundation for. See American foundation for tropical medicine

TROPICAL medicine. American society of. See American society of tropical medicine

TROPICAL plant research foundation
Dissolution and the distribution of assets. W. Crocker. *Science* 97:527 Je 11 '43

TROPICS

Pigments of the imagination; tropical snakes and poisonous plants. E. D. Merrill. *Science* 97:41-2 Ja 8 '43

Diseases and hygiene

Chemical warfare on tropical diseases; drugs which protect our soldiers' lives. *Chem Age (Lond)* 48:501 My 8 '43

Menace; tropical diseases menace us, but education menaces them. *Sci Am* 168:215 My '43

Probable spread of tropical diseases; abstract. T. T. Mackie. *Science* 97:sup8 Mr 19 '43

Teaching of tropical medicine. H. L. Alexander. R. A. Moore and W. B. Wood, jr. *Science* 98:39-40 Jl 9 '43

Teaching of tropical medicine in medical schools. *Science* 96:532 D 11 '42

See also American foundation for tropical medicine

TRUANCY, Industrial. See Absenteeism (labor)

TRUCK farms. See Farms

TRUCK mines. See Coal mines and mining—Truck mines

TRUCKS

Arc welded trucks. *il Mech Handling* 30:438-40 O '43

Bassock anchoring lock for hand trucks. *il Engineering* 156:17 Jl 2 '43

Lyon-Raymond hydraulic stacking truck. *il Engineering* 156:107 Ag 6 '43

Tyne lifting trucks. *il Mech Handling* 30:31-2 Ja '43

See also

Electric trucks, Industrial Motor trucks, Industrial Mail trucks

Wheels

Treads and wheels for hand trucks; Resinox. *il diags Mod Plastics* 20:70-2+ F '43

TRUK Island

Islands in the Pacific; submarine mountain system. F. Thone. *Science* 97:sup10-11 Ap 30 '43

TRUMAN, Harry S. 1881-

They can take it to Truman; Senate committee investigating the war program. Business Week p19-20+ Je 26 '43

TRUMPET

New army bugle. *Il Mod Plastics* 21:86-7+ S '43

TRUSSES

Aircraft plant has 150-ft. timber trusses. *Il Eng N* 131:624-9 O 21 '43

Bowstring trusses provide sawtooth roof. *Il diag Eng N* 130:884-5 Je 17 '43

Clear span trusses for barns, halls, garages. *Il Am Bld* 65:54+ F '43

Design of trusses and its influence on weight and stiffness. J. Drymael. *diags Roy Aeronautical Soc J* 46:297-308 D '42

Heavy timber trusses carry timber arches. A. Zweig. *il diags Eng N* 131:190-3 JI 29 '43

Job-made tackle lifts heavy trusses. J. D. Watson. *il Eng N* 131:144-5 JI 15 '43

Ordinance plant bridge built of old trusses; system of dismantling and re-erecting the trusses. E. L. Durkee. *il Eng N* 130:901-3 Je 17 '43

Timber bowstring trusses supported on buttressed concrete columns for U.S. army hangar. *il diags Eng N* 129:771-4 D 3 '42

Truss revision adds mezzanine space to laundry. J. Feld. *diags Eng N* 131:151 JI 15 '43

Two-hinged timber roof trusses use synthetic gusset plates. *diags Eng N* 131:410-11 S 9 '43

Types of hangar trusses. E. E. Seelye. *il diags Arch Rec* 94:71-2 JI '43

Wood trusses may open the door to post-war buildings. *il Am Bld* 65:58 Mr '43

See also

Beams	Girders
Bridges	Roofs
Building	Strains and stresses

TRUST COMPANIES

Thriving trust business required but must be profitable. H. A. Theis. *Comm & Fin Chr* 158:1613 O 21 '43

See also

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Insurance trusts	Trusts and trustees
also American bankers association—Trust division; Corporate real estate association of Philadelphia	

Accounting

Simplified cost accounting for small trust departments. *Trusts & Estates* 77:156 Ag '43

See also

Trusts and trustees—Accounting

Advertising

Are we selling the right man? *Trusts & Estates* 77:130+ Ag '43

Direct-mail campaign, limited to 300 names, brings 19 per cent return; Bankers trust company of Detroit. *Ptr Ink* 202:58, 70-1 Ja 8 '43

Special report on cooperative trust promotion. *Trusts & Estates* 77:41-6 JI '43

Trust business from bank branches; program for developing such accounts. D. W. Mackay. *Trusts & Estates* 76:247-50 Mr '43

Trust companies of Rochester present a united campaign of advertising. *Il Trusts & Estates* 75:478-80 N '42

Trustee tells all; National trust company, limited, of Canada, booklet describing its trust management. *Il Trusts & Estates* 77:149-51 Ag '43

See also

Bank advertising

Costs

Official report on trust costs; summary of New York state banking department study of trust earnings and expenses. *Trusts & Estates* 76:347-50, 451-3, 529-31 Ap-Je '43

Customer relations*See also*

Trust companies—Public relations

Employees

Accomplishments of Junior advisory board, Equitable trust co., Wilmington, Del. M. F. Connor. *Trusts & Estates* 77:157 Ag '43

Meeting personnel problems. *Trusts & Estates* 76:159-60 F '43

Women in trust work. H. J. Fuchs. *Trusts & Estates* 76:265-6 Mr '43

Fees

See Trust fees

Finance

Official report on trust costs; summary of New York state banking department study of trust earnings and expenses. *Trusts & Estates* 76:347-50, 451-3, 529-31 Ap-Je '43

Investments

See Trusts and trustees—Investments

Law

See also

Trusts and trustees

Lawyers' cooperation

Brief on lawyer relations. *Trusts & Estates* 77:281-2 S '43

Life underwriters' cooperation

Life underwriter; trust principles. *Trusts & Estates* 76:523 Je '43

Trusteeship and insurance in pension planning; combination serves the client best. L. G. Hanmer. *Trusts & Estates* 77:143-6 Ag '43

Management

Economies in trust administration. A. Langston. *Trusts & Estates* 76:155-7 F '43

New business

Getting ready to build tomorrow. *Trusts & Estates* 76:255-6 Mr '43

New business fields for trust institutions envisioned. W. H. Neal. *Comm & Fin Chr* 157:846 Mr 4 '43

Odyssey of a trust prospect; seven keys to business. E. S. MacNeill. *Trusts & Estates* 76:143-3 F '43

Pension trust business for banks; new law opens door for aggressive institutions. L. G. Hanmer. *Trusts & Estates* 75:473-7 N '42

Public relations policies. J. K. Kinneman, Jr. *Trusts & Estates* 77:47-51 JI '43

Wills from partnership trusts; opportunity for coordinating estate and obtaining new business. W. R. Spinney. *Trusts & Estates* 75:565-8 D '42

Public relations

Fifth freedom; current thinking of the trust prospect. A. Journeay. *Banking* 36:31-2+ Ag '43

Public relations policies. J. K. Kinneman, Jr. *Trusts & Estates* 77:47-51 JI '43

Trust story and the press. C. D. Ames. *Trusts & Estates* 76:43-5 Ja '43

Wartime public relations for trust institutions. W. H. Neal. *Trusts & Estates* 76:149-50 F '43

Service

See Trust service

Australia

War role of Australian trustee companies; volume of business, profitability and investments in wartime. F. Blamey. *Il Trusts & Estates* 76:524-8 Je '43

TRUST FEES

Court has no discretion to allow fee for anticipated services of trustee. *Trusts & Estates* 77:90-1 JI '43

Fee bill attacked by legal journal. *Trusts & Estates* 76:435-6 My '43

Fees for smaller trusts. *Trusts & Estates* 76:69 Ja '43

Interpretive problems in New York fee law. *Trusts & Estates* 76:533-5 Je '43

Trust profitability, and otherwise. *Trusts & Estates* 76:33-4 Ja '43

Trust profits, with honor; how services can be geared to compensation and war requirements. E. S. MacNeill. *Trusts & Estates* 75:595-6 D '42

TRUST service

- Popular conception of trust service; abstract. T. Phelan. Bankers M 146:84-5 Ja '43
- Sing a song of sixpence; how to readjust approach and simplify practices to serve the greater trust market. Trusts & Estates 75: 569-70 D '42
- Testing ground method and modern trust service; argument for revocable living trust. Bankers M 146:383-7 My '43
- Trust profits, with honor; how services can be geared to compensation and war requirements. E. S. MacNeill. Trusts & Estates 75: 595-6 D '42
- Trustee tells all: National trust company, limited, of Canada, booklet describing its trust management. Il Trusts & Estates 77: 149-51 Ag '43
- Wartime trust service of Security-first national bank of Los Angeles. Bankers M 146:268-9 Mr '43

TRUST service, Education for

- Trust round table. A. B. Fehn. Am Inst Banking Bul 24:7+ O '42

TRUSTEES, Public. See Public trustees**TRUSTS, Industrial**

- A.M.A. conviction upheld by high court. Oil Paint & Drug Rep 143:3+ Ja 25 '43
- Canners on trial; California league gets set for opening of antitrust action. Business Week p62 Ja 2 '43
- Conviction of American medical assn. under anti-trust law upheld by Supreme court. Comm & Fin Chr 157:498 F 4 '43
- Milk trust fines levied. Business Week p85-6 O 9 '43
- Motion picture anti-trust suit goes to trial. Barron's 23:7 Ja 11 '43
- Safeway, Kroger grocery chains accused of anti-trust violations. Ptr Ink 202:40 Ja 29 '43
- Vitamin D trust charged by Berge. Oil Paint & Drug Rep 144:3+ O 25 '43

See also

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| tions | Price fixing |
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| Corporations | Tariff |
| Interstate commerce | Trade associations |
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International trusts

- After the war, what—in the mining industry? cartelization seems unavoidable if Atlantic charter is to be fulfilled. O. W. Roskill. Il Eng & Min J 144:62-6 My '43
- American firms tieups baring with foreign cartels asked; O'Mahoney bill. Oil Paint & Drug Rep 144:3+ N 1 '43
- Chemical firms indicted as world trust. Comm & Fin Chr 158:89 J 5 '43
- German cartels; their evolution under war conditions. L. Domeratzky. For Comm W 11:9-11+ Je 19 '43
- Merck & co. charged with illegality in E. Merck pact. Oil Paint & Drug Rep 144:3+ N 1 '43
- Mixup in tin; Justice dept. will look into world-wide cartel. Business Week p16-17 J 31 '43
- National Lead, du Pont indicted on titanium trust charges. Oil Paint & Drug Rep 144: 7+ J 5 '43
- Quebracho trust indictments returned. Oil Paint & Drug Rep 142:7+ N 30 '42
- Texas tin: international pawn? Il Business Week p19-20+ Ja 30 '43

Law

- Antitrust law litigation during 1942. Oil Paint & Drug Rep 143:56+ Ja 11 '43
- Associated press files reply to anti-trust charges. Comm & Fin Chr 158:52 J 5 '43
- Delivered-price systems under the anti-trust laws. G. H. Sage. Ind Marketing 27:22-3+ S: 32-3+ O: 72, 76+ N: 52, 59+ D '42; 28:66, 70+ F '43
- Nothing in anti-trust legislation warrants postponing Associated Press suit says Bidle. Comm & Fin Chr 156:1984 D 3 '42
- Summary judgment asked against Associated press in anti-trust action. Comm & Fin Chr 157:2084 Je 3 '43
- Trust exemption bill getting full support; Senator Bailey's measure. Weekly Underw 149:689+ O 2 '43

Germany

- Between the devil and the deep; German business man. Business Week p14+ Ag 28 '43

TRUSTS and trustees

- Beware of rigidity in trusts. H. S. Koster. Trusts & Estates 76:133-4 F '43
- Disposition of funds due absent or unknown beneficiaries; Delaware law. G. B. Pearson, jr. Trusts & Estates 77:55-8 J 1 '43
- Effect of war legislation on trusts and estates. F. W. Hill, jr. Trusts & Estates 77: 265-8 S '43
- Effect upon duties of fiduciaries in administering estates where beneficiaries are in military service. F. W. Hill, jr. Trusts & Estates 77:266-8 S '43
- Experience under principal-income act of Virginia. C. L. Harrison, jr. Trusts & Estates 76:89-90 Ja '43
- Failure to act by trustee not malfeasance. Banking Law J 60:785-8 S '43
- Fiduciary research bureau; abstract. R. S. Douglas. Trusts & Estates 76:195 F '43
- Judicial council movement; its relation to trust and estate law. F. W. Grinnell. Trusts & Estates 76:289-92 Mr '43
- Liability of bank for misappropriation of trust funds by depositor. Banking Law J 60:848-57 O '43
- Meeting war trust problems. J. L. Gray, jr. Trusts & Estates 75:583-6 D '42
- Missing principals, missing beneficiaries, and absent fiduciaries; the need for legislation. G. T. Stephenson. Bibliog Trusts & Estates 77:224-7 S '43
- Modernization of trust law; legislation needed to remove outmoded principles. Trusts & Estates 77:301-3+ S '43
- Real property, probate and trust law section, American bar association. Trusts & Estates 77:207-70 S '43
- Recent state legislation affecting fiduciaries. Trusts & Estates 76:387-9 Ap '43 [cont monthly thru August]
- Relief act and trust administration. A. W. LeGassick. Trusts & Estates 76:449-50 My '43
- Should trust law be codified? R. D. Moorhead. Trusts & Estates 75:617-20 D '42
- State legislation affecting trusts and estates. E. R. Lewis. Trusts & Estates 77:237-45 S '43
- Study of fixed income trusts. L. H. Roseberry. Il Burroughs Clearing House 72:2-4+ D '42
- Treasury form TFR-500 explained. Trusts & Estates 77:285-9 S '43
- Trust and probate decisions, 1942-1943. W. F. Reeve, 3d. Trusts & Estates 77:246-50 S '43
- Trust law codified; Texas gets workable statute. J. S. Whitworth. Trusts & Estates 76:470-1 My '43
- Trust year in review, and in prospect. Trusts & Estates 76:39-40, 161-4 Ja-F '43
- Trustee in military service not entitled to stay of proceedings. Trusts & Estates 76: 92 Ja '43
- Trustee not negligent for delay in foreclosing mortgages in default. J. A. Nobile. Banking Law J 60:631-5 Ag '43
- Trusts as business managers; Canadian practice of trustee receivers and reorganization managers. F. R. MacKelcan. Trusts & Estates 77:152-6 Ag '43
- Trustee's right to recover money paid under honest mistake of fact. Banking Law J 60:690-2 Ag '43
- Trusteeship: war and post-war; Wartime trust conference. Trusts & Estates 76:127-30 F '43

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- | | |
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| Banks and banking— | Investment trusts |
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Accounting

- Streamlining fiduciary accounting. N. J. Brewer. Trusts & Estates 77:219-23 S '43

See also

- Life tenants and remaindermen

TRUSTS and trustees—*Continued*

Bibliography

- Trust and probate literature. Trusts & Estates 76:557-8 Je '43
 Trust and probate literature, 1942-1943. P. P. Lacovara. Trusts & Estates 77:251-62 S '43

Charitable trusts

- Charitable trusts; bank as trustee saves bequest from tax; Cy Pres doctrine, surplus income to heirs? Trusts & Estates 77:90 JI '43
 Law of testator's domicile applied to testamentary charitable trust. Trusts & Estates 77:91-2 JI '43

Common trust funds

- Common trust funds grow; Girard trust co. of Philadelphia. Trusts & Estates 76:267 Mr '43
 Common trust statute progress; legislative developments and application in New York and other states. C. C. Barclay. Trusts & Estates 76:351-5 Ap '43
 Common trusts, the door to employee investment? Trusts & Estates 76:429-30 My '43
 How to start a common trust fund. R. Ward. Trusts & Estates 77:59-64 JI '43
 Joint trust for cemetery funds; Fidelity-Philadelphia trust company. M. D. Hartman. Trusts & Estates 77:379-80 O '43
 Michigan gets common trust regulations. Trusts & Estates 76:381 Ap '43
 Model common trust fund statute; Georgia gets law based on best existing acts. J. C. Shelor. Trusts & Estates 76:379-81 Ap '43
 Pennsylvania company common trust fund earns \$4.38 per unit. Trusts & Estates 77:168 Ag '43
 Profit-sharing trusts for employees. Trusts & Estates 76:521-2 Je '43
 Results of common trust fund operation. Burroughs Clearing House 27:11 Mr '43
 St Louis union has two common trust funds—reports on first. Trusts & Estates 76:68 Ja '43

Employees' trusts

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Fees

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Insurance requirements

- Liability of fiduciaries makes necessary that insurance requirements be maintained. Weekly Underw 149:80 JI 10 '43
 See also Insurance, Surety and fidelity—Fiduciary bonds

Investments

- Allocation between trust beneficiaries; some phases of life tenant and remainderman conflicts accentuated by war boom. J. M. Trenary. Trusts & Estates 77:215-18 S '43
 ABA issues new book on prudent-man rule for trust investment. Comm & Fin Chr 156:2344 D 31 '42
 Block sales of securities; liquidation through new secondary market and special offerings. E. Barry. Trusts & Estates 76:165-6, 168-9 F '43
 Experience under principal-income act of Virginia. C. L. Harrison, Jr. Trusts & Estates 76:89-90 Ja '43
 Food industry developments; industry study. Il Trusts & Estates 77:291-2, 294-8 S '43
 Investment powers; restriction to 5% of securities or obligations of one person or corporation. Trusts & Estates 76:93-4 Ja '43
 Investments in war and peace. C. A. Sienkiewicz. Trusts & Estates 76:545-6 Je '43
 Leaving money in trust; advises we combine to get higher returns on our money. R. W. Babson. Comm & Fin Chr 158:1917+ N 11 '43
 Legal views on outside investment management and place of investment company shares in trusts. M. A. Shattuck. Trusts & Estates 76:273-5 Mr '43
 Massachusetts rule vs. legal list; advantages achieved by corporate trustees in Connecticut operating under the prudent investor rule. W. C. Poole, Jr. and L. K. Elmore. Trusts & Estates 77:386, 388-92 O '43

- Plastics in peace-time; industry study. Il Trusts & Estates 77:153, 160-5 Ag '43
 Post-war trust investment policies. O. M. W. Sprague. Comm & Fin Chr 158:1189+ S 23 '43; Excerpts. Trusts & Estates 77:393-4 O '43

Prudent investor rule proposed. Trusts & Estates 75:504 N '42

Prudent trustee standard adopted; legislative enactment of liberal investment rule described; Minnesota statute. L. R. Barker. Trusts & Estates 77:174-8 Ag '43
 Self-dealing, exchange of trustee's own stock for stock of another bank. Trusts & Estates 76:204-5 F '43

Technical breach of trust; personal liability of officers of fiduciary. Trusts & Estates 76:393-4 Ap '43

Trustees surcharged on self-dealing. Trusts & Estates 77:308-9 S '43

War role of Australian trustee companies; volume of business, profitability and investments in wartime. F. Blamey. Il Trusts & Estates 76:524-8 Je '43

What price trusteeship? Trusts & Estates 77:32-3 JI '43

See also

Trusts and trustees—
 Common trust funds

Living trusts

- Joint registration or living trust? R. E. Towey. Trusts & Estates 77:278-80 S '43
 Odyssey of a trust prospect. E. S. MacNeill. Trusts & Estates 76:143-8 F '43
 Testing ground method and modern trust service; argument for revocable living trust. Bankers M 146:333-7 My '43
 Trends in estate planning. H. S. Koster. Trusts & Estates 75:488-90, 581-2; 76:51-2 N '42-Ja '43

Pension trusts

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Revocable trusts

- Revocable trust; virtues in war and peace; abstracts. M. A. Shattuck. Trusts and Estates 76:159-94 F '43; Banking Law J 60:331-6 N '43
 Testing ground method and modern trust service; argument for revocable living trust. Bankers M 146:333-7 My '43

Small trust funds

See also Trusts and trustees—Common trust funds

Spendthrift trusts

- Assignment by beneficiary of corpus before deliverable to him is invalid. Trusts & Estates 77:95-6 JI '43
 Spendthrift clause invalidates contract with attorney; dual capacity of attorney-trustee. Trusts & Estates 77:406-7 O '43

Successor trustees

- Exercise of discretionary powers by successor trustee cannot be interfered with by court. Banking Law J 60:794-801 S '43
 Limitation of powers of successor trustee. Banking Law J 60:791-4 S '43
 Substitute fiduciaries for fiduciaries in war service. F. D. Stone. Trusts & Estates 77:269-70 S '43

Taxation

- State and federal taxation; year's developments affecting estates and trusts. W. L. Nossaman. Trusts & Estates 77:228-36 S '43
 Taxation of estate and trust income; uncertainties demand revision of section 111 of 1942 act. F. H. Medinger. Trusts & Estates 76:235-8 Mr '43
 Trends in estate planning. H. S. Koster. Trusts & Estates 75:488-90, 581-2; 76:51-2 N '42-Ja '43

Termination of trusts

- Beneficiaries may not terminate trust by agreement unless object of trust has been accomplished and all interests have vested. Trusts & Estates 77:92 JI '43

TRUXILLIC acid

- Photochemical dimerization of *trans*-cinnamic acid. H. I. Bernstein and W. C. Quimby. bibliog Am Chem Soc J 65:1845-6 O '43

TRUXINIC acid

Photochemical dimerization of *trans*-cinnamic acid. H. I. Bernstein and W. C. Quimby. *bibliog Am Chem Soc J* 65:1845-6 O '43

TRYPAFLAVINE

Phosphorescence of adsorbed tryptaflavine and its quenching by oxygen. J. Franck and P. Pringsheim. *bibliog J Chem Phys* 11:21-7 Ja '43

TRYPAN blue

Vital stains; dye as carrier of iodine or arsenic into site of tumour. A. A. Goldberg. *Chem Soc J* p713-16 N '42

TRYPANOCIDES

Preparation and therapeutic properties of certain acridine derivatives; 5-methylacridines, further 5-styrylacridines and their quaternary salts; with note on antiseptic and trypanocidal action by C. H. Brown and K. M. Calver. W. Sharp, M. M. J. Sutherland and F. J. Wilson. *Chem Soc J* p344-7 Ag '43

Preparation and therapeutic properties of certain acridine derivatives; 5-styrylacridines and their quaternary salts. W. Sharp, M. M. J. Sutherland and F. J. Wilson. *Chem Soc J* p5-7 Ja '43

TRYPANOSOMA cruzi

Improved antigen for complement fixation in American trypanosomiasis. D. J. Davis. *Pub Health Rep* 58:775-7 My 14 '43

Infection in monkeys with strains of trypanosoma cruzi isolated in the United States. D. J. Davis. *bibliog Pub Health Rep* 58:1006-10, pl 1 Jl 2 '43

Triatoma sanguisuga (LeConte) and *triatoma ambigua* Neiva as natural carriers of trypanosoma cruzi in Texas. D. J. Lewis, T. McGregor and T. deShazo. *bibliog Pub Health Rep* 58:353-4 F 26 '43

TRYPSIN

Digestion of living tissues by proteolytic enzymes. C. A. Dragstedt. *Science* 98:131-2 Ag 6 '43

TRYPTOPHAN

Effect of tryptophane deficiency on reproduction. A. A. Albanese, R. M. Randall and L. E. Holt, jr. *bibliog Science* 97:312-13 Ap 2 '43

TUBE-ICE machine. See Ice machines**TUBE mills**

Span river with belt conveyors for Fontana Dam aggregates; rod mills reduce crushed stone to fine aggregate. W. B. Lenhart. *flow sheet Il Rock Prod* 46:49-57+ S '43

TUBERCLE bacilli

Biological effects of a toxic and a sensitizing substance isolated from paraffin oil extract of dead tubercle bacilli. N. Choucrun. *bibliog Science* 98:327-9 O 8 '43

Pigment production by tubercle bacillus in the presence of P-aminobenzoic acid. R. L. Mayer. *Science* 98:203-4 Ag 27 '43

TUBERCULIN

Proteins of tuberculin. F. B. Seibert and J. W. Nelson. *bibliog Il Am Chem Soc J* 65:272-8 F '43

TUBERCULOSIS

Automatic control of exposure in photo-fluorography. R. H. Morgan. *diags Pub Health Rep* 58:1533-41, pl 1-2 O 15 '43

Diasone, a new and active chemotherapeutic agent. G. W. Raiziss. *bibliog Science* 98:350 O 15 '43

Facts about tuberculosis. *Nat Safety N* 47:11-12+ My '43

Grants for research in tuberculosis. *Science* 97:237-8 Mr 12 '43

Industry, the war, and tuberculosis. C. Kuh. *Ind Med* 12:34+ Ja '43

Occupational tuberculosis; abstract. A. Licurzi. *J Ind Hygiene* 25:sup5-6 Ja '43

Opportunities in the newer methods of tuberculosis case finding. H. E. Hilleboe. *Pub Health Rep* 58:1094-1101 Jl 16 '43

Plan for prevention and care of tuberculosis in Great Britain. *Monthly Labor R* 57:509-11 S '43

Tuberculosis case finding in industry. I. R. Tabershaw. *bibliog Ind Med* 12:133-6 Mr '43

Tuberculosis case finding problems in industry; Queensboro tuberculosis & health association. J. E. Maile. *Ind Med* 12:602, 604+ S '43

Tuberculosis in industry; value of mass radiography. L. Banszky. *Electrician* 130:190 F 19 '43

Tuberculosis mortality in the United States, 1939-41. J. Yerushalmy, H. E. Hilleboe and C. E. Palmer. *Pub Health Rep* 58:1457-82 O 1 '43

Tuberculosis; post-war problem. *Science* 97:sup10 F 19 '43

TB scheme. *Economist* 145:233-4 Ag 21 '43

What the industrial nurse can do about tuberculosis. F. E. Macinnis. *Nat Safety N* 46:34+ D '42

Statistics

Deaths from tuberculosis. *Science* 96:sup11 N 13 '42

TUBES

Heat transfer to a fluid flowing periodically at low frequencies in a vertical tube. R. C. Martinelli and others. *bibliog diags A S M E Trans* 65:789-96; Discussion. 796-8 O '43

Jig assembly of tube lines for aircraft. *Il Automotive & Aviation Ind* 87:32-3+ N 15 '42

Nomographic chart simplifies fluid flow calculations through hydraulic tubing. *fold chart Product Eng* 14:358 Je '43

Resin-bonded plywood tubing. *Il Mod Plastics* 21:81-2+ O '43

Sealing tube ends with plastic; Plastalloy process. *Il Iron Age* 152:65 N 4 '43

See also
Boiler tubes
Condensers
Pipes

Manufacture

Controlled tube-closure process. *Il Steel* 112:88-9 F 15 '43

Die-closed tubes. *Business Week* p82+ F 27 '43

Induction heater speeds tube forming; cooler for transformer. W. Scott. *Il Iron Age* 152:58-9 S 23 '43

Tubular parts simplified by tube spinning process. *Il diags Product Eng* 14:153-5 Mr 43

Wolverine announces details of tube spinning process. *Iron Age* 151:58, 60 Ja 28 '43

Wolverine spun end process; Wolverine tube division of Calumet and Hecla consolidated copper co. *Il Automotive & Aviation Ind* 88:39 F 15 '43

Testing

Electrical tube gauge. E. Fawcett. *Il diags Engineering* 156:301-2 O 15 '43

TUBES (containers)

New plastic tube; made from Dow chemical co.'s Saran molding powder. *Il Business Week* p78 N 21 '42

Pre-packs for rugs; fiber tubes, display cases. *Il Mod Packaging* 16:158, 160, 162 Ap '43

Tubes, capsules and enclosures. *Il Can Chem & Process Ind* 27:248-9+ My '43

TUBES, Aluminum

Safe beam loading for aluminum tubes. M. Holt. *Il Product Eng* 14:36-7 Ja '43

TUBES, Brass

Spinning brass primer tubes; Wolverine tube division, Calumet and Hecla consolidated copper co. H. A. Knight. *Il Metals & Alloys* 18:298-301 Ag '43

TUBES, Copper

Copper tubing substitutes. *Bus Transportation* 22:55 Ap '43

Effect of selenium, tellurium, and bismuth on copper. M. Cook and G. Parker. *Engineering* 155:338, 345 Ap 23-30 '43

Folds eliminated when bending copper tubes. H. Hodges. *Il Am Mach* 87:80-2 S 30 '43

TUBES, Glass. See Glass tubing**TUBES, Photoelectric.** See Photoelectric cells**TUBES, Plastic**

Applying synthetic tubing in design. J. Delmonte. *Il Machine Design* 15:126-8+ S '43

TUBES, Plastic—Continued

Copper tubing substitutes. *Bus Transportation* 22:55 Ap '43

Extruded plastic tubing. *R Sci Instr* 14:154-5 My '43

TUBES, Rubber

See also

Hose

TUBES, Steel

Advantages of square tubing; National cylinder gas company flame-cutting machines. *il diag Product Eng* 14:418-21 Jl '43

Heat exchanger restored to service by welding on partial baffles. *W. H. Parlette. il Nat Pet N* 35 pt 2:R353 Ag 4 '43

Hollow steel propeller blades made from tubing. *A. H. Allen. il Steel* 112:92-6+ Ap 19 '43

Machining allowances for seamless tubing; reference book sheet. *diags Am Mach* 87: 125, 127 Ag 19 '43

Purchasing manual for aircraft tubing. *Steel* 112:122+ Mr 15 '43; *Aviation* 42:189, 191 Ap '43

Reclaiming alloy still tubes; with cost data. *il diags Nat Pet N* 35 pt 2:R210-12 My 5 '43

Reclamation of cracking still furnace tubes; with cost data. *L. V. Hile. il diags Pet Refiner* 22:111-15 Je '43

Structure of butt-welded steel tubing. *H. J. Mastenbrook and H. J. Steffen. bibliog il Welding J* 22:sup51-6 Ja '43

Use of tubular steel sections in structures; review of the literature from Jan. 1, 1930 to July 1, 1942. *A. Quisling and C. M. Cosman. bibliog(85 references) il diags Welding J* 22:sup101-34 Mr '43

Water-cooled tube supports for oil tubes in heaters. *diags Nat Pet N* 35 pt 2:R155 Ap 7 '43

Welded steel tubing adapted to intake pipes for aircraft engines. *il Steel* 112:68+ My 10 '43

Welding tubular structures with sphere type joints; towing carriages. *F. Waldo. il Steel* 112:110, 112+ Je 7 '43

See also

Pipes, Steel

Manufacture

Cold-drawing steel tubes; abstract. *E. Siebel, H. Buchholtz and H. Frank. Metals & Alloys* 17:1024+ My '43

Electric resistance-welded steel tubing; its quality control and application. *R. D. Malm. il diag Welding J* 22:818-21 O '43

Heavy gun tubes from seamless tubing; illustrations. *Iron Age* 152:74-9 Ag 12 '43

High speed tube welding; automotive torque tubes. *G. V. Slottman. il diags Iron Age* 150:59-66 N 26 '42

Intake pipes formed from strip; illustrations. *Iron Age* 152:65 S 16 '43

New technique saves material in producing tapered landing gear tubing. *J. P. Dods. il diags Aero Digest* 42:149-50+ F '43

Production speeded on welded seam inlet elbows; how Buick makes new-type inlet elbows for P & W engines. *il Aviation* 42: 199+ My '43

Rolling seamless tubes; abstract. *E. W. Wrage. Metals & Alloys* 17:364 F '43

Seamless tube mill pierces billets for 75-mm. gun tubes; illustrations with text. *Metal Prog* 44:415-19 S '43

Subcontracting increases output of tube mill; Summerill tubing co. *D. E. Lukens. il Steel* 112:128-30, 132 Ap 12 '43; Same. *Aviation* 42:201, 203+ Je '43

Welded steel tube for condensers and heat exchangers. *A. F. Zoll. il diags Pet Eng* 14:35-7, 40 F '43

Welded-steel tubing and its applications in war production. *H. S. Card. il diags Welding J* 21:846-51 D '42

Standards

WPB asks users of seamless cold drawn to specify standard sizes. *Steel* 113:67 Ag 2 '43

Wartime standards are adopted for refinery still tubes. *Nat Pet N* 35 pt 2:R66-7 F 3 '43

Testing

Bursting tests on notched alloy steel tubing. *G. Sachs and J. D. Lubahn. bibliog il diags Am Soc for Metals Trans* 31:71-86; Discussion. 87-8 Mr '43

Crack detection; method developed by Reynolds tube company. *il Automobile Eng* 33:247-8 Je '43

Creep resistance of superheater tube steels in tube and bar form. *J. A. Jones and W. E. Bardgett. diags Engineer* 176:6-8 Jl 2 '43

Effect of cold drawing on mechanical properties of welded steel tubing. *W. E. Black. bibliog il Ill U Eng Exp Sta Bul* 341:1-32 '43 (pa. 40c); Conclusions. *Iron Age* 152: 53 S 23 '43

Electro-magnetic crack detection in welded tubular structures. *il diags Engineer* 175: 178-9 F 26 '43

TUBES, Vacuum. See Vacuum tubes

TUBING. See Tubes

TUBOCURARINE

Contraction of denervated muscle produced by d-tubocurarine. *A. R. McIntyre and R. E. King. Science* 97:516 Je 4 '43

Curare alkaloids from chondodendron tomentosum. *O. Wintersteiner and J. D. Dutcher. bibliog Science* 97:467-70 My 21 '43

TUBS, Foot. See Foot tubs

TUDOR, Frederic

He looked at an ice pond, and saw a world trade. *Adv & Sell* 36:78 O '43

TUFTS college

Tufts college chapter of the society of the Sigma xi. *N. Y. Wessell. Science* 97:347-8 Ap 16 '43

TUGBOATS. See Towboats

TUGWELL, Rexford Guy, 1891-
Puerto Rico's little new deal. *S. B. Heath. Pfr Inc* 202:60+ F 26 '43

TULAREMIA

Effect of chlorination on pasteurilla tularen-sis in aqueous suspension. *H. B. Foote and others. bibliog diag Am Water Works Assn J* 35:902-10 Jl '43

Positive plague and tularemia specimens reported in Canada during 1942. *Pub Health Rep* 58:646 Ap 16 '43

Tularemia: spontaneous occurrence in shrews. *G. M. Kohls and E. A. Steinhau. Pub Health Rep* 58:842 My 28 '43

TUMBLING barrels

Canning & co. tumbler barrel. *il Mech Hand-ling* 30:460-1 O '43

Cleaning castings with water and sand; hydroblast tumbling barrel. *Foundry* 71:134 Mr '43

TUMORS

Indeno-2''3'':2':1'-benzanthrone; tumour-in-hibitory properties. *G. Swain and A. R. Todd. Chem Soc J* p626-8 O '42

Successful production of a mammalian tumor with a virus-like principle. *A. Taylor. Science* 97:123 Ja 29 '43

Tumors of the head, face and neck. *J. A. Wolfer. Ind Med* 11:528-9 N '42

See also

Cancer
Granuloma inguinale

TUMORS (plant). See Galls (botany)

TUNG oil

Cold weather halves 1943 tung crop expectancy. *Paint Oil & Chem R* 105:37 My 6 '43

Magnesium castings impregnated by new method; tung oil forced through castings by direct pressure. *S. H. Brams. il Iron Age* 152:57-9 N 11 '43

Quest for quick-drying oil. *Fortune* 26:82+ D '42

Relation between oil content and kernel content of tung fruit; hulling tung fruit on the farm. *R. S. McKinney. il Oil Paint & Drug Rep* 144:7+ Jl 19 '43

Solvents in extraction of tung oil. *A. F. Freeman, F. C. Pack and R. S. McKinney. bibliog il Ind & Eng Chem* 35:1156-9 N '43

Synthetic developments with fats and oils; abstract. *J. E. Good. Oil Paint & Drug Rep* 144:56+ N 1 '43

TUNG oil—Continued

Tung oil production being increased in Latin America. *Oil Paint & Drug Rep* 144:3+ Ag 2 '43

Tung oil's boom. *il Business Week* p48+ N 21 '42

Tung trees planted in India. *For Comm W* 11:41 My 1 '43

Viscometric estimation of particle dimensions; miscellar changes involved in the heat-bodying of tung oil. J. P. Hollihan and D. R. Briggs. *bibliog J Phys Chem* 47:30-9 Ja '43

TUNGSTEN

China's mineral output; tungsten production. *Chem Age (Lond)* 48:603 Je 5 '43

Conservation of tungsten in automotive electrical parts. *Automotive & Aviation Ind* 89:74 Jl 15 '43

Ductile tungsten in peace and in war. L. A. Hawkins. *il Chem & Eng N* 21:89-90 Ja 25 '43

Effect of high electrostatic fields on the conductivity of tungsten. P. L. Vissat. *bibliog diag Phys R* 64:119-25 Ag 1 '43

Energies of the γ -rays from radioactive scandium, gallium, tungsten, and lanthanum. C. E. Mandeville. *bibliog Phys R* 64:147-50 S 1 '43

Ferro-alloy metals, 1942. H. W. Davis. *Eng & Min J* 144:73 F '43

Fluorescent inspection of tungsten; cracks in leads passing through glass are major cause of gassy electronic tubes; Zyglo inspection method. S. A. Kulin. *il Electronics* 16:95+ Jl '43

Saving tungsten electrodes in atomic hydrogen welding; abstract. L. G. Pickhaver. *Metals & Alloys* 17:336 F '43

Spectrum of neutral tungsten. W. I. O. Laporte and J. E. Mack. *bibliog Phys R* 63:246-97 Ap 1 '43

Thermal and electrical conductivities of tungsten and tantalum. M. Cox. *bibliog Phys R* 64:241-7 O 1 '43

Tungsten in British Columbia. *Can Chem & Process Ind* 27:568 O '43

Tungsten mining and ore dressing greatly advanced. C. H. Segerstrom. *il Min Cong J* 29:32-4 F '43

Width of X-ray diffraction lines from cold-worked tungsten and α -brass. C. S. Smith and E. E. Stickley. *bibliog Phys R* 64:191-8 O 1 '43

Analysis

Determination of tungsten in low-grade ores. H. E. Peterson and W. L. Anderson. *U S Bur Mines Rep of Invest* 3709:1-15 '43

Determination of tungsten in low-grade tungsten ores. F. S. Grimaldi and V. North. *bibliog Ind & Eng Chem Anal ed* 15:652-4 O 15 '43

Spectrochemical assay for traces of tungsten. A. G. Scobie. *Ind & Eng Chem Anal ed* 15:79-80 Ja 15 '43

Substitute for cinchonine in the tungsten assay; rhodamine B. J. T. Oats. *Eng & Min J* 144:72 Ap '43

TUNGSTEN alloys

Electrodeposition of cobalt-tungsten alloys from an acid plating bath. M. L. Holt, R. E. Black and P. F. Hoglund. *Electrochem Soc Trans* 84 (preprint 15):139-47 O '43

See also

Tungsten steel

TUNGSTEN carbide

Carbide dies for steel shell cases. E. Glen. *il diags Metals & Alloys* 17:536-8 Mr '43

Diamond dust is recovered for hardest war industry jobs; used to polish tungsten carbide wire drawing dies; abstract. C. B. Shopmyer. *Franklin Inst J* 235:433 Ap '43

Ford reclaims tungsten carbide chips. *diag Iron Age* 152:61 Jl 15 '43; *Same. Steel* 113:105 Ag 16 '43

Hardness vs. wear resistance. J. R. Spence. *il Welding J* 22:181 Mr '43

How tungsten carbide chips are reclaimed. *diag Automotive & Aviation Ind* 88:42 My 1 '43

See also

Cutting tools, Carbide

TUNGSTEN metallurgy

Flotation of tungsten ores. D. C. McLaren. *il Can Min J* 64:8-13 Ja '43

Methods and costs of concentrating hübnerite ores at the Ima tungsten mine, Lemhi county, Idaho. C. M. Dice. *flow sheet U S Bur Mines Information Circ* 7230:1-14 '43

Tungsten from the high Sierras. United States vanadium corporation. M. Wharton. *il Explosives Eng* 21:77-9, 100-2 My '43

Tungsten mining and ore dressing greatly advanced. C. H. Segerstrom. *il Min Cong J* 29:32-4 F '43

TUNGSTEN mines and mining

Tungsten exploration work of Bureau of mines reviewed. *Min & Met* 24:453 O '43

Bolivia

Tungsten from Bolivia. R. B. Hall. *il Comp Air M* 48:7073-8 Jl '43

California

New tungsten area in California. A. Thickstun. *il map Eng & Min J* 144:78-81 Jl '43

Tungsten from the high Sierras. United States vanadium corporation. M. Wharton. *il Explosives Eng* 21:77-9, 100-2 My '43

China

Tungsten deposits of southern Kiangsi, China. K. Hsu. *bibliog il diags maps Econ Geol* 38:431-74 S '43

Colorado

Tissue for tool steel; tungsten ore mining by Wolf Tongue mining company. T. L. Wells. *il Explosives Eng* 20:351-6 D '42

Idaho

Yellow Pine mine, producing combination of tungsten, antimony, and gold. J. D. Bradley, J. A. Mecia and R. E. Baker. *il diags Eng & Min J* 144:60-6 Ap '43

Yellow Pine mine, strategic metal bonanza. H. D. Bailey. *il map Comp Air M* 48:7189-92 N '43

Nevada

Rose Creek tungsten mine, Pershing county. R. J. Roberts. *map U S Geol S Bul* 940-A:1-14, pl 1-3; *pa* 30c Supt. of doc. '43

Tungsten deposits of the Nightingale district, Pershing county. W. C. Smith and P. W. Guild. *map U S Geol S Bul* 936-B:39-58, pl 2-5; *pa* 40c Supt. of doc. '42

North Carolina

Important tungsten discovery in North Carolina. *Eng & Min J* 144:72 S '43

TUNGSTEN ores

Large tungsten orebody opened in Tasmania. *Eng & Min J* 144:134 Ag '43

Tin and tungsten deposits at Silver Hill, Spokane county, Washington. L. R. Page. *maps U S Geol S Bul* 931-H:177-203, pl 32-6; *pa* 30c Supt. of doc. '42

Tungsten deposits of southern Kiangsi, China. K. Hsu. *bibliog il diags maps Econ Geol* 38:431-74 S '43

Tungsten deposits of the Nightingale district, Pershing county, Nevada. W. C. Smith and P. W. Guild. *map U S Geol S Bul* 936-B:39-58, pl 2-5; *pa* 40c Supt. of doc. '42

Tungsten; hints to prospectors. M. S. Hedley. *Can Min J* 64:491-3 Ag '43

Tungsten ores and concentrates. *Can Min J* 64:164-6 Mr '43

Wolfram in Nigeria. *Can Min J* 64:583-4 S '43

See also

Scheelite

TUNGSTEN oxides

Heat capacities and entropies of molybdenum and tungsten trioxides. H. Seltz, F. J. Dunkerley and E. J. DeWitt. *bibliog Am Chem Soc J* 65:600-2 Ap '43

TUNGSTEN steel

Grinding cartridge case and bullet jacket dies. F. E. Whittemore, jr. *diags Steel* 112:76+ Mr 22 '43

TUNING

Mean-tone temperament; the classical system of instrumental tuning. W. B. White. *Acoustical Soc Am J* 15:12-16 Jl '43

See also

Piano tuning

TUNING forks

- New method of frequency measurement. H. L. Clark and J. E. Hancock. *il diag Instrumts* 16:60-2 F '43; Abstract. *Electronics* 16:148+ My '43
 Precision time control; amplified tuning fork power supply in National broadcasting company studios and control rooms at New York. *il diag Electronics* 15:49+ D '42

TUNISIA

Freed Tunisia. *Economist* 144:824 Je 26 '43

See also

Physical geography— Tunisia
 Tunisia

Economic conditions

Tunisia; economy of vital protectorate. P. M. Copp. *il For Comm W* 9:10-13+ D 5 '42

TUNNEL air

Use of Diesel engines in tunnels. S. H. Ash and L. L. Naus. *U S Bur Mines Information Circ* 7222:1-26 '42; Conclusions. *Nat Safety N* 47:42+ Je '43

TUNNEL drainage

Pioneer highway tunnels modernized for service; Liberty tunnels at Pittsburgh. *il diags Eng N* 131:326-9 Ag 26 '43

TUNNEL lining

Buenos Aires underground railway. E. Kindel. *diags Engineer* 175:184-7 Mr 5 '43
 Concrete blocks used to line shield-driven tunnel in London. G. L. Grove. *Eng N* 130:803 Je 3 '43

Lining inclined section of Delaware aqueduct. C. G. Hoerner. *il diags plan Civil Eng* 13:139-43 Mr '43

No delays to war traffic on this tunnel repair job; repair of concrete lining simplified by installing liner plates; Pittsburgh & West Virginia railroad. *il Ry Age* 113:910-12+ D 5 '42

Pioneer highway tunnels modernized for service; Liberty tunnels at Pittsburgh. *il diags Eng N* 131:326-9 Ag 26 '43

Placing concrete lining in a 19-ft. tunnel; hydro-electric project in northern California. *il diags Eng N* 131:604-6 O 21 '43
 Prefabricated reinforcing steel for tunnel lining. L. M. Leedom. *il Civil Eng* 13:282-3 Je '43

TUNNEL shields

Shield tunneling 100 years ago; tunnel under the Thames river, London. H. W. Richardson. *il diags Eng N* 131:204-5 Jl 29 '43

TUNNEL ventilation

How to prevent oscillations in large inertia fan drives; Pennsylvania Turnpike tunnels. E. O. Marty, S. F. Henderson and F. Richardz. *il diag Heating-Piping* 15:80-1 F '43

See also

Subways—Ventilation

TUNNEL workers

Control of safety and health of men working under compressed air on the Queens Midtown tunnel. E. Levy. *Am Soc C E Proc* 69:1030-5 S '43

TUNNELS and tunneling

Blasting five tunnels at one time; Trap rock company of Dresser, Wisconsin. W. P. Beinhorn. *il Explosives Eng* 21:172-3 S '43
 Blue Ridge tunnel. A. W. Loomis. *il Comp Air M* 48:7132-5 S '43

Build industrial reinforced concrete tunnel without blocking street traffic connecting two buildings of Caterpillar tractor company. *il diag Concrete* 51:8 My '43

C. & O. replaces 1850 Blue Ridge tunnel. *il diags Eng N* 131:18-20 Jl 1 '43

Deep tunnel air raid shelters. *il diags Engineer* 174:445-6, 456-8, 472-4 N 27-D 11 '42

Delaware aqueduct. *il diags plans map Engineer* 174:226-8, 248-50, 270-2, 290-2; 175:344-6, 362-4, 382-3, 385, 402-4, 422-3, 440-1, 460-3 S 18-O 9 '42, Ap 30-Je 11 '43

Determination of lateral passive soil pressure and its effect on tunnel stresses. M. A. Drucker. *diags Franklin Inst J* 235:499-512 My '43

How a tunnel drill round is blasted. M. W. Terrill. *diags maps Comp Air M* 48:7193-5 N '43

Long Island railroad puts 4.6 mi. line in tunnel. *il Eng N* 130:4-5 Ja 7 '43

New Leadville drainage tunnel to boost zinc output. *diag map Eng & Min J* 144:66-7, 83 S '43

Penstock, tunnel, flow line maintenance; hydro plants, Southern California Edison co. T. C. Stavert. *il Elec West* 31:66-7 S '43

Relocation of compressor station calls for engineering ingenuity. *il Gas Age* 90:11+ D 17 '42

Shield tunnels of the Chicago subway. K. Terzaghi. *diags plans Boston Soc C E J* 29:163-210 Jl '42; Discussion. 30:122-7 Ap '43

Treasury tunnel extension to tap Black Bear zinc. *il maps Eng & Min J* 144:78-80 O '43
 Youghiogheny dam nears completion. *il Explosives Eng* 21:46-7 Mr '43

See also

Aqueducts	Mont Ceniz tunnel
Blasting	Pipe laying
Conduits	Rock drills
Drilling and boring	Sewerage
(earth and rocks)	Subways
Excavation	Tunnel lining
Mining engineering	
also New York (city)—Tunnels	

Cost

Earthwork and tunnel. Tucumcari project, New Mexico; unit prices. *Eng N* 129:734 N 19 '42

Repair

No delays to war traffic on this tunnel repair job; repair of concrete lining simplified by installing liner plates; Pittsburgh & West Virginia railroad. *il Ry Age* 113:910-12+ D 5 '42

Vehicular tunnels

Canyon highway tunnel. T. L. Wells. *il Explosives Eng* 20:332-4 N '42
 Electric eyes control tunnel traffic; mine of Utah copper co., Bingham, Utah. *il Elec West* 90:59 Mr '43

Narrows Tunnel project, New York. *diags plan Engineer* 176:152-3 Ag 20 '43

Pioneer highway tunnels modernized for service; Liberty tunnels at Pittsburgh. *il diags Eng N* 131:326-9 Ag 26 '43

Queens Midtown tunnel. O. Singstad. *il diags maps Am Soc C E Proc* 69:361-97 Mr '43; Discussion. 69:783-4, 895-904, 1025-36, 1433-92 My-Je, S, N '43

TUNNELS and tunneling, Subaqueous

Narrows Tunnel project, New York. *diags plan Engineer* 176:152-3 Ag 20 '43

Queens Midtown tunnel. O. Singstad. *il diags maps Am Soc C E Proc* 69:361-97 Mr '43; Discussion. 69:783-4, 895-904, 1025-36, 1433-92 My-Je, S, N '43

Shield tunneling 100 years ago; tunnel under the Thames river, London. H. W. Richardson. *il diags Eng N* 131:204-5 Jl 29 '43

TUPELO

Grinding of hardwoods; studies on swamp tupelo. E. R. Schafer and J. C. Pew. *bibliog Paper Tr J* 116:25-8 Ja 23 '43

TURBIDIMETERS

Null-reading photoelectric microdensitometer for use in turbidimetry and abridged spectrophotometry. J. G. Baier, jr. *bibliog il diags Ind & Eng Chem Anal ed* 15:144-8 F 15 '43

Use of turbidity determinations in estimating the suspended load of natural streams. R. G. Grassy. *bibliog diags Am Water Works Assn J* 35:439-53 Ap '43

TURBIDIMETRIC analysis

Turbidimetric determination of small amounts of chlorides. E. N. Luce, E. C. Denice and F. E. Akerlund. *Ind & Eng Chem Anal ed* 15:365-6 Je 15 '43

TURBIDITY

Mathematics of turbid media. S. Q. Duntley. *bibliog diags Opt Soc Am J* 33:252-7 My '43

Use of turbidity determinations in estimating the suspended load of natural streams. R. G. Grassy. *bibliog diags Am Water Works Assn J* 35:439-53 Ap '43

TURBINES

Fluid motion inside rotating radial impellers; abstract. E. Grunagel. *Roy Aeronautical Soc J* 47:sup136-7 Ap '43

TURBINES—Continued

Fluid torque converter and coupling. R. Eksergian. diags Franklin Inst J 235:441-78, pl 1 My '43

Grand Coulee pits adapted to Shasta turbines. il Elec W 119:592-3 F 20 '43

Hydraulic turbine practice of the T.V.A. H. J. Petersen and J. F. Roberts. il diags Mech Eng 65:237-44 Ap '43

Turbine-driven pump under Fifth avenue regulates New York's water pressure. il diags Power 87:459-61 Jl '43

See also

Gas turbines
Steam turbines
Windmills

Control

Wicket gates eliminated in low-cost water-wheel governor. il diags Elec W 119:1958-9 Je 12 '43

Failure

Water turbine overspeed causes wreck. il Locomotive 44:132+ Ja '43

Models

Seeing through turbines. il Mod Plastics 20: 59 Jl '43

Protection

Electric trap keeps eels out of turbine. H. C. Akins. diags Elec W 120:1540 O 30 '43

Repair

Hydraulic turbines pitted surfaces repaired by electric welding. E. F. Bladholm. il diags Power Pl Eng 47:84, 110, 112+ N '43

Metallizing repairs turbine shaft. il diags Elec W 118:2134 D 26 '42

TURBULENCE

Effect of turbulence and channel slope on translation waves. G. H. Keulegan and G. W. Patterson. bibliog diags J Research Nat Bur Stand 30:461-512 Je '43

Effect of turbulence on sedimentation. W. E. Dobbins. il diags Am Soc C E Proc 69:235-62 bibliog(p260) F '43; Discussion. 69:632, 779-82, 977-84, 1298-1306 bibliog(p1306) Ap-Je, O '43

New theory of free turbulence. H. Reichardt. Roy Aeronautical Soc J 47:167-76 Je '43

TURKEY

See also

Medical service, Industrial—Turkey World war, 1939—Turkey

Economic conditions

News by countries. For Comm W 10:16 Ja 2; 11:25-6 Je 12; 12:23-4 S 11 '43

Turkey and the new economic nationalism. G. Riviere. il Mag of Wall St 72:235+ Je 12 '43

Turkey's 1942 economy showed general downward trend. For Comm W 11:7+ My 15 '43

TURKEY red oil

Sulphonated oil products; properties and uses in textile processing. Textile Col 65:286-7 Jl '43

TURKEYS

No turkey at all; sale of storage birds has been halted. Business Week p40+ S 4 '43

Turkeys mobilized. Business Week p102 N 6 '43

White meat for all; OPA moves to end tieup in turkey marketing. Business Week p19-20 N 14 '42

TURKISH toweling. See Terry fabrics**TURNER and Newall, limited**

Annual general meeting, Manchester. Economist 144:158 Ja 30 '43

TURNING

Ball turning on a lathe. F. J. Atzrott. diags Am Mach 87:106 Je 24 '43

How to run an engine lathe. il diags Am Mach 87:113-28 Jl 8 '43

See also

Lathes

TURNOVER

Turn-over as a collection gauge. J. E. Walsh. Credit & Fin Management 45:15-16 F '43

See also

Labor turnover

TURNABLES

Blaw-Knox turntable for heavy road vehicles. il Engineering 154:476 D 11 '42

Cableless turntables; Chicago, Rock Island & Pacific. il Ry Mech Eng 117:486 O '43

Engine terminal improvements speed locomotive handling. il Ry Age 114:1163-70 Je 12, '43

TURPENTINE

Acid treatment shows increase in turpentine yield. Chem & Eng N 20:1392 N 10 '42

All-America package competition award; Turpentine & rosin factors, inc. il Mod Packaging 16:101+ Ap '43

Bottling pure gum turpentine. il Mod Packaging 16:71+ Je '43

Solvents from pine. R. C. Palmer. il Ind & Eng Chem 35:1023-5 O '43

Turpentine and rosin, 1942. Chem & Met Eng 50:121-3 F '43

Turpentine bottles. il Mod Packaging 16:50 Jl '43

Turpentine in the war effort. S. Palkin. il Manuf Rec 112:30-1+ My '43

Turpentine; manufacture, composition, etc. S. T. Dingman. bibliog il Metal Finishing 41:245-7 Ap '43

See also

Naval stores

TURRIALBA, Costa Rica. Institute of tropical agriculture. See Agricultural research

TURTLES

Turtles and the origin of the fauna of Latin America. G. G. Simpson. bibliog Am J Sci 241:413-29 Jl '43

TUSCALOOSA formation

Subsurface stratigraphy and lithology of Tuscaloosa formation in southeastern Gulf Coastal Plain. A. C. Munyan. bibliog diags map Am Assn Pet Geologists Bul 27:596-607 My '43

TUTIN

Tutin. S. N. Slater. Chem Soc J p50-1, 143-4 F, Ap '43

TWENTIETH Century-Fox film corporation

Preferred stock offered. Comm & Fin Chr 158:198 Jl 12 '43

Preferred stock offered; shares of Chase national bank. Comm & Fin Chr 158:399 Jl 26 '43

TWINE

America's most valuable agricultural waste; flax straw. Textile Col 65:331-4+ Ag '43

See also

Agave fiber

TWINNING of crystals. See Crystallization

TWISTING machines

How to conserve throwing plant equipment. C. W. Bendigo. il Textile World 92:92-3 N '42

How to handle twister maintenance. diags Textile World 92:90-1 N '42

Large-package twisting at Quaker Meadows. il Textile World 92:82+ D '42

Let's talk about our twistors. W. F. Crowder. il Textile World 93:111 F '43

TYGON

New Tygon formulations. J. M. Crowe. Chem Ind 52:612 My '43

Triple debut; U.S. Stoneware turning out new cement [Reanite], coating material, and elastic plastic [Tygon]. Business Week p52+ Jl 17 '43

Tygon, a new synthetic corrosion-resistant material. il Product Eng 14:88-90 F '43; Mod Plastics 20:85-6+ Mr '43

TYNDALL effect

Simple and permanent Tyndall cone apparatus. H. J. Abrahams and A. Dubner. il diags J Chem Educ 20:61-2 F '43

TYPE and type founding

Crowell-Coiler adopts a type developed by London Times. il Inland Ptr 111:51-2 S '43

See also

Advertisements—
Typography
Printing—Specimens

TYPESETTING

These exponents of one type now outstanding stylists: D. Silve and H. Lauck. R. N. McArthur. Inland Ptr 111:42 My '43

TYPESETTING—Continued

Typographic clinic. H. N. King. Published in monthly numbers of Inland printer

See also

Advertisements—Printing
Typography Printing, Practical

TYPESETTING machines

Directory for machine magazines. *il Inland* Ptr 110:61 Ja '43

See also

Linotype

TYPEWRITER industry

Our typewriter exports; the record and the prospects. O. H. Jakes. *il For Comm W* 10:6+ Mr 20 '43

Service

Remington Rand runs typewriter clinics for government employees. S. L. Hooper. *Sales Management* 52:72+ S 1 '43

TYPEWRITERS

How to get along with fewer typewriters. *Management R* 32:10-11 Ja '43

Industry unresponsive to plea for used typewriters for war service. *Ptr Ink* 202:58 Ja 15 '43

Office economies without radical changes; Standard register company saves typewriters and cuts office costs. B. E. Klopfer. *il Am Business* 13:24-6, 38-9 S '43

Platen and roller saving plan. *il Am Business* 12:8-9 N '42

That Dvorak keyboard. *il Business Week* p32 O 16 '43

Typewriters; sale or hire controlled. *Economist* 144:768 Je 12 '43

Wartime use of typewriters; abstract. *Management R* 31:409 D '42

Care

Taking care of your typewriter to make it last. *Consumers' Research Bul* 12:20-1 N '43

TYPEWRITERS, Portable**Rating**

Portable typewriters. *Consumers' Research Bul* 11:18-21 F '43

TYPEWRITING**Bibliography**

Current publications in the field of type-writing education, 1942. M. E. Smith. 30p West Virginia university, Morgantown, W. Va. '43

TYPHA. See Cattails**TYPHOID carriers**

Bacteriostatic action of sulfadiazine on E. typhosa in carriers and cases. A. V. Hardy. *Pub Health Rep* 58:833-9 My 28 '43

TYPHOID fever

Bacteriostatic action of sulfadiazine on E. typhosa in carriers and cases. A. V. Hardy. *Pub Health Rep* 58:833-9 My 28 '43

Extent of immunization and case histories for diphtheria, smallpox, scarlet fever, and typhoid fever in 200,000 surveyed families in 28 large cities. S. D. Collins and C. Councell. *Pub Health Rep* 58:1121-51 bibliog(p1150-1) JI 23 '43

Relation between coliforms and enteric pathogens. R. W. Kehr and C. T. Butterfield. *Pub Health Rep* 58:589-607 bibliog(p606-7) Ap 9 '43; Abstract. *Water & Sewage* 81:25-6+ Je '43

Research and control; typhoid fever and other waterborne diseases. N. J. Howard. *il Water & Sewage* 80:16-17 D '42

Typhoid fever—workmen's compensation act—held to arise out of employment; Illinois Supreme court. *Pub Health Rep* 58:374-5 F 26 '43

TYPHUS fever

Complement fixation in rickettsial diseases. H. Plotz. *Science* 97:20-1 Ja 1 '43

Murine typhus fever control. C. R. Eskey. *Pub Health Rep* 58:631-8 Ap 16 '43

Rickettsioses in India. N. H. Topping, R. Heilig and V. R. Naidu. bibliog *Pub Health Rep* 58:1208-10 Ag 6 '43

Strain of endemic typhus fever virus isolated from house mice (*mus musculus musculus*). G. D. Brigham and E. G. Fickens. bibliog *Pub Health Rep* 58:135-6 Ja 22 '43

Typhus fever; contraction by bakery employee, liability of employer. *Pub Health Rep* 58:1426-7 S 17 '43

Typhus fever control unit of the United States Public health service. *Pub Health Rep* 58:638-9 Ap 16 '43

TYPISTS

Blind girls as transcribers. *il Am Business* 12:13 D '42

TYPOGRAPHICAL errors. See Errors, Typographical**TYPOGRAPHY. See Advertisements—Typography; House organs—Typography; Printing****TYROSINE**

Chromatography as a means of separating amino acids. J. L. Wachtel and H. G. Cassidy. bibliog *Am Chem Soc J* 65:665-8 Ap '43

Iodination of tyrosine by iodine monochloride. F. Block, Jr. and G. Powell. bibliog *Am Chem Soc J* 65:1430-1 JI '43

Remarks on the absorption spectra of phenylalanine and tyrosine in connection with the absorption in toluene and paracresol. H. Sponer. bibliog *J Chem Phys* 10:672-6 N '42

TYROTHRIN

Experimental Rocky Mountain spotted fever; results of treatment with certain drugs. E. A. Steinhaus and R. R. Parker. *Pub Health Rep* 58:351-2 F 26 '43

U

UBATEX. See Rubber, Substitutes for**UGANDA**

Golden jubilee as a British protectorate. *Economist* 144:422 Ap 3 '43

UINTA mountains

Carboniferous formations of the Uinta and northern Wasatch mountains, Utah. J. S. Williams. diag map *Geol Soc Bul* 54:591-624, pl 1-3 bibliog(p623-4) Ap '43

UKRAINE

Ukraine fighting affects food problem. *Baron's* 23:6 S 6 '43

ULCERS, Peptic. See Stomach—Diseases**ULEN realization corporation**

Financial analysis. *Comm & Fin Chr* 157:2059+ Je 3 '43

ULLMANN reaction

New modification of the Ullmann synthesis of fluorene derivatives. W. C. Lothrop and E. A. Godwin. bibliog *Am Chem Soc J* 65:363-7 Mr '43

ULTRACENTRIFUGES. See Centrifuges**ULTRASONIC interferometers. See Interferometers, Sonic****ULTRASONIC waves**

Application of superasonics in metallurgy; abstract. *Automobile Eng* 33:237 Je '43

Effects on mixtures and solutions; abstract. K. Sollner. *Science* 98:sup12 S 17 '43

New sonic and superasonic transmitter for the production of strong intensities in gases; abstract. L. Ehret and H. Hahne-mann. *Wireless Eng* 20:255-6 My '43

Regions of infinite acceleration and flow realms in a compressible fluid. M. G. Scherberg. *J Aeronautical Sci* 10:223-6+ JI '43

Specific heats of carbon tetrafluoride from superasonic measurements. W. H. Byers. bibliog *J Chem Phys* 11:348-50 Ag '43

Supersonic measurements in CO₂ and H₂O at 98°C. W. H. Pielemeier and W. H. Byers. bibliog *Acoustical Soc Am J* 15:17-21 JI '43

Supersonic measurements in CO₂ at 0° to 100°C. W. H. Pielemeier. bibliog *Acoustical Soc Am J* 15:22-6 JI '43

Supersonic research abroad. *Electronics* 16:180+ Ag '43

Supersonic-wave transmitter driven by an arc generator; abstract. H. H. Zschirt. *Wireless Eng* 20:254-5 My '43

Superasonics in biology; abstract. J. G. Lynn and others. *Electronics* 16:154+ My '43

Ultra-sonic; focused ultra-sound waves from curved crystals. *Sci Am* 168:115 Mr '43

ULTRAVIOLET rays

Absorption of light by 1,5-dien-3-yne in the region 2300-2900 Å. H. Bastron, R. E. Davis and L. W. Butz. *Am Chem Soc J* 65: 973-5 My '43

Action of ultraviolet light upon cellulosic materials; abstract. E. Heuser, R. A. Stillings and J. Van Nostrand. *Rayon* 24: 532 O '43

Irradiation of abietic acid with ultraviolet rays. R. F. Brown, G. B. Bachman and S. J. Miller. *bibliog Am Chem Soc J* 65: 623-6 Ap '43

Phosphorescence microscope. *Science* 98:sup8 O 22 '43

Ultraviolet light, its action on cellulose and protein sizes; abstract. M. de Buccar. *Paper Ind* 25:444 J1 '43

See also
Electric lamps,
Fluorescent
Fluorescence

Raman effect
Spectrum, Ultra-
violet

Biological effect

Luminous bacteria new research guinea pigs; used to determine amount of ultraviolet radiation needed to kill air-borne bacteria. *Illum Eng* 38:273 Je '43

Virus is vulnerable to ultraviolet rays. H. C. Rentschler. *Il Nat Safety* N 48:36+ J1 '43; Same abr. *Sci Am* 168:270 Je '43

See also
Ultraviolet rays—
Lamps

Industrial applications

Black light for night flight; fluorescent treated plastics and near-ultraviolet rays make it possible to read without destroying night vision. *Il Aviation* 41:243 D '42

Detection of scheelite by ultraviolet radiation. D. C. McLaren. *Il Can Min J* 64:494-500 Ag '43

Fluorescent inspection of tungsten; cracks in leads passing through glass are major cause of gassy electronic tubes; Zyglo inspection method. S. A. Kuln. *Il Electronics* 16:95+ J1 '43

Fluorescent penetrant method of detecting discontinuities. T. de Forest. *Il Am Soc for Metals Trans* 31:739-48; Discussion. 748-52 S '43

Hyglo; crack detection for the workshop. *Il Chem Age (Lond)* 48:534 My 15 '43

Invisible rays make war maps, charts, instruments visible. E. W. Beggs. *Sci Am* 168:28-9 Ja '43

Prospecting with ultra-violet; search for scheelite. *Chem Age (Lond)* 48:611-12 Je 5 '43

See in the dark; black light enabling map reading at night; finding of strategic mineral deposits. *Il Business Week* p72+ S 11 '43

Lamps

Efficient ultra-violet generator; oscillator circuit used in conjunction with electrodeless quartz tube. S. W. Edwards. *Il diags Radio* N 30:44-5 N '43

Electronic tubes for ultraviolet radiation. J. H. Laub. *Il diags Electronics* 16:80-5+ My '43

Production, concentration, and decomposition of ozone by ultraviolet lamps. A. W. Ewell. *bibliog Il J Ap Phys* 13:759-67 D '42

Safety requirements for sterilamps in air conditioning systems. A. R. Dennington. *Il diags Heat & Ven* 40:46-9 Mr '43

Soft drink sterilisation; Sterilamp installation for bottle cleaning and syrup protection; Pepsi-Cola company. *Il Electrician* 131:294 S 24 '43

Tests show bactericidal power of ultraviolet. D. W. Johnson and C. G. Harrell. *Il Food Ind* 15:92-3 J1 '43

Ultra-violet, near, middle, far; selection of lamp for specific purpose. L. C. Porter. *Il diags Sci Am* 169:15-17 J1 '43

Measurement

Measurements of ultraviolet solar radiation in Washington, 1936 to 1942. W. W. Coblenz and R. Stair. *bibliog diags J Research Nat Bur Stand* 30:435-47 Je '43

New electronic eye to measure U.S. sunfall. *Il Heat & Ven* 39:61 D '42; *Sci Am* 167: 274+ D '42

Physiological effect

Ultraviolet flashes stimulate living cells; abstract. E. N. Harvey. *diag Electronics* 16: 162+ My '43

See also
Ultraviolet rays—
Lamps

ULTRAVIOLET spectrum. *See* Spectrum, Ultraviolet

UMBRELLAS

Recovered ribs. *Il Business Week* p48 Ap 3 '43

Umbrella pinch. *Business Week* p30+ F 6 '43

UNAUTHORIZED insurance. *See* Insurance companies—Regulation

UNCERTAINTY principle

American association for the advancement of science; science, common sense and decency. I. Langmuir. *Science* 97:1-7 Ja 1 '43

UNCLAIMED deposits. *See* Bank deposits, Unclaimed

UNDECALDEHYDE

Direct reduction of certain carboxylic acids to aldehydes, and the preparation of undecaldehyde by a modified Blaise reaction. R. R. Davies and H. H. Hodgson. *Soc Chem Ind J* 62:128 Ag '43

UNDECANOIC acid

Synthesis of a pyridine analog of hydno-carpic acid and of a lower homolog. F. Brody and M. T. Bogert. *bibliog Am Chem Soc J* 65:1075-80 Je '43

UNDECYLIC acid. *See* Undecanoic acid

UNDERGROUND construction

Humidity control in underground bomb-proof spaces. E. Ledoux. *Il diags Heating-Piping* 14:6-8, 364-6; 15:34-6 Ja, Je '42, Ja '43

Our deep-rooted future; subterranean protection against air raids. *Comp Air M* 48: 7122 Ag '43

See also

Concrete construction	Subways—Construction
Garages, Underground	

UNDERGROUND structures

Relocation of utility substructures; Chicago subway. J. B. Jackson. *Il diag W Soc E J* 48:2-13 Mr '43

See also

Pipe lines	Subways
Pumping stations—	Tunnels and tunnel-
Underground stations	ing

UNDERTAKERS

Burial business; cost of dying fluctuates; wartime regulations. *Il Business Week* p38+ S 25 '43

UNDERWEAR

Knit goods for military purposes. *Il Textile World* 93:102-3 Ag '43

Munsingwear, inc. sponsors research on insulating properties of underwear at University of Minnesota. *Heat & Ven* 39:53 N '42

Vat dyeing OD army underwear. O. W. Clark. *Textile World* 93:104-5 Ap '43

See also

Hosiery

UNDERWOOD Elliott Fisher company

Stocks with three-way profit prospects. *Mag of Wall St* 71:710 Ap 3 '43

UNDERWRITERS' laboratories

Annual meeting, Chicago. *East Underw* 44: 30 Ap 23 '43; *Nat Underw* 47:3+ Ap 22 '43

History and objectives of the Underwriters' laboratories; abstracts. A. Small. *East Underw* 44:18 Je 4 '43; *Nat Underw* 47:1+ Je 3 '43

Laboratories aid war effort in many ways. *Nat Underw* 47:4 Ja 7 '43

Laboratories held not exempt from taxation. *East Underw* 44:22 J1 23 '43

Some 1942 war time activities. A. Small. *East Underw* 43:60+ D 11 '42

UNDERWRITERS' laboratories—Continued

Testing for victory; industrial safety. A. Small. *il Sci Am* 168:216-18 My '43; *Excerpt. Nat Safety N* 47:16-17+ Ap '43

UNEMPLOYMENT

Committee plans to win the peace. P. G. Hoffman. *il Dun's R* 51:7-12 Je '43; Same *abr. Comm & Fin Chr* 157:921+ Mr 11 '43
Foresees 15 million jobless after war. P. B. Fleming. *Comm & Fin Chr* 157:1879 My 20 '43

Full employment. *Economist* 143:662-4; 144:5-6, 101 N 28 '42, Ja 2, 23 '43

Massachusetts prepares for tomorrow. J. W. Culliton. *Harvard Business R* 21 no 3:298-308 [Ap] '43

Modern social security plans and unemployment. S. Eckler. *bibliog Int Labour R* 48:555-83 N '43

See also
Demobilization Insurance, Unemployment
Employment ment
Employment agencies

Relief measures

Achieving security. *Fortune* 26:supp-5-8 D '42
Don't bank on foreign trade; serious obstacles seen on that road to post-war unemployment relief. J. Hirsch. *Barron's* 23:11 Ap 5 '43

Post-war unemployment problem demands action now; A.F. of L. proposes program. *Comm & Fin Chr* 158:835 Ag 26 '43

President offers Congress post-war program and security, work and relief system; reports of the National resources planning board. *Comm & Fin Chr* 157:1017, 1024-5 Mr 18 '43

Problem of unemployment. *Engineer* 175:90-1 Ja 29 '43

Promotion of full employment in Switzerland. *Int Labour R* 48:479-82 O '43

Reduction in taxes to stimulate purchasing power after war urged; business is committed to take initiative in creating jobs. B. Ruml. *Comm & Fin Chr* 158:1503 O 14 '43

See also
Insurance, Unemployment
Public works

Federal relief

All public assistance and earnings of persons employed under Federal works programs, 1938-1941. *Survey of Cur Business* 1942 Sup p59 [supplemented in monthly numbers]

Cease special relief accounting agency. *Comm & Fin Chr* 157:432 Ja 28 '43

See also
National Youth ad- Work projects ad-
ministration ministration

Public works

International public works and post-war anti-depression policy. L. L. Lorwin. *For Comm W* 12:15 S 11 '43

Needed for the postwar period; public works to absorb excess employables. W. N. Carey. *il Civil Eng* 13:462-4 O '43

Postwar mass employment in public works. T. S. Spitzer. *Pub Util* 31:803-4; 32:15-24 Je 24-Jl 8 '43

Post-war public works vital. R. Moses. *Comm & Fin Chr* 158:1709+ O 28 '43

Great Britain

Beveridge and the beanstalk. *Economist* 143:758-9 D 19 '42

Unemployment. *Economist* 144:632-3 My 15 '43

Ireland

Eire's unemployment problem. *Economist* 144:426 Ap 3 '43

Sweden

Unemployment in Sweden, 1942. T. O. Klath. *Monthly Labor R* 56:825 Ap '43

Switzerland

Promotion of full employment in Switzerland. *Int Labour R* 48:479-82 O '43

Unemployment in Switzerland, August 1942. *Monthly Labor R* 56:826 Ap '43

United States

Changing composition of the unemployed, April 1940-August 1943. S. L. Wolfbein. *Monthly Labor R* 57:700-3 O '43

See also
Insurance, Unemployment—United States
Unemployment—Relief measures

UNEMPLOYMENT benefit plans

Take it or else; accept proffered employment or be denied state unemployment benefits. *Business Week* p89-90 S 13 '43

Unemployment assistance in Switzerland. *Int Labour R* 48:368-9 S '43

UNEMPLOYMENT insurance. See Insurance, Unemployment**UNFAIR practices acts. See Price cutting**

UNGERER and company
Fifty years old. *Soap & San Chem* 19:50 O '43

UNIFLOW engines. *See Steam engines—Uniflow engines*

UNIFORMS

Color signals freshness in operating policies; buses and uniforms, San Antonio transit company. *il Bus Transportation* 22:50-1 Ag '43

Slacks or skirts? uniforms for women bus drivers. *il Bus Transportation* 22:38-9 Jl '43

What the well dressed Los Angeles woman driver will wear. *il Bus Transportation* 22:52-3 My '43

UNIFORMS, Military

Gray for the navy. *Business Week* p29-30 My 8 '43

Olive drab for Army nurses corps; new fabrics and uniforms for nurses and WAACS. *il Textile World* 93:93 Ap '43

Report of the committee cooperating with the government on uniform fabrics. L. A. Olney. *Am Dyestuff Rep* 31:644-6 D 7 '42

Top on uniforms; army, navy and WPB plan to cut down high cost of uniforms to commissioned men. *Business Week* p81-4 D 12 '42

UNIFORMS, Nurses'

Olive drab for army nurses corps; new fabrics and uniforms for nurses and WAACS. *il Textile World* 93:93 Ap '43

UNION agreements. See Trade agreements

UNION carbide and carbon corporation
Annual report. *Comm & Fin Chr* 157:999 Mr 15 '43

UNION of American biological societies

Annual meeting and dinner of council. *Science* 97:198 F 26 '43

UNION Pacific railroad

Annual report, 46th, year ended Dec. 31, 1942. *Ry Age* 114:887-9 My 1 '43; Same. *Comm & Fin Chr* 157:1583-4 Ap 29 '43

Annual report; remarks. F. W. Charske. *Comm & Fin Chr* 157:1654 My 3 '43

UNION shops. See Open and closed shop**UNION tank car company**

Rules on car line's purchase of trucker; I.C.C. holds that Union Tank must be applicant when subsidiary is buyer. *Ry Age* 115:322-3 Ag 21 '43

UNIONMELT welding. See Electric welding—Unionmelt process**UNIT heaters. See Electric heaters; Gas heaters; Heaters; Steam heaters****UNIT processes**

Unit processes. flow sheets *bibliog il diags Ind & Eng Chem* 35:263-329 Mr '43

UNITAS. See Finance, International; Money—International aspects**UNITED air lines transport corporation**

Acquisition recommended. *Comm & Fin Chr* 158:198 Jl 12 '43
Gains in 1942. *Comm & Fin Chr* 157:174 Ja 11 '43

UNITED aircraft corporation

Annual report. *Comm & Fin Chr* 157:1191 Mr 29 '43

Investment audit. S. Devlin. *Mag of Wall St* 71:292-3+ D 26 '42

Ten years' progress. F. W. Caldwell. *Aeronautical Eng R* 1:77 N '42

- UNITED automobile workers of America** (International union, United automobile, aircraft, and agricultural implement workers of America)
 Chrysler weapon; case against m. of m. documented by compilation of U.A.W.'s strike record. *Business Week* p98+ Ag 28 '43
 Consumer union; Donald Montgomery, as U.A.W.'s consumer counsel. *Business Week* p98-9 F 20 '43
 GM department of UAW-CIO asks 10 to 11 per cent wage increase. *Automotive & Aviation Ind* 89:48+ Ag 15 '43
 Government or municipal ownership of monopolistic or strategic industries proposed by UAW; other points in post-war program. *Comm & Fin Chr* 158:104 JI 8 '43
 It's up to NWLB; panel O.K.'s three most important demands of Chrysler workers. *Business Week* p96-7 Je 12 '43
 Looking ahead; U.A.W. demands contract embodying postwar security fund. *Business Week* p82 My 15 '43
 Membership nearly doubled during past year. *Automotive & Aviation Ind* 89:52+ O 15 '43
 Postwar U.A.W. *Business Week* p98-100 O 9 '43
 Union raps NWLB. *Business Week* p103 Ap 24 '43
 UAW-CIO opposes adoption of incentive pay plans. *Automotive & Aviation Ind* 88:48+ Ap 1 '43
 UAW-CIO wants industry-wide equal pay for equal work. *Automotive & Aviation Ind* 88:48+ My 1 '43
 WLB penalizes UAW-CIO members at Chrysler corp. *Automotive & Aviation Ind* 89:48+ S 1 '43
- UNITED carbon company**
 News from the chemists' front. *Barron's* 23: 25 S 20 '43
 United carbon company wins patent suit. *Oil Paint & Drug Rep* 142:3+ D 14 '42
- UNITED corporation**
 Acts to comply with SEC order regarding simplification of capital structure. *Comm & Fin Chr* 158:1180-1 S 20 '43
 Another for SEC; United corp. yields to reclassification order. *Business Week* p109-10 S 18 '43
 Descriptions of holding companies. O. Ely. *Pub Util* 32:365-8 S 16 '43
 Divesting plan rejected by SEC; way left open for another. *Comm & Fin Chr* 158:778-9 Ag 23 '43
 Preference shares at double discount. W. Andrews. *Barron's* 23:4 Mr 1 '43
 Public utility securities; United corporation ordered to recapitalize. *Comm & Fin Chr* 158:823+ Ag 26 '43
 Report to stockholders. *Comm & Fin Chr* 157:735-6 F 22 '43
- UNITED drug, inc.**
 Another look. *Mag of Wall St* 71:358+; 72: 96+ Ja 9, My 1 '43
 Offers \$30,000,000 debentures and preferred stock. *Comm & Fin Chr* 158:587-8 Ag 9 '43
 Thumbnail stock appraisal. *Mag of Wall St* 72:633 S 18 '43
 To refund \$30,000,000 debentures. *Comm & Fin Chr* 157:2259 Je 14 '43
- UNITED electric coal companies**
 Prospects. H. Lawrence. *Barron's* 23:8 My 17 '43
- UNITED engineering trustees, inc.**
 Elects officers; annual report. *Elec Eng* 62: 43-4 Ja '43
 Report for 1941-1942. *Mech Eng* 65:82-5 Ja '43
- UNITED fruit company**
 Appraisal. H. J. Nelson. *Barron's* 23:1 Ap 26 '43
 Middle America bureau formed by United Fruit. *Comm & Fin Chr* 157:354 Ja 28 '43
 New crops tried; introducing many products such as manila fiber in Latin America. *Business Week* p65-6 Je 12 '43
 United Fruit net off sharply. *Barron's* 23:1 JI 19 '43
- UNITED gas corporation**
 Simplification plan filed. *Comm & Fin Chr* 156:1783 N 16 '42
 Utility deal approved. *Comm & Fin Chr* 156: 2142 D 14 '42
- UNITED gas improvement company**
 Decides to comply with Public utility act. *Comm & Fin Chr* 156:2311 D 28 '42
 Dissolution of U.G.I. is voted by directors. *Elec W News* ed 119:6 Ja 2 '43
 Divestment plan filed with SEC. *Comm & Fin Chr* 157:175 Ja 11 '43
 Granddaddy of all utility holding companies. M. R. Kynaston. *Pub Util* 31:479-85 Ap 15 '43; *Abstract. Am Gas Assn Mo* 26:188 My '43
 Hearing on merger proposal. *Comm & Fin Chr* 158:682-3 Ag 16 '43
 New president, etc.; plan for partial liquidation declared effective. *Comm & Fin Chr* 157:2355 Je 21 '43
 Proposal to merge two subsidiaries outlined to SEC. *Comm & Fin Chr* 158:198 JI 12 '43
 Sale of Connecticut railway stock and purchase of its bonds for resale to a utility approved by SEC. *Comm & Fin Chr* 157: 1951 My 24 '43
 SEC approves partial liquidation plan of U.G.I. *Elec W News* ed 119:1040 Mr 27 '43
 SEC approves plan of partial liquidation; Commission also ratifies reclassification of Philadelphia electric company common for exchange purposes. *Comm & Fin Chr* 157: 1190-1 Mr 29 '43
 Securities disturbing investors. J. S. Williams. *Mag of Wall St* 71:233+ D 12 '42
 Stock distribution. *Comm & Fin Chr* 158:779 Ag 23 '43
 Stockholders ratify liquidation plan. *Comm & Fin Chr* 157:1568 Ap 26 '43
 To sell holdings in Connecticut railway and lighting company. *Comm & Fin Chr* 157: 1471 Ap 19 '43
 UGI dissolution plan. W. T. Hyde, jr. *Barron's* 22:16 D 28 '42
- UNITED glass bottle manufacturers, limited**
 Statement by the chairman. W. Sinclair. *Economist* 144:511 Ap 17 '43
- UNITED grain growers, ltd.**
 Bonds offered. *Comm & Fin Chr* 157:824 Mr 1 '43
- UNITED horological association**
 Pendulum is back; horologists are willing to repair clocks. *Business Week* p38 O 30 '43
- UNITED KINGDOM provident institution**
 Statement. E. Benn. *Economist* 144:373 Mr 20 '43
- UNITED light and power company**
 Court upholds SEC dissolution plan. *Comm & Fin Chr* 158:588 Ag 9 '43
 Denied bond premium. *Comm & Fin Chr* 156: 1872 N 23 '42
 Dissolution of American light & traction co. planned; review of year's operations. *Comm & Fin Chr* 157:1278 Ap 5 '43
 Dissolution plan appealed. *Comm & Fin Chr* 158:1285 S 27 '43
 Liquidating value. W. T. Hyde, jr. *Barron's* 23:16 Ja 18 '43
 Plan approved by SEC; right of common stockholder to share in assets upon dissolution established. *Comm & Fin Chr* 157: 1367-8 Ap 12 '43
 SEC utility policy. *Bankers M* 146:420-1 My '43
 Steps in dissolution. *Comm & Fin Chr* 158: 1578 O 18 '43
- UNITED merchants and manufacturers, inc.**
 Another look. *Mag of Wall St* 72:195 My 29 '43
 Another look. *Mag of Wall St* 72:479 Ag 7 '43
 Preferred stock offered. *Comm & Fin Chr* 158:95 JI 5 '43
- UNITED mine workers of America**
 Fall of Fagan. *Business Week* p92-3 D 19 '42
 Miners approve longer working schedule, ask higher wages, in 37th convention. *Coal Age* 47:45 N '42
 Miners get a lift; U.M.W. journal blast at Connally-Smith prosecutions in Pittsburgh. *Business Week* p82 Ag 21 '43
 Showdown in coal; workers hold out firmly for \$2 pay rise. *Business Week* p82-3 Mr 6 '43
- UNITED nations, 1942**
 Diplomatic lineup; Ottawa would give each of United nations a voice in making decisions proportionate to its contribution to the project. *Business Week* p46+ JI 17 '43

UNITED nations, 1942—Continued

Plan for early United nations set-up, aims at Senate leadership. E. Blair. *Barron's* 23: 4 Mr 22 '43

President says United nations must continue together in post-war to keep world peace. *Comm & Fin Chr* 157:195 Ja 14 '43

Raw materials solvency; United nations co-operation has assured supplies. W. L. Batt. *Min & Met* 24:308-9 J1 '43

Towards a full alliance. *Economist* 144:258-60 F 27 '43

United nations and the future. E. M. Patterson, ed. bibliog *Ann Am Acad* 228:1-107 J1 '43

United nations unity. *Economist* 144:616 My 15 '43

Bibliography

United nations. Booklist [ALA, Chicago] 39: 399-417 pt 2 Je 1 '43 (pa 25c)

UNITED nations food conference, 1943

Allied food conference ruled out idea of any nation playing Santa Claus. M. Jones. *Comm & Fin Chr* 158:27 J1 '43

Blueprint for the conquest of hunger. T. Parran. *Pub Health Rep* 58:893-9 Je 11 '43

British food plan. *Economist* 144:633 My 29 '43

British view; world food problem held to be that of reasonable, steady prices. D. Tyerman. *Barron's* 23:6+ My 24 '43

Food conference at Hot Springs expects freedom from want to be achieved. *Comm & Fin Chr* 157:2074 Je 3 '43

Food policy. *Economist* 145:38 J1 10 '43

Food weapon for peace. *Business Week* p15-16 My 15 '43

Harmony at Hot Springs; Derso and Kelen portfolio of cartoons. *Fortune* 28:128-34 Ag '43

Hopeful conference. *Economist* 144:745-6 Je 12 '43

Hot Springs: a summary. *Economist* 144:751 Je 12 '43

Hungry world. *Economist* 144:577-9 My 8 '43

Interim food commission organized for study. *Comm & Fin Chr* 158:526 Ag 5 '43

International food bank urged by British at food conference, favor greater production. *Comm & Fin Chr* 157:1976 My 27 '43

President hails work of food conference as demonstrating unity for peace as well as war. *Comm & Fin Chr* 158:51 J1 5 '43

Roosevelt urges food conference to develop world production to meet nutritional needs. *Comm & Fin Chr* 157:1877 My 20 '43

United nations conference on food and agriculture. *Int Labour R* 48:139-56 Ag '43; *Fed Res Bul* 29:609-12 J1 '43

United nations food conference adjourns urging concerted efforts to win freedom from want. *Comm & Fin Chr* 158:50 J1 5 '43

United nations food conference next month, a curtain raiser for post-war parleys. E. Blair. *Barron's* 23:4 Ap 19 '43

United nations' food talks will not be binding; to cover wide range of subjects. *Comm & Fin Chr* 157:1591 Ap 29 '43

U.S. invites 42 nations to confer on post-war food supply. *Comm & Fin Chr* 157:1504 Ap 22 '43

What Hot Springs conference means to food processors. P. H. Appleby. *Il Food Ind* 15: 59-61+ Ag '43

World's food. *Economist* 144:718 Je 5 '43

UNITED nations relief and rehabilitation administration

UNRRA's big job. *Business Week* p17-18 N 6 '43

UNITED service organizations for national defense

Your city, too, may want to localize its campaign for some national cause; Hartford, Conn. ran its own USO copy. P. F. Frank. *Il Ptr Ink* 202:42-3 Ja 8 '43

UNITED services life insurance company

Emerson loses United Services proxy fight. *Nat Underw (Life ed)* 47:13 Mr 19 '43

UNITED STATES

Toward the mountain; an America at peace in years to come is a goal accessible to skill and courage. K. T. Compton. *Il Tech R* 45:235-6+ Mr '43

See also

Mines and mineral resources—United States
Roads—United States
Water supply—United States
Railroads—United States

Accounting

See Government accounting

Agricultural marketing administration (merged into Food distribution administration)

Food distribution programs of the Agricultural marketing administration. F. V. Waugh. *Ann Am Acad* 225:169-76 Ja '43

Agriculture, Department of

Abstract of a plan for collaboration between colleges and universities and the Department of agriculture with special reference to training replacements during the war. *Science* 97:95-6 Ja 22 '43

Agricultural chemistry bureau revamped; nutrition, economics bureaus merged. *Oil Paint & Drug Rep* 143:5 Mr 1 '43

Annual report of the Secretary of agriculture. *Science* 97:sup6 Ja 29 '43

Food czar at last; Agriculture department's fight for control ends with Wickard's selection. *Business Week* p16-18 D 12 '42

Food production programs of the United States Department of agriculture. C. M. Hardin. *Ann Am Acad* 225:191-200 Ja '43

Inventions of workers in the U.S. Department of agriculture. *Science* 96:sup9 N 20 '42

Publication of scientific and technical material. M. C. Merrill. *Science* 97:343-4 Ap 16 '43

Scientific research by the Department of agriculture. T. S. Harding. *Science* 98:240-1 S 10 '43

See also

Food administration

Regional research laboratories

See Agricultural laboratories

Air service

War dept. establishes principle of separate air force in new rule. *Comm & Fin Chr* 158:1722 O 28 '43

Air service, Army

Air force radio communications. *Il Radio N* 29:56-82+ Je '43

Air service command keeps replacement parts flowing to combat zones. E. L. Warner, jr. *Il Automotive & Aviation Ind* 88:17-19+ My 1 '43

American doctrine of air power. N. F. Silsbee. *Il Aviation* 42:112-15+ F; 96, 98-9+ Mr '43

Approving redesigns on air force contracts. E. C. Duval. *Il Machine Design* 15:115-17 Je '43

Army air corps' vision, plus technical genius, producing weapons far surpassing enemy's. E. Blair. *Barron's* 23:4 Ja 4 '43

Army air force standards. *Aviation* 42:197, 199 S; 183, 185 O '43

AAF's independence proclaimed by army. *Aviation* N 1:11 N 1 '43

Army air forces Materiel command administers gigantic aircraft program. L. Peat. *map S A E J* 51:sup22-4+ Ja '43

Army air forces observe 36th birthday anniversary. *Il Aviation* N 1:10 Ag 2 '43

Army reports delivery of 73,132 planes in 18 months to July 1. *Aviation* N 1:9 Ag 9 '43

Building the AAF. B. K. Yount. *Il Aviation* 42:124-5+ Ag; 225, 227 S; 229, 231+ O; 223, 225 N; 221, 223, 225+ D '43

Engineers with the Army air forces. S. C. Godfrey. *Il Civil Eng* 13:7-10 Ja '43

Fighters with film; Army air forces' first motion picture unit. C. K. Manning. *Il Am Phot* 37:20-1 Ag '43

Fighting the aircraft maintenance war. R. C. Stunkel. *Il Aviation* 41:118-19+ D '42

UNITED STATES—Air service, Army—*Cont.*
 Meteorological officers in the Army air forces.
 Science 96:489 N 27 '42
 Motion picture in the service of the Army
 air forces. L. Carr. Soc Motion Picture Eng
 J 41:329-31 O '43
 OWI discloses world-wide scope of AAF's Air
 service command. il Aviation N 1:10-11 S
 20 '43
 Operations of Army air force combat camera
 units in the theaters of war. R. Jester.
 Soc Motion Picture Eng J 41:136-40 Ag
 '43
 Organization of the Army air forces. N. F.
 Silsbee. chart S A E J 51:sup42-6 Ja '43
 Packaging problems of the Army air force.
 R. Schmidt. Paper Ind 25:800 O '43
 Paying the 8th air force. R. L. Thomas. il
 Banking 36:27-9 O '43
 Significance of the mass training of aircraft
 maintenance experts. L. D. Bell. Aero Dig-
 est 42:170-1+ F '43
 They are not expendable: protection of the
 civilian personnel of the Air service com-
 mand. J. L. Whitney. il Nat Safety N 47:
 19+ Ap '43
 Training ground crews at Chanute Field, Il-
 linois. il Aeronautical Eng R 2:23+ Ag '43
 Troop carrier command; the common carrier
 of death and destruction; destination: the
 enemy's rear. il Fortune 28:130-5+ O '43
 Wright Field training film production labora-
 tory. H. C. Brecha. Soc Motion Picture Eng
 J 39:348-52 D '42

Transport command

Air transport command and the air lines.
 H. L. George. il Air Transport 1:22-5 S '43
 Banana run; Brownsville-Panama Canal Zone
 route. J. Foster, Jr. il Aviation 42:114-15+
 S '43

Air service, Navy

Blimps on patrol. R. G. Picinich, Jr. il Aero
 Digest 43:116-17+ JI '43
 4,600,000 ton-miles with naval air transport
 service. J. P. Whitney. il Air Transport 1:
 26-8 S '43
 Guardians of the convoys; blimps in lighter-
 than-air branch of naval coastal patrol
 service. E. H. Forbes. il Aviation 41:197-9
 N '42
 How our navy gears pilots for war. F. Tup-
 per, Jr. il Aviation 41:239-41+ D '42
 Navy sky-fighters. W. L. Robinson. il Sci
 Am 167:246-9 D '42
 Our growing sea-air power. Marine Eng 48:
 183-4 O '43
 Our navy's Jekyll-Hydes; radioman-gunner
 on our heavy bombers. F. Tupper, Jr. il
 Radio N 29:8-9+ F '43
 Radio in naval aviation. F. Akers. il Radio
 N 29:150-4 Je '43

See also

Naval air stations
 also United States—Navy department—
 Bureau of aeronautics

Air transport information, Office of

New office issues Inter-American air sched-
 ules. Civil Aero J 4:42 Ap 15 '43

Aircraft production board

Aircraft production board; setup and or-
 ganization chart. Aviation 42:110-11 F '43

Appropriations and expenditures

United States war program, commitments,
 and expenditures, monthly cumulative to-
 tals from June 1940 to March 1943. Survey
 of Cur Business 23:29 Je '43

See also

Budget—United States Government loans
 and grants
 Government expendi-
 tures

Area

Area figures for United States and Great
 Lakes states. C. S. Osborn and S. Osborn.
 Science 97:533-4 Je 11 '43
 Census areas for the United States, 1940.
 C. E. Batschelet and M. J. Proudfoot.
 Science 98:107-9 JI 30 '43; Reply. C. S.
 Osborn and S. Osborn. 98:323-4 O 8 '43

Armed services

Manpower requirements for 1943-44. Monthly
 Labor R 57:204-11 Ag '43
 Our servicemen and economic security. R.
 H. Skilton, ed. bibliog Ann Am Acad 227:
 1-157 My '43

See also

United States—Air service	United States— Marine corps
United States— Army	United States— Navy
United States—Coast guard	United States armed forces institute

Pay, allowances, etc.

Allowances to dependents of servicemen in
 the United States. D. C. Cline. Ann Am
 Acad 227:1-8 My '43

Army

Arms and the men; Army service forces.
 International security division. A. M.
 Krech. Nat Safety N 48:10-11+ Ag '43
 Army's first concern; prevention of casualties,
 accidental and combat. R. A. Lovett. Nat
 Safety N 48:14-15+ N '43
 Army's internal security program. H. G.
 Reynolds. Oil & Gas J 41:79+ N 12 '42;
 Same. Am Pet Inst Proc 23(1):55-7 '42;
 Same abr. Nat Pet N 34 pt 2:R396-6 N 25
 '42
 Innkeeper no. 1; Air forces still hangs onto
 240 of the 473 hotels taken over by the
 army. Business Week p28+ O 9 '43
 President says planned 7,500,000 army not
 big. Comm & Fin Chr 156:2247 D 24 '42
 Some problems in which the army is in-
 terested. Chem & Eng N 21:1329 Ag 25 '43;
 Same. Mech Eng 65:692 S '43
 War production safety; U.S. Army safety
 program. C. G. Richmond. Safety Eng 84:
 25-6, 28 D '42; 85:18 Ja '43

See also

Post exchanges	United States—Fiscal director, Office of (War department)
United service organ- izations for national defense	United States— Quartermaster corps
United States—Air service, Army	

Amphibian engineers

See United States—Army—Engineer am-
 phibian command

Classification systems

See United States—Army—Personnel
 problems

Commissariat

Air conditioning helps army determine ra-
 tions required under various climatic con-
 ditions; Laboratory of physiological hy-
 giene; University of Minnesota. M. Figen.
 il diags Heat & Ven 40:21-5 Mr '43
 Army food. F. P. Logan. il Chem & Eng N
 21:1606-11 O 10 '43
 Army solves problem of feeding 5,000,000
 U.S. soldiers daily throughout world. Refrig
 Eng 45:210+ Mr '43
 Boneless meat, new weapon for U.S. fight-
 ers; Armour & co. il Mod Packaging 16:66-70
 Ja '43
 Diets of our military forces. P. E. Howe.
 Ann Am Acad 225:72-9 Ja '43
 Food packaging for overseas use. R. R. Mel-
 son. il Ind & Eng Chem 35:16-19 Ja '43
 Food requirements for overseas use. V. O.
 Wodicka. il Ind & Eng Chem 35:12-15 Ja '43
 Latest revisions in ration K. il Mod Pack-
 aging 16:52-3+ My '43
 Protection against moisture vapor a must
 for army packages. J. d'A. Clark. il Food
 Ind 15:75-8 Ap '43
 Refrigeration in Iceland. R. E. Orcutt. Refrig
 Eng 45:327+ My '43

Construction regiments

New York contracting organizations sponsor
 army recruiting dinner; recruiting men
 from construction industry for construction
 regiments. Eng N 130:854 Je 10 '43

See also

United States—Army
 —Engineer corps

UNITED STATES—Army—Continued

Education

- Army specialized training program. A. L. H. Rubin. J Eng Educ 33:583-629 Ap '43
- Army specialized training program; basic curricula with specialization. H. Beukema. J Eng Educ 34:80-111 S '43
- Army specialized training program for civil engineers. H. Beukema. Civil Eng 13:469-70 O '43
- Current status of army specialized training program. H. Beukema. J Eng Educ 34:50-62 S '43
- Experience in the operation of an A.S.T.P. unit; Georgia school of technology. J Eng Educ 34:164-6 O '43
- Training technical leaders for war; the army program. H. Beukema. Elec Eng 62:89-93 Mr '43
- Work of the Armed forces institute. F. T. Spaulding. J Eng Educ 34:150-7 O '43
- See also*
Military education

Engineer amphibian command

- Assault across the water; our army's amphibian engineers. *il* Fortune 28:116-19, 206+ JI '43

Engineer corps

- Alcan highway; builders of Alcan. H. J. McKeever. *il* Roads & Sts 86:51 Ja '43
- Alcan highway; Corps of engineers. R. P. Rosengren. Roads & Sts 86:52+ Ja '43
- Army engineer equipment to be transferred to troops. Eng N 130:463 Ap 8 '43
- Army engineer school teaches war building. T. H. Evans. *il* Eng N 129:820-1 D 10 '42
- Army engineers pave the way. *il* Comp Air M 48:7115-17 Ag '43
- Army engineers wartime insurance peak passed. Nat Underw 47:4 Ag 5 '43
- Army equipment pool aids contract work. *il* Eng N 130:348-50 Mr 11 '43
- Beating a path to Russia's back door; Persian war supply corridor. W. G. Bowman. *il* map Eng N 131:520-7 O 7 '43
- Engineer troops tackle flood emergency. *il* Eng N 130:770-1 My 27 '43
- Engineers with the Army air forces. S. C. Godfrey. *il* Civil Eng 13:7-10 Ja '43
- Surplus materials placed in pool to alleviate critical shortages. Eng N 130:429 Mr 25 '43
- Training army engineers for general construction abroad; Camp Claiborne. V. T. Boughton. *il* Eng N 131:29-36 JI 1 '43
- Training officers and men at Fort Belvoir. E. H. Marks. *il* Civil Eng 13:3-7 Ja '43
- U.S. Corps of engineers calls for construction specialists. C. D. Sturdevant. Concrete 51:6+ Ag '43

Equipment and supplies

- Army foot tubs. L. T. Bordner. *il* diag Mod Plastics 20:82-3+ Je '43
- Army revises regulations on surplus equipment. Elec W News ed 120:181 JI 17 '43
- Army supply program. L. D. Clay. Fortune 27:96-7+ F '43
- Army's government issue laundry soap. *il* Soap & San Chem 19:28-9+ Ja '43
- Army's oil front. Business Week p14 JI 10 '43
- Battlefield sleuths; armament makers' technical observers. Business Week p78+ Ap 24 '43
- Fuels and lubricants for U.S. army motorized ground forces. G. A. Round. *il* Nat Pet N 35 pt 2:R291-4, R296-7, R300 JI 7 '43; Excerpts. S A E J 51:sup33-6 Ag '43
- How the army approves redesigns. E. C. Duval; T. J. Little. *il* Machine Design 15:115-17+ Je '43
- How to bale for the army; illustrated instructions. Mod Packaging 17:68-9 S '43
- How to expedite army and navy approvals of redesigns. *il* Product Eng 13:684-3 D '42
- Operation chart for plastics in army and navy items; reference book sheet. A. Sprung. Product Eng 13:745-6 D '42
- Patriotic idea developed into vital link in allied chain of oil supply; portable pipe line. *il* Oil & Gas J 42:25-6 Ag 5 '43; Same. Pet Eng 15:133-4 O '43; Same cond. Heating-Piping 15:467+ S '43

- Rubber; army conserves, too; synthetic rubber; story of natural rubber; reclaiming processes; how auto transportation is to be maintained. A. F. Macconochie. *il* Steel 111: 80-2, 84+ N 16 '42
- Unique test building for army equipment; hot and cold rooms for testing mechanized equipment under conditions ranging from those of the tropics to the Arctic. *il* Eng N 131:400-2 S 9 '43
- Used construction equipment sought by both army and navy. Eng N 131:495-6 S 30 '43

See also

- | | |
|------------------------|--------------------|
| Canteens (flasks) | United States—Army |
| Helmets | —Ordnance and |
| Motor trucks, Military | ordnance stores |
| | United States— |
| | Quartermaster |
| | corps |

Expeditionary forces

- News for the Gulf; with plastic plates from U.S., army prints overseas editions of Times and Time in Iran. Business Week p56+ S 25 '43
- Second A.E.F.; a portfolio. Fortune 27:86-95 Ja '43
- Signal corps in Great Britain. R. E. Hertzberg. *il* Radio N 28:131+ N '42

Handbooks, manuals, etc.

- Baedeckers to battle; guidebooks for soldiers in North Africa, India and New Caledonia. *il* Arch Forum 79:2, 4 JI '43

Insurance service

- Army insurance organization. J. C. O'Connor. Nat Underw 47:3+ JI 1 '43

Medical and sanitary affairs

- Can your copy support these Army medical department aims? *il* Ptr Ink 205:81-2+ O 1 '43
- Decreased death rate in the army from wounds; abstract. N. T. Kirk. Science 97: sup10 Je 18 '43
- Desert warriors use air conditioning; treatment of heat prostration; using refrigerated trucks as portable hospitals. G. E. Weiss. Heating-Piping 15:418 Ag '43
- Disinfectants for the armed forces. G. F. Reddish and others. Soap & San Chem 13: 101, 103, 105 Ag '43
- Eyes have it; fitting soldiers with a million pairs of glasses a year. Business Week p28+ Mr 20 '43
- Medical department of the Army. Science 96: sup10-11 N 13 '42
- Medical packs help reduce war casualties. D. Guernsey. *il* Mod Packaging 16:51-4+ Ag '43
- Packaging medical supplies for the army. J. D. Studley. Paper Tr J 117:27-8 N 11 '43; Same cond. Paper Ind 25:797-9 O '43
- Unit principles for Medical corps packs. *il* Mod Packaging 17:84-5+ O '43

Medical corps

- Contributions of the Medical corps of the army to the Public health laboratory. E. E. Hume. Science 97:293-300 Ap 2 '43

Motion picture service

- United States Army motion picture service; symposium. C. Weeply and others. Soc Motion Picture Eng J 40:3-63 Ja '43

Ordnance and ordnance stores

- Arms and the changing tide of war. L. H. Campbell, Jr. Mech Eng 65:7-8 Ja '43
- Army ordnance decentralized in wide reorganization. S A E J 50:sup38-9+ D '42
- Field modifications of ordnance vehicles. H. O. Mathews. S A E J 51:sup22-4, 39 Ag '43
- Magazine separation determines plan of ordnance depot. A. C. Polk. *il* Civil Eng 13: 26-8 Ja '43
- Ordnance automotive experience in this war. L. H. Campbell, Jr. S A E J 51:sup21-2+ F '43
- Ordnance field service; connecting link between producer and soldier. J. S. Hatcher. *il* S A E J 51:sup24-5, 51-2 JI '43
- Ordnance moves; Gen. Campbell puts the branches in the centers where they can keep in close touch with manufacturers. Business Week p74+ N 23 '42

UNITED STATES—Army—Ordnance and ordnance stores—Continued

Ordnance packaging procedure seen enlarging post-war commerce. *il* Iron Age 151:70, 72 Mr 18 '43
 Plenty and on time! L. H. Campbell. *il* Mach 49:133-5 Ap '43
 Requirements of protective papers for ordnance overseas packaging. H. T. Holbrook. *Paper Ind* 25:794-6 O '43
 Tremendous trifles of the Army Ordnance department. T. Lewis. *il* Mech Eng 65:101-4 F '43
 25 years of ordnance progress. *il* Product Eng 14:344-5 Je '43
 Weapon maintenance in battle. E. E. MacMorland. *Mech Eng* 65:773-4+ N '43

Paper requirements

Army and navy requirements conference held by TAPPI, Chicago, Sept. 21-24. *Paper Tr J* 117:47-50+ S 30 '43
 TAPPI, army and navy requirements conference; exhibits, papers. *il* Paper Ind 25:726+ O '43
 TAPPI, army-navy requirements conference. *il* Mod Packaging 17:96-8, 100, 102+ N '43

Pay, allowances, etc.

Checking government checks; ODB's work. *il* Banking 36:23-5 Ag '43
 See also United States—War department—Office of dependency benefits

Personnel problems

Personnel research in the army. *Personnel J* 21:349-55 Ap '43
 Testing as a part of military classification. *flow chart Science* 97:473-8 My 28 '43

Post exchanges

See Post exchanges

Recreation

Radio and camp shows build service men's morale; Coca-Cola, Camel, General Electric and other national advertisers. P. Murray. *il* Ptr Ink 202:20, 22, 24+ Ja 22 '43
 Shell Oil sponsors roadshow for servicemen in western camps. *il* Sales Management 52:46+ F 1 '43

Recruiting and enlistment

See also
 United States—Army—Personnel problems

Signal corps

Civilian training in our war effort. L. B. Bender. *il* Radio N 28:10-13+ D '42
 Development laboratories, Wright field. R. E. Williams, Jr. *il* Radio N 29:76-9+ Je '43
 Eastern signal corps schools code training. *il* Radio N 30:24-5+ S '43
 Invasion communications; jobs of the Signal corps are many and varied. R. L. Sigeron. *il* Sci Am 169:53-5 Ag '43
 Military communications, their part in global war. C. J. McIntyre. *il* Electronics 16:100-2+ Mr '43
 Radios for our bombers; serviced and repaired by Signal corps men. H. J. Andrews. *il* Radio N 30:30-1 O '43
 Signal corps in Great Britain. R. E. Hertzberg. *il* Radio N 28:131+ N '42
 Signal corps organizes standards agency. *Ind Stand* 14:118 Ap '43
 Special U.S. Army Signal corps issue. *Radio N* 28:23-134+ N '42
 Training film activities of the U.S. army; symposium. *il* diags Soc Motion Picture Eng J 41:205-62 S '43
 War matériel; Signal corps activity in designing new devices. *il* Product Eng 14:195-9 Ap '43

Specialist corps

War department abolishes Specialist corps. *Comm & Fin Chr* 156:1816 N 19 '42

Specialized training division

See United States—Army—Education

Textile requirements

Army cuts may not affect output. G. Montgomery. *Textile World* 93:90-1 S '43
 Army reports to cotton industry at N.Y. forum. *Comm & Fin Chr* 157:1311 Ap 8 '43

Army's 1943 textile program. C. L. Corbin. *Textile World* 93:79 Mr '43
 Development and research in the Q. M. C. F. M. Steadman. *Am Dyestuff Rep* 32:244-7 My 24 '43
 Knit goods for military purposes. *il* Textile World 93:102-3 Ap '43
 Knit goods for military purposes; cotton and wool socks, wool hose-tops and sweaters. *Textile World* 93:69 Ja '43
 Manual of military fabrics. *il* diag Textile World 93:83-90 F '43
 Quartermaster board and field testing. M. R. Wainer. *Rayon* 24:429-30, 495-6, 545-7 Ag-O '43
 Quartermaster board and field testing. M. R. Wainer. *Textile Col* 65:105-6+ Mr '43
 See also
 Army fabrics

Transportation

Troop movements take precedence. *il* Ry Age 113:841-3 N 21 '42
 Troop sleepers and kitchen cars. *Business Week* p30+ Ap 8 '43

Transportation corps

Civilians needed to man small boats used by the army. *Marine Eng* 48:187 Jl '43
 Ft. Slocum graduates more T.C. officers; list with portraits. *Ry Age* 114:661 Ap 3 '43
 Military Railway and Transportation corps officers train at Fort Slocum, N.Y. *Ry Age* 114:276-8 Ja 30 '43
 Mission of Transportation corps. C. P. Gross. *Ry Age* 114:1184-6 Je 12 '43

Troop carrier command

Troop carrier command; the common carrier of death and destruction; destination: the enemy's rear. *il* Fortune 28:130-5+ O '43

Uniforms

See Uniforms, Military

Women's work

See Women's army corps

Army and navy munitions board

Army-navy munitions board plays important role. *Iron Age* 150:54+ D 31 '42

Board of tax appeals

See United States—Tax court

Budget, Bureau of

Bureau of the budget and governmental budgeting in wartime. G. A. Moe. *N A C A Bul* 25:43-62 S 15 '43

Library

Budget bureau library in wartime. R. Fine. *Special Lib* 34:283-6+ Jl-Ag '43

Census, Bureau of

Put statistics to work! Census bureau offers valuable aid to business and industry. *Steel* 112:80-1 My 17 '43

Civilian defense, Office of

Rules for affiliated hospital units of the Office of civilian defense. *Science* 97:572-3. Je 25 '43

Civilization

Challenge and response; what are American civilization's chances of survival? It's up to us. *Fortune* 28:104-5 Jl '43
 Spirit of a people. J. W. Parker. *Mech Eng* 65:5-6 Ja '43

Coast guard

Coast guard mechanics training course at G-M institute. *il* Marine Eng 48:180-1 Jl '43
 Coast guard radio. *il* Radio N 29:158-60 Je '43
 Coast guard's program on port security. S. V. Parker. *Am Pet Inst Proc* 23(1):61-3 '42
 Don't overlook the coast guard. R. Manville. *il* Adv & Sell 36:50 N '43
 Training centers constructed on a beach resort site; training schools and stations for the U.S. Coast guard, the U.S. Maritime service and a medical center for the U.S. Public health service. *il* diags Eng N 131:382-7 S 9 '43

UNITED STATES—Continued

Commerce

- American economy in 1942: foreign trade. C. A. R. Wardwell and R. B. Bangs. Survey of Cur Business 23:14-15 Ja '43
- Boundless possibilities in future foreign trade. J. H. Jones. For Comm W 11:3+ My 15 '43
- Foreign trade after the war. A. Maffry and H. B. Lary. U S Bur For & Dom Com, Economic Ser 28:1-22 '43
- Foreign trade; exports in 1942. Survey of Cur Business 23:9 F '43
- Foreign trade reconstruction. A. V. Dye. Ann Am Acad 228:84-91 J1 '43
- Future challenges the foreign trader. E. E. Schnellbacher. Il For Comm W 11:3-4+ Je 5 '43
- Indexes of exports and imports, 1938-1941. Survey of Cur Business 1942 Sup p88-95
- Lend-lease operations and wartime foreign trade. Nat City Bank p6-8 Ja '43
- Merchandise exports and imports, monthly, Jan. 1938-Nov. 1942. Fed Res Bul 29:85 Ja '43 [cont monthly]
- More facts about policies and methods of lend-lease. P. Young. Il For Comm W 10: 7-11+ Mr 20 '43
- Post-war export outlook is enough to floor you! G. A. Nichols. Il Ptr Ink 202:15-17+ F 19 '43
- Postwar markets take form. Business Week p28+ Ja 30 '43
- Southeastern Asia and the Philippines as a market. A. R. Upgren. Ann Am Acad 226: 9-21 Mr '43
- Trade balances and Latin American inflation. Nat City Bank p117-19 O '43
- U.S. cash foreign trade, 1942 figures reveal significant trends. G. A. Witherow. For Comm W 11:4+ Ap 3 '43
- United States in the world economy; the international transactions of the United States during the interwar period. H. B. Lary and others. 38 charts 25 tables U S Bur For & Dom Com, Economic Ser 23: 1-216; pa 35c Supt. of doc. '43
- U.S. trade with Latin American republics, first quarter of 1943. For Comm W 12:35 J1 24 '43
- Vital stepping stone to U.S. world-trade advance. T. E. Lyons. Il For Comm W 10: 3-6+ Ja 23 '43
- World retailing of American goods is prediction for post-war era. L. B. Sizer. Comm & Fin Chr 157:385 Ja 28 '43

See also

- | | |
|---|--|
| Aeronautics, Commercial—United States | Paper industry and trade—United States |
| Automobile industry and trade—United States | Rubber industry and trade—United States |
| Chemical industries—United States | Shipping—United States |
| Cotton trade—United States | Tariff—United States |
| Export trade | Textile industry—United States |
| Imports | United States— |
| Interstate commerce | Foreign and domestic commerce, Bureau of |
| Interstate commerce commission | |
| Merchant marine—United States | |

Latin America

See Latin America—Commerce

Commerce, Department of

- Budget slashes are hamstringing commerce services to business. Sales Management 52: 18, 20-2 Ag 15 '43
- Services available to small exporters. For Comm W 10:3+ Mr 6 '43
- See also United States—Foreign and domestic commerce, Bureau of

Commercial policy

- Antipodes come of age industrially; upsurge in South Africa, Brazil, Australia and the Argentine. G. Riviere. Mag of Wall St 72: 360-1+ J1 10 '43
- BEW plan for post-war disposal of surplus called dangerous to private enterprise. W. B. Craig. Comm & Fin Chr 157:1213 Ap 1 '43

Control of foreign trade in 1942. Oil Paint & Drug Rep 143:48+ Ja 11 '43

- Decision on renewal of trade agreements act will indicate future U.S. policy. S. Welles. Comm & Fin Chr 157:1404 Ap 15 '43
- Dynamic future of common stock investment; profit potentials under world recovery. G. S. Kent. Mag of Wall St 72:120-2, 154-6 My 15 '43
- Export-import bank and American business. W. L. Pierson. Il For Comm W 11:4-5+ My 15 '43; Abstract. Barron's 23:3 Je 21 '43
- Foreign trade after the war. A. Maffry and H. B. Lary. For Comm W 13:5-7, 40-1 O 23 '43
- House group favors trade pacts renewal. Comm & Fin Chr 157:1593+ Ap 29 '43
- International cooperation; increased trade foundations for lasting peace. F. B. Sayre. Comm & Fin Chr 157:1874 My 20 '43
- Looking ahead in foreign trade. A. E. Taylor. For Comm W 13:3-4 O 23 '43
- Peace through world trade; National broad-casting company symposium. T. Lamont; E. A. Johnston; T. J. Watson. Comm & Fin Chr 158:1, 19 J1 1 '43
- Russia as a post-war customer; economic collaboration will require long-term agreements. P. Wohl. map Barron's 23:3+ S 13 '43
- Total war in South America; struggle for markets there still finds Germany a formidable foe. S. Ross. Barron's 23:3 J1 12; 7-8 J1 19 '43
- Urges clarification of federal policy on foreign imports in post-war set-up. W. B. Craig. Comm & Fin Chr 158:428 J1 29 '43
- Wartime controls and stimuli upon the foreign trade of Latin America. H. Chalmers. For Comm W 11:3-5+ Ap 24; 14-17+ My 1 '43
- We must make up our minds. W. G. Light-bowne. Comm & Fin Chr 158:689, 701 Ag 19 '43

See also

- | | |
|------------------------------------|----------------------|
| Commercial treaties and agreements | Free ports and zones |
| Export trade—Regulation | Imports |
| | Tariff—United States |

Comptroller general

- Comptroller general and termination audits. J Account 76:369-71 N '43
- No rubber stamp; Comptroller general in controversy over contract termination. Business Week p22+ O 30 '43

Conciliation service

- See United States—Labor, Department of—Conciliation service

Congress

- Can Congress come back? Business Week p 15-16 Ja 2 '43
- Congress on strike. Business Week p 15-16 Je 12 '43
- Congressman: a case history. Il Fortune 27: 76-80+ Ap '43
- Departure of 77th Congress marks end of New Deal era, but war complicates political situation. E. Blair. Barron's 22:4 D 28 '42
- President charges Congress with encroachment in rider to pay bill; dropping of three federal workers. Comm & Fin Chr 158:204 J1 15 '43
- 77th Congress adjourns after longest session in history; new Congress convenes Jan. 6. Comm & Fin Chr 156:2252 D 24 '42
- Seventy-seventh Congress adjourns; with résumé of legislation affecting railroads. Ry Age 113:1003-4 D 19 '42
- What of the 78th Congress? A. Barnes. Pub Util 30:827-34 D 17 '42
- What to expect of our new Congress. Mag of Wall St 71:277-8+ D 26 '42

Senate

- Plan for early United Nations set-up, aims at Senate leadership. E. Blair. Barron's 23:4 Mr 22 '43

Cultural relations

- Recognition of cultural diversities in the postwar world. R. Benedict. Ann Am Acad 228:101-7 J1 '43

UNITED STATES—Continued

Defense plant corporation

See Defense plant corporation

Defense transportation, Office of

- America has evolved organization for war transportation. *il Ry Age* 114:1005-8+ *My* 22 '43
- Army won't let ODT limit trucks. *Ry Age* 113:886-9 *N* 28 '42
- District court of appeals rules war agencies beyond state courts' jurisdiction. *Comm & Fin Chr* 153:1227 *S* 23 '43
- Eastman announces ODT staff changes. *Ry Age* 115:30 *JI* 3 '43
- Eastman's ODT. O. Knight. *Nat Pet* *N* 35:37 *My* 26; 22 *Je* 9; 26 *Je* 16 '43
- New railway aides named by Eastman. *Ry Age* 114:141-2+ *Ja* 2 '43
- ODT a cautious and reasonable regulator; abstract. T. M. Banks, Jr. *Ry Age* 113:973 *D* 12 '42
- ODT backs down; protests stirred up by Order 21. *Business Week* 229-30+ *Ja* 9 '43
- O.D.T.-commission co-operation. J. B. Eastman. *Ry Age* 115:492-3 *S* 25 '43
- Oil transport division expanded; ODT consolidates several divisions into new Division of petroleum and other liquid transport. *Nat Pet* *N* 35:24+ *Mr* 3 '43
- One year of the Local transport division, Office of defense transportation. G. A. Richardson. *Mass Transportation* 39:30-1+ *Ja* '43
- Petroleum section of ODT is expanded. *Oil & Gas* *J* 41:28-9 *Mr* 18 '43
- Policy summarized. J. B. Eastman. *Bus Transportation* 22:46 *Mr* '43
- Praises O.D.T. and I.C.C. A. W. Vogtle. *Ry Age* 114:641-2 *Mr* 27 '43
- Procurement patterns and people; ODT organization, relations with WPB clarified; Purchases and stores division. A.A.R. *Ry Age* 115:146-50 *JI* 24 '43

Defenses

- Engineers against time; A.S.M.E. and national defense. J. L. Walsh. *Mech Eng* 65:406-7 *Je* '43

See also

- | | |
|-------------------------|------------------------|
| Civilian defense | Munitions |
| Industrial mobilization | Purchasing, Government |
| Military buildings | Requisitioning |
| Military service | Tanks, Military |
| Military training | United States—Army |
| camp | United States—Navy |
| Munition factories | |

Bibliography

- War information: a contribution toward a bibliography of bibliographies. *Bul of Bibliog* (F.W. Faxon co, Boston) 17:181-3; 18: 5-8 *S-D* '42, *My-Ag* '43

Diplomatic and consular service

- Department of state announces major new economic posts for service in the other American republics. *For Comm* *W* 9:3+ *N* 14 '42

Economic conditions

- American economy in 1942. C. A. R. Wardwell and R. B. Bangs. *Survey of Cur Business* 23:3-25+ *Ja* '43
- Century of prices; business cycle, national income and real wages. H. M. Tremaine. *Mag of Wall St* 72:36-7+ *Ap* 17 '43
- Coming great shifts in our civilian economy. H. M. Tremaine. *il Mag of Wall St* 72: 513-15, 547 *Ag* 21 '43
- Composition of income and ownership of capital by income classes in the United States in 1936. R. S. Tucker. *Am Stat Assn J* 38:187-200 *Je* '43
- Economic democracy; new phase? J. T. Adams. *Barron's* 22:3 *N* 30 '42
- First quarter review. *Survey of Cur Business* 23:3-6 *My* '43
- Further shift to war economy. *Fed Res Bul* 29:287-92 *Ap* '43
- Postwar international economic position of the United States. M. Nadler. *Ann Am Acad* 228:92-100 *JI* '43
- Review of 1942; transition to war economy. *Fed Res Bul* 29:1-12 *Ja* '43; Same abr. *Comm & Fin Chr* 157:281+ *Ja* 21 '43

- Sees gloomy outlook for 1943 with more regulation. L. P. Ayres. *Comm & Fin Chr* 156: 2342 *D* 31 '42
- Twentieth century fund surveys wartime changes in Nation's economy. *Comm & Fin Chr* 157:2387 *Je* 24 '43

See also

- | | |
|------------------------------|--|
| Banks and banking— | Income—United States |
| Business conditions | Labor and laboring classes—United States |
| Cost of living—United States | Money—United States |
| Finance—United States | Wages—United States |
| Income—Statistics | |

Economic policy

- Appraising the new deal's post-war plan for a semi-socialistic economic system. L. Stern. *Mag of Wall St* 71:630-2+ *Ap* 3 '43
- Bright post-war future if we face economic problems intelligently. E. Schram. *Comm & Fin Chr* 157:1932 *My* 27 '43
- Business man's doubts on government spending; with editorial comment. B. Barton. *Fortune* 27:136+ *F* '43
- Collapse or boom at the end of the war. H. G. Moulton and K. Schlotterbeck. *Trusts & Estates* 76:112 *F* '43
- Curtailment of the civilian economy. *Survey of Cur Business* 23:5-9 *F* '43
- Duty of the servant to the master; duty of the state towards the citizens. H. W. Jackson. *Manuf Rec* 112:34-5+ *O* '43
- Foreign and domestic policy statements of Republican post-war advisory council. *Comm & Fin Chr* 158:1115 *S* 16 '43
- Major problems to be faced by United States in post-war period. H. H. Heimann. *Comm & Fin Chr* 158:429 *JI* 23 '43
- Paternalism in government should be abolished. W. L. Hemingway. *Comm & Fin Chr* 158:1191+ *S* 23 '43
- Peaceful world of opportunity. J. H. Jones. *For Comm* *W* 11:16-17+ *Ap* 17 '43
- Planning an antidote for regimentation. B. Ruml. *Comm & Fin Chr* 158:105+ *JI* 8 '43
- Political and industrial effects of changing economic controls. W. Gates. *Mag of Wall St* 72:12-15+ *Ap* 17 '43
- Preserve free enterprise; decries administration extravagance, ineptitude. H. F. Byrd. *Comm & Fin Chr* 157:1881+ *My* 20 '43; Conclusions. *Trusts & Estates* 76:499 *Je* '43
- Program to guarantee minimum essentials. J. F. Byrnes. *Comm & Fin Chr* 156:2071 *D* 10 '42
- Re-shaping America for the post-war world. G. J. Kent. *il Mag of Wall St* 72:560-3+ *S* 4 '43
- Shape of post-war private enterprise. L. Stern. *Mag of Wall St* 71:333-5+ *Ja* 9 '43
- Theories of the new deal economists. L. H. Haney. *Comm & Fin Chr* 158:1397, 1406-9 *O* 7 '43; Discussion. 158:1689+; 1782, 1794-5, 1991+; 2007 *O* 28, *N* 4, 18 '43
- U.S. Chamber of commerce offers nine-point plan to preserve free economy. *Comm & Fin Chr* 158:23 *JI* 1 '43
- United States in a new world; domestic economy. *bibliog Fortune* 26:supp 1-21 *D* '42; Discussion. 27:124+ *My* '43
- Urges creation of board of economic strategy. A. W. Taylor. *Comm & Fin Chr* 158: 1091 *S* 16 '43
- War and the civilian economy. J. F. Byrnes. *Trusts & Estates* 76:23-4 *Ja* '43
- What kind of national economy after the war? J. M. Bickel. *Credit & Fin Management* 45:12-13+ *N* '43

See also

- | | |
|------------------------------------|------------------------------------|
| Committee for economic development | Reconstruction (World war, 1939-) |
| Economic policy | Reconstruction finance corporation |
| Finance—United States | Taxation—United States |
| Inflation (finance) | United States—Commercial policy |
| National resources planning board | |

Economic stabilization, Office of

- Emergency price control; text of Act to amend Act of 1942 and executive order. *Fed Res Bul* 28:1080-5 *N* '42

UNITED STATES—Continued

Economic warfare, Office of

Export situation improves. *Business Week* p62+ J1 31 '43
 Foreign trade policies set for OEW by OWM. *Oil Paint & Drug Rep* 144:3+ Ag 30 '43
 OEW appointments announced. *Oil Paint & Drug Rep* 144:4 S 6 '43
 OEW must consult State department. *Oil Paint & Drug Rep* 144:3+ J1 26 '43
 President relieves Wallace and Jones of foreign economic powers; abolishes BEW. *Comm & Fin Chr* 158:332 J1 22 '43; *Excerpt*. *Oil Paint & Drug Rep* 144:3+ J1 19 '43
 Questions and answers on OEW's decentralization. *Iron Age* 152:138+ S 2 '43

Emergency management, Office of

See also

United States—Civilian defense, Office of
 United States—Price administration, Office of

Employment service

Labor conditions, employment security operations (Social security board) 1938-1941. *Survey of Cur Business* 1942 Sup p47 [supplemented in monthly numbers]
 Louisville plan for manpower control. C. B. Coates. *Il Factory Management* 101:75-80 F '43
 Offshore labor; USES to find workers in Puerto Rico. *Business Week* p50 J1 24 '43
 Placement work of United States employment service, 1942. *Monthly Labor R* 56:1118-19 Je '43

Executive departments

ABC's of the war program; list of government's alphabetical agencies. *Oil Paint & Drug Rep* 143:43 Ja 11 '43
 Alphabetical list of government agencies. *Automotive & Aviation Ind* 88:124-5 Mr 15 '43
 District court of appeals rules war agencies beyond state courts' jurisdiction. *Comm & Fin Chr* 158:1227 S 23 '43
 Employment in federal executive service, December 1940-December 1942. F. L. Christman. *Monthly Labor R* 56:478-83 Mr '43
 Federal alphabet. *Business Week* p32 Ap 10 '43; Same. *Electronics* 15:186+ My '43
 Fortune survey; how do you feel about the State department. Office of price administration. War labor board. War production board? *Fortune* 28:20+ N '43
 Government agencies requesting war necessity engineering projects of the Society of automotive engineers; chart. S A E J 51: insert F '43
 Government offices try Stricker plan; Ramspeck committee probing methods to reduce red tape. *Il Am Business* 13:16-17 O '43
 Those federal lending agencies, what they are and what they do. *Business Week* p40-1 Ja 2 '43
 Unification of federal agencies concerned with foreign economic affairs. *Monthly Labor R* 57:470 S '43
 See also
 also Federal communications commission and names of other agencies beginning Federal; Interstate commerce commission

Export control, Office of

See Export trade—Regulation

Federal bureau of investigation

FBI as an aid to the banker; how bank employees may give intelligent assistance in case of robbery. J. E. Hoover. *Il Bankers Mo* 60:439-41+ O '43
 FBI war investigative jurisdiction. J. T. Madigan. *N E Water Works Assn J* 57:163-8 Je '43
 Newspaper library and the army, navy and F.B.I. W. Alcott. *Special Lib* 34:308-10+ J1-Ag '43

Federal trade commission

See Federal trade commission

Fiscal director, Office of (War department)

Paying the 8th air force. R. L. Thomas. *Il Banking* 36:27-9 O '43

Food and drug administration

Drug administration activities during 1942. *Oil Paint & Drug Rep* 143:55 Ja 11 '43
 FDA sustained; Supreme court upholds agency's right to set farina standards and control labeling. *Business Week* p64 Mr 6 '43

Food distribution administration

See Food administration

Foreign and domestic commerce, Bureau of

Bureau of foreign and domestic commerce, how it can help you. A. R. Hahn. *Sales Management* 52:43+ S 1; 32, 34+ S 15; 94+ O 1; 66+ O 15; 92+ N 1; 70+ N 20 '43
 Commerce department has Distribution division. *Oil Paint & Drug Rep* 143:3 F 8 '43
 Commerce field officers expected to survive. *Oil Paint & Drug Rep* 143:7 Je 28 '43
 Foreign investment information service. *Comm & Fin Chr* 157:1767 My 13 '43
 How Washington can aid in your postwar planning. *Adv & Sell* 36:64, 66 Ag '43
 New Bureau officials assume duties. *For Comm W* 12:25 Ag 21 '43
 New Office of foreign investment information. *For Comm W* 11:16 Je 5 '43

Foreign economic administration, Office of

Crowley to head foreign economic activities. *Comm & Fin Chr* 158:1327 S 30 '43
 Foreign administration setup announced by L. T. Crowley. *Oil Paint & Drug Rep* 144:7+ N 1 '43; Same cond. *Comm & Fin Chr* 158:1820 N 4 '43
 OFEA to handle all foreign trade. *Oil Paint & Drug Rep* 144:3+ O 4 '43

Foreign economic coordination, Office of

New economic unit set up by State dept. to coordinate problems of liberated areas. *Comm & Fin Chr* 158:523 Ag 5 '43

Foreign population

See also

Aliens
 Japanese in the United States

Foreign relations

Favors organized international cooperation to keep peace, by force, if necessary. C. Hull. *Comm & Fin Chr* 158:1086+ S 16 '43
 Favors U.S. participation in post-war peace organization. J. W. Bricker. *Comm & Fin Chr* 158:25+ J1 1 '43
 Foreign and domestic policy statements of Republican post-war advisory council. *Comm & Fin Chr* 158:1115 S 16 '43
 Foreign policy is pronouncement of government and citizens. G. H. Shaw. *Comm & Fin Chr* 158:1795 N 4 '43
 Fortune survey; after the war, should U.S. play larger part, about same part, or smaller part in world affairs. *Fortune* 27:16+ Je '43
 Fortune survey; labor opinion on the war and the peace. *Fortune* 27:14+ F '43
 Futility of isolationism. C. Benedict. *Mag of Wall St* 72:5+ Ap 17 '43
 International co-operation or World war III. W. Agar. *Ann Am Acad* 228:47-51 J1 '43
 Isolationist reaction? *Fortune* 27:116, 118 Ap '43
 Military alliance does not mean peaceful world; speak up America. A. M. Landon. *Comm & Fin Chr* 158:1397+ O 7 '43
 Modern foreign policy. J. M. Jones. *Il Fortune* 28:112-15+ Ag; 130-3+ S; 117-21+ O '43
 More perfect united nations—how and when? C. Pepper. *Ann Am Acad* 228:40-6 J1 '43
 Our official postwar line; unconditional surrender, then: a world of international trade, national sovereignties, four freedoms, and more than four contradictions. *Fortune* 27:86-8+ Mr '43

UNITED STATES—Foreign relations—Cont.

President sees winning over of Martinique as justification of foreign policy. *Comm & Fin Chr* 158:436 *Jl* 29 '43

Public opinion and foreign policy; public is outdistancing Mr Hull and needs leadership again. *Fortune* 28:134-5 *N* '43

Relations with Europe; prepared by committee of editors of *Time*, *Life*, and *Fortune*. *Fortune* 27:sup 1-21 *Ap* '43

Senate approves resolution calling for post-war collaboration for peace. *Comm & Fin Chr* 158:1919 *N* 11 '43

Some aspects of post-war business; how will world peace affect the United States? C. H. Minor. *Credit & Fin Management* 45:4-6+ *Mr* '43

To keep American tradition alive we must blaze trail for the world. W. O. Douglas. *Comm & Fin Chr* 158:1085, 1100-1 *S* 16 '43

West looks west and finds foreign policy no abstract subject. E. Janeway. *Fortune* 28:108, 114 *N* '43

What is our foreign policy? revitalizing and strengthening of international law; is that enough? *Fortune* 27:126-8 *Mr* '43

Which way America. A. M. Landon. *Comm & Fin Chr* 158:1687+ *O* 28 '43

See also

World war, 1939—
United States

France

See France—Foreign relations—United States

Great Britain

See Great Britain—Foreign relations—United States

Russia

See Russia—Foreign relations—United States

Foreign relief and rehabilitation operations, Office of

OFRRO, its principles and procedures; abstract. P. C. Jessup. *For Comm W* 12:11 *Jl* 24 '43

Forest service

Bureau set down: Forest service's plan to harness the lumber industry. *Business Week* p20+ *Mr* 6 '43

New director of tropical forestry named. *For Comm W* 11:18 *My* 15 '43

Geological survey

New director of the U.S. Geological survey; William Embry Wrather. *Science* 98:80 *Jl* 23 '43

Government printing office

Changed attitude among printers toward Government printing office and the war; abstract. A. E. Geigengack. *Inland Ptr* 111:25-7 *Je* '43

Government printing office and the war. A. E. Geigengack. *Paper Tr J* 117:35-7 *O* 28 '43; Same cond. *Paper Ind* 25:909-10+ *N* '43

Government printing office changes policy; operations to be decentralized into six warehouse districts. *Inland Ptr* 110:25-6 *F* '43

G.P.O. largest print shop in the world, opened in 1861. *Inland Ptr* 111:52 *Ap* '43

To centralize buying in Printing office; Representative Boren introduces bill. *Paper Tr J* 117:7+ *N* 4 '43

Government property

Disposition of government property. C. E. Mack and J. M. Knox. *Harvard Business R* 22 no 1:54-62 *[O]* '43

President asks Congress to permit more effective use of government supplies. *Comm & Fin Chr* 156:2169 *D* 17 '42

History

Surprise and cold steel. *Il Fortune* 27:112-13 *My* '43

Revolution

Washington's general without an army; by improvisation and shrewd planning, Nathanael Greene turned a long series of defeats into final victory. *Il Fortune* 27:103 *Ja* '43

Tripolitan war, 1801-1805

Daring Stephen Decatur. *Il Fortune* 27:126-7 *F* '43

Industries and resources

Changing status of the United States under raw materials shortages. L. Stern. *Il Mag of Wall St* 73:11-13+ *O* 16 '43

New geography of American business. W. H. Hillyer. map *Barron's* 23:3 *My* 31; 8+ *Je* 7; 4 *Je* 28; 6+ *Jl* 19; 9 *Ag* 23; 7 *S* 6; 7 *S* 27 '43

Postwar products planning and raw materials sources. C. E. Williams. *Min & Met* 24:268-70 *Je* '43; Same, with *il. Chem & Eng N* 21:1035-40 *Jl* 10 '43

Regional distortions resulting from the war. E. C. Bratt and D. S. Wilson. maps *Survey of Cur Business* 23:9-15+ *O* '43

Regional shifts in industry and markets, which temporary? which permanent? J. D. C. Weldon. *Il Mag of Wall St* 72:339-41+ *Jl* 10 '43

Wartime expansion improves world basic commodities position of U.S.; Conference bd. *Comm & Fin Chr* 157:2072 *Je* 3 '43

See also

Agriculture—United States

Airplane industry and trade—United States

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Chemical industries—United States

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Industrial mobilization

Middle West—Industries and resources

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Middle West—Industries and resources

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Middle West—Industries and resources

Middle West—Industries and resources

Middle West—Industries and resources

Middle West—Industries and resources

Insular possessions

See also

Hawaiian Islands

Philippine Islands

Puerto Rico

Internal revenue, Bureau of

Bureau of internal revenue. C. Axman. *East Underw* 44:30+ pt 2 *O* 1 '43

Salary regulations of Commissioner of Internal revenue. *Monthly Labor R* 56:149-52 *Ja* '43

Interstate commerce commission

See Interstate commerce commission

Justice, Department of

Justice department shifts divisions to aid war. *Comm & Fin Chr* 158:1020 *S* 9 '43

Library

Library manual of the U.S. Department of Justice; reviewed by L. H. Morley. *Special Lib* 33:361-3 *D* '42

Subject, method, scholarship and the Library manual. M. A. McKavitt. *Special Lib* 33:357-60 *D* '42

War frauds unit

War frauds unit is investigating 900 cases currently. *Iron Age* 152:72+ *Ag* 19 '43

Labor, Department of

Annual report of Secretary of labor, 1941-42. *Monthly Labor R* 56:476-8 *Mr* '43

Supreme court upholds Labor department subpoena powers under Walsh-Healey act. *Comm & Fin Chr* 157:374 *Ja* 28 '43

Conciliation service

Activities of the United States conciliation service, 1942-43. *Monthly Labor R* 57:540-2 *S* '43

Activities of United States Conciliation service, November 1942. *Monthly Labor R* 56:69-71 *Ja* '43 [cont monthly]

UNITED STATES—Continued

Labor statistics, Bureau of

Observations on the cost of living index of the Bureau of labor statistics. L. Teper. bibliog Am Stat Assn J 38:271-84; Discussion. A. J. Wickens and F. M. Williams. 284-6 S '43

Marine corps

Combat engineers in the Marine corps. G. E. Tomlinson. il Eng N 130:416-19 Mr 25 '43
Radio in the Marines. E. C. Dyer. il Radio N 29:155-7 Je '43
Recruiting station for the United States marines, Detroit. il plan Arch Forum 77:36-7 D '42

Insignia

Labels for leathernecks; molded plastic insignia for marines. il Mod Plastics 20:57-8+ Ap '43

Textile requirements

Finishing 16-oz. green kersey to meet the Marine corps specification. D. Welsh. il Textile World 93:70-1 Mr '43

Maritime commission

Administrative and working relationships between the Georgia industrial hygiene service and the United States maritime commission. L. M. Petrie. bibliog Ind Med 12:500-2 Jl '43

Key men of the Maritime commission; Technical, Procurement, and Production divisions. pors Marine Eng 47:121-7 N '42
Set ship schedule; Maritime commission's new program. Business Week p28 Mr 6 '43
Stationary license, passport to sea duty; Training division of U.S. Maritime service. il Power 87:222-4 Ap '43

Merchant marine

See Merchant marine—United States

Mines, Bureau of

Annual report of the Mining division, fiscal year 1942. C. F. Jackson. pls U S Bur Mines Rep of Invest 3664:1-51 '42
Bureau of mines in the war program. R. R. Sayers. il Min Cong J 29:24-7 Ja '43
First organization and work of the Coal-mine inspection division, Bureau of mines. U S Bur Mines Information Circ 7243:1-138 '43
Mines bureau plans oil search. Nat Pet N 35:19 My 26 '43
Work of the Safety division, fiscal year 1942. 4pls U S Bur Mines Rep of Invest 3698:1-140 '43

Libraries

Operating a technical library under a library committee; Central experiment station, Bureau of mines, Pittsburgh. C. W. Foote. J Chem Educ 20:544-5 N '43

National advisory committee for aeronautics

Mobilization of scientific resources. il J Ap Phys 14:399-405 Ag '43

National bureau of standards

See United States—Standards, National bureau of

Navy

Building and maintaining the greatest navy in history. E. L. Cochrane. il Mach 50:132-9+ N '43
Launching the land ship U.S.S. Knox; General Electric complete engine room, containing turbine-electric propulsion set, control boards, and auxiliary equipment plant. il Marine Eng 48:210-11+ My '43
Our growing sea-air power. Marine Eng 48:181-5 O '43
Personnel tips from the navy. K. McLaren. Banking 35:88-90 F '43
Problems of navy casualty reports. A. C. Jacobs. Nat Underw 47:19 S 16 '43; Same. Nat Underw (Life ed) 47:8 S 17 '43
Radio and electronics in the navy. S. P. Sashoff. il Electronics 16:72-5 Ap '43
Radio engineer in the navy. C. F. Holden. Inst Radio Eng Proc 31:517-19 S '43

Smoke eaters of the navy; how selected crews are trained to fight fires at sea. A. D. Rathbone. 4th. il Sci Am 168:150-3 Ap '43
Thomas A. Edison's influence on the United States navy. H. G. Bowen. Edison Elec Inst Bul 11:133-5 My '43

See also

Moving pictures in naval education
Naval bases
Naval research laboratory
Navy yards and naval stations
Oil reserves (United States Navy)
United States—Air service, Navy
United States—Marine corps
Warships—United States

Construction battalions

Derry navy base in North Ireland. W. G. Bowman. il Eng N 131:330-2 Ag 26 '43
For action—join the seabees. J. B. Mason. il Am Bld 64:48-9+ N '42
Navy commissions huge seabee training camp. Eng N 129:747 N 26 '42
Seabees use familiar equipment in unfamiliar surroundings. il Roads & Sits 86:68 Ag '43
We defend what we build; seabees, the fighting technicians of our navy. A. D. Rathbone. 4th. il Sci Am 168:54-7 F '43

Education

Recent developments in the navy college training program. J. W. Barker. J Eng Educ 34:63-72; Discussion. 72-9 S '43

Equipment and supplies

How to expedite army and navy approvals of redesigns. il Product Eng 13:684-8 D '42
Navy builds prestressed concrete tanks. R. B. Garrabrant. il Eng N 130:135-7 Ja 28 '43
Operation chart for plastics in army and navy items; reference book sheet. A. Sprung. Product Eng 13:745-6 D '42
United States navy materials testing laboratory; applications of air conditioning, ventilating and heating. F. J. Rice. il diags Heat & Ven 40:54-61 Ja '43
Used construction equipment sought by both army and navy. Eng N 131:495-6 S 30 '43

Paper requirements

Army and navy requirements conference; held by TAPPI, Chicago, Sept. 21-24. Paper Tr J 117:47-50+ S 30 '43
TAPPI, army and navy requirements conference; exhibits, papers. il Paper Ind 25:726+ O '43
TAPPI, army-navy requirements conference. il Mod Packaging 17:96-8, 100, 102+ N '43

Navy department

How to do business with the navy. R. Faegre. Paper Ind 25:780+ O '43
Navy to use insurance company adjusting service. Nat Underw 47:1+ S 9 '43
Paper and container conservation and reclamation within the Navy department. F. G. Barber. Paper Tr J 117:83-4 N 25 '43; Same abr. Paper Ind 25:782+ O '43
Paper development. Paper Tr J 116:36 My 6 '43

Accounting

Accounting requirements of the Navy price adjustment board. N. L. McLaren. J Account 76:287-94 O '43
Preview of postwar office methods; Allotment division, Bureau of supplies and accounts, United States Navy. il Am Business 13:28-32 S '43

Bureau of aeronautics

Coordination is key of navy's huge aircraft design and procurement task. L. Feat. S A E J 51:sup30-1 Mr '43

Bureau of yards and docks

Bureau of yards and docks abandons cost-plus-a-fixed-fee contracts. Eng N 130:772 My 27 '43

Financial operations

Gobs of money. il Am Inst Banking Bul 24:8-9 O '42

UNITED STATES—Navy department—Financial operations—Continued

How the navy is paid. *il Banking* 36:37-8 N '43

See also

United States—Navy department—Accounting

Insurance requirements

Instruction manual for insurance on navy projects. L. F. Beck. *East Underw* 44:38 N 5 '43

Navy insurance division program working smoothly. J. C. O'Connor. *Nat Underw* 47:3+ F 4 '43

Officials

See Public officials—

Ordnance department

Operation of limitation order L-31 in the Ordnance department. R. B. Harris. *Am Gas J* 158:32 My '43

Ordnance department training; Aberdeen proving ground. B. B. Abrams. *il Mech Eng* 65:233-6 Ap '43

Tremendous trifles of the Army Ordnance department. T. Lewis. *il Mech Eng* 65:101-4 F '43

Petroleum administration for war

Condensed oil-agency directory. *Oil & Gas J* 41:104 Ja 28 '43

Difficulties the transmission man sees in relation to PAW and WPB. R. H. Ulrich. *Oil & Gas J* 41:74+ My 6 '43

Executive order establishing the Petroleum administration for war and defining its functions and duties; text. *Oil & Gas J* 41:22-4 D 10 '42; Same. *Nat Pet* N 34:9-10 D 9 '42

Hugh M. Kent heads PAW's salvage operations. *Nat Pet* N 35:9 F 3 '43

Ickes now petroleum administrator for war; Office of petroleum coordinator abolished. *Oil Paint & Drug Rep* 142:5+ D 7 '42

Liquefied petroleum gas advisers named. *Oil Paint & Drug Rep* 144:5 S 13 '43

New PAW unit to develop international oil plan. *Comm & Fin Chr* 158:615 Ag 12 '43

Oil's mid-western nerve center; district 2 office in Chicago. *Nat Pet* N 35:27-8, 30 My 5 '43

Organization chart for Marketing division. *Nat Pet* N 35:8 F 3 '43

Petroleum administration denies responsibility for unequal gasoline distribution. *Business Week* p27-8+ O 30 '43

PAW creates division to broaden use of allied oil. H. D. Ralph. *Oil & Gas J* 42:80 J1 29 '43

PAW division coordinates foreign petroleum affairs. H. D. Ralph. *Oil & Gas J* 41:62-3 D 31 '42

PAW enlarges oil well drilling program. *Nat Pet* N 35:26 J1 28 '43

PAW granted \$5,473,000 for operations next 12 months. *Oil & Gas J* 42:80 Je 24 '43

PAW made claimant agency, brightening supply outlook. H. D. Ralph. *Oil & Gas J* 41:10-11 D 17 '42

PAW reports to the industry. R. K. Davies and others. *Oil & Gas J* 42:99-100+ J1 29 '43

Petroleum agency directory. *Oil & Gas J* 42:218 J1 29 '43

Relationship of the Petroleum administration for war to the natural-gas industry. E. H. Poe. *Oil & Gas J* 41:82+ My 6 '43; Same. *Gas Age* 91:20-2+ Je 3 '43

Remarks by members of the staff of the Petroleum coordinator for war. *Am Pet Inst Proc* 23(1):43-52 '42

Petroleum coordinator, Office of (now Petroleum administration for war)

Marketing division is balance between consumers, suppliers. H. D. Ralph. *Oil & Gas J* 41:33-4+ D 10 '42

Politics and government

Fate of mighty nations; in the Republican era of 1897-1912 American internationalism was born. R. W. Davenport. *il Fortune* 27:114-19+ My '43

Fortune survey: how good is our government? *Fortune* 27:8 F '43

Hails two party system as guardian of liberty and free government. J. W. Bricker. *Comm & Fin Chr* 157:2162+ Je 10 '43

New deal decade. *Economist* 144:288-9 Mr 6 '43

Our form of government; report of committee of editors of *Time*, *Life* and *Fortune*. *Fortune* 28:supp 1-13 N '43

Postwar world and the American tradition. H. W. Dods. *Gen Elec R* 46:425-30 Ag '43

Technology and political organization. H. C. Havighurst. *Advanced Management* 8:49-55 Ap '43

Population

See Population

Power administration, Office of (proposed)

Dirksen power bill may be amended to death. R. N. Larkin. *Elec W* 119:1964 Je 12 '43

Federal power administrator proposed. E. M. Dirksen. *Pub Util* 31:767-9 Je 10 '43

Merger of all federal power agencies asked. *Elec W* 119:1787 My 29 '43

Price administration, Office of

Appeasement on prices. *Business Week* p 15-16 D 26 '42

Approval by Congress of ration plans to be asked by OPA; Brown names Bowles OPA manager; Maxon resigns. *Comm & Fin Chr* 158:334 J1 22 '43

Brown gets set. *Business Week* p19-20 Mr 13 '43

Brownlee named deputy OPA administrator in reorganization after Congress shake-up. *Comm & Fin Chr* 158:832 Ag 26 '43

Ceiling-price gyps. *Business Week* p72+ Je 26 '43

Denies OPA authority on rate decrease petition; Wisconsin public service commission. *il Elec W* 120:267 J1 24 '43

Detroit judge tells receiver to ignore OPA ceilings in sale of property. *Comm & Fin Chr* 158:1097 S 16 '43

Directory of field offices of Office of price administration. *Iron Age* 151:116+ My 20 '43

Drug manufacturers complain about OPA questionnaire mess. *Oil Paint & Drug Rep* 142:3+ D 7 '42

Financial reports to the OPA. W. W. Wertz. *J Account* 74:511-16 D '42

Hard line to hold. *Business Week* p17-18 O 23 '43

House inquiry hears allegation that OPA seeks profits control. *Comm & Fin Chr* 157:2383 Je 24 '43

Information pleas; OPA answers them for congressmen. *Business Week* p62+ My 8 '43

Judge rules against secret OPA hearings. *Comm & Fin Chr* 158:1227 S 23 '43

New guide to regulations and personnel. *Iron Age* 151:104+ Je 24 '43

New war mobilization set-up comes at critical time in wage-price controversy. E. Blair. *Barron's* 23:4-+ My 31 '43

O.P.A. and rate regulation. *J Land & Pub Util Econ* 19:103-4 F '43

OPA cleans house. *Business Week* p16-17 J1 24 '43

OPA completing new advisory set-ups. *Iron Age* 152:114+ S 23 '43

OFA defends enforcement setup; Dean denies protests led to panel call. *Nat Pet* N 35:7-8 J1 28 '43

OPA forms branch for non-ferrous metals; realignment of the Textile, clothing and leather division. *Oil Paint & Drug Rep* 142:5+ D 14 '42

OPA gets tough. *Business Week* p16-17 F 20 '43

OPA loses appeal on Washington rate rise. *Elec W News* ed 120:383 J1 31 '43

OPA organizes industry advisory committees. *Steel* 113:171-3 S 20 '43

OPA procedures; abstract. J. D. Coppock; L. K. Tunks. *Oil Paint & Drug Rep* 143:52A My 10 '43

OPA restricts lawyers to legal counselors. *Oil Paint & Drug Rep* 143:5 Mr 22 '43

OPA slates Bowles to be general manager as Maxon quits. *Oil Paint & Drug Rep* 144:3+ J1 19 '43

UNITED STATES—Price administration, Office of—Continued

- OPA suspension acts held unconstitutional. Comm & Fin Chr 158:1419 O 7 '43
- OPA turns kindly. Business Week p17 Je 5 '43
- OPA's new deal. Business Week p 16-17 Ag 28 '43
- OPA's utility rate control. L. D. Farrar. Pub Util 31:486-92 Ap 15 '43
- Outlines platform of his OPA functioning. C. Bowles. Oil Paint & Drug Rep 144:3+ Ag 2 '43
- Relations between the state regulatory agencies and federal war agencies. R. A. Nixon. Pub Util 30:715-20 N 19 '42
- Squeezes eased. Business Week p80-1 D 5 '42
- Standard tests and specifications. Ind Stand 13:292-3, 320-1; 14:33 N '42-Ja '43
- Their day in court; Dirksen bill would open U.S. district courts to appeals from OPA's price control rulings. Business Week p14-15 O 9 '43
- These men head OPA's oil price branch. pors Nat Pet N 35:9 Je 16 '43
- Truce on profits. Business Week p16+ O 30 '43
- Why meat shortages vary; how the OPA disrupts meat selling. S. G. Thompson. Barron's 23:3 Ja 25 '43
- Without redress; OPA's procrastination. Business Week p96-7 O 23 '43

Public health service

- Forty-first annual conference of the United States public health service with the state and territorial health officers. T. Parran and others. Pub Health Rep 68:1077-1108 Jl 16 '43
- Public health service drinking water standards. Am Water Works Assn J 35:93-104 Ja '43
- Publications of the U.S. Public health service. A. Seidell. Science 97:339-41 Ap 16 '43
- Skin disease detectives; U.S. Public health service dermatoses investigation section. Il Safety Eng 85:50-4 Ap '43
- Training centers constructed on a beach resort site; training schools and stations for the U.S. Coast guard, the U.S. Maritime service and a medical center for the U.S. Public health service. Il diags Eng N 131: 382-7 S 9 '43

Bibliography

- Public health service publications; a list of publications issued during the period July-December 1942. Pub Health Rep 58:355-9 F 26 '43
- Public health service publications; a list of publications issued during the period January-June 1943. Pub Health Rep 58:1511-16 O 8 '43

Public roads administration

- Alcan highway; Public roads administration. H. J. McKeever. Il Roads & Sts 86:54-5 Ja '43

Quartermaster corps

- Army food. P. P. Logan. Il Chem & Eng N 21:1606-11 O 10 '43
- If you want that army order, here's the right procedure. Il Food Ind 15:55-6 O '43
- Quartermaster board and field testing. M. R. Wainer. Textile Col 65:105-6+ Mr '43
- Quartermaster board and field testing. M. R. Wainer. Rayon 24:429-30, 495-6, 545-7 Ag-O '43
- Refrigeration quartermaster at the Camp Lee quartermaster training center. A. N. Johansen. Il Refrig Eng 45:10-11 Ja '43
- Science aids the quartermaster. Textile Col 65:460-1 O '43
- What the Quartermaster corps expects from paper products. R. R. Melson. Paper Tr J 117:32-4 N 11 '43; Same cond. Paper Ind 25:784+ O '43; Abstract. Mod Packaging 17:97-8 N '43

Research and development branch

- Development and research in the Q. M. C. F. M. Steadman. Am Dyestuff Rep 32:244-7 My 24 '43
- Quartermaster planning adds to research staff. Oil Paint & Drug Rep 144:3+ Jl 26 '43

Subsistence research laboratory

- Food requirements for overseas use. V. O. Wodicka. Il Ind & Eng Chem 35:12-15 Ja '43

Reclamation, Bureau of

- Bureau of reclamation decentralized to assure full use of western resources. Eng N 131:445 S 23 '43
- Bureau of reclamation divided into six areas. Elec W 120:1005 S 18 '43

Scientific and technical mobilization, Office of (proposed)

- American association for the advancement of science; resolution of the council on the Science mobilization bill (S.702). Science 98:135-7 Ag 6 '43
- American chemical society and the Kilgore bill, S607. Science 97:438-9 My 14 '43
- Arnold defends Kilgore bill. Chem & Eng N 21:508 Ap 10 '43
- Committee on military affairs gets bill for Office of technological mobilization; text [Kilgore bill, 1942]. Chem Ind 51:351-2+ D '42
- Electrochemical society and the Kilgore bill. Science 97:461 My 21 '43
- Federal control of research activities; with text of Kilgore bill S.702. R Sci Instr 14: 195-204 Jl '43
- Is scientific research to be strangled? F. W. Preston. Glass Ind 24:257+ Je '43
- Kilgore bill endorsed by Thurman Arnold. Oil Paint & Drug Rep 143:5+ Ap 5 '43
- Kilgore bill; pro and con. A. P. Sachs; H. C. Parmelee. Chem Ind 52:726-8 Je '43
- Kilgore bill threatens government monopoly of industrial research, NAM warns. Comm & Fin Chr 157:1981 My 27 '43
- Kilgore bills; A.C.S. registers disapproval. C. L. Parsons. Chem & Eng N 21:573 Ap 25 '43
- Kilgore Senate bill 702. G. Egloff. Science 97:442-3 My 14 '43
- Mobilization of science; text of Kilgore bill (S. 702). Science 97:407-12 My 7 '43; Discussion. 97:432-3, 486-7, 488, 508-11, 552-4, 577-8 My 28-Je 4, 18-25 '43
- Opposition to Kilgore bills increasing as scientists organize against regimentation. A. L. Foster. Oil & Gas J 42:45+ Je 17 '43
- Regimentation of science; Kilgore bill. L. A. Hawkins. Elec W 119:2121-3 Je 26 '43
- Science mobilization bill. K. A. C. Elliott and H. Grundfest. Science 97:375-7 Ap 23 '43
- Science mobilization bill. H. M. Kilgore. Science 98:161-2 Ag 13 '43; Reply. H. T. Stetson. 98:364-5 O 22 '43
- Scientific mobilization supported by Wallace. Oil Paint & Drug Rep 144:3+ O 18 '43
- Scientific, technical, inventive industrial mobilization for war; proposals before Congress to mobilize under government direction technological manpower of the nation. G. Egloff. Nat Pet N 35 pt 2:R188-90 Ap 7 '43
- That Kilgore bill on science mobilization. Am Cer Soc Bul 22:260-1, 288-90 Jl 15-Ag 15 '43
- Use of accountants in war; statement presented before Senate subcommittee on technological mobilization. J Account 76:27-34 Jl '43

Scientific research and development, Office of

- Harvard alumni bulletin report. Science 98: 148 Ag 13 '43
- Mobilization of scientific resources. Il J Ap Phys 14:388-95 Ag '43
- Organization and operations of the Office of scientific research and development. K. T. Compton. J Eng Educ 33:294-302 D '42
- Research and the war effort. V. Bush. Elec Eng 62:96-102 Mr '43

Signal corps

See United States—Army—Signal corps

Social conditions

- Envisions marked changes in the post-war world. J. H. S. Bossard. Comm & Fin Chr 157:1569, 1578-9 Ap 29 '43
- Fortune survey; are there any organizations or groups of people in this country you feel might be harmful unless curbed? Fortune 28:14 N '43

UNITED STATES—Social conditions—Cont.

Main street front; a report on an American community after one year of war; Mattoon, Ill. *il Fortune* 26:114-19- *D '42*
 Tomorrow is here! C. B. Brown. *Ptr Ink* 203: 58+ *My* 14 '43

See also

Labor and laboring
 classes—United
 States

Standards, National bureau of

National bureau of standards 1942 program.
il Ind Stand 14:254-5 *S '43*
 Publications of the National bureau of stand-
 ards, J. L. Mathusa and K. S. Gibson.
Science 97:341-2 *Ap* 16 '43

State, Department of

Modern foreign policy. J. M. Jones. *il For-*
tune 28:112-15 *Ag*; 130-3+ *S '43*
 Stettinius replaces Welles in State dept.
Comm & Fin Chr 158:1327 *S* 30 '43

Bibliography

Publications of the Department of state; a
 list cumulative from October 1, 1929. 32p
 U.S. Dept. of state, Washington '43

Statistics

Financial, industrial, and commercial statis-
 tics. *Fed Res Bul* 29:47-93 *Ja '43* [cont
 monthly]
 Survey of current business; 1942 supplement.
 Survey of Cur Business 1942 *Sup p* 1-271
 (pa 50c)

Supreme court

U.S. Supreme court decisions of 1942; re-
 view of its opinions in cases affecting sell-
 ing and advertising. *Ptr Ink* 202:24, 28 *F* 5
 '43
 Wiley Rutledge seated on Supreme court;
 succeeds James F. Byrnes. *Comm & Fin*
Chr 157:671 *F* 18 '43

Tax court

Practice before Tax court. *J Account* 75:
 194-5, 280-1 *Mr '43*

Tennessee Valley authority

See Tennessee Valley authority

Territories*See also*

Alaska
 Hawaiian Islands

Treasury department

Financial department of the United States
 government. E. E. Naylor. *J Account* 76:
 421-32 *N '43*

Library

Treasury department library. I. S. Diamond.
Special Lib 34:279-81 *JI-Ag '43*

Veterans' administration

Death or disability payments to World war
 veterans; monthly benefits, vocational
 training, hospital privileges and other
 benefits for veterans. F. T. Hines. *East*
Underw 44:26 *O* 1 '43

War department

CAP is transferred to War department. *Avia-*
tion 42:245 *Je '43*

Civil engineers' contractual relations with
 War department. H. H. Hale. *Civil Eng* 13:
 55 *Ja '43*

Health conservation in industrial establish-
 ments of the War department. W. J.
 McConnell. *Ind Med* 12:600+ *S '43*

Lighting control objectives of the War de-
 partment. W. S. Everett. *Illum Eng* 37:862-5
D '42

New method for handling appeals under War
 department contracts. J. W. Gaskins. *Eng*
N 131:28 *JI* 1 '43

Stevens pays off; sells to Army air forces.
Business Week p 18 *Ja* 2 '43

Termination problems as seen by the War
 department. V. Z. Brink. *J Account* 76:125-
 32 *Ag '43*

War dept. establishes principle of separate
 force in new rule. *Comm & Fin Chr*
 158:1722 *O* 28 '43

See also

Fiscal director, Office United States—
 of (War depart- Quartermaster
 ment) corps

Buildings

Access to the world's largest building; roads,
 bus terminal, parking field for Pentagon
 building. *il diag map Eng N* 130:420-4 *Mr* 25
 '43

Air conditioning equipment of Pentagon
 building. *il plan Sheet Metal Worker* 34:32,
 34+ *F '43*

Army's Pentagon building. *il plans Arch*
Rec 93:63-70 *Ja '43*

Five sides to a pentagon; heating, plumbing,
 air conditioning, refrigeration, ventilating.
il Dom Eng 161:56-7+ *My*; 66-7 *Je '43*

New War department building nearly mile in
 circumference. *il Steel* 112:65-6+ *F* 1 '43

New War department building road network.
 J. Barnett. *il diag map Civil Eng* 13:127-30
Mr '43

Pentagon building, Arlington, Virginia. *il*
plans Arch Forum 78:37-52 *Ja '43*

Pentagon building is 100% air conditioned;
 War department office building. *Refrig Eng*
 44:396-7 *D '42*

Fuel and lubricants division

Army promises closer coordination in procure-
 ment of oil supplies. H. D. Ralph. *Oil &*
Gas J 42:14-15 *JI* 1 '43

*Insurance requirements**See also*

United States—Army
 —Insurance service

Office of dependency benefits

Army allotment system; how it functions. *Ins*
Field (Life ed) 72:6-7 *Je* 25 '43

Checking government checks; ODB's work.
il Banking 36:23-5 *Ag '43*

Three million dependents' checks a month.
il Banking 35:44-5 *Je '43*

Two billion annually handled by war agency.
East Underw 44:18 *My* 7 '43

Price adjustment board

Functions of the governmental accountant
 in renegotiation. M. C. Troper. *J Account*
 75:213-18 *Mr '43*

War food administration

See Food administration

War information, Office of

Declaration of interdependence. J. M. Cory.
Special Lib 34:78-80+ *Mr '43*

Did OWI die of indirection? *Adv & Sell* 36:
 19-20 *JI '43*

House acts to discontinue OPA subsidy pro-
 gram and abolish operations of OWI. *Comm*
& Fin Chr 157:2388 *Je* 24 '43

Information center, Office of war infor-
 mation. Washington, D.C. *il plan Arch Forum*
 77:64 *N '42*

Lack of definite foreign policy hampers OWI.
 E. Davis. *Comm & Fin Chr* 157:1686 *My* 6
 '43

Orders freer hand for OWI on war news.
Comm & Fin Chr 158:1229 *S* 23 '43

Roberts heads OWI advisory committee;
 seven principles of news policy listed.
Comm & Fin Chr 158:337 *JI* 22 '43

Overseas branch

U.S. arsenal of words. *il Fortune* 27:82-5+
Mr '43

Radio control center

U.S. short-wave broadcast control center;
 new Office of war information radio head-
 quarters. *il plans Electronics* 16:114-17+
O '43

War labor board

See National war labor board

War manpower commission

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UNITED STATES—Continued

War mobilization, Office of

- Establishment of Office of war mobilization. Monthly Labor R 56:1089-90 Je '43
 Have we a war cabinet? Byrnes takes over control of home front. Steel 112:75 Je 7 '43
 New war mobilization office headed by Byrnes; Vinson economic stabilization director. Comm & Fin Chr 157:2083 Je 3 '43
 Over-all War board set up by Roosevelt. Oil Paint & Drug Rep 143:3+ My 31 '43
 War adjustment unit being set up in OWM. Comm & Fin Chr 158:1621 O 21 '43
 War mobilization office to fight inflation. H. D. Ralph. Burroughs Clearing House 27:19-20 Jl '43

War production board

- Alkyd resins advisers; inorganic advisory group; copper fungicide advisory group. Oil Paint & Drug Rep 142:5 D 28 '42
 Committee for the review of data requests from industry eliminates, simplifies 40 per cent of voluminous WPB foris. Steel 111:56+ D 14 '42
 Committee of engineers and scientists appointed for WPB. Roads & Sts 85:40 N '42
 Construction under \$10,000 now handled by War production board field offices. Concrete 51:5 N '43
 Decentralization of operations function planned by WPB. Steel 113:49 S 27 '43; Oil Paint & Drug Rep 144:7+ S 27 '43; Credit & Fin Management 45:30 O '43
 Difficulties the transmission man sees in relation to PAW and WPB. R. H. Ulrich. Oil & Gas J 41:74+ My 6 '43
 Functional operating organization of industry advisory committees to Refrigeration and air conditioning section, General industrial equipment division, War production board; chart. Refrig Eng 45:336 My '43
 Functions, organization of operations office formalized. Steel 112:91 My 17 '43
 How War production board orders affect banking transactions. A. M. Strong. Bankers Mo 59:485-6+ N '42
 How Wilson has reorganized WPB; chart. Business Week p18 Ap 3 '43
 More union men in WPB urged to smooth path for shifting workers. Business Week p80+ Jl 31 '43
 Necessity of living off each other's inventories; WPB pooling of surplus equipment and supplies. J. H. Collins. Pub Util 32:210-15 Ag 19 '43
 Nelson gives Wilson full control of WPB. Comm & Fin Chr 157:932 Mr 11 '43
 Nelson under fire from all sides. E. Blair. Barron's 23:4 My 3 '43
 New division established in WPB; Salvage division under Paul Cabot. Steel 112:31 Ja 18 '43
 New management labor council for WPB. Comm & Fin Chr 157:1394 Ap 15 '43
 New organization of WPB. Chem & Eng N 21:506 Ap 10 '43
 New WPB committee formed to concentrate production; establishment of industrial facilities committee. E. Colborn. Am Mach 87:124c Je 10 '43
 New WPB form numbers confusing; conversion table for 600 forms which have been renumbered up to June 7. Iron Age 151:148+ Je 17 '43
 PD and UF forms renumbered in WPB series. Steel 112:69 Je 21 '43
 Refrigeration, the War production board, and advisory committee. M. G. Munce. Refrig Eng 46:22-4+ Jl '43
 Standard tests and specifications. Ind Stand 13:291-2, 317-19; 14:31-3 N '42; Ja '43
 WPB and EPC define their natural gas agreement. Gas Age 92:25-6 O 7 '43
 W.P.B. and sewerage. M. Maverick. Water Works & Sewerage 90:127-9 Ap '43
 WPB branches gain stature; charts. Business Week p20, 22+ D 5 '42
 WPB completes organization of Controls bureau. Steel 112:37 My 31 '43
 WPB consolidates materials functions. Oil Paint & Drug Rep 142:3+ N 16 '42
 WPB decentralization exempts chemical production projects. Oil Paint & Drug Rep 144:3+ O 25 '43

- WPB decentralized plan. Comm & Fin Chr 158:1523 O 14 '43
 War production board: is it? Fortune 27:90-7 Mr '43
 WPB issues revised program symbols for claimant agencies and WPB industry divisions. Iron Age 152:122+ S 16 '43
 WPB-NHA war housing policy; joint declaration. W. J. Casey. Arch Rec 93:7+ Ja '43
 WPB regional office assistance outlined. Iron Age 152:112+ S 2 '43
 WPB reorganization gives Wilson more authority. Oil Paint & Drug Rep 143:3+ Mr 29 '43
 WPB scheduling director appointed, R. J. Cordiner. por Oil Paint & Drug Rep 142:3+ D 14 '42
 WPB simplifies. Business Week p24 O 2 '43
 W.P.B. to have a special sewerage section. Water Works & Sewerage 90:92 Mr '43
 WPB transportation group. Comm & Fin Chr 157:672 F 18 '43
 WPB vice-chairmen report to Wilson in streamlined setup. Oil Paint & Drug Rep 143:3+ Mr 8 '43
 War production board's aid to industry in expediting production of coke and pig iron. S. Weiss. Il Blast F & Steel Pl 30:1245-7 N '42
 War production board's plan to decentralize. T. N. Sandifer. Chem Ind 53:444+ O '43

Bureau of planning and statistics

- WPB planning and statistics bureau. Comm & Fin Chr 158:437 Jl 29 '43

Chemicals division

- Directory of WPB Chemicals division. Metal Finishing 41:284-5 My '43
 War materials control; Chemicals division personnel. Oil Paint & Drug Rep 143:42+ Ja 11 '43

Civilian requirements, Office of

- Bedrock concept; OCS visualizes ultimate cut of 32% in civilian economy to 56 billions a year. Business Week p16-17 F 13 '43
 Civil supply office set up within WPB; replaces Office of civilian supply. Comm & Fin Chr 157:1983 My 27 '43
 Civilian in middle. Business Week p17 Ap 3 '43
 Civilian supply bill is hit by Eastman. Ry Age 114:960-1 My 15 '43
 Civilians get a break. Business Week p15 Ja 30 '43
 Housewife's say; OCR will collect data to use in securing allocations for consumer goods. Business Week p76 O 9 '43
 Impact of war on advertising. Adv & Sell 36:19-21 Ap '43
 Nationwide civilian consumer survey begun for OCR by Census bureau. Comm & Fin Chr 158:1924 N 11 '43
 OCR adopts program to provide essentials for civilian population. Comm & Fin Chr 158:607 Ag 12 '43
 OCR reorganizes. Business Week p14 Jl 31 '43
 OCR loses jurisdiction over civilian coal, oil. Elec W News ed 120:389 Jl 31 '43
 Outlook for civilian supplies. P. J. Howe. Adv & Sell 36:17-18+ S '43
 Still in the saddle. Business Week p17-18 Ap 17 '43
 Trials and errors. E. Janeway. Fortune 27:64+ My '43

Components scheduling plan

- Detailed procedure given by WPB for component scheduling plan operation; questions and answers clarify component scheduling under GSO M-293. Iron Age 151:116-116B Je 10 '43
 Engineers face new plan of scheduled components. S A E J 51:sup23+ Je '43
 Now it is CSP. Business Week p16 My 8 '43
 Wilson steps out; complete charge of components, even to shifting war orders. Business Week p14 Mr 6 '43
 Wilson wins for scheduling. Business Week p15-16 F 13 '43

Conservation division

- Conservation consultants. A. K. Graham. Chem Ind 52:723-4 Je '43
 Continuing need for the conservation of resources. H. Coonley. Mech Eng 65:785-8 N '43

UNITED STATES—War production board—
Conservation division—*Continued*
WPB reorganizes Conservation division. Oil
Paint & Drug Rep 143:7+ My 3 '43

Containers division

Washington personnel chart of WPB Containers division. Mod Packaging 16:82 Mr '43
What is relation of WFA to WPB containers branch? Il Mod Packaging 17:96-7+ O '43

Controlled materials plan

Allotments of CMP materials to small users put on annual basis. Steel 113:71 N 1 '43
Answers to questions on CMP. Iron Age 150:120-3 D 3; 132-4 D 10 '42
Aviation's place in the Controlled materials plan. J. Foster, Jr. Aviation 42:114-15+ Ap '43
CAP for CMP. Coordinated adjustment procedure. Business Week p 14-15 S 18 '43
Clarifying CMP: how it affects steel producers, fabricators and warehouses. N. E. Stearns. Iron Age 150:91-2+ D 17 '42
Components coming up; what to do about scarce items is WPB's most urgent problem; production men meeting it. Il Fortune 27:94-7+ My '43
Construction under CMP; NHA as a claimant agency. W. J. Casey. Arch Rec 93:7+ F '43
Control materials plan division established by War board. Oil Paint & Drug Rep 142:3+ N 23 '42
Controlled materials, a review. Survey of Cur Business 22:5-7 D '42
CMP (Controlled materials plan). Dom Eng 160:54-5+ D '42
Controlled materials plan. Sheet Metal Worker 34:16-19+ Ap '43
Controlled materials plan. H. C. Chapman. N A C A Bul 24:577-90 Ja 15 '43
Controlled materials plan. G. N. Farrand. J Account 75:247-60 Mr '43
CMP (Controlled materials plan). L. W. Moffett. Automotive & Aviation Ind 87:49-50+ N 15 '42
CMP and the chemical industries. D. P. Morgan. Chem & Met Eng 49:88-90 D '42
CMP broadens. Business Week p93+ Mr 20 '43
CMP clarified by new regulation no. 1. Iron Age 151:94-5 Ja 14 '43
CMP fact finder, a quick reference to CMP. Iron Age 151:99-100+ Je 3 '43
CMP hits bulleseye; filling needs. Steel 113:80-1+ S 6 '43
Controlled materials plan; how it will work, how to get ready for it; reports to executives. Il Business Week p41-50 D 12 '42 [reprint 20c]
CMP in Dominion. Business Week p32 D 26 '42
CMP in full operation; what it means to the power engineer. Power Pl Eng 47:102, 104+ J1 '43
CMP is a must. T. C. Clark. Iron Age 151:92-3 Ja 14 '43
CMP is born. S A E J 50:sup40 D '42
Controlled materials plan is generally acceptable to OPC. H. D. Ralph. Oil & Gas J 41:64+ N 12 '42
Controlled materials plan is latest priorities scheme. Roads & Bridges 81:64, 66-8+ Ja '43
CMP manual assists consumers in establishing materials record. Il Steel 112:45 Mr 22 '43
C.M.P. news. Published in weekly numbers of Iron Age
Controlled materials plan now covers all construction. Eng N 131:121-2 J1 15 '43
CMP operating procedures completed by War board. Oil Paint & Drug Rep 143:3+ F 15 '43
CMP operating supplies rule changed. Oil Paint & Drug Rep 143:5 My 24 '43
CMP spelled out; symposium at meeting of purchasing agents. Oil Paint & Drug Rep 143:52 My 31 '43
Controlled materials plan; technical details. Pet Eng 14:101, 103-4 D '42
Controlled materials plan; visual presentation. Iron Age 151:94-5 Ap 8 '43
CMP's progress. Business Week p67-8 Ja 9 '43

Current thinking explained about transition from PRP to CMP. Iron Age 151:102-3+ Ja 28 '43
Despite stormy crossing, Controlled materials plan has landed. R. Colborn. Am Mach 86:1318c N 12 '42
Dilemma of materials control; CMP in operation. L. Gordon. Il Dun's R 51:5-10+ Ag '43
Fluidity will continue to mark administration of CMP. R. Colborn. Am Mach 87:124c Mr 18 '43
Functions and operation of plan; instructions on preparation of bills of material. Steel 111:3-13 sec 2 D 14 '42
Handling of details under CMP explained. Iron Age 151:102-4 F 4 '43
How a B-product producer operates under the controlled materials plan. Iron Age 151:122+ Je 17 '43
How Controlled materials plan will be directed; instructions for preparing bills of materials. Iron Age 150:114-25 N 19 '42
How P-98-b works under CMP. F. A. Watts. Oil & Gas J 42:42-4, 116 My 27 '43
How to procure materials under CMP. Sheet Metal Worker 34:14+ My '43
Interim report on CMP. J. H. Martin. Harvard Business R 21 no4:472-84 [J1] '43
Limitations on warehouse sales established by new regulation. Iron Age 151:128-31 F 11 '43
Material situation and its effect on freight cars. D. W. Odiome. Ry Age 114:1132-4+ Je 5 '43
Materials plan. D. M. Nelson. Factory Management 100:75-7, supp D '42
Need for materials control. D. M. Nelson. Ry Age 115:131-2 J1 24 '43
New class B list establishes end-use symbols. Iron Age 151:112-16 Ap 22 '43
New Controlled materials plan. Sheet Metal Worker 33:21+ N; 21-2 D '42
New procedures in CMP. Factory Management 101:97-8 My '43
New rating regulations under CMP. Sheet Metal Worker 34:51-2 Ap '43
New WPB division established to direct materials control plan. Steel 111:41 N 23 '42
Newly set-up CMP already is having reorganization. R. Colborn. Am Mach 86:1390c N 26 '42
Operation under CMP during transition from PRP clarified. Steel 112:77-8 Ap 12 '43
Operations under new Controlled materials plan explained in detail. flow chart Iron Age 150:90-5 D 24 '42
Principal operating procedures established in regulations 3 and 5; Copper division re-aligned to simplify operation under CMP. Steel 112:2-6 F 22 '43
Priorities allocations prices; including CMP regulations; informative material including indexes, schedules, ratings, price schedules; personnel and directories of administrative bodies; revised as of May 4, 1943. Steel 112:1-48 sec 2 My 10 '43 [revisions and additions cont in weekly numbers]
Priorities and the Controlled materials plan; railroad purchasing problems. C. E. Smith. Ry Age 114:289-91 Ja 30 '43
Procedure for obtaining maintenance, repair and operating supplies explained. Iron Age 151:124-7 F 18 '43
Procurement patterns and people; ODT organization, relations with WPB clarified; Purchases and stores division. A.A.R. Ry Age 115:146-50 J1 24 '43
Questions and answers on CMP. Dom Eng 161:58+ Ja '43
Questions and answers relating to brass mill operations under CMP. Iron Age 151:112+ Je 17 '43
Recent developments; questions and answers. Iron Age 151:100-3 Ja 21 '43
Regulations for materials plan are announced. Credit & Fin Management 45:25-6 Mr '43
Riding the storm. Business Week p19-20 Mr 27 '43
Simplified CMP and priorities guide. Iron Age 151:1-28 sec 2 Ap 29 '43
Still in low gear; CMP is checked by paper work. Business Week p14-15 Ap 17 '43
Symbols for major programs released. Iron Age 151:132+ My 20 '43
System becomes fully operative July 1 as transition period ends; advisory committees. Steel 112:66-7 Je 28 '43

UNITED STATES—War production board—Controlled materials plan—*Continued*

War housing construction to operate under controlled-materials plan. Eng N 130:864 Je 17 '43

WPB clarifies order placement when suppliers can't be found. Iron Age 152:143 S 2 '43

WPB controlled material plan designed to aid small business in overcoming supply problems. H. H. Heimann. Comm & Fin Chr 156:1895 N 26 '42

WPB defends CMP against charges of slowing output. R. Colborn. Am Mach 87:112c Ap 1 '43

WPB Vice-Chairman Wilson to conduct CMP scheduling. R. Colborn. Am Mach 86:1460c D 10 '42

Wartime guides for your business; tracing the pattern for materials control. W. H. Hillyer. Barron's 23:7 F 1 '43

What CMP means to local transportation. M. Haas. Bus Transportation 22:66-9 Je '43

What CMP means to textile men. B. Stubblefield. Textile World 92:62-4 D '42

What's new about the Controlled materials plan. Factory Management 101:insert [80a-80d] F '43

Your CMP procedures; abstract. Management R 32:182-3 My '43

Glass division

Raw materials; functions of Glass unit of the War production board. J. R. Hostetter. Am Cer Soc Bul 22:290-2 Ag 15 '43

Iron and steel division

Personnel. Iron Age 151:133 My 13 '43

Revised Steel division of WPB. Steel 111: Insert D 21 '42

Steel division; organization chart. Iron Age 152:101 Ag 5 '43

Management consultant division

Management man for a management job. Business Week p7 Ag 7 '43

New WPB unit set up. Comm & Fin Chr 158: 616 Ag 12 '43; Oil Paint & Drug Rep 144: 3+ Ag 9 '43

Materials redistribution department

Need critical metals to finish war contract? phone WPB's MRD. Steel 111:103-4 D 7 '42

Redistribute idle inventories. Chem Ind 52: 729 Je '43

Personnel

Directory of regional offices. Iron Age 151: 133 My 13 '43

Eberstadt leaves WPB post; Wilson named production chief. Comm & Fin Chr 157: 649+ F 18 '43

Materials allocation, distribution consolidated under Eberstadt; reorganization. Steel 111:46-8 N 16 '42

Nelson dismisses Eberstadt and gives Wilson his duties at WPB. Iron Age 151:135 F 18 '43

New personnel list. Iron Age 152:124+ Ag 5 '43

Two labor officials placed in WPB posts. Comm & Fin Chr 156:2076 D 10 '42

WPB appointments. Comm & Fin Chr 157: 1407 Ap 15 '43

War production board personnel. Am Bld 65:59 F '43

WPB personnel changes. Oil Paint & Drug Rep 143:4 F 15 '43

Production engineering service

Trouble shooter; new WPB engineering service. Business Week p62+ Ja 30 '43

Trouble-shooting unit helps eliminate war production snags; Production engineering service. Steel 112:42 Ja 25 '43

Production research and development office

Chemical industries branch, O.P.R.D., what it is and how it functions. D. E. Keyes. Chem & Met Eng 50:112-13 Je '43

Mobilization of scientific resources. J Ap Phys 14:396-8 Ag '43

Mobilizing new technology for war production; Office of production research and development. S. D. Kirkpatrick. Chem & Met Eng 49:80-1 D '42

WPB sets up research office to explore production methods; additional industry advisory committees appointed. Steel 111:57 N 16 '42

Pulp and paper division

Function of War products development section. J. G. Strange. Paper Tr J 116:24-7 My 6 '43

Radio and radar division

WPB reorganization of Radio and radar division. Electronics 16:224+ N '43

Simplification branch

Fewer frills; standardization roster. Business Week p30-3 My 1 '43

Smaller war plants division (transferred to Smaller war plants corporation)

Completes operating organization. Mech Eng 65:86 Ja '43

Procedure is simplified for companies seeking contracts; Smaller war plants division. chart Steel 111:38-9 N 30 '42

Small war plants division reorganized by War board. chart Oil Paint & Drug Rep 142:3+ N 30 '42

War utilities, Office of

Guide to Office of war utilities policy, administrative divisions; with chart. Elec W News ed 119:1210, 1212-13 Ap 10 '43

Krug named power czar; new WPB office created. Elec W 119:284a Ja 23 '43

Plans and policies of the Office of war utilities. J. A. Krug. Am Water Works Assn J 35:341-5 Jl '43

Women's bureau

War work of the U.S. Women's bureau. Monthly Labor R 55:1170-84 D '42

UNITED STATES armed forces institute

Work of the Armed forces institute. F. T. Spaulding. J Eng Educ 34:150-7 O '43

UNITED STATES chamber of commerce, See

Chamber of commerce of the United States

UNITED STATES citizens service corps

National sales force to back up government advertising projects. Pir Ink 201:19-20 D 11 '42

UNITED STATES gypsum company

Annual report. Comm & Fin Chr 157:903 Mr 8 '43

UNITED STATES industrial alcohol company

Another look. Mag of Wall St 71:429+ Ja 23 '43

UNITED STATES junior chamber of commerce

Jaycees, young men skilled in action. W. M. Shepherd. Il Am Inst Banking Bul 25:18-19 Ap '43

UNITED STATES lines company

International mercantile marine co. merger approved. Comm & Fin Chr 157:2043 My 31 '43

UNITED STATES merchant marine academy,Kings Point, New York
Dedication of Merchant marine academy. Il Marine Eng 45:186-81 O '43**UNITED STATES playing card company**

Strategic habit stocks. J. C. Clifford. Mag of Wall St 72:531 Ag 21 '43

UNITED STATES plywood corporation

Another look. Mag of Wall St 72:195+ My 29 '43

Another look. Mag of Wall St 72:704+ O 2 '43

New stock offering. Comm & Fin Chr 158: 296 Jl 19 '43

Stock issues proposed. Comm & Fin Chr 158: 95 Jl 5 '43

UNITED STATES potters association

Annual convention, 64th, Pittsburgh, Dec. 15-16. Cer Ind 40:20-3 Ja '43

UNITED STATES rubber company

Annual report. Comm & Fin Chr 157:903-4 Mr 8 '43

Consolidated income account, 1939-1942. Comm & Fin Chr 157:1094 Mr 22 '43

Market leaders for 1943. Mag of Wall St 71: 372 Ja 9 '43

Peace-time leaders. Mag of Wall St 72:508 Ag 21 '43

UNITED STATES rubber company—Continued
Recent aircraft developments. H. L. Hayward. *Aeronautical Eng R* 1:155 N '42
Stocks with three-way profit prospects. *Mag of Wall St* 71:709 Ap 3 '43

UNITED STATES rubber export company
Export business shot. U.S. Rubber takes on other lines abroad. L. C. Boos. *il Ptr Ink* 202:20-1 Mr 5 '43

UNITED STATES savings and loan league
Annual meeting. 50th. Chicago. *Comm & Fin Chr* 156:1881 N 26 '42
Meeting. Chicago. Sept. 22-23. *Comm & Fin Chr* 158:1318+S 30 '43
Members of standing committees for 1943. *Comm & Fin Chr* 157:1581-2 Ap 29 '43
Pledges complete support to war financing program. *Comm & Fin Chr* 156:2321 D 31 '42

UNITED STATES steel corporation
Annual report for 1942. *Comm & Fin Chr* 157:1173-5 Mr 29 '43
Big Steel; digest and analysis of 41st annual report. *Personnel J* 22:18-23 My '43
Chairman says industry will need higher prices if costs and taxes experience further rise. *Comm & Fin Chr* 157:1752 My 10 '43
Control of roads; subsidiary to change name. *Comm & Fin Chr* 156:2312 D 28 '42
Cost-output relation for the U.S. steel corporation. C. A. Smith. *R Econ Stat* 24:166-76 N '42
Hearing delayed for year; foreign holdings, etc. *Comm & Fin Chr* 158:1677 O 25 '43
Payrolls now ten times net profit. *Steel* 112:53-4 F 8 '43
Plant expansion to cost over \$700,000,000. *Comm & Fin Chr* 156:2143 D 14 '42
Quarterly earnings report and figures for 1942. *Comm & Fin Chr* 157:480 F 1 '43
Record expansion in Pittsburgh district. *Comm & Fin Chr* 156:2231-2 D 21 '42
Sales, wages at highest volume; owners' share near lowest level. *Steel* 112:63 Mr 29 '43
Steel industry marketwise; U.S. Steel comparison with other steel companies. W. Gates. *Mag of Wall St* 72:301-3+ Je 26 '43
Steel's war story given stockholders by movie. *Ind Marketing* 28:54+ Je '43
See also Carnegie-Illinois steel corporation

UNITED STATES tobacco company
Strategic habit stocks. J. C. Clifford. *il(p530)*
Mag of Wall St 72:531 Ag 21 '43

UNITED steelworkers of America
CIO launches big drive for white collar workers in steel industry. T. Campbell. *Iron Age* 152:97-8 N 4 '43

Lake Superior iron mine operators sign agreement with CIO union. *Steel* 112:61-2 Mr 8 '43

Steel union, with 700,000 members sees chance to help guide production. *Iron Age* 151:93 Je 24 '43

Union prospers. *Business Week* p90+ O 2 '43

United Steelworkers. CIO tell all; reveal dues, salaries, fees, expenses. *Iron Age* 151:84-5 F 25 '43

UNITED stockyards corporation
Annual report. *Comm & Fin Chr* 157:48 Ja 4 '43

UNITED traction company, Albany, N.Y.
United traction company. O. Ely. *Pub Util* 31:235-6 F 18 '43

UNITS

Educational problem of units. R. E. Doherty. *J Eng Educ* 33:470-4 Ja '43

Spectroscopic methods; the primary standard of wave-length. W. F. Meggers. *bibliog Rs Mod Phys* 14:59-63; Discussion. 63 Ap-Jl '42

See also

Metric system

Weights and measures

UNIVERSAL camera corporation
Binoculars in mass. *il Fortune* 27:134-5 Je '43

UNIVERSAL joints. *See* Joints, Universal

UNIVERSAL oil products company

U. S. court probe hits Universal Oil Products patent suit; master charger fraud, asks new trial. *Nat Pet N* 35:5-6 O 27 '43

UNIVERSAL pictures company
Merger plan. *Comm & Fin Chr* 157:1951, 2158; 158:96 My 24, Je 7, Jl 5 '43

Registration with SEC. *Comm & Fin Chr* 158:1677 O 25 '43

UNIVERSE

Astronomical problems of to-day. J. Jeans. *Science* 98:373-6 O 29 '43

See also

Astronomy

UNIVERSITIES. *See* Colleges and universities

UNIVERSITY professors and lecturers of allied countries in Great Britain, Association of. *See* Association of university professors and lecturers of allied countries in Great Britain

UNLISTED securities. *See* Securities—Unlisted securities

UNSATURATED compounds

Coordination of silver ion with unsaturated compounds; *cis*- and *trans*-2-pentene. H. J. Lucas, R. S. Moore and D. Pressman. *bibliog Am Chem Soc J* 65:227-9 F '43

Coordination of silver ion with unsaturated compounds; mixtures of trimethylethylene and cyclohexene. H. J. Lucas, F. W. Billmeyer, Jr. and D. Pressman. *bibliog Am Chem Soc J* 65:230-1 F '43

Determination of unsaturates in hydrocarbon gases; the hydrogenation method. R. F. Robey and C. E. Morrell. *Ind & Eng Chem Anal* 14:880-3 N 15 '42

See also

Double bonds

Hydrocarbons

Hydrogenation

UNSATURATION

Structural effects of unsaturation and hyperconjugation in aldehydes, nitriles and chlorides as shown by their dipole moments in the vapor state. E. C. Hurdis and C. P. Smyth. *bibliog Am Chem Soc J* 65:89-96 Ja '43

Unsaturation of butadiene and related polymers as determined by iodine chloride addition. A. R. Kemp and H. Peters. *bibliog Ind & Eng Chem Anal* 15:453-9 Jl 15 '43

UPHOLSTERY

See also

Spring (furniture)

Trimming (for drapery, upholstery, etc.)

Cleaning

Rug and upholstery cleaners; formulation, production, sales. C. T. Small. *Chem Ind* 51:733-40 N '42

UPPER atmosphere. *See* Atmosphere, Upper

URACIL

Ultraviolet absorption spectra of nitrogenous heterocycles; the blocking effect of methyl groups on the ultraviolet absorption spectra of some hydroxypurines and pyrimidines. J. R. Loofbourow, M. M. Stimson and M. J. Hart. *bibliog Am Chem Soc J* 65:148-51 F '43

Ultraviolet absorption spectra of nitrogenous heterocycles; the effect of pH on the spectrum of uracil-5-carboxylic acid. M. M. Stimson and M. A. Reuter. *Am Chem Soc J* 65:151-2 F '43

Analysis

Sensitive color reaction for the detection of uracil and cytosine. T. E. Johnson. *Science* 98:90-2 Jl 23 '43

URANIUM compounds

See also

Ammonium uranate

URANYL acetate

New reagents for sodium in presence of lithium. E. R. Caley and L. B. Rogers. *bibliog Ind & Eng Chem Anal* 15:32-6 Ja 15 '43

URANYL oxalate

Analysis of the uranyl oxalate actinometer as applied to accelerated light and weathering tests. F. T. Bowditch, C. E. Greider and C. G. Oilinger. *bibliog Am Soc T M Proc* 42:845-50 '42

URBAN fringe (term)

Land-use control in the urban fringe of Portland, Oregon. F. Arpke. map J Land & Pub Util Econ 18:468-80 N '42

URBAN land institute

Potter elected head at annual meeting. Comm & Fin Chr 157:580 F 11 '43

URBAN redevelopment corporations. See City planning**URBANISM.** See Cities and towns**UREA**

Chemical seasoning of timber: the use of urea. Chem Age (Lond) 49:153-6 Ag 14 '43

Denaturation of tobacco mosaic virus by urea; kinetic aspects. M. A. Lauffer. bibliog Am Chem Soc J 65:1793-1802 O '43

New use for urea in printing discharge. A. J. Hall. Textile Col 65:61-2 F '43

Rate of conversion of ammonium cyanate to urea in non-aqueous solvents. W. J. Svirbely and S. Peterson. Am Chem Soc J 65:166-70 F '43

Several alkyl- β -thioethylamines and the corresponding ureas, sulfoxides and sulfones. K. W. Brighton and E. E. Reid. Am Chem Soc J 65:458-9 Mr '43

Structure of the polymer from urea and formaldehyde; abstract. C. S. Marvel, J. R. Elliott and H. Yuska. Mod Plastics 21:112+ O '43

Susceptibility of wood to decay; effect of urea and other nitrogen compounds. F. H. Kauffert and E. A. Behr. Ind & Eng Chem 34:1510-15 D '42

URIC acid

Ultraviolet absorption spectra of nitrogenous heterocycles: the effect of hydroxy substitutions on the ultraviolet absorption of the series: hypoxanthine, xanthine and uric acid. M. M. Stimson and M. A. Reuter. bibliog Am Chem Soc J 65:153-5 F '43

URINARY calculi. See Calculi, Urinary**URINE**

Effect of urinary cortin-like material on carbohydrate metabolism. B. N. Horwitt and R. I. Dorfman. bibliog Science 97:337 Ap 9 '43

Presence of a cortin-like substance (cold protecting material) in the urine of normal men. R. I. Dorfman, B. N. Horwitt and W. R. Fish. bibliog Science 96:496-7 N 27 '42

Production of folic acid by rat liver in vitro. L. D. Wright and A. D. Welch. bibliog (20 references) Science 98:179-82 Ag 20 '43

Analysis

Estimation of the sulfonamides; a rapid and accurate micromethod. S. W. Lee, N. B. Hannay and W. C. Hand. bibliog Ind & Eng Chem Anal ed 15:403-6 Je 15 '43

Glucuronic acid in the urine as a measure of the absorption of certain organic compounds. W. Deichmann and G. Thomas. bibliog diag J Ind Hygiene 25:286-92 S '43

Measurement of industrial lead exposure by analyses of blood and excreta of workmen. J. Cholack and K. Bambach. bibliog J Ind Hygiene 25:47-54 F '43

Toxicology of acrylonitrile (vinyl cyanide); determination of thiocyanates in blood and urine. A. H. Lawton, T. R. Sweeney and H. C. Dudley. bibliog J Ind Hygiene 25:13-19 Ja '43

URUGUAY**See also**

Paper industry and trade—Uruguay

Economic conditions

Headaches on the Plata. Il Business Week p18-19 D 5 '42

News by countries. Published in Foreign commerce weekly

Uruguay's wartime economy shows sharp contrasts. Il For Comm W 11:4-9 My 22 '43

URUSHIOL

Toxic principle of poison ivy and other related plants. D. Wasserman and C. R. Dawson. bibliog (59 references) J Chem Educ 20:448-53 S '43

USE and occupancy insurance. See Insurance, Use and occupancy**USED cars.** See Automobile industry and trade —Used cars**USED machinery.** See Machine tool industry—Used machines**USED products.** See Products, Used**USURY**

Difference between cash price and credit price included in note not usurious interest. Banking Law J 60:767-72 S '43

Mistake of fact in loan transaction purges it from usury. Banking Law J 60:533-6 JI '43

USURY laws

Of usury; moneylending and investment. Economist 144:206 F 13 '43

See also

Loans, Small—Laws and regulations

UTAH copper company

Safety at the Arthur and Magna mills. R. L. Erickson. Il Min Cong J 29:16-19 JI '43

UTAH power and light company

Asks authority for transfer of assets preliminary to public offering of bonds. Comm & Fin Chr 156:2332 D 21 '42

FPC orders utility to dispose of \$27,000,000. Elec West 91:86 S '43

High yields on Utah Power & Light bonds. A. Jansen. Barron's 22:18-19 D 14 '42

UTHWATT, Sir Augustus Andrewes, 1879-

Portrait. Arch Forum 77:49 N '42

UTHWATT committee report. See Land utilization**UTILITIES, Public.** See Public utilities**UTILITIES employees securities company**

Agreement reached; company to be dissolved. Comm & Fin Chr 157:2459 Je 28 '43

To redeem funded debt. Comm & Fin Chr 158:1677 O 25 '43

V**V loans.** See Loans, Bank—Defense loans**V-mail.** See Postal service—United States**VACANCY statistics.** See Housing—Statistics**VACATIONS**

Decisions of National war labor board, Aug. and Sept. 1942; vacations with pay. Monthly Labor R 56:67 Ja '43

Fewer vacations foreseen this year; pay allowances a wartime practice. Comm & Fin Chr 157:2273 Je 17 '43

Holidays at home. Economist 144:405 Mr 27 '43

Salesman's corner; vacations. F. Rundell. Inland Ptr 111:26-7 Je '43

Start vacations early in week, ODT urges. Comm & Fin Chr 157:1787 My 13 '43

Trends in vacation policies. Management R 32:155-6 Ap '43

Trends in vacation policies. Management R 32:248-9 JI '43

Vacation and holiday provisions in union agreements. Monthly Labor R 56:924-31 My '43

Vacation debacle. Business Week p89-90 My 8 '43

VACCINATION

Jaundice following administration of human serum. J. W. Oliphant, A. G. Gilliam and C. L. Larson. bibliog Pub Health Rep 58:1233-42 Ag 13 '43

Parental and familial factors in the acceptance of diphtheria and smallpox immunization. L. Ereslow, P. R. Shalit and G. W. Anderson. Pub Health Rep 58:384-96 Mr 5 '43

VACCINES

Aqueous-base yellow fever vaccine. M. V. Hargett, H. W. Burruss and A. Donovan. Pub Health Rep 58:505-12 bibliog (p511-12) Mr 26 '43

Can colds be prevented? no effective method; not vaccines, not vitamins. R. H. Feldt. Sci Am 169:20-1 JI '43

VACCINES—Continued

Rocky Mountain spotted fever: duration of potency of tick-tissue vaccine. R. R. Parker and E. A. Steinhaus. Pub Health Rep 58: 230-2 F 5 '43

Specific prophylaxis against enteric diseases; abstract. S. Mudd. Am Water Works Assn J 35:629-30 My '43

VACUATOR. See Sewage disposal plants—Equipment

VACUUM

High vacuum technology for production of metallic magnesium. J. M. Crowe. Chem Ind 53:84 J1 '43

How vacuum affects turbine capacity. G. L. Graff. chart Power 87:58-9 Ja '43

Introduction to high vacuum in chemical industries. T. R. Olive. il diag Chem & Met Eng 50:102-5+ O '43

Laboratory liquid-air storage. J. R. Roebuck. diags R Sci Instr 14:90-7 Ap '43

New high vacuum in an industrial plant attained. Min & Met 24:354 Ag '43

Tire valve in vacuum application. C. H. Bachman and I. B. Bensin. diags R Sci Instr 13:534-5 D '42

Use of Wood's metal in vacuum systems. A. L. Hughes and C. S. Pao. diags R Sci Instr 14:254-5 Ag '43

Vacuum distillation equipment for volatile solids. L. Bolstad and R. E. Dunbar. diags Ind & Eng Chem Anal ed 15:464 J1 15 '43

Vacuum evaporated films on glass; their theory, production and applications. S. Bateson. il Can Chem & Process Ind 27:438-40 Ag '43

Vacuum sublimation. M. H. Hubacher. diags Ind & Eng Chem Anal ed 15:448-50 J1 15 '43

Vacuum sublimation and molecular distillation apparatus. B. Riegel, J. Belswanger and G. Lanzl. il diags Ind & Eng Chem Anal ed 15:417-21 J1 15 '43

Vacuumizing rigid metal containers. il Mod Packaging 16:80 J1 '43

See also

Electric discharges
Manometers

VACUUM bottles. See Thermos bottles

VACUUM cleaners

Vacuum cleans dust from commutator. S. H. Sleman. il diag Factory Management 101: 146+ Mr '43

Repair

Vacuum cleaner repair business. Consumers' Research Bul 11:23-4 My '43

VACUUM cleaning

Wear testing of carpets. H. F. Schiefer. J Research Nat Bur Stand 29:367-70 N '42

VACUUM gages

See also

Manometers

VACUUM pumps

Broom and Wade combined air compressor and vacuum pump. il diags Engineering 155:127 F 12 '43

Electronic pump bends electrons. S. Summers. diags Radio N 29:22-3+ Ja '43

Gas removed by putting vacuum pumps on boreholes. il Coal Age 48:87-8 My '43

Hydraulic filter pump. W. B. Lenhart. il Rock Prod 46:30-1 F '43

Introduction to high vacuum in chemical industries. T. R. Olive. il diag Chem & Met Eng 50:102-5+ O '43

Speed in vacuum; dehydrating penicillin may be expedited by diffusion pump. Business Week p66 N 6 '43

Vacuum in a modern hospital. J. Naab. il Comp Air M 48:6958-9 F '43

Vacuum pump trouble in district heating system. S. R. Lewis. diag Heating-Piping 15: 513 O '43

Vacuum pumps employ bellows driven by electric motors. il Sci Am 168:273 Je '43

VACUUM tube amplifiers. See Amplifiers, Vacuum tube

VACUUM tube voltmeters. See Voltmeters, Vacuum tube

VACUUM tubes

Army-navy preferred list of vacuum tubes. Inst Radio Eng Proc 30:sup 23 N '42

Army-navy preferred list of vacuum tubes,

March 1, 1943. Electronics 16:182 My '43

Crime detection; electronic devices. R. P. Turner. il diags Radio N 30:20-2+ S '43

Electron control methods. C. D. Prater. il diags Radio N 29:14-15+ Mr '43

Electron tubes; their principles and their instrumentation applications. A. W. Kramer. diags Instruments 16:258, 260+, 334-6, 408, 410-15, 430-2, 602-4+, 664-7+, 733-42 My; Ag. O-D '43

Electronic tubes for ultraviolet radiation. J. H. Laub. il diags Electronics 16:80-5+ My '43

Electronic tubes, how they work. diags Gen Elec R 46:612-17 N '43

Electronics: a lever on industry; rocketing a \$4 billion war business toward a postwar industrial revolution. il Fortune 28:132-5+ J1 '43

Electronics mystery solved, may lead to improved tubes; discovery that gas dissolves in certain metals. H. C. Rentschler. Sci Am 169:17 J1 '43

Electronics; techniques for a new world; a Fortune collage. il Fortune 28:sup J1 '43

Emissive power of typical grid and plate surfaces; test of graphite coatings. R. Szymanowitz. Electronics 16:93+ My '43

Fundamental atomic physics. C. D. Prater. il diags Radio N 28:29-30, 62-3 D '42; 29: 11-13+ F '43

Gas discharge devices. C. D. Prater. diags Radio N 29:24-5+ My '43

How an electron tube functions. W. C. White. Elec W 120:116+ J1 10 '43

New world of electronics; special section. L. W. Chubb and others. il diags maps

Electronics 16:83-156 Mr '43

Practical radio course; construction and operation of various types of vacuum tubes. A. A. Ghirardi. il diags Radio N 29:30-1, 57-9 Ja; 28-9+ F; 30-1+ Mr; 34-5+ Ap; 31-2+ My; 30:43-4+ J1; 38-9+ Ag; 43-4+ S '43

Radio progress during 1942; electronics. bibliog Inst Radio Eng Proc 31:129-30 Ap '43

Radio tubes; list upon which production is expected to be concentrated. Consumers' Research Bul 11:21 My '43

Sixty years of electronics, 1883-1943; electron tubes for industry and communications; charts. Electronics 16:112a-112c J1 '43

Space-current flow in vacuum-tube structures. B. J. Thompson. Inst Radio Eng Proc 31:485-91 S '43

Trails of progress in electronics and radio. E. F. W. Alexanderson. Gen Elec R 46:161-2 Mr '43

Tube collector; types made prior to 1933. il diag Radio N 29:35 F; 33+ Ap; 73-4 My; 30:40+ J1 '43

Tube registry; tube types registered with RMA data bureau during November. Electronics 16:152+ Ja '43

Tubes for high-power short-wave broadcast stations; their characteristics and use. G. Chevnigny. il diags Inst Radio Eng Proc 31: 331-40 J1 '43

See also

Amplifiers, Vacuum tube	Radio detectors
Cathode ray tubes	Radio receiving apparatus
Electric rectifiers	Radio rectifiers
Electron multipliers	Thyratron
Geiger-Müller counters	Voltmeters, Vacuum tube
Magnetron	X ray tubes
Photoelectric cells	

Care

Rules for prolonging tube life. H. J. Dailey. il Electronics 16:76-8 Ap '43

Cold cathode tubes

Cold cathode tubes used on relays. E. C. Schurch. Elec W 119:468-9, 630, 782, 980+ F 6 Mr 20 '43

Control uses

Adjusting sensitive relays. R. T. Fisher. il diag Electronics 16:70-3+ F '43

Amplidyne-electronic equipment increases versatility of paper machine. G. V. Kullgren. il Paper Tr J 115:57 N 26 '42

VACUUM tubes—Control uses—Continued

- Automatic control circuits for broadcast transmitters. W. R. Sloat. *Il diags Electronics* 16:102-5+ N '43
- Automatic transmitter protection; electronic relay system. F. Marx. *diags Electronics* 16:98-9+ Je '43
- Automatic voltage compensator for resistance welding control. E. M. Callender and R. S. Phair. *Il diags Elec Eng* 62:Trans 701-5 N '43
- Balancing 50-ton marine gears; G-E Thymotrol type electronic control for driving motor. *Il diag Electronics* 16:132 JI '43
- Contribution of resistance welding control to the war effort. H. L. Palmer. *bibliog Il Welding J* 22:347-9 My '43; Same. *Gen Elec R* 46:1507-10 S '43
- Cramer electronic timers and reset timers. *Il Electronics* 16:298 Mr '43
- Curtis & Marble electronic timer for shear. *Il Textile World* 93:113 Je '43
- De-icers controlled by electronic device. *Il diag Product Eng* 14:80 F '43
- Deionization considerations in a harmonic generator employing a gas-tube switch. W. G. Shepherd. *diags Inst Radio Eng Proc* 31:66-74 F '43
- Delay and timing circuits. R. P. Turner. *diags Radio N* 30:32-4+ Ag '43
- Differential electronic stabilizer for alternating voltages, and some applications. A. Glynnne. *bibliog diags Inst E E J* 90 pt 2: 101-10 Ap '43; Discussion. 90 pt 2:110-15, 367-8 Ap, O '43
- Diode as a frequency-changer. F. M. Colebrook and G. H. Aston. *Wireless Eng* 20: 5-14 Ja '43
- Diode frequency changers. E. G. James and J. E. Houldin. *Wireless Eng* 20:15-26 Ja '43
- Electrical remote control. C. J. Dorr and L. N. Galton. *Il diags Electronics* 15:60-4, 173-4 N; 57-60+ D '42
- Electronic beam control. S. R. Winters. *Il diags Radio N* 29:18-19+ Ja '43
- Electronic circuit to control intensity and timing of power for spot welding. W. B. Nottingham. *diags R Sci Instr* 14:161-70 Je '43
- Electronic circuits actuate automatic combustion control. K. D. Knoblock. *diags Elec W* 120:1168-70 O '43
- Electronic control conserves paint. *Il diag Product Eng* 14:621 O '43
- Electronic-control feeding for pulverizers and crushers. *Il Rock Prod* 46:77 Mr '43
- Electronic control for de-icer system. *Il Automotive & Aviation Ind* 89:37+ N 1 '43
- Electronic control of de-icing equipment. W. Kliever. *Il Aero Digest* 41:197-8 N '42
- Electronic control of d-c motors. E. E. Moyer. *Il diags Electronics* 16:98-103+ My; 119-25 Je; 118-22 JI; 133-8+ S; 128-33+ O '43
- Electronic control of industrial and power plants; abstract. S. G. King. *Electrician* 129:669-70 D 18 '42
- Electronic exciter for a-c generators; combination voltage regulator and exciter. A. Benson and R. Heidbrak. *diags Electronics* 16:112-14+ Ag '43
- Electronic motor control has excellent characteristics for new machine-tool drive. S. D. Fendley. *Il diags Steel* 112:100, 103-4+ My 24 '43
- Electronic pilot; Minneapolis-Honeywell's automatic stabilizer for high-altitude bombers can be used on firm's own postwar products. *Business Week* p68+ S 25 '43
- Electronic regulators for a-c generators. A. Benson. *diags Electronics* 16:104-7 Ap '43
- Electronic tubes power adjustable-speed drives. *Il diag Power* 87:462-3 JI '43
- Electronic welding control. H. L. Palmer; M. E. Bivens and others. *Il diags Electronics* 15:36-40+ Ag; 55-8+ S; 62-7 O; 65-9+ N; 63-7+ D '42; 16:78-81+ Ja '43
- Electronics forges ahead! R. F. Yates. *Il diag Machine Design* 15:141-4 Ap '43
- Fundamental a.c. circuit demonstrator; electronic switch to be used in conjunction with cathode-ray oscilloscope. S. A. Procter. *diags Radio N* 30:35-7 O '43
- General Electric electronic controls for welding. *Il Mach* 49:182+ Mr '43
- Maintenance of electronic controls. W. D. Cockrell. *Il Chem Ind* 53:58-61 JI '43; Same. *Paper Ind* 25:503-6 Ag '43; Same. *Pet Refiner* 22:119-22 Ag '43; Same. *Rock Prod* 46:102, 104+ Ag '43; Same. *Gen Elec R* 46:489-92 S '43; Same cond. *Power* 87: 446-8+ JI '43; Same cond. *Aero Digest* 43:211, 213+ S '43
- Manifold-solenoid de-icer systems with electronic control. M. L. Taylor and W. B. Pond. *Il diags Aviation* 42:144-7 N '43
- Method for the exact regulation of fixed rotational speeds of an axle; abstract. F. Kirschstein. *Wireless Eng* 20:258 My '43
- Milling machine electronically controlled. *Il diag Electronics* 16:110+ F '43
- Motors do a better job; by means of electron tubes, direct-current motors can be operated from alternating-current power lines. *diag Sci Am* 169:166-8 O '43
- Mot-O-Trol electronic adjustable-speed drive. *Il Am Mach* 87:124+ Ap 29 '43
- New electronic variable-speed drive; Thymotrol. S. D. Fendley. *Il diags Power Pl Eng* 47:44-8 F '43; Same. *Paper Tr J* 116: 33-7 F 11-43; Same. *Gen Elec R* 46:225-30 Ap '43; Same cond. *Iron Age* 151:58-61 Mr 18 '43; Same cond. *Radio N* 29:11-13+ My '43; Excerpts. *Automotive & Aviation Ind* 88:32-3+ Mr 1 '43; Concrete (mill sec) 51:139-40 Mr '43; *Power* 87:178-9+ Mr '43; Abstract. *Electronics* 16:138-9+ Mr '43
- New servant for textile mills; electronic equipment. A. P. Mansfield. *Il diags Textile World* 93:66-9 Mr '43
- Opportunities for electronics in industrial temperature instrumentation. M. F. Béhar. *Electronics* 15:72-4+ D '42
- Power company uses of electronic equipment. W. H. Blankmeyer. *Il Electronics* 16:134-5, 169-70+ Mr '43
- Power feed with electronic control developed for Reed-Prentice machine. *Il Mach* 50:204 O '43
- Power recovery in testing aircraft engines. C. A. Chayne. *Il diags Automotive & Aviation Ind* 87:26-8, 84+ D 15 '42
- Production controls aid the war program. R. A. Powers. *Il diags Electronics* 16:126-8 Mr '43
- Pumps controlled automatically over phone line to reservoir; water system of Kalamazoo, Mich. *diag Electronics* 16:148+ Ap '43
- Resistance welding speeded, improved by tube control. G. W. Garman. *Il diags Electronics* 16:116-19+ Mr '43
- Simplified carrier-failure and tone alarm system for broadcast stations. J. Herold. *diag Electronics* 16:315-16 Mr '43
- Single contact controls shaft rotation direction. *Il diag Electronics* 16:104+ Ja '43
- Stepless speed control governed electronically; new Westinghouse drive. *diag Product Eng* 14:412 JI '43
- Tubes drive relay in telegraph repeater circuit. A. F. Connery. *diag Electronics* 16: 226+ Je '43
- Variable-speed control; use of magnetic coupling for recovering power used on engine test beds. *diag Elec R (Lond)* 133: 337-8 S 10 '43
- Variable waveform unit for testing aluminum welding. J. W. Dawson and H. Klemperer. *Il diags Electronics* 16:62-6+ F '43
- Voltage-regulated power supplies. A. B. Bereskin. *diags Inst Radio Eng Proc* 31: 47-52 F '43
- Welding monitor for training students in judging correct arc length. *Il diags Electronics* 16:142, 146+ S '43
- Wide motor speed range with alternating-current supply; Mot-O-Trol. T. R. Lawson. *Il diags Steel* 112:106, 108+ Je 21 '43; Same abr. *Concrete (mill sec)* 51:182-3 Je '43; Same abr. *Rayon* 24:311-13 Je '43; Excerpt. *Elec W* 119:1638+ My 15 '43

VACUUM tubes—Continued

Cooling

Method of cooling hydrogen discharge tubes. C. Hsueh. *il diags R Sci Instr* 14:250-3 Ag '43

Failure

Fluorescent inspection of tungsten; cracks in leads passing through glass are major cause of gassy electronic tubes; Zyglo inspection method. S. A. Kulin. *il Electronics* 16:95+ JI '43

Generating action

Barkhausen-Kurz oscillations; the influence of the electron-sorting process on the efficiency; abstract. B. Kockel. *Wireless Eng* 19:527 N '42

Generation and amplification of decimetric and centimetric waves; abstract. H. E. Hollmann. *Wireless Eng* 20:449-50 S '43

Generation of short waves. A. Arsenjewa-Heil and O. Heil. *Electronics* 16:164+ JI '43

Graphical method to find the optimal operating conditions of triodes as class C telegraph transmitters. J. C. Frommer. *Inst Radio Eng Proc* 30:519-25 N '42; Abstract. *Wireless Eng* 20:267-72 Je '43

Positive grid and retarding field oscillators. R. I. Sarbacher and W. A. Edson. *il diags Electronics* 16:108-11+ Ag '43

Signal converter; thermionic discharge tube for production of time base deflection potentials of a cathode-ray tube. P. Nagy and M. J. Goddard. *bibliog il diags Wireless Eng* 20:273-99 Je '43; Abstract. *Electronics* 16:198-200+ O '43

Simple pulse-generating circuits. L. E. Greenlee. *diags Electronics* 16:118+ Ja '43

Transit-time oscillation at large amplitudes [application of power-series technique; including a two-stage decimetric-wave generator in one vacuum]; abstract. W. Kleinstaub. *Wireless Eng* 19:526-7 N '42

Ultrashort electromagnetic waves; generation. I. E. Mouroumtseff. *bibliog il diags Elec Eng* 62:206-15 My '43

See also

Oscillators

History

Saga of the vacuum tube. G. F. J. Tyne. *bibliog il diags Radio N* 29:25-7+ Mr; 31-2+ Ap; 26-9+ My; 30:30-2+ JI; 26-7+ Ag; 26-8+ S; 26-7+ O; 26-8+ N '43 (to cont)

Industrial applications

Advertisers! meet the electron! *il Ptr Ink* 202:11-13, 60 Ja 22 '43

As the electrons whirl; typical functional electronic applications. *il Eng & Min J* 144: 90-1 Ag '43

Better brazed and soldered joints made possible by induction heating. J. P. Jordan. *il diags Product Eng* 14:102-5 F '43

Cold heat to expedite plywood fabrication; passing high frequency electric current through wood sections polymerizes glue. C. S. Ricker. *flow diag il diags Aviation* 42:116-20+ Mr '43

Dehydration of food by radio-frequency energy. V. W. Sherman. *Engineer* 176:205 S 10 '43

Electrical weatherman guards war production; electronic dew point recorder for furnace atmospheres. *Power PI Eng* 47:79 Je '43

Electron tubes. W. C. White. *il Radio N* 30: 50-1+ N '43

Electron tubes available for industrial functions. *il diags Product Eng* 14:554-7 S '43

Electronic aid for industry. *il diags Am Mach* 87:94-6 Ag '43

Electronic applications, a new curriculum in electrical engineering. T. S. Gray and R. H. Frazier. *il diag Electronics* 16:122-4+ O '43

Electronic generators extend induction heating field; electrolytic process of coating sheet steel with tin. H. C. Humphrey. *il diags Electronics* 16:56-9+ Ja '43

Electronic method for endurance testing of propeller components; abstract and discussion. R. M. Guerke and G. P. Knapp. *S A E J* 51:sup35 My '43

Electronic sewing machine. C. N. Hoyler. *il diags Electronics* 16:90-3+ Ag '43

Electronic sorting and testing; Cyclograph. *il*

Iron Age 152:57-8 N 4 '43

Electronic tubes and their applications. M. E. Franklin. *il diag Radio N* 28:14-16+ D '42

Electronic tubes in wire telegraphy; Postal telegraph-cable company. A. F. Connery. *il*

Electronics 16:166+ Mr '43

Electronics in industry. C. J. Madsen. *il Marine Eng* 48:217-18 S '43; Abstract. *Heat & Ven* 40:55 Ag '43

Electronics in postwar industry. A. C. Monteth. *Steel* 113:109+ N 1 '43

Electronics provides tools for many industries. M. Pescatello. *Barron's* 23:9 JI 26 '43

Electronics; summary of types of tubes and how they operate; elementary circuits and their typical industrial applications. *il diags Product Eng* 14:643-58 O '43

Engineer's place in the post-war picture. S. S. Egert. *Electronics* 16:86-7+ JI '43

Ferranti high-voltage direct-current testing equipment. *il diags Engineering* 156:6-8 JI 2 '43

Food dehydration; electronic method. *Science* 98:sup10 Ag 27 '43

General Electric outlines progress in industrial electronics. *il Elec W News* ed 120: 1102-3 S 25 '43

Heating wood with radio-frequency power. J. P. Taylor. *bibliog il diags A S M E Trans* 65:201-12 Ap '43

High frequency heating conserves critical tin. G. E. Stoltz. *diags Blast F & Steel PI* 30: 1357-8 D '42; Same. *Metal Finishing* 40:648-9 D '42; Excerpts. *Power* 87:730-73c+ Ja '43

High-frequency heating in plywood manufacture. *Engineering* 156:116-17 Ag 6 '43

Induction brazing of carbide tips. *il Iron Age* 151:60 My 27 '43

Induction heating comes of age. G. W. Penny and J. A. Hutcheson. *il diags Electronics* 16:123-5 Mr '43

Induction heating helps conserve critical tin. *il diags Product Eng* 14:116-17 Ja '43

Industrial applications involving electronic detection. A. Edelman. *il Electronics* 16: 129-33+ Mr '43

Industrial electronics; a promise and an accomplishment. L. A. Umansky. *Paper Tr J* 117:18-19 S 23 '43

Industrial electronics; conference. Schenectady. N. Y. Sept. 14. *Mech Eng* 65:819-23 N '43; *il Blast F & Steel PI* 31:1258-61+ N '43; *Power* 87:758+ N '43

Know electronics, it may reveal new applications for ceramic industry. *il diags Cer Ind* 41:32-3 Ag '43

Magic from vacuum tubes. C. H. Vivian. *il diags Comp Air M* 48:7126-31 S '43

Methods of depositing metallic films. S. Wein. *bibliog il diags Electronics* 16:110-13+ S '43

Post-war planning problems; electronics industries. W. MacDonald. *Electronics* 16:72-3+ My '43

Postwar U-H-F. I. E. Mouroumtseff. *Radio N* 30:46+ N '43

Power output of a-c operated amplifiers. W. A. Schwarzmann. *diags Electronics* 16: 94-6+ Ag '43

Radio-frequency electricity in power applications. J. P. Taylor. *il Elec W* 120:1164-7 O 2 '43

Radio-frequency heating applied to wood gluing. R. A. Bierwirth and C. N. Hoyler. *diags Inst Radio Eng Proc* 31:529-37 O '43

R-F heating of plastics; symposium. *il Electronics* 16:194+ Je '43

R-F heating speeds plastic molding. J. P. Taylor. *bibliog il diags Electronics* 16:102-7+ S '43

Radio sewing machine; high frequencies for fusing plastic parts. *il Sci Am* 169:26 JI '43

Radio tubes for heat treating by high-frequency induction; electrolytic tin plate. H. C. Humphrey. *il diags Steel* 112:111-12 F 1 '43

Telephone and telegraph vast users of electronics. F. A. Cowan. *il map Electronics* 16:88-91, 162, 165 Mr '43

Thin case hardening with radio-frequency energy. V. W. Sherman. *il diags Aeronautical Eng R* 2:7+ My '43

Tin fusing by radio waves. *Electrician* 130: 451 Ap 30 '43

VACUUM tubes—Industrial applications—Cont.

- Tool brazing speeded by electronic induction heating; new grinding system. *il diags Steel* 112:90, 92+ My 31 '43
- Tuned transformers; design of these electronic units simplified by means of universal performance curves. J. E. Maynard. *diags Gen Elec R* 46:559-61, 606-9 O-N '43
- Wartime progress in electronics. R. Eichberg. *il diags Radio N* 28:20-1, 70-3 D '42; 29:14-16, 73-5 Ja; 24-5, 62-5 F '43
- Westinghouse induction heating process for flowing tin plate makes continuous production possible. *il plan Am Mach* 86:1394 N 26 '42; *Iron Age* 150:59-60 N 19 '42

Manufacture

- Glass strain; method for determining and analyzing strains in electronic tubes and other glass forms. H. J. Nolte. *diags Gen Elec R* 46:275-80 My '43; *Abstract. Electrician* 131:31-3 JI 9 '43
- Magnetic induction field of air-core coils; its application to high-frequency heating in valve manufacture. C. B. Kirkpatrick. *diags Wireless Eng* 20:372-82 Ag '43
- Training girls to make tubes; General electric co. L. A. Yoder. *il Electronics* 16:106-7+ Ag '43
- Tubes for high-power short-wave broadcast stations; their characteristics and use. G. Chevigny. *il diags Inst Radio Eng Proc* 31: 331-40 JI '43
- Westinghouse lamp division finds air conditioning indispensable in manufacture of electronic tubes. *il Heat & Ven* 40:56 Ap '43

Measurement uses

- B-H curve tracer for lamination samples; magnetic material used in transformers and chokes. R. Adler. *il diags Electronics* 16: 128-31+ N '43
- Concentricity; testing concentricity of enamel film on round wire; special tester utilizing electronic circuits. E. F. Hansen. *il diags Gen Elec R* 45:615-16 N '42; *Same. Electrician* 130:105-6 Ja 29 '43; *Abstract. Electronics* 16:170+ Ap '43
- Detecting small mechanical movements; vacuum tube circuit for detecting mechanical movements as small as a millionth of an inch, by converting them into capacitance changes. J. C. Frommer. *diags Electronics* 16:104-5 JI '43
- Dielecometer; instrument for dielectric constant determination. J. H. Jupe. *diag Elec R (Lond)* 133:271-3 Ag 27 '43
- Electronic apparatus for vibration testing. R. O. Fehr and C. Shabtach. *il diags Electronics* 16:94-6 Je '43
- Electronic interval-measurer. *il diags Electronics* 16:152 Ag '43
- Electronic liquid level indicator. S. C. Coroniti. *bibliog diags R Sci Instr* 13:484-8 N '42
- Electronic measurements; résumé of circuits and devices. C. E. Jackson. *il diags Radio N* 30:26-9+ g '43
- Electronics applied to heat transfer tests; circuits employ Wheatstone bridge and photoelectric relay; units applicable to other measurement and control problems. R. V. Brown. *il diags Electronics* 16:113-15 JI '43
- Flight recorder to ease test pilot's job; electronic instrument records temperature and pressure changes. *il Aviation* 41:149 N '42
- Gisholt balancing machine checks rotating parts in production. *il diags Electronics* 16: 310+ Mr '43
- Instrument for the determination of contact making and breaking time. W. Richter and W. H. Elliot. *il diags Elec Eng* 62:Trans 14-16 Ja '43
- Insulation-resistance meter; electronic instrument. R. N. Bushman. *il diags Gen Elec R* 46:403-5 JI '43
- Measurement, basis of all science. G. Thompson. *il Electronics* 16:140-3 Mr '43
- Measurement of vibration with electronic instruments. *il Power Pl Eng* 46:82-4 D '42
- New method of frequency measurement. H. L. Clark and J. E. Hancock. *il diags Instruments* 15:60-2 F '43; *Abstract. Electronics* 16:148+ My '43
- Opportunities for electronics in industrial temperature instrumentation. M. F. Béhar. *Electronics* 15:72-4+ D '42

- Power output meters. G. Dexter. *il diags Radio N* 30:38-9+ JI '43
- Precision stroboscopic frequency meter. E. L. Kent. *il diags Electronics* 16:120-1 S '43
- Radio to measure moisture content of soil; crystal-controlled oscillator unit. S. R. Winters. *il diags Radio N* 30:23+ S '43
- Recording audio analyzer. *il diags Electronics* 16:100-3+ JI '43
- Recording unit for strain and timing functions; dynamic performance of heavy machines recorded by combination of electronic and photographic equipment. J. H. Meier. *il diags Electronics* 16:79-83+ Ap '43
- Simple test set for mercury vapor rectifiers. M. J. Weiner. *diags Electronics* 16:112 Ap '43
- Simplified scaling circuit. D. DeVault. *diag R Sci Instr* 14:23 Ja '43

See also

Voltmeters, Vacuum tube

Noise

- Chart for radio noise. J. M. Sowerby. *Wireless Eng* 20:327-30 JI '43
- Fluctuations in space-charge-limited currents. D. A. Bell. *bibliog Inst E E J* 89 pt3:207-12 D '42
- Shot-effect in space-charge-limited diodes. D. M. Surdin. *Wireless Eng* 20:127-30 Mr '43
- Some aspects of radio reception at ultra-high frequency; admittances and fluctuation noise of tubes and circuits. L. Malter. *bibliog diags Inst Radio Eng Proc* 31:491-500 S '43

Patents

- Saga of the vacuum tube; Dr Lee de Forest at height of his career; many of his patents discussed. G. F. J. Tyne. *bibliog il diags Radio N* 30:26-8+ S; 26-7+ O '43
- Saga of the vacuum tube; era of controversy over patent rights. G. F. J. Tyne. *bibliog il diags Radio N* 30:26-7+ Ag '43
- Saga of the vacuum tube; European patents. G. F. J. Tyne. *bibliog il diags Radio N* 30:26-8+ N '43

Scientific applications

- Applications of electronics to physiology. W. E. Gilson. *bibliog diags Electronics* 16:86-9+ Ja '43
- Electrical amplifying stethoscope and phonoelectrocardiograph. G. E. Donovan. *bibliog il diags Inst E E J* 90 pt 3:38-49 Je '43; *Abstracts. Electrician* 129:638 D 11 '42; *Elec R (Lond)* 131:720-1 D 4 '42; *Discussion. Inst E E J* 90 pt 3:49-52, 149-50 Je, S '43
- Electroencephalograph design. P. Traugott. *il diags Electronics* 16:132+ Ag '43
- Electronic aids in chemistry. C. E. Jackson. *diags Radio N* 30:24-5+ N '43
- Encephalophone converts brain potentials into sounds. *diag Electronics* 16:144+ My '43
- Film-recording seismograph. H. Benioff and others. *il diags Electronics* 16:89-92 My '43
- Medical science joins hands with electronics. W. E. Gilson. *bibliog il Electronics* 16:144-5+ Mr '43
- Scientific exploration for oil; electronics plays an important part. D. H. Gardner. *il Electronics* 16:136-7+ Mr '43
- Scientific farming; advent of radionic devices has made possible increases in quantity and quality of food production. S. R. Winters. *il Radio N* 30:30-1+ Ag '43
- Surgical applications for electronic metal locator. *diag Electronics* 16:114 My '43

Terminology

- Electron tube terminology. W. C. White. *il Electronics* 15:42-5+ D '42

Testing

- Deionization considerations in a harmonic generator employing a gas-tube switch. W. G. Shepherd. *diags Inst Radio Eng Proc* 31:66-74 F '43
- Graphical determination of power amplifier performance. R. I. Sarbacher. *Electronics* 15:52-6+ D '42
- Thyratron tube tester. V. P. McKinney. *diag Electronics* 16:128+ JI '43
- Thyratron tube tester. W. D. Stewart. *il diags Radio N* 29:20-1 Mr '43

VACUUM tubes—Testing—*Continued*

Tracing valve characteristics, using the cathode-ray oscillograph. G. Bocking, bibliog diags Wireless Eng 19:556-63 D '42; Discussion. G. N. Patchett, diag 20:488 O '43

Transportation

Packaging radio tubes; abstract. K. P. Morehead. Mod Packaging 16:71-2 My '43
Wartime packaging of glass electronic tubes; Tung-Sol lamp works. K. P. Morehead. diags Glass Ind 24:260+ Je '43

Velocity modulation tubes

Generation of short waves. A. Arsenjewa-Heil and O. Heil. Electronics 16:164+ JI '43
Sensitivity of velocity-modulated valves used for reception; abstract. J. Müller. Wireless Eng 16:34-5 Ja '43
Tubes employing velocity modulation. R. I. Sarbacher and W. A. Edson. bibliog diags Inst Radio Eng Proc 31:439-52 Ag '43
Ultrasort electromagnetic waves; generation. L. E. Mourontseff. diags Elec Eng 62:214-15 My '43
Velocity-modulation currents. D. L. Webster. J Ap Phys 13:786-7 D '42

VALENCE

Configuration of tervalent nitrogen; bicyclic hydrazine derivative. E. L. Buhle, A. M. Moore and F. Y. Wiselogle. bibliog Am Chem Soc J 65:29-32 Ja '43

Coordination and valence. A. A. Blanchard. bibliog J Chem Educ 20:454-60 S '43

Difficulties in the valence bond theory. K. Fajans. J Chem Phys 10:760-1 D '42

Mills-Nixon effect and its bearing on the benzene valency problem; abstract. H. D. Springall. Chem & Ind 62:149 Ap 17 '43

Serological properties of simple substances; the composition of precipitates of antibodies and polyhaptenic simple substances; the valence of antibodies. L. Pauling, D. Pressman and C. Ikeda. diags Am Chem Soc J 64:3010-14 D '42

See also

Chemical bonds Dielectric constants
Coordination (chemistry) Double bonds

VALLEYS*See also*

Canyons

Rivers

VALLEYS, Submarine. *See* Canyons, Submarine

VALUABLE papers insurance. *See* Insurance, Valuable papers

VALUATION

Investors and break-up values. Economist 144:531-2 Ap 24 '43; Excerpts. Trusts & Estates 77:73-4 JI '43

See also

Depreciation	Inventories
Electric utilities—	Public utilities—
Valuation	Valuation
Insurance, Fire—	Real property—
Valuation of property	Valuation

VALUE*See also*

Money

Prices

VALVES

Air-gas mixing valves; Enness-Cura and Swain designs for producer gas plants. il diags Automobile Eng 33:377-9 S '43

Air-inlet valve design for pipelines. A. W. Sweeten. diags charts Eng N 131:37-40 JI 1 '43

Alter valve sequence for steam economy. R. F. Davis. diags Elec W 119:980 Mr 20 '43

Automatic trip air valves. diags Engineer 174:428 N 20 '42; Engineering 154:486-7 D 18 '42

Guide improves pump-valve operation. R. Boettinger. diags Power 86:900-1 D '42

Handbook of piping maintenance; valves. P. W. Swain and E. W. Feller. flow chart il diags Power 86:861-75 D '42

High-pressure stop and blow-down valves. diags Engineering 154:506 D 25 '42

How to break piping bottlenecks; steel and its substitutes. G. W. Laucks. il diags Pet Refiner 22:71-6 F '43; Same cond. Heating-Piping 15:224-8 My '43; Same. Chem & Eng N 21:756-9 My 25 '43

How to keep your valves working. Textile World 93:97 Mr '43

Modified stock valve. E. Warrick and P. Fugassi. diag Ind & Eng Chem Anal ed 15:13 Ja 15 '43

Molded valves for oil well pumps. il diags Mod Plastics 20:83, 130 Ap '43

No blowouts for barrage balloons; plastic gas release valves. il diags Mod Plastics 21:69-71 O '43

Pressure-temperature ratings raised for steel flanges, fittings, valves. Nat Pet N 35 pt 2: R122-5 Mr 3 '43

Reducing valve wear by hard-facing. R. L. Lerch. il Power Pl Eng 47:71-3 Mr '43

Review of power and mechanical equipment; piping, fittings and valves. il diags Power 86:956-8 Mid-D '42

Safety and relief valves for refrigerators. E. K. Falls. diags Refrig Eng 45:257-62; Discussion. 262-3 Ap '43

Selection factors and operating characteristics of control valves. R. E. Olson. il diags Chem & Met Eng 50:132-6 My '43

Skimp pipe size for the duration; tables of economical pipe and gate valve size. W. Maddock. Power 87:470-1 JI '43

Solvent-treating method releases tight pipeline valve stems. G. J. Hill. diags Pet Eng 14:145-6 N '42

Tag means a valve outcast; maintenance and repair program. Whiting refinery of the Standard oil co. of Indiana. il Nat Pet N 35 pt 2:R514-16 N 3 '43

Tire valve in vacuum application. C. H. Bachman and I. B. Bensin. diags R Sci Instr 13:534-5 D '42

See also

Locomotives—Valves	Safety valves
and valve gear	Steam engines—
	Valves

Electric control

Adds auxiliary control to motor-operated valves. diag Power 87:693 O '43

Automatic process control and cycle timers. B. M. Mills. il diags Pet Refiner 22:119-22 O '43

Automatic valve control governs flow in war plant piping systems. E. M. Mills. il Heating-Piping 15:304 Je '43; Same. Gen Elec R 46:463 Ag '43; Same. Chem Ind 53:222+ Ag '43; Same cond. Sci Am 169:59-60 Ag '43

Manufacture

Construction of globe valves by arc welding. H. C. Elliott. il diags Welding J 21:755-6 N '42; Same. Steel 112:103-4 Mr 8 '43; Same. Power Pl Eng 47:93-4 Ap '43

Repair

Boring, seating tool for valve repairs. G. M. Heath. il Nat Pet N 35 pt 2:R352 Ag 4 '43

Reconditioning inside stem gate valves in the distribution system. H. W. Nicolson. diag Am Gas J 157:24 D '42

Renewing small gate valves. il Pet Refiner 22:105-6 S '43

Valve repair conserves essential metals. il Pet Eng 14:31-2 D '42

Valve repair speeds war effort; oil company operates a salvage department. J. C. Albright. il diag Power 87:253-4 Ap '43

Valves repaired by electric welding. E. E. Kerns. il diags Metals & Alloys 18:48-9 JI '43; Same abr. Nat Pet N 35 pt 2:R350+ Ag 4 '43; Abstract. Power 87:181+ Mr '43

VALVES, Electronic. *See* Vacuum tubes

VALVES, Hydraulic

Development of tapping and valve-inserting machines. J. A. Jensen. il Am Water Works Assn J 35:775-80 Je '43

Double check valve performance; with text of Connecticut regulations regarding cross connections. F. O. A. Almqvist. diags Water Works & Sewerage 90:329-33 S '43

Flush valve made of plastics to save copper. il diag Product Eng 14:270-1 My '43

Novel pump-priming valve. P. Keast. diags Eng & Min J 144:77 Mr '43

VALVES, Hydraulic—Continued

- Preparing the valve system for emergency service. A. J. Kuecker. *Am Water Works Assn J* 34:1767-70 D '42
- Types of valves used in hydraulic transmissions. diags *Product Eng* 14:510-11 Ag '43
- Valves can make or break smooth heater operation. W. P. Spining. diags *Power* 87:510-11+ Ag '43
- Valves won't regulate. diags *Power* 87:768-9+ N '43

Testing

- Loss of head in flow of fluids through various types of one-and-one-half-inch valves. W. M. Lansford. bibliog *il diag Ill U Eng Exp Sta Bul* 340:1-33 '43 (pa 40c)

VALVES, Radio. See Vacuum tubes**VANADIUM**

- Application of palladium- and platinum-polyvinyl alcohol-vanadium catalysts. L. D. Rampino and F. F. Nord. bibliog *Am Chem Soc J* 65:429-31 Mr '43
- Discoveries of vanadium in Idaho, Wyoming to make U. S. largely self-sufficient. *il Steel* 112:43+ F 22 '43
- Ferro-alloy metals, 1942. F. Betz, jr. *Eng & Min J* 144:73 F '43
- New York iron ores may provide additional vanadium supplies. *Steel* 112:89 Ap 12 '43; Same. *Blast F & Steel Pl* 31:539 My '43
- Occurrence and production of vanadium. G. O. Argall, jr. *il flow sheets fold map Colorado School of Mines (Golden) Quarterly* 38:1-56 bibliog(p52-6) O '43 (pa \$1)
- Rare element prospecting in pegmatites. T. T. Quirke and H. E. Kremers. bibliog *Econ Geol* 38:173-87 My '43
- Smelting of vanadium-bearing titaniferous sinter in an experimental blast furnace. C. E. Wood, T. L. Joseph and S. S. Cole. bibliog *il diag U S Bur Mines Rep of Invest* 3679:1-24 '43; Excerpts. *Iron Age* 151:59, 131 Je 24 '43
- Vanadium deposits of Colorado and Utah: a preliminary report. R. P. Fischer. pls fold maps U S Geol S Bur 936-P:363-94; pa 30c Supt. of doc. '42
- Vanadium in ancient ocean beds in Idaho and Wyoming. *Science* 97:sup10 Mr 5 '43
- Vanadium output indicates vigorous progress. B. Burwell. *il Min Cong J* 29:27-9 F '43

Analysis

- Spectrographic analysis of rat tissues for ingested vanadium. E. P. Daniel, E. M. Hewston and M. W. Kies. *Ind & Eng Chem Anal ed* 14:921-2 N 15 '42
- Vanadium in steel; improved yield of ferro-cyanide. B. S. Evans. *Chem Age (Lond)* 47:504 D 5 '42

VANADIUM ores

- Geology and mineralization of the San Antonio mine, Santa Eulalia district, Chihuahua, Mexico. W. P. Hewitt. bibliog maps *Geol Soc Bul* 54:173-204, pl 1-2 F '43

VANADIUM oxides

- Catalytic oxidations of naphthalene series. R. N. Shreve and R. W. Welborn. bibliog *il diags Ind & Eng Chem* 35:279-88 Mr '43

VANADIUM steel

- Tempering of two high-carbon, high-vanadium high speed steels. B. S. Lement and M. Cohen. bibliog *Am Soc for Metals Trans* 30:1021-42; Discussion. 1042-8 D '42

VANADIUM sulfates

- Study of heterogeneous equilibria in aqueous solutions of the sulfates of tetravalent vanadium at 30°. C. S. Rohrer, O. E. Lanford and S. J. Kieh. bibliog *Am Chem Soc J* 64:2810-16 D '42

**VAN BOMEL, Leroy Allison, 1885-
Sketch. por Mag of Wall St 71:345+ Ja 9 '43****VANCOUVER, British Columbia****Rapid transit**

- How mass transportation is conducted. *il map Mass Transportation* 39:136-43 Ap '43

Water supply

- Vancouver agrees to chlorinate district's water supply. *Water & Sewage* 80:24+ D '42

VAN DER POL'S equation

- New analytical method for solving van der Pol's and certain related types of nonlinear differential equations, homogeneous and non-homogeneous. J. Shohat. *J Ap Phys* 14:40-8 Ja '43

VAN DER WAALS forces

- Interaction of the van der Waals type between three atoms. B. M. Axilrod and E. Teller. *J Chem Phys* 11:299-300 Je '43

VANILLA

- Vanilla-bean crop in Society islands. *For Comm W* 9:20-1 N 14 '42
- Vanilla investigations. *Chem Ind* 52:343 Mr '43

VANILLA bean association

- Elects Buckley head. *Oil Paint & Drug Rep* 143:7 F 8 '43

VANILLIN**Analysis**

- Detecting adulteration of ethylvanillin with vanillin. H. Nechamkin. *Ind & Eng Chem Anal ed* 15:268-9 Ap 15 '43

VANPORT CITY, Oregon

- Vanport City, *il plans map Arch Forum* 79:53-62 Ag '43
- War workers' city. *il Business Week* p 18 Je 12 '43

VAN SWERINGEN system**See also**

- Chesapeake and Ohio railway

VAPOR pressure

- Activity coefficient of potassium iodide in sulfur dioxide from vapor-pressure measurements. W. G. Eversole and A. L. Hanson. bibliog *diag J Phys Chem* 47:1-9 Ja '43
- Computing results of analysis. G. M. Stearns. *Oil & Gas J* 41:49-50 F 4 '43
- Differences in the vapor pressures and entropies of the liquid nitrogens. I. Kirshenbaum. bibliog *J Chem Phys* 10:717-22 D '42
- Differences in the vapor pressures, heats of vaporization, and triple points of nitrogen (14) and nitrogen (15) and of ammonia and trideuterioammonia. I. Kirshenbaum and H. C. Urey. bibliog *diag J Chem Phys* 10:706-17 D '42
- Dissociation pressures of compounds of ammonia and trideuterioammonia with some metallic salts. A. E. Hart and J. R. Partington. diags *Chem Soc J* p104-13 Mr '43
- Heat capacity and entropy, heats of transition, fusion and vaporization and the vapor pressures of cyclohexane; the vibrational frequencies of alicyclic ring systems. J. G. Aston, G. J. Szasz and H. L. Fink. bibliog *Am Chem Soc J* 65:1135-9 Je '43
- Heat capacity and entropy, heats of transition, fusion and vaporization and the vapor pressures of cyclopentane; evidence for a non-planar structure. J. G. Aston, H. L. Fink and S. C. Schumann. *Am Chem Soc J* 65:341-6 Mr '43
- Heats of vaporization from reference substance plot. D. H. Gordon. *Ind & Eng Chem* 35:851-3 Ag '43
- Iodine monochloride; the system potassium chloride-iodine monochloride. J. Cornog and E. E. Bauer. bibliog *Am Chem Soc J* 64:2620-4 N '42
- Isoopiestic measurements in dilute solutions; the system potassium chloride-sodium chloride at 25° at concentrations from 0.03 to 0.10 molal. A. R. Gordon. bibliog *diag Am Chem Soc J* 65:221-4 F '43
- Physical properties of terpenes; the system α - and β -pinene. R. E. Fugitt, W. D. Stalcup and J. E. Hawkins. bibliog *Am Chem Soc J* 64:2978-81 D '42
- Polymorphism of phosphoric oxide. W. L. Hill, G. T. Faust and S. B. Hendricks. bibliog *il Am Chem Soc J* 65:794-802 My '43
- Statistical theory of liquids. G. Jaffé. *Phys R* 63:313-14 Ap 1 '43
- Surface tension and vapor pressure. L. Z. Pollara. *J Phys Chem* 46:1163-7 D '42
- Vapor-pressure chart for volatile hydrocarbons. R. V. Smith. bibliog(48 titles) U S Bur Mines Information Circ 7215:1-10 '42; Same. *Pet Eng* 14:145 Ja; 88, 90, 92 F '43

VAPOR pressure—Continued

- Vapor pressure nomograph for isomeric octanols. D. S. Davis. *Ind & Eng Chem* 35:232 F '43
- Vapor pressure of aqueous solutions of sodium chloride at 20, 25 and 30° for concentrations from 2 molar to saturation. P. Olynik and A. R. Gordon. *biolog Am Chem Soc J* 65:224-6 F '43
- Vapor pressure of metallic indium. J. S. Anderson. *Chem Soc J* 1941:3 Ap '43
- Vapor pressure of phenothiazine. O. A. Nelson and L. E. Smith. *diag Am Chem Soc J* 64:3035-7 D '42
- Vapor pressure of phenylhydrazine as a function of the temperature. G. E. Williams and E. C. Gilbert. *biolog Am Chem Soc J* 64:2776-7 D '42
- Vapor pressure slide rule. F. T. Miles. *biolog Ind & Eng Chem* 35:1052-61 O '43

VAPOR recovery. See Petroleum refining—Vapor recovery; Petroleum storage—Vapor recovery

VAPORIZATION

- Effect of high electrostatic fields upon the vaporization and resistance of molybdenum filaments. W. P. Reid. *biolog Phys R* 63:359-66 My 1 '43
- Effect of high electrostatic fields upon the vaporization of molybdenum. G. B. Estabrook. *biolog diags Phys R* 63:352-8 My 1 '43
- Equilibrium flash vaporization of three petroleum fractions. W. C. Edmister, J. C. Reidel and W. J. Merwin. *biolog flow diag il Am Inst Chem Eng Trans* 39:457-85; Discussion. 455-9 Ag '43
- Phase equilibria at high temperatures. R. R. White and G. G. Brown. *flow diag biol diags Ind & Eng Chem* 34:1162-74 O '42; Same. *Nat Pet N* 34 pt 2:R374, R376-8, R380-1, R432-5 O 28, N 25 '42; Same. *Pet Eng (Ref annual)* 14:282-3, 286-92, 295-6 Jl 1 '43
- Prediction of the shrinkage of crude oils. D. L. Katz. *biolog Oil & Gas J* 41:179-80, 182, 184+ N 12 '42

See also

Evaporation**VAPORIZATION, Heat of**

- Differences in the vapor pressures, heats of vaporization, and triple points of nitrogen (14) and nitrogen (15) and of ammonia and trideuteroammonia. I. Kirshenbaum and H. C. Urey. *biolog diag J Chem Phys* 10:706-17 D '42
- Heats of vaporization from reference substance plot. D. H. Gordon. *Ind & Eng Chem* 35:851-3 Ag '43
- Heats of vaporization of some hexanes. J. F. Lemons and W. A. Felsing. *biolog diag Am Chem Soc J* 65:46-8 Ja '43
- Vapor pressure slide rule. F. T. Miles. *biolog Ind & Eng Chem* 35:1052-61 O '43

VAPORS

- Composition of vapors from boiling binary solutions. D. F. Othmer. *biolog il diags Ind & Eng Chem* 35:614-20 My '43
- Condensation of vapors; film coefficients for alcohols, esters, and ketones. D. F. Othmer and S. Berman. *biolog il diags Ind & Eng Chem* 35:1068-77 O '43
- Diffusion of vapors into an air stream flowing viscously and vertically. L. M. K. Boelter. *biolog diag Am Inst Chem Eng Trans* 39:557-64 Ag '43
- Effect of vapor load on plate efficiency in fractionating columns. G. G. Brown and F. J. Lockhart. *biolog Am Inst Chem Eng Trans* 39:63-73 F '43; Same. *Nat Pet N* 35 pt 2:R140-3 Mr 3 '43; Discussion. *Am Inst Chem Eng Trans* 39:73-5 F '43
- Modification of the silica gel method for the determination of atmospheric organic solvent vapors. L. V. Cralley, T. E. Shea and L. J. Cralley. *biolog J Ind Hygiene* 25:172-4 Ap '43
- Simple device for preparing vapor-air mixtures. J. B. Gislard. *diag Ind & Eng Chem Anal ed* 15:582 S 15 '43

See also

- | | |
|------------------------|----------------|
| Adsorption | Fumigants |
| Condensers | Gases |
| Dew points | Solvents |
| Electric precipitation | Steam |
| Equation of state | Vapor pressure |
| Evaporation | Water vapor |
| Fumes | |

VARIATION (biology)

See also

Mutation (biology)**VARIATION (statistics)**

- Analysis of variance for percentages based on unequal numbers. W. G. Cochran. *biolog Am Stat Assn J* 38:287-301 S '43
- Correction formulas for moments of a grouped-distribution of discrete variates. J. A. Pierce. *Am Stat Assn J* 38:57-62 Mr '43
- Factors in the variability of response in enumerative studies. G. L. Palmer. *Am Stat Assn J* 38:143-52 Je '43
- Measures of dispersion for a finite distribution. A. O. Hirschman. *Am Stat Assn J* 38:346-52 S '43
- Mechanical determination of correlation coefficients and standard deviations. J. R. Platt. *diag Am Stat Assn J* 38:311-18 S '43
- Overestimation of mean squares by the method of expected numbers; analysis of sex differences in growth rate of swine. R. E. Comstock. *Am Stat Assn J* 38:335-40 S '43

See also

- | | |
|--------------------------|---------------------------------|
| Correlation (statistics) | Seasonal variation (statistics) |
|--------------------------|---------------------------------|

VARNISH, Insulating**Testina**

- Intrinsic electric strength and conductivity of varnish films and their variation with temperature. A. M. Thomas and M. V. Griffith. *biolog diags Inst E E J* 89 pt 1:487-98 N '42

VARNISH and varnishing

- Adaptability of resins in present-day formulation problems, including federal specifications. E. Edelstein. *Paint Oil & Chem R* 105:12-14+ Ap 8 '43
- Conservation of titanium dioxide by the selection of inerts and vehicles. *Paint Oil & Chem R* 104:5 N 19 '42
- Factors governing the selection of baking finishes. *il Product Eng* 14:689-92 N '43
- Precision coating of shell cases; spraying equipment applies thin coating of phenolic varnish. R. H. Snutner. *il Am Mach* 87:80-1 Ap 1 '43
- Rosin's roles in varnishmaking. *Oil Paint & Drug Rep* 143:7+ Ap 26; 7+ My 3; 7+ My 10; 7+ My 17; 42+ My 31 '43
- Some newer oils for varnishes, by Chicago club. *Oil Paint & Drug Rep* 144:58 N 1 '43
- Steel cartridge case varnishes. W. H. Stephens. *Metals & Alloys* 18:82 Jl '43

See also

- | | |
|-----------------------------|----------|
| Drying oils | Rosin |
| Films | Shellac |
| Lacquer and lacquer-
ing | Tung oil |

Analysis

- Detection of metallic driers in varnishes and oils by spot test analysis. J. V. Atkinson. *biolog Paint Oil & Chem R* 106:10, 22-3 Jl 1 '43

VARVES

- Dating the ice age varves. H. P. Gillette. *Roads & Sts* 85:33-4+ D '42; Same. *Water Works & Sewerage* 89:539-41 D '42

VASSAR college

- Successful investing formulas: Vassar College's plan for common stock control. L. Tomlinson. *Barron's* 23:18 Ag 16 '43

VAT dyes. See Dyes and dyeing—Vat dyes

VATS

- Wooden vats and tanks; reliance on home-grown timber. *Chem Age (Lond)* 48:663 Je 26 '43

VECTOR analysis

- A.c. vector mathematics. R. Feinberg. *biolog Electrician* 129:474-5 O 30 '42
- A.c. vector representation; fundamental principles involving the use of the operator j . A. G. Powell. *Elec R (Lond)* 132:577-8 Ap 30 '43
- Energy flow in electric systems; the V_4 energy-flow postulate. J. Seplan. *diags Elec Eng* 61:Trans 835-41 D '42
- Graphic solutions of Ohm's law for a.c. networks. R. C. Paine. *diags Electronics* 16:232+ Je '43

VECTOR analysis—Continued

Graphical-vector solution and study of the coil-loaded line. A. K. Robinson. *Inst E* E J 90 pt 3:115-28 S '43

How acceleration analysis can be improved. A. S. Hall and E. S. Ault. *diags Machine Design* 15:100-2+ F; 90-2+ Mr '43

Reflections from unmatched feeder terminals; simple graphical method. G. W. O. Howe. *Wireless Eng* 20:216-18 My '43

Symmetrical component analysis; vectorial treatment for standard short-circuit solutions. R. N. Buttery. *diags Elec R (Lond)* 132:113-15 Ja 22 '43

Symmetrical components. G. W. Stubbings. *Electrician* 130:34-5 Ja 8 '43

Synchronous machines; their vector relationships. G. F. Freeman. *diags Elec R (Lond)* 133:13-15 J1 2 '43

Three-phase vector conventions. B. C. Lee. *diags Electrician* 131:7-8 J1 2 '43

Vector solution of the three-degree case of wing bending, wing torsion, aileron flutter. L. Arnold. *diags J Aeronautical Sci* 9:497-500 N '42

VEGETABLE gardening

Campaign sells 20,000 victory gardens to citizens of Alhambra. *Sales Management* 52:68 Mr 15 '43

Dig for victory; gas utility plays leading role in garden program; Fall River gas works co. H. V. Potter. *il Am Gas Assn Mo* 25: 198-200 My '43

Fertilizer for your victory garden. Consumers' Research Bul 11:18 Ap '43

Gasoline and gardens, too! oil companies promote victory gardens. *il Nat Pet N* 35: 29-30 Je 2 '43

Grow your own; victory gardens. *il Business Week* p38+ Mr 20 '43

Small packages of lime for victory gardens. *il Rock Prod* 46:42-3 Ap '43

Victory garden publicity boosting seed, equipment sales to new high. *Ptr Ink* 202:38-9 Mr 12 '43

Victory vitamins; 1943 home-garden program. *Business Week* p17-18 Ja 9 '43

VEGETABLE juices

Acidulated juices; abstract. H. G. Beattie and C. S. Pederson. *Food Ind* 15:128 My '43

Fruit and vegetable juice preparation and preservation. D. K. Tressler. C. S. Pederson and H. G. Beattie. *bibliog il diag Ind & Eng Chem* 35:96-100 Ja '43

VEGETABLES

Ascorbic acid values of fruits and vegetables for dietary surveys. M. Olliver. *Chem & Ind* 62:146-8 Ap 17 '43

Crop hopes fade. *Business Week* p19 My 22 '43

Florists convert; turn to vegetables and seedlings. *Business Week* p29-30 Ag 14 '43

Mexico's exports, 1940-1942. *For Comm W* 10: 21 F 13 '43

Production and marketing of fruits and vegetables. H. R. Wellman. *Ann Am Acad* 225: 201-5 Ja '43

Thiosulphate solutions used to prevent discolorization of the cut surfaces of fruit and vegetables; patent. *Food Ind* 15:108 Ja '43

Vitamin-C content of raw and cooked vegetables. L. H. Lampitt. L. C. Baker and T. L. Parkinson. *bibliog Soc Chem Ind J* 62:61-7 My '43

Vitamin content of vegetables; with tabulation. M. Pyke. *Soc Chem Ind J* 61:149-51 O '42

Vitamin-P activity of some British fruits and vegetables. A. L. Bacharach and M. E. Coates. *Soc Chem Ind J* 62:85-7 Je '43

See also

Canned food
Drying (fruits and vegetables)
Greenhouses

also names of vegetables, e.g. Beets and beet sugar; Cabbages; Corn; Cucumbers; Lettuce; Potatoes; Tomatoes

Analysis

Determination of pure carotene in plant tissue; a rapid chromatographic method. M. E. Wall and E. G. Kelley. *bibliog Ind & Eng Chem Anal* ed 15:18-20 Ja 15 '43

Quantitative field test for estimation of peroxidase. W. B. Davis. *Ind & Eng Chem Anal* ed 14:952-3 D 15 '42

Rapid determination of starch; index to maturity in starchy vegetables. J. P. Nielsen. *bibliog Ind & Eng Chem Anal* ed 15: 176-9 Mr 15 '43

Cleaning

Wetting agents speed washing. R. W. Mitchell. *il Food Ind* 15:81 J1 '43

Moisture content

Equilibrium moisture content of dehydrated vegetables. B. Makower and G. L. Dehority. *bibliog il Ind & Eng Chem* 35:193-7 F '43

Preservation

Research shows how vegetables can be preserved by brining; tests made with corn, peas, green string beans, green lima beans and okra. F. W. Fabian. *Food Ind* 15:65-6+ My '43

See also

Canning and pre-
serving Vegetables, Dried
 Vegetables, Frozen

Prices

Statistical bronco; indecision over price ceilings for 13 fresh vegetables. *Business Week* p84 O 16 '43

Vegetable stew; new ceilings steam up local growers. *Business Week* p79-80 Mr 20 '43

Storage

How to store vegetables at home. *Am Eld* 65:53 Ap '43

Transportation

Cross-haul critics long on theory. J. B. Eastman. *Ry Age* 114:215 Ja 16 '43

No cars for food? California farmers on spot. *Business Week* p88 Mr 13 '43

VEGETABLES, Dried

Dehydrated vegetables high in vitamins, call for proper packaging; optimum vitamin contents of eight vegetables. *Sci Am* 167: 284 D '42

Dehydrated vegetables under the microscope; abstract. R. M. Reeve. *Food Ind* 15:129-30 S '43

Dehydrating fruits, vegetables in community canning plants. J. A. Schaller. *il diags Food Ind* 15:56-8 Ap '43

Dehydration of fruits and vegetables. W. V. Cruess. *bibliog il Ind & Eng Chem* 35:53-61 Ja '43

Desecrated vegetables. R. W. Arango-Jones. *Food Ind* 15:109-10 Mr '43

Facts of vegetable dehydration revealed by microscope. R. M. Reeve. *il diag Food Ind* 14:51-4+ D '42

How to compress foods; United States Department of agriculture guide to fruit and vegetable dehydrators. *il Food Ind* 15:64-5+ Ag '43

Hungary's dried-vegetable industry. *For Comm W* 10:24 Ja 9 '43

Multistage dehydration produces better food at lower cost. L. V. Burton. *diags Food Ind* 15:51-3 My '43

New vegetable-dehydration process, India. *For Comm W* 11:27 Ap 24 '43

Packaging requirements for dehydrated vegetables. A. L. Pitman, W. Rabak and H. Yee. *bibliog il Food Ind* 15:49-52+ Ja '43

Packaging requirements for dehydrated vegetables. J. R. Sanborn and G. J. Hucker. *Paper Tr J* 116:27-33 Ap 29 '43; Excerpts. *Paper Ind* 25:548-50 Ag '43

Packing and storing dehydrated vegetables. *il Mod Packaging* 16:52-7 Ja '43

Raw material problem in vegetable dehydration. H. E. Wheeler. *il Food Ind* 15:82+ O '43

Small dehydrators for vegetables. S. G. Davis, W. E. Esselen, Jr. and F. P. Griffiths. *bibliog il diags Food Ind* 15:54-7 My; 53-5+ Je '43

This is what it costs to dehydrate vegetables. W. D. Ramage and C. L. Rasmussen. *diags plans Food Ind* 15:64-71+ J1; 66-7+ Ag; 75-7+ S '43

VEGETABLES, Dried—Continued

Tunnel dehydrators and their use in vegetable dehydration. W. B. Van Arsdell, bibliog diags Food Ind 14:43-6+ O; 47-50+ N; 47-50+ D '42

24 ways to improve vegetable dehydration. L. V. Burton, il Food Ind 14:40-2+ D '42
Value of brine peeling tested; method tried at USDA laboratory. diags Food Ind 15:51-2 Je '43

Yam dehydrated; sweet potato as stock feed crop. Business Week p65-6 Ja 30 '43

See also

Carrots, Dried Potatoes, Dried
Drying (fruits and Spinach, Dried
vegetables)

Moisture content

Determining moisture in dehydrated vegetables. F. A. Lee and J. C. Moyer, il Food Ind 15:64-5+ N '43

Equilibrium moisture content of dehydrated vegetables. B. Makower and G. L. Dehority, bibliog il Ind & Eng Chem 35:193-7 F '43
Rapid moisture determination in dehydrated foods. F. B. Johnston, diag Can Chem & Process Ind 27:100+ F '43

Testing

Peroxidase test for blanching requires careful application. H. J. Phaff and M. A. Joslyn, bibliog il Food Ind 15:50-2 Mr '43

VEGETABLES, Frozen

Dual-process quick freezing plant built in South; Dixie Frosted Foods uses immersion unit and air-blast freezer. G. H. Watson, il diags Food Ind 15:66-8+ O '43

Frozen vegetables, 1933-1941. Survey of Cur Business 1942 Sup p117 [supplemented in monthly numbers]

Spending your ration points on frozen vegetables. il Consumers' Research Bul 11:5-8 My '43

Varieties of vegetables rated with respect to their adaptability to satisfactory freezing-storage; table. B. W. Gardner, jr. Consumers' Research Bul 12:15 Jl '43

See also

Broccoli, Frozen Peas, Frozen
Lima beans, Frozen Spinach, Frozen

VEHICLES

See also

Automobiles Street cars
Cars Trailers
Motor buses Trolley buses
Motor trucks Trucks
Motor vehicles

VEHICULAR tunnels. See Tunnels and tunneling—Vehicular tunnels

VEINS (ore). See Ore deposits

VELOCITY

Impact of a wave-packet and a reflecting particle. H. E. Ives, Opt Soc Am J 33:163-6 Mr '43

Velocity and acceleration analysis of universal joints. Machine Design 14:93-4 N '42

Velocity and acceleration of Geneva mechanisms. J. H. Billings, diags Machine Design 15:157-8 Ag '43

See also

Acceleration Falling bodies
Chemical reaction— Sound—Velocity
Velocity

VELOGRAPH. See Oscillographs

VELON. See Saran

VELOUR

Cotton and rayon velour (jacquard and plain). il U S Nat Bur Stand Commercial Standard CS103-42:1-11; pa 5c Supt. of doc. '42; Excerpt. Textile Col 65:31-2 Ja '43

VELOX boiler. See Boilers—Velox boiler

VENDING machines

Too busy to talk; coin machine makers omit convention. Business Week p72+ Mr 13 '43

VENEERS and veneering

Flexible pressure in veneer and plywood work. T. D. Perry, bibliog diags Mech Eng 65:417-24 Je '43; Same. Mod Plastics 20:73-7+ Ag '43; Same. Engineer 176:132-3, 155-6 Ag 13-20 '43; Same cond. Aero Digest 43:237, 239, 241-2+ Jl '43; Discussion. Mech Eng 65:677-8 S '43

Official plywood and veneer specifications. R. C. Perkins, il Aero Digest 42:273-4+ My '43

See also

Plywood

VENEREAL diseases

British government ads fight venereal disease. R. Walker, il Adv & Sell 36:28+ Ag '43

Quarantine; city ordinance upheld. Pub Health Rep 58:587-8 Ap 2 '43

Recommendations to state and local health departments for a venereal disease control program in industry. O. L. Anderson and others. Ind Med 11:507-10 N '42

33B; compulsory treatment in certain cases of venereal disease. Economist 143:759 D 19 '42

Venereal disease. Economist 143:570, 601 N 7-14 '42

Venereal disease control program for Indiana industries. G. W. Bowman and L. W. Spolyar. Ind Med 12:346-7 My '43

Venereal disease in industry. C. F. Yeager. Ind Med 12:554-7 Ag '43

See also

Gonorrhea

VENEZUELA

See also

Gold mines and mining—Venezuela Petroleum industry and trade—Venezuela
Income tax—Venezuela Petroleum laws and regulations—Venezuela
Insurance law—Venezuela

Economic conditions

News by countries. For Comm W 10:19+ Ja 23; 25-7 My 29 '43

Industries and resources

Wanted: ships and machinery. J. F. Chapman, il map Business Week p 19-20, 22+ Ja 2 '43

VENTILATION

Economic factors in converting recirculated air for ventilation; activated carbon gas adsorption supplemented by filtration and bacteria control. H. E. Ziel and H. Sleik, bibliog diags plan Heating-Piping 15:367-71; Discussion. 371-2 Jl '43

Forced ventilation improves hay-making methods. Heat & Ven 40:95 Je '43

How to meet war time restrictions in heating and air conditioning design; ventilation. T. W. Reynolds, Heat & Ven 40:60H-60J F '43

Panel discussion on Will current ventilating system operation undermine public health and efficiency? Heating-Piping 15:381-5 Jl '43

Ventilated design for windowless walls; Douglas Aircraft plant. il diag Eng N 130: 500-1 Ap 8 '43

Ventilation and hygiene in houses. Gas J (Lond) 240:135-6 O 28 '42

Ventilation for ships under construction; exhaust of fumes, compartment ventilation, and ventilating closed spaces during painting. H. E. Packard, il diag Heating-Piping 14:711-14 D '42

Ventilation (natural and artificial) in relation to the black-out. E. W. Murray. Inst Chem Eng Trans 19:25-9; Discussion. 29-32 '41

What the ventilating engineer should know about carbon tetrachloride. H. P. Quadland, il Heat & Ven 40:38-9 Mr '43

See also

Air conditioning Fans, Mechanical
Air diffusers Heating
Air filters Humidity
Air flow Mechanical equipment of buildings
Air pipes Mine ventilation
Air pollution Ozone
Chimneys Subways—Ventilation
Cooling Tanks—Ventilation
Dust removal Tunnel ventilation
Electric fans, Ventilating Ventilators
Exhaust systems
also subdivision Heating and ventilation under various subjects, e.g.
Air raid shelters Factories
Chemical plants Foundries

VENTILATION—See also—*Continued*

Munition factories Sewage disposal
Office buildings, In- plants
dustrial Ships

Bibliography

Reprints of ASHVE papers; list. Heating-Piping 15:58-63 Ja '43

Tables, calculations, etc.

Development of formulae for calculating ventilation for the Chicago subways. E. Brock. diags W Soc E J 48:76-91 Je '43
Velocity equivalents of gage readings; reference data. Heat & Ven 40:98a-98b Je '43

See also

Air pipes—Tables, calculations, etc.

VENTILATION research

Air flow through side outlets on horizontal ducts. D. W. Nelson and G. E. Smedberg. il diags Sheet Metal Worker 34:34, 36+ Mr '43
Committee on research, ASHVE, annual report, 1942. il Heating-Piping 15:95-101 F '43
Final values of the interaction constant for moist air. J. A. Goff, J. R. Andersen and S. Gratch. Heating-Piping 15:319-24 Je '43

VENTILATORS

Huge press draws cowl ventilators for Liberty fleet. A. R. Boone. il Steel 112:104, 106+ Mr 15 '43
Symington-Gould corp. installs simple but effective system in tank castings foundry. A. S. Crocker. il plans Heat & Ven 40:84-7 Je '43
Unit heaters and ventilating equipment. il Factory Management 101:156, 158 S '43
Ventilation for steel mill buildings. G. E. Wallin. il diags Steel 112:102+ My 10; 120-2+ My 17; 91-2, 94 My 24 '43

See also

Electric fans, Ventilating

VENTURI flume**See also**

Parshall flume

VENTURI meters

Effect of installation on the coefficients of Venturi meters. W. S. Pardoe. charts A S M E Trans 65:337-47; Discussion. 347-9 My '43

VERATRINE

Veratrine alkaloids; surface film studies. A. Rothen and L. C. Craig. bibliog il Am Chem Soc J 65:1102-6 Je '43

Veratrine alkaloids; the correlation of the veratrine alkaloids with the solanum alkaloids. L. C. Craig and W. A. Jacobs. bibliog Science 97:122 Ja 29 '43

VERATROLE

Studies in the veratrole and methylenedioxybenzene series. R. T. Arnold and F. Bordwell. bibliog Am Chem Soc J 64:2983-6 D '42

VERDET constant

Magneto-optic rotation; acetic and chloroacetic acids in polar and non-polar solvents. C. E. Waring, S. Steingiser and H. H. Hyman. Am Chem Soc J 65:1066-8 Je '43

Magneto-optic rotation; selenium oxychloride in aqueous solutions. C. E. Waring, S. Steingiser and H. H. Hyman. Am Chem Soc J 65:1068-70 Je '43

VERITY, George Matthew, 1865-1942

Sketch. por Steel 111:66 N 16 '42; Blast F & Steel Pl 30:1380 D '42

VERMICULITE

Some Transvaal minerals. Chem Age (Lond) 43:401-2 Ap 10 '43

Vermiculite found in Union of South Africa. For Comm W 10:25 Ja 16 '43

VERTEBRATE paleontology, Society of. See Society of vertebrate paleontology**VERTEBRATES**

Darwin medal award to Professor D. M. S. Watson. H. Dale. Science 97:31 Ja 8 '43

VERTEBRATES, Fossil

Abstracts of the Society of vertebrate paleontology, December meeting at Ottawa (canceled). Geol Soc Bul 53:1841-3 pt 2 D '42

Bibliography

Bibliography of fossil vertebrates, 1934-1938. C. L. Camp, D. N. Taylor and S. P. Welles. Geol Soc Special Pa no 42:1-663 '42

VESUVIUS, Mount

Mt Vesuvius. Science 98:sup10 O 8 '43

VETERANS' administration. See United States —Veterans' administration**VETERANS' pensions. See Pensions, Military****VETERINARIANS**

Income in selected professions. E. F. Denison. Survey of Cur Business 23:25-8 Jl '43

VETERINARY medicine

Veterinary medicinals false label drive set. Oil Paint & Drug Rep 144:3+ O 18 '43

See also

Veterinarians

VIADUCTS. See Bridges**VIBRATION**

Analysis of longitudinal motions of trains by the electrical analog. L. A. Pipes. bibliog diags J Ap Phys 13:780-6 D '42

Damping of large amplitude vibrations of a fluid in a pipe. R. C. Binder. Acoustical Soc Am J 15:41-3 Jl '43

Determination of the effect of various types of weld metals on the internal damping characteristics of steel specimens. O. H. Henry, R. R. Feitl and J. A. Falcon. Welding J 22:sup266-9 Je '43

Dispersion of elastic waves in solid circular cylinders. G. E. Hudson. bibliog Phys R 63:46-51 Ja 1 '43

Forced vibrations of non-linear springs. C. R. Wylie, Jr. bibliog Franklin Inst J 236: 273-84 S '43

Frictional phenomena; technical applications of external friction of solids. A. Gemant. diags J Ap Phys 14:517-19 O '43

Frictional phenomena; technical applications of the internal friction of solids. A. Gemant. bibliog diags J Ap Phys 14:258-70 Je '43

General method of approximation to the influence function of an elastic system. E. Saibel. bibliog Franklin Inst J 234:535-47 D '42

Observations on the vibrations of piano strings. O. H. Schuck and R. W. Young. bibliog il diags Acoustical Soc Am J 15:1-11 Jl '43

Refresh on vibratory motion for instrument men. S. R. Williams. il Instruments 16: 597-601 O '43

Some mechanical properties of plastics and metals under sustained vibrations; mild steel, duralumin, laminated plastics, polymethyl methacrylate. B. J. Lazan. bibliog il diags A S M E Trans 65:87-98 F '43; Same cond. Mod Plastics 20:83-8+ N '42; Discussion. A S M E Trans 65:98-104 F '43

Vibration, humidity, temperature and pressure test generators and chambers. W. W. MacDonald. il Electronics 16:82-4 F '43

See also

Airplane engines—

Vibration

Airplanes—Vibration

Balancing of machinery

Crystals, Piezo-

electric

Diesel engines—

Vibration

Earth movements

Earthquakes

Light

Machinery—Vibration

Oscillations

Sound waves

Steam turbines—

Vibration

Vibration absorbers

Vibrators

Measurement

Applications and limitations of mechanical-electrical analogies, new and old. J. Miles. bibliog diags Acoustical Soc Am J 14:183-92 Ja '43

Axial vibration of Diesel engine crankshafts. R. Poole. diags Inst Mech Eng J & Proc 146:Proc 167-82, pl 1-2 F '42; Discussion. 148:Proc 197-218 Mr '43

Design office problem in the estimation of the torsional resonance characteristics of small marine Diesel-propulsion units. R. W. S. Mitchell. diags Inst Mech Eng J & Proc 149:Proc 133-42 S '43

Dynamic stiffness and effective inertia methods in modern torsional vibration theory. R. G. Manley. bibliog diags Roy Aeronautical Soc J 47:5-21 Ja '43

VIBRATION—Measurement—Continued

- Electrical circuit analysis of torsional oscillations. L. A. Pipes. bibliog diags J Ap Phys 14:352-62 JI '43
- Electrical transducer circuit for use with capacity pick-up devices. E. V. Potter. diags U S Bur Mines Rep of Invest 3685:1-7 '43; Same. R Sci Instr 14:130-5 My '43; Abstract. Electronics 16:150+ JI '43
- Electronic apparatus for vibration testing. R. O. Fehr and C. Shabtach. il diags Electronics 16:94-6 Je '43
- Experimental investigations in aircraft dynamics. W. B. Bergen. bibliog il diags J Aeronautical Sci 10:233-49 O '43
- Martin engineers develop new apparatus for vibration studies. il diags Automotive & Aviation Ind 88:44-5+ F 15 '43
- Measurement of torsional vibrations. R. Stansfield. diags Inst Mech Eng J & Proc 148:Proc 175-93 Mr '43; Same abr. Engineering 154:178-80, 198-200 Ag 28-S 4 '42; Same abr. Engineer 174:77-9, 101-2 JI 24-31 '42; Discussion. Engineering 154:74 JI 24 '42; Inst Mech Eng J & Proc 150:Proc 17-29 N '43
- Measurement of vibration with electronic instruments. il Power PI Eng 46:82-4 D '42
- Modified treatment of the iterative method. E. Saibel. Franklin Inst J 235:163-6 F '43
- Recording audio analyzer. il diags Electronics 16:100-3+ JI '43
- Vibration characteristics of free-free circularly curved bars. W. A. Pliskin, J. E. Edwards and F. P. Bundy. il J Ap Phys 14:410-17 Ag '43
- Vibration; stress determination by electrical means. Automobile Eng 33:184 My '43
- Vibration testing; vibration meters and motors. R. O. Fehr. il Gen Elec R 45:695-9 D '42; Same cond. Electrician 131:203-5 Ag 27 '43

VIBRATION absorbers

- Counterpoise cancels vibration in sander. il diags Product Eng 14:340-1 Je '43
- Damps transverse shaft vibration; patent assigned to General Motors corp. diags Machine Design 14:153+ D '42
- Design and operation of nose wheel shimmy dampers. G. M. Magrum. il diags Aero Digest 41:142+ D '42
- Eliminating vibration in reciprocating machinery. J. E. Hubel. il Power PI Eng 47:89-90 S '43
- How to prevent oscillations in large inertia fan drives; Pennsylvania Turnpike tunnels. E. O. Marty, S. F. Henderson and F. Richardz. il diags Heating-Piping 15:80-1 F '43
- If your machines have the shakes. il diags Textile World 93:82-3 JI '43

- Optimum performance of pendulum-type torsional vibration absorber. A. H. Shieh. diags J Aeronautical Sci 9:337-40 JI '42; Discussion. R. G. Manley. 10:38-9 Ja '43

- Rubber mountings; minimising vibration transfer from engine to chassis. P. C. Roche. il diags Automobile Eng 32:499-502 N '42

See also
Resilites

VIBRATORS

- Automatic frequency-controlled oscillator and amplifier for driving mechanical vibrators. E. V. Potter. diags U S Bur Mines Rep of Invest 3702:1-10 '43; Same. R Sci Instr 14:207-15 JI '43; Abstract. Electronics 16:194+ N '43

- Avery pneumatic vibrator. il diags Mech Handling 30:412-14 S '43

VICIANOSE

- Preparation of β -primeverose heptaacetate and β -vicianose heptaacetate. C. M. McCloskey and G. H. Coleman. bibliog Am Chem Soc J 65:1778-80 S '43

- VICKERY, Howard Leroy, 1892-
Sketch. por(pl73) Marine Eng 48:178 Ag '43

VICKSBURG bridge company

- Warning issued to security holders. Comm & Fin Chr 158:400 JI 26 '43

VICTOR chemical works

- Annual report. Comm & Fin Chr 157:1191 Mr 29 '43

- VICTORY tax. See Income tax—United States
—Victory tax

VICUNA

- Peru now domesticates the vicuña, source of fine wool. For Comm W 13:30 O 23 '43

VINEGAR

See also
Acetic acid

- VINSOL resin. See Gums and resins

- VINSON, Frederick Moore, 1890-
What Vinson brings to his job. por Business Week p5 Je 5 '43

- VINSON bill. See Contracts, Government—Renegotiation

VINYL acetate

- Behavior of plasticizers in vinyl chloride-acetate resins. M. C. Reed. bibliog diags Ind & Eng Chem 35:896-904 Ag '43

- Electrical properties of polyvinyl acetate. T. W. Dakin. Electrochem Soc Trans 33 (preprint 27):309-17 Ap '43

- End group structure of polyvinyl alcohol. C. S. Marvel and G. E. Inskeep. bibliog Am Chem Soc J 65:1710-14 S '43

- Theory of molecular size distribution and gel formation in branched-chain polymers. W. H. Stockmayer. bibliog J Chem Phys 11:45-55 F '43

VINYL alcohol

- Application of palladium- and platinum-polyvinyl alcohol-vanadium catalysts. L. D. Rampino and F. F. Nord. bibliog Am Chem Soc J 65:429-31 Mr '43

- End group structure of polyvinyl alcohol. C. S. Marvel and G. E. Inskeep. bibliog Am Chem Soc J 65:1710-14 S '43

- Molding polyvinyl alcohol. C. B. Hess and J. W. Criss. Rubber Age 53:431-3 Ag '43

- Polyvinyl alcohol; a medium for mounting and clearing biological specimens. W. G. Downs. Science 97:539-40 Je 11 '43

- Vinyl alcohols; 1,4-dehydrogenation. R. C. Fuson and R. E. Foster. bibliog Am Chem Soc J 65:913-15 My '43

- Vinyl alcohols; isomeric bromo-1,2-dimesityl-1-propen-1-ols. R. C. Fuson, R. V. Lindsey, Jr. and F. B. Welidon. bibliog Am Chem Soc J 64:2888-91 D '42

- Vinyl alcohols; oxidative cleavage. R. C. Fuson and others. bibliog Am Chem Soc J 64:2886-8 D '42

VINYL chloride

- Behavior of plasticizers in vinyl chloride-acetate resins. M. C. Reed. bibliog diags Ind & Eng Chem 35:896-904 Ag '43

- Coloring materials for copolymer vinyl chloride-acetate compounds. F. G. Clark. bibliog il Ind & Eng Chem 35:368-74 Mr '43

- Creep and creep recovery in plasticized polyvinyl chloride. H. Leaderman. bibliog Ind & Eng Chem 35:374-8 Mr '43

- Industrial applications of chemicals and related materials. Oil Paint & Drug Rep 143:67 Je 7 '43

- Osmotic pressures of polyvinyl chloride solutions by a dynamic method. R. M. Fuoss and D. J. Mead. bibliog diags J Phys Chem 47:59-70 Ja '43

- Polyvinyl chloride cables. Electrician 131:384 O 15 '43

- Polyvinyl chloride (P.V.C.) cables. Engineer 176:309 O 15 '43

See also
Koroseal

VINYL compounds

- Abrasion resistance of flexible vinyl plastics. F. W. Duggan. il diags Product Eng 14:44-9 Ja '43

- Advances in plastics during 1942; vinyl resins. H. Bunn. il Mod Plastics 20:96-7 Ja '43

- Application of vinyl resins and plastics to textiles. C. W. Patton. il Am Dyestuff Rep 32:124-7+ Mr 15 '43

- Basicity studies of tertiary vinyl amines. R. Adams and J. E. Mahan. bibliog Am Chem Soc J 64:2588-93 N '42

- Compars; new family of rubber-like materials. E. S. Peierls. il Rubber Age 54:41-2 O '43

- German patents relating to vinyl polymers (cont). M. Hoseh. bibliog India Rubber W 107:379-80, 473-4, 571-2+ Ja-Mr '43

- Heat of polymerization of some vinyl compounds. G. Goldfinger, D. Josefowitz and H. Mark. Am Chem Soc J 65:1432-3 JI '43

- Ketones as solvents for vinyl resins. R. W. Quarles. Ind & Eng Chem 35:1033-43 O '43

VINYL compounds—Continued

- Marvinol; new rubber-like plastic. *il* Manuf Rec 112:86-7+ O '43
- Molding vinyl copolymer dentures. A. W. Browne. *il* Mod Plastics 20:71-2 Ag '43
- New plasticizers for vinyl resins and cellulose esters. D. W. Elam, H. M. Preusser and R. L. Page. Mod Plastics 20:95-7 My '43
- Optically active acyl peroxides; preparation, decomposition, and use as catalysts for vinyl polymerization. C. S. Marvel, R. L. Frank and E. Prill. *bibliog* Am Chem Soc J 65:1647-52 Ag '43
- Plastics from acetylene. J. I. Jones. *bibliog* Chem & Ind 62:66-71 F '20 '43
- Solvent uses of nitroparaffins. R. L. Ericsson. *bibliog* *il* Ind & Eng Chem 35:1026-30 O '43
- Some remarks on the kinetics of vinyl derivative polymerization. J. Abere and others. *bibliog* J Chem Phys 11:379-86 Ag '43
- Stress-strain characteristics of vinyl elastomers. M. C. Reed. *il* Ind & Eng Chem 35: 429-31 Ap '43
- Supplementing surgery with vinyls. E. F. Lougee. *il* Mod Plastics 21:80-1+ N '43
- Tubes from coal; Marvinol, vinyl plastic processed in rubber mills. *Business Week* p66+ S 25 '43
- Vinyl acetals for rubberized fabric. E. R. Derby. *Textile Col* 64:533 N '42
- Vinyl compound combats corrosion; Tygon. *il* Mod Plastics 20:85-6+ Mr '43
- Vinyl resins in war and peace. R. B. Akin. *bibliog* (76 references) *il* Chem Ind 52:456-60, 599-603 Ap-May '43
- Vinylalkylmalonic esters and barbituric acids. D. Heyl and A. C. Cope. *bibliog* Am Chem Soc J 65:669-73 Ap '43

See also

Koroseal

VINYL cyanide. *See* Acrylonitrile

VINYL halides

Factors influencing the course and mechanisms of Grignard reactions; the effect of metallic halides on the reaction of Grignard reagents with vinyl halides and substituted vinyl halides. M. S. Kharasch and C. F. Fuchs. *Am Chem Soc J* 65:504-7 Ap '43

VINYLDIENE chloride. *See* Dichloroethylene

VINYLLITE

Housewife's helper; vinylite applicator. *il* Mod Plastics 20:67+ J '43

Plastic insulations for conductors. E. D. Youmans. *Elec W* 120:457-9 Ag 7 '43

Plotting a true course; Vinylite plastics for navigational instruments. *il* Am Gas J 159: 28 O '43

VINYON

Properties of synthetic fibers; charts. *Textile World* 93:115-17 S '43

VIRGINIA

See also

Forests and forestry—Virginia
Manganese mines and mining—Virginia

Mines and mineral resources—Virginia
Roads—Virginia

Industries and resources

Resources of Virginia; committee appointed to prepare inventory of Virginia resources. S. S. Negus. *Science* 98:102-3 JI 30 '43

VIRGINIA academy of science

Annual meeting, 21st, Richmond, May 12-13. *Science* 98:306 O 1 '43

Research endowment. *Science* 98:57 JI 16 '43

VIRGINIA fire and marine insurance company
Globe Indemnity acquires 95% of Virginia Fire and Marine shares; new directors. *Nat Underw* 47:6-7 JI 1 '43; *East Underw* 44: 14+ JI 2 '43

Proposal to purchase Virginia F. & M. made by Globe Indemnity. *East Underw* 44:16 Je 4 '43

VIRGINIA military institute

Founder's day services at V.M.I. honor memory of Col. Claudius Crozet. *Civil Eng* 13: 57-8 Ja '43

VIRGINIA public service company

Plan approved by SEC. *Comm & Fin Chr* 158:1864 N 8 '43

VIRIAL coefficients

Second virial coefficients of gaseous mixtures. A. E. Edwards and W. E. Roseveare. *bibliog* *diag* Am Chem Soc J 64:2816-19 D '42

VIRUSES

Biological products; establishments licensed for the propagation and sale of viruses, serums, toxins, and analogous products. *Pub Health Rep* 57:1775-81 N 20 '42

Giant molecules and disease virus particles. F. Thone. *Science* 98:sup10 S 10 '43

Herpes simplex virus recovered from the spinal fluid of a suspected case of lymphocytic choriomeningitis. C. Armstrong. *bibliog* *Pub Health Rep* 58:116-21 Ja 1 '43

Interference of inactive virus with the propagation of virus of influenza. W. Henle and G. Henle. *Science* 98:87-9 JI 23 '43

Intra-ocular virus infections. C. A. Evans, H. Y. Yanamura and R. G. Green. *bibliog* *Science* 98:45-6 JI 9 '43

Non-virulent frozen and dried antigens for complement-fixation tests with central nervous system virus infections. J. Casals. *Science* 97:337-8 Ap 9 '43

Virus is vulnerable to ultraviolet rays. H. C. Rentschler. *il* Nat Safety N 48:36+ JI '43; *Same abr.* *Sci Am* 168:270 Je '43

Virus recovered from patients with primary atypical pneumonia. F. L. Horsfall, Jr. and others. *bibliog* *Science* 97:289-91 Mr 26 '43

See also

Vaccines

VIRUSES, Plant

Names and classification of the curly-top virus. E. Carsner and C. W. Bennett. *Science* 98:385-6 O 29 '43

See also

Tobacco mosaic virus

VISCOMETERS. *See* Viscosimeters

VISCOSIMETERS

Breakdown of thixotropic structure as function of time. R. N. Weltmann. *bibliog* J Ap Phys 14:343-60 JI '43

Capillary viscometers. L. A. Steiner. *il* *diag* Chem Age (Lond) 48:448-50 Ap 24 '43

Mooney viscometer adopted for GR-S control. *India Rubber W* 109:40-+ O '43

Rolling ball viscometer. R. M. Hubbard and G. G. Brown. *bibliog* *il* Ind & Eng Chem Anal ed 15:212-18 Mr 15 '43

Technico universal torsion viscometer. *il* Chem Age (Lond) 48:455 Ap 24 '43

Viscosity characteristics of lubricating oils saturated with natural gases at high pressures. J. S. Swearingen and E. D. Redding. *bibliog* *il* *diag* Ind & Eng Chem 34: 1496-8 D '42

Viscosity of pitches. W. F. Fair, Jr. and E. W. Volkmann. *bibliog* *il* Ind & Eng Chem Anal ed 15:235-9 Ap 15 '43

Viscosity of starches; determination in a rotating cylinder viscometer. H. N. Barham, J. A. Wagoner and G. N. Reed. *diag* Ind & Eng Chem 34:1490-5 D '42

VISCOSITY

Anomalies of elasticity and flow and their interpretation. R. Simha. *bibliog* J Phys Chem 47:348-63 Ap '43

Anomalous flow in glasses. N. W. Taylor. *bibliog* J Phys Chem 47:235-53 Mr '43

Compounding neoprene latex. B. Dales, R. H. Walsh and H. E. Abernathy. *India Rubber W* 107:565-7 Mr '43

Correlating fluid viscosity. A. S. Smith and G. G. Brown. *bibliog* Ind & Eng Chem 35:705-11 Je '43

Cuprammonium viscosity as a control method review. T. W. Toovey. *Paper Ind* 24:1162-5 F '43

Effect of pH changes upon some of the properties of sodium thymonucleate solutions. C. F. Vilbrandt and H. G. Tennent. *Am Chem Soc J* 65:1806-9 O '43

Effect of opacifiers on fused viscosity of feldspathic glazes. J. R. Beam. *bibliog* *il* *diag* Am Cer Soc J 26:205-12 JI 1 '43

Experimental facts pertaining to the relationship between viscosity, molecular size, and molecular shape. M. A. Laufer. *il* Chem R 31:561-86 *bibliog* (81 references, p585-6) D '42

Flow and recovery properties of viscose rayon yarn. J. J. Press. *bibliog* (90 titles) J Ap Phys 14:224-33 My '43

VISCOSITY—Continued

- Fluidity of electrolytes. E. C. Bingham and R. T. Foley. bibliog J Phys Chem 47:511-27 O '43
- Fundamental problem of the theory of viscous fluids. H. Putman. J Ap Phys 14: 244-5 My '43
- Molecular weights and intrinsic viscosities of polyisobutylenes. P. J. Flory. bibliog Am Chem Soc J 65:372-82 Mr '43
- Molecular weights of high polymers. M. L. Huggins. bibliog diags Ind & Eng Chem 35:980-6 S '43
- Nomograph for apparent viscosity of sulfate stock. D. S. Davis. bibliog Ind & Eng Chem 35:1128 O '43
- Overall plate efficiency of commercial hydrocarbon fractionating columns as a function of viscosity. H. G. Drickamer and J. R. Bradford. bibliog Am Inst Chem Eng Trans 39:319-57 Je '43; Same. Pet Refiner 22:105-18 O '43; Same abr. Nat Pet N 35 pt 2:R378-82 Ag 4 '43; Discussion. Am Inst Chem Eng Trans 39:357-60 Je '43
- Properties of liquid sulfur. R. E. Powell and H. Eyring. bibliog Am Chem Soc J 65: 648-54 Ap '43
- Relation of specific gravity, viscosity to dipping consistency of enamel. M. Reiss. diags Cer Ind 41:34-6 S '43
- Solution viscosities of the amylose components of starch. J. F. Foster and R. M. Hixon. Am Chem Soc J 65:618-22 Ap '43
- Some physical properties of living matter. C. H. Norris. bibliog J Phys Chem 46:1111-17 D '42
- Specific heat and viscosity nomographs for calcium chloride brines. D. S. Davis. Ind & Eng Chem 34:1532 D '42
- Structural viscosity studies of coating clay compositions; instrument for measuring and distinguishing thixotropy, dilatancy, plasticity, and Newtonian flow. G. H. Sheets. bibliog il diags Paper Tr J 116:23-36 Ja 21 '43
- Viscosities of carbon monoxide, helium, neon, and argon between 80° and 300°K. coefficients of viscosity. H. L. Johnston and E. R. Grilly. bibliog J Phys Chem 46:948-63 N '42
- Viscosities of polyester solutions; application of the melt viscosity-molecular weight relationship to solutions. P. J. Flory. bibliog J Phys Chem 46:370-7 N '42
- Viscosities of the methane-propane system. L. B. Bicher, jr. and D. L. Katz. bibliog diags Ind & Eng Chem 35:754-61 J1 '43
- Viscosity and molecular weight; the nitrate of wood carbohydrate. S. Coppick. bibliog Paper Tr J 117:25-9 Ag 12 '43
- Viscosity and working characteristics of glasses; abstract. Boov and Turner. Glass Ind 24:261 Je '43
- Viscosity characteristics of lubricating oils saturated with natural gases at high pressures. J. S. Swearingen and E. D. Redding. bibliog il diags Ind & Eng Chem 34: 1496-8 D '42
- Viscosity function; non-ideal systems. E. P. Irany. bibliog Am Chem Soc J 65:1392-3 J1 '43
- Viscosity of borax and boron oxide during the softening process; abstract. B. V. Rabinovich. Chem & Met Eng 50:201 Ap '43
- Viscosity of dilute solutions of long-chain molecules; dependence on concentration. M. L. Huggins. bibliog Am Chem Soc J 64: 2716-18 N '42
- Viscosity of dilute solutions of long-chain molecules; dependence on the solvent. M. L. Huggins. bibliog J Ap Phys 14:246-8 My '43
- Viscosity of *n*-paraffin solutions; viscosity and structural relations of linear polymers. A. R. Kemp and H. Peters. bibliog Ind & Eng Chem 35:1108-12 O '43
- Viscosity of propane, butane, and isobutane. M. R. Lipkin, J. A. Davison and S. S. Kurtz, jr. bibliog diags Ind & Eng Chem 34:976-8 Ag '42; Same. Pet Eng (Ref annual) 14:279-80 J1 1 '43
- Viscosity of solutions in branched-chain paraffins. E. H. McArdle and A. E. Robertson. Ind & Eng Chem Anal ed 15:484-7 Ag 15 '43
- Viscosity of starches; determination in a rotating cylinder viscometer. H. N. Barham, J. A. Wagoner and G. N. Reed. diags Ind & Eng Chem 34:1490-5 D '42
- Viscosity of sulfur. R. F. Bacon and R. Fanelli. bibliog diags Am Chem Soc J 65: 639-48 Ap '43
- Visage viscosity comparator. il Diesel Power 21:430-2 My '43
- See also
Fluidity
Plasticity
Surface tension

Measurement

- Action of light on cellulose; viscosity-concentration relations of cellulose acetate solutions. R. E. Montonna and C. C. Windling. bibliog Ind & Eng Chem 35:214-16 F '43
- Analysis of the thixotropy of pigment-vehicle suspensions; basic principles of the hysteresis loop. H. Green and R. N. Weltmann. bibliog Ind & Eng Chem Anal ed 15:201-6 Mr 15 '43
- Chemical influences in drilling mud evaluated by viscosity measurements. A. W. McCray. il diags Pet Eng 14:66+ Ja '43
- Dynamic viscosity of nitrogen. W. L. Sibbitt, G. A. Hawkins and H. L. Solberg. bibliog diags A S M E Trans 65:401-4; Discussion. 404-5 J1 '43
- Fluidity of nylon solutions in *m*-cresol: measurement of chemical damage in nylon textiles. J. Boulton and D. L. C. Jackson. diags Soc Dyers & Col J 59:21-6 F '43
- Osmotic pressure and viscosity measurements with cellulose acetate fractions. A. Bartovics and H. Mark. bibliog Am Chem Soc J 65:1901-5 O '43
- Penetrometer method for determining the flow properties of high viscosity fluids. W. W. Pendleton. bibliog diags J Ap Phys 14:170-80 Ap '43; Correction. 14:551 O '43
- Pressure drop data as applied to pulp suspensions. J. Cooper, jr. bibliog Paper Tr J 115:32-6 N 19 '42
- Starch viscosity or strength. W. L. Morgan and N. L. Vaughn. bibliog il diags Ind & Eng Chem 35:233-3 F '43
- Thixotropic behavior of oils. R. N. Weltmann. bibliog Ind & Eng Chem Anal ed 15:424-9 J1 15 '43
- Viscometric estimation of particle dimensions; micellar changes involved in the heat-bodying of tung oil. J. P. Hollihan and D. R. Briggs. bibliog J Phys Chem 47:30-9 Ja '43
- Viscometric method for determining free menthol in peppermint oil. L. J. Swift and M. H. Thornton. bibliog Ind & Eng Chem Anal ed 15:422-3 J1 15 '43
- Viscosimetry and new graphical viscosity classifications. C. M. Larson and W. C. Schwaderer. Oil & Gas J 42:49-50+ J1 15 '43
- Viscosity measurement and viscosity index. J. C. Cragg and E. A. Evans. bibliog Inst Pet J 29:99-109; Discussion. 110-23 Ap '43
- Viscosity of coal-tar residues; comparison of viscosity measurements and A.S.T.M. penetration tests. W. F. Fair, jr. and E. W. Volkmann. bibliog Ind & Eng Chem Anal ed 15:240-2 Ap 15 '43
- Viscosity of pitches. W. F. Fair, jr. and E. W. Volkmann. bibliog il Ind & Eng Chem Anal ed 15:235-9 Ap 15 '43
- See also
Viscosimeters

VISES

- Herbert milling machine vice. il Engineering 154:487 D 18 '42
- Milling machine vise with swivel jaw. P. E. Veraa. diags Mach 49:187-8 D '42

VISIBILITY

- Analytical representation of standard response curves. P. Moon and D. E. Spencer. bibliog Opt Soc Am J 33:89-103 F '43
- Seeing through fog. J. G. Holmes. Light & Lighting 36:23-6, 28+ F '43
- Visibility calculator based on equivalent type sizes. il Sci Am 168:227 My '43
- See also
Lighting
Sight

VISION. See Sight

VISITING housekeepers. See Housekeeping service (social work)

VISTANEX

Vistanex, an osobutene polymer. C. C. Pryor. *il Pet Eng* 14:84+ Ja '43

VISUAL instruction

Limitations of visual education. H. J. Gilkey. *J Eng Educ* 33:426-31 Ja '43

New method of teaching; synchrophone as mechanical aid to technical instruction. *il Electrician* 131:19-20 Jl 2 '43

Slidefilm teaches first aid. L. S. Metcalfe. *il Textile World* 93:124, 126 F '43

Synchrophone method of audio-visual instruction. *il Engineering* 155:157-8 F 19 '43

See also

Slide films

VISUAL purple

Eye uses 500 films every minute. *Sci Am* 168: 218 My '43

VITAL stains. See Stains and staining, Vital

VITAL statistics

Provisional birth, death, and infant mortality rates for 1942. *Pub Health Rep* 58:647 Ap 16 '43

See also

Birth rate

Mortality—Statistics

Diseases—Statistics

Population—Statistics

Infant mortality—Statistics

Germany

Death-rate in Germany. *Science* 98:126 Ag 6 '43

Great Britain

Birth and death rates in Great Britain. *Science* 98:192 Ag 27 '43

Vital statistics of England and Wales. *Science* 97:370 Ap 23 '43

VITAMERS (term)

Heat-labile, avidin-uncombinable, species-specific and other vitamers of biotin. D. Burk and R. J. Wenzler. *bibliog Science* 97:57-60 Ja 15 '43

VITAMINS

American contribution to vitamin production and use. R. R. Williams. *il Chem & Eng N* 20:1644-6 D 25 '42

Can colds be prevented? no effective method; not vaccines, not vitamins. R. H. Feldt. *Sci Am* 169:20-1 Jl '43

Dehydrated foods; abstract. A. F. Morgan. *Science* 96:sup 12 D 18 '42

Dehydrated vegetables high in vitamins, call for proper packaging; optimum vitamin contents of eight vegetables. *Sci Am* 167: 284 D '42

Enrichment of white flour. *Science* 98:32-3 Jl 9 '43

Fortification of oil, fat, and flour; stability of added carotene and effect of antioxidants. P. W. Morgal, L. W. Byers and E. J. Miller. *bibliog Ind & Eng Chem* 35:794-7 Jl '43

How distribution of vitamins in wheat affects flour. J. S. Andrews. *bibliog Food Ind* 15:78-9 Ag '43

How industry is fighting hidden hunger. T. C. Desmond. *il Factory Management* 101: 96-7 Je '43

Industrial development of synthetic vitamins. R. T. Major. *Chem & Ind* 62:19-23 Ja 16 '43

Large-scale production of azotobacter. S. B. Lee and R. H. Burris. *bibliog il Ind & Eng Chem* 35:354-7 Mr '43

Lend-lease purchases of vitamins during first 18 months of operations. *For Comm W* 9:35 N 21 '42

Lesions in rats given sulfaguanidine in purified diets. L. L. Ashburn and others. *bibliog Pub Health Rep* 57:1883-91, pl 1-2 D 11 '42

Methods for vitamin control of processed foods; abstract. B. L. Oser. *Food Ind* 15: 109 Ja '43

Molecular distillation. K. C. D. Hickman. *il Chem & Eng N* 20:1561-2 D 10 '42

Nation's food; fish as food; vitamin and mineral content of fish. J. A. Lovern. *bibliog Chem & Ind* 62:328-30 Ag 28 '43

Need for water-insoluble forms of water-soluble vitamins. F. L. Gunderson. *Science* 98:277 S 24 '43

Nutritional hedge; no bar to extension of flour enrichment. *Business Week* p40 My 29 '43

Production of vitamins presents new operating problems; fine chemicals division of Gelatin Products. *il Chem & Eng N* 21: 549-51 Ap 25 '43

Soil and crop basis of better nutrition. L. A. Maynard. *bibliog il Chem & Eng N* 21:217-20 F 25 '43

Sweden manufactures new vitamin product; Deltafor Da. *For Comm W* 11:28-9 Ap 24 '43

Synthesis of vitamins by microorganisms in relation to vitamin content of fancy cheeses; abstract. P. R. Burkholder, J. Collier and D. Moyer. *Food Ind* 15:128 O '43

Synthetic vitamins and their relation to defense. M. J. Rahrig. *bibliog J Chem Educ* 20:401-5 Ag '43

Urges vitamin cut; slash in prices sought by OPA staff. *Business Week* p92 S 18 '43

Vitamin content of vegetables. M. Pyke. *Soc Chem Ind J* 61:149-51 O '42

Vitamin content of spray-dried whole egg. A. A. Klose, G. I. Jones and H. L. Fevold. *bibliog Ind & Eng Chem* 35:1203-5 N '43

Vitamin feeding pays. *Business Week* p42 F 20 '43

Vitamin pills for employees. A. J. Abrams. *Management R* 32:289-91 Ag '43

Vitamin production for military needs. *For Comm W* 9:30 D 12 '42

Vitamin programs to reduce lost time. *Am Business* 12:23-4 D '42

Vitamin sales boom as harried retailers battle for distribution rights. R. C. Fyne. *il Sales Management* 52:72+ Je 15 '43

Vitamins go to war. *il Business Week* p55-69 Jl 10 '43; Correction. p68 Ag 21 '43

Vitamins in dehydrated seeds and sprouts. P. R. Burkholder. *Science* 97:562-4 Je 18 '43

Vitamins in edible soybeans. P. R. Burkholder. *bibliog Science* 98:188-90 Ag 27 '43

Vitamins in industry, yes or no? H. S. Bean. *il Safety Eng* 86:41+ S; 98-9 O; 61-2+ N '43

Vitamins not drugs according to FDA. Oil Paint & Drug Rep 144:3 S 20 '43

Vitamins price rollback asked. Oil Paint & Drug Rep 144:5+ Ag 2 '43

What about vitamin tablets? T. S. Harding. *Sci Am* 168:214-15 My '43

Who should sell vitamins, druggist or grocer? A. Gray. *Adv & Sell* 36:28 O '43

See also

Deficiency diseases

Advertising

Borden wins national distribution for Hemo in less than six months; chocolate flavored malt drink. R. C. Fyne. *il Sales Management* 52:74+ O 1 '43

Vitamins, advertised direct to the public, hit \$150,000,000 per year. *Ptr Ink* 203:33-5 Ap 23 '43

Analysis

Chemical differentiation between niacinamide and niacin in pharmaceutical products. D. Melnick and B. L. Oser. *Ind & Eng Chem Anal ed* 15:355-6 My 15 '43

Direct quantitative determination of nicotinamide in vitamin mixtures. F. W. Lamb. *bibliog Ind & Eng Chem Anal ed* 15:352-5 My 15 '43

Yeast microbiological methods for determination of vitamins; pyridoxine. L. Atkin and others. *bibliog Ind & Eng Chem Anal ed* 15: 141-4 F 15 '43

Vitamin A

Anhydro (cyclized) vitamin A. E. M. Shantz, J. D. Cawley and N. D. Embree. *bibliog Am Chem Soc J* 65:901-6 My '43

Effect of carbon treatment on fish liver oils; vitamin A destruction and peroxide formation. L. O. Buxton. *bibliog Ind & Eng Chem* 34:1486-3 D '42

Effect of dehydration upon the vitamin A content of eggs. S. M. Hauge and F. P. Zscheile. *Science* 96:536 D 11 '42

Effectiveness of vitamin A in the treatment of defective color vision. J. H. Elder. *bibliog Science* 97:561-2 Je 18 '43

Fluorescence of vitamin A. H. Sobotka, S. Kann and E. Loewenstein. *Am Chem Soc J* 65:1959-61 O '43

VITAMINS—Vitamin A—Continued

- Kitol, a new provitamin A. N. D. Embree and E. M. Shantz. *bibliog Am Chem Soc J* 65:910-13 My '43
- Possible new member of the vitamins A₁ and A₂ group. N. D. Embree and E. M. Shantz. *bibliog Am Chem Soc J* 65:906-9 My '43
- Relationship of vitamin A to resistance to *nippostrongylus muris*. J. Y. C. Watt and others. *Science* 97:381-2 Ap 23 '43
- Rich byproducts from culled lettuce leaves. *Business Week* p56 Ap 24 '43
- Studies in the polyene series; the employment of 3-(2'-6'-trimethylcyclohexenyl)-1-methylcrotonaldehyde for the synthesis of vitamin A and analogues. I. M. Heilbron and others. *Chem Soc J* p727-33 D '42
- Types of nutritional deficiency. E. L. Batchelder. *Ann Am Acad* 225:37 Ja '43
- Vitamin A potency of yellow beef fat and beef liver. B. W. Gardner, jr. *Consumers' Research Bul* 12:16 Ag '43
- Vitamin A stocks report issued, as of July 31. *Oil Paint & Drug Rep* 144:52 S 20 '43
- Vitamin A value of fresh and dehydrated carrots; abstract. R. H. Wilson, J. O. Thomas and F. deEds. *Food Ind* 15:109-10 Ja '43

Analysis

- Methylene chloride; in the extraction and determination of vitamin A and oil in soupfin shark livers. P. C. Tompkins and R. A. Bolomey. *bibliog Ind & Eng Chem Anal* 15:437-9 JI 15 '43
- Spectrophotometric and biological assay of vitamin A in oils. N. H. Coy, H. L. Sassaman and A. Black. *bibliog Ind & Eng Chem Anal* 15:441-3 JI 15 '43

Vitamin B complex

- B-complex award of Mead Johnson and company. A. H. Smith. *Science* 93:237 S 10 '43
- Complex vitamin B complex. A. G. Hogan and O. Kamm. *Science* 97:353 Ap 16 '43
- Isolation of the antianemia factor (vitamin B₁₂) in crystalline form from liver. J. J. Piffner and others. *Science* 97:404-5 Ap 30 '43
- Microbiological and chemical assay of nicotinic acid in B complex products. R. D. Greene, A. Black and F. O. Howland. *bibliog Ind & Eng Chem Anal* 15:77-8 Ja 15 '43
- Newer members of the B complex; their nutritional significance. C. A. Elvehjem. *bibliog Chem & Eng N* 21:853-7 Je 10 '43
- Nutritive value of cotton, peanut, and soy seeds. T. F. Zucker and L. Zucker. *bibliog Ind & Eng Chem* 35:368-72 Ag '43
- Types of nutritional deficiency; newer members of vitamin B complex. C. A. Elvehjem. *Ann Am Acad* 225:35-6 Ja '43
- Vitamin cures predicted; abstract. C. A. Elvehjem. *Science* 97:sup 12 Ap 2 '43
- Vitamin-rich food made from byproduct yeast. L. V. Burton. *flow diag il Food Ind* 15:66-94 N '43

See also

Pantothenic acid

Vitamin B₁

- B₁ challenged. A. Keys. *Business Week* p69 O 30 '43
- Effect of sodium bicarbonate on the thiamine content of peas. H. J. Deuel, jr. and others. *Science* 97:50-1 Ja 8 '43
- Location of vitamin-B₁ in wheat. A. H. Ward. *bibliog diag Chem & Ind* 62:11-14 Ja 9 '43; Abstract. *Can Chem & Process Ind* 27:158 Mr '43
- Prevention of oral lesions in B₁ avitaminotic dogs by ascorbic acid. W. M. Govier and M. E. Greig. *bibliog Science* 95:216-17 S 3 '43
- Subclinical vitamin deficiency. M. H. Carleen and others. *bibliog Science* 97:47-9 Ja 8 '43
- Thiamin in products of commercial rice milling; abstract. M. C. Kik. *Food Ind* 15: 119 Ap '43
- Thiamine inactivation by the fresh-fish or Chastek-paralysis factor. R. R. Sealock, A. H. Livermore and C. A. Evans. *bibliog Am Chem Soc J* 65:935-40 My '43

Types of nutritional deficiency; vitamin B₁ (thiamine). R. M. Wilder. *Ann Am Acad* 225:29-31 Ja '43

Analysis

- Determination of thiamine; abstract. J. M. Chaves and I. V. Mattoso. *Chem & Met Eng* 50:198 S '43
- Determination of thiamine in bread by the thiochrome method; a comparison of phosphate-containing enzyme preparations. D. F. Clausen and R. E. Brown. *bibliog Ind & Eng Chem Anal* 15:100-1 F 15 '43
- Determination of vitamin B₁ (thiamine) in extracts and concentrates; comparison of biological and chemical methods. R. A. Brown and others. *bibliog Ind & Eng Chem Anal* 15:494-5 Ag 15 '43
- Recovery of solvents used in the chemical determination of thiamine. M. Pader. *Ind & Eng Chem Anal* 15:25 Ja 15 '43

Vitamin B₂

- Adsorption of riboflavin by lactose; influence of concentration. A. Leviton. *il Ind & Eng Chem* 35:589-93 My '43
- Efficacy of a commercial dried liver meal as a riboflavin-rich protein supplement in chick rearing rations. R. H. Common and W. Bolton. *Soc Chem Ind J* 61:153-5 O '42
- Natural occurrence of riboflavin deficiency in the eyes of dogs. T. D. Spies. *bibliog Science* 93:369-70 O 22 '43
- Riboflavin-vitamin B₁₂ in soil. C. C. Carpenter. *Science* 93:109-10 JI 30 '43
- Superficial vascularization of the cornea; the result of riboflavin therapy. H. R. Sandstead. *bibliog Pub Health Rep* 57:1821-5 N 27 '42
- Types of nutritional deficiency; riboflavin. E. L. Batchelder. *Ann Am Acad* 225:31-2 Ja '43

Analysis

- Fluorometric determination of riboflavin in pork products. W. J. Peterson, D. E. Brady and A. O. Shaw. *bibliog Ind & Eng Chem Anal* 15:634-6 O 15 '43
- Preparation of samples for microbiological determination of riboflavin. F. M. Strong and L. E. Carpenter. *bibliog Ind & Eng Chem Anal* 14:909-13 N 15 '42

Vitamin B₃

- Synthesis of vitamin B₃. J. H. Mowat, F. J. Pilgrim and G. H. Carlson. *Am Chem Soc J* 65:354-5 My '43
- Yeast microbiological methods for determination of vitamins; pyridoxine. L. Atkin and others. *bibliog Ind & Eng Chem Anal* 15:141-4 F 15 '43

Vitamin C

- Ascorbic acid content of sweet peppers. V. A. Beckley and V. E. Noley. *Soc Chem Ind J* 62:14-16 Ja '43
- Ascorbic acid values of fruits and vegetables for dietary surveys. M. Olliver. *Chem & Ind* 62:146-8 Ap 17 '43
- Autooxidation of ascorbic acid. R. W. Peterson and J. H. Walton. *bibliog Am Chem Soc J* 65:1212-17 Je '43
- Conserving vitamin C in canning chicken; abstract. E. J. Redman, L. Buckley and R. T. Legault. *Food Ind* 14:103 D '42
- Hay fever and vitamin C. H. N. Holmes and W. Alexander. *Science* 96:497-9 N 27 '42
- Kinetics of the reaction between ascorbic acid and oxygen in the presence of copper ion. E. Silverblatt, A. L. Robinson and C. G. King. *bibliog Am Chem Soc J* 65:137-41 F '43
- Oxidation processes; the autooxidation of ascorbic acid. A. Weissberger, J. E. LuValle and D. S. Thomas, jr. *bibliog Am Chem Soc J* 65:1934-9 O '43
- Prevention of oral lesions in B₁ avitaminotic dogs by ascorbic acid. W. M. Govier and M. E. Greig. *bibliog Science* 95:216-17 S 3 '43
- Raman spectra of L-ascorbic acid, tetrionic acid and related compounds. J. T. Edsall and E. L. Sagall. *bibliog Am Chem Soc J* 65:1312-16 JI '43
- Tropical guava shrubs; rich source of vitamin C. *Science* 93:sup10 O 22 '43
- Type of nutritional deficiency. A. Black. *Ann Am Acad* 225:38-9 Ja '43

VITAMINS—Vitamin C—Continued

- Vitamin-C content of raw and cooked vegetables. L. H. Lampitt, L. C. Baker and T. L. Parkinson. *bibliog Soc Chem Ind J* 62:61-7 My '43
- Vitamin C from evergreens. W. B. Dunham. *Science* 98:325 O 8 '43
- Vitamin C in evergreen-tree needles. M. Donnelly. *Science* 98:132 Ag 6 '43; Discussion. B. Schick; C. Macnamara. 98:241-2 S 10 '43
- War vitamin; ascorbic acid finds place in shock treatment. *Sci Am* 168:179-80 Ap '43
- Work of Soviet botanists; plants as sources of bandaging materials, vitamin C, medicines, food, etc. B. Shishkin. *Science* 97:354-5 Ap 16 '43

Analysis

- Ascorbic acid; rapid determination in fresh, frozen, or dehydrated fruits and vegetables. H. J. Loeffler and J. D. Ponting. *bibliog Ind & Eng Chem Anal ed* 14:846-9 N 15 '42
- Chromogenic reagent for vitamin C determinations. R. A. Koenig, T. L. Schiefelbusch and C. R. Johnson. *Ind & Eng Chem Anal ed* 15:181-2 Mr 15 '43
- Colorimetric determination of vitamin C. M. L. Isaacs. *Ind & Eng Chem Anal ed* 14:948-9 D 15 '42
- Extraction of ascorbic acid from plant materials; relative suitability of various acids. J. D. Ponting. *bibliog Ind & Eng Chem Anal ed* 15:389-91 Je 15 '43
- Photoelectric method for the determination of ascorbic acid. H. F. W. Kirkpatrick. *Soc Chem Ind J* 62:39-41 Mr '43
- Photometric determination of reduced and total ascorbic acid. M. Hochberg, D. Melnick and B. L. Oser. *bibliog diag Ind & Eng Chem Anal ed* 15:182-8 Mr 15 '43

Vitamin D

- Deny exclusive right to vitamin D to University of Wisconsin alumni research foundation. *Ptr Ink* 204:32 Jl 9 '43
- Types of nutritional deficiency. A. Black. *Ann Am Acad* 225:38-9 Ja '43
- Vitamin D patent suit filed against Douglas. *Oil Paint & Drug Rep* 144:3+ Ag 9 '43
- Vitamin D patents held invalid. L. E. Davies. *Science* 98:78-9 Jl 23 '43
- Vitamin D trust charged by Berge. *Oil Paint & Drug Rep* 144:3+ O 25 '43

Analysis

- Physical-chemical method for determination of vitamins D in fish liver oils. D. T. Ewing and others. *bibliog Ind & Eng Chem Anal ed* 15:301-5 My 15 '43

Vitamin E

- Biological potency of the natural tocopherols and certain derivatives. M. Joffe and P. L. Harris. *bibliog Am Chem Soc J* 65:925-7 My '43
- Chemistry of vitamin E; synthesis and properties of 2-isopropyl-4,6,7-trimethyl-5-hydroxycomaran. L. I. Smith and J. A. King. *bibliog Am Chem Soc J* 65:441-4 Mr '43
- Edema in vitamin E deficient chicks. H. R. Bird. *Science* 97:98 Ja 22 '43
- Natural α -, β - and γ -tocopherols and certain esters of physiological interest. J. G. Baxter and others. *bibliog pl Am Chem Soc J* 65:918-24 My '43
- Vitamin E; long chain aliphatic compounds with recurring isoprene units. L. I. Smith and G. F. Rouault. *bibliog Am Chem Soc J* 65:745-50 My '43
- Vitamin E; synthesis of 1-chloro-3,7,11,15-tetramethylhexadecanol-3, and its condensation with trimethylhydroquinone to form α -tocopherol. L. I. Smith and J. A. Sprung. *bibliog Am Chem Soc J* 65:1276-83 Jl '43

Vitamin G

See Vitamins—Vitamin B₃

Vitamin H

- Heat-labile, avidin-uncombable, species-specific and other vitamins of biotin. D. Burk and R. J. Wenzler. *bibliog Science* 97:57-60 Ja 15 '43
- Structure of biotin. V. du Vigneaud. *bibliog Science* 96:455-61 N 20 '42

Vitamin K

- Dihydroxy-stearic acid and vitamin K deficiency. E. E. Lockhart, H. Sherman and R. S. Harris. *Science* 96:542-3 D 11 '42

Vitamin M

- Vitamin M factor. S. Saslaw and others. *Science* 97:514-15 Je 4 '43

Vitamin P

- Vitamin-P activity of some British fruits and vegetables. A. L. Bacharach and M. E. Coates. *Soc Chem Ind J* 62:35-7 Je '43

VITREOSIL. See Silica, Fused

VITREOUS state. See Glassy state

VITRIFICATION

- Varying basic factors involved in bloating of clays. C. R. Austin, J. L. Nunes and J. D. Sullivan. *il Brick & Clay Rec* 101:24-6 D '42

VITRIFIED clay sewer pipes. See Sewer pipes, Vitrified clay

VOCATIONAL education

- Education in the pulp and paper industry; Joint vocational education committee of the pulp and paper industry of Canada and the United States. R. B. Wolf. *Paper Tr J* 117:38-40 O 28 '43

See also

- | | |
|------------------------|-------------------------------|
| Agricultural education | Industrial education |
| Apprentices | Mining schools and education |
| Chemical education | National youth administration |
| Employees, Training of | Technical education |
| Engineering education | Trade schools |

Cooperative plan

- Problems in conducting a cooperative training program. A. C. Mossin. *J Retailing* 19:56-63 Ap '43

Federal aid

- Federally-aided vocational schools; list. *Sheet Metal Worker* 34:24+ F '43
- Policies on war-training production work in vocational schools. *Monthly Labor R* 56:72-3 Ja '43
- Programs under George-Deen act help to break retail bottlenecks. *Sales Management* 52:62+ Jl 1 '43

Brazil

- Economic mobilisation and man-power problems in Brazil. *Int Labour R* 47:727-30 Je '43

Great Britain

- Post-war education and training scheme in Great Britain. *Monthly Labor R* 57:112-13 Jl '43

VOCATIONAL guidance

- Conclusions based on 5,000 job placements of Maine youth. C. C. Robinson. *Monthly Labor R* 56:1122-3 Je '43
- Placement of the cardiac in industry. R. B. Crain. *bibliog ind Med* 12:368-71 Je '43

See also

Occupations

VOCATIONAL rehabilitation. See Disabled—Rehabilitation

VOCATIONAL schools. See Trade schools

VOLATILITY

- Pure hydrocarbons from petroleum; vapor-liquid equilibria of close-boiling hydrocarbons. J. Griswold. *bibliog il Ind & Eng Chem* 35:247-51 F '43; Discussion. 35:826 Jl '43

VOLCANIC ash, tuff, etc.

- Volcanic cinders suitable for use in base course construction. E. A. Willis, H. Aaron and R. C. Lindberg. *il Pub Roads* 23:125-35 O '42

VOLCANOES

- Birth of new volcano, in Michoacán, Mexico. E. Ordoñez. *il Min & Met* 24:314-15 Jl '43
- Cerro Colorado, an isolated non-basaltic volcano in central New Mexico. H. E. Wright. *diags maps Am J Sci* 241:43-56, pl 1 Ja '43
- New Mexican volcano, Parícutin. *Science* 98:sup10+ Ag 13 '43
- New seismograph for the National astro-physical observatory of Mexico. *Science* 97:sup 10 Ap 2 '43

VOLCANOES—Continued

1942 eruption of Mauna Loa, Hawaii. G. A. Macdonald. maps Am J Sci 241:241-56, pl 1-2 Ap '43

Particulin, Mexico's new volcano. W. Davis. Science 97:sup8 My 21 '43
Some characteristics of the summit eruption of Mauna Loa, Hawaii, in 1940. P. E. Schulz. diag map Geol Soc Bul 54:739-46, pl 1 Je '43

See also

Rocks, Igneous
Vesuvius, Mount

VOLHARD analysis. See Volumetric analysis

VOLTA, Alessandro, 1745-1827

Alessandro Volta. K. R. Webb. bibliog Chem & Ind 62:269-71 Ji 17 '43

VOLTAGE

Effect of voltage variation; motors, incandescent lamps and fluorescent tubes; data sheets. Power 87:279 Ap '43
Inherent asymmetry; unbalanced voltage with three phases in same plane. Elec R (Lond) 133:102 Ji 23 '43

Transmission line voltage indication. L. F. Hunt. diag Elec W 119:2142 Je 26 '43

Voltage drop for conductors carrying currents of maximum code rating; table. E. S. Oberndorf. Elec W 120:328 Ji 24 '43

Voltage drop for 3-phase circuits; chart. Power 87:205 Mr '43

Voltage surges caused by contactor coils. J. R. Taylor and C. E. Randall. diags Inst E E J 90 pt 2, 90-95 Ap '43; Abstracts. Electrician 129:557-8 N 20 '42; Engineering 155:19 Ja 1 '43; Discussion. Inst E E J 90 pt 2:95-100 Ap '43; Electrician 129:558-9 N 20 '42

See also

High voltages
Voltmeters

VOLTAGE regulation

Capacitor of 5,000 kva. for substation regulation. W. W. Perry and D. M. Umphrey. il diags Elec W 119:1954-6 Je 12 '43

Combined voltage regulating and quenching circuit for the Geiger-Müller counter. W. F. Bale and J. F. Bonner, Jr. diags R Sci Instr 14:222-3 Ji '43

New control system for automatic parallel operation of load-ratio-control transformers. S. Minneel and S. B. Farnham. bibliog diags Elec Eng 62:Trans 488-93 Ji '43

Phase shifter regulates figure 8 interconnection; load division on three-utility system in Ohio. L. P. Ferri and H. R. Vaughan. il diags Elec W 120:75-7 Ji 10 '43

Power factor control helps shovel voltage. D. Stoetzel. Elec W 120:844-5 S 4 '43

Rated voltage by taps for auxiliaries. L. H. Henley. diag Elec W 120:1391-2 O 16 '43

Safe capacitor selection for power-factor improvement. J. E. Barkle. il diag Power 87:230-2+ Ap '43

Series capacitors; where place? how big? S. Lubin. Elec W 119:1324, 1484, 1644, 1808, 1996, 2162; 120:124+, 346+, 500 Ap 17-Ag 7 '43

Seven ways to keep voltage up. J. E. Hobson and O. W. Freeborn. il Factory Management 101:142, 144 Mr '43

Shunt capacitors; report of AIEE committee on power transmission and distribution. bibliog (79 titles) diags Elec Eng 62:Trans 222-30 My '43

Small a-c generators and their applications. A. J. Girdwood. il diags Elec Eng 62:449-55 O '43

System-voltage control in the war emergency. A. E. Silver. Edison Elec Inst Bul 11:260-4 S '43

System-voltage programs release capacity margins. diags Elec W 120:1170-2 O 2 '43

Three methods for control of voltage regulation in wartime. diags Elec W 120:1194 O 2 '43

Thyratron motor control. E. E. Moyer and H. L. Palmer. diags Elec Eng 62:Trans 706-12 N '43

Transmission-line and system problems in supplying large electric-arc furnaces during wartime. B. M. Jones. bibliog il diags Elec Eng 62:Trans 197-202 Ap '43

Variable B voltage supply for lab or classroom. A. H. Brody and J. L. Lahey. il diag Electronics 16:156+ O '43

Voltage control; on-load ratio changers using mercury switches. il Electrician 129:657-8 D '43 '42; Abstract. Elec R (Lond) 131:827-8 D 25 '42

Voltage-regulated power supplies. A. B. Bereskin. diags Inst Radio Eng Proc 31:47-52 F '43

VOLTAGE regulators

By-pass switches isolate regulators. il diag Elec W 119:1162 Ap 3 '43

Differential electronic stabilizer for alternating voltages, and some applications. A. Glynn. bibliog diags Inst E E J 90 pt 2:101-10 Ap '43; Abstracts. Electrician 129:586 N 27 '42; Elec R (Lond) 131:655-6 N 20 '42; Discussion. Inst E E J 90 pt 2:110-15, 367-8 Ap, O '43; Electrician 129:586-8 N 27 '42

Electronic exciter for a-c generators; combination voltage regulator and exciter. A. Benson and R. Heidbrak. diags Electronics 16:112-14+ Ag '43

Electronic regulators for a-c generators. A. Benson. diags Electronics 16:104-7 Ap '43
Electronic voltage regulator for precise densitometric measurements. H. W. Dietert and M. F. Hasler. diags Opt Soc Am J 33:45-9 Ja '43

High output generating systems. W. F. Fell. il diags Aviation 42:167, 169-70+ Je '43

How to determine setting for feeder regulators; line drop compensator setting chart. Elec W 120:108 Ji 10 '43

Localised automatic control. E. T. Norris. il Electrician 130:161-3 F 12 '43

New regulator controls generator rkva. output. J. T. Logan. Elec W 118:2090-1 D 26 '42

Right locations for step-regulators. H. S. Williams and M. W. Rothpletz. Elec W 120:674 Ag 21 '43

Rotating regulator for arc furnaces; Rotorol. R. A. Geiselman, C. C. Levy and W. R. Harris. il diags Elec Eng 62:Trans 671-4 N '43

Rotorol provides operating advantages in the pulp and paper industry. W. R. Harris. il diags Paper Tr J 115:35-6, 38+ N 26 '42

Sticking regulator contacts remedied. G. Read. diag Elec W 120:456 Ag 7 '43

Switch scheme to by-pass regulators. diag Elec W 119:988 Mr 20 '43

Use of equivalent annual ambient temperature in overloading transformers and voltage regulators. M. S. Oldacre. bibliog Elec Eng 62:Trans 477-80 Ji '43

Voltage regulator circuit; hydraulic analog; electronic circuit; applications. il diags Product Eng 14:655 O '43

Voltage stabilizer for electron diffraction power supply. S. H. Bauer, J. M. Hastings and D. P. MacMillan. diag R Sci Instr 14:30-2 F '43

Testing

Appropriate regulator range; three ways of checking. E. D. Hartzell and others. il diags Elec W 119:1444-7 My 1 '43

Graphic performance analyzer for distribution voltage regulators. E. D. Hartzell and R. C. Thompson. diag Edison Elec Inst Bul 11:16-17 Ja '43

VOLTMETERS

Average-voltage voltmeter. F. K. Dalton. Elec W 118:1650+, 1806 N 14-28 '42

Core loss correction made by voltmeter. diag Elec W 118:1650+ N 14 '42

Electric instruments; performance at higher than normal operating frequencies; simple, practical methods of checking accuracy. S. C. Richardson. il diags Gen Elec R 46:565-9 O '43

General Electric crest voltmeter. il R Sci Instr 14:120 Ap '43

How to interchange voltmeters and ammeters. E. G. Key. diags Power Pl Eng 47:90-2 O '43

Line voltage in Middle West and South; use of recording voltmeter. C. H. Humes. Electronics 16:204+ N '43

Two new electrostatic voltmeters for high and low voltages; abstract. M. Nacken. Wireless Eng 20:510-11 O '43

VOLTMETERS—Continued

Voltmeters, ammeters and wattmeters; instruments make use of three electrical effects according to the type of measurement. Elec West 90:47-8 Ja '43

VOLTMETERS, Vacuum tube

A-c operated vacuum tube voltmeter. J. N. Thurston. *il diags Electronics* 16:102-4 O '43

How to use vacuum tube voltmeters. G. Dexter. *il diags Radio N* 29:26-7+ Ap '43

Laboratory type V.T.V.M. M. Silver. *il diags Radio N* 30:32-4+ S '43

Measurement of peak voltages in high-voltage testing, with particular reference to a modified diode peak voltmeter. R. N. Buttrely. *bibliog diags Inst E E J* 90 pt 2:186-91 Je '43

Meter substitutes. R. F. Turner. *il diags Radio N* 30:38-9+ O '43

Pocket vacuum tube voltmeters. R. P. Turner. *diags Radio N* 29:32-3+ Mr '43

Sensitive cathode-ray voltmeter. Z. V. Harvalik. *diag R Sci Instr* 14:263-5 S '43

Vacuum-tube voltmeter for measuring high negative potentials. M. Kupferberg. *diag R Sci Instr* 14:254 Ag '43

Versatile continuous reading thermionic voltmeter. L. J. Anderson and J. C. Hindman. *bibliog il diags Ind & Eng Chem Anal* ed 15:42-5 Ja 15 '43

VOLUME

Calculation of areas, volumes, surfaces reduced to simple terms. *Water Works & Sewerage* 90:sup271-3 Je '43

VOLUME, Molecular. See Molecular volume**VOLUME, Specific. See Specific volume****VOLUMENOMETER**

Improved volumenometer. J. C. Richmond, J. B. Peterson and W. H. Herschel. *bibliog il diags Am Cer Soc J* 26:127-31 Ap 1 '43

VOLUMETERS

Results of tests on volumeters for liquid hydrocarbons. R. J. S. Pigott, E. E. Ambrosius and E. W. Jacobson. *A S M E Trans* 65:350-2 My '43

Volumeter practice in the petroleum industry. E. E. Ambrosius and E. W. Jacobson. *Am Pet Inst Proc* 23(4):49-53 '42; Same. *Oil & Gas J* 41:209-10+ N 12 '42

VOLUMETRIC analysis

Amylose and amylopectin content of starches determined by their iodine complex formation. F. L. Bates, D. French and R. E. Rundle. *bibliog Am Chem Soc J* 65:142-8 F '43

Automatic adjustment of solute concentration in the moving boundary method for the determination of transport numbers. R. Wright. *Chem Soc J* p678-80 N '42

Certain indicators for volumetric analysis; abstract. A. D. Mitchell. *Chem & Ind* 62:195-6 My 22 '43

Dead-stop end point as applied to the Karl Fischer method for determining moisture. G. Wernimont and F. J. Hopkinson. *bibliog il Ind & Eng Chem Anal* ed 15:272-4 Ap 15 '43

Determination of active oxygen in the presence of barium and lead. M. Fleischer. *Ind & Eng Chem Anal* ed 15:31-2 Ja 15 '43

Determination of chloride in bauxite-supported anhydrous aluminum chloride catalysts; extraction and distillation methods. W. A. La Lande, Jr., H. Heinemann and W. S. W. McCarter. *diag Ind & Eng Chem Anal* ed 15:385-7 Je 15 '43

Determination of dissolved oxygen. R. C. Adams and others. *il diags Can Chem & Process Ind* 27:422, 424, 426+ J1 '43

Determination of fluorine in organic compounds with cerous nitrate. M. L. Nichols and J. S. Olsen. *bibliog(61 references) diags Ind & Eng Chem Anal* ed 15:342-6 My 15 '43

Determination of furfural. I. J. Duncan. *bibliog Ind & Eng Chem Anal* ed 15:162-4 Mr 15 '43

Determination of iron in the presence of chromium and titanium with the Jones reductor. F. S. Grimaldi, R. E. Stevens and M. K. Carson. *bibliog Ind & Eng Chem Anal* ed 15:387-8 Je 15 '43

Determination of mercury in rubber by the Volhard method; separation of iodine. C. L. Luke. *bibliog diag Ind & Eng Chem Anal* ed 15:597-9 S 15 '43

Determination of metallic copper and cuprous oxide in commercial cuprous oxide pigments. I. Baker and R. S. Gibbs. *bibliog Ind & Eng Chem Anal* ed 15:505-8 Ag 15 '43

Determination of selenious acid and selenites; rapid volumetric method. D. F. Adams and L. I. Gilbertson. *bibliog Ind & Eng Chem Anal* ed 14:926-7 D 15 '42

Determination of small amounts of arsenic, antimony, and tin in lead and lead alloys. C. L. Luke. *bibliog il Ind & Eng Chem Anal* ed 15:626-9 O 15 '43

Determination of small amounts of tellurium in high-lead and tin-base alloys. R. A. Schaefer. *bibliog Ind & Eng Chem Anal* ed 15:379 Je 15 '43

Determination of sulfur dioxide in beer; a modification of Monier-Williams method. B. H. Nissen and R. B. Petersen. *Ind & Eng Chem Anal* ed 15:129-30 F 15 '43

Determination of sulfur in acid-soluble sulfides. H. C. Froelich. *Ind & Eng Chem Anal* ed 14:900 N 15 '42

Determination of tetraethyllead in gasoline. L. Schwartz. *Ind & Eng Chem Anal* ed 15:499-501 Ag 15 '43; Same. *Pet Refiner* 22:123-5 O '43

Determination of the saponification number of fats and oils; elimination of the blank. W. Rieman. *3d, Ind & Eng Chem Anal* ed 15:325-6 My 15 '43

Determination of total sulfur in rubber. C. L. Luke. *diag Ind & Eng Chem Anal* ed 15:602-4 S 15 '43

Dissociation constants and pH-titration curves at constant ionic strength from electrometric titrations in cells without liquid junction; titrations of formic acid and acetic acid. R. G. Bates, G. L. Siegel and S. F. Acree. *bibliog diag J Research Nat Bur Stand* 30:347-59 My '43

Microdetermination of mercury in organic compounds. H. W. Eckert. *bibliog Ind & Eng Chem Anal* ed 15:406-7 Je 15 '43

Microextraction and microtitration of fatty acids. D. Stetten, Jr. and G. F. Grail. *diag Ind & Eng Chem Anal* ed 15:300 Ap 15 '43

New selective reagent for lithium; application to the rapid volumetric estimation of lithium in the presence of potassium and sodium. L. B. Rogers and E. R. Caley. *Ind & Eng Chem Anal* ed 15:209-11 Mr 15 '43

Polarographic characteristics of stannous and cupric tartrate complexes and amperometric titration of tin with cupric ion in tartrate medium. J. J. Lingane. *bibliog Am Chem Soc J* 65:866-72 My '43

Quantitative investigations of amino acids and peptides. E. H. Frieden, M. S. Dunn and others. *bibliog il J Phys Chem* 47:10-30, 85-94, 118-33 Ja-F '43

Rapid determination of sodium chloride in the presence of protein; application to salt-cured food products. W. J. Dyer. *bibliog Ind & Eng Chem Anal* ed 15:439-40 J1 15 '43

Rapid volumetric method for the determination of lead in brass. P. M. Fisk and F. F. Pollak. *Chem Soc J* p41-2 Ja '43

Semimicroanalysis of saline soil solutions. R. F. Reitemeyer. *bibliog Ind & Eng Chem Anal* ed 15:393-402 Je 15 '43

Semimicrodetermination of phosphorus in organic compounds. M. D. Bachofer and E. C. Wagner. *bibliog Ind & Eng Chem Anal* ed 15:601-2 S 15 '43

Simplified technique in the use of liquid amalgam reducers. G. F. Smith and L. T. Kurtz. *bibliog diag Ind & Eng Chem Anal* ed 14:854-5 N 15 '42

Solanine, glycoside of the potato; its isolation and determination. H. S. Rooke and others. *bibliog Soc Chem Ind J* 62:20-4 F '43

Spectrophotometric determination of the dissociation constants of diphenylselenium dibromide and diphenylselenium diiodide. J. D. McCullough. *bibliog Am Chem Soc J* 64:2672-6 N '42

Sulphite acid testing; the Palmrose iodate and the Winkler tests. D. R. Mcmasters. *bibliog Paper Tr J* 117:30-5 J1 8 '43

Tables for the determination of alkaline compounds in a softened water. D. Feben. *Am Water Works Assn J* 35:1312-14 O '43

VOLUMETRIC analysis—Continued

Volumetric determination of bromide in brines. H. H. Willard and A. H. A. Heyn. *Ind & Eng Chem Anal* ed 15:321-2 My 15 '43

See also
Colorimetric analysis
Iodometry
Oxidimetry

Apparatus

Apparatus for photoelectric titrations; application to dark-colored resins. R. H. Osborn, J. H. Elliott and A. F. Martin. *bibliog* *il* *diags* *Ind & Eng Chem Anal* ed 15:642-6 O 15 '43

Apparatus in micro-volumetric analysis; research brings variety of inventions. D. L. Masters. *bibliog* *diags* *Chem Age* (Lond) 48:439-42 Ap 24 '43

Dual alternating current titrometer. C. J. Penther and F. B. Rolfsen. *bibliog* *il* *diag* *Ind & Eng Chem Anal* ed 15:337-40 My 15 '43

Improved electrometric apparatus for use with the Karl Fischer method for determination of water. C. D. McKinney, Jr. and R. T. Hall. *bibliog* *il* *diag* *Ind & Eng Chem Anal* ed 15:460-2 Jl 15 '43

Improved salt bridge for polarographic and potentiometric measurements. D. N. Hume and W. E. Harris. *diag* *Ind & Eng Chem Anal* ed 15:465 Jl 15 '43

Self-recording, semi-automatic mechanized electrometric titrations; with special reference to control of gasoline refining. D. J. Pompeo, C. J. Penther and K. E. Hallikainen. *bibliog* *diags* *Instruments* 16:402-3+ Jl '43

VOLUMETRIC apparatus

See also
Volumeters
Volumetric analysis
—Apparatus

VOLUNTARY trusts. *See* Trusts and trustees

—Living trusts

VOTING, Absent

See also
Soldiers—Suffrage

VULCANIZATION

Accelerated vulcanization of SK-B; Russian tests. *India Rubber W* 109:184+ N '43

Chemical materials used in rubber manufacture. *il* *Oil & Gas J* 41:49-50, 53 N 26 '42
Chemical reactions during vulcanization; liquid rubber latex. E. A. Hauser, D. S. le Beau and J. Y. L. Kao. *bibliog* *J Phys Chem* 46:1099-1111 D '42; *Abstract, India Rubber W* 107:410+ Ja '43

Effect of petroleum solvents on the cold resistance of synthetic vulcanizates. R. E. Morris and others. *il* *India Rubber W* 108:553-5+ S '43

Heat resistance of neoprene GN vulcanizates. D. B. Forman. *bibliog* *il* *diags* *Ind & Eng Chem* 35:952-7 S '43

Merry-go-round cures propeller blade fairing. *il* *Am Mach* 87:89 S 16 '43

Simple vulcanizates of Buna S and sulfur; physical and chemical properties. L. E. Cheyney and A. L. Robinson. *bibliog* *il* *Ind & Eng Chem* 35:976-9 S '43

Suggested vulcanizing combination for GR-1. *Rubber Age* 53:433 Ag '43

Vulcanization or other heat treatment by electrical conduction; rubber and rubber-like materials. F. L. Yezley. *diags* *Rubber Age* 52:133-4 N '42

See also
Rubber—Manufacture

Accelerators

Accelerators and antioxidants in the rubber industry. P. I. Murrill. *il* *Chem & Eng N* 20:1361 N 10 '42

Answer to comments on accelerators for latex: water-soluble vs water-insoluble. H. H. Abernathy. *Rubber Age* 52:405-6 F '43

Use of accelerators in Buna S. A. M. Neal. *Rubber Age* 53:31-4 Ap '43

What you can use; accelerators for rubber (cont). *Oil Paint & Drug Rep* 142:38 D 21; 58 D 28 '42; 143:38 Ja 4; 54 Ja 18; 45 Ja 25; 40 F 1; 44 F 8; 8 F 15; 51 F 22; 32 Mr 15; 42 Mr 29; 47 Ap 5; 46 Ap 12; 40 Ap 19; 49 Ap 26; 66 My 3; 63 My 10 '43

X-ray study of reactions involving accelerators; orientation of crystalline phases on stretching of rubber stocks. G. L. Clark, R. L. LeTourneau and J. M. Ball. *il* *Ind & Eng Chem* 35:198-204 F '43

VULPRENE. *See* Rubber, Substitutes for

VULTEE aircraft, inc. (now Consolidated Vultee aircraft corporation)

Consolidated-Vultee's merger plans. *Steel* 112:76 F 1 '43; *Comm & Fin Chr* 157:439 F 1 '43

Ten years' progress. A. P. Fontaine. *il* *Aeronautical Eng R* 1:79 N '42

W

WAACS. *See* Women's army corps

WABASH railway

Annual report. *Comm & Fin Chr* 157:1655-6 My 3 '43

Receivers discharged and receivership terminated. *Comm & Fin Chr* 158:1677 O 25 '43

WAC. *See* Women's army corps (formerly Women's army auxiliary corps)

WAGE agreements. *See* Trade agreements

WAGE deductions

Employees' subscriptions for war savings bonds. *J Account* 76:75 Jl '43

Explaining deductions from payroll income. *Burroughs Clearing House* 27:6 S '43

Helps workers with personal bookkeeping. *Ptr Ink* 204:76 Jl 2 '43

Provisions of new income tax law explained in detail. A. C. Kiechlin. *Inland Ptr* 111:22-4 Ag '43

Ruml (garbled); operating pay-as-you-go tax plan. *Business Week* 120-1 Je 19 '43

Simple pay deduction process; checkbook permits depositor to segregate deductions withheld. F. W. Hetzel. *il* *Banking* 35:26+ Ap '43

That Victory tax; employers expect withholding levy to be taken in stride. *Business Week* p22+ N 28 '42

Top that 10%! *il* *Banking* 35:69-70 D '42

Treasury initiates payroll savings campaign, urges employers as war bond issuing agencies. *Comm & Fin Chr* 156:1893 N 26 '42

Urges President Roosevelt to impress workers with need of accepting 20% withholding tax. G. J. Seedman. *Comm & Fin Chr* 158:724 Ag 19 '43

War workers major participants in payroll savings plan, survey shows. *Comm & Fin Chr* 158:526 Ag 5 '43

WAGE differentials

Differentials again. *Business Week* p62 D 5 '42

Pay differentials for night work under union agreements. C. Williams. *Monthly Labor R* 57:133-44 Jl '43

WAGE fixing

Blanket boost; Curtiss-Wright's plan for uniform pay rates in scattered cities. *Business Week* p87 S 18 '43

Wages bracketed; employers see confusion in Labor board machinery for handling maladjustment cases. *Business Week* p96-8 Jl 17 '43

WAGE fixing, Government

See also
Minimum wage

WAGE payment plans

Additional compensation for supervisors. *Management R* 32:273-5 Jl '43

Apply incentives that will get production. *il* *Factory Management* 101:116-23 Ag '43

Are your wage rates too low to make money for you? Lincoln electric co. piece work plan. *Cer Ind* 41:31-2 S '43

Effect of incentive payments on hourly earnings; fabrication of nonferrous metals. E. M. Olsen. *Monthly Labor R* 56:849-67 My '43

GM re-emphasizes demands for incentive pay methods. *Automotive & Aviation Ind* 89:48 O 1 '43

Government moves to stabilize office salaries. *Am Business* 13:17-18+ Je '43

WAGE payment plans—Continued

How one firm presented an incentive plan to WLB; Cluett, Peabody & Co. W. B. Dailey. Factory Management 101:240+ O '43
 How to enlist the worker's co-operation in extra pay plans. J. W. Roberts. Steel 112: 116+ Je 7 '43

In lieu of raises; portal-to-portal pay issue being revived by C.I.O. packing house workers. Business Week p101 J1 24 '43

Incentive guides; cue from NWLB. Business Week p102+ O 23 '43

Incentive pay plan augments production at Murray-Eorse, S. H. Brams. Iron Age 151:60+ Ap 29 '43

Incentive pay plan heads for showdown in contract negotiations between General Motors and UAW. Steel 113:79-80 S 13 '43

Incentive wages in the war. Business Week p82+ Ag 14 '43

More pay—more production; Murray corp. of America proves it at the Eorse plant. Fortune 28:138-40+ S '43

New Grumman wage plan studied for key to manpower problem. Aviation N 1:14 O 18 '43

Recasting concepts of employee compensation. H. S. Koster. Trusts & Estates 77: 357 O '43

Salaries and wages; cost-of-living allowances in Egypt. For Comm W 10:13-14 Ja 23 '43

Ten years' progress in management; wage plan. J. M. Juran. A S M E Trans 65:236-8 Ap '43

Three incentive plans, so better efficiency; Walter Kidde & company, Belleville, N.J. Y. J. Hill. Factory Management 101:90-2 O '43

Vacation and holiday provisions in union agreements. Monthly Labor R 56:924-31 My '43

Wage incentive. Fortune 28:136-7 S '43

Wage policy for the metal producing and metalworking industry. J. W. Roberts. Steel 111:54-5+ N 30 '42

Wage systems and incentives. T. E. A. K. Jackson. Engineering 155:516-17 Je 25 '43

Wanted: incentives for the production front. W. Williams. Factory Management 101: 109+ My '43

WLB affirms award in Tribune-Guild case. Comm & Fin Chr 157:1023 Mr 18 '43

War-time salary administration. R. P. Brecht. Personnel J 22:132-4 O '43

What about 1943 salary and wage changes? Am Business 12:10-11 D '42

What have management, labor and government to gain by work incentives? Iron Age 151:79-81 Ap 29 '43

Why and what of Lincoln Electric's incentive plan. W. Williams. Factory Management 101:94-6 S '43

See also

Bonus system

Military service—

Labor problems

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Payrolls

Profit sharing

Rate setting

Salesmen—Salaries

and commissions

Vacations

Wage deductions

Wages—Dismissal

wage

Group bonus

How group bonus works; wood box shop. P. Bernstein. Factory Management 101:81+ Ja '43

WAGE scales

How to classify bank jobs. L. K. Curry. Banking 36:31-2 O '43

Labor-management, joint development and joint application of job evaluation in a single unit motor bodies plant. N. O. Paquette and C. Fraser. Advanced Management 8:92-6 J1 '43

WAGE tax. See Taxation—Philadelphia**WAGES**

Wage rates and living costs in a war economy. M. S. Brody. J Business 16 pt 2:1-38 J1 '43

Wage scale in the Northwest; Coeur d'Alene mining district. Min & Met 24:200 Ap '43

See also

Bonus system

Cost of living

Engineers—Salaries

Executives—Salaries

Family allowances

Labor and laboring

classes

Minimum wage

Overtime

Payrolls

Pensions, Industrial

Prices

Profit sharing

Railroads—Wages

Rate setting

Salaries

Salesmen—Salaries

and commissions

Wage payment plans

Wage scales

Dismissal wage

What about dismissal wages? policies in effect in some companies. Am Business 13: 14-15 Mr '43

Economic aspects

Ability, wages, and income. H. Staehle. R Econ Stat 25:77-87 F '43

Redundant currency vs gold measurements as builders of workable wages. E. S. Pillsbury. Comm & Fin Chr 157:2358+ Je 24 '43

Law

Emergency price control: text of Act to amend Act of 1942 and executive order. Fed Res Bul 28:1080-5 N '42

Matter of L. Metcalfe Walling appellant v. C. K. Benson and W. Havard Perkins. J Account 76:366-8 O '43

State minimum-wage law prohibits consideration of tips as wages; California decision. Monthly Labor R 57:555-6 S '43

Wage and hour standards in the chemical industry. W. B. Smith. J Chem Ind 53:45-8 J1 '43

What is the law on wages? W. B. Smith. Soap & San Chem 19:22-4 Mr '43

See also

Minimum wage

Overtime

Regulation

Additional regulations for making individual wage and salary adjustments. Monthly Labor R 57:711-12 O '43

Akron rubber workers protest wage decision. Rubber Age 53:253 Je '43

Annuity forms not usable for 5% wage purposes is ruling. F. J. Budinger. Nat Underw (Life ed) 47:6 J1 9 '43

Bonuses in court; C.I.O.'s row with Mesta. Business Week p100-2 O 23 '43

Can I hike wages? how some of the WLB rules can and can't be applied. Nat Pet N 34:10 D 30 '42

Clarification of the salary stabilization act. K. Marks. J Adv & Sell 36:24+ Mr '43

Commission limitation reviewed. W. H. Bennett. East Underw 44:38 O 15 '43

Decisions of National war labor board, Aug. and Sept. 1942. Monthly Labor R 56:59-64 Ja '43

Delegation of wage-approval power by War labor board. Monthly Labor R 56:148-9 Ja '43

Effects of President Roosevelt's executive order freezing wages and prices. Comm & Fin Chr 157:1370+ Ap 15 '43

Employee-salesman's pay restricted. Nat Underw (Life ed) 47:3+ O 8 '43; Same.

Nat Underw 47:17 O 7 '43

Escalator brake; NWLB clamps a lid on wage increases. Business Week p86+ D 19 '42

Executive order establishing new price-wage curbs. Monthly Labor R 56:876 My '43

Fifth regional war labor board issues foundry wage schedule. Steel 113:62 Ag 16 '43

Government moves to stabilize office salaries. Am Business 13:17-18+ Je '43

Handbook of labor statistics, 1941 edition; v2, Wages and wage regulation. U S Bur Labor Statistics Bul 694:373-418; pa 45c

Supt. of doc. '42

Incentive o.k'd; NWLB's decision in Grumman case. Business Week p100-1 O 9 '43

Increases and decreases of wages and salaries of insurance organizations under federal control. W. H. Bennett. Weekly Underw 147:1172+ N 21 '42

Internal revenue bureau joggles supervisor pay; formula for determining allowable pay increases for supervisory employees going to a 48-hour week. Nat Pet N 35:16 J1 7 '43

Interpret salary stabilization act's application to insurance. East Underw 44:13 O 1 '43

Labor leaders urge President to correct OPA food policies and easing of wages. Comm & Fin Chr 157:2186 Je 10 '43

WAGES—Regulation—Continued

- Mine pay hiked; Commission's approval of wage boosts in nonferrous field. *Business Week* p106-8 Ap 17 '43
- More wage rates and job descriptions set for office workers; approvable white collar rates by W.L.B. for New York and northern New Jersey. *Am Business* 13:14-16 Ag '43
- NWLB policy outlined for wage increases. *Comm & Fin Chr* 156:2069 D 10 '42
- NWLB's equalizer. *Business Week* p60+ D 5 '42
- No on ship pay. *Business Week* p79 Ag 14 '43
- No pay increase; NWLB ruling on hospitalization insurance. *Business Week* p116 JI 10 '43
- Now comes pay showdown; case of 1,200,000 shipyard workers demanding 15c an hour increase. *Business Week* p15-16 JI 3 '43
- Oct. 15 pay base; President's order to be interpreted strictly. *Business Week* p16-17 N 14 '42
- Only ordinary permitted under 5% rule. *Nat Underw* 47:19+ Ag 12 '43; Same. *Nat Underw* (Life ed) 47:1+ Ag 13 '43
- Outlines procedure on wage adjustments. *Comm & Fin Chr* 156:2070 D 10 '42
- Pay hike formula; NWLB all set to adjust salaries and wages. *Business Week* p120+ N 21 '42
- President Roosevelt bars further increases in prices and wages to prevent inflation. *Comm & Fin Chr* 157:1385+ Ap 15 '43; Excerpt (Text of executive order). *Oil Paint & Drug Rep* 143:3+ Ap 12 '43
- Question of A. & H. policies, tax, wage freezing. J. R. Peterson. *Nat Underw* 47:17 Ag 5 '43; Same. *Nat Underw* (Life ed) 47:2 Ag 6 '43
- Regulation of wages, absenteeism, and hours in Australia. N. T. Johnson. *Monthly Labor R* 56:28-31 Ja '43
- Regulations of stabilization director controlling wage adjustments; Wage-stabilization policy of National war labor board. *Monthly Labor R* 55:1142-7 D '42
- Rules on relation of insurance to wage stabilization. *Nat Underw* (Life ed) 47:3+ Je 18 '43
- Salary stabilization pointers. *Banking* 36:16-18+ Ag '43
- Some aspects of wage and salary administration of interest to accountants. G. A. Gesell. *J Account* 75:131-6 F '43
- Stabilization of cost of living by wage and price control. *Monthly Labor R* 55:917-24 N '42
- Stabilization of wages and prices; Executive order no. 9328 supplemented. *Monthly Labor R* 56:1090-2 Je '43
- Strike settlement cracks Little Steel formula. *Steel* 113:69-70 N 8 '43
- Tax dangers in current wage and salary rate raises. J. M. Crimmins. *Am Business* 13:10-11 F '43
- Traffic in labor at Detroit probed. *Business Week* p110-11 Ap 17 '43
- Treasury relents; employers may continue paying commissions to salesmen. *Business Week* p90+ O 16 '43
- Treasury to reconsider commission ruling on salary and commission increases. *Sales Management* 52:24 O 15 '43
- Unions fight back; hold-the-line order stirs flood of protests. *Business Week* p14 Ap 24 '43
- Vinson gets letter on anti-inflationary act; sent by three associations. *East Underw* 44:12-13 Ag 6 '43; *Nat Underw* (Life ed) 47:2+ Ag 6 '43
- Wage adjustment board reconstituted to handle private work. *Eng N* 131:577 O 21 '43
- Wage and price stabilization in New Zealand. *Monthly Labor R* 57:250-4 Ag '43
- Wage and salary freeze. H. D. Ralph. *Burroughs Clearing House* 27:20-1 D '42
- Wage and salary stabilization. J. W. Havighurst. *N A C A Bul* 24:809-25 Mr 15 '43
- Wage and salary stabilization; quiz. *Trusts & Estates* 76:67-8 Ja '43
- Wage commission for catering industry in Great Britain. *Monthly Labor R* 57:42-4 JI '43
- Wage rates and living costs in a war economy; wage-rate control in Great Britain and the United States. M. S. Brody. *J Business* 16 pt 2:6-11 JI '43
- Wage stabilization and inflation. J. E. Johnson, comp. *Ref Shelf v* 16, no 4:1-187 biblpg(p177-87) '43 (\$1.25)
- Wage stabilization in the United States. *Int Labour R* 47:512-14 Ap '43
- Wage stabilization is dynamite! W. Margulies. *Credit & Fin Management* 45:22-3+ Ap '43
- Wage-stabilization measures in Australia. *Monthly Labor R* 56:1204-5 Je '43
- Wages and prices. *Business Week* p56+ N 28 '42
- Wages: squaring the vicious circle. *Fortune* 27:79-81, 190+ My '43
- WLB affirms award in Tribune-Guild case. *Comm & Fin Chr* 157:1023 Mr 18 '43
- WLB revises rules for wage adjustments. *Comm & Fin Chr* 157:1212 Ap '43
- WLB revises wage increase regulation. *Iron Age* 152:130+ S 2 '43
- WLB takes initial action as to wage rise following order on wage adjustment authority. *Comm & Fin Chr* 157:2109 Je '43
- What about 1943 salary and wage changes? *Am Business* 12:10-11 D '42
- What is 15%? Little Steel formula and take-home pay. *Business Week* p36+ S 25 '43
- Women's wages; important technicalities at stake in NWLB's case that involves Alcoa, C.I.O., and a new group of workers. *Business Week* p64-6 Ja 2 '43

Statistics

- Annual average salary-wage per employee in nonagricultural industries, 1939-42; tabulation. *Survey of Cur Business* 23:17 Mr '43
- Currency circulation and salaries and wages, 1940-April 1943; chart. *Survey of Cur Business* 23:2 Je '43
- Earnings and social security in the United States. W. S. Woytinsky. 260p \$2.50 Social science research council, 230 Park av, New York '43
- Earnings in aircraft-parts plants, November 1942. E. M. Olsen. *Monthly Labor R* 56:1054-68 Je '43
- Elimination of overtime payments from gross hourly earnings. L. M. Solomon. T. P. Kanninen and J. M. Sherman. *Monthly Labor R* 55:1053-6 N '42
- Factory average weekly and hourly earnings, 1938-1941. *Survey of Cur Business* 1942 Sup p53-7 [supplemented in monthly numbers]
- Handbook of labor statistics, 1941 edition; v2, Wages and wage regulation. U S Bur Labor Statistics Bul 694:1-426; pa 45c Supt. of doc. '42
- Hourly and weekly wages and hours worked per week; tabulations. *Automotive & Aviation Ind* 88:88-90 Mr 15 '43
- Hourly entrance rates paid to common laborers, 1942. R. L. Davis and J. L. Dana. map *Monthly Labor R* 56:313-28 F '43
- Indexes of wage-earner employment and of weekly wages in manufacturing industries, monthly, 1941; revised series. *Survey of Cur Business* 23:28 Mr '43
- Indexes of wage-earner employment and of weekly wages in manufacturing industries; revised series, monthly, 1939-1941. *Survey of Cur Business* 22:23-4 D '42
- Miscellaneous wage data, construction, farm, railways, road-building wages, common labor, 1938-1941. *Survey of Cur Business* 1942 Sup p58-9 [supplemented in monthly numbers]
- Money in circulation and salaries and wages, 1935-1942; chart. *Barron's* 23:8 Ja 25 '43
- Rates of pay and working hours of seafarers; conditions in Belgium, Great Britain, the Netherlands, and Norway. *Int Labour R* 48:23-42 JI '43
- Statistics of the general level of wages; hourly rates or earnings; daily, weekly or monthly earnings; yearly 1929-1941; quarterly Sept. 1941-Sept. 1942. *Int Labour R* 47:257-68 F '43 [cont quarterly]
- Union wages and hours in the baking industry, June 1, 1942. *Monthly Labor R* 56:347-55 F '43
- Wage and hour statistics. Published in *Monthly labor review*

WAGES—Statistics—Continued

Wage-rate changes in United States industries; manufacturing and nonmanufacturing establishments during month ending Oct. 15, 1942. Monthly Labor R 56:135-8 Ja '43 [cont monthly]

Wage rates in building trades; asbestos workers, common laborers, plumbers, roofers, sheet metal workers, and steam fitters, as of July 1, 1942. Sheet Metal Worker 34:42 Ja '43

Wages and salaries in specified groups of manufacturing industries: United States total and percent distribution by state and region, 1939 and 1942. D. Creamer and C. F. Schwartz. Survey of Cur Business 23:15-16 Je '43

See also
Labor cost
Payrolls

Wages—United
States

Australia

Opinion on women's wages in Australian metal trades. Monthly Labor R 56:53-5 Ja '43

Rates of pay in Australia, June 30, 1942. Monthly Labor R 56:781-2 Ap '43

Regulation of wages, absenteeism, and hours in Australia. N. T. Johnson. Monthly Labor R 56:28-31 Ja '43

Wage-stabilization measures in Australia. Monthly Labor R 56:1204-5 Je '43

Brazil

Minimum monthly wage rates in Brazil, 1943. R. M. Cahn. Monthly Labor R 57:349-50 Ag '43

California

Earnings in selected occupations in machinery manufacture, San Francisco Bay area, March 1943. Monthly Labor R 57:564-6 S '43

Wage stabilization in California airframe industry, 1943. T. W. Reedy and N. A. Tolles. Monthly Labor R 56:1188-98 Je '43

Canada

Canada held it; joint assault of labor and politics against inflation. Business Week p42+ N 6 '43

Canada lifts steel wage ceiling and foresees trouble. K. R. Wilson. Rock Prod 46:73+ Mr '43; Same cond. Inland Ptr 110:64-5 Mr '43

Equal pay for equal work in Canada. Monthly Labor R 55:1160-1 D '42

Present negotiations to settle steel wage dispute threaten Canadian wage-and-price freeze. K. R. Wilson. Inland Ptr 110:55-6 F '43

Wage stopgap? McTague scheme would provide government allowances for dependent children in lieu of bigger pay. Business Week p60 S 25 '43

Wages in Canada, 1941. Monthly Labor R 56:138-47 Ja '43

Finland

Adjustment of wages to cost of living in Finland. Monthly Labor R 55:1014 N '42

Germany

Cutting wages. Economist 143:769 D 19 '42

Great Britain

Butchers' wages. Economist 143:585 N 7 '42

Central control of farm wages in England and Wales. E. M. Hodgkinson. Monthly Labor R 56:592 Mr '43

Engineering wages award. Economist 145:471 O 2 '43

English wage policy. R. E. Jefferson. Personnel J 21:295-6 F '43

English wages. Personnel J 22:190-1 N '43

Industrial wages; advances during war period. Elec R (Lond) 133:84 J1 16 '43

Proposed fair-wages resolution in Great Britain. Monthly Labor R 55:1285-7 D '42

Wage commission for catering industry in Great Britain. Monthly Labor R 57:42-4 J1 '43

Wage increases for railway workers. Economist 144:817 Je 26 '43

Wages negotiating machinery. Economist 145:84+ J1 17 '43

Weekly earnings in British industry, January 1943. Monthly Labor R 57:351-2 Ag '43

Weekly earnings in Great Britain and Northern Ireland, July 1942. Monthly Labor R 56:782-5 Ap '43

Women's engineering wages. Economist 144:699 My 29 '43

Workers' incomes; average earnings in January, 1943, compared with earnings in 1938 and 1942. Economist 145:156+ J1 10 '43

Workers' incomes; average weekly earnings, Oct. 1938-Jan. 1943, and percentage increase since Oct. 1938. Economist 145:24-5 J1 3 '43

Workers' incomes; with table giving average earnings in July, 1942, compared with earnings in 1938 and 1941. Economist 144:64-6 Ja 16 '43

Haiti

Minimum-wage legislation in Haiti, 1942. V. Chapin. Monthly Labor R 56:593 Mr '43

Illinois

Earnings of clerical workers in Illinois and New York factories, October 1942. Monthly Labor R 56:586-9 Mr '43

India

Wages, hours, and living standards in India. R. K. Das. Monthly Labor R 57:689-99 O '43

Mexico

Minimum-wage rates in Mexico, 1942 and 1943. Monthly Labor R 56:153-5 Ja '43

New York (city)

Clerical wages rise in New York area. Comm & Fin Chr 157:1888 My 20 '43

Wages rates per hour; building trades, 1874-1942. Eng N 130:606 Ap 22 '43

Weekly salaries of clerical workers in New York city, December 1942. Monthly Labor R 56:1200-1 Je '43

New York (state)

Earnings of clerical workers in Illinois and New York factories, October 1942. Monthly Labor R 56:586-9 Mr '43

Equal pay principle in New York war industries. Monthly Labor R 57:102-4 J1 '43

Increase of women's earnings in New York confectionery industry. Monthly Labor R 57:144-5 J1 '43

Women's wages in laundries in New York state, 1942. Monthly Labor R 56:1121 Je '43

Paraguay

Pay increases in Paraguay, 1942. E. B. Montgomery. Monthly Labor R 56:155-6 Ja '43

Portugal

Wages and hours in Portugal. Monthly Labor R 56:786-91 Ap '43

Sweden

New sliding-scale wage agreement in Sweden. Int Labour R 47:632-4 My '43

Swedish master wage agreement, 1943. T. O. Klath. Monthly Labor R 56:792 Ap '43

Switzerland

Adjustment of wages to the rising cost of living in Switzerland. Int Labour R 47:651-4 My '43

Wages in Switzerland in 1941. Monthly Labor R 55:1283-4 D '42

United States

Akron pay rise? Business Week p86 Ap 10 '43

Camouflaged wage increase circumvents Little Steel. Il Steel 112:49-50+ My 10 '43

Construction wage rates and trends; 1910-1942. Eng N 130:604, 606, 608, 610 Ap 22 '43

Earnings and hours in book and job printing, January 1942; hourly earnings. E. B. Harris and W. C. Linn. Monthly Labor R 55:785-801, 1024-41 O-N '42

Earnings and hours in the pocket-cutlery industry, July 1942. J. F. Lacikey. Monthly Labor R 55:1015-20 N '42

Earnings, hours, and labor turn-over in cordage and twine plants, October 1942. N. Buchalter. Monthly Labor R 56:355-6 F '43

Earnings in aircraft-engine plants, May 1942. L. M. Solomon and N. A. Tolles. Monthly Labor R 55:1230-5 D '42

WAGES—United States—Continued

Earnings in aircraft-parts plants, November 1942. E. M. Olsen. Monthly Labor R 56:1054-68 Je '43

Earnings in California aircraft-parts plants, November 1942. E. M. Olsen. Monthly Labor R 56:758-67 Ap '43

Earnings in machine-tool-accessories industry, 1942. O. C. Clark. Monthly Labor R 56:336-46 F '43

Earnings in manufacture of carbon products for electrical industry, 1942. O. F. Brown. Monthly Labor R 56:329-35 F '43

Earnings in manufacture of domestic laundry equipment, 1942. O. F. Brown. Monthly Labor R 56:534-41 Mr '43

Earnings in manufacture of electrical appliances, 1942. O. C. Clark. Monthly Labor R 56:526-33 Mr '43

Earnings in manufacture of food-products machinery, 1942. O. F. Brown. Monthly Labor R 55:1241-50 D '42

Earnings in manufacture of internal-combustion engines, 1942. G. E. Votava. Monthly Labor R 55:1042-7 N '42

Earnings in manufacture of mechanical power-transmission equipment, 1942. O. F. Brown. Monthly Labor R 56:109-18 Ja '43

Earnings in manufacture of miscellaneous metalworking machinery, 1942. H. R. Hosea. Monthly Labor R 55:1236-40 D '42

Earnings in manufacture of pressure and vacuum gauges, August 1942. E. B. Morris. Monthly Labor R 55:1021-3 N '42

Earnings in manufacture of refrigerating equipment, 1942. O. F. Brown. Monthly Labor R 56:768-76 Ap '43

Earnings in manufacture of tractors, 1942. V. L. Amonette. Monthly Labor R 55:1048-52 N '42

Earnings in ship-construction yards, fall of 1942. W. C. Quant. Monthly Labor R 57:315-36 Ag '43

Factory average weekly and hourly earnings, 1938-1941. Survey of Cur Business 1942 Sup p53-7 [supplemented in monthly numbers]

Factory wages rise over living costs, survey by NAM reveals. Comm & Fin Chr 158:928 S 2 '43

Factory worker wage gains outstrip increased living costs, N.A.A.M. survey. Comm & Fin Chr 157:929 Mr 11 '43

Hourly entrance rates paid to common laborers, 1942. R. L. Davis and J. L. Dana. map Monthly Labor R 56:313-28 F '43

Hourly wage rate study stresses need for reducing living costs. C. Bowles. Comm & Fin Chr 158:1111 S 16 '43

Hours and earnings in the fertilizer industry, January 1943. E. B. Morris. Monthly Labor R 57:337-47 Ag '43

Level of factory wage rates in wartime. R. J. Myers and H. D. Bloch. Monthly Labor R 57:637-49 O '43

Lewis fights for inflation. S. G. Thompson. Barron's 23:3 Mr 15 '43

Men's and women's wages in the United States. Z. C. Dickinson. bibliog Int Labour R 47:693-720 Je '43

Miscellaneous wage data, construction, farm, railways, road-building wages, common labor, 1938-1941. Survey of Cur Business 1942 Sup p58-9 [supplemented in monthly numbers]

Skilled and common wage rates, per hour. Published in Engineering news-record, first technical issue of each month

Stores must pay; NVLB applies Little Steel formula to employees of five Pittsburgh stores. Business Week p100-1 Jl 3 '43

Union wages and hours in the baking industry, June 1, 1942. Monthly Labor R 56:347-55 F '43

Union wages and hours in the building trades, July 1, 1942. K. B. Mohn and A. V. Simi. Monthly Labor R 55:1251-78 D '42

Union wages and hours in the printing trades, June 1, 1942. Monthly Labor R 56:558-84 Mr '43

Wage and hour statistics. Published in Monthly labor review

Wage-rate changes in United States industries; manufacturing and nonmanufacturing establishments during month ending Oct. 15, 1942. Monthly Labor R 56:135-8 Ja '43 [cont monthly]

Wage rates of union street-railway employees, June 1, 1942. Monthly Labor R 56:119-27 Ja '43

Wages and hours of union motortruck drivers and helpers, June 1, 1942. Monthly Labor R 56:128-35 Ja '43

Wages in aircraft-propeller industry, October 1942. T. W. Reedy. Monthly Labor R 56:748-57 Ap '43

Wages in manufacture of mechanical rubber goods, August 1942. H. M. Douty and others. Monthly Labor R 56:542-57 Mr '43

Wages in rubber tire and tube plants, August 1942. H. M. Douty. Monthly Labor R 56:233-54 F '43

Wages in southern cane-sugar refineries, winter of 1942-43. J. W. Bloch. Monthly Labor R 56:982-5 My '43

Wages; squaring the vicious circle. Fortune 27:79-81, 190+ My '43

Wartime wages and manpower in farming. W. Bowden. bibliog Monthly Labor R 55:1111-24 D '42

See also

Salaries
Wages—Regulation

Wisconsin

Paper mill wages up sharply in four years. Paper Tr J 117:8 Ag 12 '43

WAGNER-DINGELL bill. See Insurance, Social—United States

WAGON Jobbers. See Jobbers, Wagon

WALDEN inversion

Malonic ester synthesis and Walden inversion. W. E. Grigsby and others. bibliog Am Chem Soc J 64:2606-10 N '42

WALES

Industries and resources

Chemical future for S. Wales. W. C. Devereux. flow sheet Chem Age (Lond) 49:179-83 Ag 21 '43

New industries for Wales; plastics, petrol, and light alloys: abstract. W. I. Jones. Chem Age (Lond) 48:560 My 22 '43

WALKER, Earl Howard

Up the hard way. por Business Week p84 S 18 '43

WALKER, George W.

How one designer is blueprinting the automobile of the future; George Walker, pioneer user of plastics. L. Stouffer. Int Sales Management 52:24-6 F 15 '43

WALKER, Hiram—Gooderham and Worts, Ltd.

Annual report, year ended Aug. 31, 1942. Comm & Fin Chr 156:2143-4 D 14 '42

Companies with record high earnings. J. C. Harrington. Mag of Wall St 71:527, 556 F 20 '43

WALKER, Thomas Leonard, 1867-1942

Memorial. A. L. Parsons. por(pl) Geol Soc Proc 1942:241-9 bibliog(p244-9) Ap '43

WALL board

Dry-wall construction; time-saver standards. H. R. Sleeper. diags Arch Rec 94:83-8 S; 77-81 O '43

How to refinish interiors with insulation board. Il Am Bld 65:66 Ja '43

Neutral sizing material for insulating board. L. K. Arnold and J. B. McLeod. Paper Ind 25:156 My '43

Sweden's wallboard industry. For Comm W 12:28 Ag 14 '43

Versatile gypsum finds applications in new wallboards and roofs. Sci Am 169:13 Jl '43

Manufacture

Make heating and ventilating survey at insulate plant of M. & O. paper co.; Engineering experiment station, University of Minnesota. F. B. Rowley. R. C. Jordan and C. E. Lund. Il Paper Tr J 115:9-11 D 31 '42

WALL paper. See Wallpaper

WALL Street

What became of the stock market? and what of the SEC? W. Dodge. Fortune 26:126-3+ D '42

See also

New York stock exchange

WALL Street Journal

Wall Street Journal, at 60, broadens scope of news. *Sales Management* 51:76+ D 1 '42

WALLACE, Henry Agard, 1888-

Begin apprenticeship to world peace; Detroit speech; abstracts. *Comm & Fin Chr* 158: 427 JI 29 '43; *Trusts & Estates* 77:124-5 Ag '43

Declares common man talks were intended to stimulate thinking for lasting peace. *Comm & Fin Chr* 158:1431 O 7 '43

Exonerates 95 or 99% of corporations from recent criticisms of big business. *Comm & Fin Chr* 158:831 Ag 26 '43

Inter-American institute of agricultural sciences at Turrialba. *Science* 97:sup10 Mr 26 '43

President relieves Wallace and Jones of foreign economic powers; abolishes BEW. *Comm & Fin Chr* 158:332 JI 22 '43

Tour of Latin America. por *Comm & Fin Chr* 157:1318, 1589 Ap 8, 29 '43

Vice-pres. Wallace contends Jesse Jones obstructs war effort. *Comm & Fin Chr* 158: 20 JI 1 '43; *Oil Paint & Drug Rep* 144:3+ JI 5 '43

WALLBOARD. See Wall board**WALLOWA** batholith. See Batholiths**WALLPAPER**

Coated paper; its origin, development, and purposes. W. B. Wheelwright. *il diag Paper* 1d 24:936-7 D '42

Introduce pasted paper for amateur paper hangers. *il Ptr Ink* 203:77 Ap 16 '43

See also

Paper hanging

Rating

Wallpaper. *il Consumers' Research Bul* 12: 13-15 Ag '43

WALLS

Estimating water vapor transmission through walls; reference data. *Heat & Ven* 40:42a-42b Mr; 74a-74b Ap '43

Heat transmission through insulation as affected by orientation of wall. F. B. Rowley and C. E. Lund. *il diags Heating-Piping* 15:361-5; Discussion. 365-6 JI '43

Single wall system of house assembly. S. Paul. *il plans Eng N* 130:362-4 Mr 11 '43

Summer comfort factors as influenced by the thermal properties of building materials. C. O. Mackey and L. T. Wright, Jr. *Heating-Piping* 14:750-7 D '42; Discussion. 15:150-2 Mr '43

See also

Building
Dampness in build-
ings
Dams
Fire walls

Foundations
Masonry
Partitions
Plaster and plaster-
ing

WALLS, Brick

Air conditioned aircraft plant has walls that breathe so as to avoid condensation troubles. *il Heating-Piping* 15:290-1 Je '43

Breathing walls of brick and tile, a new masonry conception; Douglas Aircraft plant at Oklahoma City. *il diag Brick & Clay Rec* 102:14-16 Ap '43

Mastic used to seal leaky brick walls; made from gilsonite asphaltic mixture and slate granules. Pennsylvania railroad's harbor-side terminal warehouse. J. E. Nicholson. *il Eng N* 129:716-17 N 19 '42

Moisture penetration of brick walls can be controlled; workmanship important in making mortar joints. *diags Brick & Clay Rec* 103:34, 36 Ag '43

Resistance of brick walls to wind; firewall that failed because of 32-mph. wind; restrictions on firewalls in city building codes. H. A. Sweet. *diag Eng N* 131:630-1 O 21 '43; Discussion. 131:734-5 N 18 '43

Ventilated design for windowless walls; Douglas Aircraft plant. *il diag Eng N* 130: 500-1 Ap 8 '43

Ventilated wall saves steel in walls of Douglas Aircraft plant. *il Heat & Ven* 40: 42 My '43

Windowless breathing walls enclose Douglas aircraft's new Oklahoma City plant. *il Arch Forum* 79:8+ Ag '43

Testing

Measurement of brick bond; abstract. J. C. Pearson. *Brick & Clay Rec* 103:41 JI '43

WALLS, Concrete

Army hospital built of concrete blocks. *il Eng N* 130:856-7 Je 10 '43

Concrete blocks for sabotage protection. G. W. Hoffmann. *il diags Eng N* 130:918-19 Je 24 '43

Concrete masonry walls pass severe anti-sabotage test. *Concrete* 50:30 D '42

Concrete reservoirs of the vertical-beam type. C. M. Stanley, Jr. *diags Am Soc C E Proc* 68:1679-88 D '42; Discussion. *diags* 69:456-7, 619-29, 716-18 Mr-May '43

Firing range for testing small arms ammunition. *il Concrete* 51:3 S '43

How this concrete contractor restores old farm buildings. *il Concrete* 51:14+ Je '43

How to specify for well built poured concrete basement walls, footings. *il diags Am Bld* 65:56+ S '43

Many authentic tests prove stability of concrete masonry wall construction. *Concrete* 51:18+ Ap '43

See also

Concrete piling
Dams, Concrete

Earth filled walls

Earth-filled walls for X-ray building; research building at Ohio state university to house betatron and electrostatic generator. *il diag plan Eng N* 131:636-7 O 21 '43

WALLS, Interior

Clay products for durability, quality, simplicity and truthfulness; Mercy hospital school of nursing. W. Koehl. *il Brick & Clay Rec* 103:28-9 Ag '43

Dry-wall construction; time-saver standards. H. R. Sleeper. *Arch Rec* 94:83-8 S; 77-81 O '43

See also

Mural painting and Plaster and plaster-
decoration ing
Partitions Wall board

WALLS, Stone

Walnut Bottom Run improvement at Beaver Falls; flood-prevention channel. D. F. Harvey. *il Pub Works* 74:23 O '43

WALNUT shells

Substitute for lycopodium parting; Partex, made by pulverizing English walnut shells. *Iron Age* 150:48 D 17 '42

WALNUTS

Air conditioning insures nut quality; electrically air conditioned storeroom for California walnut growers assn. *il Elec West* 89:63 D '42

WALSCHIED, J. Emil

Made Colonial Life president. por *East Underw* 44:3 Mr 12 '43

WALWORTH company

Recapitalization proposed. *Comm & Fin Chr* 158:1677 O 25 '43

Walworth free of senior obligations. *Barron's* 23:13 O 25 '43

WANT ads. See Advertisements, Classified—Want ads; Employment systems—Advertising aids

WAR

Four on war; from the writings of earlier scientists. M. F. Ashley-Montagu. *il Tech R* 45:315-16+ Ap '43

See also

Accounting and war Industrial mobiliza-
Advertising and war tion
Aeronautics, Military Meteorology, Military
Army Military engineering
Agriculture and war Military occupation
Air raids Munitions
Air raids and building Peace
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Communication, Military Rapid transit in war
Transportation in war

also names of wars, e.g. European war, 1914-1918; World war, 1939-

also subdivision War problems under special subjects, e.g.

Electric utilities—Public utilities—War problems
War problems

WAR—Continued

Economic aspects

- Cost of living indexes in wartime. F. M. Williams, F. R. Rice and E. D. Schell. *Am Stat Assn J* 37:415-24 D '42
- Dynamic future of common stock investment. G. S. Kent. *Il Mag of Wall St* 72: 64-8, 104-5, 120-2, 154-6, 170-2+ My 1-29 '43
- Future of the American dollar; can our government keep it good? G. B. Collingwood. *Il Mag of Wall St* 72:510-12, 540 Ag 21 '43
- Preservation of capital; role of institutional investors. L. M. Simon. *Trusts & Estates* 75:539-43, 604-5; 76:11-16 D '42-Ja '43
- Wage rates and living costs in a war economy. M. S. Brody. *J Business* 16 pt 2:1-38 Jl '43
- War economy and the economic man. H. W. Spiegel. *J Business* 16:1-6 Ja '43
- Warfare and natural resources. H. B. Ward. *Science* 95:289-92 O 1 '43
- War's economic effects; some fundamental issues. N. J. Silberling. *For Comm W* 10:15 Mr 13 '43

See also

War finance

World war, 1939—

Economic aspects

Labor problems

- Woman workers in two wars. M. Robinson. *Monthly Labor R* 57:650-71 O '43

See also

World war, 1939—

Labor problems

Social aspects

- Marriage and the family after the war. R. E. Baber. *Ann Am Acad* 229:164-75 S '43

WAR, Cost of

- Big numbers. *Economist* 144:419 Ap 3 '43
- Permanent war gains versus the costs of the war. W. Gates. *Il Mag of Wall St* 71: 456-8+ F 6 '43
- Total war in one year cost U.S. \$46 billion. *Comm & Fin Chr* 156:2331 D 31 '42

See also

World war, 1939—

Cost

WAR, Maritime (international law)

See also

Maritime law

WAR, Psychology of

- of the shadow of death. T. D. Elliot. *Ann Am Acad* 229:87-99 S '43

WAR administration

- Battles on the home front. W. Gates. *Mag of Wall St* 71:573-5+ Mr 6 '43
- Blames business men drafted for war aid, not bureaucrats, for failure in war program. H. L. Ickes. *Comm & Fin Chr* 158: 322 Jl 22 '43

- Bottleneck in ideas; still missing: a technical agency for lost ideas and full technical mobilization. *Fortune* 27:82-5+ My '43
- Britain's balance sheet; four-year credits and debits of war. *Il Fortune* 28:122-6+ N '43
- Business dealt in on war talks; Stettinius and Beaverbrook's and impending Anglo-Soviet-American discussions. *Business Week* p40+ O 2 '43
- Congressional support emerging for Baruch's program. E. Blair. *Barron's* 23:1+ Je 28 '43

- Home front leadership; excerpt from My war memories. E. von Ludendorff. *Business Week* p107 Jl 31 '43

- If this is a people's war; proposal for a joint congressional committee on the progress of the war, with some nominations. *Fortune* 27:96-7 Ja '43
- Means of war. *Economist* 145:486-7 O 9 '43

- New war mobilization set-up comes at critical time in wage-price controversy. E. Blair. *Barron's* 23:4+ My 31 '43

- No other President successful as FDR in getting Congress to share war responsibility. G. H. Montague. *Comm & Fin Chr* 157: 426 Ja 28 '43

- Office of war mobilization recommended. *Trusts & Estates* 75:452 N '42

- Records of war administration. H. Venne-man. *Special Lib* 34:121-2 Ap '43

- Secret Baruch report spurs Roosevelt to make other changes like naming Davis. E. Blair. *Barron's* 23:4 Ap 5 '43

- Showdown near on contest over control of production and manpower. E. Blair. *Barron's* 22:4 N 30 '42

- Urges creation of national war council to stop muddling through on home front. A. M. Landon. *Comm & Fin Chr* 157:1595 Ap 29 '43

See also

- United States—War War finance
mobilization, Office War manpower com-
mission

WAR advertising council

- End food waste! War advertising council launches campaign. *Business Week* p98-9 Ag 14 '43

- Food industry to survey public opinion, launch ad program. *Ptr Ink* 204:45+ Ag 20 '43

- Gold medal to C. J. La Roche in recognition of his distinguished services to advertising. *Adv & Sell* 36:6-7 F '43

- Government leaders broadcast war message in every ad plea. *Ptr Ink* 204:86+ Jl 23 '43
- Impact of war on advertising; Third war loan. *Adv & Sell* 36:32, 34 O '43

- LaRoche leaves Young & Rubicam to devote full time to Advertising council. *Ptr Ink* 202:19 F 19 '43

- Psychological warfare is advertising's job on the home front; localizing the broad national campaigns. C. J. La Roche. *Ind Marketing* 28:72, 76, 78+ Ja '43

- Space for war. *Business Week* p82+ Jl 3 '43

- Third war loan advertising greatly in excess of second loan. R. H. Ganly. *Ptr Ink* 204: 86+ S 24 '43

- Wanted: an advertising victory fund to help win the war, to be administered by the Advertising council. G. E. Cole. *Adv & Sell* 36:17-18+ Ap '43

- War ad council enlarges committee. *Ptr Ink* 204:81 S 24 '43

- War ad council to ask advertisers for space. *Ptr Ink* 203:61 Je 18 '43

- War advertising council's plea; with the government, it asks for more war space. *Adv & Sell* 36:21 Ag '43

- Young & Rubicam loses LaRoche. *Adv & Sell* 36:26+ S '43

WAR agencies

- Handbook of war agencies [United States and New York state], 1943 ed 163p pa State of New York, Executive dept. Division of commerce, Albany '43

WAR and advertising. See Advertising and war

WAR and building

See also

- Air raids and building

WAR and children

- Child. E. S. Boll. bibliog *Ann Am Acad* 229:69-78 S '43

- Child delinquency. T. Sellin. *Ann Am Acad* 229:157-63 S '43

WAR and Christianity

- Christian churches in the war. *Il Fortune* 27:118-21+ Mr '43

WAR and disease

- Disease problems after the war; abstract. K. F. Meyer. *Science* 97:sup10 Je 4 '43

- Public health and the family in World War II. C. P. Taft. *Ann Am Acad* 229:145-9 S '43

WAR and education

- Education for war; a report on U.S. colleges and universities in 1942. *Il Fortune* 26:132-7+ D '42

- Family and other institutions. W. Waller. *Ann Am Acad* 229:107-16 S '43

- Values not easily regained; disaster which war is bringing to universities and laboratories. R. B. Fosdick. *Science* 97:379-81 Ap 23 '43

See also

- Colleges and universities—War service

- WAR and labor. See Military service—Labor problems; World war, 1939—Labor problems

WAR and science

Is war the progeny of science, or science the progeny of war, or are both of these suppositions fundamentally false? R. A. Millikan. Science 97:485-6 My 28 '43; Reply. W. Kaempfert. 97:532-3 Je 11 '43

Mobilization of scientific resources; wartime scientific agencies. *il J Ap Phys* 14:373-405 Ag '43

Organization of American scientists for the war. K. T. Compton. Science 98:93-8 Jl 30 '43

Science and society. Science 98:84-5 Jl 23 '43

See also

World war, 1939—
Science and the
war

WAR-art associates

Plane artists; catalogs prepared by staff of War-art associates. Business Week p70 Ja 30 '43

WAR contracts. See Contracts, Government**WAR correspondents**

Daily papers take out special insurance for war correspondents. East Underw 44:1+ My 7 '43

WAR damage corporation

Formula for progress; heed signposts put up by War damage corporation. C. J. Schoen. *Ins Field (Fire ed)* 71:20-1 N 19 '42

Lauds Brooks bill; urges building owners to seek return of WDC surplus after war. C. Smith. Nat Underw 47:3 Jl 1 '43

Report war damage premiums in 1942. East Underw 44:1+ Mr 5 '43

WDC fee not subject to tax. Nat Underw 47:4 Ja 7 '43

WDC head claims service office at FCAB headquarters. East Underw 43:1+ N 20 '42

War damage corporation; officers and their careers. C. Axman. *pers East Underw* 43:50-1+ D 11 '42

WAR debts. See Debts, Public**WAR department office building. See United States—War department—Buildings****WAR department theaters. See United States—Army—Motion picture service****WAR emergency pipelines, inc.**

Big Inch stands as monument to Nation's oil men. J. R. Parten and others. *il maps Oil & Gas J* 41:49-54+, 58+, 65-6+, 69-70, 74+, 79+ 94 Ja 7 '43

Status of WEP program. P. Reed. *il Oil & Gas J* 42:38-9 Jl 23 '43

WEP operating plan disclosed. H. D. Ralph. *il Oil & Gas J* 41:39-40 F 25 '43

WAR emergency radio service

Channel allocations for WERS. Electronics 16:158 F '43

Report on the War emergency radio service system. L. Winner. *il diags Radio* 29:10-13, 54-6 Ja '43

WERS calling; radio amateurs and other volunteer workers are setting up a communications system for war or peace. U. S. Grant. *3d. il Sci Am* 169:23-5 Jl '43

WAR emergency tankers, inc.

B. B. Howard named head of W.E.T., new tanker agency. Nat Pet N 35:30 S 8 '43

WAR finance

Announcement of Treasury financing by Secretary Morgenthau. Fed Res Bul 28:1182-3 D '42

April war loan drive. Nat City Bank p40-3 Ap '43

Bank promotion of sales of governments; war finance and the banks. A. Sproul. Comm & Fin Chr 157:385+ Ja 28 '43

Bank stocks; effect of financing, 1914-1919 and 1939-1942 on some of the leading New York City banks. Comm & Fin Chr 157:566+ F 11 '43

Banks urged to use war loan deposit accounts to facilitate war financing. Comm & Fin Chr 156:1392 D 3 '42

Britain's financial victory. D. Tyerman. Comm & Fin Chr 158:925+ S 2 '43

British war finance and the banks. C. Muller. J Business 16:77-99 Ap '43

Budget white paper, comparison with America. Economist 144:544-5 My 1 '43

Budget white paper; national income. Economist 144:518-19 Ap 24 '43; Correction. 144:545 My 1 '43

Bureau of the budget and governmental budgeting in wartime. G. A. Moe. N A C A Bul 25:43-62 S 15 '43

Campaign to raise \$13 billion. H. D. Ralph. Burroughs Clearing House 27:19-21 Ap '43

Canadian securities; Canada's sixth war loan drive. B. Williams. Comm & Fin Chr 157:1587 Ap 29 '43

Declares war taxes low in comparison to Canada and Britain. H. Morgenthau, jr. Comm & Fin Chr 158:611 Ag 12 '43

Dip into payrolls. Business Week p 102-3+ Je 5 '43

Dominion provides billion-dollar lend-lease for United nations. Steel 112:82 F 15 '43

Dramatic victory fund arithmetic. A. W. Atwood. *il Banking* 35:23-5+ Ap '43

Economic stabilization controls and war finance. Fed Res Bul 28:1065-77 N '42

Every citizen must support mobilization of financial resources. W. M. Robbins. Comm & Fin Chr 157:1888 My 20 '43

Every possible investor must be reached in third war loan drive. A. Sproul. Comm & Fin Chr 158:706 Ag 19 '43

Financing war without inflation; Canadian experience. Trusts & Estates 77:5 Jl '43

Finds U.S. war expenditures, tax collections rise faster than Canadian or British. Comm & Fin Chr 158:139 Jl 8 '43

Forecast money and credit rationing; declares banks must adapt to war conditions. F. Delano. Comm & Fin Chr 156:1889+ N 26 '42

Four years of war finance. Economist 145:342-3 S 4 '43; Correction. 145:409 S 18 '43

FDR urges public to put more in Treasury payroll savings plan. Comm & Fin Chr 158:35 Jl 1 '43

Germany at war; war finance. Economist 144:427 Ap 3 '43

History's greatest credit flood; parallels and contrasts between British and American banks in meeting war's financial demands. R. B. Makin. *il Banking* 35:23-3 D '42

In Washington; financing the war as it relates to banks and the national economy. Bankers M 145:416, 418-19 N '42

Inflation through Federal Reserve security purchases. Trusts & Estates 75:441-2 N '42

Job for five million workers. Banking 36:29 S '43

Money or wealth? some lingering fallacies in war finance. H. L. Jome. Bankers M 145:377-82 N '42

Morgenthau opens \$13 billion war loan drive. Comm & Fin Chr 157:1377 Ap 15 '43

Morgenthau says \$45 billion more needed this year. Comm & Fin Chr 157:2094 Je 3 '43

Morgenthau urges all to put 25% of income into war bonds. Comm & Fin Chr 157:2178 Je 10 '43

Morgenthau warns of heavier taxes and hints that compulsory savings may be necessary. Comm & Fin Chr 156:2163 D 17 '42

National income tops \$10 billion a month; war expenditures equivalent to more than half the total. Barron's 22:1 N 16 '42

Our greatest job on the home front; fourth war loan planned. E. B. Hall. Comm & Fin Chr 158:1883+ N 11 '43; Same abr. Inv Banking 14:9-13 N '43

Participation by commercial banks in the war financing program. A. Sproul. Fed Res Bul 28:1190-1 D '42

Paying for the war. Bankers M 146:138-43 F '43

President hails Italian victory but warns we still have long way to go. Comm & Fin Chr 158:1117 S 16 '43

Putting over the Third war loan. H. V. Odle. *il Burroughs Clearing House* 25:26-8+ N '43

Rational war finance; review of A treatise on war inflation, by W. Fellner. D. C. Vandermeulen. Mech Eng 65:671-2 S '43

Results of the first victory fund drive; tabulation. Burroughs Clearing House 27:21 F '43

Results of the second war loan drive. Burroughs Clearing House 27:20-1 Je '43

Robbins heads War finance group. Comm & Fin Chr 157:1119 Mr 25 '43

Savings and war finance. W. W. Aldrich. Bankers M 146:501-12 Je '43; Same abr. Comm & Fin Chr 157:1777+ My 13 '43

Second victory loan. Nat City Bank p27-8 Mr '43

WAR finance—Continued

Second war loan drive. Fed Res Bul 29:293-4 Ap '43
 Second war loan drive at \$18,533,000,000. Comm & Fin Chr 157:2089 Je 3 '43
 September bond drive. Nat City Bank p100-1 S '43
 Short history of war finance. W. L. Hemingway. Banking 36:39 Jl '43
 Sproul heads NY War finance committee. Comm & Fin Chr 157:925 Mr 11 '43
 Story of money in war! cartoons. Banking 35:40 D '42
 Success of the second war loan. Nat City Bank p51-2 My '43
 Success of the victory loan. Nat City Bank p4-5 Ja '43
 Tells banks' part in victory fund drive; Economic policy commission. Banking 35:47 Ap '43
 Text of the President's budget message to Congress. Comm & Fin Chr 157:286-8 Ja 21 '43
 Third war loan. Nat City Bank p88-90 Ag '43
 Third war loan drive. Fed Res Bul 29:707-12 Ag '43
 Third war loan; drive over top. Business Week p105-6 O 9 '43
 Third war loan drive set at \$15 billion, issues limited to non-banking investors. Comm & Fin Chr 158:430 Jl 29 '43
 Third war loan drive: some comparisons. H. Bratter. Banking 36:12-13 O '43
 Third war loan success. Nat City Bank p112-13 O '43
 Treasury finance; pattern for war financing during the next several months. H. D. Ralph. Burroughs Clearing House 27:19-20 D '42
 Treasury to borrow \$70 billion this year. Comm & Fin Chr 157:1783 My 13 '43
 25% of national income must be used in bond campaign. P. H. Odegard. Comm & Fin Chr 157:2405 Je 28 '43
 Two war loans—Canada and United States. Trusts & Estates 77:105 Ag '43
 Urges sale of government bonds to individuals. J. N. Whipple. Comm & Fin Chr 158:1881+ N 11 '43; Same abr. Inv Banking 14:1-6 N '43
 Victory fund buyers; marketing report on December sales. Banking 35:27 Mr '43
 Victory loan. Nat City Bank p134-7 D '42
 Victory loan drive nets \$12,906,000,000. Comm & Fin Chr 157:383 Ja 28 '43
 War bonds, taxes, and economic stability. M. S. Eccles. Fed Res Bul 29:393-6 My '43
 War finance and bank credit. H. E. Agger. Trusts & Estates 76:323-4 Ap '43
 War finance and the banks. M. Nadler. Bankers M 145:531-2 D '42
 War finance conference; annual meeting of the IBA. Inv Banking 13:5-24 D '42
 War financing and banking developments. Fed Res Bul 28:1173-81 D '42
 War financing and post-war business outlook. A. R. Uppgren. Bankers M 146:239-46 Mr '43
 War loan drive and the money market. Fed Res Bul 29:369-77 My '43
 Wartime problems of Washington financial librarians. E. Rackstraw. Special Lib 34:276-9 Jl-Ag '43
 What will it take to pay for this war? W. Gates. Mag of Wall St 71:219-21+ D 12 '42

Who sold the bonds in other wars? Inv Banking 13:4 D '42

Would solve national debt by issuing legal tender bonds yielding \$1 a year per \$1000 bond. M. M. Mattison. Comm & Fin Chr 158:406 Jl 29 '43

See also

Bonds, Government	Saving, Compulsory
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Finance—Canada	Finance
Finance—Great Britain	World war, 1939—
Finance—United States	United States—
	Lend-lease operations

WAR frauds unit. See United States—Justice, Department of—War frauds unit

WAR gases. See Chemical warfare; Gases, Asphyxiating and poisonous

WAR information, Office of. See United States—War information, Office of

WAR insurance corporation. See War damage corporation

WAR labor board. See National war labor board

WAR manpower commission

BMU spreads out. Business Week p110-12 My 22 '43
 Centralization of manpower control. Monthly Labor R 56:26-8 Ja '43
 Draft gets down to business. Business Week p 15-17 D 19 '42
 It's work or fight; WMC order compels workers to shift into essential lines. Business Week p14 F 6 '43
 McNutt streamlines manpower controls; five operating divisions set up. Comm & Fin Chr 157:73 Ja 7 '43
 McNutt's men; five operating divisions. Business Week p60+ D 26 '42
 Manpower chairman sets up five operating divisions. Oil Paint & Drug Rep 142:3 D 21 '42
 Manpower commission names eighty-five surplus labor areas. Iron Age 151:90 Ja 14 '43
 Manpower; mobilization of the total victory force. Index 22 no 4:73-80 [D] '42
 Manpower police; Bureau of manpower utilization. Business Week p52+ F 27 '43
 Manpower shifts; WMC reshuffles its list of industrial areas. Business Week p100-1 Mr 27 '43
 Meeting the labor squeeze. Personnel J 22:172-85 N '43
 Policy on woman workers. Monthly Labor R 56:669-71 Ap '43
 Relationships between War manpower commission and the engineering colleges. W. W. Charters. J Eng Educ 34:158-63 O '43
 Reorganization. Monthly Labor R 56:255 F '43
 Roosevelt gives McNutt full control over manpower, voluntary enlistments ended. Comm & Fin Chr 156:2065+ D 10 '42
 Stricter control of workers on war-useful jobs made effective by WMC. Comm & Fin Chr 158:1622 O 21 '43
 Technical manpower. F. V. Harper. Chem & Eng N 21:651-2 My 10 '43
 Training, key to the skilled help shortage; Apprenticeship and training service of the War manpower commission. C. W. Stapleton. J Bus Transportation 22:24-6 F; 38-40 Mr '43
 Training spreads; WMC plans to handle almost ten million trainees in next twelve months. Business Week p84+ Ag 21 '43
 Wanted: local help in the manpower problem. F. J. McSherry. Factory Management 100:78-81 D '42
 WMC committee for industry-labor-farm. Comm & Fin Chr 157:1319 Ap 8 '43
 WMC curbs transfer of millions of workers in essential industries. Comm & Fin Chr 157:1497, 1501+ Ap 22 '43
 WMC flayed for creating intolerable situation in steel industry with its 48-hr. week policies. Iron Age 152:92-4 Jl 22 '43

WAR materials, inc.

Scrap in scrap; head of War materials, inc. resigns. Business Week p33+ Mr 6 '43

WAR measures

Canada freezes all business. J. Montagnes and D. Gordon. Factory Management 100:81+ D '42
 Canada's new order in force; business establishments were frozen at November 2, 1942 status. For Comm W 9:12 N 21 '42
 Declares chief problem is organizing civilian economy; predicts more rationing. J. F. Byrnes. Comm & Fin Chr 156:1894 N 26 '42
 Federal attempts to control living costs. Monthly Labor R 56:877-82 My '43
 How Canada meets issues of wartime. K. R. Wilson. Inland Ptr 110:61-2 D '42
 Ottawa models. Business Week p86+ Mr 20 '43
 Pay bonus nipped; Ottawa's payment of new subsidy to retailers lowers cost-of-living index. Business Week p50+ F 13 '43
 Relations between the state regulatory agencies and federal war agencies. R. A. Nixon. Pub Util 30:715-20 N 19 '42
 Treasury bans export of checks, drafts to blocked countries, also restricts imports. Comm & Fin Chr 158:214 Jl 15 '43
 War economy and the economic man. H. W. Spiegel. J Business 16:1-6 Ja '43

WAR measures—Continued

Wartime labor control in the Union of South Africa. Monthly Labor R 57:473-83 S '43
 Wartime relief from civil obligations in Great Britain. R. F. J. Sanders. Ann Am Acad 227:62-8 My '43

See also

Air raids—Protective measures
 Commodity control
 Electric utilities—War problems
 Enemy aliens
 Gas industry—War measures
 Highway administration—War measures
 Industrial mobilization
 Insurance, War risk
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 Prices—Regulation
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 World war, 1939—Commodity control
 World war, 1939—Labor problems

WAR metallurgy committee. See National academy of sciences—War metallurgy committee

WAR mobilization, Office of. See United States—War mobilization, Office of

WAR news

Roberts heads OWI advisory committee; seven principles of news policy listed. Comm & Fin Chr 158:337 Jl 22 '43

See also

War correspondents

WAR orders. See Contracts, Government; Munitions—Manufacture

WAR photographs

Grafex sees the war. Il Am Phot 37:34-5 O '43

Tunisian triumph; war pictures. E. Elisofon. Il Am Phot 37:32-3 S '43

WAR posters*See also*

Posters

WAR production board. See United States—War production board

WAR production drives. See Incentives in industry

WAR profits

Big boys of business not cashing in, Thomas W. Lamont tells poet Benet. Comm & Fin Chr 158:225, 230-1 Jl 15 '43

Earnings of large war material manufacturers. Nat City Bank p52-4 My '43

Industry's wartime earnings; abstract. J. S. Sutton. Management R 32:398-400 N '43

Private enterprise, to survive, must keep lean and efficient. M. Karkier. Ptr Ink 201:78-+ N 13 '42

Profit and patriotism. A. Woodburn. Engineer 175:13-14 Ja 1 '43; Discussion. A. Herbert. 175:33-4 Ja 8 '43

Profit in wartime; what is the proper basis for renegotiation. J. L. Carey. Credit & Fin Management 44:4-6 D '42; Excerpts. Trusts & Estates 76:276-7 Mr '43

Renegotiation as a public relations job for American business. M. H. Karkier. Il Ind Marketing 27:19-21+ D '42

Renegotiation: what it is; what it does; how it works. R. P. Patterson. Il Dun's R 51:8-13+ Ja '43

Truce on profits. Business Week p16+ O 30 '43

WAR risk insurance. See Insurance, Fire—War risks; Insurance, Life—War risks; Insurance, Marine—War risks; Insurance, Military and naval service; Insurance, War risk

WAR savings stamps

Treasury approves 10c war stamps on Christmas card idea. Il Ptr Ink 201:20 D 11 '42

WAR shipping administration

Insurance personnel of WSA. E. N. Eager. East Underw 43:74+ D 11 '42

War effort of the maritime industry. E. S. Land. Marine Eng 48:173-5 My '43

WSA. Maritime bureau insurance work described. Nat Underw 47:10 S 23 '43

WSA opens New York office. East Underw 44:26+ Ag 13 '43; Weekly Underw 149:307 Ag 14 '43

WSA rules on cargoes under collect freight. Weekly Underw 147:1248 N 28 '42; East Underw 43:23 N 27 '42

War shipping administration; with organization chart and sketches of personnel. Marine Eng 48:170-86 Ag '43

WAR ships. See Warships

WAR utilities, Office of. See United States—War production board—War utilities, Office of

WAR veterans. See Soldiers, Discharged

WAR workers. See Munition factories—Employees

WARD baking company

Annual report. Comm & Fin Chr 157:736 F 22 '43

WARD LA FRANCE truck corporation

Undisclosed acts condemned by SEC; purchase of stock reviewed in report. Comm & Fin Chr 157:2356 Je 21 '43

WARD-LEONARD control. See Electric control

WAREHOUSE receipts

Field warehousing. E. A. Baker. J Account 75:433-7 My '43

WAREHOUSES

Cost comparison of wood, steel and concrete warehouses. A. F. Comstock. diags Eng N 130:626-9 Ap 22 '43

Fitting designs for the "57"; warehouses for H. J. Heinz co., California. Il plans Arch Rec 93:61-4 Ap '43

Mastic used to seal leaky brick walls; made from gilsonite asphaltic mixture and slate granules. Pennsylvania railroad's harbor-side terminal warehouse. J. E. Nicholson. Il Eng N 123:716-17 N 19 '42

New ideas in job organization speed work on army warehouses of concrete. Il Concrete 51:4-5 Jl '43

To and from storage; better handling in warehousing areas means faster service to production departments. Il Factory Management 101:109-10 Jl '43

Warehouse bulge. Business Week p65 D 12 '42

See also

Cold storage warehouses

Heating and ventilation

Joseph T. Ryerson & son, inc. uses heated discharge air for maintaining dry conditions in warehouses. Heat & Ven 39:49 N '42

WAREHOUSING

Cotton warehouse held liable for stored bales. Nat Underw 47:40 Mr 11 '43

Field warehousing. E. A. Baker. J Account 75:433-7 My '43

Foreign-trade zones versus bonded warehouses. T. E. Lyons. For Comm W 11:18 My 8 '43

How the new aircraft steel warehousing program operates. flow chart Aero Digest 42:156-9 Je '43; Same cond. Automotive & Aviation Ind 38:42+ Je 15 '43

Owner's right of action against insured warehouseman for fire loss. East Underw 44:28 My 28 '43

Warehouse problems with CMP answered. Iron Age 152:126+ Ag 26; 102+ S 2 '43

WARGA, Mary Elizabeth

Personalities in science. por Sci Am 168:99 Mr '43

WARM air furnaces. See Furnaces, Warm air

WARM air heating. See Heating, Warm air

WARM air heating and air conditioning association, National. See National warm air heating and air conditioning association

WARNER, Charles Albert, 1894-

Chairman, Petroleum division A.I.M.E. por Min & Met 24:231 My '43

WARNER brothers pictures, inc.

Another look. Mag of Wall St 72:96 My 1 '43

Arranges \$23,000,000 financing. Comm & Fin Chr 158:199 Jl 12 '43

Market leaders for 1943. Mag of Wall St 71:372 Ja 9 '43

Thumbnail stock appraisal. Mag of Wall St 72:633 S 18 '43

WARNER sugar corporation

Plan amended. Comm & Fin Chr 158:96 Jl 5 '43

Reorganization plan. Comm & Fin Chr 157:262-3 Ja 18 '43

WARREN, Lindsay Carter, 1889-
Portrait. Business Week p24 O 30 '43

WARREN, Whitney, 1864-1943
Sketch. por Arch Rec 93:98+ Mr '43

WARREN brothers company
Debt retired, report on operations. J. J. Henry. Comm & Fin Chr 158:1692 O 28 '43
Plan consummated; elects directors. Comm & Fin Chr 156:2047-8 D 7 '42
Report of operations. Comm & Fin Chr 157:1661 My 6 '43
Successful reorganization. Comm & Fin Chr 157:178+ Ja 14 '43

WARSAW, New York

Water supply

How metering saved a major capital expenditure. G. F. Sheehe. *Il Water Works & Sewerage* 90:14-16 Ja '43

WARSHIPS

Building and maintaining the greatest navy in history. E. L. Cochrane. *Il Mach* 50:132-9+ N '43

Coefficient of propulsive efficiency. K. C. Barnaby. Engineer 175:472-5 Je 11 '43
Naval construction in 1942. F. McMurtrie. *Il Engineer* 175:4-6, supp2, 27-8, supp2, 46-8, 67-8 Ja 1-22 '43

Refrigeration installations aboard naval vessels. T. J. Bay. *Refrig Eng* 45:17-19 Ja '43
Reinvestigation of the practicability of the small displacement capital ship; abstract and discussion. W. E. Strobe and S. J. Dwyer. *diag plan Marine Eng* 48:156-9 Ja '43

Some signposts from the naval events of 1942. H. C. Ferraby. Engineer 175:2-4 Ja 1 '43

Standardized heating and ventilating equipment for fighting ships. T. H. Urdahl, J. Everetts, Jr. and W. C. Whittlesey. *Il diag Heating-Piping* 15:333-6, 419-21 JI-Ag '43

Warship ventilating, heating and air conditioning. T. H. Urdahl and W. C. Whittlesey. *Il Heating-Piping* 15:105-10 F '43; Same. *Marine Eng* 48:212+ My '43

Warships of World war II. F. J. McDiarmid. *Il Barron's* 23:16 F 1; 16 F 15; 18 Mr 8; 7 Mr 15; 7 Mr 22; 7 Ap 5; 9 Ap 19 '43

See also

Airplane carriers	Torpedo boat destroyers
Armor plate	Torpedo boats

Identification

Split-second recognition, a new allied weapon. *Il Aviation* 42:119+ JI '43

Great Britain

From paddle to screw in the navy. F. C. Bowen. Engineer 176:12-13 JI 2 '43

Italy

Surrender of the Italian fleet. *Il diags Eng* 48:223-5 S 17 '43

United States

Construction men build fighting ships; destroyer escort vessels for the navy. *Il diags plan Eng N* 131:12-17 JI 1 '43

Defoe building destroyer escorts. *Il Marine Eng* 48:207-8 Ag '43

Navy shipbuilding output increases 250 percent. *Marine Eng* 48:189 Ag '43

Navy's new destroyer escort vessels. *Il Marine Eng* 48:191 Ap '43

Our comeback at Pearl Harbor. R. G. Skerrett. *Il map Comp Air M* 48:7152-9 O '43

Pearl Harbor ships fight again; raising sunken warships. *Il Marine Eng* 48:178-87 Je '43

Some aspects of Diesel engines for navy main propulsion. E. W. Mills. *Mech Eng* 65:625-7 S '43

Thomas A. Edison's influence on the United States navy. H. G. Bowen. *Edison Elec Inst Bul* 11:133-5 My '43

Training navy men to operate destroyer escorts. R. C. Buell. *Il Marine Eng* 48:210-11+ Ag '43

WASHERS (machinery)

Washers inspected on gravity table. A. E. Sites. *Il Am Mach* 87:100 Ag 5 '43

WASHING

See also

Coal washing
Laundry

WASHING agents. See Cleaning compositions

WASHING apparatus

Sudser saves soap in washer; compressed air discharges into soap solution to form suds which falls onto revolving brushes to clean citrus fruit. I. Feinberg. *diag Food Ind* 15:61 Ja '43

WASHING machines

Hope for washers; manufacturers' appeal to WPB. Business Week p92 Ag 21 '43

WASHING machines (for metal parts)

American foundry equipment co.'s metal washing machine. *Il diag Metal Finishing* 41:92 F '43

Continuous machines for productive metal washing. R. W. Mitchell and M. T. Zinty. *Il diags Am Mach* 87:90-2 Je 24 '43
Designed for varying requirements; machine for removing cutting or rust-preventive oils and metal chips from shells. W. Nekola. *Il Machine Design* 15:118 Ap '43

Fraser-Heller metal degreasing system. *Il diag Engineering* 155:146-7 F 19 '43

L & R mfg. co. cleaning machine. *Il Steel* 112:89 Ja 11 '43

Metal-washing machines for discontinuous operation. R. W. Mitchell and M. T. Zinty. *Il diags Am Mach* 87:97-9 Je 10 '43

Spray washing and rinsing machine. *diags Am Mach* 87:96 My 27 '43

Tumbler-spray metal-washing machine. *Il Mach* 49:194 Mr '43

WASHINGTON, D.C.

Are utilities a proving ground for the race question? order to the Capital transit company. L. D. Farrar. *Pub Util* 31:805-14 Je 24 '43

Washington; the U.S.A. in miniature; study of changing conditions. P. James. *Il Adv & Sell* 36:15-16+ Ag '43

See also

Cost of living—Washington, D.C.

Hotels

Setting new planning standards; Hotel Statler. *Il plans Arch Rec* 94:70-4 S '43
Washington Statler; views, plans, and construction outline. *Arch Forum* 78:61-76 Je '43

Railroads

Old power plant carries war load; Washington terminal company. *Il Ry Age* 115:5-7 JI 3 '43

Rapid transit

Michigan 6363, it's Washington's most popular number; phone call of Capital transit company's information department. E. C. Giddings. *Il Bus Transportation* 22:26-7 Ap '43

Women operators in Washington, D.C. A. Shapiro. *Mass Transportation* 39:330-1 S '43

Sanitary affairs

Wartime problems in refuse collection and disposal. *Pub Works* 73:16+ D '42

WASHINGTON (state)

See also Mines and mineral resources—Washington (state)

Economic conditions

Measurement of business activity in the Puget Sound area. G. I. Butterbaugh. *bibliog map J Business* 16:1-72 pt 2 Ap '43

WASHINGTON academy of sciences

Officers. *Science* 97:198 F 26 '43

WASHINGTON award

Washington award for 1943 presented to Andrew Abraham Potter; presentation by E. G. Fox, response by A. A. Potter. *W Soc E J* 48:51-9 Je '43

Washington engineering award to Dean Potter. *Elec W News* ed 119:689 F 27 '43

WASHINGTON gas and electric company, Tacoma, Washington

Hearing on sale of water system; trustee's annual report, Sept. 30, 1942. *Comm & Fin Chr* 156:1960 N 30 '42

WASHINGTON gas light company

Sells bonds privately. Comm & Fin Chr 157: 1191-2 Mr 29 '43

WASHROOMS. See Lavatories**WASTE**

Conserving the use of critical materials; developing scrap-saving methods as a means of supporting the war effort; General motors corporation. B. D. Kunkle. *il Mech Eng* 65:267-73 Ap '43

Waste in electrical construction in war plants. C. H. Shaw. *diags Elec W* 120:395-7 S 18 '43

See also

Coal waste	Salvage (waste, etc.)
Conservation of resources	Scrap material
Exhaust steam	Scrap metal
Paper—Conservation	Time saving
Paper mills—Waste	Trade waste
Petroleum refineries	Waste heat
—Waste	Waste paper
Railroads—Scrap material	Waste products
Rubber waste	Water waste
	Wood waste

WASTE, Utilization of

Cooperative research on sulphite waste liquor. J. P. Weidner. *Pulp & Pa of Can* 44:739-40 S '43

Industrial waste disposal. F. W. Mohlman. *il diags Chem & Met Eng* 50:127-31 F '43

Recovery of free acid from pickling liquors. H. W. Gehm. *Ind & Eng Chem* 35:1003-4 S '43

See also

Oil reclamation	Sewage sludge as fertilizer
Refuse, Utilization of	Solvents—Recovery
Rubber waste	Waste products
Salvage (waste, etc.)	
Scrap metal	

WASTE disposal. See Refuse disposal; Trade waste

WASTE fuel

Combustion of excess gas; automatic control of boiler firing. R. A. Fox. *diags Oil & Gas J* 41:109-10+ Mr 25 '43

Liquid fuel from sulphite waste liquor; abstract. J. Juschtin. *Paper Ind* 24:984 D '42

Smoke-box char as boiler fuel. *diags Engineer* 176:250 S 24 '43

See also

Blast furnace gas	Sawdust
Coal waste	Sewage sludge—Gas production
Coke breeze	Wood as fuel
Coke-oven gas	

WASTE heat

Conversions from oil to waste heat. T. W. Reynolds. *plan Heat & Ven* 40:73-4 My '43

Heat-saving method for steel chimneys. W. F. Schaphorst. *Chem Ind* 52:349 Mr '43

Heat utilization in sulphate mills; use of flash steam from the digester blow to heat hot water for pulp washing. H. T. Baker. *Paper Tr J* 117:32-4 JI 15 '43; Abstract. *Paper Ind* 25:551-2 Ag '43

Substation losses heat company office; Savannah electric & power company. *diag Elec W* 119:1496 My 1 '43

Sulphite blow heat and gas recovery. J. N. Swartz. *il diag Pulp & Pa of Can* (Convention no) 44:139-42 [F] '43

See also

Blast furnace gas	Sewage sludge—Gas production
Boilers, Waste heat	Steam plants—By-product power
Coke-oven gas	Waste fuel
Exhaust steam	
Heat exchangers	

WASTE paper

Changes in waste paper. *Paper Tr J* 117: 91 S 30 '43

Deinking and reuse of old papers. F. C. Clark. *Paper Tr J* 116:23-5 Ap 8 '43; Same cond. *Paper Ind* 25:302-4 Je '43

Demonstrate new deinking method before congressional committee. *Paper Tr J* 117: 20-1 O 21 '43

New angles on waste paper. *Pulp & Pa of Can* 43:996 D '42

Report of the fine papers committee, Canadian pulp and paper association; replies to questionnaire on broke handling; with discussion. *Pulp & Pa of Can* (Convention no) 44:154-8 [F] '43

Rules on processing waste paper. *Paper Tr J* 116:32 My 13 '43

Vanishing ink; new process for de-inking paper demonstrated by J. H. R. Cromwell. *Business Week* p61-2 O 23 '43

Waste paper situation serious. *Paper Tr J* 117:16 O 14 '43

Prices

Fines are imposed on waste paper dealers; guilty of violating OPA maximum price regulation. *Paper Tr J* 115:9 D 17 '42

To enforce ceiling price on waste paper; action against seven dealers and brokers and two paper mills. *Paper Tr J* 117:7 Ag 26 '43

WASTE products

Oklahoma oil-field brines and their utilization. B. W. Logue. *Oil & Gas J* 41:49-50+ F 11 '43

Recovery of chemicals from oil field brines awaits market for chloride compounds. *il Nat Pet N* 35 pt 2:R282-3 Je 2 '43

See also

Bagasse	Railroads—Scrap material
Blast furnace gas	Rubber waste
Chemurgy	Salvage (waste, etc.)
Coal waste	Scrap metal
Coke manufacture—By-products	Sewage sludge—Gas production
Coke-oven gas	Slag
Cornstalks	Straw
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Flue dust	Tailings
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Gas manufacture—By-products	Waste fuel
Lignin	Waste paper
Meadol	Wood as fuel
Packing houses—By-products	Wood waste

WATCHES

Shortage of watches becoming more critical.

Consumers' Research Bul, 11:18 My '43

Watches, field glasses, cameras; all are becoming scarce. Consumers' Research Bul 11:23 D '42

When watch factories tick again; pictograph. *Sales Management* 52:60 S 15 '43

WATCHMEN

Train watchmen for safety. *Safety Eng* 86: 37-9 S '43

WATER

Chemical separation of the isotopes of hydrogen by the addition of metals and compounds of metals to water, acids and bases; relative efficiencies of specific reactions; the effects of certain factors other than temperature. H. L. Johnston and C. O. Davis. *bibliog diag Am Chem Soc J* 64: 2613-20 N '42

Dead-stop end point as applied to the Karl Fischer method for determining moisture. G. Wernimont and F. J. Hopkinson. *bibliog il Ind & Eng Chem Anal ed* 15:272-4 Ap 15 '43

Determination of water in aniline by a cloud point method; comparison of rapeseed oil with cottonseed-mineral oil mixtures. W. Seaman, A. R. Norton and J. J. Hugonet. *Ind & Eng Chem Anal ed* 15:322-4 My 15 '43

Dielectric dispersion and absorption of water and some organic liquids. W. P. Conner and C. P. Smyth. *bibliog diag Am Chem Soc J* 65:382-9 Mr '43

Diffusion length of C neutrons in water. G. R. Gamertsfelder and M. Goldhaber. *Phys R* 62:556-7 D 1 '42

Electrolysis of water; plant for the production of pure hydrogen and oxygen. *il Chem Age* (Lond) 47:535-6 D 12 '42

Equilibrium in hydrogen-water systems containing tritium. J. F. Black and H. S. Taylor. *diags J Chem Phys* 11:395-402 S '43

Estimation of water in alcohol with aid of dicyclohexyl. G. R. Robertson. *bibliog Ind & Eng Chem Anal ed* 15:451-2 JI 15 '43

Ethanol-water system; vapor-liquid properties at high pressures. J. Griswold, J. D. Haney and V. A. Klein. *bibliog il diag Ind & Eng Chem* 35:701-4 Je '43

WATER—Continued

- Improved electrometric apparatus for use with the Karl Fischer method for determination of water. C. D. McKinney, Jr. and R. T. Hall. *bibliog* *il* *diag* *Ind & Eng Chem Anal* ed 15:460-2 J1 15 '43
- Influence of hindered molecular rotation on the dielectric constants of water, alcohols, and other polar liquids. G. Oster and J. G. Kirkwood. *bibliog* *J Chem Phys* 11:175-8 Ap '43
- Infra-red prism spectrograph as a precision instrument. R. A. Oetjen, C. Kao and H. M. Randall. *bibliog* *il* *diag* *R Sci Instr* 13: 515-23 D '42
- Modern liquid state theory in relation to engineering; structure of water. R. S. Silver. *Engineering* 156:114 Ag 6 '43
- Natural waters available for industrial use. W. D. Collins. *il* *map* *Chem & Eng N* 21: 1062-5 J1 10 '43
- Phase equilibria in hydrocarbon systems; composition of dew-point gas in ethane-water system. H. H. Reamer and others. *bibliog* *il* *Ind & Eng Chem* 35:790-3 J1 '43
- Rapid determination of water in by-product sulfur. L. Shnidman. *il* *Ind & Eng Chem Anal* ed 15:430-3 J1 15 '43
- Rates of evaporation of water through compressed monolayers on water. I. Langmuir and V. J. Schaefer. *bibliog* *il* *Franklin Inst J* 235:119-62 F '43
- Resemblance between surface films on solids and on water. S. J. Gregg. *Chem Soc J* p696-708 N '42
- Role of neighboring groups in replacement reactions; the effects of small amounts of water on the reaction of silver acetate in acetic acid with some butene and cyclohexene derivatives. S. Winstein and R. E. Buckles. *bibliog* *Am Chem Soc J* 64:2787-90 D '42
- Triple point of water. W. Waring. *bibliog* *Science* 97:221-2 Mr 5 '43
- Use of the exchange between carbon dioxide, carbonic acid, bicarbonate ion, and water for isotopic concentration. A. F. Reid and H. C. Urey. *bibliog* *J Chem Phys* 11:403-12 S '43
- Variation in the structure of water in ionic solutions. G. W. Stewart. *bibliog* *J Chem Phys* 11:72-4 F '43
- Vibrational frequencies of the isotopic water molecules; equilibria with the isotopic hydrogens. W. F. Libby. *bibliog* *J Chem Phys* 11:101-9 Mr '43
- See also*
- | | |
|---|---|
| Air conditioning equipment—Water requirements | Hydrolysis |
| Cooling of water | Ice |
| Cooling water | Irrigation |
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| Hydraulics | Wells |
| | Wetting agents |
- Aeration**
- Flow in steep chutes with special reference to self-aeration, by R. Ehrenberger; tr. and abst. by E. F. Wilsey. *diags* *Am Soc C E Proc* 69:sup31-41 S '43
- See also*
- Water purification—
Aeration
- Analysis**
- Army water testing method simplifies chlorine residual check; method employs ortho-tolidine in tablet form. *Eng N* 130:908 Je 17 '43
- Chromium, a water and sewage problem. D. W. Graham. *bibliog* *Am Water Works Assn J* 35:159-64 F '43
- Colorimetric determination of chlorine residuals up to 10 ppm. with ortho-tolidine. N. S. Chamberlin and J. R. Glass. *bibliog* *Am Water Works Assn J* 35:1965-84, 1205-21 *bibliog*(p1083-4, 1221) Ag-S '43

- Colorimetric determination of fluoride in natural waters with thorium and alizarin. N. A. Salviety. *bibliog* *Ind & Eng Chem Anal* ed 15:620-1 O 15 '43
- Control of chlorination; committee progress report. *Am Water Works Assn J* 34:1782-4 D '42
- Control of chlorination; committee report. *bibliog* *Am Water Works Assn J* 35:1315-28 O '43
- Crystalline compounds observed in water treatment. C. E. Imhoff and L. A. Burkardt. *bibliog*(40 references) *il* *Ind & Eng Chem* 35:373-82 Ag '43
- Detection of poisons in water supplies; abstract. O. M. Smith. *Water Works & Sewerage* 39:470-1 N '42
- Determination of dissolved oxygen. R. C. Adams and others. *il* *diag* *Can Chem & Process Ind* 27:422, 424, 426+ J1 '43
- Determination of high chlorine residuals; chemistry of the ortho-tolidine reactions. N. S. Chamberlin. *Water Works & Sewerage* 39:496-9 N '42
- Determination of iron in water; a modified colorimetric procedure. F. J. Hallinan. *Ind & Eng Chem Anal* ed 15:510-12 Ag 15 '43
- Determination of monoalkyl ethers of ethylene glycol. H. W. Werner and J. L. Mitchell. *bibliog* *Ind & Eng Chem Anal* ed 15:375-6 Je 15 '43
- Determination of the phenols content of surface waters. R. D. Scott. *Am Water Works Assn J* 35:592-4 My '43
- Estimation of high chlorine residuals. A. E. Griffin and N. S. Chamberlin. *bibliog* *Am Water Works Assn J* 35:571-8 My '43
- Fixing and determining oil in feed water and boiler water. C. A. Noll and W. J. Tomlinson. *bibliog* *Ind & Eng Chem Anal* ed 15: 629-32 O 15 '43
- pH zones of import in water supply and sewage treatment practice; pH conversion chart; effect of carbonate and bicarbonate alkalinity. *Water Works & Sewerage* 90: sup265-7 Je '43
- Interpretation of chemical analyses of water. J. M. Montgomery. *Water Works & Sewerage* 90:sup123-4 Je '43
- Ions, parts per million, and equivalents per million; system for reporting results of analysis of water standardized by the American society for testing materials. *Mech Eng* 64:742-3 O '42; *Discussion*. 65: 212-13 Mr '43
- Modification of the flash color test to control break-point chlorination. F. C. Laux and J. E. Nickel. *Am Water Works Assn J* 34:1785-6 D '42; *Abstract*. *Water Works & Sewerage* 89:531 D '42
- Preservation of phenol content in polluted river water samples previous to analysis. M. B. Ettinger, S. Schott and C. C. Ruchhoff. *bibliog* *Am Water Works Assn J* 35: 299-302 Mr '43
- Rapid tests of water quality. F. W. Gilcreas. *bibliog* *Am Water Works Assn J* 35:1201-4 S '43
- Recognition of impurities in water; poisonous substances added as result of enemy action; abstract. F. C. Hilton-Sergeant. *Am Water Works Assn J* 35:343-4 Mr '43
- Slide rule for carbonate equilibria and alkalinity in water supplies. A. A. Hirsch. *bibliog* *Ind & Eng Chem Anal* ed 14:943-6 D 15 '42
- Spectrophotometric determination of magnesium by titan yellow. E. E. Ludwig and C. R. Johnson. *bibliog* *Ind & Eng Chem Anal* ed 14:895-7 N 15 '42
- Tables for the determination of alkaline compounds in a softened water. D. Feben. *Am Water Works Assn J* 35:1312-14 O '43
- Use of *p*-aminodimethylaniline as an indicator for free chlorine. W. A. Moore. *Am Water Works Assn J* 35:427-8 Ap '43
- War problems in analysis and treatment; detection and removal of mustard gas and lewisite. A. M. Buswell and others. *Am Water Works Assn J* 35:1303-11 O '43

See also
Water—Bacteriology
Water sampling

Bibliography

- TAPPI survey of water technology, 1942. L. B. Miller. *Paper Tr J* 116:29-31 Ap 22 '43

WATER—Continued

Bacteriology

Bacteriological results of break-point chlorination; observations at Fredericksburg, Va. A. E. Wilson, jr. *Water Works & Sewerage* 89:494-5 N '42

Bacteriology of fresh water; distribution and types of coliform bacteria in lakes and streams; abstract. C. B. Taylor. *Am Water Works Assn J* 35:641-2 My '43

Chlorine residual and bacteriological quality. M. Levine, A. Heller and R. Bender. *Am Water Works Assn J* 34:1787-96 D '42

Coliform confirmation from raw and chlorinated waters with brilliant green bile lactose broth. E. Wattie. *Pub Health Rep* 58:377-83 Mr 5 '43

Corrosion of water pipes in a steel mill. C. L. Clark and W. J. Nungester. *bibliog il Am Soc for Metals Trans* 31:304-14 Je '43; Same cond. *Oil & Gas J* 42:65-6+ O 7 '43; Discussion. *Am Soc for Metals Trans* 31:314-20 Je '43

Discussion of bacteriological requirements for the revised drinking water standards. *Pub Health Rep* 58:107-11 Ja 15 '43; Same. *Am Water Works Assn J* 35:154-8 F '43; Same. *Water & Sewage* 81:24+ My '43; Same. *Water Works & Sewerage* 90:sup134-5 Je '43

Ecology and significance of the different types of coliform bacteria found in water; abstract. C. B. Taylor. *Am Water Works Assn J* 35:641 My '43

Effect of certain microorganisms on the injection of water into sand; abstract. F. B. Plummer and others. *Oil & Gas J* 42:78 My 20 '43

Effect of chlorination on *pasteurella tularensis* in aqueous suspension. H. B. Foote and others. *bibliog diag Am Water Works Assn J* 35:902-10 JI '43

Hypothetical relationship of water supplies to poliomyelitis; abstract. K. F. Maxcy. *Am Water Works Assn J* 35:628-9 My '43

Instruction in water bacteriology at the Massachusetts decontamination school. J. A. McCarthy. *N E Water Works Assn J* 56:288-93 S '42

New agent for bacteriological examination of water; Carragar; reclamation of agar. R. E. Thompson. *Water & Sewage* 81:18, 38-40 JI '43

Paratyphoid fever; an epidemiological study; abstract. W. Savage. *Am Water Works Assn J* 35:631-2 My '43

Relation between coliforms and enteric pathogens. R. W. Kehr and C. T. Butterfield. *Pub Health Rep* 58:589-607 *bibliog*(p606-7) Ap 9 '43; Abstract. *Water & Sewage* 81:25-6+ Je '43

Relative resistance of coliform organisms and certain enteric pathogens to excess-lime treatment. E. Wattie and C. W. Chambers. *bibliog Am Water Works Assn J* 35:709-20 Je '43

Research and control; outbreaks of intestinal disease; is water the cause? N. J. Howard. *Water & Sewage* 81:22+ My '43

Research and control; typhoid fever and other waterborne diseases. N. J. Howard. *il Water & Sewage* 80:16-17 D '42

Bibliography

TAPPI survey of water technology, 1942. L. B. Miller. *Paper Tr J* 116:25-34 Ap 22 '43

Deactivation and deaeration

Condenser deaerates Trenton Channel feed. R. Briscoe. *plan Elec W* 119:1775 My 29 '43

Make deaerating heaters suit plant cycle. W. P. Spining. *diags Power* 86:717-19, 786-8; 87:29-31 O-N '42, Ja '43

Hardness

See also

Water softening

Heavy oxygen water

Some further observations on the interchange of heavy oxygen between water and certain inorganic oxy-anions. E. R. S. Winter and H. V. A. Briscoe. *Chem Soc J* p631-7 O '42

Mineral content

See Water supply—Mineral content

Odor

See also

Water purification—
Taste and odor removal

Oil content

Fixing and determining oil in feed water and boiler water. C. A. Noll and W. J. Tomlinson. *bibliog Ind & Eng Chem Anal* ed 15: 629-32 O 15 '43

Salinity

Salt content of wells in Massachusetts affected by the tidal wave and hurricane of 1938. V. M. Hynes. *N E Water Works Assn J* 56:355-60 S '42

See also

Water supply—
Chloride content

Testing

Water purification and test kit. *il Mod Packaging* 16:42-3 JI '43

WATER, Distilled

Distilled water supply for small schools. S. Gaddis and C. Kubina. *diag J Chem Educ* 20:381+ Ag '43

How to drink sea water; Herron's safety-stills. *Fortune* 28:68, 74 Ag '43

Influence of stress on the corrosion pitting of steel in distilled water. D. J. McAdam, jr. and G. W. Geil. *bibliog il Am Soc for Metals Trans* 30:1159-98; Discussion. 1198-1201 D '42

Pure water without heat; costs of purifying water by stills and by regenerative exchange filters using resins in a food and beverage plant. A. A. Fette. *Power Pl Eng* 47:118+ My '43

WATER, Underground

Ground water and hydrothermal deposits. C. H. Behre, jr. and R. M. Garrels. *bibliog Econ Geol* 38:65-9 Ja '43

Measure your wells now; falling water levels give warning of approaching failure of supply. W. M. Laird. *diag Pub Works* 73:18+N '42

New trends in ground water development. R. Nebolsine. *il diag plan N E Water Works Assn J* 57:186-200 S '43

Role of connate water in the secondary recovery of oil. P. A. Dickey and R. B. Bossler. *Oil & Gas J* 41:39-40 F 18 '43

See also

Artesian wells
Wells

Prospecting

New developments in ground-water exploration; geological and geophysical methods. Illinois. C. A. Bays. *diags Am Water Works Assn J* 35:911-20 JI '43

Purposes and procedures of ground-water surveys in Illinois. A. M. Buswell and M. Suter. *Am Water Works Assn J* 35:921-6 JI '43

California

Nature and significance of certain variations in composition of Los Angeles Basin groundwaters. R. R. Morse. *bibliog map Econ Geol* 38:475-511 S '43

Illinois

New developments in ground-water exploration; geological and geophysical methods. C. A. Bays. *diags Am Water Works Assn J* 35:911-20 JI '43

Purposes and procedures of ground-water surveys in Illinois. A. M. Buswell and M. Suter. *Am Water Works Assn J* 35:921-6 JI '43

South Dakota

Two deep water wells near Rapid City. J. P. Gries. *Am Assn Pet Geologists Bul* 27:646-50 My '43

Texas

Ground water and relation of geology to its occurrence in Houston district. N. A. Rose. *diag maps Am Assn Pet Geologists Bul* 27: 1081-1101 Ag '43

WATER and sewage works development, Committee on. See Committee on water and sewage works development

WATER closets

See also

Privies

WATER collectors, Ranney. See Ranney**WATER companies**

See also

Waterworks

WATER conduits

Entrainment of air in flowing water; closed conduit flow. A. A. Kalinske and J. M. Robertson. *il diag Am Soc C E Proc* 68: 1141-53 S '42; Discussion. 69:306-10 F '43

Maintenance practices for penstocks and flow lines. J. M. Spaulding. *Elec W* 120:463-6 Ag 7 '43

See also

Aqueducts

Irrigation canals

Channels

Water pipes

WATER conservation

Background of Philadelphia's present water waste control program. M. J. McLaughlin. *il Pub Works* 74:20-2 O '43

Control of water consumption; discussion. *Water & Sewage* 81:116-+ Ap '43

Report on voluntary conservation program for water utility industry. *Am Water Works Assn J* 35:1249-54 S '43

Water conservation in wartime; a round-table discussion. *Am Water Works Assn J* 35: 173-80 F '43

Water conservation; methods of double use employed by the army. *Sci Am* 169:108 S '43

Water saving survey in Allentown, Pa. W. R. Schnabel. *il Am Water Works Assn J* 35: 993-8 Ag '43

See also

Water waste

WATER consumption

Control of water consumption; discussion. *Water & Sewage* 81:116-+ Ap '43

Water supply observations during black-outs. F. J. Remy. *Water Works & Sewerage* 90: 322 S '43

See also

Air conditioning—Water equipment—Water requirements

Water waste

WATER cooling. See Cooling of water**WATER cooling towers.** See Cooling towers**WATER damage insurance.** See Insurance, Water damage**WATER departments**

See also

Fire service (water supply) Waterworks—Management

Laboratories

Testing and treating water supplies in rural districts; laboratory, Boonville, Mo. R. F. Bishop and J. F. Sanders. *il Pub Works* 74: 18-20 Mr '43

WATER distribution

Maintenance of chlorine residual in the distribution system; symposium. C. R. Harvill, J. H. Morgan and others. *Am Water Works Assn J* 34:1797-1806 D '42

Manual of recommended water sanitation practice accompanying United States Public health service drinking water standards. 1942; recommended general sanitary requirements for water distribution systems. *Pub Health Rep* 58:102-3 Ja 15 '43; Same. *Am Water Works Assn J* 35:150-8 F '43; Same. *Water Works & Sewerage* 90:sup133 Je '43

Obtaining water from government lake during a drought. C. Fore. *il Pub Works* 74:25-6-+ Je '43

Preparing the valve system for emergency service. A. J. Kuecker. *Am Water Works Assn J* 34:1767-70 D '42

Turbine-driven pump under Fifth avenue regulates New York's water pressure. *il diag Power* 87:459-61 Jl '43

Value of distribution system studies for meeting present emergencies and post-war problems. E. S. Cole. *Am Water Works Assn J* 34:1762-6 D '42; Same. *Water Works & Sewerage* 89:517-18 D '42

Waste water survey saves plant capacity; with cost data. Allentown, Pa. W. R. Schnabel. *il Eng N* 130:561-3 Ap 22 '43

Water softening increases consumption at Oak Lawn, Ill. H. De Reuter. *plan Pub Works* 74:26 My '43

Waterworks distribution systems in wartime. W. P. Tarbell. *Water & Sewage* 81:24-+ Ag '43

See also

Aqueducts

Drinking water systems

Hydrants

Hydraulics

Pumping stations

Water districts

Water flow

Water pipes

Waterworks

Cost

Contract unit bid prices; list of projects showing how contractors bid in 1942-1943. *Eng N* 130:sup220-+ Ap 22 '43

Reservoir and water mains, Fort Worth, Texas; unit prices. *Eng N* 130:910 Je 17 '43

Water distribution system, Milton, Washington; unit prices. *Eng N* 130:104 Mr 25 '43

Water line, Cleveland; unit prices. *Eng N* 131:554 O 7 '43

Cross connections

Cross-connection hazards from refrigerating equipment; abstract. L. C. Ajax. *Eng N* 130:446 Mr 25 '43

Double check valve performance; with text of Connecticut regulations regarding cross connections. F. O. A. Almqvist. *diag Water Works & Sewerage* 90:329-33 S '43

Tables, calculations, etc.

Computation of flows in distribution systems. W. Gavett. *bibliog il diag Am Water Works Assn J* 35:267-87 Mr '43

WATER districts

War time problems in the Portland water district. F. J. Remy. *N E Water Works Assn J* 56:309-19 S '42

Wartime problems of the East Bay municipal utility district. J. S. Longwell. *Am Water Works Assn J* 35:309-16 Mr '43

WATER flow

Computation of flows in distribution systems. W. Gavett. *bibliog il diag Am Water Works Assn J* 35:267-87 Mr '43

Determination of productive capacities of flow pipes on gas lift. S. F. Shaw. *diag Oil & Gas J* 42:47-8, 50, 53-4 Je 17 '43

Discharge of pipes flowing partly full. C. Rohwer. *il diag Civil Eng* 13:488-90 O '43

Effect of turbulence and channel slope on translation waves. G. H. Keulegan and G. W. Patterson. *bibliog diag J Research Nat Bur Stand* 30:461-512 Je '43

Entrainment of air in flowing water; closed conduit flow. A. A. Kalinske and J. M. Robertson. *il diag Am Soc C E Proc* 68: 1141-53 S '42; Discussion. 69:306-10 F '43

Entrainment of air in flowing water; symposium. L. S. Hall and others. *il diag Am Soc C E Proc* 68:1099-1153 S '42; Discussion. 69:166-9, 435-52, 515-27, 847-57 Ja, Mr- Ap, Je '43

Flow characteristics at rectangular open-channel junctions. E. H. Taylor. *il Am Soc C E Proc* 68:1521-30 N '42; Discussion. 69: 905-6, 1154-6, 1293-7 Je, S-O '43

Flow in channels with vertically curved beds, by H. Lauffer; tr. and abstr. by C. E. Bardsley. *Am Soc C E Proc* 69:sup9-21 S '43

Flow in steep chutes with special reference to self-aeration, by R. Ehrenberger; tr. and abstr. by E. F. Wilsey. *diag Am Soc C E Proc* 69:sup31-41 S '43

Flow of liquids under critical conditions. A. H. Nissan. *diag Inst Pet J* 28:257-73 N '42

Hardy Cross method; its practical application in determining flows and heads in pipe systems. D. R. Taylor. *flow charts diag Water Works & Sewerage* 90:77-81 Mr '43

Identical value method for solving simple pipe-flow problems. A. A. Hirsch. *Am Water Works Assn J* 35:288-94 Mr '43

Loss of head in flow of fluids through various types of one-and-one-half-inch valves. W. M. Lansford. *bibliog il diag Ill U Eng Exp Sta Bul* 340:1-33 '43 (pa 40c)

WATER flow—Continued

Removal of air from pipe lines by flowing water. A. A. Kalinske and P. H. Bliss. *il Civil Eng* 13:480-2 O '43

Selection of main line meters; charts designed to simplify problem. J. C. Thoresen. *diags Water Works & Sewerage* 90:221-7 Je '43

Studies of liquid holdup in packed towers. B. W. Jesser and J. C. Elgin. *bibliog diags Am Inst Chem Eng Trans* 39:277-98 Je '43

Tube pitting traced to unequal water flow. R. Briscoe. *il Elec W* 119:443-4 F '43

See also

Hydraulic jump	Turbines
Hydraulics	Water meters
Intakes	Weirs (measuring)
Stream flow	

WATER gages

Beware of the empty water glass. J. M. Hall. *Ry Mech Eng* 117:83-4 F '43

Questions and answers for power engineers; steam gages and water columns. *diags Power* 87:698-700 O '43

WATER gas. See Gas, Water**WATER glass. See Sodium silicates****WATER hammer**

Water hammer; its study and correction. H. Ryon. *il Water Works & Sewerage* 90:sup45-8 Je '43

Wheatley liquid hammer equalizer. *il Chem & Met Eng* 50:128-9 Ag '43

WATER heaters

See also

Electric water heaters	Hot water supply
Gas water heaters	Steam water heaters

WATER heating

Heat utilization in sulphate mills; use of flash steam from the digester blow to heat hot water for pulp washing. H. T. Baker. *Paper Tr J* 117:32-4 Jl '43

Sprinkler water heating. *Dom Eng* 161:62+ Ja '43

See also

Hot water supply

WATER hyacinths

Water hyacinth in California. I. L. Wiggins. *bibliog Science* 97:138-9 F '43

Water hyacinth in Indian paper manufacture; abstract. M. A. Azam. *Paper Ind* 24:386 N '42

WATER in air conditioning. See Air conditioning equipment—Water requirements**WATER in the body**

Negative water balances during exposures to low barometric pressures. H. G. Swann and others. *Science* 96:588-9 D '42

Water and you. A. L. Meyer. *Sci Am* 168:114-15 Mr '43

WATER laws and legislation

See also

Water rights	Wells—Laws and regulations
Waterworks—Laws and regulations	

WATER leakage. See Water pipes—Leakage**WATER level indicators**

Compressed-air low-water alarm. *diags Power* 87:120-1 F '43

Remote water level indicator; Yarnall-Waring co. *il Instruments* 16:584+ S '43

Yarnall-Waring water-level indicator. *diags Steel* 113:127 Ag '43

See also

Water gages

WATER measurement

Discharge of pipes flowing partly full. C. Rohwer. *il diags Civil Eng* 13:488-90 O '43

Hydrant discharge measurements. P. S. Wilson. *il Water Works & Sewerage* 90:sup87-90 Je '43

Measurement of large quantities of water; abstract. V. F. Hess. *Science* 97:sup10+ My '43

Use of current meters in measuring pipe discharges; abstract. C. Rohwer. *Am Water Works Assn J* 35:1363 O '43

See also

Flow meters	Water meters
Stream measurement	Weirs (measuring)
Water flow	

WATER meters

Hershey's wartime meters. *il Water Works & Sewerage* 89:79 D '42

How metering saved a major capital expenditure; experiences and results at Warsaw, N.Y. G. F. Sheehy. *il Water Works & Sewerage* 90:14-16 Ja '43

Practical plan helps; hot water in waters. W. F. Schaphorst. *Chem Ind* 53:536 O '43

Renovating water meters. *Water Works & Sewerage* 90:sup120 Je '43

Selection of main line meters; charts designed to simplify problem. J. C. Thoresen. *diags Water Works & Sewerage* 90:221-7 Je '43

Story of the fire-line meter. R. E. Ferguson. *il diags Water Works & Sewerage* 90:341-4 S '43

See also

Water waste

Installation

Installation of water meters. J. L. Ford. *Am Water Works Assn J* 35:786-8 Je '43

Repair

Gauge for meter change gears. D. C. Calderwood. *il Water Works & Sewerage* 90:196 Je '43

How the meter division met wartime emergency conditions in Elgin. L. Trentlage. *Am Water Works Assn J* 35:1002-4 Ag '43

Meter maintenance during war time. E. T. Cranch. *Water Works & Sewerage* 90:204 Je '43

Water meter repairing, strictly an art. L. Trentlage. *il Water Works & Sewerage* 90:317-21 S '43

Specifications

American water works association tentative specifications for cold water meters, displacement type. N E Water Works Assn J 56:sup [3] 1-10 D '42

Emergency alternate provisions for tentative specifications for cold water meters—displacement type—7M.1-T. Am Water Works Assn J 34:1914 D '42; Same. N E Water Works Assn J 56:sup [3] 11 D '42

Testing

Importance of testing disc meters at the correct rates of flow. P. S. Wilson. *Water Works & Sewerage* 90:sup117-13 Je '43

Water meter testing principle and practice. *Water Works & Sewerage* 90:sup116-17 Je '43

WATER pipes

Development of tapping and valve-inserting machines. J. A. Jensen. *il Am Water Works Assn J* 35:775-80 Je '43

Eliminating dead ends for fire protection. C. E. Harrison. *il Pub Works* 73:21 D '42

Laying pipe underwater with a cradle; cast iron water main in river channel at Norfolk, Va. *il diags Eng N* 130:310-11 F '43

Maintenance practices for penstocks and flow lines. J. M. Spaulding. *Elec W* 120:463-5 Ag '43

Submarine main laid with floating rig. Charleston, S.C. *il Eng N* 131:475 S '43

Substitute materials in the water works field. R. Bennett. *Am Water Works Assn J* 35:40-5 Ja '43

Trenching and laying sewer and water pipe. *il diags Pub Works* 74:11+ O; 16-19 D '43

See also

Aqueducts	Pipes
Culverts	Plumbing
Hot water heating	Valves, Hydraulic
Hot water supply	Water distribution
Pipe fittings	Water flow
Pipe joints	Waterworks
Pipe laying	

Air removal

Entrainment of air in flowing water; closed conduit flow. A. A. Kalinske and J. M. Robertson. *il diags Am Soc C E Proc* 68:1141-53 S '42; Discussion. 69:306-10 F '43

Removal of air from pipe lines by flowing water. A. A. Kalinske and P. H. Bliss. *il Civil Eng* 13:480-2 O '43

Cleaning

Clean and line water mains, New Jersey; unit prices. *Eng N* 130:766 My '43

WATER pipes—Cleaning—Continued

- Cleaning mains in a small city. M. C. Turner. *il Pub Works* 74:17 Ja '43
 Water main cleaning in the war effort. C. Inglee. *Am Water Works Assn J* 34:1771-6 D '42; Same. *Water Works & Sewerage* 89:526-8 D '42; Same. *Water & Sewerage* 81:14-15+ Ja '43
 Water main cleaning now imperative. F. J. Veale. *il Water & Sewerage* 81:76, 78, 80+ Ap '43

Corrosion

- Control of corrosion. R. S. Weston. *bibliog il Water Works & Sewerage* 90:323-7 S '43
 Corrosion of water pipes in a steel mill. C. L. Clark and W. J. Nungester. *bibliog il Am Soc for Metals Trans* 31:304-14 Je '43; Same cond. *Oil & Gas J* 42:65-6+ O '43; Discussion. *Am Soc for Metals Trans* 31:314-20 Je '43
 Restoring a corroded penstock; oxyacetylene flame-priming to remove rust and scale before applying protective paint. *il Power Pl Eng* 47:36-7 Je '43

- See also*
 Water purification—
 Corrosion control

Damage from air raids

- Effects of bombings on structures and other installations. W. C. Voss. *N E Water Works Assn J* 57:127-36 Je '43
 War's effect on English local government. A. Collins. *Am Water Works Assn J* 35:1146-54; Comments. U.S. Grant. *3d. 1155 S '43*

Deposits

- Checking tuberculation by chloramine treatment. J. W. Ackerman. *Water Works & Sewerage* 90:sup169-70 Je '43
 Chlorine, a critical material solves a critical problem; sterilization and prevention of deposits in water pipe; Little Rock, Arkansas. L. A. Jackson and W. A. Mayhan. *il Water Works & Sewerage* 90:113-18 Ap '43
 Measures taken at Falmouth, Mass. to control red water and tuberculation of mains. E. S. Chase. *map N E Water Works Assn J* 57:173-85 S '43

Detection

- Miller pipe locating magnet. B. Miller. *il diag Water Works & Sewerage* 90:335-6 S '43

Electric grounding

- Progress report; American research committee on grounding. *Am Water Works Assn J* 35:33-7 Mr '43

Leakage

- Effect of water waste on power consumption. H. E. Beckwith. *bibliog Am Water Works Assn J* 35:295-8 Mr '43
 Locating leaks in hidden pipes. chart Can Min J 64:493 Ag '43
 Waste water survey saves plant capacity; with cost data. Allentown, Pa. W. R. Schnabel. *il Eng N* 130:551-3 Ap 22 '43

Length of service

- Determination by statistical methods of the average service life of 6-inch cast-iron water mains in Brooklyn, New York. A. V. Ruggles. tables *N E Water Works Assn J* 56:361-84; Discussion. 384-9 S '42
 Statistical method for the estimation of average service life for physical property. C. B. Benson. *N E Water Works Assn J* 56:390-6 S '42

Lining

- Acceptance and use of A.W.W.A. standard specifications for coal-tar enamel protective coatings for steel water pipe. D. Bronson and G. E. McComb. *il Am Water Works Assn J* 35:613-23 My '43
 Cement lining of pipe in place at New Albany, Ind.; with cost data. F. A. Schaefer. *Am Water Works Assn J* 35:781-5 Je '43; Abstract. *Water Works & Sewerage* 90:170 My '43
 Clean and line water mains, New Jersey; unit prices. *Eng N* 130:766 My 20 '43
 Prefabricated reinforcing steel for tunnel lining. L. M. Leedom. *il Civil Eng* 13:282-3 Je '43

- Rejuvenate with Victoree lining. R. W. Esty. *il Water Works & Sewerage* 90:201-4 Je '43

Protection

- Acceptance and use of A.W.W.A. standard specifications for coal-tar enamel protective coatings for steel water pipe. D. Bronson and G. E. McComb. *il Am Water Works Assn J* 35:613-23 My '43
 Proposed American standard specifications for coal-tar-dip coating for cast iron pipe and fittings. *il N E Water Works Assn J* 56:sup [2] 3-10 D '42

Repair

- Crews to repair pipe breaks in bombed areas. *Eng N* 129:925 D 31 '42
 Emergency war repairs in water systems; abstracts. D. W. Johnson. *Am Water Works Assn J* 35:345-6 Mr '43; *Eng N* 130:503 Ap 8 '43
 Maintenance of water supply in Britain under war conditions. *diags Am Water Works Assn J* 35:7-11 Ja '43
 Manual on emergency repairs to water distribution systems; with list of equipment manufacturers and bibliography of their publications. *il diags Am Water Works Assn J* 34:1889-1913 D '42
 Precast joints in split repair sleeves. W. Turner. *il Pub Works* 74:36+ My '43
 War emergency repairs in Great Britain. C. F. Greeves-Carpenter. *il Eng N* 130:439-41 Mr 25 '43

Service life

- See Water pipes—Length of service*

Service pipes

- Flow of water in house service pipes; table. *Water Works & Sewerage* 90:sup114 Je '43

Standards

- Emergency alternate provisions to A.W.W.A. steel pipe specifications. *Am Water Works Assn J* 35:1238-40 S '43
 Tentative emergency specifications for reinforced concrete pressure pipe. *Am Water Works Assn J* 35:499-511 Ap '43
 Tentative revision of standard specifications for steel water pipe of sizes up to but not including 30 inches. *Am Water Works Assn J* 35:471-98 Ap '43

Sterilization

- Chlorine, a critical material solves a critical problem; sterilization and prevention of deposits in water pipe; Little Rock, Arkansas. L. A. Jackson and W. A. Mayhan. *il Water Works & Sewerage* 90:113-18 Ap '43
 Disinfection of mains at Ottawa. H. R. Stockwell. *il Water & Sewerage* 81:19 Ag '43
 Emergency sterilization of water mains; abstract. R. C. Clement. *Water Works & Sewerage* 90:74-5 F '43
 Emergency sterilization of water mains; Paterson mobile chloronome. *il Water & Sewerage* 81:30+ F '43
 Methods and efficiency of disinfecting jute packing. *Pub Works* 74:18+ Je '43
 Proposed plan for water main sterilization. A. N. Heller. *Am Water Works Assn J* 35:168-72 F '43
 Sterilization of new and repaired mains. C. H. Billings. *bibliog Am Water Works Assn J* 34:1777-81 D '42; Abstract. *Water Works & Sewerage* 89:468 N '42
 Sterilization of water mains; discussion. *Water & Sewerage* 81:107-13 Ap '43

Tables, calculations, etc.

- Computation of flows in distribution systems. W. Gavett. *bibliog il diags Am Water Works Assn J* 35:267-87 Mr '43
 Discharge of pipes flowing partly full. C. Rohwer. *il diags Civil Eng* 13:488-90 O '43
 Hardy Cross method; its practical application in determining flows and heads in pipe systems. D. R. Taylor. *flow charts diags Water Works & Sewerage* 90:77-91 Mr '43
 Identical value method for solving simple pipe-flow problems. A. A. Hirsch. *Am Water Works Assn J* 35:288-94 Mr '43
 Inclined diagonal pipe runs; calculating pipe lengths. C. Erick. *diags Water Works & Sewerage* 90:sup65 Je '43

WATER pipes—Tables, calculations, etc.—*Cont.*
Pipe friction chart, fairly rough and rough
pipe; reference data. Heat & Ven 39:46a-
46b N '42

WATER pipes, Concrete

Concrete in water containing structures.
F. L. Fitzpatrick. Am Concrete Inst J 14:
215-17 Ja '43

Experience with wire-wound prestressed
concrete pressure pipe in Chicago. W. W. De-
Berard and W. B. Weldon. Il diag Am
Water Works Assn J 35:1263-80 O '43; Same
abr. Water Works & Sewerage 90:378-83
O '43

Good practice in laying concrete pipe. L. R.
Howson. Am Water Works Assn J 35:1258-
62 O '43

Installation of a new gallery in Elkhart, In-
diana; installing porous concrete pipe. C. L.
Link. Il diag Pub Works 73:14-15+ D '42

Reinforced concrete pipe for use under high
internal pressure; abstract. A. Schapiro.
Am Water Works Assn J 35:524 Ap '43

Tentative emergency specifications for re-
inforced concrete pressure pipe. Am Water
Works Assn J 35:499-511 Ap '43

Wire-wound prestressed concrete pressure
pipe. R. B. Crepps. Il diags Am Concrete
Inst J 14:545-55 Je '43

Manufacture

New method used to make prestressed con-
crete pipe. Il diag Eng N 131:476-8 S 23 '43

WATER pipes, Copper

Problems of copper and galvanised iron in
the same water system. L. Kenworthy. En-
gineering 156:85-6, 125, 164, 205 JI 30, Ag 13,
27, S 10 '43

WATER pipes, Lead

Action of a chlorinated water supply upon
lead pipe; abstract. G. G. Schaut. Am
Water Works Assn J 35:237 F '43

WATER pipes, Plastic

FPHA to use plastic tubing. Il Arch Rec 93:
80+ Je '43

Studies relating to use of Saran for water
pipes in buildings and for service lines.
F. M. Dawson and A. A. Kalinske. Il Am
Water Works Assn J 35:1053-64 Ag '43

WATER pipes, Steel

Emergency alternate provisions for thickness-
es of steel pipe. Am Water Works Assn J
35:1338-90 '43

Emergency alternate provisions to A.W.W.A.
steel pipe specifications. Am Water Works
Assn J 35:1233-40 S '43

Field welding of steel water pipe. H. A.
Price and G. H. Garrett. Il diags Am Water
Works Assn J 35:1295-1302 O '43

Outline of installation procedure for steel
water pipelines. W. W. Hurlbut. Il diags
Am Water Works Assn J 35:1281-94 O '43

Pipeline crossing built by novel method. Il
Eng N 130:434-6 Mr 25 '43

Steel-penstock erection at a western hydro-
electric project. L. G. Christofferson. Il
plan Civil Eng 13:409-12 S '43

Tentative revision of standard specifications
for steel water pipe of sizes up to but not
including 30 inches. Am Water Works Assn
J 35:471-98 Ap '43

Testing

Destruction test of a 66-in. forged steel pen-
stock pipe. Welding J 22:sup361 Ag '43

WATER pipes, Wood

History of piping. M. A. Hasselmann. Il diags
Heating-Piping 15:357-9 JI '43

Wood piping installation. R. Turner. Power
Pl Eng 46:67 D '42

WATER pollution

Chemical contamination of water supplies.
L. Rubin. bibliog N E Water Works Assn J
56:276-87 S '42

Chicago's water endangered by sewage in
Lake Michigan. Eng N 131:169-70 JI 22 '43

Chromium, a water and sewage problem.
D. W. Graham. bibliog Am Water Works
Assn J 35:159-64 F '43

Determination of the phenols content of sur-
face waters. E. D. Scott. Am Water Works
Assn J 35:592-4 My '43

Effect of sulphate mill wastes on fish life.
J. A. Extrom and D. S. Farner. Il Paper
Tr J 117:27-32 JI 29 '43

Effects of war gases on water supplies; de-
contamination. H. H. Potter. N E Water
Works Assn J 57:137-62 Je '43

Illinois water litigation, 1940-1941; petition
by state of Illinois for temporary increase
in diversion from Lake Michigan. L. Pearce.
bibliog map Am Soc C E Proc 68:1689-1713
D '42; Discussion. 69:772-4, 942-8 My-Je '43

New plumbing standards to keep drinking
water pure. A. A. Kalinske and F. M.
Dawson. Il diags Ind Stand 14:235-7 Ag '43

No emergency action required to meet Chi-
cago water needs; city can check threat-
ened pollution within the limits on lake
diversion set by the U.S. Supreme court.
Eng N 131:309 Ag 26 '43

Poliovirus in sewage. R. E. Thomp-
son. Water & Sewage 81:24+ Mr '43

Pollution of public water supplies by the use
of chemicals and bacterial cultures; ab-
stract. H. E. Barnes. Water Works &
Sewerage 89:470 N '42

Preservation of phenol content in polluted
river water samples previous to analysis.
M. B. Ettinger, S. Schott and C. C. Ruch-
hofs. bibliog Am Water Works Assn J
35:299-302 Mr '43

Recognition of impurities in water; poisonous
substances added as result of enemy action;
abstract. P. C. Hilton-Sergeant. Am Water
Works Assn J 35:343-4 Mr '43

Salt content of wells in Massachusetts af-
fected by the tidal wave and hurricane of
1938. V. M. Hynes. N E Water Works Assn
J 56:355-60 S '42

Suggestions for prevention of pollution of
waters by oil field wastes; abstract. Am
Water Works Assn J 35:954-5 JI '43

Training and organization of technical con-
sultants to deal with chemical and bacteri-
al contamination. L. A. Bradley. N E
Water Works Assn J 56:271-5 S '42

War problems in analysis and treatment; de-
tection and removal of mustard gas and
lewisite. A. M. Buswell and others. Am
Water Works Assn J 35:1303-11 O '43

See also

Algae	Water—Bacteriology
Coal mines and min- ing—Waste disposal	Water distribution— Cross connections
Filters and filtration	Water purification
Refuse disposal	Water supply
Sewage disposal	
Trade waste	

WATER power

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Dams	Hydroelectric plants
Hydraulic engineer- ing	Hydroelectric power Turbines
Hydraulic machinery	
also subdivision	Power utilization under names of rivers, e.g. Columbia river—Power utilization

Canada

Engineers and the British empire; water
power production in Canada. M. Smith. Il
Engineer 176:82-4 JI 30 '43

Water power resources of Canada. Engineer-
ing 155:392 My 14 '43; Electrician 130:485-
6 My 14 '43

Switzerland

See also

Hydroelectric plants	
—Switzerland	
WATER prospecting. See Water, Underground	
—Prospecting	

WATER purification

AWWA's wartime conference in Cleveland;
Water purification division sessions. Water
Works & Sewerage 90:300-4 Ag '43

Biological water conditioning; Judson reser-
voir, southern California; growth of Chara
inhibits algae. H. C. Myers. Water Works
& Sewerage 90:185-6 My '43

Calgon treatment as applied in water quality
control for the solution of four problems.
O. Rice. Water Works & Sewerage 90:
sup167 Je '43

Census data on water treatment plants in
the United States. Pub Works 74:41 F '43

Chart for converting grains per gallon to
pounds per million and the reverse. Water
Works & Sewerage 90:sup136 Je '43

WATER purification—Continued

- Checking chart for dry chemical feeders. A. A. Hirsch. *Water Works & Sewerage* 90:290 Ag '43
- Control of algae. F. E. Hale. *il Water Works & Sewerage* 90:sup139-40 Je '43
- Correct stabilizing treatment plus tailored control eliminate scale in cooling systems. W. H. Thompson and J. W. Ryznar. *bibliog il Oil & Gas* 7 42:43, 46, 49-51 S 16 '43
- Crystalline compounds observed in water treatment. C. E. Imhoff and L. A. Burkardt. *bibliog(40 references) il Ind & Eng Chem* 35:373-82 Ag '43
- De-ionized water for the electroplating industry; application of Amberlite resins; abstract. W. S. Morrison. *Iron Age* 152:69-70 Jl 8 '43
- Demineralizing industrial water and process liquors. E. Nordell. *il Chem & Met Eng* 50: 112-15 O '43
- Developments in water purification during the past year. F. E. Stuart. *il Water & Sewerage* 80:13-15 D '42; 81:38-9 Ja '43
- Efficacy of water purification in removing polio virus. H. J. Carlson, G. M. Ridenour and C. F. McKhann. *Water & Sewerage* 81: 16-18+ Ag '43
- Experimental treatment plant at Miami. A. B. DeWolf. *diags Am Water Works Assn J* 35:1085-9 Ag '43
- First year of operation of Beckley's new water supply. E. E. Chandler. *il Water Works & Sewerage* 90:158-60 My '43
- How presedimentation worked at Forsyth. F. F. Palmer. *plan Pub Works* 74:25-6 Jl '43
- Industrial water conditioning processes. W. W. Cerna. *il diags J Chem Educ* 20:107-15, 191-7 Mr-Apr '43
- Lazy man's water works; Bishop, Calif. G. L. Wood. *il diags Am Water Works Assn J* 35:303-8 Mr '43
- Manual of recommended water sanitation practice accompanying United States Public health service drinking water standards, 1942; recommended sanitary requirements for water-treatment systems. *Pub Health Rep* 58:92-101 Ja 15 '43; Same. *Am Water Works Assn J* 35:142-9 F '43; Same. *Water Works & Sewerage* 90:sup130 Je '43; Same *abr. Water & Sewerage* 81:14-16+ Mr '43
- Mill water-treatment plant; maintenance of pumps, motors, controls, and feeds. H. Nix. *il Textile World* 93:134-5 Ap '43
- Overcoming a bloodworm (chironomid) problem; Canton, N. C. J. C. Rickards. *il diags Pub Works* 74:11-12+ F '43
- Polio virus and water purification. H. J. Carlson, G. M. Ridenour and C. F. McKhann. *bibliog Eng* 123:333-4 D 31 '42
- Pure water without heat; costs of purifying water by stills and by regenerative exchange filters using resins in a food and beverage plant. A. A. Fette. *Power Pl Eng* 47:118+ My '43
- Results obtained by hydro-treaters; abstract. W. A. Darby. *diag Pub Works* 74:17 Mr '43
- Rockport, Mass.; the evolution of a small water works system. E. S. Chase and G. C. Houser. *N E Water Works Assn J* 56:335-54 S '42
- Some wartime waterworks practices. *Pub Works* 74:20 Jl '43
- Summary of census data on water treatment plants in the United States. S. R. Weibel. *Pub Health Rep* 57:1679-94 N 6 '42; Same. *Am Water Works Assn J* 34:1831-46 D '42
- Tentative manual of zeolite test procedures (ion-exchange materials; cation exchangers operating on the sodium cycle). *il diags Am Water Works Assn J* 35:721-50 Je '43
- Treatment of boiler water; problems encountered in cooling-water systems. W. A. Tanzola. *Oil & Gas* 7 41:45-7+ Ap 22 '43
- War problems in analysis and treatment; detection and removal of mustard gas and lewisite. A. M. Buswell and others. *Am Water Works Assn J* 35:1303-11 O '43
- Wartime control of water quality. C. R. Cox. *Am Water Works Assn J* 34:1755-61 D '42
- Water conditioner; American K.A.T. corp. *Chem Ind* 53:378 S '43
- Water conditioning for compressor and pipeline stations. C. E. Erb. *bibliog Pet Eng* 14:190g-190h, 191-4 Mr '43

Water purification by the ion-exchange method. O. K. Smith. *diags Pet Eng* 14:57-60 S '43

Water supply practice in army training centers. L. H. Kessler, V. B. Sundstrom and A. O. Tomek. *il Am Water Works Assn J* 35:1009-50 Ag '43

Water treatment at the Calco chemical division. V. L. King and others. *il Chem & Eng N* 21:1046-9 Jl 10 '43

See also

Feed water purification	Water softening
Filters and filtration	Water supply for factories
Filtration plants	Water supply for textile mills
Reservoirs—Protection	
Water—Deaeration and deaeration	

Aeration

Delaware aqueduct; Kensico aerator. *il diags Engineer* 175:460-3 Je 11 '43

Bibliography

TAPPI survey of water technology, 1942. L. B. Miller. *Paper Tr J* 116:28-9 Ap 22 '43

Chlorination

Army water testing method simplifies chlorine residual check; method employs orthotolidine in tablet form. *Eng N* 130:908 Je 17 '43

Bacteriological results of break-point chlorination; observations at Fredericksburg, Va. A. E. Wilson, jr. *Water Works & Sewerage* 89:494-5 N '42

Chloramine for crenothrix; experience of Stillwater, Minnesota; abstract. H. S. Grove. *Water & Sewerage* 81:20 Ja '43

Chlorinated condensing water averts cleaning, saves fuel; Millers Ford station. R. D. Gillette and L. P. Sudrablin. *il Elec W* 119: 2112-14 Je 26 '43

Chlorination of cooling water. *il Chem Age (Lond)* 48:295-6 Mr 13 '43

Chlorination; routine and emergency. C. R. Moore. *il Water Works & Sewerage* 90:99-100 Mr '43

Chlorinator installation at Nanaimo, B.C. under new federal regulations. *il plan Water & Sewerage* 81:23+ Mr '43

Chlorinator operation during the winter. R. M. Harris. *il Water & Sewerage* 81:9-10 Ja '43

Chlorine, a critical material solves a critical problem; sterilization and prevention of deposits in water pipe; Little Rock, Arkansas. L. A. Jackson and W. A. Mayhan. *il Water Works & Sewerage* 90:113-18 Ap '43

Chlorine residual and bacteriological quality. M. Levine, A. Heller and R. Bender. *Am Water Works Assn J* 34:1787-96 D '42

Colorimetric determination of chlorine residuals up to 10 ppm. with ortho-tolidine. N. S. Chamberlin and J. R. Glass. *Am Water Works Assn J* 35:1065-84, 1205-21 bibliog(p 1083-4, 1221) Ag-S '43

Conservation in and by chlorination; industrial water supplies. R. B. Martin. *Paper Tr J* 116:31-4 My 6 '43

Control of chlorination; committee progress report. *Am Water Works Assn J* 34:1782-4 D '42

Control of chlorination; committee report. *bibliog Am Water Works Assn J* 35:1315-28 O '43

Determination of high chlorine residuals; chemistry of the ortho-tolidin reactions. N. S. Chamberlin. *Water Works & Sewerage* 89:496-9 N '42

Disinfectants for the armed forces; disinfection of small quantities of water by individual soldier in the field. G. F. Reddish. *Soap & San Chem* 19:101+ Ag '43

Drinking water on construction jobs; hazards and precautions. *Nat Safety* N 47:57+ Je '43

Effect of chlorination on pasteurella typhimurien-sis in aqueous suspension. H. B. Foote and others. *bibliog diag Am Water Works Assn J* 35:902-10 Jl '43

Estimation of high chlorine residuals. A. E. Griffin and N. S. Chamberlin. *bibliog Am Water Works Assn J* 35:571-8 My '43

Improved filter-plant operation as a result of prechlorination. A. J. Deslauriers. *il Water & Sewerage* 81:40+ Ap '43

WATER purification—Chlorination—Continued
 Latest in chlorination trends; abstract. A. E. Griffin. *Water Works & Sewerage* 90:169 My '43

Maintenance of chlorine residual in the distribution system; symposium. C. R. Harvill, J. H. Morgan and others. *Am Water Works Assn J* 34:1797-1806 D '42

Modification of the flash color test to control break-point chlorination. P. C. Laux and J. B. Nickel. *Am Water Works Assn J* 34:1785-6 D '42; Abstract. *Water Works & Sewerage* 89:551 D '42

Progress report on studies of water chlorination. H. W. Streeter. bibliog. *Am Water Works Assn J* 35:421-6 Ap '43

Proposed plan for water main sterilization. A. N. Heller. *Am Water Works Assn J* 35:168-72 F '43

Rapid tests of water quality. F. W. Gilcreas. bibliog. *Am Water Works Assn J* 35:1201-4 S '43

Recent developments in sterilization treatment; abstract. A. E. Griffin. *Water Works & Sewerage* 89:468 N '42

Research and control; typhoid fever and other waterborne diseases. N. J. Howard. *il Water & Sewage* 80:15-17 D '42

Some chemical aspects of the ammonia-chlorine treatment of water. W. A. Moore, S. Megregian and C. C. Ruchhoff. bibliog. *Am Water Works Assn J* 35:1329-40; Discussion. 1340-3 O '43

Some practical aspects of handling chlorine. C. F. Bingham. *il diag Water Works & Sewerage* 90:sup171-3 Je '43

Testing and treating water supplies in rural districts; laboratory. Boonville, Mo. R. F. Bishop and J. F. Sanders. *il Pub Works* 74:18-20 Mr '43

Use of *p*-aminodimethylaniline as an indicator for free chlorine. W. A. Moore. *Am Water Works Assn J* 35:427-8 Ap '43

Use of liquid chlorine in the treatment of water and sewage; memorandum of May 28, 1914. E. S. Chase. *Water Works & Sewerage* 90:345-6 S '43

Vancouver agrees to chlorinate district's water supply. *Water & Sewage* 80:24+ D '42
 Water purification and test kit. *il Mod Packaging* 16:42-3 Jl '43

Coagulation

Application of ferric salts in water and sewage treatment; with especial reference to ferrisul. F. K. Burr. bibliog. *il Water Works & Sewerage* 90:347-51 S '43

How the war affects alum quality; reasons behind changes in specifications for sulphate of alumina. F. E. Stuart. *il Water & Sewage* 81:11-13+ Ja '43; Same abr. *Am Water Works Assn J* 35:34-6 Ja '43

Silica sol as auxiliary coagulant with copperas; graphical determination of optimum proportions of dual coagulants in water treatment. A. A. Hirsch. *Bibliog Ind & Eng Chem* 35:811-14 Jl '43

Victory alum; symposium. *Water Works & Sewerage* 90:273-4 Jl '43

Color removal

Color removal with the Accelerator. J. M. Kahn. *Am Water Works Assn J* 35:597-600 My '43

Corrosion control

Control of corrosion. R. S. Weston. bibliog. *il Water Works & Sewerage* 90:323-7 S '43

Measures taken at Falmouth, Mass. to control red water and tuberculation of mains. E. S. Chase. map N E *Water Works Assn J* 57:173-85 S '43

Scalar diagram of pH of calcium carbonate equilibrium. A. A. Hirsch. *Am Water Works Assn J* 35:594-6 My '43

Treating water to prevent corrosion. J. R. Baylis. *Water Works & Sewerage* 90:sup163-4 Je '43

Value of sodium hexametaphosphate in the control of difficulties due to corrosion in water systems; committee report. bibliog. *Am Water Works Assn J* 34:1807-28; Discussion. F. E. Hale. 1828-30 D '42

Electrosmosis process

Electrical water purification. Electrician 130: 419-21 Ap 23 '43

Filtration

See Filters and filtration

Iron removal

Removal of iron from water; use of carbonaceous ion exchangers. F. K. Lindsay. *Ind & Eng Chem* 35:378-80 Mr '43

Studies on the removal of iron and manganese from water. E. W. Moore and E. A. Snow. bibliog. N E *Water Works Assn J* 56:320-34 S '42

Water supplies and iron removal plant, Provincetown, Mass.; filtering through marble, coke and sand. P. F. Howard. *diags plans N E Water Works Assn J* 57:63-72 Mr '43

Lime treatment

Device for feeding lime solution into mains. E. T. Cranch. *il Water Works & Sewerage* 90:sup157 Je '43

Relative resistance of coliform organisms and certain enteric pathogens to excessive lime treatment. E. Wattie and C. W. Chambers. bibliog. *Am Water Works Assn J* 35:709-20 Je '43

See also

Water softening

Manganese removal

Experiences with manganese removal at Durham, N.C. R. S. Phillips. *il Water Works & Sewerage* 90:263-5 Jl '43

Removing manganese in water supplies. Eng N 131:488 S 23 '43

Studies on the removal of iron and manganese from water. E. W. Moore and E. A. Snow. bibliog. N E *Water Works Assn J* 56:320-34 S '42

Odor removal

See Water purification—Taste and odor removal

Ozone treatment

Ozone treatment of water. V. Hann. bibliog. *Am Water Works Assn J* 35:585-91 My '43

Patents

Water and sewage patents (cont). J. F. Smith. *Water Works & Sewerage* 89:528; 90:150, 187, 220, 372 D '42, Ap-Je, O '43

Silver process

Water sanitation with silver. A. Goetz. *Am Water Works Assn J* 35:579-84 My '43

Sterilization

See Water pipes—Sterilization; Water purification—Silver process

Taste and odor removal

Calculation of threshold odor. H. A. Thomas, Jr. bibliog. *il Am Water Works Assn J* 35:751-69 Je '43

Improved technique in taste and odor control at Toronto. N. J. Howard. *il Water & Sewage* 81:36, 60+ Ap '43

Survey made of activated carbon use for control of tastes and odors in water supplies; abstract. E. A. Sigworth. Eng N 131:478 S 23 '43

WATER rates

Depreciation reserve in water rate regulation. *Pub Works* 74:40-1 Ag '43

Milwaukee water rate case ends with important decision. *Water Works & Sewerage* 90:136 Ap '43

Survey of water rates in American cities. *Water Works & Sewerage* 90:136 Ap '43

Water supplies for victory gardens; what cities are doing. *Pub Works* 74:34 Jl '43

WATER rights

Adjudication of water rights in the Raymond basin. C. W. Sopp. maps *Am Water Works Assn J* 35:429-38 Ap '43

Sharing the water; states drained by Missouri river organize to seek compact for protection of basin interests. *Business Week* p50-1 Je 26 '43

WATER sampling

Determination of sand in well water. G. C. Bunker. *diag Water Works & Sewerage* 90: 223 Je '43

Device for sampling material carried by silt-bearing streams. H. F. Weaver. *pl U S Bur Mines Information Circ* 7249:1-2 '43

WATER sampling—Continued

Preservation of phenol content in polluted river water samples previous to analysis. M. B. Ettinger, S. Schott and C. C. Ruchhoff. *bibliog* Am Water Works Assn J 35:299-302 Mr '43

Sampling errors in water and sewage plant data. H. A. Thomas, jr. *Water Works & Sewerage* 90:182-4 My '43

WATER softening

Boiler-water treatment. D. D. Howat. *bibliog* *diags* Chem Age (Lond) 48:365-70, 387-92, 413-18 Ap 3-17 '43

Cation-exchange water softening rates. J. du Domaine, R. L. Swain and O. A. Hougen. *flow chart* *il Ind & Eng Chem* 35:546-53 My '43

Deminerlizing industrial water and process liquors. E. Nordell. *il Chem & Met Eng* 50:12-15 O '43

Deminerlizing process of water softening; latest development in the use of zeolites. S. B. Applebaum. *il diags* *Water & Sewage* 81:13-16+ O '43

Deminerlizing solutions by a two-step ion exchange process. H. L. Tiger and S. Sussman. *bibliog* *diags* *Ind & Eng Chem* 35:186-92 F '43

Design and operation of Woodlawn softening plant. E. V. Grimshaw and E. F. Twomey. *flow diag* Am Water Works Assn J 35:795-804 Je '43

Heat exchange and engine cooling systems; cooling water treatment. *diags* *Diesel Power* 21:914-18+ O '43

How to take care of water-treatment equipment. S. F. Alling. *il diags* *Textile World* 92:100-1 N; 94-5 D '42

Hydrogen zeolite treatment of California water. S. P. Pickett. *flow diag* *il Power Pl Eng* 47:82-4 Ap '43

New type of plant may solve many water-softening problems; Spiractor process. R. E. Thompson. *il diags* *Water & Sewage* 80:18-19+ D '42

Paper mill operating experiences with Accelerator softeners and clarifiers. A. C. Embshoff. *il diags* *Paper Tr J* 116:43-8 My 13 '43; *Abstract*, *Paper Ind* 25:202+ My '43

Save critical materials by softening water. C. R. Knowles. *il Ry Age* 114:820-3 Ap 24 '43

Softener works better with recirculated sludge; Jefferson Lake sulphur co. M. Brooke. *diag* *Power* 87:367 Je '43

Tables for the determination of alkaline compounds in a softened water. D. Feben. *Am Water Works Assn J* 35:1312-14 O '43

Tests of modern base-exchange materials in practice; abstract. K. Hofer. *Am Water Works Assn J* 35:520 Ap '43

Two new developments in the water conditioning field; Spiractor and deminerlizing processes. S. B. Applebaum. *bibliog* *flow diag* *il diags* Am Water Works Assn J 35:1472-86 N '43; Same, without *bibliog*. *Water & Sewage* 81:19-20+ J1; 13-16+ O '43

Value of sodium hexametaphosphate in the control of difficulties due to corrosion in water systems; committee report. *bibliog* Am Water Works Assn J 34:1807-28; *Discussion*. F. E. Hale. 1828-30 D '42

Water softening increases consumption at Oak Lawn, Ill. H. De Reuter. *plan* *Pub Works* 74:26 My '43

Water softening, with particular reference to its economic aspects. C. P. Hoover. *il map* *Water Works & Sewerage* 90:sup144-6 Je '43

See also

Feed water purification Water supply for textile mills
Zeolites

WATER storage

Water storage as an air raid precaution. W. Sleight. *Pub Works* 74:56-7 Je '43

See also

Dams Reservoirs
Irrigation Standpipes
Rain and rainfall Water tanks

WATER supply

Auxiliary water supplies for emergency service. E. L. Holloway. *Am Water Works Assn J* 35:701-8 Je '43

Characteristics of natural waters. C. Willson. *Water Works & Sewerage* 90:sup121-2 Je '43

Some current municipal water supply problems. Eng N 131:244 Ag 12 '43

Water, a critical war material. A. E. Gorman. N E Water Works Assn J 56:302-8 S '42

Water and sewage works development; statement of the aims and objectives of the Inter-association committee on water and sewage works development. *Am Water Works Assn J* 35:1156-60 S '43

See also

Aqueducts	Pumping machinery
Artesian wells	Pumping stations
Cooling of water	Pumps
Dams	Railroads—Water supply
Drinking fountains	Rain and rainfall
Feed water	Reservoirs
Filters and filtration	Rivers
Filtration plants	Snow
Fire service (water supply)	Water, Underground
Hot water supply	Water districts, and other headings
Hydrants	beginning Water
Hydraulic engineering	Watersheds
Irrigation	Waterworks
Plumbing	Wells

also subdivision Water supply under names of cities, e.g. New York (city)—Water supply

Chloride content

Variability in the normal chloride content of surface and ground water supplies in Massachusetts. F. H. Kingsbury and E. W. Smith. N E Water Works Assn J 57:10-14 Mr '43

Costs*See also*

Water distribution—Cost
Waterworks—Costs

Fluorine content

AWWA's wartime conference; symposium on fluorides and dental health. *Water Works & Sewerage* 90:302-3 Ag '43

Caries-fluorine hypothesis and a suggested study to test its application. D. B. Ast. *Pub Health Rep* 58:857-79 *bibliog* (91 titles, p877-9) Je 4 '43

Domestic water and dental caries. H. T. Dean. *Am Water Works Assn J* 35:1161-83 *bibliog* (86 titles, p 1180-3); *Discussion*. 1184-6 S '43

Program of treatment of public water supply to correct fluoride deficiency. D. B. Ast. *bibliog* Am Water Works Assn J 35:1191-7 S '43

Survey of the relationship of fluorine in drinking water to dental health. R. E. Thompson. *Water & Sewage* 81:23-4+ O '43

Iron content*See also*

Water purification—Iron removal

Mineral content

Alkalinity equivalents; table. *Water Works & Sewerage* 90:30 Ja '43

Crystalline compounds observed in water treatment. C. E. Imhoff and L. A. Burkhardt. *bibliog* (40 references) *il Ind & Eng Chem* 35:873-82 Ag '43

Significance of the chemical requirements of the new drinking-water standards. N. J. Howard. *Water & Sewage* 81:17+ Mr '43

See also

Deminerlization

Standards

AWWA's wartime conference; symposium on water quality standards. *Water Works & Sewerage* 90:303-4 Ag '43

Comparison of the new Canadian and U.S. water-quality standards. N. J. Howard. *il Water & Sewage* 81:9-11 F '43

Concerning the new drinking water standards; abstract. C. K. Calvert. *Water Works & Sewerage* 90:168 My '43

WATER supply—Standards—Continued

Discussion of chemical and bacteriological requirements for the revised drinking water standards. Pub Health Rep 58:104-11 Ja 15 '43; Same. Am Water Works Assn J 35: 151-8 F '43; Same. Water & Sewage 81: 23-4+ My '43; Same. Water Works & Sewerage 90:sup133-6 Je '43

Present status of a water-purity standard for Canada. N. J. Howard. Water & Sewage 81:17+ JI '43

Public health service drinking water standards adopted Sept. 25, 1942, for drinking and culinary water supplied by common carriers in interstate commerce. Pub Health Rep 58:72-82 Ja 15 '43; Same. Am Water Works Assn J 35:93-104 Ja '43; Same. Water & Sewage 81:11, 34-6, 38-9 F '43; Same. Water Works & Sewerage 90:sup125-7 Je '43; Excerpt. Eng N 130:433 Mr 25 '43

Significance of the chemical requirements of the new drinking-water standards. N. J. Howard. Water & Sewage 81:17+ Mr '43

See also

Filters and filtration
—Standards

Argentina

Annual report of the board of directors of the National department of sanitary works, Argentina, 1940. J. M. Sanchis. Am Water Works Assn J 35:1117-18 Ag '43

Australia

Engineers and the British empire; water control schemes in Australia. M. Smith. Il map Engineer 176:200-2 S 10 '43

Engineers and the British empire; water supply and hydro-electric power. M. Smith. Il maps Engineer 176:218-21 S 17 '43

California

Adjudication of water rights in the Raymond basin. C. W. Sopp. maps Am Water Works Assn J 35:429-38 Ap '43

Organization and activities of the subcommittee on water supply of the California state council of defense. C. G. Hyde, H. Reinhardt and M. R. MacKall. Am Water Works Assn J 35:183-95 F '43

Wartime problems of the East Bay municipal utility district. J. S. Longwell. Am Water Works Assn J 35:309-16 Mr '43

See also

Central Valley project. Water, Underground
ect, California —California

Canada

Canadian waterworks; list of small systems. Water & Sewage 81:27+ Je '43

Comparison of the new Canadian and U.S. water-quality standards. N. J. Howard. Il Water & Sewage 81:9-11 F '43

Cost of producing water; figures covering operating, maintenance and administration expenses. A. E. Berry. Water & Sewage 81:21-4 Je '43

Directory of Canadian waterworks systems; reference data. Water & Sewage 81:32-105 Je '43

Presents status of a water-purity standard for Canada. N. J. Howard. Water & Sewage 81:17+ JI '43

Florida

Wartime activities of the Bureau of sanitary engineering of the Florida state board of health. J. B. Miller. Am Water Works Assn J 35:196-3 F '43

Georgia

Water and the 1941 drought in Georgia. M. T. Thomson. Il map Civil Eng 13:475-6 O '43

Great Britain

Maintenance of water supply in Britain under war conditions. diags Am Water Works Assn J 35:7-18 Ja '43

War's effect on English local government. A. Collins. Am Water Works Assn J 35: 1146-54; Comments. U. S. Grant, 3d. 1155 S '43

Illinois

See also
Water, Underground
—Illinois

Indiana

Indiana water resources investigations. C. H. Bechert. Am Water Works Assn J 35:929-32 JI '43

Mutual aid plan in Indiana. L. A. Geupel. Am Water Works Assn J 35:227-31 F '43

Maryland

Maryland's war emergency water and sewerage problems. Pub Works 73:32+ N '42

Massachusetts

Salt content of wells in Massachusetts affected by the tidal wave and hurricane of 1938. V. M. Hynes. N E Water Works Assn J 56:355-60 S '42

Variability in the normal chloride content of surface and ground water supplies in Massachusetts. F. H. Kingsbury and E. W. Smith. N E Water Works Assn J 57:10-14 Mr '43

New Mexico

Pecos River joint investigation in the Pecos River basin in New Mexico and Texas; abstract. Am Water Works Assn J 35:1235-6 S '43

New York (state)

Mutual aid in New York during 1942. E. Devendorf. Am Water Works Assn J 35: 201-6 F '43; Abstract. Water Works & Sewerage 90:23-4 Ja '43

North Carolina

Public water supply defense in North Carolina. W. H. Booker. Am Water Works Assn J 35:223-6 F '43; Same. Water Works & Sewerage 90:69-70 F '43

Ontario

Commission management for water-supply systems; defects of Ontario legislation. W. Storrie. Water & Sewage 81:21-2+ JI '43

Texas

Pecos River joint investigation in the Pecos River basin in New Mexico and Texas; abstract. Am Water Works Assn J 35: 1235-6 S '43

See also

Water, Underground
—Texas

United States

American society of civil engineers; water supply engineering report of the committee of the Sanitary engineering division for the three years ending December 31, 1942. Am Soc C E Proc 69:399-416 Mr '43

Comparison of the new Canadian and U.S. water-quality standards. N. J. Howard. Il Water & Sewage 81:9-11 F '43

Developments of the year in water supply. W. V. Weir. Il diags map Water Works & Sewerage 90:1-13 Ja '43

Natural waters available for industrial use. W. D. Collins. Il map Chem & Eng N 21: 1062-5 JI 10 '43

Plenty of water. Business Week p22 My 8 '43

Water supply in wartime. R. L. McNamee. Am Water Works Assn J 35:687-93 Je '43

Year's stream flow was sixth highest. map Elec W 120:1526-7 O 30 '43

Virginia

Conditions in the Hampton Roads area; abstract. C. B. Boreland; E. F. Dugger. Water Works & Sewerage 90:72 F '43

WATER supply, Rural

Farm water supply pointers. diags Am Bid 65:49+ Ag '43

How to prevent water systems freeze-ups. Il Dom Eng 160:62 D '42

Protect the basis for sanitation and production; water systems; service policy. H. E. Buch & sons co. Il Dom Eng 161: 50-2+ Ja '43

Rural water supply. Il diag Elec R (Lond) 133:163-6 Ag 6 '43

Testing and treating water supplies in rural districts; laboratory, Boonville, Mo. R. F. Bishop and J. F. Sanders. Il Pub Works 74:18-20 Mr '43

Two ideas on electrical farm water systems. Dom Eng 161:62-3 Je '43

Victory for water systems; newly released order L-257. Dom Eng 162:60 JI '43

WATER supply, Rural—Continued

Water systems and the food shortage; views on equipment shortage. *Il Dom Eng* 161:44-6 Mr '43

Water systems; service and repair. *diags Dom Eng* 160:58-9 N '42

WATER supply engineering

American society of civil engineers; water supply engineering report of the committee of the Sanitary engineering division for the three years ending December 31, 1942. *Am Soc C E Proc* 69:399-416 Mr '43

Army camp water supply systems. J. Girand. *il plan Civil Eng* 13:219-21 My '43

Construction problems of Little Rock's new water supply; abstract. E. A. Elliot. *Water Works & Sewerage* 89:462-7 N '42

Hydraulic simplified; principles of hydraulics as applied to waterworks problems. *il diags Pub Works* 74:11-12+ Je '43

Manual of recommended water sanitation practice accompanying United States Public health service drinking water standards, 1942. *bibliog Pub Health Rep* 58:84-111 Ja 15 '43; Same. *Am Water Works Assn J* 35:135-53 F '43; Same. *Water Works & Sewerage* 90:sup128-36 Je '43; Excerpts. *Water & Sewage* 81:13-16+ Mr; 23-4+ My '43

New horizons for water service. E. J. Cleary. *il Eng N* 130:827-37, 840 Je 3 '43

New trends in ground water development. R. Nebolsine. *il diag plan N E Water Works Assn J* 57:186-200 S '43

Quarter century of development in Cleveland's water supply. A. G. Levy, S. C. Simmermacher and L. A. Marshall. *il diags plan map Am Water Works Assn J* 35:869-99 JI '43

Toledo water supply. *il diag map Engineer* 175:136-8, 146-9, 164-5 F 12-26 '43

Value of distribution system studies for meeting present emergencies and post-war problems. E. S. Cole. *Am Water Works Assn J* 34:1762-6 D '42; Same. *Water Works & Sewerage* 89:517-18 D '42

Water supply practice in army training centers. L. H. Kessler, V. B. Sundstrom and A. O. Tomek. *il Am Water Works Assn J* 35:1009-50 Ag '43

See also

Aqueducts
Dams
Filters and filtration
Filtration plants
Fire service (water supply)
Hot water supply
Hydraulic engineering
Intakes
Irrigation
Pipe laying
Pumping
Pumping machinery

Pumping stations
Pumps
Railroads—Water supply
Reservoirs
Water conduits
Water distribution
Water flow
Water meters
Water pipes
Water purification
Water waste
Waterworks
Wells

History

Eupalinos, first civil engineer; builder of water conduits in ancient Greece. F. R. Bichowsky. *il diags map Comp Air M* 48:7086-90 JI '43

Some ancient waterworks. E. C. Oakes. *diags Engineer* 175:316-18 Ap 16 '43

Tables, calculations, etc.*See also*

Rain and rainfall—Statistics

Water pipes—Tables, calculations, etc.

WATER supply for airports

Pumping-station construction at western air fields. A. J. Taunton. *il diags Water & Sewage* 81:15-19 S '43

Water supplies for relief airfields. H. A. McIntyre. *il Water & Sewage* 81:18-19+ Mr '43

WATER supply for armies

Army camp water supply systems. J. Girand. *il plan Civil Eng* 13:219-21 My '43

Disinfectants for the armed forces; disinfection of small quantities of water by individual soldier in the field. G. F. Reddish. *Soap & San Chem* 19:101+ Ag '43

How the army gets water; portable pipelines. *il Water & Sewage* 81:15, 38-9 Ag '43

Portable pipeline hits Axis; invention carrying gasoline and water to battle fronts. *il Nat Pet N* 35:6-7 Ag 4 '43

Shofu cylinder; a Japanese method of water filtration in the field; abstract. R. D. Kirkpatrick. *diag Am Water Works Assn J* 35:626-7 My '43

Special water uses for pumps. *Marine Eng* 48:205 JI '43

Water big factor in Sicily; reprinted from New York world-telegram. E. Pyle. *Am Water Works Assn J* 35:1255-6 O '43

Water in military campaigns. E. Bartow. *il J Chem Educ* 20:167-70 Ap '43

Water supply development for the army. F. V. Ragsdale. *Am Water Works Assn J* 35:181-2 F '43

Water supply for army camps and war factories; Engineer department of the U.S. army; instructions. *Engineer* 175:277-8 Ap 2 '43

Water supply practice in army training centers. L. H. Kessler, V. B. Sundstrom and A. O. Tomek. *il Am Water Works Assn J* 35:1009-50 Ag '43; Excerpts. *Eng N* 131:352 Ag 26 '43

Work of geologists on water supplies for war purposes. O. E. Meinzer. *Econ Geol* 38:323-4 Je '43

WATER supply for contractors

Drinking water on construction jobs; hazards and precautions. *Nat Safety N* 47:57+ Je '43

WATER supply for distilleries

Water for grain alcohol distilleries. C. S. Boruff, B. Smith and M. G. Walker. *flow diag Ind & Eng Chem* 35:1211-13 N '43

WATER supply for factories

Conservation in and by chlorination; industrial water supplies. R. B. Martin. *Paper Tr J* 116:31-4 My 6 '43

Corrosion of water pipes in a steel mill. C. L. Clark and W. J. Nungester. *bibliog il Am Soc for Metals Trans* 31:304-14 Je '43; Same cond. *Oil & Gas J* 42:65-6+ O 7 '43; Discussion. *Am Soc for Metals Trans* 31:314-20 Je '43

Demineralizing industrial water and process liquors. E. Nordell. *il Chem & Met Eng* 50:112-15 O '43

Drinking water; a natural aid to health and efficiency. *il Nat Safety N* 47:170 Mr '43

Industrial water conditioning processes. W. W. Cerna. *bibliog il diags J Chem Educ* 20:107-15, 191-7 Mr-Apr '43

Natural waters available for industrial use. W. D. Collins. *il map Chem & Eng N* 21:1062-5 JI 10 '43

Pure water without heat; costs of purifying water by stills and by regenerative exchange filters using resins in a food and beverage plant. A. A. Fette. *Power Pl Eng* 47:118+ My '43

Water supply for army camps and war factories; Engineer department of the U.S. army; instructions. *Engineer* 175:277-8 Ap 2 '43

Water treatment at the Calco chemical division. V. L. King and others. *il Chem & Eng N* 21:1046-9 JI 10 '43

Willow Run; sanitary system. *il Dom Eng* 162:66-7 Ag '43

See also

Cooling water
Drinking water systems

Water supply for paper mills
Water supply for textile mills

Bibliography

TAPPI survey of water technology, 1942. L. B. Miller. *Paper Tr J* 116:25-34 Ap 22 '43

WATER supply for mines

Softener works better with recirculated sludge; Jefferson Lake sulphur co. M. Brooke. *diag Power* 87:367 Je '43

WATER supply for paper mills

Application and maintenance of pumping equipment associated with water treating equipment. A. T. Nielsen. *Paper Tr J* 116:42-4 My 27 '43; Same cond. *Paper Ind* 25:309-10 Je '43

Conservation in and by chlorination; industrial water supplies. R. B. Martin. *Paper Tr J* 116:31-4 My 6 '43

Efficient reuse of process water. H. A. Morrison. *Paper Tr J* 117:33-6 Ag 19 '43; Same cond. *Paper Ind* 25:190+ My '43

WATER supply for paper mills—Continued

- New water developments and wartime economy. R. T. Sheen and L. E. Miller. bibliog Paper Tr J 116:21-4 Ja 23 '43; Excerpts. Paper Ind 24:1156-7 F '43
- Paper mill operating experiences with Accelerator softeners and clarifiers. A. C. Embshoff. il diags Paper Tr J 116:43-8 My 13 '43; Abstract. Paper Ind 25:202+ My '43
- TAPPI water committee report, 1942. L. B. Miller. Paper Tr J 116:30 Ja 14 '43

Bibliography

- TAPPI survey of water technology, 1942. L. B. Miller. Paper Tr J 116:25-34 Ap 22 '43
- WATER supply for petroleum industry**
- Practical methods for improving plant cooling water systems. il Nat Pet N 35 pt 2: R148-50 Ap 7 '43
- Water conditioning for compressor and pipeline stations. C. E. Erb. bibliog Pet Eng 14:190g-190h 191-4 Mr '43
- Water treating. C. E. Erb. bibliog il Oil & Gas J 41:198+ Mr 25 '43

WATER supply for plating

- De-ionized water for the electroplating industry; application of Amberlite resins; abstract. W. S. Morrison. Iron Age 152:69-70 Jl 8 '43
- Water purification for plating shops; anion exchangers. Metal Finishing 41:265 My '43

WATER supply for power plants

- Chlorinated condensing water averts cleaning, saves fuel; Millers Ford station. R. D. Gillespie and L. P. Sudrablin. il Elec W 119: 2112-14 Je 26 '43
- Hydrogen zeolite treatment of California water. S. P. Pickett. flow diag il Power Pl Eng 47:82-4 Ap '43
- New water developments and wartime economy. R. T. Sheen and L. E. Miller. bibliog Paper Tr J 116:21-4 Ja 28 '43

- Ponds circulated for year-round water; Orange Rockland electric company. il map Elec W 119:2152 Je 26 '43

- Treatment of boiler water; problems encountered in cooling-water systems. W. A. Tanzola. Oil & Gas J 41:45-7+ Ap 22 '43

See also

- Feed water purification

WATER supply for textile mills

- How to take care of water-treatment equipment. S. F. Ailing. diags Textile World 92: 100-1 N; 94-5 D '42
- Mill water-treatment plant; maintenance of pumps, motors, controls, and feeds. H. Nix. il Textile World 93:134-5 Ap '43

WATER tanks

- Spider rods in water tanks; abstract. J. M. Perryman. Water Works & Sewerage 90: 327 S '43
- Static water tanks; abstract. J. T. Griffith. Engineering 155:140 F 12 '43

Freezing

- Keeping sprinkler tank riser from freezing. diags Eng N 130:374-5 Mr 11 '43
- Preventing freezing of elevated steel tanks; hot water pipe. W. H. Metcalf. Pub Works 74:52 O '43

Leakage

- Water tank; finding leak. diags Power 87: 624-6 S '43

Painting

- American water works association tentative recommended practice; repainting elevated steel tanks and water storage tanks (with notes on repairs). Am Water Works Assn J 35:933-9 Jl '43

Protection

- Maintenance of elevated tanks. J. M. Perryman. il Water Works & Sewerage 89:511-14 D '42
- Water tank corrosion; suggested remedies; abstract. L. Kenworthy. Elec R (Lond) 132: 844 Je 25 '43

Standards

- Adopt water tank standard at Pittsburgh meeting. Cer Ind 40:44 My '43

WATER tanks, Concrete

- Concentric-ring concrete tank for Topeka. il diags Eng N 131:194-7 Jl 29 '43
- Small precast concrete storage tanks provide first aid fire protection. diags Concrete 50: 20+ D '42

WATER tanks, Steel

- Thin sheet stainless steel welded into lightweight water storage tanks. il diag Product Eng 14:622 O '43

Painting

- American water works association tentative recommended practice; repainting elevated steel tanks and water storage tanks (with notes on repairs). Am Water Works Assn J 35:933-9 Jl '43
- Care and maintenance of elevated tanks; abstract. E. E. Alt. Am Water Works Assn J 35:526 Ap '43
- Interior coatings for drinking water tanks. E. C. Haines. Oil Paint & Drug Rep 144: 64+ N 1 '43; Same. Paint Oil & Chem R 106:105 N 4 '43

Standards

- Revisions in standard specifications for elevated steel water tanks, standpipes and reservoirs. Am Water Works Assn J 34: 1915-16 D '42; Same. N E Water Works Assn J 56:supl-2 D '42

WATER tanks, Wood

- Horizontal stave wood tank; abstract. H. R. Powell. Am Water Works Assn J 35:527 Ap '43
- Timber water tank serves war plant. il Eng N 131:43 S 23 '43
- Water storage and sewage-treatment tanks built of wood. H. Harvey. il Water & Sewage 81:12-13 F '43
- Wood stave tank on a timber tower. il diags Eng N 131:157-8 Jl 15 '43

WATER towers

- Timber tower for 50,000-gal. tank. diags Eng N 130:143 Ja 28 '43
- Watersphere of Madison, Wisconsin. L. A. Smith. il Water Works & Sewerage 90:161-4 My '43
- Wood stave tank on a timber tower. il diags Eng N 131:157-8 Jl 15 '43

See also

- Standpipes

WATER towers, Concrete

- Tall rigid-frame tower of reinforced concrete supports big water tank. il Concrete 51:6 Jl '43

- WATER tube boilers. *See* Boilers, Water tube

WATER vapor

- Comparative resistance to vapor transmission of various building materials. L. V. Teesdale. Heating-Piping 14:736-42 D '42
- Condensation of water vapour from air. M. Hirsch. diags Inst Chem Eng Trans 19:69-78; Discussion. 78-81 '41
- Determination of humidity. G. M. Stearns. diag Oil & Gas J 41:33 F 25 '43
- Estimating water vapor transmission through walls; reference data. Heat & Ven 40:42a-42b Mr; 74a-74b Ap '43
- Influence of water vapor on silica brick at high temperatures. F. A. Harvey. bibliog il diags Am Cer Soc J 26:373-7 N 1 '43
- Moisture content of air and gas. G. M. Stearns. Oil & Gas J 41:70 F 18 '43
- Near infra-red spectrum of water vapor; the parallel bands ν_3 , $\nu_1 + \nu_2$ and the perpendicular band ν_2 . H. H. Nielsen. bibliog tables Phys R 62:422-33 N 1 '42
- Round-table discussion on the solvent action of water vapor at high temperature and pressure. M. Hecht and others. Am Soc T M Proc 42:977-1022 bibliog(58 titles, p 1020-2) '42
- Scattering of low velocity hydrogen ions in water vapor. J. H. Simons and others. bibliog diag J Chem Phys 11:316-21 Jl '43
- Selective adsorption of hydrocarbon and water vapor on alumina at atmospheric pressure; abstract. Chen Chun Ku, R. L. Huntington and L. S. Reid. Oil & Gas J 42:73+ My 20 '43
- Sorption of water vapor by soap curd. J. W. McBain and W. W. Lee. bibliog Ind & Eng Chem 35:784-7 Jl '43

WATER vapor—Continued

Supersonic measurements in CO_2 and H_2O at 98°C . W. H. Pielemeier and W. H. Ebers. *bibliog Acoustical Soc Am J* 15:17-21 *JI* '43
 Surface recombination of H atoms and OH radicals. W. V. Smith. *diags J Chem Phys* 11:110-25 *Mr* '43
 Ventilation requirements for solvents in industrial tanks. L. Silverman. *bibliog diags J Ind Hygiene* 25:306-19 *S* '43

See also
 Humidity
 Steam

WATER walls. *See* Furnaces, Boiler**WATER waste**

Effect of water waste on power consumption. H. E. Beckwith. *bibliog Am Water Works Assn J* 35:235-8 *Mr* '43; *Abstract. Water Works & Sewerage* 89:522-3 *D* '42
 How metering saved a major capital expenditure; experiences and results at Warsaw, N.Y. G. F. Sheehe. *il Water Works & Sewerage* 90:14-16 *Ja* '43
 Waste water survey saves plant capacity; with cost data. Allentown, Pa. W. R. Schnabel. *il Eng N* 130:551-3 *Ap* 22 '43

See also
 Water conservation

WATER wheels

See also
 Turbines

WATER works. *See* Waterworks**WATERPROOF paper.** *See* Paper, Waterproof**WATERPROOFING**

All-America package competition award; Reynolds metals co. combining sheets of lead foil, kraft paper, bond paper, asphaltic sealers, cellophane and thermoplastic adhesives to make containers that replace metal can. *Mod Packaging* 16:85+ *Ap* '43
 Basement waterproofing; time-saver standards. *diags Arch Rec* 93:79-82 *My* '43
 Batteries for the battlefield; packaging method. *il Mod Packaging* 17:70-1+ *S* '43
 How critical war materials were saved at Atlanta; renovation and rustproofing applied to two filter plants. P. Weir. *il Water Works & Sewerage* 90:189-95 *Je* '43
 Invisible raincoat waterproofs many kinds of materials. Franklin *Inst J* 236:109-10 *JI* '43
 Mastic used to seal leaky brick walls; made from gilsonite asphaltic mixture and clay granules. Pennsylvania railroad's harbor-side terminal warehouse. J. E. Nicholson. *il Eng N* 129:716-17 *N* '42
 Moisture penetration of brick walls can be controlled; workmanship important in making mortar joints. *diags Brick & Clay Rec* 103:34, 36 *Ag* '43
 Paint and waterproofing applied to concrete ships. *Am Concrete Inst J* 14:593-4 *Je* '43
 Protection against moisture vapor, a must for army packages. J. d'A. Clark. *il Food Ind* 15:75-8 *Ap* '43
 Water-proofing compound; General Electric's Dri-Film. *Chem Ind* 52:485 *Ap* '43; *Automotive & Aviation Ind* 58:46+ *Ap* 15 '43; *Rubber Age* 53:44 *Ap* '43; *Science* 97:suppl 1 *Ap* 30 '43; *Steel* 112:92 *Ap* 26 '43; *Glass Ind* 24:167 *Ap* '43; *Sci Am* 168:254 *Je* '43; *Power Pl Eng* 47:88 *O* '43
 What to do when floors leak. F. W. Daniels. *il diags Factory Management* 101:132-4 *Ja* '43

See also
 Paper—Water resist- Paper board—
 ance Water resistance
 Paper, Waterproof

WATERPROOFING of textiles

Chemical treatment of textiles; water and moth repellents; patents. *Chem Age (Lond)* 49:108 *JI* 31 '43
 Cleaning of war time textiles. *Textile Col* 65:66 *F* '43
 Flameproofing military fabrics; processes which afford protection against fire, water, mildew. W. W. Chase. *Textile World* 93:90 *Ap* '43
 Huge water proof bag developed for North African campaign. *Manuf Rec* 112:35 *F* '43
 Impact of war-time requirements on post-war finishes; presented for the A.A.T.C.C. Rhode Island section by H. S. Travis. *Am Dyestuff Rep* 31:634-7+ *D* 7 '42

New auxiliaries for producing water-repellency. A. J. Hall. *Textile Col* 65:146-7 *Ap* '43

Pillow in a carton. *il Mod Packaging* 16:56-7+ *D* '42

Production of coated fabrics; application of polyvinyl resins. J. B. Cleaveland. *il Textile World* 92:76-7 *D* '42

Textile applications of natural and synthetic resins. M. H. Gurley, Jr. *Rayon* 23:726-7 *D* '42

Vinyl acetate to replace rubber in fabrics; Saflex. *Sci Am* 168:9-10 *Ja* '43

Waterproof and water repellent finishes. P. Wengraf and E. W. K. Schwarz. *bibliog diags Am Dyestuff Rep* 31:551-8 *N* 9 '42

Waterproofness of fabrics permeable to air. L. G. Lawrie. *Textile Inst J* 33:S49 *O* '42

See also
 Raincoats
 Rubberized fabrics

Testing

Simple waterproofing test. *Textile Col* 65:471 *O* '43

Tentative textile standard no. 7, 1942; specification for a Bundesmann type water-repellency testing machine. *diags Textile Inst J* 33:S50-2 *O* '42; Same. *Soc Dyers & Col J* 59:43-4 *F* '43

Water-resistant fabric utility. G. A. Slowinske. *bibliog il diags Am Dyestuff Rep* 32:85-91 *F* 15 '43

WATERSHEDS

Some aspects of the evaluation of watershed flood control projects. B. Frank. *bibliog J Land & Pub Util Econ* 18:391-411 *N* '42

WATERWAYS

Critical cargoes carried on inland waters; water transportation system of the Ontario paper company. *il map Pulp & Pa of Can* 43:944-8+ *D* '42

War uses of the inland waterways. *il Marine Eng* 48:189-90 *My* '43

See also
 Canals River traffic
 Channels Rivers

Canada

Engineers and the British empire; transport on the inland waterways. M. Smith. *il diags map Engineer* 176:42-5 *JI* 16 '43

South America

Inland waterway for South America. C. J. Seibert. *map Eng N* 130:360-1 *Mr* 11 '43; Discussion (Part of inland waterways in Latin American transportation). F. Lavis. *map* 131:277-8 *Ag* 12 '43

United States

Big money in land-grant discount; exhibit from study board; other public-aids statements; highway and waterway data. *Ry Age* 114:162-3+ *Ja* 9 '43

Inland freight hit. *il Business Week* p20+ *Mr* 27 '43

Inland waterways gain importance in wartime movement of petroleum. H. D. Ralph. *il Oil & Gas J* 42:226-7+ *S* 30 '43
 Manpower and weather will determine traffic on waterways during 1943. *Weekly Underw* 148:896 *Ap* 24 '43

See also
 Columbia river
 Mississippi river

WATERWORKS

A.W.W.A. technical sessions at Cleveland. *Water Works & Sewerage* 90:291-9 *Ag* '43

Canadian planning for postwar reconstruction. W. C. Miller. *Am Water Works Assn J* 35:549-55 *My* '43; Same. *Water & Sewage* 81:82, 84+ *Ap* '43

Canadian section, A.W.W.A. annual meeting. Hamilton, Ont., April 7-9. *Water & Sewage* 81:27-34+ *Ap* '43

Design and operation of Woodlawn softening plant. E. V. Grimshaw and E. F. Twomey. *flow diag Am Water Works Assn J* 35:795-804 *Je* '43

Developments of the year in water supply. W. V. Weir. *il diags map Water Works & Sewerage* 90:1-13 *Ja* '43

Fifty-three years' development of a Missouri water plant. C. W. Miller. *il Pub Works* 74:16-17 *Ag* '43

WATERWORKS—Continued

Hydraulics simplified; principles of hydraulics as applied to waterworks problems. *il* diags Pub Works 74:11-12+ Je '43

Indiana section's 36th annual meeting. Water Works & Sewerage 90:167-71 My '43

Institutional sewage treatment and water supply. H. R. Green. *il* layout Pub Works 74:11-15+ Ap '43

Kentucky-Tennessee section, American water works association, meets in Paducah, Oct. 19-21. Water Works & Sewerage 89:519-25 D '42

Maine water utilities association 14th annual meeting, Portland, Feb. 9-10. Water Works & Sewerage 90:95-8 Mr '43

Manitoba and Minnesota water and sewage works meeting. Water & Sewerage 81:22-3+ Ag '43

Maryland-Delaware water and sewerage assn. 17th annual conference. Water Works & Sewerage 90:213-13 Je '43

Montana section A.W.W.A. wartime conference, Billings, May 14-15. Water Works & Sewerage 90:211-12 Je '43

New England water works association hears U-1 order interpreted; meeting, Boston, May 20. Water Works & Sewerage 90:197-200 Je '43

New England water works association's February meeting. Water Works & Sewerage 90:109-11 Mr '43

New horizons for water service. E. J. Cleary. *il* Eng N 130:827-37, 840 Je 3 '43

New W.P.E. order pretested by N.Y. water operators; meeting, Syracuse, March 26-27. Water Works & Sewerage 90:145-7 Ap '43

New York section, A.W.W.A. annual winter meeting, New York, Dec. 30. Water Works & Sewerage 90:22-4 Ja '43

North Carolina section, A.W.W.A. wartime conference, Durham. Water Works & Sewerage 90:17-21 Ja '43

Ohio section holds successful one day meeting. Water Works & Sewerage 90:174-6 My '43

Pennsylvania water operators meet at Harrisburg, June 8. Water Works & Sewerage 90:273-5 JI '43

Philadelphia bureau develops integrated chart system of water supply. M. J. McLaughlin. plan Water Works & Sewerage 90:358 O '43

Pioneering by the Paducah water works. L. R. Howson. Am Water Works Assn J 35:770-4 Je '43; Abstract. Water Works & Sewerage 89:520 D '42

Planning the postwar water supply program. A. Wolman. Am Water Works Assn J 35: 861-8 JI '43; Same. Water Works & Sewerage 90:259-62 JI '43

Post-war program for waterworks officials. Pub Works 74:34-5 Ap '43

Quarter century of development in Cleveland's water supply. A. G. Levy; S. C. Simmermacher; L. A. Marshall. *il* diags plan map Am Water Works Assn J 35:869-99 JI '43

Report of the committee on water works practice. Am Water Works Assn J 35:320-8 Mr '43

Rockport, Mass.; the evolution of a small water works system. E. S. Chase and G. C. Houser. N E Water Works Assn J 56:335-54 S '42

Some ancient waterworks. E. C. Oakes. diags Engineer 175:316-13 Ap 16 '43

Southwest section, American water works association, wartime conference; Little Rock, Ark. Oct. 12-14. Water Works & Sewerage 89:465-73 N '42

Suit your building to its neighborhood. A. L. Shaw. *il* N E Water Works Assn J 57:3-9 Mr '43

War time water conference of three associations. H. A. Faber. Water Works & Sewerage 89:488-91 N '42

Water works and sewerage; do these two utilities belong under single management? with financial and cost data. T. L. Amis. Water Works & Sewerage 89:515-16 D '42

Water works and sewerage reference and data section. *il* diags Water Works & Sewerage 90:sup 1-287 Je '43

Water works improvements at Aurora, Ill. C. Duy. Am Water Works Assn J 35:789-94 Je '43

See also

Aqueducts
Dams
Filters and filtration
Filtration plants
Fire service (water supply)
Hydrants
Intakes
Pumping stations
Pumps
Reservoirs
Standpipes
Water departments
Water distribution
Water pipes
Water purification
Water supply
Water supply engineering
also Committee on water and sewerage works development

Accounting

Depreciation reserve in water rate regulation. Pub Works 74:40-1 Ag '43

Kansas City improvements meet wartime conditions. K. K. King. *il* Am Water Works Assn J 35:987-92 Ag '43; Same. Water Works & Sewerage 90:287-9 Ag '43

Operator's monthly balance sheet. C. E. Moore. Am Water Works Assn J 34:1880-8 D '42

Water works accounting practices in Canada. C. W. Eastwood. Am Water Works Assn J 35:562-7 My '43; Same. Water & Sewerage 81:92, 94+ Ap '43

Auxiliary workers

Legal aspects of civilian defense volunteer services in Michigan. G. R. Sidwell. Am Water Works Assn J 35:655-7 My '43

Recruiting and training auxiliaries for water works. E. Devendorf. Am Water Works Assn J 35:1090-5 Ag '43

Bibliography

Abstracts of water works literature. Published in monthly numbers of Journal of the American water works association A.W.W.A. publications. Am Water Works Assn J 34:2009-12 D '42

Information on water and sewerage works problems; where to find it; revised. L. H. Ens- unit. Water Works & Sewerage 89:sup17-18 Je '42; 90:sup19-20 Je '43

Papers scheduled at section meetings during 1942. Am Water Works Assn J 34:1937-45 D '42

Waterworks digest. Published in monthly numbers of Public works

Costs

Cost of producing water; figures covering operating, maintenance and administration expenses. A. E. Berry. Water & Sewerage 81:21-4 Je '43

Water supply system. Schenectady, N. Y.; unit prices. Eng N 129:875 D 17 '42

Waterworks improvements. Elk City, Oklahoma; unit prices. Eng N 130:508 Ap 8 '43

Directories

Directory of Canadian waterworks systems; reference data. Water & Sewerage 81:32-105 Je '43

Electric equipment

Public water supply. *il* Elec R (Lond) 132: 707-10 My 28 '43

Emergency problems

Auxiliary water supplies for emergency service. E. L. Holloway. Am Water Works Assn J 35:701-8 Je '43

Chlorination; routine and emergency. C. R. Moore. *il* Water Works & Sewerage 90:99-100 Mr '43

Emergency experiences during flash floods. B. S. Bush and M. J. Barrick. Am Water Works Assn J 35:81-7 Ja '43; Abstract. Water Works & Sewerage 89:491 N '42; Discussion. Am Water Works Assn J 35:87-92 Ja '43

Manual on emergency repairs to water distribution systems; with list of equipment manufacturers and bibliography of their publications. *il* diags Am Water Works Assn J 34:1839-1913 D '42

Mutual aid program in Indiana; abstract. L. A. Geupel. Water Works & Sewerage 89: 524 D '42

WATERWORKS—Emergency problems—Cont.

Review of the Olean flood in relation to the mutual aid and civilian protection programs. A. D. Drake and F. O'B. Nehin. *Am Water Works Assn J* 34:1743-54 D '42

See also

Waterworks—War measures

Employees

A.W.W.A. and procurement of sanitary engineers. *Am Water Works Assn J* 35:653-4 My '43

Labor relations in municipally owned plants; abstract. J. W. Irwin. *Water Works & Sewerage* 90:297-8 Ag '43

Legal aspects of civilian defense volunteer services in Michigan. G. R. Sidwell. *Am Water Works Assn J* 35:655-7 My '43

Manpower and selective service problems; abstract. P. B. Niles. *Water Works & Sewerage* 90:297 Ag '43

Manpower situation. H. J. Jordan. *Am Water Works Assn J* 35:1393-5 O '43

Michigan university water works school on wartime maintenance of water service; with examination material. *Am Water Works Assn J* 35:601-8 My '43

Mutual aid training program in zone 22, New York state. E. P. Stewart and H. H. Wagenhals. *Am Water Works Assn J* 35:609-12 My '43

Occupational deferment of water works employees. *Am Water Works Assn J* 35:372-80 Mr '43

Pensions for water works men; abstract. W. W. Brush. *Water Works & Sewerage* 89:472 N '42

Selective service of essential public water supply operator and deferment procedure; abstract. E. L. Compere. *Water Works & Sewerage* 89:471-2 N '42

Training of water works personnel under the E.S.M.W.T. program. N. C. Ebaugh. *Am Water Works Assn J* 35:199-200 F '43

See also

Waterworks—Auxiliary workers

Equipment

Classified index of products used in the water works and sewerage fields. *Water Works & Sewerage* 90:sup8-18 Je '43

Development of tapping and valve-inserting machines. J. A. Jensen. *Am Water Works Assn J* 35:775-80 Je '43

Emergency equipment for water works utilities. *Il diag Product Eng* 14:203 Ap '43; Same. *Am Water Works Assn J* 35:942-3 J '43

Hydrostatically-operated chemical dosing pump. *Il diags Engineering* 156:86-7 JI 30 '43

Lazy man's water works; Bishop, Calif. G. L. Wood. *Il diags Am Water Works Assn J* 35:303-8 Mr '43

Lubrication of machinery in water and sewage treatment plants. *Il diags table Pub Works* 74:20-1+ Je; 22-4+ JI '43

New type of plant may solve many water-softening problems; Spiractor process. R. E. Thompson. *Il diags Water & Sewerage* 80:18-19+ D '42

New water supply of Beckley, West Virginia; with cost data. W. D. Kelley. *Il Water Works & Sewerage* 90:153-8 My '43

On the water front; priority ratings for waterworks; abstract. H. E. Jordan. *Water Works & Sewerage* 89:521-2 D '42

Postwar waterworks equipment; the manufacturers' viewpoint. *Eng N* 130:838-9 Je 3 '43

Postwar water works materials. W. V. Weir. *Am Water Works Assn J* 35:1051-7 Ag '43

Preference rating procedure up-to-date; order P-46. *Pub Works* 73:32+ D '42

Priorities and the Controlled materials plan. *Am Water Works Assn J* 34:1917-23 D '42

Products index; buyer's guide, with addresses of Canadian manufacturers and agents of sewerage and waterworks equipment. *Water & Sewerage* 81:116-28 Je '43

Substitute materials in the water works field. R. Bennett. *Am Water Works Assn J* 35:37-52 Ja '43

War production board; regulations and directives of interest to water works managers. *Am Water Works Assn J* 35:386-420, 660-86 Mr, My '43

See also

Filtration plants
Pumping stations

Finance

Annual report, 1941, Department of water supply, Detroit, Mich. M. E. Flentje. *Am Water Works Assn J* 35:1114-15 Ag '43

Kansas City improvements meet wartime conditions. K. K. King. *Il Am Water Works Assn J* 35:987-92 Ag '43; Same. *Water Works & Sewerage* 90:287-9 Ag '43

Postwar planning and possibilities of reduced fire insurance premiums as a factor in the cost of small town water works systems. J. R. McConas. *Am Water Works Assn J* 35:556-61 My '43

Surplus waterworks funds; discussion. *Water & Sewage* 81:118+ Ap '43

Laboratories

War production board regulations for laboratory equipment and materials, orders L-144, P-43 and P-135. *Am Water Works Assn J* 35:257-65 F '43

Laws and regulations

Commission management for water-supply systems; defects of Ontario legislation. W. Storrie. *Water & Sewage* 81:21-2+ JI '43

Depreciation reserve in water rate regulation. *Pub Works* 74:40-1 Ag '43

Disposal of surplus waterworks funds; court judgment in the Belleville case. W. R. Strike. *Water & Sewage* 81:86, 88+ Ap '43

See also

Wells—Laws and regulations

Maintenance and repair

Applications of metallizing in water works practice. J. S. Stevens. *Am Water Works Assn J* 35:53-7 Ja '43

How critical war materials were saved at Atlanta; renovation and rustproofing applied to two filter plants. P. Weir. *Il Water Works & Sewerage* 90:189-95 Je '43

Metallizing as a method of water works maintenance. C. E. Palmer. *Il Water Works & Sewerage* 89:391-6 S '42; Same cond. *Am Water Works Assn J* 34:1374-80 S '42

Same cond. *Water & Sewerage* 80:20+ D '42; 81:16-18+ Ja '43; Abstract. *Eng N* 129:102 JI 16 '42

Water works maintenance policy as affected by the War production board. H. E. Jordan. *Am Water Works Assn J* 35:539-41 Ap '43

Management

Commission management for water-supply systems; defects of Ontario legislation. W. Storrie. *Water & Sewage* 81:21-2+ JI '43

Manual of recommended water sanitation practice accompanying United States Public health service drinking water standards, 1942. bibliog *Pub Health Rep* 58:84-111 Ja 15 '43; Same. *Am Water Works Assn J* 35:135-58 F '43; Same. *Water Works & Sewerage* 90:sup128-36 Je '43; Excerpts. *Water & Sewage* 81:13-16+ Mr; 23-4+ My '43

Papers presented at Superintendents' prize contest session, Cleveland conference. T. W. Good and others. *Am Water Works Assn J* 35:983-1004 Ag '43

Relationship between small town water supply and state health department. W. A. Reiman. *Am Water Works Assn J* 35:77-80 Ja '43

War emphasis in water works management. S. B. Morris. *Am Water Works Assn J* 35:1-6 Ja '43

What are the responsibilities of public water supply officials in the correction of dental deficiencies. A. Wolman. *Am Water Works Assn J* 35:1198-1200 S '43

See also

Water meters

Municipal ownership

Creston, Iowa, bought water works, doubled capacity and eliminated shortage; with cost data. J. B. Russell. *Il Pub Works* 74:14-15 My '43

WATERWORKS—Continued**Protection**

Guarding public water supplies. L. E. Moore. N E Water Works Assn J 56:265-70 S '42
 Practical aspects of guarding utility properties. G. A. Hunt. Am Water Works Assn J 35:65-8 Ja '43

See also

Waterworks—War measures

Records

Value of graphs in waterworks records. A. Reichstein. Pub Works 74:32 Ap '43

Safety measures

Safety in water plants. V. W. Buys. Am Water Works Assn J 35:317-19 Mr '43

Statistics

Summary of census data on water treatment plants in the United States. S. R. Weibel. Pub Health Rep 57:1679-94 N 6 '42; Same. Am Water Works Assn J 34:1831-46 D '42

War measures

Administrative policies of the Water division, Office of war utilities. A. E. Gorman. Am Water Works Assn J 35:846-52 Jl '43

Call men, their education and preparation; maintaining water service in case of air raid. E. C. Boothby. Il Water Works & Sewerage 90:94 Mr '43

Can American water systems provide for civilian defense. K. J. Carl. Am Water Works Assn J 35:19-26 Ja '43

Civilian defense and public water supply. U. S. Grant, 3d. Am Water Works Assn J 35:1139-45 S '43

Civilian defense and public water supply. G. E. McCallum. Am Water Works Assn J 35:27-9 Ja '43

Financial problems of civil defense; British experience. H. Berry. Am Water Works Assn J 35:1005-8 Ag '43

Guarding public water supplies. L. E. Moore and others. N E Water Works Assn J 56:265-319 S '42

If Chicago were bombed—this could happen! model intended to convey picture of destruction. Il Gas Age 90:12-13 D 17 '42

Intermunicipal agreements aid wartime water service. Eng N 130:481 Ap 8 '43

Maintenance of public water supplies for civilian defense. D. W. Evans. Am Water Works Assn J 35:30-3 Ja '43; Abstract. Water Works & Sewerage 90:18-19 Ja '43

Maintenance of water supply in Britain under war conditions. diags Am Water Works Assn J 35:7-18 Ja '43

Michigan university water works school on wartime maintenance of water service; with examination material. Am Water Works Assn J 35:601-8 My '43

Mutual aid in New York during 1942. E. Devendorf. Am Water Works Assn J 35:201-6 F '43; Abstract. Water Works & Sewerage 90:23-4 Ja '43

Mutual aid plan in Indiana. L. A. Geupel. Am Water Works Assn J 35:227-31 F '43

Mutual aid training program in zone 22, New York state. E. P. Stewart and H. H. Wagenhals. Am Water Works Assn J 35:609-12 My '43

New P-141 order interpreted by Government division. Water Works & Sewerage 90:334 S '43

Operation of a control center; play by the staff of the Division of sanitation, New York state department of health, in collaboration with Colonel Thomas M. Sherman. Am Water Works Assn J 35:207-22 F '43

Organization and activities of the sub-committee on water supply of the California state council of defense. C. G. Hyde, H. Reinhardt and M. R. MacKall. Am Water Works Assn J 35:183-95 F '43

Plans and policies of the Office of war utilities. J. A. Krug. Am Water Works Assn J 35:841-5 Jl '43

Plans for emergency distribution system repairs in San Francisco. G. W. Pracy. Am Water Works Assn J 35:69-70 Ja '43

Preparing the valve system for emergency service. A. J. Kuecker. Am Water Works Assn J 34:1767-70 D '42

Problem of a diminishing demand at Marshalltown, Iowa. H. V. Pedersen. Am Water Works Assn J 35:999-1001 Ag '43

Problems resulting from plant expansion and minimum standards for water plants in the Southwest. H. J. Darcey. Am Water Works Assn J 35:71-2 Ja '43

Proceedings of the Air raid precautions school for water works instruction of the New England water works association and the Office of civilian defense. N E Water Works Assn J 57:81-168 Je '43

Public water supply defense in North Carolina. W. H. Booker. Am Water Works Assn J 35:223-6 F '43; Same. Water Works & Sewerage 90:69-70 F '43

Report on voluntary conservation program for water utility industry. Am Water Works Assn J 35:1249-54 S '43

Some wartime waterworks practices. Pub Works 74:20 Jl '43

Supplementary utilities order U-1-f; building of extensions. Am Water Works Assn J 35:1245-8 S '43

Utilities orders U-1 and U-1-f as amended. Am Water Works Assn J 35:1371-85 O '43
 Virginia section, A.W.W.A. 9th annual conference, Richmond, Nov. 5-6. Water Works & Sewerage 90:71-5 F '43

War problems in analysis and treatment; detection and removal of mustard gas and lewisite. A. M. Buswell and others. Am Water Works Assn J 35:1303-11 O '43

War's effect on English local government. A. Collins. Am Water Works Assn J 35:1146-54; Comments. U. S. Grant, 3d. 1155 S '43

Wartime administration; discussion. Water & Sewage 81:113-14+ Ap '43

Wartime administrative problems of the Dallas city water works. H. A. Hunter. Am Water Works Assn J 35:73-6 Ja '43

Wartime control of water quality. C. R. Cox. Am Water Works Assn J 34:1755-61 D '42

Wartime operation of New Bedford's water works. Pub Works 74:36 Ag '43

Wartime problems of supply, operation and design. L. R. Howson. Am Water Works Assn J 35:543-8 My '43

Wartime problems of the East Bay municipal utility district. J. S. Longwell. Am Water Works Assn J 35:309-16 Mr '43

Wartime water works problems; abstracts of papers. Am Water Works Assn J 35:105-12 Ja '43

Water conservation in wartime; a round-table discussion. Am Water Works Assn J 35:173-80 F '43

Water supply in wartime. R. L. McNamee. Am Water Works Assn J 35:687-93 Je '43

West Virginia water conference on war time operation. H. A. Faber. Water Works & Sewerage 90:65-8 F '43

See also

Waterworks—Auxiliary workers
 Waterworks—Emergency problems

Waterworks—**Protection****Winter operation**

Chlorinator operation during the winter. R. M. Harris. Il Water & Sewage 81:9-10 Ja '43

See also

Water tanks—Freezing

WATERWORKS schools

Michigan university water works school on wartime maintenance of water service; with examination material. Am Water Works Assn J 35:601-8 My '43

Mutual aid training program in zone 22, New York state. E. P. Stewart and H. H. Wagenhals. Am Water Works Assn J 35:609-12 My '43

Proceedings of the Air raid precautions school. N. E. W. W. A. N E Water Works Assn J 57:81-168 Je '43

WATSON, David Meredith Sears, 1886-Darwin medal award. H. Dale. Science 97:31 Ja 8 '43

WATSON, George A. 1869-1943
 Sketch. por Nat Underw 47:2+ Ja 21 '43

WATT, Robert J. 1894-Portrait. *Business Week* p42 J1 31 '43**WATT hour meters**Extra register dial shows hourly flow. *Elec W* 120:1186+ O 2 '43Guide for electric meter application; single-phase domestic loads. R. A. Caldwell. *Elec W* 119:93 Ja 9 '43Polyphase metering corrections by cosine method. E. G. Yarrill. *diags Elec W* 120:1161-3 O 2 '43Watt-hour meter compensates power transformer losses. W. C. Woodson. *il diags Elec W* 120:452-4 Ag 7 '43**Testing**How to check a meter installation. *Elec W* 119:304 Ja 23 '43Simmer unit tests meter for rotation. M. A. Gilles. *il Elec W* 118:1638 N 14 '42**WATTLE bark**Sumach substitute for wattle. T. Woodhead. *Chem Age (Lond)* 47:380 O 31 '42**WATTMETERS**Direct-reading wattmeters for use at radio frequencies. G. H. Brown, J. Epstein and D. W. Peterson. *il diags Inst Radio Eng Proc* 31:403-10 Ag '43Electric instruments; performance at higher than normal operating frequencies; simple, practical methods of checking accuracy. S. C. Richardson. *il diags Gen Elec R* 46:565-9 O '43Power output meters. G. Dexter. *il diags Radio N* 30:38-9+ J1 '43Voltsmeters, ammeters and wattmeters; instruments make use of three electrical effects according to the type of measurement. *Elec West* 90:47-8 Ja '43*See also*

Watt hour meters

TestingTesting wattmeters with one potentiometer. M. Underwood. *diag Instruments* 16:404 J1 '43**WAVE guides. See Radio conductors****WAVE mechanics**Asymmetric rotor; calculation and symmetry classification of energy levels. G. W. King, R. M. Hainer and P. C. Cross. *bibliog J Chem Phys* 11:27-42 Ja '43Differences in the vapor pressures and entropies of the liquid nitrogens. I. Kirshenbaum. *bibliog J Chem Phys* 10:717-22 D '42Interaction of the van der Waals type between three atoms. B. M. Axilrod and E. Teller. *J Chem Phys* 11:299-300 Je '43Note concerning I-type doubling in linear polyatomic molecules. H. H. Nielsen and W. H. Shaffer. *bibliog J Chem Phys* 11:140-4 Mr '43Polarizability of H⁻. L. R. Henrich. *Phys R* 62:545-7 D 1 '42Quantization of molecules. K. Fajans. *bibliog J Chem Phys* 10:759-60 D '42Relativistic theory of excited spin states of the proton and the neutron. V. L. Ginsburg. *bibliog Phys R* 63:1-12 Ja 1 '43Vibration-rotation energies of the linear X-Y-Z type molecule. A. H. Nielsen. *J Chem Phys* 11:160-3 Ap '43Wave function for the negative hydrogen ion. R. E. Williamson. *bibliog Phys R* 62:538-9 D 1 '42*See also*Quantum theory
Uncertainty principle**WAVE motion, Theory of**Specular reflection of plane wave pulses in media of continuously variable refractive properties. M. E. Rose. *Phys R* 63:111-20 F 1 '43**WAVELL, Sir Archibald Percival, 1883-**Soldier into statesman; from commander-in-chief in India to viceroy. *Economist* 144:809-10 Je 26 '43**WAVES**Breakwaters. R. R. Minikin. *Engineering* 155:342-3 Ap 30 '43Effect of turbulence and channel slope on translation waves. G. H. Keulegan and G. W. Patterson. *bibliog diags J Research Nat Bur Stand* 30:461-512 Je '43Waves as a sand-transporting agent. U. S. Grant. *Am J Sci* 241:117-23 F '43*See also*

Electric waves

Light

Radiation

Radio waves

Sound waves

Ultrasonic waves

Vibration

WAXED paper. *See Paper, Waxed***WAXES**

Guatemalan substitute for lac? For Comm W 11:31 My 22 '43

New process increases recovery of high-melting-point wax. J. Salmund. *flow diag il Pet Eng* 14:180+ My '43Nut yields wax; joboba bush. *Business Week* p60 Je 26 '43Observations on polishes; new and substitute raw materials. G. S. Collingridge. *Chem Age (Lond)* 47:461-4 N 28 '42Refining of high melting-point waxes. V. N. Jenkins. *flow chart il Oil & Gas J* 41:98-9, 101+ Mr 25 '43Rust-inhibiting wax coatings. W. Bridge-man. *il Steel* 112:122+ Ap 5 '43Use of waxes and wax emulsions in the waterproofing of kraft papers. R. E. Killingsworth. *Paper Ind* 26:526 Ag '43Wax dip tanks. *Chem Ind* 53:361 S '43Wax distillate used to plug channels in pay zone. H. F. Simons. *il Oil & Gas J* 42:47 My 13 '43Wax substitutes. C. S. Glickman. *bibliog il Chem Ind* 53:496-500 O '43*See also*

Beeswax

Carnauba wax

Floor wax

Paraffin

AnalysisAnalysis of commercial oil emulsions and wax dispersions. F. M. Biffen and F. D. Snell. *il Ind & Eng Chem Anal* ed 15:517-19 Ag 15 '43Analysis of oils, fats and waxes used in industry. O. J. Schierholtz. *bibliog il diag Can Chem & Process Ind* 26:725-6+; 27:42+ D '42-Ja '43Determination of wax in asphalt. R. L. Betts and H. D. Wirsig. *bibliog diags Ind & Eng Chem Anal* ed 15:478-83 Ag 15 '43**WAYBILLS**New government bill of lading; revised form is harmonized and combined with a freight waybill form. *il Ry Age* 114:1221-3 Je 19 '43**WAYLEAVES. See Eminent domain****WAYNE, Anthony, 1745-1796**Surprise and cold steel. *por Fortune* 27:112-13 My '43**WEALTH**Women possess large share of the wealth. *Nat Underw (Life ed)* 47:11 My 7 '43*See also*

Capital

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Economics

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Income tax

Money

Profit

Prosperity

WEAPONS*See also*

Bazooka

Rifles

Guns

WEAR of metals. See Metals—Wear**WEATHER**Influence of sunspots on weather. *Science* 97:sup10 F 5 '43It's the weather; value of the degree day and long-range statistics. R. Little. *Am Gas Assn Mo* 26:355-60+ S '43Relationship of disease and weather studied at Northwestern university medical school in air conditioned room. H. Kreisman. *il diags Heat & Ven* 40:61-6 F '43Weather data for normal heating season; principal cities in the U.S.; reference data. *maps Heat & Ven* 40:70a-70b O '43*See also*

Atmospheric temperature

Humidity

Meteorology

Rain and rainfall

Storms

Weather forecasting

Winds

WEATHER forecasting

Better weather forecasts for hemisphere flying. W. A. M. Burden. *il For Comm W* 12: 3-4+ *Jl* 24 '43
 Doing the ice age varves. H. P. Gillette. *Roads & Sts* 85:33-4+ *D* '42; Same. *Water Works & Sewerage* 89:539-41 *D* '42
 How's the weather? odd weather predictors. *Sci Am* 167:273-4 *D* '42

See also

Meteorology, Military
 Radio meteorographs

WEATHER forecasts

Communications; branch of CAA operates communication system and wire service for Weather bureau. E. Sibley. *il map Radio N* 29:112-15+ *Je* '43
 Flying being made safer through new CAA weather service. *Civil Aero J* 4:89 *Jl* 15 '43

WEATHER vanes

Eight-way wind direction indicator. J. C. Smith. *Elec W* 119:478 *F* 6 '43
 Wind direction indicator. *Marine Eng* 48: 286+ *S* '43

WEATHERING

Analysis of the uranyl oxalate actinometer as applied to accelerated light and weathering tests. F. T. Bowditch, C. E. Greider and C. G. Ollinger. *bibliog Am Soc T M Proc* 42:845-50 '42
 Weathering of igneous rocks near Hong Kong. R. W. Brock. *Geol Soc Bul* 54:717-38 *J* '43

WEAVING

Automatic weaving developments. H. deG. Gaudin. *Textile Inst J* 34:P119-21; Discussion *P122 Ag* '43
 Determining and recording picker-lap weights. E. H. Helliwell. *diag Textile World* 93:131-2 *Je* '43
 Device for preventing double picks. A. R. Kandler. *diag Textile World* 93:119 *O* '43
 Fabric defects charted. S. C. Veney. *il Textile World* 92:88-9 *D* '42
 Hints on weaving nylon fabrics. *il Textile World* 93:100-1 *Je* '43
 How to reduce loom stoppages. A. R. Kandler. *diag Textile World* 93:106-7 *F* '43
 Imperfections in woven fabrics. T. Nelson. *il Textile World* 93:93 *My* '43
 Installation of future weaving plants. E. Snowden. *Textile Inst J* 34:P89-94 *My* '43
 Point system for grading fabrics. R. E. Spear. *Textile World* 93:78 *O* '43
 Speeding-up weave change-overs; looms for civilian work shifted to military fabric production. H. E. Wenrich. *il diag Textile World* 93:76-7 *My* '43

See also

Carpets
 Cotton weaving
 Jacquard weaving
 Looms
 Rayon weaving
 Rugs
 Shuttles
 Silk weaving
 Textile fabrics
 Textile fibers
 Woolen and worsted weaving

WEAVING (handicraft)

Haiti encourages hand weaving. *For Comm W* 10:27 *Mr* 6 '43

WEBB, Beatrice (Potter) (Mrs Sidney Webb)

1858-1943
 Sketch. *Economist* 144:586 *My* 8 '43

WEBB institute of naval architecture

Webb Institute towing tank. M. Costagliola. *diags Marine Eng* 48:186, 188 *F* '43

WEBB-POMERANE act. *See* Export associations**WEBSTER, Leslie Tillotson, 1894-1943**

Sketch. J. Casals and T. M. Rivers. *Science* 98:167 *Ag* 20 '43

WEBSTER CITY, Iowa**Streets**

Street improvements in Webster City; with cost data. H. A. Little. *il diags Pub Works* 74:21-2 *Ap* '43

WEDGES (photography)

Spectral characteristics of optical wedges. M. H. Sweet. *il diags Opt Soc Am J* 33: 194-208 *Ap* '43

WEEDS

See also

Railroads—Weed removal

WEEK-end houses

Planned for the future; lakeside summer cottage. *il plan Arch Rec* 92:40 *D* '42

WEEK idea in merchandizing. *See* Advertising campaigns—Special weeks**WEIBEL process.** *See* Electric welding—Weibel process**WEIGHING**

See also

Balances
 Scales

WEIGHT

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Airplanes—Weight
 Locomotives—Weight

WEIGHT (physiology)

Ideal weights; a little hunger may improve the Nation's health. *Sci Am* 168:215 *My* '43

See also

Stature

WEIGHT lifting. *See* Lifting**WEIGHTS and measures**

Accuracy of measurement; abstract. H. L. Curtis. *Science* 97:sup10+ *F* 26 '43
 Chart for converting grains per gallon to pounds per million and the reverse. *Water Works & Sewerage* 90:sup136 *Je* '43
 Foot/cubic foot/ounce. K. G. Irwin. *J Chem Educ* 20:464-5 *S* '43
 How much is a barrel? W. F. Schaphorst. *Heat & Ven* 39:27 *D* '42
 Machinery weights; data for estimating weights of ship machinery. E. A. Stevens, Jr. *Marine Eng* 47:134-7 *Ag*; 156-9 *S*; 143-5 *N*; 167-8 *D* '42; 48:170, 172 *Ja*; 190, 192 *F* '43
 Relationship of microns, millimeters and the inch. H. R. Mauersberger. *Rayon* 24:344 *Jl* '43

See also

Balances	Measuring instruments
Conversion tables	Metric system
Electric measurements	Specific gravity
Gages	Wood measurement
Gravity	

WEIL'S disease

Leptospirosis in rats (*R. norvegicus*) in and about Washington, D.C.; evaluation of the methods used for diagnosis. C. L. Larson. *bibliog Pub Health Rep* 58:949-55 *Je* 18 '43
 Treatment of young white mice infected with leptospira icterohaemorrhagiae with immune serum. C. L. Larson. *bibliog Pub Health Rep* 58:10-15 *Ja* 1 '43

WEINBERG, Wilhelm, 1862-1937

Hardy-Weinberg law. C. Stern. *Science* 97: 137-8 *F* 5 '43

WEIRS

Flow-control weir at Niagara falls. *il diags map Engineering* 156:241-4, 250 *S* 24 '43
 Flow diversion at Niagara falls; construction of weir. H. C. Woods. *il diags map Civil Eng* 13:403-6 *S* '43
 Flow diversion at Niagara falls; hydraulic aspects of the remedial weir. C. G. Cline. *il maps Civil Eng* 13:359-62 *Ag* '43
 Long weir increases Niagara Falls power. *il diag Eng N* 130:744-6 *My* 20 '43

See also

Dams

WEIRS (measuring)

Aeration of spillways. G. H. Hickox. *il diags Am Soc C E Proc* 68:1777-96 *D* '42; Discussion 69:422-4, 785-8, 868-70, 1461-2 *Mr, My-Je, N* '43
 Improved liquid splitter; Rotaweir proportioning weir. *il Chem & Met Eng* 50:127 *Ag* '43

Removable weir plate assembly for weir installations. D. I. Grush. *diags Am Water Works Assn J* 35:900-1 *Jl* '43

Submergence effect on sharp-crested weirs. J. K. Vennard and R. F. Weston. *bibliog diags Eng N* 130:814-16 *Je* 3 '43; Discussion. J. C. Stevens. 131:187 *Jl* 29 '43

Weir with flow proportional to head; for float-regulated chemical dosing of sewage effluent. E. G. Smith. *diags Eng N* 131:198-9 *Jl* 29 '43; Correction. E. Soucek. 131:317 *Ag* 26 '43

WELCH, Vincent Sylvester

Vice-president of Equitable society. *por*
East Underw 44:34+ pt 2 O 1 '43

WELDERS

Women mean business; women welders; Truscon steel co. G. R. Reiss. *il* Steel 112:86-7+ F 1 '43

Training

Aircraft welders need special training; welding aluminum and chromium molybdenum steel. *il* diags *Am Mach* 87:112-13 My 13 '43

America's wartime merchant fleet; welding and the training of welders. *il* Engineer 175:302-4, 322-4 Ap 16-23 '43

Proposed code of minimum requirements for instruction of welding operators. *il* diags *Welding J* 22:522-44 J1 '43

Training of welding foremen. F. H. Achard. *Welding J* 22:113-15 F '43

Welding for victory; school in Des Moines. J. G. Sherbo. *il* *Welding J* 22:599-600 Ag '43

Welding operator training. A. N. Kugler. *il* diags *Welding J* 22:806-14 O '43

See also

Electric welders—
Training

WELDING

Aid to better welding; use of carbon paste. H. H. Griffith. *il* *Welding J* 22:902-3 N '43

Aircraft welding; oxy-acetylene, normal metallic arc, atomic hydrogen and spot welding. *il* *Elec R (Lond)* 131:577-80 N 6 '42

Brushing wheels break bottlenecks in weld joint preparation and weld cleaning. *il* Steel 113:107, 110+ Ag 2 '43

Bus construction of welded wrought-iron pipe. J. A. Gerber. *il* *Elec W* 120:988-9 S 18 '43

Cast ordnance parts redesigned for fabrication as welded stampings. diags *Product Eng* 14:206-7 Ap '43

Chart classifying the principal welding processes. *Metal Prog* 44:826 O '43

Cleaning welded metal surfaces; nickel, monel and inconel. K. M. Spicer. *il* *Sheet Metal Worker* 34:27-9 Je '43

Comparison of welding processes; tabulation. R. S. Burpo, Jr. comp. *Metals & Alloys* 17:987 My '43

Conservation of electrodes, oxygen, acetylene and power in welding; panel discussion. *Welding J* 22:246-7 Ap '43

Conservation of material by welding. A. O. Andersen and W. L. Mitzenius. *il* *Welding J* 21:821-3 D '42

Cures of welding troubles; illustrations with text. C. H. Jennings. *Sheet Metal Worker* 34:26-9 Ag '43

Designing for production welding; motor-mounting base on a turret lathe. H. A. Oldenkamp. *il* diags *Welding J* 22:24-6 Ja '43

Designs of deep-drawn shapes made by simple dies and welding. E. H. Hautz. *il* diags *Product Eng* 13:728-30 D '42

Fire hazards of welding equipment. *Engineering* 156:230 S 17 '43

First aid for broken parts. *il* diags *Bus Transportation* 22:58-9 Mr '43

Fixtures with expansion gun speeds welding. diags *Product Eng* 14:210 Ap '43

Foolproof procedures for precision production welding. F. Shaw and V. Forgett. *il* diags *Aero Digest* 42:237-8, 241-2+ My '43

Jig for welding shafts and similar pieces. *il* diags *Roads & Sts* 85:59 N '42

Keeping machinery on the job by welding. M. H. Rutishauser. *Roads & Sts* 85:54 N '42

Modern welding methods for copper and copper alloys. J. J. Vreeland. *il* *Welding J* 22:784-92 O '43

National metal congress; abstracts of papers read at meetings of the American society for metals and American welding society. *Automotive & Aviation Ind* 89:42-3+ N 1 '43

Preheat temperatures; chart. *Welding J* 21:751-2 N '42

Preparation for welding. H. R. Morrison. diags *Welding J* 21:767-9 N '42

Pressure welding of pipe lines. A. L. Forbes, Jr. *il* *Oil & Gas J* 42:186, 189 S 23 '43

Pressure welding of pipe lines; El Paso natural gas company. A. L. Forbes. *il* *Pet Eng* 14:190a-190b+ Mr '43

Questions and answers on welding practices; help on problems relating to welding practices as applied to locomotive and car maintenance (cont). *Ry Mech Eng* 116:535; 117:40, 181-2, 224, 324-5, 374-5 D '42-Ja, Ap-May, J1-Ag '43

Recent developments in welding. C. W. Brett. *pls* *Inst Pet J* 29:157-62 Je '43

Reclaiming high-speed steel tools by an improved welding process. T. Sutton. *il* Steel 111:38, 90 N 30 '42

Repair worn parts and surfaces by welding and metallizing. H. Filippi. *Brick & Clay Rec* 102:22 Ap '43

Rotating jig speeds welding of sea chests. J. A. Faoro. *il* diags *Am Mach* 87:111 Je 10 '43

Savings with welded casing; with cost data. *Oil & Gas J* 41:49 Ja 21 '43

Special applications of welding. C. W. Brett. *il* *Chem & Ind* 62:301 Ag 7 '43

Stress relieving in welded construction. H. Lawrence. *Steel* 113:94, 96+ Ag 16 '43

Tool-tipping by welding. *Metals & Alloys* 18:819 O '43

Tool-tipping procedure; data sheets. *Mach* 50:205 S '43

30th buyers reference number. *il* diags *Am Mach* 87:327-33 Ja 21 '43

True low-temperature welding process; Castolin eutectic low temperature welding. *il* *Diesel Power* 21:50-1 Ja '43

Use of welded casing for surface and oil strings; with cost data. *Oil & Gas J* 41:57 Ja 14 '43

War accelerates technical progress. *Steel* 112:290-2+ Ja 4 '43

Weld finishing; abstract. E. G. West. *Metals & Alloys* 18:884+ O '43

Welded locomotive boiler. E. G. Young. *il* diags *Welding J* 22:823-7 O '43

Welded weapons in war. S. B. Ritchie. *il* *Welding J* 22:893-901 N '43

Welder's relation to the saving of metals. *Oil & Gas J* 41:35 D 3 '42

Welding and cutting in gas-plant maintenance. V. Forgett and F. Waldo. *il* *Gas Age* 91:9-11+ F 11 '43

Welding as it applies to railroads. R. Moran. *il* *Welding J* 22:793-7 O '43

Welding brasses and bronzes. *Chem Age (Lond)* 48:299-300 Mr 13 '43

Welding contraction and locked-up stresses. *il* diags *Engineer* 175:423-5 My 28 '43

Same. *Metal Prog* 44:249-51 Ag '43

Welding highlights of National metal congress. J. V. Kiehl. *il* *Metal Prog* 42:886-6 N '42

Welding large turbine spindle. *il* diags *Power* 87:368-9 Je '43

Welding of aircraft propeller blades. C. A. Liedholm. *il* *Welding J* 22:165-72 Mr '43

Abstract. *Metals & Alloys* 16:1140 D '42

Welding of light metals; gas, arc and atomic-hydrogen welding of aluminum and magnesium. Herrmann and Zurbügg. diags *Iron Age* 152:53-7 Ag 26 '43

Welding processes; a summary. R. S. Burpo, Jr. diags *Metals & Alloys* 17:555, 557 Mr '43

Welding saves locomotive frames. H. A. Hocking. *il* *Am Mach* 86:1288-90 N 12 '42

Welding wrought iron. *Iron Age* 150:60-1 D 17 '42

Welding's great day. *Fortune* 27:46+ My '43

See also
Airplanes—Welding operations
Aluminum—Welding
Brazing
Bridges—Welding operations
Bronze welding
Copper—Welding
Electric welding
Electric welding, Arc
Magnesium—Welding
ing

Bibliography

Current welding literature. Published in monthly numbers of *Welding Journal*

WELDING—Bibliography—Continued

Reviews of recent foreign welding literature.
Welding J 22:sup181-4, sup224, sup371+
sup422 Ap-May, Ag-S '43

Failures

First report on stress corrosion cracking of stainless steel in chloride solutions. M. A. Scheil and others. *il* diags Welding J 22:sup493-506 O '43

Fractures in welded ships. J. Tutin. *il* diags Engineer 176:28-9 Jl 9 '43; Same. Marine Eng 48:200-1+ Ag '43; Same. Metal Prog 44:448+ S '43; Same. Welding J 22:721-3 S '43; Discussion. 22:723-4, 1004-5 S, D '43

Hygienic aspects

Health aspects of welding. A. G. Cranch and E. L. Vosburgh. bibliog Welding J 22:343-6 My '43; Abstract. Metal Prog 44:253+ Ag '43

Health hazards in welding; a review. C. Kiper. bibliog Ind Med 12:150-2 Mr '43

Inspection

Applicable methods of inspection for pressure vessels and piping. W. D. Halsey. Welding J 22:821-2 O '43

Gamma-ray radiography of welded high pressure power plant piping. R. W. Emerson. bibliog *il* diags Am Soc T M Proc 42:1111-29; Discussion. 1130-3 '42

Inspection of welded structures. R. B. Lincoln. Welding J 22:919-20 N '43

Magnetic powder method of inspecting weldments and castings for subsurface defects. C. H. Hastings. bibliog diags Welding J 22:sup43-51 Ja '43

See also

Welding—X ray inspection

Safety measures

Air exhaust of welding fumes aids war production. *il* Safety Eng 85:19 Mr '43

Industrial safety cleanings; welding glass warning. Chem Age (Lond) 48:92 Ja 16 '43

Safe welding of oil drums. E. L. Fitzgerald. Power Pl Eng 47:95 Ag '43

This saboteur can make welding repairs risky; explosive vapors linger in gasoline and oil containers; three cleaning methods. diags Power 87:399 Je '43

Welding glasses permit better view of the operation. E. D. Tillyer. *il* Sci Am 168:273-4 Je '43

Standards

American standard code for pressure piping; power, gas and air, oil, district heating, refrigeration, fabrication details, materials. diags Welding J 22:182-7 Mr '43

Swiss standard types of welds; gas and arc welding. diags Welding J 22:sup568-70 N '43

Swiss standards on weldability of steel. diags Welding J 22:sup94-6 F '43

Testing

Electro-magnetic crack detection in welded tubular structures. *il* diags Engineer 175:178-9 F 26 '43

Hammer test for welded pressure vessels; an investigation. C. O. Dohrenwend. *il* diags Welding J 22:sup507-21 O '43; Correction. 22:sup615 D '43

Report on bursting test of fusion-welded pipe. *il* diags Oil & Gas J 42:45 Jl 15 '43

Spherical containers for transporting gas under high pressure; transportation of helium under 2000 lb. pressure in multiple-sphere tank cars, reprinted from Mechanical engineering, Dec. 1929. *il* Welding J 22:sup304-7 Jl '43

Test specimens from welded pipe. J. J. Crowe. diags Metal Prog 44:432 S '43

Weldability of NE 8630 steel for aircraft structures and a suggested specification for weld metals. A. R. Lytle and K. H. Koopman. *il* Welding J 22:sup82-93 F '43

See also

Electric welding—Oxyacetylene welding
Testing—Testing

Thermit process

Thermit-welding stern frames. J. H. Deppeler. *il* diags Marine Eng 47:139-42 N '42

X ray inspection

Equivalent penetrameters in radiographic testing. R. J. Schier and G. E. Doan. *il* Am Soc T M Proc 42:1166-8; Discussion. 1169-70 '42

High-voltage X-rays in the boiler shop. O. R. Carpenter. *il* Am Soc T M Proc 42:1101-8; Discussion. 1109-10 '42

Investigation of the behavior of residual stresses under external load and their effect on safety. J. T. Norton and D. Kesselthal. bibliog *il* Welding J 22:sup63-78 F '43

Long films for radiography; inspecting welded joints. A. Gobus. *il* Metals & Alloys 17:125 Ja '43

Micro-radiography of light alloy spot welds. S. T. Gross and G. L. Clark. bibliog *il* diags Iron Age 152:44-8 Jl 22 '43

Radiographic inspection technique applied to special welding problems. D. M. McCutcheon. *il* Welding J 22:16-20 Ja '43

Radiography of aircraft spot-welds. R. Taylor. *il* diags Aero Digest 43:263, 265-6+ Jl '43

Radiography of welds and weldments. R. E. Lorentz, Jr. *il* diags Am Soc T M Proc 42:1046-62; Discussion. 1063 '42

X-ray method vs. guided bend method of testing electric arc welders. C. G. Lutts, S. D. Herbelin and L. W. Pote. *il* diags Welding J 22:31-4 Ja '43

WELDING, Electric. See Electric welding

WELDING, Oxyacetylene. See Oxyacetylene welding

WELDING, Subaqueous

See also

Electric welding—
Subaqueous welding

WELDING research

American welding society 24th annual meeting; abstracts of papers. Iron Age 152:59-65 O 28 '43

Determination of the effect of various types of weld metals on the internal damping characteristics of steel specimens. O. H. Henry, R. R. Feitl and J. A. Falcon. diags Welding J 22:sup266-9 Je '43

Establishment of cooling curves of welds by means of electrical analogy. V. Paschakis. bibliog diags Welding J 22:sup462-83 O '43

Measurement of cooling rates associated with arc welding and their application to the selection of optimum welding conditions. W. F. Hess and others. *il* diags tables Welding J 22:sup377-422 S '43

Our research laboratories; Rensselaer polytechnic institute. bibliog *il* Welding J 22:sup145-9 Ap '43

Our university welding research workers and their laboratories. bibliog *il* Welding J 22:sup97-100, sup145-9, sup185-8 Mr-May '43

Research work in welding at the University of Illinois. *il* Welding J 22:sup273-7 Jl '43

Residual stresses in welded structures; challenging problem. E. Chapman. *il* diags Iron Age 152:46-50 Jl 29 '43

Residual stresses; report of Welding research council. Welding J 22:sup220-2 My '43; Discussion. H. C. Boardman. 22:sup263-5 Je '43

Tentative system for preserving ductility in weldments. G. E. Doan, R. D. Stout, J. H. Frye, Jr. and S. S. Tör. bibliog *il* diags Welding J 22:sup278-99, sup423-37 Jl, S '43

University research committee reorganized. Welding J 22:sup178 Ap '43

Welding low-alloy high-strength steel; a review of the literature from January 1, 1938 to January 1, 1941. W. Spraragen and H. Chiswick. bibliog *il* diags Welding J 22:sup225-63, sup439-40 Je, S '43

Welding research committee reorganized. Welding J 22:sup 1 Ja '43

WELDING research council. See Engineering foundation—Welding research council

WELDING rods

Cast iron rod comes back; how to repair castings. A. Havens. *il* Am Mach 87:108-10 O 14 '43

Farm shortage aggravated by inability to get welding rods. Iron Age 151:90D Mr 18 '43

WELDING rods—Continued

- Short ends of welding rods used. R. Baugh. *Il Am Mach* 87:132 F 18 '43
 Silicon loss between the rod and the deposited metal in oxyacetylene welding of cast iron. R. M. Allen, F. F. Dennis and G. Swartz. *Welding J* 22:sup179-81 Ap '43
 Usos iron wire as proxy welding rod. *Elec W* 120:1018+ S 18 '43

WELDING shops

- Well-organized shop for welding oil-field equipment. *Il Pet Eng* 14:87 Ja '43

WELDING society, American. See American welding society**WELFARE departments, Public.** See Public welfare departments**WELFARE work**

See also

- Military service— United service organizations for national defense
 Welfare work

WELFARE work in industry

- British welfare work outside the factories. Monthly Labor R 56:677-80 Ap '43
 Counselors aid new women workers; Briggs manufacturing company. W. E. Landis. *Il Am Mach* 87:83-5 Mr 4 '43
 Employees play; Lockheed workers' club. *Business Week* p83+ Je 5 '43
 Personnel program keyed to times; Paccot mill at New Holland. *Il Textile World* 93:82-4 Ag '43

See also

- | | |
|------------------------|----------------------|
| Benefit societies | Insurance, Group |
| Credit counseling | Medical service. |
| Day nurseries, Factory | Industrial |
| Employees' buildings | Pensions, Industrial |
| Employees' counselors | Profit sharing |
| Employment management | Recreation |
| Employment systems | Saving |
| | Unemployment— |
| | Relief measures |
| | Wage deductions |

WELL drilling contracts

- Driller and the law; abstract. A. L. H. Street. *Am Water Works Assn J* 35:352-4 Mr '43

WELL water. See Wells**WELLAND ship canal**

- Engineers and the British empire; transport on the inland waterways. M. Smith. *Il diag* map Engineer 176:42-5 Jl 16 '43

WELLCOME foundation

- Director of research of the Wellcome foundation; Dr C. H. Kellaway. *Science* 98:368-9 O 22 '43

WELLES, Sumner, 1892-

- Retirement of Sumner Welles. C. Bargerson. *Comm & Fin Chr* 158:925+ S 2 '43

WELLPOINT system

- Wellpoints eliminate sheeting for sewer; with cost data. *Il plan Eng* N 130:367-9 Mr 11 '43

WELLS

- Changing from artesian to deep well service; Lebanon, O. L. F. Werts. *Il diag* Pub Works 74:34, 36+ F '43

- Construction of wells for public water supplies. H. Grove. *Il Water & Sewage* 81:25-6+ S '43

- Control of water well drilling; Illinois section committee report. *Am Water Works Assn J* 35:927-8 Jl '43

- Determination of sand in well water. G. C. Bunker. *diag Water Works & Sewerage* 90:228 Je '43

- Installation of a new gallery in Elkhart, Indiana; installing porous concrete pipe. C. L. Link. *Il diag Pub Works* 73:14-15+ D '42
 Maintenance of deep wells; discussion. *Water & Sewage* 81:29-34+ Ap '43

- Measure your wells now; falling water levels give warning of approaching failure of supply. W. M. Laird. *diag Pub Works* 73:18+ N '42

- New trends in ground water development; abstract. R. Nebosine. *Water Works & Sewerage* 90:138 Ap '43

- Salt content of wells in Massachusetts affected by the tidal wave and hurricane of 1938. V. M. Hynes. *N E Water Works Assn J* 56:355-60 S '42

- Setting and housing well pumps. J. A. Goetz. *Il diag* Water Works & Sewerage 90:140-2 Ap '43

- Six methods for increasing yield from water supply wells. J. J. Woltman. *Eng N* 130:427 Mr 25 '43

- Some aspects of driven well construction. H. R. Shipman. *Il diag* Pub Works 74:16-18 S '43

- Some structural requirements for sanitary wells; abstract. *Am Water Works Assn J* 35:959-63 Jl '43

- Treating incrustated wells. J. R. Goetz and F. L. Coventry. *Il Water Works & Sewerage* 90:sup98 Je '43

- Two deep water wells near Rapid City, South Dakota. J. P. Gries. *Am Assn Pet Geologists Bul* 27:646-50 My '43

- Water works improvements at Aurora, Ill. C. Duy. *Am Water Works Assn J* 35:789-94 Je '43

See also

- | | |
|---------------------|-------------------------|
| Artesian wells | Petroleum—Well |
| Drilling and boring | drilling |
| (earth and rocks) | Water, Underground |
| Gas, Natural | Well drilling contracts |

History

- Early history of water-well drilling in the United States. C. W. Carlston. *bibliog Il diag* Econ Geol 38:119-36 Mr '43

Laws and regulations

- State codes; well drilling. *Am Water Works Assn J* 35:957-9 Jl '43

WESSON oil and snowdrift company

- More stable earnings seem in prospect. *Baron's* 22:6 N 23 '42

WEST, Robert R.

- West to head economic research. *por Textile World* 93:96 S '43

WEST

- West looks west and finds foreign policy no abstract subject. E. Janeway. *Fortune* 28:108, 114 N '43

See also

- Pacific coast

Industries and resources

- New geography of American business. W. H. Hillyer. *map Barron's* 23:8+ Je 7 '43

- West speculates on postwar prospects. *Steel* 113:86-7 N 1 '43

WEST disinfecting company

- Bonds offered. *Comm & Fin Chr* 157:2459-60 Je 28 '43

WEST INDIES

- FDR cites plans for improving West Indies. *Comm & Fin Chr* 156:1805 N 19 '42

See also

- Cuba
 Haiti
 Puerto Rico

WEST INDIES, British

- Economic conditions. Published in Foreign commerce weekly

- Progress report. *Economist* 144:264 F 27 '43

- War poses problems for British West Indies. H. N. Stark. *Il For Comm W* 9:8-12, 34-6 D 19 '42

- West India? *Economist* 144:168-9 F 6 '43

- West Indies. *Economist* 144:357 Mr 20 '43

See also

- Jamaica

WEST INDIES, French

- Martinique and France's other West Indian islands. H. N. Stark. *Il For Comm W* 10:3-7, 34-5 Mr 27 '43

- Martinique, Guadeloupe and the five small islands in the French West Indies group. *Science* 98:sup8+ Jl 23 '43

WEST INDIES, Netherlands

- Peace and war in the Netherlands West Indies. H. N. Stark. *Il map For Comm W* 10:6-13, 39 F 27 '43

Bibliography

- Selective guide to the English literature on the Netherlands West Indies; with a supplement on British Guiana. P. H. Hiss. 129p. pa. Netherlands Information bur, 10 Rockefeller plaza, New York '43

WEST Texas utilities company
Bonds offered. Comm & Fin Chr 158:1079 S 13 '43

WEST VIRGINIA

See also

Coal—West Virginia Salt mines and mining—West Virginia
Roads—West Virginia

WEST VIRGINIA university

Mineral industries now have fine building at the University of West Virginia. Coal Age 47:89-90 N '42

WESTBROOK, Stillman Foote, 1888-1943

Sketch. East Underw 44:6 My 7 '43

WESTERN adjustment bureau

Auto and wind losses down; report at annual meeting. Nat Underw 47:5+ F 11 '43

WESTERN auto supply company

Tax relief. H. Lawrence. Barron's 23:5-6 Ap 5 '43
Western Auto's tax cushion. Barron's 23:6 F 22 '43

WESTERN electric company

War communication systems in boxes; Western electric co. expert packers. il Mod Packaging 17:76-80 O '43

Western Electric contributes to aeronautical progress. F. C. McMullen. il Aeronautical Eng R 2:27 F '43

WESTERN hemisphere

See also

Pan Americanism

WESTERN insurance bureau

Annual meeting. Chicago, June 2. Ins Field (Fire ed) 72:7+ Je 3 '43; Nat Underw 47:3+ Je 3; 8 Je 10 '43; East Underw 44:29 Je 18 '43

WESTERN Maryland railway

Western Maryland's improving credit. M. Howe. Barron's 23:10 Je 21 '43

WESTERN Pacific railroad

How the Western Pacific handles ever-increasing wartime traffic. il map Ry Age 114:610-14 Mr 27 '43

Railroad securities. Comm & Fin Chr 157:741, 1101 F 25, Mr 25 '43
Railroad showing growth trend. Barron's 23:18-19 Ja 4 '43

WESTERN petroleum refiners association

Annual meeting. Kansas City, Mo. March 25. Oil & Gas J 41:19+ Ap 1 '43; Nat Pet N 35:15-16+ Mr 31 '43

WESTERN society of engineers

Annual meeting, 74th. Chicago, June 7. W Soc E J 48:103-8 S '43

Year book, containing the constitution, by-laws, membership roster, and the administrative and operating organization. W Soc E J 48:1-72 pt 2 S '43

WESTERN underwriters association

Annual meeting. Chicago, April 20-21. East Underw 44:1+ Ap 23 '43; Ins Field (Fire ed) 72:3-5+ Ap 22 '43; Nat Underw 47:1+ Ap 22 '43

WESTERN union telegraph company

Agreement reached upon terms of purchase of Postal system. Comm & Fin Chr 157:1952 My 24 '43

Approves merger. Comm & Fin Chr 158:683-4 Ag 16 '43

Cleared of anti-trust charge. Comm & Fin Chr 158:1286 S 27 '43

Discontinues greeting services. Comm & Fin Chr 156:2312 D 28 '42

FCC approves Western Union and Postal merger. Comm & Fin Chr 158:1385 O 4 '43

Giant communications triumvirate planned; Postal-Western merger foreshadows reshuffling of phone, telegraph and world services. O. J. Gingold. Barron's 23:3 Je 7 '43

Merger in effect. Comm & Fin Chr 158:1579 O 18 '43

New service. Comm & Fin Chr 157:648 F 15 '43

Offices of two merging companies continued for the present. Comm & Fin Chr 158:1774 N 1 '43

Stockholders of company and Postal telegraph co. asked to approve merger plans. Comm & Fin Chr 158:199-200 Jl 12 '43

Telegraph merger; money order rates lowered for armed services. Comm & Fin Chr 156:1960 N 30 '42

Telegraph merger plan. O. J. Gingold. Barron's 23:1 My 17 '43

To abolish duplicate offices. Comm & Fin Chr 158:1578 O 25 '43

Western Union faces new era. O. J. Gingold. Barron's 23:3 Jl 26 '43

Wire merger due. Business Week p102-3 Ag 7 '43

WESTINGHOUSE air brake company

Annual report. Comm & Fin Chr 157:904 Mr 8 '43

Control systems to be available to general industrial field. Comm & Fin Chr 157:1279 Ap 5 '43

WESTINGHOUSE electric and manufacturing company

Annual report. Comm & Fin Chr 157:1095-6 Mr 22 '43

Fostering of an engineer. J. Slepian. Elec Eng 62:403-4 S '43

Westinghouse contributes to aeronautical progress. V. J. Kropf. il Aeronautical Eng R 1:157 N '42

Westinghouse subordinates company in advertising to help win the war; hitherto confidential material included in wartime conservation. J. M. McKibbin. il Ind Marketing 28:37+ F '43

WESTINGHOUSE science scholarships. See Science talent search

WESTMAN, Harold Prendergast, 1904-

Secretary, I.R.E. 1930-1942 joins staff of American standards association. por Inst Radio Eng Proc 31:123 Ap '43

WESTMINSTER bank

Statement of the chairman. R. E. Beckett. Economist 144:121-2 Ja 23 '43

WESTMORELAND coal company

Financial position. Comm & Fin Chr 156:2234+ D 24 '42

WESTON electrical instrument corporation

Companies with record high earnings. J. C. Harrington. Mag of Wall St 71:556 F 20 '43

Progress in electrical experimentation of aircraft. W. N. Goodwin, jr. il Aeronautical Eng R 1:158 N '42

WESTOVER, Harvey LeRoy, 1879-1943

Sketch. O. S. Aamodt. Mr 26 '43
Science 97:278-9 Mr 26 '43

WESTVACO chlorine products corporation

Another look. Mag of Wall St 71:300 D 26 '42

WETTING

Wetting and spreading; a laboratory experiment. L. J. Bircher. bibliog diag J Chem Educ 20:428-30 S '43

WETTING agents

Edible wetting agent; washing of dried fruit. Food Ind 15:129 Ag '43

Evaluation of detergents and wetting agents. Textile Col 64:519-21 N '42

Industrial applications of wetting agents. C. A. Sluhan. il J Chem Educ 20:38-40 Ja '43

Manual of dairy detergents and cleaning practices. M. E. Parker. Food Ind 15:71-2+ Ag '43

New textile agent; Scourite S. Soap & San Chem 19:66 S '43

Surface-active agents. il Textile World 92:96+ D '42

Surface-active agents. F. D. Snell. bibliog il Ind & Eng Chem 35:107-17 Ja '43

Use of wetting agents in reducing dust produced by wet drilling in basalt. J. A. Johnson. U S Bur Mines Rep of Invest 3678:1-27 '43

Wetting agents. J. M. Crowe. Chem Ind 52:54-5 Ja '43

Wetting agents speed washing; effect more thorough cleaning of fruits and vegetables. R. W. Mitchell. il Food Ind 15:81 Jl '43

See also

Aerosol-OT

WHALE liver oil

Kitol, a new vitamin A. N. D. Embree and E. M. Shantz. bibliog Am Chem Soc J 65:910-13 My '43

WHALE meat

Have a whale? steaks on way to eastern market. *Business Week* p18+ J1 10 '43
Whale catch, British Columbia, Canada. *For Comm W* 12:22 J1 31 '43

WHALE oil

Hardened whale oil values; abstract. *J. Lund. Soap & San Chem* 19:67 Ap '43
Mixed unsaturated glycerides of liquid fats; low-temperature crystallisation of whale oil. T. P. Hilditch and L. Maddison. *Soc Chem Ind J* 61:169-73 N '42; Abstract. *Paint Oil & Chem R* 105:12-14 F 11 '43

WHARVES

City, as wharfinger, must exercise diligence to provide safe berth. *East Underw* 44: 24 J1 30 '43
Long wharf constructed in five months. *Il diags Eng N* 130:896-8 Je 17 '43

See also
Loading and unload-
ing—Ships
Piers

WHARVES, Concrete

Heating arch ties for a concrete roof; electric ovens utilized in construction of wharf shed at St John harbor. F. E. Sterns. *Il diags Civil Eng* 13:253-6 Je '43

WHEAT

Agricultural department report on winter wheat and rye acreage sown for 1943 crop. *Comm & Fin Chr* 156:2343 D 31 '42
Alcohol from granular wheat flour. P. A. Singleton. flow sheet *Il Chem Ind* 52:594-6 My '43

Alcohol from grits; fermentation of ground wheat yields protein feed. *Business Week* p79 Je 19 '43

Canadian chemistry; wheat studied as source of butylene glycol. S. J. Cook. *Chem & Eng N* 21:1612 O 10 '43
Endosperm content of wheat. P. Halton and E. Barton-Wright. *bibliog Soc Chem Ind J* 62:123-4 Ag '43

Feed wheat program. *Comm & Fin Chr* 157: 293 Ja 21 '43

Five postwar trade problems. A. E. Taylor. *Harvard Business R* 21 no2:150-63 [Ja] '43
Flour mill margins again threatened. *Barron's* 23:10 F 1 '43

How distribution of vitamins in wheat affects flour. J. S. Andrews. *bibliog Food Ind* 15: 78-9 Ag '43

Location of vitamin-B₁ in wheat. A. H. Ward. *bibliog diags Chem & Ind* 62:11-14 Ja 9 '43; Abstract. *Can Chem & Process Ind* 27:158 Mr '43

New alcohol process cuts costs; Balls-Tucker process, Park & Tilford's Brownsville distillery. R. L. Taylor. *Il diags Chem Ind* 53:53-5 J1 '43

New wheat-for-feed program in effect. *Comm & Fin Chr* 157:1394 Ap 15 '43

President suspends wheat import quotas. *Comm & Fin Chr* 157:1784 My 13 '43

Protein as a by-product of alcohol distillation from wheat. *Science* 97:sup8 Je 25 '43

Protest against the CCC rate cut. *Banking* 36:48 Ag '43

Sulphite alcohol process provides high-grade protein. *Oil Paint & Drug Rep* 144:3+ J1 19 '43

Supreme court upholds excess wheat penalty. *Comm & Fin Chr* 157:2300 Je 17 '43

Supreme court upholds penalty levied against wheat marketed in excess of quota. *Comm & Fin Chr* 156:1894 N 26 '42

War menaces our surplus of wheat. *Barron's* 23:6-7 Mr 29 '43

Wheat as a raw material for alcohol production. W. H. Stark, P. Kolachov and H. F. Wilkie. *Il Ind & Eng Chem* 85:183-7 F '43

Wheat ban hit; order halting shipment of Canadian grain to Mexico. *Business Week* p40 Mr 6 '43

Wheat marketing quotas suspended as war measure. *Comm & Fin Chr* 157:932 Mr 11 '43

Wheat rolls in. *Business Week* p14-15 J1 3 '43

Wheat whirligig; trimming bread's frills and boosting flour's ceiling. *Business Week* p22+ Ja 9 '43

Wheat; world conditions. *Index* 22 no 4:81-8 [D] '42

See also
Flour

Analysis

Occurrence of lead, tin, and silver in wheat and its milling products. N. L. Kent. *bibliog Il Soc Chem Ind J* 61:183-6 D '42

See also
Flour—Analysis

Drying

Drying of wheat; the further drying of Manitoba wheat. J. D. Mounfield. *Soc Chem Ind J* 62:93-7 J1 '43

Prices

Wheat and cotton price factors. *Barron's* 23:8 F 8 '43

Statistics

New wheat condition figures, based on weather factors, for the prairie provinces. F. H. Sanderson. *Am Stat Assn J* 37:473-83; Reply. C. F. Wilson. 483-8 D '42

Wheat, 1938-1941. Survey of *Cur Business* 1942 Sup p120-1 [supplemented in monthly numbers]

World wheat supplies. *Economist* 144:566+ My 1 '43

Transportation

Central western shippers consider wheat problems. *Ry Age* 115:7-8 J1 3 '43

Argentina

Wheat production in Argentina. *For Comm W* 10:21 Ja 16 '43

Brazil

Milling regulations established and prices fixed for 3 years. *For Comm W* 10:10-11 Ja 2 '43

Egypt

Egypt's production and consumption of wheat, 1942. *For Comm W* 10:22-3 F 20 '43

Italy

Italy reported to have good wheat crop. *For Comm W* 13:27 O 2 '43

Kenya colony

Wheat-growing in British East Africa. *For Comm W* 10:21 F 13 '43

Manitoba

Drying of wheat; the further drying of Manitoba wheat. J. D. Mounfield. *Soc Chem Ind J* 62:93-7 J1 '43

New Zealand

Production and consumption of wheat in New Zealand. *For Comm W* 9:28 N 28 '42

Peru

Increased wheat production encouraged by Peruvian government. *For Comm W* 13:20 N 6 '43

Rhodesia

Wheat production in British South Africa. *For Comm W* 10:20-1 Ja 2 '43

WHEAT as fuel

Grain wheat fuel combined with charcoal in gas producer. *Automobile Eng* 33:83 F '43

WHEAT flour. See Flour**WHEAT straw. See Straw****WHEATON college**

Additions to Wheaton college, Norton, Mass.; views, plans, and construction outline. *Arch Forum* 78:81-8 Ja '43

WHEATSTONE bridge

Electronics applied to heat transfer tests; circuits employ Wheatstone bridge and photoelectric relay; units applicable to other measurement and control problems. R. V. Brown. *Il diags Electronics* 16:113-15 J1 '43

Insulation for Wheatstone bridges. *Il Mod Plastics* 20:79+ Ap '43

WHEELER, Harold Alden, 1903-Sketch. *por Inst Radio Eng Proc* 31:528 O '43

WHEELING, West Virginia**Water supply**

Maintenance of chlorine residual in the distribution system. A. R. Todd. *Am Water Works Assn J* 34:1805-6 D '42

WHEELING steel corporation

Another look. *Mag of Wall St* 72:480+ Ag 7 '43

WHEELS

Selecting wheels and casters. J. W. Greve. *il diags Machine Design* 15:120-3 J1; 141-4 Ag '43

See also

Car wheels	Pulleys
Gearing	Sheaves
Grinding wheels	Trucks—Wheels
Locomotives—Wheels	Turbines

WHEELS, Steel

Wheel forging replaced by brazed steel disks; transformer truck wheels. C. H. Hannon. *il Iron Age* 151:45 Ja 21 '43

WHEELWRIGHT, Kentucky

Transformation of a coal mining town; Inland steel company's program. L. M. Williams. *il Min Cong J* 29:37-40 Ag '43

WHEY

Influence of moisture on browning of dried whey and skim milk. H. Doob, Jr., A. Willmann and P. F. Sharp. *biolog il Ind & Eng Chem* 34:1460-8 D '42

WHISKY

Activated carbon treatment of raw whisky. G. C. Williams and E. A. Fallin. *biolog il Ind & Eng Chem* 35:251-4 F '43

Changes in whisky while maturing. A. J. Liebmann and M. Rosenblatt. *biolog il Ind & Eng Chem* 35:994-1002 S '43

May adjust whiskey dispute; companies willing to pay losses on market value basis. *Weekly Underw* 148:677+ Mr 27 '43

Psychometric testing; Calvert packaging research laboratory. H. F. Willkie. *il Mod Packaging* 16:85-7, 116 Ja '43

Seagram expands. *Business Week* p20+ O 30 '43

Whither whisky? merger scramble. *Business Week* p32+ Ap 24 '43

See also

Distilleries
Distilling industries

WHISTLES

Air siren built by Idaho power company. *il Elec W* 120:1040+ S 18 '43

WHITAKER, Lorenzo Robert, 1899-

Sketch. *por bibliog Am Cer Soc Bul* 22:319 S 15 '43

WHITE, Alfred Holmes, 1873-

Many chemical engineers in attendance at A. H. White's birthday party. *por Chem & Met Eng* 50:163 My '43

WHITE, Harry Dexter

Brastruster for the postwar world. *por Business Week* p19 Ap 17 '43

WHITE, Henry Seely, 1861-1943

Sketch. M. E. Wells. *Science* 98:76-7 J1 23 '43

WHITE, Roy Barton, 1883-

Portrait. *Ry Age* 115:134 J1 24 '43

WHITE**See also**

Titanium oxides

WHITE lead

White lead processes; pictured flow sheet. *Chem & Met Eng* 50:130-3 Mr '43

WHITE metal (legend)

Mythical white metal and other super-hard irons. C. W. Davis. *Metal Prog* 43:74-5 Ja '43

WHITE metals

Identifying mixed white metals. *il Metals & Alloys* 16:906 N '42

Simple tests identify white metals. *J Chem Educ* 20:442-3 S '43

White metals, 1942. E. F. Cone. *il Metals & Alloys* 17:56-7 Ja '43

WHITE motor company

Re-appraisal of companies in the news. *Mag of Wall St* 72:35 Ap 17 '43

White Motor sells for future with plant all out for war. E. Whitmore. *il Am Business* 13:7-9, 22, 24 F '43

WHITE water. See Paper mills—Waste**WHITEWARE. See Porcelain; Pottery****WHITMAN, Ezra Bailey, 1880-**

Sketch. *por Civil Eng* 13:109-10 F '43

WHITNEY, Albert Wurts, 1870-1943

Albert W. Whitney retires after long service. *por Ins Field (Fire ed)* 72:16-17 Mr 4 '43

Albert Whitney's memory saluted by executives. *Ins Field (Fire ed)* 72:11 O 7 '43

Retires. *por Ind Stand* 14:20 Ja '43

Sketch. *por East Underw* 44:25+ J1 30 '43; *Ins Field (Fire ed)* 72:10 Ag 5 '43; *Nat Underw* 47:14 J1 29 '43; *Weekly Underw* 149:213 J1 31 '43; *Nat Safety N* 48:22+ S '43

Sketch. P. G. Agnew. *Ind Stand* 14:230 Ag '43

Tribute. J. Lichtenstein. *East Underw* 44:13 Ag 20 '43

WHITNEY, Willis Rodney, 1868-

Fritz medal awarded to Willis Whitney. *Power* 86:923c+ D '42

Willis Whitney, John Fritz medalist; address by D. C. Prince, with response by W. R. Whitney. *por Elec Eng* 62:151-4 Ap '43

WHOLESALE druggists association, National. See National wholesale druggists association**WHOLESALE prices. See Prices, Wholesale****WHOLESALE trade****Statistics**

Benchmarks of wholesale health, 1941; financial ratios for 24 lines. R. A. Foulke. *il Dun's R* 50:9-11 N '42

New York city leads in wholesale trade of Nation in 80 of 95 lines analyzed. *Comm & Fin Chr* 158:611 Ag 12 '43

Sales of wholesalers, 1929-43. L. J. Paradiso and L. Bridge. *Survey of Cur Business* 23:15-22 Ag '43

Wholesale trade; sales and inventories, Aug. 1943, and tables giving comparisons with other periods. *Survey of Cur Business* 23:5-6 O '43

WHOOPIING cough

Occurrence of whooping cough, chickenpox, mumps, measles and German measles in 200,000 surveyed families in 28 large cities, with list of references. S. D. Collins, R. E. Wheeler and E. D. Shannon. *40p U.S. National inst. of health, Washington; pa 10c Suppl of doc.* '43

Reported whooping cough morbidity and mortality in the United States. C. C. Dauer. *map Pub Health Rep* 58:661-76 Ap 23 '43

WICKARD, Claude Raymond, 1893-

Food czar at last. *por Business Week* p16-18 D 12 '42

Portrait. *Banking* 35:20 F '43

WICKWIRE Spencer propellers. See Airplane propellers**WIGGINS, Archibald Lee Manning, 1891-**

A. L. M. Wiggins; ideas, future plans, and guiding philosophy of incoming A.B.A. president. H. V. Odle. *por Burroughs Clearing House* 27:13-15+ S '43

Portrait. *Trusts & Estates* 77:353 O '43

Sketch and interview. *por Banking* 36:33+, 46-8+ O '43

Small-town crusader makes good. J. P. McEvoy. *por Barron's* 23:4 N 1 '43

WILD-cat drilling. See Petroleum—Prospecting**WILD horses. See Horses****WILDERNESS areas**

Twenty-five-year effort at saving nature for scientific purposes. V. E. Shelford. *Science* 98:280-1 S 24 '43

WILDLIFE**See also**

Birds—Protection
Wilderness areas

WILDLIFE society

Wildlife society. W. P. Taylor. *Science* 98:185-8 Ag 27 '43

WILGUS, William John, 1865-

Sketch. *por(p46) Civil Eng* 13:47 Ja '43

- WILKINSON, Ford Lee, Jr.** 1895-
Sketch. por(p609) Mech Eng 65:610 Ag '43
- WILLGERODT's reaction**
New modification of Willgerodt's reaction.
E. Schwenk and E. Bloch. bibliog Am
Chem Soc J 64:3051-2 D '42
- WILLIAMS, Arthur J.** 1898-
Sketch. por(p174) Marine Eng 48:180 Ag '43
- WILLIAMS, Edward Locke**, 1891-
Sketch. por East Underw 44:19 S 24 '43; Nat
Underw 47:1+ S 23 '43
- WILLIAMS, Robert R.** 1886-
Sketch. por Chem & Eng N 21:1718 O 25 '43
- WILLIAMS Deacon's bank, limited**
Statement by the chairman. J. P. Dewhurst.
Economist 144:157 Ja 30 '43
- WILLIS, Horace Harold**, 1891-
Sketch. por Textile Col 65:162 Ap '43
- WILLKIE, Wendell Lewis**, 1892-
Says end of present administration's power
necessary to maintain free society. Comm
& Fin Chr 158:1616-17 O 21 '43
Washington: both sides of the curtain;
Willkie's headlong charge toward the Re-
publican nomination. E. Blair. Barron's
23-4 O 25 '43
- WILLOW RUN (proposed Bomber City)**
Planning principles applied in wartime;
town for Willow Run workers. T. B.
Augur. plans Arch Rec 93:72-7 Ja '43
Town of Willow Run; civic center and pro-
posed neighborhood units. il plans Arch
Forum 78:37-54 Mr '43
- WILLOW RUN bomber plant.** See Airplane
factories
- WILLS**
Cash bequests under wills. H. S. Koster.
Trusts & Estates 77:138 Ag '43
Man who's his own lawyer. W. S. Weiss.
Consumers' Research Bul 11:19-20 Ap; 12:
24-5 S '43
Revocation by subsequent will. Trusts &
Estates 76:95 Ja '43
Soldiers' and sailors' wills. E. P. Griffin.
Trusts & Estates 77:263 S '43
We safekeep wills and thus develop trust
business. E. M. Gaillard. Bankers Mo 60:
172-3 Ap '43
See also
Executors and ad- Power of appoint-
ministrators ment
Perpetuities (law) Probate law
- WILLSTATTER, Richard**, 1872-1942
Sketch. R. Adams. por(front) Am Chem Soc
J 65:127-8 F '43
- WILLYS-OVERLAND motors, inc.**
Annual report: Comm & Fin Chr 157:264 Ja
18 '43
- WILMINGTON, Delaware**
Rapid transit
Three-way triumph; Wilmington, switched
from trolley cars to trolley coaches. G. J.
MacMurray. il Bus Transportation 22:60-2
S '43
- WILSON, Charles E.**
War production board: is it? por Fortune 27:
90-7 Mr '43
- WILSON, Gilbert C.**
Yam dehydrated; sweet potato as stock feed
crop. por Business Week p65-6 Ja 30 '43
- WILSON, Robert Erastus**, 1893-
Perkin medal. por Ind & Eng Chem 35:177
F '43
Receives Perkin medal. por Oil Paint &
Drug Rep 143:7+ Ja 11 '43
- WILSON, William**, 1887-
Recipient, Institute of radio engineers medal
of honor, 1943. por Inst Radio Eng Proc
31:46 F '43
- WILSON and company, inc.**
Bonds offered. Comm & Fin Chr 157:1368 Ap
12 '43
Registers \$20,000,000 bonds. Comm & Fin Chr
157:1279 Ap 5 '43
Thumbnail stock appraisal. Mag of Wall St
72:683 O 2 '43
- WILSON brothers**
New control. Comm & Fin Chr 158:1079 S 13
'43
- WINANT, John Gilbert**, 1889-
Sketch. pors Spectator (Life ed) 150:66, cover
F '43
- WINCHES**
Limitax automatic hoisting winch. il Mech
Handling 30:172 Ap '43
See also
Windlass
- WIND.** See Winds
- WIND instruments**
See also
Clarinet
Trumpet
- WIND insurance.** See Insurance, Tornado
- WIND power**
Large wind-driven synchronous generators.
T. F. Wall. Engineering 155:421-3, 461-3,
501-3 My 28, Je 11, 25 '43
Modern uses for wind power. diag Electrician
130:437-8 My 14 '43
Problem of the wind dynamo. W. E. War-
rillow. il Electrician 130:643-4 Je 25 '43
Wind-power plant continues operation; plant
at Grandpa's Knob, Vermont. J. W. Wilbur.
diag Power El Eng 45:78-9 O '42; Same
cond. il Locomotive 44:148-52 Ja '43
Wind power; scope for small generating
plants. Elec R (Lond) 133:246 Ag 20 '43
Windmill generators. T. Cooney. Electrician
131:33-4 J 19 '43
See also
Windmills
- WIND pressure**
Resistance of brick walls to wind; firewall
that failed because of 32-mph. wind; re-
strictions on firewalls in city building codes.
H. A. Sweet. diag Eng N 131:630-1 O 21
'43; Discussion. 131:734-5 N 18 '43
Stress analysis of tall towers; four methods
for calculating stresses and required shell
thicknesses for vessels used in refineries;
towers designed for hammer winds or seismic
forces. E. F. Brummerstedt. bibliog il diags
Nat Pet N 35 pt 2:R539-40, R542-3 N '43
- WIND tunnels**
Airplane testing tunnel at Wright's field;
manufactured gales and controlled temper-
atures. J. G. Bergdoll, Jr. Science 97:sup10
Ap 16 '43
Cold tunnel has high power for aerodynamical
testing. A. Klemm. Sci Am 168:276 Je
'43
Contraction cone for a wind tunnel. B.
Szczeniowski. J Aeronautical Sci 10:311-12
O '43
Curtiss-Wright's new research laboratory. W.
E. Voisin. il plans Automotive & Aviation
Ind 88:39-4 Je 15 '43
Design of the contraction cone for a wind
tunnel. H. Tsien. diag J Aeronautical Sci
10:68-70 F '43
Elliptic tunnel-wall corrections on drag and
stall. J. G. Gavin, Jr. and R. W. Hensel.
bibliog diags J Aeronautical Sci 9:533-7 D
'42
Finest wind tunnel will provide velocities
close to speed of sound; Southern Califor-
nia co-operative wind tunnel. il Sci Am
169:75-6 Ag '43
Fundamentals of wind tunnel control. R. R.
Longwell. il diag Aviation 42:162-3+ O '43
Langley Field aerodynamic laboratory; il-
lustrations. Aero Digest 43:126-7 Ag '43
Multiple recording manometer for use in wind
tunnels. P. J. Campbell. il diags J Aero-
nautical Sci 10:313-17 O '43
Sub-zero hurricanes to test new U.S. strato
planes; new tunnel to be built at Wright
field; abstracts. J. G. Bergdoll, Jr. Refrig
Eng 45:360 My '43; Heat & Ven 40:88 My
'43
Tunnel to speed engine research; Cleveland
laboratory of the National advisory com-
mittee for aeronautics. Aviation N 1:15+
Ag 23 '43
Wind-tunnel cooling. A. N. Tifford. bibliog J
Aeronautical Sci 10:98-100 Mr '43
Wind tunnel test specifications for quality
control of bomb fuzes. A. L. Atherton.
il Product Eng 14:95-8 F '43
Wind tunnel tests and actual performance
data. H. G. Smith. Aero Digest 41:170+ N
'42; 42:144+ F '43
- WIND turbines.** See Wind power

WINDING*See also*

Cotton winding

WINDING machinesFriction driving mechanism for rewinding roll. P. E. Verrea. *diag Mach* 49:200 Ag '43Heavy-duty winding machine. *il Elec W* 119: 1322 Ap 17 '43Modern winding methods. F. Nasmith. *Textile Inst J* 34:P112-16 J1 '43Side shifts of paper corrected in roll-winding machine. *il diags Electronics* 16:144+ Ap '43To improve winding efficiency pay more attention to operatives and to upkeep of machines. W. F. Crowder. *Textile World* 93: 80-1 O '43Unreeling device regulates bar stock; cutting and straightening of small commutator bars. L. G. Bergstrom. *il Elec W* 120:506-7 Ag 7 '43Winding machine has transmission drive. *il Elec W* 120:102 J1 10 '43**Tension control**Constant speed and tension unwind and windup system, by Industrial oven eng. co. *diag Textile World* 93:121-2 S '43**WINDLASS**Windlass facilitates breaker tank removal. *il diag Elec W* 119:1661 My 15 '43Windlasses. R. C. Lamond. *diag Marine Eng* 48:218+ J1 '43**WINDMILLS**How to estimate the power of a windmill. W. F. Schaphorst. *chart Am Gas J* 159: 40 O '43Suffolk windmills. R. Wailes. *il Engineering* 155:34-5, 78-80 Ja 8, 22 '43Wind-power plant continues operation; plant at Grandpa's Knob, Vermont. J. W. Wilbur. *diag Power Pl Eng* 46:78-9 O '42; Same cond. *il Locomotive* 44:148-52 Ja '43**WINDOW displays.** *See* Show windows**WINDOW sashes**How to replace industrial sash with glass block panels. *il Am Bld* 65:54 My '43Wartime designs for expansion joints and sash; with time-saver standards. J. Schurman. *diags Arch Rec* 92:64-6 D '42**WINDOWLESS construction**Air conditioned aircraft plant has walls that breathe so as to avoid condensation troubles. *il Heating-Piping* 15:290-1 Je '43Air conditioning for a blackout plant; General electric co. *il Power Pl Eng* 47:114, 116 O '43Air conditioning makes 24 hour a day war production possible. C. G. Lauckner, 3d. *il Heating-Piping* 15:510-12 O '43Breathing walls of brick and tile, a new masonry conception; Douglas aircraft plant at Oklahoma City. *il diag Brick & Clay Rec* 102:14-16 Ap '43Curtiss-Wright electric propellers are made and assembled in windowless controlled atmosphere plant. R. A. Rotz. *il Heat & Ven* 40:75-8 S '43Decentralized air conditioning serves big aircraft factory; Douglas aircraft plant at Long Beach. H. M. Hendrickson. *il diag Heating-Piping* 15:340-4 J1 '43Douglas Aircraft windowless plant in Oklahoma. *il diag Steel* 112:86-8 Ap 5 '43Engineering twenty-four hour daylight to master manpower problems. C. F. Prideaux. *il diags Illum Eng* 38:227-50 My '43Heating and air conditioning a windowless factory. R. U. Berry. *il Gen Elec R* 46: 545-8 O '43Rigid-frame concrete industrial plant; magnesium-alloying plant; fireproofing secured by eliminating windows. A. F. Plant and S. J. Deltrick. *il diags Eng N* 131:334-8 Ag 26 '437000 tons of refrigeration help to make it hot for Herr Hitler; air conditioning windowless bomber plant. J. C. Tweedell. *il Heating-Piping* 15:289 Je '43Ventilated design for windowless walls; Douglas Aircraft plant. *il diag Eng N* 130: 500-1 Ap 8 '43Ventilated wall saves steel in walls of Douglas Aircraft plant. *il Heat & Ven* 40: 42 My '43Windowless breathing walls enclose Douglas aircraft's new Oklahoma City plant. *il Arch Forum* 79:8+ Ag '43Windowless ordnance plant. *il Arch Rec* 93: 68-9 Ap '43Windowless plant features special air filters; Cleveland graphite bronze company. *il Comp Air M* 48:6988 Mr '43Wright aeronautical corporation; Cyclone engine plant in New Jersey equipped with blackout ventilation. R. N. Hosey. *il Heat & Ven* 40:36-40 Ja '43**WINDOWS**Blackout lighting using the principle of mutual exclusion by color; tests using variety of window coatings, filters, and light sources. R. A. Wank and E. H. Wakefield. *diag Illum Eng* 38:41-4 Ja '43Conservation of critical materials by use of glass block units. T. W. Reynolds. *il Heat & Ven* 40:45-6 Ag '43How to blackout and insulate windows. *diags Am Bld* 65:49 Ap '43It's here, solar heating for post-war homes. *il diag plan Am Bld* 65:34-6+ S '43Solar heating; survey proves large windows, properly oriented, save fuel even in rigorous climates. *il diag plan Arch Forum* 79:6-8+ Ag '43Sun heat tested; Libbey-Owens-Ford studying use of extraneous windows on southern exposure. *il Business Week* p64, 68 Ag 28 '43Window and door details; design data. *Arch Forum* 79:66 J1 '43*See also*Glass
Show windows

Windowless construction

Frost and condensation

Winter humidity in homes and the problem of condensation on windows and walls. Consumers' Research Bul 11:14-16 Mr '43

WINDSContinental drift and ancient dunes. J. R. Peters. *Science* 93:60 J1 16 '43

Holds 28 mile wind not windstorm. East Underw 44:27 Mr 26 '43

*See also*Hurricanes
Insurance, Tornado
Tornadoes
Wind pressure**WINDSHIELDS.** *See* Airplanes—Windshields**WINDSOR, Ontario****Water supply**Operating results at the Windsor filtration plant. G. H. Strickland. *il Water & Sewage* 81:39+ Ap '43**WINDSTORM insurance.** *See* Insurance, Tornado**WINE**Big wine deal; distillers have bought big part of American wine industry. *il Fortune* 28:124-9+ S '43Cut in wine hurts. *Business Week* p 110+ Ag 28 '43Madera's wine exports. *For Comm W* 11:22 Ap 3 '43Monochloroacetic acid use in wine requested. *Oil Paint & Drug Rep* 144:3+ Ag 2 '43Port difficulties for Portugal. *Economist* 143: 606 N 14 '42South America's wine industry. A. J. Mullen. *il For Comm W* 11:5-7+ Je 12 '43Spanish wine industry. *For Comm W* 12:26 S 18 '43Tartarates from domestic wineries. J. M. Crowe. *il Chem Ind* 53:336-7 S '43Upheaval in wines. *Business Week* p66+ D 12 '42Wine makers offer correspondence course in wine lore and salesmanship. *il Sales Management* 52:60, 62 Mr 15 '43Wine shortage in Morocco. *For Comm W* 11: 24 Ap 24 '43Wine's boost. *Business Week* p49 Ja 16 '43**Analysis**Monochloroacetic acid in wine. G. E. Malory and R. F. Love. *Ind & Eng Chem Anal ed* 15:207-9 Mr 15 '43

WINGS, Airplane. See Airplane wings
WINNIPEG, Manitoba

Rapid transit

How mass transportation is conducted. *Il*
 Mass Transportation 39:109-16 Mr '43

Sewerage

Sewage-sludge digestion; methane fermentation. D. L. McLean. *Il* plan Water & Sewage 81:13-14, 36-8 Ag '43

Water supply

Pumping station operation and maintenance; with special reference to McPhillips Street station. C. Keeping. *Il* Water & Sewage 81:18-19+ O '43

WINTER construction

Alcan highway; maintenance and winter problems. H. J. McKeever. *Il* diags Roads & Sts 86:46-50 Ja '43

Asphalt paving job successfully completed in midwinter; Burlington, Vermont. G. C. Stanley. *Il* Roads & Sts 86:51 S '43

Building the Peace River suspension bridge in sub-zero weather. R. Archibald. *Il* Pub Works 74:24+ Ag '43

Cold-weather paving of asphaltic roads. W. R. Macatee. *Il* Roads & Bridges 81:23+ F '43

Hospital construction in winter weather. *Il* Eng N 131:693-5 N 4 '43

700 acres of pavement; design and construction features of huge western air base. H. J. McKeever. *Il* diags Roads & Sts 86:41-8 S '43

Winter hazards on construction jobs. Nat Safety N 46:94-5 D '42

Winter protection for construction; army hospital. *Il* Eng N 130:738-41 My 20 '43

See also

Concrete construction in winter

WINTERS, Texas

Winters, the WPE, and the freeze. W. H. Gray. Pub Util 31:288-92 Mr 4 '43

WIRE

Nickel plating fine wire; Hanover wire cloth co. J. H. Conolly. *Il* diags Iron Age 151:50-1 Ap 1 '43

Ring method for measuring elastic moduli. A. King. R Sci Instr 14:33-4 F '43

Steel stitched cartons for wire. *Il* Mod Packaging 16:72 Ag '43

Stitching wire. Blast F & Steel Pl 31:357 Mr '43

See also

Electric wire

Wire rope

Manufacture

See also

Wire drawing
 Wire forming machines

Prices

Plain wire, Pittsburgh; prices, 1929-1942; tabulation. Steel 112:372 Ja 4 '43

Standards

Metal gauge comparator; chart insert. R. R. Bostic. Iron Age 151:53-4 Ap 15 '43

Preferred sizes; wire and sheet metal; advantages. H. W. Robb. bibliog Steel 111: 76-8, 95-101 N 30 '42

WIRE, Copper

Ampere load limits for copper in overhead lines. A. H. Kidder and C. B. Woodward. Elec Eng 62:Trans 148-52 Mr '43

Thermal rating of overhead line wire. M. Zucker. bibliog *Il* Elec Eng 62:Trans 501-7 Jl '43

Manufacture

Wire-rod rolling. *Il* Elec R (Lond) 133:531-5 O 22 '43

WIRE, Steel

Galvanised iron and steel wire; restrictions on use of zinc. Mech Handling 29:219 N '42

Mallin's spring steel music wire; tabulation. Instruments 16:491 Ag '43

Residual stresses in wire loops at anchorage shoes or grommets. G. Brewer. *Il* diags Metal Prog 44:441-7 S '43

Which spring material? A. M. Wahl. *Il* Machine Design 14:87-9 N '42

Wire-wound prestressed concrete pressure pipe. R. B. Crepps. *Il* diags Am Concrete Inst. J 14:545-55 Je '43

See also

Wire rope

Manufacture

Submerged combustion takes its place in the war industries. W. G. See. Metal Finishing 40:63-6 D '42

See also

Wire forming machines

Testing

Physical properties of steel wire as affected by variations in the drawing operations. H. J. Godfrey. bibliog *Il* Am Soc T M Proc 42:513-26; Discussion. 527-31 '42

WIRE association

Annual meeting, Chicago. Steel 113:41 O 25 '43

WIRE bound boxes. See Boxes, Wire bound

WIRE cloth

To find the open area wire cloth. W. F. Schaphorst. Pulp. & Pa of Can 44:448 My '43

Advertising

Wire maker suggests a hennery in every home. Ptr Ink 203:35 Ap 23 '43

WIRE drawing

Diamond dies for wire drawing; abstract. B. P. Dudding, C. G. Eden and R. E. Leeds. Metals & Alloys 17:358+ F '43

Diamond dust is recovered for hardest war industry jobs; used to polish tungsten carbide wire drawing dies; abstract. C. B. Shopmeyer. Franklin Inst J 235:433 Ap '43

Physical properties of steel wire as affected by variations in the drawing operations. H. J. Godfrey. bibliog *Il* Am Soc T M Proc 42:513-26; Discussion. 527-31 '42

WIRE forming machines

Hard wire braiding; development of new machine carrier. *Il* Electrician 129:501-2 N 6 '42

WIRE handling

Using both ram and fork with one lift truck; Wire and cable division, General electric company. H. C. Ramsey. *Il* Factory Management 101:90-1 My '43

WIRE rope

Choosing the right sling; Kearney & Trecker corp. C. R. Hochmuth. *Il* Steel 113:117+ Jl 12 '43

Defective drum causes wire-rope damage. *Il* Oil & Gas J 42:88 Ag 26 '43

Economizing on wire rope; digest of expert opinions on increasing life. N. C. Rockwood. *Il* Rock Prod 46:85-6 Ja '43

Elevator wire rope maintenance. U S Nat Bur Stand Circ C441:1-7; pa 5c Supt. of doc. '42

Fleet angle affects wire-rope service. *Il* Oil & Gas J 42:76 O 7 '43

Handle wire rope carefully and avoid kinks. *Il* Roads & Sts 85:57 N '42

Making wire rope last longer. A. S. Park. *Il* Comp Air M 48:6932-6 Ja '43

New export association formed. For Comm W 10:31 Ja 16 '43

Prolonging the life of wire ropes. E. Ingham. Mech Handling 30:11-13 Ja '43

Proper handling of wire rope for maximum service. *Il* Pet Eng 14:108 Ag '43

Some hints on maintenance and conservation frequently overlooked; general precautions and maintenance of wire rope. *Il* Min Cong J 29:28-30 Ap '43

Splicing wire rope. *Il* Roads & Sts 86:73-5 Ja '43

Suggests ways of prolonging life of wire rope. F. L. Spangler. Foundry 71:211-12 Je '43

Wire line troubles; list. Nat Safety N 48:31 Ag '43

Wire rope sales to be over 200,000 tons. Iron Age 152:103 O 7 '43

Advertising

Nelson calls it advertising; Macwhyte company helps wire rope users make their supply last. F. J. Nelson. Ind Marketing 28:38-9+ F '43

WIRE rope—Advertising—Continued

These industrial ads tell 'em what they want to know; Macwhytte co, Kenosha, Wis. manufacturers of wire ropes, slings, aircraft cables, etc. *il* *Ptr Ink* 205:20-1 O '29 '43

Failure

Rapid retardation causes wire rope failure. J. B. Mullins. *Power* 87:692-3 O '43

Lubrication

It pays to oil your elevator ropes. F. L. Spangler. *il* *Power Pl Eng* 47:63+ F '43
Lubrication of wire rope. *il* *Roads & Sts* 85:52-3 N '42

Rope life boosted by care in inspection and lubrication. F. Young. *il* *Coal Age* 47:64-5 N '42

Safety measures

Brazed ends make wire rope safer to handle. F. L. Spangler. *il* *Coal Age* 48:35-6 Mr '43; *Same, Roads & Sts* 86:81+ Mr '43; *Same, Paper Ind* 25:43 Ap '43; *Same, Steel* 112:104 Ap 26 '43; *Same, Safety Eng* 85:29 My '43
Elevator wire-rope maintenance. *Mech Eng* 65:110-12 F '43

How to determine safe loads for wire rope slings. *Elec W* 120:1022 S 18 '43

Mechanical equipment; handling materials. *Nat Safety N* 47:71-2+ Mr '43

Safety habit. H. D. Wright. *il* *diags Safety Eng* 84:6-8 D '42

WIRE rope fastenings

Casting lugs on ends of wire rope. C. R. Hochmuth. *il* *diag Power Pl Eng* 47:92 F '43; *Same, Pet Eng* 14:111 F '43; *Same, Roads & Sts* 86:84 F '43; *Same, Marine Eng* 48:202 Mr '43; *Same, Min Con J* 29:33 Mr '43; *Same, Civil Eng* 13:284 Je '43; *Same, Safety Eng* 86:27 S '43

Correct method of applying clips to wire rope. F. L. Spangler. *il* *diags Pet Eng* 14:58 Mr '43; *Same, Coal Age* 48:100 Ap '43; *Same, Steel* 112:100 Je 21 '43; *Same, Paper Ind* 25:610-11 S '43; *Same abr, Iron Age* 151:72 F 11 '43; *Same cond. Factory Management* 101:148 My '43

Rope socket design effects economy. S. P. King. *diags Pet Eng* 15:136 O '43

WIRED radio. See Radio broadcasting—Wired radio

WIRELESS. See Radio communication and other headings beginning Radio

WISCONSIN

Recreation livelihood area; northern Wisconsin and upper Michigan. G. S. Wehrwein and H. A. Johnson. *bibliog map J Land & Pub Util Econ* 19:193-206 My '43

See also

Land—Wisconsin

WISCONSIN central railway

Reorganization plan filed. *Comm & Fin Chr* 158:1286 S 27 '43

WISCONSIN university

Budget of the University of Wisconsin. *Science* 98:168-9 Ag 20 '43

Gifts and grants to the University of Wisconsin. *Science* 98:103 J1 30 '43

Gifts received by the University of Wisconsin. *Science* 97:155 F 12 '43

WITCOGUM. See Rubber, Artificial

WITHHOLDING tax. See Income tax—Collection

WITTE, Edwin Emil, 1887-

Portrait. *Business Week* p80 Ja 30 '43

WOAD

Woad; the ancient universal dye. B. Brown. *Textile Col* 65:427-8+ O '43

WOBURN iodine value. See Iodine number**WOMAN**

Women possess large share of the wealth. *Nat Underw (Life ed)* 47:11 My 7 '43

See also

Advertising—Women, Appeal to
Insurance, Life—
Women as prospects

Insurance, Life—
Women's attitude
Working women
World war, 1939—
Women's work
Young women

Employment

Absenteeism among women war workers at two Royal ordnance factories. *Economist* 145:347 S 4 '43

Admission of women to union membership; boilermakers' union; British engineering union. *Monthly Labor R* 55:1006-7 N '42

Advertising helps sell women on their ability to fill men's jobs. *il* *Ptr Ink* 202:46-7 Ja 15 '43

All-woman factory now in production; Northern aircraft products. *Automotive & Aviation Ind* 89:56 J1 15 '43

America's womanpower. A. Gray. *il* *Adv & Sell* 36:68+ My '43

Aprons and overalls in war. T. Wolfson. *Ann Am Acad* 229:46-55 S '43

Assigning card-room jobs to women; time studies and analysis. E. H. Helliwell. *il* *Textile World* 93:62-3 Mr '43

Attracting women to war jobs. *Adv & Sell* 36:132 F '43

Bank women discuss their job. M. B. Leach. *Banking* 35:41-2 F '43

Bank women's opportunity. M. B. Leach. *Banking* 35:58, 60 Mr '43

Can we pay women same wage rates as men? E. J. Bengel. *Am Business* 12:12-13+ D '42

Chemical womanpower. H. Garry. *il* *Chem Ind* 52:445-9 Ap '43

Choosing women for war-industry jobs. M. P. Crowder. *bibliog U S Women's Bur Special Bul* 12:1-10; pa 5c Supt. of doc. '43

Controls stiffened; employers in Louisville asked to replace male workers in easy jobs with women. *Business Week* p86 S 25 '43

Counselors aid new women workers; Briggs manufacturing company. W. E. Landis. *il* *Am Mach* 87:83-5 Mr 4 '43

Coy and hard to please, more women needed in industry; recommends advertising. *Ptr Ink* 202:41 Ja 8 '43

Decisions of National war labor board, Aug. and Sept. 1942; equal pay for woman workers. *Monthly Labor R* 56:63-4 Ja '43

Dexterity tests for women workers. *il* *Am Mach* 86:1280-1 N 12 '42

Do women create more problems in industry than men? C. Nash. *Ind Med* 12:450-1 J1 '43

Do's and don'ts for women. *il* *Factory Management* 101:117 S '43

Educating the women; International harvester co., Stewart-Warner corp., Crane co. M. R. Putman. *il* *Steel* 113:98-9 J1 5 '43

Efficiency of women employees; eleven helpful tips. L. H. Sanders. *il* *Mass Transportation* 39:244-5 J1 '43

Employment in war work of women with young children. *Monthly Labor R* 55:1184-5 D '42

Employment of women in California, March 1943. *Monthly Labor R* 57:105-6 J1 '43

Employment of women in New York state factories, 1942. *Monthly Labor R* 56:282-3 F '43

Employment of women in petroleum refineries. J. M. Silberman and C. G. Bernhard. *Monthly Labor R* 57:197-203 Ag '43

Employment of women in shipyards. 1942. E. V. Kennedy. *Monthly Labor R* 56:277-82 F '43

Employment of women in the textile industry to replace men who have entered the armed services; Rhode Island section forum. *Am Dyestuff Rep* 32:78-84 F 15 '43

Enrollment campaigns for woman workers, 1942. *Monthly Labor R* 56:488-90 Mr '43

Equal pay for the woman worker. *Management R* 32:131-3 Ap '43

Equal pay for women in war industries. *U S Women's Bur Bul* 196:1-26; pa 10c Supt. of doc. '42

Equal pay principle in New York war industries. *Monthly Labor R* 57:102-4 J1 '43

Examining women in industry. D. F. Frame. *Ind Med* 12:266-9 My '43

Female labor in the paper converting industry. W. E. Strong. *Paper Ind* 24:859-60 N '42

Fortune management poll; employment of Negroes, women, and students. *Fortune* 27:143-4 F '43

Four-point training for women; Lodge & Shipley machine tool company. R. S. Schultz and T. Applegate. *il* *diags Am Mach* 87:82-4 Ap 29 '43

WOMAN—Employment—Continued

- Fulham's women workers. W. C. Parker. *il Elec R (Lond)* 131:773-6 D 18 '42
- Girl meter readers as a help in the war effort. C. E. Johansen. *Am Gas Assn Proc* 1942:123-4; Same. *Am Gas Assn Mo* 25:31-2 Ja '43
- Girl truckers are quick to learn, and take excellent care of equipment. G. E. Stringfellow. *il Steel* 112:122+ Je 7 '43
- Girls and middle-aged women comprise 47 per cent of Boeing Aircraft's personnel. *il Steel* 112:84, 86, 88 Ap 12 '43
- Girls in war plants; moral and social let-down. M. Mulford. *Personnel J* 21:356-8 Ap '43; Reply (Morals and production). J. M. Dannenfelser, Jr. 22:58-61 Je '43
- Good personnel relations help increase production. A. R. Cook. *Factory Management* 101:122-6 O '43
- Guides for wartime use of women on farms. U S Women's Bur Special Bul 8:1-11; pa 10c Supt. of doc. '42
- Help wanted; female. *Textile World* 93:55 Ja '43
- Heroines of industry; women man machines at Cornwall. D. Ross-Ross. *il Pulp & Pa of Can* 44:798-800 O '43
- How Continental oil co. trains women laboratory workers. *il Oil & Gas J* 42:36-7 Je 17 '43
- How New Britain war plants recruited women workers. W. J. Cashman. *il Factory Management* 101:66-8+ Ap '43
- How Newark super-sells to win 50,000 women to war work. *il Sales Management* 52:96+ O 15 '43
- How to learn to be a top notch industrial trucker; Elwell-Parker electric company's booklet for instructing women operators. *il Steel* 113:108, 110, 114+ Jl 15 '43
- How to train women for gas company jobs. L. S. Flint. *Am Gas J* 158:22-4 F '43
- Increase in woman factory workers in New York state in 1942. *Monthly Labor R* 56:921-3 My '43
- Inducting women into industry. L. Moushey. *il Pet Refiner* 22:109-10 Ap '43
- Influence of women on aircraft production methods. W. G. Tuttle. *il Aero Digest* 42:142-3, 195, 199 Mr '43
- It's women's work now in many departments of Pacific gas and electric company. *il Elec West* 90:47-9 My '43
- Job adjustments for women workers; abstract. *Management R* 32:418-19 N '43
- Jobs, environment tailored to physical, mental qualifications; Republic drill & tool co. *Steel* 112:65-6 F 22 '43
- Koppers trains girls for Butadiene division. *il Blast F & Steel Pl* 31:324 Mr '43
- Labor shortage eased by women taking many heavy jobs in mills. *il Steel* 112:51-2 My 10 '43
- Leave for mothers. *Business Week* p100 O 30 '43
- Listen ladies! M. G. Rehfsuss. *Am Inst Banking Bul* 24:13-14 O '42
- Los Angeles goes courting; getting girls who do a good job. *il Mass Transportation* 39:183-5 My '43
- Make way for the WIPs! Women's industrial production services. *il Safety Eng* 85:13 My '43
- Making women like their jobs. W. C. Van Cleaf. *il Factory Management* 101:104-5 Ja '43
- Margin now is womanpower. *il Fortune* 27:98-103+ F '43
- Mechanical department employs many women workers; women workers on Southern Pacific; women workers in southern district. M. J. Warren; R. L. Tibbet. *il (p327, 333, 340) Ry Mech Eng* 117:306-7+ Jl '43
- Meeting the labor squeeze; go get your women, by War manpower commission. *Personnel J* 22:179-85 N '43
- Men's and women's wages in the United States. Z. C. Dickinson. *bibliog Int Labour R* 47:693-720 Je '43
- Meterettes on the job in Kansas City. *il Gas Age* 91:24 F 11 '43
- Mrs Casey Jones; ODT survey shows greater need of women on railroads. *Business Week* p83-4 N 28 '42
- Molding machine designed for women operators. *il Iron Age* 151:66 F 11 '43
- Morals: production problem. *Management R* 32:286-8 Ag '43
- More jobs for women. *il Am Business* 13:22-3 Je '43
- More wings for Airacobras; constant motion production lines aid unskilled women workers; Bell aircraft corp. C. F. Lozon. *il diags Aviation* 42:126-40 F 13 '43
- More women workers taken into the clay industry. Brick & Clay Rec 103:19 Jl '43
- Mothers in industry; care for pregnant women. *Safety Eng* 85:37-8 Ja '43; Excerpts. *Nat Safety N* 47:98 Ja '43
- Navy yard has 1400 women, jobs once held by men. *il Steel* 112:24-5 Ja 18 '43
- New Britain found 2,341 new war workers within its boundaries! *il Ptr Ink* 202:26+ Mr 26 '43
- New Orleans' women keep 'em rolling. T. C. Wicker. *il Mass Transportation* 39:276-8 Ag '43
- No seniority for women employees; idea of union. *Ry Age* 114:636 Mr 27 '43
- Nowadays there are few railroad departments uninjured by women. *il Ry Age* 114:828-9 Ap 24 '43
- Older woman worker coming into her own. *Comm & Fin Chr* 157:74 Ja 7 '43
- Packaging institute discussion. *il Mod Packaging* 16:69-72 D '42
- Part-time employment of women in wartime. U S Women's Bur Special Bul 13:1-17 '43; pa 10c Supt. of doc
- Personnel helps for foremen; women. L. Marion. *Factory Management* 101:107 Je '43
- Placement and health maintenance for women in industry. M. R. Burnell. *Ind Med* 11:521-3 N '42
- Placing of women in foundries. *Foundry* 71:155 Mr '43
- Policy of War manpower commission on woman workers. *Monthly Labor R* 56:669-71 Ap '43
- Problems with female help. D. A. Laird. *Factory Management* 101:83+ Ja '43
- Production changes necessary for women workers. W. G. Tuttle. *il Automotive & Aviation Ind* 88:24-6+ Ap 15 '43
- Puppets recruit war workers. A. R. Fiske. *il Ptr Ink* 205:25+ O 22 '43
- Putting women to work in war industries; abstract. M. Anderson. *Ind Med* 12:28-9 Ja '43
- Railroads had 63,187 women employees in January; statistical statements. *Ry Age* 114:735 Ap 10 '43
- Ratio rises rapidly in war plants. P. V. McNutt. *Steel* 112:65 My 31 '43
- Remanning with women. Harrisburg Railways garage. E. F. Theisinger. *il Bus Transportation* 22:26-9 My '43
- Replacement of men by women in New York service industries. *Monthly Labor R* 56:486-7 Mr '43
- Rest periods for women war workers; abstract. M. Anderson. *Safety Eng* 86:54 Ag '43
- Slacks in the office? yes or no. *il Am Business* 13:22 27 Ap '43
- Standards for women's employment in wartime. *Monthly Labor R* 56:1120-1 Je '43
- State laws and women workers. M. Anderson. *il Bus Transportation* 22:35-7 My '43
- Tailoring the war job for women workers. *Management R* 32:103-5 Mr '43
- Teaming handling devices with women; Wright aeronautical corporation. H. E. Linsley. *il Am Mach* 87:109-11 O 28 '43
- Ten years' progress in management; increase in adaptability of workers to job requirements. E. W. Lancaster. *bibliog A S M ET Trans* 65:243-62 Ap '43
- Texas printer reports success with women workers. Rein company, of Houston. C. N. Tunnell. *il Inland Ptr* 111:23-5 Ap '43
- They did it before, they can do it again; women as bus line employees. *il Bus Transportation* 22:28-31 Ja '43
- They fill plant and warehouse jobs of men gone to war. *il Nat Pet N* 35 pt 2:R101 Mr 3 '43
- Touchy problem; government urging planned leave for pregnant worker. *Business Week* p80+ S 25 '43
- Tough tasks being performed satisfactorily by women; Standard products division. Worthington pump & machinery corp. W. W. Kempfert. *il Steel* 113:66-7 S 27 '43

WOMAN—Employment—Continued

- Training girls to make tubes; General electric co. L. A. Yoder. *il Electronics* 16:106-7+ Ag '43
- Training, key to the skilled help shortage; Apprentice and training service, War manpower commission. C. W. Stapleton. *il Bus Transportation* 22:38-40 Mr '43
- Training of women for the chemical industries. J. Coull. *Chem & Eng N* 21:1707-8 O 25 '43
- Training women for industry; abstract. S. Southall. *Foundry* 71:165-6+ Je '43
- Training women operators; abstract. H. Frommelt. *Iron Age* 151:58 Ap 15 '43
- Training women operators for chemical industry; University of Pittsburgh trains women for butadiene-styrene plant of Koppers united co. J. P. Coull. *il diags Chem & Met Eng* 50:116-18 Je '43
- Training women to run industrial trucks. *il Ry Age* 114:580-1 Mr 20 '43
- Transettes introduced to San Antonio public. *il Mass Transportation* 39:182 Mr '43
- Transettes; San Antonio company's introduction of women to aid bus patrons. *il Bus Transportation* 22:54 Je '43
- Twelve golden industrial rules. D. V. Baker. *Ind Med* 12:185 Mr '43
- War industries tuit of women as men become scarce; North American aviation, inc. *il Mach* 49:178-81 D '42
- War work of the U.S. Women's bureau. *Monthly Labor R* 55:1170-84 D '42
- Wartime employment of women and children in the U.S.S.R. *Int Labour R* 48:361-4 S '43
- Wartime employment of women in manufacturing. *Monthly Labor R* 57:723-8 O '43
- We like women counselors for women workers; Briggs manufacturing company. W. E. Landis. *il Factory Management* 101:102-3 O '43
- Welding tank hulls; women as welders. G. R. Reiss. *il Steel* 112:106+ Ap 26 '43
- What the well dressed Los Angeles woman driver will wear. *il Bus Transportation* 22:5-3 My '43
- What women can do for banking. G. S. Stoermer. *il Am Inst Banking Bul* 25:18-19+ Ja '43
- When lovely woman stoops to dolly; industrial advertisers play up the adaptability of their machines to women workers. *il Ptr Ink* 202:20-1 Ja 8 '43
- Where women war workers are coming from; photographs. *Factory Management* 101:90-1 Je '43
- Why we like women in our shop; Allison division, General motors corporation, Indianapolis. W. G. Guthrie. *il Factory Management* 101:90-4+ F '43
- Why women quit. *Business Week* p94 O 16 '43
- Will women supply the needed manpower? A. Gray. *Ptr Ink* 204:26+ Ag 20 '43
- Womanpower in airline maintenance shops. C. N. James. *il Aviation* 41:126-7+ D '42
- Womanpower in refineries surveyed. *il Nat Pet N* 35:22+ Ag 4 '43
- Woman power in the plastics industry. *il Mod Plastics* 20:61-5+ Ja '43
- Womanpower problem in the arsenal of democracy. H. Baker. *Special Lib* 34:75-8 Mr '43
- Woman war worker today, executive tomorrow! C. Snow. *Ptr Ink* 202:33+ Ap 2 '43
- Woman workers in two wars. M. Robinson. *Monthly Labor R* 57:650-71 O '43
- Woman's place in war work. *il Am Mach* 87:94-6 S 2 '43
- Women about banks. M. B. Leach. *il Banking* 35:31-2 Ja '43
- Women and warplanes will help win this war; training program. Curtiss-Wright corp. H. C. Herrick. *il Steel* 112:101-2+ Ap 26 '43
- Women are efficient on milk route trucks; abstract. R. Gayley. *S A E J* 51:sup18-19 Je '43
- Women as sheet metal workers. E. Stein. *Sheet Metal Worker* 34:21 Mr '43
- Women as supervisors. *Management R* 32:78-80 F '43
- Women at work in the foundry; Bendix aviation corp. J. H. Caldwell. *il Foundry* 71:128-9+ Ap '43
- Women building ships' turbines. *il Marine Eng* 47:132 N '42
- Women drop out; riveters leaving aircraft plants. *Business Week* p88+ Ag 21 '43
- Women efficient at many jobs formerly reserved to men. *il Pet Refiner* 22:118+ S '43
- Women electricians. *Elec R (Lond)* 132:280 F 26 '43; *Electrician* 130:212 F 26 '43
- Women engineers. *Economist* 144:682 My 29 '43
- Women engineers; examples of skilled work in war industries. *il Elec R (Lond)* 133:317-18 S 3 '43
- Women established as truck drivers; abstract. M. A. Savin. *S A E J* 51:sup18 Je '43
- Women fill breach as iron ore analysts on Mesabi range. *il Steel* 113:90 J1 5 '43
- Women fill plant jobs. *il Nat Pet N* 35 pt 2: R395-6, R398+ S 1 '43
- Women getting more work on railroads. *Ry Age* 115:28 J1 3 '43
- Women in finishing plants. *Am Dyestuff Rep* 32:438-9 O 11 '43
- Women in industry. C. H. Vivian. *il Comp Air M* 48:6950-5 F '43
- Women in industry. J. E. Walters. *Ann Am Acad* 229:56-62 S '43
- Women in industry; a study of 135 women working as riveters in the aircraft industries. W. C. Bradbury and C. B. S. Evans. *bibliog Ind Med* 12:690, 692 O '43
- Women in industry; abstracts. E. M. Davies. *Paper Tr J* 116:46+ Je 24 '43; *Paper Ind* 25:420-2 J1 '43
- Women in industry; their problems of health. M. H. Kronenberg. *Ind Med* 11:589-92 D '42
- Women in machine shops; discussion at meeting of American society of tool engineers. *Iron Age* 151:65-6 Ap 1 '43
- Women in power stations. *il Electrician* 130:509-10 My 21 '43
- WIPES for du Pont; established at Virginia plant; promotion in rank based on individual effort. *Business Week* p114-15 My 22 '43
- Women in railroad work increase in number. *Ry Age* 115:531-2 O 2 '43
- Women in shipbuilding. *Economist* 144:767-8 Je 12 '43
- Women in steel mills. *Iron Age* 151:75 My 6 '43
- Women in the air conditioning industry; Carrier corp. M. Ingels. *il Heating-Piping* 15:447-9 S '43
- Women in the paper industry. *Paper Ind* 25:117-18 My '43
- Women in the transit industry; abstract. I. L. Lorenz. *Mass Transportation* 39:175+ My '43
- Women learn fast; apprenticeship training, General electric company. C. N. Brown. *il Am Mach* 86:1492-4 D 24 '42
- Women make good as service station attendants for Shell. *il Sales Management* 52:32-3 F 15 '43
- Women mean business; women welders; Truscon steel co. G. R. Reiss. *il Steel* 112:86-74 F 1 '43
- Women not so different, says personnel worker. L. O. Norton. *Nat Safety N* 46:72 D '42
- Women, now! *il Business Week* p72+ Ja 9 '43
- Women on production at Monarch. W. E. Whipp. *il Iron Age* 150:59-63 N 5 '42; *Same. Steel* 112:58-9+ Ja 11 '43; *Same cond. Am Mach* 86:1213-15 O 29 '42; *Same cond. Mach* 49:222-5 N '42
- Women operators in Washington, D.C. A. Shapiro. *Mass Transportation* 39:330-1 S '43
- Women operators prove their worth in aircraft steel tube mill; Summerhill tubing co. *il Aero Digest* 42:184 Ja '43
- Women replacements in stores accounting, purchasing and stores operation; discussion. *Am Gas Assn Proc* 1942:86-8
- Women run appliance repair shop. R. M. Oliver. *il Ptr Ink* 205:22-3 O 1 '43
- Women run this shop, and do it well; Republic drill & tool co. H. E. Fleming. *il Steel* 111:68-9+ D 21 '42
- Women serve on the home fronts; workers in our pulp and paper mills. R. A. Wheatley; J. D. B. Howard. *il Pulp & Pa of Can* 44:719-29 S '43

WOMAN—Employment—Continued

- Women serving navy yard as bus and truck drivers. *il* Mass Transportation 39:251 JI '43
- Women shipbuilders. *il* Elec R (Lond) 132: 843 Je 25 '43
- Women take over men's plant jobs. *il* Nat Pet N 35 pt 2:R4-6 Ja 6 '43
- Women take parts of men's jobs; regrouping of jobs makes it possible to retain experienced men; Gulf states utilities company. R. S. Nelson. *il* Elec W 120:822-3 S 4 '43
- Women war workers; replies to questionnaire sent to New England industries. L. E. MacBrayne. *il* Safety Eng 84:28-30 N '42
- Women who work for victory. W. G. Tuttle. Mech Eng 65:657-60 S '43
- Women workers are one answer to the labor problem; Alliance clay products co. *il* Brick & Clay Rec 101:22+ N '42
- Women workers in pulp and paper mills; experience of Pacific mills limited. R. H. R. Young. *il* Pulp & Pa of Can 44:639-48 Ag '43
- Women workers in some expanding wartime industries, New Jersey, 1942. D. K. Newman and C. Manning. U S Women's Bur Bul 197:1-14; pa 10c Supt. of doc. '43
- Women workers in the shipyards. B. Oppenheim. *il* Marine Eng 48:221-2, 224 Ap '43
- Women workers meet heavy duty requirements of Buffalo steel mills. Iron Age 151: 152-3 My 20 '43
- Women's shoe standards. *il* Safety Eng 86: 31-3 JI '43; Same cond. Nat Safety N 48: 19+ Ag '43
- Women's wages; important technicalities at stake in NWLB's case that involves Alcoa. C.I.O., and a new group of workers. Business Week p64-6 Ja 2 '43
- Women's wages in laundries in New York state, 1942. Monthly Labor R 56:1121 Je '43
- Women's work in wartime. F. Perkins. Monthly Labor R 56:661-5 Ap '43
- Work togs for the gals: how designers are combining style with safety. E. M. Kelley. *il* Sales Management 52:20-2 My 1 '43
- Your questions as to women in war industries. U S Women's Bur Bul 194:1-10 '42
- See also*
- | | |
|------------------------|--------------------|
| Canneries—Employees | Woman—Occupations |
| Day nurseries, Factory | Women as engineers |
| Embroidery workers | Working women |
| Home labor | World war, 1939— |
| Saleswomen | Women's work |

Bibliography

- Bibliography of women in industry. Nat Safety N 46:101 D '42

Safety aspects

- Clothing the woman war worker. *il* Ind Stand 14:69-71 Mr '43; Same cond. Safety Eng 85:11-12, 14 Ap '43; Same cond. Nat Safety N 47:16-17+ My '43
- Danger, women working! safety and hygiene. J. V. Grimaldi. *il* Safety Eng 84:9, 12-13 D '42
- Dressed to kill accidents; safety work clothes for women. H. Shell. *il* Safety Eng 86:37, 40-1+ O '43
- Girls in uniform; Sperry gyroscope co. P. A. Wright. *il* Nat Safety N 48:74+ O '43
- It's a woman's war, too; feminine influence in safety equipment market. E. W. Andrews. *il* Nat Safety N 47:3-9+ Mr '43
- Promote safety by showing women in ads safely dressed. G. Currier. *il* Ind Marketing 23:23-5+ Ap '43
- Safeguard women war workers in two steel works. *il* Safety Eng 86:10-12 Ag '43
- Safety for women in airline maintenance and overhaul; abstract. R. P. Russell. Safety Eng 85:26+ Ap '43
- Safety plus style for the shipyards; clothing for women workers. *il* Nat Safety N 47:68 Ja '43
- Safety vs. oomph; training women to take over jobs in the petroleum industry; abstract. A. J. Gorand. Nat Pet N 35:6 Mr 31 '43
- Special consideration; protecting health of women workers. H. Truax. Safety Eng 86: 51-2 S '43

- Woman's place; safety and hygiene for working women. M. Anderson. Safety Eng 85: 20-3 Mr '43
- Women go to bat; safety program of W. B. Conkey company. L. Stemp. *il* Safety Eng 86:15-16 O '43

Australia

- Conditions of employment and welfare of women in Australian war industry. Int Labour R 48:100-5 JI '43
- Opinion on women's wages in Australian metal trades. Monthly Labor R 56:53-5 Ja '43
- Regulations for employment of women in Australia, 1942. N. T. Johnson. Monthly Labor R 56:671-3 Ap '43

Canada

- Woman war workers in Canada. Monthly Labor R 57:503-5 S '43
- Women in shops; employment experience of the Montreal locomotive works, limited. L. L. Park. Mech Eng 64:858-9 D '42

Great Britain

- Britain conscripts women for industry and war service. K. O. Norton. *il* For Comm W 9:8-11, 38 N '42
- Britain shows the way to full use of women. Factory Management 101:268+ S '43
- British women at work; abstract. Management R 32:64 F '43
- British women fill many railroad jobs. D. Sells. Ry Age 114:255 Ja 23 '43
- First national conference of women shop stewards of the Amalgamated engineering union in Great Britain. Int Labour R 48: 399-400 S '43
- Health and welfare of women in war factories; abstract. J Ind Hygiene 25:sup53-4 Mr '43
- How Britain develops forewomen; abstract. J Canliffe. Management R 32:176-7 Mr '43
- Women man Britain's war plants. D. V. Baker. *il* Steel 111:138+ D '42

Health and hygiene

- Women in industry; a study of 135 women working as riveters in the aircraft industries. W. C. Bradbury and C. B. S. Evans. bibliog Ind Med 12:690, 692 O '43
- Women in industry from the standpoint of the gynecologist. W. T. Pommerenke. Ind Med 12:512-13; Discussion. 513-14 Ag '43
- Women's wartime occupational hazards. Ind Med 12:486-7 JI '43

See also

Menstruation

Law**See also**

Husband and wife

Occupations

- Can we use women operators? street car operators, conductors, bus drivers, etc. *il* Mass Transportation 38:331-6 N '42
- Fortune survey. Fortune 28:10, 12 Ag '43
- Gasoline gals peacetime casualties? *il* Nat Pet N 35:40-1 S '43
- Is a Miss as good as a male? Connecticut railway and lighting company's experience with women mechanical workers. E. F. Theisinger. *il* Bus Transportation 22:31-6 Je '43
- Laboratories add women scientists to research staff. Am Gas Assn Mo 25:229 My '43
- Los Angeles railway meets manpower shortage. *il* Transit J 86:432-3 D '42
- Message to women: never be afraid of any advertising job. D. Dignam. Ptr Ink 203: 24, 28+ My 14 '43
- Sisters of the steam gage; women in power plants. *il* Power Pl Eng 47:72-3 S '43
- Slacks or skirts? uniforms for women bus drivers. *il* Bus Transportation 22:38-9 JI '43
- So they took women and like 'em! Pacific Greyhound drivers. *il* Bus Transportation 22:23-5 Ap '43
- Truckwomen O.K.'d; New York automotive session is told they do work well. Nat Pet N 35:15 My 12 '43
- Woman safety engineer; Dorothy Chipchase. Safety Eng 86:18 Ag '43

WOMAN—Occupations—Continued

Women and welding plant; building electric welding machines. *il* Electrician 130:534 My 23 '43

Women can't drive; like hell they can't, says San Diego railway. *L. S. Flint. il* Bus Transportation 21:511-13 N '42

Women in public-housekeeping occupations in California. *Monthly Labor R* 56:914-21 My '43

Women offered opportunity as airway aides; CAA communications training schools. *Civil Aero J* 4:93 J 15 '43

See also

Insurance, Life—
Agents—Women
agents
Insurance agents—
Women agents
Insurance women
Office workers

Saleswomen
Woman—Employ-
ment
Women as aviators
Women as chemists
Women as engineers

Canada

Woman war workers in Canada. *Monthly Labor R* 57:503-5 S '43

Great Britain

Equal work? men and women in fire guard duty. *Economist* 143:628 N 21 '42

United States

Woman workers in two wars. *M. Robinson. Monthly Labor R* 57:650-71 O '43

WOMAN'S home companion (periodical)

Panel, a new market test tube; Woman's Home Companion reader-reporter group. *R. Robinson. Adv & Sell* 36:23-4+ Je '43

WOMEN as aviators

Tennessee school graduates ten girl instructors. *Civil Aero J* 4:29 Mr 15 '43

Women instructors graduated. *il* Aviation 42:239+ Ap '43

WOMEN as bank employees. See Bank employees**WOMEN as chemists**

Pittsburgh women chemists active in research. *A. R. Lowe. il* Chem & Eng N 21:1441-4 S 10 '43

Women chemists in the paper industry. *L. Hans. Paper Ind* 25:33-5 Ap '43

Women chemists play role in Detroit production. *H. I. Miner. il* Chem & Eng N 21:80-3 Ja 25 '43

Women in chemistry. *A. Kuebel. J Chem Educ* 20:248-9 My '43

See also

Kiely, Helen
Murray, Margaret
Kay

WOMEN as engineers

Engineering courses train women; Eastern aircraft division of General Motors sending women college graduates back for additional training. *il* Am Mach 87:99 J 8 '43

Engineers made to order; Vega's training. *E. V. Gustavson. il* Aviation 42:167, 169+ N '43

Training for women in aeronautical engineering at the University of Cincinnati. *Science* 97:548-9 Je 18 '43

Training of women in engineering. *C. W. Cole. J Eng Educ* 34:167-84 O '43

Training women for engineering tasks; University of California. *E. D. Howe. Mech Eng* 65:742-4 O '43

What can be done to train women for jobs in engineering. *R. H. Baker and M. L. Reimold. il* Mech Eng 64:853-5 D '42; Discussion. 65:210 Mr '43

Women engineers; Amalgamated engineering union and admission of women members. *Economist* 143:628-9 N 21 '42

Women in engineering. *L. M. Gilbreth. Mech Eng* 64:856-7+ D '42

WOMEN as lawyers

Effect of war on employment of woman lawyers. *Monthly Labor R* 57:502 S '43

WOMEN as printers

Women print currency. *Inland Ptr* 110:23 N '42

WOMEN as purchasers

No more weaker sex, after the war: women to demand, and get, contrivances ultra convenient and labor saving. *A. Hirose. Ptr Ink* 203:45 My 7 '43

What are women buying in boom towns? *P. Jefferson. Adv & Sell* 35:96+ D '42

Women's purchasing power and desires on increase. *H. L. Stephen. Ptr Ink* 201:68 D 18 '42

WOMEN in aeronautics*See also*

Women as aviators

WOMEN ordnance workers

WOW vows 'em; national organization of 33,000. *Business Week* p91-2 My 1 '43

WOMEN'S army auxiliary corps. *See* Women's army corps

WOMEN'S army corps

Benefits to Women's army auxiliary corps. *Ann Am Acad* 227:156-7 My '43

Fabrics for military purposes; cotton marquisette for sandfly bars; fabrics for use in outfits for WAACS. *il* Textile World 92:70 N '42

Now WAC. *Comm & Fin Chr* 158:134 J 8 '43

Pay of members of army and navy women's corps. *Monthly Labor R* 57:577-9 S '43

Structural tile barracks for the WAACS. *il* Eng N 129:838-40 D 17 '42

Training center; views, plans and construction outline. *Arch Forum* 77:80-3 N '42

Wrigley converts program to promote WAAC enlistments. *Ptr Ink* 203:69 Ap 23 '43

WOMEN'S clubs*See also*

Women ordnance workers

WOMEN'S naval reserve

Pay of members of army and navy women's corps. *Monthly Labor R* 57:577-9 S '43

Sugar Camp, as was; Sugar Camp, as is. *il* Sales Management 52:24-5 S 1 '43

WOMEN'S periodicals*See also*

Advertising mediums
—Women's period-
icals
Woman's home com-
panion (periodical)

WOMEN'S reserves

Women in the service. *E. M. Culver. Ann Am Acad* 229:63-8 S '43

Women's reserves; allowances for dependents, and death or injury benefits. *M. H. McAfee. Ann Am Acad* 227:152-5 My '43

See also

Women's army corps

WOOD, Arthur Barton, 1870-

Sketch. *por* East Underw 44:3 J 1 23 '43

WOOD, Harland Goff, 1907-

Research award of Eli Lilly and company. *Science* 97:156-7 F 12 '43

WOOD

Analysis of the factors responsible for raised grain on the wood of oak following sanding and staining. *G. G. Marra. il* diag A S M E Trans 65:177-84; Discussion. 184-5 Ap '43

Artificial rubber from wood is planned; Canadian interest aroused by Stockholm report. *Paper Tr J* 115:8 N 12 '42

Chemical utilisation of wood; source of new raw materials for many industries. *R. S. Aries and J. I. Knudson. il* Chem Age (Lond) 47:583-5 D 26 '42

English wood charcoal. *L. G. G. Warne. Soc Chem Ind J* 62:88-90, pl 1-2 Je '43

Fire-retardant treatment for wood. *Nat Safety N* 48:27+ N '43

Heat-conduction problems in presses used for gluing of wood. *G. H. Brown. diags Inst Radio Eng Proc* 31:537-48 O '43

Heating wood with radio-frequency power. *J. P. Taylor. bibliog il diags A S M E Trans* 65:201-12 Ap '43

Molded plastic-bonded veneers and wood in aircraft construction. *R. J. Nebesar. il* Mech Eng 65:197-201 Mr '43; Same *abr. Engineer* 175:412-13 My 21 '43

Nazis in the woodpile; how Germany seeks control of world's forests (condensed from Saturday evening post, Sept. 5, 1942. p19). *E. Glesinger. Pulp & Pa of Can (Convention no)* 44:189+ [F] '43

Planes of wood. *il* Business Week p19-20 J 10 '43

Plasticized wood for aircraft parts. *F. W. Fink. il* Iron Age 151:52-4 F 25 '43; Same. *Automotive & Aviation Ind* 88:21-2+ Je 1 '43

WOOD—Continued

- Problems affecting the use of wood in aircraft. R. W. Hess. *Mech Eng* 65:653-6+ S '43
- Problems in wood aircraft. I. C. Peterson. bibliog diags S A E J 51:369-80 O '43
- Radio-frequency heating applied to wood gluing. R. A. Bierwirth and C. N. Hoyler. *diags Inst Radio Eng Proc* 31:529-37 O '43
- Resin impregnation of wood. R. Casselman. bibliog *Mech Eng* 65:737-8+ O '43; Same, without bibliog. *Mod Plastics* 21:124-6+ N '43
- Thermal conductivity nomographs for wood. D. S. Davis. *Ind & Eng Chem* 35:673 Je '43
- Wood springs pinch hit for steel. *il Sales Management* 52:35-6 Je 1 '43
- Wood, the most important raw material of the future. N. C. Brown. *Mech Eng* 65:182+ Mr '43

See also

- | | |
|----------------------|-------------------|
| Balsa | Maple |
| Bridges, Wooden | Pine |
| Cellulose | Plywood |
| Concrete-wood slabs | Poplar |
| Douglas fir | Redwood |
| Dry rot | Sawdust |
| Forests and forestry | Ships, Wooden |
| Hard woods | Wood construction |
| Lignin | Wood preservation |
| Lumber | Wood pulp |
| Lumbering | |

Analysis

- Fluorescence of the extractives of wood. W. W. Marteny. bibliog diags *Paper Tr J* 116:27-32 F 11 '43; Same cond. *Paper Ind* 24:877-9 N '42
- Lignin in wood; TAPPI tentative standard T 13 m-43. *Paper Tr J* 117:27-8 S 2 '43

See also

Wood pulp—Analysis

Bibliography

- Chemical testing methods literature review. E. L. Browning. *Paper Tr J* 116:31-2 Mr 18 '43
- Fibrous raw materials testing committee report 1942; literature survey. B. E. Lauer. *Paper Tr J* 116:32-4 Mr 18 '43

Chemistry

- Nitrated wood; fractionation and molecular magnitudes. S. Coppick and E. C. Jahn. bibliog *il Ind & Eng Chem* 35:890-4 Ag '43
- Partial pyrolysis of wood. R. W. Merritt and A. A. White. *il Ind & Eng Chem* 35:297-301 Mr '43
- Properties of lignin esters. J. J. McNair and E. C. Jahn. bibliog *Paper Tr J* 117:29-33 Ag 19 '43
- Recent advances in the chemistry of wood, 1942. R. H. Yorston. bibliog *Pulp & Pa of Can* (Convention no) 44:197-8+ [F] '43
- Viscosity and molecular weight; the nitrate of wood carbohydrate. S. Coppick. bibliog *Paper Tr J* 117:25-9 Ag 12 '43

See also

Terpenes

Decay

- Does depth influence rate of decay in mine timber? merullus lacrymans as destructive agent. C. W. Fritz. *Can Min J* 63:719-20 N '42
- Study of decay of mine timber. J. N. Scudder, H. E. DeKay, Jr. and A. L. Toenges. U S Bur Mines Rep of Invest 3710:1-14 '43
- Susceptibility of wood to decay; effect of urea and other nitrogen compounds. F. H. Kaufert and E. A. Behr. bibliog *il Ind & Eng Chem* 34:1510-15 D '42

See also

Wood preservation

Fireproofing

See Fireproofing

Moisture content

- Finishes for plywood in the aircraft industry. R. B. Anderson. bibliog *Mech Eng* 65:506-7 J1 '43
- Mechanical pulping of wood; effects of moisture content of wood on grinding. W. S. Morris. diags *Pulp & Pa of Can* 44:501-8 Je '43

Prices

- New ceiling prices on pulpwood in Canada. *Pulp & Pa of Can* 44:513-14 Je '43

Shrinkage and swelling

- Some observations on density and shrinkage of ponderosa pine wood. R. A. Cockrell. bibliog *il A S M E Trans* 65:729-38; Discussion. 738-9 O '43

Testing

- Effect of wood structure upon heat conductivity. F. F. Wangaard. bibliog *il A S M E Trans* 65:127-35 F '43
- Fatigue characteristics of natural and resin-impregnated, compressed, laminated woods. F. B. Fuller and T. T. Oberg. bibliog *il diags J Aeronautical Sci* 10:81-5 Mr '43
- Some observations on density and shrinkage of ponderosa pine wood. R. A. Cockrell. bibliog *il A S M E Trans* 65:729-38; Discussion. 738-9 O '43

Transportation

- Pulpwood transportation in the South. A. Ernest. *il Paper Ind* 25:499-501 Ag '43

WOOD, Compressed

- Fatigue characteristics of natural and resin-impregnated, compressed, laminated woods. F. B. Fuller and T. T. Oberg. bibliog *il diags J Aeronautical Sci* 10:81-5 Mr '43
- Heating wood with radio-frequency power. J. P. Taylor. bibliog *il diags A S M E Trans* 65:201-12 Ap '43

WOOD, Laminated

- Arches of laminated wood. *il Arch Rec* 94:75 J1 '43
- Concrete and timber aid fast war plant construction. *il Eng N* 130:666-70 My 6 '43
- Details of Duramold fabrication. S. M. Fairchild. *il Aero Digest* 42:232, 235-6, 239 F '43
- Fabrication of laminated timber members. V. Ketchum. *il diags Civil Eng* 13:76-9 F '43
- Fatigue characteristics of natural and resin-impregnated, compressed, laminated woods. F. B. Fuller and T. T. Oberg. bibliog *il diags J Aeronautical Sci* 10:81-5 Mr '43
- Glued laminated beams carry test load of 502,410 lb. *il Eng N* 130:810 Je 3 '43
- Glued, laminated wood arches for defense projects. *il Eng N* 130:518 Ap 15 '43
- Hydulignum laminated-wood airscrews. *il Engineering* 155:27, 30 Ja 8 '43
- Insulating wood; improved qualities for electrical purposes. A. E. L. Jervis. diags *Elec E (Lond)* 131:581-3 N 6 '42; Abstract. *Elec W* 119:146 Ap 3 '43
- Laminated timber bridge deck developed in Arizona. R. A. Hoffman. diags *Civil Eng* 13:390-1 Ag '43
- Long-span arches for modification center. *il diags Eng N* 131:632-5 O 21 '43
- Manhole cover of treated wood. *il diags Roads & Sts* 85:46 D '42; Same cond. *Eng N* 129:668 N 12 '42

- Resin impregnation of wood. R. Casselman. bibliog *Mech Eng* 65:737-8+ O '43; Same, without bibliog. *Mod Plastics* 21:124-6+ N '43

- Selection of stretch-press form blocks; with particular reference to laminated wood. C. L. Fenn. *il Am Mach* 87:83-6 Ag 5 '43
- Ship's backbone now made of one piece of laminated wood. *il Sci Am* 169:174 O '43
- Special expedients speed construction of naval air training station. *il Eng N* 130:792-7 Je 3 '43

- Synthetic adhesives in use; speedy construction of laminated work. diags *Chem Age (Lond)* 43:247 F 27 '43

- Timber bowstring trusses supported on buttressed concrete columns for U.S. army hangar. *il diags Eng N* 129:771-4 D 3 '42
- United Kingdom produces new wood material; hydulignum. *For Comm W* 10:27 Ja 30 '43

See also

Plywood

WOOD, Powdered

- Identification of powdered wood charcoals. L. G. G. Warne. *il Soc Chem Ind J* 62:141-4 S '43

WOOD alcohol. *See* Methanol

WOOD as fuel

- Back to firewood. *il* Business Week p38 F 27 '43
 Effective use of wood waste cuts purchased power needs; Lane co. inc. *il* diags plan Power Pl Eng 47:58-62 F '43
 How to figure hog-fuel combustion. G. L. Graiff. Power 87:325+ My '43

See also

- Boilers—Wood firing
 Sawdust

WOOD construction

- Aircraft plant has 150-ft. timber trusses. *il* Eng N 131:624-9 O 21 '43
 Angle of load to grain for timber connectors. M. S. Ketchum. diags Civil Eng 13:227 My '43
 Blimp hangars point to new uses for wood. *il* Ry Age 114:1224 Je 19 '43
 Bowstring trusses provide sawtooth roof. *il* diag Eng N 130:884-5 Je 17 '43
 Chemically treated wood in war and industry. W. P. Arnold. *il* Chem & Eng N 21:1168-71 J 25 '43
 CCC buildings salvaged for army camps. *il* Eng N 131:162-4 J 15 '43
 Complex substation structure built of wood in place of steel. *il* Elec West 89:47 D '42
 Concrete and timber aid fast war plant construction. *il* Eng N 130:666-70 My 6 '43
 Conservation of materials in substation design; use of wood structures; Jersey central power & light company. E. M. Adkins. *il* diags Elec W 119:755-7 Mr 6 '43
 Conservation of wood. A. G. H. Dietz. *il* Boston Soc C B J 30:187-96 J 1 '43; Same. Engineer 176:312-14 O 15 '43
 Cost-cutting methods by precutting framing. T. C. Combs. *il* diags Am Bid 65:101+ O; 40-1 N '43 (to be cont)
 Creosoted wood dam for water supply; low earth dam with wood core wall, spillway of wood sheet piling, wooden flume. *il* Pub Works 74:22 Ag '43
 Effect of studs and joists on heat flow through frame construction. P. D. Close. Heating-Piping 15:529-31 O '43
 Fabrication of laminated timber members. V. Ketchum. *il* Civil Eng 13:76-9 F '43
 Fire stops for timber deck roofs. J. McCawley. *il* diags Sheet Metal Worker 34:18-20 F '43
 Frame buildings for a western cantonment designed to resist earthquake stresses. D. H. McCreery. *il* diag Civil Eng 13:269-71 Je '43
 Frame for world's largest timber factory completed; Douglas aircraft co. *il* Eng N 130:334 Mr 11 '43
 Heavy timber trusses carry timber arches. A. Zweig. *il* diags Eng N 131:190-3 J 29 '43
 Job-made tackle lifts heavy trusses. J. D. Watson. *il* Eng N 131:144-5 J 15 '43
 Long-span arches for modification center. *il* diags Eng N 131:632-5 O 21 '43
 Movable scaffold solves problem; erecting towering arches of timber blimp hangar. *il* Manuf Rec 112:44-5 N '43
 Navy develops all-timber blimp hangar. A. Amirikian. *il* diags Civil Eng 13:471-4, 525-8 O-N '43
 New plants of 1942; Ohio Crankshaft. *il* Factory Management 101:B68-B70 Ap '43
 New plants of 1942; Walter Kidde. *il* Factory Management 101:B64-B66 Ap '43
 Plywood plate girders for buildings. *il* diags Eng N 131:690-2 N 4 '43
 Prefabricated house; wood, material of realization. *il* diag Arch Forum 78:71-8 Ap '43
 Recent progress in timber research. L. J. Markwardt. *il* W Soc E J 48:108-16 S '43
 Single wall system of house assembly. S. Paul. *il* plans Eng N 130:362-4 Mr 11 '43
 Small cottage of wood construction with finished walls act as stiff slabs rather than covered frames; views, plans and construction outline. Arch Forum 77:76-7 N '42
 Spacing of split-ring timber connectors. F. J. Mehrlinger, J. H. Carr and A. G. H. Dietz. *il* diags Eng N 131:531-4 O 7 '43
 Special expedients speed construction of naval air training station. *il* Eng N 130:792-7 Je 3 '43
 Strength of nailed plywood joints subjected to lateral loading. diag Eng N 130:691-3 My 6 '43

- Switching station modified to save copper and steel; treated timbers for structures and galvanized conduit for buses. P. H. Adams. *il* diag Elec W 119:1946-9 Je 12 '43
 Timber arches for blimp dock erected from scaffold on flatcars. *il* diags Eng N 131:320-3 Ag 26 '43
 Timber bowstring trusses supported on buttressed concrete columns for U.S. army hangar. *il* diags Eng N 129:771-4 D 3 '42
 Timber connectors save 400,000 tons of steel in year. *il* Steel 112:55 My 10 '43; Comp Air M 48:7039 My '43
 Timber derricks for shipyard use. *il* diags Eng N 130:742-3 My 20 '43
 Timber tower for 50,000-gal. tank. diags Eng N 130:143 Ja 28 '43
 Training centers constructed on a beach resort site; training schools and stations for the U.S. Coast guard, the U.S. Maritime service and a medical center for the U.S. Public health service. *il* diags Eng N 131:382-7 S 9 '43
 Truss-braces on joists steady 22-foot spans. *il* diag Eng N 129:797 D 3 '42
 Truss revision adds mezzanine space to laundry. J. Feld. diags Eng N 131:151 J 15 '43
 Two-hinged timber roof trusses use synthetic gusset plates. diags Eng N 131:410-11 S 9 '43
 Two timber blimp docks erected with traveling timber scaffolds. *il* diags Eng N 131:460-5 S 23 '43
 Two traveling tower derricks erect huge timber blimp hangar. *il* diags Eng N 130:542-6 Ap 22 '43
 Unique wood hangar at Fairchild plant. *il* Aeronautical Eng R 2:170 O '43
 Wartime construction of factory buildings; building types study; with time-saver standards. *il* diags Arch Rec 92:51-56 D '42
 Winds wreck wood arches of partly erected hangar. *il* Eng N 130:272 F 25 '43
 Wood and concrete for heavy loading. *il* Arch Rec 92:56-7 D '42
 Wood in pulp and paper mill construction. F. W. Gottschalk. *il* Paper Ind 25:36-40 Ap '43
 Wood stave tank on a timber tower. *il* diags Eng N 131:157-8 J 15 '43
 Wood trusses may open the door to post-war building. *il* Am Bid 65:68 Mr '43
 World's greatest timber structure; hangar for non-rigid airships. H. Harvey. *il* Roads & Sts 86:52 J 1 '43
 World's greatest timber structure; huge airship hangar made possible by use of timber connectors. H. Harvey. *il* Roads & Bridges 81:40-1+ My '43; Abstract. Roads & Sts 86:52 J 1 '43
 World's largest timber structure; hangar for blimps. *il* Pub Works 74:45 My '43

See also

- | | |
|--------------------|-------------------|
| Bridges, Wooden | Ships, Wooden |
| Plywood | Water tanks, Wood |
| Sewage tanks, Wood | Wood, Laminated |

Cost

- Cost comparison of wood, steel and concrete warehouses. A. F. Comstock. diags Eng N 130:626-9 Ap 22 '43

Design

- Designing rigid frames of timber. J. J. Polivka. *il* diags Eng N 129:790-3 D 3 '42
 Precast columns and timber bents combined for rigid frames. *il* diags Eng N 131:535-7 O 7 '43
 Timber rigid frames and trussed columns; navy shop buildings. C. C. Jennings and M. N. Saigo. *il* Eng N 131:139-41 J 15 '43

WOOD containers

- Processed wood as war containers. Management R 32:233 Je '43
 Wood for war. M. R. Merryfield. *il* Mod Packaging 16:41-5+ My '43

- See also*
 Barrels
 Boxes

Manufacture

- Causes and prevention of injuries in the manufacture of lumber products, 1941. F. S. McElroy and G. R. McCormack. Monthly Labor R 55:960-77 N '42

WOOD cutting. See Lumbering

WOOD distillation

Destructive distillation of lignocellulose. R. Katzen, R. E. Muller and D. F. Othmer. bibliog diags Ind & Eng Chem 35:302-5 Mr '43

Tar elimination in pyroligneous acid; removal of tar-forming constituents by polymerization and condensation. D. F. Othmer and R. Katzen. bibliog flow sheets II Ind & Eng Chem 35:288-96 Mr '43

WOOD drying

Solvents used to remove moisture from timbers. Eng N 129:721 N 19 '42

WOOD dust

Wood dust as a cause of bronchitis. W. L. Bergman, G. J. Rukstnat and W. D. McNally. Ind Med 12:509-12 Ag '43

WOOD finishing

Analysis of the factors responsible for raised grain on the wood of oak following sanding and staining. G. G. Marra. II diag A S M E Trans 65:177-84; Discussion. 184-5 Ap '43
Lustrous finishes for wood. S. E. Beck. Paint Oil & Chem R 106:9-11 Jl 15 '43
Lustrous finishes for wood. D. A. Metz and S. E. Beck. Paint Oil & Chem R 105:14 Je 3 '43

See also

Lacquer and lacquer- Varnish and varnishing

WOOD floors. See Floors, Wood

WOOD grinders

Mechanical pulping of wood; effects of moisture content of wood on grinding. W. S. Morris. diags Pulp & Pa of Can 44:501-8 Je '43

See also

Pulps

WOOD handling

See also

Lumber handling

WOOD measurement

New method of wood evaluation. C. H. Keepers. II Paper Tr J 117:23-7 Ag 26 '43

WOOD oil

See also

Cedar oil Tall oil
Palm oil Tung oil
Pine oil

WOOD preservation

American wood preservers' association 39th annual meeting, Chicago, April 27. Ry Age 114:864-6 My 1 '43

Army builds creosoted timber bridges. II Pub Works 74:19+ Je '43

Balanced-tank tie dipper prevents splashing. II diag Coal Age 48:97 O '43

Chemically treated wood in war and industry. W. P. Arnold. II Chem & Eng N 21: 1168-71 Jl 25 '43; Same cond. Chem Age (Lond) 49:359-61 O 9 '43

Copper gets in its pores; electrolytic process protects wood from insects. II Elec West 91:61 O '43

Designing and constructing creosoted timber bridges and culverts. W. D. Keeney. II diags Pub Works 74:18-24+ Ja '43

Developments in the use of timber for bridges and culverts. B. M. Winegar. II Roads & Bridges 81:41+ Mr '43

Distribution fundamentals; pole inspection and treatment. II Elec West 90:59 My '43

Electrolytic treatment averts pine infestation. II diag Elec W 119:2117-19 Je 26 '43

Greensalt treatment for southern pine; abstract. C. M. Hill. Elec W 119:1136+ Ap 3 '43

Ground-line treatment prolongs pole service life. P. B. Hull. II Elec W 120:638-40 Ag 21 '43

Guard the wood; postwar possibilities in osmotic process. Business Week p67 My 29 '43

Lustrous finishes for wood. S. E. Beck. Paint Oil & Chem R 106:9-11 Jl 15 '43

Marine borers on the Gulf coast. W. E. Wheat. II Civil Eng 12:679-81 D '42

One method for specifying treated crossarms. Elec W 120:120 Jl 10 '43

Pole yard adapted to pentachlorophenol. II Elec W 118:1818 N 28 '42

Prolonging the life of wooden structures by chemicals; abstract. H. E. Fensom. Roads & Bridges 81:82 My '43

Pulled piles reveal effectiveness of asphalt-treated wrapping; protecting untreated piling from marine borers. II Eng N 130:480-1 Ap 8 '43

Real impregnation of wood. R. Casselman. bibliog Mech Eng 65:737-8+ O '43; Same, without bibliog. Mod Plastics 21:124-6+ N '43

Salvaged creosoted piles good after 25 years. Eng N 130:677 My 6 '43

Session on wood preservation. Ry Age 115: 456-7 S 18 '43

Susceptibility of wood to decay; effect of urea and other nitrogen compounds. F. H. Kaufert and E. A. Behr. bibliog II Ind & Eng Chem 34:1510-15 D '42

Timber copperplated to frustrate worms. H. W. Young. II diag Comp Air M 48:7060-2 Je '43

Timber treatment a conservation measure. Eng & Min J 144:91 Ag; 74-5 S '43

Timber treatment pays out in southern West Virginia. II Coal Age 48:58-60 Jl '43

Treated timber at Isabella mine; Weirton coal company. II Min Cong J 29:12-14 Ja '43

Treatment and stubbing extend pole life. J. G. Charest. II Elec W 120:72-4, 248-50 Jl 10-24 '43

Wood sewer sound after carrying acids 17 years; W. J. Bush citrus products co. Eng N 130:495 Ap 8 '43

Wood treatment makes it resistant to all three of its enemies. Sci Am 168:221-2 My '43

See also

Creosote Paint, Protective
Dry rot Varnish and varnishing
Fireproofing

WOOD products

And peace came, and the merchant knew not his strange new ware; pluswood and other products. L. B. Colby. Sales Management 52:39-40 Ag 1 '43

Chemical utilisation of wood; source of new raw materials for many industries. R. S. Aries and J. I. Knudson. II Chem Age (Lond) 47:583-5 D 26 '42

Lubricants from tree stumps. Engineer 176: 11 Jl 2 '43

Partial pyrolysis of wood. R. W. Merritt and A. A. White. II Ind & Eng Chem 35:297-301 Mr '43

Plastic developments from redwood. H. F. Lewis. II Mech Eng 65:515-17 Jl '43

Plastics and the paper industry; plastics derived from wood. R. V. V. Nicholls. Pulp & Pa of Can (Convention no) 44:143-4 [F] '43; Same. Can Chem & Process Ind 27:122-3 Mr '43

Sweden making products from dead trees. Paper Tr J 116:11 My 27 '43

Thermal insulation for electrostatic heating; manufacture of Pregwood propeller blocks. II Electronics 16:180+ N '43

Wood waste may have chemical future. Chem Ind 52:461-2 Ap '43

Wooden dividend; old stumps of pine trees yield chemicals. II Business Week p78+ F 27 '43

See also

Alcohol Terpenes
Cellulose Wood pulp

WOOD pulp

ANPA pulpwod committee solicits funds for drive to stimulate stockpile. Ptr Ink 204:44 Jl 2 '43

Experimental pulping with inorganic chlorides in acetic acid; abstract. F. Schütz and W. Knackstedt. Paper Ind 25:558-9 Ag '43

Future outlook in pulp-paper trade. W. L. Neubrecht and A. C. Schumacher. Paper Ind 25:294, 296+ Je '43

Government, mills and media spur 1,600 local drives for pulpwod. Sales Management 52: 26, 28+ O 15 '43

Grinding of hardwoods; studies on swamp tupelo, paper birch, green ash, sugarberry, southern cottonwood, black willow, and American elm. E. R. Schafer and J. C. Pew. bibliog Paper Tr J 116:25-32 Ja 28 '43

Hercules adapts wood pulp for powder. Paper Tr J 115:18 D 24 '42

WOOD pulp—Continued

- How pulps affect quality of paper; will quality of book papers suffer as more ground wood is used? W. B. Wheelwright. Inland Ptr 111:28-9 My '43
- Immediate production of additional pulpwood aim of Victory campaign plan. Ptr Ink 204: 38 JI 30 '43
- Influence of cooking and bleaching upon the chain length distribution of the carbohydrate fraction in pulpwood. J. E. Atchison. bibliog Paper Tr J 116:23-34 Je 3 '43; Same cond. Paper Ind 24:1282-6 Mr '43
- Measurement and influence of fiber length. J. d'A. Clark. bibliog diags Paper Tr J 115:36-42 D 24 '42
- Mechanical pulping of wood; effects of moisture content of wood on grinding. W. S. Morris. diags Pulp & Pa of Can 44:501-8 Je '43
- Microchemistry of pulp fibers; the significance of fiber ballooning in the pulping process. W. M. Harlow. bibliog il Paper Tr J 117: 27-9 JI 8 '43
- Nationwide drive is on for more pulp. R. L. Van Boskirk. Mod Packaging 17:45-7 S '43
- Nature of hydration and fiber bonding. J. d'A. Clark. il diags Paper Ind 25:382-6, 507-10 bibliog(p510) JI-Ag '43
- New uses for wood pulp are being tested. Paper Tr J 116:21 Ap 15 '43
- Nitrated wood; fractionation and molecular magnitudes. S. Coppick and E. C. Jahn. bibliog il Ind & Eng Chem 35:890-4 Ag '43
- Outlook for paper industries. G. Agassiz. Barron's 23:4 S 20 '43
- Poplar paper; Uruguay works on plan to get newsprint from its own trees. Business Week p62 Ja 9 '43
- Pulp and paper industry in war and peace. W. L. Neubrech and A. G. Schumacher. Survey of Cur Business 22:10-18 D '42
- Pulp shortage grows worse; industry acts to ease situation. il Inland Ptr 111:60 S '43
- Pulping of extracted yellow pine wood chips. O. Kress and R. H. Mosher. bibliog Paper Tr J 117:29-34 O 7 '43; Excerpts. Paper Ind 25:916-18 N '43
- Pulps from pine and spruce barks; abstract. A. V. Wacek and A. Schön. Paper Ind 25: 322 Je '43
- Pulpwood consuming committee is formed. Paper Tr J 116:9-11 My 20 '43
- Pulpwood supply for Pacific Northwest mills. R. W. Cowlin. il map Paper Ind 25:713-16 O '43
- Pulpwood volume table. C. E. Ostrom. Pulp & Pa of Can 44:458 My '43
- Raw materials; pulp, pulpwood and de-inked papers. E. W. Tinker. Paper Tr J 116:42-4 Je 24 '43; Same. Pulp & Pa of Can 44:589-90 JI '43; Abstract. Paper Ind 25:392-4 JI '43
- Recommendations for pulp distribution. G. R. Wallace. Paper Tr J 116:74 Je 24 '43
- Science enters the woods; good forestry practice can provide permanent pulp and paper supply. C. E. Randall. il Sci Am 169:64-5 Ag '43
- Some observations on pulpwood types and their preparation in relation to pulp cleanliness. L. J. Rioux and M. Barsalou. Pulp & Pa of Can (Convention no) 44:120-2-4 [F] '43
- U.S. organizes pulpwood campaign. F. Block. Pulp & Pa of Can 44:518 Je '43
- Virginia's pulpwood supply. S. G. Hobart. il Paper Ind 25:259-62 Je '43
- WPB assumes control over use of wood pulp. Comm & Fin Chr 158:106 JI 8 '43
- WPB reports on wood pulp supply. Paper Tr J 116:10-11 Je 3 '43
- WPB to strictly control pulp. Paper Tr J 117: 17 JI 1 '43
- Wood pulp allocation and 1943 wood and pulp prospects. O. M. Porter. Paper Tr J 116: 125-8 F 18 '43
- Wood pulp experiences a year of steady demand under government control. O. F. Swanson. Paper Tr J 116:58-4 F 18 '43
- Wood pulp pinch; WPB takes full control of supplies, and Canada puts quotas on newsprint deliveries. Business Week p34 JI 10 '43
- See also
Paper
Paper making

Analysis

- Lignin in wood pulp; TAPPI tentative standard T 222 m-43. Paper Tr J 117:28-9 S 2 '43
- Pentosans in pulp; TAPPI tentative standard T 223 m-43. Paper Tr J 117:29-30 S 2 '43

Bibliography

- Chemical testing methods literature review. B. L. Browning. Paper Tr J 116:31-2 Mr 18 '43

Statistics

- Wood pulp, 1938-1941. Survey of Cur Business 1942 Sup p148-9 [supplemented in monthly numbers]
- Wood-pulp production and stocks; revised series, monthly, 1940-March 1942. Survey of Cur Business 23:30 Je '43

Testing

- Comparison of southern and northern kraft pulps. O. Kress and F. T. Ratliff. bibliog Paper Tr J 117:31-5 O 21 '43; Excerpts. Paper Ind 25:918-19 N '43
- Cuprammonium viscosity as a control method review. T. W. Toovey. Paper Ind 24:1162-5 F '43
- Effect of chemical-wood ratio in pulping Douglas fir by the sulphate process. J. S. Martin and M. W. Bray. Paper Tr J 117: 29-33 S 16 '43
- Factors influencing apparent density and its effect on paper properties. J. d'A. Clark. bibliog diag Paper Tr J 116:31-8 Ja 7 '43
- Groundwood stock blending. E. Overstrom. Pulp & Pa of Can (Convention no) 44:88-90 [F] '43
- pH factor in the hypochlorite bleaching of wood pulp; single-stage treatment of sulphite pulp. F. Casciani and G. K. Storin. Paper Tr J 115:33-40 N 12; 27-31 N 19 '42
- Laboratory processing of pulp; ball-mill method; Kollergang method; TAPPI suggested method T 224 sm-43 and T 225 sm-43. bibliog diags Paper Tr J 117:23-7 S 9 '43
- Number of fibers per gram of pulp and its relation to fiber dimensions. J. H. Graff. Paper Tr J 117:25-31 O 21 '43
- Optical characteristics of paper as a function of fiber classification. S. R. Parsons. bibliog Paper Tr J 115:34-42 D 17 '42
- Properties of beechwood pulp and wood anatomy; abstract. G. A. Klenitz and W. Klau-ditz. Paper Ind 24:886 N '42
- Reddening of unbleached sulphite pulp. A. K. Ames. Pulp & Pa of Can (Convention no) 44:131-44 [F] '43
- Some interrelationships of pulp properties. J. d'A. Clark. bibliog il diags Pulp & Pa of Can (Convention no) 44:91-102 [F] '43
- Specific external surface of pulp; TAPPI suggested method T 226 sm-43. diag chart Paper Tr J 117:29-32 S 23 '43
- Study of stock preparation in paperboard mills. W. H. de Montmorency. il Pulp & Pa of Can (Convention no) 44:107-19 [F] '43
- Substitution of birch for spruce-balsam ground in the newsprint furnish. W. W. Holland. Pulp & Pa of Can (Convention no) 44:148-51 [F] '43
- Viscosity and molecular weight; the nitrate of wood carbohydrate. S. Coppick. bibliog Paper Tr J 117:25-9 Ag 12 '43
- Wood influence on pulp quality. H. J. Ostrowski. Pulp & Pa of Can 44:807-9 O '43

Transportation

- OPA equalizes freight costs on wood pulp. Paper Tr J 116:10 Ja 14 '43

WOOD research

- Institute for wood research created in Sweden. For Comm W 10:26-7 Ja 30 '43

- Recent progress in timber research. L. J. Markwardt. il W Soc E J 48:108-16 S '43

WOOD sewers. See Sewers, Wood**WOOD tanks. See Tanks, Wood; Water tanks, Wood****WOOD using industries**

- See also
Furniture
- WOOD waste
Burning sawmill waste. F. H. Boothby. Elec W 119:1476-1 My 1 '43

WOOD waste—Continued

Production of a structural board by gelatinization of wood wastes, S. Coppick and E. C. Jahn, *biblog Paper Tr J* 117:23-5 J1 15 '43

Steering with redwood wheels, *il diag Mod Plastics* 20:77-81-4 Ja '43

Wood waste may have chemical future, *Chem Ind* 52:461-2 Ap '43

See also

Sawdust
Wood as fuel

WOODEN barrels. See Barrels

WOODEN bridges. See Bridges, Wooden

WOODEN ships. See Ships, Wooden

WOODEN tires. See Tires, Wooden

WOODS, S. A., machine company

Lease or lend? Boston firm whose plant was seized by the Army for operation by another, *Business Week p* 17-18 Ja 2 '43

WOODS HOLE marine biological laboratory. See Marine biological laboratory, Woods Hole, Massachusetts

WOOD'S metal

Use of Wood's metal in vacuum systems, A. L. Hughes and C. S. Pao, *diag R Sci Instr* 14:264-5 Ag '43

WOODWARD, Sherman Melville, 1871-

Sketch, *por Civil Eng* 13:53-4 Ja '43

WOODWARD governor company

Bigger share in management for every worker, E. Whitmore, *il Am Business* 12:16-18, 20-2 N '42

WOODWORK

See also

Furniture

Plywood

Woodworking machinery

WOODWORKERS

Causes and prevention of injuries in the manufacture of lumber products, 1941, F. S. McElroy and G. R. McCormack, *Monthly Labor R* 55:960-77 N '42
Wood dust as a cause of bronchitis, W. L. Bergman, G. J. Rukatinat and W. D. McNally, *Ind Med* 12:509-12 Ag '43

WOODWORKING machinery

Safety measures

Effective wood saw guard, *Ry Mech Eng* 117:175-6 Ap '43

WOODWORKING shops

How group bonus works; wood box shop, P. Bornstein, *Factory Management* 101:31-4 Ja '43

Accidents

Causes and prevention of injuries in the manufacture of lumber products, 1941, F. S. McElroy and G. R. McCormack, *Monthly Labor R* 55:960-77 N '42

Power

Effective use of wood waste cuts purchased power needs; Lane co., inc, *il diag plan Power Pl Eng* 47:53-62 F '43

Safety measures

Entertainment plus safety talks broadcast over plant public address system; Mengel company, W. Murphy, *il Nat Safety N* 48:24-5+ N '43

WOODWORTH, Newton A. 1888-

Nobody's war baby; N. A. Woodworth co., Detroit turns out two million high-precision Wright aircraft motor parts a month, *por Fortune* 27:138-9 Je '43

WOOL

Dielectric properties of animal fibers, J. Errera and H. S. Sack, *biblog diag Ind & Eng Chem* 35:712-16 Je '43

Distribution of cut fiber lengths in wool sampled by cylindrical tube borings, I. Michelson, L. Tanner and H. J. Wollner, *diag Ind & Eng Chem Anal ed* 14:949-51 D 15 '42

Movements of wool fibres in milling, H. T. Rothwell, *biblog Textile Inst J* 33:159-80, pl 1-2 O '42

Structure of the wool fiber, as revealed by the electron microscope, C. W. Hock and H. F. McMurdie, *biblog il Am Dyestuff Rep* 32:433-6, 451-4 O 11 '43; Same, *J Research Nat Bur Stand* 31:229-36, pl 1-10 O '43

Wool and its by-products; abstract, M. R. Freney; M. Lipson, *Chem & Ind* 62:331 Ag 28 '43

Wool felt responds to proper reconditioning, *Textile Col* 65:314-15 J1 '43

See also

Blankets

Cashmere

Dyes and dyeing—

Wool

Felt

Mohair

Rayon yarn—Wool

mixtures

Shoddy

Vicuña

Wool trade

Yarn

Blending

Blending room reorganization, G. Wakefield, *diag Textile World* 93:104 S '43

Blends for 32-oz. army overcoating, W. G. Holman, *il Textile World* 93:91 Ap '43

Preparing blends for wool cards; oiling of mixes, virgin wool, and substitutes, N. J. Crofts, *il Textile World* 93:93 Mr '43

Preparing wool blends, N. J. Crofts, *Textile World* 93:134 F '43

Chemistry

Action of sulphites on wool, A. J. Hall, *Textile Col* 65:311-13 J1 '43

Analysis of the selective combination of wool with acids in mixtures, J. Steinhart, *biblog J Research Nat Bur Stand* 29:425-36 D '42

Catalyzed hydrolysis of amide and peptide bonds in proteins, J. Steinhart and C. H. Fugitt, *biblog J Research Nat Bur Stand* 29:315-27 N '42

Chemically modified wools of enhanced stability, W. B. Geiger, F. F. Kobayashi and M. Harris, *biblog il Ind & Eng Chem* 34:1398-1402 N '42; Same, *J Research Nat Bur Stand* 29:331-9 N '42; Same, *Textile Col* 64:555-70 D '42; Same, *Am Dyestuff Rep* 32:99-104 Mr 1 '43; Abstract, *Textile World* 92:76-7 N '42

Combination of wool protein with acids in mixtures, and its relation to the acid dyeing of wool, J. Steinhart, C. H. Fugitt and M. Harris, *biblog J Research Nat Bur Stand* 29:417-24 D '42; Same, *Textile Col* 65:15-17, 22, 40 Ja '43

Combination of wool protein with weak acids, J. Steinhart, C. H. Fugitt and M. Harris, *biblog J Research Nat Bur Stand* 30:123-8 F '43

Nature of the reaction of wool with alkali, L. R. Mizell and M. Harris, *biblog J Research Nat Bur Stand* 30:47-63 Ja '43; Same, *Am Dyestuff Rep* 32:145-8 Mr 29 '43

Damage

Identification of fiber damage; chemical and microscopic tests, W. Krauss, *il Textile World* 92:90-1 D '42

Measurement of damage in wool materials; examination of existing methods, C. S. Whewell and F. Austerlitz, *biblog Soc Dyers & Col J* 59:45-61; Discussion, 51-2 Mr '43

Felting

Effect of alkaline treatments on the felting properties of wool, J. W. Creely and G. C. Le Compte, *Am Dyestuff Rep* 31:667-70, 682 D 21 '42

Modern methods of reducing the normal felting properties of wool and wool goods, H. Phillips, *biblog il diag Soc Dyers & Col J* 58:245-52; Discussion, 252-3 D '42

Reducing felting of wool, H. Phillips, *Textile Col* 65:316+ J1 '43

Researches on wool felting, J. Schofield, *il diag Textile Inst J* 29:T239-52; 32:T181-94 O '38, N '42; Discussion, 29:T280-4, T305-8; 39:T42-6 N '38-Ja '39

Grading

Lighting for wool sorting, G. G. Cousins and C. H. Brooks, *il plan Illum Eng* 58:433-7 S '43

Measurement

Porous plug and fibre diameter measurement; a practical method of wool fibre diameter measurement, A. B. D. Cassie, *biblog diag Textile Inst J* 33:T195-204 D '42

Sulfur content

Action of sulphites on wool, A. J. Hall, *Textile Col* 65:311-13 J1 '43

WOOL—Sulfur content—*Continued*

Chemically modified wools of enhanced stability. W. B. Geiger, F. F. Kobayashi and M. Harris. bibliog *il Ind & Eng Chem* 34: 1398-1402 N '42; Same. *J Research Nat Bur Stand* 29:381-9 N '42; Same. *Textile Col* 64:565-70 D '42; Same. *Am Dyestuff Rep* 32:99-104 Mr '43; *Abstract. Textile World* 92:76-7 N '42

Testing

Measurement of damage in wool materials; examination of existing methods. C. S. Whewell and F. Austerlitz. bibliog *Soc Dyers & Col J* 59:45-51; *Discussion.* 51-2 Mr '43

Sweaters of the future; will they be all wool, Aralac, or nylon? Consumers' Research Bul 11:24-5 O '42

Wear testing of carpets. H. F. Schiefer. *pls J Research Nat Bur Stand* 29:333-79 N '42

*See also***Wool**—Damage**WOOL, Artificial**

German industry makes more extensive research into development of wood chemistry. *Chem & Met Eng* 50:196+ F '43

Microscopical identification of Lanital, Aralac and soybean fibers. G. L. Royer. *il Am Dyestuff Rep* 32:165-6 Mr 29 '43

*See also***Aralac****WOOL, Effect of acids on**

Combination of wool protein with acids in mixtures, and its relation to the acid dyeing of wool. J. Steinhart, C. H. Fugitt and M. Harris. bibliog *J Research Nat Bur Stand* 29:417-24 D '42

Combination of wool protein with weak acids. J. Steinhart, C. H. Fugitt and M. Harris. bibliog *J Research Nat Bur Stand* 30:123-8 F '43

Influence of acid dyes on the setting properties of wool fibres. G. H. Elliott and J. B. Speakman. *Soc Dyers & Col J* 59:124-6 Ja '43

WOOL, Effect of alkalis on

Chemically modified wools of enhanced stability. W. B. Geiger, F. F. Kobayashi and M. Harris. bibliog *il Ind & Eng Chem* 34: 1398-1402 N '42; Same. *J Research Nat Bur Stand* 29:381-9 N '42; Same. *Textile Col* 64: 565-70 D '42; Same. *Am Dyestuff Rep* 32:99-104 Mr '43; *Abstract. Textile World* 92:76-7 N '42

Effect of alkaline treatments on the felting properties of wool. J. W. Creely and G. C. Le Compte. *Am Dyestuff Rep* 31:667-70, 682 D 21 '42

Nature of the reaction of wool with alkali. L. R. Mizell and M. Harris. bibliog *J Research Nat Bur Stand* 30:47-53 Ja '43; Same. *Am Dyestuff Rep* 32:145-8 Mr 29 '43

WOOL, Mineral. *See* Mineral wool**WOOL, Unshrinkable**

Modern methods of reducing the normal felting properties of wool and wool goods. H. Phillips. bibliog *il diags Soc Dyers & Col J* 58:245-52; *Discussion.* 252-3 D '42

WOOL carbonizing

Dyeing of carbonized pieces, with special reference to carbonizing faults. S. L. Peel. *Soc Dyers & Col J* 59:2-6 Ja '43; Same. *Textile Col* 65:239-44 Je '43

Infra-red applied to carbonizing. F. D. Snyder. *il Textile World* 93:58-60 Ja '43

Problem in carbonizing. *Textile World* 93:135 F '43

Strict control of carbonizing; automatic instruments at Botany. *il Textile World* 93: 86-7 My '43

Study of the neutralization of carbonized 32 oz. olive-drab overcoating. K. S. LaFleur. *Am Dyestuff Rep* 32:275-9 Je 21 '43

Study of the sulfuric acid carbonizing bath used in carbonizing the government 32 oz. olive-drab overcoating. K. S. LaFleur. *il Am Dyestuff Rep* 32:473-6, 485-9 N 8 '43

WOOL carding

Cushion starters on woolen cards; Peerless woolen mills. *il diags Textile World* 92:97-8 D '42

Preparing blends for wool cards; oiling of mixes, virgin wool, and substitutes. N. J. Crofts. *il Textile World* 93:93 Mr '43

WOOL cleaning*See also***Wool scouring****WOOL fat**

Wool grease allocated. *Oil Paint & Drug Rep* 144:5+ Ag 23 '43

WOOL finishing. *See* Woolen and worsted finishing**WOOL oiling**

Preparing blends for wool cards; oiling of mixes, virgin wool, and substitutes. N. J. Crofts. *il Textile World* 93:93 Mr '43

WOOL research

Effect of alkaline treatments on the felting properties of wool. J. W. Creely and G. C. Le Compte. *Am Dyestuff Rep* 31:667-70, 682 D 21 '42

Microscopical observations of wool dyeing. G. L. Royer, H. E. Millson and E. I. Stearns. *il Am Dyestuff Rep* 32:285-90 Je 21 '43

Microscopical study of dyed wool. G. L. Royer and C. Maresh. bibliog *il Am Dyestuff Rep* 32:181-6 Ap 12 '43

Researches on wool felting. J. Schofield. *p/ diag Textile Inst J* 29:T239-52; 33:T181-94 O '38, N '42; *Discussion.* 29:T280-4, T305-8; 30:T42-6 N '38-Ja '39

Tickle in wool knit goods. A. F. Barker. *il Textile World* 93:90-1 My '43

WOOL sampling

Distribution of cut fiber lengths in wool sampled by cylindrical tube borings. I. Michelson, L. Tanner and H. J. Wollner. *diags Ind & Eng Chem Anal ed* 14:949-51 D 15 '42

WOOL scouring

How to simplify maintenance of wool scouring equipment. W. A. Lofft. *il Textile World* 92:94-5 N '42

WOOL trade

More wool for civilians in 1943? *Barron's* 22:6 N 23 '42

WEP's wool blending rule cancelled. *Textile World* 93:91 Jl '43

Wool eased; huge stockpiles. *Business Week* p 14-15 Ja 2 '43

Advertising

Fabric house wins brand identity with dealers and consumers; Arlington Mills labels are carried after re-manufacture for their sales potency with consumers. *il Sales Management* 52:23-5 S 15 '43

Llama, the vicuna, the camel help Strock sell its quality story. E. M. Murphy. *il Sales Management* 52:76+ O 15 '43

Statistics

Wool, 1938-1941. Survey of Cur Business 1942 Sup p168-9 [supplemented in monthly numbers]

Great Britain

Exports from United Kingdom, 1938-1942. *For Comm W* 11:32 Ap 3 '43

Exports of wool textiles, quarterly, 1941-1942. *Economist* 143:678 N 28 '42

Situation in United Kingdom. *For Comm W* 10:29 Ja 30 '43

Situation in United Kingdom. *For Comm W* 12:28 Jl 17 '43

Wool textiles in 1942. *Economist* 144:sup25 Mr 13 '43

United States

Government to buy U.S. wool clip. *Textile World* 93:113 Mr '43

Wool guarantee; government's plan to buy 1943 clip. *Business Week* p38+ Ap 24 '43

WOOL washing. *See* Wool scouring**WOOLEN and worsted fabrics**

Cooperative studies on a laboratory method for evaluating synthetic detergents. J. B. Crowe. *Am Dyestuff Rep* 32:237-41 My 24 '43

Making an ingredient a major selling factor: use of Botany label on men's suits; sold direct to retailers. *il Ptr Ink* 203:25-6 My 21 '43

Manual of military fabrics; 32 oz. melton overcoating fabric covered by army specification no. 8-53-A. *il Textile World* 93:88-9 Ag '43

Men's wear fabrics for 1943. H. E. Reed. *il Textile World* 92:81 D '42

WOOLEN and worsted fabrics—Continued

Olive drab for army nurses corps; new fabrics and uniforms for nurses and WAACS. *il* Textile World 93:93 Ap '43
 Tickle in wool knit goods. A. F. Barker. *il* Textile World 93:90-1 My '43
 What the government buys; woolen and worsted fabrics, woven. Textile World 93:88 F '43

See also

Blankets	Kersey
Carpets	Melton
Dyes and dyeing—	Rayon fabrics—
Wool	Wool mixtures
Felt	

Cotton mixtures

Dyeing of Morley goods. G. Webster. Soc Dyers & Col J 59:54-6 Mr '43
 Graphical method for obtaining oven dry cotton percentages in government lining fabrics. H. C. Haller and A. Felgendreger. *bibliog* Am Dyestuff Rep 32:301-2, 311-14 Jl '43
 Mercerizing wool mixtures. Textile Col 65:299 Jl '43
 Part-wool blankets for use in barracks. H. F. Schiefer, L. R. Mizell and F. T. Mose-dale, J Research Nat Bur Stand 30:203-8 Mr '43

Protection

Fireproofing cotton and woolen fabrics. R. Van Tuyle. *il* Am Dyestuff Rep 32:297-301 Jl '43
 Modern mildew proofing. P. E. N. Cillium. Textile Col 65:359-65+ Ag '43

Shrinkage

Modern methods of reducing the normal felting properties of wool and wool goods. H. Phillips. *bibliog* *il* diags Soc Dyers & Col J 58:245-52; Discussion. 252-3 D '42
 Reducing felting of wool. H. Phillips. Textile Col 65:316+ Jl '43
 Tentative textile standard no. 1a, 1942; standard method for determining resistance to shrinkage of wool fabrics. *il* diags Textile Inst J 33:S41-8 O '42; Same. Soc Dyers & Col J 59:19-20 Ja '43

Testing

Color fastness and physical properties of wool and rayon gabardines. H. M. Fletcher and H. M. S. Sherwood. *bibliog* Am Dyestuff Rep 32:280, 291-6 Je 21 '43
 Fabric pests; tentative fabric pest deterrent tests as standardized by joint association committee. F. W. Fletcher. Soap & San Chem 18:117, 119, 121+ D '42
 Factors influencing thermal transmission of blanket materials. E. Freedman. *il* Rayon 24:527-8, 588-9 O-N '43; Same. Textile Col 65:477-80 N '43; Abstract. Textile World 93:77+ O '43
 Tentative textile standard no. 1a, 1942; standard method for determining resistance to shrinkage of wool fabrics. *il* diags Textile Inst J 33:S41-8 O '42; Same. Soc Dyers & Col J 59:19-20 Ja '43

WOOLEN and worsted finishing

Finishing 16-oz. navy meltons. D. Welsh. *il* Textile World 93:89-90 Je '43
 Finishing worsted barathas. J. H. Stone. Textile World 93:89 O '43
 Mercerizing wool mixtures. Textile Col 65:299 Jl '43
 Movements of wool fibres in milling. H. T. Rothwell. *bibliog* Textile Inst J 33:T159-80 pl 1-2 O '42
 Silky appearance in textile materials. Textile Col 65:345-8 Ag '43

See also

Kersey
 Wool carbonizing

WOOLEN and worsted machinery

Maintenance in woolen mills. F. A. Westbrook. *il* Textile World 93:96-7 Je '43

See also

Looms
 Wool scouring

WOOLEN and worsted manufacture

Fabrics for military purposes; manufacturing and finishing procedures for four types of new wool blankets. *il* Textile World 93:105 F '43

History of the cropping process. J. Schofield. *il* Textile Inst J 34:P39-40 F '43

See also

Dyes and dyeing—	Woolen and worsted
Wool	finishing
Weaving	Woolen and worsted
Wool carbonizing	mills
Wool scouring	Woolen and worsted
	weaving

WOOLEN and worsted mills**Electric equipment**

Cushion starters on woolen cards; Peerless woolen mills. *il* diags Textile World 92:97-8 D '42

Equipment

How to simplify maintenance of wool scouring equipment. W. A. Lofft. *il* Textile World 92:94-5 N '42
 Infra-red carbonizing and drying unit perfected by Riggs & Lombard. *il* Rayon 24:209 Ap '43
 Strict control of carbonizing; automatic instruments at Botany. *il* Textile World 93:86-7 My '43

Management

Blending room reorganization. G. Wakefield. *il* diags Textile World 93:104 S '43
 Maintenance in woolen mills. F. A. Westbrook. *il* Textile World 93:96-7 Je '43

WOOLEN and worsted spinning

Nomograph for worsted spinners. M. C. Bishop. Textile World 93:85 O '43
 Single-end machine speeds up training of learners. R. Jalbent. *il* Textile World 93:139-40 S '43
 Twist nomograph for spinning. M. C. Bishop. Textile World 93:84-5 Jl '43

WOOLEN and worsted weaving

Hand loom for making samples. F. W. Sterling. *il* diag Textile World 93:85 Jl '43
 Loomfixers' manual; wool section (cont). E. P. Schremp. *il* diags Textile World 93:100 Ja; 110 Mr; 96 My; 118 Jl; 142 S; 110 O '43
 Weaving OD army overcoatings. W. G. Holman. Textile World 93:66 Ja '43

WOOLEN and worsted yarn

Effect of alkaline treatments on the felting properties of wool. J. W. Creely and G. C. Le Compte. Am Dyestuff Rep 31:667-70, 682 D 21 '42
 Producing worsted warp yarns. S. Kershaw. Textile World 93:132 Ap '43

See also

Angola yarn

Aralac mixtures

Producing Aralac-wool blends. *il* Textile World 93:98 Je '43

WOOLF, Douglas G.

Joins Textile research institute. *por* Textile World 93:121 O '43

WOOLTON, Frederick James Marquis, 1st baron, 1883-

Britain eats to fight; Lord Woolton, Food minister, has turned potential disaster into nutritional triumph. *por* Fortune 27:81-7+ Ap '43

WOOLWORTH, F.W., company

Annual report. Comm & Fin Chr 157:1096 Mr 22 '43

Court reserves decision in OPA suit. Comm & Fin Chr 158:1385 O 4 '43

Dime swank. Business Week p88+ Jl 17 '43

Investment audit. G. L. Merton. Mag of Wall St 71:238-9+ D 12 '42

WOOTON, Paul, 1881-

President Roosevelt helps business editors honor Paul Wooton. *por* Ind Marketing 28:76 Jl '43

WORCESTER, Joseph Ruggles, 1860-1943

Sketch. *por* Boston Soc C E J 30:214-15 Jl '43

WORCESTER, Massachusetts**Water supply**

Utility power serves city in drought; pumped water into Worcester system; with cost data. *il* Elec W 119:1500 My 1 '43

WORD division

Australian printer decries lax American methods. E. N. Teall. Inland Ptr 110:67-8 D '42

WORDS

- Comments on words as tools. C. E. Crane. East Underw 44:8 O 22 '43
Need for more uniform usage of words of indefinite meaning. P. C. Ackerman. Science 96:560 D 18 '42; Discussion. F. Jehle. 97:184 F 19 '43
Printers of today working in a made-over language. E. N. Teall. Inland Ptr 110:40 Mr '43
Short words carry a punch; secret of good writing for every engineer. C. M. Ripley. *il* Power 87:160-1 Mr '43
Strange are the styles of words. E. N. Teall. Inland Ptr 111:56-7 Je '43
When words fail, invent one. P. H. Erbes, Jr. Ptr Ink 204:15+ Ag 6 '43

WORK

See also
Employees Labor and laboring
Employment classes
Fatigue Occupations

WORK clothes

ASA asks for comments on proposed work clothes standards. *il* Ind Stand 14:285-6 O '43

Clothing the woman war worker. *il* Ind Stand 14:69-71 Mr '43; Same cond. Safety Eng 85:11-12, 14 Ap '43; Same cond. Nat Safety N 47:15-14 My '43

Dressed to kill accidents; safety work clothes for women. H. Shell. *il* Safety Eng 86:37, 40-1+ O '43

Femmes' frills. *il* Business Week p36 D 19 '42

Girls in uniform; Sperry gyroscope co. P. A. Wright. *il* Nat Safety N 48:74+ O '43
Overalls to the fore. Sales Management 52:21 Je 1 '43

Safety plus style for the shipyards; clothing for women workers. *il* Nat Safety N 47:68 Ja '43

Women's work clothes; abstract. M. E. Wambganass. Management R 32:19-20 Ja '43

Work togs for the gals; how designers are combining style with safety. E. M. Kelley. *il* Sales Management 52:20-2 My 1 '43

WORK function. See Electrons; Ionization, Gaseous**WORK projects administration**

End of WPA; editorial. Eng N 129:837 D 17 '42; Discussion. 130:176-9, 470-1; 131:8-9 F 11, Ap 8, Jl 1 '43

In defense of WPA. H. P. Boardman. Eng N 131:186 Jl 29 '43

President orders liquidation of WPA; says work relief program not needed now. Comm & Fin Chr 156:2169 D 17 '42

Presidential order ends WPA, records to be closed Feb. 1. Eng N 129:809-10 D 10 '42

WPA liquidation may increase local relief costs. Comm & Fin Chr 156:2056 D 10 '42

WPA lists accomplishments. Comm & Fin Chr 157:69 Ja 7 '43

WPA now liquidated. Comm & Fin Chr 158:110 Jl 8 '43

WPA operations to be fully liquidated May 1. Comm & Fin Chr 157:1313 Ap 8 '43

WORKING women

Admission of women to union membership; Boilermakers' union; British engineering union. Monthly Labor R 55:1006-7 N '42

Living costs of woman workers in New York, 1942. Monthly Labor R 57:100 Jl '43

See also
Woman—Employment Woman—Occupations

WORKMEN'S compensation and the handicapped

Compensation laws and the handicapped worker; abstract. V. E. Brink. Management R 32:153 Ap '43

Court decisions; workmen's compensation; twilight zone between federal and state jurisdiction over compensation for injuries on navigable waters. Monthly Labor R 56:497-8 Mr '43

Employer paying compensation must pay part of attorney's fees incurred by employee for recovery against third party. Weekly Underw 149:627 S 18 '43

Employment of epileptics. W. G. Lennox and S. Cobb. bibliog Ind Med 11:571-5 D '42

Injury to employee while crossing road to board truck under contract for transportation held compensable. Weekly Underw 149:47 Jl 3 '43

Job benefits rise; laws liberalized. Business Week p63+ Ap 3 '43

Physician and surgeon; relationship to the compensation carrier in wartime. J. W. Vaccaro. Ind Med 12:402-4+ Je '43

Pre-existing disease and permanent disability. East Underw 43:36 D 4 '42

Principal features of workmen's compensation laws, as of September 1943. A. Acee. Monthly Labor R 57:729-48 O '43

Seek liberalization of compensation laws; some gubernatorial messages. East Underw 44:30 Ja 22 '43

State workmen's compensation legislation in 1943. Monthly Labor R 57:543-50 S '43

Typhoid fever—workmen's compensation act—held to arise out of employment; Illinois Supreme court. Pub Health Rep 58:374-5 F 26 '43

Workmen's compensation laws and industrial medicine. W. H. Pillsbury. Ind Med 11:534-8 N '42

See also
Accidents, Industrial Insurance, Work-
Employers' liability men's compensa-
tion

Medical care

Compensation fraud inquiry under way in New York. Weekly Underw 148:652 Mr 20 '43

Management of industrial injuries. H. W. Meyerding. Ind Med 12:634, 636, 638 S '43

Twenty New York physicians charged with compensation fraud on city fund. Weekly Underw 147:1194 N 21 '42

California

Kerato-conjunctivitis held compensable under workmen's compensation act; California Supreme court. Pub Health Rep 58:854-5 My 28 '43

Egypt

Workmen's compensation law of Egypt, 1942. G. L. Jones. Monthly Labor R 56:692 Ap '43

Great Britain

Amendment of British workmen's compensation act. Monthly Labor R 56:908 My '43

Beveridge report, with special reference to pensions and workmen's compensation. H. Lesser. Gas J (Lond) 241:471 Ap 14 '43

Workmen's compensation; employee's application for review. F. E. Sugden. Elec R (Lond) 132:624-5 My 7 '43

Workmen's compensation; supersession of present system proposed. Elec R (Lond) 131:763 D 11 '42

Ohio

File test case; labor federation seeks compensation statute construction. Weekly Underw 149:563 S 18 '43

Wisconsin

Wisconsin's workmen's compensation expiration in 1942. Monthly Labor R 57:117-18 Jl '43

WORKMEN'S compensation insurance. See Insurance, Workmen's compensation

WORLD politics

See also
Geopolitics

WORLD war, 1939-

Believes Germany will hold out another year; expects Russia to come out of war as greatest democracy. E. V. Rickenbacker. Comm & Fin Chr 158:708 Ag 19 '43

Churchill sees 1944 as climax of European war. Comm & Fin Chr 158:1871+ N 11 '43

Findings of Senate committee after tour of war theatres. Comm & Fin Chr 158:1510 O 14 '43

Information available this January pointing toward a victory in Europe in 1943 and conclusions. A. D. Whiteside. Dun's R 51:4-7 Ja '43

WORLD war, 1939—Continued

Pledges all-out war on Japan; says allies will take pledge off Russia. W. Churchill. Comm & Fin Chr 157:2088 Je 3 '43

President hails first crack in Axis but warns of hard task against Hitler and Tojo. Comm & Fin Chr 158:519+ Ag 5 '43

President hails Italian victory but warns we still have long way to go. Comm & Fin Chr 158:1117 S 16 '43

President in annual message foresees United Nations advance. Comm & Fin Chr 157:193, 196-7 Ja 14 '43

Roosevelt's message to Congress pledges new blows at Axis; asks for more output. Comm & Fin Chr 158:1224-5+ S 23 '43

Submarines must be licked. Business Week p44+ Mr 27 '43

Total Axis defeat seen by President; Armistice day address. Comm & Fin Chr 156:1892 N 26 '42

When will the war end? R. W. Babson. Comm & Fin Chr 157:1857+ My 20 '43

Year of decision. Economist 144:383-4 Mr 27 '43

See also

Electric utilities—	Rapid transit in war
War problems	Reconstruction
Military service	(World war, 1939-)
Public utilities—War	United nations, 1942
problems	Waterworks—War
Railroads in war	measures

Aerial operations

Advancing the bomber line; the Southwest Pacific air pays dividends on ingenuity and toughness. Il Fortune 28:112-15+ S '43

Aerial strength; its real value must be acknowledged. J. A. Ward. Il Aero Digest 42:84-6, 126+ Ja '43

Air estimates. A. Sinclair. Engineer 175:234-5, 237 Mr 19 '43

Air force targets; Port of Genoa. Il plan Engineer 174:434-7 N 27 '42

Air force targets; Ruhr dams and water power stations. Il Engineer 175:405-9 My 21 '43

Air force targets; Tirso dam and powerhouse, Sardinia. Il diag Engineer 175:443-5 Je 4 '43

Air power deciding the battles in Africa. J. A. Ward. Il Aero Digest 41:94-6, 101+ D '42

Air power decisive factor in this war. Viscount Trenchard. Aero Digest 42:182-3 Ja '43

Air power now assumes dominant war role. L. V. Spencer. Il Aero Digest 42:111-15 Je '43

Air war. Published in weekly numbers of Aviation news

Air war over Europe. J. W. Morrison. Il diag Aero Digest 41:102, 105-6, 108+ N '42

America at war. Published in monthly numbers of Aviation

American doctrine of air power. N. F. Silsbee. Aviation 42:112-15+ F; 96, 98-9+ Mr '43

Application of air power. E. P. Sorensen. Il Mech Eng 65:549-52 Ag '43

Attrition blows aimed at Axis oil supplies. map Oil & Gas J 42:14+ Ag 5 '43

Bases for bombing from Britain. W. G. Bowman. Il diag plan Eng N 131:253-9 Ag 12 '43

Bombing eastern Europe, key to Nazi defeat. J. A. Ward. Il Aero Digest 42:109-11, 142+ Ap '43

Bombing, the American way. E. E. Miller. Il diag Aviation 42:114-21+ Ag; 118-19+ S '43

Effect on the war of 1943 aircraft production. J. A. Ward. Il Aero Digest 42:83-6+ F '43

Heavy bomber changes aerial warfare. J. A. Ward. Il Aero Digest 41:81-4+ N '42

Luftwaffe reserve is mythical; output of famous fighters cut; air war review. Il Aviation N 1:12-13 Ag 9 '43

Post-Tunisian air strategy. J. A. Ward. Il Aero Digest 42:116-18+ My '43

Problems of global air war. N. F. Silsbee. Il map Mech Eng 65:313-20 My '43

Screaming Stukas couldn't do it. J. C. Ward, Jr. Aero Digest 43:309 Ag '43

Those claims are right; performances of both English and American planes reviewed. M. V. Cave. Il Aviation 42:116-18+ JI '43

We learned war maintenance with the AVG. T. M. Lett, Jr. Il Aviation 41:104-6+ D '42

Will aircraft beat the U-boat? J. A. Ward. Il Aero Digest 42:114-17 Mr '43

See also

Air raids

Art

Artist's record of modern war, of humanized machines and mechanized men; paintings by Julio de Diego. Fortune 28:110, 114-15 O '43

Painters interpret the war; they protest the death of cities and innocent people; portfolio. Il Fortune 27:106-12 Mr '43

Atrocities

Japanese executed captured American flyers, President reveals. Comm & Fin Chr 157:1596 Ap 29 '43

Bibliography

Geography of the war; a bibliography. R. B. Sealock. Booklist [ALA] 40:30-6 pt 2 S '43

Official war publications; guide to state, federal, and Canadian publications. J. K. Wilcox. v4 195p \$1.50 Bur. of public administration, Univ. of California, Berkeley '42

Official war publications; guide to state, federal, and Canadian publications. J. K. Wilcox. v5 252p \$1.75 Univ. of Calif. Bur. of public administration, Berkeley '43

Official war publications; guide to state, federal, and Canadian publications. J. K. Wilcox. v6 274p \$1.75 Bur. of public administration, Univ. of California, Berkeley '43

Casualties

How army handles war casualties. J. W. Fischbach. East Underw 44:3 My 14 '43

Insurance shows German losses. Weekly Underw 148:313+ F 6 '43

Problems of navy casualty reports. A. C. Jacobs. Nat Underw 47:19 S 16 '43; Same. Nat Underw (Life ed) 47:8 S 17 '43

Civilian losses

Bombs kill more Nazis than they did British. L. I. Dublin. East Underw 44:4 S 3 '43

Civilian casualties in air-raids. Sept. 1939-Sept. 1943. Economist 145:519 O 16 '43

First hundred thousand. Economist 143:532-3 O 31 '42

Claims

American property claims against Germany and the coming peace treaty. H. G. Aron and F. W. Eisner. Bankers M 146:471-94 Je '43

Form group to aid in settling claims on foreign property loss. Comm & Fin Chr 158:311 JI 22 '43

Protective committee for victims of Axis property seizures. Comm & Fin Chr 157:1868 My 20 '43

Commerce

Allies evolve trade controls; joint British-American economic board in North Africa. Business Week p44+ Ag 14 '43

Export situation improves. Business Week p62+ JI 31 '43

Goods still move; even landlocked Swiss take to the sea. Business Week p49-50 Ag 14 '43

Reciprocal accords ease wartime stresses. J. C. Rovensky. For Comm W 10:18-19 F 27 '43

Trade policies of foreign countries during 1942. H. Chalmers. For Comm W 10:3-4+ Ja 30; 3-6+ Mr 13 '43

War debts include those owed to suppliers who have gone without manufactured goods. D. Tyerman. Barron's 23:4 JI 26 '43

Wartime controls and stimuli upon the foreign trade of Latin America. H. Chalmers. For Comm W 11:3-5+ Ap 24; 14-17+ My 1 '43

See also

World war, 1939—
Shipping

Commodity control

Coming squeeze, on civilian business, on your living standard. W. Gates. Mag of Wall St 71:624-6+ Mr 20 '43

WORLD war, 1939—Commodity control—Cont.
Licensing of materials. *il Engineer* 175:115-16 F 5 '43

Limitation order L-219. G. N. Farrand. *J Account* 75:334-42 Ap '43

More rationing in prospect. *Barron's* 22:6 D 7 '42

Sees extension of rationing and increased standardization in 1943. L. Henderson. *Comm & Fin Chr* 156:2069 D 10 '42

Utility principle. *Economist* 144:384-5 Mr 27 '43

Victory models; government trying to solve problems of trade-marks, simplification and standardization. L. D. H. Weld. *il Ptr Ink* 201:46, 48+ D 25 '42

Wartime changes in consumer goods in American markets. L. B. Webb. *Monthly Labor R* 55:891-902 N '42

See also

Prices—Regulation	United States—War
Priorities and allocations, Industrial	production board—
Rationing	Controlled materials plan
United States—	
Price administration, Office of	

Compensation of war victims

Benefits for OCD workers. *Nat Underw (Life ed)* 47:6+ Ja 15 '43; Same. *Nat Underw* 47:16 Ja 14 '43

Compensation for war injuries. *Economist* 144:69-70 Ja 16 '43

Equal compensation. *Economist* 144:265 F 27 '43

Equal compensation for war-injured men and women. Great Britain. *Monthly Labor R* 56:908-10 My '43

Grievance redressed. *Economist* 144:459 Ap 10 '43

OCD volunteers put under U.S. compensation plan. *Nat Underw* 47:22 Ja 7 '43

Pepper's war benefits bill is reintroduced. *East Underw* 44:24 Ja 22 '43

Cost

Budget white paper; comparison with America. *Economist* 144:544-5 My 1 '43

Budget white paper; national income. *Economist* 144:518-19 Ap 24 '43; Correction. 144:545 My 1 '43

Cost of Hitler; expenses and income losses incurred as a result of the Fuehrer's aggressions. L. S. Wellstone. *il For Comm W* 10:3-4+ F 6 '43

Diplomatic history

Behind the Kremlin front. *Business Week* p44+ O 23 '43

Earlier invasion; Moscow declarations; Russia, China gain by pact. *Business Week* p14-15 N 6 '43

U.S., Britain, Russia and China sign pact, closer military unity and post-war co-operation. *Comm & Fin Chr* 158:1799+ N 4 '43

Documentation

Records of war administration. H. Venne-man. *Special Lib* 34:121-2 Ap '43

War subject headings for information files. 2d ed 65p pa \$2. Special libraries assn, 31 E. 10th st, New York '43

World war II subject headings for pamphlets and clippings in the War information center. 31p Cleveland public lib, War and defense information center, Cleveland '42

Economic aspects

American economy in 1942. C. A. R. Wardwell and R. E. Bangs. *Survey of Cur Business* 23:3-23+ Ja '43

Annual report of the Bank for international settlements, year ending March 31, 1942. *Fed Res Bul* 29:15-41 Ja '43

Business and the war; some effects on manufacturing. W. Hayes and R. Wyant. *Dun's R* 50:17-19 D '42

Chemical residues of the war. W. S. Landis. *il Chem & Eng N* 21:539-44 Ap 25 '43

Curtailment of the civilian economy. *Survey of Cur Business* 23:5-9 F '43

Economic battle lines; United nations have relief and materials missions thruout North Africa and in nearby neutral nations. *Business Week* p26+ D 26 '42

Economic effects of Italy's surrender. V. L. Horoth. *il Mag of Wall St* 72:667-9+ O 2 '43

Economic effects of our African victory; North and West French Africa. V. L. Horoth. *il Mag of Wall St* 71:281-3+ D 26 '42

Economic losses hit Nazis. *Business Week* p52, 94-5 F 27 '43

Economics in the war effort. R. A. Stevenson. *Civil Eng* 13:71-2 F '43

Everything for victory. C. I. Gragg and S. F. Teele. *Harvard Business R* 21 no 3:269-76 [Ap] '43

Further shift to war economy. *Fed Res Bul* 29:287-92 Ap '43

Home-front soundness means world-success; today's anti-inflation battle. *For Comm W* 11:12-13+ Ap 10 '43

If the war ends next year—in 1944—in 1945. J. D. C. Weldon. *Mag of Wall St* 71:208-10+ D 12 '42

Impact of the war upon smaller manufacturing plants. H. R. Bowen. *Survey of Cur Business* 23:19-24 J1; 19-24 S '43

Impact of war. R. S. Hecht. *Am Inst Banking Bul* 25:5-6 J1 '43 (to be cont)

International factors in post-war business. A. W. Zelomek. *Ptr Ink* 205:79-80+ O 29 '43

New economic unit set up by State dept. to coordinate problems of liberated areas. *Comm & Fin Chr* 158:523 Ag 5 '43

New poor. F. E. Kirkbride. *Trusts & Estates* 75:561-2 D '42

Permanent war gains versus the costs of the war. W. Gates. *il Mag of Wall St* 71:456-8+ F 6 '43

Regional distortions resulting from the war. E. C. Bratt and D. S. Wilson. *maps Survey of Cur Business* 23:9-15+ O '43

Time still favors the Allies. *Business Week* p42+ Ja 2 '43

Watch the world go by; liquidating the Nazi conquests. G. Riviere. *Mag of Wall St* 72:404+ J1 24 '43

What war year II will bring. E. Blair. *Barron's* 22:3-4 D 7 '42

See also

Inflation (finance)

World war, 1939—

Prices

Education and the war

See War and education

Evacuation, Civilian

Selection of civilian evacuation routes; Pennsylvania chooses major highways for emergency movement. R. F. Riegelsmeier. *il Civil Eng* 12:659-60 D '42

Finance

All out, how far? our economic mobilization against the background of British experience. V. L. Horoth. *il Mag of Wall St* 71:153-62 N 28 '42

British white paper on war finance. *Fed Res Bul* 29:729-40 Ag '43

Canadian securities; Canada's new program of mutual aid. B. Williams. *Comm & Fin Chr* 157:834 Mr 4 '43

Facts about Japanese war finance. *For Comm W* 11:24 Je 12 '43

Financial basis for victory; wasteful expenditures and their effect on war debt. H. E. Byrd. *Trusts & Estates* 76:107-10 F '43

United States war program, commitments, and expenditures, monthly cumulative totals from June 1940 to March 1943. *Survey of Cur Business* 23:29 Je '43

White paper statistics; war finance. *Economist* 144:498-9 Ap 17 '43

See also

Finance—Germany

Finance—Great Britain

Finance—United States

War finance

Food question

Africa rewrites food program. *Business Week* p15-16 N 21 '42

Agriculture should be held munitions industry in view of war food problem. H. Hoover. *Comm & Fin Chr* 157:381 Ja 28 '43

Allied meat purchases. *Economist* 145:409 S 18 '43

WORLD war, 1939—Food question—Continued

- American supply of foods to combat areas. J. B. Canning. *Ann Am Acad* 225:177-82 Ja '43
- Australia campaigns to increase food production. *For Comm W* 10:24 Ja 30 '43
- Banker-farmer food team. C. R. Wickard. *il Banking* 35:19-20 F '43
- Britain eats to fight; Lord Woolton, Food minister, has turned potential disaster into nutritional triumph. *il Fortune* 27:81-7+ Ap '43
- Britain will buy South American meat for U.S. forces overseas. *Comm & Fin Chr* 157:852 Mr 4 '43
- Criticizes food control system. H. Hoover. *Comm & Fin Chr* 156:2257 D 24 '42
- Food and nutrition as related to the war. C. G. King. *Science* 97:129-31 F '43; Same. *il Chem & Eng N* 21:150-1 F 10 '43
- Food as weapon is helping to win war declares President; statement on Farm mobilization day. *Comm & Fin Chr* 157:283 Ja 21 '43
- Food from North Africa. *Economist* 144:617 My 15 '43
- Food situation in a world at war; symposium. *Ann Am Acad* 225:83-95 Ja '43
- Food supply a major problem. *Survey of Cur Business* 23:6-8 F '43
- German supplies of edible fats. R. Crone. *For Comm W* 13:8-9+ N 6 '43
- Germany at war; harvest arithmetic. *Economist* 145:467 O 2 '43
- Greater Pacific island output is aim of BEW. *For Comm W* 10:26 Mr 13 '43
- Hunger spreads over Europe. *Fortune* 27:84-5+ Ja '43
- Lend-lease operation. C. B. Marshall. *Ann Am Acad* 225:183-9 Ja '43
- Remedy for food shortages. H. Hoover. *Trusts & Estates* 76:117 F '43
- Seeds of victory; shipments to allies and fighting fronts. *Business Week* p78+ My 8 '43
- Toward better distribution and increased production of foodstuffs. *Nat City Bank* p94-5 Ag '43
- 25% of 1943 food to armed forces, allies. *Comm & Fin Chr* 157:680 F 18 '43
- U.S.-Canada agree on maximum food output. *Comm & Fin Chr* 157:424 Ja 28 '43
- War forces progress in food processing. E. Hardy. *il Food Ind* 14:39+ D '42
- War needs to take fourth of food output. *Comm & Fin Chr* 156:2149 D 17 '42
- Freezing of assets**
- Alien assets frozen total over \$7 billion. *Comm & Fin Chr* 157:1887 My 20 '43
- Argentine funds in U.S. reported frozen; withdrawal by Argentina of gold held in U.S. *Comm & Fin Chr* 158:1932 N 11 '43
- More assets iced; Treasury's control over enemy aliens' funds now covers \$8,500,000. *Business Week* p95-6+ F 27 '43
- Present status of Dutch accounts in the U.S.A. F. W. Eisner. *Bankers M* 145:442-3 N '42
- Treasury rules on enemy nationals' policy payments. *Nat Underw (Life ed)* 47:4+ JI 16 '43

Hospitals

See also
Hospital trains

Jews

- Plight of the Jews. *Economist* 143:766-7 D 19 '42

Labor problems

- British manpower-control experience. T. K. Hitch. *Survey of Cur Business* 23:16-24 F '43
- Canadian regulations for employment of civilians. *Monthly Labor R* 56:673-7 Ap '43
- Conditions of employment of prisoners of war. *Int Labour R* 47:169-96 F '43
- Conscription of Netherlands labor. *For Comm W* 10:3+ Mr 27 '43
- Juvenile labour in wartime in the United States. *bibliog Int Labour R* 48:324-37 S '43
- Labor conscription. C. S. Slocombe. *Personnel J* 21:194-206 D '42
- Lease or lend? S. A. Woods machine company plant seized by Army. *Business Week* p 17-18 Ja 2 '43

- Man- and woman-power problems; Britain's exhausted reserves. F. E. Makin. *Barron's* 23:11 Mr 8 '43
- Manpower-control policies in Great Britain. *Monthly Labor R* 55:1134-41 D '42
- Manpower in war industry; volume and proportions of the resources of Britain and America. *Economist* 144:141 Ja 30 '43
- Manpower; mobilization of the total victory force. *Index* 22 no 4:73-80 [D] '42
- National selective service civilian regulations in Canada. *Int Labour R* 47:493-5 Ap '43
- People in war production; digest, with commentary, of a British study. C. S. Slocombe. *Personnel J* 22:154-71 N '43
- Principles of employment supervision in war and peace. E. M. Johnstone. *Int Labour R* 48:277-307 S '43
- Record demand for engineers; situation as reviewed by War manpower commission in April, 1943. *Refring Eng* 46:13-16, 93-4+ JI-Ag '43
- Regional machinery for controlling production; assuring better utilisation of equipment and labour. O. Lyttelton. *Engineering* 154:354-5 O 30 '42
- Report on manpower opposes national service act, calls for tightening of overall machinery. *Comm & Fin Chr* 156:1808 N 19 '42
- Wartime labor relations policy. A. Earl. *Personnel J* 21:258-64 Ja '43

See also

- National war labor board World war, 1939—
 Women's work
- War manpower commission

Laws and legislation

- War-damaged premises; remission or reduction of rent. F. E. Sugden. *Elec R (Lond)* 133:248 Ag 20 '43

Maps

- World island; map. *Fortune* 27:supp Ja '43

Medical and sanitary affairs

- Advances in medicine and surgery. *Science* 97:sup10+ Mr 26 '43
- Front-line medicine; restores more of wounded to useful life than in any previous war. *il Fortune* 23:124-8, 142+ JI '43
- Germany's health; conditions in German Europe. *Economist* 144:180-1 F 6 '43
- Needs, functions and objectives of the sanitary engineering procurement and assignment service. C. W. Klassen. *Am Water Works Assn J* 35:651-3 My '43; Same. *Water Works & Sewerage* 90:165-6 My '43; Abstract. *Eng N* 130:693-4 My 6 '43

See also

Hospital trains

Moral and religious aspects

- Christian churches in the war. *il Fortune* 27:118-21+ Mr '43

Naval operations

- Fourth year of the war at sea. H. W. Richmond. *Engineering* 156:194 S 3 '43
- How naval battles are fought; the strategy and tactics of the war at sea. *il Sci Am* 168:100-3+ Mr '43
- Naval campaign in the Mediterranean. A. V. Alexander. *Engineer* 176:249-50 S 24 '43; Same abr. *Engineering* 156:256-7 S 24 '43
- Some signposts from the naval events of 1942. H. C. Ferraby. *Engineer* 175:2-4 Ja 1 '43

Occupied territory

- See also*
Europe—German occupation United States—Foreign economic coordination, Office of

Peace and mediation

- Aggressors minus N and H; disarmament of our enemies by restrictions on nitrate and hydrogenation plants. M. G. Harris. *Fortune* 28:58+ N '43
- Can the public utilities police the peace? international system controlled by Anglo-American interests proposed. F. X. Welch. *Pub Util* 31:333-41 Mr 18 '43

WORLD war, 1939—Peace and mediation—Cont.
 Doctor and patient; need for peace system which British public opinion will uphold. Economist 144:811-12 Je 26 '43
 First things first; latter-day equivalent of the fourteen points. Economist 144:350-1 Mr 20 '43
 Fortune survey; if war continues, Roosevelt; if war ends, a Roosevelt peace, but not Roosevelt. Fortune 27:10+ Je '43
 Four steps in approaches to attain lasting peace. H. Hoover. Comm & Fin Chr 158: 1013, 1016-17 S 9 '43
 Germany's frontiers. Economist 145:33-4 Jl 10 '43
 Inside news from Barron's Capital reporter. E. Blair. Barron's 23:5+ Ag 30 '43
 Isolationist reaction? Fortune 27:116, 118 Ap '43
 Next steps in the organization of the United nations. C. M. Eichelberger. Ann Am Acad 228:34-9 Jl '43
 Peace aims. Economist 144:204 F 13 '43
 Peace must be won at home. W. B. Donham. Harvard Business R 21 no2:137-49 [Ja] '43
 Peace terms. Economist 144:651 My 22 '43
 Peacemaking: a process; the goals. Fortune 27:supp 8-16 Ap '43
 Pope appeals for just peace. Comm & Fin Chr 158:1018 S 9 '43
See also
 Non-partisan council to win the peace

Personal narratives
 Rickenbacker's own story. E. V. Rickenbacker. il S A E J 51:sup26-3, 38-9 Mr '43
 This war is not over. E. Rickenbacker. il Aero Digest 43:115-18 S '43

Petroleum supply
 Allies may reopen oil routes. il Oil & Gas J 41:31-2 Mr 4 '43
 Attrition blows aimed at Axis oil supplies. map Oil & Gas J 42:14+ Ag 5 '43
 Council urges greater use of foreign oil for military and lend-lease requirements. Oil & Gas J 42:14-15 Jl 22 '43
 512,000 barrel a day crude deficit seen; PIWC committee warns United nations. il Nat Pet N 35:32, 34+ S 8 '43
 Germany at war; oil problem. Economist 145:18 Jl 3 '43
 Lack of refineries hampers greater use of foreign oil. J. P. O'Donnell. Oil & Gas J 42:43-4 O 21 '43
 Late reports reveal heavy damage to Rumanian plants. il Oil & Gas J 42:45 Ag 26 '43
 Lend-lease oil shipments next 18 months valued at approximately \$752,000,000. Oil & Gas J 42:24 Je 3 '43
 Little Inch of the battle zones; portable, lightweight steel pipe line. il Oil & Gas J 42: 58-9 S 30 '43
 OWI gives insight on oil consumed by warfare. Oil & Gas J 41:32 Mr 11 '43
 Oil in 1942. Economist 144:sup20 Mr 13 '43
 Patriotic idea developed into vital link in allied chain of oil supply; portable pipe line. il Oil & Gas J 42:25-6 Ag 5 '43; Same. Pet Eng 15:133-4 O '43; Same cond. Heating-Piping 15:467+ S '43
 Petroleum and the war effort. D. G. Lingle. Am Pet Inst Proc 23(1):35-6 '42
 Petroleum goes to war. E. K. Brown. Pet Refiner 22:134, 138 O '43
 Reduction in oil production is caused entirely by warfare. J. P. O'Donnell. il Oil & Gas J 41:42-3+ D 31 '42
 Somervell centralizes military oil needs. W. J. Maddox. Nat Pet N 35:16 Je 23 '43
 Suppressed military data prevent accurate analysis of motor-fuel shortage. H. D. Ralph. il Oil & Gas J 42:28-9 S 9 '43
 Tanker interruptions threat against all oil operations. J. P. O'Donnell. il Oil & Gas J 41:86, 88 D 31 '42
 Whole United nations strategy at stake in fight over high-octane gasoline supply. E. Blair. Barron's 23:6+ Ap 26 '43
 World pooling of oil and transportation directed by PAW; eases load on U.S. Nat Pet N 35:3+ O 13 '43
 World's oil in wartime. W. A. Sawdon. map Pet Eng 15:65-8 O '43

Political aspects

Worldwide struggle for power; certain Nazi doom is shifting alignments. J. Dana. il Mag of Wall St 72:221+ Je 12 '43

Press reports and censorship

New censorship rules for messages from U.S. Comm & Fin Chr 157:671 F 18 '43
 President believes war at turning point but warns of uphill fight to victory; address at Herald Tribune forum. Comm & Fin Chr 156:1980 D 3 '42

Prices

Effectiveness of price control. D. D. Humphrey. Survey of Cur Business 23:10-15+ F '43
 German Europe; European price relations. Economist 143:545 O 31 '42
 Price levels. Bankers M 146:425-6 My '43
 Trend towards world inflation. Nat City Bank p69-71 Je '43
 Wholesale price movement and cost of living compared with stock market for war years. Comm & Fin Chr 157:1486 Ap 22 '43

See also

Prices—Regulation

Prisoners and prisons

Conditions of employment of prisoners of war. Int Labour R 47:169-96 F '43
 Conditions of employment of prisoners of war. Monthly Labor R 56:891-5 My '43
 Laghouat escape tunnel. R. G. Brickell. plan Engineer 175:445-6 Je 4 '43
 Six million prisoners of war. il Fortune 27: 108-11+ F '43
 U.S. war prisoners get Red Cross food. Comm & Fin Chr 157:427 Ja 28 '43

Propaganda

U.S. arsenal of words. il Fortune 27:82-5+ Mr '43

Public opinion

Fortune survey; if war continues, Roosevelt; if war ends, a Roosevelt peace, but not Roosevelt. Fortune 27:10+ Je '43
 Survey under fire; faraway bombardment squadron tell what they think this war is all about. T. White. Fortune 27:8 My '43

Rationing

See Rationing; World war, 1939—Commodity control

Reconstruction

See Reconstruction (World war, 1939-)

Refugees

See Refugees

Relief work

Baruch gives \$1,000,000 to war relief agencies. Comm & Fin Chr 157:199 Ja 14 '43
 Foreign relief job expands. Business Week p42+ Jl 24 '43
 Foreign relief posts. Comm & Fin Chr 157: 428 Ja 28 '43
 44 nations sign relief and rehabilitation pact. Comm & Fin Chr 158:1924 N 11 '43
 Lehman foresees creation of allied relief office. Comm & Fin Chr 157:1980 My 27 '43
 Lehman named director of foreign relief. Comm & Fin Chr 156:2068 D 10 '42
 On order, goods for Europe; governments of countries to be reoccupied submit to Washington and London detailed schedules of what they will need for rehabilitation. Business Week p33+ Jl 17 '43
 Quality of mercy. Economist 144:201-2 F 13 '43
 Red cross spent \$62,000,000 for foreign relief in first year of the war. Comm & Fin Chr 156:2336 D 31 '42
 Relief to war-torn nations by outright gifts to avert third world war. H. Lehman. Comm & Fin Chr 158:52 Jl 5 '43
 Revised plan for United nations relief declared agreeable by U.S., Britain, Russia and China. Comm & Fin Chr 158:1517 O 14 '43
 UNRRA's big job. Business Week p17-18 N 6 '43

WORLD war, 1939—Relief work—Continued

U.S. submits plan to United Nations for relief of war-torn countries. *Comm & Fin Chr* 158:135 J1 8 '43

See also United States—Foreign relief and rehabilitation operations, Office of

Science and the war

Bottleneck in ideas; still missing: a technical agency for lost ideas and full technical mobilization. *Fortune* 27:82-5+ My '43

Fuller utilization of scientific resources for total war. *T. Rosebury. Science* 96:571-5 D 25 '42

Harnessing the know how. *A. L. Elder Chem & Met Eng* 50:114-16 Ap '43

Lasting value in war science effort. *W. D. Coolidge. Power Pl Eng* 47:47 Ja '43

Mobilization of science; war uses and preview of fundamental scientific research in peace. *F. B. Jewett. Trusts & Estates* 75:445-50 N '42

National survival through science. *H. N. Holmes. Science* 96:433-9 N 13 '42

Number of scientific men engaged in war work. *L. Carmichael. Science* 98:144-5 Ag 13 '43

Peacetime values from a war technology. *G. Egloff. Science* 97:101-8 Ja 29 '43; Same. *Chem & Eng N* 21:141-9 F 10 '43; Discussion. 21:912-13 Je 10 '43

Physics in war and peace. *R. M. Sutton. Gen Elec R* 46:479-80 S '43

Planning of sciences. London conference. *Chem Age (Lond)* 48:175-8 F 6 '43

Research and the war effort. *F. Bush. Elec Eng* 62:96-102 Mr '43

Research in wartime. *J. H. Simons. Science* 97:390-2 Ap 30 '43

Science, electrical engineering and the war effort. *R. G. Parrott. Inst E E J* 90 pt 1: 59-62 F '43

Science mobilization bill. *K. A. C. Elliott and H. Grundfest. Science* 97:375-7 Ap 23 '43

Scientific man power. *P. V. McNutt. Tech R* 45:237-8+ Mr '43

See also American institute of physics—War policy committee; United States—Scientific and technical mobilization, Office of (proposed)

Shipping

Allied, neutral ship losses in two wars; chart. *Weekly Underw* 148:1201 Je 5 '43

Army shipping record surpasses last war's. *Comm & Fin Chr* 158:135 J1 8 '43

Axis ship losses a mortal blow. *P. Wohl. map Barron's* 22:3 N 23 '42

Combined shipping adjustment board. *Marine Eng* 43:185-7 Ag '43

Improvement in shipping and imports. *Nat City Bank* p93-5 Ag '43

Keep 'em sailing! how government and private underwriters have worked to move and protect cargoes; diagram and chronology. *Ins Field (Fire ed)* 72:8-10 Mr 18 '43; Same, without diagram. *East Underw* 44:17 Mr 19; 17 Mr 26 '43

Mediterranean shortcut; seizure of island bases clears a path for convoys to India. *Business Week* p88+ Je 19 '43

Merchant fleet now greatest in history. *Weekly Underw* 148:802-3 Ap 10 '43

Merchant shipping of the U.S. in wartime. *Il For Comm W* 13:5-10, 30-1 O 2 '43

Ocean rate regulation. *World war* II. *H. S. Perry. Harvard Business R* 21 no2:238-52 [Ja] '43

On the rising tide. *Business Week* p42+ J1 3 '43

Perfect shipping, the packing; materials sent outside the country. *Il Manuf Rec* 112:38-9+ Ap '43

Peril at sea. *Economist* 144:134-5 Ja 30 '43

Progress of anti U-boat war cited by Roosevelt, Churchill in joint statements. *Comm & Fin Chr* 158:714 Ag 19 '43

Saving of Hororata rated unparalleled feat. *Weekly Underw* 148:1286 Je 12 '43

Slow or fast ships? *Economist* 144:292-3 Mr 6 '43

Transportation for war. *G. E. Talmage, Jr. Harvard Business R* 21 no 3:336-43 [Ap] '43

U.S. transferring 150 to 200 merchant ships to Great Britain. *Churchill discloses. Comm & Fin Chr* 158:613 Ag 12 '43

Victory fleet winning its battle at sea and on the production line. *Il Marine Eng* 48: 172-8 O '43

Social aspects

American family in World war II. *R. H. Abrams, ed. Ann Am Acad* 229:1-175 S '43

Envisions marked changes in the post-war world. *J. H. S. Bossard. Comm & Fin Chr* 157:1569, 1578-9 Ap 29 '43; Abstract. *East Underw* 44:18 Ap 23 '43

Main street front; a report on an American community after one year of war; *Mattoon, Ill. Il Fortune* 26:114-19+ D '42

Strategy

Air power with land and sea forces. *C. Caldwell. Il Aero Digest* 43:117-20+ Ag '43

Bombing eastern Europe, key to Nazi defeat. *J. A. Ward. Il Aero Digest* 42:109-11, 142+ Ap '43

Churchill predicts amphibious operations on large scale soon will be undertaken; report to Commons. *Comm & Fin Chr* 157:2281 Je 17 '43

Job before us. *Il maps Fortune* 26:93-108+ D '42; 27:65-73+ Ja '43

Poised for the big push. *Business Week* p15-16 Je 6 '43

Post-Tunisian air strategy. *J. A. Ward. Il Aero Digest* 42:116-18+ My '43

President says negotiations with Darlan are only temporary expedient in stress of battle. *Comm & Fin Chr* 156:2071 D 10 '42

Searchlight in the fog; comments on possibilities in 1943. *M. Fielding. W Soc E J* 47:245-9 D '42

Strategy of this war. *J. V. Cinnin. W Soc E J* 47:279-87 D '42

Towards the climax. *Economist* 144:645-6 My 22 '43

War in the western Pacific. *H. E. Yarnell. map Ann Am Acad* 226:62-72 Mr '43

With blood, sweat, and TNT; Europe is ringed with thick belts of forts that defy planes and tanks. *Il Fortune* 27:120-4 F '43

See also Casablanca conference, 1943

World war, 1939—
Aerial operations

Submarine operations

Down to the sea for subs; chasers of World war one come back as Y P boats. *A. D. Rathbone. Il Sci Am* 168:4-6 Ja '43

Will aircraft beat the U-boat? *J. A. Ward. Il Aero Digest* 42:114-17 Mr '43

Supplies

Allies study possibility of using Italy's steel furnaces for final drive. *S. H. Barmasel. maps Iron Age* 152:96-8 J1 22 '43

Axis lend-lease? *Economist* 144:142 Ja 30 '43

Coalition warfare, super-streamlined; how reverse lend-lease speeded victories. *C. J. Rolo. Barron's* 23:3 My 17 '43

Economic noose tightened. *Business Week* p42+ My 15 '43

Economic pooling and lend-lease operations among the belligerent Allies. *H. Chalmers. For Comm W* 10:3-6, 25-6 Mr 13 '43

Gain, and a responsibility; allied successes in Africa guarantee new sources of many strategic materials. *Il Business Week* p101+ N 21 '42

Industry intensifies direct war matériel production. *Il Steel* 112:222-5, 403-30 Ja 4 '43

International example: Middle East supply centre. *Economist* 145:314, 317-18 S 4 '43

Military lend-lease to French African forces valued at \$75,000,000. *Comm & Fin Chr* 157:2189 Je 10 '43

No rest for the Axis; supply shortages and production losses. *Business Week* p62+ Ja 9 '43

Plans for pooling US-British resources. *Comm & Fin Chr* 157:72 Ja 7 '43

Production moves in step with strategy changes. *Il Steel* 112:60-3 Je 28 '43

Production paces the war. *C. E. Wilson. Mech Eng* 65:792-4 N '43

Raw materials solvency; United Nations co-operation has assured supplies. *W. L. Batt. Min & Met* 24:308-9 J1 '43

WORLD war, 1939—Supplies—Continued

U.S., Britain, Canada form joint steel committee. Comm & Fin Chr 156:2340 D 31 '42

See also

Raw materials World war, 1939—
World war, 1939— Food question
Commodity control World war, 1939—
 Petroleum supply

Transportation

Highways to strategic materials; completed portions of Pan-American highway can help the United Nations' war effort. E. W. James. Il map Sci Am 168:110-12 Mr '43

See also

World war, 1939—
Shipping

War aims

China is ready; post-war aims. K. Lee. Il Am Inst Banking Bul 25:16-17 Jl '43
Our official postwar line; unconditional surrender, then; a world of international trade, national sovereignties, four freedoms, and more than four contradictions. Fortune 27:86-8+ Mr '43
What is our foreign policy? revitalizing and strengthening of international law; is that enough? Fortune 27:126-8 Mr '43

See also

Atlantic charter
Casablanca conference, 1943

Women's work

Britain conscripts women for industry and war service. K. O. Horton. Il For Comm W 9:8-11, 38 N 28 '42
More womanpower. Economist 144:174 F 6 '43
Shop assistants and conscription for war work. Economist 143:796 D 26 '42
Votes to commission women doctors in army and navy. Comm & Fin Chr 157:1598 Ap 29 '43
Women man Britain's war plants. D. V. Baker. Il Steel 111:138+ D 7 '42
Women's land army. Economist 144:537 Ap 24 '43
Women's work in wartime. F. Perkins. Monthly Labor R 56:661-5 Ap '43

See also

Women's army corps
Women's naval reserve

Africa

Economic effects of our African victory; North and West French Africa. V. L. Horoth. Il Mag of Wall St 71:281-3+ D 26 '42
What's at stake in Africa. Business Week p15-16 N 14 '42

Africa, North

African construction front. W. G. Bowman. Il Eng N 131:454-9 S 23 '43
African front line aircraft assembly. Il Aero Digest 42:122-4 My '43
Air power deciding the battles in Africa. J. A. Ward. Il Aero Digest 41:94-6, 101+ D '42
American army lands in French Africa. Comm & Fin Chr 156:1983 D 3 '42
Mediterranean curtain raiser. Il map Fortune 27:66-73+ Ja '43

Algeria

Algeria told AEF aim is destruction of our common enemies. F. D. Roosevelt. Comm & Fin Chr 156:2175 D 17 '42

Argentina

Diplomatic exchange. Economist 144:39-40 Ja 9 '43

Balkan states

Balkan repercussions; downfall of Mussolini. Economist 145:134 Jl 31 '43
Balkan satellites. Economist 143:512-13, 542-3 O 24-31 '42
Balkan strategy. Economist 144:814-15 Je 26 '43
Battle of the Balkans looms. map Business Week p80+ Ap 17 '43
Fighting in the Balkans. Economist 145:458-9 O 2 '43

Belgium

Repair of war damage in Belgium. Int Labour R 48:490-1 O '43

Bolivia

Bolivia at war. Economist 144:759-60 Je 12 '43
Bolivia decrees war against Axis powers. Comm & Fin Chr 157:1381 Ap 15 '43

Brazil

Brazil in the war. Economist 145:363 S 11 '43
War comes to Belém. Il Business Week p19-20+ N 21 '42

Bulgaria

Exit King Boris. Economist 145:336 S 4 '43
Tension in Bulgaria. Economist 145:463-4 O 2 '43

Burma

Into the jungle; a report from Burma on two notable operations, the Arakan campaign and Wingate expedition. J. Shepley. Il map Fortune 28:136-7+ O '43

Canada

Canada at war. H. Mitchell. Mech Eng 64:860-2 D '42
Canada's mutual aid plan. Economist 144:823-4 Je 26 '43
Canada's war effort. B. Claxton. Trusts & Estates 75:453-4 N '42
Canadian aid. Economist 144:680-1 My 29 '43
Canadian altruism. Economist 144:237-8 F 20 '43
Canadian securities; Canada's new program of mutual aid. B. Williams. Comm & Fin Chr 157:834 Mr 4 '43

Bibliography

Official war publications; guide to state, federal, and Canadian publications. J. K. Wilcox. v5-6 195p; 252p; 274p v4 \$1.50; v5-6 ea \$1.75 Bur. of public administration, Univ. of California, Berkeley '42-'43

China

China faces political crisis. Business Week p48+ S 11 '43
China is ready; post-war aims. K. Lee. Il Am Inst Banking Bul 25:16-17 Jl '43
President tells Chinese promises of help are being borne out. Comm & Fin Chr 155:335 Jl 22 '43
Shifting alignment in China. J. Dana. Il Mag of Wall St 72:333+ Jl 10 '43
Trials and errors. E. Janeway. Fortune 27:60+ Ap '43

Croatia

Crisis in Croatia. Economist 145:495-6 O 9 '43

Egypt

FDR and Egyptian Premier exchange messages. Comm & Fin Chr 156:2256 D 24 '42

Finland

Divided Finland. Economist 144:9 Ja 2 '43
Finnish tug-of-war. Economist 145:490-1 O 9 '43

France

Corsica and Algiers; the political issue; France and the Allies. Economist 145:455-6 O 2 '43
Darlan assassinated; Giraud chosen successor. Comm & Fin Chr 157:73 Ja 7 '43
L'état français. Economist 144:327-8 Mr 13 '43
France in waiting. Economist 145:65-6 Jl 17 '43
FDR appeals to French to cooperate with U.S. Comm & Fin Chr 156:1802 N 19 '42
French focus. Economist 143:595-6 N 14 '42
Gen. Giraud gets pledge of rearming French troops. Comm & Fin Chr 158:333 Jl 22 '43
House divided. Economist 144:490 Ap 17 '43
L'idée Gaulliste. Economist 144:658-9 My 22 '43
Laval and after. Economist 144:621-2 My 15 '43
Laval mobilizes more workers for Germany; radio address to French people. Comm & Fin Chr 157:2170 Je 10 '43
President sees winning over of Martinique as justification of foreign policy. Comm & Fin Chr 158:436 Jl 29 '43

WORLD war, 1939—France—Continued

President's message to Pétain rejected; Vichy breaks diplomatic relations with U.S. Comm & Fin Chr 156:1803 N 19 '42
Recognition at last; French national committee. Economist 145:338 S 4 '43
Reunion in Algiers. Economist 144:747-8 Je 12 '43
Servants, not leaders. Economist 144:351-2 Mr 20 '43
U.S. and Britain recognize French committee administering French overseas territories. Comm & Fin Chr 158:929 S 2 '43

Germany

Design of Nazi ordnance matériel. il diags Product Eng 14:255-9 My '43
Economic losses hit Nazis. Business Week p92, 94-5 F 27 '43
Festung Europa; Germany's interior lines have become her long-stretched roads to defeat. maps Fortune 28:109-11+ Ag '43
Fortune survey; what should be done with Germany? Fortune 27:26, 28 Je '43
Germany at war; fifth year. Economist 145:402 S 18 '43
Germany at war; harvest arithmetic. Economist 145:467 O 2 '43
Germany at war; on the defensive. Economist 144:270 F 27 '43
Germany at war; problem of reserves. Economist 144:300 Mr 6 '43
Germany at war; war finance. Economist 144:427 Ap 3 '43
Germany's loot. Economist 144:47-8 Ja 9 '43
Germany's plunder of Europe. Trusts & Estates 76:427-8 My '43
Hitler's defenses tremble. Business Week p44+ S 4 '43
R.A.F. raids in Ruhr valley cause bottle-necks in Germany industry. O. Dutch. Iron Age 152:102 S 23 '43
Spring meeting. Economist 144:489 Ap 17 '43
Total mobilization in Nazi Europe: how is it working out! For Comm W 11:51-2 My 1 '43
Winter in Germany. Economist 143:657-8, 693-4, 726-7 N 28-D 12 '42

See also

Europe—German occupation

Great Britain

All out, how far? our economic mobilization against the background of British experience. V. L. Horoth. il Mag of Wall St 71: 158-62 N 28 '42
Britain asks, what price liberty? V. Delport. il Steel 112:352-4+ Ja 4 '43
Britain fights for family life. M. A. Hamilton. Ann Am Acad 229:11-19 S '43
Britain's balance sheet; four-year credits and debits of war. il Fortune 28:122-6+ N '43
England, its civilian protection and industrial and utility operations in wartime. D. M. DeBard. Elec Eng 62:55-60 F '43
Great Britain in wartime. W. G. Bowman. il Eng N 131:172-3 Jl 22 '43
London cable; mood of Britain at the start of the fifth year. Fortune 28:36+ O '43
War and Empire. Economist 143:597-8 N 14 '42
When the bombs fall; British ARP setup. A. B. Konz. N E Water Works Assn J 57: 116-26 Je '43

See also

World war, 1939—
Canada

Hawaiian Islands

Our comeback at Pearl Harbor. R. G. Skerrett. il map Comp Air M 48:7152-9 O '43

India

India's war role. Business Week p96-7 Ap 3 '43

Iraq

Iraq joins United nations. Comm & Fin Chr 157:585 F 11 '43

Ireland

Four years of neutrality. Economist 145:400-1 S 18 '43

Italy

After the armistice. Economist 145:385-6 S 18 '43
Angot; Allies' task of administration as they invade. Economist 145:103 Jl 24 '43
C. B. Baldwin heads relief for Italy. Comm & Fin Chr 158:1232 S 23 '43
Churchill urges Italy to break with Germany or suffer avalanche of fire and steel. Comm & Fin Chr 158:832 Ag 26 '43
Dark victory; Italy's fall aids cause but also entails economic liabilities. map Business Week p15-16 S 11 '43
Diplomatic offensive stalled. Business Week p15-16 S 13 '43
Economic effects of Italy's surrender. V. L. Horoth. il Mag of Wall St 72:667-9+ O 2 '43
Eisenhower offers Italians peace terms. Comm & Fin Chr 158:612 Ag 12 '43
Faded laurels; Italy's twenty-first year of fascism. Economist 143:791-2 D 26 '42
First surrender. Economist 145:353-4 S 11 '43
Italy declares war on Germany, U.S., Britain and Russia acknowledge co-belligerency. Comm & Fin Chr 158:1717 O 28 '43
Military armistice granted Italy; capitulation approved by U.S., Britain and Russia. Comm & Fin Chr 158:1114 S 16 '43
Mussolini resigns as Italian premier; King names Badoglio head of military government. Comm & Fin Chr 158:431 Jl 29 '43
President assures Pope Allies will spare churches and respect Vatican. Comm & Fin Chr 158:525 As 5 '43
President Roosevelt calls Mussolini betrayer and appeals to Italy to get out of war. Comm & Fin Chr 158:135 Jl 8 '43
Price of Italy. il Business Week p15-16 Jl 31 '43
Roosevelt and Churchill appeal to Italian people to surrender. Comm & Fin Chr 158: 320 Jl 22 '43
Should Italy be granted neutrality? R. W. Babson. Comm & Fin Chr 158:505 Ag 5 '43
Surrender of the Italian fleet. il diags Engineer 176:223-5 S 17 '43
Twenty years on. Economist 143:530-2 O 31 '42
Unconditional surrender terms still apply to Italy. Secretary Hull declares. Comm & Fin Chr 158:431 Jl 29 '43

Japan

Japan, a formidable enemy. W. G. Hillen. il Refrig Eng 46:233-6 O '43
Japan digs in. Economist 144:167-8 F 6 '43
Japan spurns fair and honest trading; abstracts. J. C. Grew. For Comm W 9:3+ N 21 '42; Inv Banking 13:31-4 D '42
Pacific stalemate? Economist 144:714-15 Je 5 '43
War in the East. il maps Fortune 26:94-100+ D '42
War in the western Pacific. H. E. Yarnell. map Ann Am Acad 226:62-72 Mr '43

Morocco

FDR, Moroccan Sultan exchange pledges. Comm & Fin Chr 156:2254 D 24 '42

New Guinea

What we learned in New Guinea. il maps Fortune 27:140-4+ Je '43

Norway

Conscript Norwegians to fight for Nazis. Comm & Fin Chr 157:1600 Ap 29 '43

Pacific ocean

War in the western Pacific. H. E. Yarnell. map Ann Am Acad 226:62-72 Mr '43

Portugal

Portuguese concession. Economist 145:516 O 16 '43

Rumania

Cold comfort for Rumania. Economist 144: 102 Ja 23 '43

Russia

FDR hails Red army on 25th anniversary. Comm & Fin Chr 157:927 Mr 11 '43
Nazi nightmare; Russians' new successes deprive Reich of natural resources. map Business Week p32+ Ja 23 '43

WORLD war, 1939—United States—Lend-lease operations—Continued

- Lend-lease operation. C. B. Marshall. Ann Am Acad 225:183-9 Ja '43
- Lend-lease operations and wartime foreign trade. Nat City Bank p5-8 Ja '43
- Lend-lease passes 15 billions. Business Week p46+ O 9 '43
- Lend-lease regarded as vital to victory. Comm & Fin Chr 157:922 Mr 11 '43
- Lend-lease shipments of point-rationed goods. For Comm W 10:37 Mr 13 '43
- Lend-lease to Africa put at \$40 million. Comm & Fin Chr 158:236 Jl 15 '43
- Lend-lease to allies set record in October. Comm & Fin Chr 156:1986 D 3 '42
- Lend-lease to China and India. Science 97: sup12 Mr 12 '43
- March lend-lease exports reach new high; increased aid to Soviet Union disclosed. Comm & Fin Chr 157:2089 Je 3 '43
- Military lend-lease to French African forces valued at \$75,000,000. Comm & Fin Chr 157:2189 Je 10 '43
- More facts about policies and methods of lend-lease. P. Young. Il For Comm W 10:7-11+ Mr 20 '43
- President Roosevelt reveals 1,000,000 to be overseas by year-end; report of operations under the Lend-lease act. Comm & Fin Chr 156:2257 D 24 '42
- President says Axis peoples need not fear surrender, reports lend-lease near \$14 billion. Comm & Fin Chr 158:927 S 2 '43; Correction. 158:1004 S 9 '43
- President signs bill continuing lend-lease for another year. Comm & Fin Chr 157:1310 Ap 8 '43
- Reciprocal lend-lease: extraordinary figures for the Southwest Pacific. For Comm W 11:23 My 8 '43
- Soaring billions. Business Week p38+ My 8 '43
- Truman committee favors repayment for lend-lease aid. Comm & Fin Chr 158:1918 N 11 '43
- Two years lend-lease was \$9.6 billion. E. R. Stettinius, jr. Comm & Fin Chr 157:1309 Ap 8 '43
- Two years of lend-lease; tabulation. Business Week p28 Mr 20 '43
- U.S. rejects Argentine plan for lend-lease. Comm & Fin Chr 158:1111 S 16 '43
- United States to lend Britain and Australia silver for coinage. Comm & Fin Chr 156: 2243 D 24 '42
- War debts. Economist 145:361 S 11 '43
- Why lend-lease foods are sold by the British. E. R. Stettinius, jr. Food Ind 15:51-2 Ap '43

Yugoslavia

- Fratricide in Yugoslavia; Partisan-Mihailovich schism widens into a split among allies. S. Pribichevich. Il map Fortune 27: 148-53, 162, 164+ Je; 134-5+ S '43

WORM gearing. See Gearing, Worm**WORMS, Intestinal and parasitical**

- Relationship of vitamin A to resistance to nipprostrongylus muris. J. Y. C. Watt and others. Science 97:381-2 Ap 23 '43

WORSTED*See also*

- | | |
|------------------------------|--------------------------|
| Woolen and worsted finishing | Woolen and worsted mills |
| | Yarn |

WOUNDS

- Effect of propamidine on bacterial growth. H. I. Korn. Bibliog. Science 98:224 S 3 '43
- Sulfonamides in the treatment of war wounds and burns. C. L. Fox, jr. Special Lib 34:244-7 Jl-Ag '43
- Treatment of burns and wounds. Science 98: sup9 Jl 30 '43
- Wound healing. N. Egorov. Science 97:162 F 12 '43

See also

- Burns and scalds

WRAPPERS, Package. See Package wrappers**WRAPPING machines**

- Idle machines put to work wrapping ration bars. Il Mod Packaging 16:180 Ap '43
- Mechanical movements and their design. F. Grover. diags Inst Mech Eng J & Proc 147: Proc 199-200 O '42; Discussion. Il diag 148: Proc 33-4 N '42

- Mechanization of paper packaging. C. Stevens. Il Paper Tr J 115:31-2 D 10 '42
- Soap machine wraps chocolate; case history of war changes at Rockwood & co. Il Mod Packaging 16:78-9+ F '43

WRAPPING materials

- Dehydration to prevent corrosion; moisture-proof wrappings and silica gel for metal parts. Il Mod Packaging 16:69-72+ Mr '43
- Permeability of flexible materials. L. W. Elder. Il Mod Packaging 16:69-71 Jl '43
- Protection of foodstuffs against war gases. S. H. Katz. bibliog Il Ind & Eng Chem 35:20-3 Ja '43; Same, without bibliog. Mod Packaging 16:80-3 F '43

See also

- | | |
|-------------------------|----------------|
| Cellophane | Pliofilm |
| Paper, Waxed | Wrapping paper |
| Paper board, Corrugated | |

WRAPPING paper

- Army and navy requirements conference held by TAPPI, Chicago, Sept. 21-24. Paper Tr J 117:47-50+ S 30 '43
- Brown kraft for the duration for hosiery envelopes. Il Mod Packaging 16:47 Jl '43
- How Fleischmann changed from foil to paper. Il Mod Packaging 16:171 Ap '43
- Kraft paper production sets new record. W. J. Dixon. Paper Tr J 116:98, 100 F 18 '43
- Merfenolopes; a new reagent for controlling slime in the manufacture of food papers; nontoxicity of phenyl mercuric compounds. H. R. Murdock. bibliog Paper Ind 25:634+ S '43; Same. Pulp & Pa of Can 44:877-8 N '43
- 1942 review and 1943 forecast for the kraft paper manufacturing industry. W. J. Dixon. Paper Ind 24:1300 Mr '43
- Specialty papers under stricter control; glassine, greaseproof and vegetable, parchment papers. Paper Tr J 117:17 Jl 29 '43

See also

- Paper, Waxed
- Prices
- Dollars and cents ceilings on kraft. Paper Tr J 116:9 Ja 7; 9 Ja 28 '43

WRATHER, William Embry, 1883-

- Introducing the United States Geological survey's new director. por Eng & Min J 144:53 My '43
- New director of the U.S. Geological survey. Science 98:80 Jl 23 '43

WRECKING

- Craft of demolition; safe practice with acetylene and explosives. J. Langley. Il Chem Age (Lond) 48:525-6 My 15 '43

See also

- Bridges—Wrecking
- Concrete—Wrecking

WRENCHES

- Accuracy for torque wrenches checked. H. Williams. Il Am Mach 87:102 Ag 5 '43
- Coiled spring works ratchet wrench. R. Hodge. Il diags Am Mach 87:103 Ag 19 '43
- Constructing a set of socket wrenches. D. El. McDonald. diags Am Mach 86:1296-7 N 12 '42
- Makes a ratchetless ratchet wrench. Il diags Power 87:621-2 S '43; Same. Power Pl Eng 47:91 N '43
- Portable nut and reamer power wrenches. Il Ry Mech Eng 117:86 F '43
- Scale checks torque wrenches. S. C. Spink. Il Am Mach 87:87 S 30 '43
- Wrench accidents. Il Nat Safety N 48:21-2+ Ag '43
- Wrench clearances required for bolting-up pipe flanges. A. H. Korn. diags Product Eng 13:154-6 Mr '42; Abstract. Power 87: 748 N '43
- Wrench for threaded bushing. M. Crawford. diag Am Mach 86:1364-5 N 26 '42
- WRIGHT, Theodore Paul, 1895-
Portrait. Business Week p22 Mr 20 '43
- WRIGHT aeronautical corporation
Activities for 1942. Comm & Fin Chr 158: 900 Ag 30 '43

WRIGHT brothers

- Flight of a heavier-than-air machine; North Carolina Kitty Hawk day proclamation. J. M. Broughton. Science 98:400-1 N 5 '43

- WRIGHT field**
War on health hazards; Wright field. Z. T. Wirtschafter. *il Nat Safety N* 48:18-19+ JI '43
- WRIGLEY, Philip Knight, 1895-**
Chewing gum is a war material. *Fortune* 27: 98-100+ Ja '43
- WRIGLEY, William, Jr., company**
Strategic habit stocks. J. C. Clifford. *il* (p531) *Mag of Wall St* 72:542 Ag 21 '43
- WROUGHT iron**
Bus construction of welded wrought-iron pipe. J. A. Gerber. *il Elec W* 120:988-9 S 18 '43
How to work wrought iron. *il Factory Management* 100:113 D '42
Properties of important wrought chromium-iron alloys; tabulation. *Metal Prog* 43:560a Ap '43
Welding wrought iron. *Iron Age* 150:60-1 D 17 '42
Welding wrought iron, high carbon steel and cast steel. H. R. Morrison. *il Welding J* 22:418-20 Je '43
- WURSTER, William Wilson, 1895-**
Portfolio of designs. *Arch Forum* 79:45-65 JI '43
- WURSTER's salts**
Calculation of the absorption spectrum of Wurster's salts. M. G. Mayer and K. J. McCallum. *bibliog Rs Mod Phys* 14:248-57; Discussion. R. S. Mulliken. 257-8 Ap-JI '42
Polymerization of the free radicals of the Wurster dye type; the dimeric resonance bond. L. Michaelis and S. Granick. *bibliog Am Chem Soc J* 65:1747-55 S '43
- WURTZ reaction**
Formation of cyclopropanes from mono-halides; some reactions of 1-chloro-2-methyl-2-phenylpropane (neophyl chloride). F. C. Whitmore, C. A. Weisgerber and A. C. Shabica, jr. *bibliog Am Chem Soc J* 65: 1469-71 Ag '43
Reactions of organometallic compounds with alkyl halides; the action of sodium ethyl on (-)-2-bromooctane. N. G. Brink, J. F. Lane and E. S. Wallis. *bibliog Am Chem Soc J* 65:943-9 My '43
- WYANDOTTE chemicals corporation**
J. B. Ford co. and Michigan alkali co. consolidate as Wyandotte chemical corporation. *Metal Finishing* 41:102-3 F '42
Successor company. *Comm & Fin Chr* 157: 176 Ja 11 '43
- WYER, William, 1895-**
New Jersey Central chief executive. *por Ry Age* 115:59 JI 10 '43
- WYOMING**
See also
Grand Teton national park
- X**
- X RAY apparatus**
Betatron; abstract. D. W. Kerst. *Science* 96: sup 10 D 4 '42
Campbell, Wyant & Cannon foundry co. installs million volt X-ray unit. E. Bremer. *il Foundry* 71:108-10+ O '43
Electrical developments of 1942; X-ray equipment. G. Bartlett. *il Gen Elec R* 46:45-7 Ja '43
Electro-medical apparatus; study of service problems. J. Kane. *il diags Radio N* 30: 35-6+ Ag '43
High-production X-ray made possible by built-in materials handling system. W. D. Crelley. *il Steel* 113:89+ O 25 '43
Macro 100 industrial maintenance unit; X-ray inspection of alloys and steel. *il Chem Age (Lond)* 48:296 Mr 13 '43; *Elec R (Lond)* 132:360 Mr 12 '43
Million-volt portable radiographic X-ray unit. E. E. Charlton and W. F. Westendorp. *il diags Am Soc T M Proc* 42:1088-93; Discussion. 1099-1100 '42
Study of cassette design for the radiography of aircraft castings. L. W. Ball. *diags Am Soc T M Proc* 42:1156-64; Discussion. 1165 '42
- Tension-compression device for quantitative X-ray diffraction evaluation of strain in metals and a calibrated series of aluminum alloys. G. L. Clark, G. Pish and R. Seabury. *bibliog il diags J Ap Phys* 14:284-90 Jm '43
X-ray high temperature camera. A. de Bretteville, jr. *diags R Sci Instr* 13:481-3 N '42
X-ray machine gives radiations more penetrating than radium; development at Massachusetts institute of technology. *Sci Am* 167:276-1 D '42
X-ray table designed for portability. *il diags Product Eng* 14:200-2 Ap '43
See also
Electron accelerator X ray laboratories
Metals—X ray inspection X ray tubes
- Advertising**
- Vast market for industrial X-ray apparatus developed by war. G. D. Crain, jr. *il Ind Marketing* 23:34-6+ Ja '43
- X RAY films**
Photoelectric timer controls X-ray film exposure. *diags Electronics* 16:178+ JI '43
X-ray film evaluation. V. Danford. *Am Soc T M Proc* 42:1176-82 '42
- X RAY inspection.** *See* Metals—X ray inspection; Welding—X ray inspection
- X RAY laboratories**
Earth-filled walls for X-ray building; research building at Ohio state university to house betatron and electrostatic generator. *il diag plan Eng N* 131:636-7 O 21 '43
X-ray diffraction laboratory at the National research council. *Can Min J* 64:507-8 Ag '43
See also Rochester university—Industrial X ray laboratory
- X RAY spectrum.** *See* Spectrum, X ray
- X RAY tubes**
Beryllium windows for permanently evacuated X-ray tubes. H. Brackney and Z. J. Atlee. *bibliog il diag R Sci Instr* 14:59-63 Mr '43
Beryllium windows in X-ray tubes for diffraction. Z. J. Atlee. *il diag Gen Elec R* 46:233-6 Ap '43
Cold cathode X-ray diffraction tube. F. G. Chesley. *il diags R Sci Instr* 14:3-5 Ja '43
Improved magnetic flow switch for use with water-cooled X-ray tubes. P. C. Hodges. *diags Science* 97:124 Ja 29 '43
Radiography and X-ray tube design. J. Lampert. *bibliog il diag Electronics* 16: 134-9+ N '43
Windows of beryllium diffract X-ray beam. J. M. Crowe. *Chem Ind* 52:342 Mr '43
X-ray and Geiger Mueller tubes. C. D. Prater. *il diags Radio N* 30:32-4+ O '43
X-ray tube circuit; hydraulic analog; electronic circuit; applications. *il diags Product Eng* 14:654 O '43
See also
Cathode ray tubes
- X RAYS**
Physics in 1942. T. H. Osgood. *J Ap Phys* 14:64-6 F '43
Solarization with X-rays and visible light. A. May. *bibliog Opt Soc Am J* 33:81-8 F '43
See also
Crystallography—Spectrum, X ray
X ray studies Welding—X ray inspection
Metals—X ray X ray apparatus
inspection X ray tubes
Radiography
- Absorption**
- See also*
Spectrum, X ray
- Diffraction**
- Atomic and electronic distributions in liquid nitrogen, nitric oxide, and nitrous oxide. P. C. Sharrach. *bibliog J Chem Phys* 11:435-41 O '43
Basic principles of X-ray diffraction. R. Taylor. *il diags Automotive & Aviation Ind* 89: 28-30 JI 15 '43
Beryllium windows for permanently evacuated X-ray tubes. H. Brackney and Z. J. Atlee. *bibliog il diag R Sci Instr* 14:59-63 Mr '43

X RAYS—Diffraction—Continued

Beryllium windows in X-ray tubes for diffraction. Z. J. Atlee. *il diag Gen Elec R* 46:233-6 **Ap '43**

Configuration of starch in the starch-iodine complex; X-ray diffraction studies of the starch-iodine complex. R. E. Rundle and D. French. *bibliog il Am Chem Soc J* 65:1707-10 **S '43**

Crystalline compounds observed in water treatment. C. E. Imhoff and L. A. Burkardt. *bibliog (40 references) il Ind & Eng Chem* 35:373-82 **Ag '43**

Crystallography for routine analysis. C. H. Walker. *il diag Engineer* 175:492-4 **Je 18 '43**

Diffraction of X-rays by binary alloys. R. Smoluchowski. *Phys R* 64:267-8 **O 1 '43**

Diffraction of X-rays by liquid elements. N. S. Gingrich. *bibliog Rs Mod Phys* 15:90-110 **Ja '43**

Diffraction of X-rays by sodium laurate and sodium palmitate at higher temperatures. O. E. A. Bolduan, J. W. McBain and S. Ross. *bibliog il J Phys Chem* 47:528-35 **O '43**

Diffraction of X-rays by sodium stearate at room temperature. J. W. McBain, A. de Bretteville, Jr. and S. Ross. *bibliog il J Chem Phys* 11:179-83 **Ap '43**

Long X-ray diffraction spacings of the keratins. R. S. Bear. *Am Chem Soc J* 65:1784-5 **S '43**

Quartz crystals oriented by X-ray diffraction method. *il diag Electronics* 16:98+ **F '43**

Structure of liquid mercury. J. A. Campbell and J. H. Hildebrand. *bibliog J Chem Phys* 11:330-3 **JI '43**

Structure of liquid xenon. J. A. Campbell and J. H. Hildebrand. *bibliog diag J Chem Phys* 11:334-7 **JI '43**

Width of X-ray diffraction lines from cold-worked tungsten and α -brass. C. S. Smith and E. E. Stickley. *bibliog Phys R* 64:191-8 **O 1 '43**

X-ray analysis and chemical scale removal. S. C. Morian. *il diag Pet Refiner* 22:72-5 **Ja '43**

X-ray diffraction investigation of sodium stearate from room temperature to the melting point. A. de Bretteville, Jr. and J. W. McBain. *bibliog il J Chem Phys* 11:426-9 **S '43**

X-ray diffraction of sodium laurate, palmitate and stearate at room temperature. J. W. McBain, O. E. A. Bolduan and S. Ross. *2 pls Am Chem Soc J* 65:1873-6 **O '43**

X-ray diffraction studies on precipitated cuprous and cupric sulfides. H. B. Weiser, W. O. Milligan and J. M. Marshall, Jr. *bibliog J Phys Chem* 47:496-501 **O '43**

See also

X ray laboratories

Industrial applications

Electrical developments of 1942; X-ray equipment. G. Bartlett. *il Gen Elec R* 46:45-6 **Ja '43**

General principles of industrial radiography. R. Taylor. *diag Automotive & Aviation Ind* 88:24-5+ **F 1 '43**

Industrial research laboratory of the University of Rochester; X-ray laboratory equipped with a million-volt unit. *Science* 97:395-6 **Ap 30 '43**

Modern liquid state theory in relation to engineering. R. S. Silver. *Engineering* 156:114-15 **Ag 6 '43**

Philips M. 100 industrial X-ray unit. *il Electrician* 130:112 **Ja 29 '43**; Same. *Mech Handling* 30:132 **Mr '43**

See-through inspection with the fluoroscope. *il Mod Packaging* 17:66-7 **S '43**

Vast market for industrial X-ray apparatus developed by war. G. D. Crain, Jr. *il Ind Marketing* 28:34-6+ **Ja '43**

X-ray checks hand grenade fuses. *il Electronics* 16:152 **N '43**; *Steel* 113:149 **N 8 '43**

X-rays, first electron-tube application. M. D. Fagen. *bibliog il diag Electronics* 16:148-51 **Mr '43**

See also

Metals—X ray inspection
Radiography

Welding—X ray inspection
X rays—Diffraction

Measurement

Measurements on X-ray production and absorption in the range 0.7 to 2.5 Mv. A. A. Petruskas, L. C. Van Atta and F. E. Myers. *bibliog diags Phys R* 63:389-99 **Je 1 '43**

Physical methods of dosage determination in radiation therapy. E. H. Quimby. *bibliog diags J Ap Phys* 13:678-87 **N '42**

Physiological effect

Enhancement of leukemogenic action of methylcholanthrene by pre-irradiation with X-rays. J. Furth and M. C. Boon. *bibliog Science* 98:138-9 **Ag 6 '43**

Therapeutic use

Electro-medical apparatus; study of service problems. J. Kane. *il diags Radio N* 30:35-6+ **Ag '43**

Physical methods of dosage determination in radiation therapy. E. H. Quimby. *bibliog diags J Ap Phys* 13:678-87 **N '42**

XANTHINE

Antibacterial effect of enzymatic xanthine oxidation. F. Lipmann and C. R. Owen. *bibliog Science* 98:246-8 **S 10 '43**

Ultraviolet absorption spectra of nitrogenous heterocycles; the blocking effect of methyl groups on the ultraviolet absorption spectra of some hydroxypurines and pyrimidines. J. R. Loofbourow, M. M. Stimson and M. J. Hart. *bibliog Am Chem Soc J* 65:148-51 **F '43**

Ultraviolet absorption spectra of nitrogenous heterocycles; the effect of hydroxy substitutions on the ultraviolet absorption of the series: hypoxanthine, xanthine and uric acid. M. M. Stimson and M. A. Reuter. *bibliog Am Chem Soc J* 65:153-5 **F '43**

XANTHOPHYLLS

Separation of carotenes from xanthophylls. A. J. Haagen-Smit, C. E. P. Jeffreys and J. G. Kirchner. *bibliog Ind & Eng Chem Anal* ed 15:179-80 **Mr 15 '43**

See also

Gazaniaxanthin
Lutein

XANTHOPTERIN

Production of folic acid by rat liver in vitro. L. D. Wright and A. D. Welch. *bibliog (20 references) Science* 98:179-82 **Ag 20 '43**

Successful treatment of granulocytopenia and leukopenia in rats with crystalline folic acid. F. S. Daft and W. H. Seibell. *bibliog Pub Health Rep* 58:1542-5 **O 15 '43**

XANTHYDROL

Use of xanthydrol as a reagent for the characterization of primary amides. R. F. Phillips and E. M. Pitt. *bibliog Am Chem Soc J* 65:1355-7 **JI '43**

XENON

Structure of liquid xenon. J. A. Campbell and J. H. Hildebrand. *bibliog diag J Chem Phys* 11:334-7 **JI '43**

XENYLACETIC acid

Antispasmodics. F. F. Blicke and N. Grier. *bibliog Am Chem Soc J* 65:1725-8 **S '43**

XYLAN

Effect of acetylation on water-binding properties of cellulose; relation between physical properties and hygroscopicity. W. H. Aiken. *bibliog Ind & Eng Chem* 35:1206-10 **N '43**

XYLENE

Condensations by sodium; metalation of benzene, toluene and xylene; the orienting influence of sodium and the influence of alkyl groups on metalation. A. A. Morton, E. L. Little, Jr. and W. O. Strong, Jr. *bibliog Am Chem Soc J* 65:1339-46 **JI '43**

Determination of benzene; detection and estimation of benzene in the presence of toluene, xylene, and other substances. E. H. Dolin. *bibliog Ind & Eng Chem Anal* ed 15:242-7 **Ap 15 '43**

Polyalkylbenzenes; the reaction between dimethylacrylic acid and m-xylene. L. I. Smith and L. J. Spillane. *bibliog Am Chem Soc J* 65:202-8 **F '43**

Solvent properties of C₈ aromatic hydrocarbons. P. D. Hammond and E. H. McArdle. *bibliog Ind & Eng Chem* 35:809-10 **JI '43**

XYLENE—Continued

Thermodynamics and molecular structure of benzene and its methyl derivatives. K. S. Pitzer and D. W. Scott. bibliog diag Am Chem Soc J 65:803-29 My '43

Toluene and xylene. Textile Col 65:348-9 Ag '43

XYLENOL

Alkylated cresols from refinery gases. W. Weinrich. il plan Ind & Eng Chem 35:264-72 Mr '43

Separation of individual cresols and xyleneols from their mixtures. D. R. Stevens. bibliog il Ind & Eng Chem 35:655-60 Je '43

XYLIDINE

Nuclear alkylation of aromatic bases; the action of methyl alcohol on *m*-toluidine hydrochloride. R. W. Cripps and D. H. Hey. Chem Soc J p14-15 Ja '43

XYLITOL

New form of crystalline xylitol. J. F. Carson, S. W. Waisbrot and F. T. Jones. Am Chem Soc J 65:1777-8 S '43

XYLOHYDROQUINONE

Reaction between quinones and metallic enolates; dibromo-*p*-xyloquinone and sodiomalonic ester. L. I. Smith and J. Nichols. bibliog Am Chem Soc J 65:1739-47 S '43

XYLOQUINONE

Reaction between quinones and metallic enolates; dibromo-*p*-xyloquinone and sodiomalonic ester. L. I. Smith and J. Nichols. bibliog Am Chem Soc J 65:1739-47 S '43

Y**YALE and Towne manufacturing company**

Record sales. H. Lawrence. Barron's 23:5 Mr 29 '43

YALE laboratories of primate biology. See Yerkes laboratories of primate biology, Orange Park, Florida

YALE university

Successful investing formulas; Yale plan. L. Tomlinson. Barron's 23:6+ Je 21 '43

YAM beans

Insecticidal possibilities in the yam bean seed. Soap & San Chem 19:105+ My '43

Rotenone substitute now under study. Oil Paint & Drug Rep 142:7+ N 23 '42

YARD lighting. See Factories—Yards—Lighting

YARDS, Railroad. See Railroads—Yards

YARN

List of new man made fibers, filaments and yarns, their trade-names, producers and fabricators. Rayon 24:320 Je '43

Plexon, plastic coated yarn; data on production, properties, uses. il Textile World 93:79 Ag '43

See also

Angola yarn	Paper yarn
Cotton yarn	Rayon yarn
Dyes and dyeing—	Woolen and worsted
Yarn	yarn

Moisture content

Yarn conditioning for processing. G. Ullmann. Textile Col 65:23-5, 41 Ja '43

Tables, calculations, etc.

Yarn numbering systems. Rayon 24:420 Ag '43

Yarn numbers quickly determined; chart. B. W. Wetherbee. Textile World 93:98 Ja '43

Testing

See also

Cotton yarn—Testing
Rayon yarn—Testing

YEARBOOKS (statistical, historical, etc.)

Facts on file yearbook, 1942; person's index of world events. R. L. Lapica, ed. v2 420p, 74p \$20 Facts on file, 41 E. 42d st, New York '43

YEASTS

Brewers' yeast in the war effort; abstract.

P. P. Gray. Food Ind 15:145 Jl '43

Enzymic degradation of cell wall substances.

D. H. F. Clayson. bibliog Chem & Ind 62:298-300; Discussion. 300-1 Ag 7 '43

Food yeast; torula utilis. Food Ind 15:123 Ag '43

How Fleischmann changed from foil to paper. il Mod Packaging 16:171 Ap '43

New transformation act in food field? torula utilis. For Comm W 12:27 Jl 10 '43

Preparation of *d*-fructose-1,6-diphosphate by means of baker's yeasts. C. Neuberg and H. Lustig. Am Chem Soc J 64:2722-3 N '42

Staining of yeast spores. L. S. McClung. Science 98:159-60 Ag 13 '43

Vitamin-rich food made from byproduct yeast. L. V. Burton. flow diag il Food Ind 15:66-9+ N '43

Yeast makes meat. il Business Week p96 Ag 14 '43

Yeast microbiological methods for determination of vitamins; pyridoxine. L. Atkin and others. bibliog Ind & Eng Chem Anal ed 15:141-4 F 15 '43

See also

Invertase

Analysis

Microbiological and chemical assay of nicotinic acid in B complex products. R. D. Greene, A. Black and F. O. Howland. bibliog Ind & Eng Chem Anal ed 15:77-8 Ja 15 '43

Manufacture

Molasses elaboration; removal of calcium sulfate; recovery of non-sugars. G. T. Reich. bibliog flow diag il diags Am Inst Chem Eng Trans 38:1049-66 D '42; Same. Can Chem & Process Ind 27:2-6 Ja '43

YELLOW fever

Aqueous-base yellow fever vaccine. M. V. Hargett, H. W. Burruss and A. Donovan. Pub Health Rep 58:505-12 bibliog(p511-12) Mr 26 '43

Jaundice following administration of human serum. J. W. Oliphant, A. G. Gilliam and C. L. Larson. bibliog Pub Health Rep 58:1233-42 Ag 13 '43

Persistence of yellow fever virus in the brains of monkeys immunized by cerebral inoculation. H. A. Penna and A. Bittencourt. Science 97:448-9 My 14 '43

YELLOW truck and coach manufacturing company

Plan ratified. Comm & Fin Chr 158:1079 S 13 '43

YENCHOW, George

Remington Arms: the rise of the foreman. pors Fortune 27:92-6+ Ap '43

YERBA maté. See Maté**YERKES laboratories of primate biology, Orange Park, Florida**

Yerkes laboratories of primate biology; name changed from Yale laboratories of primate biology. Science 96:465-6 N 20 '42

YNTENA, Theodore Otte, 1900-

Portrait. Business Week p27 Ja 2 '43

YORK corrugating company

Registers with SEC. Comm & Fin Chr 157:1472 Ap 19 '43

YORK ice machinery corporation

Merger with York corp. approved by court. Comm & Fin Chr 157:2356 Je 21 '43

York now to be known as York corporation. Refrig Eng 46:110 Ag '43

YOUNG, Robert Ralph, 1897-

Portrait. Business Week p101 My 8 '43
Rumpus in Erie; Robert R. Young renews old battle with Wall Streeters over road's bonds. Business Week p101-2 F 13 '43

YOUNG men's Christian associations

Men of science-prisoners of war service of the Y.M.C.A. J. E. Raepel. Special Lib 34:20-2 Ja '43

YOUNG people. See Youth**YOUNG women**

Fortune survey; seventeen million young women: believe in men, marriage, morals, children, birth control, and jobs—with certain qualifications. Fortune 28:10, 12+ Ag '43

- YOUNG'S modulus.** See Elasticity
YOUNGSTOWN sheet and tube company
 Another look. *Mag of Wall St* 71:439 Ja 23 '43
 Another look. *Mag of Wall St* 72:693+ O 2 '43
 Strengthens finances. *H. Lawrence. Barron's* 23:5 Mr 15 '43

YOUTH

- Post-war youth: report by the Board of education. *Economist* 145:394 S 18 '43
 President favors post-war training for youth. *Comm & Fin Chr* 157:1683 My 6 '43
 Youth must replenish intellectual vigor of stricken nations, declares Roosevelt. *Comm & Fin Chr* 156:1895 N 28 '42

See also

- College students National youth ad-
 High school students ministration
YP boats. See Submarine chasers

YTTERBIUM

- Rare-earth metal amalgams; the separation of ytterbium from its neighbours. *J. K. Marsh. Chem Soc J* p8-10 Ja '43

YTTRIUM

- Some yttrium-group oxalates. *J. K. Marsh. Chem Soc J* p40-1 Ja '43

YUGOSLAVIA

- Chetniks and partisans. *Economist* 144:791-2 Je 19 '43

- Fratricide in Yugoslavia: Partisan-Mihailovich schism widens into a split among allies. *S. Pribichevich. il map Fortune* 27: 148-53, 162, 164+ Je; 134-5+ S '43

Economic conditions

- Dismembered Yugoslavia. *map Economist* 144: 362-3 Mr 20 '43

YUKON

- Notes from the Yukon. *H. W. Richardson. maps Eng N* 131:181, 232, 245 Jl 29-Ag 12 '43

Z

ZABA, Joseph

- Journal presents new series on oil-well pumping. *por Oil & Gas J* 42:23 Jl 1 '43

ZANZIBAR

See also

- Agriculture-Zanzibar
 Commerce

- Increased foreign trade in 1941. *For Comm W* 10:20 Mr 20 '43

ZAREH, incorporated

- Saroyan did it, so why can't Zareh? *J. Stenbuck. il Adv & Sell* 36:44, 128 O '43

ZEAXANTHOL

- Carotenoids of yellow corn grain. *J. W. White, jr., F. P. Zscheile and A. M. Brunson. bibliog Am Chem Soc J* 64:2603-6 N '42

ZEEMAN effect

- Spectra of the rare gases and their Zeeman effects. *J. B. Green. bibliog Phys R* 64: 151-5 S 1 '43

ZEIN

- Binary solvents for zein. *R. H. Manley and C. D. Evans. bibliog Ind & Eng Chem* 35: 661-5 Je '43

- Stabilizing zein dispersions against gelation. *C. D. Evans and R. H. Manley. Ind & Eng Chem* 35:230-2 F '43

- Zein placed under allocation by WPB. *Oil Paint & Drug Rep* 143:5 My 17 '43

ZEO-KARB

- Equilibria in a carbonaceous cation exchanger. *H. F. Walton. bibliog J Phys Chem* 47: 371-82 My '43

ZEOLITES

- Boiler-water treatment; the use of zeolites. *D. D. Howat. bibliog Chem Age (Lond)* 48:387-92 Ap 10 '43

- Fractionation of the rare earths by zeolite action. *R. G. Russell and D. W. Pearce. Am Chem Soc J* 65:595-600 Ap '43

- Hydrogen zeolite treatment of California water. *S. P. Pickett. flow diag il Power Pl Eng* 47:82-4 Ap '43

- Predictable results from use of carbonaceous acid-regenerated zeolites. *F. Kemmer and J. Thompson. il diag Power Pl Eng* 47: 82-5 Je '43

See also

Chabazite

Testing

- Tentative manual of zeolite test procedures (ion-exchange materials; cation exchangers operating on the sodium cycle). *il diags Am Water Works Assn J* 35:721-50 Je '43

ZIJNEN sphere

- Measurement of velocity and pressure in three-dimensional flow, by F. F. Krisam; tr. and abst. by E. F. Wilsey. *diags Am Soc C E Proc* 69:sup22-30 S '43

ZIMMERMANN, John Edward, 1874-1943

- Sketch. *Edison Elec Inst Bul* 11:216 Jl '43

ZINC

- Catalytic activity of intermetallic compounds in the vapor-phase reduction of nitrobenzene. *B. Berk and O. W. Brown. bibliog diag J Phys Chem* 46:964-8 N '42

- Cation and anion interchange with zinc montmorillonite clays. *M. M. Elgabaly and H. Jenny. bibliog J Phys Chem* 47:399-408 My '43

- Effect of zinc on corrosion-fatigue of steels. *N. Stuart and U. R. Evans. Engineering* 155:336-7 Ap 23 '43

- Electrolytic polishing of zinc and brass. *J. L. Rodda. Min & Met* 24:323 Jl '43

- Energies for self-diffusion in zinc. *H. B. Huntington. Phys R* 63:383-4 My 1 '43

- Physical constants of purest zinc. *bibliog Metal Prog* 44:703 O '43

- Quenching of cadmium resonance radiation (3261A) by hydrocarbons and other gases. *E. W. R. Steacie and D. J. LeRoy. bibliog J Chem Phys* 11:164-71 Ap '43

- Studies on the structure of thin metallic films by means of the electron microscope. *R. G. Picard and O. S. Duffendack. il J Ap Phys* 14:291-305 Je '43

- Uses of rolled zinc and zinc alloys. *Iron Age* 151:55-7+ Je 3 '43

See also

Galvanizing

Analysis

- Benzoin as fluorescent qualitative reagent for zinc. *C. E. White and M. H. Neustadt. bibliog Ind & Eng Chem Anal ed* 15:599-600 S 15 '43

- Concentration methods in spectrographic analysis; recovery of cobalt, nickel, molybdenum, copper, and zinc from plant materials and soil extracts by 8-hydroxyquinoline. *R. O. Scott and R. L. Mitchell. bibliog Soc Chem Ind J* 62:4-8 Ja '43

- Detection of metallic driers in varnishes and oils by spot analysis. *J. V. Atkinson. bibliog Paint Oil & Chem R* 106:10, 22-3 Jl 1 '43

- Electrolytic determination of zinc in aluminum alloys. *G. H. Osborn. Soc Chem Ind J* 62:58-60 Ap '43

- Iodometric estimation of zinc in magnesium alloys. *C. C. Casto and A. J. Boyle. Ind & Eng Chem Anal ed* 15:623-4 O 15 '43

- Polarographic analysis of copper and zinc in brass plate; a rapid control method. *W. P. Tyler and W. E. Brown. Ind & Eng Chem Anal ed* 15:520-3 Ag 15 '43

- Recent developments in analytical chemistry. *Chem Age (Lond)* 49:205 Ag 28 '43

- Sampling of zinc skimmings; an essential preliminary to analysis. *D. J. Bullivant. il diags Chem Age (Lond)* 49:341 O 2 '43

Conservation

- Cutting zinc alloy dies for salvage. *C. J. Frey. diags Aviation* 42:134 Mr '43

- Galvanized iron and steel wire; restrictions on use of zinc. *Mech Handling* 29:219 N '42

- New lead-coating process eliminates use of zinc alloy. *W. Yonkman. il Product Eng* 14:282-3 My '43; Same. *Metal Finishing* 41: 560-1 S '43; Same. *Steel* 113:127, 130+ N 15 '43

ZINC—Conservation—Continued

- New restrictions imposed on use of zinc in civilian products. Steel 111:104 D 7 '42
 WPB adopts Washington ad club's plan for saving zinc. *Ptr Ink* 201:56 D 25 '42
 What can the newspaper library do to conserve zinc? L. S. Somers. *Special Lib* 34:306-8 J1-Ag '43
 Zinc-saving program OK'd; use in engravings designed for newspaper use. *Comm & Fin Chr* 156:2257 D 24 '42

Prices

- Price, wholesale, prime, western (St Louis) 1938-1941. *Survey of Cur Business* 1942 Sup p144 [supplemented in monthly numbers]
 Wartime price control of copper, lead, zinc; premium price plan. J. D. Sumner. *Min & Met* 24:9-11 Ja '43
 Zinc at New York, monthly, 1929-1942; tabulation. *Iron Age* 151:210 Ja 7 '43

Protection

- Cronak process and how to use it; abstract. E. A. Anderson. *Iron Age* 152:59-61 J1 1 '43
 Iridite process; method of protecting zinc and cadmium surfaces against corrosion. *Metal Finishing* 41:578 S '43; *Steel* 113:124 O 4 '43
 New phosphate coatings with unusual corrosion resistance. G. Jernstedt. *il Electrochem Soc Trans* 83 (preprint 30):323-35 Ap '43; *Abstract Steel* 113:95-6 D 27 '43
 New phosphating treatment revealed to electrochemists. F. J. Van Antwerpen. *Chem & Eng N* 21:710+ My 10 '43

ZINC alloys

- Beware impurities in zinc alloys. *Metal Prog* 43:930 Je '43
 Cast zinc-base dies produce aircraft stampings. *il Foundry* 71:144+ J1 '43
 Casting die wedges for light metal flanging; wedge made of Kirksite. L. C. Costello. *il diag Iron Age* 152:70-3 O 28 '43
 Coring Kirksite dies. W. G. McConkey. *il Iron Age* 151:64-6 Ap 8 '43
 Factors to be considered when designing die-castings. H. Chase. *il Product Eng* 14:237-41, 303-6, 376-9 Ap-Je '43
 Fatigue testing of zinc-base alloy die castings. E. H. Kelton. *il diag Am Soc T M Proc* 42:692-705; *Discussion*. 706-7 '42
 Impression-cast chuck jaws made by casting Kirksite "A" alloy about a sample forging. H. F. Lenz. *il diag Iron Age* 152:54-7 Ag 5 '43
 Impression-cast jaws for aircraft fittings. H. F. Lenz. *il Aero Digest* 42:269-70+ My '43; *Same*. *Automotive & Aviation Ind* 89:34-6 J1 1 '43
 Kirksite cast jaws facilitate machining operations. *il Mach* 49:216+ J1 '43
 Kirksite die casting technique. L. C. Costello. *il Iron Age* 151:60-4 Je 10 '43
 Reclaiming Kirksite dies in aircraft manufacture; metal spraying. *il Steel* 111:66+ D 28 '42
 Specifications for zinc alloys; comparable government and commercial specifications tabulated. *Iron Age* 151:44 F 4 '43
 Steel, plastics and zinc used in combination die set. J. C. Wright. *il diag Iron Age* 151:68-70 Je 17 '43
 Study of the deposition potentials and microstructures of electrodeposited nickel-zinc alloys. B. Lustman. *il Electrochem Soc Trans* 84 (preprint 6):47-59 O '43
 Uses of rolled zinc and zinc alloys. *Iron Age* 151:55-7+ Je 3 '43

See also**Brass****ZINC bromide**

- Activity coefficients of zinc chloride, bromide and iodide from electromotive forces. D. M. Egan and J. R. Partington. *Chem Soc J* p157-68 Ap '43

ZINC chloride

- Activity coefficients of zinc chloride, bromide and iodide from electromotive forces. D. M. Egan and J. R. Partington. *Chem Soc J* p157-68 Ap '43

- Influence of *p*-substituents on the decomposition of zinc chloride double salts of diazonium chlorides by acetic anhydride. H. H. Hodgson and C. K. Foster. *Chem Soc J* p747-8 D '42

- Treatment of liquid-phase cracked gasolines with zinc chlorides. M. M. Gerasimov and others. *Pet Eng* 14:151-2, 154 Ag '43

ZINC chromate

- How zinc saves steel from rusting; metal protective paints containing zinc pigments. F. C. Schmutz and G. W. Ashman. *il Eng N* 131:682-6 N 4 '43

- Zinc yellow in the inhibition of corrosion-fatigue of steel in sodium chloride solution. C. G. Fink, W. D. Turner and G. T. Paul. *bibliog il Electrochem Soc Trans* 83 (preprint 13):159-82 Ap '43; *Abstract. Chem & Met Eng* 50:178-9 S '43

ZINC coating

- Iron and steel corrosion prevention; fixing zinc in powder form to chemically prepared surface. V. C. J. Nightingall. *Iron Age* 152:64 S 2 '43

See also

- Galvanizing
 Zinc plating

ZINC compounds

- Lead and zinc pigments and zinc salts sold by domestic manufacturers in the United States, 1941-42. *Chem Ind* 53:414 S '43
 Spectroscopic studies of the simpler porphyrins; the absorption and fluorescence spectra of *ms*-tetra(3', 4'-methylenedioxyphenyl)porphine of HCl number four and of its Ag, Cd, Hg, Zn, and Ni complex salts. V. M. Albers, H. V. Knorr and D. L. Fry. *bibliog J Chem Phys* 10:700-5 D '42

ZINC dust

- How zinc saves steel from rusting; metal protective paints containing zinc pigments. F. C. Schmutz and G. W. Ashman. *il Eng N* 131:682-6 N 4 '43

ZINC hydroxide

- Desulphurization of petroleum distillates with zinc hydroxide. K. A. Musatov and L. G. Krymova. *diag Pet Eng* 15:157-8+ O '43

ZINC industry and trade

- Zinc in 1942. E. V. Gent. *il Min Cong J* 29:22-3 F '43; *Same cond. Metal Prog* 43:256+ F '43

Advertising

- New Jersey Zinc educational film has long range objectives. W. Bassett. *il Ind Marketing* 28:22-3+ O '43

Statistics

- 1940 domestic production of copper-lead-zinc; tabulation. G. M. Fowler. *Eng & Min J* 143:51-2 N '42
 Some light on our metal output. *Barron's* 23:6 My 31 '43
 Zinc, 1938-1941. *Survey of Cur Business* 1942 Sup p144
 Zinc, 1942. E. Just. *Eng & Min J* 144:65-6 F '43

ZINC iodide

- Activity coefficients of zinc chloride, bromide and iodide from electromotive forces. D. M. Egan and J. R. Partington. *Chem Soc J* p157-68 Ap '43

ZINC metallurgy

- Differential-density cone at Mascot gets coarser feed. *flow sheet Eng & Min J* 144:50+ Ja '43
 Modern mill treats the Combined Metals ore. J. B. Blow. *il Min Cong J* 29:24-5 Ap '43
 New heavy-media mill at Leadville. E. Just. *il diag Eng & Min J* 144:68-9+ S '43
 Reclaiming zinc and lead; the treatment of complex residues. A. G. Arend. *il Chem Age (Lond)* 48:11-13 Ja 2 '43
 Rough milling followed by central milling prolongs life of Wisconsin lead-zinc district. R. E. Morgan. *flow sheet il Eng & Min J* 144:76-9 Je '43

- Zinc metallurgy, 1942. H. R. Hanley. *Eng & Min J* 144:103-4 F '43

- Zinc ore reduction, 1942. A. A. Center. *Min & Met* 24:63-4 F '43

Electrometallurgy

- Zinc refining steps ahead; American smelting and refining co. new electrolytic plant in Texas. R. H. Ramsey. *il Eng & Min J* 144:62-7 Ag '43

ZINC miners

Wages in lead and zinc mines and mills in the Tri-State area, June 1943. E. M. Olsen. Monthly Labor R 57:558-63 S '43

ZINC mines and mining**Arkansas**

Arkansas travelogue; manganese and zinc deposits of northern Arkansas. E. Just. il Eng & Min J 144:46-9 Ja '43

Colorado

New Leadville drainage tunnel to boost zinc output. diag map Eng & Min J 144:66-7, 88 S '43

Treasury tunnel extension to tap Black Bear zinc. il maps Eng & Min J 144:78-80 O '43

Kansas-Oklahoma-Missouri district

Tri-state district strives to maintain output. E. Just. il Eng & Min J 143:69-70 D '42

Nevada

Growing zinc supply from Pioche. R. L. Dean. il diag Min Cong J 29:18-22 Ap '43

Zinc mining revived at the Fernce. il diags Min Cong J 29:54-5 My '43

New Mexico

Major zinc producing district now in the making in southwest New Mexico. J. B. Hutt. Eng & Min J 144:78-9+ Ag '43

Tennessee

Electrical practice in American zinc co.'s mines. J. H. Edwards. il Eng & Min J 143:62-5 N '42

Sentinels of safety trophy presented to Grasse. il Explosives Eng 20:338-9 N '42

Wisconsin

Rough milling followed by central milling prolongs life of Wisconsin lead-zinc district. R. E. Morgan. flow sheet il Eng & Min J 144:76-9 Je '43

ZINC ores

Metals to win the war; what to look for and where. G. M. Fowler. map Eng & Min J 143:50-2 N '42

See also**Sphalerite****ZINC oxides**

Effect of opacifiers on fused viscosity of feldspathic glazes. J. R. Beam. bibliog il diags Am Cer Soc J 26:205-12 Jl 1 '43

Red zinc oxide. W. Ehret and A. Greenstone. bibliog il Am Chem Soc J 65:872-7 My '43

Role of zinc oxide in compounding government synthetic rubber; flexometer tests simulating road tests on tires. R. S. Havenhill and J. J. Ranklin. il India Rubber W 107:365-8+ Ja '43

Zinc oxide in glass. N. J. Kreidl. bibliog Glass Ind 24:59-62+, 112-15+, 158-61+ F-Ap '43

Zinc oxide; manufacture and applications in protective coatings. H. E. Outcault. Can Chem & Process Ind 27:118-21 Mr '43

Zinc oxide pigments; the surface area and catalytic activity. C. W. Siller. bibliog il Am Chem Soc J 65:431-4 Mr '43

Zinc oxide smoke as a reference standard in electron wave-length calibration. C. Lu and E. W. Malmberg. bibliog R Sci Instr 14:271-3 S '43

ZINC plating

Current zinc electroplating practice; electrogalvanizing. A. Bregman. il Iron Age 152:46-53 N 11; 64-6 N 18 '43

Electrogalvanizing of strip steel. E. H. Lyons, Jr. bibliog diag Electrochem Soc Trans 84 (preprint 12):101-10 O '43; Abstract. Iron Age 152:54-5 O 21 '43; Excerpt. Steel 113:88, 100 D 20 '43

Electroplated zinc saves critical materials. Iron Age 150:60 N 19 '42

Interpretation of the mechanism of bright electroplating. J. A. Henricks. bibliog Electrochem Soc Trans 82(preprint 22):237-56 O '42; Same. Metal Finishing 41:134-7, 202-6 Mr-Ap '43

Recent developments in zinc plating. M. B. Diggins. Metal Finishing 41:277-81 My '43

Zinc-plated bolts can cause exhaust failure. H. A. Campbell. S A E J 51:sup32-3+ Ag '43

Zinc plating instead of cadmium; composite of abstracts. Metals & Alloys 17:1040+ My '43

Zinc, sabotage of steel at elevated temperatures; abstract. F. Page, Jr. Iron Age 152:71 Jl 8 '43

See also**Galvanizing****ZINC silicate**

Exaggerated phosphorescence of zinc silicate phosphors. H. C. Froelich and G. R. Fonda. J Phys Chem 46:878-85 N '42

ZINC sulfide

Destruction of the phosphorescence of ZnS-Cu phosphors; abstract. Becker and Schaper. Wireless Eng 20:207 Ap '43

See also**Sphalerite****ZINC uranyl acetate**

Determination of sodium in the presence of molybdenum. C. H. Hale. bibliog Ind & Eng Chem Anal ed 15:516-17 Ag 15 '43

ZINC yellow. See Zinc chromate**ZIRCON**

Mineral dressing of Oregon beach sands. J. Dasher, F. Fraas and A. Gabriel. diags U S Bur Mines Rep of Invest 3668:1-19 '42

ZIRCONIA. See Zirconium oxide**ZIRCONIUM****Analysis**

Detection of zirconium with 5-chlorobromamine acid. J. H. Yoe and L. G. Overholser. Ind & Eng Chem Anal ed 15:73 Ja 15 '43

ZIRCONIUM oxide

Concentration of hafnium; preparation of hafnium-free zirconia. E. M. Larsen, W. C. Ferneli and L. L. Quill. bibliog diag Ind & Eng Chem Anal ed 15:512-15 Ag 15 '43

Vapor phase esterification over zirconium oxide. W. J. Knox, Jr. and T. N. Burbridge. bibliog diag Am Chem Soc J 65:999-1001 Je '43

ZONING

Relocation of manpower and zoning; assisting non-conforming users and other northern Wisconsin settlers. S. Henderson and M. L. Upchurch. J Land & Pub Util Econ 19:3-17 F '43

ZONING laws

Chicago zoning ordinance. A. Lindell. W Soc E J 48:117-19 S '43

ZOOLOGISTS**See also****Stejneger, Leonard****ZOOLOGY****Nomenclature**

General council on zoological nomenclature. Science 97:403-4 Ap 30 '43

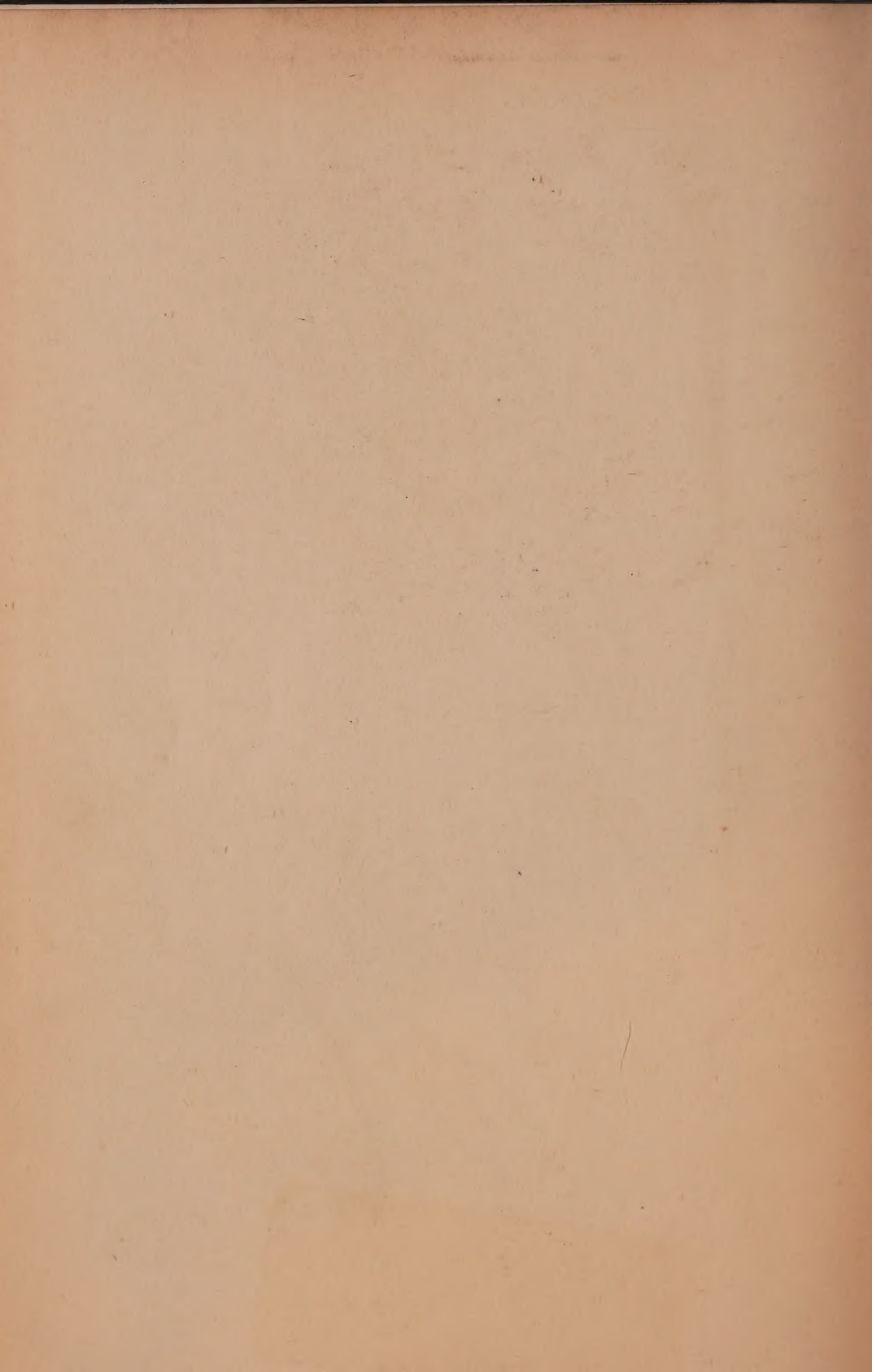
What is a generic name? H. W. Rickett. Science 97:15-16 Ja 1 '43

Latin America

Turtles and the origin of the fauna of Latin America. G. G. Simpson. bibliog Am J Sci 241:413-29 Jl '43

ZOOT suits. See Men's suits**ZYGOTOCRINUS**

Zygotocrinus, a new fossil inadunate crinoid genus. E. Kirk. bibliog pl Am J Sci 241:640-6 O '43





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